## SAT-DES

## South Africa

## Demographic and Health Survey 2016



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## ABBREVIATIONS

| ADA | American Diabetes Association |
| :---: | :---: |
| AIDS | acquired immune deficiency syndrome |
| ANC | antenatal care |
| ARI | acute respiratory infection |
| ASAR | age-specific attendance rate |
| ASFR | age-specific fertility rate |
| BCG | Bacille Calmette-Guérin |
| BMI | body mass index |
| CAGE | Concern/Cut-down, Anger, Guilt, and Eye-Opener |
| CAPI | computer-assisted personal interviewing |
| CARMMA | Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa |
| CBR | crude birth rate |
| CDC | Centers for Disease Control and Prevention |
| CHW | community health worker |
| COPD | chronic obstructive pulmonary disease |
| CPR | contraceptive prevalence rate |
| CSPro | Censuses and Surveys Processing |
| DBE | Department of Basic Education |
| DSD | Department of Social Development |
| DBS | dried blood spot |
| DHS | Demographic and Health Survey |
| DTaP | diphtheria, tetanus, and acellular pertussis vaccine |
| DU | dwelling unit |
| DWCPD | Department of Women, Children and People with Disabilities; now known as the Department of Women |
| EA | enumeration area |
| ELISA | enzyme-linked immunosorbent assay |
| EU | European Union |
| GAR | gross attendance ratio |
| GBD | global burden of disease |
| GCVL | Global Clinical and Viral Laboratory |
| GFR | general fertility rate |
| Global Fund | Global Fund to Fight AIDS, Tuberculosis and Malaria |
| GPI | gender parity index |
| HbAlc | glycated haemoglobin |
| HepB | hepatitis B |
| Hib | haemophilus influenzae type b |
| HIV | human immunodeficiency virus |
| HCT | HIV counselling and testing |


| IASP | International Association for the Study of Pain |
| :---: | :---: |
| ICCIDD | International Council for Control of Iodine Deficiency Disorders |
| ICF | ICF (originally, Inner City Fund) |
| IFSS | Internet file streaming system |
| IPV | inactivated polio vaccine |
| IUD | intrauterine contraceptive device |
| IYCF | infant and young child feeding |
| MMR | maternal mortality ratio |
| MSF | master sample frame |
| MTCT | mother-to-child transmission |
| NAR | net attendance ratio |
| NCCEMD | National Committee on Confidential Enquiries into Maternal Deaths |
| NDoH | National Department of Health |
| NDP | National Development Plan |
| NGO | nongovernmental organisation |
| NHI | National Health Insurance |
| OPV | oral polio vaccine |
| ORS | oral rehydration salts |
| ORT | oral rehydration therapy |
| PCV | pneumococcal conjugate vaccine |
| PNC | postnatal care |
| PPM | parts per million |
| PRMR | pregnancy-related mortality ratio |
| PSU | primary sampling unit |
| RHF | recommended homemade fluids |
| RV | rotavirus vaccine |
| SADHS | South Africa Demographic and Health Survey |
| SAMRC | South African Medical Research Council |
| SASSA | South African Social Security Agency |
| SD | standard deviation |
| SDGs | Sustainable Development Goals |
| SSB | sugar-sweetened beverage |
| Stats SA | Statistics South Africa |
| TFR | total fertility rate |
| UNFPA | United Nations Population Fund |
| UNICEF | United Nations Children's Fund |
| USAID | United States Agency for International Development |
| VIP | ventilated improved pit latrine |
| VMMC | voluntary medical male circumcision |
| WG | Washington Group on Disability Statistics |
| WHO | World Health Organization |
| WtHR | waist-to-height ratio |

## READING AND UNDERSTANDING TABLES FROM THE SOUTH AFRICA DHS (SADHS) 2016

The SADHS 2016 final report is based on approximately 250 tables of data. They are located for quick reference through links in the text (electronic version) and at the end of each chapter. Additionally, this reader-friendly report features about 110 figures that clearly highlight background characteristics and changes over time. Colourful maps display breakdowns for provinces. The text highlights key points in bullets and clearly identifies indicator definitions in boxes.

While the text and figures featured in each chapter highlight some of the most important findings from the tables, not every finding can be discussed or displayed graphically. For this reason, SADHS data users should be comfortable reading and interpreting tables.

The following pages provide an introduction to the organisation of SADHS tables, the presentation of background characteristics, and a brief summary of
 sampling and understanding denominators. In addition, this section provides some exercises for users as they practise their new skills in interpreting SADHS tables.

Example 1: Women's Exposure to Mass Media
A Question Asked of All Survey Respondents

| Table 3.4.1 Exposure to mass media: Women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016 |  |  |  |  |  |  |
| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | Accesses all three media at least once a week | Accesses none of the three media at least once a week | Number of women |
| Age |  |  |  |  |  |  |
| 15-19 | 37.1 | 71.8 | 47.3 | 25.1 | 20.2 | 1,427 |
| 20-24 | 40.2 | 72.1 | 53.6 | 27.7 | 18.0 | 1,415 |
| 25-29 | 41.3 | 73.8 | 55.4 | 30.2 | 16.7 | 1,444 |
| 30-34 | 43.8 | 75.8 | 57.8 | 34.0 | 16.7 | 1,333 |
| 35-39 | 40.3 | 75.1 | 59.1 | 31.2 | 16.4 | 1,072 |
| 40-44 | 40.4 | 73.9 | 55.8 | 30.6 | 18.2 | 941 |
| 45-49 | 38.7 | 72.9 | 58.2 | 28.9 | 17.7 | 883 |
| Residence |  |  |  |  |  |  |
| Urban | 49.8 | 79.4 | 60.5 | 37.1 | 12.5 | 5,731 |
| Non-urban | 20.9 | 61.6 | 43.3 | 14.1 | 28.4 | 2,783 |
| Province |  |  |  |  |  |  |
| Western Cape | 74.6 | 91.9 | 75.2 | 57.8 | 2.4 | 995 |
| Eastern Cape | 21.3 | 62.8 | 46.5 | 14.1 | 27.4 | 938 |
| Northern Cape | 46.1 | 80.9 | 53.4 | 31.8 | 12.2 | 173 |
| Free State | 46.7 | 78.1 | 68.0 | 37.3 | 12.1 | 442 |
| KwaZulu-Natal | 30.8 | 63.3 | 47.8 | 22.1 | 28.2 | 1,616 |
| North West | 33.2 | 80.3 | 59.8 | 25.2 | 12.3 | 570 |
| Gauteng | 52.2 | 77.3 | 60.1 | 39.5 | 13.0 | 2,284 |
| Mpumalanga | 27.0 | 68.0 | 42.9 | 15.1 | 20.3 | 671 |
| Limpopo | 17.4 | 69.5 | 39.5 | 10.4 | 23.5 | 824 |
| Education |  |  |  |  |  |  |
| No education | 11.1 | 46.7 | 30.8 | 8.9 | 45.2 | 168 |
| Primary incomplete | 11.2 | 54.1 | 38.5 | 9.1 | 36.0 | 447 |
| Primary complete | 18.4 | 54.0 | 40.8 | 11.1 | 36.2 | 327 |
| Secondary incomplete | 34.4 | 71.1 | 50.6 | 24.3 F | 20.1 | 4,195 |
| Secondary complete | 52.4 | 80.9 | 63.1 | 397 | 10.8 | 2,369 |
| More than secondary | 61.3 | 86.1 | 69.6 | 45.9) | 5.7 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 16.1 | 35.0 | 31.2 | 7.8 | 48.6 | 1,648 |
| Second | 26.2 | 70.4 | 48.8 | 16.7 | 19.1 | 1,715 |
| Middle | 43.3 | 83.9 | 57.2 | 31.8 | 9.9 | 1,805 |
| Fourth | 51.1 | 88.3 | 66.2 | 40.1 | 6.8 | 1,763 |
| Highest | 65.4 | 89.0 | 71.1 | 51.9 | 5.2 | 1,583 |
| Total | 4. 40.3 | 73.6 | 54.9 | 29.6 | 17.7 | 8,514 |

Step 1: Read the title and subtitle. They tell you the topic and the specific population being described. In this case, the table is about women age 15-49 and their access to different types of media. All eligible female respondents age 15-49 were asked these questions.

Step 2: Scan the column headings-highlighted in green in Example 1.They describe how the information is categorised. In this table, the first three columns of data show different types of media that women access at least once a week. The fourth column shows women who access all three media, while the fifth column is women who do not access any of the three types of media at least once a week. The last column lists the number of women interviewed in the survey.

Step 3: Scan the row headings-the first vertical column highlighted in blue in Example 1. These show the different ways the data are divided into categories based on population characteristics. In this case, the table presents women's exposure to media by age, urban/non-urban residence, province, educational level, and wealth quintile. Most of the tables in the SADHS report will be divided into these same categories.

Step 4: Look at the row at the bottom of the table highlighted in pink. These percentages represent the totals of all women age 15-49 and their exposure to different types of media. In this case, $73.6 \%$ * of women watch television weekly and $54.9 \%$ listen to the radio weekly.

Step 5: To find out what percentage of women with more than secondary education access all three media at least once a week, draw two imaginary lines, as shown on the table. This shows that $45.9 \%$ of women age 15-49 with more than secondary education access three types of media weekly.

Step 6: By looking at patterns by background characteristics, we can see how women's access to media varies across South Africa. Mass media are often used to communicate health messages. Knowing how mass media exposure varies among different groups can help program planners and policy makers determine how to most effectively reach their target populations.
*For the purpose of this document, data are presented exactly as they appear in the table including decimal places. However, the text in the remainder of this report rounds data to the nearest whole percentage point.

Practice: Use the table in Example 1 to answer the following questions:
a) What percentage of women in South Africa do not access any of the three media at least once a week?
b) What age group of women are most likely to read a newspaper weekly?
c) Compare women in urban and non-urban areas-which group is more likely to listen to the radio weekly?
d) What are the lowest and highest percentages (range) of women who do not access any of the three media at least once a week by province?
e) Is there a clear pattern in exposure to television on a weekly basis by education?
f) Is there a clear pattern in exposure to radio by wealth quintile?
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Example 2: Prevalence and treatment of diarrhoea
A Question Asked of a Subgroup of Survey Respondents

| Table 10.12 Prevalence and treatment of diarrhoea |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey; and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016 |  |  |  |  |
|  | $2$ |  | Among children under age 5 with diarrhoea: |  |
| Background characteristic | Percentage with diarrhoea | Number of children | Percentage for whom advice or treatment was sought ${ }^{1}$ | Number of children with diarrhoea |
| Age in months |  |  |  |  |
| <6 | 7.0 | 363 | (36.9) | 25 |
| 6-11 | 16.3 | 325 | 66.2 | 53 |
| 12-23 | 16.8 | 677 | 62.4 | 114 |
| 24-35 | 8.2 | 660 | 55.9 | 54 |
| 36-47 | 8.5 | 688 | 79.6 | 58 |
| 48-59 | 7.1 | 730 | (63.0) | 52 |
| Sex |  |  |  |  |
| Male | 11.2 | 1,783 | 59.9 | 200 |
| Female | 9.4 | 1,661 | 67.1 | 157 |
| Source of drinking water ${ }^{2}$ |  |  |  |  |
| Improved | 10.2 | 3,111 | 62.9 | 318 |
| Unimproved | 11.4 | 333 | (64.3) | 38 |
| Type of toilet facility ${ }^{3}$ |  |  |  |  |
| Unimproved sanitation | 10.2 | 2,523 | 59.6 | 94 |
| Shared facility ${ }^{4}$ | 10.6 | 724 | 60.7 | 77 |
| Unimproved facility | 9.1 | 73 | * | 7 |
| Open defecation | 8.3 | 123 | * | 10 |
| Handwashing place |  |  |  |  |
| Observed, fixed place | 8.6 | 1,727 | 71.2 | 148 |
| Observed, mobile place | 13.5 | 1,177 | 52.5 | 159 |
| Not observed | 9.2 | 539 | (72.8) | 49 |
| Residence |  |  |  |  |
| Urban | 9.0 | 2,204 | 65.5 | 199 |
| Non-urban | 12.7 | 1,240 | 60.0 | 157 |
| Province |  |  |  |  |
| Western Cape | 5.4 | 306 | * | 16 |
| Eastern Cape | 9.4 | 382 | (63.8) | 36 |
| Northern Cape | 8.1 | 67 | * | 5 |
| Free State | 5.8 | 156 | * | 9 |
| KwaZulu-Natal | 13.7 | 636 | 56.4 | 87 |
| North West | 16.4 | 269 | 57.9 | 44 |
| Gauteng | 8.6 | 980 | (73.2) | 85 |
| Mpumalanga | 10.7 | 309 | (69.3) | 33 |
| Limpopo | 12.0 | 338 | 57.1 | 41 |
| Mother's education |  |  |  |  |
| No education | 10.6 | 49 | * | 5 |
| Primary incomplete | 17.4 | 167 | (61.6) | 29 |
| Primary complete | 13.1 | 133 | * | 17 |
| Secondary incomplete | 10.3 | 1,680 | 58.5 - | 173 |
| Secondary complete | 9.6 | 1,027 | 76.9 | 98 |
| More than secondary | 8.6 | 388 | (49.1) | 34 |
| Wealth quintile |  |  |  |  |
| Lowest | 11.8 | 744 | 55.1 | 88 |
| Second | 13.8 | 822 | 53.7 | 114 |
| Middle | 8.7 | 766 | 80.3 | 67 |
| Fourth | 8.7 | 642 | (65.6) | 56 |
| Highest | 6.8 | 470 | (77.8) | 32 |
| Total | 10.33 | 3,444 | 63.0 | 356 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes advice or treatment from the following sources: public sector, private medical sector, and
supermarket. Excludes advice or treatment from a traditional health practitioner
${ }^{2}$ See Table 2.1 for definition of categories
${ }^{3}$ See Table 2.3 for definition of categories
Facilities that would be considered improved if they were not shared by two or more households

Step 1: Read the title and subtitle. In this case, the table is about two separate groups of children: children under age 5 (a) and children under age 5 with diarrhoea in the two weeks before the survey (b).

Step 2: Identify the two panels. First, identify the columns that refer to all children under age 5 (a), and then isolate the columns that refer only to children under age 5 with diarrhoea in the two weeks before the survey (b).

Step 3: Look at the first panel. What percentage of children under age 5 had diarrhoea in the two weeks before the survey? It's $10.3 \%$. Now look at the second panel. How many children under age 5 had diarrhoea in the two weeks before the survey? It's 356 children or $10.3 \%$ of the 3,444 children under age 5 (with rounding). The second panel is a subset of the first panel.

Step 4: Only $10.3 \%$ of children under age 5 had diarrhoea in the two weeks before the survey. Once these children are further divided into the background characteristic categories, there may be too few cases for the percentages to be reliable.

- What percentage of children under age 5 with diarrhoea in the two weeks before the survey whose mothers have more than secondary education sought advice or treatment? $49.1 \%$. This percentage is in parentheses because between 25 and 49 children under age 5 whose mothers have more than secondary education had diarrhoea in the two weeks before the survey (unweighted). Readers should use this number with caution-it may not be reliable. (For more information on weighted and unweighted numbers, see Example 3.)
- What percentage of children under age 5 with diarrhoea in the two weeks before the survey whose mothers have no education sought advice or treatment? There is no number in this cell-only an asterisk. This is because fewer than 25 children under age 5 whose mothers have no education had diarrhoea in the two weeks before the survey (unweighted). Results for this group are not reported. The subgroup is too small, and therefore the data are not reliable.

Note: When parentheses or asterisks are used in a table, the explanation will be noted under the table. If there are no parentheses or asterisks in a table, you can proceed with confidence that enough cases were included in all categories, i.e., that the data are reliable.

## Example 3: Understanding Sampling Weights in SADHS Tables

A sample is a group of people who have been selected for a survey. In the SADHS, the sample is designed to represent the national population age 15-49. In addition to national data, most countries want to collect and report data on smaller geographical or administrative areas. However, doing so requires a minimum sample size per area. For the SADHS 2016, the survey sample is representative at the national and provincial levels, and for urban and non-urban areas.

To generate statistics that are representative of South Africa as a whole and the 9

| Table 3.1 Background characteristics of respondents |  |  |  |
| :---: | :---: | :---: | :---: |
| Percent distribution of women age 15-49 by selected background characteristics, South Africa DHS 2016 |  |  |  |
|  | Women |  |  |
| Background characteristic | Weighted percent | Weighted number | Unweighted number |
| Province |  | 2 |  |
| Western Cape | 11.7 | 995 |  |
| Eastern Cape | 11.0 | 938 | 1.041 |
| Northern Cape | 2.0 | 173 | 718 |
| Free State | 5.2 | 442 | 854 |
| KwaZulu-Natal | 19.0 | 1,616 | 1,360 |
| North West | 6.7 | 570 | 863 |
| Gauteng | 26.8 | 2,284 | 863 |
| Mpumalanga | 7.9 | 671 | 1,054 |
| Limpopo | 9.7 | 824 | 1,105 |
| Total 15-49 | 100.0 | 8,514 | 8,514 | provinces, the number of women surveyed in each province should contribute to the size of the total (national) sample in proportion to size of the province. However, if some provinces have small populations, then a sample allocated in proportion to each province's population may not include sufficient women from each province for analysis. To solve this problem, provinces with small populations are oversampled. For example, let's say that you have enough money to interview 8,514 women and want to produce results that are representative of South Africa as a whole and its provinces (as in Table 3.1). However, the total population of South Africa is not evenly distributed among the provinces: some provinces, such as Gauteng, are heavily populated while others, such as Northern Cape are not. Thus, Northern Cape must be oversampled.

A sampling statistician determines how many women should be interviewed in each province in order to get reliable statistics. The blue column (1) at the right in the table above shows the actual number of women interviewed in each province. Within the provinces, the number of women interviewed ranges from 656 in Western Cape to 1,360 in KwaZulu-Natal. The number of interviews is sufficient to get reliable results in each province.

With this distribution of interviews, some provinces are overrepresented and some provinces are underrepresented. For example, the population in Gauteng is about $27 \%$ of the population in South Africa, while Northern Cape's population contributes only $2 \%$ of the population in South Africa. But as the blue column shows, the number of women interviewed in Gauteng accounts for only about $10 \%$ of the total sample of women interviewed $(863 / 8,514)$ and the number of women interviewed in Northern Cape accounts for almost the same percentage of the total sample of women interviewed $(8 \%$, or $718 / 8,514)$. This unweighted distribution of women does not accurately represent the population.

In order to get statistics that are representative of South Africa, the distribution of the women in the sample needs to be weighted (or mathematically adjusted) such that it resembles the true distribution in the South Africa. Women from a small province, like Northern Cape, should only contribute a small amount to the national total. Women from a large province, like Gauteng, should contribute much more. Therefore, DHS statisticians mathematically calculate a "weight" which is used to adjust the number of women from each province so that each province's contribution to the total is proportional to the actual population of the province. The numbers in the purple column (2) represent the "weighted" values. The weighted values can be smaller or larger than the unweighted values at province level. The total national sample size of 8,514 women has not changed after weighting, but the distribution of the women in the provinces has been changed to represent their contribution to the total population size.

How do statisticians weight each category? They take into account the probability that a woman was selected in the sample. If you were to compare the green column (3) to the actual population distribution of South

Africa, you would see that women in each province are contributing to the total sample with the same weight that they contribute to the population of the South Africa. The weighted number of women in the survey now accurately represents the proportion of women who live in Gauteng and the proportion of women who live in Northern Cape.

With sampling and weighting, it is possible to interview enough women to provide reliable statistics at national and province levels. In general, only the weighted numbers are shown in each of the SADHS tables, so don't be surprised if these numbers seem low: they may actually represent a larger number of women interviewed.

## SUSTAINABLE DEVELOPMENT GOAL INDICATORS

## South Africa DHS 2016


na $=$ Not applicable
${ }^{1}$ Expressed in terms of deaths per 1,000 live births for the 5 -year period preceding the survey
${ }^{2}$ Equivalent to the age-specific fertility rate for girls age 10-14 for the 3 -year period preceding the survey, expressed in terms of births per 1,000 girls age $10-14$
${ }^{3}$ Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age $15-19$
${ }^{4}$ Data are not age-standardised
${ }^{5}$ Data are presented for children age 12-23 months receiving all vaccines included in their national programme appropriate for their age: BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine.
${ }^{6}$ Data are available for women age 18 and older
${ }^{7}$ In the DHS, psychological violence is termed emotional violence
${ }^{8}$ Data are available only for currently married women who are not pregnant
${ }^{9}$ Data are available only for women and men age 15-49
${ }^{10}$ Measured as the percentage of the population using clean fuel for cooking
${ }^{11}$ Data are available for women and men age 15-49 who have and use and account at bank or other financial institution; information on use of a mobile-money-service provider is not available
${ }^{12}$ Data are available for women and men age 15-49 who have used the Internet in the past 12 months
${ }^{\text {a }}$ The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females

## SOUTH AFRICA



# INTRODUCTION AND SURVEY METHODOLOGY 

Stastistics South Africa (Stats SA), in partnership with the South African Medical Research Council (SAMRC), conducted the South Africa Demographic and Health Survey 2016 (SADHS 2016) at the request of the National Department of Health (NDoH). Technical assistance was provided through The DHS Program. Timely information about the health of the nation is essential for monitoring and evaluation. Survey data collection took place from 27 June 2016 to 4 November 2016.

### 1.1 Survey Objectives

The primary objective of the SADHS 2016 is to provide up-to-date estimates of basic demographic and health indicators. Specifically, the SADHS 2016 collected information on fertility levels; marriage; sexual activity; fertility preferences; awareness and use of contraceptives; breastfeeding practices; nutrition; childhood and maternal mortality; maternal health, including antenatal and postnatal care; key aspects of child health, including immunisation coverage and prevalence and treatment of acute respiratory infection (ARI), fever, and diarrhoea; potential exposure to the risk of HIV infection; coverage of HIV counselling and testing (HCT); and physical and sexual violence against women. Another critical objective of the SADHS 2016 is to provide estimates of health and behaviour indicators for adults age 15 and older, including use of tobacco, alcohol, and codeine-containing medications. In addition, the SADHS 2016 provides estimates of the prevalence of anaemia among children age 6-59 months and adults age 15 and older, and the prevalence of hypertension, anaemia, high HbA1c levels (an indicator of diabetes), and HIV among adults age 15 and older.

The information collected through the SADHS 2016 is intended to assist policymakers and programme managers in evaluating and designing programmes and strategies for improving the health of the country's population.

### 1.2 Sample Design

The sampling frame used for the SADHS 2016 is the Statistics South Africa Master Sample Frame (MSF), which was created using Census 2011 enumeration areas (EAs). In the MSF, EAs of manageable size were treated as primary sampling units (PSUs), whereas small neighbouring EAs were pooled together to form new PSUs, and large EAs were split into conceptual PSUs. The frame contains information about the geographic type (urban, traditional, or farm) and the estimated number of residential dwelling units (DUs) in each PSU. The sampling convention used by Stats SA is DUs. One or more households may be located in any given DU; recent surveys have found 1.03 households per DU on average.

Administratively, South Africa is divided into nine provinces. The sample for the SADHS 2016 was designed to provide estimates of key indicators for the country as a whole, for urban and non-urban areas separately, and for each of the nine provinces in South Africa. To ensure that the survey precision is comparable across provinces, PSUs were allocated by a power allocation rather than a proportional allocation. Each province was stratified into urban, farm, and traditional areas, yielding 26 sampling strata. ${ }^{1}$

The SADHS 2016 followed a stratified two-stage sample design with a probability proportional to size sampling of PSUs at the first stage and systematic sampling of DUs at the second stage. The Census 2011 DU count was used as the PSU measure of size. A total of 750 PSUs were selected from the 26 sampling

[^0]strata, yielding 468 selected PSUs in urban areas, 224 PSUs in traditional areas, and 58 PSUs in farm areas. ${ }^{2}$

A listing operation was carried out in all selected PSUs from January to March 2016, and the updated lists of DUs served as a sampling frame for the selection of DUs in the second stage. In the second stage of selection, a fixed number of 20 DUs per cluster were selected with systematic selection from the created listing. All households in a selected DU were eligible for interviews.

Some of the selected PSUs were informal, unstructured settlements with no clear identifications of DUs. To ensure listing coverage within each informal, unstructured PSU selected, ${ }^{3}$ segmentation was carried out, with the PSU divided into multiple segments of about 20 DUs each. Only one segment was selected at random for the survey; in segments with 20 DUs or fewer, all DUs in the segment were eligible for the survey. In segments with more than 20 DUs, 20 DUs were randomly selected and were eligible for the survey. A cluster in the SADHS 2016 is therefore either a PSU or a segment of a PSU.

Figure 1.1 diagrams the subsampling followed in the survey. In half of selected DUs, all households were eligible for interviews with the Household Questionnaire, and all women age 15-49 who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible for interviews with a standard individual questionnaire. Within this subsample, households in every other DU were eligible to have their salt tested for the presence of iodine.

Figure 1.1 Subsampling scheme followed in the SADHS 2016


In the remaining half of DUs, all households were eligible for interviews with the Household Questionnaire, and all women and men age 15 and older who were either permanent residents of the selected households or visitors who stayed in the household the night before the survey were eligible for individual interviews and for biomarker collection. Women age 15-49 and men age 15-59 were eligible for the standard individual questionnaire, as well as a South Africa-specific module on adult health; women age 50 and older and men age 60 and older were eligible for a few sections of the individual questionnaire and the adult health module. In addition, children age 0-59 months were eligible for biomarker collection.

Finally, in all households in selected DUs, one woman age 18 and older was selected for a module on domestic violence. In addition, for each child age 0-5 whose biological mother did not live in the household, a guardian was eligible to complete the Caregiver's Questionnaire.

[^1]
### 1.3 Questionnaires

Five questionnaires were used in the SADHS 2016: the Household Questionnaire, the individual Woman's Questionnaire, the individual Man's Questionnaire, the Caregiver's Questionnaire, and the Biomarker Questionnaire. These questionnaires, based on The DHS Program's standard Demographic and Health Survey questionnaires, were adapted to reflect the population and health issues relevant to South Africa. Input was solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international donors. After the preparation of the questionnaires in English, the questionnaires were translated into South Africa's 10 other official languages. In addition, information about the fieldworkers for the survey was collected through a self-administered Fieldworker Questionnaire.

The Household Questionnaire was used to list all of the members of, and visitors to, selected households. Basic demographic information was collected on the characteristics of each person listed, including his or her age, sex, marital status, education, and relationship to the head of the household. For children under age 18, parents' survival status was determined. The data obtained in the Household Questionnaire were used to identify women and men eligible to be interviewed with the relevant individual questionnaire, children whose caregiver was eligible for the Caregiver's Questionnaire, and those persons eligible for the Biomarker Questionnaire. The Household Questionnaire also collected information on characteristics of the household's dwelling unit, such as source of drinking water; type of sanitation facility; materials used for the floor, walls, and roof of the dwelling unit; and ownership of various durable goods. In addition, the questionnaire included a module based on questions developed by the Washington Group on Disability Statistics to estimate the prevalence of disabilities among individuals age 5 and older.

The Woman's Questionnaire was used to collect information from all eligible women age 15 and older. In all households, eligible women age 15-49 were asked questions on the following topics:

- Background characteristics such as age, education, and media exposure
- Birth history and child mortality
- Knowledge and use of family planning methods
- Antenatal, delivery, and postnatal care
- Breastfeeding and infant feeding practices
- Vaccinations and child illnesses
- Marriage and sexual activity
- Fertility preferences
- Women's work and partners' background characteristics
- Knowledge of HIV/AIDS and methods of HIV transmission
- Adult and pregnancy-related mortality

The Man's Questionnaire was administered to all men age 15-59 in the subsample of households selected for the male survey. The Man's Questionnaire collected much of the same information elicited by the Woman's Questionnaire but was shorter because it did not contain a detailed reproductive history, questions on maternal and child health, or questions on adult and maternal mortality.

Both the Woman's and Man's Questionnaires also included a module on adult health that captured information on use of tobacco, alcohol, and codeine-containing medications; consumption of fat, salt, sugar, fruit, and vegetables; health care-seeking behaviours; and self-reported prevalence of a variety of noncommunicable diseases. The module was administered to all men age 15 and older and to all women age 15 and older in the subsample of households selected for the male survey and biomarker collection.

The Caregiver's Questionnaire was used to collect information on children age 0-5 whose biological mother was deceased or did not live in the household. It gathered information on the child's sociodemographic characteristics, vaccinations, and health in the 2 weeks prior to the survey.

The Biomarker Questionnaire was used to record data on biomarkers (anthropometry, anaemia testing, blood pressure measurement, HbA1c testing, and HIV testing) collected from respondents by nurses. In addition, for adults age 15 and older, information on prescribed medications was recorded.

The purpose of the Fieldworker Questionnaire was to collect basic background information on the people who were collecting data in the field, including the team supervisor, interviewers, and nurse.

In this survey, interviewers used tablet computers to record responses during interviews. The tablets were equipped with Bluetooth technology to enable remote electronic transfer of files (transfer of assignment sheets from team supervisors to interviewers and transfer of completed questionnaires from interviewers to supervisors). The computer-assisted personal interviewing (CAPI) data collection system employed in the SADHS 2016 was developed by The DHS Program using the mobile version of CSPro. The CSPro software was developed jointly by the U.S. Census Bureau, The DHS Program, and Serpro S.A.

The survey protocol was reviewed and approved by the SAMRC Ethics Committee and the ICF Institutional Review Board.

### 1.4 Measuring Iodine Content of Household Salt

Salt collected from the subsample of households eligible for iodine testing was stored in $50-\mathrm{ml}$ polypropylene tubes with screw-tops, away from direct light, and couriered to the SAMRC Iodine Laboratory in Cape Town in batches for testing. After the completion of the fieldwork, the iodine content of the salt was measured using the iodometric titration method recommended by the World Health Organization (WHO), globally recognised as the reference method (WHO/UNICEF/ICCIDD 2007). The titration method for salt fortified with potassium iodate (iodated salt) as described by DeMaeyer et al. (1979) has been slightly modified (Jooste and Strydom 2010). The principle of the method is that free iodine is liberated from the iodate in salt under acidic conditions. Potassium iodide solution is then added to keep the iodine in a dissolved state, and the dissolved free iodine (as triiodide) is titrated with standardised sodium thiosulfate solution, incorporating starch as an external (indirect) indicator.

Specifically, 10 g salt was dissolved in 45 ml deionised water, followed by adding 2 ml of 2 N sulfuric acid and 5 ml of $10 \%$ potassium iodide. The salt solution was kept in the dark for 10 minutes to reach optimal reaction time, and then titrated with sodium thiosulfate $(0.005 \mathrm{~N})$ with constant stirring until the reaction solution turned pale yellow. Next 2 ml starch solution ( $1 \%$ starch dissolved in $15 \%$ sodium chloride) was added, forming a blue starch-iodine complex, followed by continued titration with sodium thiosulfate, until the blue colour disappeared indicating that the equivalence point had been reached. As the amount of sodium thiosulfate used is proportional to the amount of free iodine liberated from the salt, the concentration of iodine in the salt sample was calculated based on the titrated volume (burette reading) of sodium thiosulfate using the formula below. The results are expressed as milligrams of iodine per kilogram $(\mathrm{mg} / \mathrm{kg})$ of salt or the equivalent parts of iodine per million parts of salt ( ppm ).

## Formula:

$\mathrm{mg} / \mathrm{kg}(\mathrm{ppm})$ iodine $=$ titration volume in $\mathrm{ml} \times$ normality of sodium thiosulfate $(\mathrm{eq} / \mathrm{l}) \times 21.15$ (g/eq I) $\times 1,000 /$ salt sample weight in $g$

The thiosulfate solution was standardised by using 5 ml of 0.005 N potassium iodate and following the same procedure for analysing a salt sample. The normality of the sodium thiosulfate solution is based on the law of equivalents:
normality of sodium thiosulfate $=$ normality potassium iodate x volume potassium iodate $/$ volume sodium thiosulfate

### 1.5 Anthropometry, Anaemia Testing, Blood Pressure Measurement, HbA1c Testing, and HIV Testing

In the subsample of households selected for the male survey and the adult health module, the SADHS 2016 incorporated the following biomarkers: anthropometry, anaemia testing, blood pressure measurement, HbA1c testing, and HIV testing. For each biomarker measurement or test for which an individual was eligible, the respondent or the child's parent/guardian was required to provide written consent before the measurement or test could proceed. In the case of never-in-union respondents age 15-17, consent was required from both the respondent and the parent/guardian.

All households in which children underwent anthropometry and/or were tested for anaemia were given a brochure on which the measurements were recorded. The brochure also explained the causes and prevention of anaemia. Similarly, each respondent age 15 and older received a different brochure on which relevant measurements were recorded. This brochure provided information about body mass index (BMI), anaemia, blood pressure, diabetes, and HIV. The brochure also included the national AIDS hotline number to enable respondents to locate nearby facilities that provide HIV testing and counselling.

In contrast with the data collection procedure for the household and individual interviews, data related to all biomarkers were initially recorded on a paper Biomarker Questionnaire and subsequently entered into interviewers' tablet computers.

Anthropometry. Height and weight measurements were recorded for children age 0-59 months for whom consent was obtained from their parents/guardians and for women and men age 15 and older who consented to measurement. Seca 878 digital scales, Seca 417 infantometers (for children under age 2), and Seca 213 portable stadiometers (for children age 2 and older and for adults) were used for these measurements. In addition, waist circumference was measured for women and men using a Seca 201 measuring tape.

Anaemia testing. Blood specimens for anaemia testing were collected from women and men age 15 and older who consented to be tested and from children age 6-59 months for whom consent was obtained from their parents/guardians. Blood samples were drawn from a drop of blood taken from a finger prick (or a heel prick in the case of children age 6-11 months) and collected in a microcuvette. Haemoglobin analysis was carried out on-site using a battery-operated portable HemoCue 201+ analyser. Results were provided verbally and in writing. Parents/guardians of children with a haemoglobin level below $7 \mathrm{~g} / \mathrm{dl}$ were instructed to take the child to a health facility for follow-up care. Likewise, nonpregnant women, pregnant women, and men were referred for follow-up care if their haemoglobin levels were below $7 \mathrm{~g} / \mathrm{dl}, 9 \mathrm{~g} / \mathrm{dl}$, and $9 \mathrm{~g} / \mathrm{dl}$, respectively.

Blood pressure. Three blood pressure measurements were taken from consenting women and men age 15 and older using Omron 1300 digital blood pressure monitors. Measurements were taken at intervals of 3 minutes or more. For the purpose of returning the result to the respondent, the third measurement was used to classify the respondent with respect to hypertension, according to internationally recommended categories (WHO 1999). Respondents who were informed that they had high blood pressure were provided with a written referral to a health facility for further management.

HbA1c and HIV testing. Nurses collected finger-prick blood specimens for laboratory HbA1c and HIV testing of women and men age 15 and older who consented. The protocol for blood specimen collection and analysis was based on the anonymous linked protocol developed by The DHS Program. This protocol allows for merging of test results with the sociodemographic data collected in the individual questionnaires after removal of all information that could potentially identify an individual.

Nurses explained the procedure, the confidentiality of the data, and the fact that the test results would not be made available to respondents. Blood for HbA1c and HIV testing was collected on a filter paper card. The card was preprinted with five circles, each of which could hold approximately $75 \mu \mathrm{l}$ of blood and the
first of which had been treated with a reagent required for HbAlc testing. If a respondent consented to both HbAlc and HIV testing, five blood spots from the finger prick were collected on the filter paper card, to which a barcode label unique to the respondent was affixed. Duplicate barcodes were attached to the Biomarker Questionnaire, one to indicate that the respondent had consented to HbA 1 c testing and another to indicate that the respondent had consented to HIV testing. A fourth copy of the same barcode was affixed to the dried blood spot (DBS) transmittal sheet to track the blood samples from the field to the laboratory.

Respondents who consented to HIV testing were asked whether they would consent to having the laboratory store their blood sample for future unspecified testing. If respondents did not consent to additional testing using their sample, it was indicated on the Biomarker Questionnaire that they refused additional tests using their specimen, and the words "no additional testing" were written on the filter paper card.

If the respondent consented only to HbAlc testing, a single blood drop was collected on the appropriate pretreated circle of the filter paper card to which the barcode label was affixed, and duplicate barcode labels were attached to the Biomarker Questionnaire and the DBS transmittal sheet.

Blood samples were dried overnight and packaged for storage the following morning. Samples were periodically collected from the field and transported to the Global Clinical and Viral Laboratory (GCVL) in Durban. Upon arrival at GCVL, each blood sample was logged into the CSPro HIV Test Tracking System database, given a laboratory number, and stored at $-20^{\circ} \mathrm{C}$ until tested.

The HbA1c and HIV testing protocols stipulated that blood could be tested only after questionnaire data collection had been completed, data had been verified and cleaned, and all unique identifiers other than the anonymous barcode number had been removed from the data file.

To measure HbA1c, a common method was adapted for use with DBS specimens. Specifically, using a blood chemistry analyser, total haemoglobin concentration was measured by a colorimetric method monitoring the change in absorbance at $410 \mathrm{~nm} . \mathrm{HbAlc}$ concentration was measured by a turbidimetric immunoinhibition method monitoring the change in absorbance at 340 nm . HbA1c concentration is expressed as a percentage of total haemoglobin.

The HIV testing algorithm (Figure 1.2) called for testing all samples with an enzyme-linked immunosorbent assay (ELISA), the Genscreen HIV 1/2 Combi Assay (Bio-Rad). All samples that tested positive on the ELISA 1 were subjected to a second ELISA (ELISA 2), the E411 Cobas HIV $1 / 2$ Combi Assay (Roche). Similar to samples that tested positive on the ELISA 1, $5 \%$ of the samples that tested negative on the ELISA 1 were also subjected to the ELISA 2 for internal quality control, while the other $95 \%$ were recorded as negative.

Concordant negative results on the ELISA 1 and ELISA 2 were recorded as negative. If the results on the ELISA 1 and ELISA 2 were discordant, the two ELISAs were repeated. If the results remained discordant, the specimen was classified as inconclusive.

Concordant positive results on the ELISA 1 and ELISA 2 were subjected to a third assay, the Geenius ${ }^{\text {TM }}$ HIV1/2 confirmatory rapid test (Bio-Rad). When both the ELISA 1 and ELISA 2 were positive, the sample was classified as positive if the confirmatory rapid test was positive, and inconclusive if the confirmatory rapid test was negative or indeterminate.

Figure 1.2 HIV testing algorithm


### 1.6 Pretest

The pretest for the SADHS 2016 consisted of classroom training and field practice. The classroom portion of the pretest was conducted 11-29 January 2016 at the Kopanong Hotel \& Conference Centre in Benoni, Gauteng. The pretest fieldwork took place 1-5 February 2016 in five provinces: Eastern Cape, KwaZuluNatal, Free State, Gauteng, and North West. Stats SA recruited three female interviewers, one male interviewer, one nurse, and one logistics officer from each of the five provinces selected for field practice, for a total of 30 fieldworkers. Coordinators from Stats SA's provincial offices were trained as supervisors, for a total of five supervisors. Staff from Stats SA's head office, SAMRC, and The DHS Program conducted training sessions. Nurses attended the first week of the main training of interviewers before breaking away for separate biomarker training. Following field practice, a daylong debriefing session was held with the pretest field staff at the Lakes Hotel \& Conference Centre in Benoni. Modifications to the questionnaires, translations, and survey protocol were made based on lessons drawn from the exercise.

### 1.7 Training of Field Staff

Stats SA recruited and trained nearly 300 fieldworker candidates for the main training of field staff. This number made provision for male and female interviewers, supervisors, logistics officers/drivers, and nurses for 30 teams. Although only 210 fieldworkers were needed to conduct the survey, the number recruited and trained exceeded this figure so that (1) the top performers during the training could be selected for fieldwork and (2) there would be back-up fieldworkers in case anything happened to require replacing any of the appointed fieldworkers during the main data collection. The main training was conducted from 16 May 2016 to 17 June 2016 and took place at the Birchwood Hotel \& Conference Centre in Kempton Park, Gauteng.

For all fieldworker candidates except nurses and logistics officers, the training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of questionnaire
content, instruction on how to administer the paper and electronic questionnaires, and mock interviews between participants in the classroom. In addition, they were trained on map reading so that they could identify the sampled DUs in the field, and they received publicity training to ensure they were comfortable introducing themselves and explaining the purpose of the survey to respondents. A 1-day "on-site" field practice, held on 6 June 2016, paired trainees, and each had to complete a set of paper questionnaires. This provided them with an opportunity to familiarise themselves with the questionnaires in a closed environment. The completed questionnaires were later used during the CAPI training, when the data were entered into the electronic system.

Nurses were trained to collect biomarker data, including taking height/length, weight, and waist measurements; testing for anaemia by measuring haemoglobin level; and preparing DBS specimens for subsequent HbA1c and HIV testing. The biomarker training was held 1-17 June 2016 and consisted of lectures, demonstrations of biomarker measurement or testing procedures, exercises aimed at standardisation of height and weight measurements, and practice with children at a health clinic. The logistics officers trained alongside the nurses to ensure that they would be able to support them.

A 2-day field practice was organised on 14 and 15 June 2016 to provide trainees with hands-on practice before the actual fieldwork. A total of 30 teams were formed and participated in field practice. On the first day of field practice, each team consisted of a supervisor, a minimum of three female interviewers, one male interviewer, and one logistics officer (male). On the second day, each team was joined by one or more nurses.

Training participants were evaluated through homework, in-class exercises, quizzes, and observations made during field practice. Ultimately, 120 ( 90 females and 30 males) were selected to serve as interviewers, 30 as nurses, 30 as field logistics officers/drivers, and 30 as team supervisors. The selection of team supervisors was based on their experience in leading survey teams and their performance during the main training. Following their selection, team supervisors received additional instruction and practice using the CAPI system to perform supervisory activities. These activities included assigning households for interviews and receiving completed interviews from interviewers, recognising and dealing with error messages, receiving system updates and distributing updates to interviewers, entering biomarker questionnaires and DBS transmittal sheets, dealing with duplicated cases, closing clusters, and transferring interviews to the Stats SA head office via a secure Internet file streaming system (IFSS).

### 1.8 Fieldwork

Data collection was carried out by 30 field teams, each consisting of one team supervisor, three female interviewers, one male interviewer, one nurse, and one logistics officer/driver. Electronic data files were transferred to the Stats SA head office in Pretoria every day via the secured IFSS. Senior staff from the Stats SA head office and provincial offices coordinated fieldwork activities. Stats SA also led fieldwork supervision, receiving support from SAMRC on the supervision of biomarker collection and from ICF on standard DHS supervision procedures. Field visits made by independent teams from Stats SA's Survey Coordination, Monitoring and Evaluation chief directorate were an important aspect of supervision. At the midpoint of fieldwork, monitoring teams visited 84 completed clusters in four provinces (Gauteng, Free State, Western Cape, and KwaZulu-Natal) to confirm that the correct DUs had been visited, to ensure household members were correctly listed, and to verify nonresponse. Feedback was provided to provincial coordinators, and, where necessary, clusters were revisited. The survey data collection took place from 27 June 2016 to 4 November 2016.

### 1.9 Data Processing and Analysis

All electronic data files for the SADHS 2016 were transferred via the IFSS to the Stats SA head office in Pretoria, where they were stored on a password-protected computer. The data processing operation included secondary editing, which required resolution of computer-identified inconsistencies and coding of
open-ended questions. The data were processed by a core group of four people; secondary editing was completed by 11 people. All persons involved in data processing took part in the main fieldwork training, and they were supervised by senior staff from Stats SA with support from ICF. Data editing was accomplished using CSPro software. Secondary editing was initiated in October 2016 and completed in February 2017. Checking inconsistencies in dates of immunisations was aided by the digital images of the immunisation page of the Road-to-Health booklet that had been collected on the tablet by fieldworkers at the time of the interview for that purpose.

Appropriate analysis weights were calculated, taking the design probabilities and the response rate into account. Standard methods of analysis (Rutstein and Rojas 2006) were applied involving conversion of all dates to century month codes to facilitate calculation of ages at the time of different life events.

### 1.10 Response Rates

Table 1.1 shows response rates for the SADHS 2016. A total of 15,292 households were selected for the sample, of which 13,288 were occupied. Of the occupied households, 11,083 were successfully interviewed, yielding a response rate of $83 \%$.

In the interviewed households, 9,878 eligible women age 15-49 were identified for individual interviews; interviews were completed with 8,514 women, yielding a response rate of $86 \%$. In the subsample of households selected for the male survey, 4,952 eligible men age 15-59 were identified and 3,618 were successfully interviewed, yielding a response rate of $73 \%$. In this same subsample, 12,717 eligible adults age 15 and older were identified and 10,336 were successfully interviewed with the adult health module, ${ }^{4}$ yielding a response rate of $81 \%$. Response rates were consistently lower in urban areas than in nonurban areas.

| Number of households, number of interviews, and response rates, according to residence (unweighted), South Africa DHS 2016 |  |  |  |
| :---: | :---: | :---: | :---: |
| Result | Residence |  | Total |
|  | Urban | Non-urban |  |
| Household interviews |  |  |  |
| Households selected | 9,547 | 5,745 | 15,292 |
| Households occupied | 8,397 | 4,891 | 13,288 |
| Households interviewed | 6,556 | 4,527 | 11,083 |
| Household response rate ${ }^{1}$ | 78.1 | 92.6 | 83.4 |
| Interviews with women age 15-49 |  |  |  |
| Number of eligible women | 5,858 | 4,020 | 9,878 |
| Number of eligible women interviewed | 4,805 | 3,709 | 8,514 |
| Eligible women response rate ${ }^{2}$ | 82.0 | 92.3 | 86.2 |
| Household interviews in subsample selected for male survey and adult health module |  |  |  |
| Households selected | 4,751 | 2,872 | 7,623 |
| Households occupied | 4,164 | 2,426 | 6,590 |
| Households interviewed | 3,240 | 2,237 | 5,477 |
| Household response rate ${ }^{1}$ | 77.8 | 92.2 | 83.1 |
| Interviews with men age 15-59 |  |  |  |
| Number of eligible men | 2,996 | 1,956 | 4,952 |
| Number of eligible men interviewed | 2,021 | 1,597 | 3,618 |
| Eligible men response rate ${ }^{2}$ | 67.5 | 81.6 | 73.1 |
| Interviews with adults age 15+ |  |  |  |
| Number of eligible adults | 7,463 | 5,254 | 12,717 |
| Number of eligible adults interviewed | 5,685 | 4,651 | 10,336 |
| Eligible adults response rate ${ }^{2}$ | 76.2 | 88.5 | 81.3 |
| ${ }^{1}$ Households interviewed/households occupied <br> ${ }^{2}$ Respondents interviewed/eligible respondents |  |  |  |

[^2]
## Key Findings

- Drinking water: 92\% of households use an improved source of water. Nearly all urban households (98\%) use an improved source of water, as compared with only $80 \%$ of non-urban households.
- Availability of water: 31\% of households in South Africa using piped or borehole water reported having a water interruption of at least a single day in the last 2 weeks. Non-urban households are more likely than urban households to report an interruption ( $51 \%$ versus $23 \%$ ).
- Sanitation: 73\% of households use an improved toilet facility, and $22 \%$ use a shared toilet facility of an otherwise acceptable type. Two percent of households use an unimproved facility, and $2 \%$ have no facility.
- Electricity: Nine out of 10 households (90\%) have electricity.
- Household population and composition: 37\% of the household population falls in a dependency age group: $30 \%$ are age $0-14$, and $7 \%$ are age 65 or older. The average household consists of 3.4 members.
- Orphans: Among children under age 18,16\% are orphans (one or both parents are dead), and almost one-quarter (23\%) do not live with either biological parent.
- School attendance: The net attendance ratio declines sharply from $88 \%$ in primary school to $77 \%$ in secondary school. Girls and boys are about equally likely to attend primary and secondary school.
- Disability: Overall, $20 \%$ of the population age 5 and older was reported to have some level of difficulty in at least one functional domain.

Information on the socioeconomic characteristics of the household population in the SADHS 2016 provides a context to interpret demographic and health indicators and can furnish an approximate indication of the representativeness of the survey. In addition, this information sheds light on the living conditions of the population.

This chapter presents information on source of drinking water, sanitation, exposure to smoke inside the home, wealth, handwashing, household population composition, educational attainment, school attendance, family living arrangements, disabilities, and food security among the household population.

### 2.1 Drinking Water Sources and Treatment

## Improved sources of drinking water

Include piped water, public taps, boreholes, protected dug wells and springs, and rainwater. Households that use bottled water for drinking are classified as using an improved source only if the water they use for cooking and hand washing comes from an improved source.
Sample: Households

Improved sources of water protect against outside contamination so that water is more likely to be safe to drink. In South Africa, 92\% of households use an improved source of drinking water; almost all urban households ( $98 \%$ ) report using an improved source of drinking water, as compared with only $80 \%$ of nonurban households (Table 2.1). By province, the proportion of the household population using an improved source of drinking water ranges from a low of $71 \%$ in Eastern Cape to a high of over $99 \%$ in Northern Cape (Figure 2.1).

The most common source of drinking water for both urban and non-urban households is piped water, but the source of piped water differs (Figure 2.2). Among urban households, $62 \%$ use water piped into their dwelling, $24 \%$ use water piped into their yard/plot, and $2 \%$ use water piped to a neighbour. In contrast, only $9 \%$ of non-urban households have water piped into their dwelling, $29 \%$ have water piped into their yard $/$ plot, and $5 \%$ use water piped to a neighbour. One in 10 (9\%) urban households use a public or communal tap, as compared with one in four (25\%) non-urban households. While $0.2 \%$ of urban households use surface water as their source of drinking water, 7\% of non-urban households rely on it.

Overall, 78\% of South African households have water on the premises. Eight percent of households travel 30 minutes or longer to fetch water. Most households ( $92 \%$ ) report that they do not treat their water prior to drinking.

Table 2.2 presents information on the percentage of households using piped water or boreholes that reported availability of water in the last 2 weeks.

Figure 2.1 Improved source of drinking water by province
Percentage of the household population using an improved source of drinking water


Figure 2.2 Household drinking water by residence
Percent distribution of households by source of drinking water


Note: Percentages do not sum to $100 \%$ due to rounding. Thirty-one percent of households in South Africa using piped or borehole water reported having a water interruption of at least a single day in the last 2 weeks. Non-urban households are more likely to report an interruption than urban households ( $51 \%$ versus $23 \%$ ).

Comparison with the SADHS 1998: The percentage of households obtaining water from improved sources increased from $85 \%$ in 1998 to $92 \%$ in 2016. Whereas in 1998 only $39 \%$ of households had water piped into their dwelling and $23 \%$ into their yard or plot, $45 \%$ reported having water piped into their dwelling and $26 \%$
into their yard or plot in 2016. Most of the observed gains in access to improved water sources came from an increase in the proportion of non-urban households using water piped into their yard/plot ( $17 \%$ in 1998 versus $29 \%$ in 2016).

### 2.2 Sanitation

## Improved toilet facilities

Include any non-shared toilet of the following types: flush/pour flush toilets to piped sewer systems, septic tanks, and pit latrines; ventilated improved pit (VIP) latrines; pit latrines with slabs; composting toilets; and chemical toilets.
Sample: Households

As shown in Figure 2.3, nearly three-quarters (73\%) of households in South Africa use improved toilet facilities, which are non-shared facilities that prevent people from coming into contact with human waste and can reduce the transmission of cholera, typhoid, and other diseases. Shared toilet facilities of an otherwise acceptable type are also common, especially in urban areas; $27 \%$ of urban households use a shared facility, as compared with $12 \%$ of nonurban households. Two percent of households in South Africa use unimproved facilities, with an additional $2 \%$ not using any facility (Table 2.3).

Comparison with the SADHS 1998: The percentage of households not using any toilet facility decreased from $12 \%$ in 1998 to $2 \%$ in 2016. Most of this change is due to improvements in non-urban areas; $26 \%$ of non-urban households did not use a toilet facility in 1998, compared with $5 \%$ in 2016.

Figure 2.3 Household toilet facilities by residence


Note: Percentages do not sum to $100 \%$ due to rounding.

### 2.3 Exposure to Smoke inside the Home

Exposure to smoke inside the home, either from cooking with solid fuels or smoking tobacco, has potentially harmful health effects. Thirteen percent of households in South Africa use solid fuels, consisting mostly of wood, for cooking (Table 2.4). Use of solid fuels for cooking is much more common in non-urban areas $(33 \%)$ than urban areas ( $3 \%$ ). Exposure to smoke from cooking is greater when cooking takes place inside the house rather than in a separate building or outdoors. In South Africa, the majority of households (87\%) cook inside their house. Eight percent of households cook in a separate building, and $4 \%$ cook outside.

Exposure to tobacco smoke is common in South Africa. In $20 \%$ of households, someone smokes inside the house on a daily basis, and in $2 \%$ of households, someone smokes inside on a weekly basis.

## Other Housing Characteristics

The survey collected data on access to electricity, dwelling type, flooring materials, wall materials, and the number of rooms used for sleeping. Overall, $90 \%$ of households in South Africa have electricity, and $78 \%$ live in a formal dwelling type. The most common flooring materials are cement ( $39 \%$ of households) and ceramic tiles ( $33 \%$ ), while the most common materials used for walls are bricks ( $32 \%$ ) and cement ( $28 \%$ ). Thirty-five percent of households use one room for sleeping.

## Household Refuse Disposal

As shown in Table 2.5, 57\% of households in South Africa report that their refuse is removed at least once a week, $11 \%$ have their own refuse dump, and $20 \%$ burn their refuse. Households in non-urban areas are far more likely than those in urban areas to use their own refuse dump ( $25 \%$ versus $5 \%$ ) or burn their refuse ( $54 \%$ versus $4 \%$ ). Refuse burning is especially common in Limpopo and Mpumalanga ( $48 \%$ and $45 \%$, respectively).

### 2.4 Household Wealth

## Household Durable Goods

The survey collected information on household effects, means of transportation, and ownership of farm animals. As shown in Table 2.6, $96 \%$ of households own a cellphone, $84 \%$ an electric or gas stove, $77 \%$ a television, $61 \%$ a radio, and $22 \%$ a computer. Almost 3 in 10 households own an automobile ( $29 \%$ ), and $8 \%$ own a bicycle. Non-urban households are much more likely to own farm animals than urban households (38\% versus 5\%).

## Wealth Index


#### Abstract

Wealth index Households are given scores based on the number and kinds of consumer goods they own, ranging from a television to a bicycle or car, and housing characteristics such as source of drinking water, toilet facilities, and flooring materials. These scores are derived using principal component analysis. National wealth quintiles are compiled by assigning the household score to each usual (de jure) household member, ranking each person in the household population by her or his score, and then dividing the distribution into five equal categories, each comprising 20\% of the population.


Sample: Households

Table 2.7 presents the distribution of the de jure household population by wealth quintile according to residence and province. In South Africa, urban households are more likely than non-urban households to fall into the higher wealth quintiles, while non-urban households are more likely to fall into the lower wealth quintiles. Fifty-nine percent of the urban population is in the two highest wealth quintiles. By contrast, $73 \%$ of the non-urban population falls in the two lowest wealth quintiles (Figure 2.4). Wealth varies widely by province. Seventy-eight percent of the population in Western Cape is in the two highest wealth quintiles, as compared with only $14 \%$ of the population in Limpopo. Forty-two percent of the population in Eastern Cape is in the lowest wealth quintile, compared with only $3 \%$ in Western Cape.

Figure 2.4 Household wealth by residence
Percent distribution of de jure population by wealth quintiles


### 2.5 Handwashing

Handwashing is an important step in improving hygiene and preventing the spread of disease. Rather than asking direct questions on the practice of handwashing, which can be subject to overreporting, interviewers in the SADHS 2016 asked to see the place where members of the household most often wash their hands. A
place for washing hands was observed in $85 \%$ of households (Table 2.8). In half (50\%) of the households where a place for handwashing was observed, interviewers observed soap and water. One-third of handwashing locations ( $34 \%$ ) had water but no soap, $1 \%$ had soap but no water, and $14 \%$ did not have soap, water, or any other cleaning agents. The percentage of households with a place for handwashing in which no water, soap, or other cleansing agent was observed was markedly higher in non-urban areas than urban areas ( $26 \%$ and $9 \%$, respectively).

### 2.6 Household Population and Composition

## Household

A person or group of related or unrelated persons who live together in the same dwelling unit(s), who acknowledge one adult male or female as the head of the household, who share the same housekeeping arrangements, and who are considered a single unit.

## De facto population

All persons who stayed in the selected households the night before the interview (whether usual residents or visitors).

## De jure population

All persons who are usual residents of the selected households, whether or not they stayed in the household the night before the interview.

## How data are calculated

All tables are based on the de facto population, unless otherwise specified.

A total of 37,128 individuals stayed overnight in the 11,083 sample households in the SADHS 2016. Fifty-two percent $(19,407)$ were female, and $48 \%(17,721)$ were male (Table 2.9). The population pyramid in Figure 2.5 illustrates the distribution by 5 -year age groups and sex. Children under age 15 account for $30 \%$ of the population, while individuals age 65 and older make up only $7 \%$.

As shown in Table 2.10, the majority of households in South Africa are male-headed (57\%). The average household consists of 3.4 usual members. Non-urban households are on average larger than urban households (3.8 and 3.1 persons per household, respectively). Overall, $22 \%$ of households in South Africa are caring for foster or orphaned children.

Comparison with the SADHS 1998: The percentage of the population below age 15 decreased from 38\% in 1998 to $30 \%$ in 2016 , while the percentage of the population age 65 or older held relatively steady, increasing from $6 \%$ in 1998 to $7 \%$ in 2016. Over this same period, the average household size decreased from 4.2 persons to 3.4 persons, while there was essentially no change in the percentage of female-headed
households ( $42 \%$ in 1998 versus $43 \%$ in 2016). The percentage of households with foster and/or orphan children dropped from $28 \%$ in 1998 to $22 \%$ in 2016.

### 2.7 Children's Living Arrangements and Parental Survival

## Orphan

A child with one or both parents who are dead.
Sample: Children under age 18

Twenty-eight percent of children under age 18 are living with both parents, and $23 \%$ are not living with a biological parent (Table 2.11). Sixteen percent of children under age 18 are orphans, meaning that one or both parents have died. The percentage of children who are orphans rises rapidly with age, from $2 \%$ among children under age 2 to $13 \%$ among children age 5-9 and $32 \%$ among children age 15-17 (Figure 2.6). Free State has the highest percentage of children who are orphans (25\%).

Comparison with the SADHS 2016: The percentage of children under age 15 living with both parents decreased from $33 \%$ in 1998 to $29 \%$ in 2016, while the percentage not living with a biological parent decreased from $25 \%$ to $22 \%$. The percentage of children under age 15 who are orphans increased from $10 \%$ to $14 \%$.

### 2.8 Education

### 2.8.1 Educational Attainment

## Median educational attainment

Half of the population has completed less than the median number of years of schooling, and half of the population has completed more than the median number of years of schooling.
Sample: De facto household population age 6 and older

Tables 2.12.1 and 2.12.2 present information on educational attainment among the household population age 6 and over. Overall, $9 \%$ of women and girls age 6 and over have never been to school, $22 \%$ have attended some primary school, $6 \%$ have completed primary but advanced no further, $34 \%$ have attended some secondary school, $19 \%$ have completed secondary school but advanced no further, and $9 \%$ have attained some education after secondary school. Women and girls age 6 and over have completed a median of 8.8 years of schooling.

Educational attainment among men and boys is similar to that among women and girls. Eight percent of men and boys age 6 and over have never attended school, $25 \%$ have attended some primary school, $6 \%$ have completed primary school, $33 \%$ have attended some secondary school, $19 \%$ have completed secondary school, and $8 \%$ have attained some education after secondary school. Men and boys age 6 and over have completed a median of 8.5 years of schooling.

Comparison with the SADHS 1998: Educational attainment at the household level has increased since 1998. Among women and girls age 6 and over, the percentage who have never attended school has decreased from $14 \%$ to $9 \%$, and the median number of years of schooling has increased from 6.4 to 8.8. Among men
and boys age 6 and over, the percentage who have never attended school has decreased from $11 \%$ to $8 \%$, and the median number of years of schooling completed has increased from 6.4 to 8.5 .

## Patterns by background characteristics

- The median number of years of schooling is higher in urban areas than in non-urban areas among both females ( 9.6 years versus 7.0 years) and males ( 9.4 years versus 6.7 years).
- The percentage of females and males with no education is higher in non-urban areas than urban areas ( $14 \%$ versus $7 \%$ for females and $10 \%$ versus $6 \%$ for males).
- Educational attainment increases with increasing household wealth. Females in the lowest wealth quintile have completed a median of 6.3 years of schooling, as compared with a median of 11.2 years among females in the highest wealth quintile. The median number of years of schooling increases from 6.2 years among males in the lowest wealth quintile to 11.1 among those in the highest quintile.
- Among both females and males, the median number of years of schooling is highest in Gauteng (10.1 years and 9.7 years, respectively) and lowest in Eastern Cape ( 7.4 years and 7.1 years, respectively).


### 2.8.2 School Attendance

## Net attendance ratio (NAR)

Percentage of the school-age population that attends primary or secondary school
Sample: Children age 7-13 for primary school NAR and children age 14-18 for secondary school NAR

## Gross attendance ratio (GAR)

The total number of children attending primary school divided by the official primary school-age population and the total number of children attending secondary school divided by the official secondary school-age population.
Sample: Children age 7-13 for primary school GAR and children age 14-18 for secondary school GAR

School attendance ratios are shown in Table 2.13. Eighty-seven percent of girls age 7-13 attend primary school, as compared with $90 \%$ of boys. The net attendance ratio (NAR) drops in secondary school: $77 \%$ of boys and $76 \%$ of girls attend secondary school.

The gross attendance ratio (GAR) for primary school is 109 for girls and 115 for boys; the GAR for secondary school is 110 for girls and 108 for boys. These figures indicate that a number of children outside the official school-age population for that level are attending primary or secondary school.

## Gender parity indices (GPI)

The ratio of female to male students attending primary school and the ratio of female to male students attending secondary school. Each index reflects the magnitude of the gender gap.
Sample: Primary school students and secondary school students

The gender parity index (GPI) for the GAR at the primary school level is 0.95 , indicating that in primary school there are slightly more male students than female students. However, at the secondary school level, the GPI for the GAR is 1.01 , indicating that there is little disparity in secondary school attendance between boys and girls.

## Age-specific attendance rate (ASAR)

Children and young people attending school, irrespective of whether they are attending the appropriate grade for their age.
Sample: De facto household population age 5-24 attending school

ASARs for the population age 5 to 24 are presented in Figure 2.7 by age and sex. The ASAR indicates participation in schooling at any level, from primary to higher levels of education. The patterns are generally the same for males and females. By age 6,7 in 10 children attend school. Between age 7 and age 16 , more than $90 \%$ of children attend school. The attendance rate declines rapidly from age 17 to 24 .

Patterns by background characteristics

Figure 2.7 Age-specific attendance rates
Percentage of the de facto household population age 5-24 attending school


- At the primary school level, there is little difference in the NAR between non-urban and urban areas ( $89 \%$ and $88 \%$, respectively). However, at the secondary school level, the NAR is modestly higher in non-urban areas than in urban areas ( $79 \%$ versus $75 \%$ ).
- Among provinces, Limpopo has the highest NAR and GAR at the secondary school level ( $87 \%$ and $135 \%$, respectively), and Western Cape has the lowest ( $71 \%$ and $92 \%$, respectively).


### 2.9 Disability

The SADHS 2016 included The DHS Program's disability module, a series of questions from the Washington Group on Disability Statistics (WG) that are based on the framework of the World Health Organization's International Classification of Functioning, Disability, and Health. The questions address six core functional domains-seeing, hearing, communication, cognition, walking, and self-care-and provide basic necessary information on disability comparable to that being collected worldwide via the WG disability tools.

### 2.9.1 Disability by Domain and Age

The respondent to the Household Questionnaire provided information for all household members and visitors on whether they had no difficulty, some difficulty, a lot of difficulty, or no ability at all in each of the functional domains. Results, based on 33,155 persons, are presented in Table $\mathbf{2 . 1 4}$ for the de facto household population age 5 and older.

## Functional domains

Seeing, hearing, communicating, remembering or concentrating, walking or climbing steps, and washing all over or dressing.
Sample: De facto household population age 5 or above

Overall, $20 \%$ of the population age 5 and older was reported to have some level of difficulty in at least one functional domain. Six percent of the population was reported to either have a lot of difficulty functioning
in at least one domain or could not function in a domain at all. Those age 60 or older ( $23 \%$ ) were much more likely than other age groups to have a lot of difficulty or not be able to function in at least one domain.

The most common disability was having difficulty seeing ( $12 \%$ ), followed by having difficulty walking or climbing steps ( $6 \%$ ) and difficulty remembering or concentrating (6\%).

### 2.9.2 Disability by Background Characteristics

Table 2.15 presents disability data among the de facto household population age 5 and older by background characteristics. Women are slightly more likely than men to have difficulties in any functional domain; $22 \%$ of women have at least some level of disability in any domain, as compared with $18 \%$ of men. The percentage of the population in non-urban areas with one or more disability is greater than the percentage in urban areas ( $23 \%$ versus $19 \%$ ). Surprisingly, among those receiving a disability grant, $43 \%$ are reported to have no difficulty in any domain.

### 2.10 Social Grants and Food Security

### 2.10.1 Social Grants by Background Characteristics

A social grant is a sum of money typically paid monthly by the government to qualifying citizens. The types of grants available range from old age grants to social relief of distress. Seventy-one percent of South African households know at least one place where they can obtain social grant forms (Table 2.16). Among these households, $97 \%$ named the South African Social Security Agency (SASSA), the Department of Social Development (DSD), or a social development office as a place where grant forms can be obtained. Post offices, banks, magistrate's courts, and pay points are among the other places where forms can be obtained, but less than $3 \%$ of households named any of these locations.

The respondent to the Household Questionnaire was asked whether household members and visitors to the household received any social grants and, if so, which types. Overall, $35 \%$ of the household population receives at least one type of grant (Table 2.17). Child support is the most common type of grant, received by $24 \%$ of the household population.

## Patterns by background characteristics

- Non-urban households are more likely to know where to obtain forms for social grants than urban households ( $78 \%$ versus 68\%) (Table 2.16).
- Children age 0-17 (67\%-70\%) and adults age 60 and older $(77 \%)$ are much more likely than those in other age groups to receive a grant (Figure 2.8).
- Receipt of grants does not differ by sex; $35 \%$ of the male and female household population receives some type of social grant (Table 2.17).
- Receipt of a social grant is more common among persons living in non-urban than urban households ( $48 \%$ versus $27 \%$ ).
- The proportion of the household population that receives a social grant is highest in Eastern Cape and Limpopo (45\% each) and lowest in Gauteng ( $23 \%$ ).
- Receipt of social grants decreases with increasing household wealth. Forty-seven percent of the household population in the lowest wealth quintile receives social grants, as compared with $15 \%$ in the highest quintile


### 2.10.2 Food Security by Background Characteristics

Households were asked two questions related to food security. First, they were asked whether any adults in the household had gone hungry in the past 12 months because there was not enough food. Second, they were asked whether any child in the household had gone hungry in the past 12 months.

Nearly all households included at least one adult, and among these households $82 \%$ had never experienced problems satisfying adult food needs in the past 12 months, $4 \%$ seldom experienced problems, $11 \%$ sometimes experienced problems, $2 \%$ often experienced problems, and $1 \%$ always experienced problems (Table 2.18).

Among the households interviewed, only $53 \%$ had children age $0-17$ as household members. Among these households, $80 \%$ reported never experiencing problems satisfying child food needs in the past 12 months, $4 \%$ seldom experienced problems, $11 \%$ sometimes experienced problems, $2 \%$ often experienced problems, and $1 \%$ always experienced problems (Table 2.19).

## List of TAbles

For more information on household population and housing characteristics, see the following tables:

- Table 2.1 Household drinking water
- Table 2.2 Availability of water
- Table 2.3 Household sanitation facilities
- Table 2.4 Household characteristics
- Table 2.5 Household refuse disposal
- Table 2.6 Household possessions
- Table 2.7 Wealth quintiles
- Table 2.8 Handwashing
- Table 2.9 Household population by age, sex, and residence
- Table 2.10 Household composition
- Table 2.11 Children's living arrangements and orphanhood
- Table 2.12.1 Educational attainment of the female household population
- Table 2.12.2 Educational attainment of the male household population
- Table 2.13 School attendance ratios
- Table 2.14 Disability by domain and age
- Table 2.15 Disability among the household population according to background characteristics
- Table 2.16 Knowledge of where social grant forms may be obtained
- Table 2.17 Social grants
- Table 2.18 Food security: Adults
- Table 2.19 Food security: Children

Table 2.1 Household drinking water
Percent distribution of households and de jure population by source of drinking water and by time to obtain drinking water, percentage of households and de jure population using various methods to treat drinking water, and percentage using an appropriate treatment method, according to residence, South Africa DHS 2016

| Characteristic | Households |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Total | Urban | Non-urban | Total |
| Source of drinking water |  |  |  |  |  |  |
| Improved source | 98.1 | 79.6 | 92.2 | 98.5 | 76.3 | 90.4 |
| Piped into dwelling | 61.8 | 9.3 | 45.1 | 66.6 | 8.5 | 45.5 |
| Piped into yard/plot | 24.4 | 28.5 | 25.7 | 22.0 | 27.5 | 24.0 |
| Piped to neighbour | 1.6 | 5.4 | 2.8 | 1.4 | 5.2 | 2.8 |
| Public/communal tap | 8.9 | 25.1 | 14.1 | 7.3 | 24.7 | 13.6 |
| Borehole | 0.3 | 8.1 | 2.8 | 0.2 | 7.4 | 2.8 |
| Protected well | 0.0 | 0.5 | 0.2 | 0.0 | 0.5 | 0.2 |
| Protected spring | 0.1 | 0.8 | 0.3 | 0.1 | 0.9 | 0.4 |
| Rainwater | 0.0 | 1.6 | 0.5 | 0.0 | 1.3 | 0.5 |
| Bottled water, improved source for cooking/handwashing ${ }^{1}$ | 1.1 | 0.3 | 0.8 | 0.9 | 0.2 | 0.6 |
| Unimproved source | 1.7 | 19.9 | 7.5 | 1.3 | 23.3 | 9.3 |
| Unprotected well | 0.0 | 3.9 | 1.3 | 0.0 | 5.0 | 1.8 |
| Unprotected spring | 0.1 | 2.6 | 0.9 | 0.1 | 3.1 | 1.2 |
| Water carrier/tanker truck | 1.4 | 3.8 | 2.1 | 1.0 | 3.7 | 2.0 |
| Cart with small tank/water vendor | 0.1 | 2.4 | 0.8 | 0.0 | 2.3 | 0.9 |
| Surface water | 0.2 | 7.0 | 2.3 | 0.2 | 9.1 | 3.4 |
| Bottled water, unimproved source for cooking/handwashing ${ }^{1}$ | 0.1 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 |
| Other source | 0.2 | 0.5 | 0.3 | 0.1 | 0.4 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Time to obtain drinking water (round trip) |  |  |  |  |  |  |
| Water on premises ${ }^{2}$ | 90.0 | 51.8 | 77.8 | 91.8 | 48.7 | 76.1 |
| Less than 30 minutes | 8.3 | 25.9 | 13.9 | 6.6 | 26.4 | 13.8 |
| 30 minutes or longer | 1.6 | 20.6 | 7.7 | 1.5 | 23.4 | 9.5 |
| Don't know | 0.1 | 1.6 | 0.6 | 0.1 | 1.5 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Water treatment prior to drinking ${ }^{3}$ |  |  |  |  |  |  |
| Boiled | 5.4 | 3.6 | 4.8 | 5.3 | 3.4 | 4.6 |
| Bleach/chlorine added | 0.5 | 2.8 | 1.2 | 0.4 | 3.0 | 1.3 |
| Strained through cloth | 0.0 | 0.1 | 0.1 | 0.0 | 0.1 | 0.0 |
| Ceramic, sand, or other filter | 1.9 | 0.5 | 1.4 | 1.7 | 0.4 | 1.2 |
| Solar disinfection | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Let stand and settle | 0.4 | 0.9 | 0.5 | 0.4 | 1.1 | 0.7 |
| Other | 0.2 | 0.1 | 0.2 | 0.2 | 0.1 | 0.2 |
| No treatment | 91.8 | 92.1 | 91.9 | 92.1 | 92.3 | 92.2 |
| Percentage using an appropriate treatment method ${ }^{4}$ | 7.6 | 6.6 | 7.3 | 7.3 | 6.2 | 6.9 |
| Number of households/population | 7,542 | 3,541 | 11,083 | 23,656 | 13,549 | 37,205 |

${ }^{1}$ Households using bottled water for drinking are classified as using an improved or unimproved source according to their water source for cooking and handwashing
${ }^{2}$ Includes water piped to a neighbour
${ }^{3}$ Respondents may report multiple treatment methods, so the sum of treatment may exceed 100\%
${ }^{4}$ Appropriate water treatment methods include boiling, bleaching, filtering, and solar disinfecting

## Table 2.2 Availability of water

Percent distribution of households and de jure population using piped water or water from a borehole, by availability of water in the last 2 weeks, according to residence, South Africa DHS 2016

| Availability of water in last 2 weeks | Households |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Total | Urban | Non-urban | Total |
| Not available for at least 1 day | 22.8 | 51.4 | 30.5 | 24.0 | 54.9 | 33.3 |
| Available with no interruption of at least 1 day | 75.9 | 47.6 | 68.3 | 74.9 | 44.1 | 65.6 |
| Don't know | 1.3 | 1.0 | 1.2 | 1.1 | 1.0 | 1.1 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number using piped water or water from a borehole ${ }^{1}$ | 7,392 | 2,713 | 10,105 | 23,287 | 9,953 | 33,240 |

${ }^{1}$ Includes households/population reporting piped water or water from a borehole as their main source of drinking water and households/population reporting bottled water as their main source of drinking water if their main source of water for cooking and handwashing is piped water or water from a borehole

## Table 2.3 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities and percent distribution of households and de jure population with a toilet/latrine facility by location of the facility, according to residence, South Africa DHS 2016

| Type and location of toilet/latrine facility | Households |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Total | Urban | Non-urban | Total |
| Improved sanitation | 69.5 | 81.4 | 73.3 | 77.8 | 86.6 | 81.0 |
| Flush/pour flush to piped sewer system | 60.0 | 7.1 | 43.1 | 67.6 | 6.1 | 45.2 |
| Flush/pour flush to septic tank | 0.9 | 1.7 | 1.2 | 1.0 | 1.2 | 1.0 |
| Flush/pour flush to pit latrine | 0.9 | 0.7 | 0.9 | 0.8 | 0.6 | 0.7 |
| Ventilated improved pit (VIP) latrine | 1.1 | 14.8 | 5.5 | 1.0 | 16.4 | 6.6 |
| Pit latrine with ventilation pipe but no gauze mesh/netting | 1.1 | 19.5 | 7.0 | 1.2 | 22.4 | 8.9 |
| Pit latrine with a slab without ventilation pipe | 5.2 | 36.2 | 15.1 | 5.9 | 38.5 | 17.8 |
| Composting toilet/ecological sanitation system | 0.3 | 1.4 | 0.6 | 0.3 | 1.4 | 0.7 |
| Unimproved sanitation | 30.5 | 18.6 | 26.7 | 22.2 | 13.4 | 19.0 |
| Shared facility ${ }^{1}$ | 26.9 | 11.9 | 22.1 | 19.4 | 7.2 | 14.9 |
| Flush/pour flush to piped sewer system | 19.3 | 1.8 | 13.7 | 14.0 | 0.7 | 9.1 |
| Flush/pour flush to septic tank | 0.5 | 0.7 | 0.6 | 0.4 | 0.2 | 0.3 |
| Flush/pour flush to pit latrine | 0.5 | 0.1 | 0.4 | 0.3 | 0.1 | 0.2 |
| Ventilated improved pit (VIP) latrine | 0.4 | 1.1 | 0.7 | 0.3 | 0.7 | 0.5 |
| Pit latrine with ventilation pipe but no gauze mesh/netting | 0.5 | 2.0 | 1.0 | 0.6 | 1.6 | 1.0 |
| Pit latrine with a slab without ventilation pipe | 4.2 | 6.1 | 4.8 | 2.8 | 3.8 | 3.2 |
| Composting toilet/ecological sanitation system | 0.6 | 0.0 | 0.4 | 0.4 | 0.0 | 0.3 |
| Chemical toilet | 0.9 | 0.1 | 0.6 | 0.6 | 0.0 | 0.4 |
| Unimproved facility | 2.5 | 1.3 | 2.2 | 2.1 | 1.3 | 1.8 |
| Flush/pour flush not to sewer/septic tank/pit latrine | 0.6 | 0.4 | 0.6 | 0.5 | 0.3 | 0.4 |
| Bucket | 1.9 | 0.9 | 1.6 | 1.6 | 0.9 | 1.4 |
| Open defecation (no facility/bush/field) | 1.0 | 5.4 | 2.4 | 0.7 | 4.9 | 2.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households/population | 7,542 | 3,541 | 11,083 | 23,656 | 13,549 | 37,205 |
| Location of toilet facility |  |  |  |  |  |  |
| In own dwelling | 55.9 | 12.4 | 42.4 | 59.0 | 11.2 | 42.1 |
| In own yard/plot | 37.7 | 84.6 | 52.2 | 36.1 | 86.5 | 54.0 |
| Elsewhere | 6.5 | 3.1 | 5.4 | 4.9 | 2.3 | 4.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households/population with a toilet/latrine facility | 7,468 | 3,351 | 10,819 | 23,486 | 12,885 | 36,371 |

${ }^{1}$ Facilities that would be considered improved if they were not shared by two or more households

Table 2.4 Household characteristics
Percent distribution of households and de jure population by housing characteristics, percentage using solid fuel for cooking, percentage using clean fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, South Africa DHS 2016

| Housing characteristic | Households |  |  | Population |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Total | Urban | Non-urban | Total |
| Electricity |  |  |  |  |  |  |
| Yes | 91.6 | 86.6 | 90.0 | 93.6 | 85.9 | 90.8 |
| No | 8.4 | 13.4 | 10.0 | 6.4 | 14.1 | 9.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Dwelling type |  |  |  |  |  |  |
| Formal | 78.5 | 76.3 | 77.8 | 81.6 | 75.7 | 79.5 |
| Traditional | 0.3 | 16.3 | 5.4 | 0.3 | 18.7 | 7.0 |
| Informal | 20.3 | 6.5 | 15.9 | 17.2 | 5.0 | 12.8 |
| Other | 0.8 | 1.0 | 0.9 | 0.8 | 0.5 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Flooring material |  |  |  |  |  |  |
| Earth, sand | 0.8 | 2.0 | 1.2 | 0.5 | 2.3 | 1.2 |
| Dung | 0.4 | 7.0 | 2.5 | 0.3 | 7.9 | 3.1 |
| Wood/planks | 1.9 | 0.4 | 1.4 | 1.6 | 0.3 | 1.2 |
| Laminated or polished wood | 2.5 | 0.7 | 2.0 | 2.5 | 0.4 | 1.8 |
| Vinyl or asphalt strips | 8.6 | 5.5 | 7.6 | 8.2 | 5.1 | 7.1 |
| Ceramic tiles | 39.5 | 17.8 | 32.6 | 44.5 | 19.3 | 35.3 |
| Cement | 31.1 | 54.9 | 38.7 | 29.2 | 54.2 | 38.3 |
| Carpet | 14.6 | 11.2 | 13.5 | 12.6 | 10.1 | 11.7 |
| Other | 0.6 | 0.5 | 0.5 | 0.5 | 0.2 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Wall material |  |  |  |  |  |  |
| No walls | 1.8 | 2.0 | 1.9 | 1.5 | 1.9 | 1.6 |
| Dirt/mud | 0.7 | 9.8 | 3.6 | 0.6 | 11.1 | 4.4 |
| Plastic | 0.7 | 0.1 | 0.5 | 0.6 | 0.2 | 0.4 |
| Wattle and daub | 0.1 | 0.3 | 0.1 | 0.1 | 0.4 | 0.2 |
| Stone with mud | 0.2 | 1.0 | 0.4 | 0.1 | 1.4 | 0.6 |
| Mud with cement mix | 0.7 | 4.2 | 1.8 | 0.7 | 4.5 | 2.1 |
| Cardboard | 1.0 | 0.3 | 0.8 | 0.7 | 0.2 | 0.5 |
| Reused wood | 0.8 | 0.2 | 0.6 | 0.7 | 0.2 | 0.5 |
| Cement | 23.3 | 37.0 | 27.7 | 24.6 | 37.2 | 29.2 |
| Stone with lime/cement | 3.4 | 3.3 | 3.4 | 3.5 | 3.4 | 3.4 |
| Bricks | 36.1 | 22.0 | 31.6 | 37.5 | 21.1 | 31.5 |
| Cement block/concrete | 13.6 | 12.8 | 13.4 | 14.1 | 13.1 | 13.8 |
| Wood planks | 1.0 | 0.2 | 0.7 | 1.0 | 0.2 | 0.7 |
| Corrugated iron/zinc | 15.9 | 5.6 | 12.6 | 13.6 | 4.2 | 10.1 |
| Other | 0.8 | 1.1 | 0.9 | 0.8 | 1.1 | 1.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Rooms used for sleeping 2383 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Two | 33.8 | 27.4 | 31.7 | 37.2 | 26.5 | 33.3 |
| Three or more | 27.9 | 44.3 | 33.1 | 37.3 | 56.8 | 44.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Place for cooking |  |  |  |  |  |  |
| In the house | 97.3 | 64.7 | 86.9 | 97.1 | 57.8 | 82.8 |
| In a separate building | 1.6 | 22.6 | 8.3 | 2.0 | 28.8 | 11.7 |
| Outdoors | 0.7 | 11.9 | 4.3 | 0.8 | 13.2 | 5.3 |
| No food cooked in household | 0.3 | 0.7 | 0.4 | 0.1 | 0.2 | 0.2 |
| Other | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Cooking fuel |  |  |  |  |  |  |
| Electricity from mains | 85.2 | 58.3 | 76.6 | 86.1 | 52.7 | 73.9 |
| Electricity from other sources | 0.6 | 0.2 | 0.5 | 0.6 | 0.2 | 0.4 |
| Gas | 4.4 | 3.6 | 4.1 | 4.6 | 3.3 | 4.1 |
| Paraffin | 6.8 | 3.8 | 5.9 | 5.3 | 2.4 | 4.3 |
| Coal | 0.7 | 1.4 | 0.9 | 0.7 | 2.2 | 1.3 |
| Wood | 1.6 | 31.7 | 11.2 | 2.0 | 38.8 | 15.4 |
| Agricultural crop | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Animal dung | 0.4 | 0.2 | 0.3 | 0.5 | 0.2 | 0.4 |
| Other | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 |
| No food cooked in household | 0.3 | 0.7 | 0.4 | 0.1 | 0.2 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Percentage using solid fuel for cooking ${ }^{1}$ | 2.6 | 33.4 | 12.5 | 3.2 | 41.2 | 17.0 |
| Percentage using clean fuel for cooking ${ }^{2}$ | 90.2 | 62.0 | 81.2 | 91.3 | 56.1 | 78.5 |
| Frequency of smoking in the home |  |  |  |  |  |  |
| Daily | 22.0 | 16.8 | 20.3 | 22.5 | 16.2 | 20.2 |
| Weekly | 2.3 | 2.5 | 2.3 | 2.2 | 2.5 | 2.3 |
| Monthly | 0.3 | 0.3 | 0.3 | 0.3 | 0.4 | 0.3 |
| Less than once a month | 0.8 | 0.9 | 0.9 | 0.8 | 1.0 | 0.9 |
| Never | 74.6 | 79.5 | 76.2 | 74.2 | 80.0 | 76.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of households/population | 7,542 | 3,541 | 11,083 | 23,656 | 13,549 | 37,205 |

[^3]Table 2.5 Household refuse disposal
Percent distribution of households by household refuse removal, according to background characteristics, South Africa DHS 2016

| Characteristic | Removed at least once a week | Removed less than once a week | Communal refuse dump | Communal container/ central collection point | Own refuse dump | Own refuse burned | No rubbish disposal | Other | Total | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 78.3 | 4.9 | 4.6 | 2.2 | 4.5 | 4.4 | 0.9 | 0.2 | 100.0 | 7,542 |
| Non-urban | 12.1 | 1.1 | 4.0 | 0.9 | 25.1 | 53.7 | 2.7 | 0.4 | 100.0 | 3,541 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 89.0 | 1.1 | 2.0 | 4.8 | 1.6 | 1.0 | 0.4 | 0.1 | 100.0 | 1,206 |
| Eastern Cape | 35.5 | 2.2 | 3.3 | 2.3 | 18.8 | 34.7 | 3.1 | 0.1 | 100.0 | 1,301 |
| Northern Cape | 61.8 | 1.6 | 3.1 | 0.7 | 10.6 | 19.8 | 2.3 | 0.0 | 100.0 | 210 |
| Free State | 76.3 | 3.1 | 2.6 | 0.1 | 6.5 | 7.1 | 3.9 | 0.4 | 100.0 | 579 |
| KwaZulu-Natal | 50.5 | 2.5 | 1.4 | 1.5 | 14.0 | 28.6 | 0.9 | 0.5 | 100.0 | 1,968 |
| North West | 52.8 | 1.2 | 8.4 | 0.9 | 11.6 | 22.4 | 2.0 | 0.8 | 100.0 | 833 |
| Gauteng | 76.5 | 7.4 | 7.1 | 1.7 | 6.2 | 1.1 | 0.0 | 0.0 | 100.0 | 3,047 |
| Mpumalanga | 28.8 | 6.9 | 3.8 | 1.3 | 11.9 | 45.2 | 2.1 | 0.0 | 100.0 | 851 |
| Limpopo | 19.8 | 0.5 | 5.1 | 1.3 | 22.1 | 47.7 | 3.1 | 0.4 | 100.0 | 1,087 |
| Total | 57.1 | 3.7 | 4.4 | 1.8 | 11.1 | 20.1 | 1.4 | 0.3 | 100.0 | 11,083 |

Table 2.6 Household possessions
Percentage of households possessing various household effects, means of transportation, and livestock/farm animals by residence South Africa DHS 2016

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Possession | Urban | Non-urban | Total |
| Household effects |  |  |  |
| Radio | 63.1 | 55.9 | 60.8 |
| Television | 81.8 | 66.2 | 76.8 |
| Cellphone | 95.8 | 95.4 | 9.7 |
| Computer | 27.7 | 9.1 | 21.8 |
| Non-mobile telephone | 11.0 | 1.0 | 7.8 |
| Refrigerator | 77.9 | 67.8 | 74.7 |
| Vacuum cleaner/floor polisher | 17.4 | 4.2 | 13.2 |
| Microwave oven | 58.6 | 33.1 | 50.5 |
| Electric/gas stove | 88.2 | 74.0 | 83.7 |
| Washing machine | 44.0 | 17.2 | 35.4 |
| A watch | 52.5 | 30.2 | 45.4 |
| Means of transport |  |  |  |
| Bicycle | 8.9 | 5.4 | 7.8 |
| Animal-drawn cart | 1.0 | 1.3 | 1.1 |
| Motorcycle/scooter | 3.1 | 0.9 | 2.4 |
| Car/bakkie/van/truck | 34.3 | 16.8 | 28.7 |
| Boat with a motor | 0.7 | 0.3 | 0.6 |
| Ownership of farm animals ${ }^{1}$ | 4.5 | 38.2 | 15.2 |
| Number | 7.542 | 3,541 | 11,083 |

${ }^{1}$ Cattle, horses, donkeys, goats, sheep, pigs, chickens, or other poultry

## Table 2.7 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to residence and province, South Africa DHS 2016

|  | Wealth quintile |  |  |  |  |  |  | Number of <br> persons |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Residence/province | Lowest | Second | Middle | Fourth | Highest |  | Total |  |
| Residence |  |  |  |  |  |  |  |  |
| $\quad$ Urban | 9.6 | 11.5 | 19.5 | 28.7 | 30.7 | 100.0 | 23,656 | 0.14 |
| $\quad$ Non-urban | 38.2 | 34.8 | 20.9 | 4.7 | 1.3 | 100.0 | 13,549 | 0.23 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 2.7 | 7.5 | 11.8 | 32.1 | 45.8 | 100.0 | 4,071 | 0.14 |
| Eastern Cape | 42.4 | 16.8 | 14.8 | 17.0 | 9.0 | 100.0 | 4,728 | 0.31 |
| Northern Cape | 11.8 | 18.9 | 23.7 | 29.0 | 16.7 | 100.0 | 784 | 0.18 |
| Free State | 8.0 | 11.5 | 31.8 | 32.7 | 16.1 | 100.0 | 1,967 | 0.17 |
| KwaZulu-Natal | 25.5 | 22.6 | 20.6 | 15.8 | 15.4 | 100.0 | 6,939 | 0.28 |
| North West | 14.7 | 29.1 | 30.3 | 18.7 | 7.3 | 100.0 | 2,534 | 0.16 |
| Gauteng | 12.3 | 12.9 | 19.0 | 24.0 | 31.9 | 100.0 | 9,293 | 0.14 |
| Mpumalanga | 23.9 | 29.3 | 26.5 | 12.3 | 8.0 | 100.0 | 3,011 | 0.22 |
| Limpopo | 27.6 | 40.7 | 17.8 | 7.7 | 6.2 | 100.0 | 3,880 | 0.24 |
| Total | 20.0 | 20.0 | 20.0 | 20.0 | 20.0 | 100.0 | 37,205 | 0.20 |

${ }^{1}$ The Gini coefficient presented is based on household wealth, not income

## Table 2.8 Handwashing

Percentage of households in which the place most often used for washing hands was observed by whether the location was fixed or mobile and total percentage of households in which the place for handwashing was observed, and among households in which the place for handwashing was observed, percent distribution by availability of water, soap, and other cleansing agents, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of households in which place for washing hands was observed: |  |  | Number of households | Among households in which place for handwashing was observed, percentage with: |  |  |  |  |  |  | Number of households in which a place for handwashing was observed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | And place for handwashing was a fixed place | And place for handwashing was mobile | Total |  | Soap and water ${ }^{1}$ | Water and cleansing agent other than soap only ${ }^{2}$ | Water only | Soap but no water ${ }^{3}$ | Cleansing agent other than soap only ${ }^{2}$ | No water, no soap, no other cleansing agent | Total |  |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 67.3 | 19.7 | 87.0 | 7,542 | 57.0 | 1.1 | 31.8 | 1.3 | 0.0 | 8.8 | 100.0 | 6,560 |
| Non-urban | 27.9 | 54.2 | 82.1 | 3,541 | 34.5 | 0.7 | 37.7 | 1.3 | 0.0 | 25.8 | 100.0 | 2,907 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 81.0 | 10.4 | 91.3 | 1,206 | 86.1 | 1.0 | 12.0 | 0.0 | 0.0 | 0.8 | 100.0 | 1,102 |
| Eastern Cape | 42.4 | 39.5 | 81.9 | 1,301 | 45.4 | 0.7 | 36.3 | 0.6 | 0.0 | 17.0 | 100.0 | 1,065 |
| Northern Cape | 67.5 | 22.9 | 90.3 | 210 | 54.2 | 0.6 | 33.5 | 1.2 | 0.0 | 10.6 | 100.0 | 190 |
| Free State | 64.5 | 22.1 | 86.6 | 579 | 38.1 | 0.3 | 47.9 | 0.9 | 0.0 | 12.7 | 100.0 | 502 |
| KwaZulu-Natal | 55.2 | 25.0 | 80.3 | 1,968 | 49.3 | 1.4 | 30.7 | 1.8 | 0.0 | 16.8 | 100.0 | 1,579 |
| North West | 47.3 | 48.2 | 95.5 | 833 | 35.5 | 0.1 | 45.7 | 1.4 | 0.1 | 17.1 | 100.0 | 796 |
| Gauteng | 61.2 | 18.6 | 79.8 | 3,047 | 49.2 | 2.0 | 36.3 | 1.6 | 0.0 | 10.9 | 100.0 | 2,431 |
| Mpumalanga | 47.9 | 42.6 | 90.5 | 851 | 35.2 | 0.1 | 39.4 | 1.8 | 0.0 | 23.5 | 100.0 | 771 |
| Limpopo | 24.6 | 70.2 | 94.8 | 1,087 | 47.0 | 0.1 | 31.4 | 1.5 | 0.0 | 19.9 | 100.0 | 1,031 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 17.0 | 51.4 | 68.4 | 2,187 | 23.0 | 0.7 | 37.4 | 2.0 | 0.0 | 36.9 | 100.0 | 1,495 |
| Second | 30.1 | 51.3 | 81.4 | 2,349 | 30.4 | 1.0 | 43.9 | 1.4 | 0.0 | 23.3 | 100.0 | 1,912 |
| Middle | 53.2 | 33.9 | 87.1 | 2,247 | 38.0 | 1.4 | 46.5 | 1.4 | 0.0 | 12.7 | 100.0 | 1,956 |
| Fourth | 82.5 | 11.9 | 94.4 | 2,043 | 61.6 | 1.1 | 32.1 | 1.5 | 0.0 | 3.7 | 100.0 | 1,929 |
| Highest | 93.2 | 3.1 | 96.4 | 2,257 | 86.7 | 0.8 | 11.7 | 0.4 | 0.0 | 0.4 | 100.0 | 2,175 |
| Total | 54.7 | 30.7 | 85.4 | 11,083 | 50.1 | 1.0 | 33.6 | 1.3 | 0.0 | 14.0 | 100.0 | 9,467 |

[^4]Table 2.9 Household population by age, sex, and residence
Percent distribution of the de facto household population by various age groups and percentage of the de facto household population age 10-19, according to sex and residence, South Africa DHS 2016

| Age | Urban |  |  | Non-urban |  |  | Total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male | Female | Total | Male | Female | Total | Male | Female | Total |
| <5 | 10.3 | 9.3 | 9.8 | 13.5 | 11.2 | 12.3 | 11.5 | 10.0 | 10.7 |
| 5-9 | 10.0 | 8.3 | 9.1 | 14.0 | 11.5 | 12.7 | 11.4 | 9.5 | 10.4 |
| 10-14 | 8.2 | 7.9 | 8.0 | 12.9 | 10.3 | 11.5 | 9.9 | 8.8 | 9.3 |
| 15-19 | 8.0 | 8.4 | 8.2 | 12.3 | 8.8 | 10.5 | 9.6 | 8.5 | 9.0 |
| 20-24 | 8.9 | 8.9 | 8.9 | 8.7 | 7.6 | 8.1 | 8.8 | 8.4 | 8.6 |
| 25-29 | 9.2 | 9.8 | 9.5 | 6.1 | 7.1 | 6.6 | 8.1 | 8.8 | 8.4 |
| 30-34 | 8.9 | 8.5 | 8.7 | 6.1 | 7.0 | 6.6 | 7.9 | 7.9 | 7.9 |
| 35-39 | 7.8 | 7.3 | 7.5 | 4.1 | 4.9 | 4.5 | 6.5 | 6.4 | 6.4 |
| 40-44 | 7.0 | 6.5 | 6.7 | 4.3 | 4.6 | 4.5 | 6.0 | 5.8 | 5.9 |
| 45-49 | 5.4 | 5.6 | 5.5 | 3.2 | 4.5 | 3.9 | 4.6 | 5.2 | 4.9 |
| 50-54 | 4.1 | 4.7 | 4.4 | 3.0 | 4.2 | 3.7 | 3.7 | 4.5 | 4.1 |
| 55-59 | 3.5 | 4.3 | 3.9 | 2.9 | 4.0 | 3.5 | 3.3 | 4.2 | 3.7 |
| 60-64 | 2.9 | 3.3 | 3.1 | 2.8 | 3.8 | 3.3 | 2.9 | 3.5 | 3.2 |
| 65-69 | 2.0 | 2.4 | 2.2 | 2.0 | 3.0 | 2.5 | 2.0 | 2.6 | 2.3 |
| 70-74 | 1.3 | 1.9 | 1.6 | 1.3 | 2.2 | 1.8 | 1.3 | 2.0 | 1.7 |
| 75-79 | 0.7 | 1.1 | 0.9 | 1.0 | 1.8 | 1.5 | 0.8 | 1.4 | 1.1 |
| 80+ | 0.9 | 1.6 | 1.3 | 0.8 | 2.8 | 1.9 | 0.8 | 2.1 | 1.5 |
| Don't know | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Dependency age groups |  |  |  |  |  |  |  |  |  |
| 0-14 | 28.5 | 25.4 | 26.9 | 40.5 | 33.0 | 36.5 | 32.8 | 28.2 | 30.4 |
| 15-64 | 65.7 | 67.1 | 66.4 | 53.4 | 56.7 | 55.2 | 61.3 | 63.2 | 62.3 |
| 65+ | 4.9 | 7.0 | 6.0 | 5.1 | 9.8 | 7.6 | 5.0 | 8.1 | 6.6 |
| Don't know | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Child and adult populations |  |  |  |  |  |  |  |  |  |
| 0-17 | 33.2 | 30.2 | 31.6 | 48.1 | 38.5 | 43.0 | 38.5 | 33.3 | 35.8 |
| 18+ | 65.9 | 69.3 | 67.6 | 50.9 | 61.0 | 56.3 | 60.5 | 66.2 | 63.5 |
| Don't know | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 | 1.0 | 0.5 | 0.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Adolescents 10-19 | 16.2 | 16.2 | 16.2 | 25.2 | 19.1 | 22.0 | 19.5 | 17.3 | 18.3 |
| Number of persons | 11,354 | 12,177 | 23,531 | 6,367 | 7,230 | 13,597 | 17,721 | 19,407 | 37,128 |

Table 2.10 Household composition
Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, South Africa DHS 2016

|  | Residence |  |  |
| :--- | ---: | ---: | ---: |
| Characteristic | Urban | Non-urban | Total |
| Household headship |  |  |  |
| Male | 61.9 | 47.7 | 57.4 |
| Female | 38.1 | 52.3 | 42.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of usual members |  |  |  |
| 0 | 0.2 | 0.1 | 0.2 |
| 1 | 24.9 | 21.5 | 23.8 |
| 2 | 21.2 | 16.3 | 19.6 |
| 3 | 17.1 | 15.6 | 16.7 |
| 4 | 15.7 | 13.2 | 14.9 |
| 5 | 9.4 | 10.4 | 9.7 |
| 6 | 5.0 | 8.2 | 6.0 |
| 7 | 2.8 | 5.4 | 3.6 |
| 8 | 1.5 | 3.7 | 2.2 |
| $9+$ | 2.3 | 5.6 | 3.3 |
| Total | 100.0 | 100.0 | 100.0 |
| Mean size of households | 3.1 | 3.8 | 3.4 |
| Percentage of households with orphans |  |  |  |
| and foster children under age 18 |  |  |  |
| Double orphans | 2.0 | 4.2 | 2.7 |
| Single orphans ${ }^{1}$ | 8.5 | 16.2 | 10.9 |
| Foster children ${ }^{2}$ | 11.3 | 31.2 | 17.7 |
| Foster and/or orphan children | 15.8 | 36.2 | 22.3 |
| Number of households | 7,542 | 3,541 | 11,083 |

Note: Table is based on de jure household members, i.e., usual residents.
${ }^{1}$ Includes children with one dead parent and an unknown survival status of the other parent
${ }^{2}$ Foster children are those under age 18 living in households with neither their mother nor their father present, and the mother and/or the father are alive

Table 2.11 Children's living arrangements and orphanhood
Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, percentage of children not living with a biological parent, and percentage of children with one or both parents dead, according to background characteristics, South Africa DHS 2016

| Background characteristic | Living with both parents | Living with mother but not with father |  | Living with father but not with mother |  | Not living with either parent |  |  |  | Missing information on father/ mother | Total | Percentage not living with a biological parent | Percentage with one or both parents dead ${ }^{1}$ | Percentage maternal orphans | Number of children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Father alive | Father dead | Mother alive | Mother dead | Both alive | Only father alive | Only mother alive | Both dead |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-4 | 33.1 | 45.1 | 2.5 | 2.0 | 0.1 | 12.8 | 0.5 | 0.7 | 0.4 | 2.8 | 100.0 | 14.3 | 4.4 | 1.2 | 3,966 |
| <2 | 33.1 | 52.9 | 1.1 | 1.5 | 0.0 | 9.1 | 0.1 | 0.1 | 0.0 | 2.0 | 100.0 | 9.4 | 1.5 | 0.2 | 1,487 |
| 2-4 | 33.1 | 40.5 | 3.4 | 2.3 | 0.2 | 15.0 | 0.7 | 1.0 | 0.6 | 3.3 | 100.0 | 17.3 | 6.2 | 1.8 | 2,479 |
| 5-9 | 26.9 | 35.9 | 5.8 | 2.3 | 0.6 | 18.5 | 1.7 | 2.5 | 1.8 | 4.1 | 100.0 | 24.4 | 13.2 | 4.9 | 3,869 |
| 10-14 | 26.4 | 27.3 | 9.9 | 3.0 | 1.0 | 15.7 | 3.3 | 4.5 | 4.5 | 4.4 | 100.0 | 28.0 | 24.5 | 10.0 | 3,460 |
| 15-17 | 24.7 | 23.3 | 12.2 | 3.2 | 1.6 | 14.5 | 3.1 | 5.1 | 8.2 | 4.2 | 100.0 | 30.9 | 31.9 | 14.6 | 2,002 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 28.3 | 34.4 | 6.8 | 2.8 | 0.8 | 15.4 | 1.6 | 2.8 | 3.1 | 3.9 | 100.0 | 22.9 | 16.1 | 6.4 | 6,834 |
| Female | 28.2 | 34.6 | 6.9 | 2.2 | 0.6 | 15.6 | 2.3 | 2.9 | 2.9 | 3.7 | 100.0 | 23.7 | 16.6 | 6.7 | 6,463 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 37.6 | 32.5 | 7.1 | 2.8 | 0.7 | 10.4 | 1.5 | 2.1 | 2.7 | 2.6 | 100.0 | 16.8 | 14.7 | 5.5 | 7,475 |
| Non-urban | 16.4 | 37.1 | 6.5 | 2.2 | 0.7 | 22.0 | 2.5 | 3.8 | 3.5 | 5.4 | 100.0 | 31.7 | 18.4 | 8.0 | 5,822 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 50.8 | 30.2 | 4.0 | 2.8 | 0.6 | 6.2 | 1.6 | 1.1 | 1.0 | 1.8 | 100.0 | 9.8 | 8.3 | 3.2 | 1,222 |
| Eastern Cape | 17.3 | 30.8 | 7.5 | 2.1 | 1.0 | 23.8 | 3.2 | 4.1 | 3.5 | 6.8 | 100.0 | 34.6 | 20.7 | 9.1 | 1,919 |
| Northern Cape | 32.0 | 35.5 | 5.3 | 1.7 | 1.1 | 14.7 | 1.7 | 1.9 | 2.5 | 3.8 | 100.0 | 20.7 | 13.6 | 6.2 | 291 |
| Free State | 25.6 | 31.7 | 10.3 | 2.4 | 1.2 | 12.5 | 3.6 | 3.4 | 5.2 | 4.0 | 100.0 | 24.7 | 25.0 | 11.1 | 734 |
| KwaZulu-Natal | 17.8 | 39.1 | 7.5 | 2.8 | 0.3 | 18.8 | 2.1 | 4.4 | 4.2 | 2.9 | 100.0 | 29.5 | 19.6 | 7.6 | 2,586 |
| North West | 26.6 | 40.2 | 5.2 | 2.5 | 1.7 | 12.3 | 1.6 | 1.6 | 3.8 | 4.5 | 100.0 | 19.3 | 15.8 | 9.1 | 909 |
| Gauteng | 42.5 | 30.8 | 7.8 | 3.0 | 0.5 | 8.0 | 1.0 | 2.2 | 2.1 | 1.9 | 100.0 | 13.3 | 14.1 | 4.0 | 2,821 |
| Mpumalanga | 27.5 | 36.1 | 7.4 | 3.5 | 0.3 | 15.9 | 2.1 | 2.3 | 2.3 | 2.5 | 100.0 | 22.6 | 15.4 | 5.6 | 1,174 |
| Limpopo | 18.5 | 37.8 | 4.8 | 1.0 | 0.8 | 23.3 | 1.5 | 2.5 | 2.7 | 7.0 | 100.0 | 30.1 | 13.7 | 6.3 | 1,641 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 18.5 | 35.3 | 8.0 | 1.8 | 0.6 | 19.8 | 2.7 | 4.5 | 3.6 | 5.2 | 100.0 | 30.5 | 20.4 | 7.9 | 3,131 |
| Second | 23.6 | 35.9 | 6.8 | 2.4 | 0.5 | 18.2 | 1.4 | 2.8 | 2.9 | 5.4 | 100.0 | 25.4 | 16.3 | 6.7 | 2,840 |
| Middle | 24.0 | 37.9 | 7.5 | 3.0 | 0.8 | 15.2 | 1.7 | 2.7 | 3.7 | 3.5 | 100.0 | 23.3 | 17.2 | 7.0 | 2,797 |
| Fourth | 31.8 | 34.2 | 6.7 | 2.7 | 1.1 | 13.3 | 2.2 | 2.4 | 3.1 | 2.5 | 100.0 | 21.0 | 16.0 | 6.9 | 2,510 |
| Highest | 51.7 | 27.0 | 4.5 | 2.9 | 0.4 | 8.0 | 1.5 | 1.3 | 1.4 | 1.3 | 100.0 | 12.2 | 9.2 | 3.5 | 2,020 |
| Total <15 | 28.9 | 36.5 | 5.9 | 2.4 | 0.5 | 15.7 | 1.7 | 2.5 | 2.1 | 3.7 | 100.0 | 22.0 | 13.6 | 5.2 | 11,295 |
| Total < 18 | 28.3 | 34.5 | 6.9 | 2.5 | 0.7 | 15.5 | 1.9 | 2.9 | 3.0 | 3.8 | 100.0 | 23.3 | 16.4 | 6.6 | 13,297 |

Note: Table is based on de jure members, i.e., usual residents.
${ }^{1}$ Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent

Table 2.12.1 Educational attainment of the female household population
Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, South Africa DHS 2016

| Background characteristic | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | More than secondary | Don't know | Total | Number | Median years completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 27.6 | 71.8 | 0.1 | 0.4 | 0.0 | 0.0 | 0.2 | 100.0 | 1,468 | 0.6 |
| 10-14 | 0.6 | 74.8 | 14.9 | 9.6 | 0.0 | 0.0 | 0.1 | 100.0 | 1,701 | 4.7 |
| 15-19 | 0.5 | 3.6 | 6.7 | 75.7 | 12.3 | 0.9 | 0.3 | 100.0 | 1,659 | 9.0 |
| 20-24 | 0.7 | 2.6 | 3.2 | 42.9 | 39.7 | 10.6 | 0.2 | 100.0 | 1,631 | 11.0 |
| 25-29 | 0.9 | 3.8 | 2.3 | 40.4 | 35.7 | 16.7 | 0.2 | 100.0 | 1,699 | 11.1 |
| 30-34 | 2.0 | 4.6 | 3.2 | 41.7 | 30.9 | 16.8 | 0.9 | 100.0 | 1,538 | 10.9 |
| 35-39 | 1.9 | 5.6 | 3.5 | 42.6 | 30.3 | 15.6 | 0.6 | 100.0 | 1,237 | 10.8 |
| 40-44 | 4.2 | 7.4 | 3.8 | 39.0 | 27.7 | 16.1 | 1.8 | 100.0 | 1,131 | 10.6 |
| 45-49 | 7.7 | 13.1 | 8.1 | 33.4 | 24.1 | 12.6 | 1.0 | 100.0 | 1,015 | 9.6 |
| 50-54 | 13.0 | 19.3 | 9.1 | 32.1 | 15.0 | 10.1 | 1.4 | 100.0 | 873 | 8.1 |
| 55-59 | 15.6 | 23.0 | 8.6 | 29.1 | 10.8 | 11.4 | 1.5 | 100.0 | 811 | 7.2 |
| 60-64 | 22.6 | 25.7 | 8.6 | 25.6 | 7.1 | 8.0 | 2.3 | 100.0 | 678 | 6.1 |
| $65+$ | 33.7 | 24.7 | 6.0 | 19.8 | 7.3 | 7.0 | 1.5 | 100.0 | 1,564 | 4.4 |
| Don't know | 19.8 | 18.4 | 3.1 | 24.0 | 14.9 | 3.2 | 16.7 | 100.0 | 92 | 7.2 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.6 | 17.9 | 5.4 | 34.3 | 23.1 | 11.9 | 0.8 | 100.0 | 10,837 | 9.6 |
| Non-urban | 13.6 | 29.5 | 6.3 | 32.9 | 12.1 | 4.6 | 1.0 | 100.0 | 6,262 | 7.0 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 6.1 | 17.4 | 4.7 | 35.4 | 20.5 | 14.8 | 1.1 | 100.0 | 1,996 | 9.5 |
| Eastern Cape | 9.9 | 29.0 | 8.0 | 33.3 | 12.0 | 7.2 | 0.7 | 100.0 | 2,176 | 7.4 |
| Northern Cape | 10.4 | 25.7 | 6.4 | 35.8 | 15.6 | 5.3 | 0.8 | 100.0 | 372 | 7.9 |
| Free State | 7.1 | 25.9 | 6.4 | 35.5 | 17.8 | 7.1 | 0.2 | 100.0 | 940 | 8.4 |
| KwaZulu-Natal | 11.0 | 23.7 | 5.4 | 31.2 | 20.5 | 7.3 | 0.9 | 100.0 | 3,317 | 8.7 |
| North West | 9.5 | 24.7 | 6.9 | 36.1 | 16.0 | 5.8 | 0.9 | 100.0 | 1,104 | 8.0 |
| Gauteng | 5.9 | 15.8 | 5.1 | 33.1 | 26.8 | 12.7 | 0.6 | 100.0 | 4,038 | 10.1 |
| Mpumalanga | 12.6 | 24.6 | 5.1 | 36.1 | 14.5 | 6.1 | 1.1 | 100.0 | 1,306 | 8.2 |
| Limpopo | 13.9 | 24.3 | 5.4 | 34.6 | 12.8 | 7.5 | 1.6 | 100.0 | 1,849 | 7.9 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 16.8 | 30.7 | 7.8 | 34.8 | 8.3 | 0.8 | 0.8 | 100.0 | 3,347 | 6.3 |
| Second | 11.0 | 26.8 | 5.8 | 38.3 | 14.3 | 2.9 | 1.0 | 100.0 | 3,283 | 7.9 |
| Middle | 8.1 | 22.6 | 6.7 | 36.7 | 19.9 | 5.4 | 0.6 | 100.0 | 3,303 | 8.8 |
| Fourth | 6.7 | 18.7 | 5.6 | 35.0 | 23.4 | 9.1 | 1.4 | 100.0 | 3,520 | 9.4 |
| Highest | 4.0 | 12.9 | 2.9 | 25.1 | 28.4 | 26.2 | 0.5 | 100.0 | 3,646 | 11.2 |
| Total | 9.2 | 22.1 | 5.7 | 33.8 | 19.1 | 9.2 | 0.9 | 100.0 | 17,099 | 8.8 |

${ }^{1}$ Completed 7 th grade/standard 5/AET 3 at the primary level
${ }^{2}$ Completed 12 th grade/standard $10 /$ form $5 /$ matric at the secondary level

Table 2.12.2 Educational attainment of the male household population
Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, South Africa DHS 2016

| Background characteristic | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | More than secondary | Don't know | Total | Number | Median years completed |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |
| 6-9 | 28.5 | 71.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.3 | 100.0 | 1,633 | 0.4 |
| 10-14 | 1.0 | 81.2 | 11.4 | 5.9 | 0.0 | 0.0 | 0.5 | 100.0 | 1,754 | 4.2 |
| 15-19 | 0.6 | 8.1 | 10.7 | 72.9 | 6.2 | 0.9 | 0.6 | 100.0 | 1,695 | 8.4 |
| 20-24 | 1.5 | 4.6 | 3.1 | 47.7 | 34.0 | 8.7 | 0.4 | 100.0 | 1,560 | 10.5 |
| 25-29 | 1.8 | 5.2 | 3.5 | 41.3 | 33.1 | 13.8 | 1.2 | 100.0 | 1,434 | 10.8 |
| 30-34 | 2.7 | 4.2 | 5.0 | 43.5 | 30.4 | 13.4 | 0.8 | 100.0 | 1,398 | 10.7 |
| 35-39 | 3.1 | 7.5 | 3.8 | 39.5 | 30.9 | 13.5 | 1.8 | 100.0 | 1,143 | 10.7 |
| 40-44 | 4.3 | 10.6 | 5.2 | 34.1 | 30.6 | 13.4 | 1.9 | 100.0 | 1,062 | 10.6 |
| 45-49 | 5.4 | 13.7 | 7.1 | 30.0 | 27.8 | 14.4 | 1.6 | 100.0 | 813 | 10.4 |
| 50-54 | 9.6 | 17.5 | 6.7 | 33.1 | 18.4 | 11.4 | 3.3 | 100.0 | 661 | 9.0 |
| 55-59 | 11.9 | 22.4 | 6.1 | 25.2 | 19.3 | 11.7 | 3.4 | 100.0 | 580 | 8.1 |
| 60-64 | 15.3 | 25.0 | 6.0 | 27.8 | 10.8 | 12.9 | 2.1 | 100.0 | 510 | 7.2 |
| $65+$ | 27.0 | 18.9 | 6.1 | 21.1 | 10.5 | 13.3 | 3.1 | 100.0 | 880 | 6.4 |
| Don't know | 22.6 | 19.6 | 2.4 | 23.8 | 15.1 | 4.1 | 12.4 | 100.0 | 173 | 6.7 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.4 | 20.1 | 5.0 | 33.3 | 22.6 | 11.1 | 1.5 | 100.0 | 9,962 | 9.4 |
| Non-urban | 10.4 | 33.9 | 7.1 | 32.9 | 11.2 | 3.2 | 1.2 | 100.0 | 5,335 | 6.7 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 4.8 | 19.5 | 6.6 | 32.4 | 19.7 | 15.7 | 1.3 | 100.0 | 1,683 | 9.3 |
| Eastern Cape | 8.5 | 34.2 | 6.1 | 32.2 | 12.3 | 5.6 | 1.0 | 100.0 | 1,906 | 7.1 |
| Northern Cape | 12.0 | 27.7 | 6.0 | 32.1 | 16.7 | 3.9 | 1.7 | 100.0 | 312 | 7.4 |
| Free State | 9.0 | 28.3 | 5.9 | 31.8 | 18.4 | 5.9 | 0.7 | 100.0 | 755 | 7.9 |
| KwaZulu-Natal | 9.0 | 26.1 | 6.1 | 32.5 | 19.5 | 6.0 | 0.7 | 100.0 | 2,719 | 8.3 |
| North West | 10.0 | 28.1 | 6.4 | 31.5 | 18.0 | 4.0 | 2.1 | 100.0 | 1,117 | 7.6 |
| Gauteng | 5.7 | 18.7 | 4.4 | 34.6 | 23.3 | 11.7 | 1.7 | 100.0 | 4,060 | 9.7 |
| Mpumalanga | 9.0 | 25.0 | 5.5 | 33.0 | 19.5 | 6.1 | 1.9 | 100.0 | 1,246 | 8.3 |
| Limpopo | 9.5 | 29.3 | 6.7 | 35.1 | 11.4 | 6.5 | 1.5 | 100.0 | 1,499 | 7.5 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 13.6 | 34.6 | 7.1 | 34.3 | 8.8 | 0.6 | 1.1 | 100.0 | 2,950 | 6.2 |
| Second | 8.1 | 28.5 | 7.2 | 38.8 | 13.8 | 2.0 | 1.5 | 100.0 | 3,129 | 7.6 |
| Middle | 7.7 | 25.6 | 5.9 | 34.4 | 19.0 | 5.8 | 1.6 | 100.0 | 3,115 | 8.4 |
| Fourth | 6.1 | 22.4 | 4.8 | 33.9 | 22.5 | 8.4 | 1.9 | 100.0 | 3,002 | 9.1 |
| Highest | 3.7 | 13.9 | 3.6 | 24.4 | 28.7 | 24.8 | 0.9 | 100.0 | 3,101 | 11.1 |
| Total | 7.8 | 24.9 | 5.7 | 33.2 | 18.6 | 8.4 | 1.4 | 100.0 | 15,296 | 8.5 |

${ }^{1}$ Completed 7 th grade/standard 5/AET 3 at the primary level
${ }^{2}$ Completed 12 th grade/standard $10 /$ form $5 /$ matric at the secondary level

Table 2.13 School attendance ratios
Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, South Africa DHS 2016

|  | Net attendance ratio ${ }^{1}$ |  |  |  | Gross attendance ratio ${ }^{2}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Male | Female | Total | Gender parity index ${ }^{3}$ | Male | Female | Total | Gender parity index ${ }^{3}$ |
| PRIMARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 89.5 | 86.7 | 88.2 | 0.97 | 115.0 | 108.4 | 111.8 | 0.94 |
| Non-urban | 89.8 | 87.1 | 88.5 | 0.97 | 115.8 | 109.9 | 113.0 | 0.95 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 84.4 | 88.0 | 86.2 | 1.04 | 102.1 | 105.8 | 103.9 | 1.04 |
| Eastern Cape | 91.9 | 87.8 | 89.9 | 0.96 | 116.3 | 103.4 | 109.9 | 0.89 |
| Northern Cape | 90.2 | 87.6 | 88.9 | 0.97 | 110.9 | 108.5 | 109.7 | 0.98 |
| Free State | 93.4 | 86.8 | 90.2 | 0.93 | 117.5 | 105.6 | 111.7 | 0.90 |
| KwaZulu-Natal | 87.6 | 83.3 | 85.6 | 0.95 | 113.6 | 111.9 | 112.8 | 0.98 |
| North West | 91.5 | 89.7 | 90.7 | 0.98 | 110.6 | 110.5 | 110.6 | 1.00 |
| Gauteng | 91.3 | 87.9 | 89.7 | 0.96 | 119.8 | 112.1 | 116.2 | 0.94 |
| Mpumalanga | 87.7 | 87.1 | 87.4 | 0.99 | 122.4 | 112.1 | 117.3 | 0.92 |
| Limpopo | 89.7 | 86.7 | 88.2 | 0.97 | 118.4 | 109.8 | 114.2 | 0.93 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 91.8 | 87.6 | 89.7 | 0.95 | 122.0 | 110.1 | 116.0 | 0.90 |
| Second | 89.3 | 88.3 | 88.8 | 0.99 | 115.6 | 111.6 | 113.7 | 0.96 |
| Middle | 89.9 | 86.5 | 88.4 | 0.96 | 117.3 | 111.0 | 114.4 | 0.95 |
| Fourth | 90.3 | 86.7 | 88.7 | 0.96 | 112.6 | 110.4 | 111.6 | 0.98 |
| Highest | 85.5 | 84.5 | 85.0 | 0.99 | 105.3 | 101.0 | 103.1 | 0.96 |
| Total | 89.6 | 86.9 | 88.3 | 0.97 | 115.3 | 109.1 | 112.3 | 0.95 |
| SECONDARY SCHOOL |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 76.3 | 73.7 | 74.9 | 0.97 | 99.6 | 101.9 | 100.8 | 1.02 |
| Non-urban | 78.2 | 79.6 | 78.8 | 1.02 | 118.3 | 121.5 | 119.7 | 1.03 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 64.8 | 76.2 | 70.9 | 1.18 | 88.2 | 94.6 | 91.6 | 1.07 |
| Eastern Cape | 74.3 | 75.5 | 74.9 | 1.02 | 97.9 | 117.9 | 107.0 | 1.20 |
| Northern Cape | 77.3 | 77.2 | 77.3 | 1.00 | 105.9 | 102.9 | 104.3 | 0.97 |
| Free State | 73.2 | 75.1 | 74.1 | 1.03 | 102.6 | 109.3 | 105.9 | 1.07 |
| KwaZulu-Natal | 80.4 | 74.2 | 77.4 | 0.92 | 117.6 | 112.5 | 115.1 | 0.96 |
| North West | 66.8 | 78.3 | 72.3 | 1.17 | 100.3 | 104.9 | 102.5 | 1.05 |
| Gauteng | 81.7 | 69.8 | 75.5 | 0.86 | 100.1 | 96.0 | 97.9 | 0.96 |
| Mpumalanga | 70.8 | 80.7 | 75.7 | 1.14 | 111.2 | 115.1 | 113.1 | 1.03 |
| Limpopo | 88.4 | 86.3 | 87.4 | 0.98 | 136.5 | 133.2 | 134.9 | 0.98 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 68.6 | 70.0 | 69.3 | 1.02 | 100.2 | 101.7 | 101.0 | 1.02 |
| Second | 80.8 | 78.3 | 79.6 | 0.97 | 126.5 | 115.2 | 121.1 | 0.91 |
| Middle | 77.6 | 75.1 | 76.5 | 0.97 | 106.9 | 113.9 | 110.2 | 1.07 |
| Fourth | 76.1 | 78.1 | 77.1 | 1.03 | 100.0 | 106.1 | 103.1 | 1.06 |
| Highest | 85.0 | 80.2 | 82.6 | 0.94 | 107.6 | 113.2 | 110.4 | 1.05 |
| Total | 77.2 | 76.0 | 76.6 | 0.98 | 108.1 | 109.5 | 108.8 | 1.01 |

${ }^{1}$ The NAR for primary school is the percentage of the primary school-age ( $7-13$ years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school-age (14-18 years) population that is attending secondary school. By definition, the NAR cannot exceed 100.0.
${ }^{2}$ The GAR for primary school is the total number of primary school students, expressed as a percentage of the official primary school-age population. The GAR for secondary school is the total number of secondary school students, expressed as a percentage of the official secondary school-age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100.0
${ }^{3}$ The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.14 Disability by domain and age
Percent distribution of the de facto household population age 5 and over by the degree of difficulty in functioning according to domain, and percent distribution by the highest degree of difficulty in functioning in at least one domain by age, South Africa DHS 2016

| Domain and age | Degree of difficulty |  |  |  |  |  | A lot of difficulty or cannot do at all | Number of persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No difficulty | Some difficulty | A lot of difficulty | Cannot do at all | Don't know | Total |  |  |
| Domain |  |  |  |  |  |  |  |  |
| Difficulty seeing | 87.9 | 9.7 | 2.2 | 0.2 | 0.1 | 100.0 | 2.3 | 33,155 |
| Difficulty hearing | 95.2 | 3.7 | 1.0 | 0.1 | 0.1 | 100.0 | 1.1 | 33,155 |
| Difficulty communicating | 98.7 | 0.7 | 0.3 | 0.2 | 0.0 | 100.0 | 0.6 | 33,155 |
| Difficulty remembering or concentrating | 94.1 | 4.3 | 1.3 | 0.3 | 0.1 | 100.0 | 1.5 | 33,155 |
| Difficulty walking or climbing steps | 93.5 | 4.1 | 1.9 | 0.4 | 0.0 | 100.0 | 2.3 | 33,155 |
| Difficulty washing all over or dressing | 97.6 | 1.6 | 0.4 | 0.4 | 0.0 | 100.0 | 0.8 | 33,155 |
| Difficulty in at least one domain ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 5-9 | 86.0 | 10.4 | 2.5 | 1.1 | 0.0 | 100.0 | 3.6 | 3,862 |
| 10-14 | 91.0 | 6.6 | 1.9 | 0.3 | 0.2 | 100.0 | 2.2 | 3,455 |
| 15-19 | 90.8 | 6.9 | 1.9 | 0.3 | 0.0 | 100.0 | 2.2 | 3,354 |
| 20-29 | 90.5 | 7.2 | 1.9 | 0.3 | 0.1 | 100.0 | 2.2 | 6,324 |
| 30-39 | 87.3 | 9.4 | 2.4 | 0.6 | 0.2 | 100.0 | 3.1 | 5,316 |
| 40-49 | 77.7 | 17.1 | 4.2 | 0.8 | 0.2 | 100.0 | 5.0 | 4,021 |
| 50-59 | 60.2 | 30.2 | 8.1 | 1.3 | 0.2 | 100.0 | 9.3 | 2,925 |
| 60+ | 40.9 | 35.6 | 19.4 | 3.8 | 0.2 | 100.0 | 23.3 | 3,634 |
| Don't know | 83.8 | 8.8 | 4.3 | 2.1 | 1.1 | 100.0 | 6.3 | 264 |
| Age 15 and over | 77.3 | 15.9 | 5.6 | 1.1 | 0.2 | 100.0 | 6.6 | 25,573 |
| Total | 79.8 | 14.2 | 4.8 | 1.0 | 0.2 | 100.0 | 5.8 | 33,155 |

${ }^{1}$ If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown

Table 2.15 Disability among the household population according to background characteristics
Percentage of the de facto household population age 5 and over who have difficulty in functioning according to domain, and by the highest degree of difficulty in functioning in at least one domain, according to background characteristics, South Africa DHS 2016

| Background characteristic | No difficulty in any domain | Domain |  |  |  |  |  | Difficulty in at least one domain ${ }^{1}$ |  |  |  | A lot of difficulty or cannot do at all in more than one domain | Number <br> of persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Seeing | Hearing | Communicating | Remembering or concentrating | Walking or climbing steps | Washing all over or dressing | Some difficulty | A lot of difficulty | Cannot do at all | A lot of difficulty or cannot do at all |  |  |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 82.2 | 9.7 | 4.4 | 1.4 | 4.7 | 4.4 | 2.4 | 12.6 | 4.0 | 1.0 | 5.1 | 1.3 | 15,687 |
| Female | 77.7 | 14.1 | 5.1 | 1.1 | 6.8 | 8.2 | 2.4 | 15.6 | 5.5 | 1.0 | 6.5 | 1.9 | 17,468 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 81.2 | 12.0 | 4.2 | 1.1 | 5.0 | 5.5 | 1.6 | 13.8 | 4.1 | 0.8 | 4.9 | 1.4 | 21,230 |
| Non-urban | 77.4 | 12.1 | 5.9 | 1.6 | 7.3 | 8.1 | 3.7 | 14.9 | 6.2 | 1.3 | 7.5 | 2.2 | 11,925 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 84.1 | 9.0 | 3.6 | 1.3 | 5.1 | 5.3 | 1.8 | 12.6 | 2.7 | 0.4 | 3.2 | 0.9 | 3,744 |
| Eastern Cape | 73.6 | 14.8 | 7.7 | 1.8 | 9.2 | 8.5 | 3.7 | 17.3 | 7.5 | 1.5 | 9.0 | 2.7 | 4,196 |
| Northern Cape | 74.9 | 14.3 | 6.2 | 1.5 | 9.7 | 9.8 | 2.0 | 19.1 | 4.5 | 1.2 | 5.7 | 1.9 | 699 |
| Free State | 77.9 | 14.0 | 4.7 | 1.1 | 6.6 | 6.9 | 1.9 | 13.2 | 7.6 | 1.1 | 8.8 | 2.6 | 1,731 |
| KwaZulu-Natal | 77.5 | 14.2 | 5.7 | 1.7 | 7.3 | 8.0 | 3.6 | 15.4 | 6.1 | 1.1 | 7.1 | 2.1 | 6,200 |
| North West | 80.6 | 10.7 | 4.6 | 1.5 | 7.8 | 6.1 | 2.9 | 14.7 | 3.7 | 0.8 | 4.5 | 1.5 | 2,269 |
| Gauteng | 81.9 | 12.6 | 3.8 | 0.9 | 3.4 | 4.0 | 0.9 | 13.9 | 3.3 | 0.8 | 4.0 | 1.0 | 8,269 |
| Mpumalanga | 84.6 | 8.5 | 3.1 | 0.7 | 4.0 | 5.6 | 1.0 | 10.2 | 3.7 | 1.3 | 5.0 | 1.4 | 2,618 |
| Limpopo | 79.9 | 8.9 | 4.2 | 1.1 | 4.7 | 7.9 | 3.8 | 12.9 | 5.5 | 1.2 | 6.8 | 1.8 | 3,430 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 77.1 | 11.8 | 6.2 | 1.9 | 7.2 | 8.0 | 3.8 | 14.9 | 6.4 | 1.3 | 7.8 | 2.1 | 6,495 |
| Second | 79.9 | 11.2 | 5.2 | 1.2 | 6.3 | 6.8 | 2.7 | 13.8 | 5.0 | 1.0 | 6.1 | 1.9 | 6,577 |
| Middle | 81.1 | 11.2 | 4.2 | 1.4 | 5.9 | 5.9 | 2.2 | 13.4 | 4.3 | 1.1 | 5.4 | 1.6 | 6,573 |
| Fourth | 80.1 | 12.9 | 4.0 | 1.1 | 5.4 | 5.8 | 1.6 | 14.0 | 4.7 | 0.9 | 5.7 | 1.5 | 6,644 |
| Highest | 80.9 | 13.1 | 4.3 | 0.8 | 4.4 | 5.6 | 1.5 | 14.7 | 3.7 | 0.6 | 4.3 | 1.2 | 6,865 |
| Disability grant recipient ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Yes | 42.7 | 25.4 | 13.3 | 10.5 | 23.8 | 25.2 | 9.2 | 27.2 | 19.2 | 10.8 | 30.0 | 9.4 | 763 |
| No | 84.2 | 10.3 | 2.6 | 0.6 | 3.6 | 3.4 | 0.4 | 12.6 | 2.7 | 0.2 | 3.0 | 0.4 | 19,176 |
| Total | 79.8 | 12.0 | 4.8 | 1.3 | 5.8 | 6.4 | 2.4 | 14.2 | 4.8 | 1.0 | 5.8 | 1.7 | 33,155 |

[^5]Table 2.16 Knowledge of where social grant forms may be obtained
Percentage of households that know where forms to apply for government social grants may be obtained, and among households that know where forms may be obtained, percentage that cite specific places, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of households that know where forms to apply for government social grants may be obtained | Number of households | Among households that know where forms can be obtained, percentage that cite specific places: |  |  |  |  |  | Number of households that know where forms may be obtained |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Post office | Bank | Magistrate's court | SASSA/ <br> Department of Social Development/ social development office | Pay point | Other |  |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 67.6 | 7,542 | 1.2 | 0.2 | 0.8 | 96.6 | 3.0 | 2.1 | 5,101 |
| Non-urban | 78.0 | 3,541 | 0.4 | 0.0 | 1.0 | 96.6 | 2.6 | 3.3 | 2,762 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 69.7 | 1,206 | 0.7 | 0.5 | 1.6 | 95.0 | 7.6 | 3.7 | 841 |
| Eastern Cape | 73.3 | 1,301 | 0.4 | 0.0 | 0.5 | 94.2 | 2.0 | 6.2 | 953 |
| Northern Cape | 85.5 | 210 | 0.1 | 0.0 | 0.3 | 99.4 | 2.2 | 0.6 | 180 |
| Free State | 79.2 | 579 | 0.5 | 0.0 | 0.6 | 95.4 | 8.4 | 2.7 | 459 |
| KwaZulu-Natal | 79.9 | 1,968 | 0.6 | 0.2 | 1.0 | 98.5 | 2.4 | 1.3 | 1,573 |
| North West | 78.8 | 833 | 0.5 | 0.1 | 0.7 | 96.4 | 3.6 | 2.8 | 656 |
| Gauteng | 60.7 | 3,047 | 2.3 | 0.0 | 0.7 | 96.0 | 1.5 | 1.5 | 1,850 |
| Mpumalanga | 69.6 | 851 | 0.5 | 0.0 | 1.0 | 98.2 | 0.7 | 2.1 | 593 |
| Limpopo | 69.8 | 1,087 | 0.3 | 0.2 | 1.2 | 97.7 | 1.2 | 1.9 | 759 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 68.7 | 2,187 | 0.2 | 0.0 | 0.5 | 96.6 | 2.1 | 3.4 | 1,503 |
| Second | 69.8 | 2,349 | 0.9 | 0.1 | 0.5 | 97.2 | 2.4 | 2.3 | 1,638 |
| Middle | 75.5 | 2,247 | 1.2 | 0.0 | 1.3 | 96.3 | 3.0 | 2.4 | 1,697 |
| Fourth | 77.5 | 2,043 | 0.9 | 0.2 | 1.1 | 96.5 | 3.3 | 2.0 | 1,583 |
| Highest | 63.9 | 2,257 | 1.5 | 0.3 | 1.1 | 96.2 | 3.8 | 2.5 | 1,442 |
| Total | 70.9 | 11,083 | 0.9 | 0.1 | 0.9 | 96.6 | 2.9 | 2.5 | 7,863 |

SASSA = South African Social Security Agency

Table 2.17 Social grants
Percentage of the de facto household population by whether they are receiving a government social grant or pension, and percentage of the de facto population receiving specific grant types, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage receiving any grant | Percentage receiving specific grant types: |  |  |  |  |  |  | Number of persons |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Old age | Disability | Child support | Care dependency | Foster child | Other | Don't know |  |
| Age |  |  |  |  |  |  |  |  |  |
| 0-4 | 67.4 | 0.0 | 0.1 | 66.9 | 0.1 | 0.3 | 0.0 | 0.0 | 3,973 |
| 5-17 | 69.7 | 0.0 | 0.4 | 66.4 | 0.3 | 2.5 | 0.0 | 0.1 | 9,318 |
| 18-29 | 2.2 | 0.0 | 1.1 | 0.2 | 0.0 | 0.7 | 0.1 | 0.0 | 7,678 |
| 30-39 | 2.2 | 0.0 | 1.9 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 5,316 |
| 40-49 | 4.4 | 0.0 | 4.0 | 0.1 | 0.0 | 0.0 | 0.3 | 0.0 | 4,021 |
| 50-59 | 10.2 | 0.7 | 8.3 | 0.0 | 0.1 | 0.0 | 1.0 | 0.1 | 2,925 |
| 60+ | 77.1 | 76.0 | 0.3 | 0.0 | 0.0 | 0.0 | 0.6 | 0.1 | 3,634 |
| Don't know | 23.7 | 3.4 | 3.0 | 16.4 | 0.0 | 0.0 | 0.5 | 0.3 | 264 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 34.5 | 5.4 | 1.9 | 25.9 | 0.1 | 0.8 | 0.3 | 0.0 | 17,721 |
| Female | 34.5 | 9.5 | 1.6 | 22.2 | 0.1 | 0.8 | 0.2 | 0.1 | 19,407 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 27.0 | 6.1 | 1.7 | 18.2 | 0.1 | 0.6 | 0.3 | 0.1 | 23,531 |
| Non-urban | 47.5 | 10.1 | 1.8 | 34.0 | 0.2 | 1.2 | 0.2 | 0.0 | 13,597 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 23.8 | 6.8 | 2.5 | 13.5 | 0.2 | 0.5 | 0.1 | 0.1 | 4,073 |
| Eastern Cape | 44.9 | 9.8 | 2.2 | 30.9 | 0.2 | 1.6 | 0.3 | 0.0 | 4,708 |
| Northern Cape | 43.4 | 10.3 | 3.6 | 27.7 | 0.3 | 0.9 | 0.4 | 0.0 | 774 |
| Free State | 38.9 | 7.3 | 2.3 | 26.2 | 0.3 | 1.9 | 0.9 | 0.0 | 1,921 |
| KwaZulu-Natal | 39.1 | 8.4 | 2.0 | 27.3 | 0.2 | 0.9 | 0.2 | 0.1 | 6,955 |
| North West | 34.6 | 7.5 | 1.3 | 24.3 | 0.1 | 1.1 | 0.2 | 0.1 | 2,563 |
| Gauteng | 23.1 | 5.3 | 1.0 | 16.3 | 0.0 | 0.2 | 0.2 | 0.1 | 9,235 |
| Mpumalanga | 38.0 | 5.8 | 1.6 | 29.8 | 0.0 | 0.7 | 0.1 | 0.0 | 2,993 |
| Limpopo | 44.9 | 10.2 | 1.5 | 32.3 | 0.1 | 0.8 | 0.1 | 0.0 | 3,906 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 46.5 | 8.6 | 1.8 | 34.5 | 0.2 | 1.1 | 0.2 | 0.0 | 7,424 |
| Second | 41.7 | 7.9 | 2.0 | 30.5 | 0.2 | 0.8 | 0.2 | 0.1 | 7,469 |
| Middle | 37.7 | 6.7 | 1.8 | 27.8 | 0.1 | 1.0 | 0.2 | 0.1 | 7,435 |
| Fourth | 31.5 | 7.6 | 2.0 | 20.7 | 0.0 | 0.8 | 0.3 | 0.0 | 7,377 |
| Highest | 14.9 | 6.7 | 1.1 | 6.5 | 0.1 | 0.3 | 0.2 | 0.0 | 7,422 |
| Total | 34.5 | 7.5 | 1.8 | 24.0 | 0.1 | 0.8 | 0.2 | 0.1 | 37,128 |

## Table 2.18 Food security: Adults

Percent distribution of households by the frequency of problems satisfying food needs of de jure adults in the past 12 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | In the past 12 months, frequency of problems satisfying food needs of adults |  |  |  |  |  |  | Number of household |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Seldom | Sometimes | Often | Always | Not applicable | Total |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 84.5 | 3.3 | 8.7 | 1.6 | 0.8 | 1.1 | 100.0 | 7,507 |
| Non-urban | 77.0 | 4.3 | 14.6 | 2.8 | 0.9 | 0.4 | 100.0 | 3,510 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 87.1 | 3.3 | 6.8 | 0.6 | 0.4 | 1.8 | 100.0 | 1,204 |
| Eastern Cape | 75.3 | 6.1 | 13.5 | 2.7 | 2.0 | 0.3 | 100.0 | 1,287 |
| Northern Cape | 79.7 | 7.7 | 7.8 | 1.6 | 1.0 | 2.2 | 100.0 | 209 |
| Free State | 78.0 | 6.1 | 9.1 | 4.2 | 2.0 | 0.6 | 100.0 | 578 |
| KwaZulu-Natal | 75.5 | 3.2 | 16.7 | 2.8 | 1.0 | 0.7 | 100.0 | 1,956 |
| North West | 81.4 | 5.0 | 10.1 | 2.9 | 0.2 | 0.3 | 100.0 | 830 |
| Gauteng | 88.3 | 2.8 | 6.5 | 0.7 | 0.6 | 1.2 | 100.0 | 3,035 |
| Mpumalanga | 81.8 | 2.4 | 12.0 | 2.4 | 0.8 | 0.5 | 100.0 | 847 |
| Limpopo | 82.6 | 1.9 | 12.0 | 2.3 | 0.4 | 0.8 | 100.0 | 1,070 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 66.8 | 5.7 | 20.6 | 4.2 | 2.0 | 0.6 | 100.0 | 2,162 |
| Second | 79.4 | 4.6 | 11.9 | 2.5 | 0.8 | 0.8 | 100.0 | 2,329 |
| Middle | 81.9 | 3.4 | 11.2 | 1.4 | 0.7 | 1.3 | 100.0 | 2,234 |
| Fourth | 85.7 | 3.4 | 8.0 | 1.3 | 0.6 | 1.0 | 100.0 | 2,041 |
| Highest | 96.6 | 1.0 | 1.2 | 0.2 | 0.1 | 0.8 | 100.0 | 2,251 |
| Total | 82.1 | 3.6 | 10.6 | 2.0 | 0.9 | 0.9 | 100.0 | 11,016 |

Table 2.19 Food security: Children
Percent distribution of households by the frequency of problems satisfying food needs of de jure children in the past 12 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | In the past 12 months, frequency of problems satisfying food needs of children |  |  |  |  |  |  | Number of households |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never | Seldom | Sometimes | Often | Always | Not applicable | Total |  |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 83.4 | 3.0 | 8.5 | 1.7 | 0.8 | 2.7 | 100.0 | 3,688 |
| Non-urban | 74.4 | 4.3 | 15.2 | 3.2 | 0.9 | 2.0 | 100.0 | 2,236 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 85.0 | 4.0 | 9.0 | 0.4 | 0.3 | 1.4 | 100.0 | 657 |
| Eastern Cape | 74.3 | 6.4 | 12.1 | 2.2 | 1.5 | 3.5 | 100.0 | 777 |
| Northern Cape | 83.6 | 7.1 | 6.3 | 1.3 | 0.0 | 1.8 | 100.0 | 134 |
| Free State | 76.5 | 5.5 | 8.6 | 5.0 | 2.6 | 1.8 | 100.0 | 347 |
| KwaZulu-Natal | 68.9 | 3.2 | 18.8 | 4.1 | 1.1 | 3.8 | 100.0 | 1,011 |
| North West | 79.5 | 2.9 | 12.2 | 4.1 | 0.3 | 1.0 | 100.0 | 388 |
| Gauteng | 87.9 | 2.3 | 5.9 | 0.6 | 0.5 | 2.8 | 100.0 | 1,436 |
| Mpumalanga | 80.7 | 3.0 | 11.8 | 2.5 | 0.6 | 1.4 | 100.0 | 486 |
| Limpopo | 82.2 | 1.9 | 11.8 | 2.2 | 0.6 | 1.4 | 100.0 | 686 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 62.3 | 6.3 | 21.8 | 5.1 | 2.0 | 2.5 | 100.0 | 1,177 |
| Second | 77.0 | 3.4 | 13.1 | 3.1 | 0.9 | 2.5 | 100.0 | 1,208 |
| Middle | 81.1 | 3.8 | 10.9 | 1.5 | 0.7 | 2.0 | 100.0 | 1,230 |
| Fourth | 86.3 | 3.0 | 7.0 | 1.3 | 0.5 | 1.9 | 100.0 | 1,186 |
| Highest | 93.8 | 1.0 | 1.8 | 0.0 | 0.0 | 3.4 | 100.0 | 1,122 |
| Total | 80.0 | 3.5 | 11.0 | 2.2 | 0.8 | 2.4 | 100.0 | 5,923 |

## Key Findings

- Education: About 1 in 4 respondents ( $28 \%$ of women and $24 \%$ of men) have completed secondary school, and an additional 1 in 10 respondents have attended more than secondary school ( $12 \%$ of women and $11 \%$ of men).
- Literacy: 96\% of women and 95\% of men are literate.
- Exposure to media: $30 \%$ of women and $27 \%$ of men are exposed to three specified types of media (newspapers, television, and radio) weekly.
- Employment: Men are more likely to be currently employed than women ( $46 \%$ versus $34 \%$ ).

TThis chapter presents information on the demographic and socioeconomic characteristics of the survey respondents such as age, education, place of residence, marital status, employment, and wealth status. This information is useful for understanding the factors that affect use of reproductive health services, contraceptive use, and other health behaviours.

### 3.1 Basic Characteristics of Survey Respondents

A total of 8,514 women age $15-49$ and 3,618 men age $15-59$ were interviewed in the SADHS 2016 with the standard individual questionnaires. Among the respondents age $15-49,33 \%$ of women and $39 \%$ of men were in the $15-24$ age group, $33 \%$ of women and $30 \%$ of men were in the $25-34$ age group, and $34 \%$ of women and $32 \%$ of men were in the $35-49$ age group (Table 3.1). While men up to age 59 were interviewed, the body of tables in this report presents data for men age 15-49 so that this information is comparable with the data for women; data for men age 50-59 and age 15-59 are presented as separate rows in the tables.

Black African is the largest self-reported population group, making up $87 \%$ of female and $88 \%$ of male respondents, followed by the Coloured population group, which accounts for $9 \%$ of women and $7 \%$ of men. The next-largest segment is the White population group ( $3 \%$ each of women and men), reflecting considerable underrepresentation of this group in the survey. Two percent of women and men each reported belonging to the Indian/Asian population group.

Well over half of women (59\%) and two-thirds of men (65\%) have never been married. Women more often are married or living together with a partner (i.e., in a union) than men ( $36 \%$ and $31 \%$, respectively). Women and men are equally likely to report that they are divorced or separated ( $3 \%$ and $4 \%$, respectively). Two percent of women report that they are widowed, as compared with $1 \%$ of men.

The majority of respondents live in urban areas ( $67 \%$ of women and $69 \%$ of men). By province, the largest percentage of women and men live in Gauteng ( $27 \%$ of women and $31 \%$ of men), followed by KwaZuluNatal ( $19 \%$ of women and $16 \%$ of men). Only $2 \%$ of female and male respondents live in Northern Cape.

### 3.2 Education and Literacy

Educational attainment is high in South Africa. About 1 in 4 respondents ( $28 \%$ of women and $24 \%$ of men) have completed secondary school, and an additional 1 in 10 respondents have attended more than secondary school ( $12 \%$ of women and $11 \%$ of men) (Tables 3.2.1 and 3.2.2). Forty-nine percent of women report that they attended some secondary school but did not complete it, as compared with $51 \%$ of men. Only 2\% of respondents reported having no formal education (Figure 3.1). The median number of years of schooling completed by women and men age $15-49$ is 10.4 and 10.0 , respectively.

## Literacy

Respondents who have attended higher than secondary school are assumed to be literate. All other respondents, shown a typed sentence to read aloud, are considered literate if they could read all or part of the sentence.
Sample: Women and men age 15-49

Ninety-six percent of women and $95 \%$ of men are literate (Tables 3.3.1 and 3.3.2). Four percent of women and $5 \%$ of men cannot read at all.

Comparison with the SADHS 1998: Among women, the median number of years of school completed has increased by 1.7 years, from 8.7 to 10.4. The percentage of women with no education decreased from $7 \%$ in 1998 to $2 \%$ in 2016.

## Patterns by background characteristics

- Respondents from urban areas are more educated than their non-urban counterparts. For example, $14 \%$ of women in urban areas have attended more than secondary school, as compared with only $7 \%$ of women in non-urban areas. The median number of years of schooling completed is 10.8 years for urban women, compared with 9.7 years for non-urban women.
- Educational attainment varies by province. Gauteng has the highest percentage of women who have completed secondary school or higher and Eastern Cape has the lowest ( $51 \%$ versus 28\%) (Figure 3.2).
- Educational attainment increases with increasing household wealth. Seventy-one percent of both women and men in the highest wealth quintile have completed secondary school or higher, as compared with $16 \%$ of women and $13 \%$ of men in the lowest wealth quintile (Figure 3.3).

Figure 3.1 Education of survey respondents
Percent distribution of women and men age 15-49 by highest level of schooling attended or completed


Figure 3.2 Secondary education by province

Percentage of women age 15-49 with secondary education complete or higher


- Literacy generally decreases with age. Among women, literacy decreases from $98 \%$ among those age 15-19 to $93 \%$ among those age 40-49. Among men, literacy decreases from $97 \%$ among those age $15-19$ to $92 \%$ among those age 40-44 (Tables 3.3.1 and 3.3.2).
- Literacy also increases with increasing wealth, rising from $91 \%$ among women in the lowest wealth quintile to $99 \%$ in the fourth quintile and from $88 \%$ among men in the lowest wealth quintile to nearly $100 \%$ in the highest quintile.

Figure 3.3 Secondary education by household wealth

Percentage of women and men age 15-49 with secondary education complete or higher

■ Women ■ Men


### 3.3 Mass Media Exposure and Internet Usage

## Exposure to mass media

Respondents were asked how often they read a newspaper, listened to the radio, or watched television. Those who responded at least once a week are considered regularly exposed to that form of media.
Sample: Women and men age 15-49

Data on women's and men's exposure to mass media are essential in the development of educational programmes and the dissemination of all types of information, particularly information about family planning, HIV/AIDS awareness, and other important health topics. Women are more likely than men to be exposed to newspapers and television, but not radio (Figure 3.4). Television is the most common form of media exposure for both women and men across nearly all subgroups (Table 3.4.1 and Table 3.4.2). Thirty percent of women and $27 \%$ of men are exposed to all three types of media. Eighteen percent of women and $16 \%$ of men are not regularly exposed to any form of media.

The Internet is also a critical tool through which information is shared. Internet use includes accessing web pages, email, and social media. Approximately half of women and men accessed the Internet in the 12 months before the survey. Among those who had used the Internet in the past 12 months, $71 \%$ of women and $62 \%$ of men accessed it on a daily basis (Tables 3.5.1 and 3.5.2).

## Patterns by background characteristics

- Non-urban women are twice as likely as their urban counterparts to have no regular exposure to any form of mass media ( $28 \%$ versus $13 \%$ ). A similar pattern holds true for men ( $22 \%$ versus $13 \%$ ).
- Women in KwaZulu-Natal (28\%) and men in Eastern Cape (31\%) are most likely to report no regular exposure to any of the three media. Women and men in Western Cape are least likely to report that they do not access the three media at least weekly ( $2 \%$ of women and $7 \%$ of men).
- Better-educated women and men have much greater exposure to mass media. Only $6 \%$ of both women and men with more than a secondary education lack regular exposure to any media, as compared with $45 \%$ of women and $40 \%$ of men with no education.
- Exposure to mass media generally increases with increasing wealth. Fifty-two percent of women and $38 \%$ of men in the highest wealth quintile access all three forms of mass media, compared with $8 \%$ each of women and men in the lowest quintile.
- Internet usage generally decreases with age among both women and men (Tables 3.5.1 and 3.5.2). For example, $61 \%$ of women age $20-24$ used the Internet in the past 12 months, compared with $24 \%$ of women age 45-49.
- Women and men in urban areas ( $56 \%$ and $58 \%$, respectively) are more likely than their non-urban counterparts ( $30 \%$ and $39 \%$, respectively) to have used the Internet in the past 12 months.
- Internet usage increases with increasing wealth among both women and men; for example, $19 \%$ of women in the lowest wealth quintile accessed the Internet in the past 12 months, as compared with $81 \%$ in the highest quintile.


### 3.4 Employment

## Currently employed

Respondents who were employed in the 7 days before the survey.
Sample: Women and men age 15-49

Among respondents age $15-49$, men are more likely to be employed than women; $34 \%$ of women are currently employed, as compared with $46 \%$ of men (Tables 3.6.1 and 3.6.2). An additional $4 \%$ of women and $6 \%$ of men reported that they were not currently employed but had worked in the past 12 months.

Comparison with the SADHS 1998: The percentage of women who report being currently employed has remained relatively unchanged since 1998 ( $32 \%$ in 1998 versus $34 \%$ in 2016).

## Patterns by background characteristics

- Women and men who are in a union (married or living together with a partner as though married) or divorced/separated/widowed women and men are more likely to be employed than those who have never been married or lived with a partner as though married.
- A greater percentage of urban women and men are currently employed than their non-urban counterparts (Figure 3.5).
- Employment status varies widely by province. Women and men in Western Cape were most likely to be currently employed at the time of the survey, while women in KwaZulu-Natal and men in Free State were least likely to be employed (Tables 3.6.1 and 3.6.2).
- For women, employment increases with increasing household wealth, rising from $22 \%$ in the lowest quintile to $53 \%$ in the highest quintile. For men, those in the highest quintile $(60 \%)$ are more likely than those in other quintiles ( $41 \%-45 \%$ ) to be currently employed.


### 3.5 Occupation

## Occupation

Categorised as professional/technical/managerial, clerical, sales and services, skilled manual, unskilled manual, domestic service, agriculture, and other
Sample: Women and men age 15-49 who were currently employed or had worked in the 12 months before the survey

Among those who are employed, $20 \%$ of women work in professional, technical, or managerial occupations; $19 \%$ work in unskilled manual occupations; $18 \%$ are engaged in sales and services; and $16 \%$ do clerical work (Table 3.7.1 and Figure 3.6). One-third ( $33 \%$ ) of men who are employed are engaged in skilled manual occupations; $14 \%$ work in professional, technical, or managerial occupations; $14 \%$ work in sales and services; and $13 \%$ are engaged in unskilled manual occupations (Table 3.7.2 and Figure 3.6). Three percent of women and $5 \%$ of men work in agriculture.

The vast majority of women earn only cash for their work ( $94 \%$ ), are employed by a non-family member (85\%), and work all year (78\%) (Table 3.8).

## Patterns by background characteristics

- Urban women are most likely to be employed in the professional, technical, or managerial sector ( $22 \%$ ), while urban men are most likely to be employed in skilled manual occupations (32\%). In non-urban areas, however, the largest percentage of women work in unskilled manual occupations ( $26 \%$ ), while again the largest percentage of men work in the skilled manual sector (38\%) (Table 3.7.1 and Table 3.7.2).
- Women and men with more than a secondary education are much more likely to work in professional, technical, and managerial occupations ( $49 \%$ of women and $44 \%$ of men) than other occupations. Women with no education are most likely to work in domestic service ( $25 \%$ ); men with an incomplete primary education most often work in skilled manual occupations (48\%).
- The proportion of women and men working in professional, technical, and managerial occupations increases with increasing wealth. For example, women in the highest quintile are 10 times more likely to work in a professional, technical, or managerial occupation than women in the lowest quintile ( $38 \%$ versus 3\%).


### 3.6 Adult Health

Table 3.9 shows the weighted and unweighted numbers and the weighted percent distributions of women and men age 15 and older who were interviewed using the SADHS adult health module. A total of 6,126 women and 4,210 men age 15 and older were interviewed in the SADHS 2016 with the adult health module.

The characteristics of the respondents who completed the adult health module are generally similar to those presented in Table 3.1, except the age distribution differs because there was no upper age limit for eligibility. In addition, the percentages of women and men age 15 or older who had never been married or lived with a partner as though married ( $50 \%$ of women and $53 \%$ of men) were lower than the percentages for women and men age 15-49 ( $59 \%$ and $65 \%$ ). Most strikingly, the percentage of respondents age 15 or older with no education is larger than for respondents age $15-49 ; 8 \%$ of women and $5 \%$ of men age 15 and older have no education, as compared with only $2 \%$ each of women and men age 15-49.

All women and men who were administered the adult health module were eligible for biomarker collection including anthropometry, blood pressure measurement, and testing for anaemia, HIV, and HbA1c. The adult health module results are presented in Chapters $15,16,17$, and 18.

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Table 3.1 Background characteristics of respondents
Percent distribution of women and men age 15-49 by selected background characteristics, South Africa DHS 2016

| Background characteristic | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |
| 15-19 | 16.8 | 1,427 | 1,505 | 20.2 | 647 | 705 |
| 20-24 | 16.6 | 1,415 | 1,408 | 18.4 | 588 | 602 |
| 25-29 | 17.0 | 1,444 | 1,397 | 15.8 | 506 | 492 |
| 30-34 | 15.7 | 1,333 | 1,295 | 14.1 | 450 | 436 |
| 35-39 | 12.6 | 1,072 | 1,032 | 12.3 | 395 | 339 |
| 40-44 | 11.0 | 941 | 964 | 10.8 | 345 | 335 |
| 45-49 | 10.4 | 883 | 913 | 8.5 | 271 | 270 |
| Population group |  |  |  |  |  |  |
| Black African | 86.8 | 7,388 | 7,359 | 87.9 | 2,815 | 2,807 |
| White | 3.1 | 265 | 214 | 3.2 | 104 | 81 |
| Coloured | 8.6 | 730 | 848 | 7.3 | 232 | 251 |
| Indian/Asian | 1.5 | 126 | 88 | 1.5 | 48 | 38 |
| Other | 0.1 | 6 | 5 | 0.1 | 2 | 2 |
| Marital status |  |  |  |  |  |  |
| Never married | 58.6 | 4,992 | 5,134 | 64.7 | 2,073 | 2,161 |
| Married | 23.3 | 1,983 | 1,825 | 19.5 | 624 | 547 |
| Living together | 12.5 | 1,066 | 1,016 | 11.4 | 364 | 343 |
| Divorced/separated | 3.4 | 287 | 337 | 3.5 | 113 | 99 |
| Widowed | 2.2 | 185 | 202 | 0.9 | 28 | 29 |
| Residence |  |  |  |  |  |  |
| Urban | 67.3 | 5,731 | 4,805 | 68.8 | 2,203 | 1,768 |
| Non-urban | 32.7 | 2,783 | 3,709 | 31.2 | 999 | 1,411 |
| Province |  |  |  |  |  |  |
| Western Cape | 11.7 | 995 | 656 | 10.2 | 328 | 186 |
| Eastern Cape | 11.0 | 938 | 1,041 | 11.3 | 362 | 411 |
| Northern Cape | 2.0 | 173 | 718 | 1.9 | 61 | 251 |
| Free State | 5.2 | 442 | 854 | 5.0 | 159 | 295 |
| KwaZulu-Natal | 19.0 | 1,616 | 1,360 | 16.3 | 521 | 471 |
| North West | 6.7 | 570 | 863 | 7.4 | 237 | 379 |
| Gauteng | 26.8 | 2,284 | 863 | 30.7 | 984 | 371 |
| Mpumalanga | 7.9 | 671 | 1,054 | 8.2 | 263 | 413 |
| Limpopo | 9.7 | 824 | 1,105 | 9.0 | 288 | 402 |
| Education |  |  |  |  |  |  |
| No education | 2.0 | 168 | 190 | 1.9 | 62 | 76 |
| Primary incomplete | 5.3 | 447 | 524 | 6.8 | 219 | 274 |
| Primary complete | 3.8 | 327 | 338 | 5.2 | 166 | 189 |
| Secondary incomplete | 49.3 | 4,195 | 4,409 | 51.1 | 1,637 | 1,628 |
| Secondary complete | 27.8 | 2,369 | 2,172 | 24.1 | 773 | 722 |
| More than secondary | 11.8 | 1,008 | 881 | 10.8 | 345 | 290 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 19.4 | 1,648 | 1,763 | 19.3 | 618 | 664 |
| Second | 20.1 | 1,715 | 1,865 | 21.3 | 682 | 772 |
| Middle | 21.2 | 1,805 | 1,956 | 22.3 | 715 | 755 |
| Fourth | 20.7 | 1,763 | 1,733 | 20.4 | 653 | 597 |
| Highest | 18.6 | 1,583 | 1,197 | 16.7 | 534 | 391 |
| Total 15-49 | 100.0 | 8,514 | 8,514 | 100.0 | 3,202 | 3,179 |
| 50-59 | na | na | na | na | 416 | 439 |
| Total 15-59 | na | na | na | na | 3,618 | 3,618 |

[^6]Table 3.2.1 Educational attainment: Women
Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Highest level of schooling |  |  |  |  |  | Total | Median years completed | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | More than secondary |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 0.3 | 2.5 | 4.1 | 63.1 | 22.5 | 7.4 | 100.0 | 9.9 | 2,842 |
| 15-19 | 0.2 | 2.8 | 4.9 | 81.0 | 9.6 | 1.4 | 100.0 | 9.1 | 1,427 |
| 20-24 | 0.4 | 2.3 | 3.2 | 45.0 | 35.6 | 13.5 | 100.0 | 11.0 | 1,415 |
| 25-29 | 0.4 | 3.9 | 2.5 | 41.6 | 36.6 | 14.9 | 100.0 | 11.0 | 1,444 |
| 30-34 | 1.8 | 3.9 | 3.0 | 45.1 | 31.8 | 14.4 | 100.0 | 10.8 | 1,333 |
| 35-39 | 2.2 | 5.7 | 3.4 | 44.5 | 29.9 | 14.4 | 100.0 | 10.7 | 1,072 |
| 40-44 | 4.3 | 8.5 | 3.4 | 42.3 | 27.4 | 14.1 | 100.0 | 10.4 | 941 |
| 45-49 | 7.5 | 14.2 | 7.6 | 36.8 | 22.4 | 11.5 | 100.0 | 9.4 | 883 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 1.6 | 3.7 | 3.5 | 45.4 | 31.5 | 14.3 | 100.0 | 10.8 | 5,731 |
| Non-urban | 2.8 | 8.4 | 4.6 | 57.2 | 20.2 | 6.8 | 100.0 | 9.7 | 2,783 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 1.5 | 3.2 | 2.9 | 48.9 | 25.1 | 18.5 | 100.0 | 10.6 | 995 |
| Eastern Cape | 1.5 | 8.6 | 6.2 | 55.6 | 20.3 | 7.7 | 100.0 | 9.6 | 938 |
| Northern Cape | 2.7 | 7.0 | 4.5 | 52.8 | 24.6 | 8.4 | 100.0 | 9.8 | 173 |
| Free State | 1.1 | 5.4 | 3.5 | 50.6 | 29.9 | 9.6 | 100.0 | 10.4 | 442 |
| KwaZulu-Natal | 3.1 | 5.9 | 3.2 | 46.7 | 31.0 | 10.1 | 100.0 | 10.5 | 1,616 |
| North West | 2.7 | 8.5 | 4.3 | 53.3 | 23.6 | 7.6 | 100.0 | 9.9 | 570 |
| Gauteng | 1.6 | 3.0 | 4.2 | 40.5 | 36.0 | 14.7 | 100.0 | 11.0 | 2,284 |
| Mpumalanga | 3.0 | 6.2 | 4.1 | 57.0 | 20.1 | 9.6 | 100.0 | 10.0 | 671 |
| Limpopo | 1.2 | 5.4 | 2.1 | 61.3 | 19.4 | 10.6 | 100.0 | 10.1 | 824 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 4.7 | 11.7 | 7.7 | 59.6 | 14.8 | 1.5 | 100.0 | 9.0 | 1,648 |
| Second | 2.0 | 6.3 | 4.3 | 60.9 | 21.6 | 4.9 | 100.0 | 9.9 | 1,715 |
| Middle | 1.4 | 4.6 | 3.7 | 51.4 | 30.8 | 8.1 | 100.0 | 10.4 | 1,805 |
| Fourth | 1.1 | 3.0 | 3.0 | 45.8 | 35.0 | 12.1 | 100.0 | 10.8 | 1,763 |
| Highest | 0.9 | 0.6 | 0.3 | 27.4 | 36.7 | 34.1 | 100.0 | 11.5 | 1,583 |
| Total | 2.0 | 5.3 | 3.8 | 49.3 | 27.8 | 11.8 | 100.0 | 10.4 | 8,514 |

[^7]Table 3.2.2 Educational attainment: Men
Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Highest level of schooling |  |  |  |  |  | Total | Median years completed | $\begin{gathered} \text { Number of } \\ \text { men } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No education | Some primary | Completed primary ${ }^{1}$ | Some secondary | Completed secondary ${ }^{2}$ | More than secondary |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 0.5 | 5.8 | 4.8 | 65.4 | 18.5 | 5.1 | 100.0 | 9.2 | 1,235 |
| 15-19 | 0.0 | 6.6 | 7.8 | 78.3 | 7.0 | 0.3 | 100.0 | 8.5 | 647 |
| 20-24 | 1.0 | 4.9 | 1.5 | 51.1 | 31.1 | 10.4 | 100.0 | 10.4 | 588 |
| 25-29 | 0.5 | 6.1 | 4.8 | 42.3 | 29.1 | 17.3 | 100.0 | 10.8 | 506 |
| 30-34 | 1.8 | 5.1 | 4.8 | 45.4 | 26.9 | 16.0 | 100.0 | 10.6 | 450 |
| 35-39 | 3.0 | 8.0 | 5.6 | 43.5 | 28.1 | 11.8 | 100.0 | 10.4 | 395 |
| 40-44 | 6.2 | 9.9 | 6.2 | 41.0 | 25.3 | 11.4 | 100.0 | 10.2 | 345 |
| 45-49 | 4.8 | 10.3 | 6.2 | 36.2 | 28.8 | 13.6 | 100.0 | 10.4 | 271 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 1.7 | 4.8 | 4.2 | 48.0 | 27.9 | 13.4 | 100.0 | 10.4 | 2,203 |
| Non-urban | 2.6 | 11.4 | 7.4 | 57.9 | 15.8 | 5.0 | 100.0 | 9.1 | 999 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 0.6 | 4.5 | 2.4 | 48.2 | 31.9 | 12.4 | 100.0 | 10.5 | 328 |
| Eastern Cape | 1.9 | 11.1 | 7.0 | 58.0 | 14.2 | 7.9 | 100.0 | 9.0 | 362 |
| Northern Cape | 3.8 | 9.3 | 6.4 | 43.7 | 31.5 | 5.3 | 100.0 | 9.7 | 61 |
| Free State | 1.2 | 9.6 | 5.4 | 49.8 | 24.9 | 9.1 | 100.0 | 9.5 | 159 |
| KwaZulu-Natal | 3.4 | 5.2 | 8.0 | 51.7 | 24.1 | 7.5 | 100.0 | 9.7 | 521 |
| North West | 2.7 | 11.8 | 7.4 | 51.2 | 23.6 | 3.4 | 100.0 | 9.7 | 237 |
| Gauteng | 1.3 | 4.7 | 3.8 | 47.2 | 26.9 | 16.0 | 100.0 | 10.6 | 984 |
| Mpumalanga | 4.1 | 8.4 | 4.0 | 51.4 | 24.8 | 7.3 | 100.0 | 9.7 | 263 |
| Limpopo | 0.7 | 6.8 | 4.6 | 59.9 | 16.2 | 11.7 | 100.0 | 9.5 | 288 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 5.3 | 15.4 | 9.1 | 57.3 | 12.2 | 0.8 | 100.0 | 8.3 | 618 |
| Second | 1.8 | 9.0 | 8.3 | 59.6 | 18.0 | 3.3 | 100.0 | 9.4 | 682 |
| Middle | 1.9 | 6.0 | 4.4 | 56.0 | 23.8 | 7.9 | 100.0 | 10.0 | 715 |
| Fourth | 0.5 | 2.6 | 2.8 | 49.8 | 33.2 | 11.1 | 100.0 | 10.6 | 653 |
| Highest | 0.1 | 0.5 | 0.8 | 28.1 | 35.3 | 35.3 | 100.0 | 11.5 | 534 |
| Total 15-49 | 1.9 | 6.8 | 5.2 | 51.1 | 24.1 | 10.8 | 100.0 | 10.0 | 3,202 |
| 50-59 | 10.9 | 27.9 | 3.2 | 30.5 | 14.7 | 12.9 | 100.0 | 7.7 | 416 |
| Total 15-59 | 3.0 | 9.3 | 5.0 | 48.7 | 23.0 | 11.0 | 100.0 | 9.8 | 3,618 |

${ }^{1}$ Completed 7th grade/standard 5/AET 3 at the primary level
${ }^{2}$ Completed 12 th grade/standard $10 /$ form $5 /$ matric at the secondary level

Table 3.3.1 Literacy: Women
Percent distribution of women age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, South Africa DHS 2016

| Background characteristic | Higher than secondary schooling | No schooling, primary or secondary school |  |  |  |  | Total | Percentage literate ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Can read a whole sentence | Can read part of a sentence | Cannot read at all | No card with required language | Blind/visually impaired |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 7.4 | 83.4 | 6.8 | 2.3 | 0.0 | 0.0 | 100.0 | 97.7 | 2,842 |
| 15-19 | 1.4 | 90.0 | 6.7 | 1.9 | 0.0 | 0.0 | 100.0 | 98.1 | 1,427 |
| 20-24 | 13.5 | 76.8 | 6.9 | 2.7 | 0.1 | 0.0 | 100.0 | 97.2 | 1,415 |
| 25-29 | 14.9 | 75.1 | 7.7 | 2.1 | 0.1 | 0.0 | 100.0 | 97.8 | 1,444 |
| 30-34 | 14.4 | 75.0 | 7.3 | 2.8 | 0.2 | 0.3 | 100.0 | 96.7 | 1,333 |
| 35-39 | 14.4 | 73.6 | 8.3 | 3.4 | 0.0 | 0.3 | 100.0 | 96.2 | 1,072 |
| 40-44 | 14.1 | 67.2 | 11.9 | 6.7 | 0.1 | 0.0 | 100.0 | 93.2 | 941 |
| 45-49 | 11.5 | 69.6 | 11.3 | 7.4 | 0.0 | 0.2 | 100.0 | 92.5 | 883 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 14.3 | 75.4 | 7.5 | 2.6 | 0.1 | 0.1 | 100.0 | 97.2 | 5,731 |
| Non-urban | 6.8 | 77.9 | 9.8 | 5.4 | 0.1 | 0.0 | 100.0 | 94.5 | 2,783 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 18.5 | 78.5 | 2.1 | 0.9 | 0.0 | 0.0 | 100.0 | 99.1 | 995 |
| Eastern Cape | 7.7 | 77.0 | 10.4 | 4.8 | 0.0 | 0.1 | 100.0 | 95.1 | 938 |
| Northern Cape | 8.4 | 77.0 | 11.0 | 3.3 | 0.0 | 0.3 | 100.0 | 96.4 | 173 |
| Free State | 9.6 | 83.9 | 5.1 | 1.4 | 0.0 | 0.0 | 100.0 | 98.6 | 442 |
| KwaZulu-Natal | 10.1 | 74.9 | 11.5 | 3.4 | 0.0 | 0.1 | 100.0 | 96.5 | 1,616 |
| North West | 7.6 | 79.4 | 6.8 | 5.7 | 0.4 | 0.0 | 100.0 | 93.8 | 570 |
| Gauteng | 14.7 | 72.1 | 9.2 | 3.7 | 0.1 | 0.2 | 100.0 | 96.0 | 2,284 |
| Mpumalanga | 9.6 | 80.2 | 5.0 | 5.0 | 0.2 | 0.0 | 100.0 | 94.8 | 671 |
| Limpopo | 10.6 | 77.2 | 8.9 | 2.9 | 0.0 | 0.3 | 100.0 | 96.8 | 824 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 1.5 | 75.0 | 14.6 | 8.9 | 0.0 | 0.0 | 100.0 | 91.0 | 1,648 |
| Second | 4.9 | 80.9 | 10.1 | 3.9 | 0.1 | 0.2 | 100.0 | 95.8 | 1,715 |
| Middle | 8.1 | 81.8 | 7.4 | 2.4 | 0.2 | 0.1 | 100.0 | 97.3 | 1,805 |
| Fourth | 12.1 | 82.0 | 5.0 | 0.8 | 0.1 | 0.0 | 100.0 | 99.1 | 1,763 |
| Highest | 34.1 | 59.8 | 4.3 | 1.6 | 0.0 | 0.3 | 100.0 | 98.2 | 1,583 |
| Total | 11.8 | 76.2 | 8.2 | 3.5 | 0.1 | 0.1 | 100.0 | 96.3 | 8,514 |

${ }^{1}$ Refers to women who attended schooling higher than the secondary level and women who can read a whole sentence or part of a sentence

Table 3.3.2 Literacy: Men
Percent distribution of men age 15-49 by level of schooling attended and level of literacy, and percentage literate, according to background characteristics, South Africa DHS 2016

| Background characteristic | Higher than secondary schooling | No schooling, primary or secondary school |  |  |  |  | Total | Percentageliterate $^{1}$ | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Can read a whole sentence | Can read part of a sentence | $\begin{gathered} \text { Cannot read } \\ \text { at all } \\ \hline \end{gathered}$ | No card with required language | Blind/visually impaired |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 5.1 | 78.8 | 11.9 | 4.1 | 0.1 | 0.0 | 100.0 | 95.8 | 1,235 |
| 15-19 | 0.3 | 84.2 | 12.9 | 2.6 | 0.0 | 0.0 | 100.0 | 97.4 | 647 |
| 20-24 | 10.4 | 72.9 | 10.9 | 5.7 | 0.1 | 0.0 | 100.0 | 94.1 | 588 |
| 25-29 | 17.3 | 64.9 | 13.5 | 4.4 | 0.0 | 0.0 | 100.0 | 95.6 | 506 |
| 30-34 | 16.0 | 63.6 | 15.1 | 5.0 | 0.3 | 0.0 | 100.0 | 94.7 | 450 |
| 35-39 | 11.8 | 72.6 | 10.7 | 4.4 | 0.2 | 0.3 | 100.0 | 95.0 | 395 |
| 40-44 | 11.4 | 67.9 | 12.6 | 8.1 | 0.0 | 0.0 | 100.0 | 91.9 | 345 |
| 45-49 | 13.6 | 64.9 | 15.2 | 6.2 | 0.0 | 0.0 | 100.0 | 93.8 | 271 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 13.4 | 71.0 | 12.0 | 3.5 | 0.0 | 0.1 | 100.0 | 96.4 | 2,203 |
| Non-urban | 5.0 | 72.2 | 14.5 | 8.1 | 0.2 | 0.0 | 100.0 | 91.6 | 999 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 12.4 | 72.2 | 12.3 | 2.7 | 0.0 | 0.4 | 100.0 | 96.9 | 328 |
| Eastern Cape | 7.9 | 74.9 | 11.1 | 5.5 | 0.6 | 0.0 | 100.0 | 93.9 | 362 |
| Northern Cape | 5.3 | 76.6 | 14.3 | 3.7 | 0.0 | 0.0 | 100.0 | 96.3 | 61 |
| Free State | 9.1 | 74.2 | 12.6 | 4.1 | 0.0 | 0.0 | 100.0 | 95.9 | 159 |
| KwaZulu-Natal | 7.5 | 71.0 | 18.5 | 3.0 | 0.0 | 0.0 | 100.0 | 97.0 | 521 |
| North West | 3.4 | 82.0 | 9.1 | 5.4 | 0.0 | 0.0 | 100.0 | 94.6 | 237 |
| Gauteng | 16.0 | 66.4 | 13.9 | 3.7 | 0.0 | 0.0 | 100.0 | 96.3 | 984 |
| Mpumalanga | 7.3 | 72.6 | 12.6 | 7.2 | 0.3 | 0.0 | 100.0 | 92.5 | 263 |
| Limpopo | 11.7 | 71.0 | 4.6 | 12.6 | 0.0 | 0.0 | 100.0 | 87.4 | 288 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 0.8 | 65.0 | 21.9 | 11.8 | 0.3 | 0.2 | 100.0 | 87.7 | 618 |
| Second | 3.3 | 75.3 | 14.9 | 6.3 | 0.1 | 0.0 | 100.0 | 93.6 | 682 |
| Middle | 7.9 | 73.7 | 14.0 | 4.3 | 0.0 | 0.0 | 100.0 | 95.7 | 715 |
| Fourth | 11.1 | 78.4 | 9.2 | 1.3 | 0.0 | 0.0 | 100.0 | 98.7 | 653 |
| Highest | 35.3 | 62.0 | 2.4 | 0.4 | 0.0 | 0.0 | 100.0 | 99.6 | 534 |
| Total 15-49 | 10.8 | 71.4 | 12.8 | 4.9 | 0.1 | 0.0 | 100.0 | 94.9 | 3,202 |
| 50-59 | 12.9 | 48.0 | 22.3 | 16.4 | 0.0 | 0.4 | 100.0 | 83.2 | 416 |
| Total 15-59 | 11.0 | 68.7 | 13.9 | 6.2 | 0.1 | 0.1 | 100.0 | 93.6 | 3,618 |

${ }^{1}$ Refers to men who attended schooling higher than the secondary level and men who can read a whole sentence or part of a sentence

Table 3.4.1 Exposure to mass media: Women
Percentage of women age 15-49 who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016

| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | Accesses all three media at least once a week | Accesses none of the three media at least once a week | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-19 | 37.1 | 71.8 | 47.3 | 25.1 | 20.2 | 1,427 |
| 20-24 | 40.2 | 72.1 | 53.6 | 27.7 | 18.0 | 1,415 |
| 25-29 | 41.3 | 73.8 | 55.4 | 30.2 | 16.7 | 1,444 |
| 30-34 | 43.8 | 75.8 | 57.8 | 34.0 | 16.7 | 1,333 |
| 35-39 | 40.3 | 75.1 | 59.1 | 31.2 | 16.4 | 1,072 |
| 40-44 | 40.4 | 73.9 | 55.8 | 30.6 | 18.2 | 941 |
| 45-49 | 38.7 | 72.9 | 58.2 | 28.9 | 17.7 | 883 |
| Residence |  |  |  |  |  |  |
| Urban | 49.8 | 79.4 | 60.5 | 37.1 | 12.5 | 5,731 |
| Non-urban | 20.9 | 61.6 | 43.3 | 14.1 | 28.4 | 2,783 |
| Province |  |  |  |  |  |  |
| Western Cape | 74.6 | 91.9 | 75.2 | 57.8 | 2.4 | 995 |
| Eastern Cape | 21.3 | 62.8 | 46.5 | 14.1 | 27.4 | 938 |
| Northern Cape | 46.1 | 80.9 | 53.4 | 31.8 | 12.2 | 173 |
| Free State | 46.7 | 78.1 | 68.0 | 37.3 | 12.1 | 442 |
| KwaZulu-Natal | 30.8 | 63.3 | 47.8 | 22.1 | 28.2 | 1,616 |
| North West | 33.2 | 80.3 | 59.8 | 25.2 | 12.3 | 570 |
| Gauteng | 52.2 | 77.3 | 60.1 | 39.5 | 13.0 | 2,284 |
| Mpumalanga | 27.0 | 68.0 | 42.9 | 15.1 | 20.3 | 671 |
| Limpopo | 17.4 | 69.5 | 39.5 | 10.4 | 23.5 | 824 |
| Education |  |  |  |  |  |  |
| No education | 11.1 | 46.7 | 30.8 | 8.9 | 45.2 | 168 |
| Primary incomplete | 11.2 | 54.1 | 38.5 | 9.1 | 36.0 | 447 |
| Primary complete | 18.4 | 54.0 | 40.8 | 11.1 | 36.2 | 327 |
| Secondary incomplete | 34.4 | 71.1 | 50.6 | 24.3 | 20.1 | 4,195 |
| Secondary complete | 52.4 | 80.9 | 63.1 | 39.7 | 10.8 | 2,369 |
| More than secondary | 61.3 | 86.1 | 69.6 | 45.9 | 5.7 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 16.1 | 35.0 | 31.2 | 7.8 | 48.6 | 1,648 |
| Second | 26.2 | 70.4 | 48.8 | 16.7 | 19.1 | 1,715 |
| Middle | 43.3 | 83.9 | 57.2 | 31.8 | 9.9 | 1,805 |
| Fourth | 51.1 | 88.3 | 66.2 | 40.1 | 6.8 | 1,763 |
| Highest | 65.4 | 89.0 | 71.1 | 51.9 | 5.2 | 1,583 |
| Total | 40.3 | 73.6 | 54.9 | 29.6 | 17.7 | 8,514 |

Table 3.4.2 Exposure to mass media: Men
Percentage of men age $15-49$ who are exposed to specific media on a weekly basis, according to background characteristics, South Africa DHS 2016

| Background characteristic | Reads a newspaper at least once a week | Watches television at least once a week | Listens to the radio at least once a week | Accesses all three media at least once a week | Accesses none of the three media at least once a week | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-19 | 27.1 | 72.8 | 45.7 | 17.6 | 18.9 | 647 |
| 20-24 | 35.0 | 69.0 | 57.2 | 22.8 | 15.9 | 588 |
| 25-29 | 39.3 | 65.3 | 62.0 | 28.8 | 19.1 | 506 |
| 30-34 | 39.7 | 74.3 | 63.3 | 29.2 | 13.9 | 450 |
| 35-39 | 49.1 | 70.7 | 65.2 | 32.7 | 13.4 | 395 |
| 40-44 | 47.4 | 68.5 | 68.1 | 35.9 | 18.0 | 345 |
| 45-49 | 46.9 | 74.4 | 71.7 | 34.3 | 9.7 | 271 |
| Residence |  |  |  |  |  |  |
| Urban | 43.5 | 75.1 | 62.2 | 31.3 | 13.4 | 2,203 |
| Non-urban | 28.6 | 60.6 | 54.9 | 18.1 | 22.2 | 999 |
| Province |  |  |  |  |  |  |
| Western Cape | 43.3 | 86.8 | 64.8 | 32.0 | 6.7 | 328 |
| Eastern Cape | 23.8 | 47.9 | 35.6 | 10.0 | 31.2 | 362 |
| Northern Cape | 40.1 | 72.1 | 37.9 | 19.4 | 16.5 | 61 |
| Free State | 35.9 | 71.3 | 57.9 | 23.7 | 15.0 | 159 |
| KwaZulu-Natal | 25.5 | 67.3 | 57.8 | 17.4 | 18.8 | 521 |
| North West | 33.5 | 71.2 | 66.7 | 24.7 | 14.7 | 237 |
| Gauteng | 47.9 | 75.2 | 64.1 | 36.2 | 14.2 | 984 |
| Mpumalanga | 53.9 | 64.9 | 70.1 | 40.2 | 16.7 | 263 |
| Limpopo | 37.9 | 74.5 | 65.1 | 24.3 | 10.7 | 288 |
| Education |  |  |  |  |  |  |
| No education | 6.5 | 42.9 | 52.4 | 2.6 | 40.1 | 62 |
| Primary incomplete | 16.7 | 49.8 | 47.7 | 8.2 | 32.4 | 219 |
| Primary complete | 25.0 | 62.7 | 56.4 | 13.3 | 19.9 | 166 |
| Secondary incomplete | 34.1 | 69.5 | 55.5 | 23.2 | 17.6 | 1,637 |
| Secondary complete | 53.1 | 76.9 | 67.4 | 38.9 | 10.0 | 773 |
| More than secondary | 55.7 | 83.4 | 74.9 | 43.3 | 6.2 | 345 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 23.4 | 37.3 | 44.4 | 8.0 | 36.4 | 618 |
| Second | 31.1 | 64.4 | 57.6 | 20.5 | 19.3 | 682 |
| Middle | 42.8 | 79.3 | 63.4 | 31.9 | 11.2 | 715 |
| Fourth | 50.5 | 85.8 | 66.8 | 38.5 | 6.8 | 653 |
| Highest | 46.9 | 86.4 | 67.6 | 37.9 | 6.6 | 534 |
| Total 15-49 | 38.8 | 70.6 | 59.9 | 27.2 | 16.1 | 3,202 |
| 50-59 | 40.0 | 71.2 | 64.9 | 26.8 | 13.3 | 416 |
| Total 15-59 | 39.0 | 70.6 | 60.5 | 27.2 | 15.8 | 3,618 |

Table 3.5.1 Internet usage: Women
Percentage of women age 15-49 who have ever used the Internet, and percentage who have used the Internet in the past 12 months; and among women who have used the Internet in the past 12 months, percent distribution by frequency of Internet use in the past month, according to background characteristics, South Africa DHS 2016

| Background characteristic | Ever used the Internet | Used the Internet in the past 12 months | Number of women | Among women who have used the Internet in the past 12 months, percentage who, in the past month, used the Internet: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Almost every day | At least once a week | Less than once a week | Not at all | Total | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 61.0 | 58.4 | 1,427 | 63.6 | 25.1 | 9.2 | 2.1 | 100.0 | 833 |
| 20-24 | 63.4 | 60.7 | 1,415 | 73.0 | 18.4 | 7.0 | 1.6 | 100.0 | 858 |
| 25-29 | 58.1 | 55.7 | 1,444 | 75.7 | 15.5 | 7.7 | 1.1 | 100.0 | 803 |
| 30-34 | 49.9 | 47.5 | 1,333 | 73.4 | 17.5 | 8.5 | 0.6 | 100.0 | 634 |
| 35-39 | 40.1 | 38.0 | 1,072 | 71.7 | 18.2 | 9.4 | 0.7 | 100.0 | 407 |
| 40-44 | 32.4 | 31.0 | 941 | 71.3 | 22.7 | 4.8 | 1.2 | 100.0 | 291 |
| 45-49 | 24.9 | 24.0 | 883 | 70.0 | 20.6 | 7.6 | 1.8 | 100.0 | 212 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 57.9 | 56.0 | 5,731 | 74.9 | 17.6 | 6.3 | 1.2 | 100.0 | 3,211 |
| Non-urban | 32.7 | 29.8 | 2,783 | 57.2 | 26.7 | 14.2 | 1.9 | 100.0 | 828 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 64.9 | 62.6 | 995 | 81.2 | 12.5 | 5.5 | 0.8 | 100.0 | 623 |
| Eastern Cape | 43.1 | 40.5 | 938 | 62.9 | 26.0 | 10.2 | 0.9 | 100.0 | 380 |
| Northern Cape | 43.9 | 40.9 | 173 | 61.9 | 21.5 | 10.2 | 6.4 | 100.0 | 71 |
| Free State | 47.0 | 45.3 | 442 | 61.8 | 21.8 | 15.6 | 0.8 | 100.0 | 200 |
| KwaZulu-Natal | 43.7 | 41.5 | 1,616 | 64.6 | 24.7 | 9.4 | 1.3 | 100.0 | 672 |
| North West | 43.5 | 41.4 | 570 | 62.6 | 19.1 | 17.8 | 0.6 | 100.0 | 236 |
| Gauteng | 59.1 | 57.1 | 2,284 | 79.8 | 15.9 | 3.1 | 1.3 | 100.0 | 1,305 |
| Mpumalanga | 42.4 | 39.1 | 671 | 62.4 | 25.9 | 7.8 | 3.9 | 100.0 | 263 |
| Limpopo | 37.1 | 35.2 | 824 | 61.6 | 22.4 | 14.8 | 1.2 | 100.0 | 290 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 9.8 | 8.6 | 168 | * | * | * | * | 100.0 | 14 |
| Primary incomplete | 4.5 | 4.3 | 447 | (45.2) | (36.1) | (13.8) | (4.9) | 100.0 | 19 |
| Primary complete | 14.5 | 13.8 | 327 | (59.2) | (27.9) | (8.2) | (4.6) | 100.0 | 45 |
| Secondary incomplete | 39.0 | 36.4 | 4,195 | 62.8 | 24.4 | 10.9 | 1.9 | 100.0 | 1,527 |
| Secondary complete | 67.2 | 64.8 | 2,369 | 74.3 | 17.9 | 6.5 | 1.3 | 100.0 | 1,534 |
| More than secondary | 90.8 | 89.2 | 1,008 | 81.7 | 12.8 | 5.2 | 0.3 | 100.0 | 899 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 20.3 | 18.5 | 1,648 | 53.7 | 31.1 | 13.0 | 2.2 | 100.0 | 304 |
| Second | 36.4 | 33.1 | 1,715 | 57.8 | 27.1 | 12.8 | 2.3 | 100.0 | 567 |
| Middle | 48.4 | 46.1 | 1,805 | 68.8 | 18.8 | 11.3 | 1.1 | 100.0 | 832 |
| Fourth | 62.1 | 59.7 | 1,763 | 71.7 | 19.7 | 7.2 | 1.4 | 100.0 | 1,052 |
| Highest | 82.1 | 81.1 | 1,583 | 82.6 | 13.6 | 3.0 | 0.9 | 100.0 | 1,284 |
| Total | 49.7 | 47.4 | 8,514 | 71.2 | 19.5 | 7.9 | 1.3 | 100.0 | 4,040 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.5.2 Internet usage: Men
Percentage of men age 15-49 who have ever used the Internet, and percentage who have used the Internet in the past 12 months; and among men who have used the Internet in the past 12 months, percent distribution by frequency of Internet use in the past month, according to background characteristics, South Africa DHS 2016

| Background characteristic | Ever used the Internet | Used the Internet in the past 12 months | Number of men | Among men who have used the Internet in the past 12 months, percentage who, in the past month, used the Internet: |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Almost every day | At least once a week | Less than once a week | Not at all | Total | Number of men |
| Age |  |  |  |  |  |  |  |  |  |
| 15-19 | 59.3 | 57.5 | 647 | 54.6 | 27.3 | 16.1 | 2.0 | 100.0 | 372 |
| 20-24 | 67.9 | 64.7 | 588 | 63.9 | 25.7 | 9.4 | 1.1 | 100.0 | 381 |
| 25-29 | 64.8 | 61.7 | 506 | 71.2 | 19.4 | 8.7 | 0.6 | 100.0 | 312 |
| 30-34 | 53.4 | 50.1 | 450 | 64.2 | 26.5 | 9.0 | 0.4 | 100.0 | 225 |
| 35-39 | 47.3 | 46.7 | 395 | 58.0 | 31.6 | 7.4 | 3.1 | 100.0 | 184 |
| 40-44 | 30.8 | 29.0 | 345 | 63.7 | 24.6 | 10.7 | 0.9 | 100.0 | 100 |
| 45-49 | 34.7 | 33.7 | 271 | 60.1 | 33.0 | 6.9 | 0.0 | 100.0 | 91 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 59.7 | 58.0 | 2,203 | 67.1 | 23.1 | 8.8 | 1.0 | 100.0 | 1,279 |
| Non-urban | 42.5 | 38.7 | 999 | 46.8 | 35.5 | 15.6 | 2.1 | 100.0 | 387 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 62.8 | 61.7 | 328 | 67.0 | 25.9 | 5.4 | 1.6 | 100.0 | 202 |
| Eastern Cape | 40.4 | 37.6 | 362 | 65.6 | 25.2 | 7.8 | 1.4 | 100.0 | 136 |
| Northern Cape | 51.7 | 50.3 | 61 | 50.7 | 39.3 | 7.6 | 2.4 | 100.0 | 31 |
| Free State | 58.1 | 55.1 | 159 | 73.5 | 18.2 | 6.8 | 1.5 | 100.0 | 87 |
| KwaZulu-Natal | 44.6 | 40.8 | 521 | 53.7 | 24.8 | 19.6 | 1.9 | 100.0 | 213 |
| North West | 52.7 | 50.0 | 237 | 45.6 | 45.1 | 9.3 | 0.0 | 100.0 | 119 |
| Gauteng | 61.7 | 60.9 | 984 | 69.9 | 21.5 | 8.4 | 0.3 | 100.0 | 599 |
| Mpumalanga | 50.9 | 47.2 | 263 | 55.5 | 29.1 | 13.6 | 1.8 | 100.0 | 124 |
| Limpopo | 57.1 | 53.7 | 288 | 50.6 | 30.3 | 15.4 | 3.8 | 100.0 | 155 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 2.9 | 2.9 | 62 | * | * | * | * | 100.0 | 2 |
| Primary incomplete | 8.5 | 5.4 | 219 | * | * | * | * | 100.0 | 12 |
| Primary complete | 20.3 | 19.2 | 166 | (47.1) | (35.4) | (17.5) | (0.0) | 100.0 | 32 |
| Secondary incomplete | 47.9 | 45.4 | 1,637 | 48.5 | 33.3 | 16.2 | 2.1 | 100.0 | 743 |
| Secondary complete | 74.8 | 72.2 | 773 | 68.4 | 23.9 | 6.7 | 1.0 | 100.0 | 558 |
| More than secondary | 93.4 | 92.5 | 345 | 86.7 | 11.0 | 2.3 | 0.0 | 100.0 | 319 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 27.0 | 25.0 | 618 | 47.1 | 41.1 | 11.0 | 0.8 | 100.0 | 154 |
| Second | 43.6 | 39.6 | 682 | 51.4 | 32.0 | 13.7 | 3.0 | 100.0 | 270 |
| Middle | 54.1 | 51.9 | 715 | 54.6 | 30.9 | 12.8 | 1.8 | 100.0 | 371 |
| Fourth | 65.6 | 63.8 | 653 | 65.9 | 22.8 | 10.6 | 0.7 | 100.0 | 417 |
| Highest | 85.9 | 84.9 | 534 | 77.2 | 16.1 | 6.2 | 0.5 | 100.0 | 454 |
| Total 15-49 | 54.3 | 52.0 | 3,202 | 62.4 | 26.0 | 10.4 | 1.3 | 100.0 | 1,665 |
| 50-59 | 23.0 | 21.8 | 416 | 74.6 | 16.7 | 7.3 | 1.4 | 100.0 | 91 |
| Total 15-59 | 50.7 | 48.5 | 3,618 | 63.0 | 25.5 | 10.2 | 1.3 | 100.0 | 1,756 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.6.1 Employment status: Women
Percent distribution of women age 15-49 by employment status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Employed in the 12 months preceding the survey |  | Not employed in the 12 months preceding the survey | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currently employed ${ }^{1}$ | Not currently employed |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 2.5 | 0.9 | 96.6 | 100.0 | 1,427 |
| 20-24 | 19.2 | 5.3 | 75.5 | 100.0 | 1,415 |
| 25-29 | 37.0 | 6.2 | 56.9 | 100.0 | 1,444 |
| 30-34 | 45.7 | 5.2 | 49.2 | 100.0 | 1,333 |
| 35-39 | 47.8 | 4.7 | 47.5 | 100.0 | 1,072 |
| 40-44 | 52.4 | 2.2 | 45.4 | 100.0 | 941 |
| 45-49 | 54.0 | 3.6 | 42.4 | 100.0 | 883 |
| Marital status |  |  |  |  |  |
| Never married | 27.2 | 3.8 | 69.0 | 100.0 | 4,992 |
| Married or living together | 42.8 | 4.4 | 52.7 | 100.0 | 3,050 |
| Divorced/separated/widowed | 56.6 | 4.9 | 38.5 | 100.0 | 472 |
| Number of living children |  |  |  |  |  |
| 0 | 18.1 | 2.5 | 79.4 | 100.0 | 2,436 |
| 1-2 | 41.0 | 5.1 | 53.9 | 100.0 | 4,155 |
| 3-4 | 43.3 | 3.9 | 52.8 | 100.0 | 1,629 |
| $5+$ | 28.6 | 4.2 | 67.2 | 100.0 | 294 |
| Residence |  |  |  |  |  |
| Urban | 38.8 | 4.3 | 57.0 | 100.0 | 5,731 |
| Non-urban | 25.5 | 3.7 | 70.7 | 100.0 | 2,783 |
| Province |  |  |  |  |  |
| Western Cape | 46.1 | 6.9 | 46.9 | 100.0 | 995 |
| Eastern Cape | 32.2 | 4.3 | 63.5 | 100.0 | 938 |
| Northern Cape | 29.2 | 5.9 | 64.9 | 100.0 | 173 |
| Free State | 29.0 | 4.4 | 66.6 | 100.0 | 442 |
| KwaZulu-Natal | 28.6 | 2.1 | 69.3 | 100.0 | 1,616 |
| North West | 34.2 | 5.1 | 60.7 | 100.0 | 570 |
| Gauteng | 39.0 | 3.6 | 57.4 | 100.0 | 2,284 |
| Mpumalanga | 31.4 | 4.1 | 64.5 | 100.0 | 671 |
| Limpopo | 28.3 | 4.5 | 67.2 | 100.0 | 824 |
| Education |  |  |  |  |  |
| No education | 34.8 | 0.1 | 65.1 | 100.0 | 168 |
| Primary incomplete | 28.4 | 4.1 | 67.5 | 100.0 | 447 |
| Primary complete | 28.3 | 1.9 | 69.8 | 100.0 | 327 |
| Secondary incomplete | 23.6 | 3.4 | 73.0 | 100.0 | 4,195 |
| Secondary complete | 43.7 | 5.7 | 50.6 | 100.0 | 2,369 |
| More than secondary | 62.6 | 4.6 | 32.7 | 100.0 | 1,008 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 22.3 | 3.6 | 74.2 | 100.0 | 1,648 |
| Second | 28.4 | 4.3 | 67.2 | 100.0 | 1,715 |
| Middle | 33.6 | 3.4 | 63.0 | 100.0 | 1,805 |
| Fourth | 36.3 | 4.7 | 59.0 | 100.0 | 1,763 |
| Highest | 52.5 | 4.5 | 43.0 | 100.0 | 1,583 |
| Total | 34.4 | 4.1 | 61.5 | 100.0 | 8,514 |

1 "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. Currently employed is not the same as the official government employment rate.

Table 3.6.2 Employment status: Men
Percent distribution of men age 15-49 by employment status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Employed in the 12 months preceding the survey |  | Not employed in the 12 months preceding the survey | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Currently employed ${ }^{1}$ | Not currently employed |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | 3.9 | 3.3 | 92.8 | 100.0 | 647 |
| 20-24 | 33.0 | 8.6 | 58.5 | 100.0 | 588 |
| 25-29 | 56.5 | 8.2 | 35.3 | 100.0 | 506 |
| 30-34 | 69.2 | 6.2 | 24.6 | 100.0 | 450 |
| 35-39 | 65.7 | 5.0 | 29.3 | 100.0 | 395 |
| 40-44 | 63.4 | 5.0 | 31.7 | 100.0 | 345 |
| 45-49 | 64.0 | 5.4 | 30.5 | 100.0 | 271 |
| Marital status |  |  |  |  |  |
| Never married | 31.3 | 6.7 | 62.0 | 100.0 | 2,073 |
| Married or living together | 74.5 | 4.2 | 21.3 | 100.0 | 988 |
| Divorced/separated/widowed | 59.8 | 8.0 | 32.2 | 100.0 | 141 |
| Number of living children |  |  |  |  |  |
| 0 | 27.5 | 5.9 | 66.6 | 100.0 | 1,644 |
| 1-2 | 62.1 | 6.5 | 31.3 | 100.0 | 1,017 |
| 3-4 | 72.6 | 5.1 | 22.3 | 100.0 | 414 |
| $5+$ | 65.4 | 6.7 | 27.9 | 100.0 | 127 |
| Residence |  |  |  |  |  |
| Urban | 50.5 | 5.6 | 44.0 | 100.0 | 2,203 |
| Non-urban | 35.6 | 7.0 | 57.4 | 100.0 | 999 |
| Province |  |  |  |  |  |
| Western Cape | 59.6 | 9.2 | 31.2 | 100.0 | 328 |
| Eastern Cape | 36.2 | 8.4 | 55.5 | 100.0 | 362 |
| Northern Cape | 43.3 | 7.8 | 48.9 | 100.0 | 61 |
| Free State | 31.0 | 4.9 | 64.1 | 100.0 | 159 |
| KwaZulu-Natal | 41.9 | 5.5 | 52.7 | 100.0 | 521 |
| North West | 58.3 | 3.8 | 37.8 | 100.0 | 237 |
| Gauteng | 46.2 | 2.6 | 51.2 | 100.0 | 984 |
| Mpumalanga | 53.1 | 9.1 | 37.8 | 100.0 | 263 |
| Limpopo | 40.2 | 11.2 | 48.6 | 100.0 | 288 |
| Education |  |  |  |  |  |
| No education | 48.3 | 6.0 | 45.6 | 100.0 | 62 |
| Primary incomplete | 39.4 | 6.2 | 54.4 | 100.0 | 219 |
| Primary complete | 40.3 | 6.2 | 53.6 | 100.0 | 166 |
| Secondary incomplete | 35.9 | 6.7 | 57.4 | 100.0 | 1,637 |
| Secondary complete | 57.5 | 6.2 | 36.3 | 100.0 | 773 |
| More than secondary | 73.3 | 1.9 | 24.8 | 100.0 | 345 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 41.2 | 6.6 | 52.2 | 100.0 | 618 |
| Second | 44.0 | 9.5 | 46.5 | 100.0 | 682 |
| Middle | 44.9 | 4.6 | 50.5 | 100.0 | 715 |
| Fourth | 41.4 | 6.1 | 52.5 | 100.0 | 653 |
| Highest | 60.2 | 2.7 | 37.1 | 100.0 | 534 |
| Total 15-49 | 45.8 | 6.0 | 48.1 | 100.0 | 3,202 |
| 50-59 | 53.5 | 4.4 | 42.1 | 100.0 | 416 |
| Total 15-59 | 46.7 | 5.8 | 47.4 | 100.0 | 3,618 |

1 "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason. Currently employed is not the same as the official government employment rate.

Table 3.7.1 Occupation: Women
Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, South Africa DHS 2016

| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Domestic service | Agriculture | Other/ missing | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | (27.3) | (31.9) | (12.1) | (3.7) | (14.0) | (9.4) | (0.6) | (1.0) | 100.0 | 48 |
| 20-24 | 17.5 | 28.5 | 16.8 | 4.3 | 15.1 | 5.1 | 3.4 | 9.3 | 100.0 | 347 |
| 25-29 | 19.1 | 17.1 | 20.4 | 5.9 | 17.6 | 8.4 | 1.9 | 9.5 | 100.0 | 623 |
| 30-34 | 16.6 | 15.2 | 22.6 | 2.9 | 18.0 | 12.9 | 3.1 | 8.7 | 100.0 | 678 |
| 35-39 | 22.1 | 13.5 | 14.1 | 6.2 | 18.6 | 12.6 | 3.4 | 9.5 | 100.0 | 563 |
| 40-44 | 20.0 | 12.5 | 18.8 | 4.0 | 19.7 | 12.8 | 2.7 | 9.6 | 100.0 | 514 |
| 45-49 | 21.8 | 9.9 | 13.4 | 4.7 | 22.0 | 17.5 | 2.2 | 8.5 | 100.0 | 509 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 16.6 | 17.8 | 17.7 | 5.1 | 18.2 | 11.5 | 2.4 | 10.8 | 100.0 | 1,549 |
| Married or living together | 24.0 | 15.0 | 17.9 | 4.3 | 18.0 | 10.9 | 2.6 | 7.4 | 100.0 | 1,441 |
| Divorced/separated/widowed | 13.7 | 8.4 | 19.6 | 3.5 | 23.2 | 17.9 | 5.1 | 8.3 | 100.0 | 291 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 25.9 | 22.8 | 18.1 | 3.3 | 12.9 | 6.8 | 1.9 | 8.4 | 100.0 | 502 |
| 1-2 | 20.3 | 16.0 | 19.3 | 5.5 | 16.8 | 10.8 | 2.0 | 9.1 | 100.0 | 1,914 |
| 3-4 | 15.6 | 11.4 | 14.5 | 3.0 | 24.8 | 16.9 | 4.7 | 9.1 | 100.0 | 768 |
| $5+$ | 4.2 | 6.7 | 17.4 | 6.5 | 31.5 | 17.3 | 5.6 | 10.8 | 100.0 | 96 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 22.1 | 17.4 | 18.4 | 4.7 | 16.1 | 11.3 | 1.5 | 8.4 | 100.0 | 2,466 |
| Non-urban | 12.0 | 10.5 | 16.4 | 4.4 | 25.8 | 13.4 | 6.6 | 10.9 | 100.0 | 814 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 24.0 | 18.3 | 15.0 | 2.8 | 16.4 | 11.0 | 2.1 | 10.5 | 100.0 | 528 |
| Eastern Cape | 16.2 | 13.7 | 17.0 | 4.1 | 25.8 | 15.4 | 2.1 | 5.7 | 100.0 | 342 |
| Northern Cape | 18.3 | 12.9 | 14.7 | 3.0 | 18.6 | 12.0 | 4.1 | 16.4 | 100.0 | 61 |
| Free State | 13.2 | 16.6 | 19.8 | 5.4 | 24.3 | 7.7 | 2.4 | 10.6 | 100.0 | 148 |
| KwaZulu-Natal | 24.7 | 12.8 | 16.1 | 6.0 | 15.5 | 11.3 | 3.8 | 9.8 | 100.0 | 496 |
| North West | 10.9 | 13.5 | 19.8 | 6.2 | 24.7 | 14.7 | 3.4 | 6.8 | 100.0 | 224 |
| Gauteng | 21.2 | 18.8 | 20.0 | 4.6 | 15.7 | 11.9 | 1.5 | 6.3 | 100.0 | 973 |
| Mpumalanga | 15.9 | 13.3 | 17.6 | 3.4 | 19.8 | 11.9 | 3.1 | 15.0 | 100.0 | 239 |
| Limpopo | 14.3 | 11.4 | 19.2 | 6.4 | 19.9 | 9.4 | 6.0 | 13.3 | 100.0 | 270 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 9.0 | 5.6 | 14.3 | 1.1 | 17.3 | 25.2 | 18.1 | 9.4 | 100.0 | 59 |
| Primary incomplete | 0.9 | 0.5 | 14.3 | 5.6 | 33.2 | 24.5 | 12.5 | 8.7 | 100.0 | 145 |
| Primary complete | 2.7 | 7.2 | 7.7 | 5.4 | 35.8 | 30.0 | 3.2 | 8.0 | 100.0 | 99 |
| Secondary incomplete | 8.3 | 6.3 | 17.6 | 5.0 | 30.0 | 19.8 | 3.6 | 9.3 | 100.0 | 1,131 |
| Secondary complete | 17.6 | 22.8 | 23.4 | 5.4 | 12.5 | 6.9 | 1.3 | 10.1 | 100.0 | 1,170 |
| More than secondary | 49.2 | 24.6 | 11.6 | 2.5 | 4.4 | 0.5 | 0.2 | 7.1 | 100.0 | 678 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.4 | 3.5 | 18.2 | 6.2 | 28.5 | 21.8 | 12.0 | 6.5 | 100.0 | 426 |
| Second | 12.3 | 9.2 | 20.4 | 4.5 | 26.4 | 15.2 | 3.1 | 8.8 | 100.0 | 562 |
| Middle | 11.9 | 16.6 | 17.8 | 6.0 | 22.5 | 12.9 | 1.0 | 11.4 | 100.0 | 668 |
| Fourth | 19.5 | 18.8 | 18.3 | 4.0 | 18.5 | 11.4 | 1.5 | 7.9 | 100.0 | 722 |
| Highest | 37.6 | 22.3 | 16.0 | 3.5 | 6.1 | 4.6 | 0.3 | 9.6 | 100.0 | 902 |
| Total | 19.6 | 15.7 | 17.9 | 4.6 | 18.5 | 11.8 | 2.7 | 9.1 | 100.0 | 3,281 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.7.2 Occupation: Men
Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, South Africa DHS 2016

| Background characteristic | Professional/ technical/ managerial | Clerical | Sales and services | Skilled manual | Unskilled manual | Domestic service | Agriculture | Other/ missing | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 9.3 | 0.0 | 4.3 | 32.0 | 31.8 | 0.0 | 2.7 | 20.0 | 100.0 | 47 |
| 20-24 | 10.2 | 3.1 | 14.6 | 30.3 | 20.7 | 0.0 | 3.7 | 17.5 | 100.0 | 244 |
| 25-29 | 17.2 | 5.7 | 12.8 | 28.0 | 11.0 | 1.5 | 4.4 | 19.4 | 100.0 | 327 |
| 30-34 | 9.7 | 4.6 | 13.2 | 38.1 | 10.9 | 0.4 | 5.7 | 17.4 | 100.0 | 339 |
| 35-39 | 14.1 | 5.9 | 13.8 | 36.7 | 11.6 | 0.0 | 3.6 | 14.4 | 100.0 | 279 |
| 40-44 | 14.1 | 3.3 | 13.4 | 38.6 | 11.7 | 0.9 | 6.1 | 11.9 | 100.0 | 236 |
| 45-49 | 23.3 | 1.4 | 15.8 | 27.7 | 8.3 | 0.0 | 6.7 | 16.8 | 100.0 | 188 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 12.0 | 4.5 | 13.5 | 30.6 | 16.4 | 0.6 | 5.7 | 16.8 | 100.0 | 787 |
| Married or living together | 16.7 | 4.2 | 12.7 | 35.7 | 9.5 | 0.5 | 3.6 | 17.1 | 100.0 | 778 |
| Divorced/separated/widowed | 10.6 | 0.7 | 20.2 | 38.8 | 10.9 | 0.0 | 8.6 | 10.2 | 100.0 | 96 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |
| 0 | 14.9 | 3.6 | 12.9 | 27.9 | 16.6 | 0.7 | 5.6 | 17.8 | 100.0 | 549 |
| 1-2 | 13.4 | 5.6 | 14.9 | 34.6 | 10.3 | 0.5 | 4.8 | 15.9 | 100.0 | 698 |
| 3-4 | 13.6 | 2.7 | 13.5 | 39.4 | 11.6 | 0.2 | 2.0 | 17.1 | 100.0 | 321 |
| 5+ | 17.6 | 1.6 | 5.8 | 37.3 | 14.6 | 0.5 | 10.9 | 11.8 | 100.0 | 91 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 16.0 | 4.5 | 15.2 | 31.9 | 11.9 | 0.3 | 3.7 | 16.4 | 100.0 | 1,235 |
| Non-urban | 8.7 | 3.1 | 8.6 | 38.1 | 15.6 | 1.1 | 8.1 | 16.8 | 100.0 | 426 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 17.8 | 3.7 | 13.2 | 26.7 | 16.2 | 0.0 | 4.8 | 17.6 | 100.0 | 226 |
| Eastern Cape | 13.3 | 5.0 | 8.7 | 31.1 | 20.3 | 2.7 | 3.4 | 15.6 | 100.0 | 161 |
| Northern Cape | 10.4 | 9.3 | 11.3 | 21.6 | 14.6 | 0.0 | 2.6 | 30.2 | 100.0 | 31 |
| Free State | 11.9 | 6.6 | 16.7 | 25.2 | 7.5 | 0.0 | 3.7 | 28.5 | 100.0 | 57 |
| KwaZulu-Natal | 11.6 | 5.0 | 17.9 | 32.4 | 14.2 | 1.2 | 7.9 | 9.9 | 100.0 | 247 |
| North West | 6.6 | 1.1 | 13.7 | 43.9 | 18.1 | 0.3 | 3.9 | 12.3 | 100.0 | 147 |
| Gauteng | 19.9 | 4.7 | 16.9 | 32.7 | 6.3 | 0.1 | 4.1 | 15.4 | 100.0 | 480 |
| Mpumalanga | 7.7 | 2.3 | 8.7 | 35.5 | 16.8 | 0.0 | 5.6 | 23.5 | 100.0 | 163 |
| Limpopo | 11.4 | 3.8 | 5.4 | 43.3 | 11.3 | 0.0 | 5.1 | 19.8 | 100.0 | 148 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | (8.8) | (1.0) | (11.8) | (40.1) | (9.4) | (2.1) | (9.0) | (17.9) | 100.0 | 34 |
| Primary incomplete | 4.6 | 0.0 | 4.0 | 47.7 | 16.4 | 2.5 | 12.6 | 12.3 | 100.0 | 100 |
| Primary complete | 4.7 | 0.9 | 9.0 | 36.8 | 15.9 | 1.2 | 18.2 | 13.2 | 100.0 | 77 |
| Secondary incomplete | 5.8 | 2.3 | 11.3 | 38.5 | 17.7 | 0.6 | 5.6 | 18.3 | 100.0 | 698 |
| Secondary complete | 14.1 | 5.8 | 20.0 | 30.8 | 10.2 | 0.0 | 2.0 | 17.2 | 100.0 | 492 |
| More than secondary | 43.9 | 9.0 | 12.4 | 17.6 | 3.4 | 0.0 | 0.8 | 12.9 | 100.0 | 259 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.5 | 2.8 | 9.4 | 43.1 | 17.1 | 0.7 | 10.2 | 13.1 | 100.0 | 295 |
| Second | 5.6 | 2.2 | 12.0 | 38.8 | 18.8 | 1.0 | 7.4 | 14.2 | 100.0 | 365 |
| Middle | 12.4 | 4.5 | 11.9 | 37.9 | 10.1 | 0.7 | 2.8 | 19.7 | 100.0 | 354 |
| Fourth | 21.4 | 6.5 | 13.4 | 26.5 | 10.6 | 0.2 | 2.6 | 18.8 | 100.0 | 310 |
| Highest | 27.8 | 4.8 | 20.5 | 20.9 | 7.7 | 0.0 | 1.7 | 16.6 | 100.0 | 336 |
| Total 15-49 | 14.1 | 4.1 | 13.5 | 33.4 | 12.9 | 0.5 | 4.9 | 16.5 | 100.0 | 1,660 |
| 50-59 | 23.6 | 4.8 | 9.5 | 27.9 | 16.7 | 0.0 | 7.4 | 10.0 | 100.0 | 241 |
| Total 15-59 | 15.3 | 4.2 | 13.0 | 32.8 | 13.4 | 0.4 | 5.2 | 15.7 | 100.0 | 1,901 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.8 Type of employment: Women
Percent distribution of women age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to residence, South Africa DHS 2016

| Employment characteristic | Residence |  | Total |
| :---: | :---: | :---: | :---: |
|  | Urban | Nonurban |  |
| Type of earnings |  |  |  |
| Cash only | 94.3 | 92.3 | 93.8 |
| Cash and in-kind | 3.0 | 3.7 | 3.2 |
| In-kind only | 0.4 | 0.8 | 0.5 |
| Not paid | 2.2 | 3.2 | 2.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Type of employer |  |  |  |
| Employed by family member | 6.3 | 4.1 | 5.8 |
| Employed by non-family member | 84.5 | 84.7 | 84.6 |
| Self-employed | 9.2 | 11.3 | 9.7 |
| Total | 100.0 | 100.0 | 100.0 |
| Continuity of employment |  |  |  |
| All year | 80.6 | 70.7 | 78.1 |
| Seasonal | 12.1 | 21.3 | 14.4 |
| Occasional | 7.4 | 8.0 | 7.5 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women employed during the last 12 months | 2,466 | 814 | 3,281 |

Table 3.9 Background characteristics of respondents who completed the adult health module
Percent distribution of women and men age 15 and older by selected background characteristics, South Africa DHS 2016

| Background characteristic | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Weighted percent | Weighted number | Unweighted number | Weighted percent | Weighted number | Unweighted number |
| Age |  |  |  |  |  |  |
| 15-24 | 23.3 | 1,429 | 1,416 | 29.5 | 1,241 | 1,307 |
| 15-19 | 11.8 | 721 | 730 | 15.5 | 651 | 705 |
| 20-24 | 11.6 | 708 | 686 | 14.0 | 591 | 602 |
| 25-34 | 22.7 | 1,391 | 1,334 | 22.9 | 962 | 928 |
| 35-44 | 16.7 | 1,022 | 989 | 17.7 | 744 | 674 |
| 45-54 | 14.1 | 866 | 878 | 11.7 | 492 | 495 |
| 55-64 | 11.4 | 701 | 720 | 9.6 | 406 | 413 |
| 65+ | 11.7 | 719 | 789 | 8.6 | 364 | 393 |
| Population group |  |  |  |  |  |  |
| Black African | 84.4 | 5,170 | 5,179 | 83.9 | 3,534 | 3,573 |
| White | 5.2 | 320 | 258 | 6.1 | 257 | 193 |
| Coloured | 8.4 | 516 | 607 | 8.0 | 335 | 379 |
| Indian/Asian | 1.9 | 114 | 77 | 1.9 | 82 | 63 |
| Other | 0.1 | 6 | 5 | 0.1 | 2 | 2 |
| Marital status |  |  |  |  |  |  |
| Never married | 50.4 | 3,085 | 3,076 | 52.5 | 2,209 | 2,293 |
| Married | 25.8 | 1,582 | 1,512 | 29.8 | 1,255 | 1,212 |
| Living together | 9.8 | 599 | 541 | 10.5 | 442 | 416 |
| Divorced/separated | 4.6 | 281 | 312 | 4.7 | 197 | 179 |
| Widowed | 9.5 | 580 | 685 | 2.5 | 107 | 110 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 66.1 | 4,048 | 4,150 | 52.0 | 2,189 | 2,199 |
| Employed for cash | 25.5 | 1,560 | 1,448 | 45.1 | 1,897 | 1,884 |
| Employed not for cash | 8.5 | 518 | 528 | 2.9 | 124 | 127 |
| Residence |  |  |  |  |  |  |
| Urban | 65.2 | 3,996 | 3,361 | 68.3 | 2,874 | 2,324 |
| Non-urban | 34.8 | 2,130 | 2,765 | 31.7 | 1,336 | 1,886 |
| Province |  |  |  |  |  |  |
| Western Cape | 11.5 | 703 | 474 | 11.3 | 476 | 280 |
| Eastern Cape | 11.9 | 730 | 798 | 11.7 | 493 | 554 |
| Northern Cape | 2.1 | 127 | 529 | 2.0 | 84 | 353 |
| Free State | 5.3 | 325 | 647 | 4.9 | 207 | 384 |
| KwaZulu-Natal | 19.4 | 1,191 | 968 | 16.2 | 683 | 603 |
| North West | 6.5 | 398 | 581 | 7.4 | 310 | 504 |
| Gauteng | 25.0 | 1,534 | 561 | 29.6 | 1,245 | 470 |
| Mpumalanga | 7.7 | 473 | 705 | 7.8 | 326 | 515 |
| Limpopo | 10.5 | 646 | 863 | 9.2 | 386 | 547 |
| Education |  |  |  |  |  |  |
| No education | 8.1 | 495 | 586 | 5.2 | 217 | 289 |
| Primary incomplete | 10.8 | 664 | 743 | 11.4 | 481 | 551 |
| Primary complete | 4.8 | 293 | 305 | 5.0 | 212 | 240 |
| Secondary incomplete | 44.0 | 2,695 | 2,718 | 45.8 | 1,930 | 1,913 |
| Secondary complete | 21.7 | 1,328 | 1,209 | 21.4 | 900 | 828 |
| More than secondary | 10.6 | 652 | 565 | 11.2 | 470 | 389 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 19.0 | 1,163 | 1,237 | 18.7 | 787 | 861 |
| Second | 18.8 | 1,152 | 1,271 | 19.9 | 839 | 956 |
| Middle | 20.3 | 1,242 | 1,366 | 21.2 | 894 | 971 |
| Fourth | 20.5 | 1,258 | 1,277 | 19.6 | 827 | 789 |
| Highest | 21.4 | 1,311 | 975 | 20.5 | 864 | 633 |
| Total 15+ | 100.0 | 6,126 | 6,126 | 100.0 | 4,210 | 4,210 |
| Total 15-49 | na | 4,300 | 4,193 | na | 3,220 | 3,179 |

[^8]na $=$ Not applicable

## Key Findings

- Marital status: Six in 10 women (59\%) and two-thirds of men (65\%) age 15-49 have never been in a union (never married or lived together with a partner as though married).
- Polygyny: 2\% of in-union women report that their husband or partner has more than one wife. This represents a decline in polygyny relative to 1998, when $7 \%$ of in-union women reported their husband or partner had multiple wives.
- Age at first union: Neither women nor men in South Africa marry or live together with a partner early. Among women and men age $30-49$, only $32 \%$ and $23 \%$, respectively, were in a union by age 25.
- Sexual initiation: Median ages at first sexual intercourse among women and men age 20-49 are 18.1 years and 17.5 years, respectively. This indicates that, on average, men begin having sex earlier than women and that age at first sex does not correlate with age at first union.

Marriage and sexual activity help determine the extent to which women are exposed to the risk of pregnancy. Thus, they are important determinants of fertility levels. However, the timing and circumstances of marriage and sexual activity also have profound consequences for women's and men's lives.

### 4.1 Marital Status

## In a union

Women and men who report being married or living together with a partner as though married at the time of the survey
Sample: Women and men age 15-49

Thirty-six percent of women and $31 \%$ of men age $15-49$ are in a union; that is, they are either married or living together with someone as if married (Figure 4.1 and Table 4.1). Six in 10 women (59\%) and twothirds of men ( $65 \%$ ) have never been in a union. Three percent of women and $4 \%$ of men are divorced or separated. Very few women (2\%) or men (1\%) are widowed.

Figure 4.1 Marital status
Percent distribution of women and men age 15-49


Comparison with the SADHS 1998: The percentage of women age 15-49 who are married or living together with someone as if married decreased from $43 \%$ in 1998 to $36 \%$ in 2016 . The percentage of women who are divorced or separated dropped from $6 \%$ to $3 \%$, while there was no change in the percentage who are widowed ( $2 \%$ in both 1998 and 2016).

### 4.2 Polygyny

## Polygyny

Women who report that their husband or partner has other wives are considered to be in a polygynous union.
Sample: In-union women age 15-49

Two percent of women reported that their husbands or partners have other wives, and $4 \%$ do not know (Table 4.2.1). Among women who reported that their husband or partner had another wife, nearly all indicated that their husband had only one additional wife. Two percent of men reported having multiple wives (Table 4.2.2).

Comparison with the SADHS 1998: The percentage of women who reported that their husband or partner had other wives decreased from $7 \%$ in 1998 to $2 \%$ in 2016.

## Patterns by background characteristics

- Older women are more likely than younger women to have co-wives. The percentage of women with co-wives peaks among women age 45-49 (5\%) (Table 4.2.1).
- Women living in non-urban areas are more likely to report co-wives ( $4 \%$ ) than their counterparts living in urban areas (2\%).
- Women from Limpopo are most likely to report having co-wives. Six percent of women living in Limpopo report having co-wives, as compared with $0.4 \%$ of women living in Western Cape (Figure 4.2).

Figure 4.2 Polygyny by province
Percentage of in-union women age 15-49 in a


### 4.3 Age at First Union

## Median age at first union

Age by which half of respondents have been married or living together with a partner as if married.
Sample: Women age 20-49, 25-49, and 30-49 and men age 20-49, 25-49, 30-49, 20-59, 25-59, and 30-59

The SADHS 2016 results indicate that early unions (marriage or living together with a partner as though married) are rare in South Africa. Among women who are currently age $25-49,2 \%$ were in a union by age $15,7 \%$ by age $18,13 \%$ by age $20,20 \%$ by age 22 , and $31 \%$ by age 25 (Table 4.3). Forty-four percent of women age 25-49 have never been in a union. The proportion of women who have been in a union by age 25 is so low that it is not possible to calculate a median age at first union for this age group (less than half of women began living with their spouse or partner before reaching age 25). Moreover, it is not possible to calculate a median age at first union among women age 30-49 because less than $50 \%$ of women are in a union by age 30. Median age at first union can be calculated only for women age 35-39, 40-44, and 45-49; in all cases, the median age at first union exceeds 30 years (30.7-31.9 years).

Early unions are also uncommon among men in South Africa. Among men currently age 25-49, 1\% were in a union by age $15,3 \%$ by age $18,6 \%$ by age $20,11 \%$ by age 22 , and $21 \%$ by age 25 . Forty-five percent of men age 25-49 have never been in a union. As with women, it is not possible to calculate a median age at first union for men age 25-49 or 30-49. Among men age 35-39, 40-44, and 45-49, the median age at first union ranges from 31.9-33.5 years.

Comparison with the SADHS 1998: The percentage of women age 25-49 who have never been in a union has increased since 1998, from $26 \%$ to $44 \%$. In 1998, the median age at first union among women age 25-49 was 24.2 years; in 2016, the median age at first union among women age $30-49$ could not be determined because it exceeded 30 years.

### 4.4 Age at First Sexual Intercourse

## Median age at first sexual intercourse

Age by which half of respondents have had sexual intercourse.
Sample: Women age 20-49 and 25-49 and men age 20-49, 25-49, 20-59, and 25-59

In South Africa, the median age at first sexual intercourse among women age 20-49 is 18.1 years (Table 4.4). Seven percent of women first have sex before age 15 and $49 \%$ before age 18 . By age $20,76 \%$ of women have had sexual intercourse.

The median age at first intercourse among men age 20-49 is 17.5 years. Thirteen percent of men first have sex before age 15 and $58 \%$ do so before age 18 . By age $20,81 \%$ of men have engaged in sexual intercourse.

A comparison of Table 4.3 and Table 4.4 reveals that most women and men in South Africa initiate sexual intercourse many years before marrying or living together with a partner as though married.

## Patterns by background characteristics

- Across nearly all background characteristics, men in South Africa initiate sexual intercourse at slightly younger ages than women (Table 4.5). An exception is that the median age at first sexual intercourse is lower among women with no education, a primary incomplete education, or a primary complete education than among men in the corresponding groups. For example, the median age at first sex
among women age $20-49$ with no education is 17.5 years, as compared with 18.4 years among men age 20-59 with no education.
- Median age at first sexual intercourse varies by province. Among women age 20-49, the median age is lowest in Eastern Cape (17.4 years) and highest in KwaZulu-Natal (18.7 years). Differences are smaller among men age 20-59, with median ages ranging from 17.1 years in Eastern Cape, Free State, and Mpumalanga to 17.9 years in Western Cape and Limpopo.
- The median age at first sex among women age $20-49$ in the lowest wealth quintile is 17.6 years, compared with 18.8 years among those in the highest quintile (Figure 4.3).

Figure 4.3 Women's median age at first sex by household wealth


Comparison with the SADHS 1998: The median age at first sexual intercourse among women age 20-49 has not changed since 1998 (18.2 years in 1998 versus 18.1 years in 2016).

### 4.5 Recent Sexual Activity

The survey also collected data on recent sexual activity. Fifty percent of women and $59 \%$ of men age 15-49 reported having sexual intercourse during the 4 weeks before the survey; an additional $27 \%$ of women and $23 \%$ of men had not had sex recently but had sex in the year before the survey. Twelve percent of women and $12 \%$ of men have never had sex (Table 4.6.1 and Table 4.6.2).

## Patterns by background characteristics

- Women age 30-39 are most likely to have had sex within the 4 weeks before the survey ( $62 \%-65 \%$ ). Young women age 15-19 are least likely to have had sex recently (18\%). Among men, recent sexual intercourse increases with age, from $19 \%$ among those age $15-19$ to over $70 \%$ among those age $30-49$.
- Women and men in urban areas are more likely to report recent sexual intercourse than those in nonurban areas. For example, $63 \%$ of men in urban areas reported having recent sexual intercourse, as compared with $49 \%$ of men in non-urban areas.
- The proportion of women and men who reported that they recently had sexual intercourse varies by province. Recent sexual intercourse is highest in Gauteng (62\%) and lowest in Limpopo and KwaZulu-Natal ( $41 \%$ each) among women and highest in Gauteng (70\%) and lowest in Limpopo (45\%) among men.


## List of Tables

For more information on marriage and sexual activity, see the following tables:

- Table 4.1 Current marital status
- Table 4.2.1 Number of women's co-wives
- Table 4.2.2 Number of men's wives
- Table 4.3 Age at first union
- Table 4.4 Age at first sexual intercourse
- Table 4.5 Median age at first sexual intercourse by background characteristics
- Table 4.6.1 Recent sexual activity: Women
- Table 4.6.2 Recent sexual activity: Men

Table 4.1 Current marital status
Percent distribution of women and men age 15-49 by current marital status, according to age, South Africa DHS 2016

| Age | Marital status |  |  |  |  |  | Total | Percentage of respondents currently in a union | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Never married or lived with a partner | Married | Living together with a partner | Divorced | Separated | Widowed |  |  |  |
| WOMEN |  |  |  |  |  |  |  |  |  |
| 15-19 | 96.7 | 1.3 | 1.8 | 0.0 | 0.2 | 0.0 | 100.0 | 3.1 | 1,427 |
| 20-24 | 79.7 | 7.1 | 12.1 | 0.3 | 0.8 | 0.1 | 100.0 | 19.2 | 1,415 |
| 25-29 | 61.4 | 17.9 | 17.8 | 0.2 | 2.4 | 0.4 | 100.0 | 35.6 | 1,444 |
| 30-34 | 42.5 | 33.6 | 18.0 | 1.5 | 2.9 | 1.5 | 100.0 | 51.6 | 1,333 |
| 35-39 | 39.4 | 38.5 | 15.2 | 1.1 | 2.7 | 3.0 | 100.0 | 53.7 | 1,072 |
| 40-44 | 35.3 | 42.0 | 11.9 | 2.4 | 4.6 | 3.8 | 100.0 | 53.9 | 941 |
| 45-49 | 31.3 | 39.9 | 11.1 | 3.9 | 3.6 | 10.2 | 100.0 | 51.0 | 883 |
| Total 15-49 | 58.6 | 23.3 | 12.5 | 1.1 | 2.2 | 2.2 | 100.0 | 35.8 | 8,514 |
| MEN |  |  |  |  |  |  |  |  |  |
| 15-19 | 99.9 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 0.1 | 647 |
| 20-24 | 92.6 | 1.5 | 5.7 | 0.0 | 0.2 | 0.0 | 100.0 | 7.2 | 588 |
| 25-29 | 70.8 | 10.3 | 14.7 | 0.0 | 4.2 | 0.0 | 100.0 | 25.0 | 506 |
| 30-34 | 45.4 | 28.8 | 19.8 | 1.1 | 4.7 | 0.1 | 100.0 | 48.6 | 450 |
| 35-39 | 41.0 | 35.5 | 18.1 | 0.6 | 4.5 | 0.3 | 100.0 | 53.6 | 395 |
| 40-44 | 28.3 | 45.4 | 17.0 | 1.1 | 5.7 | 2.5 | 100.0 | 62.4 | 345 |
| 45-49 | 22.2 | 50.2 | 13.5 | 0.9 | 6.6 | 6.6 | 100.0 | 63.6 | 271 |
| Total 15-49 | 64.7 | 19.5 | 11.4 | 0.4 | 3.1 | 0.9 | 100.0 | 30.9 | 3,202 |
| 50-59 | 16.7 | 59.1 | 10.1 | 6.4 | 4.3 | 3.4 | 100.0 | 69.2 | 416 |
| Total 15-59 | 59.2 | 24.0 | 11.2 | 1.1 | 3.2 | 1.2 | 100.0 | 35.3 | 3,618 |

Table 4.2.1 Number of women's co-wives
Percent distribution of in-union women age 15-49 by number of co-wives, and percentage of in-union women with one or more cowives, according to background characteristics, South Africa DHS 2016

| Background characteristic | Number of co-wives |  |  |  | Total | Percentage with one or more cowives ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2+ | Don't know |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | (93.9) | (5.2) | (0.0) | (0.9) | 100.0 | (5.2) | 44 |
| 20-24 | 94.0 | 0.6 | 0.0 | 5.3 | 100.0 | 0.6 | 271 |
| 25-29 | 93.6 | 1.4 | 0.3 | 4.7 | 100.0 | 1.7 | 514 |
| 30-34 | 95.1 | 1.5 | 0.3 | 3.1 | 100.0 | 1.8 | 688 |
| 35-39 | 93.8 | 1.7 | 0.3 | 4.3 | 100.0 | 2.0 | 575 |
| 40-44 | 93.5 | 1.9 | 0.3 | 4.3 | 100.0 | 2.2 | 507 |
| 45-49 | 93.6 | 4.0 | 0.5 | 1.9 | 100.0 | 4.5 | 450 |
| Residence |  |  |  |  |  |  |  |
| Urban | 94.9 | 1.5 | 0.1 | 3.5 | 100.0 | 1.6 | 2,259 |
| Non-urban | 91.5 | 3.1 | 0.9 | 4.5 | 100.0 | 4.0 | 790 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 98.0 | 0.4 | 0.0 | 1.6 | 100.0 | 0.4 | 454 |
| Eastern Cape | 94.0 | 0.7 | 0.9 | 4.4 | 100.0 | 1.5 | 275 |
| Northern Cape | 93.9 | 1.1 | 0.6 | 4.4 | 100.0 | 1.7 | 66 |
| Free State | 97.7 | 1.8 | 0.0 | 0.5 | 100.0 | 1.8 | 146 |
| KwaZulu-Natal | 96.0 | 1.6 | 0.3 | 2.1 | 100.0 | 1.9 | 361 |
| North West | 87.6 | 3.9 | 0.3 | 8.1 | 100.0 | 4.2 | 215 |
| Gauteng | 94.5 | 1.9 | 0.0 | 3.6 | 100.0 | 1.9 | 1,035 |
| Mpumalanga | 88.8 | 3.1 | 0.4 | 7.7 | 100.0 | 3.5 | 244 |
| Limpopo | 90.4 | 4.3 | 1.3 | 4.0 | 100.0 | 5.6 | 254 |
| Education |  |  |  |  |  |  |  |
| No education | 90.7 | 6.0 | 0.0 | 3.2 | 100.0 | 6.0 | 83 |
| Primary incomplete | 87.3 | 3.2 | 0.9 | 8.7 | 100.0 | 4.0 | 185 |
| Primary complete | 96.7 | 0.3 | 1.5 | 1.5 | 100.0 | 1.8 | 142 |
| Secondary incomplete | 92.7 | 2.6 | 0.4 | 4.3 | 100.0 | 3.0 | 1,297 |
| Secondary complete | 96.4 | 1.0 | 0.0 | 2.6 | 100.0 | 1.0 | 875 |
| More than secondary | 95.6 | 1.1 | 0.0 | 3.3 | 100.0 | 1.1 | 469 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 92.4 | 2.0 | 0.7 | 4.9 | 100.0 | 2.7 | 505 |
| Second | 90.9 | 3.1 | 0.8 | 5.2 | 100.0 | 3.9 | 610 |
| Middle | 93.5 | 2.2 | 0.1 | 4.2 | 100.0 | 2.3 | 637 |
| Fourth | 95.3 | 1.8 | 0.0 | 2.9 | 100.0 | 1.8 | 569 |
| Highest | 97.3 | 0.7 | 0.0 | 2.0 | 100.0 | 0.7 | 729 |
| Total | 94.0 | 1.9 | 0.3 | 3.8 | 100.0 | 2.2 | 3,050 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Excludes women who responded "don't know" when asked if their husband or partner has other wives

Table 4.2.2 Number of men's wives
Percent distribution of in-union men age 15-49 by number of wives/partners, according to background characteristics, South Africa DHS 2016

| Background characteristic | Number of wives/partners |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | $2+$ | Not asked ${ }^{1}$ |  |  |
| Age |  |  |  |  |  |
| 15-19 | * | * | * | 100.0 | 1 |
| 20-24 | (98.3) | (1.7) | (0.0) | 100.0 | 42 |
| 25-29 | 98.9 | 1.1 | 0.0 | 100.0 | 127 |
| 30-34 | 100.0 | 0.0 | 0.0 | 100.0 | 219 |
| 35-39 | 97.4 | 2.6 | 0.0 | 100.0 | 212 |
| 40-44 | 98.3 | 1.7 | 0.0 | 100.0 | 215 |
| 45-49 | 96.1 | 2.0 | 1.9 | 100.0 | 172 |
| Residence |  |  |  |  |  |
| Urban | 98.4 | 1.2 | 0.4 | 100.0 | 765 |
| Non-urban | 97.5 | 2.5 | 0.0 | 100.0 | 223 |
| Province |  |  |  |  |  |
| Western Cape | 97.6 | 0.0 | 2.4 | 100.0 | 136 |
| Eastern Cape | 100.0 | 0.0 | 0.0 | 100.0 | 69 |
| Northern Cape | 100.0 | 0.0 | 0.0 | 100.0 | 19 |
| Free State | 97.9 | 2.1 | 0.0 | 100.0 | 35 |
| KwaZulu-Natal | 94.6 | 5.4 | 0.0 | 100.0 | 96 |
| North West | 98.4 | 1.6 | 0.0 | 100.0 | 91 |
| Gauteng | 99.5 | 0.5 | 0.0 | 100.0 | 395 |
| Mpumalanga | 96.6 | 3.4 | 0.0 | 100.0 | 84 |
| Limpopo | 96.2 | 3.8 | 0.0 | 100.0 | 62 |
| Education |  |  |  |  |  |
| No education | (100.0) | (0.0) | (0.0) | 100.0 | 36 |
| Primary incomplete | 98.6 | 1.4 | 0.0 | 100.0 | 86 |
| Primary complete | 95.1 | 4.9 | 0.0 | 100.0 | 50 |
| Secondary incomplete | 97.8 | 2.2 | 0.0 | 100.0 | 387 |
| Secondary complete | 99.7 | 0.3 | 0.0 | 100.0 | 282 |
| More than secondary | 96.7 | 1.1 | 2.2 | 100.0 | 146 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 97.6 | 2.4 | 0.0 | 100.0 | 175 |
| Second | 96.7 | 3.3 | 0.0 | 100.0 | 204 |
| Middle | 99.3 | 0.7 | 0.0 | 100.0 | 215 |
| Fourth | 98.8 | 1.2 | 0.0 | 100.0 | 177 |
| Highest | 98.5 | 0.0 | 1.5 | 100.0 | 217 |
| Total 15-49 | 98.2 | 1.5 | 0.3 | 100.0 | 988 |
| 50-59 | 97.2 | 1.8 | 0.9 | 100.0 | 288 |
| Total 15-59 | 98.0 | 1.6 | 0.5 | 100.0 | 1,276 |

Notes: In-union men include men who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Men who are in a union with a man and were not asked questions about polygyny

## Table 4.3 Age at first union

Percentage of women and men age 15-49 who were first in a union by specific exact ages, and median age at first union, according to current age, South Africa DHS 2016

| Current age | Percentage first in a union by exact age: |  |  |  |  | Percentage never in a union | Number of respondents | Median age at first union |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 0.4 | na | na | na | na | 96.7 | 1,427 | a |
| 20-24 | 0.9 | 3.6 | 8.4 | na | na | 79.7 | 1,415 | a |
| 25-29 | 1.1 | 5.5 | 10.7 | 16.8 | 28.9 | 61.4 | 1,444 | a |
| 30-34 | 2.1 | 7.0 | 12.0 | 17.7 | 31.0 | 42.5 | 1,333 | a |
| 35-39 | 1.7 | 5.4 | 11.6 | 20.6 | 30.1 | 39.4 | 1,072 | 31.1 |
| 40-44 | 2.2 | 8.9 | 14.8 | 22.1 | 33.2 | 35.3 | 941 | 31.9 |
| 45-49 | 2.2 | 10.7 | 17.9 | 26.0 | 36.0 | 31.3 | 883 | 30.7 |
| 20-49 | 1.6 | 6.5 | 12.1 | na | na | 51.0 | 7,087 | a |
| 25-49 | 1.8 | 7.2 | 13.0 | 20.0 | 31.4 | 43.8 | 5,672 | a |
| 30-49 | 2.0 | 7.8 | 13.8 | 21.1 | 32.3 | 37.8 | 4,229 | a |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 0.0 | na | na | na | na | 99.9 | 647 | a |
| 20-24 | 0.4 | 0.6 | 3.2 | na | na | 92.6 | 588 | a |
| 25-29 | 0.6 | 1.9 | 5.3 | 9.9 | 20.8 | 70.8 | 506 | a |
| 30-34 | 1.1 | 3.1 | 6.4 | 10.8 | 18.7 | 45.4 | 450 | a |
| 35-39 | 1.3 | 1.9 | 3.3 | 8.3 | 22.3 | 41.0 | 395 | 33.5 |
| 40-44 | 0.3 | 4.9 | 7.1 | 12.5 | 22.6 | 28.3 | 345 | 33.2 |
| 45-49 | 2.7 | 3.8 | 8.5 | 15.5 | 20.9 | 22.2 | 271 | 31.9 |
| 20-49 | 0.9 | 2.4 | 5.3 | na | na | 55.9 | 2,555 | a |
| 25-49 | 1.1 | 3.0 | 5.9 | 11.0 | 20.9 | 44.9 | 1,967 | a |
| 30-49 | 1.4 | 3.6 | 7.0 | 13.2 | 23.2 | 31.6 | 1,877 | a |
| 20-59 | 1.0 | 2.7 | 6.0 | na | na | 50.4 | 2,971 | a |
| 25-59 | 1.2 | 3.2 | 6.6 | 12.5 | 22.7 | 39.9 | 2,383 | a |
| 30-59 | 1.4 | 3.6 | 7.0 | 13.2 | 23.2 | 31.6 | 1,877 | a |

Note: The age at first union is defined as the age at which the respondent began living with her/his first spouse/partner.
na $=$ Not applicable due to censoring
$a=$ Omitted because less than $50 \%$ of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group

Table 4.4 Age at first sexual intercourse
Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, South Africa DHS 2016

| Current age | Percentage who had first sexual intercourse by exact age: |  |  |  |  | Percentage who never had intercourse | Number of respondents | Median age at first intercourse |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | 5.7 | na | na | na | na | 56.7 | 1,427 | a |
| 20-24 | 6.5 | 50.5 | 78.7 | na | na | 9.2 | 1,415 | 18.0 |
| 25-29 | 5.7 | 47.9 | 77.1 | 90.8 | 94.6 | 2.2 | 1,444 | 18.1 |
| 30-34 | 8.3 | 49.5 | 75.3 | 86.3 | 93.3 | 1.1 | 1,333 | 18.0 |
| 35-39 | 6.4 | 50.3 | 78.8 | 89.8 | 94.1 | 0.5 | 1,072 | 18.0 |
| 40-44 | 6.1 | 46.5 | 73.8 | 86.6 | 91.6 | 1.0 | 941 | 18.2 |
| 45-49 | 8.7 | 47.0 | 72.2 | 83.6 | 90.1 | 0.9 | 883 | 18.2 |
| 20-49 | 6.9 | 48.8 | 76.3 | na | na | 2.8 | 7,087 | 18.1 |
| 25-49 | 7.0 | 48.4 | 75.7 | 87.7 | 93.0 | 1.2 | 5,672 | 18.1 |
| 15-24 | 6.1 | na | na | na | na | 33.0 | 2,842 | a |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | 14.5 | na | na | na | na | 49.1 | 647 | a |
| 20-24 | 14.7 | 66.9 | 87.5 | na | na | 8.2 | 588 | 17.0 |
| 25-29 | 14.0 | 63.1 | 83.9 | 90.2 | 93.6 | 3.9 | 506 | 17.3 |
| 30-34 | 11.5 | 53.6 | 75.0 | 87.7 | 93.6 | 0.5 | 450 | 17.7 |
| 35-39 | 15.6 | 59.6 | 81.5 | 88.2 | 94.9 | 0.6 | 395 | 17.4 |
| 40-44 | 9.5 | 49.5 | 82.0 | 91.6 | 96.0 | 0.8 | 345 | 18.0 |
| 45-49 | 8.0 | 44.2 | 73.0 | 85.7 | 92.1 | 1.6 | 271 | 18.3 |
| 20-49 | 12.7 | 57.9 | 81.4 | na | na | 3.1 | 2,555 | 17.5 |
| 25-49 | 12.1 | 55.2 | 79.5 | 88.9 | 94.1 | 1.6 | 1,967 | 17.6 |
| 15-24 | 14.6 | na | na | na | na | 29.6 | 1,235 | a |
| 20-59 | 12.0 | 55.4 | 79.4 | na | na | 2.8 | 2,971 | 17.6 |
| 25-59 | 11.3 | 52.6 | 77.3 | 87.8 | 93.3 | 1.5 | 2,383 | 17.8 |

na $=$ Not applicable due to censoring
$a=$ Omitted because less than $50 \%$ of the women or men had sexual intercourse for the first time before reaching the beginning of the age group

Table 4.5 Median age at first sexual intercourse by
background characteristics
Median age at first sexual intercourse among women age 20-49 and age 25-49, and median age at first sexual intercourse among men age 20-59 and age 25-59, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women age |  | Men age |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 20-49 | 25-49 | 20-59 | 25-59 |
| Residence |  |  |  |  |
| Urban | 18.1 | 18.2 | 17.6 | 17.8 |
| Non-urban | 17.9 | 17.9 | 17.7 | 18.0 |
| Province |  |  |  |  |
| Western Cape | 18.6 | 18.8 | 17.9 | 17.9 |
| Eastern Cape | 17.4 | 17.5 | 17.1 | 17.5 |
| Northern Cape | 18.5 | 18.6 | 17.8 | 18.1 |
| Free State | 18.2 | 18.2 | 17.1 | 17.2 |
| KwaZulu-Natal | 18.7 | 18.6 | 17.7 | 17.8 |
| North West | 17.9 | 18.0 | 17.6 | 17.8 |
| Gauteng | 17.8 | 17.8 | 17.7 | 17.9 |
| Mpumalanga | 17.7 | 17.7 | 17.1 | 17.5 |
| Limpopo | 17.9 | 17.9 | 17.9 | 18.2 |
| Education |  |  |  |  |
| No education | 17.5 | 17.6 | 18.4 | 18.4 |
| Primary incomplete | 16.9 | 17.0 | 18.0 | 18.1 |
| Primary complete | 17.0 | 17.0 | 17.9 | 18.0 |
| Secondary incomplete | 17.6 | 17.7 | 17.5 | 17.7 |
| Secondary complete | 18.5 | 18.5 | 17.6 | 17.9 |
| More than secondary | 19.2 | 19.1 | 17.4 | 17.7 |
| Wealth quintile |  |  |  |  |
| Lowest | 17.6 | 17.7 | 17.9 | 18.1 |
| Second | 17.8 | 17.8 | 17.5 | 17.7 |
| Middle | 17.9 | 17.9 | 17.4 | 17.5 |
| Fourth | 18.1 | 18.2 | 17.5 | 17.8 |
| Highest | 18.8 | 18.8 | 18.0 | 18.1 |
| Total | 18.1 | 18.1 | 17.6 | 17.8 |

Table 4.6.1 Recent sexual activity: Women
Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, South Africa DHS 2016

| Background characteristic | Timing of last sexual intercourse |  |  |  | Never had sexual intercourse | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within the past 4 weeks | Within 1 year ${ }^{1}$ | One or more years | Missing |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 17.5 | 22.8 | 3.0 | 0.0 | 56.7 | 100.0 | 1,427 |
| 20-24 | 48.5 | 35.0 | 7.2 | 0.0 | 9.2 | 100.0 | 1,415 |
| 25-29 | 58.0 | 31.6 | 8.0 | 0.2 | 2.2 | 100.0 | 1,444 |
| 30-34 | 65.2 | 25.4 | 8.2 | 0.1 | 1.1 | 100.0 | 1,333 |
| 35-39 | 62.2 | 24.8 | 12.5 | 0.1 | 0.5 | 100.0 | 1,072 |
| 40-44 | 57.2 | 24.4 | 17.2 | 0.2 | 1.0 | 100.0 | 941 |
| 45-49 | 50.2 | 20.8 | 27.5 | 0.6 | 0.9 | 100.0 | 883 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 33.5 | 33.5 | 12.8 | 0.2 | 20.1 | 100.0 | 4,992 |
| Married or living together | 80.6 | 15.4 | 3.8 | 0.1 | 0.1 | 100.0 | 3,050 |
| Divorced/separated/widowed | 34.1 | 32.8 | 32.6 | 0.2 | 0.3 | 100.0 | 472 |
| Marital duration ${ }^{2}$ |  |  |  |  |  |  |  |
| 0-4 years | 84.1 | 12.4 | 3.1 | 0.3 | 0.1 | 100.0 | 819 |
| 5-9 years | 84.0 | 13.9 | 2.0 | 0.0 | 0.1 | 100.0 | 728 |
| 10-14 years | 78.8 | 17.5 | 3.7 | 0.0 | 0.0 | 100.0 | 428 |
| 15-19 years | 81.2 | 15.5 | 3.3 | 0.0 | 0.0 | 100.0 | 445 |
| 20-24 years | 76.7 | 17.6 | 5.4 | 0.0 | 0.2 | 100.0 | 241 |
| $25+$ years | 65.2 | 25.3 | 9.6 | 0.0 | 0.0 | 100.0 | 220 |
| Married more than once | 76.9 | 15.4 | 6.3 | 0.0 | 1.4 | 100.0 | 170 |
| Residence |  |  |  |  |  |  |  |
| Urban | 53.9 | 24.1 | 10.3 | 0.1 | 11.6 | 100.0 | 5,731 |
| Non-urban | 43.1 | 32.8 | 11.5 | 0.1 | 12.5 | 100.0 | 2,783 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 52.3 | 20.4 | 12.9 | 0.2 | 14.3 | 100.0 | 995 |
| Eastern Cape | 43.2 | 35.5 | 12.9 | 0.0 | 8.3 | 100.0 | 938 |
| Northern Cape | 46.9 | 28.1 | 13.3 | 0.0 | 11.7 | 100.0 | 173 |
| Free State | 44.9 | 28.1 | 13.5 | 0.0 | 13.5 | 100.0 | 442 |
| KwaZulu-Natal | 41.1 | 30.1 | 11.2 | 0.5 | 17.1 | 100.0 | 1,616 |
| North West | 56.7 | 24.1 | 11.9 | 0.0 | 7.2 | 100.0 | 570 |
| Gauteng | 61.5 | 22.4 | 7.0 | 0.0 | 9.1 | 100.0 | 2,284 |
| Mpumalanga | 52.7 | 28.3 | 9.5 | 0.1 | 9.3 | 100.0 | 671 |
| Limpopo | 41.1 | 31.7 | 12.6 | 0.1 | 14.5 | 100.0 | 824 |
| Education |  |  |  |  |  |  |  |
| No education | 51.3 | 27.1 | 16.0 | 0.4 | 5.1 | 100.0 | 168 |
| Primary incomplete | 52.6 | 24.7 | 16.3 | 0.2 | 6.2 | 100.0 | 447 |
| Primary complete | 49.8 | 20.9 | 15.3 | 0.6 | 13.3 | 100.0 | 327 |
| Secondary incomplete | 44.6 | 28.1 | 9.8 | 0.1 | 17.4 | 100.0 | 4,195 |
| Secondary complete | 56.5 | 27.6 | 10.1 | 0.1 | 5.8 | 100.0 | 2,369 |
| More than secondary | 59.1 | 24.0 | 10.5 | 0.1 | 6.3 | 100.0 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 45.2 | 30.1 | 12.4 | 0.2 | 12.2 | 100.0 | 1,648 |
| Second | 52.0 | 29.7 | 9.2 | 0.1 | 9.1 | 100.0 | 1,715 |
| Middle | 52.0 | 27.3 | 10.8 | 0.0 | 9.8 | 100.0 | 1,805 |
| Fourth | 49.3 | 27.1 | 10.6 | 0.2 | 12.9 | 100.0 | 1,763 |
| Highest | 53.4 | 20.3 | 10.4 | 0.2 | 15.7 | 100.0 | 1,583 |
| Total | 50.4 | 27.0 | 10.7 | 0.1 | 11.8 | 100.0 | 8,514 |

[^9]Table 4.6.2 Recent sexual activity: Men
Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, South Africa DHS 2016

| Background characteristic | Timing of last sexual intercourse |  |  |  | Never had sexual intercourse | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Within the past 4 weeks | Within 1 year ${ }^{1}$ | One or more years | Missing |  |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 18.7 | 25.8 | 6.5 | 0.0 | 49.1 | 100.0 | 647 |
| 20-24 | 52.9 | 32.1 | 6.7 | 0.0 | 8.2 | 100.0 | 588 |
| 25-29 | 67.3 | 21.4 | 7.2 | 0.3 | 3.9 | 100.0 | 506 |
| 30-34 | 74.4 | 19.1 | 5.6 | 0.4 | 0.5 | 100.0 | 450 |
| 35-39 | 79.0 | 17.9 | 2.1 | 0.4 | 0.6 | 100.0 | 395 |
| 40-44 | 74.7 | 18.7 | 5.9 | 0.0 | 0.8 | 100.0 | 345 |
| 45-49 | 74.8 | 14.0 | 9.6 | 0.0 | 1.6 | 100.0 | 271 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 45.2 | 27.2 | 8.4 | 0.2 | 19.1 | 100.0 | 2,073 |
| Married or living together | 86.2 | 12.8 | 0.6 | 0.1 | 0.2 | 100.0 | 988 |
| Divorced/separated/widowed | 63.9 | 23.0 | 13.1 | 0.0 | 0.0 | 100.0 | 141 |
| Marital duration ${ }^{2}$ |  |  |  |  |  |  |  |
| 0-4 years | 88.2 | 10.9 | 0.4 | 0.5 | 0.0 | 100.0 | 260 |
| 5-9 years | 87.0 | 12.7 | 0.2 | 0.0 | 0.0 | 100.0 | 245 |
| 10-14 years | 88.1 | 10.1 | 1.7 | 0.0 | 0.0 | 100.0 | 143 |
| 15-19 years | 82.0 | 17.6 | 0.4 | 0.0 | 0.0 | 100.0 | 133 |
| 20-24 years | 79.0 | 19.8 | 1.2 | 0.0 | 0.0 | 100.0 | 62 |
| $25+$ years | (77.2) | (17.3) | (0.0) | (0.0) | (5.5) | 100.0 | 35 |
| Married more than once | 89.3 | 10.2 | 0.6 | 0.0 | 0.0 | 100.0 | 111 |
| Residence |  |  |  |  |  |  |  |
| Urban | 63.1 | 20.9 | 5.7 | 0.2 | 10.1 | 100.0 | 2,203 |
| Non-urban | 49.1 | 26.3 | 7.2 | 0.0 | 17.5 | 100.0 | 999 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 58.1 | 18.7 | 8.4 | 1.4 | 13.4 | 100.0 | 328 |
| Eastern Cape | 57.9 | 24.4 | 5.3 | 0.0 | 12.5 | 100.0 | 362 |
| Northern Cape | 50.9 | 25.6 | 8.0 | 0.0 | 15.5 | 100.0 | 61 |
| Free State | 54.4 | 22.7 | 6.6 | 0.0 | 16.2 | 100.0 | 159 |
| KwaZulu-Natal | 47.1 | 27.6 | 6.9 | 0.0 | 18.4 | 100.0 | 521 |
| North West | 57.6 | 26.0 | 6.3 | 0.0 | 10.1 | 100.0 | 237 |
| Gauteng | 70.2 | 17.8 | 4.2 | 0.0 | 7.8 | 100.0 | 984 |
| Mpumalanga | 61.1 | 22.0 | 7.7 | 0.0 | 9.3 | 100.0 | 263 |
| Limpopo | 45.2 | 28.8 | 8.0 | 0.0 | 18.0 | 100.0 | 288 |
| Education |  |  |  |  |  |  |  |
| No education | 59.1 | 32.8 | 5.9 | 0.0 | 2.2 | 100.0 | 62 |
| Primary incomplete | 53.7 | 18.3 | 10.0 | 0.7 | 17.3 | 100.0 | 219 |
| Primary complete | 52.4 | 21.2 | 6.5 | 0.0 | 19.9 | 100.0 | 166 |
| Secondary incomplete | 52.9 | 23.3 | 6.7 | 0.1 | 17.0 | 100.0 | 1,637 |
| Secondary complete | 68.0 | 22.0 | 4.8 | 0.0 | 5.2 | 100.0 | 773 |
| More than secondary | 71.6 | 22.1 | 4.0 | 0.4 | 2.0 | 100.0 | 345 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 56.4 | 24.4 | 5.9 | 0.3 | 13.0 | 100.0 | 618 |
| Second | 56.5 | 24.9 | 6.8 | 0.2 | 11.5 | 100.0 | 682 |
| Middle | 60.4 | 21.4 | 6.8 | 0.0 | 11.3 | 100.0 | 715 |
| Fourth | 58.6 | 23.3 | 5.6 | 0.0 | 12.5 | 100.0 | 653 |
| Highest | 61.9 | 18.2 | 5.5 | 0.3 | 14.1 | 100.0 | 534 |
| Total 15-49 | 58.7 | 22.6 | 6.2 | 0.1 | 12.4 | 100.0 | 3,202 |
| 50-59 | 60.3 | 19.6 | 18.5 | 0.6 | 1.1 | 100.0 | 416 |
| Total 15-59 | 58.9 | 22.2 | 7.6 | 0.2 | 11.1 | 100.0 | 3,618 |

[^10]
## Key Findings

- Total fertility rate: The total fertility rate (TFR) is 2.6 children per woman, a decline from 2.9 in 1998.
- Patterns of fertility: The TFR declines with increasing household wealth, from 3.1 children among women in the lowest wealth quintile to 2.1 children among women in the highest wealth quintile.
- Birth intervals: The median birth interval is 55.3 months. One in 10 women ( $11 \%$ ) had their second- or higher-order birth within 24 months of their previous birth.
- Age at first birth: The median age at first birth among women age $25-49$ is 21.3 years. Eighteen percent of women gave birth by age 18 .
- Teenage pregnancy: 9\% of women age 15-17 and 16\% of women age 15-19 have begun childbearing.

The number of children that a woman bears depends on many factors, including the age at which she begins childbearing, the intervals between her births, and her fecundity. Postponing first births and extending the interval between births have played a role in reducing fertility levels in many Southern African countries, including South Africa. These factors also have positive health consequences. In contrast, short birth intervals (of less than 24 months) can lead to harmful outcomes for both newborns and their mothers, such as preterm birth, low birth weight, and maternal or child death. Childbearing at a very young age is associated with an increased risk of complications during pregnancy and childbirth and higher rates of neonatal mortality.

This chapter describes the current level of fertility in South Africa and some of its proximate determinants. It presents information on the total fertility rate, birth intervals, insusceptibility to pregnancy (due to postpartum amenorrhoea, postpartum abstinence, or menopause), age at first birth, and teenage childbearing.

### 5.1 Current Fertility

## Total fertility rate (TFR)

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates. Age-specific fertility rates are calculated for the 3 years before the survey, based on detailed birth histories provided by women.
Sample: Women age 15-49

The total fertility rate (TFR) is 2.4 children per woman in urban areas and 3.1 children per woman in nonurban areas, resulting in a national TFR of 2.6 children per woman (Table 5.1). Age-specific fertility rates (ASFRs) peak at age 25-29 among both urban and non-urban women (Figure 5.1). Four percent of women reported that they were pregnant at the time of the survey (Table 5.2).

Comparison with the SADHS 1998: The TFR declined from 2.9 children per woman in 1998 to 2.6 children per woman in 2016. The TFR among women in non-urban areas dropped from 3.9 in 1998 to 3.1 in 2016. In urban areas, the TFR increased marginally from 2.3 to 2.4 over the same period (Figure 5.2). Between 1998 and 2016, ASFRs for the 3-year period preceding the survey declined slightly across all age groups (Table 5.3.2).

## Patterns by background characteristics

- TFRs vary by population group: Black African women have the highest TFR ( 2.7 children per woman), followed by Coloured ( 2.5 children), Indian/Asian (1.7 children), and White (1.5 children) women (Table 5.2).
- By province, the TFR ranges from a low of 2.1 children per woman in Western Cape to a high of 3.1 children in North West and Limpopo.
- With the exception of women with no schooling, the TFR falls with increasing education, from 3.6 among those with an incomplete primary education to 2.2 among those with more than a secondary education.
- The TFR also falls with increasing household wealth, from 3.1 children per woman among those living in the poorest $20 \%$ of households to 2.1 children per woman among those living in the wealthiest households (Figure 5.3).


### 5.2 Children Ever Born and Living

By collecting complete live-birth histories, the SADHS allowed an estimation of the number of children ever born to women of reproductive age and living at the time of the survey. On average, women age 15-49 have given birth to 1.6 children, nearly all of whom are still alive (Table 5.4). In-union women age 15-49 have had an average of 2.4 children, of whom 2.2 were alive at the time of the survey.

Among women overall, the mean number of children ever born increases from 0.1 among those age 15-19 to 3.0 among those age 45-49. Among in-union women, the mean number of children rises from 1.1 among those age 20-24 to 3.2 among those age 45-49.

### 5.3 BIRTH INTERVALS

## Median birth interval

Number of months since the preceding birth by which half of children are born Sample: Non-first births in the 5 years before the survey

Birth intervals of less than 24 months are associated with increased health risks for both mothers and newborns. The SADHS results showed that the median birth interval is 55.3 months. About 1 in 10 women had their second- or higher-order birth within 24 months of their previous birth (Table 5.5 and Figure 5.4).

Comparison with the SADHS 1998: The median birth interval increased between 1998 and 2016 (from 47.1 months to 55.3 months). The percentage of women who had birth intervals of less than 24 months decreased over that period, from $14 \%$ to $11 \%$.

Figure 5.4 Birth intervals
Percent distribution of non-first births by number of months since the preceding birth


Patterns by background characteristics

- Birth intervals are virtually the same among women living in urban and non-urban areas (55.6 months versus 54.5 months).
- By province, the median birth interval ranges from a low of 51.4 months in Eastern Cape to a high of 63.6 months in Free State.
- The median birth interval rises with increasing household wealth, from 51.3 months for births to women in the lowest wealth quintile to 65.9 months for births to women in the highest quintile.


### 5.4 Insusceptibility to Pregnancy

## Postpartum amenorrhoea

The period of time after the birth of a child and before the resumption of menstruation.

## Postpartum abstinence

The period of time after the birth of a child and before the resumption of sexual intercourse.

## Postpartum insusceptibility

The period of time during which a woman is considered not at risk of pregnancy because she is postpartum amenorrhoeic and/or abstaining from sexual intercourse postpartum.

## Median duration of postpartum amenorrhoea

Calculated as the number of months after childbirth by which time half of women have begun menstruating.
Sample: Women who gave birth in the 3 years before the survey

## Median duration of postpartum insusceptibility

Calculated as the number of months after childbirth by which time half of women are no longer protected against pregnancy by either postpartum amenorrhoea or abstinence from sexual intercourse.
Sample: Women who gave birth in the 3 years before the survey

At the time of the survey, mothers were insusceptible to pregnancy for $37 \%$ of births that occurred in the preceding 3 years because they were amenorrhoeic or abstaining (Table 5.6). Mothers were postpartum amenorrhoeic for $22 \%$ of the births and abstaining for $25 \%$ of the births.

The percentage of births for which the mother was insusceptible drops steadily by the number of months since birth. Mothers were insusceptible to pregnancy for $90 \%$ of births that occurred within 2 months of the date of the interview; in contrast, mothers were insusceptible to pregnancy for only $11 \%$ of births that occurred 32-35 months before the interview.

Since less than half of women were postpartum amenorrhoeic within the first 2 months of birth, a median duration of amenorrhoea could not be calculated. The median duration of abstinence for births in the 3 years preceding the survey is 4.7 months. Overall, women are insusceptible to pregnancy after childbirth for a median duration of 8.1 months.

## Patterns by background characteristics

- Postpartum insusceptibility is almost identical among women age 15-29 and women age 30-49 (8.0 months and 8.4 months, respectively) (Table 5.7).
- The median duration of postpartum insusceptibility is about 4 months shorter among urban women (6.6 months) than among non-urban women ( 10.7 months).


## Menopause

Women are considered to have reached menopause if they are neither pregnant nor postpartum amenorrhoeic and have not had a menstrual period in the 6 months before the survey, if they report being menopausal or having had a hysterectomy, or if they have never menstruated.
Sample: Women age 30-49

Sixteen percent of women age 30-49 are menopausal. The percentage of menopausal women increases with age, rising from $9 \%$ among women age $30-34$ to $45 \%$ among women age $48-49$ (Table 5.8). Note, however, that the methodology used in estimating the prevalence of menopause did not take into account the use of contraceptive methods that reduce the frequency of menstrual periods. Thus, Table $\mathbf{5 . 8}$ may overestimate the prevalence of menopause.

### 5.5 Age at First Birth

## Median age at first birth

Age by which half of women have had their first child.
Sample: Women age 20-49 and 25-49

The median age at first birth among women age 25-49 is 21.3 years (Table 5.9). Two in 10 (18\%) women age 25-49 have given birth by age 18, 4 in 10 ( $38 \%$ ) have given birth by age 20, and three-quarters ( $74 \%$ ) have given birth by age 25 . Nearly 1 in $10(9 \%)$ women age $25-49$ have never given birth.

Comparison with the SADHS 1998: The median age at first birth among women age 25-49 has risen slightly since 1998 , from 20.8 years to 21.3 years.

Patterns by background characteristics

- Women age 25-49 living in urban areas have their first birth about a year later than women living in non-urban areas (21.6 years versus 20.7 years) (Table 5.10).
- By province, the median age at first birth among women age 25-49 ranges from a low of 20.1 years in Mpumalanga to a high of 22.1 years in Western Cape.
- The median age at first birth rises from 20.5 years among women in the lowest wealth quintile to 24.2 years among women in the highest quintile (Figure 5.5).

Figure 5.5 Median age at first birth by household wealth

Median age at first birth among women age 25-49


### 5.6 Teenage Childbearing

## Teenage childbearing

Percentage of women age 15-19 who have given birth or are pregnant with their first child
Sample: Women age 15-19

Sixteen percent of women age 15-19 have begun childbearing; $12 \%$ have given birth, and additional $3 \%$ are pregnant with their first child (Table 5.11). Six percent of teenage girls and $15 \%$ of teenage boys had sexual intercourse before age $15 ; 0.6 \%$ of teenage girls gave birth before age 15 , while no teenage boys reported having fathered a child before age 15 (Table 5.12).

Comparison with the SADHS 1998: Overall, the percentage of women age 15-19 who have begun childbearing is unchanged relative to 1998 ( $16 \%$ in both 1998 and 2016). However, the proportion of women age 19 who have begun childbearing has decreased ( $35 \%$ in 1998 and $28 \%$ in 2016).

## Patterns by background characteristics

- Urban women (14\%) are less likely than nonurban women (19\%) to begin childbearing in their teen years (Table 15.11).
- The percentage of women age 15-19 who have begun childbearing rises rapidly with age, from $4 \%$ among women age 15 to $28 \%$ among women age 19 .
- By province, childbearing among teenagers ranges from a low of $8 \%$ in Western Cape to a
high of $20 \%$ in both Northern Cape and North ranges from a low of $8 \%$ in Western Cape to a
high of $20 \%$ in both Northern Cape and North West (Figure 5.6).

Figure 5.6 Teenage pregnancy and motherhood by province

Percentage of women age 15-19 who have begun childbearing


- Teenage childbearing is most common among young women in the two lowest wealth quintiles ( $20 \%$ and $22 \%$, respectively) and least common among young women in the highest wealth quintile (7\%) (Figure 5.7)

Figure 5.7 Teenage pregnancy and motherhood by household wealth

Percentage of women age 15-19 who have begun childbearing


## List of Tables

For more information on fertility levels and some of the determinants of fertility, see the following tables:

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- Table 5.2 Fertility by background characteristics
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- Table 5.3.2 Trends in age-specific and total fertility rates
- Table 5.4 Children ever born and living
- Table 5.5 Birth intervals
- Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility
- Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility
- Table 5.8 Menopause
- Table 5.9 Age at first birth
- Table 5.10 Median age at first birth
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Table 5.1 Current fertility
Age-specific and total fertility rates, general fertility rate, and crude birth rate for the 3 years preceding the survey, by residence, South Africa DHS 2016

|  | Residence |  |  |
| :--- | :---: | :---: | :---: |
| Age group | Urban | Non- <br> urban | Total |
| $10-14$ | $[0]$ | $[3]$ | $[1]$ |
| $15-19$ | 62 | 86 | 71 |
| $20-24$ | 125 | 150 | 133 |
| $25-29$ | 131 | 156 | 139 |
| $30-34$ | 94 | 107 | 98 |
| $35-39$ | 52 | 87 | 62 |
| $40-44$ | 21 | 29 | 23 |
| $45-49$ | $[1]$ | $[4]$ | $[2]$ |
| TFR (15-49) | 2.4 | 3.1 | 2.6 |
| GFR (15-44) | 87 | 109 | 94 |
| GFR (15-49) | 80 | 101 | 87 |
| CBR | 21.9 | 23.1 | 22.3 |

Notes: Age-specific fertility rates are per 1,000 women.
Rates for the 10-14 and 45-49 age groups may be slightly biased due to truncation and are therefore displayed in brackets. Rates are for the period 1-36 months prior to interview. Rates for the 10-14 age group are based on retrospective data from women age 15-17.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women
age 15-44 or per 1,000 women age 15-49
CBR: Crude birth rate, expressed per 1,000 population

Table 5.2 Fertility by background characteristics
Total fertility rate for the 3 years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, according to background characteristics, South Africa DHS 2016

| Background characteristic | Total fertility rate | Percentage of women age 15-49 currently pregnant | Mean number of children ever born to women age 40-49 |
| :---: | :---: | :---: | :---: |
| Population group |  |  |  |
| Black African | 2.7 | 4.0 | 3.0 |
| White | 1.5 | 5.4 | 1.8 |
| Coloured | 2.5 | 2.9 | 2.8 |
| Indian/Asian | 1.7 | 0.0 | (2.1) |
| Residence |  |  |  |
| Urban | 2.4 | 4.1 | 2.6 |
| Non-urban | 3.1 | 3.6 | 3.4 |
| Province |  |  |  |
| Western Cape | 2.1 | 3.3 | 2.6 |
| Eastern Cape | 2.9 | 3.3 | 3.1 |
| Northern Cape | 2.7 | 3.1 | 2.6 |
| Free State | 2.4 | 2.5 | 2.8 |
| KwaZulu-Natal | 2.5 | 3.5 | 2.8 |
| North West | 3.1 | 3.7 | 3.0 |
| Gauteng | 2.6 | 5.5 | 2.6 |
| Mpumalanga | 3.0 | 4.1 | 3.4 |
| Limpopo | 3.1 | 2.6 | 3.2 |
| Education |  |  |  |
| No education | 2.8 | 2.8 | 3.5 |
| Primary incomplete | 3.6 | 4.1 | 3.7 |
| Primary complete | 3.5 | 5.9 | 3.6 |
| Secondary incomplete | 2.8 | 3.8 | 3.0 |
| Secondary complete | 2.4 | 4.0 | 2.4 |
| More than secondary | 2.2 | 3.5 | 2.2 |
| Wealth quintile |  |  |  |
| Lowest | 3.1 | 4.2 | 3.4 |
| Second | 2.9 | 5.1 | 3.4 |
| Middle | 2.7 | 4.3 | 3.1 |
| Fourth | 2.3 | 3.2 | 2.6 |
| Highest | 2.1 | 2.6 | 2.2 |
| Total | 2.6 | 3.9 | 2.9 |

Notes: Total fertility rates are for the period 1-36 months prior to the interview. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.3.1 Trends in age-specific fertility rates
Age-specific fertility rates for 5 -year periods preceding the survey, according to age group, South Africa DHS 2016

|  | Number of years preceding survey |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Age group | $0-4$ | $5-9$ | $10-14$ | $15-19$ |
| $10-14$ | $[1]$ | 3 | 2 | 2 |
| $15-19$ | 77 | 86 | 76 | 79 |
| $20-24$ | 138 | 136 | 134 | 132 |
| $25-29$ | 134 | 135 | 130 | 137 |
| $30-34$ | 107 | 111 | 104 | $[109]$ |
| $35-39$ | 66 | 68 | $[83]$ |  |
| $40-44$ | 24 | $[34]$ |  |  |
| $45-49$ | $[3]$ |  |  |  |

Notes: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of interview. For the 0-4 year period, rates for the 10-14 age group are based on retrospective data from women age 15-19

Table 5.3.2 Trends in age-specific and total fertility rates
Age-specific and total fertility rates (TFR) for the 3-year period preceding the SADHS 1998 and the SADHS 2016, according to mother's age at the time of the birth, South Africa DHS 2016

| Mother's age at birth | SADHS 1998 | SADHS 2016 |
| :--- | :---: | :---: |
| $15-19$ | 76 | 71 |
| $20-24$ | 139 | 133 |
| $25-29$ | 143 | 139 |
| $30-34$ | 109 | 98 |
| $35-39$ | 74 | 62 |
| $40-44$ | 29 | 23 |
| $45-49$ | $[9]$ | $[2]$ |
| TFR (15-49) | 2.9 | 2.6 |

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation and are therefore displayed in brackets.

Table 5.4 Children ever born and living
Percent distribution of all women and in-union women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, South Africa DHS 2016

| Age group | Number of children ever born |  |  |  |  |  |  |  |  |  |  | Total | Number of women |  | Mean number of living children |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10+ |  |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 87.6 | 11.5 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,427 | 0.13 | 0.13 |
| 20-24 | 42.1 | 40.4 | 15.0 | 2.1 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,415 | 0.78 | 0.76 |
| 25-29 | 15.3 | 38.3 | 31.5 | 12.3 | 2.1 | 0.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 1,444 | 1.49 | 1.41 |
| 30-34 | 9.6 | 25.6 | 35.2 | 19.7 | 6.7 | 2.7 | 0.4 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 1,333 | 1.99 | 1.89 |
| 35-39 | 5.7 | 19.1 | 32.8 | 23.8 | 11.9 | 3.5 | 2.0 | 0.4 | 0.8 | 0.0 | 0.1 | 100.0 | 1,072 | 2.43 | 2.29 |
| 40-44 | 5.4 | 14.4 | 27.7 | 26.3 | 14.3 | 6.6 | 2.9 | 1.2 | 0.7 | 0.5 | 0.1 | 100.0 | 941 | 2.75 | 2.60 |
| 45-49 | 6.3 | 11.2 | 23.8 | 25.5 | 16.2 | 10.4 | 3.0 | 2.2 | 0.9 | 0.4 | 0.3 | 100.0 | 883 | 2.99 | 2.76 |
| Total | 27.7 | 24.3 | 23.2 | 14.1 | 6.2 | 2.7 | 1.0 | 0.4 | 0.3 | 0.1 | 0.1 | 100.0 | 8,514 | 1.64 | 1.55 |
| IN-UNION WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | (53.3) | (40.3) | (6.4) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | 100.0 | 44 | (0.53) | (0.51) |
| 20-24 | 20.7 | 51.6 | 23.0 | 4.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 271 | 1.12 | 1.09 |
| 25-29 | 8.8 | 31.1 | 37.1 | 17.5 | 4.3 | 0.7 | 0.6 | 0.0 | 0.0 | 0.0 | 0.0 | 100.0 | 514 | 1.82 | 1.73 |
| 30-34 | 7.3 | 19.1 | 40.3 | 20.9 | 8.3 | 3.5 | 0.5 | 0.1 | 0.0 | 0.0 | 0.0 | 100.0 | 688 | 2.17 | 2.06 |
| 35-39 | 4.3 | 15.0 | 33.5 | 25.0 | 14.9 | 3.5 | 1.9 | 0.3 | 1.4 | 0.1 | 0.1 | 100.0 | 575 | 2.61 | 2.47 |
| 40-44 | 3.3 | 12.9 | 27.6 | 27.4 | 16.0 | 6.9 | 2.6 | 1.3 | 1.1 | 0.7 | 0.1 | 100.0 | 507 | 2.90 | 2.74 |
| 45-49 | 4.5 | 8.1 | 21.8 | 30.2 | 16.0 | 9.7 | 4.3 | 2.9 | 1.5 | 0.2 | 0.6 | 100.0 | 450 | 3.22 | 2.99 |
| Total | 7.8 | 20.9 | 31.6 | 21.8 | 10.5 | 4.1 | 1.6 | 0.7 | 0.7 | 0.2 | 0.1 | 100.0 | 3,050 | 2.35 | 2.22 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.5 Birth intervals
Percent distribution of non-first births in the 5 years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Months since preceding birth |  |  |  |  |  | Total | Number of non-first births | Median number of months since preceding birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 7-17 | 18-23 | 24-35 | 36-47 | 48-59 | 60+ |  |  |  |
| Mother's age |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | * | * | 100.0 | 11 | * |
| 20-29 | 5.1 | 10.2 | 21.2 | 19.8 | 16.7 | 27.0 | 100.0 | 920 | 44.5 |
| 30-39 | 3.4 | 4.5 | 11.6 | 13.7 | 13.2 | 53.5 | 100.0 | 1,100 | 63.6 |
| 40-49 | 2.6 | 2.5 | 8.7 | 8.8 | 11.4 | 66.0 | 100.0 | 260 | 86.3 |
| Sex of preceding birth |  |  |  |  |  |  |  |  |  |
| Male | 3.6 | 6.6 | 15.6 | 15.9 | 13.9 | 44.3 | 100.0 | 1,222 | 55.1 |
| Female | 4.5 | 6.9 | 14.9 | 15.2 | 14.8 | 43.6 | 100.0 | 1,069 | 55.5 |
| Survival of preceding birth |  |  |  |  |  |  |  |  |  |
| Living | 3.6 | 6.9 | 14.7 | 15.3 | 14.3 | 45.2 | 100.0 | 2,161 | 56.2 |
| Dead | 11.3 | 4.6 | 25.0 | 20.2 | 15.4 | 23.6 | 100.0 | 130 | 40.9 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 2-3 | 3.6 | 6.2 | 14.0 | 14.8 | 14.1 | 47.4 | 100.0 | 1,817 | 58.0 |
| 4-6 | 5.6 | 8.9 | 19.1 | 17.0 | 15.3 | 34.1 | 100.0 | 421 | 47.6 |
| 7+ | 6.0 | 11.5 | 27.5 | 30.4 | 16.9 | 7.7 | 100.0 | 53 | 40.9 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 4.2 | 7.0 | 15.1 | 15.7 | 13.5 | 44.4 | 100.0 | 1,450 | 55.6 |
| Non-urban | 3.8 | 6.4 | 15.6 | 15.2 | 15.8 | 43.3 | 100.0 | 841 | 54.5 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 2.2 | 8.4 | 13.8 | 13.1 | 19.0 | 43.5 | 100.0 | 202 | 54.7 |
| Eastern Cape | 4.6 | 6.2 | 16.3 | 18.8 | 15.8 | 38.3 | 100.0 | 259 | 51.4 |
| Northern Cape | 1.7 | 4.2 | 11.5 | 17.3 | 17.8 | 47.5 | 100.0 | 43 | 58.1 |
| Free State | 4.9 | 2.0 | 14.8 | 13.6 | 11.1 | 53.5 | 100.0 | 101 | 63.6 |
| KwaZulu-Natal | 4.0 | 7.1 | 14.8 | 18.4 | 13.3 | 42.3 | 100.0 | 402 | 52.8 |
| North West | 2.5 | 5.7 | 12.7 | 19.1 | 14.9 | 45.1 | 100.0 | 192 | 55.0 |
| Gauteng | 4.8 | 8.6 | 17.5 | 12.5 | 10.9 | 45.8 | 100.0 | 651 | 56.5 |
| Mpumalanga | 6.1 | 5.5 | 14.3 | 17.9 | 18.1 | 38.1 | 100.0 | 213 | 53.8 |
| Limpopo | 2.0 | 4.9 | 14.2 | 13.0 | 17.2 | 48.7 | 100.0 | 229 | 59.1 |
| Mother's education |  |  |  |  |  |  |  |  |  |
| No education | (3.0) | (0.0) | (10.0) | (19.0) | (9.4) | (58.6) | 100.0 | 46 | (75.3) |
| Primary incomplete | 3.0 | 5.2 | 25.1 | 18.7 | 15.0 | 33.0 | 100.0 | 152 | 45.7 |
| Primary complete | 11.3 | 3.8 | 22.1 | 19.4 | 11.6 | 31.8 | 100.0 | 102 | 42.0 |
| Secondary incomplete | 3.9 | 7.3 | 15.1 | 15.7 | 17.4 | 40.6 | 100.0 | 1,131 | 53.2 |
| Secondary complete | 3.8 | 8.1 | 13.2 | 12.0 | 10.6 | 52.2 | 100.0 | 652 | 61.9 |
| More than secondary | 2.4 | 4.1 | 13.3 | 20.8 | 11.7 | 47.7 | 100.0 | 208 | 59.3 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 4.2 | 4.2 | 18.4 | 19.0 | 16.7 | 37.3 | 100.0 | 528 | 51.3 |
| Second | 3.8 | 6.7 | 15.4 | 17.6 | 13.1 | 43.3 | 100.0 | 554 | 53.0 |
| Middle | 4.2 | 8.8 | 14.7 | 12.3 | 16.3 | 43.8 | 100.0 | 525 | 56.3 |
| Fourth | 3.3 | 8.0 | 12.8 | 13.0 | 15.6 | 47.3 | 100.0 | 414 | 57.8 |
| Highest | 4.7 | 6.1 | 14.0 | 14.7 | 6.6 | 53.9 | 100.0 | 270 | 65.9 |
| Total | 4.0 | 6.8 | 15.3 | 15.6 | 14.4 | 44.0 | 100.0 | 2,291 | 55.3 |

Notes: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.6 Postpartum amenorrhoea, abstinence, and insusceptibility
Percentage of births in the 3 years preceding the survey for which mothers are postpartum amenorrhoeic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, South Africa DHS 2016

|  | Percentage of births for which the mother is: |  |  |  |
| :--- | ---: | ---: | ---: | ---: |
| Months since birth | Amenorrhoeic | Abstaining | ${\text { Insusceptible }{ }^{1}}^{\text {Number of births }}$ |  |
| $<2$ | 45.5 | 87.3 | 90.1 | 116 |
| $2-3$ | 46.0 | 65.8 | 78.5 | 123 |
| $4-5$ | 42.5 | 44.0 | 64.7 | 132 |
| $6-7$ | 25.2 | 31.6 | 44.7 | 126 |
| $8-9$ | 28.9 | 31.0 | 49.6 | 91 |
| $10-11$ | 28.6 | 24.8 | 47.0 | 111 |
| $12-13$ | 22.8 | 17.7 | 33.3 | 112 |
| $14-15$ | 23.4 | 20.4 | 36.3 | 126 |
| $16-17$ | 18.7 | 17.3 | 32.0 | 135 |
| $18-19$ | 13.3 | 10.6 | 21.5 | 128 |
| $20-21$ | 16.4 | 24.3 | 32.4 | 85 |
| $22-23$ | 6.3 | 10.6 | 14.7 | 111 |
| $24-25$ | 13.4 | 8.4 | 20.4 | 109 |
| $26-27$ | 18.0 | 11.6 | 25.9 | 103 |
| $28-29$ | 13.3 | 17.0 | 25.0 | 127 |
| $30-31$ | 14.9 | 9.7 | 20.8 | 107 |
| $32-33$ | 5.8 | 6.5 | 11.3 | 128 |
| $34-35$ | 5.8 | 5.4 | 11.1 | 99 |
| Total | 21.9 | 25.0 | 37.0 | 2.068 |
| Median | $a$ | 4.7 | 8.1 | na |
| Mean | 8.8 | 9.9 | 14.2 | na |

## Note: Estimates are based on status at the time of the survey.

na $=$ Not applicable
$a=$ Omitted because less than $50 \%$ of women were postpartum amenorrhoeic within the first 2 months of birth
${ }^{1}$ Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.7 Median duration of amenorrhoea, postpartum abstinence, and postpartum insusceptibility
Median number of months of postpartum amenorrhoea, postpartum abstinence, and postpartum insusceptibility following births in the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

| Background <br> characteristic | Postpartum <br> amenorrhoea | Postpartum <br> abstinence | Postpartum <br> insusceptibility ${ }^{1}$ |
| :--- | :---: | :---: | :---: |
| Mother's age |  |  |  |
| $15-29$ | a | 5.2 | 8.0 |
| $30-49$ | a | 3.9 | 8.4 |
| Residence | a |  |  |
| Urban | 1.9 | 3.9 | 6.6 |
| Non-urban |  | 6.2 | 10.7 |
| Wealth quintile | 6.3 |  |  |
| Lowest | a | 6.6 | 11.5 |
| Second | $*$ | 5.2 | 7.3 |
| Middle | a | 6.1 | 10.9 |
| Fourth | a | 3.8 | 6.2 |
| Highest |  | 4.7 | $(6.0)$ |
| Total |  | 8.7 |  |

Notes: Medians are based on status at the time of the survey (current status). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
a = Omitted because less than $50 \%$ of women were postpartum amenorrhoeic within the first 2 months of birth
${ }^{1}$ Includes births for which mothers are either still amenorrhoeic or still abstaining (or both) following birth

Table 5.8 Menopause
Percentage of women age $30-49$ who are menopausal, according to age, South Africa DHS 2016

| Age | Percentage <br> menopausal | Number of women |
| :--- | :---: | :---: |
| $30-34$ | 8.9 | 1,333 |
| $35-39$ | 9.5 | 1,072 |
| $40-41$ | 13.7 | 403 |
| $42-43$ | 16.1 | 384 |
| $44-45$ | 24.7 | 306 |
| $46-47$ | 30.4 | 383 |
| $48-49$ | 44.7 | 348 |
| Total | 16.2 | 4,229 |

${ }^{1}$ Percentage of women who (1) are not pregnant, and (2) have had a birth in the past 5 years and are no postpartum amenorrhoeic, and (3) for whom one of the following additional conditions applies: (a) their last menstrual period occurred 6 or more months preceding the survey, (b) they declared that they are in menopause or have had a hysterectomy, or (c) they have never menstruated

Table 5.9 Age at first birth
Percentage of women age $15-49$ who gave birth by exact ages, percentage who have never given birth, and median age at first birth, according to current age, South Africa DHS 2016

| Current age | Percentage who gave birth by exact age |  |  |  |  | Percentage who have never given birth | Number of women | Median age at first birth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 15 | 18 | 20 | 22 | 25 |  |  |  |
| 15-19 | 0.6 | na | na | na | na | 87.6 | 1,427 | a |
| 20-24 | 1.7 | 18.2 | 38.0 | na | na | 42.1 | 1,415 | a |
| 25-29 | 1.1 | 17.8 | 37.9 | 57.8 | 76.0 | 15.3 | 1,444 | 21.2 |
| 30-34 | 1.1 | 15.4 | 34.1 | 53.7 | 74.1 | 9.6 | 1,333 | 21.6 |
| 35-39 | 1.4 | 18.8 | 38.4 | 54.3 | 71.9 | 5.7 | 1,072 | 21.4 |
| 40-44 | 1.4 | 18.6 | 38.0 | 56.4 | 72.6 | 5.4 | 941 | 21.3 |
| 45-49 | 2.8 | 20.0 | 42.2 | 60.9 | 76.4 | 6.3 | 883 | 20.9 |
| 20-49 | 1.5 | 18.0 | 37.8 | na | na | 15.7 | 7,087 | a |
| 25-49 | 1.5 | 17.9 | 37.8 | 56.4 | 74.3 | 9.1 | 5,672 | 21.3 |

na $=$ Not applicable due to censoring
$a=$ Omitted because less than $50 \%$ of women had a birth before reaching the beginning of the age group

Table 5.10 Median age at first birth
Median age at first birth among women age 25-49, according to background characteristics, South Africa DHS 2016

| Background | Women age |
| :--- | :---: |
| characteristic | $25-49$ |


| Residence |  |
| :--- | :--- |
| Urban | 21.6 |
| Non-urban | 20.7 |

Province
Western Cape 22.1
Eastern Cape 21.4
Northern Cape 21.5
Free State $\quad 21.9$
KwaZulu-Natal $\quad 21.3$
North West 21.0
Gauteng 21.4
Mpumalanga $\quad 20.1$
Limpopo 20.7

| Education |  |
| :--- | ---: |
| No education | 20.9 |
| Primary incomplete | 19.4 |
| Primary complete | 19.4 |
| Secondary incomplete | 20.4 |
| Secondary complete | 22.3 |


| Wealth quintile |  |
| :--- | :--- |
| Lowest | 20.5 |
| Second | 20.6 |
| Middle | 20.7 |
| Fourth | 21.4 |
| Highest | 24.2 |
| Total | 21.3 |

Table 5.11 Teenage pregnancy and motherhood
Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women age 15-19 who: |  | Percentage who have begun childbearing | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | Have had a live birth | Are pregnant with first child |  |  |
| Age |  |  |  |  |
| 15-17 | 5.8 | 3.2 | 9.0 | 857 |
| 15 | 2.4 | 1.4 | 3.8 | 239 |
| 16 | 3.5 | 3.8 | 7.3 | 307 |
| 17 | 10.8 | 4.0 | 14.8 | 311 |
| 18 | 20.0 | 2.6 | 22.6 | 270 |
| 19 | 24.5 | 3.3 | 27.8 | 299 |
| Population group |  |  |  |  |
| Black African | 12.8 | 3.2 | 16.0 | 1,260 |
| White | * |  |  | 25 |
| Coloured | 8.7 | 3.3 | 11.9 | 128 |
| Indian/Asian | * | * | * | 13 |
| Residence |  |  |  |  |
| Urban | 10.6 | 3.0 | 13.6 | 874 |
| Non-urban | 15.4 | 3.3 | 18.6 | 552 |
| Province |  |  |  |  |
| Western Cape | 5.0 | 3.1 | 8.1 | 160 |
| Eastern Cape | 14.2 | 3.7 | 17.9 | 184 |
| Northern Cape | 17.3 | 3.0 | 20.3 | 31 |
| Free State | 9.6 | 2.4 | 12.1 | 71 |
| KwaZulu-Natal | 16.3 | 3.0 | 19.4 | 303 |
| North West | 17.8 | 2.3 | 20.1 | 81 |
| Gauteng | 9.8 | 4.3 | 14.1 | 311 |
| Mpumalanga | 15.3 | 2.8 | 18.2 | 118 |
| Limpopo | 11.1 | 1.3 | 12.4 | 167 |
| Education |  |  |  |  |
| No education | * | * | * | 3 |
| Primary incomplete | 17.1 | 14.0 | 31.1 | 40 |
| Primary complete | 8.6 | 3.4 | 12.0 | 70 |
| Secondary incomplete | 12.7 | 2.7 | 15.4 | 1,156 |
| Secondary complete | 12.6 | 3.3 | 15.9 | 137 |
| More than secondary | * | * | * | 20 |
| Wealth quintile |  |  |  |  |
| Lowest | 14.9 | 5.1 | 20.0 | 343 |
| Second | 18.2 | 3.5 | 21.7 | 271 |
| Middle | 15.6 | 2.7 | 18.3 | 277 |
| Fourth | 8.0 | 1.4 | 9.4 | 310 |
| Highest | 4.0 | 2.5 | 6.5 | 226 |
| Total | 12.4 | 3.1 | 15.6 | 1,427 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 5.12 Sexual and reproductive health behaviours before age 15
Among women and men age 15-19, percentage who initiated sexual intercourse, were married or living together with a partner as if married, and had a live birth/fathered a child before age 15, according to sex, South Africa DHS 2016

|  | Had sexual <br> intercourse before <br> age 15 | Married or living <br> together with a <br> partner as if <br> married before <br> age 15 | Gave birth/ <br> fathered a child <br> before age 15 | Number of <br> respondents |
| :--- | :---: | :---: | :---: | :---: |
| Sex | 5.7 | 0.4 | 0.6 | 1,427 |
| Women | 14.5 | 0.0 | 0.0 | 647 |
| Men |  |  |  |  |

## Key Findings

- Desire for another child: $19 \%$ of in-union women age 15-49 want to have another child soon, $9 \%$ want to wait at least 2 years, $6 \%$ want another child but are undecided on the timing, and $5 \%$ are undecided about having more children.
- Desire to limit childbearing: Overall, $58 \%$ of in-union women and $45 \%$ of in-union men do not want another child.
- Ideal family size: Women currently want 2.6 children on average, while men want 3.2 children.
- Unwanted births: Of all births in the past 5 years and current pregnancies, $46 \%$ were wanted at the time of conception, $34 \%$ were mistimed, and $20 \%$ were unwanted.
- Wanted fertility rates: The wanted fertility rate in South Africa is 2.0 children, as compared with the actual total fertility rate of 2.6 children; thus, on average, women are having 0.6 more children than they want.

Information on fertility preferences can help family planning programme planners assess the desire for children, the extent of mistimed and unwanted pregnancies, and the demand for contraception to space or limit births. This information may suggest the direction that fertility patterns will take in the future.

This chapter presents information on whether and when women and men who are in a union (currently married or living together with a partner as if married) want more children, ideal family size, whether the last birth was wanted, and the theoretical fertility rate if all unwanted births were prevented.

### 6.1 Desire for Another Child

## Desire for another child

Women and men were asked whether they wanted more children and, if so, how long they would prefer to wait before the birth of the next child. Women and men who are sterilised are assumed not to want any more children.
Sample: In-union women and men age 15-49

Most in-union women age 15-49 (58\%) want no more children. Nineteen percent of in-union women want to have another child soon (within the next 2 years), and $9 \%$ want to wait at least 2 years before having another child. In addition, $6 \%$ of in-union women want another child but are undecided on the timing, and $5 \%$ are undecided about having more children (Table 6.1). In comparison, $45 \%$ of in-union men age 15-49 want no more children and $27 \%$ want to have another child soon.

Comparison with the SADHS 1998: The overall proportion of in-union women who want no more children (including women who are sterilised) has decreased slightly since 1998 , from $62 \%$ to $58 \%$.

However, among women with no living children, the percentage who want no more children has nearly doubled, from $8 \%$ to $15 \%$.

## Patterns by background characteristics

- In-union women with no children are much more likely than women who have begun childbearing to want a child soon. Fifty percent of women with no children want to have a child within the next 2 years, as compared with $37 \%$ of women with one child and $13 \%$ of women with two children.
- Once they have begun childbearing, in-union men are more likely than women to want another child soon at every parity level. For example, $19 \%$ of men with four children want to have another child soon, compared with only $6 \%$ of women with four children.
- Desire to limit childbearing does not differ between urban and non-urban areas. Fifty-eight percent of urban women and $59 \%$ of non-urban women want no more children, while $45 \%$ of both urban men and non-urban men want no more children (Table 6.2). Larger differences, however, are seen by province. For example, $36 \%$ of men in Limpopo and North West want no more children, as compared with $58 \%$ of men in Western Cape.
- In-union women in the highest (67\%) and lowest ( $62 \%$ ) wealth quintiles are more likely to want no more children than women in the second, third, and fourth quintiles ( $52 \%-55 \%$ ).
- The desire to limit childbearing increases as the

Figure 6.1 Desire to limit childbearing by number of living children

Percentage of in-union women age 15-49 who want no more children


Note: In-union women include those who are currently married or living together with a partner as if married. number of living children increases. The percentage of in-union women who want no more children increases from $15 \%$ among those with no living children to $94 \%$ among those with six or more children (Figure 6.1).

### 6.2 Ideal Family Size

## Ideal family size

Respondents with no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" Respondents who had children were asked, "If you could go back to the time when you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be?"
Sample: Women and men age 15-49

If women could choose their family size, they would prefer to have 2.6 children on average, while men would choose to have 3.2 children. Ideal family size is slightly higher among women and men who are in a union (Table 6.3 and Figure 6.2).

Comparison with the SADHS 1998: Ideal family size has fallen modestly since 1998, from 2.9 to 2.6 children among all women and from 3.3 to 2.9 children among in-union women.

Patterns by background characteristics

- The more children women and men already have, the more children they consider ideal. For example, women who have only one child consider 2.5 children to be ideal on average. In contrast, women who have six or more children consider 4.1 children to be ideal (Figure 6.3).

Figure 6.2 Ideal family size


Note: In-union women and men include those who are currently married or living together with a partner as if married.

- Older women want larger families. Women age 45-49 report an ideal family size of 3.0 children on average, while women age 15-19 report an ideal family size of only 2.1 children (Table 6.4).
- Family size norms vary across provinces. Women in Limpopo want larger families of 3.3 children, while women in Free State want smaller families of 2.2 children.

Figure 6.3 Ideal family size by number of living children
Mean ideal number of children
■ Women ■ Men


- Women with no education want more children (3.3 on average) than women with any secondary education (2.5-2.6 on average).
- Women in the poorest households want more children. The ideal number of children is 2.8 among women in the second wealth quintile, as compared with 2.4 among women in the highest quintile.


### 6.3 Fertility Planning Status

## Planning status of births/current pregnancies

Women reported whether their births/pregnancies were wanted at the time (planned), at a later time (mistimed), or not at all (unwanted).
Sample: Current pregnancies and births in the 5 years before the survey to women age 15-49

According to mothers' reports, half of births were wanted at the time of conception (46\%) and one-third (34\%) were mistimed, that is, wanted at a later date. Twenty percent of births were not wanted at all (Figure 6.4).

Comparison with the SADHS 1998: There has been essentially no change since 1998 in the proportion of births that were wanted at the time of conception, mistimed, or not wanted at all. In 1998, $46 \%$ of births were wanted, $36 \%$ were mistimed, and $17 \%$ were not wanted.

## Patterns by background characteristics

- The more children a woman has, the more likely it is that her last birth was unwanted. Eleven percent of first births were unwanted, as compared with $44 \%$ of fourth- or higher-order births (Table 6.5).
- Women less than age 20 are most likely to have mistimed births ( $64 \%$ ) and least likely to have unwanted births (15\%).


### 6.4 Wanted Fertility Rates

## Unwanted birth

Any birth in excess of the number of children a woman reported as her ideal number.

## Wanted birth

Any birth fewer than or equal to the number of children a woman reported as her ideal number.

## Wanted fertility rate

The average number of children a woman would have by the end of her childbearing years if she bore children at the current age-specific fertility rates, excluding unwanted births.
Sample: Women age 15-49

Wanted fertility rates reflect the level of fertility that would result if all unwanted births were prevented. The wanted fertility rate in South Africa is 2.0 children, as compared with the actual total fertility rate of 2.6 children (Table 6.6). Thus, while they are unlikely to report that their last birth was unwanted, women in South Africa are having 0.6 more children than they want on average.

Comparison with the SADHS 1998: The total wanted fertility rate in South Africa declined from 2.3 children in 1998 to 2.0 children in 2016. However, the gap between wanted and actual fertility ( 0.6 children) has remained constant over time (Figure 6.5).

## Patterns by background characteristics

- The total wanted fertility rate is consistently lower than the actual total fertility rate, but the size of the gap varies by women's background characteristics (Table 6.6).
- The gap between wanted and actual fertility is largest among Black African and Coloured women ( 0.6 children each) and lowest among Indian/Asian women ( 0.1 children).
- The gap between wanted and actual fertility is slightly higher in non-urban areas ( 0.7 children) than in urban areas ( 0.5 children).
- Women in Eastern Cape have the largest gap between actual and wanted fertility (1.0 children). The gap is smallest in Gauteng ( 0.4 children).
- The gap between wanted and actual fertility rates generally narrows with increasing education and wealth. For example, the gap narrows from 0.8 children among women in the lowest wealth quintile to 0.3 children among women in the highest wealth quintile.


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- Table 6.6 Wanted fertility rates

Figure 6.5 Comparison in wanted and actual fertility: 1998 and 2016

Wanted and actual number of children per woman


Table 6.1 Fertility preferences by number of living children
Percent distribution of in-union women and in-union men age 15-49 by desire for children, according to number of living children, South Africa DHS 2016

| Desire for children | Number of living children |  |  |  |  |  |  | $\begin{gathered} \text { Total } \\ 15-49 \end{gathered}$ | Total 15-59 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | 6+ |  |  |
| WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| Have another soon ${ }^{2}$ | 49.9 | 37.4 | 13.1 | 11.3 | 6.0 | 1.4 | 0.8 | 19.2 | na |
| Have another later ${ }^{3}$ | 14.3 | 17.3 | 10.6 | 3.6 | 1.8 | 0.0 | 0.0 | 9.2 | na |
| Have another, undecided when | 8.9 | 12.3 | 6.5 | 2.5 | 1.2 | 0.0 | 2.3 | 6.2 | na |
| Undecided | 2.5 | 6.2 | 6.8 | 3.1 | 2.2 | 6.9 | 1.5 | 4.9 | na |
| Want no more | 13.3 | 22.3 | 54.1 | 62.5 | 73.8 | 78.6 | 85.5 | 49.7 | na |
| Sterilised ${ }^{4}$ | 2.1 | 1.7 | 6.8 | 15.6 | 14.5 | 11.8 | 8.4 | 8.3 | na |
| Declared infecund | 9.0 | 2.9 | 2.2 | 1.4 | 0.5 | 1.2 | 1.5 | 2.5 | na |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | na |
| Number of women | 221 | 664 | 995 | 673 | 319 | 110 | 68 | 3,050 | na |
| MEN ${ }^{5}$ |  |  |  |  |  |  |  |  |  |
| Have another soon ${ }^{2}$ | 47.8 | 44.0 | 24.0 | 15.0 | 19.3 | (5.4) | 6.6 | 26.6 | 22.0 |
| Have another later ${ }^{3}$ | 15.8 | 17.6 | 10.2 | 4.3 | 6.7 | (4.8) | 11.0 | 10.6 | 8.5 |
| Have another, undecided when | 5.6 | 8.1 | 13.7 | 4.6 | 6.2 | (2.1) | 7.0 | 8.4 | 6.7 |
| Undecided | 14.1 | 10.1 | 11.2 | 4.9 | 3.5 | (1.4) | 7.2 | 8.5 | 7.8 |
| Want no more | 11.1 | 18.9 | 40.1 | 68.9 | 63.4 | (86.3) | 68.1 | 44.3 | 52.1 |
| Sterilised ${ }^{4}$ | 1.4 | 0.4 | 0.8 | 2.3 | 0.6 | (0.0) | 0.0 | 0.9 | 1.1 |
| Declared infecund | 0.9 | 0.5 | 0.0 | 0.1 | 0.4 | (0.0) | 0.0 | 0.3 | 1.0 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 99 | 201 | 296 | 163 | 129 | 46 | 53 | 988 | 1,276 |

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
na $=$ Not applicable
${ }^{1}$ The number of living children includes the current pregnancy
${ }^{2}$ Wants next birth within 2 years
${ }^{3}$ Wants to delay next birth for 2 or more years
${ }^{4}$ Includes both female and male sterilisation
${ }^{5}$ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife)

Table 6.2 Desire to limit childbearing
Percentage of in-union women age 15-49 who want no more children, by number of living children, and total percentage of inunion men age 15-49 who want no more children, according to background characteristics, South Africa DHS 2016

| Background characteristic | Number of living children ${ }^{1}$ |  |  |  |  |  |  | Total for women | Total for men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |  |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 18.1 | 26.2 | 63.1 | 79.5 | 89.1 | 88.9 | * | 57.8 | 45.4 |
| Non-urban | 3.2 | 15.1 | 52.7 | 74.3 | 86.7 | 92.3 | 94.6 | 58.6 | 44.7 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | * | 29.3 | 73.4 | 80.4 | (95.3) | * | * | 64.2 | 57.5 |
| Eastern Cape | * | 16.5 | 63.4 | 79.1 | (91.8) | * | * | 60.5 | 52.4 |
| Northern Cape | (22.1) | (31.7) | 74.9 | 87.0 | * | * | * | 68.1 | 40.4 |
| Free State | * | 33.0 | 56.1 | 98.3 | * | * | * | 59.4 | 44.8 |
| KwaZulu-Natal | * | 37.8 | 58.4 | 70.2 | (92.6) | * | * | 60.8 | 45.4 |
| North West | * | 18.9 | 53.6 | 89.2 | (89.4) | * | * | 56.8 | 36.2 |
| Gauteng | (21.7) | 22.9 | 62.3 | 76.1 | (85.6) | * | * | 54.9 | 43.4 |
| Mpumalanga | (8.9) | 15.6 | 56.6 | 78.1 | (88.9) | (95.6) | * | 55.5 | 45.9 |
| Limpopo | * | (14.0) | 40.1 | 67.3 | 76.1 | * | * | 52.4 | 35.7 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | 78.6 | (50.2) |
| Primary incomplete | * | (24.4) | (55.6) | 71.0 | (89.0) | * | (88.8) | 62.8 | 34.2 |
| Primary complete | * | * | (41.7) | (63.9) | * | * | * | 54.4 | 42.1 |
| Secondary incomplete | 7.5 | 26.5 | 56.8 | 77.2 | 90.1 | 88.9 |  | 59.5 | 44.1 |
| Secondary complete | 11.4 | 23.5 | 63.8 | 78.2 | 77.0 | * | * | 54.4 | 47.1 |
| More than secondary | (22.8) | 19.6 | 68.8 | 85.6 | * | * | * | 55.9 | 50.7 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | (17.2) | 22.8 | 63.8 | 71.1 | 88.9 | (93.6) | (95.2) | 62.1 | 42.8 |
| Second | (1.6) | 24.8 | 48.9 | 71.9 | 86.8 | (94.3) | * | 53.4 | 38.1 |
| Middle | 7.2 | 12.5 | 51.4 | 78.3 | 80.8 | (88.0) | * | 51.5 | 39.1 |
| Fourth | (18.3) | 18.0 | 55.8 | 75.5 | (92.7) | * | * | 54.8 | 46.3 |
| Highest | (25.1) | 37.4 | 77.9 | 89.6 | (100.0) | * | * | 67.0 | 59.0 |
| Total 15-49 | 15.4 | 24.0 | 60.8 | 78.1 | 88.2 | 90.4 | 93.9 | 58.0 | 45.2 |
| 50-59 | na | na | na | na | na | na | na | na | 80.5 |
| Total 15-59 | na | na | na | na | na | na | na | na | 53.2 |

Notes: Women who have been sterilised are considered to want no more children. In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ The number of living children includes the current pregnancy

Table 6.3 Ideal number of children by number of living children
Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for in-union respondents, according to number of living children, South Africa DHS 2016

| Ideal number of children | Number of living children |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0 | 1 | 2 | 3 | 4 | 5 | $6+$ |  |
| WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 0 | 10.6 | 6.6 | 6.0 | 5.8 | 4.6 | 10.7 | 6.1 | 7.4 |
| 1 | 8.4 | 10.0 | 7.8 | 6.0 | 6.0 | 3.9 | 1.7 | 8.0 |
| 2 | 48.6 | 39.9 | 38.7 | 27.1 | 24.7 | 19.9 | 13.3 | 38.5 |
| 3 | 18.1 | 25.0 | 22.3 | 24.8 | 9.5 | 12.4 | 12.2 | 21.1 |
| 4 | 11.0 | 14.2 | 20.0 | 25.2 | 38.4 | 22.4 | 30.5 | 18.1 |
| 5 | 2.1 | 2.5 | 2.9 | 6.4 | 6.8 | 19.0 | 4.3 | 3.7 |
| $6+$ | 0.9 | 1.8 | 2.1 | 4.3 | 9.6 | 10.6 | 29.5 | 3.0 |
| Non-numeric responses | 0.3 | 0.0 | 0.2 | 0.3 | 0.4 | 1.0 | 2.3 | 0.3 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 2,324 | 2,168 | 2,029 | 1,189 | 501 | 196 | 107 | 8,514 |
| Mean ideal number of children for: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All women | 2.2 | 2.5 | 2.6 | 3.0 | 3.4 | 3.5 | 4.1 | 2.6 |
| Number of women | 2,317 | 2,167 | 2,025 | 1,186 | 500 | 194 | 104 | 8,493 |
| In-union women | 2.4 | 2.6 | 2.7 | 3.0 | 3.5 | 3.7 | 4.1 | 2.9 |
| Number of in-union women | 220 | 664 | 993 | 670 | 317 | 109 | 66 | 3,040 |
| MEN ${ }^{3}$ |  |  |  |  |  |  |  |  |
| 0 | 5.1 | 4.2 | 4.0 | 8.8 | 6.9 | 7.5 | 6.2 | 5.2 |
| 1 | 5.2 | 5.5 | 4.2 | 2.4 | 1.1 | 1.3 | 0.0 | 4.5 |
| 2 | 36.9 | 23.9 | 26.9 | 14.5 | 17.0 | 15.9 | 12.4 | 29.5 |
| 3 | 25.2 | 35.5 | 18.7 | 23.5 | 8.9 | 12.8 | 14.6 | 24.4 |
| 4 | 17.1 | 16.8 | 28.2 | 31.0 | 33.7 | 6.1 | 13.1 | 20.5 |
| 5 | 5.1 | 7.2 | 8.9 | 10.3 | 10.0 | 21.2 | 2.0 | 6.9 |
| $6+$ | 4.7 | 6.3 | 7.4 | 8.1 | 19.4 | 32.0 | 44.0 | 7.8 |
| Non-numeric responses | 0.7 | 0.7 | 1.7 | 1.5 | 2.9 | 3.3 | 7.6 | 1.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 1,631 | 517 | 505 | 253 | 167 | 58 | 72 | 3,202 |
| Mean ideal number of children for men age 15-49: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All | 2.9 | 3.1 | 3.3 | 3.4 | 3.8 | 4.6 | 5.5 | 3.2 |
| Number of men | 1,619 | 513 | 496 | 249 | 162 | 56 | 66 | 3,162 |
| In-union men | 2.6 | 3.1 | 3.3 | 3.4 | 3.8 | (4.7) | 5.8 | 3.4 |
| Number of in-union men | 97 | 200 | 292 | 162 | 125 | 44 | 51 | 971 |
| Mean ideal number of children for men age 15-59: ${ }^{2}$ |  |  |  |  |  |  |  |  |
| All men | 2.9 | 3.1 | 3.3 | 3.4 | 3.9 | 4.7 | 5.6 | 3.2 |
| Number of men | 1,665 | 557 | 574 | 325 | 217 | 90 | 129 | 3,558 |
| In-union men | 2.7 | 3.0 | 3.2 | 3.4 | 4.0 | 4.8 | 5.2 | 3.5 |
| Number of in-union men | 115 | 231 | 339 | 225 | 167 | 71 | 99 | 1,247 |

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ The number of living children includes the current pregnancy for women
${ }^{2}$ Means are calculated excluding respondents who gave non-numeric responses
${ }^{3}$ The number of living children includes one additional child if the respondent's wife is pregnant (or if any wife is pregnant for men with more than one current wife)

Table 6.4 Mean ideal number of children
Mean ideal number of children for all women age 15-49 according to background characteristics, South Africa DHS 2016

| Background characteristic | Mean | Number of women ${ }^{1}$ |
| :---: | :---: | :---: |
| Age |  |  |
| 15-19 | 2.1 | 1,424 |
| 20-24 | 2.5 | 1,415 |
| 25-29 | 2.7 | 1,441 |
| 30-34 | 2.6 | 1,333 |
| 35-39 | 2.8 | 1,071 |
| 40-44 | 2.9 | 932 |
| 45-49 | 3.0 | 877 |
| Residence |  |  |
| Urban | 2.5 | 5,720 |
| Non-urban | 2.8 | 2,772 |
| Province |  |  |
| Western Cape | 2.3 | 995 |
| Eastern Cape | 2.3 | 934 |
| Northern Cape | 2.4 | 172 |
| Free State | 2.2 | 440 |
| KwaZulu-Natal | 2.5 | 1,612 |
| North West | 2.7 | 567 |
| Gauteng | 2.6 | 2,281 |
| Mpumalanga | 2.9 | 668 |
| Limpopo | 3.3 | 822 |
| Education |  |  |
| No education | 3.3 | 165 |
| Primary incomplete | 3.0 | 445 |
| Primary complete | 2.8 | 326 |
| Secondary incomplete | 2.5 | 4,186 |
| Secondary complete | 2.6 | 2,366 |
| More than secondary | 2.6 | 1,004 |
| Wealth quintile |  |  |
| Lowest | 2.7 | 1,645 |
| Second | 2.8 | 1,711 |
| Middle | 2.6 | 1,800 |
| Fourth | 2.5 | 1,755 |
| Highest | 2.4 | 1,582 |
| Total | 2.6 | 8,493 |

${ }^{1}$ Number of women who gave a numeric response

Table 6.5 Fertility planning status
Percent distribution of births to women age 15-49 in the 5 years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, South Africa DHS 2016

|  | Planning status of birth |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Wanted <br> then | Wanted <br> later | Wanted no <br> more |  | Total | | Number of <br> births |
| :---: |
| Birth order and mother's age at birth |

[^11]Table 6.6 Wanted fertility rates
Total wanted fertility rates and total fertility rates for the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

| Background <br> characteristic | Total wanted <br> fertility rate | Total fertility <br> rate |
| :--- | :--- | :---: |
| Population group |  |  |
| $\quad$ Black African |  |  |
| White | 2.1 | 2.7 |
| Coloured |  |  |
| Indian/Asian | 1.2 | 1.5 |
| Residence | 1.9 | 2.5 |
| $\quad$ Urban | 1.6 | 1.7 |
| $\quad$ Non-urban |  |  |
| Province | 1.9 | 2.4 |
| Western Cape | 2.4 | 3.1 |
| Eastern Cape |  |  |
| Northern Cape | 1.6 | 2.1 |
| Free State | 1.9 | 2.9 |
| KwaZulu-Natal | 1.9 | 2.7 |
| North West | 1.7 | 2.4 |
| Gauteng | 1.8 | 2.5 |
| Mpumalanga | 2.5 | 3.1 |
| $\quad$ Limpopo | 2.2 | 2.6 |
| Education | 2.2 | 3.0 |
| $\quad$ No education | 2.6 | 3.1 |
| Primary incomplete |  |  |
| Primary complete | 2.0 | 2.8 |
| Secondary incomplete | 2.5 | 3.6 |
| Secondary complete | 2.6 | 3.5 |
| More than secondary | 2.1 | 2.8 |
| Wealth quintile | 1.9 | 2.4 |
| Lowest | 2.0 | 2.2 |
| Second |  |  |
| Middle | 2.3 | 3.1 |
| Fourth | 2.2 | 2.9 |
| Highest | 2.0 | 2.7 |
| Total | 1.9 | 2.3 |
|  | 1.8 | 2.1 |
|  | 2.0 | 2.6 |

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

## Key Findings

- Contraceptive knowledge: Nearly $100 \%$ of women and men have heard of at least one modern method of contraception.
- Contraceptive prevalence rate: 55\% of in-union women and $60 \%$ of sexually active women are currently using a method of contraception.
- Use of modern contraceptives: Nearly all women ( $99 \%$ ) who use a contraceptive use a modern method. Among sexually active women, the most commonly used methods are injectables (25\%) and male condoms (16\%); $18 \%$ of sexually active women use 3-month injectables and $7 \%$ use 2-month injectables.
- Knowledge of the fertile period: One-third (34\%) of women and $10 \%$ of men know that a woman is most likely to conceive halfway between two periods.
- Source of modern methods: $80 \%$ of all modern contraceptive users obtain their methods from the public sector.
- Percentage of demand for contraception satisfied: Three-quarters (76\%) of the demand for contraception among sexually active women is satisfied by use of modern methods.
- Unmet need for contraception: 19\% of sexually active women have an unmet need for contraception.

Couples can use contraceptive methods to limit or space the number of children they have. This chapter presents information on the use and sources of contraceptive methods, informed choice of methods, and rates and reasons for discontinuing contraceptives. It also examines the potential demand for contraception among all women, in-union women, and sexually active women and how much contact nonusers have with family planning providers.

The 2001 South African National Contraception Policy Guidelines focused on clients' right to choose a method and placed emphasis on quality of care. These guidelines were updated in 2012 as the National Contraception and Fertility Planning Policy and Service Delivery Guidelines and the National Contraceptive Clinical Guidelines (NDoH 2013a). The updated guidelines highlight the fact that a range of contraceptive methods should be offered in a comprehensive, integrated manner with other relevant sexual and reproductive health services in the public sector and that contraceptive clients should have access to "accurate, unbiased information about all available methods in order to make an informed choice." Methods available in the public health sector at no cost to clients seeking contraception are progestogenonly injectables (3-month and 2-month), contraceptive pills, male and female condoms, intrauterine devices (IUDs), male and female sterilisation, emergency contraceptive pills, and, since 2014, implants.

Alongside the launch of the updated policy was a national campaign that promoted the concept of dual protection.

### 7.1 Contraceptive Knowledge and Use

Knowledge of contraceptives is universal in South Africa (Table 7.1). Nearly 100\% of women and men age 15-49 have heard of at least one method of contraception.

On average, women and men have heard of eight and six methods of contraception, respectively. The most commonly known methods among both women and men are the male condom ( $98 \%$ of women and $99 \%$ of men), injectables ( $96 \%$ of women and $79 \%$ of men), contraceptive pills ( $94 \%$ of women and $79 \%$ of men), and the female condom ( $93 \%$ of women and $85 \%$ of men). Although not introduced until 2014, $84 \%$ of women and $50 \%$ of men have heard about implants.

## Contraceptive prevalence rate

Percentage of women who use any contraceptive method
Sample: All women age 15-49, in-union women age 15-49, and sexually active women age 15-49

Table 7.2 shows the percent distribution of all women, in-union women, and sexually active women in South Africa by the contraceptive method they currently use. Overall, the contraceptive prevalence rate (CPR) is $60 \%$ among sexually active women and $55 \%$ among in-union women. The CPR among all women age $15-49$ is $48 \%$. Nearly all women ( $99 \%$ ) who use a contraceptive method use a modern method.

## Modern methods

Include male and female sterilisation, injectables, intrauterine devices (IUDs), contraceptive pills, implants, male and female condoms, and emergency contraception

Among in-union women, the most popular methods are injectables (24\%: 18\% 3-month injectables and $6 \%$ 2-month injectables), the male condom ( $9 \%$ ), contraceptive pills (8\%), and female sterilisation (8\%). Less than $5 \%$ use long-acting contraceptive methods ( $3 \%$ use implants and $1 \%$ use IUDs). Similarly, among sexually active women, the most commonly used methods are injectables ( $25 \%$ : $18 \%$ 3-month injectables and 7\% 2-month injectables), male condoms ( $16 \%$ ), contraceptive pills ( $7 \%$ ), and female sterilisation (6\%). Longacting contraceptive methods are used by $5 \%$ (Figure 7.1). Less than $1 \%$ of in-union women or sexually active women use any traditional method.

Figure 7.1 Contraceptive use


Note: In-union women include women who are currently married or living together with a partner as if married. Sexually active women are women who had sexual intercourse within the 4 weeks preceding the survey.

Comparison with the SADHS 1998: A comparison between 1998 and 2016 shows that modern contraceptive use among sexually active women has remained stable ( $61 \%$ versus 59\%) (Figure 7.2). There have been, however, differences in the method mix. Declines are observed in the use of female sterilisation ( $12 \%$ in 1998 versus $6 \%$ in 2016), contraceptive pills ( $13 \%$ versus $7 \%$ ), and injectables ( $30 \%$ versus $25 \%$ ). In contrast, use of male condoms has increased dramatically (from $2 \%$ in 1998 to $16 \%$ in 2016). Implants, not available in 1998, are now used by $4 \%$ of sexually active women (Table 7.3.1). Use of traditional methods has remained extremely low ( $1 \%$ in 1998 versus $0.4 \%$ in 2016)

## Patterns by background characteristics

- Sexually active non-urban and urban women are equally likely to use modern contraceptives ( $60 \%$ and $59 \%$, respectively) (Table 7.3.2).
- Use of modern methods of contraception rises with increasing education, from $44 \%$ among sexually active women with no education to $62 \%$ among women with more than a secondary education
- There is a notable difference in contraceptive use across provinces. Among sexually active women, modern contraceptive use ranges from a low of $51 \%$ in Free State to a high of $65 \%$ in KwaZulu-Natal (Figure 7.3).
- With the exception of the province of Limpopo, 3-month injectables are more widely used than 2-month injectables by sexually active women in all background characteristic categories.
- Use of injectables (of either type) decreases with increasing household wealth, from $31 \%$ among sexually active women in the lowest wealth quintile to $13 \%$ among those in the highest quintile (Figure 7.4).
- Use of female sterilisation increases with increasing household wealth, from $3 \%$ in the bottom two quintiles to $14 \%$ in the highest quintile. Among women who have been sterilised, the most common age at sterilisation is 30-34 years (39\%). The median age at sterilisation is 32.5 years (Table 7.4).


## Knowledge of the Fertile Period

The survey also collected information on women and men's knowledge of the fertile period. One-third ( $34 \%$ ) of women and $10 \%$ of men know that a woman is most likely to conceive halfway between two
periods (Table 7.5). Among women, correct knowledge of the fertile period is highest among those age 35-39 (39\%) and lowest among those age 15-19 (27\%) (Table 7.6).

### 7.2 Source of Modern Contraceptive Methods

## Source of modern contraceptives

The place where the modern method currently being used was obtained the last time it was acquired
Sample: Women age 15-49 currently using a modern contraceptive method

Eighty percent of all modern contraceptive users obtain their methods from the public sector, $11 \%$ from the private medical sector, and $8 \%$ from other sources (Table 7.7). However, the importance of each source varies depending on the method.

- Injectables, implants, and pills: the vast majority of women obtain 3-month injectables (94\%), 2-month injectables ( $95 \%$ ), and implants ( $94 \%$ ) from the public sector, especially government health clinics/community health centres. Over three-quarters of women obtain pills (77\%) from the public sector.
- Male condoms: the predominant sources for male condoms are government health clinics/community health centres ( $51 \%$ ), shops ( $26 \%$ ), and chemists/pharmacies ( $12 \%$ ).
- Female sterilisation: government hospitals (63\%) and private hospitals ( $27 \%$ ) are the most common sources for female sterilisation.


### 7.3 Informed Choice

## Informed choice

Informed choice indicates that women were informed at the time they started the current episode of method use about the method's side effects, about what to do if they experience side effects, and about other methods they could use.
Sample: Women age 15-49 who are currently using selected modern contraceptive methods and who started the last episode of use within the 5 years before the survey

Fifty-six percent of women using modern contraceptives report that they were informed about side effects or other problems with the method they used, and $49 \%$ report that they were informed about what to do if they experienced side effects. A higher proportion of women (64\%) report being informed of other methods they could use. Forty-four percent of women using modern contraceptives made a fully informed choice, meaning that they received all three pieces of information (Table 7.8). Although the number of IUD users is low and therefore the results should be interpreted with caution, women using IUDs (79\%) were most likely to report that they were informed about all three aspects, followed by women using implants (54\%) and women who are sterilised (51\%).

### 7.4 Discontinuation of Contraceptives

## Contraceptive discontinuation rate

Percentage of contraceptive use episodes discontinued within 12 months
Sample: Continuous time periods or episodes of contraceptive use in the 5 years before the survey experienced by women who are currently age 15-49 (one woman may contribute more than one episode)

About 3 in $10(29 \%)$ episodes of contraceptive use in the 5 years before the survey were discontinued within 12 months of commencing use. In $4 \%$ of episodes, women switched to another method. While discontinuation rates are similar for 3-month injectables (31\%), 2-month injectables ( $28 \%$ ), pills ( $33 \%$ ), and male condoms ( $33 \%$ ), the rate is lower for implants (13\%) (Table 7.9 and Figure 7.5).

Figure 7.5 Contraceptive discontinuation rates
Percentage of contraceptive episodes discontinued within 12 months by women age 15-49


Overall, the most common reason for discontinuing a method was method-related health concerns or side effects (28\%), followed by the desire to become pregnant (19\%) and the desire for a more effective method (11\%). Other reasons reported by women were that they became pregnant while using the method ( $9 \%$ ) and that they infrequently had sex ( $8 \%$ ) (Table 7.10). Women were far more likely to cite method-related health concerns and side effects as a reason for discontinuing implants ( $74 \%$ ) and injectables ( $40 \%$ for 3-month injectables and $39 \%$ for 2 -month injectables) than for discontinuing pills (22\%) or male condoms (7\%).

### 7.5 Demand for Contraception

## Unmet need for contraception

Proportion of women who (1) are not pregnant and not postpartum amenorrhoeic and are considered fecund and want to postpone their next birth for 2 or more years or stop childbearing altogether but are not using a contraceptive method, or (2) have a mistimed or unwanted current pregnancy, or (3) are postpartum amenorrhoeic and their most recent birth in the last 2 years was mistimed or unwanted.
Sample: All women age 15-49, in-union women age 15-49, and sexually active women age 15-49

## Demand for

Unmet need for contraception contraception: + current contraceptive use (any method)

| Proportion of <br> demand <br> satisfied: | Current contraceptive use (any method) |
| :--- | :---: |

Proportion of demand satisfied by modern methods:

Regardless of the population examined, total demand for contraception among women in South Africa is high. Seventy percent of in-union women age 15-49 in South Africa have a demand for contraception; 24\% want to space births, and $46 \%$ want to limit births (Table 7.11.1). At present, $79 \%$ of the potential demand for contraception is being met, almost entirely by modern methods. However, $15 \%$ of in-union women have an unmet need for contraception: they want to space or limit births but are not currently using contraception.

Nearly 8 in 10 (78\%) sexually active women have a demand for contraception; $35 \%$ want to space births and $43 \%$ want to limit births (Table 7.11.2 and Figure 7.6). Currently, $60 \%$ of sexually active women are using a contraceptive method, indicating that $76 \%$ of the demand is met-almost exclusively by modern contraceptive methods. Nineteen percent of sexually active women have an unmet need for contraception ( $9 \%$ for spacing and $9 \%$ for limiting).

Comparison with the SADHS 1998: The proportion of in-union women with an unmet need for contraception has declined slightly since 1998, from $17 \%$ to $15 \%$. Over the same period, the total demand

Figure 7.6 Demand for contraception
 for contraceptive methods among in-union women has decreased from $73 \%$ to $70 \%$. The percentage of the demand for contraception satisfied with modern contraceptive methods has increased slightly, from $76 \%$ to $78 \%$.

The proportion of sexually active women with an unmet need for contraception has increased slightly, from $16 \%$ to $19 \%$. While the total demand for planning has not changed ( $78 \%$ in both 1998 and 2016), the percentage of demand satisfied with modern contraceptive methods has decreased slightly, from 78\% to 76\%.

## Patterns by background characteristics

- Unmet need among sexually active women is higher in the 15-19 (31\%) and 20-24 (28\%) age groups than in other age groups ( $14 \%-18 \%$ ).
- Unmet need is modestly higher among sexually active women in non-urban areas than among those in urban areas ( $21 \%$ versus $18 \%$ ).
- Unmet need among sexually active women varies considerably by province, from $12 \%$ in Western Cape to $25 \%$ in Limpopo (Figure 7.7).


## Decision Making about Contraception

Forty-seven percent of in-union women who are
with their partner, $41 \%$ said that they usually make the decision themselves, and $11 \%$ said that their partner usually makes the decision. Among in-union women who are not using a contraception method, $42 \%$ reported that they usually make the decision to not use contraception jointly with their partner, $37 \%$ reported that they usually make the decision, and $18 \%$ reported that their partner usually makes the decision (Table 7.12).

## Future Use of Contraception

The survey also collected information on nonusers' intent to use contraception in the future. Thirty-six percent of in-union women age 15-49 who are not currently using contraception intend to use a method at some future time, $6 \%$ are unsure, and $59 \%$ do not intend to use contraceptives. The percentage of in-union women who do not intend to use family planning in the future is highest among those with no children (71\%), followed by those with four or more children (65\%) (Table 7.13).

## Exposure to Family Planning Messages

Table 7.14 provides information on exposure to family planning messages among women and men age 15-49. Thirty-six percent of women reported hearing a family planning message in the past 6 months on the radio, while $42 \%$ reported hearing a message on television. In addition, $35 \%$ of women read a family planning message in a newspaper or magazine, and $46 \%$ were exposed to a message by a community health worker. The proportion of women who were exposed to family planning messages exceeded that among men for each source. Overall, $35 \%$ of women and $46 \%$ of men were not exposed to family planning messages through any of these sources.

Life orientation, covering a broad range of life skills from the junior to senior school grades, has been part of the Department of Basic Education's National Curriculum since 2011 (DBE 2011). The National Adolescent Sexual and Reproductive Health and Rights (ASRH\&R) Framework Strategy (2014-2019), established by the Department of Social Development as a call to action, prioritises a comprehensive sexuality education curriculum and the need to strengthen school-based programmes (DSD 2015). In the SADHS 2016, women and men age 15-24 who were currently attending school were asked whether they had heard about family planning at school in the past 6 months. Seven in 10 women ( $70 \%$ ) and 6 in 10 men ( $61 \%$ ) reported that they had heard about family planning at school in the preceding 6 months (Table 7.15). Among young women and young men age $15-19$ who were attending school, $70 \%$ and $56 \%$, respectively, reported having heard about family planning at school.

### 7.6 Contact of Nonusers with Family Planning Providers

## Contact of nonusers with family planning providers

Respondent discussed family planning in the 12 months before the survey during a visit to a health facility.
Sample: Women age 15-49 who are not currently using any contraceptive methods

All women age 15-49 who were not using contraceptives were asked if they had visited a health facility in the 12 months before the survey for their own care or that of their children and, if so, whether they had discussed family planning methods with a health care worker. Twenty-five percent of women reported discussing family planning with a provider during a health facility visit. However, $31 \%$ of nonusers had visited a health facility in the past 12 months without discussing family planning (Table 17.16). The remaining women did not report visiting a health facility in the 12 months before the survey and therefore did not have the opportunity to engage with health facility staff on the topic of family planning.

## Patterns by background characteristics

- Women age 20-39 are more likely (31-32\%) than younger women age 15-19 (11\%) and older women age 40-49 (22-24\%) to have discussed family planning during a health facility visit.
- Women living in North West are most likely to have discussed family planning during a health facility visit (34\%), while women in Free State are least likely to have done so (19\%).


## List of Tables

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Table 7.1 Knowledge of contraceptive methods
Percentage of all respondents, in-union respondents, sexually active respondents, and respondents who have never had sex age 15-49 who have heard of any contraceptive method, according to specific method, South Africa DHS 2016

| Method | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | All women | In-union women | Sexually active women ${ }^{1}$ | Never had sex | All men | In-union men | Sexually active men ${ }^{1}$ | Never had sex |
| Any method | 99.7 | 99.9 | 99.9 | 98.0 | 99.8 | 99.9 | 100.0 | 98.6 |
| Any modern method | 99.7 | 99.9 | 99.9 | 98.0 | 99.8 | 99.9 | 100.0 | 98.6 |
| Female sterilisation | 64.1 | 73.5 | 70.1 | 45.1 | 41.7 | 51.6 | 46.0 | 25.0 |
| Male sterilisation | 43.4 | 51.7 | 48.1 | 33.2 | 32.9 | 41.5 | 36.4 | 21.4 |
| Pill | 94.4 | 96.7 | 96.4 | 82.6 | 78.7 | 83.4 | 81.6 | 64.4 |
| IUD | 63.9 | 71.6 | 69.0 | 41.4 | 24.6 | 30.6 | 26.8 | 15.5 |
| Injectables | 96.0 | 97.1 | 97.2 | 84.5 | 79.2 | 81.1 | 81.6 | 63.1 |
| Implants | 84.1 | 85.2 | 86.7 | 69.1 | 49.7 | 50.8 | 51.7 | 39.8 |
| Male condom | 97.7 | 97.8 | 98.3 | 93.3 | 99.4 | 99.4 | 99.5 | 98.4 |
| Female condom | 93.2 | 94.0 | 95.0 | 84.6 | 85.2 | 83.3 | 86.0 | 80.3 |
| Emergency contraception | 62.9 | 65.0 | 67.7 | 49.5 | 47.3 | 51.5 | 51.5 | 32.2 |
| Other modern method | 2.1 | 1.7 | 2.0 | 1.5 | 0.9 | 1.1 | 1.0 | 1.0 |
| Any traditional method | 59.5 | 65.4 | 66.2 | 37.6 | 58.3 | 61.4 | 61.7 | 37.6 |
| Rhythm | 37.9 | 41.7 | 42.3 | 27.5 | 26.2 | 30.8 | 27.9 | 16.4 |
| Withdrawal | 54.2 | 60.9 | 61.1 | 33.2 | 55.4 | 57.9 | 58.7 | 36.1 |
| Other traditional method | 2.3 | 2.8 | 2.6 | 0.9 | 1.2 | 1.8 | 1.5 | 0.3 |
| Mean number of methods known by respondents 15-49 | 8.0 | 8.4 | 8.4 | 6.5 | 6.2 | 6.6 | 6.5 | 4.9 |
| Number of respondents | 8,514 | 3,050 | 4,364 | 1,009 | 3,202 | 988 | 1,889 | 397 |
| Mean number of methods known by respondents 15-59 | na | na | na | na | 6.2 | 6.6 | 6.5 | 4.9 |
| Number of respondents | na | na | na | na | 3,618 | 1,276 | 2,140 | 401 |

Note: In-union women and men include those who are currently married or living together with a partner as if married.
na = Not applicable
Had sexual intercourse within the 4 weeks preceding the survey
Table 7.2 Current use of contraception by age
Percent distribution of all women, in-union women, and sexually active women age 15-49 by contraceptive method currently used, according to age, South Africa DHS 2016

| Age | Any method | Any modern method | Modern method |  |  |  |  |  |  |  |  |  |  | Any traditional method | Traditional method |  | using <br> Not currently using | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female sterilisation | Male sterilisation | Pill | IUD | $\begin{gathered} \text { Injec- } \\ \text { tables } \\ (3 \text { month }) \end{gathered}$ | $\begin{gathered} \text { Injec- } \\ \text { tables } \\ (2 \text { month }) \end{gathered}$ | Implants | Male condom | Female condom | Emergency contraception | Other |  | Rhythm | Withdrawal |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 24.9 | 24.9 | 0.0 | 0.0 | 0.9 | 0.1 | 7.3 | 7.2 | 2.2 | 7.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 75.1 | 100.0 | 1,427 |
| 20-24 | 54.4 | 54.2 | 0.2 | 0.1 | 4.6 | 1.3 | 18.3 | 12.1 | 4.8 | 12.3 | 0.2 | 0.1 | 0.0 | 0.2 | 0.1 | 0.2 | 45.6 | 100.0 | 1,415 |
| 25-29 | 60.9 | 60.2 | 1.0 | 0.0 | 7.9 | 0.8 | 22.3 | 9.0 | 4.0 | 15.1 | 0.2 | 0.0 | 0.0 | 0.7 | 0.0 | 0.7 | 39.1 | 100.0 | 1,444 |
| 30-34 | 57.1 | 56.7 | 3.9 | 0.2 | 6.6 | 1.2 | 21.6 | 6.1 | 4.1 | 12.5 | 0.3 | 0.1 | 0.1 | 0.4 | 0.2 | 0.2 | 42.9 | 100.0 | 1,333 |
| 35-39 | 56.6 | 56.3 | 6.7 | 0.2 | 6.1 | 1.7 | 18.2 | 4.9 | 3.3 | 15.0 | 0.0 | 0.0 | 0.2 | 0.2 | 0.2 | 0.0 | 43.4 | 100.0 | 1,072 |
| 40-44 | 46.0 | 45.9 | 11.8 | 1.0 | 4.9 | 0.8 | 13.0 | 2.9 | 1.8 | 9.3 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 54.0 | 100.0 | 941 |
| 45-49 | 33.4 | 33.2 | 9.8 | 0.4 | 3.4 | 0.4 | 6.9 | 1.2 | 1.3 | 9.4 | 0.4 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 66.6 | 100.0 | 883 |
| Total | 48.2 | 47.9 | 4.0 | 0.2 | 5.0 | 0.9 | 15.9 | 6.7 | 3.2 | 11.7 | 0.2 | 0.0 | 0.0 | 0.3 | 0.1 | 0.2 | 51.8 | 100.0 | 8,514 |
| IN-UNION WOMEN ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | (36.7) | (36.7) | (0.0) | (0.0) | (11.0) | (0.0) | (17.7) | (1.1) | (2.2) | (4.7) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (0.0) | (63.3) | 100.0 | 44 |
| 20-24 | 53.2 | 52.9 | 0.2 | 0.0 | 8.1 | 0.3 | 19.1 | 12.4 | 4.6 | 8.2 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 | 46.8 | 100.0 | 271 |
| 25-29 | 62.3 | 60.5 | 1.0 | 0.0 | 12.7 | 0.7 | 23.3 | 8.6 | 4.8 | 9.4 | 0.0 | 0.0 | 0.0 | 1.8 | 0.0 | 1.8 | 37.7 | 100.0 | 514 |
| 30-34 | 58.0 | 57.2 | 5.1 | 0.4 | 8.5 | 1.7 | 23.5 | 6.4 | 3.9 | 7.3 | 0.3 | 0.0 | 0.0 | 0.8 | 0.3 | 0.5 | 42.0 | 100.0 | 688 |
| 35-39 | 61.2 | 61.1 | 8.5 | 0.4 | 7.8 | 2.3 | 20.0 | 4.9 | 3.7 | 12.9 | 0.0 | 0.0 | 0.4 | 0.2 | 0.1 | 0.0 | 38.8 | 100.0 | 575 |
| 40-44 | 50.8 | 50.7 | 16.5 | 1.8 | 6.9 | 0.5 | 12.9 | 3.5 | 1.2 | 7.4 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 49.2 | 100.0 | 507 |
| 45-49 | 39.0 | 38.9 | 13.8 | 0.8 | 5.6 | 0.7 | 7.4 | 1.3 | 2.0 | 7.2 | 0.2 | 0.0 | 0.0 | 0.1 | 0.0 | 0.1 | 61.0 | 100.0 | 450 |
| Total | 54.6 | 54.0 | 7.7 | 0.6 | 8.4 | 1.2 | 18.2 | 5.7 | 3.3 | 8.8 | 0.1 | 0.0 | 0.1 | 0.6 | 0.1 | 0.5 | 45.4 | 100.0 | 3,050 |
| SEXUALLY ACTIVE WOMEN ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 60.4 | 60.4 | 0.0 | 0.0 | 4.2 | 0.0 | 15.9 | 11.0 | 5.1 | 24.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.6 | 100.0 | 264 |
| 20-24 | 61.3 | 61.0 | 0.3 | 0.3 | 6.0 | 1.8 | 19.1 | 12.5 | 5.7 | 15.0 | 0.0 | 0.2 | 0.0 | 0.3 | 0.0 | 0.3 | 38.7 | 100.0 | 695 |
| 25-29 | 67.5 | 66.4 | 1.2 | 0.0 | 9.9 | 0.9 | 21.3 | 10.6 | 4.5 | 18.0 | 0.0 | 0.0 | 0.0 | 1.1 | 0.0 | 1.1 | 32.5 | 100.0 | 854 |
| 30-34 | 60.7 | 60.4 | 4.2 | 0.3 | 8.1 | 1.3 | 21.4 | 6.9 | 4.7 | 12.9 | 0.4 | 0.2 | 0.0 | 0.4 | 0.0 | 0.4 | 39.3 | 100.0 | 879 |
| 35-39 | 63.4 | 63.3 | 8.7 | 0.3 | 8.4 | 1.4 | 18.2 | 4.3 | 3.4 | 18.3 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.0 | 36.6 | 100.0 | 677 |
| 40-44 | 52.1 | 52.1 | 15.3 | 1.7 | 5.6 | 1.0 | 12.5 | 2.6 | 2.1 | 11.0 | 0.2 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 47.9 | 100.0 | 548 |
| 45-49 | 42.9 | 42.9 | 12.7 | 0.9 | 4.7 | 0.7 | 6.7 | 1.3 | 2.3 | 13.2 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 57.1 | 100.0 | 447 |
| Total | 59.6 | 59.3 | 5.7 | 0.4 | 7.3 | 1.2 | 17.5 | 7.3 | 4.1 | 15.6 | 0.1 | 0.1 | 0.1 | 0.4 | 0.0 | 0.3 | 40.4 | 100.0 | 4,364 |

[^12] ${ }^{1}$ In-union women include women who are currently married or living together with a partner as if married ${ }^{2}$ Women who have had sexual intercourse within the 4 weeks preceding the survey

Table 7.3.1 Trends in the current use of contraception
Percent distribution of sexually active women age 15-49 by contraceptive method currently used, according to the South Africa DHS 1998 and the South Africa DHS 2016

| Method | 1998 | 2016 |
| :--- | ---: | ---: |
| Any method | 62.1 | 59.6 |
| Any modern method | 61.2 | 59.3 |
| Female sterilisation | 12.0 | 5.7 |
| Male sterilisation | 1.7 | 0.4 |
| IUD | 1.9 | 1.2 |
| Pill | 13.2 | 7.3 |
| Injectables | 30.1 | 24.8 |
| Implants | na | 4.1 |
| Male condom | 2.3 | 15.6 |
| Female condom | na | 0.1 |
| Other modern method | 0.0 | 0.2 |
| Any traditional method | 1.0 | 0.4 |
| Periodic abstinence/rhythm | 0.3 | 0.0 |
| Withdrawal | 0.4 | 0.3 |
| Herbs | 0.2 | $n a$ |
| Other | 0.2 | 0.0 |
| Not currently using | 37.9 | 40.4 |
| Total | 100.0 | 100.0 |
| Number of women | 6,062 | 4,364 |

na $=$ Not applicable
Table 7.3.2 Current use of contraception according to background characteristics
Percent distribution of sexually active women age 15-49 by contraceptive method currently used, according to background characteristics, South Africa DHS 2016

| Background characteristic | Any method | Any modern method | Modern method |  |  |  |  |  |  |  |  |  |  | Any traditional method | Traditional method |  | Notcurrentlyusing | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Female sterilisation | Male sterilisation | Pill | IUD | Injectables (3 month) | $\begin{gathered} \text { Injec- } \\ \text { tables } \\ (2 \text { month }) \end{gathered}$ | Implants | Male condom | Female condom | Emergency contraception | Other |  | Rhythm | Withdrawal |  |  |  |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 47.5 | 47.0 | 0.6 | 0.0 | 4.2 | 0.8 | 7.1 | 6.2 | 3.2 | 24.5 | 0.1 | 0.4 | 0.0 | 0.5 | 0.0 | 0.5 | 52.5 | 100.0 | 772 |
| 1-2 | 61.1 | 60.7 | 2.9 | 0.6 | 8.7 | 1.2 | 19.7 | 8.6 | 4.2 | 14.4 | 0.2 | 0.0 | 0.1 | 0.4 | 0.0 | 0.4 | 38.9 | 100.0 | 2,441 |
| 3-4 | 66.2 | 66.0 | 15.9 | 0.4 | 6.6 | 1.4 | 20.8 | 5.4 | 3.4 | 11.9 | 0.1 | 0.0 | 0.0 | 0.3 | 0.1 | 0.2 | 33.8 | 100.0 | 992 |
| $5+$ | 55.4 | 55.4 | 10.2 | 0.0 | 4.6 | 0.6 | 14.5 | 2.6 | 9.6 | 13.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 44.6 | 100.0 | 160 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 59.6 | 59.1 | 6.8 | 0.5 | 7.8 | 1.4 | 16.1 | 6.7 | 4.1 | 15.5 | 0.2 | 0.1 | 0.1 | 0.4 | 0.0 | 0.4 | 40.4 | 100.0 | 3,137 |
| Non-urban | 59.9 | 59.6 | 3.0 | 0.2 | 6.0 | 0.6 | 21.4 | 8.7 | 4.0 | 15.6 | 0.1 | 0.0 | 0.0 | 0.2 | 0.1 | 0.2 | 40.1 | 100.0 | 1,227 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 62.7 | 62.4 | 11.3 | 2.4 | 4.4 | 2.5 | 15.4 | 5.6 | 7.0 | 13.8 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 | 37.3 | 100.0 | 525 |
| Eastern Cape | 61.0 | 61.0 | 6.4 | 0.5 | 3.4 | 1.0 | 22.8 | 10.4 | 4.9 | 11.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 39.0 | 100.0 | 410 |
| Northern Cape | 54.9 | 54.6 | 5.0 | 0.2 | 5.4 | 0.3 | 21.7 | 5.6 | 4.9 | 11.5 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 0.3 | 45.1 | 100.0 | 82 |
| Free State | 51.1 | 51.1 | 3.9 | 0.5 | 3.2 | 0.0 | 24.2 | 2.7 | 4.2 | 11.8 | 0.3 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 48.9 | 100.0 | 200 |
| KwaZulu-Natal | 65.0 | 64.7 | 6.2 | 0.4 | 6.3 | 1.3 | 19.8 | 3.4 | 4.8 | 22.1 | 0.0 | 0.4 | 0.0 | 0.3 | 0.0 | 0.3 | 35.0 | 100.0 | 685 |
| North West | 58.9 | 58.8 | 3.7 | 0.0 | 11.9 | 0.8 | 16.9 | 6.4 | 2.7 | 16.3 | 0.0 | 0.1 | 0.0 | 0.2 | 0.0 | 0.2 | 41.1 | 100.0 | 325 |
| Gauteng | 58.0 | 57.5 | 5.3 | 0.0 | 9.7 | 1.1 | 16.0 | 7.1 | 3.1 | 14.9 | 0.2 | 0.0 | 0.2 | 0.5 | 0.0 | 0.5 | 42.0 | 100.0 | 1,430 |
| Mpumalanga | 62.1 | 61.9 | 3.4 | 0.3 | 6.1 | 0.6 | 17.0 | 10.5 | 3.5 | 19.8 | 0.6 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 37.9 | 100.0 | 356 |
| Limpopo | 53.9 | 53.0 | 2.6 | 0.0 | 7.6 | 0.9 | 12.9 | 14.7 | 2.8 | 11.1 | 0.4 | 0.0 | 0.0 | 0.9 | 0.2 | 0.7 | 46.1 | 100.0 | 351 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 44.0 | 44.0 | 8.7 | 0.0 | 3.5 | 1.3 | 17.6 | 2.8 | 0.0 | 10.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 56.0 | 100.0 | 86 |
| Primary incomplete | 47.9 | 47.9 | 2.8 | 0.0 | 4.5 | 0.4 | 23.0 | 2.0 | 2.2 | 12.9 | 0.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 52.1 | 100.0 | 239 |
| Primary complete | 54.2 | 54.2 | 6.5 | 0.0 | 5.5 | 1.2 | 17.1 | 4.7 | 3.6 | 15.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 45.8 | 100.0 | 169 |
| Secondary incomplete | 60.5 | 60.1 | 4.7 | 0.3 | 5.2 | 0.7 | 20.4 | 8.5 | 5.0 | 15.2 | 0.1 | 0.0 | 0.0 | 0.4 | 0.0 | 0.4 | 39.5 | 100.0 | 1,913 |
| Secondary complete | 60.8 | 60.5 | 5.4 | 0.3 | 8.7 | 1.5 | 16.7 | 7.4 | 3.4 | 16.4 | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.2 | 39.2 | 100.0 | 1,354 |
| More than secondary | 62.7 | 62.0 | 10.1 | 1.5 | 12.8 | 2.0 | 8.3 | 6.2 | 4.0 | 16.7 | 0.1 | 0.1 | 0.1 | 0.7 | 0.0 | 0.7 | 37.3 | 100.0 | 603 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 60.0 | 59.4 | 2.7 | 0.0 | 5.9 | 0.3 | 24.3 | 6.5 | 3.2 | 16.5 | 0.0 | 0.0 | 0.0 | 0.6 | 0.0 | 0.6 | 40.0 | 100.0 | 758 |
| Second | 59.2 | 59.2 | 2.9 | 0.2 | 5.3 | 0.8 | 20.6 | 9.4 | 5.0 | 14.7 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 40.8 | 100.0 | 920 |
| Middle | 58.4 | 58.0 | 3.9 | 0.0 | 6.0 | 1.3 | 18.2 | 7.7 | 4.2 | 16.5 | 0.2 | 0.1 | 0.0 | 0.4 | 0.1 | 0.3 | 41.6 | 100.0 | 952 |
| Fourth | 62.3 | 61.9 | 5.2 | 0.4 | 7.3 | 1.2 | 16.2 | 8.5 | 4.6 | 18.3 | 0.1 | 0.1 | 0.0 | 0.5 | 0.0 | 0.5 | 37.7 | 100.0 | 882 |
| Highest | 58.5 | 58.0 | 13.9 | 1.7 | 12.0 | 2.1 | 8.9 | 3.8 | 3.2 | 11.7 | 0.3 | 0.2 | 0.3 | 0.5 | 0.0 | 0.5 | 41.5 | 100.0 | 852 |
| Total | 59.6 | 59.3 | 5.7 | 0.4 | 7.3 | 1.2 | 17.5 | 7.3 | 4.1 | 15.6 | 0.1 | 0.1 | 0.1 | 0.4 | 0.0 | 0.3 | 40.4 | 100.0 | 4,364 |



## Table 7.4 Timing of sterilisation

Percent distribution of sterilised women age 15-49 by age at the time of sterilisation and median age at sterilisation, according to the number of years since the operation, South Africa DHS 2016

| Years since operation | Age at time of sterilisation |  |  |  |  |  | Total | Number of women | Median age ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <25 | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 |  |  |  |
| <2 | 1.9 | 22.0 | 40.8 | 10.6 | 20.2 | 4.5 | 100.0 | 64 | 32.6 |
| 2-3 | (6.0) | (16.9) | (26.4) | (33.0) | (16.4) | (1.4) | 100.0 | 58 | (33.2) |
| 4-5 | (1.9) | (13.6) | (40.7) | (35.2) | (8.6) | (0.0) | 100.0 | 46 | (33.4) |
| 6-7 | (0.0) | (18.6) | (36.3) | (36.6) | (8.6) | (0.0) | 100.0 | 37 | (33.8) |
| 8-9 | (5.2) | (14.1) | (41.7) | (36.3) | (2.8) | (0.0) | 100.0 | 41 | (33.4) |
| 10+ | 7.8 | 29.2 | 46.2 | 16.8 | 0.0 | 0.0 | 100.0 | 92 | a |
| Total | 4.4 | 20.6 | 39.4 | 25.5 | 9.1 | 1.1 | 100.0 | 338 | 32.5 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
a = Not calculated due to censoring
${ }^{1}$ Median age at sterilisation is calculated only for women sterilised before age 40 to avoid problems of censoring

## Table 7.5 Knowledge of fertile period

Percent distribution of women and men age 15-49 by knowledge of the fertile period during the ovulatory cycle, South Africa DHS 2016

| Perceived fertile period | All women | All men |
| :---: | :---: | :---: |
| Just before her menstrual period begins | 13.4 | 17.4 |
| During her menstrual period | 4.8 | 4.9 |
| Right after her menstrual period has ended | 17.6 | 19.3 |
| Halfway between two menstrual periods | 34.1 | 9.7 |
| Other | 0.1 | 0.0 |
| No specific time | 13.4 | 16.9 |
| Don't know | 16.6 | 31.8 |
| Total | 100.0 | 100.0 |
| Number | 8,514 | 3,202 |

## Table 7.6 Knowledge of fertile period by age

Percentage of women age 15-49 with correct knowledge of the fertile period during the ovulatory cycle, according to age, South Africa DHS 2016

|  | Percentage with <br> correct <br> knowledge of the <br> fertile period | Number of <br> women |
| :--- | :---: | :---: |
| $15-19$ | 26.5 | 1,427 |
| $20-24$ | 32.0 | 1,415 |
| $25-29$ | 37.6 | 1,444 |
| $30-34$ | 36.5 | 1,333 |
| $35-39$ | 38.7 | 1,072 |
| $40-44$ | 35.7 | 941 |
| $45-49$ | 32.9 | 883 |
| Total | 34.1 | 8,514 |

Note: Correct knowledge of the fertile period is defined as "halfway between two menstrual periods."

Table 7.7 Source of modern contraception methods
Percent distribution of users of modern contraceptive methods age $15-49$ by most recent source of method, according to method, South Africa DHS 2016

| Source | Female sterilisation | IUD | Injectables (3 month) | Injectables (2 month) | Implants | Pill | Male condom | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Public sector | 72.0 | 65.3 | 93.9 | 94.5 | 94.2 | 77.1 | 56.2 | 80.3 |
| Government hospital | 63.0 | 18.6 | 11.4 | 4.5 | 22.8 | 4.7 | 3.8 | 13.1 |
| Government health clinic/ community health centre | 9.1 | 46.6 | 79.7 | 87.0 | 69.6 | 70.3 | 51.2 | 65.1 |
| Mobile clinic | 0.0 | 0.0 | 2.9 | 2.9 | 1.9 | 2.1 | 1.2 | 2.0 |
| Other public sector | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 |
| Private medical sector | 28.0 | 34.7 | 5.0 | 3.9 | 5.3 | 21.0 | 13.1 | 11.4 |
| Private hospital/clinic | 26.5 | 8.2 | 1.4 | 1.1 | 1.7 | 1.0 | 0.6 | 3.5 |
| Chemist/pharmacy | 0.0 | 0.9 | 1.1 | 1.5 | 0.8 | 15.0 | 12.3 | 5.4 |
| Private doctor | 1.5 | 25.6 | 2.6 | 1.4 | 2.8 | 4.9 | 0.3 | 2.4 |
| Other private medical sector | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 |
| Other sources | 0.0 | 0.0 | 0.7 | 0.7 | 0.5 | 1.1 | 28.9 | 7.5 |
| Workplace/workplace clinic | 0.0 | 0.0 | 0.5 | 0.7 | 0.2 | 0.6 | 1.1 | 0.6 |
| Community centre, library, or other public place | 0.0 | 0.0 | 0.0 | 0.0 | 0.3 | 0.0 | 1.7 | 0.4 |
| Shop | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 25.9 | 6.4 |
| Friend/relative | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.2 | 0.2 | 0.1 |
| Other | 0.0 | 0.0 | 0.1 | 0.2 | 0.0 | 0.8 | 1.8 | 0.6 |
| Missing | 0.0 | 0.0 | 0.3 | 0.6 | 0.0 | 0.0 | 0.0 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 338 | 75 | 1,351 | 574 | 277 | 423 | 994 | 4,076 |

Note: Total includes 20 users of male sterilisation, 17 users of female condoms, 4 users of emergency contraception, and 4 users of other modern methods who are too few in number to be shown separately.

## Table 7.8 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the 5 years preceding the survey, percentage who were informed about possible side effects or problems of that method, percentage who were informed about what to do if they experienced side effects, percentage who were informed about other methods they could use, and percentage who were informed of all three, according to method and initial source, South Africa DHS 2016

|  | Among women who started last episode of modern contraceptive method within 5 years |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| preceding the survey: |  |  |

Notes: Table includes users of only the methods listed individually. Total includes 7 users for whom the initial source of the method is missing who are not shown separately. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
CHW = community health worker
${ }^{1}$ Source at start of current episode of use

## Table 7.9 Twelve-month contraceptive discontinuation rates

Among episodes of contraceptive use experienced within the 5 years preceding the survey, percentage of episodes discontinued within 12 months, according to reason for discontinuation and specific method, South Africa DHS 2016

| Method | Method failure | Desire to become pregnant | Other fertilityrelated reasons ${ }^{2}$ | Side effects/ health concerns | Wanted more effective method | Other methodrelated reasons ${ }^{3}$ | Other reasons | $\begin{gathered} \text { Any } \\ \text { reason } \end{gathered}$ | Switched to another method ${ }^{5}$ | Number of episodes of use ${ }^{6}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Injectables (3 month) | 3.0 | 3.4 | 2.3 | 12.7 | 1.9 | 3.1 | 4.1 | 30.5 | 4.7 | 1,460 |
| Injectables (2 month) | 1.6 | 4.9 | 3.2 | 11.1 | 0.8 | 3.5 | 3.0 | 28.0 | 2.8 | 698 |
| Implants | 0.0 | 0.5 | 0.0 | 10.9 | 0.4 | 0.6 | 0.0 | 12.5 | 1.5 | 341 |
| Pill | 4.0 | 3.8 | 2.6 | 11.1 | 3.3 | 3.2 | 5.1 | 33.2 | 3.8 | 507 |
| Male condom | 4.4 | 6.9 | 3.3 | 2.0 | 5.6 | 2.6 | 7.7 | 32.5 | 5.7 | 1,178 |
| Other ${ }^{1}$ | (2.8) | (6.4) | (1.7) | (0.7) | (3.0) | (2.2) | (0.7) | (17.4) | (2.0) | 316 |
| All methods | 3.0 | 4.6 | 2.5 | 8.5 | 2.8 | 2.8 | 4.4 | 28.5 | 4.1 | 4,500 |

[^13]Table 7.10 Reasons for discontinuation
Percent distribution of discontinuations of contraceptive methods in the 5 years preceding the survey by main reason stated for discontinuation, according to specific method, South Africa DHS 2016

| Reason | IUD | Injectables (3 month) | Injectables (2 month) | Implants | Pill | Male condom | Other ${ }^{1}$ | All methods |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Became pregnant while using | (29.4) | 8.5 | 5.2 | 0.5 | 10.2 | 12.6 | (7.8) | 9.3 |
| Wanted to become pregnant | (42.5) | 13.6 | 18.9 | 13.7 | 25.0 | 22.2 | (35.7) | 19.3 |
| Husband/partner disapproved | (0.0) | 1.4 | 0.3 | 0.0 | 2.0 | 5.1 | (0.0) | 2.3 |
| Wanted a more effective method | (1.4) | 9.0 | 7.3 | 2.6 | 15.4 | 13.3 | (24.8) | 10.7 |
| Side effects/health concerns | (16.1) | 40.2 | 39.3 | 73.9 | 21.5 | 7.3 | (1.7) | 28.4 |
| Lack of access/too far | (0.0) | 2.8 | 4.3 | 0.0 | 0.5 | 0.9 | (0.0) | 2.0 |
| Cost too much | (0.0) | 0.6 | 0.0 | 0.0 | 0.2 | 0.6 | (0.0) | 0.4 |
| Inconvenient to use | (4.4) | 6.2 | 8.2 | 2.2 | 8.3 | 6.7 | (18.1) | 7.0 |
| Up to God/fatalistic | (0.0) | 0.8 | 0.4 | 0.0 | 1.5 | 1.4 | (2.7) | 1.0 |
| Difficult to get pregnant/ menopausal | (0.0) | 0.4 | 0.0 | 4.2 | 0.0 | 0.9 | (0.0) | 0.6 |
| Infrequent sex/husband away | (0.0) | 7.5 | 6.1 | 1.8 | 4.4 | 13.8 | (4.9) | 8.3 |
| Marital dissolution/separation | (0.0) | 0.2 | 1.1 | 0.0 | 0.9 | 1.2 | (0.0) | 0.7 |
| Other | (6.1) | 7.8 | 6.3 | 1.1 | 7.9 | 8.5 | (0.0) | 7.3 |
| Don't know | (0.0) | 1.1 | 2.5 | 0.0 | 2.3 | 5.6 | (4.3) | 2.8 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of discontinuations | 30 | 710 | 366 | 89 | 284 | 625 | 33 | 2,136 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Male sterilisation, female condom, emergency contraception, rhythm, and withdrawal are included in the discontinuation rate for other methods

Table 7.11.1 Need and demand for contraception among in-union women
Percentage of in-union women age 15-49 with unmet need for contraception, percentage with met need for contraception, total demand for contraception, and percentage of the demand for contraception that is satisfied, according to background characteristics, South Africa DHS 2016

| Background characteristic | Unmet need for contraception |  |  | Met need for contraception (currently using) |  |  | Total demand for contraception |  |  | Number of women | Percentage of demand satisfied ${ }^{2}$ | Percentage of demand satisfied by modern methods ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | (16.7) | (7.0) | (23.6) | (19.4) | (17.3) | (36.7) | (36.1) | (24.3) | (60.4) | 44 | (60.9) | (60.9) |
| 20-24 | 20.5 | 7.9 | 28.4 | 37.5 | 15.7 | 53.2 | 58.0 | 23.6 | 81.6 | 271 | 65.2 | 64.9 |
| 25-29 | 7.2 | 4.6 | 11.8 | 32.0 | 30.3 | 62.3 | 39.3 | 34.8 | 74.1 | 514 | 84.1 | 81.6 |
| 30-34 | 6.9 | 9.0 | 15.9 | 20.5 | 37.5 | 58.0 | 27.5 | 46.5 | 73.9 | 688 | 78.5 | 77.4 |
| 35-39 | 2.8 | 9.5 | 12.4 | 16.2 | 45.0 | 61.2 | 19.0 | 54.6 | 73.6 | 575 | 83.2 | 83.0 |
| 40-44 | 3.2 | 9.9 | 13.0 | 5.4 | 45.4 | 50.8 | 8.6 | 55.3 | 63.9 | 507 | 79.6 | 79.4 |
| 45-49 | 1.2 | 11.7 | 13.0 | 1.9 | 37.1 | 39.0 | 3.2 | 48.8 | 52.0 | 450 | 75.0 | 74.8 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.1 | 8.1 | 14.2 | 18.2 | 37.0 | 55.2 | 24.3 | 45.1 | 69.4 | 2,259 | 79.5 | 78.6 |
| Non-urban | 6.0 | 10.7 | 16.7 | 17.0 | 35.9 | 52.9 | 23.0 | 46.6 | 69.6 | 790 | 76.0 | 75.4 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 4.1 | 6.0 | 10.1 | 18.2 | 41.1 | 59.3 | 22.3 | 47.1 | 69.4 | 454 | 85.4 | 84.9 |
| Eastern Cape | 6.1 | 10.1 | 16.2 | 14.1 | 39.8 | 53.9 | 20.1 | 50.0 | 70.1 | 275 | 76.9 | 76.9 |
| Northern Cape | 6.7 | 9.3 | 16.0 | 10.0 | 42.0 | 52.0 | 16.7 | 51.2 | 68.0 | 66 | 76.5 | 76.0 |
| Free State | 4.0 | 12.0 | 16.1 | 15.0 | 31.1 | 46.2 | 19.0 | 43.2 | 62.2 | 146 | 74.2 | 74.2 |
| KwaZulu-Natal | 6.4 | 11.7 | 18.1 | 18.1 | 33.2 | 51.3 | 24.5 | 44.9 | 69.4 | 361 | 73.9 | 73.1 |
| North West | 4.8 | 9.2 | 13.9 | 15.9 | 38.6 | 54.5 | 20.6 | 47.8 | 68.4 | 215 | 79.6 | 79.2 |
| Gauteng | 7.2 | 7.1 | 14.3 | 19.1 | 36.4 | 55.6 | 26.4 | 43.5 | 69.9 | 1,035 | 79.5 | 78.2 |
| Mpumalanga | 4.5 | 8.6 | 13.1 | 20.2 | 38.8 | 59.0 | 24.7 | 47.5 | 72.1 | 244 | 81.8 | 80.8 |
| Limpopo | 8.3 | 12.5 | 20.9 | 19.3 | 30.0 | 49.2 | 27.6 | 42.5 | 70.1 | 254 | 70.2 | 69.0 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 1.9 | 21.7 | 23.6 | 7.5 | 22.1 | 29.6 | 9.4 | 43.8 | 53.2 | 83 | 55.6 | 55.6 |
| Primary incomplete | 6.0 | 13.5 | 19.6 | 7.8 | 32.0 | 39.9 | 13.9 | 45.6 | 59.4 | 185 | 67.1 | 67.1 |
| Primary complete | 9.9 | 10.7 | 20.6 | 12.4 | 32.4 | 44.8 | 22.3 | 43.2 | 65.5 | 142 | 68.5 | 68.5 |
| Secondary incomplete | 6.4 | 8.5 | 14.8 | 16.9 | 39.5 | 56.4 | 23.3 | 48.0 | 71.3 | 1,297 | 79.2 | 78.2 |
| Secondary complete | 5.0 | 8.1 | 13.1 | 20.7 | 35.2 | 55.9 | 25.7 | 43.3 | 69.0 | 875 | 81.0 | 80.5 |
| More than secondary | 6.9 | 6.1 | 13.0 | 22.9 | 37.6 | 60.5 | 29.8 | 43.7 | 73.5 | 469 | 82.3 | 80.7 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 5.1 | 10.4 | 15.4 | 13.6 | 40.8 | 54.4 | 18.7 | 51.2 | 69.9 | 505 | 77.9 | 76.7 |
| Second | 9.5 | 9.4 | 18.9 | 18.5 | 32.0 | 50.6 | 28.0 | 41.4 | 69.4 | 610 | 72.8 | 72.7 |
| Middle | 5.0 | 7.5 | 12.5 | 21.1 | 32.8 | 53.9 | 26.1 | 40.3 | 66.4 | 637 | 81.2 | 80.2 |
| Fourth | 6.1 | 7.4 | 13.6 | 21.5 | 36.9 | 58.4 | 27.6 | 44.3 | 71.9 | 569 | 81.1 | 80.4 |
| Highest | 4.9 | 9.2 | 14.1 | 14.7 | 41.1 | 55.8 | 19.6 | 50.3 | 70.0 | 729 | 79.8 | 78.7 |
| Total | 6.1 | 8.8 | 14.9 | 17.9 | 36.7 | 54.6 | 24.0 | 45.5 | 69.5 | 3,050 | 78.6 | 77.8 |

Notes: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012. In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.
Total demand is the sum of unmet need and met need
${ }^{2}$ Percentage of demand satisfied is met need divided by total demand
${ }^{3}$ Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, and other modern methods

Table 7.11.2 Need and demand for contraception among all women and among sexually active women
Percentage of all women and sexually active women age 15-49 with unmet need for contraception, percentage with met need for contraception, total demand for contraception, and percentage of the demand for contraception that is satisfied, according to background characteristics, South Africa DHS 2016

| Background characteristic | Unmet need for contraception |  |  | Met need for contraception (currently using) |  |  | Total demand for contraception ${ }^{1}$ |  |  | Number of women | Percentage of demand satisfied ${ }^{2}$ | Percentage of demand satisfied by modern methods ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |  |
| ALL WOMEN |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 6.6 | 1.4 | 8.0 | 19.0 | 5.9 | 24.9 | 25.6 | 7.3 | 32.9 | 1,427 | 75.7 | 75.6 |
| 20-24 | 11.7 | 4.3 | 16.0 | 34.7 | 19.7 | 54.4 | 46.4 | 24.0 | 70.4 | 1,415 | 77.2 | 76.9 |
| 25-29 | 6.9 | 3.9 | 10.8 | 33.3 | 27.6 | 60.9 | 40.2 | 31.6 | 71.8 | 1,444 | 84.9 | 83.9 |
| 30-34 | 6.9 | 7.9 | 14.8 | 22.1 | 35.0 | 57.1 | 29.1 | 42.9 | 72.0 | 1,333 | 79.4 | 78.8 |
| 35-39 | 3.2 | 7.4 | 10.6 | 14.4 | 42.2 | 56.6 | 17.6 | 49.6 | 67.2 | 1,072 | 84.2 | 83.9 |
| 40-44 | 2.2 | 9.7 | 11.9 | 5.2 | 40.7 | 46.0 | 7.5 | 50.4 | 57.9 | 941 | 79.4 | 79.3 |
| 45-49 | 0.7 | 9.9 | 10.6 | 1.3 | 32.1 | 33.4 | 2.0 | 42.0 | 44.0 | 883 | 75.9 | 75.6 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.9 | 5.8 | 11.7 | 20.9 | 27.6 | 48.5 | 26.8 | 33.4 | 60.2 | 5,731 | 80.6 | 80.0 |
| Non-urban | 6.3 | 6.1 | 12.4 | 20.0 | 27.4 | 47.4 | 26.3 | 33.5 | 59.8 | 2,783 | 79.3 | 79.0 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 4.3 | 4.0 | 8.3 | 19.8 | 30.6 | 50.4 | 24.1 | 34.6 | 58.7 | 995 | 85.9 | 85.3 |
| Eastern Cape | 5.7 | 6.5 | 12.3 | 18.6 | 34.8 | 53.4 | 24.4 | 41.3 | 65.7 | 938 | 81.3 | 81.3 |
| Northern Cape | 6.7 | 5.6 | 12.3 | 15.9 | 31.2 | 47.1 | 22.6 | 36.8 | 59.4 | 173 | 79.2 | 79.0 |
| Free State | 5.2 | 6.2 | 11.4 | 18.0 | 23.6 | 41.6 | 23.2 | 29.8 | 53.0 | 442 | 78.4 | 78.4 |
| KwaZulu-Natal | 6.2 | 5.0 | 11.2 | 21.3 | 25.6 | 46.9 | 27.5 | 30.6 | 58.1 | 1,616 | 80.8 | 80.4 |
| North West | 5.5 | 6.9 | 12.3 | 20.8 | 30.5 | 51.4 | 26.3 | 37.4 | 63.7 | 570 | 80.6 | 80.5 |
| Gauteng | 6.8 | 6.6 | 13.4 | 21.2 | 26.7 | 47.9 | 28.0 | 33.3 | 61.3 | 2,284 | 78.1 | 77.4 |
| Mpumalanga | 5.4 | 5.9 | 11.3 | 23.7 | 28.2 | 51.9 | 29.1 | 34.1 | 63.2 | 671 | 82.1 | 81.5 |
| Limpopo | 7.2 | 6.5 | 13.7 | 20.2 | 20.7 | 40.9 | 27.4 | 27.2 | 54.6 | 824 | 75.0 | 74.1 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 2.0 | 14.5 | 16.5 | 8.8 | 26.3 | 35.1 | 10.9 | 40.8 | 51.7 | 168 | 68.0 | 68.0 |
| Primary |  |  |  |  |  |  |  |  |  |  |  |  |
| incomplete | 5.2 | 10.5 | 15.8 | 9.6 | 31.4 | 41.0 | 14.9 | 41.9 | 56.8 | 447 | 72.3 | 72.3 |
| $\begin{array}{lllllllllll}\text { Primary complete } & 6.8 & 8.6 & 15.4 & 14.7 & 28.7 & 43.4 & 21.5 & 37.4 & 58.9 & \\ \text { Secondary }\end{array}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Secondary incomplete | 5.6 | 5.8 | 11.4 | 19.2 | 26.8 | 46.0 | 24.8 | 32.6 | 57.4 | 4,195 | 80.2 | 79.8 |
| Secondary |  |  |  |  |  |  |  |  |  |  |  |  |
| More than |  |  |  |  |  |  |  |  |  |  |  |  |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 5.7 | 7.3 | 13.0 | 18.4 | 28.2 | 46.6 | 24.0 | 35.5 | 59.5 | 1,648 | 78.2 | 77.7 |
| Second | 7.2 | 6.0 | 13.2 | 22.2 | 27.5 | 49.8 | 29.4 | 33.6 | 63.0 | 1,715 | 79.0 | 78.9 |
| Middle | 5.1 | 6.2 | 11.4 | 23.9 | 26.4 | 50.3 | 29.0 | 32.6 | 61.7 | 1,805 | 81.6 | 81.1 |
| Fourth | 6.5 | 4.1 | 10.6 | 21.2 | 28.3 | 49.4 | 27.7 | 32.4 | 60.0 | 1,763 | 82.4 | 81.8 |
| Highest | 5.7 | 5.8 | 11.5 | 16.7 | 27.5 | 44.2 | 22.4 | 33.3 | 55.7 | 1,583 | 79.3 | 78.6 |
| Total | 6.0 | 5.9 | 11.9 | 20.6 | 27.6 | 48.2 | 26.6 | 33.5 | 60.1 | 8,514 | 80.2 | 79.7 |
| SEXUALLY ACTIVE WOMEN ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 26.8 | 4.4 | 31.2 | 47.0 | 13.5 | 60.4 | 73.8 | 17.9 | 91.7 | 264 | 65.9 | 65.9 |
| 20-24 | 19.9 | 8.1 | 27.9 | 41.7 | 19.6 | 61.3 | 61.6 | 27.6 | 89.2 | 695 | 68.7 | 68.3 |
| 25-29 | 8.6 | 5.4 | 14.0 | 38.6 | 28.9 | 67.5 | 47.2 | 34.3 | 81.5 | 854 | 82.9 | 81.5 |
| 30-34 | 8.7 | 9.2 | 17.9 | 25.8 | 35.0 | 60.7 | 34.4 | 44.2 | 78.6 | 879 | 77.3 | 76.8 |
| 35-39 | 3.7 | 9.8 | 13.5 | 17.6 | 45.8 | 63.4 | 21.3 | 55.6 | 76.9 | 677 | 82.5 | 82.3 |
| 40-44 | 3.6 | 13.2 | 16.8 | 6.7 | 45.5 | 52.1 | 10.3 | 58.7 | 69.0 | 548 | 75.6 | 75.6 |
| 45-49 | 1.0 | 16.4 | 17.4 | 1.5 | 41.4 | 42.9 | 2.4 | 57.9 | 60.3 | 447 | 71.2 | 71.2 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.8 | 8.9 | 17.7 | 25.3 | 34.3 | 59.6 | 34.1 | 43.1 | 77.3 | 3,137 | 77.1 | 76.5 |
| Non-urban | 10.6 | 10.4 | 21.0 | 27.6 | 32.3 | 59.9 | 38.2 | 42.7 | 80.9 | 1,227 | 74.0 | 73.7 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 6.2 | 5.6 | 11.8 | 24.9 | 37.8 | 62.7 | 31.1 | 43.4 | 74.5 | 525 | 84.2 | 83.8 |
| Eastern Cape | 8.9 | 11.9 | 20.8 | 21.3 | 39.7 | 61.0 | 30.2 | 51.6 | 81.8 | 410 | 74.6 | 74.6 |
| Northern Cape | 9.9 | 10.2 | 20.1 | 18.9 | 35.9 | 54.9 | 28.8 | 46.1 | 75.0 | 82 | 73.2 | 72.8 |
| Free State | 7.8 | 11.6 | 19.4 | 22.2 | 28.9 | 51.1 | 30.0 | 40.5 | 70.5 | 200 | 72.5 | 72.5 |
| KwaZulu-Natal | 12.0 | 8.7 | 20.7 | 32.1 | 32.8 | 65.0 | 44.2 | 41.5 | 85.7 | 685 | 75.8 | 75.5 |
| North West | 7.1 | 9.9 | 16.9 | 24.5 | 34.4 | 58.9 | 31.6 | 44.3 | 75.9 | 325 | 77.7 | 77.4 |
| Gauteng | 9.2 | 9.7 | 18.9 | 24.9 | 33.1 | 58.0 | 34.1 | 42.8 | 76.9 | 1,430 | 75.4 | 74.7 |
| Mpumalanga | 8.0 | 8.2 | 16.2 | 29.4 | 32.8 | 62.1 | 37.4 | 41.0 | 78.4 | 356 | 79.3 | 79.0 |
| Limpopo | 13.8 | 10.9 | 24.7 | 26.7 | 27.1 | 53.9 | 40.5 | 38.0 | 78.5 | 351 | 68.6 | 67.5 |

(Continued...)

Table 7.11.2-Continued

| Background characteristic | Unmet need for contraception |  |  | Met need for contraception (currently using) |  |  | Total demand for contraception ${ }^{1}$ |  |  | Number of women | Percentage of demand satisfied ${ }^{2}$ | Percentage of demand satisfied by modern methods ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | For spacing | For limiting | Total | For spacing | For limiting | Total | For spacing | For limiting | Total |  |  |  |
| SEXUALLY ACTIVE WOMEN ${ }^{4}$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 2.8 | 19.5 | 22.3 | 14.5 | 29.5 | 44.0 | 17.2 | 49.1 | 66.3 | 86 | 66.4 | 66.4 |
| Primary incomplete | 6.2 | 15.5 | 21.7 | 14.5 | 33.4 | 47.9 | 20.7 | 48.9 | 69.6 | 239 | 68.8 | 68.8 |
| Primary complete | 11.6 | 10.9 | 22.5 | 15.6 | 38.7 | 54.2 | 27.2 | 49.6 | 76.8 | 169 | 70.6 | 70.6 |
| Secondary incomplete | 9.1 | 10.1 | 19.3 | 25.6 | 35.0 | 60.5 | 34.7 | 45.1 | 79.8 | 1,913 | 75.9 | 75.3 |
| Secondary complete | 10.0 | 7.9 | 17.9 | 29.8 | 31.0 | 60.8 | 39.8 | 38.9 | 78.7 | 1,354 | 77.2 | 76.9 |
| More than secondary | 10.0 | 5.6 | 15.6 | 27.5 | 35.1 | 62.7 | 37.5 | 40.7 | 78.2 | 603 | 80.1 | 79.2 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 9.1 | 12.9 | 22.0 | 25.7 | 34.3 | 60.0 | 34.8 | 47.2 | 82.0 | 758 | 73.2 | 72.5 |
| Second | 10.1 | 8.7 | 18.9 | 27.4 | 31.8 | 59.2 | 37.5 | 40.5 | 78.0 | 920 | 75.8 | 75.8 |
| Middle | 7.7 | 9.6 | 17.3 | 27.4 | 31.0 | 58.4 | 35.1 | 40.6 | 75.7 | 952 | 77.1 | 76.6 |
| Fourth | 11.2 | 6.5 | 17.7 | 27.2 | 35.1 | 62.3 | 38.3 | 41.6 | 80.0 | 882 | 77.9 | 77.3 |
| Highest | 8.6 | 9.4 | 18.0 | 21.7 | 36.8 | 58.5 | 30.3 | 46.2 | 76.4 | 852 | 76.5 | 75.9 |
| Total | 9.3 | 9.3 | 18.7 | 25.9 | 33.7 | 59.6 | 35.3 | 43.0 | 78.3 | 4,364 | 76.2 | 75.7 |

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al. 2012.
${ }^{1}$ Total demand is the sum of unmet need and met need
${ }^{2}$ Percentage of demand satisfied is met need divided by total demand
${ }^{3}$ Modern methods include female sterilisation, male sterilisation, pill, IUD, injectables, implants, male condom, female condom, emergency contraception, and other modern methods
${ }^{4}$ Women who have had sexual intercourse within the 4 weeks preceding the survey

Table 7.12 Decision making about contraception
Among in-union women age 15-49 who are current users of contraception, percent distribution by who makes the decision to use contraception, and among in-union women who are not currently using contraception, percent distribution by who makes the decision not to use contraception, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among in-union women who are current users of contraception |  |  |  | Total | Number of women | Among in-union women who are not currently using contraception |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly woman | Woman and partner jointly | Mainly partner | Other |  |  | Mainly woman | Woman and partner jointly | Mainly partner | Other |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 16 | * | * | * | * | 100.0 | 19 |
| 20-24 | 47.5 | 40.5 | 11.9 | 0.2 | 100.0 | 144 | 34.9 | 31.3 | 31.5 | 2.2 | 100.0 | 86 |
| 25-29 | 46.6 | 44.4 | 8.8 | 0.2 | 100.0 | 320 | 36.9 | 42.1 | 19.5 | 1.5 | 100.0 | 148 |
| 30-34 | 38.8 | 48.5 | 11.3 | 1.4 | 100.0 | 399 | 38.6 | 41.3 | 15.1 | 5.1 | 100.0 | 229 |
| 35-39 | 43.1 | 47.3 | 9.4 | 0.2 | 100.0 | 352 | 34.2 | 45.5 | 19.5 | 0.9 | 100.0 | 202 |
| 40-44 | 33.7 | 51.0 | 13.6 | 1.7 | 100.0 | 258 | 41.0 | 42.4 | 13.9 | 2.7 | 100.0 | 244 |
| 45-49 | 40.2 | 48.7 | 10.8 | 0.4 | 100.0 | 175 | 35.8 | 43.4 | 16.3 | 4.6 | 100.0 | 274 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 33.9 | 53.4 | 9.4 | 3.3 | 100.0 | 72 | 31.7 | 49.4 | 15.5 | 3.5 | 100.0 | 149 |
| 1-2 | 41.0 | 47.4 | 11.1 | 0.5 | 100.0 | 912 | 37.5 | 41.1 | 17.3 | 4.1 | 100.0 | 644 |
| 3-4 | 42.1 | 46.8 | 10.2 | 1.0 | 100.0 | 592 | 37.0 | 40.7 | 20.5 | 1.7 | 100.0 | 328 |
| $5+$ | 45.4 | 41.8 | 12.8 | 0.0 | 100.0 | 90 | 43.2 | 41.7 | 11.4 | 3.6 | 100.0 | 80 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 42.4 | 47.6 | 9.3 | 0.7 | 100.0 | 1,248 | 35.7 | 43.0 | 18.0 | 3.3 | 100.0 | 862 |
| Non-urban | 38.1 | 45.7 | 15.4 | 0.8 | 100.0 | 418 | 40.4 | 39.7 | 16.4 | 3.5 | 100.0 | 339 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 42.4 | 52.7 | 4.0 | 0.9 | 100.0 | 269 | 37.1 | 45.0 | 13.0 | 4.9 | 100.0 | 163 |
| Eastern Cape | 44.6 | 43.2 | 10.9 | 1.3 | 100.0 | 148 | 46.6 | 42.2 | 6.9 | 4.3 | 100.0 | 116 |
| Northern Cape | 36.3 | 57.6 | 3.7 | 2.4 | 100.0 | 34 | 54.0 | 39.7 | 4.5 | 1.8 | 100.0 | 29 |
| Free State | 34.2 | 61.5 | 4.3 | 0.0 | 100.0 | 67 | 25.3 | 58.6 | 15.5 | 0.7 | 100.0 | 73 |
| KwaZulu-Natal | 29.3 | 59.3 | 10.6 | 0.7 | 100.0 | 185 | 26.3 | 47.5 | 23.3 | 2.9 | 100.0 | 156 |
| North West | 33.0 | 58.4 | 8.0 | 0.6 | 100.0 | 117 | 36.4 | 43.5 | 17.6 | 2.6 | 100.0 | 87 |
| Gauteng | 49.0 | 38.1 | 12.3 | 0.6 | 100.0 | 575 | 37.7 | 36.3 | 22.9 | 3.1 | 100.0 | 365 |
| Mpumalanga | 34.9 | 49.7 | 14.8 | 0.6 | 100.0 | 144 | 38.4 | 41.6 | 17.5 | 2.6 | 100.0 | 91 |
| Limpopo | 38.2 | 38.9 | 22.3 | 0.7 | 100.0 | 125 | 42.2 | 38.4 | 14.9 | 4.6 | 100.0 | 121 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | (39.8) | (58.1) | (2.1) | (0.0) | 100.0 | 25 | 37.3 | 42.7 | 16.9 | 3.2 | 100.0 | 54 |
| Primary incomplete | 50.0 | 36.3 | 11.9 | 1.8 | 100.0 | 74 | 44.2 | 33.0 | 20.2 | 2.6 | 100.0 | 103 |
| Primary complete | 46.6 | 46.4 | 6.9 | 0.0 | 100.0 | 63 | 44.1 | 35.2 | 19.6 | 1.0 | 100.0 | 68 |
| Secondary incomplete | 43.5 | 44.8 | 11.1 | 0.5 | 100.0 | 731 | 37.8 | 43.8 | 15.0 | 3.3 | 100.0 | 487 |
| Secondary complete | 43.1 | 44.3 | 11.7 | 0.9 | 100.0 | 489 | 35.5 | 43.1 | 19.2 | 2.2 | 100.0 | 325 |
| More than secondary | 29.3 | 59.8 | 9.8 | 1.1 | 100.0 | 284 | 30.2 | 43.2 | 19.5 | 7.0 | 100.0 | 163 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 42.7 | 42.3 | 12.5 | 2.5 | 100.0 | 275 | 45.8 | 37.9 | 10.6 | 5.7 | 100.0 | 197 |
| Second | 47.5 | 41.1 | 11.4 | 0.0 | 100.0 | 308 | 39.4 | 35.9 | 22.5 | 2.1 | 100.0 | 257 |
| Middle | 43.5 | 43.5 | 12.7 | 0.4 | 100.0 | 343 | 33.1 | 50.5 | 14.2 | 2.2 | 100.0 | 239 |
| Fourth | 41.3 | 51.0 | 7.5 | 0.2 | 100.0 | 332 | 39.7 | 39.2 | 19.1 | 2.0 | 100.0 | 209 |
| Highest | 34.0 | 54.8 | 10.3 | 0.8 | 100.0 | 407 | 30.6 | 45.4 | 19.4 | 4.7 | 100.0 | 298 |
| Total | 41.3 | 47.1 | 10.8 | 0.7 | 100.0 | 1,666 | 37.0 | 42.1 | 17.5 | 3.3 | 100.0 | 1,201 |

Notes: Table excludes women who are currently pregnant. In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.13 Future use of contraception
Percent distribution of in-union women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, South Africa DHS 2016

|  | Number of living children $^{1}$ |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Intention to use in the future | 0 | 1 | 2 | 3 | $4+$ |  |
| Total |  |  |  |  |  |  |
| Intends to use | 26.5 | 40.0 | 37.3 | 39.3 | 29.3 | 36.0 |
| Unsure | 2.8 | 7.1 | 6.1 | 3.2 | 6.2 | 5.5 |
| Does not intend to use | 70.6 | 52.9 | 56.6 | 57.6 | 64.5 | 58.6 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 149 | 374 | 373 | 269 | 219 | 1,384 |

Note: In-union women include women who are currently married or living together with a partner as if married
${ }^{1}$ Includes current pregnancy

## Table 7.14 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, in a newspaper or magazine, or from a community health worker in the past 6 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  |  |  |  |  | Men |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Radio | Television | Newspaper/ magazine | Community health worker | None of these four sources | Number of women | Radio | Television | Newspaper/ magazine | Community health worker | None of these four sources | Number of men |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 24.5 | 34.1 | 27.0 | 32.2 | 45.4 | 1,427 | 22.0 | 32.3 | 19.7 | 9.5 | 54.8 | 647 |
| 20-24 | 34.9 | 44.4 | 35.4 | 47.7 | 34.4 | 1,415 | 30.3 | 32.9 | 28.2 | 16.1 | 47.0 | 588 |
| 25-29 | 41.0 | 47.9 | 38.9 | 53.3 | 29.8 | 1,444 | 35.6 | 35.8 | 30.5 | 18.5 | 45.6 | 506 |
| 30-34 | 36.6 | 42.9 | 33.3 | 47.7 | 33.5 | 1,333 | 43.3 | 40.8 | 33.0 | 20.4 | 41.2 | 450 |
| 35-39 | 39.3 | 42.6 | 38.4 | 47.5 | 34.2 | 1,072 | 40.4 | 41.9 | 36.5 | 11.9 | 40.8 | 395 |
| 40-44 | 38.9 | 41.2 | 36.0 | 46.8 | 35.7 | 941 | 42.8 | 41.9 | 35.2 | 16.0 | 42.0 | 345 |
| 45-49 | 40.0 | 43.7 | 37.0 | 48.0 | 32.0 | 883 | 41.5 | 43.8 | 32.7 | 18.7 | 44.0 | 271 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 39.2 | 47.3 | 40.3 | 44.7 | 34.8 | 5,731 | 36.5 | 41.0 | 32.5 | 16.9 | 44.3 | 2,203 |
| Non-urban | 29.5 | 32.4 | 23.8 | 48.6 | 36.1 | 2,783 | 31.3 | 29.3 | 23.4 | 12.2 | 49.6 | 999 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 46.3 | 62.6 | 57.8 | 58.2 | 17.2 | 995 | 37.9 | 50.9 | 44.2 | 19.4 | 29.0 | 328 |
| Eastern Cape | 25.1 | 26.2 | 17.6 | 36.1 | 45.8 | 938 | 29.7 | 29.3 | 17.5 | 16.2 | 52.4 | 362 |
| Northern Cape | 33.4 | 40.1 | 37.2 | 43.9 | 37.7 | 173 | 21.5 | 30.5 | 24.8 | 14.2 | 53.3 | 61 |
| Free State | 48.2 | 49.8 | 41.7 | 56.2 | 23.4 | 442 | 36.6 | 27.7 | 22.2 | 9.2 | 52.7 | 159 |
| KwaZulu-Natal | 27.3 | 34.1 | 26.3 | 40.0 | 40.5 | 1,616 | 23.7 | 16.1 | 22.1 | 13.1 | 63.1 | 521 |
| North West | 41.8 | 47.9 | 37.6 | 59.8 | 25.8 | 570 | 22.3 | 26.6 | 21.4 | 3.2 | 60.1 | 237 |
| Gauteng | 38.6 | 43.8 | 38.6 | 37.7 | 43.4 | 2,284 | 37.9 | 46.8 | 32.1 | 15.1 | 44.5 | 984 |
| Mpumalanga | 36.9 | 41.0 | 26.9 | 42.4 | 35.6 | 671 | 69.6 | 59.6 | 48.9 | 25.8 | 17.4 | 263 |
| Limpopo | 34.9 | 42.9 | 33.7 | 65.1 | 23.9 | 824 | 28.3 | 33.5 | 28.0 | 19.5 | 40.1 | 288 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 24.2 | 20.3 | 12.9 | 31.4 | 55.7 | 168 | 22.8 | 27.8 | 7.7 | 15.2 | 59.3 | 62 |
| Primary incomplete | 22.3 | 24.3 | 7.9 | 42.3 | 44.8 | 447 | 31.4 | 21.3 | 12.2 | 8.8 | 60.9 | 219 |
| Primary complete | 24.6 | 24.5 | 16.4 | 38.2 | 49.0 | 327 | 22.7 | 29.4 | 18.4 | 5.4 | 60.8 | 166 |
| Secondary incomplete | 32.3 | 38.3 | 30.2 | 43.5 | 38.5 | 4,195 | 29.7 | 32.5 | 23.7 | 12.8 | 51.8 | 1,637 |
| Secondary complete | 42.5 | 50.8 | 43.2 | 51.6 | 28.7 | 2,369 | 42.8 | 46.5 | 42.1 | 21.3 | 34.1 | 773 |
| More than secondary | 47.9 | 57.4 | 56.3 | 49.4 | 24.6 | 1,008 | 51.5 | 56.0 | 50.9 | 23.8 | 25.9 | 345 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 20.6 | 16.7 | 14.4 | 37.1 | 52.0 | 1,648 | 27.7 | 18.4 | 16.4 | 10.0 | 60.2 | 618 |
| Second | 31.1 | 36.7 | 26.5 | 46.6 | 37.4 | 1,715 | 33.2 | 34.6 | 25.4 | 14.7 | 48.1 | 682 |
| Middle | 39.1 | 48.4 | 37.5 | 51.2 | 28.9 | 1,805 | 35.1 | 38.4 | 30.6 | 13.6 | 46.9 | 715 |
| Fourth | 45.8 | 55.6 | 45.1 | 51.0 | 27.6 | 1,763 | 39.2 | 47.2 | 37.1 | 19.3 | 37.2 | 653 |
| Highest | 42.9 | 53.8 | 50.9 | 42.9 | 30.9 | 1,583 | 39.6 | 49.3 | 40.1 | 20.4 | 36.1 | 534 |
| Total 15-49 | 36.0 | 42.4 | 34.9 | 46.0 | 35.2 | 8,514 | 34.9 | 37.3 | 29.7 | 15.4 | 46.0 | 3,202 |
| 50-59 | na | na | na | na | na | na | 37.1 | 38.4 | 30.8 | 20.6 | 42.7 | 416 |
| Total 15-59 | na | na | na | na | na | na | 35.1 | 37.5 | 29.8 | 16.0 | 45.6 | 3,618 |

na $=$ Not applicable

Table 7.15 Exposure to family planning messages at school
Percentage of women and men age 15-24 who are currently attending school and heard about family planning at school in the past 6 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Heard about family planning at school | Number of women | Heard about family planning at school | Number of men |
| Age |  |  |  |  |
| 15-19 | 70.4 | 1,169 | 55.6 | 111 |
| 15 | 64.2 | 231 | * | 25 |
| 16 | 69.3 | 287 | (59.8) | 25 |
| 17 | 70.1 | 270 | * | 17 |
| 18 | 79.5 | 193 | (63.8) | 20 |
| 19 | 70.7 | 188 | * | 24 |
| 20-24 | 68.6 | 431 | 58.1 | 186 |
| Residence |  |  |  |  |
| Urban | 70.8 | 986 | 61.4 | 387 |
| Non-urban | 68.4 | 614 | 60.8 | 342 |
| Province |  |  |  |  |
| Western Cape | 71.3 | 151 | (63.9) | 54 |
| Eastern Cape | 71.2 | 206 | 40.0 | 111 |
| Northern Cape | 70.6 | 30 | (65.2) | 11 |
| Free State | 63.7 | 84 | 43.2 | 52 |
| KwaZulu-Natal | 62.0 | 349 | 62.9 | 150 |
| North West | 69.7 | 79 | 54.6 | 40 |
| Gauteng | 72.8 | 353 | 63.6 | 146 |
| Mpumalanga | 75.5 | 129 | 82.6 | 56 |
| Limpopo | 74.8 | 219 | 75.0 | 110 |
| Education |  |  |  |  |
| Primary incomplete | (53.5) | 31 | (42.2) | 33 |
| Primary complete | (56.5) | 43 | 47.2 | 44 |
| Secondary incomplete | 70.6 | 1,191 | 64.8 | 552 |
| Secondary complete | 66.8 | 226 | 51.0 | 72 |
| More than secondary | 78.7 | 107 | (58.3) | 28 |
| Wealth quintile |  |  |  |  |
| Lowest | 65.4 | 321 | 51.6 | 145 |
| Second | 69.7 | 313 | 66.0 | 159 |
| Middle | 74.1 | 303 | 56.7 | 157 |
| Fourth | 68.4 | 361 | 66.2 | 163 |
| Highest | 72.6 | 301 | 65.6 | 106 |
| Total 15-24 | 69.9 | 1,600 | 61.1 | 729 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 7.16 Contact of nonusers with family planning providers
Among women age 15-49 who are not using contraception, percentage who during the past 12 months visited a health facility and discussed contraception and percentage who visited a health facility but did not discuss contraception, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women who visited a health facility in the past 12 months and who: |  | Number of women |
| :---: | :---: | :---: | :---: |
|  | Discussed contraception | Did not discuss contraception |  |
| Age |  |  |  |
| 15-19 | 10.7 | 23.3 | 1,071 |
| 20-24 | 32.2 | 25.7 | 646 |
| 25-29 | 32.4 | 32.7 | 564 |
| 30-34 | 31.8 | 35.8 | 572 |
| 35-39 | 31.1 | 32.7 | 466 |
| 40-44 | 24.1 | 36.6 | 508 |
| 45-49 | 21.7 | 36.6 | 588 |
| Residence |  |  |  |
| Urban | 23.7 | 31.5 | 2,951 |
| Non-urban | 26.1 | 29.2 | 1,463 |
| Province |  |  |  |
| Western Cape | 26.4 | 29.9 | 493 |
| Eastern Cape | 19.7 | 45.3 | 437 |
| Northern Cape | 28.8 | 36.1 | 92 |
| Free State | 19.4 | 23.8 | 258 |
| KwaZulu-Natal | 23.6 | 24.1 | 858 |
| North West | 33.8 | 32.4 | 277 |
| Gauteng | 22.8 | 30.9 | 1,190 |
| Mpumalanga | 25.3 | 41.2 | 323 |
| Limpopo | 28.6 | 24.9 | 487 |
| Education |  |  |  |
| No education | 18.8 | 29.8 | 109 |
| Primary incomplete | 26.9 | 29.3 | 264 |
| Primary complete | 23.7 | 33.1 | 185 |
| Secondary incomplete | 22.5 | 29.8 | 2,265 |
| Secondary complete | 27.4 | 29.5 | 1,150 |
| More than secondary | 27.6 | 39.2 | 441 |
| Wealth quintile |  |  |  |
| Lowest | 19.7 | 31.8 | 881 |
| Second | 28.9 | 29.2 | 862 |
| Middle | 27.3 | 31.2 | 897 |
| Fourth | 25.9 | 30.4 | 892 |
| Highest | 20.9 | 31.1 | 883 |
| Total | 24.5 | 30.8 | 4,414 |

## INFANT AND CHILD MORTALITY

8

## Key Findings

- Current levels: During the 5 -year period preceding the survey, the under-5 mortality rate was 42 deaths per 1,000 live births, and the infant mortality rate was 35 deaths per 1,000 live births. About 1 in 24 children do not reach their fifth birthday, and most (83\%) of these children die within the first year of life.
- Comparison with the SADHS 1998: The under-5 mortality rate declined from 59 deaths per 1,000 live births in 1998 to 42 deaths per 1,000 live births in 2016, while the infant mortality rate declined from 45 deaths per 1,000 live births to 35 deaths per 1,000 live births.
- Differences by residence: Non-urban areas have higher under-5 mortality than urban areas (49 deaths per 1,000 live births versus 38 deaths per 1,000 live births).
- Perinatal mortality: The overall perinatal mortality rate is 29 deaths per 1,000 pregnancies of 7 or more months' duration. Perinatal mortality ranges from a low of 17 deaths per 1,000 pregnancies in KwaZulu-Natal to a high of 56 deaths per 1,000 pregnancies in Mpumalanga.
- High-risk birth category: 31\% of births in the 5-year period preceding the survey were in an avoidable high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order greater than three).

Information on infant and child mortality is relevant to a demographic assessment of a country's population and is an important indicator of the country's socioeconomic development and quality of life. It can also help identify children who may be at higher risk of death and lead to strategies to reduce this risk, such as promoting birth spacing.

This chapter presents information on levels, trends, and differentials in perinatal, neonatal, infant, and under5 mortality rates. It also examines biodemographic factors and fertility behaviours that increase mortality risks for infants and children. The information was collected as part of a retrospective birth history in which female respondents listed all of the children to whom they had given birth along with each child's date of birth, survivorship status, and current age or age at death.

The quality of mortality estimates calculated from birth histories depends on the mother's ability to recall all of the children she has given birth to, as well as their birth dates and ages at death. Potential data quality problems include:

- The selective omission from birth histories of those births that did not survive, which can result in underestimation of childhood mortality.
- The displacement of birth dates, which may distort mortality trends. This can occur if an interviewer knowingly records a birth as occurring in a different year than the one in which it occurred. This may happen if an interviewer is trying to cut down on his or her overall workload, because live births occurring during the 5 years before the interview are the subject of a lengthy set of additional questions.
- The quality of reporting of age at death. Misreporting the child's age at death may distort the age pattern of mortality, especially if the net effect of the age misreporting is to transfer deaths from one age bracket to another.
- Any method of measuring childhood mortality that relies on mothers' reports (e.g., birth histories) assumes that female adult mortality is not high or, if it is high, that there is little or no correlation between the mortality of the mother and that of her children. These assumptions may not hold in countries such as South Africa with severe HIV epidemics (see Chapter 13), and the resulting childhood mortality rates will be underreported to some degree, particularly for the period 10-15 years prior to the survey, before the large-scale roll-out of antiretroviral treatment.

Selected indicators of the quality of the mortality data on which the estimates of mortality in this chapter are based are presented in Appendix C, Tables C.3-C.6.

### 8.1 Infant and Child Mortality

Neonatal mortality: The probability of dying within the first month of life. ${ }^{1}$
Postneonatal mortality: The probability of dying between the first month of life and the first birthday (computed as the difference between infant and neonatal mortality).
Infant mortality: The probability of dying between birth and the first birthday. Child mortality: The probability of dying between the first and the fifth birthday. Under-5 mortality: The probability of dying between birth and the fifth birthday.
${ }^{1}$ This differs from the WHO definition of neonatal death, which is when a death occurs during the first 28 days after birth (WHO 2011a).

During the 5 years immediately preceding the survey, the infant mortality rate was 35 deaths per 1,000 live births (Table 8.1). The child mortality rate was 7 deaths per 1,000 children who had survived to age 12 months. The overall under-5 mortality rate was 42 deaths per 1,000 live births. The neonatal mortality rate was 21 deaths per 1,000 live births; this figure is much higher than the estimate of 12 deaths per 1,000 live births for the year 2015 from the Rapid Mortality Surveillance Report 2015 (Dorrington et al. 2016) and may have resulted from the misclassification of stillbirths (see Section 8.3 below). The neonatal mortality rate will therefore not be analysed further in this report.

Comparison with the SADHS 1998: A comparison of childhood mortality between 1998 and 2016 shows a decrease in three child mortality indicators. Under-5 mortality declined from 59 to 42 deaths per 1,000 live births, child mortality declined from 15 to 7 deaths per 1,000 live births, and infant mortality fell from 45 to 35 deaths per 1,000 live births (Figure 8.1).

- There are male/female differentials across all mortality rates. For example, infant mortality rates are 41 deaths per 1,000 live births among boys and 29 deaths per 1,000 live births among girls, and under- 5 mortality rates are 49 deaths per 1,000 live births among boys and 35 deaths per 1,000 live births among girls (Table 8.2).
- Infant mortality and under-5 mortality are lower in urban areas than in non-urban areas. Infant mortality rates in urban and non-urban areas are 34 deaths per 1,000 live births and 39 deaths per 1,000 live births, respectively, while under-5 mortality rates are 38 deaths per 1,000 live births in urban areas and 49 deaths per 1,000 live births in non-urban areas.
- A total of 151 deaths occurred among the 3,572 children reported to have been born since January 2011; according to mothers, $68 \%$ of these children died in a health facility, $28 \%$ died at home, and $4 \%$ died elsewhere (data not shown).


### 8.2 Biodemographic Risk Factors

Researchers have identified multiple risk factors associated with infant/child mortality based on the characteristics of the mother and child and the circumstances of the birth. Table 8.3 presents data on the relationship between some of these risk factors and child mortality for the 10 -year period preceding the survey. A 10 -year period was used to increase the reliability of the estimates calculated.

## Patterns by background characteristics

- Mortality rates are higher among children born after short birth intervals (less than 2 years) than among children born after longer intervals (Figure 8.2). However, the number of births with short intervals is low, so these data should be interpreted with caution.
- Under-5 mortality varies greatly across provinces, from a low of 34 deaths per 1,000 live births in

Figure 8.2 Childhood mortality by previous birth interval
Deaths per 1,000 live births for the 10-year period before the survey

Previous birth interval: $\square<2$ years $\square 2$ years $\square 3$ years $\llbracket 4+$ years


Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death.

- Under-5 mortality generally declines with increasing household wealth. Notably, however, the under- 5 mortality rate in the highest wealth quintile exceeds that in the fourth quintile (Figure 8.4).

Figure 8.4 Under-5 mortality by household wealth

Deaths per 1,000 live births for the 10-year period before the survey


### 8.3 Perinatal Mortality

## Perinatal mortality rate

Perinatal deaths comprise stillbirths (pregnancy losses occurring after 7 months of gestation) and early neonatal deaths (deaths of live births within the first 7 days of life). The perinatal mortality rate is calculated as the number of perinatal deaths per 1,000 pregnancies of 7 or more months' duration.
Sample: Number of pregnancies of 7 or more months' duration to women age 15-49 in the 5 years before the survey

The causes of stillbirths and early neonatal deaths are closely linked. The perinatal mortality rate encompasses both stillbirths and early neonatal deaths and offers some reflection of the level of mortality and quality of service around the time of delivery. Thirty-seven stillbirths were recorded in the SADHS 2016, and there were 66 early neonatal deaths during the 5 -year period preceding the survey. This yields a perinatal mortality rate of 29 deaths per 1,000 pregnancies of 7 or more months' duration (Table 8.4).

The perinatal mortality rate calculated in the SADHS 2016 is consistent with the rates reported by the District Health Information System ( 31 deaths per 1,000 deliveries for the period 2012-2016) ${ }^{1}$ and the Perinatal Problem Identification Programme ( 24.8 deaths per 1,000 for deliveries weighing more than 500 g and 33.4 deaths per 1,000 for deliveries weighing more than $1,000 \mathrm{~g}$ in 2012-2013) (Pattinson and Rhoda 2014). However, it should be noted that both the District Health Information System and the Perinatal Problem Identification Programme consistently report a ratio of two stillbirths to every early neonatal death, while the SADHS 2016 results show two early neonatal deaths for every stillbirth. This difference may reflect misclassification of stillbirths as early neonatal deaths in the SADHS 2016.

## Patterns by background characteristics

- By age, the perinatal mortality rate is highest among the oldest mothers, that is, women who gave birth in their 40s ( 52 deaths per 1,000 pregnancies).
- The perinatal mortality rate is similar in urban and non-urban areas (28 and 29 deaths per 1,000 pregnancies, respectively).
- Perinatal mortality ranges from a low of 17 deaths per 1,000 pregnancies in KwaZulu-Natal to a high of 56 deaths per 1,000 pregnancies in Mpumalanga.

[^14]- Although there is no clear pattern of association with mother's education, perinatal mortality generally declines with increasing household wealth (Figure 8.5).


### 8.4 High-Risk Fertility Behaviour

The survival of infants and children depends in part on the demographic and biological characteristics of their mothers. Typically, the probability of dying in infancy is much greater among children born to mothers who are too young (under age 18) or too old (over age 34), children born after a short birth interval (less than 24 months after the preceding birth), and children born to mothers of high parity (more than three children). Table 8.5 shows the percent

Figure 8.5 Perinatal mortality by household wealth

Deaths per 1,000 pregnancies of 7 or more months' duration in the 5 -year period before the survey distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality, along with risk ratios. It also shows the percent distributions of in-union women and all women age 15-49 by their category of risk if they were to conceive a child at the time of the survey.

Forty percent of births in the 5 years preceding the survey were not in any high-risk category. Twenty-nine percent of births were in an unavoidable risk category, that is, first-order births to women between age 18 and age 34 . Thirty-one percent of births in the 5 years preceding the survey were in an avoidable high-risk category; $24 \%$ of births were in a single high-risk category (mother's age less than 18 years, mother's age more than 34 years, birth interval less than 24 months, and birth order greater than three), and $8 \%$ of births were in multiple high-risk categories.

Risk ratios denote the relationship between risk factors and mortality. For example, the risk of dying for a child who falls into any of the avoidable high-risk categories is 1.34 times that for a child who does not fall in any high-risk category. Among children in a single avoidable high-risk category, those born at an interval of less than 24 months have the highest risk ratio (1.69); this means that a child born at an interval of less than 24 months is 1.69 times more likely to die than a child not in any high-risk category.

Sixty-two percent of in-union women age 15-49 would have been in an avoidable high-risk category if they had conceived at the time of the survey; $34 \%$ would have been in a single high-risk category, and $29 \%$ would have been in a multiple high-risk category. Although this general pattern is to be expected, restricting the results to in-union women does not offer a full picture of the situation in countries such as South Africa with high levels of non-marital fertility. Among all women age $15-49,53 \%$ would have been in an avoidable high-risk category if they had conceived at the time of the survey, with $34 \%$ in a single-high risk category and $19 \%$ in a multiple high-risk category.

## List of Tables

For more information on infant and child mortality, see the following tables:

- Table 8.1 Early childhood mortality rates
- Table 8.2 Five-year early childhood mortality rates according to background characteristics
- Table 8.3 Ten-year early childhood mortality rates according to additional characteristics
- Table 8.4 Perinatal mortality
- Table 8.5 High-risk fertility behaviour


## Table 8.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for 5 -year periods preceding the survey, South Africa DHS 2016

|  | Neonatal <br> mortality <br> $(\mathrm{NN})$ | Postneonatal <br> mortality <br> $(\mathrm{PNN})^{1}$ | Infant mortality <br> $\left(1 \mathrm{q}_{0}\right)$ | Child mortality <br> $\left(4 \mathrm{q}_{1}\right)$ | Under-5 <br> mortality <br> $\left(5 q_{0}\right)$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Years preceding the survey | 21 | 14 | 35 | 7 | 42 |
| $0-4$ | 29 | 23 | 51 | 9 | 60 |
| $5-9$ | 21 | 22 | 44 | 15 | 58 |
| $10-14$ |  |  |  |  |  |

${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates

Table 8.2 Five-year early childhood mortality rates according to background characteristics
Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 5 -year period preceding the survey, according to background characteristics, South Africa DHS 2016

| Background <br> characteristic | Neonatal <br> mortality <br> $(\mathrm{NN})$ | Postneonatal <br> mortality <br> $(\mathrm{PNN})^{1}$ | Infant mortality <br> $\left({ }_{1} q_{0}\right)$ | Child mortality <br> $\left(4 q_{1}\right)$ | Under-5 <br> mortality <br> $\left(5 q_{0}\right)$ |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Child's sex |  |  |  |  |  |
| $\quad$ Male | 26 | 15 | 41 | 8 | 49 |
| Female | 16 | 13 | 29 | 5 | 35 |
| Residence |  |  |  |  |  |
| $\quad$ Urban | 19 | 15 | 34 | 5 | 38 |
| $\quad$ Non-urban | 25 | 14 | 39 | 11 | 49 |
| Total | 21 | 14 | 35 | 7 | 42 |

${ }^{1}$ Computed as the difference between the infant and neonatal mortality rates

| to additional characteristics |  |  |  |
| :---: | :---: | :---: | :---: |
| Infant, child, and under-5 mortality rates for the 10-year period preceding the survey, according to additional characteristics, South Africa DHS 2016 |  |  |  |
| Characteristic | Infant mortality ( 1 qo) | Child mortality (4 $\mathrm{q}_{1}$ ) | Under-5 mortality (5q0) |
| Mother's age at birth |  |  |  |
| <20 | 40 | 8 | 47 |
| 20-29 | 42 | 8 | 49 |
| 30-39 | 48 | 8 | 56 |
| 40-49 | * | * |  |
| Birth order |  |  |  |
| 1 | 40 | 6 | 46 |
| 2-3 | 39 | 8 | 46 |
| 4-6 | 62 | 14 | 75 |
| 7+ | * | * | * |
| Previous birth interval ${ }^{1}$ |  |  |  |
| <2 years | (69) | (19) | (87) |
| 2 years | 63 | 13 | 75 |
| 3 years | 27 | 17 | 43 |
| 4+ years | 38 | 5 | 43 |
| Birth size ${ }^{2}$ |  |  |  |
| Small/very small | (83) | na | na |
| Average or larger | 25 | na | na |
| Province |  |  |  |
| Western Cape | (39) | (4) | (43) |
| Eastern Cape | 50 | 14 | 64 |
| Northern Cape | 43 | (8) | (51) |
| Free State | 53 | 11 | 63 |
| KwaZulu-Natal | 40 | 4 | 44 |
| North West | 55 | 11 | 65 |
| Gauteng | 42 | 4 | 46 |
| Mpumalanga | 53 | 18 | 70 |
| Limpopo | 24 | 10 | 34 |
| Mother's education |  |  |  |
| No education | * | * | * |
| Primary incomplete | (61) | 28 | (88) |
| Primary complete | (42) | (13) | (54) |
| Secondary |  |  |  |
| Secondary |  |  |  |
| More than secondary | 43 | 2 | 45 |
| Wealth quintile |  |  |  |
| Lowest | 54 | 14 | 67 |
| Second | 44 | 9 | 52 |
| Middle | 46 | 6 | 51 |
| Fourth | 27 | 8 | 34 |
| Highest | 40 | 2 | 41 |

Note: Figures in parentheses are based on 250-499 unweighted person-years of exposure to the risk of death. An asterisk indicates that a rate is based on fewer than 250 person-years of exposure to the risk of death and has been suppressed.
na $=$ Not available
${ }^{1}$ Excludes first-order births
${ }^{2}$ Rates for the 5 -year period before the survey

Table 8.4 Perinatal mortality
Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the 5 -year period preceding the survey, according to background characteristics, South Africa DHS 2016

| Background characteristic | Number of stillbirths ${ }^{1}$ | Number of early neonatal deaths ${ }^{2}$ | Perinatal mortality rate ${ }^{3}$ | Number of pregnancies of 7+ months' duration |
| :---: | :---: | :---: | :---: | :---: |
| Mother's age at birth |  |  |  |  |
| <20 | 5 | 7 | 23 | 546 |
| 20-29 | 17 | 39 | 29 | 1,924 |
| 30-39 | 11 | 17 | 28 | 993 |
| 40-49 | 3 | 3 | 52 | 115 |
| Previous pregnancy interval in months ${ }^{4}$ |  |  |  |  |
| First pregnancy | 16 | 13 | 24 | 1,219 |
| <15 | 1 | 8 | 38 | 244 |
| 15-26 | 3 | 5 | 24 | 309 |
| 27-38 | 3 | 14 | 53 | 326 |
| 39+ | 14 | 26 | 27 | 1,480 |
| Residence |  |  |  |  |
| Urban | 26 | 39 | 28 | 2,287 |
| Non-urban | 11 | 27 | 29 | 1,290 |
| Province |  |  |  |  |
| Western Cape | 7 | 2 | 26 | 319 |
| Eastern Cape | 1 | 8 | 23 | 397 |
| Northern Cape | 1 | 2 | 47 | 70 |
| Free State | 1 | 4 | 36 | 165 |
| KwaZulu-Natal | 3 | 8 | 17 | 651 |
| North West | 5 | 10 | 51 | 280 |
| Gauteng | 7 | 18 | 25 | 1,011 |
| Mpumalanga | 9 | 10 | 56 | 338 |
| Limpopo | 2 | 4 | 19 | 346 |
| Mother's education |  |  |  |  |
| No education | 1 | 1 | 27 | 50 |
| Primary incomplete | 1 | 10 | 62 | 182 |
| Primary complete | 0 | 1 | 10 | 138 |
| Secondary incomplete | 19 | 49 | 39 | 1,764 |
| Secondary complete | 6 | 3 | 9 | 1,040 |
| More than secondary | 10 | 1 | 28 | 403 |
| Wealth quintile |  |  |  |  |
| Lowest | 9 | 20 | 37 | 791 |
| Second | 10 | 27 | 43 | 862 |
| Middle | 8 | 9 | 21 | 790 |
| Fourth | 5 | 7 | 17 | 659 |
| Highest | 4 | 4 | 17 | 476 |
| Total | 37 | 66 | 29 | 3,577 |

[^15]${ }^{2}$ Early neonatal deaths are deaths at age 0-6 days among live-born children
${ }^{3}$ The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of 7 or more months' duration, expressed per 1,000
${ }^{4}$ Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months

Table 8.5 High-risk fertility behaviour
Percent distribution of children born in the 5 years preceding the survey by category of elevated risk of mortality and the risk ratio, percent distribution of in-union women by category of risk if they were to conceive a child at the time of the survey, and percent distribution of all women by category of risk if they were to conceive a child at the time of the survey, South Africa DHS 2016

| Risk category | Births in the 5 years preceding the survey |  | Percentage of in-union women ${ }^{1}$ | Percentage of all women ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage of births | Risk ratio |  |  |
| Not in any high-risk category | 40.0 | 1.00 | $32.6^{\text {a }}$ | $28.8{ }^{\text {a }}$ |
| Unavoidable risk category First-order births between age 18 and age 34 | 28.9 | 0.97 | 5.4 | 18.5 |
| In any avoidable high-risk category | 31.2 | 1.34 | 62.0 | 52.7 |
| Single high-risk category <br> Mother's age <18 only Mother's age >34 only Birth interval <24 months only Birth order >3 only | $\begin{aligned} & 6.5 \\ & 6.5 \\ & 4.7 \\ & 6.0 \end{aligned}$ | $\begin{aligned} & 1.01 \\ & 0.69 \\ & 1.69 \\ & 1.49 \end{aligned}$ | $\begin{array}{r} 0.2 \\ 21.7 \\ 5.4 \\ 6.3 \end{array}$ | $\begin{array}{r} 7.2 \\ 16.8 \\ 6.2 \\ 4.1 \end{array}$ |
| Subtotal | 23.6 | 1.18 | 33.5 | 34.2 |
| Multiple high-risk category <br> Age <18 and birth interval <24 months ${ }^{2}$ | 0.1 | * | 0.0 | 0.2 |
| Age $>34$ and birth interval <24 months <br> Age $>34$ and birth order $>3$ | 0.2 5.3 | 1.86 | 0.8 23.4 | 0.6 14.8 |
| Age $>34$ and birth interval $<24$ months and birth order >3 | 0.5 | 1.86 | 1.6 | 1.0 |
| Birth interval <24 months and birth order >3 | 1.4 | (1.59) | 2.8 | 1.9 |
| Subtotal | 7.6 | 1.83 | 28.5 | 18.5 |
| Total | 100.0 | na | 100.0 | 100.0 |
| Subtotals by individual avoidable high-risk category Mother's age <18 | 6.6 | 1.12 | 0.2 | 7.4 |
| Mother's age >34 | 12.6 | 1.22 | 47.4 | 33.2 |
| Birth interval < 24 months | 6.9 | 1.71 | 10.5 | 9.9 |
| Birth order > 3 | 13.3 | 1.66 | 34.0 | 21.8 |
| Number of births/women | 3,572 | na | 3,050 | 8,514 |

Notes: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. In-union women include women who are currently married or living together with a partner as if married. Ratios in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a ratio is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher
${ }^{2}$ Includes the category age <18 and birth order >3
${ }^{\text {a }}$ Includes sterilised women

## Key Findings

- Antenatal care coverage: $94 \%$ of women age 15-49 who had a live birth in the 5 years before the survey received antenatal care from a skilled provider during the pregnancy of their most recent birth. Three in four women (76\%) had at least four ANC visits; $47 \%$ had their first antenatal visit in the first trimester.
- Components of antenatal care: Almost all women who received antenatal care had their blood pressure measured ( $99 \%$ ), a blood sample taken ( $99 \%$ ), and a urine sample taken ( $99 \%$ ). Nine in ten women were asked about use of tobacco and use of alcohol.
- Delivery services: Deliveries in a health facility increased from $83 \%$ in 1998 to $96 \%$ in 2016. A skilled provider assists in nearly all deliveries (97\%); 68\% of births are delivered by a nurse or midwife and $29 \%$ by a doctor.
- Caesarean section: Among births in the 5 years before the survey, $24 \%$ were delivered by caesarean section. In 1998, by contrast, only $16 \%$ of births were delivered by caesarean section.
- Postnatal checks: $84 \%$ of mothers and $86 \%$ of newborns had a postnatal check during the first 2 days after delivery.
- Content of postnatal care: Among most recent births born in the 2 years before the survey, $87 \%$ had their umbilical cord examined, $87 \%$ had their temperature measured, and $92 \%$ were weighed. However, mothers of only $77 \%$ of newborns received counselling on danger signs to look for in newborns, $82 \%$ were counselled about breastfeeding, and $78 \%$ were observed while breastfeeding.

Health care services during pregnancy and childbirth and after delivery are important for the survival and well-being of both the mother and the infant. Antenatal care (ANC) can reduce health risks for mothers and their babies by monitoring pregnancies and screening for complications. Delivery at a health facility, with skilled medical attention and hygienic conditions, reduces the risk of complications and infections during labour and delivery. Timely postnatal care can treat complications arising from delivery and teach the mother how to care for herself and her infant.

The first part of this chapter presents information on ANC providers, the number and timing of ANC visits, and various components of care. The second focuses on childbirth and provides information on the place of delivery, assistance during delivery, and caesarean deliveries. The last section focuses on postnatal care and presents information on postnatal health checks for mothers and newborns.

The 2015 National Maternity Care Guidelines for South Africa and South Africa's National Strategic Plan for a Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA) provide the backdrop to the contents of this chapter (NDoH 2015a; NDoH 2012).

### 9.1 Antenatal Care Coverage and Content

Basic antenatal care-identification of risk factors, early diagnosis of pregnancy complications and appropriate management, and health education-is one of the pillars of safe motherhood in South Africa (NDoH 2015a).

### 9.1.1 Skilled Providers

## Antenatal care (ANC) from a skilled provider

Pregnancy care received from skilled providers, such as doctors, nurses, or midwives.
Sample: Women age $15-49$ who had a live birth in the 5 years before the survey

The vast majority ( $94 \%$ ) of women age $15-49$ who had a live birth in the 5 years before the survey received antenatal care from a skilled provider during the pregnancy of their most recent birth (Table 9.1). Most women ( $77 \%$ ) received ANC from a nurse or midwife; $17 \%$ received care from a doctor.

Comparison with the SADHS 1998: While the percentage of women in 2016 receiving ANC from a skilled provider is unchanged relative to 1998 ( $94 \%$ and $95 \%$, respectively), there have been changes in types of ANC providers. In 1998, $30 \%$ of women received ANC from a doctor and $65 \%$ from a nurse or midwife; in 2016, $17 \%$ of women received ANC from a doctor and $77 \%$ from a nurse or midwife.

## Patterns by background characteristics

- While the percentage of women receiving ANC from a skilled provider changes little by women's age at birth, the percentage who obtain ANC from a doctor increases with age, ranging from $7 \%$ among women less than age 20 at the time of birth to $23 \%$ among women age 35-49.
- Women with higher-order births are marginally less likely to receive ANC. Ninety-two percent of women giving birth to their sixth or later child received ANC from a skilled provider, as compared with $95 \%$ of women giving birth to their first child.
- ANC coverage from a skilled provider is slightly lower in urban areas than non-urban areas ( $92 \%$ and $96 \%$, respectively). Urban women are more likely than non-urban women to receive ANC from a doctor ( $20 \%$ versus $12 \%$ ).
- By province, ANC coverage ranges from $90 \%$ in Gauteng to $99 \%$ in Eastern Cape. Women in Western Cape ( $32 \%$ ) are more likely than women in other provinces to receive ANC from a doctor (11-19\%).
- The higher a woman's educational level, the more likely it is that she will receive ANC services from a doctor. Fifty-one percent of women with more than a secondary education received ANC from a doctor, compared with $8 \%$ of women with a primary incomplete or primary complete education.
- Women in the highest wealth quintile are six times more likely to receive ANC from a doctor than those in the lowest quintile ( $44 \%$ versus $7 \%$ ). Women in the lowest wealth quintile are almost twice as likely as those in the highest quintile to receive ANC from a nurse or midwife ( $87 \%$ versus $49 \%$ ).


### 9.1.2 Timing and Number of ANC Visits

Seventy-six percent of women had at least four ANC visits during their last pregnancy resulting in a live birth, $13 \%$ of women had two to three ANC visits, and $2 \%$ had one visit (Table 9.2). Six percent of women had no ANC visits during their last pregnancy. Almost half (47\%) of women had their first ANC visit during the first trimester. A further $32 \%$ first received ANC during the fourth or fifth month of pregnancy, and only $2 \%$ delayed care until the eighth month.

Comparison with the SADHS 1998: There has been little change since 1998 in the percentage of women with the recommended four or more ANC visits ( $74 \%$ in 1998 versus $76 \%$ in 2016). However, the percentage of women who had ANC in the first trimester increased from only $28 \%$ in 1998 to $47 \%$ in 2016 (Figure 9.1). The median number of months pregnant at the first ANC visit decreased from 5.2 to 4.0 .

### 9.2 Components of ANC Visits

In terms of routine antenatal service components, there were no differences in the percentages of pregnant women who had their blood pressure measured ( $99 \%$ ), a blood sample taken ( $99 \%$ ), and a urine sample taken (99\%). As part of their ANC, 9 in 10 women were asked about use of tobacco and use of alcohol (Figure 9.2).

## Other Components of ANC

The SADHS 2016 also collected data on whether or not women took iron tablets, another component of care important to maternal and newborn health outcomes. Overall, $90 \%$ of women took iron tablets during the pregnancy of their most recent live birth
(Table 9.3).

Figure 9.1 Comparison of antenatal care coverage
Percentage of women age 15-49 who had a live birth in the 5 years before the survey (for the most recent birth)

■SADHS 1998 -SADHS 2016
 provider

Figure 9.2 Components of antenatal care


### 9.3 Protection against Neonatal Tetanus

## Protection against neonatal tetanus

The number of tetanus toxoid injections needed to protect a baby from neonatal tetanus depends on the mother's vaccinations. A birth is protected against neonatal tetanus if the mother has received any of the following:

- Two tetanus toxoid injections during the pregnancy
- Two or more injections, the last one within 3 years of the birth
- Three or more injections, the last one within 5 years of the birth
- Four or more injections, the last one within 10 years of the birth
- Five or more injections at any time prior to the birth

Sample: Last live births in the 5 years before the survey to women age 15-49

Tetanus toxoid injections are given during pregnancy to prevent neonatal tetanus, a major cause of early infant death in many developing countries, often due to failure to observe hygienic procedures during delivery. Depending on whether or when a pregnant woman has been vaccinated against tetanus before her most recent pregnancy, she may need as many as two tetanus toxoid injections during her pregnancy to protect her baby against neonatal tetanus.

Although the national policy of South Africa is that pregnant women should be vaccinated with tetanus toxoid to prevent neonatal tetanus, death from neonatal tetanus in South Africa is rare (Stats SA 2017a). Indeed, as reflected in the SADHS 2016 results, the province of Western Cape has not been implementing the national policy for years.

Table 9.4 shows that only $35 \%$ of women received sufficient doses of tetanus toxoid to protect their last birth against neonatal tetanus.

Comparison with the SADHS 1998: Tetanus toxoid injections during pregnancy were not measured the same way in the SADHS 1998 and the SADHS 2016, limiting the scope of comparisons. According to the SADHS 1998, $58 \%$ of women received at least a single dose of tetanus toxoid during pregnancy; in 2016, $60 \%$ of women received at least a single dose of tetanus toxoid during pregnancy (data not shown).

## Patterns by background characteristics

- The percentage of women whose last birth was protected from tetanus is low across all background characteristics but shows the greatest degree of variability by province. Only $6 \%$ of women in Western Cape received the number of tetanus toxoid vaccinations recommended to protect their births from tetanus, as compared with $29 \%-41 \%$ in other provinces. This finding is in keeping with Western Cape's policy of not routinely providing tetanus toxoid vaccinations during antenatal care.


### 9.4 Delivery Services

### 9.4.1 Institutional Deliveries

## Institutional deliveries

Deliveries that occur in a health facility.
Sample: All live births in the 5 years before the survey

Almost all of the live births ( $96 \%$ ) in the 5 years before the survey took place in a health facility; only $4 \%$ were delivered at home. The majority of institutional deliveries took place at public sector health facilities) (Table 9.5).

Comparison with the SADHS 1998: Deliveries in a health facility increased from $83 \%$ in 1998 to $96 \%$ in 2016. During the same time period, home deliveries decreased from 14\% to 4\% (Figure 9.3).

## Patterns by background characteristics

- Higher-order births are much more likely to be home deliveries. Seventeen percent of sixth- or higher-order births occurred at home, as compared with only $2 \%$ of first births (Table 9.5).

Figure 9.3 Comparison of place of birth
Percentage of live births in the 5 years before the survey

■ SADHS 1998 ■ SADHS 2016


- Antenatal care has a small effect on the likelihood of an institutional delivery. Ninety-two percent of mothers with no ANC visits gave birth at a health facility, compared with $97 \%$ of mothers with four or more ANC visits.
- The percentage of births delivered in a health facility differs little by residence; however, deliveries in private facilities are almost three times more common in urban areas than non-urban areas $(11 \%$ versus 4\%).
- Deliveries in a health facility vary from a low of $91 \%$ in Eastern Cape to a high of $99 \%$ in Western Cape. The highest percentage of private sector deliveries takes place in Western Cape (14\%), while the lowest percentage takes place in Mpumalanga and Limpopo (5\% each).
- The percentage of births that take place in a health facility rises with education of the mother. Moreover, private institutional deliveries are much more common among births to women who have completed secondary school or higher levels of education than among births to women with lower levels of education (Figure 9.4). Delivery in private facilities also increases dramatically with increasing wealth.

Figure 9.4 Health facility births by education
Percentage of live births in the 5 years before the survey that were delivered in a health facility


### 9.4.2 Skilled Assistance during Delivery

Skilled assistance during delivery
Births delivered with the assistance of doctors, nurses, or midwives.
Sample: All live births in the 5 years before the survey

In South Africa, nearly all births (97\%) are assisted by a skilled provider, most often a nurse or midwife ( $68 \%$ of all deliveries); $29 \%$ of deliveries are assisted by a doctor. Two percent of births are assisted by unskilled persons such as traditional birth attendants, relatives, or friends, while $1 \%$ receive no assistance during delivery (Figure 9.5).

Comparison with the SADHS 1998: The percentage of births delivered by a skilled provider rose from $84 \%$ in 1998 to $97 \%$ in 2016. This improvement is entirely due to an increase in the percentage of births delivered by nurses or midwives ( $54 \%$ in 1998 versus $68 \%$ in 2016); there was little change in the percentage delivered by doctors ( $30 \%$ in 1998 versus $29 \%$ in 2016).

Figure 9.5 Assistance during delivery
Percent distribution of births in the 5 years before the survey


## Patterns by background characteristics

- The percentage of births delivered by a skilled provider differs little by mother's age at birth, but there are differences in type of provider. Among those who were less than age 20 at birth, $98 \%$ of births were delivered by a skilled provider, with $24 \%$ delivered by a doctor and $74 \%$ delivered by a nurse or midwife. Among women who were age $35-49,94 \%$ of births were delivered by a skilled provider, with $40 \%$ delivered by a doctor and $54 \%$ by a nurse or midwife (Table 9.6).
- Skilled assistance during delivery declines with birth order: 98\% of first births have skilled assistance, as compared with $85 \%$ of sixth- or higher-order births (Figure 9.6).
- Women with no antenatal visits are less likely to be assisted by a skilled provider than women with one or more visits ( $91 \%$ versus $96 \%-97 \%$ ) (Table 9.6).
- Skilled providers assist at nearly $100 \%$ of deliveries in health facilities, compared with only $30 \%$ of deliveries that take place elsewhere.
- There is little difference between urban areas and non-urban areas in the percentage of births delivered by a skilled provider ( $98 \%$ versus $95 \%$ ).

Figure 9.6 Skilled assistance at delivery by birth order

Percentage of live births in the 5 years before the survey that were delivered by a skilled provider


- By province, the percentage of births delivered by skilled providers is uniformly high ( $93 \%-99 \%$ ). However, there are variations between provinces with regard to type of skilled provider: births in Western Cape are nearly equally likely to be delivered by a doctor (48\%) or by a nurse or midwife ( $51 \%$ ). Mpumalanga and Limpopo have the highest percentages of births assisted by a nurse or midwife ( $76 \%$ each) and the lowest assisted by a doctor ( $21 \%$ and $22 \%$, respectively).
- The more education a woman has, the more likely it is that she will receive delivery assistance from a doctor rather than a nurse or midwife. Fifty-eight percent of births to women with more than a secondary education were delivered by a doctor, as compared with $18 \%$ of births to women with no education. Similar patterns are observed by wealth.


### 9.4.3 Delivery by Caesarean

Access to caesarean sections can reduce maternal and neonatal mortality and complications such as obstetric fistula. However, use of caesarean sections without a medical need can put women at risk of short- and long-term health problems. WHO advises that caesarean sections be done only when medically necessary but does not recommend a target rate for countries to achieve at the population level. Research conducted by WHO has shown that increases in countries' caesarean section rates up to $10 \%$ are associated with declines in maternal and neonatal mortality. On the other hand, increases in caesarean section rates beyond $10 \%$ are not associated with reductions in maternal and newborn mortality rates (WHO 2015). The SADHS 2016 results show that almost one in four births in the 5 years before the survey were delivered by caesarean section $(24 \%)$. Two-thirds of these caesarean sections were elective, which includes those that were not medically indicated (Table 9.7).

Among women who had their most recent live birth in a health facility, $76 \%$ of those who gave birth by caesarean section spent 3 or more days at the facility after delivery, compared with $14 \%$ of those who had a vaginal birth (Table 9.8).

Comparison with the SADHS 1998: The proportion of births delivered by caesarean section rose from $16 \%$ in 1998 to $24 \%$ in 2016 , a $50 \%$ increase.

## Patterns by background characteristics

- More mothers age 35-49 at birth (29\%) had caesarean section deliveries than those age 20-34 (23\%) or less than age $20(25 \%)$. Elective caesarean deliveries are most common among older mothers $(21 \%$ of all deliveries to women age 35-49 at birth) (Table 9.7).
- Caesarean deliveries are more common among first- to third-order births ( $25 \%-26 \%$ ) than among higher-order births ( $11 \%-14 \%$ ).
- Six in 10 (61\%) births delivered at private health facilities are caesarean births, as compared with $22 \%$ of births delivered at public health facilities.
- The caesarean delivery rate is modestly higher in urban areas than non-urban areas ( $26 \%$ versus $21 \%$ ).
- Among provinces, caesarean rates range from a low of $17 \%$ in Limpopo a high of $30 \%$ in Western Cape.
- More educated women are more likely to undergo caesarean deliveries. The caesarean rate for births to women with more than a secondary education is $40 \%$, compared with $15 \%$ for births to women with no education.
- The caesarean rate in the highest wealth quintile is more than double the rate in the lowest quintile (39\% versus $17 \%$ ).


### 9.5 Postnatal Care

According to the 2014 WHO Recommendations on the Postnatal Care of the Mother and Newborn, "If birth is in a health facility, mothers and newborns should receive postnatal care in the facility for at least 24 hours after birth" (WHO 2014a).

### 9.5.1 Postnatal Health Check for Mothers

Safe motherhood programmes recommend that women receive a postnatal health check within 2 days after delivery. In South Africa, $87 \%$ of mothers received a postnatal check; $84 \%$ had this check within the first 2 days after the birth (Table 9.9). The majority of mothers had their first postnatal check within 4 hours $(73 \%)$ and a further $8 \%$ between 4 and 23 hours. Seven percent of mothers did not have any postnatal health check, and $6 \%$ are unsure whether they had one or not.

## Patterns by background characteristics

- Women who delivered in a health facility were much more likely to receive a postnatal health check during the first 2 days after birth than those who delivered elsewhere ( $84 \%$ versus 66\%) (Figure 9.7). One in four women who delivered elsewhere had no postnatal check (25\%) (Table 9.9).

Figure 9.7 Postnatal care by place of delivery


- Women who reside in urban areas are slightly more likely than those living in non-urban areas to receive a postnatal health check during the 2 days after birth ( $85 \%$ and $81 \%$, respectively).
- By province, Western Cape and Free State have the highest percentage of women receiving a timely postnatal health check ( $91 \%$ each), while KwaZulu-Natal has the lowest percentage ( $80 \%$ ).
- The percentage of women who received a timely postnatal check generally increases with increasing wealth, from $81 \%$ among those in the lowest wealth quintile to $87 \%$ among those in the highest quintile.


## Type of Provider

The skills of the provider determine the provider's ability to diagnose problems and recommend appropriate treatment or referral. Twenty-one percent of women received a postnatal health check during the first 2 days after delivery from a doctor. Sixty-three percent received a postnatal check from a nurse or midwife. Less than $1 \%$ of women received a postnatal check from a community health worker or a traditional birth attendant (Table 9.10).

### 9.5.2 Postnatal Health Check for Newborns

Postnatal care services for newborns should start as soon as possible after birth because many neonatal deaths occur within the first 48 hours of life. The vast majority of newborns in South Africa (86\%) received a postnatal check within 2 days after birth; most newborns ( $79 \%$ ) received a postnatal check within 4 hours. An additional $7 \%$ of newborns received a postnatal check between 4 hours and 2 days after birth and another $2 \%$ within 3-6 days after birth. Six percent of newborns did not receive a postnatal health check (Table 9.11).

## Patterns by background characteristics

- Newborns delivered in a health facility were much more likely to receive a postnatal health check during the first 2 days after birth than those delivered elsewhere ( $88 \%$ versus $36 \%$ ). Eighty-two percent of newborns delivered in a health facility had their first postnatal check less than 4 hours after birth, as compared with $20 \%$ of those delivered elsewhere.
- There are variations by province in the likelihood of newborns receiving a postnatal health check during the first 2 days after birth. The percentage of newborns with a postnatal check was lowest in KwaZulu-Natal (82\%) and highest in Western Cape (94\%).
- There is a clear correlation between a mother's educational attainment and the likelihood of a timely postnatal health check for her newborn; $94 \%$ of newborns whose mothers have more than a secondary education received a postnatal check during the first 2 days after delivery, compared with $75 \%$ of newborns whose mothers have a primary incomplete education.
- The percentage of newborns who received a timely postnatal check correlates with household wealth, rising from $81 \%$ among newborns born to women in the lowest wealth quintile to $92 \%$ among those born to women in the highest quintile.


## Type of Provider

One in every four ( $24 \%$ ) newborns received a postnatal check during the first 2 days after delivery from a doctor, while $62 \%$ received a postnatal check from a nurse or midwife (Table 9.12).

### 9.5.3 Content of Postnatal Care for Newborns

Among most recent births born in the 2 years before the survey, $87 \%$ had their umbilical cord examined, $87 \%$ had their temperature measured, and $92 \%$ were weighed. However, mothers of only about threefourths of newborns ( $77 \%$ ) received counselling on danger signs to look for in newborns, $82 \%$ were counselled about breastfeeding, and 78\% were observed while breastfeeding (Table 9.13). Overall, $90 \%$ of newborns had at least two signal functions performed during the first 2 days after birth and $85 \%$ had at least four signal functions performed.

## Patterns by background characteristics

- The percentage of newborns for whom at least four signal functions were performed during the first 2 days after birth was much higher among those delivered in health facilities (85\%) than among those delivered elsewhere (65\%).
- Among provinces, the percentage of newborns with at least four signal functions performed in the first 2 days after birth ranged from a high of $96 \%$ in KwaZulu-Natal to a low of $70 \%$ in Mpumalanga.


### 9.5.4 Discharge Timing of Newborns and Mothers

Among most recent live births in the 5 years preceding the survey that took place in a facility, $94 \%$ were discharged at the same time as their mother, $1 \%$ were discharged before their mother, and $5 \%$ were discharged after their mother (Table 9.14).

## LISt OF TABLES

For more information on maternal health care, see the following tables:

- Table 9.1 Antenatal care
- Table 9.2 Number of antenatal care visits and timing of first visit
- Table 9.3 Components of antenatal care
- Table 9.4 Tetanus toxoid injections
- Table 9.5 Place of delivery
- Table 9.6 Assistance during delivery
- Table 9.7 Caesarean section
- Table 9.8 Duration of stay in health facility after birth
- Table 9.9 Timing of first postnatal check for the mother
- Table 9.10 Type of provider of first postnatal check for the mother
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- Table 9.12 Type of provider of first postnatal check for the newborn
- Table 9.13 Content of postnatal care for newborns
- Table 9.14 Discharge timing

Table 9.1 Antenatal care
Percent distribution of women age $15-49$ who had a live birth in the 5 years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Antenatal care provider |  |  |  |  | No ANC | Total | Percentage receiving antenatal care from a skilled provider ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Nurse/ midwife | Community health worker | Traditional birth attendant | Other |  |  |  |  |
| Age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 7.0 | 87.7 | 0.7 | 0.0 | 0.0 | 4.6 | 100.0 | 94.7 | 432 |
| 20-34 | 18.0 | 75.5 | 0.6 | 0.0 | 0.0 | 5.9 | 100.0 | 93.5 | 2,200 |
| 35-49 | 22.5 | 70.9 | 0.5 | 0.0 | 0.2 | 5.9 | 100.0 | 93.4 | 404 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 16.0 | 79.0 | 0.5 | 0.0 | 0.0 | 4.5 | 100.0 | 95.0 | 1,040 |
| 2-3 | 18.7 | 74.1 | 0.7 | 0.0 | 0.0 | 6.5 | 100.0 | 92.8 | 1,586 |
| 4-5 | 14.1 | 80.1 | 0.0 | 0.0 | 0.0 | 5.8 | 100.0 | 94.2 | 326 |
| $6+$ | 10.6 | 80.9 | 2.5 | 0.0 | 1.0 | 5.0 | 100.0 | 91.5 | 84 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 20.1 | 72.4 | 0.8 | 0.0 | 0.0 | 6.8 | 100.0 | 92.4 | 1,942 |
| Non-urban | 11.8 | 84.1 | 0.2 | 0.0 | 0.1 | 3.8 | 100.0 | 95.9 | 1,094 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 32.3 | 62.0 | 0.9 | 0.0 | 0.0 | 4.8 | 100.0 | 94.3 | 276 |
| Eastern Cape | 12.0 | 86.5 | 0.0 | 0.0 | 0.0 | 1.5 | 100.0 | 98.5 | 335 |
| Northern Cape | 16.8 | 76.0 | 0.0 | 0.0 | 0.0 | 7.2 | 100.0 | 92.8 | 61 |
| Free State | 18.5 | 75.6 | 1.2 | 0.0 | 0.0 | 4.8 | 100.0 | 94.0 | 145 |
| KwaZulu-Natal | 14.9 | 79.5 | 2.2 | 0.0 | 0.0 | 3.3 | 100.0 | 94.5 | 555 |
| North West | 16.9 | 80.4 | 0.7 | 0.0 | 0.3 | 1.7 | 100.0 | 97.2 | 244 |
| Gauteng | 18.8 | 71.1 | 0.0 | 0.0 | 0.0 | 10.1 | 100.0 | 89.9 | 842 |
| Mpumalanga | 10.9 | 80.9 | 0.0 | 0.0 | 0.0 | 8.3 | 100.0 | 91.7 | 278 |
| Limpopo | 13.1 | 82.7 | 0.0 | 0.0 | 0.0 | 4.2 | 100.0 | 95.8 | 301 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | (1.2) | (96.1) | (0.0) | (0.0) | (0.0) | (2.7) | 100.0 | (97.3) | 42 |
| Primary incomplete | 8.0 | 85.7 | 0.0 | 0.0 | 0.0 | 6.3 | 100.0 | 93.7 | 141 |
| Primary complete | 8.1 | 82.3 | 1.0 | 0.0 | 0.0 | 8.6 | 100.0 | 90.4 | 108 |
| Secondary incomplete | 9.8 | 83.6 | 0.8 | 0.0 | 0.1 | 5.8 | 100.0 | 93.4 | 1,486 |
| Secondary complete | 18.9 | 74.6 | 0.5 | 0.0 | 0.0 | 6.0 | 100.0 | 93.5 | 908 |
| More than secondary | 51.3 | 44.6 | 0.2 | 0.0 | 0.0 | 3.9 | 100.0 | 95.8 | 351 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 6.9 | 86.7 | 0.2 | 0.0 | 0.1 | 6.0 | 100.0 | 93.7 | 650 |
| Second | 7.8 | 85.1 | 1.0 | 0.0 | 0.0 | 6.2 | 100.0 | 92.8 | 739 |
| Middle | 16.2 | 77.9 | 0.6 | 0.0 | 0.0 | 5.3 | 100.0 | 94.1 | 671 |
| Fourth | 22.2 | 73.1 | 0.6 | 0.0 | 0.0 | 4.2 | 100.0 | 95.3 | 557 |
| Highest | 43.8 | 48.5 | 0.6 | 0.0 | 0.0 | 7.0 | 100.0 | 92.4 | 418 |
| Total | 17.1 | 76.6 | 0.6 | 0.0 | 0.0 | 5.7 | 100.0 | 93.7 | 3,036 |

Notes: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Figures in
parentheses are based on 25-49 unweighted cases
Skilled provider includes doctor and nurse/midwife

Table 9.2 Number of antenatal care visits and timing of first visit
Percent distribution of women age 15-49 who had a live birth in the 5 years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, South Africa DHS 2016

| Number of ANC visits and timing of first visit | Residence |  | Total |
| :---: | :---: | :---: | :---: |
|  | Urban | Nonurban |  |
| Number of ANC visits |  |  |  |
| None | 6.8 | 3.8 | 5.7 |
| 1 | 2.1 | 2.0 | 2.1 |
| 2-3 | 14.4 | 11.7 | 13.4 |
| 4+ | 73.1 | 79.7 | 75.5 |
| Don't know | 3.6 | 2.8 | 3.3 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of months pregnant at time of first ANC visit |  |  |  |
| No antenatal care | 6.8 | 3.8 | 5.7 |
| <4 | 48.6 | 44.9 | 47.3 |
| 4-5 | 28.6 | 36.6 | 31.5 |
| 6-7 | 13.4 | 12.5 | 13.1 |
| $8+$ | 2.0 | 1.6 | 1.9 |
| Don't know | 0.6 | 0.6 | 0.6 |
| Total | 100.0 | 100.0 | 100.0 |
| Number of women | 1,942 | 1,094 | 3,036 |
| Median months pregnant at first visit (for those with ANC) | 3.9 | 4.1 | 4.0 |
| Number of women with ANC | 1,811 | 1,052 | 2,863 |

Table 9.3 Components of antenatal care
Among women age 15-49 with a live birth in the 5 years preceding the survey, percentage who took iron tablets during the pregnancy of the most recent live birth, and among women receiving antenatal care (ANC) for the most recent live birth in the 5 years preceding the survey, percentage receiving specific antenatal services, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women who took iron tablets during the pregnancy of their most recent live birth | Number of women with a live birth in the past 5 years | Among women who received antenatal care for their most recent birth in the past 5 years, percentage with selected services |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Blood pressure measured | Urine sample taken | Blood sample taken | Asked about use of alcohol | Asked about smoking tobacco | Number of women with ANC for their most recent birth |
| Age at birth |  |  |  |  |  |  |  |  |
| <20 | 90.3 | 432 | 98.6 | 99.0 | 98.4 | 89.2 | 88.8 | 412 |
| 20-34 | 90.1 | 2,200 | 99.1 | 99.4 | 99.0 | 92.3 | 92.1 | 2,071 |
| 35-49 | 88.9 | 404 | 99.2 | 99.0 | 98.8 | 92.4 | 92.9 | 380 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 89.5 | 1,040 | 99.1 | 99.4 | 99.4 | 89.6 | 89.0 | 993 |
| 2-3 | 91.1 | 1,586 | 99.3 | 99.6 | 98.9 | 93.2 | 93.1 | 1,483 |
| 4-5 | 86.2 | 326 | 97.5 | 97.8 | 97.0 | 92.2 | 93.9 | 307 |
| 6+ | 90.3 | 84 | 99.3 | 99.3 | 99.3 | 92.6 | 93.2 | 80 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 89.8 | 1,942 | 99.2 | 99.5 | 98.9 | 93.0 | 93.1 | 1,811 |
| Non-urban | 90.3 | 1,094 | 98.7 | 99.1 | 98.9 | 89.8 | 89.4 | 1,052 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 90.6 | 276 | 98.5 | 99.5 | 96.9 | 96.5 | 97.8 | 263 |
| Eastern Cape | 95.9 | 335 | 99.2 | 99.2 | 98.6 | 91.8 | 91.1 | 330 |
| Northern Cape | 92.6 | 61 | 98.9 | 100.0 | 97.9 | 89.1 | 89.3 | 56 |
| Free State | 86.8 | 145 | 99.3 | 99.3 | 98.9 | 92.0 | 91.6 | 138 |
| KwaZulu-Natal | 90.9 | 555 | 99.7 | 99.8 | 99.6 | 89.1 | 87.9 | 536 |
| North West | 92.7 | 244 | 99.8 | 99.0 | 97.8 | 92.0 | 91.7 | 240 |
| Gauteng | 87.7 | 842 | 99.0 | 99.4 | 99.4 | 91.7 | 92.2 | 757 |
| Mpumalanga | 91.3 | 278 | 100.0 | 99.5 | 99.5 | 93.3 | 92.9 | 255 |
| Limpopo | 85.3 | 301 | 96.9 | 98.1 | 98.8 | 92.1 | 92.5 | 288 |
| Education |  |  |  |  |  |  |  |  |
| No education | (84.1) | 42 | (100.0) | (100.0) | (100.0) | (94.7) | (94.7) | 41 |
| Primary incomplete | 84.2 | 141 | 99.0 | 99.6 | 99.6 | 88.5 | 90.9 | 132 |
| Primary complete | 92.3 | 108 | 97.7 | 99.4 | 98.6 | 88.5 | 87.7 | 99 |
| Secondary incomplete | 90.2 | 1,486 | 99.1 | 99.5 | 98.9 | 91.3 | 91.1 | 1,400 |
| Secondary complete | 90.9 | 908 | 99.1 | 98.8 | 98.5 | 92.2 | 92.1 | 854 |
| More than secondary | 89.2 | 351 | 99.3 | 99.8 | 99.5 | 95.1 | 94.9 | 337 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 87.7 | 650 | 98.9 | 99.4 | 99.4 | 89.9 | 89.0 | 611 |
| Second | 90.9 | 739 | 98.3 | 98.5 | 97.7 | 89.6 | 91.1 | 694 |
| Middle | 90.5 | 671 | 99.4 | 99.5 | 99.1 | 91.3 | 89.8 | 635 |
| Fourth | 92.6 | 557 | 99.5 | 99.6 | 99.3 | 95.8 | 95.9 | 534 |
| Highest | 87.8 | 418 | 99.4 | 100.0 | 99.3 | 94.4 | 94.8 | 388 |
| Total | 90.0 | 3,036 | 99.1 | 99.3 | 98.9 | 91.8 | 91.7 | 2,863 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 9.4 Tetanus toxoid injections
Among mothers age $15-49$ with a live birth in the 5 years preceding the survey, percentage receiving two or more tetanus toxoid injections during the pregnancy for the most recent live birth and percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage receiving two or more injections during the pregnancy for the last live birth | Percentage whose most recent live birth was protected against neonatal tetanus ${ }^{1}$ | Number of mothers |
| :---: | :---: | :---: | :---: |
| Age at birth |  |  |  |
| <20 | 31.3 | 39.8 | 432 |
| 20-34 | 29.0 | 34.3 | 2,200 |
| 35-49 | 25.5 | 35.0 | 404 |
| Birth order |  |  |  |
| 1 | 29.6 | 35.4 | 1,040 |
| 2-3 | 28.3 | 34.5 | 1,586 |
| 4-5 | 27.2 | 34.5 | 326 |
| $6+$ | 36.7 | 47.7 | 84 |
| Residence |  |  |  |
| Urban | 29.1 | 34.6 | 1,942 |
| Non-urban | 28.4 | 36.2 | 1,094 |
| Province |  |  |  |
| Western Cape | 4.9 | 6.1 | 276 |
| Eastern Cape | 23.4 | 29.2 | 335 |
| Northern Cape | 29.1 | 30.3 | 61 |
| Free State | 34.6 | 40.7 | 145 |
| KwaZulu-Natal | 28.2 | 41.1 | 555 |
| North West | 36.1 | 40.6 | 244 |
| Gauteng | 36.1 | 40.5 | 842 |
| Mpumalanga | 32.6 | 40.4 | 278 |
| Limpopo | 26.0 | 31.5 | 301 |
| Education |  |  |  |
| No education | (39.6) | (42.0) | 42 |
| Primary incomplete | 28.4 | 35.8 | 141 |
| Primary complete | 23.7 | 31.8 | 108 |
| Secondary incomplete | 30.3 | 36.2 | 1,486 |
| Secondary complete | 28.5 | 35.1 | 908 |
| More than secondary | 24.4 | 30.8 | 351 |
| Wealth quintile |  |  |  |
| Lowest | 27.5 | 35.4 | 650 |
| Second | 28.6 | 34.7 | 739 |
| Middle | 30.7 | 35.8 | 671 |
| Fourth | 33.5 | 37.3 | 557 |
| Highest | 22.4 | 31.7 | 418 |
| Total | 28.9 | 35.2 | 3,036 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Includes mothers with two injections during the pregnancy of their most recent live birth, or two or more injections (the last within 3 years of the most recent live birth), or three or more injections (the last within 5 years of the most recent live birth), or four or more injections (the last within 10 years of the most recent live birth), or five or more injections at any time prior to the most recent birth

Table 9.5 Place of delivery
Percent distribution of live births in the 5 years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, South Africa DHS 2016

| Background characteristic | Health facility |  | Home | Other | Total | Percentage delivered in a health facility | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Public sector | Private sector |  |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |
| <20 | 96.3 | 1.2 | 2.4 | 0.1 | 100.0 | 97.5 | 549 |
| 20-34 | 87.4 | 8.7 | 3.6 | 0.4 | 100.0 | 96.0 | 2,574 |
| 35-49 | 77.1 | 16.5 | 5.7 | 0.7 | 100.0 | 93.6 | 449 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 90.8 | 7.5 | 1.7 | 0.1 | 100.0 | 98.3 | 1,281 |
| 2-3 | 85.7 | 10.4 | 3.3 | 0.6 | 100.0 | 96.1 | 1,817 |
| 4-5 | 86.8 | 4.1 | 8.8 | 0.3 | 100.0 | 90.9 | 370 |
| 6+ | 78.5 | 3.2 | 16.7 | 1.6 | 100.0 | 81.7 | 104 |
| Antenatal care visits ${ }^{1}$ |  |  |  |  |  |  |  |
| None | 83.9 | 8.3 | 7.8 | 0.0 | 100.0 | 92.2 | 173 |
| 1-3 | 88.3 | 5.6 | 5.9 | 0.2 | 100.0 | 93.9 | 470 |
| 4+ | 87.4 | 9.5 | 2.6 | 0.4 | 100.0 | 96.9 | 2,292 |
| Don't know number of visits | 85.8 | 8.4 | 5.8 | 0.0 | 100.0 | 94.2 | 101 |
| Residence |  |  |  |  |  |  |  |
| Urban | 85.9 | 11.1 | 2.7 | 0.2 | 100.0 | 97.1 | 2,281 |
| Non-urban | 90.1 | 3.8 | 5.3 | 0.8 | 100.0 | 93.9 | 1,291 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 84.6 | 14.3 | 1.2 | 0.0 | 100.0 | 98.8 | 313 |
| Eastern Cape | 83.6 | 7.7 | 7.0 | 1.7 | 100.0 | 91.3 | 398 |
| Northern Cape | 91.8 | 5.6 | 2.7 | 0.0 | 100.0 | 97.3 | 69 |
| Free State | 88.7 | 7.3 | 4.0 | 0.0 | 100.0 | 96.0 | 164 |
| KwaZulu-Natal | 87.8 | 7.6 | 4.3 | 0.2 | 100.0 | 95.4 | 654 |
| North West | 86.7 | 8.7 | 3.6 | 1.0 | 100.0 | 95.4 | 282 |
| Gauteng | 86.7 | 10.2 | 2.9 | 0.2 | 100.0 | 96.9 | 1,013 |
| Mpumalanga | 90.3 | 5.0 | 4.5 | 0.2 | 100.0 | 95.3 | 332 |
| Limpopo | 92.4 | 5.1 | 2.5 | 0.0 | 100.0 | 97.5 | 347 |
| Mother's education |  |  |  |  |  |  |  |
| No education | 85.9 | 0.0 | 10.5 | 3.6 | 100.0 | 85.9 | 50 |
| Primary incomplete | 89.5 | 0.3 | 9.0 | 1.2 | 100.0 | 89.8 | 182 |
| Primary complete | 94.6 | 0.0 | 4.8 | 0.5 | 100.0 | 94.6 | 138 |
| Secondary incomplete | 94.0 | 1.5 | 4.3 | 0.3 | 100.0 | 95.4 | 1,762 |
| Secondary complete | 85.8 | 11.5 | 2.4 | 0.4 | 100.0 | 97.2 | 1,043 |
| More than secondary | 59.6 | 39.8 | 0.5 | 0.2 | 100.0 | 99.4 | 397 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 91.4 | 0.2 | 7.4 | 1.0 | 100.0 | 91.6 | 787 |
| Second | 94.3 | 0.9 | 4.6 | 0.2 | 100.0 | 95.2 | 865 |
| Middle | 94.8 | 3.4 | 1.5 | 0.3 | 100.0 | 98.2 | 788 |
| Fourth | 86.7 | 10.3 | 2.8 | 0.3 | 100.0 | 96.9 | 657 |
| Highest | 57.4 | 42.0 | 0.6 | 0.0 | 100.0 | 99.4 | 476 |
| Total | 87.4 | 8.5 | 3.7 | 0.4 | 100.0 | 95.9 | 3,572 |

${ }^{1}$ Includes only the most recent birth in the 5 years preceding the survey

Table 9.6 Assistance during delivery
Percent distribution of live births in the 5 years preceding the survey by person providing assistance during delivery, and percentage of births assisted by a skilled provider, according to background characteristics, South Africa DHS 2016

| Background characteristic | Person providing assistance during delivery |  |  |  |  | Total | Percentage delivered by a skilled provider ${ }^{1}$ | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Nurse/ midwife | Traditional birth attendant | Relative/ friend/other | No one |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |
| <20 | 24.2 | 73.6 | 0.1 | 0.8 | 1.3 | 100.0 | 97.8 | 549 |
| 20-34 | 27.7 | 69.2 | 0.1 | 2.0 | 1.0 | 100.0 | 96.9 | 2,574 |
| 35-49 | 40.4 | 54.0 | 0.2 | 2.8 | 2.6 | 100.0 | 94.4 | 449 |
| Birth order |  |  |  |  |  |  |  |  |
| 1 | 29.7 | 68.5 | 0.2 | 1.0 | 0.6 | 100.0 | 98.2 | 1,281 |
| 2-3 | 29.9 | 67.2 | 0.1 | 2.0 | 0.8 | 100.0 | 97.1 | 1,817 |
| 4-5 | 23.0 | 69.9 | 0.1 | 3.5 | 3.5 | 100.0 | 92.9 | 370 |
| 6+ | 15.8 | 68.7 | 0.0 | 7.2 | 8.3 | 100.0 | 84.5 | 104 |
| Antenatal care visits ${ }^{2}$ |  |  |  |  |  |  |  |  |
| None | 28.1 | 62.9 | 0.0 | 4.4 | 4.6 | 100.0 | 91.0 | 173 |
| 1-3 | 20.4 | 75.1 | 0.2 | 2.7 | 1.6 | 100.0 | 95.5 | 470 |
| $4+$ | 31.1 | 66.3 | 0.2 | 1.5 | 0.9 | 100.0 | 97.4 | 2,292 |
| Don't know number of visits | 30.9 | 66.2 | 0.0 | 2.9 | 0.0 | 100.0 | 97.1 | 101 |
| Place of delivery |  |  |  |  |  |  |  |  |
| Health facility | 29.9 | 69.7 | 0.1 | 0.1 | 0.3 | 100.0 | 99.5 | 3,427 |
| Public facility | 24.3 | 75.2 | 0.1 | 0.1 | 0.3 | 100.0 | 99.5 | 3,123 |
| Private facility | 87.6 | 12.1 | 0.0 | 0.0 | 0.3 | 100.0 | 99.7 | 304 |
| Elsewhere | 2.1 | 28.2 | 1.7 | 44.5 | 23.6 | 100.0 | 30.2 | 145 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 31.5 | 66.4 | 0.0 | 0.8 | 1.3 | 100.0 | 97.9 | 2,281 |
| Non-urban | 23.9 | 70.8 | 0.3 | 3.8 | 1.2 | 100.0 | 94.6 | 1,291 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 48.0 | 51.2 | 0.0 | 0.5 | 0.3 | 100.0 | 99.2 | 313 |
| Eastern Cape | 28.6 | 64.2 | 0.0 | 5.3 | 2.0 | 100.0 | 92.7 | 398 |
| Northern Cape | 41.1 | 56.5 | 0.0 | 2.4 | 0.0 | 100.0 | 97.6 | 69 |
| Free State | 41.4 | 54.8 | 0.6 | 2.5 | 0.6 | 100.0 | 96.3 | 164 |
| KwaZulu-Natal | 31.7 | 64.7 | 0.3 | 2.1 | 1.1 | 100.0 | 96.4 | 654 |
| North West | 29.0 | 67.0 | 0.0 | 3.3 | 0.7 | 100.0 | 96.0 | 282 |
| Gauteng | 23.0 | 74.6 | 0.0 | 0.7 | 1.7 | 100.0 | 97.6 | 1,013 |
| Mpumalanga | 20.7 | 75.8 | 0.0 | 1.4 | 2.1 | 100.0 | 96.4 | 332 |
| Limpopo | 21.7 | 76.1 | 0.6 | 1.5 | 0.2 | 100.0 | 97.8 | 347 |
| Mother's education |  |  |  |  |  |  |  |  |
| No education | 18.2 | 70.3 | 0.0 | 8.3 | 3.2 | 100.0 | 88.5 | 50 |
| Primary incomplete | 19.1 | 71.2 | 0.3 | 6.4 | 2.9 | 100.0 | 90.4 | 182 |
| Primary complete | 22.5 | 72.6 | 0.7 | 2.8 | 1.4 | 100.0 | 95.1 | 138 |
| Secondary incomplete | 21.9 | 74.2 | 0.2 | 2.2 | 1.5 | 100.0 | 96.1 | 1,762 |
| Secondary complete | 32.3 | 66.5 | 0.1 | 0.7 | 0.4 | 100.0 | 98.8 | 1,043 |
| More than secondary | 57.7 | 40.7 | 0.0 | 0.7 | 0.9 | 100.0 | 98.4 | 397 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 18.1 | 74.5 | 0.5 | 4.2 | 2.7 | 100.0 | 92.6 | 787 |
| Second | 22.5 | 73.9 | 0.0 | 2.1 | 1.6 | 100.0 | 96.3 | 865 |
| Middle | 23.8 | 74.6 | 0.1 | 0.6 | 0.8 | 100.0 | 98.4 | 788 |
| Fourth | 36.0 | 62.5 | 0.0 | 1.5 | 0.0 | 100.0 | 98.5 | 657 |
| Highest | 55.9 | 43.0 | 0.0 | 0.5 | 0.6 | 100.0 | 98.9 | 476 |
| Total | 28.7 | 68.0 | 0.1 | 1.9 | 1.2 | 100.0 | 96.7 | 3,572 |

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.
${ }^{1}$ Skilled provider includes doctor and nurse/midwife
${ }^{2}$ Includes only the most recent birth in the 5 years preceding the survey

Table 9.7 Caesarean section
Percentage of live births in the 5 years preceding the survey delivered by caesarean section (C-section), percentage delivered by C-section planned before the onset of labour pains, and percentage delivered by C-section decided on after the onset of labour pains, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage delivered by C-section | Timing of decision to conduct C-section |  | Number of births |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Planned before onset of labour pains | Decided on after onset of labour pains |  |
| Mother's age at birth |  |  |  |  |
| <20 | 24.8 | 13.0 | 11.8 | 549 |
| 20-34 | 23.3 | 15.7 | 7.6 | 2,574 |
| 35-49 | 28.8 | 21.0 | 7.8 | 449 |
| Birth order |  |  |  |  |
| 1 | 25.1 | 14.1 | 11.0 | 1,281 |
| 2-3 | 26.4 | 19.0 | 7.5 | 1,817 |
| 4-5 | 14.2 | 9.8 | 4.4 | 370 |
| $6+$ | 10.5 | 7.7 | 2.8 | 104 |
| Antenatal care visits ${ }^{1}$ |  |  |  |  |
| None | 22.3 | 16.6 | 5.7 | 173 |
| 1-3 | 20.5 | 12.2 | 8.3 | 470 |
| 4+ | 25.4 | 16.4 | 9.0 | 2,292 |
| Don't know number of visits | 27.5 | 16.3 | 11.2 | 101 |
| Place of delivery |  |  |  |  |
| Health facility | 25.2 | 16.6 | 8.6 | 3,427 |
| Public facility | 21.7 | 13.1 | 8.7 | 3,123 |
| Private facility | 61.3 | 52.9 | 8.3 | 304 |
| Residence |  |  |  |  |
| Urban | 25.9 | 17.8 | 8.1 | 2,281 |
| Non-urban | 21.2 | 12.6 | 8.5 | 1,291 |
| Province |  |  |  |  |
| Western Cape | 29.5 | 17.7 | 11.8 | 313 |
| Eastern Cape | 22.7 | 13.1 | 9.6 | 398 |
| Northern Cape | 24.0 | 12.6 | 11.4 | 69 |
| Free State | 26.5 | 20.9 | 5.6 | 164 |
| KwaZulu-Natal | 29.1 | 22.3 | 6.8 | 654 |
| North West | 22.7 | 13.6 | 9.1 | 282 |
| Gauteng | 22.5 | 14.4 | 8.1 | 1,013 |
| Mpumalanga | 24.7 | 16.0 | 8.7 | 332 |
| Limpopo | 16.8 | 10.2 | 6.6 | 347 |
| Mother's education |  |  |  |  |
| No education | 15.2 | 8.2 | 7.0 | 50 |
| Primary incomplete | 21.5 | 15.9 | 5.6 | 182 |
| Primary complete | 19.4 | 12.4 | 7.0 | 138 |
| Secondary incomplete | 20.7 | 12.2 | 8.5 | 1,762 |
| Secondary complete | 25.6 | 17.2 | 8.4 | 1,043 |
| More than secondary | 40.0 | 31.2 | 8.8 | 397 |
| Wealth quintile |  |  |  |  |
| Lowest | 17.2 | 10.1 | 7.1 | 787 |
| Second | 19.7 | 11.3 | 8.4 | 865 |
| Middle | 20.8 | 13.8 | 7.0 | 788 |
| Fourth | 31.7 | 20.4 | 11.3 | 657 |
| Highest | 39.1 | 31.3 | 7.9 | 476 |
| Total | 24.2 | 15.9 | 8.3 | 3,572 |

Note: The question on C-section was asked only of women who delivered in a health facility. In this table, it is assumed that women who did not give birth in health facility did not receive a C-section.
${ }^{1}$ Includes only the most recent birth in the 5 years preceding the survey

Table 9.8 Duration of stay in health facility after birth
Among women with a birth in the 5 years preceding the survey who delivered their most recent live birth in a health facility, percent distribution by duration of stay in the health facility following their most recent live birth, according to type of delivery, South Africa DHS 2016

| Type of delivery | $<6$ hours | $6-11$ <br> hours | $12-23$ <br> hours | 1-2 days | $3+$ days | Don't <br> know | Total | Number of <br> women |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Vaginal birth | 12.3 | 13.3 | 10.5 | 49.6 | 14.0 | 0.3 | 100.0 | 2,172 |
| Caesarean section | 4.5 | 1.1 | 0.6 | 17.0 | 75.8 | 1.0 | 100.0 | 745 |

Table 9.9 Timing of first postnatal check for the mother
Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution of the mother's first postnatal check for the most recent live birth by time after delivery, and percentage of women with a live birth during the 2 years preceding the survey who received a postnatal check in the first 2 days after giving birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Time after delivery of mother's first postnatal check ${ }^{1}$ |  |  |  |  |  | No postnatal check ${ }^{2}$ | Total | Percentage of women with a postnatal check during the first 2 days after birth ${ }^{1}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 4 hours | 4-23 hours | 1-2 days | 3-6 days | 7-41 days | Don't know |  |  |  |  |
| Age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 71.2 | 8.8 | 2.6 | 3.7 | 1.2 | 5.0 | 7.6 | 100.0 | 82.6 | 202 |
| 20-34 | 73.3 | 7.3 | 2.2 | 2.7 | 0.9 | 6.5 | 7.2 | 100.0 | 82.7 | 1,002 |
| 35-49 | 72.7 | 13.1 | 3.5 | 0.6 | 0.4 | 4.7 | 5.0 | 100.0 | 89.3 | 182 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 72.6 | 8.4 | 1.2 | 3.9 | 1.3 | 4.4 | 8.1 | 100.0 | 82.3 | 488 |
| 2-3 | 75.2 | 7.0 | 2.4 | 2.2 | 0.7 | 6.5 | 6.1 | 100.0 | 84.5 | 716 |
| 4-5 | 64.9 | 12.9 | 5.5 | 0.7 | 0.5 | 9.0 | 6.4 | 100.0 | 83.3 | 149 |
| 6+ | (64.1) | (11.6) | (7.0) | (0.0) | (0.0) | (6.4) | (10.9) | 100.0 | (82.7) | 33 |
| Place of delivery |  |  |  |  |  |  |  |  |  |  |
| Health facility | 73.9 | 8.1 | 2.3 | 2.7 | 0.9 | 6.0 | 6.2 | 100.0 | 84.3 | 1,332 |
| Elsewhere | 47.5 | 12.2 | 6.4 | 0.0 | 1.5 | 7.8 | 24.6 | 100.0 | 66.0 | 54 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 75.6 | 7.1 | 2.5 | 2.5 | 0.5 | 5.6 | 6.2 | 100.0 | 85.2 | 872 |
| Non-urban | 68.3 | 10.2 | 2.3 | 2.6 | 1.5 | 6.8 | 8.2 | 100.0 | 80.8 | 514 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 83.5 | 5.3 | 1.9 | 0.0 | 1.0 | 5.8 | 2.5 | 100.0 | 90.8 | 118 |
| Eastern Cape | 72.7 | 12.3 | 1.7 | 0.0 | 1.1 | 2.9 | 9.3 | 100.0 | 86.7 | 163 |
| Northern Cape | 69.3 | 9.4 | 3.6 | 3.3 | 1.0 | 2.7 | 10.7 | 100.0 | 82.3 | 27 |
| Free State | 81.3 | 5.5 | 4.1 | 5.7 | 0.0 | 1.8 | 1.7 | 100.0 | 90.8 | 60 |
| KwaZulu-Natal | 71.0 | 6.5 | 2.6 | 2.4 | 2.5 | 9.2 | 5.8 | 100.0 | 80.1 | 258 |
| North West | 74.3 | 7.8 | 2.4 | 4.3 | 1.0 | 7.3 | 2.9 | 100.0 | 84.5 | 106 |
| Gauteng | 73.6 | 5.3 | 1.9 | 2.9 | 0.3 | 5.8 | 10.2 | 100.0 | 80.8 | 385 |
| Mpumalanga | 65.4 | 10.7 | 4.4 | 3.3 | 0.6 | 8.2 | 7.5 | 100.0 | 80.5 | 127 |
| Limpopo | 68.8 | 16.1 | 2.2 | 3.5 | 0.0 | 4.3 | 5.1 | 100.0 | 87.1 | 144 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | 100.0 | * | 18 |
| Primary incomplete | 56.4 | 12.3 | 7.1 | 0.0 | 0.0 | 3.6 | 20.6 | 100.0 | 75.8 | 60 |
| Primary complete | 58.0 | 6.5 | 1.0 | 1.6 | 0.0 | 17.0 | 15.9 | 100.0 | 65.5 | 50 |
| Secondary incomplete | 74.4 | 8.5 | 2.3 | 2.7 | 0.7 | 5.6 | 5.8 | 100.0 | 85.2 | 706 |
| Secondary complete | 72.8 | 8.3 | 0.9 | 2.1 | 1.9 | 6.6 | 7.3 | 100.0 | 82.0 | 397 |
| More than secondary | 78.6 | 5.9 | 3.8 | 4.5 | 0.0 | 4.2 | 2.9 | 100.0 | 88.3 | 155 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 64.3 | 13.6 | 2.7 | 1.3 | 0.6 | 4.8 | 12.7 | 100.0 | 80.6 | 312 |
| Second | 71.3 | 6.5 | 2.6 | 2.9 | 0.4 | 8.4 | 7.9 | 100.0 | 80.4 | 326 |
| Middle | 78.4 | 6.5 | 2.2 | 2.3 | 2.4 | 6.2 | 2.1 | 100.0 | 87.1 | 291 |
| Fourth | 76.9 | 6.5 | 1.4 | 2.7 | 0.5 | 6.4 | 5.5 | 100.0 | 84.8 | 269 |
| Highest | 75.8 | 7.7 | 3.4 | 4.4 | 0.4 | 3.2 | 5.2 | 100.0 | 86.8 | 189 |
| Total | 72.9 | 8.2 | 2.4 | 2.6 | 0.9 | 6.0 | 6.9 | 100.0 | 83.6 | 1,386 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes women who received a check from a doctor, nurse/midwife, community health worker, or traditional birth attendant
${ }^{2}$ Includes women who received a check after 41 days

Table 9.10 Type of provider of first postnatal check for the mother
Among women age 15-49 giving birth in the 2 years preceding the survey, percent distribution by type of provider of the mother's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Type of health provider of mother's first postnatal check |  |  |  | No postnatal check during the first 2 days after birth | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor | Nurse/midwife | Community health worker | Traditional birth attendant |  |  |  |
| Age at birth |  |  |  |  |  |  |  |
| $<20$ | 15.8 | 66.8 | 0.0 | 0.0 | 17.4 | 100.0 | 202 |
| 20-34 | 19.7 | 62.9 | 0.2 | 0.0 | 17.3 | 100.0 | 1,002 |
| 35-49 | 31.8 | 55.6 | 0.0 | 1.9 | 10.7 | 100.0 | 182 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 17.6 | 64.7 | 0.0 | 0.0 | 17.7 | 100.0 | 488 |
| 2-3 | 22.6 | 61.2 | 0.3 | 0.5 | 15.5 | 100.0 | 716 |
| 4-5 | 19.2 | 63.9 | 0.3 | 0.0 | 16.7 | 100.0 | 149 |
| $6+$ | (30.9) | (51.8) | (0.0) | (0.0) | (17.3) | 100.0 | 33 |
| Place of delivery |  |  |  |  |  |  |  |
| Health facility | 20.9 | 63.1 | 0.0 | 0.3 | 15.7 | 100.0 | 1,332 |
| Elsewhere | 16.5 | 46.5 | 3.1 | 0.0 | 34.0 | 100.0 | 54 |
| Residence |  |  |  |  |  |  |  |
| Urban | 21.4 | 63.2 | 0.2 | 0.4 | 14.8 | 100.0 | 872 |
| Non-urban | 19.5 | 61.2 | 0.1 | 0.0 | 19.2 | 100.0 | 514 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 23.8 | 67.0 | 0.0 | 0.0 | 9.2 | 100.0 | 118 |
| Eastern Cape | 16.2 | 70.4 | 0.0 | 0.0 | 13.3 | 100.0 | 163 |
| Northern Cape | 23.0 | 59.4 | 0.0 | 0.0 | 17.7 | 100.0 | 27 |
| Free State | 38.7 | 51.4 | 0.8 | 0.0 | 9.2 | 100.0 | 60 |
| KwaZulu-Natal | 18.3 | 61.3 | 0.5 | 0.0 | 19.9 | 100.0 | 258 |
| North West | 22.6 | 61.9 | 0.0 | 0.0 | 15.5 | 100.0 | 106 |
| Gauteng | 19.7 | 60.2 | 0.0 | 0.9 | 19.2 | 100.0 | 385 |
| Mpumalanga | 15.8 | 64.7 | 0.0 | 0.0 | 19.5 | 100.0 | 127 |
| Limpopo | 25.0 | 61.6 | 0.5 | 0.0 | 12.9 | 100.0 | 144 |
| Education |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | 100.0 | 18 |
| Primary incomplete | 12.3 | 62.7 | 0.8 | 0.0 | 24.2 | 100.0 | 60 |
| Primary complete | 20.4 | 45.1 | 0.0 | 0.0 | 34.5 | 100.0 | 50 |
| Secondary incomplete | 17.1 | 67.5 | 0.1 | 0.5 | 14.8 | 100.0 | 706 |
| Secondary complete | 21.2 | 60.5 | 0.3 | 0.0 | 18.0 | 100.0 | 397 |
| More than secondary | 35.8 | 52.5 | 0.0 | 0.0 | 11.7 | 100.0 | 155 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 15.1 | 65.3 | 0.1 | 0.0 | 19.4 | 100.0 | 312 |
| Second | 18.6 | 61.6 | 0.2 | 0.0 | 19.6 | 100.0 | 326 |
| Middle | 16.3 | 70.3 | 0.4 | 0.0 | 12.9 | 100.0 | 291 |
| Fourth | 23.6 | 60.0 | 0.0 | 1.3 | 15.2 | 100.0 | 269 |
| Highest | 36.1 | 50.8 | 0.0 | 0.0 | 13.2 | 100.0 | 189 |
| Total | 20.7 | 62.5 | 0.2 | 0.2 | 16.4 | 100.0 | 1,386 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.11 Timing of first postnatal check for the newborn
Percent distribution of most recent live births in the 2 years preceding the survey by time after birth of first postnatal check, and percentage of births with a postnatal check during the first 2 days after birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Time after delivery of newborn's first postnatal check ${ }^{1}$ |  |  |  |  |  | No postnatal check ${ }^{2}$ | Total | Percentage of births with a postnatal check during the first 2 days after birth ${ }^{1}$ | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Less than 1 hour | 1-3 hours | 4-23 hours | 1-2 days | 3-6 days | Don't know |  |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |  |
| <20 | 54.1 | 23.4 | 7.8 | 1.6 | 3.8 | 5.1 | 4.2 | 100.0 | 86.8 | 202 |
| 20-34 | 46.7 | 32.7 | 4.5 | 1.7 | 2.2 | 6.1 | 6.0 | 100.0 | 85.6 | 1,002 |
| 35-49 | 53.2 | 28.4 | 4.2 | 3.2 | 0.9 | 5.2 | 4.9 | 100.0 | 88.9 | 182 |
| Birth order |  |  |  |  |  |  |  |  |  |  |
| 1 | 50.0 | 29.6 | 5.8 | 1.6 | 3.4 | 5.8 | 3.9 | 100.0 | 86.9 | 488 |
| 2-3 | 49.6 | 32.3 | 3.8 | 1.4 | 1.1 | 5.3 | 6.4 | 100.0 | 87.1 | 716 |
| 4-5 | 42.5 | 27.6 | 7.0 | 4.1 | 4.0 | 8.1 | 6.7 | 100.0 | 81.2 | 149 |
| 6+ | (32.8) | (33.1) | (8.0) | (6.3) | (4.1) | (7.2) | (8.5) | 100.0 | (80.2) | 33 |
| Place of delivery |  |  |  |  |  |  |  |  |  |  |
| Health facility | 50.5 | 31.4 | 4.9 | 1.6 | 1.7 | 5.8 | 4.2 | 100.0 | 88.3 | 1,332 |
| Elsewhere | 3.1 | 16.9 | 6.3 | 9.5 | 17.5 | 6.3 | 40.5 | 100.0 | 35.8 | 54 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 51.6 | 31.7 | 3.5 | 1.4 | 2.3 | 5.5 | 4.0 | 100.0 | 88.2 | 872 |
| Non-urban | 43.5 | 29.3 | 7.5 | 2.6 | 2.3 | 6.4 | 8.3 | 100.0 | 83.0 | 514 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 42.5 | 43.7 | 3.4 | 4.3 | 1.4 | 3.3 | 1.4 | 100.0 | 93.8 | 118 |
| Eastern Cape | 49.4 | 29.1 | 7.4 | 2.0 | 2.1 | 1.6 | 8.5 | 100.0 | 87.8 | 163 |
| Northern Cape | 67.5 | 19.1 | 0.9 | 0.8 | 2.8 | 1.8 | 7.1 | 100.0 | 88.3 | 27 |
| Free State | 61.0 | 24.1 | 3.6 | 1.1 | 3.1 | 5.5 | 1.6 | 100.0 | 89.8 | 60 |
| KwaZulu-Natal | 40.2 | 34.0 | 5.2 | 2.5 | 0.5 | 10.0 | 7.6 | 100.0 | 81.9 | 258 |
| North West | 41.7 | 37.8 | 4.7 | 0.0 | 3.5 | 6.5 | 5.9 | 100.0 | 84.2 | 106 |
| Gauteng | 52.7 | 31.3 | 0.9 | 1.2 | 2.1 | 6.7 | 5.0 | 100.0 | 86.2 | 385 |
| Mpumalanga | 62.3 | 14.6 | 6.8 | 0.4 | 4.5 | 4.6 | 6.7 | 100.0 | 84.1 | 127 |
| Limpopo | 41.0 | 29.5 | 13.7 | 3.6 | 3.8 | 4.4 | 4.0 | 100.0 | 87.8 | 144 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | 100.0 | * | 18 |
| Primary incomplete | 41.8 | 25.4 | 4.4 | 3.3 | 0.0 | 2.4 | 22.6 | 100.0 | 74.9 | 60 |
| Primary complete | 30.2 | 40.8 | 6.5 | 0.0 | 1.4 | 18.2 | 3.0 | 100.0 | 77.4 | 50 |
| Secondary incomplete | 49.5 | 29.4 | 6.3 | 1.4 | 2.0 | 6.2 | 5.1 | 100.0 | 86.6 | 706 |
| Secondary complete | 49.5 | 31.6 | 3.3 | 1.4 | 3.5 | 5.5 | 5.3 | 100.0 | 85.7 | 397 |
| More than secondary | 49.7 | 37.0 | 2.5 | 4.4 | 1.6 | 2.6 | 2.3 | 100.0 | 93.6 | 155 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 43.2 | 25.9 | 10.2 | 2.0 | 2.8 | 5.7 | 10.1 | 100.0 | 81.4 | 312 |
| Second | 52.3 | 25.9 | 4.6 | 2.2 | 1.0 | 8.1 | 5.8 | 100.0 | 85.1 | 326 |
| Middle | 44.9 | 35.6 | 3.4 | 1.5 | 3.7 | 5.6 | 5.4 | 100.0 | 85.3 | 291 |
| Fourth | 52.2 | 33.1 | 3.3 | 1.9 | 2.2 | 4.0 | 3.3 | 100.0 | 90.5 | 269 |
| Highest | 51.6 | 36.9 | 1.5 | 1.7 | 1.7 | 5.1 | 1.5 | 100.0 | 91.7 | 189 |
| Total | 48.6 | 30.8 | 5.0 | 1.9 | 2.3 | 5.8 | 5.6 | 100.0 | 86.2 | 1,386 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes newborns who received a check from a doctor, nurse/midwife, community health worker, or traditional birth attendant
${ }^{2}$ Includes newborns who received a check after the first week of life

Table 9.12 Type of provider of first postnatal check for the newborn
Percent distribution of most recent live births in the 2 years preceding the survey by type of provider of the newborn's first postnatal health check during the 2 days after the most recent live birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Type of health provider of newborn's first postnatal check |  |  |  | No postnatal check during the first 2 days after birth | Total | Number of births |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Doctor/ paediatrician | Nurse/midwife | Community health worker | Traditional birth attendant |  |  |  |
| Mother's age at birth |  |  |  |  |  |  |  |
| <20 | 21.1 | 65.8 | 0.0 | 0.0 | 13.2 | 100.0 | 202 |
| 20-34 | 22.2 | 63.4 | 0.0 | 0.0 | 14.4 | 100.0 | 1,002 |
| 35-49 | 35.9 | 53.0 | 0.0 | 0.0 | 11.1 | 100.0 | 182 |
| Birth order |  |  |  |  |  |  |  |
| 1 | 22.2 | 64.8 | 0.0 | 0.0 | 13.1 | 100.0 | 488 |
| 2-3 | 25.3 | 61.8 | 0.0 | 0.0 | 12.9 | 100.0 | 716 |
| 4-5 | 23.3 | 57.6 | 0.3 | 0.0 | 18.8 | 100.0 | 149 |
| $6+$ | (18.8) | (61.4) | (0.0) | (0.0) | (19.8) | 100.0 | 33 |
| Place of delivery |  |  |  |  |  |  |  |
| Health facility | 24.6 | 63.7 | 0.0 | 0.0 | 11.7 | 100.0 | 1,332 |
| Elsewhere | 4.6 | 30.3 | 0.9 | 0.0 | 64.2 | 100.0 | 54 |
| Residence |  |  |  |  |  |  |  |
| Urban | 26.2 | 61.9 | 0.1 | 0.0 | 11.8 | 100.0 | 872 |
| Non-urban | 19.8 | 63.2 | 0.0 | 0.0 | 17.0 | 100.0 | 514 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 36.7 | 57.1 | 0.0 | 0.0 | 6.2 | 100.0 | 118 |
| Eastern Cape | 18.9 | 68.9 | 0.0 | 0.0 | 12.2 | 100.0 | 163 |
| Northern Cape | 30.5 | 57.8 | 0.0 | 0.0 | 11.7 | 100.0 | 27 |
| Free State | 35.0 | 54.0 | 0.8 | 0.0 | 10.2 | 100.0 | 60 |
| KwaZulu-Natal | 20.7 | 61.2 | 0.0 | 0.0 | 18.1 | 100.0 | 258 |
| North West | 26.8 | 57.3 | 0.0 | 0.0 | 15.8 | 100.0 | 106 |
| Gauteng | 22.5 | 63.7 | 0.0 | 0.0 | 13.8 | 100.0 | 385 |
| Mpumalanga | 23.3 | 60.8 | 0.0 | 0.0 | 15.9 | 100.0 | 127 |
| Limpopo | 20.2 | 67.6 | 0.0 | 0.0 | 12.2 | 100.0 | 144 |
| Mother's education |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | 100.0 | 18 |
| Primary incomplete | 12.0 | 62.2 | 0.8 | 0.0 | 25.1 | 100.0 | 60 |
| Primary complete | 16.5 | 60.9 | 0.0 | 0.0 | 22.6 | 100.0 | 50 |
| Secondary incomplete | 20.6 | 66.0 | 0.0 | 0.0 | 13.4 | 100.0 | 706 |
| Secondary complete | 24.3 | 61.4 | 0.0 | 0.0 | 14.3 | 100.0 | 397 |
| More than secondary | 41.6 | 52.0 | 0.0 | 0.0 | 6.4 | 100.0 | 155 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 13.7 | 67.5 | 0.1 | 0.0 | 18.6 | 100.0 | 312 |
| Second | 17.6 | 67.5 | 0.0 | 0.0 | 14.9 | 100.0 | 326 |
| Middle | 19.7 | 65.6 | 0.0 | 0.0 | 14.7 | 100.0 | 291 |
| Fourth | 32.7 | 57.8 | 0.0 | 0.0 | 9.5 | 100.0 | 269 |
| Highest | 44.9 | 46.8 | 0.0 | 0.0 | 8.3 | 100.0 | 189 |
| Total | 23.8 | 62.4 | 0.0 | 0.0 | 13.8 | 100.0 | 1,386 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 9.13 Content of postnatal care for newborns
Among most recent live births in the 2 years preceding the survey, percentage for whom selected functions were performed during the first 2 days after the birth and percentages with at least two or at least four signal functions performed during the first 2 days after the birth, according to background characteristics, South Africa DHS 2016

|  |  |  |  |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed
${ }^{1}$ Captures newborns who were weighed "at birth." May exclude some newborns who were weighed during the 2 days after birth

Table 9.14 Discharge timing
Percentage of most recent live births in the 5 years preceding the survey that took place in a health facility in which the child and mother were discharged at the same time, percentage in which the child was discharged before the mother, and percentage in which the child was discharged after the mother, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage discharged at same time as mother | Percentage discharged before the mother | Percentage discharged after the mother | Number of births in a health facility |
| :---: | :---: | :---: | :---: | :---: |
| Age at birth |  |  |  |  |
| <20 | 95.9 | 1.3 | 2.8 | 421 |
| 20-34 | 94.5 | 0.6 | 4.9 | 2,119 |
| 35-49 | 89.6 | 1.6 | 8.3 | 377 |
| Birth order |  |  |  |  |
| 1 | 93.5 | 0.6 | 5.8 | 1,025 |
| 2-3 | 94.3 | 0.6 | 4.9 | 1,525 |
| 4-5 | 94.0 | 2.7 | 3.3 | 300 |
| 6+ | 97.6 | 0.0 | 2.4 | 67 |
| Residence |  |  |  |  |
| Urban | 92.0 | 0.7 | 7.1 | 1,888 |
| Non-urban | 97.7 | 0.9 | 1.2 | 1,029 |
| Province |  |  |  |  |
| Western Cape | 91.3 | 3.2 | 5.6 | 272 |
| Eastern Cape | 95.5 | 0.9 | 3.7 | 305 |
| Northern Cape | 95.5 | 1.0 | 3.0 | 59 |
| Free State | 93.5 | 0.5 | 4.6 | 139 |
| KwaZulu-Natal | 97.5 | 0.9 | 1.5 | 532 |
| North West | 95.9 | 0.4 | 3.3 | 232 |
| Gauteng | 89.8 | 0.0 | 10.2 | 818 |
| Mpumalanga | 94.3 | 1.2 | 4.2 | 265 |
| Limpopo | 99.0 | 0.8 | 0.3 | 295 |
| Education |  |  |  |  |
| No education | (100.0) | (0.0) | (0.0) | 36 |
| Primary incomplete | 94.5 | 0.7 | 4.8 | 126 |
| Primary complete | 99.7 | 0.0 | 0.3 | 103 |
| Secondary incomplete | 94.8 | 1.0 | 4.1 | 1,423 |
| Secondary complete | 94.1 | 0.8 | 5.0 | 881 |
| More than secondary | 88.5 | 0.7 | 10.8 | 349 |
| Wealth quintile |  |  |  |  |
| Lowest | 96.5 | 0.8 | 2.7 | 599 |
| Second | 95.8 | 1.2 | 3.0 | 703 |
| Middle | 95.0 | 0.9 | 4.0 | 661 |
| Fourth | 94.5 | 0.4 | 4.8 | 540 |
| Highest | 85.4 | 0.8 | 13.7 | 415 |
| Total | 94.0 | 0.8 | 5.0 | 2,917 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

## CHILD HEALTH

## Key Findings

- Birth weight: Among births in the last 5 years with a reported birth weight, $15 \%$ had a low birth weight (less than $2.5 \mathrm{~kg})$.
- Vaccinations: Overall, 61\% of children age 12-23 months received all basic vaccinations, and 53\% received all ageappropriate vaccinations. However, among the 66\% of children in this age group whose vaccination card was seen, $89 \%$ received all basic vaccinations and $79 \%$ received all age-appropriate vaccinations.
- Symptoms of acute respiratory infection (ARI): 3\% of children under age 5 had symptoms of ARI during the 2 weeks before the survey. Advice or treatment was sought for $88 \%$ of children with ARI symptoms; advice or treatment was sought for $31 \%$ of children the same day or the day after symptoms appeared.
- Fever: 20\% of children under age 5 had a fever in the 2 weeks before the survey. Sixty-eight percent of these children were taken for advice or treatment; for $31 \%$ of children with a fever, advice or treatment was sought the same day or the day after the fever appeared.
- Diarrhoea: 10\% of children under age 5 had diarrhoea in the 2 weeks before the survey, and advice or treatment was sought for 63\% of these children. Eighty-three percent of children with diarrhoea received ORT. However, only $24 \%$ received ORT, continued feeding, and zinc, as recommended.

Information on child health and survival can help policymakers and programme managers assess the efficacy of current strategies, formulate appropriate interventions to prevent deaths from childhood illnesses, and improve the health of children in South Africa.

This chapter presents information on birth weight and vaccination status for young children. It also looks at the prevalence of, and treatment practices for, three common childhood illnesses: acute respiratory infection (ARI), fever, and diarrhoea.

### 10.1 Birth Weight

## Low birth weight

Percentage of births with a reported birth weight below 2.5 kilograms regardless of gestational age
Sample: Live births in the 5 years before the survey that have a reported birth weight, from either a written record or a mother's report

Birth weight is a major determinant of infant and child health and mortality. Children who weigh less than 2.5 kilograms ( kg ) at birth or who are reported to be very small or smaller than average are considered to have a higher than average risk of early childhood death. For births in the 5 years preceding the survey, birth weight was recorded in the questionnaire if available from either a written record or the mother's recall. Because birth weight may not be known for many babies, mothers' estimates of their baby's size at birth were also obtained. Although these estimates are subjective, they can be a useful proxy for birth weight.

Eighty-four percent of births were reported as average or larger than average, $8 \%$ as small, and $7 \%$ as very small. Of the $88 \%$ of births with a reported birth weight, $15 \%$ had a birth weight of less than 2.5 kg (Table 10.1).

## Patterns by background characteristics

- Nineteen percent of births to older mothers (age 35-49) weighed less than 2.5 kg , as compared with $14 \%$ of births to mothers younger than age 35 .
- Twenty-seven percent of births to women who smoke cigarettes or tobacco weighed less than 2.5 kg , compared with $14 \%$ of births to women who do not smoke.
- By province, the proportion of infants with a low birth weight was highest in Northern Cape (20\%) and lowest in Limpopo (11\%).
- Although infants born to wealthier and better educated mothers were generally more likely to have a reported birth weight, the prevalence of low birth weight did not appear to be correlated with household wealth or mother's education.


### 10.2 Vaccination of Children

Universal immunisation of children against common vaccine-preventable diseases is crucial to reducing infant and child morbidity and mortality. In South Africa, routine childhood vaccines protect against tuberculosis ( BCG vaccine); diphtheria, tetanus, and pertussis ( DTaP vaccine); polio (oral polio vaccine [OPV] or inactivated polio vaccine [IPV]); Haemophilus influenzae type b (Hib vaccine); hepatitis B (HepB vaccine); Streptococcus pneumoniae (pneumococcal conjugate vaccine [PCV]); rotavirus (rotavirus vaccine [RV]); and measles (measles vaccine). The SADHS 2016 collected information on coverage of all of these vaccines among children born in the 3 years preceding the survey.

Historically, an important measure of vaccination coverage has been the proportion of children receiving all "basic" vaccinations. Children are considered to have received all basic vaccinations if they have received the BCG vaccine, three doses each of the DTaP and polio vaccines, and a single dose of the measles vaccine. In South Africa, the BCG vaccine is usually given at birth or at first clinic contact, while the DTaP and polio
vaccines are given in combination with Hib (DTaP-IPV-Hib) at approximately age 6,10 , and 14 weeks. ${ }^{1}$ A first measles vaccination should be given at or soon after age 9 months. ${ }^{2}$

## All basic vaccinations coverage

Percentage of children who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report). To have received all basic vaccinations, a child must receive at least:

- One dose of BCG vaccine, which protects against tuberculosis
- Three doses of DTaP vaccine, which protects against diphtheria, tetanus, and pertussis (whooping cough)
- Three doses of polio vaccine
- One dose of measles vaccine

Sample: Living children age 12-23 months or age 24-35 months

Information on vaccination coverage was obtained in two ways in the SADHS 2016: from written vaccination records, including the Road-to-Health booklet and other vaccination or health cards, and from verbal reports. For each child born in the 3 years before the survey, mothers were asked to show the interviewer the Road-to-Health booklet or other document used for recording the child's immunisations. If the Road-to-Health booklet or other document was available, the interviewer copied the dates of each vaccination received. If a vaccination was not recorded in the Road-to-Health booklet or on the document as having been administered, the mother was asked to recall whether that particular vaccination had been given. If the mother was not able to present the Road-to-Health booklet or other document for a child, she was asked to recall whether the child had received the BCG, polio, DTaP-IPV-Hib, hepatitis B, pneumococcal, rotavirus, and measles vaccines. If she indicated that the child had received any of the multi-dose vaccines, she was asked the number of doses the child received.

Sixty-one percent of children age 12-23 months and $63 \%$ of children age $24-35$ months received all basic vaccinations, with $58 \%$ of those age $12-23$ months and $56 \%$ of those age $24-35$ months having received all basic vaccinations by age 12 months (Table 10.2).

A second, more critical measure of vaccination coverage is the proportion of children age 12-23 months and 24-35 months who have received all age-appropriate vaccinations. The South African immunisation programme considers a child age 12-23 months to have received all age-appropriate vaccinations if the child has received all basic vaccinations, doses of OPV at birth and at 6 weeks, three doses of the HepB vaccine (given at age 6, 10, and 14 weeks), three doses of PCV (given at age 6 weeks, 14 weeks, and 9 months), and two doses of RV (given at age 6 and 14 weeks). Children age 24-35 months have received all age-appropriate vaccinations if they have received a fourth dose of DTaP-IPV-Hib and a second dose of the measles vaccine (both given at 18 months) in addition to all of the age-appropriate vaccinations relevant for a child age 1223 months. Fifty-three percent of children age 12-23 months and $42 \%$ of children age $24-35$ months have received all of the vaccines appropriate for their age. Forty-eight percent of children age 12-23 months and $35 \%$ of those age 24-35 months received the vaccines appropriate for their age by age 12 months and by age 24 months, respectively, as recommended.

[^16]Figure $\mathbf{1 0 . 1}$ shows coverage of all age-appropriate vaccinations among children age 12-23 months. Coverage was highest for the BCG vaccine ( $93 \%$ ) and the birth dose of polio vaccine ( $92 \%$ ). In the case of multi-dose vaccines such as DTaP-IPV-Hib, HepB, PCV, and RV, coverage is highest for the first dose and falls in subsequent doses. Coverage rates for the first doses of DTaP-IPV-Hib, HepB, PCV, and RV were $91 \%, 90 \%, 89 \%$, and $88 \%$, respectively. Sixtyfive percent of children age 12-23 months received the third dose of DTaP-IPV-Hib, $65 \%$ received the third dose of HepB, $62 \%$ received the third dose of PCV, and $70 \%$ received the second dose of RV. The difference between the percentages of children receiving the first and third doses is 26 percentage points for DTaP-IPV-Hib, 25 percentage points for HepB , and 27 percentage points for PCV ; the difference between the percentages of children receiving the first and second doses of RV is 18 percentage points.

A similar pattern is observed among children age

Figure 10.1 All age-appropriate childhood vaccinations


24-35 months, although coverage for first doses is slightly lower than that reported among children age 12-23 months. Coverage rates for the two vaccine doses given at age 18 months, namely, the fourth dose of DTaP-IPV-Hib and the second measles dose, are $48 \%$ and $59 \%$, respectively (Table 10.2).

Overall, $5 \%$ of children age 12-23 months and $8 \%$ of those age $24-35$ months were reported not to have received any vaccinations. No child whose vaccination card was seen was unimmunised.

## Vaccination Card Ownership and Availability

Vaccination cards are a critical tool in ensuring that a child receives all recommended vaccinations on schedule. Among children age 12-23 months and 24-35 months whose mothers were interviewed, $98 \%$ and $99 \%$, respectively, ever had a Road-to-Health card or other document on which their vaccinations were recorded. However, not all mothers were able to produce their child's vaccination card at the time of the interview. Only $66 \%$ of children age 12-23 months and $61 \%$ of children age $24-35$ months had vaccination cards available at the time of the interview (Table 10.3). A majority of the cards that were not seen were reported to be with a relative, which was expected given that there were many instances in which the child was not a resident in the household; others were misplaced, lost, or destroyed (data not shown). Mothers' recall may not be as reliable as written vaccination records and, therefore, may result in an underestimate of vaccinations (Miles et al. 2013).

Comparison with the SADHS 1998: The percentage of children age 12-23 months in South Africa who had received all basic vaccinations decreased slightly from $63 \%$ in 1998 to $61 \%$ in 2016 . The percentage who received all basic vaccinations by age 12 months increased slightly from $55 \%$ to $58 \%$. In $1998,2 \%$ of children were reported to have received no vaccinations, as compared with $5 \%$ in 2016 . The percentages of children who had a vaccination card seen at the time of the interview were $75 \%$ in 1998 and $66 \%$ in 2016.

Patterns by background characteristics

- Eighty-nine percent of children age 12-23 months whose vaccination card was seen received all basic vaccinations, as compared with $7 \%$ of children whose vaccination card was not seen and whose information was based entirely on their mother's recall. Seventy-nine percent of children age 12-23 months with a vaccination card received all age-appropriate vaccinations, compared with less than $1 \%$ of children without a card or without a card seen (Figure 10.2).
- A similar pattern was apparent among children age 24-35 months; $69 \%$ of children with a vaccination card received all age-appropriate vaccines, compared with $0.2 \%$ whose immunisation history was based entirely on their mother's recall (Table 10.4).
- Children age 12-23 months who reside in non-urban areas are somewhat more likely to receive all basic vaccinations than children residing in urban areas ( $65 \%$ versus $59 \%$ ).
- Coverage rates for basic vaccinations among children age 12-23 months residing in North West ( $56 \%$ ), Gauteng (52\%), and Mpumalanga (56\%) are lower than the national average (Figure 10.3).


## Vaccination Coverage according to Child's Residence and Caregiver's Questionnaire

The information on vaccination status presented in Table 10.2, Table 10.3, and Table 10.4 was collected by interviewing the mother, even in those instances where the child did not reside with her. Table $\mathbf{1 0 . 5}$ presents vaccination coverage according to children's residence with their mother. Coverage of each vaccine for which information was collected is higher among children who live with their mother than among those who live elsewhere. Among children age 12-23 months, $59 \%$ of those residing with their mother have received all age-appropriate vaccinations, as compared with only $8 \%$ of those who do not reside

Figure 10.3 Vaccination coverage by province

Percentage of children age 12-23 months who received all basic vaccines at any time before the survey


Note: Figures in parentheses are based on 25-49 unweighted cases with their mother. Among children age 24-35 months, $49 \%$ of those residing with their mother have received all age-appropriate vaccinations, compared with only $3 \%$ of those living elsewhere. These findings may be explained by the fact that mothers whose children did not reside with them were much less likely to have a vaccination card that was seen, and therefore the vaccination data were collected via recall.

In an effort to collect higher quality information about vaccination coverage among children who do not reside with their mother, data on childhood vaccinations were captured by interviewing caregivers of children whose mothers are deceased or who do not live in the same household as their mother. Among children age 12-23 months whose vaccination information was collected through a caregiver, $72 \%$ ever had a vaccination card and $65 \%$ had a vaccination card that was seen at the time of the interview; similarly, $70 \%$
of children age 24-35 months ever had a vaccination card and $62 \%$ had a vaccination card that was seen (Table 10.6). Thus, while the percentage of children who ever had a vaccination card was lower among those whose information was collected through interviews with caregivers than those whose information was collected through interviews with mothers, the percentage of vaccination cards seen was similar.

Table 10.5 also presents comparisons of vaccination coverage among children who reside with their mother and children whose vaccination information was collected through an interview with a caregiver. Among children age 12-23 months, $59 \%$ of those living with their mother and $51 \%$ of those living with a caregiver other than their mother received all age-appropriate vaccines; $4 \%$ of children living with their mother received no vaccinations, as compared with $14 \%$ of children living with a caregiver. Among children age $24-35$ months, $49 \%$ of those living with their mother and $51 \%$ of those living with a caregiver received all age-appropriate vaccines.

## Reasons Vaccinations Were Missed, Late, or Not Given

Among children age 12-35 months whose vaccination information was collected by interviewing their mother, $23 \%$ ever missed a vaccination, received a vaccination late, or did not receive any vaccinations at all (Table 10.7). For such children, mothers were asked why the child missed a vaccination, received it late, or did not get any vaccinations. The most commonly reported reason was that vaccines were out of stock at clinics $(49 \%)$. Other reasons reported by mothers included that they were too busy $(11 \%)$ or that the child was ill ( $10 \%$ ). Less than $1 \%$ of mothers reported fear of a vaccine's side effects as a reason for delaying or skipping a vaccination.

### 10.3 Symptoms of Acute Respiratory Infection

Acute respiratory infection (predominantly pneumonia) is a common cause of death in young children. Caregivers are advised that a young child with a cough and/or difficult breathing should be taken to a health facility promptly. Current guidelines advise a syndromic approach to the treatment of ARI whereby children with fast breathing and/or chest indrawing are treated with an antibiotic (WHO 2014b). However, in cases where the health professional is confident that the symptoms are related to a viral infection, it is reasonable not to prescribe antibiotics.

## Treatment of symptoms of acute respiratory infection (ARI)

Children with symptoms of ARI for whom advice or treatment was sought. ARI symptoms consist of (1) short, rapid breathing that is chest-related and/or (2) difficult breathing that is chest-related.
Sample: Children under age 5 with symptoms of ARI in the 2 weeks before the survey

Mothers reported that $3 \%$ of children under age 5 had ARI symptoms in the 2 weeks before the survey (Table 10.8). Advice or treatment was sought for $88 \%$ of children with ARI symptoms; among approximately onethird ( $31 \%$ ) of children with ARI symptoms, advice or treatment was sought the same day or the day after their symptoms appeared.

Advice or treatment was most commonly sought from public sector health facilities: half ( $50 \%$ ) of all children with ARI symptoms were taken to a government clinic or health centre, and a further $6 \%$ were taken to a government hospital. In $34 \%$ of cases, advice or treatment was sought from the private sector, including a private doctor ( $9 \%$ ), a private hospital/clinic ( $3 \%$ ), or a chemist or pharmacy ( $23 \%$ ) (Table 10.9). This latter finding is of concern, as children for whom advice or treatment is sought from a chemist or pharmacy are unlikely to receive antibiotics if they are indicated.

### 10.4 Fever

Fever is a common symptom of a variety of illnesses in young children. In areas where malaria is prevalent, all children with fever should access health services as it is essential to exclude malaria as the cause of the fever. However, in non-malaria areas, home treatment of fever not associated with other symptoms (e.g., fast breathing) may be appropriate.

## Treatment of fever

Children with fever for whom advice or treatment was sought.
Sample: Children under age 5 with a fever in the 2 weeks before the survey

Among children under age 5, $20 \%$ were reported to have had a fever in the 2 weeks before the survey. Sixtyeight percent of children with a fever were taken for advice or treatment, and $31 \%$ were taken for advice or treatment the same day as or the day after the fever's onset (Table 10.10). Thirty percent of children under age 5 with a fever received antibiotics; this proportion seems very high given that most episodes of fever in young children do not require antibiotics.

## Patterns by background characteristics

- The prevalence of fever was lowest among children age 0-5 months (12\%), peaked among children age 6-11 months ( $26 \%$ ), and then gradually fell with increasing age.
- Although fever was common across all wealth quintiles, children in wealthier households were more likely than those in poorer households to access advice or treatment $(73 \%$ of children in the highest wealth quintile versus $64 \%$ in the lowest quintile).
- Children from wealthier households were also the most likely to receive antibiotic drugs; 44\% of children in the highest wealth quintile were given antibiotics. This means that about 1 in 11 children in this wealth quintile received antibiotics for fever in the preceding 2 weeks.

As shown in Table 10.11, for $41 \%$ of children with a fever, advice or treatment was sought from public sector health facilities; for $27 \%$, advice or treatment was sought from the private medical sector. Among children with a fever for whom advice or treatment was sought, the most common provider of advice or treatment was a government clinic or health centre (54\%), followed by a chemist or pharmacy (22\%).

### 10.5 Diarrhoeal Disease

Diarrhoeal disease remains an important cause of mortality and morbidity among young children in South Africa. Treatment of diarrhoea in children should include increased fluids, continued feeding, and a 5-day course of zinc. The increased fluids can be provided as increased feeds (especially increased breastfeeding), as clinic-recommended homemade fluids (RHF) consisting of a sugar-salt solution, or as fluid prepared from a packet of oral rehydration salts (ORS).

Provision of increased fluids reduces the risk of the child becoming dehydrated, and widespread use of oral rehydration therapy (ORT) has resulted in a decline in deaths of young children associated with dehydration and shock. Continued feeding is important, as repeated episodes or prolonged diarrhoea place a child at risk of developing acute malnutrition. As deaths from dehydration and shock have declined, a higher proportion of deaths associated with diarrhoea are now due to complications of acute malnutrition.

Zinc has been shown to reduce the severity and duration of diarrhoea, and it is recommended that all children with diarrhoea receive a 5-day course of zinc. This means that, unlike previously when home treatment of mild cases of diarrhoea with RHF and continued feeding was appropriate, all children with diarrhoea should now access care in order to receive zinc.

### 10.5.1 Prevalence of Diarrhoea and Treatment-Seeking Behaviour

Mothers reported that $10 \%$ of children under age 5 had a diarrhoeal episode in the 2 weeks before the survey (Table 10.12). Advice or treatment was sought for $63 \%$ of these children. It is important to note that treatment of diarrhoea in young children includes provision of zinc; thus, advice or treatment should be sought in all cases of diarrhoea in young children.

## Patterns by background characteristics

- The prevalence of diarrhoea peaks among children age 6-23 months (16\%-17\%) (Figure 10.4). This corresponds to the time when children start losing protection from maternal antibodies through breastfeeding, begin to walk, and are at increased risk of contamination from the environment. Treatment was most commonly sought for children age $36-47$ months ( $80 \%$ ).
- Urban children with diarrhoea were more likely to be taken for advice or treatment than non-urban children ( $66 \%$ versus $60 \%$ ).

Figure 10.4 Diarrhoea prevalence by age


- Advice or treatment was more likely to be sought for female children with diarrhoea than male children ( $67 \%$ versus $60 \%$ ).
- The percentage of children under age 5 who had diarrhoea in the 2 weeks before the survey was highest in North West (16\%) and KwaZulu-Natal (14\%) and lowest in Western Cape (5\%) and Free State (6\%). However, because of the dearth of cases, it is not possible to compare treatment-seeking behaviour.
- Children from the lowest two wealth quintiles are more likely to have diarrhoea than those from higher wealth quintiles but are less likely to be taken for advice or treatment.


### 10.5.2 Feeding Practices during an Episode of Diarrhoea

Appropriate feeding practices
Children with diarrhoea are given more liquids than usual and as much food or more than usual.
Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

To reduce dehydration and minimise the effects of diarrhoea on nutritional status, mothers are encouraged to continue normal feeding of children with diarrhoea and to increase the amount of fluids given.

Only $15 \%$ of children under age 5 with diarrhoea in the 2 weeks before the survey were given more liquids than usual, as recommended. Fortyfour percent received the same amount of liquids. It is of concern that $35 \%$ of children were given a somewhat less or much less fluids than usual, and $6 \%$ were given no fluids at all (Figure 10.5). Children who were breastfeeding were more likely than nonbreastfeeding children to receive more or the same amount of fluid as usual ( $72 \%$ versus 55\%) (Table 10.13).

Figure 10.5 Feeding practices during diarrhoea
Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey


Just over half ( $51 \%$ ) of children with diarrhoea were fed according to the recommended practice of giving the same or more food than usual. Forty-three percent of children were given much less or somewhat less food than usual, while 2\% received no food during diarrhoea (Figure 10.5).

### 10.5.3 Oral Rehydration Therapy and Other Treatments

## Oral rehydration therapy (ORT)

Children with diarrhoea are given increased fluids, a fluid made from a special packet of oral rehydration salts (ORS), or clinic-recommended homemade fluids (RHF).
Sample: Children under age 5 with diarrhoea in the 2 weeks before the survey

As noted previously, all children with diarrhoea should receive increased fluids, continued feeding, and oral zinc. Eighty-three percent of children received ORT, either as increased fluids ( $15 \%$ ), ORS packets (51\%), or recommended home fluids (73\%) (Table $\mathbf{1 0 . 1 3}$ and Table 10.14). Fifty-seven percent of children received ORT and continued feeding, and $37 \%$ of children received zinc. Overall, only $24 \%$ of children received all three interventions (i.e., ORT, continued feeding, and zinc) (Figure 10.6). It appears that while there is good awareness and use of ORT, more attention needs to be paid to ensuring that mothers and other caregivers are aware of the importance of continued feeding and provision of zinc during episodes of diarrhoea.

Figure 10.6 Treatment of diarrhoea
Percentage of children under age 5 with diarrhoea in the 2 weeks before the survey


Eleven percent of children with diarrhoea received antibiotics, and $2 \%$ received antimotility drugs. Antibiotics are generally not indicated for diarrhoea but may be prescribed in certain cases and for concomitant illnesses. Antimotility drugs are contraindicated in children and should not be given.

Comparison with the SADHS 1998: There has been little change since 1998 in the percentage of children with diarrhoea who received ORT ( $81 \%$ in 1998 and $83 \%$ in 2016).

## Patterns by background characteristics

- Boys and girls with diarrhoea are equally likely to be given continued feeding, ORT, and zinc ( $24 \%$ and $25 \%$, respectively).
- Overall, differences in the treatment of children from urban and non-urban areas are small. However, urban children are more likely than non-urban children to be given zinc ( $41 \%$ versus $32 \%$ ), ORS and zinc ( $33 \%$ versus $22 \%$ ), and continued feeding, ORT, and zinc ( $29 \%$ versus $18 \%$ ).

Among children with diarrhoea for whom advice or treatment was sought, the most common source of advice or treatment was a government clinic or health centre ( $60 \%$ ), followed by a private doctor ( $11 \%$ ) and a chemist or pharmacy (9\%) (Table 10.15).

### 10.5.4 Knowledge of ORS Packets and Clinic-Recommended Homemade Fluids

Among all women age 15-49, regardless of whether or not they have children, $62 \%$ know about ORS packets and $90 \%$ know about clinic-recommended homemade fluids (RHF) for the treatment of diarrhoea (Table 10.16).

Patterns by background characteristics

- Knowledge of both ORS packets and RHF increases with age.
- Slightly more women in non-urban than urban areas know about RHF ( $93 \%$ versus $88 \%$ ); in contrast, women in urban areas are more likely than women in non-urban areas to know about ORS packets ( $64 \%$ versus $58 \%$ ).
- Only $83 \%$ of women in Gauteng know about RHF, as compared with more than $90 \%$ of women in the other provinces. Women in KwaZulu-Natal (79\%) and Western Cape (72\%) are most knowledgeable about ORS packets, while women in Limpopo (42\%) and Mpumalanga (46\%) are least knowledgeable.


### 10.6 Prevalence and Treatment of Childhood Illness-Summary

Fever and diarrhoea were more common than ARI symptoms, but children with ARI symptoms were more likely to be taken for advice or treatment. Advice or treatment was sought for $88 \%$ of children with ARI symptoms, $68 \%$ of children with a fever, and $63 \%$ of children with diarrhoea (Figure 10.7).

## Figure 10.7 Prevalence and treatment of childhood illness

Percentage of children under age 5 with symptoms in the 2 weeks before the survey


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Table 10.1 Child's size and weight at birth
Percent distribution of live births in the 5 years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the 5 years preceding the survey that have a reported birth weight, and among live births in the 5 years preceding the survey with a reported birth weight, percentage less than 2.5 kg , according to background characteristics, South Africa DHS 2016

| Background characteristic | Percent distribution of births by size of baby at birth |  |  |  |  | Percentage of births that have a reported birth weight ${ }^{1}$ | Number of births | Among births with a reported birth weight ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Very small | Smaller than average | Average or larger | Don't know | Total |  |  | Percentage less than 2.5 kg | Number of births |
| Mother's age at birth |  |  |  |  |  |  |  |  |  |
| <20 | 5.1 | 7.4 | 86.2 | 1.3 | 100.0 | 85.5 | 549 | 13.8 | 470 |
| 20-34 | 6.1 | 8.2 | 84.9 | 0.8 | 100.0 | 89.3 | 2,574 | 13.9 | 2,299 |
| 35-49 | 12.6 | 9.4 | 77.3 | 0.7 | 100.0 | 86.8 | 449 | 18.8 | 389 |
| Birth order |  |  |  |  |  |  |  |  |  |
| 1 | 6.2 | 7.8 | 85.3 | 0.7 | 100.0 | 88.3 | 1,281 | 16.0 | 1,132 |
| 2-3 | 7.1 | 8.2 | 84.0 | 0.6 | 100.0 | 90.3 | 1,817 | 13.4 | 1,640 |
| 4-5 | 7.7 | 9.1 | 81.5 | 1.6 | 100.0 | 82.1 | 370 | 15.4 | 304 |
| 6+ | 3.8 | 8.1 | 82.1 | 6.0 | 100.0 | 79.3 | 104 | 12.8 | 82 |
| Mother's smoking status ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| Smokes cigarettes/ |  |  |  |  |  |  |  |  |  |
| tobacco | 11.9 | 11.2 | 76.3 | 0.6 | 100.0 | 93.6 | 70 | 27.1 | 65 |
| Does not smoke | 6.1 | 8.7 | 84.4 | 0.9 | 100.0 | 87.6 | 1,738 | 14.2 | 1,523 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 6.9 | 7.5 | 84.7 | 1.0 | 100.0 | 89.4 | 2,281 | 14.4 | 2,039 |
| Non-urban | 6.5 | 9.5 | 83.3 | 0.8 | 100.0 | 86.7 | 1,291 | 14.8 | 1,120 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 11.4 | 8.0 | 80.6 | 0.0 | 100.0 | 97.1 | 313 | 17.9 | 304 |
| Eastern Cape | 6.1 | 7.2 | 86.0 | 0.7 | 100.0 | 89.2 | 398 | 14.3 | 355 |
| Northern Cape | 4.1 | 7.0 | 85.7 | 3.1 | 100.0 | 85.3 | 69 | 19.8 | 59 |
| Free State | 6.4 | 11.5 | 81.2 | 0.9 | 100.0 | 89.2 | 164 | 17.0 | 146 |
| KwaZulu-Natal | 5.8 | 7.4 | 86.0 | 0.7 | 100.0 | 89.8 | 654 | 16.9 | 587 |
| North West | 7.6 | 13.7 | 78.7 | 0.0 | 100.0 | 87.7 | 282 | 15.6 | 248 |
| Gauteng | 6.4 | 5.0 | 87.1 | 1.6 | 100.0 | 86.0 | 1,013 | 12.0 | 871 |
| Mpumalanga | 7.2 | 9.2 | 82.5 | 1.1 | 100.0 | 82.6 | 332 | 14.2 | 275 |
| Limpopo | 5.8 | 13.5 | 80.3 | 0.4 | 100.0 | 90.5 | 347 | 11.4 | 314 |
| Mother's education |  |  |  |  |  |  |  |  |  |
| No education | 4.3 | 10.6 | 83.7 | 1.4 | 100.0 | 67.5 | 50 | (14.7) | 34 |
| Primary incomplete | 8.4 | 9.9 | 80.3 | 1.4 | 100.0 | 75.4 | 182 | 13.8 | 137 |
| Primary complete | 3.5 | 7.3 | 85.6 | 3.5 | 100.0 | 81.2 | 138 | 17.1 | 112 |
| Secondary incomplete | 7.4 | 8.9 | 83.0 | 0.7 | 100.0 | 86.7 | 1,762 | 15.0 | 1,527 |
| Secondary complete | 6.0 | 7.1 | 86.2 | 0.7 | 100.0 | 92.5 | 1,043 | 13.6 | 965 |
| More than secondary | 6.6 | 7.3 | 85.3 | 0.8 | 100.0 | 96.4 | 397 | 14.6 | 383 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 6.3 | 9.8 | 82.6 | 1.2 | 100.0 | 86.2 | 787 | 14.9 | 678 |
| Second | 7.6 | 8.7 | 83.2 | 0.4 | 100.0 | 83.9 | 865 | 16.0 | 726 |
| Middle | 5.1 | 6.9 | 86.7 | 1.4 | 100.0 | 89.0 | 788 | 12.3 | 702 |
| Fourth | 7.9 | 8.5 | 83.0 | 0.6 | 100.0 | 92.4 | 657 | 14.1 | 607 |
| Highest | 7.2 | 6.2 | 85.8 | 0.8 | 100.0 | 93.9 | 476 | 15.6 | 447 |
| Total | 6.8 | 8.2 | 84.2 | 0.9 | 100.0 | 88.4 | 3,572 | 14.5 | 3,158 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Based on either a written record or the mother's recall
${ }^{2}$ Questions on smoking were asked in a subset of households

Table 10.2 Vaccinations by source of information
Percentage of children age 12-23 months and children age 24-35 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage who received specific vaccines by the appropriate age, South Africa DHS 2016

| Vaccine | Children age 12-23 months |  |  |  | Children age 24-35 months |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Vaccination card ${ }^{1}$ | Mother's report | Either source | Vaccinated by appropriate age ${ }^{2,3}$ | Vaccination card ${ }^{1}$ | Mother's report | Either source | Vaccinated by appropriate age ${ }^{3,4}$ |
| BCG | 64.6 | 27.9 | 92.5 | 92.2 | 60.7 | 30.8 | 91.5 | 90.7 |
| Polio (OPV) |  |  |  |  |  |  |  |  |
| 0 (birth dose) | 65.5 | 26.8 | 92.3 | 92.3 | 58.9 | 29.4 | 88.3 | 87.5 |
| 1 | 65.8 | 11.8 | 77.6 | 77.5 | 58.1 | 13.4 | 71.5 | 70.3 |
| DTaP-IPV-Hib |  |  |  |  |  |  |  |  |
| 1 | 66.3 | 24.8 | 91.2 | 90.1 | 60.9 | 26.6 | 87.5 | 86.8 |
| 2 | 64.8 | 10.6 | 75.4 | 75.0 | 60.9 | 10.9 | 71.8 | 69.9 |
| 3 | 62.2 | 2.8 | 65.0 | 64.6 | 59.0 | 5.9 | 64.9 | 62.4 |
| 4 | na | na | na | na | 47.7 | 0.4 | 48.1 | 42.9 |
| Нерв |  |  |  |  |  |  |  |  |
| 1 | 65.8 | 24.4 | 90.2 | 90.0 | 60.9 | 26.2 | 87.0 | 86.3 |
| 2 | 64.2 | 9.1 | 73.4 | 72.7 | 60.9 | 10.8 | 71.6 | 71.0 |
| 3 | 61.7 | 3.3 | 65.0 | 64.8 | 60.0 | 5.9 | 65.8 | 63.6 |
| Pneumococcal (PCV) |  |  |  |  |  |  |  |  |
| 1 | 65.9 | 22.8 | 88.7 | 88.6 | 60.5 | 24.9 | 85.5 | 84.8 |
| 2 | 64.3 | 8.3 | 72.7 | 72.4 | 59.8 | 9.3 | 69.1 | 66.7 |
| 3 | 59.1 | 2.8 | 61.9 | 58.5 | 55.4 | 4.8 | 60.2 | 54.5 |
| Rotavirus (RV) |  |  |  |  |  |  |  |  |
| 1 | 66.1 | 22.2 | 88.3 | 87.9 | 59.8 | 25.4 | 85.2 | 84.5 |
| 2 | 63.3 | 6.8 | 70.1 | 69.8 | 57.2 | 10.3 | 67.5 | 65.3 |
| Measles |  |  |  |  |  |  |  |  |
| 1 | 62.3 | 23.9 | 86.1 | 82.0 | 58.6 | 25.8 | 84.4 | 77.4 |
| 2 | na | na | na | na | 48.5 | 10.7 | 59.2 | 56.7 |
| All basic vaccinations ${ }^{5}$ | 58.8 | 2.4 | 61.3 | 57.7 | 57.3 | 5.4 | 62.7 | 56.3 |
| All age-appropriate <br> vaccinations $^{6}$ 52.5 0.2 52.7 47.9 41.8 0.1 41.8 34.7 |  |  |  |  |  |  |  |  |
| No vaccinations | 0.0 | 5.3 | 5.3 | na | 0.0 | 7.8 | 7.8 | na |
| Number of children | 449 | 228 | 677 | 677 | 402 | 258 | 660 | 660 |

## na $=$ Not applicable

BCG = Bacille Calmette-Guerin; OPV = Oral polio vaccine; DTaP = Diphtheria-tetanus-pertussis; IPV = Inactivated polio vaccine; Hib = Haemophilus influenzae type b; HepB = Hepatitis B; PCV = Pneumococcal conjugate vaccine; RV = Rotavirus vaccine
${ }^{1}$ Vaccination card, booklet, or other home-based record
${ }^{2}$ Received by age 12 months
${ }^{3}$ For children whose vaccination information is based on the mother's report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccination.
${ }^{4}$ Received by age 12 months for all vaccines except DTaP-IPV-Hib 4 and measles 2, which should be received by age 24 months
${ }^{5}$ BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine
${ }^{6}$ For children age 12-23 months: BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine. For children age 24-35 months: BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vaccine.

Table 10.3 Possession and observation of vaccination cards, according to background characteristics
Percentage of children age 12-23 months and children age 24-35 months who ever had a vaccination card, and percentage with a vaccination card seen, according to background characteristics, South Africa DHS 2016

| Background characteristic | Children age 12-23 months |  |  | Children age 24-35 months |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who ever had a vaccination card ${ }^{1}$ | Percentage with a vaccination card seen ${ }^{1}$ | Number of children | Percentage who ever had a vaccination card ${ }^{1}$ | Percentage with a vaccination card seen ${ }^{1}$ | Number of children |
| Sex |  |  |  |  |  |  |
| Male | 98.1 | 67.2 | 358 | 98.7 | 62.9 | 346 |
| Female | 98.0 | 65.4 | 319 | 98.3 | 58.7 | 314 |
| Birth order |  |  |  |  |  |  |
| 1 | 99.0 | 66.4 | 247 | 98.4 | 58.9 | 256 |
| 2-3 | 97.9 | 66.5 | 333 | 99.2 | 62.2 | 319 |
| 4-5 | 98.4 | 67.7 | 82 | 95.5 | 61.9 | 62 |
| 6+ | * | * | 15 | (98.0) | (63.2) | 24 |
| Residence |  |  |  |  |  |  |
| Urban | 99.1 | 63.9 | 416 | 99.2 | 57.9 | 414 |
| Non-urban | 96.3 | 70.2 | 261 | 97.3 | 66.0 | 246 |
| Province |  |  |  |  |  |  |
| Western Cape | (100.0) | (76.0) | 54 | (100.0) | (56.2) | 57 |
| Eastern Cape | 100.0 | 79.8 | 81 | 96.9 | 68.3 | 74 |
| Northern Cape | 100.0 | 75.4 | 12 | 100.0 | 64.0 | 12 |
| Free State | (98.9) | (81.3) | 25 | 97.7 | 65.5 | 30 |
| KwaZulu-Natal | 94.7 | 63.8 | 135 | 98.2 | 54.7 | 106 |
| North West | 100.0 | 65.7 | 59 | 100.0 | 65.1 | 58 |
| Gauteng | 99.5 | 55.1 | 180 | 99.7 | 56.9 | 185 |
| Mpumalanga | 98.1 | 63.5 | 61 | 100.0 | 69.6 | 63 |
| Limpopo | 94.5 | 73.2 | 69 | 94.1 | 63.2 | 74 |
| Mother's education |  |  |  |  |  |  |
| No education | * | * | 3 | * | * | 7 |
| Primary incomplete | (87.8) | (65.5) | 29 | (96.4) | (71.3) | 36 |
| Primary complete | (100.0) | (55.4) | 23 | (97.4) | (37.9) | 31 |
| Secondary incomplete | 98.3 | 66.6 | 364 | 98.6 | 62.2 | 306 |
| Secondary complete | 98.6 | 69.7 | 183 | 99.2 | 66.6 | 193 |
| More than secondary | 98.9 | 58.9 | 75 | 98.0 | 47.5 | 88 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 96.1 | 73.0 | 162 | 98.1 | 66.8 | 130 |
| Second | 99.7 | 58.4 | 167 | 97.3 | 57.9 | 157 |
| Middle | 97.0 | 64.8 | 138 | 99.6 | 60.4 | 171 |
| Fourth | 98.2 | 74.0 | 121 | 98.5 | 67.8 | 98 |
| Highest | 100.0 | 61.2 | 88 | 99.0 | 52.7 | 104 |
| Total | 98.1 | 66.3 | 677 | 98.5 | 60.9 | 660 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Vaccination card, booklet, or other home-based record
Table 10.4 Vaccinations by background characteristics
 with all age-appropriate vaccinations, by background characteristics, South Africa DHS 2016

| Background characteristic | Children age 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Children age 24-35 months |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Polio ${ }^{1}$ (OPV) |  |  | DTaP-IPV-Hib |  |  | HepB |  |  | Pneumococcal (PCV) |  |  | Rotavirus (RV) |  | Measles 1 | All basic vaccinations ${ }^{2}$ | All age-appropriate vaccinations ${ }^{3}$ | No vaccinations | Number of children | DTaP-IPVHib 4 | $\begin{gathered} \text { Measles } \\ 2 \end{gathered}$ | All age-appropriate vaccinations ${ }^{4}$ | Number of children |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 93.9 | 93.4 | 78.7 | 93.1 | 78.6 | 67.1 | 91.9 | 75.3 | 68.0 | 90.7 | 74.7 | 63.1 | 89.1 | 71.3 | 88.0 | 63.5 | 53.2 | 3.8 | 358 | 49.4 | 61.7 | 43.8 | 346 |
| Female | 90.9 | 91.0 | 76.4 | 89.0 | 71.7 | 62.6 | 88.3 | 71.2 | 61.6 | 86.4 | 70.4 | 60.6 | 87.4 | 68.8 | 84.1 | 58.7 | 52.3 | 6.9 | 319 | 46.6 | 56.5 | 39.7 | 314 |
| Birth order |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 90.2 | 91.0 | 74.8 | 90.2 | 72.0 | 63.6 | 89.1 | 69.4 | 63.3 | 87.8 | 68.8 | 62.4 | 87.1 | 67.8 | 84.6 | 59.9 | 52.8 | 6.1 | 247 | 46.6 | 58.2 | 40.3 | 256 |
| 2-3 | 94.5 | 93.1 | 79.8 | 93.6 | 77.6 | 67.0 | 92.0 | 77.2 | 67.3 | 89.7 | 74.3 | 62.3 | 89.0 | 71.5 | 87.5 | 63.8 | 54.2 | 4.8 | 333 | 49.7 | 59.4 | 42.4 | 319 |
| 4-5 | 93.1 | 94.6 | 78.7 | 85.7 | 78.3 | 63.9 | 87.2 | 71.4 | 64.0 | 88.5 | 79.0 | 64.2 | 90.7 | 72.5 | 89.6 | 60.0 | 50.0 | 2.3 | 82 | 59.3 | 70.7 | 56.3 | 62 |
| $6+$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 15 | (13.6) | (38.0) | (13.6) | 24 |
| Vaccination card |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Seen | 97.4 | 98.7 | 99.2 | 100.0 | 97.7 | 93.8 | 99.1 | 96.8 | 92.9 | 99.3 | 97.0 | 89.1 | 99.6 | 95.4 | 93.9 | 88.7 | 79.1 | 0.0 | 449 | 78.3 | 79.6 | 68.6 | 402 |
| Not seen/none | 82.9 | 79.6 | 35.0 | 73.7 | 31.4 | 8.3 | 72.6 | 27.1 | 9.9 | 67.8 | 24.7 | 8.3 | 65.9 | 20.2 | 70.9 | 7.2 | 0.7 | 15.6 | 228 | 1.1 | 27.4 | 0.2 | 258 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 92.7 | 93.3 | 76.9 | 90.4 | 75.2 | 62.9 | 89.7 | 71.6 | 62.9 | 88.2 | 72.0 | 60.5 | 88.7 | 68.9 | 86.1 | 59.1 | 51.7 | 5.3 | 416 | 45.5 | 57.7 | 39.3 | 414 |
| Non-urban | 92.1 | 90.6 | 78.7 | 92.4 | 75.6 | 68.4 | 91.0 | 76.3 | 68.4 | 89.5 | 73.7 | 64.2 | 87.6 | 72.1 | 86.1 | 64.6 | 54.4 | 5.2 | 261 | 52.5 | 61.7 | 46.0 | 246 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | (91.4) | (88.1) | (91.4) | (89.6) | (78.7) | (70.0) | (86.4) | (73.0) | (64.3) | (84.0) | (70.0) | (60.4) | (91.9) | (66.6) | (77.6) | (67.7) | (49.0) | (6.2) | 54 | (54.4) | (70.5) | (43.5) | 57 |
| Eastern Cape | 96.2 | 94.2 | 91.0 | 95.0 | 85.4 | 74.3 | 94.0 | 86.6 | 72.2 | 92.8 | 84.8 | 68.7 | 91.6 | 83.7 | 88.6 | 70.9 | 57.3 | 3.1 | 81 | 46.8 | 56.2 | 44.7 | 74 |
| Northern Cape | 95.8 | 90.3 | 84.5 | 95.8 | 87.3 | 80.6 | 91.6 | 81.1 | 78.3 | 90.8 | 83.5 | 75.7 | 84.1 | 77.0 | 84.9 | 75.4 | 64.9 | 4.2 | 12 | 56.1 | 62.8 | 46.4 | 12 |
| Free State | (97.8) | (97.8) | (95.8) | (97.8) | (95.7) | (84.8) | (97.8) | (91.6) | (87.6) | (95.7) | (91.0) | (77.2) | (94.7) | (89.3) | (90.7) | (79.5) | (71.3) | (2.2) | 25 | 57.8 | 73.4 | 54.5 | 30 |
| KwaZulu-Natal | 91.3 | 92.2 | 71.6 | 91.6 | 73.5 | 65.3 | 91.6 | 67.4 | 62.5 | 90.9 | 66.2 | 63.8 | 91.3 | 68.6 | 89.4 | 62.4 | 60.1 | 6.2 | 135 | 47.2 | 59.1 | 46.0 | 106 |
| North West | 94.5 | 98.6 | 74.4 | 99.2 | 72.4 | 65.0 | 97.0 | 81.3 | 64.0 | 89.7 | 70.1 | 51.7 | 90.6 | 65.4 | 85.0 | 55.7 | 43.7 | 0.0 | 59 | 46.1 | 68.1 | 31.9 | 58 |
| Gauteng | 92.6 | 91.5 | 68.5 | 87.9 | 69.5 | 53.6 | 87.9 | 68.6 | 58.7 | 86.5 | 71.4 | 57.4 | 84.8 | 67.1 | 87.7 | 51.9 | 45.7 | 6.6 | 180 | 44.8 | 50.1 | 36.3 | 185 |
| Mpumalanga | 85.7 | 87.1 | 79.7 | 80.9 | 74.0 | 62.9 | 80.0 | 69.6 | 67.6 | 80.0 | 68.7 | 58.8 | 78.0 | 65.6 | 75.0 | 56.4 | 50.5 | 10.4 | 61 | 47.4 | 57.9 | 42.5 | 63 |
| Limpopo | 92.9 | 93.4 | 79.5 | 94.7 | 74.0 | 71.1 | 92.1 | 70.9 | 66.3 | 93.1 | 73.3 | 66.9 | 90.2 | 67.7 | 88.7 | 66.7 | 54.9 | 2.9 | 69 | 51.0 | 64.1 | 46.5 | 74 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 3 | * | * | * | 7 |
| Primary incomplete | (87.2) | (87.2) | (72.0) | (87.2) | (66.6) | (60.2) | (87.2) | (72.1) | (59.2) | (77.9) | (62.8) | (47.1) | (75.2) | (62.8) | (70.3) | (46.0) | (37.8) | (12.8) | 29 | (43.5) | (43.6) | (34.1) | 36 |
| Primary complete | (97.6) | (100.0) | (71.7) | (83.7) | (51.2) | (51.2) | (83.7) | (52.5) | (50.1) | (83.7) | (50.1) | (40.5) | (83.7) | (51.2) | (73.1) | (45.9) | (40.5) | (0.0) | 23 | (32.5) | (47.9) | (29.9) | 31 |
| Secondary incomplete | 91.9 | 90.7 | 79.7 | 90.2 | 76.9 | 65.5 | 89.1 | 73.3 | 66.1 | 87.3 | 73.5 | 63.5 | 87.2 | 69.5 | 85.2 | 61.4 | 52.4 | 5.5 | 364 | 48.6 | 60.3 | 44.3 | 306 |
| Secondary complete | 94.7 | 95.3 | 79.9 | 94.2 | 78.3 | 67.9 | 93.2 | 78.5 | 67.8 | 92.8 | 77.5 | 64.2 | 93.0 | 76.0 | 90.6 | 66.0 | 56.3 | 3.0 | 183 | 55.3 | 68.3 | 46.8 | 193 |
| More than secondary | 90.1 | 91.7 | 64.8 | 91.7 | 70.2 | 59.8 | 90.9 | 66.7 | 57.9 | 90.9 | 66.0 | 59.1 | 87.9 | 65.8 | 89.3 | 57.6 | 52.7 | 8.3 | 75 | 37.0 | 44.6 | 28.2 | 88 |

Table 10.4-Continued

| Background characteristic | Children age 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Children age 24-35 months |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Polio ${ }^{1}$ (OPV) |  |  | DTaP-IPV-Hib |  |  | HepB |  |  | Pneumococcal (PCV) |  |  | Rotavirus (RV) |  | Measles <br> 1 | All basic vaccinations ${ }^{2}$ | All age-appropriate vaccinations ${ }^{3}$ | No vaccinations | Number of children | DTaP-IPVHib 4 | $\begin{gathered} \text { Measles } \\ 2 \end{gathered}$ | All age-appropriate vaccinations ${ }^{4}$ | Number of children |
|  | BCG | 0 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 89.1 | 87.6 | 83.6 | 90.1 | 80.4 | 72.0 | 89.1 | 76.7 | 71.0 | 88.2 | 76.6 | 68.2 | 89.0 | 74.1 | 85.1 | 66.5 | 57.0 | 6.5 | 162 | 42.7 | 53.7 | 37.4 | 130 |
| Second | 94.3 | 93.8 | 69.0 | 89.3 | 64.7 | 54.8 | 89.5 | 68.6 | 58.7 | 84.9 | 67.9 | 54.5 | 82.5 | 64.0 | 84.6 | 52.2 | 45.1 | 4.2 | 167 | 45.4 | 54.2 | 41.1 | 157 |
| Middle | 92.5 | 92.7 | 79.0 | 93.7 | 79.9 | 68.4 | 92.8 | 74.8 | 65.9 | 90.7 | 72.2 | 65.3 | 88.7 | 70.4 | 87.5 | 63.5 | 55.8 | 5.0 | 138 | 47.1 | 61.3 | 40.0 | 171 |
| Fourth | 96.6 | 96.3 | 88.2 | 93.2 | 84.2 | 67.8 | 90.4 | 78.9 | 67.0 | 92.2 | 79.3 | 61.1 | 94.7 | 76.6 | 87.0 | 64.9 | 51.8 | 3.0 | 121 | 66.4 | 75.3 | 60.7 | 98 |
| Highest | 89.7 | 91.6 | 66.2 | 89.9 | 67.0 | 62.2 | 89.0 | 66.5 | 61.5 | 89.0 | 65.9 | 60.3 | 88.4 | 65.0 | 87.6 | 60.2 | 55.9 | 8.4 | 88 | 43.4 | 55.0 | 33.7 | 104 |
| Total | 92.5 | 92.3 | 77.6 | 91.2 | 75.4 | 65.0 | 90.2 | 73.4 | 65.0 | 88.7 | 72.7 | 61.9 | 88.3 | 70.1 | 86.1 | 61.3 | 52.7 | 5.3 | 677 | 48.1 | 59.2 | 41.8 | 660 |

[^17]Table 10.5 Vaccinations by child's residence with mother or other caregiver

 percentage with all age-appropriate vaccinations, South Africa DHS 2016

| Children's residence | Children age 12-23 months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Children age 24-35 months |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Polio ${ }^{1}$ (OPV) |  |  | DTaP-IPV-Hib |  |  | HepB |  |  | Pneumococcal (PCV) |  |  | Rotavirus (RV) |  | Measles <br> 1 | All basic vaccinations ${ }^{2}$ | All age-appropriate vaccinations ${ }^{3}$ | No vaccinations | Number of children | DTaP-IPVHib 4 | $\begin{gathered} \text { Measles } \\ 2 \end{gathered}$ | All age-appropriate vaccinations ${ }^{4}$ | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { children } \end{aligned}$ |
|  | BCG | 0 | 1 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 | 3 | 1 | 2 |  |  |  |  |  |  |  |  |  |
| CHILDREN WHOSE VACCINATION INFORMATION WAS COLLECTED BY INTERVIEW WITH MOTHER |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lives with mother | 94.3 | 94.4 | 81.6 | 94.1 | 81.0 | 72.1 | 93.0 | 79.2 | 72.3 | 91.4 | 77.9 | 67.6 | 91.6 | 75.8 | 88.9 | 68.0 | 59.1 | 3.7 | 593 | 56.5 | 63.9 | 49.3 | 554 |
| Doesn't live with mother | 79.9 | 77.0 | 49.7 | 70.2 | 35.1 | 14.4 | 70.2 | 32.3 | 13.1 | 69.9 | 35.3 | 21.4 | 65.1 | 30.2 | 66.8 | 13.6 | 7.6 | 16.2 | 84 | 4.2 | 34.8 | 2.6 | 106 |


| Lives with caregiver | 85.1 | 84.4 | 72.5 | 78.5 | 67.4 | 60.5 | 82.5 | 69.6 | 65.2 | 78.4 | 66.4 | 59.4 | 81.5 | 66.1 | 77.0 | 53.9 | 51.1 | 14.0 | 126 | 55.8 | 59.3 | 51.1 | 129 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Notes: Children are considered to have received the vaccine if it was either written on the child's vaccination card or reported by the mother or the caregiver. For children whose vaccination inform report, date of vaccination is not collected. The proportions of vaccinations given during the first and second years of life are assumed to be the same as for children with a written record of vaccinal <br> BCG = Bacille Calmette-Guerin; OPV = Oral polio vaccine; DTaP = Diphtheria-tetanus-pertussis; IPV = Inactivated polio vaccine; Hib = Haemophilus influenzae type b; HepB = Hepatitis B $\mathrm{RV}=$ Rotavirus vaccine <br> ${ }^{1}$ Polio 0 is the polio vaccination given at birth <br> ${ }^{2}$ BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine <br> ${ }^{3}$ BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vac <br> ${ }^{4}$ BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vac |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 10.6 Possession and observation of vaccination cards during interview with a caregiver
Among children whose information was collected through the Caregiver's Questionnaire, percentage age 12-23 months and age 24-35 months who ever had a vaccination card and percentage with a vaccination card seen, South Africa DHS 2016

|  | Children age 12-23 months |  |  | Children age 24-35 months |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who ever had a vaccination card ${ }^{1}$ | Percentage with a vaccination card seen ${ }^{1}$ | Number of children | Percentage who ever had a vaccination card ${ }^{1}$ | Percentage with a vaccination card seen ${ }^{1}$ | Number of children |
| Total | 71.8 | 64.6 | 126 | 70.4 | 61.7 | 129 |

${ }^{1}$ Vaccination card, booklet, or other home-based record
Table 10.7 Reasons vaccinations were missed, late, or not given
Among all children age 12-35 months, percentage who ever missed a vaccination, received a vaccination late, or did not get any vaccinations, and among children age 12-35 months who ever missed a vaccination,
received a vaccination late, or did not receive any vaccinations, reasons the vaccinations were missed, late, or not given, according to background characteristics, South Africa DHS 2016和

| Background characteristic | Percentage of children who ever missed a vaccination, received one late, or never received any vaccinations | Number of children | Among children who ever missed a vaccination, received a vaccination late, or did not receive any vaccinations, the reasons vaccinations were missed, late, or not given: |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Clinic out of stock | Not aware of need for a vaccination | Fear of side effects | Did not know where to go | Too busy to take the child | No money for transport | Child was ill | Respondent was ill | Other | Don't know | Number of children |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 12-23 | 22.2 | 677 | 50.6 | 9.4 | 0.9 | 1.4 | 13.4 | 5.9 | 6.3 | 5.6 | 10.0 | 0.7 | 151 |
| 24-35 | 23.7 | 660 | 47.6 | 8.9 | 0.3 | 3.7 | 8.7 | 4.7 | 12.7 | 5.4 | 14.6 | 0.3 | 156 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 22.7 | 704 | 47.0 | 10.4 | 1.2 | 1.2 | 12.1 | 6.7 | 12.8 | 2.6 | 14.4 | 0.6 | 160 |
| Female | 23.2 | 633 | 51.3 | 7.8 | 0.0 | 4.0 | 9.9 | 3.7 | 6.0 | 8.7 | 10.2 | 0.4 | 147 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 21.0 | 830 | 46.9 | 8.0 | 0.0 | 2.3 | 9.2 | 1.9 | 15.4 | 7.4 | 11.7 | 0.3 | 174 |
| Non-urban | 26.2 | 507 | 51.8 | 10.7 | 1.4 | 2.9 | 13.3 | 9.7 | 1.9 | 3.1 | 13.2 | 0.7 | 133 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 32.4 | 111 | * | * | * | * | * | * | * | * | * | * | 36 |
| Eastern Cape | 28.8 | 155 | 53.9 | 8.7 | 0.0 | 2.2 | 16.6 | 8.3 | 2.0 | 8.4 | 17.7 | 0.0 | 45 |
| Northern Cape | 19.1 | 24 | * | * | * | * | * | * | * | * | * | * | 5 |
| Free State | 12.5 | 56 | * | * | * | * | * | * | * | * | * | * | 7 |
| KwaZulu-Natal | 29.3 | 241 | 53.5 | 11.2 | 2.0 | 4.2 | 13.0 | 6.8 | 9.9 | 4.0 | 2.5 | 0.0 | 71 |
| North West | 26.6 | 117 | (45.6) | (15.9) | (0.0) | (1.8) | (1.5) | (4.5) | (2.9) | (1.7) | (22.8) | (3.1) | 31 |
| Gauteng | 15.1 | 365 | * | * | * | * | * | * | * | * | * | * | 55 |
| Mpumalanga | 19.5 | 124 | (22.7) | (2.1) | (0.0) | (4.9) | (16.3) | (7.0) | (0.5) | (13.7) | (35.1) | (2.4) | 24 |
| Limpopo | 23.1 | 143 | (71.8) | (6.0) | (0.0) | (0.0) | (8.5) | (6.5) | (0.0) | (5.6) | (3.6) | (0.0) | 33 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 29.0 | 292 | 49.5 | 13.6 | 0.0 | 0.0 | 10.0 | 13.7 | 1.0 | 10.7 | 10.7 | 0.5 | 85 |
| Second | 22.5 | 324 | 51.3 | 13.6 | 0.6 | 5.0 | 10.6 | 2.1 | 9.4 | 3.1 | 14.5 | 0.0 | 73 |
| Middle | 22.3 | 309 | 51.2 | 3.7 | 2.0 | 0.9 | 14.8 | 1.0 | 7.8 | 1.4 | 18.0 | 1.6 | 69 |
| Fourth | 16.9 | 220 | (55.7) | (3.8) | (0.0) | (1.5) | (16.2) | (0.5) | (5.7) | (8.8) | (7.8) | (0.0) | 37 |
| Highest | 22.3 | 192 | (35.1) | (6.2) | (0.0) | (7.0) | (3.2) | (5.1) | (33.1) | (3.4) | (6.8) | (0.0) | 43 |
| Total | 22.9 | 1,337 | 49.0 | 9.2 | 0.6 | 2.6 | 11.0 | 5.3 | 9.6 | 5.5 | 12.4 | 0.5 | 307 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.8 Prevalence and treatment of symptoms of ARI
Among children under age 5, percentage who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey, and among children with symptoms of ARI in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among children under age 5: |  | Among children under age 5 with symptoms of ARI: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with symptoms of ARI ${ }^{1}$ | Number of children | Percentage for whom advice or treatment was sought ${ }^{2}$ | Percentage for whom advice or treatment was sought same or next day | Number of children |
| Age in months |  |  |  |  |  |
| <6 | 1.1 | 363 | * | * | 4 |
| 6-11 | 3.8 | 325 | * | * | 12 |
| 12-23 | 4.2 | 677 | * | * | 29 |
| 24-35 | 3.5 | 660 | * | * | 23 |
| 36-47 | 3.1 | 688 | * | * | 21 |
| 48-59 | 2.4 | 730 | * | * | 17 |
| Sex |  |  |  |  |  |
| Male | 3.6 | 1,783 | 87.2 | 34.0 | 63 |
| Female | 2.6 | 1,661 | (88.3) | (25.9) | 44 |
| Mother's smoking status ${ }^{3}$ |  |  |  |  |  |
| Smokes cigarettes/tobacco | 4.8 | 67 | * | * | 3 |
| Does not smoke | 3.3 | 1,671 | (87.1) | (31.2) | 55 |
| Residence |  |  |  |  |  |
| Urban | 3.3 | 2,204 | 87.6 | 28.8 | 73 |
| Non-urban | 2.7 | 1,240 | (87.7) | (34.7) | 34 |
| Province |  |  |  |  |  |
| Western Cape | 3.9 | 306 | * | * | 12 |
| Eastern Cape | 4.1 | 382 | * | * | 16 |
| Northern Cape | 1.3 | 67 | * | * | 1 |
| Free State | 2.6 | 156 | * | * | 4 |
| KwaZulu-Natal | 3.2 | 636 | * | * | 20 |
| North West | 1.5 | 269 | * | * | 4 |
| Gauteng | 4.0 | 980 | * | * | 39 |
| Mpumalanga | 2.7 | 309 | * | * | 8 |
| Limpopo | 0.7 | 338 | * | * | 2 |
| Mother's education |  |  |  |  |  |
| No education | 1.4 | 49 | * | * | 1 |
| Primary incomplete | 3.2 | 167 | * | * | 5 |
| Primary complete | 0.5 | 133 | * | * | 1 |
| Secondary incomplete | 3.6 | 1,680 | 91.6 | 32.5 | 61 |
| Secondary complete | 2.4 | 1,027 | * | * | 25 |
| More than secondary | 3.8 | 388 | * | * | 15 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 2.9 | 744 | (81.2) | (37.5) | 22 |
| Second | 2.5 | 822 | * | * | 20 |
| Middle | 2.4 | 766 | * | * | 19 |
| Fourth | 5.0 | 642 | * | * | 32 |
| Highest | 3.0 | 470 | * | * | 14 |
| Total | 3.1 | 3,444 | 87.6 | 30.7 | 107 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Symptoms of ARI consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related
${ }^{2}$ Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.
${ }^{3}$ Questions on smoking were asked of a subsample of women

Table 10.9 Source of advice or treatment for children with symptoms of ARI
Percentage of children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with symptoms of ARI in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

|  | Percentage for whom advice or <br> treatment was sought from <br> each source: |  |
| :--- | :---: | :---: |
|  |  | Among children <br> with symptoms of |
| Source | Among children <br> with symptoms <br> of ARI | ARI for whom <br> advice or treatment <br> was sought |
| Public sector | 55.7 | 63.5 |
| Government hospital | 5.8 | 6.6 |
| Government clinic/government health | 50.4 | 57.5 |
| centre | 0.8 | 0.9 |
| CHW | 34.0 | 38.8 |
| Private medical sector | 2.5 | 2.9 |
| Private hospital/clinic | 2.8 | 2.8 |
| Chemist/pharmacy | 9.3 | 10.7 |
| Private doctor | 3.3 | 3.7 |
| Other private sector | 3.3 | 3.7 |
| Supermarket/shop | 107 | 9.7 |
| Number of children |  |  |

[^18]Table 10.10 Prevalence and treatment of fever
Among children under age 5, percentage who had a fever in the 2 weeks preceding the survey, and among children with a fever in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought and percentage who received antibiotics as treatment, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among children under age 5: |  | Among children under age 5 with fever: |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage with fever | Number of children | Percentage for whom advice or treatment was sought ${ }^{1}$ | Percentage for whom treatment was sought same or next day | Percentage who took antibiotic drugs | Number of children with fever |
| Age in months |  |  |  |  |  |  |
| <6 | 12.0 | 363 | (66.3) | (23.8) | (25.0) | 43 |
| 6-11 | 25.7 | 325 | 66.2 | 38.4 | 24.6 | 83 |
| 12-23 | 23.3 | 677 | 62.2 | 27.2 | 32.7 | 158 |
| 24-35 | 20.8 | 660 | 72.4 | 28.1 | 29.4 | 137 |
| 36-47 | 18.9 | 688 | 77.3 | 39.0 | 32.5 | 130 |
| 48-59 | 17.4 | 730 | 64.9 | 26.3 | 31.6 | 127 |
| Sex |  |  |  |  |  |  |
| Male | 20.3 | 1,783 | 69.0 | 30.3 | 29.6 | 363 |
| Female | 19.0 | 1,661 | 67.7 | 31.0 | 31.2 | 316 |
| Residence |  |  |  |  |  |  |
| Urban | 20.3 | 2,204 | 70.8 | 31.1 | 33.1 | 447 |
| Non-urban | 18.7 | 1,240 | 63.7 | 29.7 | 25.0 | 232 |
| Province |  |  |  |  |  |  |
| Western Cape | 16.1 | 306 | (76.6) | (38.4) | (44.0) | 49 |
| Eastern Cape | 25.4 | 382 | 69.7 | 36.2 | 27.1 | 97 |
| Northern Cape | 10.8 | 67 | (54.3) | (26.1) | (51.5) | 7 |
| Free State | 14.7 | 156 | (57.5) | (25.1) | (32.9) | 23 |
| KwaZulu-Natal | 16.0 | 636 | 55.0 | 10.8 | 34.2 | 102 |
| North West | 25.7 | 269 | 58.6 | 31.9 | 17.4 | 69 |
| Gauteng | 21.3 | 980 | 76.4 | 33.0 | 26.5 | 209 |
| Mpumalanga | 20.3 | 309 | 73.3 | 26.1 | 37.3 | 63 |
| Limpopo | 17.5 | 338 | 66.7 | 46.8 | 35.1 | 59 |
| Mother's education |  |  |  |  |  |  |
| No education | 22.5 | 49 | * | * | * | 11 |
| Primary incomplete | 16.0 | 167 | (68.3) | (42.1) | (21.8) | 27 |
| Primary complete | 10.1 | 133 | * | * | * | 13 |
| Secondary incomplete | 19.3 | 1,680 | 68.6 | 28.6 | 30.5 | 325 |
| Secondary complete | 20.9 | 1,027 | 68.2 | 32.4 | 29.3 | 215 |
| More than secondary | 22.7 | 388 | 67.2 | 29.9 | 34.9 | 88 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 13.3 | 744 | 64.0 | 22.8 | 25.5 | 99 |
| Second | 21.8 | 822 | 67.3 | 29.1 | 23.0 | 179 |
| Middle | 20.7 | 766 | 68.6 | 37.6 | 33.3 | 159 |
| Fourth | 22.7 | 642 | 69.3 | 24.2 | 30.6 | 146 |
| Highest | 20.4 | 470 | 73.3 | 39.7 | 43.6 | 96 |
| Total | 19.7 | 3,444 | 68.4 | 30.6 | 30.3 | 679 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.

Table 10.11 Source of advice or treatment for children with fever
Percentage of children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources, and among children under age 5 with a fever in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

|  | $\begin{array}{c}\text { Percentage for whom advice } \\ \text { or treatment was sought from } \\ \text { each source: }\end{array}$ |  |
| :--- | :---: | :---: |
|  | $\begin{array}{c}\text { Among children } \\ \text { with fever for }\end{array}$ |  |
|  |  | $\begin{array}{c}\text { whom advice }\end{array}$ |
|  |  | $\begin{array}{c}\text { Among children } \\ \text { or treatment } \\ \text { with fever }\end{array}$ |
| was sought |  |  |$]$

CHW = Community health worker

Table 10.12 Prevalence and treatment of diarrhoea
Percentage of children under age 5 who had diarrhoea in the 2 weeks preceding the survey, and among children with diarrhoea in the 2 weeks preceding the survey, percentage for whom advice or treatment was sought, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage with diarrhoea | Number of children | Among children under age 5 with diarrhoea: |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage for whom advice or treatment was sought ${ }^{1}$ | Number of children with diarrhoea |
| Age in months |  |  |  |  |
| <6 | 7.0 | 363 | (36.9) | 25 |
| 6-11 | 16.3 | 325 | 66.2 | 53 |
| 12-23 | 16.8 | 677 | 62.4 | 114 |
| 24-35 | 8.2 | 660 | 55.9 | 54 |
| 36-47 | 8.5 | 688 | 79.6 | 58 |
| 48-59 | 7.1 | 730 | (63.0) | 52 |
| Sex |  |  |  |  |
| Male | 11.2 | 1,783 | 59.9 | 200 |
| Female | 9.4 | 1,661 | 67.1 | 157 |
| Source of drinking water ${ }^{2}$ |  |  |  |  |
| Improved | 10.2 | 3,111 | 62.9 | 318 |
| Unimproved | 11.4 | 333 | (64.3) | 38 |
| Type of toilet facility ${ }^{3}$ |  |  |  |  |
| Improved sanitation | 10.4 | 2,523 | 64.3 | 263 |
| Unimproved sanitation | 10.2 | 920 | 59.6 | 94 |
| Shared facility ${ }^{4}$ | 10.6 | 724 | 60.7 | 77 |
| Unimproved facility | 9.1 | 73 | * | 7 |
| Open defecation | 8.3 | 123 | * | 10 |
| Handwashing place |  |  |  |  |
| Observed, fixed place | 8.6 | 1,727 | 71.2 | 148 |
| Observed, mobile place | 13.5 | 1,177 | 52.5 | 159 |
| Not observed | 9.2 | 539 | (72.8) | 49 |
| Residence |  |  |  |  |
| Urban | 9.0 | 2,204 | 65.5 | 199 |
| Non-urban | 12.7 | 1,240 | 60.0 | 157 |
| Province |  |  |  |  |
| Western Cape | 5.4 | 306 | * | 16 |
| Eastern Cape | 9.4 | 382 | (63.8) | 36 |
| Northern Cape | 8.1 | 67 | * | 5 |
| Free State | 5.8 | 156 | * | 9 |
| KwaZulu-Natal | 13.7 | 636 | 56.4 | 87 |
| North West | 16.4 | 269 | 57.9 | 44 |
| Gauteng | 8.6 | 980 | (73.2) | 85 |
| Mpumalanga | 10.7 | 309 | (69.3) | 33 |
| Limpopo | 12.0 | 338 | 57.1 | 41 |
| Mother's education |  |  |  |  |
| No education | 10.6 | 49 | * | 5 |
| Primary incomplete | 17.4 | 167 | (61.6) | 29 |
| Primary complete | 13.1 | 133 | * | 17 |
| Secondary incomplete | 10.3 | 1,680 | 58.5 | 173 |
| Secondary complete | 9.6 | 1,027 | 76.9 | 98 |
| More than secondary | 8.6 | 388 | (49.1) | 34 |
| Wealth quintile |  |  |  |  |
| Lowest | 11.8 | 744 | 55.1 | 88 |
| Second | 13.8 | 822 | 53.7 | 114 |
| Middle | 8.7 | 766 | 80.3 | 67 |
| Fourth | 8.7 | 642 | (65.6) | 56 |
| Highest | 6.8 | 470 | (77.8) | 32 |
| Total | 10.3 | 3,444 | 63.0 | 356 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes advice or treatment from the following sources: public sector, private medical sector, and supermarket. Excludes advice or treatment from a traditional health practitioner.
${ }^{2}$ See Table 2.1 for definition of categories
${ }^{3}$ See Table 2.3 for definition of categories
${ }^{4}$ Facilities that would be considered improved if they were not shared by two or more households

Table 10.13 Feeding practices during diarrhoea
Percent distribution of children under age 5 who had diarrhoea in the 2 weeks preceding the survey by amount of liquids and food offered compared with normal practice, according to background characteristics, South Africa DHS 2016

| Background characteristic | Amount of liquids given |  |  |  |  |  |  | Amount of food given |  |  |  |  |  |  |  | Number of children with diarrhoea |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | More | Same as usual | Somewhat less | Much less | None | Don't know | Total | More | Same as usual | Somewhat less | Much less | None | Never gave food | Don't know | Total |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | (6.3) | (67.9) | (6.7) | (15.8) | (3.2) | (0.0) | 100.0 | (1.7) | (54.0) | (11.7) | (4.6) | (2.5) | (25.4) | (0.0) | 100.0 | 25 |
| 6-11 | 19.7 | 50.5 | 12.1 | 14.5 | 3.2 | 0.0 | 100.0 | 12.3 | 50.3 | 9.6 | 21.4 | 0.0 | 6.5 | 0.0 | 100.0 | 53 |
| 12-23 | 15.1 | 43.4 | 18.9 | 17.2 | 4.7 | 0.7 | 100.0 | 6.8 | 46.3 | 21.9 | 21.6 | 1.3 | 2.1 | 0.0 | 100.0 | 114 |
| 24-35 | 12.7 | 38.7 | 11.0 | 28.0 | 7.2 | 2.4 | 100.0 | 3.8 | 48.5 | 14.8 | 26.5 | 3.2 | 0.8 | 2.4 | 100.0 | 54 |
| 36-47 | 28.1 | 31.9 | 10.3 | 26.0 | 2.4 | 1.3 | 100.0 | 6.2 | 39.7 | 20.3 | 29.7 | 4.0 | 0.0 | 0.0 | 100.0 | 58 |
| 48-59 | (2.1) | (45.3) | (6.3) | (31.9) | (12.5) | (1.9) | 100.0 | (1.1) | (36.0) | (12.9) | (47.8) | (1.5) | (0.0) | (0.8) | 100.0 | 52 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 14.4 | 44.1 | 13.6 | 23.2 | 3.1 | 1.5 | 100.0 | 5.1 | 44.4 | 15.2 | 28.5 | 2.3 | 3.7 | 0.9 | 100.0 | 200 |
| Female | 15.8 | 43.6 | 11.3 | 20.3 | 8.5 | 0.5 | 100.0 | 6.9 | 46.2 | 18.6 | 23.3 | 1.5 | 3.4 | 0.0 | 100.0 | 157 |
| Breastfeeding status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Breastfeeding | 20.5 | 51.1 | 6.4 | 15.3 | 6.8 | 0.0 | 100.0 | 9.2 | 48.8 | 10.3 | 23.1 | 0.2 | 8.4 | 0.0 | 100.0 | 92 |
| Not breastfeeding | 13.2 | 41.4 | 14.7 | 24.2 | 5.1 | 1.4 | 100.0 | 4.7 | 44.0 | 18.9 | 27.3 | 2.6 | 1.9 | 0.6 | 100.0 | 265 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 17.6 | 43.2 | 13.9 | 21.5 | 3.7 | 0.1 | 100.0 | 5.5 | 46.9 | 18.6 | 26.4 | 1.0 | 1.6 | 0.1 | 100.0 | 199 |
| Non-urban | 11.7 | 44.7 | 11.0 | 22.5 | 7.8 | 2.3 | 100.0 | 6.4 | 43.1 | 14.3 | 26.0 | 3.2 | 6.1 | 1.0 | 100.0 | 157 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 24.9 | 32.5 | 10.7 | 23.6 | 7.9 | 0.4 | 100.0 | 8.7 | 36.4 | 15.3 | 35.0 | 1.0 | 3.1 | 0.4 | 100.0 | 88 |
| Second | 5.1 | 55.2 | 7.4 | 23.0 | 7.0 | 2.3 | 100.0 | 2.2 | 47.7 | 10.3 | 30.4 | 3.1 | 5.9 | 0.5 | 100.0 | 114 |
| Middle | 13.0 | 40.0 | 16.2 | 27.6 | 2.4 | 0.9 | 100.0 | 6.1 | 45.0 | 26.3 | 15.0 | 2.5 | 4.3 | 0.9 | 100.0 | 67 |
| Fourth | (23.4) | (43.6) | (11.6) | (15.7) | (5.3) | (0.3) | 100.0 | (8.3) | (53.1) | (16.4) | (19.4) | (1.6) | (0.8) | (0.3) | 100.0 | 56 |
| Highest | (12.9) | (43.5) | (30.8) | (12.8) | (0.0) | (0.0) | 100.0 | (6.7) | (47.2) | (24.0) | (22.1) | (0.0) | (0.0) | (0.0) | 100.0 | 32 |
| Total | 15.0 | 43.9 | 12.6 | 21.9 | 5.5 | 1.1 | 100.0 | 5.9 | 45.2 | 16.7 | 26.2 | 2.0 | 3.6 | 0.5 | 100.0 | 356 |

Notes: It is recommended that children be given more liquids to drink during diarrhoea and that food not be reduced. Figures in parentheses are based on 25-49 unweighted cases.

Table 10.14 Oral rehydration therapy, zinc, and other treatments for diarrhoea
Among children under age 5 who had diarrhoea in the 2 weeks preceding the survey, percentage given fluid from an ORS packet; clinic-recommended homemade fluids (RHF); ORS or RHF; zinc; ORS and zinc; ORS or increased fluids; oral rehydration therapy (ORT); continued feeding and ORT; continued feeding, ORT, and zinc; and other treatments, and percentage given no treatment, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of children with diarrhoea who were given: |  |  |  |  |  |  |  |  |  |  |  |  | Percent- Number <br> of <br> age children <br> given no with <br> treatment diarrhoea |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Fluid from ORS packets | Clinic-recommended homemade fluids (RHF) | Either ORS or RHF | Zinc | ORS and zinc | ORS or increased fluids | ORT <br> (ORS, RHF, or increased fluids) | Continued feeding and ORT ${ }^{1}$ | Continued feeding, ORT, and zinc | Other treatments |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  | Antibiotic drugs | Antimotility drugs | Intravenous solution | Home remedy/ other |  |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | (27.3) | (24.4) | (43.7) | (15.9) | (12.6) | (33.6) | (50.0) | (35.6) | (14.3) | (0.0) | (0.0) | (0.0) | (0.9) | (49.1) | 25 |
| 6-11 | 45.8 | 65.0 | 74.9 | 35.2 | 21.3 | 52.5 | 81.6 | 68.3 | 29.0 | 1.5 | 3.8 | 0.0 | 9.1 | 13.3 | 53 |
| 12-23 | 49.9 | 82.1 | 87.8 | 36.7 | 26.4 | 58.2 | 89.5 | 66.6 | 24.6 | 10.1 | 2.9 | 0.0 | 10.2 | 7.4 | 114 |
| 24-35 | 49.0 | 58.1 | 64.7 | 34.0 | 29.6 | 55.3 | 68.8 | 44.9 | 25.1 | 9.9 | 0.9 | 0.9 | 13.4 | 21.8 | 54 |
| 36-47 | 54.4 | 85.1 | 91.7 | 48.9 | 34.0 | 75.8 | 91.7 | 59.5 | 34.3 | 18.4 | 0.0 | 3.1 | 12.8 | 4.5 | 58 |
| 48-59 | (71.6) | (83.8) | (92.2) | (37.9) | (36.8) | (73.7) | (93.3) | (43.3) | (11.4) | (18.5) | (1.2) | (0.0) | (14.1) | (0.9) | 52 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 52.2 | 73.5 | 82.7 | 38.5 | 30.5 | 59.8 | 85.6 | 54.8 | 23.6 | 11.1 | 2.4 | 0.2 | 8.0 | 11.8 | 200 |
| Female | 50.5 | 71.4 | 77.7 | 34.6 | 24.6 | 60.9 | 80.4 | 59.4 | 25.1 | 10.0 | 1.0 | 1.2 | 14.5 | 12.4 | 157 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 53.4 | 73.0 | 81.0 | 40.6 | 32.6 | 63.7 | 82.6 | 57.8 | 29.1 | 12.4 | 2.8 | 1.2 | 11.9 | 12.0 | 199 |
| Non-urban | 48.9 | 72.0 | 79.8 | 31.9 | 21.9 | 55.9 | 84.1 | 55.4 | 18.1 | 8.4 | 0.6 | 0.0 | 9.5 | 12.2 | 157 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 39.6 | 67.5 | 79.9 | 20.6 | 14.2 | 59.2 | 83.7 | 53.3 | 15.3 | 10.1 | 1.0 | 0.0 | 10.2 | 12.4 | 88 |
| Second | 48.9 | 80.3 | 83.4 | 35.7 | 25.8 | 52.4 | 85.1 | 50.9 | 15.9 | 8.9 | 0.0 | 0.4 | 4.7 | 11.7 | 114 |
| Middle | 54.8 | 73.9 | 78.2 | 46.9 | 38.8 | 61.2 | 81.6 | 64.8 | 37.4 | 15.2 | 3.3 | 0.0 | 11.7 | 13.6 | 67 |
| Fourth | (63.3) | (78.3) | (83.4) | (50.9) | (37.8) | (69.8) | (83.4) | (64.1) | (37.3) | (8.6) | (0.0) | (3.2) | (17.0) | (8.3) | 56 |
| Highest | (65.3) | (45.8) | (71.3) | (39.2) | (33.1) | (72.8) | (78.9) | (57.7) | (28.5) | (12.6) | (10.5) | (0.0) | (21.7) | (16.1) | 32 |
| Total | 51.4 | 72.5 | 80.5 | 36.8 | 27.9 | 60.3 | 83.3 | 56.8 | 24.3 | 10.6 | 1.8 | 0.6 | 10.8 | 12.1 | 356 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
ORS = Oral rehydration salts
${ }^{1}$ Continued feeding includes children who were given more, the same as usual, or somewhat less food during the diarrhoea episode

Table 10.15 Source of advice or treatment for children with diarrhoea
Percentage of children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought from specific sources; among children under age 5 with diarrhoea in the 2 weeks preceding the survey for whom advice or treatment was sought, percentage for whom advice or treatment was sought from specific sources; among children with diarrhoea who received ORS, percentage for whom advice or treatment was sought from specific sources; and among children with diarrhoea who received clinic-recommended homemade fluids, percentage for whom advice or treatment was sought from specific sources, South Africa DHS 2016

|  | Percentage for whom advice or treatment was sought from each source: |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | $\begin{array}{c}\text { Among children } \\ \text { with diarrhoea for } \\ \text { whom advice or } \\ \text { treatment was } \\ \text { sought }\end{array}$ | $\begin{array}{c}\text { Among children } \\ \text { with diarrhoea who } \\ \text { received ORS }\end{array}$ | $\begin{array}{c}\text { Among children } \\ \text { with diarrhoea who } \\ \text { received clinic- }\end{array}$ |
| recommended |  |  |  |  |
| homemade fluids |  |  |  |  |$]$

ORS = Oral rehydration salts
CHW = Community health worker
Fluids from ORS packet

Table 10.16 Knowledge of ORS packets and clinic-recommended homemade fluids
Percentage of women age 15-49 with a live birth in the 5 years preceding the survey who know about ORS packets and percentage who know about clinic-recommended homemade fluids for treatment of diarrhoea, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women who know about ORS packets | Percentage of women who know about clinicrecommended homemade fluids | Number of women |
| :---: | :---: | :---: | :---: |
| Age |  |  |  |
| 15-19 | 50.8 | 84.2 | 176 |
| 20-24 | 58.8 | 88.3 | 699 |
| 25-34 | 63.2 | 89.5 | 1,504 |
| 35-49 | 64.1 | 92.2 | 656 |
| Residence |  |  |  |
| Urban | 63.7 | 87.8 | 1,942 |
| Non-urban | 58.0 | 92.6 | 1,094 |
| Province |  |  |  |
| Western Cape | 71.8 | 94.4 | 276 |
| Eastern Cape | 54.1 | 91.0 | 335 |
| Northern Cape | 63.1 | 90.1 | 61 |
| Free State | 67.9 | 92.2 | 145 |
| KwaZulu-Natal | 79.4 | 92.1 | 555 |
| North West | 55.0 | 92.1 | 244 |
| Gauteng | 62.5 | 82.9 | 842 |
| Mpumalanga | 46.1 | 91.7 | 278 |
| Limpopo | 42.3 | 91.7 | 301 |
| Education |  |  |  |
| No education | (53.5) | (82.2) | 42 |
| Primary incomplete | 53.2 | 90.8 | 141 |
| Primary complete | 49.1 | 82.2 | 108 |
| Secondary incomplete | 59.1 | 90.3 | 1,486 |
| Secondary complete | 65.3 | 90.7 | 908 |
| More than secondary | 71.2 | 85.8 | 351 |
| Wealth quintile |  |  |  |
| Lowest | 56.5 | 88.6 | 650 |
| Second | 54.6 | 90.0 | 739 |
| Middle | 62.8 | 90.2 | 671 |
| Fourth | 67.2 | 92.3 | 557 |
| Highest | 72.9 | 85.3 | 418 |
| Total | 61.7 | 89.5 | 3,036 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
ORS = Oral rehydration salts

## Key Findings

- Nutritional status: $27 \%$ of children under age 5 are stunted (short for their age), 3\% are wasted (thin for their height), $6 \%$ are underweight (low weight for their age), and $13 \%$ are overweight (heavy for their height).
- Breastfeeding: Breastfeeding is initiated among twothirds of children within 1 hour of birth. Thirty-two percent of infants under age 6 months are exclusively breastfed.
- Minimum acceptable diet: Only 23\% of children age 6-23 months are fed a minimum acceptable diet.
- Consumption of unhealthy foods: $18 \%$ of children age 6-23 months consumed sugary drinks, $35 \%$ consumed sugary foods, and $44 \%$ consumed salty snacks during the day or night preceding the survey.
- Salt iodisation: Nearly all households tested have iodised salt ( $98 \%$ ); $11 \%$ have inadequately iodised salt (<15 ppm) and $89 \%$ have adequately iodised salt ( $\geq 15 \mathrm{ppm}$ ) of which $11 \%$ ( $10 \%$ of all households tested) have excessively iodised salt (>80 ppm).

TThis chapter reports on the nutritional status and prevalence of anaemia among children. It also describes infant and young child feeding practices, including breastfeeding and feeding with solid/semisolid foods, dietary diversity, and frequency of feeding. In addition, information on supplementation, deworming, and household fortification of salt with iodine is presented. Relevant aspects of nutrition among women and men age 15 and older are addressed in Chapter 17.

### 11.1 Nutritional Status of Children

Nutrition is foundational to both individual and national development. In 2012, the World Health Assembly set nutrition targets for reduction of stunting, wasting, and overweight in children. Nutritional status can be described by various means, such as clinical examination, dietary assessment, biochemical tests, and anthropometry (measurement of the body).

As stated in the WHO technical report on the use and interpretation of anthropometry, anthropometry is the most portable, universally applicable, inexpensive, and non-invasive technique for assessing the size, proportions, and composition of the human body. It reflects both health and nutritional status and predicts performance, health, and survival. As such, it is a valuable tool for guiding public health policy and clinical decisions (WHO 1995).

### 11.1.1 Measurement of Nutritional Status among Young Children

Children's height/length, weight, and age data were used to calculate three indices: height-for-age, weight-for-height, and weight-for-age.

As indicated in the box below, stunting, or low height-for-age, is a sign of chronic undernutrition that reflects failure to receive adequate nutrition over a long period. Stunting can also be affected by recurrent and chronic illness. Wasting, or low weight-for-height, is a measure of acute undernutrition and represents the failure to receive adequate nutrition in the period immediately before the survey. Wasting may result from inadequate food intake or from a recent episode of illness causing weight loss. The opposite of wasting is overweight (high weight-for-height), a measure of overnutrition. Underweight, or low weight-for-age, is a composite index of weight-for-height and height-for-age. Thus, it includes both acute (wasting) and chronic (stunting) undernutrition.

## Stunting (assessed via height-for-age)

Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished. Children whose Zscore is below minus three standard deviations (-3 SD) from the median are considered severely stunted.
Sample: Children under age 5

## Wasting (assessed via weight-for-height)

The weight-for-height index measures body mass in relation to body height or length and describes acute nutritional status. Children whose weight-for-height Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely wasted.
Sample: Children under age 5

## Underweight (assessed via weight-for-age)

Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose Z-score is below minus three standard deviations (-3 SD) from the median are considered severely underweight.
Sample: Children under age 5

Overweight (assessed via weight-for-height)
Children whose weight-for-height Z-score is more than two standard deviations (+2 SD) above the median of the reference population are considered overweight.
Sample: Children under age 5

The means of the Z-scores for height-for-age, weight-for-height, and weight-for-age are also calculated as summary statistics representing the nutritional status of children in a population. These mean scores describe the nutritional status of the entire population of children without the use of a cutoff point. A mean Z-score of less than 0 (i.e., a negative mean value for stunting, wasting, or underweight) suggests a downward shift in the entire sample population's nutritional status relative to the reference population. The farther away mean Z-scores are from 0 , the higher the prevalence of undernutrition.

### 11.1.2 Data Collection

A total of 2,024 children under age 5 were eligible for height and weight measurements to assess their nutritional status. Children for whom data are missing, incomplete, or out of range to such a degree as to not be plausible, are not included in the analysis. Out-of-range data are defined in the WHO growth standards
(WHO 2006). Valid height-for-age data are available for $73 \%$ of children, valid weight-for-height data are available for $72 \%$ of children, and valid weight-for-age data are available for $73 \%$ of children. The low percentages of valid data were mainly the result of missing or incomplete data; only $1 \%-2 \%$ of the data were out of range. Table C. 7 in Appendix C provides additional information on data completeness and quality for assessments of height, weight, and age among children. Based on this information, the anthropometry data should be interpreted with caution, especially among children in the provinces of Western Cape and Gauteng.

### 11.1.3 Levels of Child MaInutrition

The SADHS 2016 results show that $27 \%$ of children under age 5 are stunted, $3 \%$ are wasted, and $6 \%$ are underweight. Disconcertingly, 13\% of children are overweight (Figure 11.1).

## Patterns by background characteristics

- The prevalence of stunting generally increases with age from 8 months to 23 months before declining by the end of the third year of life ( 35 months). The proportions of stunting (43\%) and severe stunting ( $20 \%$ ) are highest among children age 18-23 months. Also, children in this age group are most likely to be underweight ( $10 \%$ ) (Table 11.1).

Figure 11.1 Nutritional status of children
Percentage of children under age 5 classified as malnourished


Note: Numbers may not sum to total due to rounding.

- Stunting is higher among male children (30\%) than among female children (25\%).
- As shown in Figure 11.2, Gauteng and Free State have the highest stunting prevalence (34\% each). However, the percentage of children with valid anthropometry data varies widely by province, potentially affecting the results (Table C. 7 in Appendix C).
- Stunting generally declines with increasing mother's education and household wealth. For example, $36 \%$ of children in the lowest wealth quintile are stunted, as compared with $13 \%$ of children in the highest wealth quintile (Figure 11.3).

Figure 11.2 Stunting in children by province

Percentage of children under age 5 who are stunted


Figure 11.3 Stunting in children by household wealth

Percentage of children under age 5 who are stunted


### 11.2 Infant and Young Child Feeding Practices

Appropriate infant and young child feeding (IYCF) practices include early initiation of breastfeeding within the first hour of life, exclusive breastfeeding in the first 6 months of life, continued breastfeeding up to age 2 or beyond, introduction of a range of safe solid and semisolid foods at age 6 months, and gradual increases in the amount of food given and frequency of feeding as the child gets older. It is also important for children to receive a diverse diet (i.e., eating foods from different food groups to ensure that macro- and micronutrient requirements are met) (WHO 2008).

### 11.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding within the first hour of life is important for both the mother and the child. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn. Early initiation of breastfeeding also encourages bonding between the mother and her newborn, facilitating the production of regular breast milk.

## Early breastfeeding

Initiation of breastfeeding within 1 hour of birth
Sample: Last-born children who were born in the 2 years before the survey

Table $\mathbf{1 1 . 2}$ shows that $84 \%$ of last-born children who were born in the 2 years before the survey were breastfed at some point in their life. Two-thirds ( $67 \%$ ) of infants were breastfed within 1 hour of birth and $80 \%$ within 1 day of birth. However, $16 \%$ of breastfed infants received a prelacteal feed.

Comparison with the SADHS 1998: The percentage of last-born children under age 2 who were ever breastfed decreased slightly from $87 \%$ in 1998 to $84 \%$ in 2016 . However, over the same period, the percentage of children who received breast milk within 1 hour of birth increased from $39 \%$ to $67 \%$.

## Patterns by background characteristics

- While differences in breastfeeding practices according to urban and non-urban residence were minor, there were considerable variations by province. The percentage of children who had ever been breastfed was highest in Limpopo (94\%) and lowest in KwaZulu-Natal (71\%).
- Only $49 \%$ of children in North West were breastfed within 1 hour of birth, as compared with $56 \%-85 \%$ of children in other provinces.
- The percentage of children receiving a prelacteal feed was highest in Mpumalanga (32\%) and Eastern Cape ( $21 \%$ ) and lowest in North West (7\%) and Northern Cape (10\%).
- Children whose mothers had not completed a primary education (7\%) were less likely than children whose mothers had completed higher levels of education ( $14 \%-19 \%$ ) to receive a prelacteal feed.


### 11.2.2 Exclusive and Continued Breastfeeding

Breast milk contains all of the nutrients needed by children in the first 6 months of life and is the best source of nutrition. It is recommended that children be exclusively breastfed in the first 6 months of their life; that is, they should be given nothing but breast milk. Exclusive breastfeeding to age 6 months prevents infections, such as diarrhoea and respiratory illnesses, and provides the nutrients and liquid an infant requires for optimal growth and development. Early initiation of complementary feeding reduces breast milk output because the production and release of breast milk is modulated by the frequency and intensity of suckling.

Tables 11.3 and 11.4 and Figure 11.4 show breastfeeding practices by age. Thirty-two percent of infants under age 6 months are exclusively breastfed. Exclusive breastfeeding declines with age: $44 \%$ of infants age $0-1$ month are exclusively breastfed, as compared with $24 \%$ of infants age 4-5 months.

Figure 11.4 Breastfeeding practices by age
Percentage of children under age 2


Contrary to the recommendation that infants under age 6 months be exclusively breastfed, many infants in South Africa consume other liquids in addition to breast milk, such as plain water ( $14 \%$ ) and other types of milk ( $11 \%$ ); $18 \%$ consume breast milk and complementary foods. One in four $(25 \%)$ children under age 6 months are not breastfeeding at all.

Half of infants age 0-3 months and $45 \%$ of infants under age 6 months feed from a bottle with a nipple, a practice that is discouraged. More than half of children age 6-17 months feed from a bottle with a nipple. WHO recommends that children continue breastfeeding until at least age 2 . Continued breastfeeding drops from $51 \%$ at 1 year to $13 \%$ at 2 years.

Comparison with the SADHS 1998: The proportion of infants under age 6 months who are exclusively breastfed increased from $7 \%$ in 1998 to $32 \%$ in 2016. The proportion of infants under age 6 months who are predominantly breastfed (those who receive only plain water or other non-milk liquids in addition to breast milk) increased from $23 \%$ to $46 \%$. However, the proportion of children who are not breastfeeding has also increased since 1998 , from $17 \%$ to $25 \%$ among those under age 6 months, from $29 \%$ to $40 \%$ among those age 6-9 months, and from $48 \%$ to $66 \%$ among those age 12-23 months.

### 11.2.3 Duration of Breastfeeding

Among children born in the 3 years preceding the survey, the median duration of any breastfeeding is 10.7 months, and the median duration of predominant breastfeeding is 1.9 months. The median duration of exclusive breastfeeding could not be determined because less than $50 \%$ of children were exclusively breastfeeding. The mean duration of any breastfeeding is 12.2 months, the mean duration of predominant breastfeeding is 3.8 months, and the mean duration of exclusive breastfeeding is 2.9 months (Table 11.5).

Comparison with the SADHS 1998: The mean duration of any breastfeeding decreased from 15.6 months in 1998 to 12.2 months in 2016. However, the mean duration of exclusive breastfeeding more than doubled, from 1.2 months to 2.9 months.

## Patterns by background characteristics

- Girls were breastfed longer than boys (median durations of 12.2 months and 8.6 months, respectively).
- Children in non-urban areas were breastfed for 3 months longer than those in urban areas (median duration of 13.5 months versus 10.3 months).

Information on the duration of breastfeeding among children under age 5 who were breastfed in the past but have been weaned is presented in Table 11.6. The mean and median durations of breastfeeding for such children were 10.4 and 9.2 months, respectively.

### 11.2.4 Complementary Feeding

After the first 6 months, breast milk alone is no longer sufficient to meet the nutritional needs of the infant; at this time, appropriate complementary foods should be introduced. This transition from exclusive breastfeeding to family foods is the time at which children are most vulnerable to becoming undernourished. Complementary feeding should be timely (children should start receiving foods in addition to breast milk from 6 months onwards), adequate (with respect to amount, frequency, consistency, and variety), and appropriate (in terms of texture). Foods should include animal-source foods, fruits, and vegetables (WHO 1998).

In the SADHS 2016, women who had at least one child living with them who was born in 2014 or a later year were asked questions about the types of liquids and foods the child had consumed during the day or night before the interview. Mothers who had more than one child born in 2014 or a later year were asked questions about the youngest child living with them.

Eighty-three percent of children age 6-8 months received solid, semisolid, or soft foods (Table 11.4). Table 11.7 shows that the types of foods and liquids received by children during the day and night preceding the survey depend on the child's age and breastfeeding status. Eighty percent of breastfeeding children and $87 \%$ of nonbreastfeeding children age 6-8 months received complementary foods. Regardless of breastfeeding status, more than 9 in 10 children age 6-23 months consumed complementary foods (any solid or semisolid food).

## Patterns by background characteristics

- Eighty-five percent of breastfeeding children age 6-23 months consumed foods made from grains; $50 \%$ consumed fortified baby foods; $47 \%$ consumed fruits or vegetables rich in vitamin A; $46 \%$ consumed cheese, yoghurt, and other milk products; $41 \%$ consumed meat, fish, or poultry; $39 \%$ consumed food made from roots and tubers; and $38 \%$ consumed eggs.
- Eighty-four percent of nonbreastfeeding children age 6-23 months consumed foods made from grains; $45 \%$ consumed fortified baby foods; $56 \%$ consumed fruits or vegetables rich in vitamin A; 55\% consumed cheese, yoghurt, and other milk products; $51 \%$ consumed meat, fish, or poultry; $45 \%$ consumed food made from roots and tubers; and $46 \%$ consumed eggs.


### 11.2.5 Minimum Acceptable Diet

Infants and young children should be fed a minimum acceptable diet to ensure appropriate growth and development. Without adequate diversity and meal frequency, infants and young children are vulnerable to undernutrition, especially stunting and micronutrient deficiencies, and to increased morbidity and mortality.

Dietary diversity is a proxy for adequate micronutrient density of foods. Minimum dietary diversity means feeding the child food from at least four food groups out of a standard seven groups. By consuming food from at least four food groups, the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food, such as grains, roots, or tubers (WHO 2008). The four groups should come from a list of seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk, yoghurt, and cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables.

Minimum meal frequency is a proxy for a child reaching her or his energy requirements. For infants and young children, the indicator is based on how much energy the child needs and, if the child is breastfed, the
amount of energy needs not met by breast milk. Breastfed children are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least twice a day (for infants age 6-8 months) or at least three times a day (for children age 9-23 months). Nonbreastfed children age 6-23 months are considered to be fed with a minimum meal frequency if they receive solid, semisolid, or soft foods at least four times a day.

## Minimum acceptable diet

Proportion of children age 6-23 months who receive a minimum acceptable diet. This indicator is a composite of the following two groups:

Breastfed children age 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day

Breastfed children age 6-23 months
and
Nonbreastfed children age 6-23 months who received at least two milk feedings and had at least the minimum dietary diversity (not including milk feeds) and the minimum meal frequency during the previous day

Nonbreastfed children age 6-23 months
Sample: Youngest children age 6-23 months living with their mother

Minimum dietary diversity, minimum meal frequency, and appropriate milk feeds together constitute a child's minimum acceptable diet. Forty-nine percent of children age 6-23 months met the criteria for minimum dietary diversity and $52 \%$ met the criteria for minimum meal frequency. Only $23 \%$ of children age 6-23 months were fed a minimum acceptable diet (Table 11.8).

More nonbreastfed children (31\%) than breastfed children (11\%) were fed a minimum acceptable diet. Nonbreastfed children were more likely than breastfed children to meet the criteria for both minimum dietary diversity ( $55 \%$ versus $42 \%$ ) and minimum meal frequency ( $68 \%$ versus 30\%) (Figure 11.5).

Patterns by background characteristics

- The percentage of children consuming a minimum acceptable diet increased with

Figure 11.5 IYCF indicators on minimum acceptable diet

Percentage of children age 6-23 months
$■$ Breastfed $\quad$ Nonbreastfed $\quad$ All children 6-23 months
 increasing age, from $17 \%$ among those age 6-11 months to $31 \%$ among those age 18-23 months. This change was due to improvements with age in dietary diversity; $23 \%$ of children age $6-8$ months met the criteria for minimum dietary diversity, as compared with $64 \%$ of children age 18-24 months.

- Twenty-six percent of children in urban areas were fed a minimum acceptable diet, compared with $19 \%$ of children in non-urban areas.
- High inter-provincial variability was observed. The percentage of children age 6-23 months with a minimum acceptable diet ranged from a low of $7 \%$ in Limpopo to a high of $42 \%$ in Free State.
- The proportion of children consuming a minimum acceptable diet generally increased with increasing mother's education.
- The percentage of children with a minimum acceptable diet increased with increasing household wealth, from $16 \%$ among children in the second wealth quintile to $39 \%$ among those in the highest quintile. Notably, differences in minimum acceptable diet were more apparent among nonbreastfed than breastfed children.


## Consumption of Unhealthy Foods and Drinks

As part of mothers' recall of foods and liquids consumed by their youngest child under age 2, they were asked about the child's consumption of liquids and foods that can be unhealthy, including sugary drinks and foods, and salty snacks. Overall, $18 \%$ of children age 6-23 months consumed sugary drinks, $35 \%$ consumed sugary foods, and $44 \%$ consumed salty snacks during the day or night preceding the survey (Table 11.9).

## Patterns by background characteristics

- Consumption of unhealthy foods and drinks increases with age. For example, $18 \%$ of children age 6-8 months consumed salty snacks and $4 \%$ consumed sugary drinks, as compared with $64 \%$ and $33 \%$, respectively, of children age 18 23 months.
- Nonbreastfeeding children were much more likely than breastfeeding children to consume unhealthy foods and drinks (Figure 11.6)

Figure 11.6 Consumption of unhealthy foods and drinks

Percentage of children age 6-23 months
$\square$ Breastfeeding $\quad$ Nonbreastfeeding $\quad$ All children 6-23 months


### 11.3 Anaemia Prevalence in Children

## Anaemia in children

| Anaemia status | Haemoglobin level in grams/decilitre* |
| :--- | :--- |
| Anaemic | $<11.0$ |
| Mildly anaemic | $10.0-10.9$ |
| Moderately anaemic | $7.0-9.9$ |
| Severely anaemic | $<7.0$ |
| Not anaemic | 11.0 or higher |
| *Haemoglobin levels are adjusted for altitude in enumeration areas that are above <br> 1,000 metres. |  |

Sample: Children age 6-59 months

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Iron is a key component of haemoglobin, and iron deficiency is estimated to be responsible for approximately half of all anaemia globally. Other potential causes of anaemia include malaria, hookworm and other helminth infections, other nutritional deficiencies, chronic and acute infections, and genetic conditions. Anaemia is a serious concern for children because it can impair cognitive development, stunt growth, and increase morbidity from infectious diseases.

Haemoglobin testing was carried out among children age 6-59 months. Haemoglobin levels were measured for $62 \%$ of the children eligible for testing. The methodology used to measure haemoglobin is described in Chapter 1. Given the low response rates, the results should be interpreted with caution.

Overall, the prevalence of anaemia among children age 6-59 months is $61 \%$, with $24 \%$ classified as mildly anaemic, $35 \%$ as moderately anaemic, and $2 \%$ as severely anaemic (Table 11.10).

The SADHS 2016 is the first DHS in South Africa to measure the prevalence of anaemia in children age 659 months. The anaemia prevalence observed in the SADHS 2016 is much higher than expected considering the results of other national studies (Shisana et al. 2014; Labadarios et al. 2007). Thus, as noted, the results should be interpreted with caution until they are further reviewed and analysed.

### 11.4 Presence of Iodised Salt in Households

Iodine is an essential micronutrient that is necessary for the synthesis of thyroid hormones. A wide range of physiological activities require thyroid hormones, which are critical for metabolism, initial growth, and organ development, specifically brain development. Even a mild iodine deficiency may seriously affect a child's intelligence and cognitive functioning. Ensuring adequate iodine nutrition is key to preventing iodine deficiency disorders, and iodisation of salt is the primary strategy used to achieve this aim in most populations.

In South Africa, iodisation of all food-grade salt with potassium iodate has been mandatory since 1995. Quantitative measurements of iodine in salt allow calculation of the percentage of households using iodised salt ( $>0 \mathrm{ppm}$ iodine), adequately iodised salt ( $\geq 15 \mathrm{ppm}$ iodine), or excessively iodised salt ( $>80 \mathrm{ppm}$ iodine). Excess iodine can also result in poor health outcomes, such as iodine-induced thyroid dysfunction.

In the SADHS 2016, salt samples were taken and laboratory-based titration for iodine was performed in $88 \%$ of eligible households. The titration method is used worldwide as the preferred method for quantitatively determining the iodine content of iodised salt. It is also the method of choice for quality control and for managing national salt iodisation programmes (WHO/UNICEF/ICCIDD 2007). The SADHS results showed that nearly all of the households in which salt was tested had iodised salt (98\%); 11\% had inadequately iodised salt ( $<15 \mathrm{ppm}$ ), and $89 \%$ had adequately iodised salt ( $\geq 15 \mathrm{ppm}$ ) (Table 11.11).

Adequately iodised salt can be characterised as optimally iodised ( $\geq 15$ to $\leq 40 \mathrm{ppm}$ ), highly iodised ( $>65$ ppm ), or excessively iodised ( $>80 \mathrm{ppm}$ ). Among South African households, 30\% have optimally iodised salt, $18 \%$ have highly iodised salt, and $10 \%$ have excessively iodised salt.

## Patterns by background characteristics

- Non-urban households are twice as likely as urban households to have inadequately iodised salt (18\% versus $8 \%$ ).
- By province, the proportion of households with inadequately iodised salt ranges from a low of $6 \%$ in Gauteng to a high of $31 \%$ in Limpopo.
- The percentage of households with inadequately iodised salt generally decreases with increasing household wealth.
- The proportion of households with excessively iodised salt is highest in Eastern Cape (14\%) and lowest in Western Cape (7\%).


### 11.5 Micronutrient Intake, Supplementation, and Deworming among Children

Micronutrient deficiencies are major contributors to childhood morbidity and mortality. Micronutrients are available in foods and can also be provided through food fortification and direct supplementation.

The information collected on food consumption among children age 6-23 months is useful in assessing the extent to which children are consuming foods rich in two key micronutrients-vitamin A and iron-in their daily diet. Iron is an essential micronutrient that plays an important role in numerous biological systems, and iron deficiency is one of the primary causes of anaemia. Iron deficiency anaemia leads to impaired motor and cognitive functioning, slower emotional development, and poor academic performance among children. Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage and is the leading cause of childhood blindness. VAD also increases the severity of infections, such as measles and diarrhoeal disease, in children and slows recovery from illness. Fruits and vegetables rich in vitamin A should be part of the daily diet. Studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients, especially iron. Therefore, WHO recommends that meat, poultry, fish, or eggs be part of the daily diet as well or eaten as often as possible (WHO 1998).

South Africa has a national food fortification programme, introduced in 2003, that supplies additional vitamin A and iron (and other nutrients) to children's diets. The national vitamin A supplementation programme was implemented in 2002.

Table $\mathbf{1 1 . 1 2}$ presents results on dietary intake of foods rich in vitamin A and iron (based on a single 24-hour recall), as well as vitamin A supplementation (VAS) and deworming medication received in the past 6 months. In the 24 hours before the survey, about 7 in $10(73 \%)$ children age 6-23 months received foods rich in vitamin A, and 6 in $10(61 \%)$ received foods rich in iron. Among all children age 6-59 months, $72 \%$ received VAS and $63 \%$ received deworming medication in the 6 months before the survey. One in four children age 6-11 months received deworming medication. This finding needs further review and analysis since preventive deworming is not recommended for this age group.

## Patterns by background characteristics

- Consumption of vitamin A-rich and iron-rich foods increases with age.
- Vitamin A-rich and iron-rich food intakes are higher among urban children than non-urban children.
- Consumption of vitamin A-rich foods generally increases with increasing mother's education and increasing household wealth, but consumption of iron-rich foods generally does not differ according to education or wealth.
- Children whose mothers are age 15-19 ( $48 \%$ ) are less likely than children of older mothers ( $63 \%-68 \%$ ) to have been given deworming medication in the past 6 months.


## Consumption of Liver

Consuming natural sources of vitamin A rarely results in vitamin A toxicity unless excessive amounts of liver are consumed. In the SADHS 2016, as part of the dietary recall, mothers were asked if their child age 12-23 months had ever eaten liver and, if so, how many times in the past 4 weeks. Liver consumption was assessed only among children age 12-23 months, which did not allow for meaningful evaluations by background characteristics. Overall, $41 \%$ of children age 12-23 months have ever eaten liver (Table 11.13). Among these children, $70 \%$ ate liver at least once during the past 4 weeks. The contribution of liver in the diet needs to be taken into account when designing micronutrient programs.

### 11.6 Micronutrient Intake among Mothers

During pregnancy, women are at a higher risk of anaemia due to an increase in blood volume. Severe anaemia can place both the mother and the baby in danger through increased risk of blood loss during labour, preterm delivery, low birth weight, and perinatal mortality. In order to prevent anaemia, pregnant women are advised to take iron-folate supplements and to eat iron-rich foods.

Among women with a child born in the 5 years preceding the survey, only $51 \%$ took iron tablets for 90 days or more during their most recent pregnancy. Nine percent of women did not take any iron tablets during their most recent pregnancy, $19 \%$ took iron tablets for less than 60 days, and $5 \%$ took iron tables for $60-89$ days. An additional $17 \%$ took iron tablets but were uncertain as to the number of days (Table 11.14).

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- Table 11.14 Micronutrient intake among mothers
Table 11.1 Nutritional status of children


| Background characteristic | Height-for-age ${ }^{1}$ |  |  |  | Weight-for-height |  |  |  |  | Weight-for-age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below - 2 SD $^{2}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \end{gathered}$ | Number of children | Percentage below -3 SD | Percentage below -2 SD ${ }^{2}$ | Percentage above +2 SD | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \\ \hline \end{gathered}$ | Number of children | Percentage below -3 SD | Percentage below-2 SD ${ }^{2}$ | Percentage above +2 SD | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \\ \hline \end{gathered}$ | Number of children |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| <6 | 18.3 | 32.3 | -1.1 | 127 | 0.6 | 3.3 | 28.9 | 1.0 | 121 | 2.2 | 6.7 | 6.5 | -0.1 | 131 |
| 6-8 | 2.0 | 16.9 | -0.9 | 50 | 1.7 | 1.7 | 28.6 | 1.1 | 52 | 2.4 | 4.5 | 7.0 | 0.2 | 53 |
| 9-11 | 8.4 | 18.3 | -0.3 | 66 | 1.1 | 1.8 | 13.9 | 0.5 | 66 | 0.5 | 6.0 | 10.2 | 0.1 | 68 |
| 12-17 | 13.5 | 31.4 | -1.0 | 165 | 1.5 | 2.8 | 12.6 | 0.5 | 154 | 0.7 | 3.1 | 7.8 | 0.1 | 163 |
| 18-23 | 19.9 | 42.6 | -1.6 | 133 | 0.4 | 1.9 | 13.8 | 0.9 | 130 | 0.4 | 10.1 | 6.7 | -0.0 | 132 |
| 24-35 | 10.4 | 32.9 | -1.4 | 260 | 0.4 | 1.8 | 12.5 | 0.7 | 258 | 0.7 | 4.9 | 3.3 | -0.2 | 265 |
| 36-47 | 6.4 | 27.5 | -1.3 | 298 | 0.3 | 1.9 | 9.4 | 0.5 | 301 | 1.3 | 5.2 | 3.4 | -0.4 | 298 |
| 48-59 | 4.4 | 15.6 | -0.9 | 306 | 0.2 | 3.5 | 8.8 | 0.4 | 302 | 1.5 | 6.9 | 1.5 | -0.4 | 306 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 12.6 | 29.8 | -1.2 | 714 | 0.7 | 2.1 | 15.5 | 0.7 | 701 | 1.2 | 6.7 | 5.8 | -0.1 | 721 |
| Female | 7.0 | 25.0 | -1.1 | 691 | 0.4 | 2.8 | 11.0 | 0.5 | 683 | 1.0 | 5.1 | 3.3 | -0.2 | 695 |
| Birth interval in months ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| First birth ${ }^{4}$ | 6.5 | 24.0 | -1.0 | 400 | 0.7 | 2.4 | 14.9 | 0.6 | 394 | 0.2 | 3.2 | 4.0 | -0.1 | 406 |
| <24 | 13.3 | 27.1 | -1.2 | 70 | 0.0 | 1.2 | 3.1 | 0.5 | 69 | 0.0 | 2.3 | 0.2 | -0.3 | 72 |
| 24-47 | 13.9 | 31.0 | -1.3 | 217 | 0.3 | 2.2 | 12.6 | 0.7 | 207 | 0.8 | 4.4 | 4.5 | -0.2 | 215 |
| 48+ | 10.9 | 26.6 | -1.2 | 388 | 0.6 | 3.2 | 15.4 | 0.6 | 380 | 2.2 | 9.1 | 4.6 | -0.2 | 390 |
| Size at birth ${ }^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Very small | 9.7 | 29.1 | -1.3 | 58 | 1.9 | 10.2 | 5.4 | 0.1 | 54 | 4.0 | 14.9 | 6.7 | -0.5 | 60 |
| Small | 21.6 | 49.2 | -1.8 | 94 | 0.8 | 7.5 | 7.0 | 0.2 | 91 | 1.2 | 23.5 | 1.5 | -0.9 | 95 |
| Average or larger | 8.9 | 23.7 | -1.1 | 917 | 0.4 | 1.6 | 15.1 | 0.7 | 899 | 0.8 | 2.9 | 4.2 | -0.1 | 922 |
| Don't know | * | * | * | 6 | * | * | * | * | 6 | * | * | * | * | 6 |
| Mother's interview status |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interviewed | 10.0 | 26.5 | -1.2 | 1,075 | 0.6 | 2.6 | 13.8 | 0.6 | 1,050 | 1.1 | 5.5 | 4.1 | -0.2 | 1,083 |
| Not interviewed but in household | 6.9 | 33.6 | -1.3 | 81 | 2.5 | 5.7 | 5.7 | 0.3 | 77 | 4.8 | 14.0 | 5.1 | -0.4 | 83 |
| Not interviewed and not in the household ${ }^{5}$ | 9.9 | 29.3 | -1.1 | 249 | 0.0 | 0.9 | 13.2 | 0.7 | 256 | 0.3 | 4.9 | 6.4 | -0.1 | 250 |
| Mother's nutritional status ${ }^{6}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Underweight (BMI <18.5) | (16.1) | (27.2) | (-1.5) | 18 | * | * | * | * | 18 | (0.0) | (10.9) | (0.0) | (-1.1) | 19 |
| Normal <br> (BMI 18.5-24.9) | 10.4 | 29.2 | -1.2 | 306 | 0.8 | 3.0 | 12.0 | 0.5 | 307 | 1.2 | 7.4 | 1.5 | -0.4 | 313 |
| Overweight/obese <br> (BMI $\geq 25$ ) | 8.9 | 25.4 | -1.1 | 629 | 0.5 | 2.7 | 14.9 | 0.7 | 621 | 1.0 | 4.6 | 4.7 | -0.0 | 635 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 8.9 | 25.7 | -1.1 | 713 | 0.6 | 2.4 | 13.2 | 0.6 | 698 | 1.2 | 5.8 | 4.3 | -0.2 | 721 |
| Non-urban | 10.8 | 29.2 | -1.2 | 691 | 0.6 | 2.5 | 13.4 | 0.7 | 686 | 1.1 | 6.0 | 4.8 | -0.2 | 695 |


| Background characteristic | Height-for-age ${ }^{1}$ |  |  |  | Weight-for-height |  |  |  |  | Weight-for-age |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below -3 SD | Percentage below -2 SD ${ }^{2}$ | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \\ \hline \end{gathered}$ | Number of children | Percentage below -3 SD | Percentage below - 2 SD $^{2}$ | Percentage above +2 SD | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \\ \hline \end{gathered}$ | Number of children | Percentage below-3 SD | Percentage below - 2 SD $^{2}$ | Percentage above +2 SD | $\begin{gathered} \text { Mean } \\ \text { Z-score (SD) } \\ \hline \end{gathered}$ | Number of children |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 6.6 | 22.9 | -1.0 | 64 | (1.7) | (1.7) | (14.3) | (0.6) | 63 | 3.7 | 11.9 | 1.8 | -0.2 | 64 |
| Eastern Cape | 8.9 | 24.8 | -1.0 | 210 | 0.4 | 1.5 | 20.4 | 0.9 | 210 | 0.7 | 3.4 | 8.6 | 0.0 | 211 |
| Northern Cape | 7.3 | 21.4 | -1.0 | 25 | 2.1 | 2.1 | 4.6 | 0.1 | 24 | 3.9 | 8.4 | 6.5 | -0.3 | 25 |
| Free State | 10.3 | 33.5 | -1.5 | 72 | 1.5 | 4.6 | 17.0 | 0.7 | 70 | 2.9 | 8.0 | 3.5 | -0.2 | 74 |
| KwaZulu-Natal | 13.3 | 28.5 | -1.1 | 283 | 0.5 | 2.5 | 18.3 | 0.9 | 266 | 1.5 | 3.8 | 7.6 | 0.1 | 281 |
| North West | 5.6 | 27.4 | -1.2 | 128 | 0.4 | 5.9 | 7.9 | 0.3 | 128 | 1.7 | 12.6 | 3.1 | -0.5 | 130 |
| Gauteng | 14.4 | 34.2 | -1.4 | 303 | 0.2 | 1.3 | 11.2 | 0.5 | 297 | 0.2 | 5.8 | 2.8 | -0.4 | 304 |
| Mpumalanga | 4.6 | 21.5 | -1.1 | 151 | 0.5 | 0.5 | 8.5 | 0.6 | 152 | 1.3 | 4.7 | 2.2 | -0.2 | 154 |
| Limpopo | 6.2 | 21.9 | -1.0 | 168 | 0.7 | 4.1 | 7.9 | 0.4 | 173 | 0.0 | 4.9 | 2.1 | -0.3 | 173 |
| Mother's education ${ }^{7}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | (5.4) | (49.5) | (-1.4) | 22 | (3.0) | (5.3) | (0.0) | (0.0) | 24 | (5.7) | (8.7) | (0.0) | (-0.9) | 22 |
| Primary incomplete | 15.7 | 36.5 | -1.5 | 72 | 2.3 | 3.9 | 22.5 | 0.9 | 70 | 4.9 | 5.9 | 3.6 | -0.3 | 71 |
| Primary complete | 10.9 | 42.3 | -1.9 | 38 | (0.0) | (0.0) | (11.2) | (0.7) | 36 | 0.0 | 5.7 | 1.3 | -0.4 | 38 |
| Secondary incomplete | 11.8 | 31.7 | -1.4 | 586 | 0.7 | 3.5 | 13.5 | 0.6 | 575 | 1.5 | 7.9 | 3.7 | -0.3 | 594 |
| Secondary complete | 7.6 | 19.0 | -0.8 | 326 | 0.4 | 2.2 | 13.4 | 0.6 | 313 | 0.6 | 4.6 | 5.8 | 0.1 | 328 |
| More than secondary | 2.6 | 9.8 | -0.7 | 112 | 0.0 | 0.7 | 9.5 | 0.4 | 110 | 0.0 | 0.7 | 4.1 | -0.0 | 112 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 14.5 | 36.3 | -1.5 | 359 | 0.7 | 2.0 | 15.6 | 0.8 | 353 | 1.5 | 4.7 | 3.6 | -0.3 | 358 |
| Second | 8.7 | 29.4 | -1.2 | 340 | 0.5 | 4.1 | 13.3 | 0.5 | 337 | 1.2 | 8.5 | 5.4 | -0.3 | 348 |
| Middle | 8.0 | 23.9 | -1.1 | 341 | 0.8 | 2.6 | 11.3 | 0.5 | 339 | 1.2 | 5.6 | 2.9 | -0.2 | 344 |
| Fourth | 11.1 | 24.5 | -0.8 | 230 | 0.4 | 1.8 | 14.9 | 0.6 | 221 | 0.5 | 5.8 | 9.2 | 0.1 | 229 |
| Highest | 2.4 | 12.5 | -0.7 | 135 | 0.1 | 0.1 | 9.3 | 0.5 | 133 | 0.9 | 3.2 | 1.3 | -0.1 | 137 |
| Total | 9.8 | 27.4 | -1.1 | 1,404 | 0.6 | 2.5 | 13.3 | 0.6 | 1,384 | 1.1 | 5.9 | 4.5 | -0.2 | 1,416 |

 fewer than 25 unweighted cases and has been suppressed.
Recumbent length is measured for children under age 2; standing height is measured for all
2 Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median
Excludes children whose mothers were not interviewed
${ }^{4}$ First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval
${ }^{5}$ Includes children whose mothers are deceased
 ${ }^{7}$ For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire

Table 11.2 Initial breastfeeding
Among last-born children who were born in the 2 years preceding the survey, percentage who were ever breastfed and percentages who started breastfeeding within 1 hour and within 1 day of birth, and among last-born children born in the 2 years preceding the survey who were ever breastfed, percentage who received a prelacteal feed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among last-born children born in the past 2 years: |  |  |  | Among last-born children born in the past 2 years who were ever breastfed: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage ever breastfed | Percentage who started breastfeeding within 1 hour of birth | Percentage who started breastfeeding within 1 day of birth ${ }^{1}$ | Number of lastborn children | Percentage who received a prelacteal feed ${ }^{2}$ | Number of lastborn children ever breastfed |
| Sex |  |  |  |  |  |  |
| Male | 84.3 | 68.4 | 79.7 | 714 | 15.5 | 602 |
| Female | 83.7 | 66.1 | 80.7 | 672 | 15.9 | 563 |
| Assistance at delivery |  |  |  |  |  |  |
| Health personnel ${ }^{3}$ | 83.9 | 67.6 | 80.2 | 1,347 | 15.9 | 1,130 |
| Traditional birth attendant | * | * |  | 2 | * | 1 |
| Other | (89.4) | (56.5) | (76.1) | 24 | (8.9) | 22 |
| No one |  |  |  | 13 |  | 12 |
| Place of delivery |  |  |  |  |  |  |
| Health facility | 83.9 | 67.5 | 80.1 | 1,332 | 16.0 | 1,117 |
| At home | (87.2) | (64.8) | (81.9) | 47 | (9.7) | 41 |
| Other | * | * |  | 7 | * | 6 |
| Residence |  |  |  |  |  |  |
| Urban | 84.0 | 69.6 | 80.8 | 872 | 16.2 | 733 |
| Non-urban | 84.0 | 63.4 | 79.1 | 514 | 14.8 | 432 |
| Province |  |  |  |  |  |  |
| Western Cape | 92.1 | 84.7 | 92.1 | 118 | 13.9 | 108 |
| Eastern Cape | 85.7 | 60.9 | 79.7 | 163 | 20.8 | 140 |
| Northern Cape | 89.8 | 65.8 | 84.6 | 27 | 9.9 | 25 |
| Free State | 79.9 | 66.2 | 78.3 | 60 | 17.1 | 48 |
| KwaZulu-Natal | 71.0 | 58.9 | 70.1 | 258 | 16.2 | 183 |
| North West | 82.4 | 48.6 | 72.5 | 106 | 7.4 | 87 |
| Gauteng | 89.1 | 75.1 | 85.5 | 385 | 12.2 | 343 |
| Mpumalanga | 75.9 | 55.6 | 66.6 | 127 | 32.2 | 96 |
| Limpopo | 94.2 | 79.2 | 92.3 | 144 | 14.0 | 136 |
| Mother's education |  |  |  |  |  |  |
| No education | * | * | * | 18 | * | 16 |
| Primary incomplete | 81.9 | 66.6 | 80.6 | 60 | 6.7 | 49 |
| Primary complete | 93.8 | 79.3 | 90.2 | 50 | 14.3 | 47 |
| Secondary incomplete | 83.4 | 67.5 | 79.7 | 706 | 15.0 | 589 |
| Secondary complete | 84.5 | 65.9 | 79.7 | 397 | 18.7 | 335 |
| More than secondary | 82.4 | 65.7 | 79.8 | 155 | 16.1 | 128 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 88.2 | 67.4 | 85.2 | 312 | 11.4 | 275 |
| Second | 84.2 | 67.2 | 80.2 | 326 | 17.0 | 274 |
| Middle | 80.5 | 69.2 | 76.9 | 291 | 13.0 | 234 |
| Fourth | 80.5 | 64.2 | 77.6 | 269 | 15.8 | 216 |
| Highest | 87.1 | 68.8 | 80.7 | 189 | 24.4 | 164 |
| Total | 84.0 | 67.3 | 80.2 | 1,386 | 15.7 | 1,165 |

Notes: Table is based on last-born children born in the 2 years preceding the survey regardless of whether the children are living or dead at the time of the interview. Children who received breast milk are considered to have been breastfed regardless of the source of the breast milk. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes children who started breastfeeding within 1 hour of birth
${ }^{2}$ Children given something other than breast milk during the first 3 days of life
${ }^{3}$ Doctor or nurse/midwife

## Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under age 2 who are living with their mother by breastfeeding status and the percentage currently breastfeeding, and the percentage of all children under age 2 using a bottle with a nipple, according to age in months, South Africa DHS 2016

| Age in months | Breastfeeding status |  |  |  |  |  |  | Percentage currently breastfeeding | Number of youngest children under age 2 living with their mother | Percentage using a bottle with a nipple | Number of all children under age 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not breastfeeding | Exclusively breastfed | Breastfeeding and consuming plain water only | Breastfeeding and consuming non-milk liquids ${ }^{1}$ | Breastfeeding and consuming other milk | Breastfeeding and consuming complementary foods | Total |  |  |  |  |
| 0-1 | 19.2 | 44.0 | 14.0 | 1.2 | 14.9 | 6.7 | 100.0 | 80.8 | 110 | 47.3 | 115 |
| 2-3 | 28.9 | 28.2 | 6.7 | 0.4 | 11.0 | 24.9 | 100.0 | 71.1 | 110 | 52.2 | 120 |
| 4-5 | 27.2 | 23.7 | 19.5 | 0.4 | 8.5 | 20.8 | 100.0 | 72.8 | 125 | 35.4 | 128 |
| 6-8 | 40.8 | 4.9 | 0.7 | 1.3 | 5.1 | 47.2 | 100.0 | 59.2 | 146 | 55.0 | 165 |
| 9-11 | 42.5 | 0.0 | 0.0 | 0.0 | 2.1 | 55.4 | 100.0 | 57.5 | 143 | 52.2 | 160 |
| 12-17 | 53.3 | 0.4 | 0.3 | 0.0 | 0.1 | 46.0 | 100.0 | 46.7 | 311 | 50.0 | 360 |
| 18-23 | 81.5 | 0.1 | 0.0 | 0.0 | 0.0 | 18.4 | 100.0 | 18.5 | 267 | 38.5 | 317 |
| 0-3 | 24.0 | 36.1 | 10.3 | 0.8 | 13.0 | 15.8 | 100.0 | 76.0 | 221 | 49.8 | 235 |
| 0-5 | 25.2 | 31.6 | 13.6 | 0.6 | 11.4 | 17.6 | 100.0 | 74.8 | 345 | 44.7 | 363 |
| 6-9 | 40.4 | 3.7 | 0.6 | 0.9 | 5.3 | 49.1 | 100.0 | 59.6 | 194 | 55.3 | 215 |
| 12-15 | 48.6 | 0.6 | 0.4 | 0.0 | 0.2 | 50.3 | 100.0 | 51.4 | 201 | 55.7 | 231 |
| 12-23 | 66.4 | 0.2 | 0.1 | 0.0 | 0.1 | 33.2 | 100.0 | 33.6 | 578 | 44.6 | 677 |
| 20-23 | 87.0 | 0.0 | 0.0 | 0.0 | 0.0 | 13.0 | 100.0 | 13.0 | 161 | 43.4 | 189 |

Note: Breastfeeding status refers to a " 24 -hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semisolids) are hierarchical and mutually exclusive, and their percentages add to $100 \%$. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.
${ }^{1}$ Non-milk liquids include juice, juice drinks, or other liquids

Table 11.4 Infant and young child feeding (IYCF) indicators on breastfeeding status
Percentage of children fed according to various IYCF practices, South Africa DHS 2016

| Indicator | Percentage | Number of <br> children |
| :--- | :---: | :---: |
| Exclusive breastfeeding under 6 months | 31.6 | 345 |
| Exclusive breastfeeding at 4-5 months | 23.7 | 125 |
| Continued breastfeeding at 1 year | 51.4 | 201 |
| Introduction of solid, semi-solid or soft foods <br> (6-8 months) | 82.5 | 146 |
| Continued breastfeeding at 2 years | 13.0 | 161 |
| Age-appropriate breastfeeding (0-23 months) |  |  |
| Predominant breastfeeding ${ }^{2}$ (0-5 months) | 37.1 | 1,213 |
| Bottle feeding (0-23 months) | 45.9 | 345 |

${ }^{1}$ For children age 0-5 months: exclusively breastfed, for children age 6-23 months: receive breast milk and complementary foods
${ }^{2}$ Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.5 Median duration of breastfeeding
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the 3 years preceding the survey, according to background characteristics, South Africa DHS 2016

| Background characteristic | Median duration (months) of breastfeeding among children born in the past 3 years ${ }^{1}$ |  |  |
| :---: | :---: | :---: | :---: |
|  | Any breastfeeding | Exclusive breastfeeding | Predominant breastfeeding ${ }^{2}$ |
| Sex |  |  |  |
| Male | 8.6 | a | a |
| Female | 12.2 | a | 2.6 |
| Residence |  |  |  |
| Urban | 10.3 | a | 1.9 |
| Non-urban | 13.5 | a | 1.8 |
| Wealth quintile |  |  |  |
| Lowest | 16.5 | a | a |
| Second | 7.9 | (2.3) | (2.8) |
| Middle | 11.7 | a | (2.2) |
| Fourth | 8.3 | a | 3.9 |
| Highest | (4.3) | a | a |
| Total | 10.7 | a | 1.9 |
| Mean for all children | 12.2 | 2.9 | 3.8 |

Notes: Median and mean durations are based on the breastfeeding status of the child at the time of the survey (current status). Includes living and deceased children. Figures in parentheses are based on 25-49 unweighted cases. a = Omitted because less than $50 \%$ of the children in this group were exclusively or predominantly breastfeeding
${ }^{1}$ For last-born children under age 24 months who live with their mother and are breastfeeding, information to determine exclusive and predominant breastfeeding comes from a 24 -hour dietary recall. Tabulations assume that last-born children age 24 months or older who live with their mother and are breastfeeding are neither exclusively nor predominantly breastfed. It is assumed that last-born children not currently living with their mother and all non-last-born children are not currently breastfeeding.
${ }^{2}$ Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

Table 11.6 Duration of past breastfeeding
Among youngest children born in the 5 years before the survey who were ever breastfed but are not currently breastfeeding, the mean number of months breastfed and the median number of months breastfed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Mean duration of breastfeeding in months | Median duration of breastfeeding in months | Number of last-born children ever breastfed who are no longer breastfeeding |
| :---: | :---: | :---: | :---: |
| Age in months |  |  |  |
| <6 | (2.6) | (3.0) | 52 |
| 6-8 | (2.9) | (3.3) | 44 |
| 9-11 | (4.1) | (3.9) | 55 |
| 12-17 | 7.0 | 6.8 | 153 |
| 18-23 | 9.5 | 8.7 | 208 |
| 24-35 | 11.5 | 12.3 | 446 |
| 36-47 | 11.5 | 11.7 | 434 |
| 48-59 | 12.3 | 12.5 | 423 |
| Sex |  |  |  |
| Male | 10.2 | 9.1 | 929 |
| Female | 10.6 | 9.2 | 886 |
| Residence |  |  |  |
| Urban | 9.9 | 8.2 | 1,154 |
| Non-urban | 11.2 | 12.2 | 661 |
| Province |  |  |  |
| Western Cape | 7.0 | 5.9 | 162 |
| Eastern Cape | 9.6 | 6.7 | 203 |
| Northern Cape | 13.4 | 12.6 | 33 |
| Free State | 9.7 | 7.7 | 79 |
| KwaZulu-Natal | 9.6 | 8.7 | 311 |
| North West | 10.5 | 8.8 | 150 |
| Gauteng | 10.9 | 10.7 | 522 |
| Mpumalanga | 11.1 | 12.3 | 168 |
| Limpopo | 13.3 | 14.8 | 186 |
| Mother's education |  |  |  |
| No education | (9.6) | (6.7) | 23 |
| Primary incomplete | 11.9 | 12.4 | 91 |
| Primary complete | 10.7 | 9.0 | 70 |
| Secondary incomplete | 11.5 | 12.2 | 827 |
| Secondary complete | 9.6 | 8.1 | 567 |
| More than secondary | 8.0 | 6.1 | 237 |
| Wealth quintile |  |  |  |
| Lowest | 12.0 | 12.4 | 384 |
| Second | 11.4 | 12.4 | 476 |
| Middle | 10.4 | 9.9 | 380 |
| Fourth | 9.8 | 7.1 | 304 |
| Highest | 7.0 | 5.2 | 271 |
| Total | 10.4 | 9.2 | 1,815 |

Note: Figures in parentheses are based on 25-49 unweighted cases.
Table 11.7 Foods and liquids consumed by children in the day or night preceding the interview
Percentage of youngest children under age 2 who are living with their mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, South Africa DHS 2016

|  |  | Liquids |  | Solid or semisolid foods |  |  |  |  |  |  |  |  |  | Any solid or semisolid food | Number of children under age 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age in months | Infant formula | Other milk ${ }^{1}$ | Other liquids ${ }^{2}$ | Fortified baby foods | Food made from grains ${ }^{3}$ | Fruits and vegetables rich in vitamin $A^{4}$ | Other fruits and vegetables | Food made from roots and tubers | Food made from legumes and nuts | Meat, fish, poultry | Food made with oil, fat, or butter | Eggs | Cheese, yoghurt, other milk products |  |  |
| BREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | 15.7 | 5.4 | 1.8 | 3.3 | 7.3 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 8.3 | 89 |
| 2-3 | 26.9 | 2.7 | 2.4 | 28.8 | 30.8 | 0.0 | 0.0 | 0.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 35.0 | 78 |
| 4-5 | 16.8 | 8.8 | 5.5 | 21.7 | 26.5 | 4.2 | 2.4 | 1.8 | 0.0 | 1.4 | 2.2 | 3.4 | 2.4 | 28.6 | 91 |
| 6-8 | 44.6 | 22.9 | 27.8 | 62.4 | 75.7 | 32.4 | 18.0 | 31.3 | 1.5 | 15.0 | 6.5 | 21.0 | 32.1 | 79.7 | 86 |
| 9-11 | 32.6 | 16.9 | 41.3 | 62.9 | 84.1 | 60.1 | 34.9 | 35.1 | 6.8 | 32.6 | 25.2 | 40.3 | 50.4 | 96.4 | 82 |
| 12-17 | 19.7 | 27.7 | 46.2 | 37.6 | 86.3 | 52.0 | 45.0 | 48.5 | 17.5 | 52.4 | 26.1 | 47.5 | 49.0 | 98.5 | 145 |
| 18-23 | 25.3 | 20.6 | 56.8 | 43.8 | 97.1 | 33.5 | 44.4 | 34.4 | 12.6 | 68.9 | 20.2 | 38.4 | 50.8 | 99.6 | 49 |
| 6-23 | 29.3 | 23.1 | 42.1 | 50.1 | 84.7 | 46.7 | 36.2 | 39.4 | 10.6 | 41.2 | 20.4 | 38.3 | 45.5 | 93.7 | 363 |
| Total | 25.2 | 15.9 | 26.0 | 36.5 | 58.3 | 27.9 | 21.5 | 23.4 | 6.2 | 24.3 | 12.3 | 22.9 | 27.2 | 64.5 | 622 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0-1 | * | * | * | * | * | * | * | * | * | * | * | * | * | * | 21 |
| 2-3 | (53.6) | (26.0) | (16.3) | (45.6) | (47.3) | (15.0) | (1.7) | (13.3) | (1.7) | (1.7) | (13.3) | (1.7) | (15.0) | (47.3) | 32 |
| 4-5 | (84.7) | (36.6) | (3.4) | (60.4) | (60.4) | (5.9) | (6.0) | (13.2) | (2.6) | (0.0) | (1.4) | (4.3) | (11.1) | (67.3) | 34 |
| 6-8 | 78.5 | 32.1 | 37.8 | 58.3 | 71.8 | 43.4 | 30.0 | 29.9 | 3.9 | 21.7 | 13.8 | 24.0 | 29.7 | 86.5 | 60 |
| 9-11 | 74.9 | 55.0 | 46.1 | 62.1 | 83.4 | 62.3 | 41.3 | 40.7 | 15.0 | 41.3 | 24.1 | 38.1 | 55.6 | 95.8 | 61 |
| 12-17 | 51.1 | 46.7 | 56.9 | 52.4 | 82.1 | 54.6 | 39.9 | 47.9 | 19.2 | 48.4 | 32.0 | 47.9 | 53.1 | 93.4 | 166 |
| 18-23 | 29.8 | 26.9 | 54.3 | 32.0 | 89.2 | 58.6 | 60.6 | 48.6 | 17.8 | 63.9 | 42.2 | 52.7 | 63.8 | 97.5 | 218 |
| 6-23 | 48.0 | 37.4 | 52.2 | 45.4 | 84.1 | 55.9 | 47.9 | 45.2 | 16.3 | 51.1 | 33.3 | 46.0 | 55.2 | 94.7 | 504 |
| Total | 50.8 | 35.6 | 46.0 | 44.7 | 77.9 | 48.9 | 41.3 | 40.0 | 14.1 | 43.7 | 29.2 | 39.5 | 48.6 | 87.2 | 591 |

 ${ }^{1}$ Other milk includes fresh, tinned, and powdered animal milk
${ }^{2}$ Does not include plain water. Includes juice, juice drinks, or other non-milk liquids

Table 11.8 Minimum acceptable diet
Percentage of youngest children age $6-23$ months living with their mother who are fed a minimum acceptable diet based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among breastfed children 6-23 months, percentage fed: |  |  |  | Among nonbreastfed children 6-23 months, percentage fed: |  |  |  |  | Among all children 6-23 months, percentage fed: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Minimum dietary diversity ${ }^{1}$ | Minimum meal frequency ${ }^{2}$ | Minimum acceptable $\operatorname{diet}^{3}$ | Number of breastfed children age 6-23 months | Milk or milk products ${ }^{4}$ | Minimum dietary diversity ${ }^{1}$ | $\begin{gathered} \text { Minimum } \\ \text { meal } \\ \text { frequency }{ }^{5} \\ \hline \end{gathered}$ | Minimum acceptable $\operatorname{diet}^{6}$ | Number of nonbreastfed children 6-23 months | Breast milk, milk, or milk products ${ }^{7}$ | Minimum dietary diversity ${ }^{1}$ | $\begin{gathered} \text { Minimum } \\ \text { meal } \\ \text { frequency }{ }^{8} \\ \hline \end{gathered}$ | Minimum acceptable $\operatorname{diet}^{9}$ | Number of all children age 6-23 months |
| Age in months |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6-8 | 20.5 | 46.2 | 14.9 | 86 | 80.2 | 27.3 | 73.5 | 19.5 | 60 | 91.9 | 23.3 | 57.3 | 16.8 | 146 |
| 9-11 | 46.9 | 25.8 | 7.4 | 82 | 80.0 | 49.3 | 78.9 | 29.3 | 61 | 91.5 | 47.9 | 48.3 | 16.7 | 143 |
| 12-17 | 50.1 | 21.4 | 9.5 | 145 | 75.9 | 49.7 | 73.8 | 32.4 | 166 | 87.2 | 49.9 | 49.3 | 21.7 | 311 |
| 18-23 | 46.6 | 31.2 | 16.4 | 49 | 56.2 | 67.5 | 59.1 | 34.4 | 218 | 64.3 | 63.7 | 53.9 | 31.1 | 267 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Male | 35.1 | 26.4 | 10.5 | 181 | 67.0 | 56.9 | 66.7 | 32.7 | 271 | 80.2 | 48.2 | 50.6 | 23.8 | 452 |
| Female | 48.6 | 32.8 | 11.9 | 182 | 70.0 | 52.2 | 69.5 | 29.9 | 233 | 83.2 | 50.6 | 53.4 | 22.0 | 415 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 46.8 | 28.1 | 11.5 | 224 | 77.0 | 57.4 | 75.3 | 36.5 | 298 | 86.9 | 52.9 | 55.1 | 25.8 | 522 |
| Non-urban | 33.9 | 32.1 | 10.9 | 139 | 55.9 | 50.9 | 57.4 | 24.0 | 206 | 73.7 | 44.0 | 47.2 | 18.7 | 345 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | (52.0) | (10.9) | (6.6) | 38 | * | * | * | * | 36 | 100.0 | 65.9 | 54.5 | 40.2 | 74 |
| Eastern Cape | 30.2 | 20.8 | 9.2 | 45 | 67.3 | 56.7 | 67.6 | 26.3 | 62 | 81.1 | 45.5 | 47.8 | 19.1 | 107 |
| Northern Cape | (34.4) | (28.4) | (14.2) | 10 | (68.1) | (57.9) | (67.4) | (25.2) | 7 | 87.1 | 43.9 | 44.2 | 18.7 | 17 |
| Free State | (59.4) | (46.2) | (33.7) | 19 | (75.3) | (63.2) | (80.3) | (52.0) | 17 | 88.3 | 61.2 | 62.3 | 42.3 | 36 |
| KwaZulu-Natal | (54.6) | (31.5) | (22.2) | 46 | 71.0 | 47.7 | 65.6 | 28.9 | 118 | 79.1 | 49.7 | 56.1 | 27.0 | 164 |
| North West | (23.1) | (35.2) | (13.9) | 23 | 49.9 | 61.3 | 49.6 | 26.0 | 52 | 65.3 | 49.6 | 45.2 | 22.3 | 75 |
| Gauteng | (46.2) | (29.5) | (7.4) | 103 | (75.8) | (49.1) | (72.6) | (30.0) | 117 | 87.2 | 47.7 | 52.4 | 19.4 | 220 |
| Mpumalanga | (53.0) | (26.1) | (10.4) | 27 | 64.5 | 67.5 | 69.1 | 34.2 | 50 | 76.9 | 62.4 | 54.1 | 25.9 | 77 |
| Limpopo | 22.4 | 43.2 | 4.7 | 52 | 40.9 | 38.3 | 52.2 | 9.1 | 44 | 72.8 | 29.7 | 47.3 | 6.7 | 96 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | * | * ${ }^{\text {/ }}$ | * | 3 | * | * | * | * | 4 | * * | * | ${ }^{*}$ | * | 7 |
| Primary incomplete | (34.0) | (11.4) | (0.0) | 18 | (54.6) | (33.7) | (57.9) | (26.1) | 22 | 75.1 | 33.8 | 37.0 | 14.4 | 41 |
| Primary complete |  |  |  | 14 |  | * | * |  | 10 | (78.6) | (34.7) | (39.3) | (17.0) | 24 |
| Secondary incomplete | 37.8 | 30.4 | 10.1 | 192 | 60.9 | 49.8 | 60.8 | 23.0 | 261 | 77.5 | 44.7 | 47.9 | 17.5 | 453 |
| Secondary complete | 53.3 | 32.3 | 16.1 | 114 | 79.8 | 61.9 | 82.2 | 39.6 | 136 | 89.0 | 57.9 | 59.4 | 28.9 | 250 |
| More than secondary | * | * | * | 22 | 80.7 | 69.2 | 70.8 | 49.4 | 71 | 85.2 | 58.4 | 61.1 | 38.0 | 93 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 42.4 | 28.7 | 11.4 | 110 | 53.8 | 51.7 | 57.7 | 24.8 | 94 | 78.7 | 46.7 | 42.1 | 17.6 | 205 |
| Second | 36.8 | 34.5 | 9.7 | 67 | 57.0 | 47.1 | 57.7 | 19.3 | 132 | 71.5 | 43.6 | 49.9 | 16.0 | 199 |
| Middle | 41.8 | 25.1 | 10.4 | 79 | 73.0 | 47.3 | 68.8 | 33.4 | 103 | 84.7 | 44.9 | 49.8 | 23.4 | 182 |
| Fourth | 47.0 | 24.7 | 14.9 | 72 | 79.7 | 62.0 | 82.5 | 35.3 | 99 | 88.2 | 55.7 | 58.3 | 26.7 | 171 |
| Highest | (39.6) | (43.4) | (8.0) | 35 | 85.3 | 72.5 | 78.6 | 52.9 | 75 | 90.0 | 62.0 | 67.4 | 38.5 | 111 |
| Total | 41.9 | 29.6 | 11.2 | 363 | 68.4 | 54.7 | 68.0 | 31.4 | 504 | 81.6 | 49.3 | 51.9 | 22.9 | 867 |

 fortified baby food from grains; c. vitamin A-rich fruits and vegetables; d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts ${ }^{3}$ For breastfed children, minimum meal frequency is receiving solid or semisolid food at least twice a day for infants 6-8 months and at least three times a day for children $9-23$ months
Breastfed children age $6-23$ months are considered to be fed a minimum acceptable diet if they are fed the minimum dietary diversity as described in footnote 1 and the minimum meal frequency as defined in footnote 2 ${ }^{4}$ Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yoghurt
5 For nonbreastfed children age $6-23$ months, minimum meal frequency is receiving solid or semisolid food or milk feeds at least four times a day
 ${ }^{7}$ Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yoghurt
 are fed the minimum meal frequency as

Table 11.9 Consumption of sugary drinks and sugary or salty foods by children in the day or night preceding the interview
Percentage of youngest children under age 2 who are living with their mother by specific foods consumed in the day or night preceding the interview, according to breastfeeding status and age, South Africa DHS 2016

| Age in months | Liquids | Solid or | misolid foods | Number of all children under age 2 |
| :---: | :---: | :---: | :---: | :---: |
|  | Sugary drinks ${ }^{1}$ | Sugary foods ${ }^{2}$ | Salty snacks ${ }^{3}$ |  |
| BREASTFEEDING CHILDREN |  |  |  |  |
| 0-1 | 0.0 | 0.0 | 0.0 | 89 |
| 2-3 | 0.0 | 0.0 | 0.0 | 78 |
| 4-5 | 0.0 | 0.5 | 0.5 | 91 |
| 6-8 | 5.9 | 10.3 | 14.8 | 86 |
| 9-11 | 10.4 | 25.0 | 29.2 | 82 |
| 12-17 | 15.3 | 40.0 | 53.2 | 145 |
| 18-23 | 30.9 | 29.7 | 53.9 | 49 |
| 6-23 | 14.1 | 28.1 | 38.7 | 363 |
| Total | 8.2 | 16.5 | 22.7 | 622 |
| NONBREASTFEEDING CHILDREN |  |  |  |  |
| 0-1 | * | * | * | 21 |
| 2-3 | (13.3) | (13.3) | (15.0) | 32 |
| 4-5 | (10.3) | (0.0) | (0.0) | 34 |
| 6-8 | 1.4 | 17.7 | 21.4 | 60 |
| 9-11 | 9.4 | 28.2 | 42.3 | 61 |
| 12-17 | 15.0 | 36.5 | 34.0 | 166 |
| 18-23 | 33.2 | 52.8 | 66.5 | 218 |
| 6-23 | 20.6 | 40.3 | 47.6 | 504 |
| Total | 18.9 | 35.1 | 41.4 | 591 |
| TOTAL |  |  |  |  |
| 0-1 | 0.0 | 0.0 | 0.0 | 110 |
| 2-3 | 3.8 | 3.8 | 4.3 | 110 |
| 4-5 | 2.8 | 0.4 | 0.4 | 125 |
| 6-8 | 4.0 | 13.3 | 17.5 | 146 |
| 9-11 | 10.0 | 26.3 | 34.8 | 143 |
| 12-17 | 15.1 | 38.1 | 43.0 | 311 |
| 18-23 | 32.8 | 48.6 | 64.2 | 267 |
| 6-23 | 17.9 | 35.2 | 43.9 | 867 |
| Total | 13.4 | 25.6 | 31.8 | 1,213 |

Notes: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Sugary drinks such as Coke, Stoney, Dixi cola, or Jive
${ }^{2}$ Sugary foods include chocolates, sweets, candies, pastries, cakes, or biscuits
${ }^{3}$ Salty snacks include Nik Naks, Simba, Flings, or Spookies

Table 11.10 Prevalence of anaemia in children
Percentage of children age 6-59 months classified as having anaemia, according to background characteristics, South Africa DHS 2016

| Background characteristic | Anaemia status by haemoglobin level |  |  |  | Number of children age 6-59 months |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any anaemia (<11.0 g/dl) | $\begin{gathered} \text { Mild anaemia } \\ (10.0-10.9 \mathrm{~g} / \mathrm{dl}) \end{gathered}$ | $\begin{gathered} \text { Moderate } \\ \text { anaemia } \\ (7.0-9.9 \mathrm{~g} / \mathrm{dl}) \\ \hline \end{gathered}$ | Severe anaemia (<7.0 g/dl) |  |
| Age in months |  |  |  |  |  |
| 6-8 | (45.9) | (12.2) | (30.6) | (3.1) | 38 |
| 9-11 | 68.5 | 29.5 | 39.0 | 0.0 | 54 |
| 12-17 | 77.3 | 31.9 | 37.4 | 8.0 | 136 |
| 18-23 | 63.1 | 19.9 | 41.0 | 2.3 | 117 |
| 24-35 | 69.6 | 26.5 | 41.3 | 1.8 | 218 |
| 36-47 | 58.7 | 23.6 | 33.3 | 1.7 | 268 |
| 48-59 | 48.7 | 22.0 | 25.6 | 1.1 | 263 |
| Sex |  |  |  |  |  |
| Male | 63.9 | 25.5 | 37.0 | 1.4 | 542 |
| Female | 58.7 | 23.1 | 32.3 | 3.3 | 552 |
| Mother's interview status |  |  |  |  |  |
| Interviewed | 62.3 | 23.7 | 35.8 | 2.9 | 810 |
| Not interviewed but in household | 59.6 | 29.7 | 29.8 | 0.0 | 61 |
| Not interviewed and not in the household ${ }^{1}$ | 58.0 | 25.3 | 31.6 | 1.2 | 223 |
| Residence |  |  |  |  |  |
| Urban | 62.2 | 21.0 | 37.9 | 3.2 | 539 |
| Non-urban | 60.4 | 27.5 | 31.3 | 1.5 | 555 |
| Province |  |  |  |  |  |
| Western Cape | (61.3) | (31.4) | (27.4) | (2.4) | 53 |
| Eastern Cape | 59.1 | 23.3 | 35.8 | 0.0 | 168 |
| Northern Cape | 48.4 | 32.1 | 16.3 | 0.0 | 13 |
| Free State | 53.6 | 25.2 | 25.0 | 3.4 | 66 |
| KwaZulu-Natal | 41.7 | 18.2 | 22.8 | 0.6 | 189 |
| North West | 68.4 | 30.6 | 34.0 | 3.7 | 114 |
| Gauteng | 74.0 | 19.0 | 50.3 | 4.8 | 249 |
| Mpumalanga | 70.1 | 25.7 | 40.6 | 3.8 | 115 |
| Limpopo | 59.4 | 34.1 | 24.6 | 0.7 | 128 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 63.6 | 25.1 | 35.2 | 3.4 | 307 |
| Second | 62.2 | 22.3 | 38.3 | 1.5 | 265 |
| Middle | 59.6 | 25.2 | 33.3 | 1.1 | 270 |
| Fourth | 60.3 | 18.9 | 38.3 | 3.0 | 168 |
| Highest | 57.6 | 35.6 | 17.7 | 4.2 | 85 |
| Total | 61.3 | 24.3 | 34.6 | 2.4 | 1,094 |

Notes: Table is based on children who stayed in the household on the night before the interview and who were tested for anaemia. Prevalence of anaemia, based on haemoglobin levels, is adjusted for altitude using formulas in CDC 1998. Haemoglobin is in grams per decilitre ( $\mathrm{g} / \mathrm{dl}$ ). Figures in parentheses are based on 25-49 unweighted cases.
${ }^{1}$ Includes children whose mothers are deceased

Table 11.11 Presence of iodised salt in household
Among all eligible households, percentage with salt tested for iodine content, percentage with salt in the household but the salt was not tested, and percentage with no salt in the household; and among households with salt tested, percentages with salt with any iodisation, inadequately iodised salt, adequately iodised salt, optimally iodised salt, highly iodised salt, and excessively iodised salt, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among all eligible households, percentage |  |  |  | Among households in which salt was tested, percentage with |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | With salt tested | With salt, but salt not tested ${ }^{1}$ | With no salt in the household | Number of households | Salt with any iodisation (>0 ppm) | Inadequately iodised salt ( $<15 \mathrm{ppm}$ ) | Adequately iodised salt ( $\geq 15 \mathrm{ppm}$ ) | Optimally iodised salt ( $\geq 15$ to $\leq 40$ ppm) | Highly iodised salt (>65 ppm) | Excessively iodised salt (>80 ppm) | Number of households |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 87.0 | 5.9 | 7.1 | 1,877 | 98.5 | 8.3 | 91.7 | 30.4 | 17.4 | 9.5 | 1,633 |
| Non-urban | 91.0 | 3.7 | 5.3 | 889 | 96.4 | 17.9 | 82.1 | 28.7 | 18.2 | 10.5 | 809 |
| Province |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 86.7 | 6.3 | 6.9 | 294 | 98.1 | 20.6 | 79.4 | 32.5 | 10.5 | 6.7 | 255 |
| Eastern Cape | 92.5 | 3.2 | 4.3 | 334 | 98.1 | 9.4 | 90.6 | 25.6 | 21.9 | 13.5 | 309 |
| Northern Cape | 77.1 | 13.1 | 9.8 | 55 | 95.9 | 14.5 | 85.5 | 31.7 | 16.6 | 8.9 | 42 |
| Free State | 86.0 | 6.9 | 7.1 | 149 | 99.2 | 9.4 | 90.6 | 35.4 | 19.1 | 10.7 | 128 |
| KwaZulu-Natal | 88.0 | 4.8 | 7.1 | 509 | 96.7 | 8.3 | 91.7 | 29.1 | 18.2 | 8.9 | 448 |
| North West | 94.0 | 2.1 | 4.0 | 206 | 99.7 | 8.1 | 91.9 | 32.9 | 19.2 | 10.3 | 194 |
| Gauteng | 87.2 | 6.6 | 6.2 | 748 | 98.6 | 6.1 | 93.9 | 31.0 | 18.6 | 10.3 | 652 |
| Mpumalanga | 80.0 | 5.6 | 14.4 | 206 | 98.6 | 6.5 | 93.5 | 37.5 | 18.6 | 11.0 | 165 |
| Limpopo | 94.0 | 2.8 | 3.2 | 265 | 94.6 | 30.8 | 69.2 | 20.0 | 14.2 | 7.6 | 250 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 86.3 | 4.7 | 9.0 | 561 | 95.6 | 20.2 | 79.8 | 32.9 | 16.3 | 8.7 | 484 |
| Second | 88.3 | 5.1 | 6.7 | 592 | 97.1 | 12.8 | 87.2 | 28.4 | 19.1 | 12.1 | 523 |
| Middle | 89.6 | 2.1 | 8.3 | 541 | 99.5 | 9.4 | 90.6 | 34.4 | 17.8 | 8.7 | 485 |
| Fourth | 90.2 | 5.6 | 4.2 | 520 | 99.6 | 6.8 | 93.2 | 26.8 | 18.5 | 9.4 | 469 |
| Highest | 87.3 | 8.7 | 4.0 | 552 | 97.4 | 7.8 | 92.2 | 26.6 | 16.7 | 10.1 | 482 |
| Total | 88.3 | 5.2 | 6.5 | 2,766 | 97.8 | 11.4 | 88.6 | 29.8 | 17.7 | 9.8 | 2,443 |

[^19]Table 11.12 Micronutrient intake and deworming medication among children
Among youngest children age 6-23 months who are living with their mother, percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey, and among all children age 6 - 59 months, percentages who were given vitamin A supplements and deworming medication in the 6 months preceding the survey, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among youngest children age 6-23 months living with their mother: |  |  | Among all children age 6-59 months: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who consumed foods rich in vitamin A in last 24 hours ${ }^{1}$ | Percentage who consumed foods rich in iron in last 24 hours $^{2}$ | Number of children | Percentage given vitamin A supplements in past 6 months ${ }^{3}$ | Percentage given deworming medication in past 6 months ${ }^{4,5}$ | Number of children |
| Age in months |  |  |  |  |  |  |
| 6-8 | 45.8 | 26.7 | 146 | 66.5 | 19.1 | 165 |
| 9-11 | 72.7 | 53.9 | 143 | 74.4 | 34.2 | 160 |
| 12-17 | 77.2 | 66.3 | 311 | 80.0 | 63.1 | 360 |
| 18-23 | 83.9 | 77.7 | 267 | 77.1 | 70.6 | 317 |
| 24-35 | na | na | na | 75.2 | 66.9 | 660 |
| 36-47 | na | na | na | 69.2 | 69.8 | 688 |
| 48-59 | na | na | na | 67.5 | 63.6 | 730 |
| Sex |  |  |  |  |  |  |
| Male | 70.0 | 59.2 | 452 | 71.5 | 59.8 | 1,596 |
| Female | 76.8 | 63.1 | 415 | 73.2 | 65.4 | 1,484 |
| Breastfeeding status |  |  |  |  |  |  |
| Breastfeeding | 67.1 | 53.6 | 363 | 82.1 | 53.4 | 439 |
| Not breastfeeding | 77.7 | 66.5 | 504 | 70.6 | 64.0 | 2,642 |
| Mother's age |  |  |  |  |  |  |
| 15-19 | 74.6 | 63.3 | 81 | 72.6 | 48.4 | 140 |
| 20-29 | 74.0 | 59.9 | 483 | 72.8 | 62.7 | 1,606 |
| 30-39 | 71.3 | 62.9 | 261 | 71.8 | 62.7 | 1,098 |
| 40-49 | (74.1) | (59.7) | 43 | 70.3 | 67.9 | 237 |
| Residence |  |  |  |  |  |  |
| Urban | 78.6 | 64.1 | 522 | 71.9 | 63.9 | 1,970 |
| Non-urban | 65.2 | 56.6 | 345 | 72.9 | 59.9 | 1,110 |
| Province |  |  |  |  |  |  |
| Western Cape | 81.6 | 65.7 | 74 | 78.6 | 71.5 | 277 |
| Eastern Cape | 67.7 | 57.3 | 107 | 78.5 | 70.9 | 341 |
| Northern Cape | 77.2 | 70.5 | 17 | 76.6 | 66.3 | 59 |
| Free State | 78.8 | 67.8 | 36 | 78.4 | 71.1 | 137 |
| KwaZulu-Natal | 70.8 | 64.3 | 164 | 78.1 | 66.7 | 560 |
| North West | 68.3 | 59.2 | 75 | 74.8 | 62.1 | 249 |
| Gauteng | 78.4 | 58.6 | 220 | 63.4 | 55.6 | 878 |
| Mpumalanga | 84.6 | 74.5 | 77 | 74.7 | 63.6 | 281 |
| Limpopo | 57.8 | 48.6 | 96 | 66.3 | 51.3 | 298 |
| Mother's education |  |  |  |  |  |  |
| No education | * | * | 7 | (74.3) | (58.0) | 37 |
| Primary incomplete | 63.9 | 52.3 | 41 | 61.6 | 52.4 | 153 |
| Primary complete | (69.6) | (54.7) | 24 | 72.0 | 65.4 | 118 |
| Secondary incomplete | 71.3 | 61.7 | 453 | 73.5 | 62.3 | 1,499 |
| Secondary complete | 77.6 | 63.6 | 250 | 73.5 | 63.9 | 928 |
| More than secondary | 74.9 | 55.9 | 93 | 68.4 | 63.0 | 344 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 67.8 | 60.4 | 205 | 70.3 | 55.6 | 669 |
| Second | 69.0 | 60.2 | 199 | 73.3 | 62.9 | 745 |
| Middle | 70.8 | 59.8 | 182 | 73.3 | 65.7 | 682 |
| Fourth | 81.6 | 60.6 | 171 | 70.6 | 61.9 | 572 |
| Highest | 82.3 | 66.8 | 111 | 74.3 | 68.4 | 412 |
| Total | 73.3 | 61.1 | 867 | 72.3 | 62.5 | 3,080 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside, dark green leafy vegetables, ripe mango, ripe papaya, orange melons, and other locally grown fruits and vegetables that are rich in vitamin A
${ }^{2}$ Includes meat (and organ meat), fish, poultry, and eggs
${ }^{3}$ Based on both mother's recall and the vaccination card (where available)
${ }^{4}$ Based on mother's recall
${ }^{5}$ Deworming for intestinal parasites is commonly done for helminths and schistosomiasis

Table 11.13 Consumption of liver
Percentage of youngest children age 12-23 months who are living with their mother by whether they have ever eaten liver, and among children who have ever eaten liver, percentage who ate liver in the past 4 weeks by number of times liver was consumed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of children who have ever eaten liver | Number of children age 12-23 months | Among children who have ever eaten liver, percentage who ate liver in the past 4 weeks by number of times consumed |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 0 | 1 | 2-3 | 4+ | Number of children age 12-23 months who ever ate liver |
| Age in months |  |  |  |  |  |  |  |
| 12-17 | 35.1 | 311 | 24.2 | 38.8 | 20.0 | 15.0 | 109 |
| 18-23 | 46.8 | 267 | 32.5 | 25.1 | 38.0 | 3.5 | 125 |
| Residence |  |  |  |  |  |  |  |
| Urban | 42.1 | 343 | 24.9 | 36.9 | 25.7 | 12.2 | 145 |
| Non-urban | 38.2 | 235 | 34.7 | 22.8 | 35.9 | 3.4 | 90 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 37.1 | 143 | 25.8 | 24.3 | 34.2 | 10.8 | 53 |
| Second | 44.1 | 131 | 28.7 | 29.3 | 41.2 | 0.0 | 58 |
| Middle | 39.6 | 119 | (33.9) | (32.1) | (25.5) | (8.5) | 47 |
| Fourth | 48.7 | 108 | (33.3) | (31.3) | (18.4) | (16.6) | 53 |
| Highest | 30.7 | 76 | * | * | * | * | 23 |
| Total | 40.5 | 578 | 28.6 | 31.5 | 29.6 | 8.8 | 234 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

## Table 11.14 Micronutrient intake among mothers

Among women age $15-49$ with a child born in the 5 years preceding the survey, percent distribution by number of days they took iron tablets during the pregnancy of the last child, according to background characteristics, South Africa DHS 2016

| Background characteristic | Among women with a child born in the past 5 years, number of days they took iron tablets during pregnancy of last birth |  |  |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | None | <60 | 60-89 | 90+ | Don't <br> know | Total |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 8.8 | 16.8 | 5.2 | 53.1 | 16.1 | 100.0 | 176 |
| 20-29 | 8.6 | 20.5 | 4.8 | 50.1 | 16.1 | 100.0 | 1,555 |
| 30-39 | 9.2 | 16.3 | 5.1 | 51.4 | 17.9 | 100.0 | 1,063 |
| 40-49 | 9.1 | 18.8 | 9.3 | 48.0 | 14.8 | 100.0 | 242 |
| Residence |  |  |  |  |  |  |  |
| Urban | 9.0 | 20.1 | 5.5 | 49.9 | 15.4 | 100.0 | 1,942 |
| Non-urban | 8.6 | 16.1 | 4.8 | 51.7 | 18.7 | 100.0 | 1,094 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 9.4 | 30.1 | 3.7 | 43.8 | 12.9 | 100.0 | 276 |
| Eastern Cape | 3.7 | 14.5 | 5.3 | 50.8 | 25.8 | 100.0 | 335 |
| Northern Cape | 7.0 | 8.7 | 4.3 | 74.5 | 5.5 | 100.0 | 61 |
| Free State | 11.5 | 27.0 | 4.0 | 50.8 | 6.7 | 100.0 | 145 |
| KwaZulu-Natal | 7.3 | 18.0 | 4.1 | 43.1 | 27.5 | 100.0 | 555 |
| North West | 6.1 | 3.1 | 3.5 | 80.7 | 6.5 | 100.0 | 244 |
| Gauteng | 10.7 | 20.7 | 7.9 | 42.3 | 18.4 | 100.0 | 842 |
| Mpumalanga | 7.5 | 13.0 | 4.2 | 62.7 | 12.7 | 100.0 | 278 |
| Limpopo | 14.4 | 24.7 | 4.9 | 52.4 | 3.5 | 100.0 | 301 |
| Education |  |  |  |  |  |  |  |
| No education | (5.7) | (7.2) | (9.0) | (53.3) | (24.8) | 100.0 | 42 |
| Primary incomplete | 14.1 | 14.6 | 3.6 | 44.0 | 23.7 | 100.0 | 141 |
| Primary complete | 2.8 | 12.4 | 5.1 | 41.9 | 37.7 | 100.0 | 108 |
| Secondary incomplete | 8.9 | 19.7 | 5.2 | 50.1 | 16.2 | 100.0 | 1,486 |
| Secondary complete | 8.5 | 18.3 | 6.0 | 51.3 | 15.9 | 100.0 | 908 |
| More than secondary | 9.8 | 20.5 | 4.0 | 55.6 | 10.2 | 100.0 | 351 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 11.1 | 18.2 | 5.9 | 44.4 | 20.4 | 100.0 | 650 |
| Second | 7.9 | 17.7 | 5.6 | 51.7 | 17.0 | 100.0 | 739 |
| Middle | 8.2 | 20.4 | 5.3 | 49.5 | 16.7 | 100.0 | 671 |
| Fourth | 6.5 | 15.5 | 2.8 | 60.3 | 14.9 | 100.0 | 557 |
| Highest | 11.4 | 22.7 | 7.0 | 46.6 | 12.3 | 100.0 | 418 |
| Total | 8.9 | 18.7 | 5.3 | 50.5 | 16.6 | 100.0 | 3,036 |

Note: Figures in parentheses are based on 25-49 unweighted cases.

## Key Findings

- Knowledge of prevention of mother-to-child transmission of HIV: Women are more aware than men that HIV can be transmitted during pregnancy ( $83 \%$ versus $68 \%$ ), during delivery ( $78 \%$ versus $58 \%$ ), and through breastfeeding ( $77 \%$ versus $60 \%$ ).
- Sexual partners: $5 \%$ of women and $17 \%$ of men had two or more sexual partners in the year before the survey. Among these respondents, $58 \%$ of women and $65 \%$ of men reported that they used a condom during their most recent sexual intercourse. On average, women have had 3.9 lifetime sexual partners, while men have had 14.7 .
- HIV tests: The vast majority of respondents (93\% of women and $94 \%$ of men) know where to obtain an HIV test. Fifty-nine percent of women and $45 \%$ of men were tested for HIV in the past 12 months and received the results of their last test.
- Male circumcision: $57 \%$ of South African men age 15-49 are circumcised; $30 \%$ were circumcised by a health worker or professional, and $27 \%$ were circumcised by a traditional practitioner, family member, or friend.
- Sexually transmitted infections: Overall, $12 \%$ of women and $7 \%$ of men either had an STI or symptoms of an STI during the 12 months before the survey.

TThe prevention of HIV has been prioritised in the 4th National Strategic Plan for HIV, TB and STIs (SANAC 2017). Adopting the $90-90-90$ strategy to end the spread of the epidemic, the plan has the target of $90 \%$ of all people living with HIV knowing their HIV status. Thereafter, $90 \%$ of all people with diagnosed HIV infection should receive sustained antiretroviral therapy, and $90 \%$ of people receiving antiretroviral therapy should be virally suppressed. This initiative is critically important, as South Africa continues to have the largest number of people living with HIV of any country in the world. In September 2016, the Universal Test and Treat guideline was implemented. Prevention of mother-to-child transmission (MTCT) of HIV continues to be a critical component of the HIV strategy as the country enters the "last mile" to achieve elimination of MTCT.

To facilitate comparisons between the sexes, findings in this chapter refer to the $15-49$ age group unless otherwise noted. The chapter concludes with a discussion of findings among young people age 15-24.

### 12.1 Knowledge about Mother-to-Child Transmission of HIV

Increasing the level of general knowledge about transmission of HIV from mother to child and reducing the risk of transmission using antiretroviral drugs are critical in reducing mother-to-child transmission (MTCT) of HIV. To assess MTCT knowledge, respondents were asked whether HIV can be transmitted
from mother to child during pregnancy, during delivery, or through breastfeeding and whether a mother with HIV can reduce the risk of transmission to her baby by taking certain drugs.

Women are more aware than men that HIV can be transmitted during pregnancy ( $83 \%$ versus $68 \%$ ), during delivery ( $78 \%$ versus $58 \%$ ), and through breastfeeding ( $77 \%$ versus $60 \%$ ). Overall, $69 \%$ of women and $49 \%$ of men know about all three modes of MTCT. Women are also more likely than men to be aware that a mother infected with HIV can reduce the risk of transmission to her baby by taking certain drugs ( $82 \%$ versus 62\%) (Figure $\mathbf{1 2 . 1}$ and Table 12.1).

### 12.2 Multiple Sexual Partners

Given that most HIV infections in South Africa are contracted through heterosexual intercourse, information on sexual behaviour is important in designing and monitoring intervention programmes to control the spread of the epidemic. Survey respondents were asked questions on the number of sexual partners they had during the 12 months before the survey and over their lifetime. Information was also collected on use of condoms during respondents' most recent sexual intercourse with each of up to three partners.

Five percent of women and $17 \%$ of men reported that they had two or more sexual partners in the 12 months before the survey; among these individuals, $58 \%$ of women and $65 \%$ of men reported using a condom during their most recent sexual intercourse (Figure 12.2).

The proportion of women and men who had sexual intercourse in the 12 months before the survey with a person who neither was their spouse nor lived with them ( $45 \%$ of women and $55 \%$ of men) was much higher than the proportion who had two or more partners in the past 12 months; however, use of condoms at last sex with such a person was similar to use of condoms at most recent sex among those with two or more sexual partners in the 12 months before the survey ( $60 \%$ of women and $69 \%$ of men) (Table 1221 and Table 1222). On average, wom have ever had sexual intercourse have had 3.9 lifetime sexual partners, while men have had 14.7.

## Patterns by background characteristics

- The percentage of women and men with two or more partners in the 12 months before the survey who reported using a condom during their most recent sexual intercourse was higher among those in urban areas $(61 \%$ and $67 \%$, respectively) than among those in non-urban areas ( $50 \%$ and $62 \%$, respectively).
- Among women who had ever had sexual intercourse, those who were divorced, separated, or widowed reported more lifetime partners on average ( 5.4 partners) than those who had never been married (4.1 partners) and those who were currently married or living together with someone as if married (3.4 partners). Similarly, divorced, separated, or widowed men reported more lifetime partners on average (24.7 partners) than men who were currently married or living together with someone ( 15.6 partners) and those who had never been married (13.3 partners).
- While women living in urban and non-urban areas reported comparable numbers of lifetime partners (4.0 and 3.5, respectively), men living in urban areas reported a much higher number of partners than those living in non-urban areas (17.0 and 9.2, respectively).


### 12.3 Paid Sex

The act of paying for sex introduces an uneven negotiating ground for safer sexual intercourse. Transactional sex is the exchange of money, favours, or gifts for sexual intercourse. This type of sexual intercourse is associated with a greater risk of contracting HIV and other sexually transmitted infections (STIs) because of compromised power relations and the likelihood of having multiple partners.

In the SADHS 2016, men were asked about payment for sexual intercourse and condom use at last paid sexual intercourse. Five percent of men have ever paid for sex and $3 \%$ have paid for sex in the last 12 months. Among men who paid for sex in the last 12 months, $83 \%$ reported using condoms during their most recent sexual intercourse (Table 12.3).

### 12.4 Coverage of HIV Testing Services

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so that they can remain disease free. Among those who are living with HIV, knowledge of their status allows them to take action to protect their sexual partners, to access care, and to receive treatment.

In South Africa, a national campaign was launched in 2010 to provide HIV counselling and testing (HCT) and boost the number of people who know their HIV status. Testing continues to be freely available in the public sector and through nongovernmental organisations (NGOs).

### 12.4.1 Awareness of HIV Testing Services and Experience with HIV Testing

To assess awareness and coverage of HIV testing services, survey respondents were asked whether they had ever been tested for HIV. If they said that they had, they were asked whether they had received the results of their last test and where they had been tested. If they had never been tested, they were asked whether they knew a place where they could go to be tested.

The vast majority of respondents ( $93 \%$ of women and $94 \%$ of men) know where to obtain an HIV test (Tables 12.4.1 and 12.4.2). Women are more likely than men to have ever been tested for HIV and to have received the results of their last test ( $82 \%$ and $69 \%$, respectively). Similarly, a greater percentage of women than men had been tested for HIV in the 12 months before the survey and received the results of the last test ( $59 \%$ of women versus $45 \%$ of men) (Figure 12.3).

Figure 12.3 HIV testing


## Patterns by background characteristics

- The proportion of women and men who have never been tested for HIV is greatest among those age $15-19(50 \%$ and $54 \%$, respectively) and those who have never had sex ( $65 \%$ for both women and men).
- By province, the percentage of women who have been recently tested for HIV and received the results of their last test is relatively uniform, ranging from $52 \%$ in Northern Cape to $63 \%$ in Limpopo. There is greater variation among men; the percentage of men recently tested is highest in Western Cape (56\%) and lowest in Limpopo (35\%).


### 12.4.2 HIV Testing of Pregnant Women

According to current guidelines for prevention of mother-to-child transmission of HIV, women should be tested for HIV at their first antenatal care (ANC) visit and thereafter provided with HCT every 3 months (NDoH 2015b).

Table $\mathbf{1 2 . 5}$ presents information on self-reported HIV testing during pregnancy and delivery among all women age 15-49 who gave birth in the 2 years before the survey. Seventy-eight percent of women received HIV counselling during ANC. Seventy-seven percent of women received counselling on HIV and were offered, accepted, and received the results of an HIV test during ANC. Overall, $95 \%$ of women had an HIV test during ANC or labour and received the results of the test. Across all provinces, more than $90 \%$ of women had an HIV test during either ANC or labour and received the results.

### 12.5 Male Circumcision

Voluntary medical male circumcision (VMMC) has been shown to be partially effective in reducing HIV infections among males. The government of South Africa introduced its policy and programme on VMMC in 2010. As recommended in the 2012-2016 National Strategic Plan on HIV, STIs, and TB (SANAC 2011), the government set a target of reaching $80 \%$ of HIV-negative men age $15-49$ with VMMC by 2015 ( 1.6 million men).

In the SADHS 2016, men were asked whether or not they were circumcised and, if they were circumcised, who performed the circumcision. Overall, $57 \%$ of men are circumcised; $30 \%$ were circumcised by a health worker or professional, and $27 \%$ were circumcised by a traditional practitioner, family member, or friend (Table 12.6). In the context of this survey, circumcision by a health worker is considered a proxy for VMMC.

## Patterns by background characteristics

- Younger men age 15-19 (41\%) are twice as likely to be circumcised by a health worker or professional as older men age 40-49 (21\%) (Figure 12.4).
- While the percentage of men who are circumcised does not vary by residence ( $57 \%$ of both urban and non-urban men), the percentage circumcised by a health worker is higher among urban men (32\%) than non-urban men ( $25 \%$ ).
- The prevalence of male circumcision varies markedly by province, from $35 \%$ in Northern Cape to $86 \%$ in Limpopo. The percentage of men circumcised by a health worker also varies, from $7 \%$ in Eastern Cape to $41 \%$ in Free State.
- Men with no education are less likely to be circumcised than others. Thirty-eight percent of men with no education are circumcised compared with $49 \%$ of men with an incomplete primary education and $66 \%$ with more than a secondary education.


### 12.6 Self-Reporting of Sexually Transmitted Infections

## Sexually transmitted infections (STIs) and symptoms

Respondents who had ever had sex were asked whether they had an STI or symptoms of an STI (a bad-smelling, abnormal discharge from the vagina/penis or a genital sore or ulcer) in the 12 months before the survey.
Sample: Women and men age 15-49 who have ever had sex

In the SADHS 2016, respondents who had ever had sex were asked whether they had had a sexually transmitted infection (STI) or symptoms of an STI in the 12 months before the survey. Women were more likely than men to report having had an STI or having experienced STI symptoms (Table 12.7). Among women age $15-49,5 \%$ reported that they had an STI in the 12 months before the survey; $9 \%$ had a badsmelling, abnormal discharge, and $4 \%$ had a genital sore or ulcer. Four percent of men reported that they had an STI; 4\% reported a bad-smelling, abnormal discharge; and $2 \%$ reported a genital sore or ulcer.

Overall, $12 \%$ of women and $7 \%$ of men either had an STI or symptoms of an STI during the 12 months before the survey. Sixty-six percent of women and $55 \%$ of men who had an STI or STI symptoms sought advice or treatment from a clinic, hospital, private doctor, or other health professional (Table 12.8 and Figure 12.5). Five percent of women and $9 \%$ of men sought advice or treatment from a shop or pharmacy. Thirty percent of women and $36 \%$ of men did not seek any treatment.

Figure 12.5 STI advice- or treatment-seeking behaviour

Percentage of women and men age 15-49 with an STI or STI symptoms

■ Women ■ Men


### 12.7 HIV/AIDS-Related Behaviour among Young People

This section assesses the extent to which young people age 15-24 are engaged in behaviour that may place them at risk of contracting HIV.

### 12.7.1 First Sex

Young people who initiate sex at an early age are typically at higher risk of becoming pregnant or contracting an STI than young people who initiate sex later. Consistent condom use can reduce such risks.

Table $\mathbf{1 2 . 9}$ provides information on the percentage of young women and men who have had sexual intercourse before age 15 and age 18. Overall, a higher percentage of young men than young women age $15-24$ reported having sex before age 15 ( $15 \%$ and $6 \%$, respectively). A similar trend is observed among young people age 18-24 who have had sex before age 18 . Fifty percent of young women reported having sex before age 18 , as compared with $66 \%$ of young men.

Comparison with the SADHS 1998: The percentage of young women age $15-24$ who have had sex before age 15 decreased slightly from $8 \%$ in 1998 to $6 \%$ in 2016. Similarly, the proportion of young women age 18-24 who have had sex before age 18 decreased modestly, from $55 \%$ to $50 \%$. Although sexual debut data among young women may be more consistent than marriage and first birth data, Neal and Hosegood (2015) call for caution when inferring changes in sexual health trends based on self-reported sexual behaviours among young women in DHS surveys.

## Patterns by background characteristics

- Young men in urban areas are slightly more likely to have initiated sex by age 15 or 18 than their nonurban counterparts. There is no clear pattern by residence among young women.
- The percentage of young women age 15-24 who had sexual intercourse before age 15 declines with increasing education, from $18 \%$ among those who did not complete a primary education to $4 \%$ among those who studied beyond the secondary level. A similar pattern is observed among young women age 18-24 who had sexual intercourse before age 18 . In contrast, no such pattern is observed among young men.


### 12.7.2 Premarital Sex

The SADHS 2016 also collected information on patterns of sexual activity among women and men age 15-24 who had never been in a union (i.e., those who had never been married or lived with a partner as if married). Among those who have never been in a union, $37 \%$ women and $31 \%$ of men have never had sexual intercourse (Table 12.10).

## Patterns by background characteristics

- The percentage of never-in-union women who have never had sexual intercourse decreases sharply with age, from $72 \%$ among those age $15-17$ to $37 \%$ among those age $18-19$ and $6 \%$ among those age 23-24. Similarly, the percentage of never-in-union men who have never had sexual intercourse decreases from $63 \%$ among those age $15-17$ to $28 \%$ among those age $18-19$ and $7 \%$ among those age 23-24.
- The percentage of women who have never had sexual intercourse is slightly higher in urban areas than in non-urban areas ( $38 \%$ versus $36 \%$ ). The opposite pattern is observed among men; $34 \%$ of nonurban men and $28 \%$ of urban men have never had sexual intercourse.
- The percentage of women and men who have never had sex generally decreases with increasing education. For example, $59 \%$ of men with a primary incomplete education have never had sex, as compared with $2 \%$ of men with more than a secondary education.


### 12.7.3 Multiple Sexual Partners

Young men age 15-24 are more likely than their female counterparts to have had more than one sexual partner in the previous 12 months ( $21 \%$ versus $5 \%$ ) (Tables $\mathbf{1 2 . 1 1 . 1}$ and $\mathbf{1 2 . 1 1 . 2}$ ). In addition, condom use is more common among young men; $73 \%$ of young men with more than one partner in the past 12 months reported using a condom during their most recent sexual intercourse, as compared with $61 \%$ of young women.

Young men are also more likely than young women to have had intercourse with a non-marital, noncohabitating partner in the last 12 months ( $62 \%$ versus $52 \%$ ). Sixty-two percent of young women and $76 \%$ of young men used a condom during their most recent sexual intercourse with a non-marital, noncohabiting partner. However, underreporting of non-marital partners by single women (Nnko et al. 2004) or overreporting of sexual partners by men in certain circumstances (Houle et al. 2016) may have been a factor in these results.

Condom use at last sex with a non-marital, non-cohabitating partner is higher in urban areas than in nonurban areas among women but not men; $67 \%$ of women in urban areas used a condom during their last sexual intercourse with such a partner, as compared with $54 \%$ of women in non-urban areas.

### 12.7.4 Coverage of HIV Testing Services

Seeking an HIV test may be more difficult for young people than adults because many young people lack experience in accessing health services for themselves and because there are often barriers to young people obtaining services. Table $\mathbf{1 2 . 1 2}$ provides information on sexually active young people age 15-24 who have been tested for HIV and received the results of the last test. Overall, $68 \%$ of young women and $49 \%$ of young men who have had sexual intercourse in the past 12 months have been tested for HIV and received the results of the last test.

## Patterns by background characteristics

- The proportion of young people tested for HIV in the last 12 months increases with age, rising from $58 \%$ among women age $15-17$ to $71 \%$ among those age 23-24 and from $27 \%$ among men age 15-17 to $55 \%$ among those age 23-24.
- Women who have ever been married or have lived together with a partner as if married are slightly more likely than women who have never been married to have been tested for HIV in the past 12 months and to have received the results of the last test ( $70 \%$ and $67 \%$, respectively). Although a similar pattern is observed among men, the results should be interpreted with caution because of the small number of men age 15-24 who have ever been married or have lived together with a partner as if married.


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For more information on HIV/AIDS-related knowledge and behaviour, see the following tables:

- Table 12.1 Knowledge of prevention of mother-to-child transmission of HIV
- Table 12.2.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women
- Table 12.2.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men
- Table 12.3 Payment for sexual intercourse and condom use at last paid sexual intercourse
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- Table 12.12 Recent HIV tests among young people

Table 12.1 Knowledge of prevention of mother-to-child transmission of HIV
Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, by breastfeeding, and by all three means, and percentage who know that the risk of mother-to-child transmission (MTCT) of HIV can be reduced by the mother taking special drugs, according to age, South Africa DHS 2016

| Age | Percentage who know that HIV can be transmitted from mother to child: |  |  |  | Percentage who know that the risk of MTCT can be reduced by mother taking special drugs | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | During pregnancy | During delivery | By breastfeeding | By all three means |  |  |
| WOMEN |  |  |  |  |  |  |
| 15-24 | 79.3 | 69.8 | 72.5 | 62.3 | 76.2 | 2,842 |
| 15-19 | 75.9 | 64.1 | 68.3 | 56.8 | 70.2 | 1,427 |
| 20-24 | 82.6 | 75.6 | 76.8 | 67.8 | 82.3 | 1,415 |
| 25-29 | 86.8 | 82.3 | 79.8 | 72.9 | 86.6 | 1,444 |
| 30-39 | 85.1 | 82.4 | 79.4 | 73.3 | 86.4 | 2,406 |
| 40-49 | 84.3 | 80.0 | 77.2 | 71.2 | 83.3 | 1,823 |
| Total 15-49 | 83.3 | 77.7 | 76.7 | 69.1 | 82.4 | 8,514 |
| MEN |  |  |  |  |  |  |
| 15-24 | 63.9 | 50.0 | 55.1 | 39.4 | 55.4 | 1,235 |
| 15-19 | 62.1 | 46.4 | 51.7 | 37.1 | 50.8 | 647 |
| 20-24 | 65.8 | 54.0 | 58.7 | 42.0 | 60.4 | 588 |
| 25-29 | 72.8 | 59.6 | 61.9 | 50.0 | 68.3 | 506 |
| 30-39 | 68.9 | 65.1 | 62.2 | 56.2 | 63.3 | 845 |
| 40-49 | 70.5 | 64.3 | 64.0 | 55.9 | 66.5 | 616 |
| Total 15-49 | 67.9 | 58.3 | 59.7 | 48.7 | 61.6 | 3,202 |
| 50-59 | 58.9 | 49.2 | 47.9 | 40.7 | 51.4 | 416 |
| Total 15-59 | 66.8 | 57.2 | 58.4 | 47.8 | 60.5 | 3,618 |

Table 12.2.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Women
Among all women age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among women who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among women who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, South Africa DHS 2016

| Background characteristic | All women |  |  | Women who had 2+ partners in the past 12 months |  | Women who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them |  | Women who ever had sexual intercourse ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had 2+ partners in the past 12 months | Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them | Number of women | Percentage who reported using a condom during last sexual intercourse | Number of women | Percentage who reported using a condom during last sexual intercourse with such a partner | Number of women | Mean number of sexual partners in lifetime | Number of women |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 4.6 | 52.1 | 2,842 | 61.4 | 132 | 62.3 | 1,479 | 2.9 | 1,874 |
| 15-19 | 2.7 | 37.9 | 1,427 | 54.8 | 38 | 63.8 | 541 | 1.9 | 618 |
| 20-24 | 6.6 | 66.3 | 1,415 | 64.0 | 94 | 61.5 | 938 | 3.4 | 1,256 |
| 25-29 | 6.9 | 58.4 | 1,444 | 63.3 | 99 | 58.1 | 843 | 4.0 | 1,360 |
| 30-39 | 4.9 | 40.5 | 2,406 | 51.5 | 118 | 58.5 | 975 | 4.8 | 2,276 |
| 40-49 | 2.0 | 27.2 | 1,823 | (48.5) | 37 | 59.7 | 496 | 3.7 | 1,696 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never married | 5.5 | 66.8 | 4,992 | 62.9 | 276 | 60.4 | 3,333 | 4.1 | 3,826 |
| Married or living together | 2.6 | 6.0 | 3,050 | 37.0 | 80 | 48.1 | 182 | 3.4 | 2,948 |
| Divorced/separated/ widowed | 6.6 | 58.9 | 472 | (63.9) | 31 | 63.3 | 278 | 5.4 | 432 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 4.6 | 42.1 | 5,731 | 61.2 | 263 | 63.5 | 2,411 | 4.0 | 4,847 |
| Non-urban | 4.4 | 49.7 | 2,783 | 50.1 | 123 | 54.0 | 1,382 | 3.5 | 2,359 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 2.5 | 30.7 | 995 | * | 25 | 49.8 | 306 | 3.2 | 829 |
| Eastern Cape | 6.2 | 51.6 | 938 | 54.6 | 58 | 54.2 | 484 | 3.8 | 843 |
| Northern Cape | 1.8 | 39.9 | 173 | * | 3 | 56.9 | 69 | 4.0 | 144 |
| Free State | 4.2 | 41.5 | 442 | (47.4) | 18 | 70.2 | 183 | 4.3 | 372 |
| KwaZulu-Natal | 5.2 | 50.8 | 1,616 | 57.8 | 84 | 60.2 | 822 | 3.0 | 1,289 |
| North West | 7.7 | 48.2 | 570 | 57.0 | 44 | 61.0 | 275 | 5.7 | 515 |
| Gauteng | 3.6 | 42.6 | 2,284 | (61.6) | 83 | 65.7 | 974 | 4.5 | 1,961 |
| Mpumalanga | 6.6 | 46.5 | 671 | 53.0 | 44 | 58.5 | 312 | 4.1 | 569 |
| Limpopo | 3.3 | 44.8 | 824 | (60.8) | 27 | 57.1 | 369 | 2.8 | 683 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 3.6 | 34.9 | 168 | * | 6 | 42.6 | 59 | 4.5 | 152 |
| Primary incomplete | 3.0 | 37.7 | 447 | * | 13 | 50.4 | 168 | 3.6 | 394 |
| Primary complete | 4.2 | 34.4 | 327 | * | 14 | 50.7 | 113 | 3.8 | 268 |
| Secondary incomplete | 4.7 | 44.6 | 4,195 | 58.5 | 195 | 59.7 | 1,870 | 4.1 | 3,334 |
| Secondary complete | 4.6 | 49.6 | 2,369 | 69.7 | 108 | 62.5 | 1,175 | 3.5 | 2,155 |
| More than secondary | 4.9 | 40.5 | 1,008 | 33.5 | 50 | 63.7 | 408 | 3.9 | 902 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 4.2 | 46.9 | 1,648 | 47.5 | 69 | 49.4 | 773 | 3.7 | 1,407 |
| Second | 5.5 | 48.6 | 1,715 | 59.9 | 94 | 59.8 | 834 | 3.7 | 1,493 |
| Middle | 5.1 | 49.1 | 1,805 | 54.0 | 93 | 60.7 | 885 | 4.1 | 1,546 |
| Fourth | 5.3 | 46.9 | 1,763 | 65.4 | 93 | 67.1 | 828 | 4.3 | 1,483 |
| Highest | 2.4 | 29.9 | 1,583 | (60.1) | 38 | 64.5 | 473 | 3.5 | 1,276 |
| Total | 4.5 | 44.6 | 8,514 | 57.6 | 387 | 60.0 | 3,793 | 3.9 | 7,205 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Means are calculated excluding respondents who gave non-numeric responses

Table 12.2.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months: Men
Among all men age 15-49, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; among men who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner; and among men who ever had sexual intercourse, mean number of sexual partners during their lifetime, according to background characteristics, South Africa DHS 2016

| Background characteristic | All men |  |  | Men who had 2+ partners in the past 12 months |  | Men who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them |  | Men who ever had sexual intercourse ${ }^{1}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had 2+ partners in the past 12 months | Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them | Number of men | Percentage who reported using a condom during last sexual intercourse | Number of men | Percentage who reported using a condom during last sexual intercourse with such a partner | Number of men | Mean number of sexual partners in lifetime | Number of men |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 20.7 | 62.4 | 1,235 | 72.9 | 256 | 75.9 | 770 | 8.9 | 824 |
| 15-19 | 15.7 | 44.4 | 647 | 87.9 | 101 | 80.8 | 287 | 5.7 | 322 |
| 20-24 | 26.2 | 82.1 | 588 | 63.0 | 154 | 73.0 | 483 | 11.0 | 502 |
| 25-29 | 19.8 | 67.9 | 506 | 66.0 | 100 | 69.5 | 343 | 15.0 | 429 |
| 30-39 | 17.0 | 53.6 | 845 | 55.5 | 144 | 61.7 | 453 | 19.3 | 743 |
| 40-49 | 7.2 | 33.1 | 616 | (51.4) | 44 | 54.2 | 204 | 17.1 | 492 |
| Marital status |  |  |  |  |  |  |  |  |  |
| Never married | 19.5 | 72.3 | 2,073 | 71.6 | 404 | 69.9 | 1,499 | 13.3 | 1,510 |
| Married or living together | 10.7 | 16.1 | 988 | 42.0 | 106 | 60.6 | 159 | 15.6 | 850 |
| Divorced/separated/ widowed | 23.9 | 79.6 | 141 | (62.9) | 34 | 61.3 | 112 | 24.7 | 128 |
| Type of union |  |  |  |  |  |  |  |  |  |
| In polygynous union | * | * | 15 | * | 9 | * | 5 | * | 14 |
| In non-polygynous union | 10.0 | 16.0 | 970 | 41.6 | 97 | 61.9 | 155 | 15.4 | 835 |
| Not currently in union | 19.8 | 72.8 | 2,214 | 70.9 | 438 | 69.3 | 1,611 | 14.2 | 1,638 |
| Not asked | * | * | 3 | nc | 0 | nc | 0 | * | 2 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 16.0 | 54.0 | 2,203 | 67.0 | 353 | 68.3 | 1,189 | 17.0 | 1,751 |
| Non-urban | 19.1 | 58.2 | 999 | 62.1 | 190 | 69.1 | 581 | 9.2 | 737 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 11.3 | 36.2 | 328 | * | 37 | 73.6 | 119 | 8.3 | 257 |
| Eastern Cape | 18.0 | 65.8 | 362 | 60.4 | 65 | 60.5 | 238 | 9.8 | 286 |
| Northern Cape | 8.5 | 51.4 | 61 | * | 5 | 71.8 | 31 | 9.8 | 42 |
| Free State | 22.6 | 59.2 | 159 | 71.4 | 36 | 74.0 | 94 | 16.5 | 115 |
| KwaZulu-Natal | 13.6 | 58.8 | 521 | 73.5 | 71 | 63.5 | 306 | 10.0 | 347 |
| North West | 18.4 | 54.0 | 237 | 52.9 | 44 | 83.4 | 128 | 12.1 | 199 |
| Gauteng | 17.3 | 54.6 | 984 | 67.8 | 170 | 66.7 | 537 | 23.5 | 794 |
| Mpumalanga | 18.1 | 57.1 | 263 | 67.8 | 48 | 72.3 | 150 | 12.9 | 236 |
| Limpopo | 23.7 | 57.9 | 288 | 57.4 | 68 | 73.1 | 167 | 8.2 | 212 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 8.9 | 38.6 | 62 | * | 6 | (66.5) | 24 | 13.1 | 54 |
| Primary incomplete | 8.6 | 37.5 | 219 | * | 19 | 58.6 | 82 | 13.1 | 156 |
| Primary complete | 10.8 | 46.0 | 166 | * | 18 | 51.4 | 76 | 11.1 | 120 |
| Secondary incomplete | 18.6 | 58.3 | 1,637 | 65.9 | 305 | 70.2 | 954 | 14.8 | 1,236 |
| Secondary complete | 15.4 | 55.9 | 773 | 71.1 | 119 | 70.5 | 432 | 14.5 | 635 |
| More than secondary | 22.4 | 58.5 | 345 | 62.8 | 77 | 67.5 | 202 | 17.2 | 287 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 13.1 | 55.5 | 618 | 65.9 | 81 | 63.9 | 343 | 12.8 | 486 |
| Second | 18.3 | 57.6 | 682 | 62.0 | 125 | 66.0 | 393 | 12.4 | 532 |
| Middle | 19.4 | 58.7 | 715 | 64.5 | 138 | 68.4 | 420 | 18.5 | 565 |
| Fourth | 20.0 | 59.5 | 653 | 68.9 | 130 | 72.3 | 388 | 15.6 | 509 |
| Highest | 13.0 | 42.4 | 534 | (65.3) | 69 | 73.8 | 226 | 13.5 | 396 |
| Total 15-49 | 17.0 | 55.3 | 3,202 | 65.3 | 544 | 68.5 | 1,770 | 14.7 | 2,488 |
| 50-59 | 4.6 | 20.2 | 416 | (50.2) | 19 | 56.2 | 84 | 12.9 | 312 |
| Total 15-59 | 15.5 | 51.3 | 3,618 | 64.8 | 563 | 68.0 | 1,855 | 14.5 | 2,800 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
${ }^{1}$ Means are calculated excluding respondents who gave non-numeric responses

Table 12.3 Payment for sexual intercourse and condom use at last paid sexual intercourse
Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, and among them, percentage reporting that a condom was used the last time they paid for sexual intercourse, according to age, South Africa DHS 2016

| Age | Among all men: |  |  | Among men who paid for sex in the past 12 months: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who ever paid for sexual intercourse | Percentage who paid for sexual intercourse in the past 12 months | Number of men | Percentage reporting condom use at last paid sexual intercourse | Number of men |
| 15-24 | 2.0 | 1.0 | 1,235 | * | 13 |
| 15-19 | 0.1 | 0.1 | 647 | * | 1 |
| 20-24 | 4.1 | 2.0 | 588 | * | 12 |
| 25-29 | 6.8 | 4.2 | 506 | * | 21 |
| 30-39 | 7.8 | 4.6 | 845 | (85.1) | 39 |
| 40-49 | 3.9 | 3.2 | 616 | * | 19 |
| Total 15-49 | 4.7 | 2.9 | 3,202 | 83.1 | 92 |
| 50-59 | 2.1 | 1.1 | 416 | * | 5 |
| Total 15-59 | 4.4 | 2.7 | 3,618 | 83.9 | 97 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.4.1 Coverage of prior HIV testing: Women
Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women by testing status and by whether they received the results of the last test, percentage of women ever tested, and percentage of women who were tested in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who know where to get an HIV test | Percent distribution of women by testing status and by whether they received the results of the last test |  |  | Total | Percentage ever tested | Percentage who have been tested for HIV in the past 12 months and received the results of the last test | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ever tested and received results | Ever tested, did not receive results | Never tested ${ }^{1}$ |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 89.2 | 66.7 | 1.5 | 31.9 | 100.0 | 68.1 | 52.5 | 2,842 |
| 15-19 | 85.6 | 49.1 | 1.4 | 49.5 | 100.0 | 50.5 | 38.4 | 1,427 |
| 20-24 | 92.9 | 84.3 | 1.5 | 14.2 | 100.0 | 85.8 | 66.7 | 1,415 |
| 25-29 | 96.0 | 90.8 | 2.0 | 7.2 | 100.0 | 92.8 | 68.4 | 1,444 |
| 30-39 | 95.8 | 91.0 | 1.9 | 7.1 | 100.0 | 92.9 | 63.2 | 2,406 |
| 40-49 | 94.2 | 86.4 | 1.6 | 12.0 | 100.0 | 88.0 | 54.0 | 1,823 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 91.9 | 76.3 | 1.5 | 22.2 | 100.0 | 77.8 | 56.1 | 4,992 |
| Ever had sex | 94.9 | 86.9 | 1.8 | 11.4 | 100.0 | 88.6 | 64.3 | 3,989 |
| Never had sex | 80.3 | 34.1 | 0.7 | 65.2 | 100.0 | 34.8 | 23.4 | 1,003 |
| Married or living together | 95.0 | 89.7 | 1.9 | 8.4 | 100.0 | 91.6 | 62.2 | 3,050 |
| Divorced/separated/ widowed | 96.6 | 90.1 | 2.3 | 7.7 | 100.0 | 92.3 | 61.0 | 472 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 93.5 | 82.2 | 1.7 | 16.1 | 100.0 | 83.9 | 57.1 | 5,731 |
| Non-urban | 92.9 | 81.1 | 1.7 | 17.1 | 100.0 | 82.9 | 61.5 | 2,783 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 93.3 | 82.4 | 2.3 | 15.3 | 100.0 | 84.7 | 62.0 | 995 |
| Eastern Cape | 97.4 | 86.4 | 1.6 | 12.1 | 100.0 | 87.9 | 59.3 | 938 |
| Northern Cape | 92.8 | 81.0 | 1.6 | 17.4 | 100.0 | 82.6 | 52.3 | 173 |
| Free State | 96.1 | 83.9 | 1.4 | 14.7 | 100.0 | 85.3 | 58.3 | 442 |
| KwaZulu-Natal | 91.0 | 80.8 | 0.7 | 18.5 | 100.0 | 81.5 | 58.3 | 1,616 |
| North West | 97.9 | 84.0 | 3.6 | 12.4 | 100.0 | 87.6 | 61.4 | 570 |
| Gauteng | 91.2 | 79.9 | 1.6 | 18.5 | 100.0 | 81.5 | 54.1 | 2,284 |
| Mpumalanga | 97.4 | 85.7 | 2.6 | 11.7 | 100.0 | 88.3 | 61.6 | 671 |
| Limpopo | 91.3 | 77.8 | 1.6 | 20.6 | 100.0 | 79.4 | 63.2 | 824 |
| Education |  |  |  |  |  |  |  |  |
| No education | 91.2 | 77.6 | 0.3 | 22.1 | 100.0 | 77.9 | 52.5 | 168 |
| Primary incomplete | 89.6 | 76.3 | 3.2 | 20.5 | 100.0 | 79.5 | 53.9 | 447 |
| $\begin{array}{llllllll}\text { Primary complete } & 90.4 & 76.0 & 1.8 & 22.2 & 100.0 & 77.8 & 50.9 \\ \text { Secondary }\end{array}$ |  |  |  |  |  |  |  |  |
| Secondary incomplete | 92.5 | 77.7 | 1.7 | 20.6 | 100.0 | 79.4 | 56.3 | 4,195 |
| Secondary complete | 94.8 | 87.6 | 1.6 | 10.8 | 100.0 | 89.2 | 63.2 | 2,369 |
| More than secondary | 96.4 | 90.5 | 1.6 | 7.9 | 100.0 | 92.1 | 62.3 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 90.8 | 78.9 | 1.6 | 19.4 | 100.0 | 80.6 | 60.7 | 1,648 |
| Second | 92.7 | 82.0 | 2.1 | 15.9 | 100.0 | 84.1 | 59.3 | 1,715 |
| Middle | 94.0 | 84.5 | 1.2 | 14.3 | 100.0 | 85.7 | 61.2 | 1,805 |
| Fourth | 95.2 | 84.0 | 1.9 | 14.1 | 100.0 | 85.9 | 58.3 | 1,763 |
| Highest | 93.7 | 79.3 | 1.8 | 19.0 | 100.0 | 81.0 | 52.7 | 1,583 |
| Total | 93.3 | 81.8 | 1.7 | 16.5 | 100.0 | 83.5 | 58.5 | 8,514 |

[^20]Table 12.4.2 Coverage of prior HIV testing: Men
Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men by testing status and by whether they received the results of the last test, percentage of men ever tested, and percentage of men who were tested in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who know where to get an HIV test | Percent distribution of men by testing status and by whether they received the results of the last test |  |  | Total | Percentage ever tested | Percentage who have been tested for HIV in the past 12 months and received the results of the last test | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Ever tested and received results | Ever tested, did not receive results | Never tested ${ }^{1}$ |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 90.9 | 56.2 | 1.8 | 42.0 | 100.0 | 58.0 | 38.5 | 1,235 |
| 15-19 | 87.8 | 44.7 | 1.8 | 53.5 | 100.0 | 46.5 | 28.7 | 647 |
| 20-24 | 94.4 | 68.8 | 1.8 | 29.4 | 100.0 | 70.6 | 49.3 | 588 |
| 25-29 | 95.9 | 77.7 | 0.8 | 21.5 | 100.0 | 78.5 | 52.8 | 506 |
| 30-39 | 95.7 | 75.4 | 2.4 | 22.2 | 100.0 | 77.8 | 48.0 | 845 |
| 40-49 | 96.8 | 79.0 | 3.0 | 18.0 | 100.0 | 82.0 | 45.3 | 616 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 92.6 | 62.2 | 2.0 | 35.8 | 100.0 | 64.2 | 41.7 | 2,073 |
| Ever had sex | 94.9 | 69.1 | 2.1 | 28.9 | 100.0 | 71.1 | 47.3 | 1,678 |
| Never had sex | 82.6 | 33.1 | 1.8 | 65.1 | 100.0 | 34.9 | 18.1 | 395 |
| Married or living together | 96.7 | 80.9 | 2.3 | 16.8 | 100.0 | 83.2 | 49.9 | 988 |
| Divorced/separated/ widowed | 98.5 | 86.4 | 0.4 | 13.2 | 100.0 | 86.8 | 49.1 | 141 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 95.2 | 72.0 | 1.8 | 26.3 | 100.0 | 73.7 | 46.6 | 2,203 |
| Non-urban | 91.8 | 62.6 | 2.6 | 34.8 | 100.0 | 65.2 | 40.2 | 999 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 92.5 | 73.7 | 1.6 | 24.6 | 100.0 | 75.4 | 55.7 | 328 |
| Eastern Cape | 96.1 | 62.5 | 2.4 | 35.0 | 100.0 | 65.0 | 45.6 | 362 |
| Northern Cape | 86.0 | 62.1 | 1.3 | 36.5 | 100.0 | 63.5 | 37.6 | 61 |
| Free State | 95.7 | 73.6 | 3.6 | 22.7 | 100.0 | 77.3 | 52.1 | 159 |
| KwaZulu-Natal | 92.6 | 72.8 | 1.8 | 25.4 | 100.0 | 74.6 | 44.9 | 521 |
| North West | 96.5 | 73.8 | 3.8 | 22.4 | 100.0 | 77.6 | 44.3 | 237 |
| Gauteng | 96.2 | 69.8 | 1.6 | 28.6 | 100.0 | 71.4 | 41.0 | 984 |
| Mpumalanga | 93.6 | 71.9 | 1.0 | 27.1 | 100.0 | 72.9 | 49.7 | 263 |
| Limpopo | 88.3 | 54.6 | 2.7 | 42.7 | 100.0 | 57.3 | 35.0 | 288 |
| Education |  |  |  |  |  |  |  |  |
| No education | 92.9 | 77.4 | 1.2 | 21.4 | 100.0 | 78.6 | 47.7 | 62 |
| Primary incomplete | 84.8 | 52.1 | 7.0 | 40.9 | 100.0 | 59.1 | 30.7 | 219 |
| Primary complete | 89.4 | 55.9 | 3.4 | 40.7 | 100.0 | 59.3 | 34.4 | 166 |
| Secondary incomplete | 93.7 | 64.8 | 1.5 | 33.7 | 100.0 | 66.3 | 41.1 | 1,637 |
| Secondary complete | 96.3 | 79.7 | 1.1 | 19.3 | 100.0 | 80.7 | 52.5 | 773 |
| More than secondary | 99.3 | 80.9 | 3.0 | 16.1 | 100.0 | 83.9 | 56.5 | 345 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 91.6 | 61.2 | 1.4 | 37.4 | 100.0 | 62.6 | 40.1 | 618 |
| Second | 92.1 | 65.5 | 3.6 | 30.9 | 100.0 | 69.1 | 42.6 | 682 |
| Middle | 95.1 | 72.6 | 1.5 | 26.0 | 100.0 | 74.0 | 48.1 | 715 |
| Fourth | 96.1 | 73.7 | 2.4 | 23.9 | 100.0 | 76.1 | 50.4 | 653 |
| Highest | 95.7 | 72.2 | 1.1 | 26.7 | 100.0 | 73.3 | 40.4 | 534 |
| Total 15-49 | 94.1 | 69.0 | 2.0 | 28.9 | 100.0 | 71.1 | 44.6 | 3,202 |
| 50-59 | 91.2 | 72.3 | 3.6 | 24.1 | 100.0 | 75.9 | 40.9 | 416 |
| Total 15-59 | 93.8 | 69.4 | 2.2 | 28.4 | 100.0 | 71.6 | 44.1 | 3,618 |

1 Includes "don't know"

## Table 12.5 Pregnant women counselled and tested for HIV

Among all women age $15-49$ who gave birth in the 2 years preceding the survey, percentage who received counselling on HIV during antenatal care, percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counselling, and percentage who received an HIV test during ANC or labour for their most recent birth by whether they received their test results, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who received counselling on HIV during antenatal care ${ }^{1}$ | Percentage who were tested for HIV during antenatal care and who: |  |  | Percentage who received counselling on HIV and an HIV test during ANC, and received the results | Percentage who had an HIV test during ANC or labour and who: ${ }^{2}$ |  | Number of women who gave birth in the past 2 years ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Received results and: |  | Did not receive results |  |  |  |  |
|  |  | Received post-test counselling | Did not receive post-test counselling |  |  | Received results | Did not receive results |  |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 77.4 | 71.8 | 17.2 | 1.0 | 76.1 | 95.5 | 0.3 | 502 |
| 15-19 | 81.1 | 71.6 | 21.2 | 0.5 | 80.7 | 95.9 | 0.5 | 144 |
| 20-24 | 75.9 | 71.9 | 15.6 | 1.2 | 74.2 | 95.3 | 0.2 | 359 |
| 25-29 | 79.6 | 72.8 | 16.1 | 0.6 | 77.7 | 95.2 | 0.2 | 410 |
| 30-39 | 77.8 | 73.9 | 15.0 | 0.2 | 76.4 | 92.2 | 0.3 | 404 |
| 40-49 | 77.7 | 64.8 | 17.5 | 0.0 | 76.8 | 96.3 | 0.0 | 70 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 77.8 | 73.0 | 15.8 | 1.0 | 76.4 | 94.6 | 0.4 | 768 |
| Married or living together | 78.5 | 70.2 | 17.7 | 0.0 | 76.9 | 94.3 | 0.0 | 580 |
| Divorced/separated/widowed | (81.6) | (90.9) | (4.5) | (2.1) | (79.5) | (95.4) | (2.5) | 39 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 75.1 | 70.1 | 16.4 | 0.7 | 73.7 | 94.2 | 0.3 | 872 |
| Non-urban | 83.4 | 76.2 | 15.9 | 0.5 | 81.8 | 95.0 | 0.2 | 514 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 72.0 | 74.5 | 19.9 | 0.0 | 72.0 | 97.8 | 0.0 | 118 |
| Eastern Cape | 83.8 | 77.2 | 19.3 | 0.0 | 83.8 | 98.4 | 0.0 | 163 |
| Northern Cape | 78.0 | 70.9 | 17.2 | 0.8 | 75.6 | 94.4 | 1.5 | 27 |
| Free State | 85.8 | 81.9 | 10.9 | 0.0 | 84.9 | 96.6 | 0.8 | 60 |
| KwaZulu-Natal | 80.9 | 77.6 | 14.7 | 0.3 | 79.7 | 94.2 | 0.1 | 258 |
| North West | 85.9 | 73.5 | 16.3 | 3.2 | 79.7 | 95.3 | 2.4 | 106 |
| Gauteng | 68.5 | 67.2 | 12.0 | 0.8 | 66.4 | 90.8 | 0.0 | 385 |
| Mpumalanga | 85.8 | 65.6 | 23.2 | 0.0 | 85.0 | 98.6 | 0.0 | 127 |
| Limpopo | 82.4 | 70.9 | 19.8 | 0.6 | 81.8 | 92.5 | 0.0 | 144 |
| Education |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | * | 18 |
| Primary incomplete | 65.7 | 67.0 | 4.8 | 2.1 | 64.3 | 91.8 | 2.1 | 60 |
| Primary complete | 72.5 | 60.8 | 11.6 | 0.0 | 72.5 | 79.8 | 0.4 | 50 |
| Secondary incomplete | 79.0 | 74.8 | 15.5 | 0.7 | 78.1 | 94.7 | 0.3 | 706 |
| Secondary complete | 79.9 | 73.0 | 15.6 | 0.1 | 77.2 | 95.1 | 0.1 | 397 |
| More than secondary | 75.3 | 64.7 | 27.6 | 1.1 | 73.5 | 98.0 | 0.0 | 155 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 76.6 | 72.9 | 14.4 | 0.3 | 76.3 | 92.8 | 0.1 | 312 |
| Second | 77.1 | 71.0 | 14.7 | 0.6 | 75.7 | 91.5 | 0.8 | 326 |
| Middle | 81.4 | 73.7 | 17.9 | 1.5 | 79.1 | 98.0 | 0.2 | 291 |
| Fourth | 80.3 | 77.7 | 14.9 | 0.1 | 78.6 | 96.5 | 0.1 | 269 |
| Highest | 74.6 | 64.1 | 21.4 | 0.5 | 72.7 | 94.1 | 0.0 | 189 |
| Total | 78.2 | 72.4 | 16.2 | 0.6 | 76.7 | 94.5 | 0.3 | 1,386 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ In this context, "counselling on HIV" means that someone talked with the respondent about all three of the following topics: (1) babies getting HIV from their mother, (2) preventing the virus, and (3) getting tested for HIV
${ }^{2}$ Women were asked whether they received an HIV test during labour only if they gave birth in a facility
${ }^{3}$ Denominator for percentages includes women who did not receive antenatal care for their last birth in the past 2 years

Table 12.6 Male circumcision
Percent distribution of men age 15-49 by circumcision status and provider of circumcision, and percentage of men circumcised, according to background characteristics, South Africa DHS 2016

| Background characteristic | Circumcised by: |  |  | Not circumcised | Don't know circumcision status | Total | Percentage of men circumcised ${ }^{1}$ | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Health worker/ professional | Traditional practitioner/ family/friend | Other/ don't know |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 38.6 | 21.1 | 0.1 | 40.0 | 0.2 | 100.0 | 59.8 | 1,235 |
| 15-19 | 41.2 | 16.0 | 0.1 | 42.3 | 0.3 | 100.0 | 57.4 | 647 |
| 20-24 | 35.8 | 26.7 | 0.0 | 37.5 | 0.0 | 100.0 | 62.5 | 588 |
| 25-29 | 34.4 | 28.2 | 0.2 | 37.0 | 0.2 | 100.0 | 62.8 | 506 |
| 30-39 | 21.5 | 30.2 | 0.1 | 47.8 | 0.4 | 100.0 | 51.8 | 845 |
| 40-49 | 20.5 | 33.0 | 0.0 | 46.4 | 0.0 | 100.0 | 53.6 | 616 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 32.4 | 24.7 | 0.1 | 42.7 | 0.2 | 100.0 | 57.1 | 2,203 |
| Non-urban | 24.6 | 31.9 | 0.2 | 43.1 | 0.2 | 100.0 | 56.7 | 999 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 15.5 | 28.8 | 0.0 | 55.3 | 0.5 | 100.0 | 44.2 | 328 |
| Eastern Cape | 6.6 | 66.1 | 0.0 | 27.0 | 0.3 | 100.0 | 72.7 | 362 |
| Northern Cape | 23.6 | 11.3 | 0.0 | 65.1 | 0.0 | 100.0 | 34.9 | 61 |
| Free State | 41.0 | 14.5 | 0.3 | 44.2 | 0.0 | 100.0 | 55.8 | 159 |
| KwaZulu-Natal | 37.2 | 5.3 | 0.4 | 56.7 | 0.5 | 100.0 | 42.8 | 521 |
| North West | 27.0 | 21.6 | 0.2 | 51.1 | 0.0 | 100.0 | 48.9 | 237 |
| Gauteng | 37.9 | 21.9 | 0.0 | 40.2 | 0.0 | 100.0 | 59.8 | 984 |
| Mpumalanga | 31.8 | 18.2 | 0.0 | 49.6 | 0.5 | 100.0 | 49.9 | 263 |
| Limpopo | 31.4 | 54.5 | 0.0 | 14.2 | 0.0 | 100.0 | 85.8 | 288 |
| Education |  |  |  |  |  |  |  |  |
| No education | 9.5 | 28.0 | 0.0 | 62.5 | 0.0 | 100.0 | 37.5 | 62 |
| Primary incomplete | 11.7 | 36.9 | 0.0 | 50.4 | 1.0 | 100.0 | 48.6 | 219 |
| Primary complete | 29.9 | 26.0 | 0.7 | 43.5 | 0.0 | 100.0 | 56.5 | 166 |
| Secondary incomplete | 29.9 | 26.3 | 0.0 | 43.5 | 0.3 | 100.0 | 56.2 | 1,637 |
| Secondary complete | 32.5 | 26.0 | 0.1 | 41.4 | 0.0 | 100.0 | 58.6 | 773 |
| More than secondary | 39.9 | 25.7 | 0.0 | 34.5 | 0.0 | 100.0 | 65.5 | 345 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 30.8 | 30.3 | 0.1 | 38.7 | 0.2 | 100.0 | 61.1 | 2,815 |
| White | 33.8 | 0.0 | 0.0 | 66.2 | 0.0 | 100.0 | 33.8 | 104 |
| Coloured | 23.0 | 2.5 | 0.0 | 74.5 | 0.0 | 100.0 | 25.5 | 232 |
| Indian/Asian | (7.4) | (3.3) | (0.0) | (86.5) | (2.9) | 100.0 | (10.6) | 48 |
| Other | * | * | * | * | * | 100.0 | * | 2 |
| Total 15-49 | 29.9 | 26.9 | 0.1 | 42.8 | 0.2 | 100.0 | 57.0 | 3,202 |
| 50-59 | 16.0 | 29.1 | 0.2 | 53.7 | 1.0 | 100.0 | 45.3 | 416 |
| Total 15-59 | 28.3 | 27.2 | 0.1 | 44.1 | 0.3 | 100.0 | 55.6 | 3,618 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes all men who report they are circumcised, regardless of provider

Table 12.7 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms
Among women and men age 15-49 who ever had sexual intercourse, percentage reporting having an STI and/or symptoms of an STI in the past 12 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women who reported having in the past 12 months: |  |  |  |  | Percentage of men who reported having in the past 12 months: |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STI | Badsmelling/ abnormal genital discharge | Genital sore or ulcer | STI/ genital discharge/ sore or ulcer | Number of women who ever had sexual intercourse | STI | Badsmelling/ abnormal discharge from penis | Genital sore or ulcer | STI/ abnormal discharge from penis/ sore or ulcer | Number of men who ever had sexual intercourse |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 5.0 | 10.7 | 4.0 | 13.7 | 1,903 | 5.3 | 4.9 | 3.7 | 9.0 | 869 |
| 15-19 | 4.5 | 9.7 | 3.5 | 12.6 | 618 | 2.2 | 2.9 | 1.7 | 5.0 | 329 |
| 20-24 | 5.3 | 11.3 | 4.2 | 14.3 | 1,285 | 7.2 | 6.1 | 4.9 | 11.4 | 540 |
| 25-29 | 7.9 | 9.4 | 4.9 | 13.6 | 1,412 | 3.7 | 4.5 | 2.3 | 7.0 | 486 |
| 30-39 | 5.3 | 8.2 | 4.4 | 11.4 | 2,385 | 3.5 | 2.2 | 2.0 | 5.1 | 840 |
| 40-49 | 3.5 | 6.4 | 3.9 | 8.9 | 1,805 | 2.4 | 2.8 | 0.9 | 4.5 | 609 |
| Marital status |  |  |  |  |  |  |  |  |  |  |
| Never married | 5.5 | 9.1 | 4.4 | 12.1 | 3,989 | 4.5 | 4.1 | 2.6 | 7.0 | 1,678 |
| Married or living together | 4.7 | 8.1 | 3.8 | 11.0 | 3,045 | 2.3 | 2.6 | 1.3 | 5.0 | 986 |
| Divorced/separated/ widowed | 7.1 | 7.9 | 6.1 | 14.7 | 471 | 7.0 | 3.4 | 6.2 | 10.7 | 141 |
| Circumcised |  |  |  |  |  |  |  |  |  |  |
| Yes ${ }^{1}$ | na | na | na | na | na | 3.8 | 4.0 | 2.1 | 6.7 | 1,661 |
| No | na | na | na | na | na | 3.9 | 2.9 | 2.6 | 6.3 | 1,141 |
| Don't know | na | na | na | na | na | * | * | * | * | 4 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 5.1 | 7.9 | 3.4 | 10.7 | 5,069 | 2.9 | 2.8 | 1.9 | 5.1 | 1,980 |
| Non-urban | 5.8 | 10.1 | 6.1 | 14.0 | 2,437 | 6.2 | 5.4 | 3.2 | 9.8 | 825 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 2.9 | 7.3 | 2.2 | 8.6 | 853 | 4.0 | 5.6 | 5.3 | 10.8 | 284 |
| Eastern Cape | 9.9 | 12.8 | 3.7 | 16.3 | 860 | 6.7 | 8.0 | 2.0 | 9.9 | 317 |
| Northern Cape | 3.3 | 6.5 | 1.6 | 9.3 | 153 | 1.8 | 2.5 | 3.6 | 6.1 | 51 |
| Free State | 6.1 | 7.1 | 6.3 | 12.3 | 382 | 6.3 | 5.4 | 4.1 | 10.2 | 133 |
| KwaZulu-Natal | 5.8 | 9.1 | 4.1 | 10.9 | 1,340 | 5.0 | 3.2 | 3.3 | 6.0 | 425 |
| North West | 3.8 | 12.5 | 9.7 | 18.3 | 529 | 5.4 | 2.7 | 1.0 | 6.8 | 213 |
| Gauteng | 4.5 | 6.0 | 2.4 | 8.6 | 2,076 | 1.6 | 1.5 | 0.5 | 2.8 | 907 |
| Mpumalanga | 5.9 | 12.7 | 7.1 | 17.6 | 609 | 4.2 | 3.2 | 1.9 | 7.1 | 239 |
| Limpopo | 4.5 | 7.2 | 6.3 | 11.7 | 704 | 3.6 | 4.3 | 4.4 | 9.0 | 236 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 3.2 | 8.3 | 3.6 | 10.0 | 160 | 0.6 | 0.4 | 2.2 | 3.2 | 61 |
| Primary incomplete | 8.3 | 11.4 | 7.4 | 15.2 | 419 | 5.4 | 6.1 | 3.3 | 9.3 | 181 |
| Primary complete | 4.9 | 9.4 | 4.5 | 10.8 | 284 | 5.8 | 3.9 | 5.2 | 9.6 | 133 |
| Secondary incomplete | 4.8 | 9.5 | 4.9 | 12.7 | 3,466 | 4.7 | 4.2 | 2.3 | 7.3 | 1,359 |
| Secondary complete | 6.1 | 7.5 | 3.4 | 10.8 | 2,232 | 2.8 | 2.6 | 1.9 | 4.6 | 733 |
| More than secondary | 4.2 | 6.7 | 2.8 | 10.1 | 945 | 1.8 | 2.2 | 1.3 | 5.1 | 338 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 6.2 | 9.7 | 5.1 | 13.1 | 1,448 | 4.4 | 5.8 | 2.4 | 7.2 | 538 |
| Second | 5.8 | 10.5 | 5.6 | 13.9 | 1,559 | 4.3 | 3.5 | 2.8 | 7.2 | 603 |
| Middle | 5.5 | 8.6 | 4.4 | 12.7 | 1,627 | 5.4 | 4.2 | 2.8 | 8.4 | 634 |
| Fourth | 6.0 | 8.8 | 3.9 | 11.1 | 1,537 | 3.9 | 2.5 | 2.4 | 6.2 | 572 |
| Highest | 2.6 | 5.1 | 2.2 | 7.6 | 1,335 | 0.3 | 1.6 | 0.8 | 2.4 | 459 |
| Total 15-49 | 5.3 | 8.6 | 4.3 | 11.8 | 7,505 | 3.8 | 3.6 | 2.3 | 6.5 | 2,805 |
| 50-59 | na | na | na | na | na | 3.0 | 3.9 | 2.4 | 6.6 | 412 |
| Total 15-59 | na | na | na | na | na | 3.7 | 3.6 | 2.3 | 6.5 | 3,217 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
${ }^{1}$ Includes all men who report they are circumcised, regardless of provider

Table 12.8 Women and men seeking treatment for STIS
Percentage of women and men age $15-49$ reporting an STI or symptoms of an STI in the past 12 months who sought advice or treatment, South Africa DHS 2016

| Source of advice or treatment | Women | Men |
| :--- | ---: | ---: |
| Clinic/hospital/private doctor/other health |  |  |
| professional | 65.5 | 55.1 |
| Advice or medicine from shop/pharmacy | 4.8 | 8.8 |
| Advice or treatment from any other source | 0.1 | 0.2 |
| No advice or treatment | 29.9 | 36.3 |
| Number with STI or symptoms of STI | 885 | 182 |

Table 12.9 Age at first sexual intercourse among young people
Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women age 15-24 |  | Women age 18-24 |  | Men age 15-24 |  | Men age 18-24 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had sexual intercourse before age 15 | Number of women | Percentage who had sexual intercourse before age 18 | Number of women | Percentage who had sexual intercourse before age 15 | $\begin{gathered} \text { Number of } \\ \text { men } \\ \hline \end{gathered}$ | Percentage who had sexual intercourse before age 18 | $\begin{gathered} \text { Number of } \\ \text { men } \\ \hline \end{gathered}$ |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 5.7 | 1,427 | na | na | 14.5 | 647 | na | na |
| 15-17 | 6.6 | 857 | na | na | 13.9 | 387 | na | na |
| 18-19 | 4.4 | 569 | 49.7 | 569 | 15.4 | 259 | 64.6 | 259 |
| 20-24 | 6.5 | 1,415 | 50.5 | 1,415 | 14.7 | 588 | 66.9 | 588 |
| 20-22 | 6.5 | 836 | 50.9 | 836 | 13.7 | 367 | 68.0 | 367 |
| 23-24 | 6.4 | 579 | 50.0 | 579 | 16.5 | 222 | 65.2 | 222 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 6.2 | 1,826 | 49.0 | 1,314 | 17.1 | 724 | 68.4 | 510 |
| Non-urban | 5.9 | 1,016 | 52.7 | 670 | 11.1 | 511 | 63.0 | 338 |
| Education |  |  |  |  |  |  |  |  |
| No education | * | 9 | * | 7 | * | 6 | * | 6 |
| Primary incomplete | 18.2 | 72 | (76.8) | 36 | 13.2 | 72 | (62.4) | 36 |
| Primary complete | 14.5 | 116 | 70.2 | 64 | 17.9 | 60 | (58.1) | 19 |
| Secondary incomplete | 6.3 | 1,793 | 57.0 | 1,033 | 14.8 | 807 | 64.7 | 495 |
| Secondary complete | 3.6 | 640 | 43.1 | 634 | 12.7 | 228 | 67.8 | 228 |
| More than secondary | 3.5 | 211 | 27.7 | 210 | 15.7 | 63 | 77.5 | 63 |
| Total | 6.1 | 2,842 | 50.3 | 1,984 | 14.6 | 1,235 | 66.2 | 848 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable

Table 12.10 Premarital sexual intercourse among young people
Among never-in-union women and men age 15-24, percentage who have never had sexual intercourse according to background characteristics, South Africa DHS 2016

| Background characteristic | Women age 15-24 |  | Men age 15-24 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have never had sexual intercourse | Number of never-in-union women | Percentage who have never had sexual intercourse | Number of never-in-union men |
| Age |  |  |  |  |
| 15-19 | 58.5 | 1,380 | 49.2 | 646 |
| 15-17 | 72.0 | 847 | 63.4 | 387 |
| 18-19 | 37.1 | 533 | 27.8 | 258 |
| 20-24 | 11.5 | 1,128 | 8.8 | 545 |
| 20-22 | 14.7 | 702 | 10.1 | 347 |
| 23-24 | 6.3 | 426 | 6.7 | 198 |
| Residence |  |  |  |  |
| Urban | 38.4 | 1,579 | 28.2 | 694 |
| Non-urban | 35.6 | 929 | 34.2 | 497 |
| Education |  |  |  |  |
| No education | * | 5 | * | 4 |
| Primary incomplete | 44.8 | 56 | 59.1 | 62 |
| Primary complete | 53.1 | 82 | 55.5 | 59 |
| Secondary incomplete | 44.4 | 1,620 | 33.2 | 787 |
| Secondary complete | 18.5 | 565 | 15.2 | 220 |
| More than secondary | 23.5 | 179 | 1.5 | 59 |
| Total 15-24 | 37.4 | 2,508 | 30.7 | 1,191 |

[^21]Table 12.11.1 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Women
Among all young women age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among young women having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young women who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, South Africa DHS 2016

|  | Women age 15-24 |  |  | Women age 15-24 who had $2+$ partners in the past 12 months |  | Women age 15-24 who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Background characteristic | Percentage who had 2+ partners in the past 12 months | Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them | Number of women | Percentage who reported using a condom during last sexual intercourse | Number of women | Percentage who reported using a condom during last sexual intercourse with such a partner | Number of women |
| Age |  |  |  |  |  |  |  |
| 15-19 | 2.7 | 37.9 | 1,427 | 54.8 | 38 | 63.8 | 541 |
| 15-17 | 1.9 | 25.8 | 857 | * | 17 | 61.6 | 221 |
| 18-19 | 3.8 | 56.1 | 569 | (59.5) | 21 | 65.3 | 320 |
| 20-24 | 6.6 | 66.3 | 1,415 | 64.0 | 94 | 61.5 | 938 |
| 20-22 | 6.6 | 67.1 | 836 | 60.6 | 55 | 62.2 | 561 |
| 23-24 | 6.7 | 65.2 | 579 | (69.0) | 39 | 60.3 | 377 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 4.9 | 57.0 | 2,508 | 63.6 | 122 | 62.7 | 1,429 |
| Ever married or living together | 3.0 | 15.0 | 334 | * | 10 | (49.9) | 50 |
| Residence |  |  |  |  |  |  |  |
| Urban | 4.2 | 51.1 | 1,826 | 62.2 | 77 | 67.2 | 932 |
| Non-urban | 5.4 | 53.8 | 1,016 | 60.3 | 55 | 53.9 | 547 |
| Education |  |  |  |  |  |  |  |
| No education | * | * | 9 | * | 0 | * | 2 |
| Primary incomplete | 6.6 | 42.8 | 72 | * | 5 | (32.7) | 31 |
| Primary complete | 1.9 | 32.1 | 116 | * | 2 | (52.6) | 37 |
| Secondary incomplete | 3.9 | 46.6 | 1,793 | 62.8 | 71 | 60.8 | 835 |
| Secondary complete | 6.3 | 69.1 | 640 | (61.1) | 40 | 67.2 | 442 |
| More than secondary | 6.5 | 62.0 | 211 | * | 14 | 65.0 | 131 |
| Total 15-24 | 4.6 | 52.1 | 2,842 | 61.4 | 132 | 62.3 | 1,479 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.11.2 Multiple sexual partners and higher-risk sexual intercourse in the past 12 months among young people: Men
Among all young men age 15-24, percentage who had sexual intercourse with more than one sexual partner in the past 12 months and percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them; among young men having more than one partner in the past 12 months, percentage reporting that a condom was used during last intercourse; and among young men who had sexual intercourse in the past 12 months with a person who neither was their spouse nor lived with them, percentage who used a condom during last sexual intercourse with such a partner, according to background characteristics, South Africa DHS 2016

| Background characteristic | Men age 15-24 |  |  | Men age 15-24 who had 2+ partners in the past 12 months |  | Men age 15-24 who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had 2+ partners in the past 12 months | Percentage who had intercourse in the past 12 months with a person who neither was their spouse nor lived with them | $\begin{gathered} \text { Number of } \\ \text { men } \\ \hline \end{gathered}$ | Percentage who reported using a condom during last sexual intercourse | Number of men | Percentage who reported using a condom during last sexual intercourse with such a partner | Number of men |
| Age |  |  |  |  |  |  |  |
| 15-19 | 15.7 | 44.4 | 647 | 87.9 | 101 | 80.8 | 287 |
| 15-17 | 10.1 | 31.2 | 387 | (88.3) | 39 | 83.4 | 121 |
| 18-19 | 24.0 | 64.2 | 259 | 87.6 | 62 | 79.0 | 166 |
| 20-24 | 26.2 | 82.1 | 588 | 63.0 | 154 | 73.0 | 483 |
| 20-22 | 26.6 | 79.8 | 367 | 59.3 | 97 | 73.9 | 293 |
| 23-24 | 25.6 | 85.7 | 222 | 69.3 | 57 | 71.7 | 190 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 20.1 | 62.5 | 1,191 | 74.8 | 240 | 76.2 | 744 |
| Ever married or living together | (36.1) | (58.8) | 44 | * | 16 | * | 26 |
| Residence |  |  |  |  |  |  |  |
| Urban | 22.3 | 65.5 | 724 | 76.0 | 161 | 76.8 | 474 |
| Non-urban | 18.4 | 57.9 | 511 | 67.6 | 94 | 74.5 | 296 |
| Education |  |  |  |  |  |  |  |
| No education | * | * | 6 | * | 1 | * | 3 |
| Primary incomplete | 9.8 | 40.1 | 72 | * | 7 | (74.7) | 29 |
| Primary complete | 14.3 | 39.6 | 60 | * | 9 | (41.9) | 24 |
| Secondary incomplete | 19.9 | 58.7 | 807 | 77.2 | 161 | 78.8 | 474 |
| Secondary complete | 24.8 | 79.5 | 228 | 73.7 | 57 | 77.1 | 181 |
| More than secondary | 34.1 | 94.2 | 63 | * | 21 | 66.7 | 59 |
| Total 15-24 | 20.7 | 62.4 | 1,235 | 72.9 | 256 | 75.9 | 770 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 12.12 Recent HIV tests among young people
Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, percentage who were tested for HIV in the past 12 months and received the results of the last test, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women age 15-24 who have had sexual intercourse in the past 12 months: |  | Men age 15-24 who have had sexual intercourse in the past 12 months: |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have been tested for HIV in the past 12 months and received the results of the last test | Number of women | Percentage who have been tested for HIV in the past 12 months and received the results of the last test | Number of men |
| Age |  |  |  |  |
| 15-19 | 62.6 | 575 | 40.5 | 287 |
| 15-17 | 57.6 | 230 | 26.9 | 121 |
| 18-19 | 65.8 | 346 | 50.5 | 166 |
| 20-24 | 70.2 | 1,182 | 53.6 | 500 |
| 20-22 | 69.6 | 672 | 52.5 | 301 |
| 23-24 | 71.1 | 510 | 55.2 | 200 |
| Marital status |  |  |  |  |
| Never married | 67.1 | 1,431 | 48.4 | 744 |
| Ever married or living together | 70.4 | 326 | (56.2) | 44 |
| Total 15-24 | 67.7 | 1,757 | 48.8 | 788 |

Note: Figures in parentheses are based on 25-49 unweighted cases

## Key Findings

- HIV testing coverage rate: Overall, only $52 \%$ of women and men age 15 and older who were eligible for HIV testing were both interviewed and tested. The generalisability of the prevalence estimates is therefore unclear and these results should be interpreted with caution.
- HIV prevalence among adults age 15 and older: 19\% of adults are HIV positive. HIV prevalence is higher among women ( $23 \%$ ) than men ( $13 \%$ ).
- HIV prevalence by province: Among women and men age 15-49 combined, HIV prevalence ranges from a low of $10 \%$ in Limpopo to a high of $30 \%$ in KwaZulu-Natal.
- HIV prevalence among young people: Overall, $7 \%$ of young women and men age 15-24 are HIV positive. HIV prevalence is four times higher among young women than young men ( $12 \%$ versus $3 \%$ ).
- HIV prevalence among couples: Overall, $30 \%$ of couples have at least one partner infected with HIV. In $15 \%$ of couples, both partners are HIV positive. Sixteen percent of couples are discordant (that is, one partner is HIV positive and the other is HIV negative).

THe SADHS 2016 included HIV testing among survey respondents. In households selected for biomarkers, all women and men age 15 and older were eligible for testing. The methodology used to conduct HIV testing is described in detail in Chapter 1.

Although the inclusion of HIV testing in the survey allows an estimate of HIV prevalence to be generated for adults age 15 and older, the primary rationale for including HIV testing in the SADHS 2016 was to examine associations between HIV status and noncommunicable diseases. Such links are presented in Chapters 15 and 16.

This chapter provides information on HIV testing coverage rates among eligible survey respondents and the results of the testing by demographic and behavioural characteristics. Because women age 50 and older and men age 60 and older were not interviewed with the full individual questionnaires, many tables are restricted to women and men age $15-49$ or men age $15-59$. In addition, several tables focus on young people age 15-24.

### 13.1 Coverage Rates for Hiv Testing

## HIV testing coverage rate

Percentage of women and men who are tested for HIV as part of the SADHS
Sample: Women and men who are in households selected for HIV testing and are within the eligible age range for HIV testing based on information collected in the Household Questionnaire
The HIV testing response rate is calculated as follows:
Women and men age 15+ who were interviewed and whose blood sample underwent the complete HIV testing algorithm with a final result of positive, negative, or inconclusive
All women and men age 15+ in households included in the subsample for HIV testing

Overall, only $52 \%$ of women and men age 15 and older who were eligible for HIV testing were both interviewed and successfully tested (Table 13.1). Nineteen percent of women and men who were eligible for an interview and HIV testing were not interviewed, $19 \%$ were interviewed and refused to provide a blood specimen for HIV testing, and $7 \%$ were interviewed and were unavailable for blood collection after repeated attempts to contact them. The coverage rate for HIV testing was greater among women than men ( $58 \%$ versus $44 \%$ ).

## Patterns by background characteristics

- Coverage of HIV testing is higher among respondents in non-urban areas than urban areas ( $62 \%$ and $44 \%$, respectively). Seven in 10 women ( $68 \%$ ) in non-urban areas were interviewed and tested, as compared with 5 in 10 women ( $50 \%$ ) from urban areas. Over half of men ( $55 \%$ ) in non-urban areas were interviewed and tested, compared with only $38 \%$ of men from urban areas.
- By province, coverage of HIV testing is highest among women and men in North West (72\%) and lowest among women and men in Western Cape (31\%), Gauteng (36\%), and Northern Cape (39\%).
- Coverage of HIV testing differs by age. Among women, coverage rates are modestly higher among those age 50 or older ( $60 \%-64 \%$ ) than among those age $15-49$ ( $53 \%-57 \%$ ). Among men, coverage rates are highest among those in the youngest and oldest age groups; $55 \%$ of men age $15-19$ and $56 \%$ of men age 65 or older were interviewed and tested, as compared with $35 \%-50 \%$ of men age 20-64 (Table 13.2).
- Among both women and men, coverage levels are highest among those with a primary incomplete education ( $69 \%$ and $55 \%$, respectively) and lowest among those with more than a secondary education ( $43 \%$ and $34 \%$, respectively).
- Coverage of HIV testing generally decreases with increasing household wealth among both women and men. Sixty-nine percent of women and $56 \%$ of men in the lowest wealth quintile were interviewed and tested, compared with $39 \%$ of women and $29 \%$ of men in the highest wealth quintile.

The remainder of the tables presented in this chapter are based on those individuals who were interviewed and successfully tested for HIV. While the sample of adults eligible for testing was designed to be representative for women and men in South Africa nationally, by urban and non-urban residence, and by province, the low coverage rates for HIV testing may mean this has not been achieved. This concern is especially true at the provincial level, for which coverage rates showed enormous variability but were as low as $23 \%$ (among men in Western Cape). The sample weighting procedures used in the SADHS correct for differential non-response, taking into account province, place of residence (urban or non-urban), and sex (the cross-classifications of these three variables form the non-response adjustment groups). This
procedure ensures that all of these adjustment groups are represented in the HIV prevalence estimate in their proper proportions despite differing levels of participation. Details on the calculation of the sample weights are provided in Appendix A. However, the non-response adjustment to the sample weights assumes that non-response to the HIV test is missing at random-that is, within each adjustment group, people who participated in the survey HIV test have the same probability of having HIV as those who did not participate - and this may not be the case. Therefore, with the high level of non-response to the HIV test in this survey, the generalisability of the prevalence estimates produced in the SADHS is unclear. All of the results presented in this chapter should be interpreted with extreme caution.

### 13.2 HIV Prevalence

### 13.2.1 HIV Prevalence by Age and Sex

## HIV prevalence

Percentage of women and men testing positive for HIV as part of the SADHS (see testing methodology in Chapter 1).
Sample: Women and men age 15-49 and women and men age 15+ tested for HIV as part of the survey

According to the SADHS 2016, 19\% of adults age 15 and older in South Africa are HIV positive (Table 13.3). HIV prevalence is higher among women ( $23 \%$ ) than men ( $13 \%$ ). Among both women and men, HIV prevalence initially increases with age and then declines. Women have a higher HIV prevalence than men across all age groups. Among both women ( $40 \%$ ) and men ( $27 \%$ ), HIV prevalence peaks in the $35-44$ age group (Figure 13.1).

The HIV prevalence among respondents age $15-49$ is $21 \%$, and the prevalence is higher among women (27\%) than men (14\%).

Patterns by socioeconomic characteristics among women and men age 15-49

Figure 13.1 HIV prevalence by age


- HIV prevalence is higher among those who are employed ( $30 \%$ of employed women and $17 \%$ of employed men) than those who are not employed ( $26 \%$ of women and $12 \%$ of men) (Table 13.4).
- Among women and men combined, differences in HIV prevalence by residence are small ( $22 \%$ in urban areas and $20 \%$ in non-urban areas). However, the combined prevalence varies widely by province, from a low of $10 \%$ in Limpopo to a high of $30 \%$ in KwaZulu-Natal (Figure 13.2).
- Among women and men combined, HIV prevalence decreases with increasing education, from $28 \%$ among those with no education to $12 \%$ among those with more than a secondary education (Figure 13.3).

The overall HIV prevalence among respondents age 50 and older is $13 \%$, and the prevalence is slightly

Figure 13.2 HIV prevalence by province
Percentage of women and men age 15-49 who are HIV positive

higher among women than men ( $14 \%$ and $10 \%$, respectively). Patterns by sociodemographic characteristics are presented in Table 13.5.

Patterns by demographic characteristics among women and men age 15-49

- HIV prevalence varies by marital status and is highest among those who are widowed ( $44 \%$ of women and men combined) (Figure 13.4).
- Five percent of respondents who had never been married or lived with a partner and never had sexual intercourse were HIV positive, indicating that some women and men failed to report sexual activity or that there is some degree of nonsexual transmission of HIV, including mother-to-child transmission (Table 13.6).
- Women age 15-49 who slept away from home one or more times in the past 12 months had a higher HIV prevalence than those who did not (30-32\% and $24 \%$, respectively). This pattern was not observed among men.

Figure 13.3 HIV prevalence by education
Percentage of women and men age 15-49 who are HIV positive


Figure 13.4 HIV prevalence by marital status
Percentage of women and men age 15-49 who are HIV positive
-Total ■ Women ■Men


Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

- There was essentially no difference in HIV prevalence between women who were pregnant at the time of the survey ( $28 \%$ ) and those who were not pregnant or not sure ( $27 \%$ ). As a point of comparison,

HIV prevalence among antenatal care (ANC) clients in the public sector was estimated to be $30.8 \%$ in 2015 (NDoH 2017).

### 13.2.2 HIV Prevalence by Sexual Risk Behaviour

Table $\mathbf{1 3 . 7}$ presents information on HIV prevalence among respondents age $15-49$ by sexual behaviour characteristics. In reviewing these results, it is important to keep in mind that social desirability or other biases may affect reports of sexual behaviour. Overall, among those who have ever had sex, HIV prevalence is almost twice as high among women as among men ( $30 \%$ versus $16 \%$ ).

## Patterns by sexual behaviour characteristics

- Among women, HIV prevalence is higher among those who reported first having sexual intercourse before age $16(36 \%-37 \%)$ than those who first had sex at age 16 or older $(27 \%-30 \%)$. Men who reported that they first had sexual intercourse at age 20 or older were more likely to be HIV positive ( $22 \%$ ) than men who first had sexual intercourse at younger ages ( $12 \%-19 \%$ ).
- Respondents were asked how many different partners they have had sexual intercourse with in their lifetime. HIV prevalence among women increases with number of lifetime partners, from $14 \%$ among those with one lifetime partner to $50 \%$ among those with 10 or more partners (Figure 13.5). The pattern among men is generally similar.
- Table 13.7 also presents information on the relationship between condom use at last sexual intercourse and HIV status, although it is worth noting that, in reports on condom use, it is not possible to know the sequence of events (e.g., whether any reported condom use occurred before or after HIV transmission). No

Figure 13.5 HIV prevalence by number of lifetime partners

Percentage of women and men who are HIV positive

1 - 2 ■ 3-4 ■ 5-9 ■ 10+
 differences in HIV prevalence according to condom use at last sexual intercourse were observed among men. However, women who used a condom during their most recent sexual intercourse in the 12-month period before the survey were more likely to be HIV positive than those who did not use a condom ( $39 \%$ and $22 \%$, respectively). One possible explanation for this finding is that HIV-positive respondents were more likely to use condoms because they either knew or suspected that they were infected with HIV and used condoms to prevent transmission.

In summary, the results presented in Table 13.7 do not demonstrate consistent relationships between sexual behaviour and HIV prevalence. A more detailed analysis is necessary to understand these relationships because they are often confounded by other factors associated with both behavioural measures and HIV prevalence, such as age and residence.

### 13.2.3 HIV Prevalence among Young People

Table 13.8 presents HIV prevalence among young people age 15-24 according to background characteristics. Overall, $7 \%$ of young women and men age $15-24$ are HIV positive. HIV prevalence is four times higher among young women than young men ( $12 \%$ versus $3 \%$ ).

## Patterns by background characteristics

- Among young women, HIV prevalence increases with age, rising steadily from 4\% among those age $15-17$ to $19 \%$ among those age 23-24. Among young men, HIV prevalence decreases from $5 \%$ among those age $15-17$ to $2 \%$ among those age $20-22$ before increasing slightly to $4 \%$ among those age 23-24.
- HIV prevalence is higher among young men in urban areas (5\%) than young men in non-urban areas (2\%). HIV prevalence among young women is identical in urban and non-urban areas ( $12 \%$ each).
- Overall, HIV prevalence among young women and men combined is lowest in Limpopo (2\%) and highest in KwaZulu-Natal (13\%).
- Among young women and men combined, HIV prevalence decreases with increasing household wealth, from $11 \%$ among those in the lowest wealth quintile to $4 \%$ among those in the highest quintile.

Table 13.9 shows HIV prevalence among young people age 15-24 according to sexual behaviour. HIV prevalence is $8 \%$ among young people who have ever had sex; $15 \%$ of young women and $3 \%$ of young men who have ever had sex are HIV positive.

## Patterns by sexual behaviour characteristics

- Among both young women and young men, HIV prevalence increases with the number of sexual partners in the past 12 months; the trend is much more extreme among young women. Twelve percent of young women with no sexual partners in the past 12 months are HIV positive, $14 \%$ of those with one partner are HIV positive, and $21 \%$ with two or more partners are HIV positive.
- Among young men, HIV prevalence is lower among those who used a condom during their most recent sexual intercourse in the past 12 months ( $2 \%$ ) or who did not have sexual intercourse in the past 12 months ( $2 \%$ ) than among those who had sexual intercourse but did not use a condom (5\%). Among young women, differences according to condom use at last sexual intercourse are minor.


### 13.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk

The SADHS 2016 also explored HIV prevalence by other characteristics related to HIV risk among women and men age 15-49 who have ever had sex. As expected, HIV prevalence is higher among women and men who reported having a sexually transmitted infection (STI) or symptoms of an STI in the 12 months before the survey than among those who had neither an STI nor symptoms ( $31 \%$ versus $22 \%$ ). Individuals who had been tested for HIV previously were twice as likely to be HIV positive as those who had never been tested ( $25 \%$ versus 13\%) (Table 13.10).

Information on the relationship between prior HIV testing and the current HIV status of respondents age 15-49 is presented in Table 13.11. The results show that the majority of individuals who are HIV positive have been tested previously and received the result of their last test. Among respondents age 15-49 living with HIV, $87 \%$ reported that they had been tested for HIV and received the results of their most recent test, including $90 \%$ of HIV-positive women and $81 \%$ of HIV-positive men. Fifty-four percent of HIV-positive women and men received the results of their most recent test in the past 12 months. Thirteen percent of HIV-positive respondents have never been tested for HIV or were tested but did not receive the results of their last test and, therefore, cannot be aware of their status.

Male circumcision has been shown to reduce the risk of HIV infection. In the SADHS 2016, men were asked whether or not they had been circumcised and by whom. HIV prevalence is lower among men age 15-49 who have been circumcised than those who have not been circumcised (11\% versus 19\%) (Figure 13.6). HIV prevalence is slightly higher among men who were circumcised by a traditional practitioner, family member, or friend than by a health worker or health professional ( $12 \%$ versus $10 \%$ ). Information on HIV

Figure 13.6 HIV prevalence by circumcision status
Percentage of men age 15-49 who are HIV positive
 prevalence and male circumcision by background characteristics is presented in Table 13.12.

### 13.2.5 HIV Prevalence among Couples

Among the women and men interviewed and tested for HIV in the SADHS 2016, there were 419 cohabitating couples. In $70 \%$ of cohabiting couples, both partners tested negative for HIV (Table 13.13). Both partners are HIV positive in $15 \%$ of cohabitating couples, while an additional $16 \%$ of couples are discordant; that is, one partner is HIV positive and the other is HIV negative. In $5 \%$ of couples the man is HIV positive and the woman is HIV negative, and in $11 \%$ of couples the woman is HIV positive and the man is not (Figure 13.7).

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Figure 13.7 HIV prevalence among couples

Percent distribution of couples by HIV status


Note: Percentages do not sum to $100 \%$ due to rounding

For more information on HIV prevalence, see the following tables:

- Table 13.1 Coverage of HIV testing by residence and province
- Table 13.2 Coverage of HIV testing according to selected background characteristics
- Table 13.3 HIV prevalence by age
- Table 13.4 HIV prevalence by sociodemographic characteristics: Women and men age 15-49
- Table 13.5 HIV prevalence by sociodemographic characteristics: Women and men age 50 and older
- Table 13.6 HIV prevalence by demographic characteristics
- Table 13.7 HIV prevalence by sexual behaviour
- Table 13.8 HIV prevalence among young people by background characteristics
- Table 13.9 HIV prevalence among young people by sexual behaviour
- Table 13.10 HIV prevalence by other characteristics
- Table $\mathbf{1 3 . 1 1}$ Prior HIV testing by current HIV status
- Table 13.12 HIV prevalence by male circumcision
- Table 13.13 HIV prevalence among couples

Table 13.1 Coverage of HIV testing by residence and province
Percent distribution of women and men age 15 and older eligible for HIV testing by testing status, according to residence and province (unweighted), South Africa DHS 2016

| Residence and province | Testing status |  |  |  |  |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ |  | Refused to provideblood |  | Absent at the time of blood collection |  | Other/missing ${ }^{2}$ |  |  |  |
|  | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed |  |  |
| WOMEN 15+ |  |  |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 49.8 | 1.5 | 22.4 | 7.2 | 7.1 | 7.3 | 3.2 | 1.4 | 100.0 | 4,075 |
| Non-urban | 68.4 | 1.4 | 15.6 | 1.7 | 5.3 | 3.5 | 3.6 | 0.5 | 100.0 | 2,979 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 38.3 | 1.5 | 23.5 | 13.4 | 8.2 | 10.5 | 2.9 | 1.7 | 100.0 | 650 |
| Eastern Cape | 69.3 | 1.2 | 11.4 | 3.3 | 5.7 | 5.4 | 2.7 | 1.0 | 100.0 | 896 |
| Northern Cape | 44.7 | 1.4 | 28.5 | 6.8 | 3.9 | 5.3 | 8.0 | 1.4 | 100.0 | 622 |
| Free State | 67.8 | 1.5 | 11.3 | 1.8 | 8.3 | 7.3 | 1.9 | 0.0 | 100.0 | 724 |
| KwaZulu-Natal | 57.8 | 1.2 | 20.2 | 2.6 | 9.8 | 5.0 | 3.2 | 0.2 | 100.0 | 1,064 |
| North West | 77.9 | 2.2 | 8.0 | 3.1 | 3.1 | 3.6 | 0.8 | 1.4 | 100.0 | 647 |
| Gauteng | 40.2 | 1.0 | 26.3 | 9.6 | 6.7 | 8.3 | 4.0 | 3.9 | 100.0 | 726 |
| Mpumalanga | 64.2 | 2.7 | 15.4 | 4.5 | 3.5 | 4.6 | 4.5 | 0.6 | 100.0 | 805 |
| Limpopo | 54.3 | 0.8 | 30.7 | 2.2 | 6.2 | 3.0 | 2.6 | 0.2 | 100.0 | 920 |
| Total 15+ | 57.7 | 1.5 | 19.5 | 4.9 | 6.3 | 5.7 | 3.3 | 1.1 | 100.0 | 7,054 |
| MEN 15+ |  |  |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 37.7 | 2.4 | 20.6 | 11.4 | 7.0 | 14.6 | 3.4 | 3.0 | 100.0 | 3,388 |
| Non-urban | 54.5 | 1.4 | 17.2 | 4.1 | 6.8 | 9.9 | 4.3 | 1.6 | 100.0 | 2,275 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 22.9 | 2.7 | 20.8 | 16.1 | 7.4 | 24.6 | 1.9 | 3.6 | 100.0 | 528 |
| Eastern Cape | 53.0 | 1.6 | 13.1 | 6.3 | 5.2 | 14.4 | 4.2 | 2.2 | 100.0 | 734 |
| Northern Cape | 31.1 | 1.0 | 27.4 | 13.5 | 5.5 | 10.8 | 8.2 | 2.5 | 100.0 | 489 |
| Free State | 52.5 | 5.4 | 8.9 | 6.7 | 7.1 | 15.8 | 1.1 | 2.5 | 100.0 | 552 |
| KwaZulu-Natal | 48.3 | 1.3 | 18.6 | 5.4 | 11.3 | 11.2 | 3.0 | 0.9 | 100.0 | 743 |
| North West | 65.5 | 1.4 | 12.1 | 3.4 | 5.5 | 6.5 | 3.1 | 2.6 | 100.0 | 585 |
| Gauteng | 31.8 | 0.7 | 27.0 | 12.6 | 5.2 | 12.9 | 4.2 | 5.4 | 100.0 | 688 |
| Mpumalanga | 48.7 | 3.0 | 19.2 | 9.0 | 3.6 | 10.0 | 5.7 | 0.9 | 100.0 | 668 |
| Limpopo | 41.3 | 1.6 | 26.2 | 5.9 | 10.7 | 9.8 | 2.8 | 1.8 | 100.0 | 676 |
| Total 15+ | 44.4 | 2.0 | 19.2 | 8.5 | 6.9 | 12.7 | 3.8 | 2.4 | 100.0 | 5,663 |
| TOTAL (WOMEN AND MEN 15+) |  |  |  |  |  |  |  |  |  |  |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 44.3 | 1.9 | 21.6 | 9.1 | 7.0 | 10.6 | 3.3 | 2.1 | 100.0 | 7,463 |
| Non-urban | 62.4 | 1.4 | 16.3 | 2.8 | 5.9 | 6.3 | 3.9 | 1.0 | 100.0 | 5,254 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 31.4 | 2.0 | 22.3 | 14.6 | 7.8 | 16.8 | 2.5 | 2.5 | 100.0 | 1,178 |
| Eastern Cape | 62.0 | 1.4 | 12.1 | 4.7 | 5.5 | 9.4 | 3.4 | 1.5 | 100.0 | 1,630 |
| Northern Cape | 38.7 | 1.3 | 28.0 | 9.7 | 4.6 | 7.7 | 8.1 | 1.9 | 100.0 | 1,111 |
| Free State | 61.2 | 3.2 | 10.3 | 3.9 | 7.8 | 11.0 | 1.6 | 1.1 | 100.0 | 1,276 |
| KwaZulu-Natal | 53.9 | 1.3 | 19.5 | 3.8 | 10.4 | 7.5 | 3.1 | 0.5 | 100.0 | 1,807 |
| North West | 72.0 | 1.8 | 10.0 | 3.2 | 4.2 | 5.0 | 1.9 | 1.9 | 100.0 | 1,232 |
| Gauteng | 36.1 | 0.8 | 26.7 | 11.1 | 6.0 | 10.5 | 4.1 | 4.6 | 100.0 | 1,414 |
| Mpumalanga | 57.2 | 2.9 | 17.1 | 6.5 | 3.5 | 7.1 | 5.0 | 0.7 | 100.0 | 1,473 |
| Limpopo | 48.8 | 1.1 | 28.8 | 3.8 | 8.1 | 5.9 | 2.7 | 0.9 | 100.0 | 1,596 |
| Total 15+ | 51.8 | 1.7 | 19.4 | 6.5 | 6.6 | 8.8 | 3.5 | 1.7 | 100.0 | 12,717 |

[^22]Table 13.2 Coverage of HIV testing according to selected background characteristics
Percent distribution of women and men age 15 and older eligible for HIV testing by testing status, according to selected background characteristics (unweighted), South Africa DHS 2016

| Background characteristic | Testing status |  |  |  |  |  |  |  | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ |  | Refused to provide blood |  | Absent at the time of blood collection |  | Other/missing ${ }^{2}$ |  |  |  |
|  | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed | Interviewed | Not interviewed |  |  |
| WOMEN 15+ |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 55.8 | 2.1 | 18.7 | 4.6 | 8.9 | 6.3 | 2.8 | 0.8 | 100.0 | 846 |
| 20-24 | 57.0 | 1.1 | 19.7 | 5.3 | 5.7 | 7.6 | 2.1 | 1.5 | 100.0 | 811 |
| 25-29 | 57.3 | 1.6 | 17.8 | 5.1 | 8.5 | 7.2 | 1.7 | 1.0 | 100.0 | 838 |
| 30-34 | 55.8 | 1.2 | 18.4 | 5.1 | 7.9 | 6.9 | 3.7 | 1.0 | 100.0 | 724 |
| 35-39 | 52.7 | 0.8 | 22.2 | 6.4 | 5.9 | 7.4 | 3.4 | 1.1 | 100.0 | 622 |
| 40-44 | 53.1 | 1.8 | 22.2 | 6.5 | 5.1 | 7.2 | 3.8 | 0.4 | 100.0 | 554 |
| 45-49 | 55.3 | 2.1 | 20.1 | 4.8 | 8.3 | 4.3 | 4.1 | 1.0 | 100.0 | 517 |
| 50-54 | 62.0 | 1.3 | 18.5 | 4.6 | 4.4 | 4.4 | 3.8 | 1.1 | 100.0 | 476 |
| 55-59 | 62.3 | 0.9 | 17.3 | 3.9 | 8.0 | 4.8 | 2.0 | 0.9 | 100.0 | 440 |
| 60-64 | 60.4 | 1.6 | 19.9 | 5.4 | 4.0 | 4.0 | 3.8 | 0.8 | 100.0 | 371 |
| 65+ | 64.1 | 1.5 | 20.5 | 2.8 | 2.1 | 1.5 | 5.7 | 1.8 | 100.0 | 855 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 62.4 | 2.8 | 17.8 | 3.7 | 3.7 | 1.8 | 6.0 | 1.8 | 100.0 | 652 |
| Primary incomplete | 68.9 | 1.5 | 15.0 | 2.2 | 3.8 | 3.2 | 4.2 | 1.1 | 100.0 | 808 |
| Primary complete | 67.7 | 2.3 | 15.1 | 4.7 | 2.9 | 3.8 | 2.9 | 0.6 | 100.0 | 344 |
| Secondary incomplete | 60.3 | 1.3 | 19.2 | 3.7 | 7.1 | 4.8 | 3.1 | 0.6 | 100.0 | 3,030 |
| Secondary complete | 50.1 | 1.1 | 23.0 | 6.2 | 7.7 | 8.3 | 2.2 | 1.5 | 100.0 | 1,458 |
| More than secondary | 42.5 | 1.2 | 23.5 | 10.1 | 7.2 | 10.7 | 3.5 | 1.2 | 100.0 | 736 |
| Missing | 0.0 | 7.7 | 0.0 | 50.0 | 0.0 | 30.8 | 0.0 | 11.5 | 100.0 | 26 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 69.2 | 1.5 | 13.9 | 1.9 | 5.9 | 4.0 | 3.1 | 0.4 | 100.0 | 1,343 |
| Second | 61.6 | 1.4 | 19.6 | 2.8 | 6.2 | 4.0 | 3.7 | 0.7 | 100.0 | 1,395 |
| Middle | 63.5 | 1.7 | 17.4 | 3.1 | 5.9 | 4.0 | 3.6 | 0.9 | 100.0 | 1,511 |
| Fourth | 54.3 | 1.5 | 21.1 | 5.9 | 5.9 | 6.7 | 3.0 | 1.7 | 100.0 | 1,516 |
| Highest | 38.5 | 1.4 | 25.9 | 11.2 | 7.9 | 10.2 | 3.3 | 1.6 | 100.0 | 1,289 |
| Total 15+ | 57.7 | 1.5 | 19.5 | 4.9 | 6.3 | 5.7 | 3.3 | 1.1 | 100.0 | 7,054 |
| Total 15-49 | 55.5 | 1.5 | 19.6 | 5.4 | 7.3 | 6.8 | 3.0 | 1.0 | 100.0 | 4,912 |
| MEN 15+ |  |  |  |  |  |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-19 | 54.5 | 2.0 | 15.8 | 6.2 | 7.1 | 9.3 | 3.3 | 1.7 | 100.0 | 871 |
| 20-24 | 47.6 | 2.3 | 18.4 | 6.3 | 9.0 | 13.4 | 1.3 | 1.8 | 100.0 | 790 |
| 25-29 | 39.6 | 2.3 | 20.9 | 9.1 | 7.9 | 15.6 | 2.6 | 2.0 | 100.0 | 694 |
| 30-34 | 35.1 | 2.0 | 21.8 | 9.9 | 7.1 | 18.0 | 3.4 | 2.6 | 100.0 | 646 |
| 35-39 | 36.9 | 1.6 | 20.2 | 10.9 | 6.9 | 14.3 | 4.4 | 4.8 | 100.0 | 496 |
| 40-44 | 38.1 | 2.1 | 21.6 | 8.7 | 5.7 | 14.2 | 5.5 | 4.0 | 100.0 | 472 |
| 45-49 | 39.0 | 1.1 | 20.9 | 12.0 | 6.1 | 12.0 | 5.9 | 2.9 | 100.0 | 374 |
| 50-54 | 41.3 | 3.5 | 20.0 | 8.9 | 6.7 | 13.0 | 3.8 | 2.9 | 100.0 | 315 |
| 55-59 | 48.8 | 1.7 | 15.4 | 10.9 | 5.5 | 12.3 | 3.1 | 2.4 | 100.0 | 293 |
| 60-64 | 49.8 | 1.6 | 17.8 | 6.7 | 5.1 | 10.7 | 6.3 | 2.0 | 100.0 | 253 |
| 65+ | 55.8 | 2.0 | 19.0 | 7.2 | 5.0 | 4.6 | 5.9 | 0.7 | 100.0 | 459 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 51.7 | 2.5 | 15.8 | 6.9 | 4.2 | 6.1 | 8.6 | 4.2 | 100.0 | 360 |
| Primary incomplete | 55.0 | 2.4 | 17.6 | 4.3 | 4.7 | 10.2 | 4.1 | 1.6 | 100.0 | 676 |
| Primary complete | 48.9 | 1.3 | 16.5 | 8.7 | 7.4 | 11.0 | 4.9 | 1.3 | 100.0 | 309 |
| Secondary incomplete | 46.3 | 1.8 | 19.5 | 7.7 | 7.1 | 11.6 | 3.9 | 2.2 | 100.0 | 2,493 |
| Secondary complete | 37.9 | 2.3 | 20.5 | 9.3 | 8.0 | 16.5 | 2.7 | 2.7 | 100.0 | 1,198 |
| More than secondary | 34.4 | 1.9 | 22.2 | 12.9 | 8.4 | 15.1 | 1.9 | 3.3 | 100.0 | 582 |
| Missing | 0.0 | 6.7 | 0.0 | 44.4 | 0.0 | 44.4 | 0.0 | 4.4 | 100.0 | 45 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 55.5 | 1.0 | 17.2 | 5.1 | 5.1 | 9.7 | 5.0 | 1.3 | 100.0 | 1,039 |
| Second | 47.9 | 2.5 | 20.7 | 6.1 | 7.3 | 10.7 | 3.2 | 1.7 | 100.0 | 1,210 |
| Middle | 49.3 | 2.0 | 19.1 | 6.0 | 7.2 | 10.3 | 4.1 | 2.1 | 100.0 | 1,218 |
| Fourth | 39.6 | 2.4 | 17.9 | 10.2 | 7.1 | 15.1 | 4.0 | 3.7 | 100.0 | 1,150 |
| Highest | 29.3 | 2.2 | 21.1 | 15.7 | 7.6 | 18.2 | 2.5 | 3.4 | 100.0 | 1,046 |
| Total 15+ | 44.4 | 2.0 | 19.2 | 8.5 | 6.9 | 12.7 | 3.8 | 2.4 | 100.0 | 5,663 |
| Total 15-49 | 42.9 | 2.0 | 19.5 | 8.5 | 7.3 | 13.7 | 3.4 | 2.6 | 100.0 | 4,343 |

[^23]Table 13.3 HIV prevalence by age
Among de facto women and men age 15 and older who were interviewed and tested, percentage HIV positive, according to age, South Africa DHS 2016

| Age | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| 15-24 | 11.6 | 832 | 3.4 | 924 | 7.3 | 1,755 |
| 15-19 | 5.9 | 393 | 4.1 | 516 | 4.9 | 909 |
| 20-24 | 16.7 | 439 | 2.6 | 407 | 9.9 | 846 |
| 25-34 | 36.0 | 813 | 17.7 | 618 | 28.1 | 1,431 |
| 35-44 | 40.3 | 598 | 26.6 | 486 | 34.2 | 1,084 |
| 45-54 | 19.9 | 487 | 19.4 | 331 | 19.7 | 818 |
| 55-64 | 20.0 | 433 | 16.3 | 340 | 18.4 | 773 |
| 65+ | 5.3 | 438 | 2.0 | 285 | 4.0 | 722 |
| Total 15+ | 23.3 | 3,600 | 13.3 | 2,984 | 18.7 | 6,584 |
| Total 15-49 | 27.3 | 2,485 | 14.4 | 2,199 | 21.2 | 4,685 |

Table 13.4 HIV prevalence by sociodemographic characteristics: Women and men age 15-49
Percentage HIV positive among women and men age 15-49 who were tested, according to sociodemographic characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Population group |  |  |  |  |  |  |
| Black African | 29.9 | 2,229 | 16.0 | 1,938 | 23.4 | 4,167 |
| White | (<0.1) | 61 | (2.9) | 92 | 1.7 | 154 |
| Coloured | 6.2 | 169 | 3.2 | 140 | 4.8 | 309 |
| Indian/Asian | * | 26 | * | 28 | (3.0) | 54 |
| Other | nc | 0 | nc | 0 | nc | 0 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 25.7 | 1,588 | 12.2 | 1,140 | 20.0 | 2,727 |
| Employed | 30.3 | 898 | 16.7 | 1,060 | 22.9 | 1,957 |
| Residence |  |  |  |  |  |  |
| Urban | 27.4 | 1,667 | 15.4 | 1,508 | 21.7 | 3,176 |
| Non-urban | 27.2 | 818 | 12.3 | 691 | 20.4 | 1,509 |
| Province |  |  |  |  |  |  |
| Western Cape | 18.2 | 249 | 17.3 | 206 | 17.8 | 454 |
| Eastern Cape | 30.2 | 264 | 8.2 | 247 | 19.6 | 512 |
| Northern Cape | 13.5 | 49 | 10.4 | 42 | 12.1 | 92 |
| Free State | 28.1 | 123 | 17.2 | 109 | 23.0 | 232 |
| KwaZulu-Natal | 37.3 | 486 | 19.2 | 363 | 29.6 | 850 |
| North West | 29.6 | 161 | 15.5 | 165 | 22.5 | 326 |
| Gauteng | 25.3 | 690 | 14.9 | 675 | 20.2 | 1,365 |
| Mpumalanga | 34.0 | 211 | 15.7 | 193 | 25.3 | 404 |
| Limpopo | 14.5 | 250 | 5.3 | 199 | 10.4 | 450 |
| Education |  |  |  |  |  |  |
| No education | 37.4 | 48 | (17.3) | 40 | 28.3 | 88 |
| Primary incomplete | 37.4 | 150 | 14.6 | 163 | 25.6 | 313 |
| Primary complete | 34.7 | 105 | 15.5 | 128 | 24.2 | 233 |
| Secondary incomplete | 30.1 | 1,281 | 14.8 | 1,149 | 22.9 | 2,430 |
| Secondary complete | 22.4 | 652 | 15.0 | 487 | 19.2 | 1,139 |
| More than secondary | 14.6 | 249 | 9.7 | 233 | 12.2 | 482 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 30.4 | 563 | 16.3 | 447 | 24.1 | 1,010 |
| Second | 32.2 | 478 | 17.4 | 457 | 24.9 | 935 |
| Middle | 29.0 | 564 | 16.3 | 476 | 23.2 | 1,040 |
| Fourth | 26.9 | 484 | 9.2 | 467 | 18.2 | 951 |
| Highest | 15.1 | 395 | 12.3 | 353 | 13.8 | 748 |
| Total 15-49 | 27.3 | 2,485 | 14.4 | 2,199 | 21.2 | 4,685 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases

Table 13.5 HIV prevalence by sociodemographic characteristics: Women and men age $\mathbf{5 0}$ and older
Percentage HIV positive among women and men age 50 and older who were tested, according to sociodemographic characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | $\begin{gathered} \hline \text { Percentage HIV } \\ \text { positive } \\ \hline \end{gathered}$ | Number | $\begin{gathered} \hline \text { Percentage HIV } \\ \text { positive } \\ \hline \end{gathered}$ | Number |
| Population group |  |  |  |  |  |  |
| Black African | 17.9 | 877 | 14.1 | 553 | 16.5 | 1,430 |
| White | <0.1 | 97 | <0.1 | 119 | <0.1 | 216 |
| Coloured | 0.8 | 114 | 2.2 | 96 | 1.4 | 210 |
| Indian/Asian | * | 24 | * | 17 | * | 41 |
| Other | nc | 0 | nc | 0 | nc | 0 |
| Marital status |  |  |  |  |  |  |
| Never married | 22.8 | 308 | 6.6 | 92 | 19.1 | 400 |
| Married or living together | 8.2 | 430 | 9.3 | 572 | 8.8 | 1,002 |
| Divorced/separated/widowed | 14.0 | 377 | 17.6 | 121 | 14.9 | 497 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 11.8 | 831 | 11.7 | 510 | 11.7 | 1,341 |
| Employed | 21.3 | 284 | 7.5 | 275 | 14.5 | 559 |
| Residence |  |  |  |  |  |  |
| Urban | 15.0 | 686 | 9.9 | 533 | 12.8 | 1,219 |
| Non-urban | 12.9 | 429 | 11.0 | 252 | 12.2 | 680 |
| Province |  |  |  |  |  |  |
| Western Cape | 5.4 | 165 | (1.9) | 135 | 3.9 | 299 |
| Eastern Cape | 10.3 | 165 | 9.9 | 103 | 10.1 | 268 |
| Northern Cape | 10.8 | 26 | (8.5) | 17 | 9.9 | 43 |
| Free State | 16.7 | 68 | 17.2 | 38 | 16.9 | 106 |
| KwaZulu-Natal | 17.9 | 214 | 12.2 | 122 | 15.8 | 336 |
| North West | 14.7 | 67 | 15.5 | 48 | 15.0 | 114 |
| Gauteng | 21.3 | 215 | 12.0 | 208 | 16.7 | 423 |
| Mpumalanga | 17.2 | 67 | 20.4 | 39 | 18.4 | 106 |
| Limpopo | 9.8 | 129 | 5.7 | 75 | 8.3 | 204 |
| Education |  |  |  |  |  |  |
| No education | 13.1 | 261 | 10.9 | 123 | 12.4 | 384 |
| Primary incomplete | 17.9 | 276 | 12.9 | 232 | 15.6 | 508 |
| Primary complete | 21.1 | 91 | (15.6) | 36 | 19.5 | 127 |
| Secondary incomplete | 13.8 | 332 | 11.4 | 212 | 12.9 | 544 |
| Secondary complete | 9.4 | 68 | 6.5 | 87 | 7.8 | 155 |
| More than secondary | 3.7 | 87 | 1.5 | 95 | 2.6 | 182 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 17.3 | 196 | 20.8 | 125 | 18.7 | 320 |
| Second | 17.0 | 193 | 8.4 | 108 | 13.9 | 300 |
| Middle | 20.5 | 196 | 9.2 | 139 | 15.8 | 335 |
| Fourth | 10.6 | 246 | 16.0 | 153 | 12.7 | 399 |
| Highest | 8.9 | 284 | 3.1 | 261 | 6.1 | 545 |
| Total 50+ | 14.2 | 1,115 | 10.2 | 785 | 12.6 | 1,899 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases

Table 13.6 HIV prevalence by demographic characteristics
Percentage HIV positive among women and men age 15-49 who were tested, according to demographic characteristics, South Africa DHS 2016

| Demographic characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Marital status |  |  |  |  |  |  |
| Never married | 27.0 | 1,508 | 9.2 | 1,451 | 18.2 | 2,958 |
| Ever had sexual intercourse | 31.3 | 1,263 | 10.2 | 1,163 | 21.2 | 2,426 |
| Never had sexual intercourse | 4.7 | 245 | 5.2 | 288 | 5.0 | 532 |
| Married or living together | 26.9 | 844 | 22.4 | 640 | 25.0 | 1,484 |
| Divorced or separated | 34.9 | 89 | 29.4 | 93 | 32.1 | 182 |
| Widowed | 31.9 | 44 | * | 16 | 43.7 | 60 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | (53.9) | 19 | * | 11 | (56.8) | 30 |
| In non-polygynous union | 25.9 | 796 | 21.1 | 624 | 23.8 | 1,420 |
| Not currently in union | 27.5 | 1,641 | 11.1 | 1,559 | 19.5 | 3,200 |
| Don't know or not asked ${ }^{1}$ | (35.7) | 29 | * | 5 | (45.6) | 34 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 24.3 | 1,331 | 14.6 | 1,294 | 19.5 | 2,625 |
| 1-2 | 29.5 | 550 | 12.4 | 310 | 23.4 | 860 |
| 3-4 | 31.6 | 263 | 20.4 | 224 | 26.4 | 487 |
| $5+$ | 32.2 | 341 | 11.7 | 371 | 21.5 | 712 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than 1 month at a time | 30.1 | 283 | 17.1 | 255 | 23.9 | 538 |
| Away only for less than 1 month at a time | 31.0 | 871 | 12.9 | 651 | 23.3 | 1,522 |
| Not away | 24.3 | 1,331 | 14.6 | 1,294 | 19.5 | 2,625 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 28.0 | 97 | na | na | na | na |
| Not pregnant or not sure | 27.3 | 2,389 | na | na | na | na |
| ANC for last birth in the last 3 years |  |  |  |  |  |  |
| ANC provided by the public sector | 27.0 | 533 | na | na | na | na |
| ANC provided by other than the public sector | (10.5) | 33 | na | na | na | na |
| No ANC/no birth in last 3 years | 27.7 | 1,919 | na | na | na | na |
| Total 15-49 | 27.3 | 2,485 | 14.4 | 2,199 | 21.2 | 4,685 |

Note: Figures in parentheses are based on $25-49$ unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable
${ }^{1}$ Respondents in same-sex unions were not asked the question on polygyny

Table 13.7 HIV prevalence by sexual behaviour
Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, according to sexual behaviour characteristics, South Africa DHS 2016

| Sexual behaviour characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Percentage HIV } \\ \text { positive } \end{gathered}$ | Number | $\begin{gathered} \text { Percentage HIV } \\ \text { positive } \\ \hline \end{gathered}$ | Number | $\begin{gathered} \text { Percentage HIV } \\ \text { positive } \end{gathered}$ | Number |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <14 | 36.9 | 66 | 12.2 | 146 | 20.0 | 212 |
| 14-15 | 35.7 | 352 | 15.5 | 428 | 24.6 | 780 |
| 16-17 | 29.8 | 796 | 11.6 | 625 | 21.8 | 1,421 |
| 18-19 | 26.7 | 576 | 18.6 | 425 | 23.2 | 1,000 |
| 20+ | 26.9 | 392 | 22.0 | 276 | 24.9 | 668 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 13.7 | 567 | 6.5 | 169 | 12.1 | 737 |
| 2 | 25.8 | 446 | 13.8 | 172 | 22.5 | 618 |
| 3-4 | 36.1 | 731 | 10.8 | 413 | 27.0 | 1,144 |
| 5-9 | 40.7 | 327 | 15.6 | 432 | 26.4 | 759 |
| 10+ | 50.1 | 93 | 20.9 | 556 | 25.1 | 649 |
| Don't know | 41.2 | 75 | 23.0 | 165 | 28.6 | 240 |
| Multiple sexual partners in past 12 months |  |  |  |  |  |  |
| 0 | 31.6 | 252 | 15.4 | 160 | 25.3 | 413 |
| 1 | 29.2 | 1,880 | 17.2 | 1,336 | 24.3 | 3,216 |
| 2+ | 35.4 | 106 | 11.3 | 412 | 16.3 | 519 |
| Non-marital, non-cohabiting partners in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 28.0 | 1,023 | 21.8 | 708 | 25.4 | 1,730 |
| 1 | 30.9 | 1,138 | 14.4 | 849 | 23.8 | 1,987 |
| 2+ | 38.5 | 79 | 7.0 | 352 | 12.8 | 430 |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 38.5 | 903 | 15.9 | 933 | 27.0 | 1,837 |
| Did not use condom | 22.1 | 1,083 | 15.7 | 815 | 19.4 | 1,898 |
| No sexual intercourse in past 12 months | 31.6 | 252 | 15.4 | 160 | 25.3 | 413 |
| Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Used condom | 35.9 | 705 | 10.3 | 838 | 22.0 | 1,543 |
| Did not use condom | 25.1 | 512 | 16.8 | 362 | 21.6 | 874 |
| No sexual intercourse with any nonmarital, non-cohabiting partners in past 12 months ${ }^{1}$ | 28.0 | 1,023 | 21.8 | 708 | 25.4 | 1,730 |
| Total 15-49 | 29.8 | 2,239 | 15.8 | 1,908 | 23.4 | 4,147 |

Note: Total includes 57 women and 9 men whose information on age at first sexual intercourse is missing and who are not shown separately.
${ }^{1}$ Any partner who was not a spouse and did not live with the respondent

Table 13.8 HIV prevalence among young people by background characteristics
Percentage HIV positive among women and men age 15-24 who were tested for HIV, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Age |  |  |  |  |  |  |
| 15-19 | 5.9 | 393 | 4.1 | 516 | 4.9 | 909 |
| 15-17 | 4.3 | 218 | 4.8 | 301 | 4.6 | 519 |
| 18-19 | 7.9 | 175 | 3.2 | 215 | 5.3 | 390 |
| 20-24 | 16.7 | 439 | 2.6 | 407 | 9.9 | 846 |
| 20-22 | 15.0 | 271 | 1.7 | 266 | 8.4 | 537 |
| 23-24 | 19.4 | 168 | 4.2 | 142 | 12.4 | 310 |
| Marital status |  |  |  |  |  |  |
| Never married | 10.0 | 718 | 3.4 | 888 | 6.4 | 1,606 |
| Ever had sex | 12.8 | 486 | 2.5 | 622 | 7.0 | 1,107 |
| Never had sex | 4.2 | 232 | 5.6 | 267 | 4.9 | 499 |
| Married or living together | 22.2 | 109 | (2.7) | 34 | 17.6 | 143 |
| Divorced/separated/widowed | * | 4 | * | 1 | * | 6 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | (15.9) | 43 | na | na | na | na |
| Not pregnant or not sure | 11.4 | 788 | na | na | na | na |
| Residence |  |  |  |  |  |  |
| Urban | 11.6 | 530 | 4.7 | 530 | 8.1 | 1,060 |
| Non-urban | 11.6 | 301 | 1.8 | 394 | 6.1 | 696 |
| Province |  |  |  |  |  |  |
| Western Cape | (6.7) | 51 | (<0.1) | 86 | 2.5 | 137 |
| Eastern Cape | 15.6 | 96 | 3.7 | 130 | 8.8 | 226 |
| Northern Cape | 5.7 | 17 | (1.8) | 18 | 3.6 | 35 |
| Free State | 13.3 | 42 | 5.9 | 51 | 9.2 | 92 |
| KwaZulu-Natal | 21.9 | 181 | 3.7 | 191 | 12.6 | 372 |
| North West | 8.9 | 48 | 1.1 | 61 | 4.5 | 109 |
| Gauteng | 4.2 | 222 | (6.3) | 188 | 5.2 | 410 |
| Mpumalanga | 19.9 | 79 | 3.6 | 79 | 11.7 | 158 |
| Limpopo | 2.8 | 96 | 0.9 | 120 | 1.8 | 216 |
| Education |  |  |  |  |  |  |
| No education | * | 4 | * | 5 | ** | 8 |
| Primary incomplete | (26.1) | 27 | <0.1 | 62 | 7.8 | 88 |
| Primary complete | (13.7) | 34 | 1.0 | 47 | 6.3 | 82 |
| Secondary incomplete | 11.5 | 536 | 4.6 | 620 | 7.8 | 1,156 |
| Secondary complete | 10.8 | 165 | 1.7 | 149 | 6.5 | 314 |
| More than secondary | 8.7 | 66 | (<0.1) | 42 | 5.4 | 108 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 15.1 | 226 | 6.3 | 215 | 10.8 | 441 |
| Second | 14.7 | 166 | 1.1 | 174 | 7.8 | 340 |
| Middle | 9.3 | 181 | 5.8 | 198 | 7.5 | 379 |
| Fourth | 8.6 | 151 | 1.8 | 226 | 4.5 | 377 |
| Highest | 7.8 | 108 | 0.8 | 111 | 4.3 | 219 |
| Total 15-24 | 11.6 | 832 | 3.4 | 924 | 7.3 | 1,755 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na $=$ Not applicable

Table 13.9 HIV prevalence among young people by sexual behaviour
Percentage HIV positive among women and men age 15-24 who have ever had sex and were tested for HIV, according to sexual behaviour, South Africa DHS 2016

| Sexual behaviour characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Multiple sexual partners in past 12 months |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| 0 | 12.3 | 42 | 1.7 | 72 | 5.6 | 113 |
| 1 | 14.2 | 515 | 2.6 | 394 | 9.1 | 909 |
| 2+ | 20.9 | 43 | 2.9 | 191 | 6.2 | 234 |
| Non-marital, non-cohabiting partners in past 12 months ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 21.3 | 135 | 1.3 | 90 | 13.4 | 225 |
| 1 | 11.6 | 427 | 2.6 | 383 | 7.4 | 810 |
| 2+ | 22.8 | 37 | 3.0 | 184 | 6.3 | 221 |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom at last sex | 15.1 | 280 | 1.8 | 439 | 7.0 | 718 |
| Did not use condom | 14.2 | 278 | 5.3 | 146 | 11.1 | 424 |
| No sexual intercourse in past |  |  |  |  |  |  |
| Total 15-24 | 14.5 | 599 | 2.6 | 657 | 8.3 | 1,256 |

${ }^{1}$ Any partner who was not a spouse and did not live with the respondent

Table 13.10 HIV prevalence by other characteristics
Percentage HIV positive among women and men age 15-49 who have ever had sex and were tested for HIV, according to whether they had an STI in the past 12 months and prior testing for HIV, South Africa DHS 2016

| Characteristic | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Sexually transmitted infection in past 12 months |  |  |  |  |  |  |
| Had STI or STI symptoms | 37.7 | 258 | 19.2 | 136 | 31.3 | 393 |
| No STI, no symptoms | 28.4 | 1,971 | 15.5 | 1,761 | 22.3 | 3,732 |
| Don't know | * | 10 | * | 12 | * | 22 |
| Prior HIV testing |  |  |  |  |  |  |
| Ever tested | 30.6 | 2,023 | 18.0 | 1,479 | 25.3 | 3,502 |
| Received results | 30.7 | 1,989 | 17.8 | 1,434 | 25.3 | 3,423 |
| Did not receive results | (22.7) | 34 | (26.8) | 45 | 25.1 | 79 |
| Never tested | 22.8 | 216 | 8.1 | 429 | 13.0 | 645 |
| Total 15-49 | 29.8 | 2,239 | 15.8 | 1,908 | 23.4 | 4,147 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.11 Prior HIV testing by current HIV status
Percent distribution of women and men age 15-49 who tested HIV positive and who tested HIV negative according to HIV testing status prior to the survey, South Africa DHS 2016

| HIV testing prior to the survey | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | HIV positive | HIV negative | HIV positive | HIV negative | HIV positive | HIV negative |
| Ever tested for HIV and received the result of the most recent test | 89.8 | 80.5 | 81.0 | 67.6 | 87.0 | 73.9 |
| Tested in the past 12 months and received the result ${ }^{1}$ | 59.2 | 59.2 | 44.1 | 45.0 | 54.4 | 51.9 |
| Tested 12 or more months ago and received the result ${ }^{1}$ | 30.7 | 21.3 | 36.9 | 22.6 | 32.7 | 22.0 |
| Ever tested for HIV and did not receive the result of the most recent test | 2.0 | 1.8 | 3.9 | 2.0 | 2.6 | 1.9 |
| Not previously tested | 8.2 | 17.6 | 15.1 | 30.5 | 10.4 | 24.2 |
| Total 15-49 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number | 679 | 1,806 | 316 | 1,883 | 995 | 3,689 |
| ${ }^{1}$ Of the most recent HIV test |  |  |  |  |  |  |

Table 13.12 HIV prevalence by male circumcision
Among men age 15-49 who were tested for HIV, percentage HIV positive by circumcision status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Circumcised by health worker/professional |  | Circumcised by traditional practitioner/family/friend |  | All circumcised ${ }^{1}$ |  | Uncircumcised |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number | Percentage HIV positive | Number |
| Age |  |  |  |  |  |  |  |  |
| 15-19 | 6.8 | 209 | 1.4 | 87 | 5.2 | 295 | 2.7 | 218 |
| 20-24 | 0.4 | 154 | 1.1 | 111 | 0.7 | 265 | 6.0 | 142 |
| 25-29 | 1.3 | 112 | 15.6 | 110 | 8.3 | 223 | 12.9 | 113 |
| 30-34 | (37.2) | 68 | 14.3 | 78 | 25.0 | 146 | 28.7 | 135 |
| 35-39 | (39.7) | 42 | 14.4 | 88 | 22.5 | 130 | 22.2 | 137 |
| 40-44 | (9.2) | 53 | 23.9 | 68 | 17.5 | 121 | 49.6 | 98 |
| 45-49 | * | 25 | (25.2) | 58 | 24.1 | 84 | 28.6 | 88 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 12.8 | 485 | 14.1 | 381 | 13.4 | 866 | 18.1 | 640 |
| Non-urban | 3.5 | 178 | 9.5 | 218 | 6.8 | 398 | 19.4 | 291 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | * | 24 | * | 48 | (36.2) | 72 | (7.2) | 134 |
| Eastern Cape | * | 11 | 8.9 | 165 | 8.3 | 177 | 6.4 | 69 |
| Northern Cape | (3.9) | 10 | * | 5 | (10.5) | 16 | 10.3 | 27 |
| Free State | 5.5 | 44 | (32.6) | 17 | 12.9 | 61 | 22.6 | 48 |
| KwaZulu-Natal | 6.8 | 126 | * | 17 | 8.1 | 144 | 26.8 | 218 |
| North West | 7.6 | 43 | 25.4 | 36 | 15.7 | 79 | 15.3 | 86 |
| Gauteng | 16.5 | 268 | (2.7) | 171 | 11.1 | 439 | 22.1 | 236 |
| Mpumalanga | 6.7 | 67 | (15.3) | 37 | 9.8 | 104 | 22.7 | 88 |
| Limpopo | 3.6 | 70 | 7.0 | 103 | 5.6 | 173 | (3.5) | 26 |
| Education |  |  |  |  |  |  |  |  |
| No education | * | 0 | * | 11 | * | 12 | (20.3) | 28 |
| Primary incomplete | * | 15 | 6.3 | 67 | 6.7 | 82 | 22.9 | 80 |
| Primary complete | (2.1) | 44 | (19.9) | 35 | 9.9 | 80 | 24.9 | 48 |
| Secondary incomplete | 12.2 | 341 | 13.1 | 306 | 12.6 | 647 | 17.5 | 499 |
| Secondary complete | 9.3 | 159 | 12.6 | 131 | 10.7 | 291 | 21.2 | 195 |
| More than secondary | 9.5 | 103 | (11.1) | 49 | 10.0 | 152 | (9.0) | 81 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 10.9 | 70 | 12.7 | 192 | 12.2 | 262 | 22.0 | 185 |
| Second | 11.0 | 117 | 11.0 | 170 | 10.9 | 288 | 28.5 | 168 |
| Middle | 14.1 | 159 | 13.3 | 101 | 13.8 | 259 | 19.1 | 214 |
| Fourth | 6.6 | 186 | 9.9 | 81 | 7.6 | 267 | 11.3 | 199 |
| Highest | 10.2 | 132 | * | 55 | 12.4 | 187 | 12.3 | 166 |
| Total 15-49 | 10.3 | 663 | 12.4 | 600 | 11.3 | 1,264 | 18.5 | 932 |
| 50-59 | (5.6) | 50 | 13.8 | 96 | 11.0 | 146 | 17.8 | 193 |
| Total 15-59 | 10.0 | 712 | 12.6 | 695 | 11.3 | 1,410 | 18.4 | 1,125 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
1 Includes all men who report they are circumcised, including men circumcised by medical or traditional practitioners. Also includes those circumcised by other practitioners, those who don't know what type of practitioner performed their circumcision, and those who did not report a practitioner (not shown separately).

Table 13.13 HIV prevalence among couples
Percent distribution of couples living in the same household, both of whom were tested for HIV, by HIV status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Both HIV positive | Man HIV positive, woman HIV negative | Woman HIV positive, man HIV negative | Both HIV negative | Total | Number |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Woman's age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 12 |
| 20-29 | 11.2 | 11.3 | 13.6 | 64.0 | 100.0 | 113 |
| 30-39 | 13.8 | 2.9 | 13.0 | 70.4 | 100.0 | 180 |
| 40-49 | 20.9 | 2.8 | 5.0 | 71.2 | 100.0 | 115 |
| Man's age |  |  |  |  |  |  |
| 15-19 | nc | nc | nc | nc | nc | 0 |
| 20-29 | (1.0) | (6.9) | (12.2) | (79.8) | 100.0 | 64 |
| 30-39 | 17.9 | 5.8 | 14.4 | 61.9 | 100.0 | 158 |
| 40-49 | 16.6 | 4.6 | 6.5 | 72.2 | 100.0 | 134 |
| 50-59 | 16.2 | 2.3 | 8.0 | 73.5 | 100.0 | 63 |
| Age difference between partners |  |  |  |  |  |  |
| Woman older | (12.7) | (1.9) | (23.9) | (61.4) | 100.0 | 46 |
| Same age/man older by 0-4 years | 9.4 | 9.5 | 8.1 | 73.0 | 100.0 | 157 |
| Man older by 5-9 years | 17.5 | 1.4 | 7.3 | 73.9 | 100.0 | 153 |
| Man older by 10-14 years | (13.5) | (5.6) | (8.3) | (72.6) | 100.0 | 41 |
| Man older by 15+ years | * | * | * | * | 100.0 | 22 |
| Multiple partners in past |  |  |  |  |  |  |
| 12 months ${ }^{1}$ |  |  |  |  |  |  |
| Both no | 15.8 | 4.4 | 10.9 | 68.9 | 100.0 | 369 |
| Man yes, woman no | (5.8) | (12.0) | (2.5) | (79.7) | 100.0 | 42 |
| Woman yes, man no | * | * | * | * | 100.0 | 5 |
| Both yes | * | * | * | * | 100.0 | 4 |
| Residence |  |  |  |  |  |  |
| Urban | 13.4 | 5.3 | 10.1 | 71.2 | 100.0 | 316 |
| Non-urban | 18.4 | 4.4 | 12.1 | 65.2 | 100.0 | 103 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 11.0 | 5.7 | 21.0 | 62.3 | 100.0 | 75 |
| Second | 15.6 | 16.1 | 13.0 | 55.3 | 100.0 | 79 |
| Middle | 19.4 | 4.2 | 14.6 | 61.8 | 100.0 | 89 |
| Fourth | 17.9 | 0.8 | 6.0 | 75.3 | 100.0 | 66 |
| Highest | 10.7 | <0.1 | 1.4 | 88.0 | 100.0 | 110 |
| Total couples | 14.6 | 5.1 | 10.6 | 69.7 | 100.0 | 419 |

Notes: The table is based on heterosexual couples for which a valid test result (positive or negative) is available for both partners. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases
${ }^{1}$ A respondent is considered to have had multiple sexual partners in the past 12 months if he or she had sexual intercourse with two or more people during this time period. (Respondents with multiple partners include polygynous men who had sexual intercourse with two or more wives.)

## Key Findings

- Adult mortality: The probability of a 15 -year-old dying before age 50 ( $35 q_{15}$ ) is $21 \%$ among females and $23 \%$ among males. Thus, 213 of every 1,000 women age 15 would be expected to die before age 50 , and 234 of every 1,000 men age 15 would be expected to die before age 50 .
- Pregnancy-related mortality ratio: The pregnancyrelated mortality ratio during the 7 -year period before the SADHS 2016 was 536 pregnancy-related deaths per 100,000 live births.

Adult and maternal mortality indicators are useful for assessing the health status of adult populations. The maternal mortality ratio is one of 26 indicators used to assess progress towards SDG 3: ensuring healthy lives and promoting well-being for all at all ages. Reducing maternal mortality is one of the government's targets. The 2030 vision of the National Development Plan is to reduce the maternal mortality ratio to less than 100 per 100,000 live births (South African Government 2011). In 1998, the National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD) was established, and the committee set up a system to monitor deaths that occur in health facilities during pregnancy, birth, or the puerperium (Theron 2000). The Campaign on Accelerated Reduction of Maternal and Child Mortality in Africa (CARMMA), launched in South Africa in 2012, has highlighted the components of a comprehensive strategy to reduce maternal and child mortality (NDoH 2012). The Rapid Mortality Surveillance Report (Bradshaw et al. 2012) introduced a measure of maternal mortality for monitoring trends that was based on an adjustment to the number of deaths caused by direct and indirect maternal causes from vital statistics. This approach has been used in the country's SDG Indicator Baseline Report (Stats SA 2017b).

Two methods are generally used to estimate maternal mortality in developing countries from household surveys: the indirect sisterhood method (Graham et al. 1989) and a direct variant of the sisterhood method (Rutenberg and Sullivan 1991; Stanton et al. 1997). In the SADHS 2016, the direct variant of the sisterhood method was employed to estimate both adult and maternal mortality from the reports of adult women on the survival status of their siblings.

### 14.1 DATA

To obtain a sibling history, each female respondent age 15-49 was first asked to provide the total number of her mother's live births. The respondent was then asked to provide a list of all brothers and sisters born to her mother, beginning with the first born, and to identify whether each sibling was alive at the time of the survey. The current age was reported for living siblings. For deceased siblings, the age at death and number of years since death were recorded. Approximate quantitative answers were acceptable if precise information on age, age at death, or years since death was not known.

Data capture via CAPI may have aided the completeness of data on siblings because in the CAPI system, interviewers are required to populate all relevant fields in order to progress through the interview, whereas interviewers may skip over asking questions or recording responses and still continue the interview when data capture is done on paper questionnaires. Completeness of data on survival status, current age, age at death, and years since death is reported for all siblings in Table C. 8 in Appendix C. Current age is unreported
for $0 \%$ of siblings, as compared with $5 \%$ of siblings in the 1998 survey. Similarly but more markedly, both age at death and years since death among deceased siblings are unreported for $0 \%$ of siblings in the current survey, while each measure was missing for $16 \%$ of deceased siblings in the 1998 survey.

For sisters who had died and were age 12 or older at the time of death, questions were asked to determine whether the death was maternity-related: "Was [NAME OF SISTER] pregnant when she died?" and, if not, "Did she die during childbirth?" and, if not, "Did she die within 2 months after the end of a pregnancy or childbirth?" For every sister and brother who had died, the respondent was asked "Was [NAME]'s death due to an accident or violence?" Estimates of maternal mortality are refined by excluding deaths due to accidents or violence; however, other incidental deaths, such as HIV-related deaths, are not identified and are therefore not excluded.

### 14.2 Direct Estimates of Adult Mortality

## Adult mortality rate

The number of adult deaths per 1,000 population age $15-49$. Adult mortality rates by 5 -year age groups are calculated by dividing the number of deaths to siblings of respondents in each age group by the number of person-years of exposure to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000 . The number of deaths is the number of siblings (brothers or sisters) reported as having died within the 7 years preceding the survey. The person-years of exposure in each age group are calculated for both surviving and dead siblings based on their current age (living siblings) or age at death and years since death (dead siblings).
Age-adjusted rate: The rate for the 15-49 age group has been standardised so that siblings reflect the SADHS population structure.
Sample: Siblings (both living and dead) who were age 15-49 in the 7 years preceding the survey, by sex and 5 -year age groups

Estimates of mortality for the 7 years preceding the survey among women and men age $15-49$ are shown in Table 14.1. Mortality is slightly lower among women ( 6.3 deaths per 1,000 population) than among men ( 6.9 deaths per 1,000 population). Mortality rates generally rise with increasing age from age 15-19 to age 40-44 (Figure 14.1).

### 14.3 Trends in Adult Mortality

Table 14.2 shows the probability of a woman or man age 15 dying by age $50\left({ }_{35} \mathrm{q}_{15}\right)$ if the person experienced the age-specific death rates shown in Table 14.1 - that is, the death rates observed in 2009-

Figure 14.1 Adult mortality rates by age
Deaths per 1,000 population
 2016 (the 7 years preceding the survey). Probabilities are expressed per 1,000 persons at age 15 . Thus, 213 of every 1,000 women age 15 would be expected to die before age 50 , and 234 of every 1,000 men age 15 would be expected to die before age 50 . If women and men experienced probabilities of dying that were estimated as existing in 1991-1998 (the 7 years preceding the SADHS 1998), 103 of every 1,000 women and 213 of every 1,000 men age 15 would be expected to die before age 50 . The probability of dying doubled among women from the period 1991-1998 to the period 2009-2016, while the probability increased only marginally among men. Comparisons with estimates from other sources of mortality data in the country and analyses of the cause of death data available in the country's vital registration system may shed more light on the pattern shown here.

### 14.4 Direct Estimates of Maternal Mortality

## Maternal mortality rate

The number of maternal deaths per 1,000 women age $15-49$. Maternal mortality rates by 5 -year age groups are calculated by dividing the number of maternal deaths to female siblings of respondents in each age group by the total personyears of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000 . The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey during pregnancy or delivery, or in the 2 months following the delivery or end of pregnancy, by their age group at the time of death; deaths due to accidents or violence are excluded.* The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).
Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups
*This differs from the WHO definition of a maternal death, which is "the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes" (WHO 2012:98).

## Maternal mortality ratio

The number of maternal deaths per 100,000 live births. The maternal mortality ratio (MMR) is calculated by dividing the age-standardised maternal mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period times 100,000.

Out of the 394 deaths of female siblings reported for the 7 years preceding the survey, 27 were reported to have occurred during pregnancy or within 2 months of delivery or termination of the pregnancy from any cause other than accidents or violence (data not shown). These deaths accounted for $7 \%$ of all deaths among women age 15-49 and are considered too imprecise for estimating maternal mortality indictors, which require the distinction between maternal causes and incidental causes of death that happened to occur during pregnancy. The remainder of this chapter will focus on estimates of pregnancy-related mortality indicators.

### 14.5 Direct Estimates and Trends in Pregnancy-related Mortality

## Pregnancy-related mortality rate

The number of pregnancy-related deaths per 1,000 women age 15-49. Pregnancy-related mortality rates by 5 -year age groups are calculated by dividing the number of pregnancy-related deaths to female siblings of respondents in each age group by the total person-years of exposure of the sisters to the risk of dying in that age group during the 7 years preceding the survey and then multiplying by 1,000 . The number of deaths is the number of sisters reported as having died in the 7 years preceding the survey during pregnancy or delivery, or in the 2 months following the delivery or end of pregnancy, by their age group at the time of death. The person-years of exposure in each age group are calculated for both surviving and dead sisters based on their reported current age (living sisters) or age at death and years since death (dead sisters).
Sample: Sisters (both living and dead) age 15-49 in the 7 years preceding the survey, by 5-year age groups

## Pregnancy-related mortality ratio (PRMR)

The number of pregnancy-related deaths per 100,000 live births. The pregnancy-related mortality ratio is calculated by dividing the age-standardised pregnancy-related mortality rate for women age 15-49 in the 7 years preceding the survey by the general fertility rate (GFR) for the same time period times 100,000.

## Lifetime risk of pregnancy-related death

This is calculated as $1-(1-P R M R)^{T F R}$, where PRMR represents the pregnancyrelated mortality ratio and TFR represents the total fertility rate for the 7 years preceding the survey.

The SADHS 2016 defines a pregnancy-related death as the death of a woman while pregnant or within 2 months of delivery or termination of pregnancy, irrespective of the cause of death. Estimates of pregnancyrelated mortality are therefore based solely on the timing of the death in relationship to the pregnancy, which differs from the WHO definition of a pregnancy-related death (which limits the window to 42 days).

- The pregnancy-related mortality rate among women age $15-49$ is 0.47 pregnancy-related deaths per 1,000 woman-years of exposure (Table 14.3).
- The pregnancy-related mortality rate is highest among women age 40-44 (1.22). Any patterns in agespecific pregnancy-related mortality should be interpreted with caution, as there were only 31 pregnancy-related deaths in the 7 years preceding the survey.
- Pregnancy-related deaths accounted for 8\% of all deaths among women age 15-49.
- The pregnancy-related mortality ratio (PRMR) during the 7 years preceding the SADHS 2016 is estimated as 536 deaths per 100,000 live births (Table 14.4). For every 1,000 live births, about five women died during pregnancy or within 2 months after childbirth.
- At the fertility and mortality rates prevailing in 2009-2016, $1.5 \%$ of women would be expected to die from pregnancy-related causes during their reproductive lifetime (i.e., a lifetime risk of 1 in 67).

What the SADHS 2016 defines as a pregnancy-related death was labelled a maternal death in the SADHS 1998. It should be noted that although the SADHS 1998 included a question asking whether female deaths were due to complications of pregnancy or childbirth, responses were not used to identify whether a death was or was not a maternal death. Thus, it is possible to compare the PRMR estimates from the SADHS 2016 and SADHS 1998.

The SADHS 2016 PRMR estimate for the period 2009-2016 ( 536 deaths per 100,000 live births) is significantly higher than the SADHS 1998 estimate of 150 deaths per 100,000 live births in 1991-1998 (Figure 14.2 and Table 14.4). As shown in Figure 14.2, there is no overlap between the confidence intervals surrounding the SADHS 2016 and SADHS 1998 PRMR estimates. The difference between the 2016 and 1998 estimates is statistically significant and not likely to be due to sampling error. Therefore, it can be concluded that the PRMR increased between the 1998 and 2016 surveys.

The SADHS 2016 PRMR estimate of 536 deaths per 100,000 live births for the period approximately centred at 2013 is slightly lower than the figure of 580 deaths derived from household deaths in the 2011 Population Census (Stats SA 2012), which referred to the year preceding the census (i.e., 10 October 2010 to 9 October 2011). However, the decline is not statistically significant (data not shown).

## List of Tables

For more information on adult and maternal mortality, see the following tables:

- Table 14.1 Adult mortality rates
- Table 14.2 Adult mortality probabilities
- Table 14.3 Pregnancy-related mortality
- Table 14.4 Pregnancy-related mortality trends
- Table C. 8 Completeness of information on siblings (see Appendix C)
- Table C. 9 Sibship size and sex ratio of siblings (see Appendix C)


## Table 14.1 Adult mortality rates

Direct estimates of female and male mortality rates for the 7 years preceding the survey, by 5 -year age groups, South Africa DHS 2016

| Age | Deaths | Exposure years | Mortality rate $^{1}$ |
| :--- | ---: | ---: | ---: |
| FEMALE |  |  |  |
| $15-19$ | 9 | 9,179 | 1.02 |
| $20-24$ | 43 | 11,875 | 3.65 |
| $25-29$ | 55 | 12,297 | 4.48 |
| $30-34$ | 108 | 11,034 | 9.82 |
| $35-39$ | 78 | 8,555 | 9.13 |
| $40-44$ | 68 | 5,930 | 11.39 |
| $45-49$ | 32 | 3,899 | 8.32 |
| Total 15-49 | $394^{\text {a }}$ | $62,768^{\text {a }}$ | $6.34^{\text {b }}$ |
|  |  |  |  |
| $15-19$ | MALE |  |  |
| $20-24$ | 14 | 8,774 | 1.60 |
| $25-29$ | 28 | 11,306 | 2.46 |
| $30-34$ | 74 | 11,814 | 6.24 |
| $35-39$ | 78 | 10,305 | 7.60 |
| $40-44$ | 79 | 8,277 | 9.49 |
| $45-49$ | 77 | 5,616 | 13.64 |
| Total 15-49 | 44 | 3,580 | 12.23 |

[^24]| Table 14.2 Adult mortality probabilities |  |  |
| :---: | :---: | :---: |
| The probability of dying between age 15 and age 50 among women and men during the 7 years preceding the survey, South Africa |  |  |
| Survey | Women ${ }_{35}$ q $_{15}{ }^{1}$ | $\begin{aligned} & \hline \text { Men } \\ & 35 q_{15}{ }^{1} \\ & \hline \end{aligned}$ |
| SADHS 2016 | 213 | 234 |
| SADHS 1998 | 103 | 213 |
| ${ }^{1}$ The probability of dying between exact ages 15 and 50 , expressed per 1,000 persons at age 15 |  |  |

Table 14.3 Pregnancy-related mortality
Direct estimates of pregnancy-related mortality rates for the 7 years preceding the survey, by 5 -year age groups, South Africa DHS 2016

|  | Percentage of <br> female deaths <br> that are <br> pregnancy- <br> related | Pregnancy- <br> related deaths ${ }^{1}$ | Exposure <br> years | Pregnancy- <br> related mortality $^{\text {rate }^{2}}$ |
| :--- | :---: | :---: | :---: | :---: |
| $15-19$ | 0.0 | 0 | 9,179 | 0.00 |
| $20-24$ | 9.8 | 4 | 11,875 | 0.36 |
| $25-29$ | 13.0 | 7 | 12,297 | 0.58 |
| $30-34$ | 4.7 | 5 | 11,034 | 0.46 |
| $35-39$ | 8.3 | 6 | 8,555 | 0.76 |
| $40-44$ | 10.7 | 7 | 5,930 | 1.22 |
| $45-49$ | 1.3 | 0 | 3,899 | 0.11 |
| Total 15-49 | 7.8 | $31^{\text {a }}$ | $62,768^{\text {a }}$ | $0.47^{\text {b }}$ |

${ }^{1}$ Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy from any cause, including accidents or violence
${ }^{2}$ Expressed per 1,000 woman-years of exposure
${ }^{\text {a }}$ Small discrepancies in totals can result from rounding
${ }^{\text {b }}$ Age-adjusted rate

## Table 14.4 Pregnancy-related mortality trends

Direct estimates of pregnancy-related mortality rates for the 7 years preceding each survey, by 5 -year age groups, South Africa DHS 2016

|  | Pregnancy-related mortality rates ${ }^{1,2}$ |  |
| :--- | :---: | :---: |
| Age | $2009-2016$ | $1991-1998$ |
| $15-19$ | 0.00 | 0.09 |
| $20-24$ | 0.36 | 0.25 |
| $25-29$ | 0.58 | 0.21 |
| $30-34$ | 0.46 | 0.19 |
| $35-39$ | 0.76 | 0.11 |
| $40-44$ | 1.22 | 0.07 |
| $45-49$ | 0.11 | 0.00 |
| Total 15-49a | 0.47 | 0.15 |
| Total fertility rate (TFR) | 2.8 | 3.1 |
| General fertility rate (GFR) ${ }^{3}$ | 88 | 97 |
| Pregnancy-related mortality ratio (PRMR) | 4 |  |
| Confidence interval | 536 | 150 |
| Lifetime risk of pregnancy-related death ${ }^{5}$ | $270-802$ | $77-223$ |

${ }^{1}$ Pregnancy-related mortality is defined as the death of a woman while pregnant or within 2 months of termination of pregnancy from any cause, including accidents or violence ${ }^{2}$ Expressed per 1,000 woman-years of exposure
${ }^{3}$ Age-adjusted rate expressed per 1,000 women age 15-49
${ }^{4}$ Expressed per 100,000 live births; calculated as the age-adjusted pregnancy-related mortality rate times 100 divided by the age-adjusted general fertility rate
${ }^{5}$ Calculated as $1-(1-P R M R)^{T F R}$ where TFR represents the total fertility rate for the 7 years preceding the survey
${ }^{\text {a }}$ Age-adjusted rate

# USE OF HEALTH SERVICES AND PRESCRIBED MEDICATIONS 

## Key Findings

- Health insurance coverage: $16 \%$ of women and $17 \%$ of men age 15 and older have health insurance coverage.
- Utilisation of outpatient health care services: In the month before the survey, $12 \%$ of women and $11 \%$ of men age 15 and older received health, medical, or dental care as an outpatient. Overall, $55 \%$ of respondents who had an outpatient visit received care from a government clinic or community health centre, $15 \%$ received care from a government hospital, and $26 \%$ received care from a private hospital or clinic.
- Pap smear: $37 \%$ of women age 15 and older have had a Pap smear exam; among those who have ever had a Pap smear, $64 \%$ had one within the 3 years before the survey.
- Problems in accessing health care: 38\% of women age 15 and older have at least one problem in accessing health care.
- Prescribed medications: Overall, $31 \%$ of women and $19 \%$ of men age 15 and older reported that they are taking prescribed medications daily or regularly. Seventyone percent of adults age 15 and older have their prescribed medications paid for by the public sector.

Health service utilisation provides information that reflects a combination of need for care and access to care. This chapter describes access to health insurance and utilisation of ambulatory health services among respondents to the adult health module. In addition, women were asked about their experience with Pap smear exams and about barriers they face when seeking health care. The chapter also includes information about prescribed medications used daily or regularly by adults for chronic conditions. Such information will contribute towards monitoring the performance of the health system and planning for the implementation of National Health Insurance (NHI).

### 15.1 Health Insurance Coverage

Sixteen percent of women and $17 \%$ of men age 15 and older have access to some form of medical aid, medical benefit scheme, provident scheme, or hospital plan that helps them pay for health care or drug services (Table 15.1).

## Patterns by background characteristics

- As expected, health insurance coverage is associated with age. Among women, health insurance coverage is lower among those age 15-34 ( $10 \%-13 \%$ ) than among older women age 35 or older $(18 \%-20 \%)$. Among men, health insurance coverage rises from a low of $10 \%$ among those age 15-24 to a high of $27 \%$ among those age 65 or older.
- There is a large disparity in health insurance coverage by population group. Seventy-four percent of women and $77 \%$ of men who are White have health insurance coverage, whereas only $10 \%$ of women and $11 \%$ of men who are Black African have coverage.
- Women and men in urban areas are more than twice as likely as those in non-urban areas to have health insurance coverage.
- The proportion of adults with health insurance coverage is markedly higher in Western Cape than other provinces. Thirty percent of women and $36 \%$ of men in Western Cape have health insurance coverage, as compared with $9 \%-17 \%$ of women and $11 \%-17 \%$ of men in other provinces.
- Among both women and men, health insurance coverage is positively associated with increasing education and household wealth.


### 15.2 Use of Outpatient Health Care Services

Respondents were asked about outpatient health care services they had received in the month before the survey. Five percent of women and $1 \%$ of men age 15 and older had at least one visit by a home- or community-based caregiver in the month before the survey, and $12 \%$ of women and $11 \%$ of men received health, medical, or dental care as an outpatient (Table 15.2).

## Patterns by background characteristics

- The percentage of women and men who received outpatient health services during the month before the survey generally increases with age. Nine percent of women and $6 \%$ of men age 15-24 received outpatient services, as compared with $18 \%$ of women and $22 \%$ of men age 65 or older.
- HIV-positive men (16\%) were slightly more likely to receive outpatient health care services than those who were HIV negative ( $11 \%$ ) or whose status was not known because they were not tested in the SADHS (10\%). Among women, $12 \%-13 \%$ received outpatient health care services regardless of their HIV status.
- Both women and men were more likely to receive outpatient health care services if they had health insurance. Among those who received outpatient services, women and men with health insurance were much more likely than those without insurance to use private sector sources. Still, $10 \%$ of those without health insurance visited a private hospital, clinic, or private doctor (Table 15.3).
- Respondents from non-urban areas were less likely than those from urban areas to have visited a private hospital, clinic, or private doctor ( $17 \%$ versus $32 \%$ ).
- Use of public sector health services decreases with increasing household wealth (Figure 15.1).

Figure 15.1 Source of outpatient health care services by household wealth

Percentage of respondents age 15+ who received outpatient services
$\square$ Public sector $\quad$ Private medical sector


### 15.3 Women's Access to Care

### 15.3.1 Experience with a Pap Smear

The SADHS 2016 included questions on cervical cancer screening. The Pap smear exam checks for changes in the cells of the cervix that indicate cervical cancer or conditions that may develop into cervical cancer. The South African Policy on Cervical Cancer and Control recommends cytology-based screening, particularly via Pap smear, as the method of choice in the short term. The policy further recommends screening all women age $30-50$ at 10 -year intervals.

Women age 15 and older were asked whether they ever had a Pap smear and, if so, how long ago they had their most recent Pap smear and whether they received the result. Overall, $37 \%$ of women age 15 and older have ever had a Pap smear (Table 15.4). Among those who ever had a Pap smear, $64 \%$ reported having had a Pap smear within the 3 years before the survey, $15 \%$ had the exam $4-5$ years ago, $8 \%$ had the exam $6-10$ years ago, and $10 \%$ had the exam more than 10 years ago. The vast majority of women who have ever had a Pap smear received the result of their most recent test ( $86 \%$ ).

## Patterns by background characteristics

- Women age 30-59 (52\%) were more likely than younger women age 15-29 ( $16 \%$ ) and older women age 60 or older $(41 \%)$ to have ever had a Pap smear. Two-thirds ( $67 \%$ ) of women age $30-59$ who have ever had a Pap smear had the exam within the 3 years before the survey.
- By population group, women who are White ( $78 \%$ ), Coloured ( $62 \%$ ), or Indian/Asian ( $60 \%$ ) were more likely than Black African women ( $32 \%$ ) to have ever had a Pap smear.
- HIV-positive women (43\%) were more likely to have ever had a Pap smear than HIV-negative women $(33 \%)$ or women whose status is unknown because they were not tested in the SADHS (40\%). Among those who ever had a Pap smear, women who are HIV positive were also more likely to have had one in the 3 years before the survey ( $78 \%$ ) than HIV-negative women ( $59 \%$ ) and women who were not tested in the survey ( $65 \%$ ). However, HIV-positive women ( $77 \%$ ) were somewhat less likely than other women $(86 \%-89 \%)$ to have received the results of their last Pap smear.
- Six in 10 women ( $63 \%$ ) with health insurance have ever had a Pap smear, as compared with 3 in 10 women ( $33 \%$ ) without insurance.
- Women's likelihood of ever having had a Pap smear generally increases with increasing education and household wealth.
- The proportion of women age 30-59 who had a Pap smear is higher in Western Cape (83\%) than other provinces ( $43 \%-56 \%$ ) (Table 15.5 and Figure 15.2).


## Figure 15.2 Experience with a Pap smear by province

Percentage of women age 30-59 who ever had a Pap smear


### 15.3.2 Problems in Accessing Health Care among Women

## Problems in accessing health care

Women were asked whether each of the following factors is a big problem in seeking medical advice or treatment for themselves when they are sick:

- Getting permission to go to the doctor
- Getting money for advice or treatment
- Distance to a health facility
- Not wanting to go alone

Sample: Women age 15+

Thirty-eight percent of women age 15 and older report at least one problem accessing health care for themselves when they are sick (Table 15.6). The most commonly reported problem is getting money for treatment $(28 \%)$, followed by distance from the health service ( $25 \%$ ). Fifteen percent of women reported not wanting to go alone and needing permission to go as problems.

Patterns by background characteristics

- Women age 65 and older are more likely than women in all of the other age groups to experience each of the four specified problems in accessing health care. Overall, $49 \%$ of women age 65 and older reported at least one problem in accessing care.
- White women (8\%) are less likely than Black African (41\%), Coloured (29\%), or Indian/Asian ( $33 \%$ ) women to report at least one problem in accessing health care.
- Women who are divorced, separated, or widowed (48\%) are more likely than women who are married or living together with a partner ( $35 \%$ ) and women who have never been married or lived with a partner (38\%) to have at least one problem in accessing health care.
- The proportion of women who report at least one problem in accessing health care is much higher in non-urban areas (53\%) than urban areas (30\%).
- Women in Western Cape (23\%) are least likely to report any problems in accessing health care, while women in Eastern Cape (49\%) are most likely to report problems (Figure 15.3). In all provinces except KwaZulu-Natal and Mpumalanga, the most common problem in accessing health care is getting money for treatment.
- The percentage of women who report having a problem in accessing health care steadily decreases with increasing household wealth (Figure 15.4).

Figure 15.3 Problems in accessing health care by province
Percentage of women age 15-49 reporting at least one problem


Figure 15.4 Problems in accessing health care by household wealth

Percentage of women age 15+ with at least one problem


### 15.4 Prescribed Medications

### 15.4.1 Self-reported Use of Prescribed Medications

Table 15.7 presents data on women's and men's self-reported use of prescribed medications. Overall, $26 \%$ of respondents age 15 and older reported that they are taking prescribed medication daily or regularly. More women report taking prescribed medications than men ( $31 \%$ versus $19 \%$ ). Among respondents who are taking prescribed medications, $44 \%$ are taking a single medication, $39 \%$ are taking two to three medications, and $17 \%$ are taking four or more medications.

Comparison with the SADHS 1998: The percentage of women age 15 and older taking prescribed medications increased from $18 \%$ in 1998 to $31 \%$ in 2016; the percentage among men increased from $13 \%$ to $19 \%$.

## Patterns by background characteristics

- The percentage of respondents daily or regularly taking at least one prescribed medication increases with age, from $7 \%$ among those age $15-24$ to $59 \%$ among those age 65 and older (Figure 15.5). Older respondents also take a greater number of medications than younger respondents.
- White respondents were more likely to report taking prescribed medications (55\%) than respondents from other population groups, especially Black African respondents (23\%).
- The proportion of respondents taking at least one medication declines from $45 \%$ among those with no education to $20 \%$ among those who have

Figure 15.5 Prescribed medication by age
Percentage of women and men taking prescribed medication daily or regularly
 completed a secondary education before increasing to $29 \%$ among those with more than a secondary education.

- The percentage of women and men taking at least one prescribed medication increases with increasing household wealth, from $20 \%$ among those in the lowest wealth quintile to $36 \%$ among those in the highest quintile.


### 15.4.2 Payment for Prescribed Medications

Respondents who take prescribed medications on a regular basis were asked about their source of payment. Overall, $71 \%$ of adults age 15 and older report that most of their medications are provided by the public sector. Sixteen percent of adults report that their prescribed medications are paid for through medical aid, and $11 \%$ pay for their medications out of pocket (Table 15.8).

Among respondents whose medications are provided by a public clinic or hospital, $20 \%$ report that they were sent away from the clinic at least once in the past 12 months without medication because of stockouts.

Comparison with the SADHS 1998: Provision of prescribed medications by the public sector increased from $39 \%$ in 1998 to $75 \%$ in 2016 among women and from $34 \%$ to $61 \%$ among men. Medical aid provision of prescribed medications decreased among both women (from $26 \%$ to $14 \%$ ) and men (from $29 \%$ to $20 \%$ ). The proportion of respondents who pay out of pocket for their daily or regularly prescribed
medications has also decreased since 1998 , from $28 \%$ to $9 \%$ among women and from $31 \%$ to $16 \%$ among men.

## Patterns by background characteristics

- While use of medical aid to pay for prescribed medications increases with age, the proportion of respondents relying on public sector payments is similar across age groups.
- Among respondents whose prescribed medications are paid for by the public sector, the percentage who have been sent away from a clinic in the past 12 months because a medication was not in stock rises from $11 \%$ among those age $15-24$ to $28 \%$ among those age 65 and older (Figure 15.6).
- A majority of Black African (82\%) and Coloured (67\%) respondents have their prescribed medications paid for by the public sector, whereas most White respondents have their medications paid for by medical aid (64\%).
- Those who are employed, whether for cash ( $18 \%$ ) or not ( $13 \%$ ), are more likely than those

Figure 15.6 Experience of medication stockouts by age

Percentage of women and men age who are taking prescribed medications and experienced a stockout in the past 12 months
 who are not employed (8\%) to pay for their prescribed medications out of pocket. Those who are not employed $(78 \%)$ are more likely than those who are employed for cash (59\%) or employed but not for cash (55\%) to have their prescribed medications paid for by the public sector.

- In general, the percentage of respondents whose prescribed medications are paid for by medical aid increases with increasing education; only $4 \%$ of respondents with no education have their prescribed medications paid for by medical aid, as compared with $53 \%$ of those with more than a secondary education. Out-of-pocket payments also generally increase with increasing education, while public sector payments decrease.
- Ninety-four percent of respondents in the lowest wealth quintile had their prescribed medications paid for by the public sector, compared with $31 \%$ of respondents in the highest wealth quintile.


### 15.5 Prescribed Medications for Chronic Conditions

Of the 10,336 respondents age 15 and older who completed the adult health module, 8,067 consented to be interviewed with the Biomarker Questionnaire by a nurse. As part of this interview, respondents who use prescribed medications daily or regularly were requested to show the medications to the nurse, who then recorded the names of the medications.

Overall, $18 \%$ of respondents age 15 and older reported taking a prescribed medication for at least one chronic condition. The most frequently treated condition is hypertension (13\%), followed by HIV (5\%), heart and stroke-related conditions ( $2 \%$ ), diabetes ( $2 \%$ ), and high cholesterol or triglycerides ( $2 \%$ ). Three percent of respondents did not disclose their medications (Table 15.9).

Women are more likely than men to be using prescribed medications for a chronic condition ( $21 \%$ versus $14 \%$ ). However, differences in the use of medications for specific conditions between women and men are generally small. Use of anti-hypertensive medications is somewhat more common among women (14\%) than men ( $9 \%$ ), as is use of medications for HIV ( $6 \%$ of women and $3 \%$ of men).

Comparison with the SADHS 1998: Use of anti-hypertensive medications increased from $6 \%$ in 1998 to $13 \%$ in 2016.

## LIST OF TABLES

For more information on use of health services and prescribed medication, see the following tables:

- Table 15.1 Health insurance coverage
- Table 15.2 Outpatient health care services received
- Table 15.3 Source of outpatient health care services received
- Table 15.4 Experience with a Pap smear exam
- Table 15.5 Experience with a Pap smear exam by province
- Table 15.6 Problems in accessing health care
- Table 15.7 Prescribed medications
- Table 15.8 Source of payment of prescribed medications
- Table 15.9 Use of prescribed medication for common chronic conditions

Table 15.1 Health insurance coverage
Percentage of women and men age 15 and older covered by medical aid, a medical benefit scheme, a provident scheme, or a hospital plan, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Percentage covered by medical aid or other scheme or plan | Number of women | Percentage covered by medical aid or other scheme or plan | Number of men |
| Age |  |  |  |  |
| 15-24 | 10.1 | 1,429 | 10.3 | 1,241 |
| 25-34 | 13.3 | 1,391 | 12.8 | 962 |
| 35-44 | 19.6 | 1,022 | 16.1 | 744 |
| 45-54 | 18.9 | 866 | 25.9 | 492 |
| 55-64 | 17.8 | 701 | 24.8 | 406 |
| 65+ | 18.6 | 719 | 27.1 | 364 |
| Population group |  |  |  |  |
| Black African | 10.3 | 5,170 | 10.5 | 3,534 |
| White | 73.8 | 320 | 76.8 | 257 |
| Coloured | 25.2 | 516 | 26.9 | 335 |
| Indian/Asian | 43.7 | 114 | 46.5 | 82 |
| Other | * | 6 | * | 2 |
| Marital status |  |  |  |  |
| Never married | 11.4 | 3,085 | 9.6 | 2,209 |
| Married | 27.8 | 1,582 | 29.8 | 1,255 |
| Living together | 8.6 | 599 | 14.0 | 442 |
| Divorced/separated | 15.7 | 281 | 14.5 | 197 |
| Widowed | 11.3 | 580 | 18.4 | 107 |
| Residence |  |  |  |  |
| Urban | 19.8 | 3,996 | 20.7 | 2,874 |
| Non-urban | 7.6 | 2,130 | 7.7 | 1,336 |
| Province |  |  |  |  |
| Western Cape | 30.1 | 703 | 36.3 | 476 |
| Eastern Cape | 12.8 | 730 | 11.9 | 493 |
| Northern Cape | 12.5 | 127 | 12.5 | 84 |
| Free State | 12.6 | 325 | 12.1 | 207 |
| KwaZulu-Natal | 12.8 | 1,191 | 11.3 | 683 |
| North West | 14.9 | 398 | 15.7 | 310 |
| Gauteng | 17.4 | 1,534 | 17.4 | 1,245 |
| Mpumalanga | 9.3 | 473 | 11.2 | 326 |
| Limpopo | 10.5 | 646 | 13.4 | 386 |
| Education |  |  |  |  |
| No education | 4.7 | 495 | 4.8 | 217 |
| Primary incomplete | 3.7 | 664 | 4.3 | 481 |
| Primary complete | 2.6 | 293 | 6.6 | 212 |
| Secondary incomplete | 8.9 | 2,695 | 9.3 | 1,930 |
| Secondary complete | 23.7 | 1,328 | 26.5 | 900 |
| More than secondary | 52.7 | 652 | 49.9 | 470 |
| Wealth quintile |  |  |  |  |
| Lowest | 2.2 | 1,163 | 2.0 | 787 |
| Second | 2.8 | 1,152 | 4.6 | 839 |
| Middle | 6.9 | 1,242 | 8.7 | 894 |
| Fourth | 15.2 | 1,258 | 16.4 | 827 |
| Highest | 47.1 | 1,311 | 49.8 | 864 |
| Total 15+ | 15.5 | 6,126 | 16.6 | 4,210 |
| Total 15-49 | 14.5 | 4,300 | 13.5 | 3,220 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2 Outpatient health care services received
Percentage of women and men age 15 and older who have had any visits by a home- or community-based caregiver during the past month, and percentage who have received health, medical, or dental care without staying overnight during the past month, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who had any visits by a home- or community-based caregiver during the past month | Percentage who received health, medical, or dental care without staying overnight during the past month | Number of women | Percentage who had any visits by a home- or community-based caregiver during the past month | Percentage who received health, medical, or dental care without staying overnight during the past month | Number of men |
| Age |  |  |  |  |  |  |
| 15-24 | 2.7 | 9.4 | 1,429 | 1.6 | 5.8 | 1,241 |
| 25-34 | 5.8 | 10.6 | 1,391 | 0.7 | 8.6 | 962 |
| 35-44 | 4.4 | 12.4 | 1,022 | 0.3 | 9.8 | 744 |
| 45-54 | 4.4 | 14.5 | 866 | 2.3 | 13.2 | 492 |
| 55-64 | 6.1 | 14.3 | 701 | 1.7 | 20.0 | 406 |
| 65+ | 7.6 | 17.8 | 719 | 1.4 | 22.4 | 364 |
| Population group |  |  |  |  |  |  |
| Black African | 5.3 | 12.0 | 5,170 | 1.2 | 10.3 | 3,534 |
| White | 1.4 | 15.1 | 320 | 1.4 | 19.1 | 257 |
| Coloured | 3.6 | 13.4 | 516 | 1.4 | 8.8 | 335 |
| Indian/Asian | 1.8 | 21.7 | 114 | 0.0 | 14.5 | 82 |
| Other | * | * | 6 | . | . | 2 |
| HIV status |  |  |  |  |  |  |
| HIV positive | 5.7 | 12.3 | 898 | 1.3 | 15.6 | 311 |
| HIV negative ${ }^{1}$ | 5.1 | 13.1 | 2,894 | 1.1 | 10.5 | 2,017 |
| Not tested in survey | 4.2 | 11.6 | 2,334 | 1.3 | 10.3 | 1,882 |
| Health insurance ${ }^{2}$ |  |  |  |  |  |  |
| Has insurance | 2.7 | 19.4 | 952 | 1.1 | 19.5 | 698 |
| Does not have insurance | 5.3 | 11.2 | 5,174 | 1.3 | 9.1 | 3,512 |
| Residence |  |  |  |  |  |  |
| Urban | 3.7 | 11.6 | 3,996 | 1.1 | 9.5 | 2,874 |
| Non-urban | 7.0 | 13.9 | 2,130 | 1.6 | 13.6 | 1,336 |
| Province |  |  |  |  |  |  |
| Western Cape | 3.1 | 13.8 | 703 | 1.3 | 10.5 | 476 |
| Eastern Cape | 2.8 | 18.2 | 730 | 2.0 | 6.4 | 493 |
| Northern Cape | 5.9 | 19.2 | 127 | 2.6 | 8.6 | 84 |
| Free State | 7.1 | 7.0 | 325 | 1.2 | 2.6 | 207 |
| KwaZulu-Natal | 5.8 | 9.4 | 1,191 | 0.6 | 13.2 | 683 |
| North West | 10.5 | 16.0 | 398 | 0.8 | 12.4 | 310 |
| Gauteng | 2.3 | 8.7 | 1,534 | 0.8 | 9.4 | 1,245 |
| Mpumalanga | 5.1 | 10.8 | 473 | 1.9 | 16.4 | 326 |
| Limpopo | 8.5 | 19.5 | 646 | 2.5 | 16.0 | 386 |
| Education |  |  |  |  |  |  |
| No education | 7.1 | 14.0 | 495 | 1.7 | 14.6 | 217 |
| Primary incomplete | 6.3 | 13.1 | 664 | 1.6 | 11.1 | 481 |
| Primary complete | 6.4 | 14.9 | 293 | 1.3 | 11.1 | 212 |
| Secondary incomplete | 4.4 | 10.9 | 2,695 | 1.6 | 9.5 | 1,930 |
| Secondary complete | 5.2 | 11.9 | 1,328 | 0.8 | 9.6 | 900 |
| More than secondary | 2.5 | 16.9 | 652 | 0.0 | 16.2 | 470 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 4.8 | 13.2 | 1,163 | 1.8 | 8.4 | 787 |
| Second | 5.8 | 11.6 | 1,152 | 1.9 | 10.3 | 839 |
| Middle | 6.2 | 10.4 | 1,242 | 0.9 | 10.9 | 894 |
| Fourth | 6.4 | 11.6 | 1,258 | 1.3 | 9.6 | 827 |
| Highest | 1.3 | 15.2 | 1,311 | 0.5 | 14.5 | 864 |
| Total | 4.9 | 12.4 | 6,126 | 1.2 | 10.8 | 4,210 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
${ }^{2}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.3 Source of outpatient health care services received
Among respondents age 15 and older who have received outpatient health care services during the past month, percentage who received care from specific sources, according to background characteristics, South Africa DHS 2016

| Background characteristic | Public sector |  |  | Private sector |  |  |  | Other source | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Government } \\ \text { hospital } \\ \hline \end{gathered}$ | Government clinic/ community health centre | Other public sector | Private hospital/ clinic/private doctor | Chemist/ pharmacy | Dentist/oral hygienist/ dental therapist | Other private medical sector |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 12.9 | 61.2 | 0.0 | 20.1 | 2.3 | 4.2 | 0.0 | 0.8 | 206 |
| 25-34 | 11.3 | 51.2 | 2.3 | 32.9 | 0.6 | 2.8 | 0.0 | 0.8 | 230 |
| 35-44 | 17.7 | 53.0 | 0.0 | 27.0 | 0.7 | 3.1 | 0.0 | 0.5 | 200 |
| 45-54 | 12.9 | 55.4 | 0.0 | 24.2 | 3.7 | 5.5 | 0.0 | 1.5 | 191 |
| 55-64 | 24.0 | 50.0 | 0.0 | 27.6 | 2.2 | 2.5 | 0.8 | 0.9 | 181 |
| 65+ | 14.0 | 58.9 | 0.4 | 23.6 | 1.3 | 3.1 | 0.6 | 0.3 | 209 |
| Population group |  |  |  |  |  |  |  |  |  |
| Black African | 14.3 | 63.3 | 0.6 | 19.7 | 1.1 | 1.8 | 0.1 | 0.8 | 985 |
| White | 10.1 | 5.9 | 0.0 | 73.6 | 6.3 | 10.8 | 0.4 | 0.0 | 98 |
| Coloured | 27.6 | 36.1 | 0.0 | 33.8 | 4.5 | 7.2 | 0.0 | 2.0 | 99 |
| Indian/Asian | (19.9) | (11.5) | (0.0) | (48.4) | (0.0) | (21.0) | (4.2) | (0.0) | 36 |
| Other | nc | nc | nc | nc | nc | nc | nc | nc | 0 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 21.4 | 45.1 | 0.0 | 30.8 | 2.7 | 2.2 | 0.1 | 1.9 | 455 |
| Female | 11.6 | 60.9 | 0.8 | 23.1 | 1.2 | 4.3 | 0.3 | 0.1 | 762 |
| Health insurance ${ }^{1}$ |  |  |  |  |  |  |  |  |  |
| Has insurance | 6.6 | 11.5 | 0.0 | 71.4 | 4.9 | 7.5 | 0.8 | 1.8 | 321 |
| Does not have insurance | 18.3 | 70.5 | 0.7 | 9.8 | 0.6 | 2.1 | 0.0 | 0.4 | 897 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 16.2 | 46.3 | 0.6 | 32.2 | 2.2 | 4.6 | 0.3 | 1.0 | 739 |
| Non-urban | 13.7 | 68.4 | 0.3 | 16.5 | 0.9 | 1.9 | 0.2 | 0.4 | 478 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 29.9 | 19.7 | 0.0 | 43.6 | 5.9 | 6.3 | 1.0 | 1.1 | 147 |
| Eastern Cape | 11.2 | 66.8 | 0.4 | 19.2 | 1.1 | 4.9 | 0.0 | 0.0 | 164 |
| Northern Cape | 15.0 | 66.3 | 0.0 | 13.8 | 0.0 | 4.1 | 0.0 | 1.7 | 32 |
| Free State | 16.7 | 41.9 | 0.0 | 32.2 | 5.8 | 3.4 | 1.4 | 1.9 | 28 |
| KwaZulu-Natal | 17.7 | 62.8 | 0.0 | 17.6 | 0.0 | 3.8 | 0.0 | 0.0 | 202 |
| North West | 9.9 | 51.0 | 0.0 | 35.7 | 0.0 | 3.2 | 0.0 | 1.3 | 102 |
| Gauteng | 11.9 | 51.7 | 1.8 | 31.4 | 1.8 | 3.6 | 0.0 | 0.8 | 250 |
| Mpumalanga | 8.8 | 69.5 | 0.0 | 20.3 | 0.7 | 2.7 | 0.0 | 1.0 | 105 |
| Limpopo | 15.3 | 62.4 | 0.4 | 19.0 | 2.0 | 0.2 | 0.4 | 1.3 | 187 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 18.5 | 76.3 | 0.8 | 4.6 | 0.0 | 2.0 | 0.0 | 0.7 | 101 |
| Primary incomplete | 17.7 | 78.8 | 0.0 | 4.7 | 0.0 | 0.0 | 0.0 | 1.2 | 140 |
| $\begin{array}{llllllll}\text { Primary complete } & 10.4 & 78.6 & 0.0 & 10.0 & 1.1 & 0.0 & 0.0 \\ \text { Secondary } & & & & & & \end{array}$ |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |
| Secondary complete | 15.9 | 37.3 | 1.9 | 36.9 | 2.5 | 7.6 | 0.2 | 0.5 | 245 |
| More than secondary | 6.2 | 18.7 | 0.0 | 66.6 | 3.4 | 10.3 | 0.0 | 2.4 | 186 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 12.4 | 85.3 | 0.3 | 3.7 | 0.4 | 0.0 | 0.0 | 1.0 | 220 |
| Second | 13.7 | 69.0 | 2.4 | 12.6 | 1.6 | 1.4 | 0.0 | 0.3 | 220 |
| Middle | 20.6 | 57.4 | 0.0 | 18.3 | 0.5 | 2.9 | 0.0 | 1.0 | 226 |
| Fourth | 17.2 | 53.7 | 0.0 | 27.3 | 1.0 | 1.7 | 0.3 | 0.3 | 225 |
| Highest | 13.1 | 24.2 | 0.0 | 54.6 | 4.0 | 9.0 | 0.6 | 1.1 | 325 |
| Total 15+ | 15.2 | 55.0 | 0.5 | 26.0 | 1.7 | 3.5 | 0.2 | 0.8 | 1,217 |

Notes: Percentages may add to more than 100.0 because multiple responses were allowed. Figures in parentheses are based on $25-49$ unweighted cases.
nc $=$ No cases
${ }^{1}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.4 Experience with a Pap smear exam
Percentage of women age 15 and older who have ever had a Pap smear, and among women who have had a Pap smear, the timing of the last Pap smear and percentage who got the results of their last exam, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who have ever had a Pap smear | Number of women | Among women who have ever had a Pap smear exam, percentage who had the exam: |  |  |  |  | Percentage who got the results of their last exam | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Within the last 3 years | 4-5 years ago | $\begin{gathered} 6-10 \text { years } \\ \text { ago } \end{gathered}$ | More than 10 years ago | Don't know/don't remember |  |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-29 | 15.6 | 2,183 | 83.2 | 10.4 | 2.5 | 1.3 | 2.7 | 79.8 | 340 |
| 30-59 | 52.2 | 2,918 | 67.1 | 16.8 | 8.5 | 5.8 | 1.8 | 85.8 | 1,524 |
| 60+ | 40.8 | 1,025 | 39.3 | 13.7 | 11.5 | 31.6 | 4.0 | 89.1 | 418 |
| Population group |  |  |  |  |  |  |  |  |  |
| Black African | 31.7 | 5,170 | 69.6 | 15.7 | 7.0 | 5.7 | 2.1 | 82.9 | 1,640 |
| White | 77.7 | 320 | 52.3 | 12.7 | 9.4 | 23.4 | 2.3 | 94.0 | 249 |
| Coloured | 62.0 | 516 | 51.3 | 13.7 | 12.4 | 20.4 | 2.2 | 90.7 | 320 |
| Indian/Asian | 60.0 | 114 | (48.1) | (22.2) | (12.6) | (8.5) | (8.6) | (92.1) | 68 |
| Other | * | 6 | * | * | * | * | * |  | 4 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |
| Not employed | 30.4 | 4,048 | 60.1 | 15.0 | 8.0 | 13.6 | 3.2 | 84.5 | 1,230 |
| Employed for cash | 47.7 | 1,560 | 73.3 | 15.3 | 7.6 | 2.7 | 1.1 | 86.7 | 744 |
| Employed not for cash | 59.4 | 518 | 60.1 | 16.2 | 10.0 | 12.2 | 1.5 | 86.3 | 308 |
| HIV status |  |  |  |  |  |  |  |  |  |
| HIV positive | 42.7 | 898 | 77.9 | 14.0 | 5.3 | 1.9 | 0.9 | 77.4 | 384 |
| HIV negative ${ }^{1}$ | 33.1 | 2,894 | 58.6 | 16.9 | 9.7 | 11.8 | 3.0 | 85.6 | 959 |
| Not tested in survey | 40.2 | 2,334 | 64.9 | 14.1 | 7.8 | 11.1 | 2.1 | 88.7 | 939 |
| Health insurance ${ }^{2}$ |  |  |  |  |  |  |  |  |  |
| Has insurance | 63.2 | 952 | 65.4 | 15.2 | 8.0 | 10.3 | 1.1 | 94.0 | 601 |
| Does not have insurance | 32.5 | 5,174 | 64.1 | 15.3 | 8.2 | 9.7 | 2.8 | 82.4 | 1,680 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 42.9 | 3,996 | 63.2 | 14.8 | 8.5 | 11.0 | 2.5 | 87.4 | 1,716 |
| Non-urban | 26.6 | 2,130 | 68.0 | 16.8 | 7.0 | 6.3 | 1.9 | 79.8 | 566 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 66.7 | 703 | 57.0 | 12.8 | 9.1 | 19.1 | 2.0 | 91.8 | 469 |
| Eastern Cape | 37.0 | 730 | 59.5 | 14.1 | 8.8 | 14.6 | 2.9 | 81.8 | 270 |
| Northern Cape | 36.7 | 127 | 59.3 | 8.3 | 15.1 | 10.4 | 6.9 | 88.2 | 47 |
| Free State | 37.3 | 325 | 59.8 | 17.9 | 9.2 | 8.8 | 4.3 | 82.7 | 121 |
| KwaZulu-Natal | 32.7 | 1,191 | 62.4 | 14.6 | 10.8 | 8.2 | 4.0 | 87.8 | 390 |
| North West | 38.8 | 398 | 70.2 | 19.6 | 5.2 | 5.0 | 0.0 | 76.2 | 154 |
| Gauteng | 32.7 | 1,534 | 70.7 | 16.0 | 6.6 | 5.6 | 1.1 | 86.5 | 501 |
| Mpumalanga | 34.1 | 473 | 67.7 | 19.8 | 5.5 | 4.1 | 2.9 | 77.7 | 161 |
| Limpopo | 26.0 | 646 | 75.3 | 15.3 | 5.4 | 3.6 | 0.5 | 82.8 | 168 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 24.6 | 495 | 57.1 | 8.1 | 11.7 | 17.5 | 5.7 | 81.8 | 122 |
| Primary incomplete | 32.4 | 664 | 58.2 | 14.5 | 7.5 | 17.5 | 2.3 | 78.2 | 215 |
| Primary complete | 37.7 | 293 | 53.7 | 18.0 | 12.9 | 13.9 | 1.5 | 77.5 | 110 |
| Secondary incomplete | 33.1 | 2,695 | 65.8 | 14.6 | 8.7 | 9.1 | 1.9 | 82.0 | 891 |
| Secondary complete | 41.7 | 1,328 | 65.8 | 16.7 | 7.6 | 7.6 | 2.3 | 91.7 | 554 |
| More than secondary | 59.8 | 652 | 68.0 | 16.7 | 5.6 | 7.1 | 2.5 | 92.2 | 390 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 22.4 | 1,163 | 76.0 | 11.3 | 5.0 | 5.3 | 2.3 | 74.6 | 261 |
| Second | 26.5 | 1,152 | 70.0 | 18.2 | 5.1 | 5.1 | 1.7 | 75.7 | 305 |
| Middle | 32.5 | 1,242 | 66.7 | 16.8 | 7.9 | 7.2 | 1.3 | 84.3 | 404 |
| Fourth | 42.7 | 1,258 | 60.0 | 13.5 | 10.5 | 12.7 | 3.3 | 87.6 | 537 |
| Highest | 59.1 | 1,311 | 60.2 | 15.9 | 8.9 | 12.7 | 2.4 | 92.2 | 775 |
| Total 15+ | 37.2 | 6,126 | 64.4 | 15.3 | 8.1 | 9.9 | 2.3 | 85.5 | 2,282 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
${ }^{2}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.5 Experience with a Pap smear exam by province
Percentage of women age 30-59 who have ever had a Pap smear, according to province, South Africa DHS 2016

|  | Percentage who <br> have ever had a <br> Pap smear | Number of <br> women |
| :--- | :---: | :---: |
| Province | 82.8 | 359 |
| Western Cape | 52.2 | 333 |
| Eastern Cape | 53.9 | 62 |
| Northern Cape | 51.1 | 161 |
| Free State | 47.7 | 565 |
| KwaZulu-Natal | 50.7 | 198 |
| North West | 43.8 | 748 |
| Gauteng | 56.0 | 212 |
| Mpumalanga | 43.3 | 279 |
| Limpopo | 52.2 | 2,918 |
| Total 30-59 |  |  |

Table 15.6 Problems in accessing health care
Percentage of women age 15 and older who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, South Africa DHS 2016

| Background characteristic | Problems in accessing health care |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Getting permission to go for treatment | Getting money for treatment | Distance to health facility | Not wanting to go alone | At least one problem accessing health care | Number of women |
| Age |  |  |  |  |  |  |
| 15-24 | 12.3 | 24.0 | 22.4 | 14.1 | 35.4 | 1,429 |
| 15-19 | 13.0 | 24.8 | 24.8 | 16.4 | 37.2 | 721 |
| 20-24 | 11.6 | 23.1 | 19.9 | 11.8 | 33.6 | 708 |
| 25-34 | 13.6 | 26.8 | 21.9 | 12.5 | 36.5 | 1,391 |
| 35-44 | 13.3 | 26.7 | 23.7 | 11.8 | 37.0 | 1,022 |
| 45-54 | 13.8 | 27.9 | 23.1 | 10.5 | 35.1 | 866 |
| 55-64 | 16.9 | 33.0 | 25.7 | 14.1 | 44.0 | 701 |
| 65+ | 23.6 | 37.0 | 35.1 | 28.2 | 48.7 | 719 |
| Population group |  |  |  |  |  |  |
| Black African | 16.2 | 30.5 | 26.9 | 15.4 | 41.3 | 5,170 |
| White | 2.6 | 5.5 | 3.2 | 2.6 | 8.4 | 320 |
| Coloured | 9.8 | 21.4 | 14.9 | 11.2 | 29.4 | 516 |
| Indian/Asian | 11.5 | 21.3 | 20.0 | 21.9 | 33.4 | 114 |
| Other | * | * | * | * | * | 6 |
| Number of living children ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 12.5 | 21.3 | 21.9 | 14.1 | 34.5 | 1,179 |
| 1-2 | 13.6 | 25.9 | 21.7 | 12.6 | 35.4 | 2,123 |
| 3-4 | 11.0 | 30.0 | 23.7 | 9.9 | 37.8 | 831 |
| $5+$ | 12.5 | 33.4 | 30.3 | 12.6 | 46.5 | 166 |
| Marital status |  |  |  |  |  |  |
| Never married | 16.2 | 27.8 | 24.4 | 15.3 | 38.0 | 3,085 |
| Married or living together | 11.9 | 25.5 | 21.5 | 12.3 | 35.3 | 2,180 |
| Divorced/separated/widowed | 17.3 | 36.2 | 32.2 | 17.5 | 47.8 | 860 |
| Employed last 12 months |  |  |  |  |  |  |
| Not employed | 16.8 | 31.3 | 26.9 | 16.5 | 41.3 | 4,512 |
| Employed for cash | 8.8 | 18.7 | 17.8 | 9.1 | 29.5 | 1,560 |
| Employed not for cash | 20.1 | 40.2 | 12.2 | 7.4 | 51.4 | 54 |
| Residence |  |  |  |  |  |  |
| Urban | 9.9 | 22.0 | 15.6 | 9.3 | 30.4 | 3,996 |
| Non-urban | 24.1 | 39.8 | 41.1 | 24.4 | 53.4 | 2,130 |
| Province |  |  |  |  |  |  |
| Western Cape | 7.2 | 16.0 | 11.3 | 8.6 | 23.3 | 703 |
| Eastern Cape | 14.2 | 37.0 | 34.2 | 19.7 | 49.4 | 730 |
| Northern Cape | 15.8 | 28.0 | 23.7 | 10.0 | 38.0 | 127 |
| Free State | 10.9 | 25.5 | 16.8 | 9.8 | 31.4 | 325 |
| KwaZulu-Natal | 23.9 | 27.8 | 29.7 | 24.6 | 39.6 | 1,191 |
| North West | 10.6 | 32.9 | 31.8 | 17.4 | 46.3 | 398 |
| Gauteng | 10.1 | 26.1 | 16.2 | 6.6 | 34.4 | 1,534 |
| Mpumalanga | 14.6 | 25.7 | 30.1 | 11.6 | 38.9 | 473 |
| Limpopo | 22.8 | 37.5 | 33.1 | 18.8 | 48.1 | 646 |
| Education |  |  |  |  |  |  |
| No education | 28.0 | 43.8 | 43.6 | 31.3 | 57.3 | 495 |
| Primary incomplete | 19.3 | 39.7 | 31.9 | 19.5 | 50.0 | 664 |
| Primary complete | 21.5 | 38.8 | 32.3 | 17.8 | 46.3 | 293 |
| Secondary incomplete | 14.9 | 30.4 | 25.6 | 14.5 | 40.7 | 2,695 |
| Secondary complete | 9.9 | 19.3 | 16.0 | 8.7 | 28.1 | 1,328 |
| More than secondary | 7.0 | 9.0 | 11.5 | 7.1 | 20.0 | 652 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 25.6 | 46.9 | 42.9 | 24.9 | 57.2 | 1,163 |
| Second | 18.8 | 37.1 | 33.0 | 18.3 | 50.1 | 1,152 |
| Middle | 12.5 | 28.5 | 23.1 | 11.0 | 39.5 | 1,242 |
| Fourth | 11.2 | 19.5 | 15.4 | 10.3 | 28.7 | 1,258 |
| Highest | 7.4 | 11.8 | 10.7 | 9.3 | 19.8 | 1,311 |
| Total 15+ | 14.8 | 28.2 | 24.5 | 14.5 | 38.4 | 6,126 |
| Total 15-49 | 12.8 | 25.8 | 22.5 | 12.5 | 36.1 | 4,300 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Restricted to women age 15-49

Table 15.7 Prescribed medications
Percentage of respondents age 15 and older who report taking prescribed medications daily or regularly, and among women and men who are taking prescribed medications regularly, the number of medications taken, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who report taking prescribed medications daily or regularly | Number of respondents | Among respondents who report taking prescribed medications daily or regularly, the number of medications taken |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 | 2-3 | 4 or more | Number of respondents |
| Age |  |  |  |  |  |  |
| 15-24 | 7.3 | 2,670 | 58.5 | 32.0 | 9.5 | 194 |
| 25-34 | 14.0 | 2,353 | 67.1 | 26.4 | 6.5 | 330 |
| 35-44 | 25.1 | 1,766 | 57.2 | 33.9 | 8.9 | 443 |
| 45-54 | 38.3 | 1,358 | 43.8 | 39.6 | 16.6 | 519 |
| 55-64 | 50.6 | 1,106 | 36.6 | 41.1 | 22.4 | 560 |
| 65+ | 58.9 | 1,083 | 27.1 | 47.5 | 25.4 | 638 |
| Population group |  |  |  |  |  |  |
| Black African | 23.0 | 8,704 | 47.9 | 38.5 | 13.6 | 1,999 |
| White | 54.5 | 577 | 34.4 | 39.0 | 26.6 | 315 |
| Coloured | 34.6 | 851 | 35.3 | 37.9 | 26.8 | 295 |
| Indian/Asian | 35.7 | 196 | (27.3) | (47.5) | (25.2) | 70 |
| Other | * | 9 | * | * |  | 5 |
| Sex |  |  |  |  |  |  |
| Male | 19.0 | 4,210 | 38.9 | 38.8 | 22.3 | 800 |
| Female | 30.7 | 6,126 | 46.8 | 38.6 | 14.6 | 1,883 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 27.1 | 6,237 | 41.1 | 39.1 | 19.8 | 1,688 |
| Employed for cash | 19.1 | 3,457 | 57.2 | 32.8 | 10.0 | 662 |
| Employed not for cash | 51.9 | 642 | 35.9 | 48.4 | 15.7 | 333 |
| Health insurance ${ }^{1}$ |  |  |  |  |  |  |
| Has insurance | 36.4 | 1,650 | 36.0 | 42.3 | 21.6 | 601 |
| Does not have insurance | 24.0 | 8,686 | 46.9 | 37.6 | 15.5 | 2,083 |
| Residence |  |  |  |  |  |  |
| Urban | 27.0 | 6,870 | 41.6 | 39.4 | 19.0 | 1,852 |
| Non-urban | 24.0 | 3,466 | 50.7 | 37.2 | 12.1 | 831 |
| Province |  |  |  |  |  |  |
| Western Cape | 37.7 | 1,178 | 33.9 | 40.9 | 25.2 | 445 |
| Eastern Cape | 25.9 | 1,223 | 50.3 | 36.8 | 12.9 | 317 |
| Northern Cape | 29.6 | 212 | 49.1 | 41.1 | 9.7 | 63 |
| Free State | 30.2 | 532 | 42.8 | 39.5 | 17.8 | 160 |
| KwaZulu-Natal | 26.9 | 1,874 | 46.3 | 37.5 | 16.2 | 503 |
| North West | 20.3 | 708 | 53.4 | 37.5 | 9.1 | 143 |
| Gauteng | 22.9 | 2,779 | 38.9 | 40.4 | 20.8 | 635 |
| Mpumalanga | 26.8 | 799 | 57.2 | 34.0 | 8.8 | 214 |
| Limpopo | 19.7 | 1,032 | 51.3 | 38.9 | 9.8 | 203 |
| Education |  |  |  |  |  |  |
| No education | 44.5 | 712 | 40.7 | 45.4 | 13.9 | 317 |
| Primary incomplete | 36.9 | 1,145 | 40.1 | 39.4 | 20.5 | 422 |
| Primary complete | 30.0 | 504 | 43.9 | 39.6 | 16.5 | 151 |
| Secondary incomplete | 22.2 | 4,625 | 47.7 | 36.7 | 15.6 | 1,026 |
| Secondary complete | 20.0 | 2,228 | 44.3 | 36.7 | 19.0 | 445 |
| More than secondary | 28.7 | 1,122 | 43.9 | 39.9 | 16.2 | 322 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 20.0 | 1,950 | 52.4 | 37.4 | 10.2 | 389 |
| Second | 22.4 | 1,991 | 54.4 | 36.3 | 9.3 | 446 |
| Middle | 23.4 | 2,136 | 48.9 | 31.6 | 19.4 | 499 |
| Fourth | 27.5 | 2,085 | 43.6 | 41.3 | 15.1 | 574 |
| Highest | 35.6 | 2,175 | 32.5 | 43.4 | 24.2 | 775 |
| Total 15+ | 26.0 | 10,336 | 44.4 | 38.7 | 16.9 | 2,684 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 15.8 Source of payment for prescribed medications
Among respondents age 15 and older who take prescribed medications regularly, the source of payment for most medications that are prescribed, and among respondents whose medications are paid for by a public clinic or hospital, percentage sent away from the clinic in the past 12 months because a medication was not in stock, according to background characteristics, South Africa DHS 2016

| Background characteristic | Source of payment for most medications that are prescribed |  |  |  |  |  | Among respondents whose medications are paid for by a public clinic or hospital |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Respondent | Family/ friend | Medical Aid | Public clinic or hospital | Other | Number of respondents | Percentage sent away from the clinic in the last 12 months because medication was not in stock | Number of respondents |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 7.4 | 18.8 | 7.0 | 66.8 | 0.0 | 194 | 10.8 | 129 |
| 25-34 | 11.6 | 2.9 | 7.4 | 77.8 | 0.2 | 330 | 11.9 | 257 |
| 35-44 | 9.9 | 0.8 | 14.9 | 74.4 | 0.0 | 443 | 13.1 | 329 |
| 45-54 | 13.9 | 0.6 | 16.9 | 67.5 | 1.1 | 519 | 22.6 | 351 |
| 55-64 | 10.5 | 0.4 | 17.3 | 71.1 | 0.7 | 560 | 23.6 | 398 |
| 65+ | 9.8 | 1.9 | 21.3 | 66.9 | 0.0 | 638 | 28.0 | 427 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 7.9 | 2.1 | 7.3 | 82.3 | 0.5 | 1,999 | 20.1 | 1,645 |
| White | 26.2 | 3.2 | 64.1 | 6.6 | 0.0 | 315 | * | 21 |
| Coloured | 10.3 | 2.7 | 20.0 | 66.7 | 0.4 | 295 | 18.3 | 196 |
| Indian/Asian | (26.4) | (7.6) | (27.1) | (38.8) | (0.0) | 70 | * | 27 |
| Other | * | * | * | * | * | 5 | * | 2 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 15.5 | 3.5 | 19.8 | 60.7 | 0.4 | 800 | 20.0 | 486 |
| Female | 8.8 | 2.1 | 14.1 | 74.6 | 0.4 | 1,883 | 20.2 | 1,405 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |
| Not employed | 7.7 | 2.9 | 11.3 | 78.0 | 0.1 | 1,688 | 21.6 | 1,317 |
| Employed for cash | 17.9 | 2.4 | 19.8 | 59.1 | 0.8 | 662 | 12.0 | 391 |
| Employed not for cash | 12.5 | 0.7 | 31.0 | 54.8 | 1.1 | 333 | 26.6 | 183 |
| Health insurance ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Has insurance | 16.4 | 2.3 | 69.0 | 11.2 | 1.1 | 601 | 22.3 | 67 |
| Does not have insurance | 9.2 | 2.5 | 0.5 | 87.5 | 0.2 | 2,083 | 20.0 | 1,823 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 12.6 | 2.6 | 20.5 | 63.9 | 0.4 | 1,852 | 19.1 | 1,183 |
| Non-urban | 6.9 | 2.4 | 5.3 | 85.1 | 0.2 | 831 | 21.8 | 708 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 13.7 | 3.4 | 26.9 | 55.8 | 0.2 | 445 | 15.9 | 248 |
| Eastern Cape | 13.2 | 1.3 | 15.1 | 70.4 | 0.0 | 317 | 19.5 | 223 |
| Northern Cape | 4.0 | 1.5 | 7.9 | 86.2 | 0.3 | 63 | 14.7 | 54 |
| Free State | 11.7 | 0.5 | 10.9 | 76.6 | 0.3 | 160 | 23.7 | 123 |
| KwaZulu-Natal | 7.0 | 2.1 | 11.1 | 79.1 | 0.6 | 503 | 17.4 | 398 |
| North West | 12.9 | 9.2 | 7.4 | 69.4 | 1.0 | 143 | 28.1 | 100 |
| Gauteng | 12.6 | 2.5 | 20.4 | 63.9 | 0.6 | 635 | 24.1 | 406 |
| Mpumalanga | 5.6 | 1.2 | 7.8 | 85.5 | 0.0 | 214 | 16.2 | 183 |
| Limpopo | 10.4 | 1.8 | 11.0 | 76.8 | 0.0 | 203 | 22.9 | 156 |
| Education |  |  |  |  |  |  |  |  |
| No education | 7.5 | 1.7 | 3.9 | 86.8 | 0.2 | 317 | 21.1 | 275 |
| Primary incomplete | 4.4 | 0.3 | 1.7 | 93.5 | 0.1 | 422 | 22.5 | 394 |
| Primary complete | 5.6 | 2.0 | 4.2 | 87.6 | 0.6 | 151 | 20.3 | 133 |
| Secondary incomplete | 7.4 | 2.2 | 8.9 | 81.4 | 0.0 | 1,026 | 19.4 | 835 |
| Secondary complete | 20.1 | 3.3 | 30.8 | 44.4 | 1.4 | 445 | 19.3 | 198 |
| More than secondary | 23.1 | 6.0 | 53.0 | 17.3 | 0.6 | 322 | 11.5 | 56 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 4.7 | 0.4 | 0.9 | 94.0 | 0.0 | 389 | 16.7 | 366 |
| Second | 4.7 | 3.0 | 1.2 | 91.0 | 0.2 | 446 | 17.4 | 406 |
| Middle | 8.1 | 1.7 | 2.9 | 87.2 | 0.1 | 499 | 22.1 | 435 |
| Fourth | 9.5 | 3.8 | 9.3 | 76.9 | 0.6 | 574 | 18.2 | 442 |
| Highest | 20.2 | 2.9 | 45.0 | 31.2 | 0.7 | 775 | 29.8 | 242 |
| Total 15+ | 10.8 | 2.5 | 15.8 | 70.5 | 0.4 | 2,684 | 20.1 | 1,891 |

[^25]Table 15.9 Use of prescribed medication for common chronic conditions
The number and percentage of men and women using prescribed medication regularly and the number and percentage of all regularly used prescribed medications for tuberculosis, asthma and chronic bronchitis, diabetes, high cholesterol or triglycerides, hypertension, heart or strokerelated conditions, arthritis, osteoporosis, epilepsy, HIV, pain, and psychiatric conditions, using Anatomical Therapeutic Chemical Classification (ATC) codes, South Africa DHS 2016

| Chronic condition | ATC code | Women |  | Men |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percentage | Number | Percentage | Number | Percentage |
| Tuberculosis | J04A | 14 | 0.3 | 7 | 0.2 | 21 | 0.3 |
| Asthma and chronic bronchitis | R03/R05 | 45 | 0.9 | 23 | 0.7 | 68 | 0.8 |
| Diabetes | A10 | 107 | 2.2 | 65 | 2.0 | 172 | 2.1 |
| High cholesterol or triglycerides | C10A | 85 | 1.7 | 62 | 2.0 | 147 | 1.8 |
| Hypertension | C02/C03/C07/C08/C09 | 706 | 14.4 | 298 | 9.4 | 1,004 | 12.5 |
| Heart and stroke-related conditions | B01AC/C01A/C01B/C01DA | 122 | 2.5 | 48 | 1.5 | 170 | 2.1 |
| Arthritis | M01A/M01B/M01C, M04 | 56 | 1.2 | 28 | 0.9 | 84 | 1.0 |
| Osteoporosis | A12, M05B | 14 | 0.3 | 4 | 0.1 | 17 | 0.2 |
| Epilepsy | N03 | 29 | 0.6 | 18 | 0.6 | 47 | 0.6 |
| HIV | J05AE/J05AF/J05AG/J05AR | 272 | 5.6 | 105 | 3.3 | 377 | 4.7 |
| Pain | M03, NO2 | 53 | 1.1 | 30 | 1.0 | 84 | 1.0 |
| Psychiatric conditions | N04AB/N05/N06 | 42 | 0.9 | 23 | 0.7 | 64 | 0.8 |
| Other chronic conditions |  | 60 | 1.2 | 16 | 0.5 | 75 | 0.9 |
| Undisclosed/refused |  | 144 | 2.9 | 116 | 3.7 | 260 | 3.2 |
| Any condition |  | 1,023 | 20.9 | 456 | 14.4 | 1,480 | 18.3 |
| Number of respondents |  | 4,899 |  | 3,168 |  | 8,067 |  |

## Key Findings

- Self-reported health status: $12 \%$ of women and $8 \%$ of men reported that they are in "poor" health. The proportion of respondents self-reporting poor health increases with age, from $4 \%$ among women and $3 \%$ among men age 15-24 to $28 \%$ among women and $21 \%$ among men age 65 and older.
- Self-reported prevalence of common chronic conditions: High blood pressure was the most common condition reported among both women ( $23 \%$ ) and men (13\%).
- Pain: Over a quarter of adults ( $29 \%$ of women and $26 \%$ of men) report being troubled by pain either all of the time or on and off; $20 \%$ of women and $16 \%$ of men report experiencing chronic pain. Chronic pain is most commonly experienced in either the arms, hands, hips, legs, or feet ( $46 \%$ of women and $40 \%$ of men) or the back ( $31 \%$ of women and $30 \%$ of men).
- Hypertension: The prevalence of hypertension (measured) has nearly doubled since 1998, from $25 \%$ to $46 \%$ among women and from $23 \%$ to $44 \%$ among men.
- Breathing difficulties: $22 \%$ of women and $27 \%$ of men report that they woke up with breathing difficulties and/or a coughing attack in the previous 12 months.
- Symptoms of asthma: The prevalence of asthma symptoms is $3 \%-4 \%$ among adults.
- Symptoms of chronic obstructive pulmonary disease (COPD): The prevalence of COPD symptoms among women and men is less than $2 \%$.
- Diabetes: $13 \%$ of women and $8 \%$ of men age 15 and older have an adjusted HbA1c level of $6.5 \%$ or above, indicating that they are diabetic. Very high proportions of women ( $64 \%$ ) and men ( $66 \%$ ) are pre-diabetic (adjusted HbA1c level of 5.7\%-6.4\%).
- Anaemia: Prevalence of anaemia is $31 \%$ among women and $17 \%$ among men.

Population-based information on nonfatal health outcomes such as disease prevalence estimates is scarce. The SADHS 1998 introduced an adult health module to fill this gap, particularly for noncommunicable diseases. These chronic conditions, including cardiovascular diseases, chronic respiratory diseases, cancers, and diabetes, are major contributors to mortality in South Africa, as well as ongoing morbidity.

This chapter presents prevalence estimates for common chronic conditions, respiratory conditions, and pain based on self-reported information among respondents age 15 and older who completed the adult health module. In addition, data on hypertension, anaemia, and diabetes prevalence are presented.

### 16.1 Self-Assessment of Health

Self-reported health status is considered to be a useful index of overall health. Respondents were asked to assess their health in broad categories: excellent, good, average, or poor. A majority of women reported that they were in excellent (15\%), good ( $39 \%$ ), or average ( $34 \%$ ) health; $12 \%$ reported that they were in poor health (Figure 16.1 and Table 16.1.1). Most men also self-reported excellent (15\%), good ( $50 \%$ ), or average ( $27 \%$ ) health; $8 \%$ reported that they were in poor health (Figure 16.1 and Table 16.1.2).

## Patterns by background characteristics

Figure 16.1 Self-reported health status
Percent distribution of self-reported health status among adults age 15+


- The proportion of respondents self-reporting poor health increases with age, from $4 \%$ among women and $3 \%$ among men age $15-24$ to $28 \%$ among women and $21 \%$ among men age 65 and older. Conversely, the proportion who report excellent health declines steadily with increasing age.
- Black African women (13\%) and men (9\%) are more likely to report poor health than women ( $3 \%-8 \%$ ) and men ( $2 \%-7 \%$ ) from other population groups.
- Reports of poor health are more common among women and men who are HIV positive ( $17 \%$ and $15 \%$, respectively) than among women and men who are HIV negative ( $12 \%$ and $9 \%$, respectively) and those whose HIV status is unknown because they were not tested in the SADHS ( $10 \%$ and $6 \%$, respectively).
- The percentage of women who report poor health varies from a low of $8 \%$ in Gauteng, North West, Northern Cape, and Western Cape to a high of $20 \%$ in Mpumalanga. The percentage of men who report poor health ranges from $3 \%$ in Western Cape to $14 \%$ in Eastern Cape.
- Self-reported poor health decreases with increasing education and wealth among both women and men, and the pattern according to education is especially striking (Figure 16.2).

Figure 16.2 Self-reported poor health by education
Percentage of adults age $15+$ with self-reported poor health status ■ Women ■ Men


### 16.2 Self-Reported Prevalence of Common Chronic Conditions

To ascertain the prevalence of chronic conditions, respondents were asked if a doctor, nurse, or other health worker had informed them that they had selected conditions. Those who had been diagnosed with a specific condition were asked whether they received treatment at the time of the diagnosis. Figure 16.3 presents the self-reported prevalence of nine chronic conditions. It should be noted that chronic conditions are frequently under-reported or incorrectly reported by patients, and therefore the results should be interpreted with caution.

High blood pressure is the most common chronic condition reported among both women and men ( $23 \%$ and $13 \%$, respectively) (Figure 16.3). Most but not all respondents ( $83 \%$ of women and $86 \%$ of men) reported that they received treatment for their high blood pressure at the time of diagnosis (Table 16.2). Other chronic conditions were reported by $6 \%$ or fewer respondents.

Figure 16.3 Chronic conditions based on self-reports


Comparison with the SADHS 1998:

- Self-reported high blood pressure has increased since 1998, from $19 \%$ to $23 \%$ among women and from $8 \%$ to $13 \%$ among men.
- Self-reported tuberculosis has increased from $2 \%$ to $5 \%$ among women and from $3 \%$ to $6 \%$ among men.
- Self-reported high cholesterol among women has increased from $1 \%$ to $4 \%$.
- Self-reported bronchitis, emphysema, or chronic obstructive pulmonary disease (COPD) has decreased from $5 \%$ to $2 \%$ among women and from $4 \%$ to $1 \%$ among men.


### 16.3 Experience with Pain

Limited data about the prevalence of chronic pain experienced by the general population tend to make the burden of pain invisible, despite the considerable impact on individuals, their families, health services, and the economy. Nonetheless, burden of disease estimates show that lower back pain, neck pain, and migraines are among the leading causes of years of life lost due to disability globally (GBD 2016). Goldberg and McGee (2011) advocate for the need to consider chronic pain not only as a medical issue, but from a public health perspective as well. They describe the multi-faceted nature of chronic pain, which often involves interactions among the physical, psychological, and social determinants of health, including mental and physical stress at work, socioeconomic status, rurality, occupational status, neighbourhood, race, and education.

The International Association for the Study of Pain (IASP) defines pain as "an unpleasant sensory and emotional experience associated with actual or potential tissue damage or described in terms of such damage" (IASP 1994). Furthermore, pain providing no obvious biological value that has persisted beyond the normal tissue healing process (usually taken to be 3 months) is classified as chronic pain.

### 16.3.1 Prevalence of Pain

The SADHS 2016 is the first national survey to gather information on pain for South Africa. Respondents were asked if they were troubled by pain or discomfort all of the time or on and off. Those who responded in the affirmative were asked if they had experienced the pain or discomfort for more than 3 months and the site of the pain or discomfort.

## Pain prevalence

Experience pain or discomfort all of the time or on and off

## Chronic pain prevalence

Experience pain or discomfort all of the time or on and off for more than 3 months
Sample: Women and men age 15+

Over a quarter of adults ( $29 \%$ of women and $26 \%$ of men) report being troubled by pain either all of the time or on and off; $20 \%$ of women and $16 \%$ of men report experiencing chronic pain (Table 16.3). Chronic pain is most commonly experienced in either the arms, hands, hips, legs, or feet ( $46 \%$ of women and $40 \%$ of men) or the back ( $31 \%$ of women and $30 \%$ of men) (Figure 16.4).

## Patterns by background characteristics

- As expected, the prevalence of chronic pain increases with age (Figure 16.5). One in 10 (11\%) respondents age 15-24 experience chronic pain, as compared with one in three ( $31 \%-36 \%$ ) respondents age 65 and older. The most common site of pain among the youngest women (age $15-24$ ) is the stomach or abdomen ( $41 \%$ ), while the most common site among the youngest men is the back ( $31 \%$ ). The most common sites of pain among those age 65 and older are the arms, hands, hips, legs, and/or feet ( $68 \%$ of women and $51 \%$ of men) (Table 16.4).
- The prevalence of chronic pain varies by province. The highest prevalence is in Northern Cape ( $27 \%$ ), followed by Eastern Cape ( $24 \%$ ) and Mpumalanga (24\%). The lowest prevalence is in Free State (12\%) and KwaZulu-Natal (13\%) (Table 16.3).
- The prevalence of pain decreases steadily with increasing education. The percentage of respondents experiencing pain or discomfort all of the time or on and off drops from $43 \%$ among those with no education to $21 \%$ among those with more than a secondary education. Similarly, the prevalence of chronic pain falls steadily from $31 \%$ among respondents with no education to $12 \%$ among those with more than a secondary education.


### 16.3.2 Tooth and Mouth Pain

## Tooth and mouth pain prevalence

Experience tooth or mouth pain or discomfort in the past 12 months
Sample: Women and men age 15+

Respondents were asked whether their teeth or mouth had caused pain or discomfort in the past 12 months and, if so, whether they got treatment the last time they had the problem and from whom.

The prevalence of tooth or mouth pain in the past 12 months was $11 \%$, and $57 \%$ of those with pain received treatment the last time they had a problem. Two-thirds of respondents who received treatment received it from a dentist, oral hygienist, or dental therapist (Table 16.5). The main reason cited for not seeking treatment was that the problem went away ( $57 \%$ of women and $69 \%$ of men). However, $11 \%$ of women and $7 \%$ of men who did not receive treatment reported that treatment was too expensive, and $7 \%$ of women and men reported that no service was available or that it was too far (Table 16.6).

## Patterns by background characteristics

- The prevalence of tooth or mouth pain ranges from $9 \%$ to $15 \%$ across all background characteristics shown in Table 16.5.
- People experiencing teeth or mouth pain are more likely to seek treatment if they have health insurance (76\%) than if they do not (53\%).
- White respondents ( $89 \%$ ) are more likely than Coloured (52\%) and Black African (54\%) respondents to receive treatment for their tooth or mouth pain.


### 16.4 Hypertension

Elevated blood pressure is a major risk factor for cardiovascular diseases such as stroke and ischaemic heart disease, which were the second and fourth leading causes of mortality, respectively, in South Africa in 2012 (Pillay-van Wyk et al. 2016). Hypertension frequently goes undiagnosed due to an absence of symptoms, particularly in the early stages of the disease (WHO 2013). Furthermore, it is often poorly controlled despite the availability of cost-effective and efficacious blood pressure lowering medications.

Among respondents who were interviewed with the adult health module, $82 \%$ of women and $77 \%$ of men had their blood pressure measured as part of the SADHS 2016. By province, this percentage ranged from $63 \%$ in Western Cape to $92 \%$ in North West among women and from $54 \%$ in Western Cape to $87 \%$ in North West among men (data not shown).

## Hypertension

Three blood pressure measurements were taken, and the average* of the second and third measurements was used to classify respondents according to internationally recommended categories (WHO 1999). Respondents were classified as having hypertension if they had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or were currently taking antihypertensive medication to control their blood pressure.

| Blood pressure category | Systolic <br> $(\mathbf{m m H g})$ |  | Diastolic <br> $(\mathbf{m m H g})$ |
| :--- | :---: | :---: | :---: |
| Optimal | $<120$ | AND | $<80$ |
| Normal | $120-129$ | OR | $80-84$ |
| High normal | $130-139$ | OR | $85-89$ |
| Level of hypertension |  |  |  |
| Grade 1, mildly elevated | $140-159$ | OR | $90-99$ |
| Grade 2, moderately elevated | $160-179$ | OR | $100-109$ |
| Grade 3, severely elevated | $180+$ | OR | $110+$ |

Note: Respondents whose blood pressure would fall in two different rows based on their systolic and diastolic levels are classified according to the highest blood pressure row they fall in on either of the two measures.
*If only two measurements were available, the second measurement was used to classify the respondent as having hypertension; if only one measurement was available, it was used to classify the respondent.

The SADHS 2016 measurements show that $46 \%$ of women and $44 \%$ of men have hypertension. These findings include $9 \%$ of women and $6 \%$ of men who have blood pressure in the normal range but are taking medication to control their blood pressure (Figure 16.6). The prevalence of combined moderate and severe hypertension (systolic $\geq 160 \mathrm{mmHg}$ or diastolic $\geq 100 \mathrm{mmHg}$ ) is substantial among both women ( $15 \%$ ) and men (14\%). Mean systolic and diastolic blood pressures are similar among women (systolic, 129 mmHg ; diastolic, 84 mmHg ) and men (systolic, 132 mmHg ; diastolic, 85 mmHg ) (Table 16.7.1 and Table 16.7.2).

The percentage of respondents who self-reported that they have been diagnosed with high blood pressure ( $23 \%$ of women and $13 \%$ of men) (Table 16.2) is much lower than the hypertension prevalence as measured in the survey. Among those with hypertension, only $20 \%$ of women and $13 \%$ of men have it under control (Table 16.7.1 and Table 16.7.2).

Comparison with the SADHS 1998: Since 1998, national mean systolic and diastolic blood pressure levels among women and men have risen by $4-11 \mathrm{mmHg}$ across all ages. Over the same period, the prevalence of hypertension has nearly doubled, from $25 \%$ to $46 \%$ among women and from $23 \%$ to $44 \%$ among men. It should be noted, however, that different instruments were used to measure blood pressure in the two surveys (Omron M1 in 1998 and Omron 1300 in 2016).

- The prevalence of hypertension rises steadily with increasing age, peaking at $84 \%$ among women and men age 65 and older (Figure 16.7).
- White women and men have the highest prevalence of hypertension ( $60 \%$ and $66 \%$, respectively), and Black African women and men have the lowest $(44 \%$ and $41 \%$, respectively).
- By province, the prevalence of hypertension among women is highest in Free State (54\%), while the prevalence among men is highest in Western Cape (59\%). The prevalence among both women (34\%) and men (29\%) is lowest in Limpopo.

Figure 16.7 Hypertension by age
Percentage of women and men with hypertension

■ Women ■ Men


- The prevalence of hypertension falls from a high of $76 \%$ among women and $66 \%$ among men with no education to a low of $35 \%$ among women with a secondary complete education and to $37 \%$ among men with a secondary incomplete education. There is no clear trend according to wealth, and the prevalence does not vary to the extent it does by education, especially among women.
- Data on the prevalence of hypertension by health status measures are presented in Table 16.8.1 and Table 16.8.2. Twenty-nine percent of women and $34 \%$ of men have hypertension but were never told by a doctor or a nurse that they had hypertension.

Tables 16.9.1 and 16.9.2 present information on blood pressure status and treatment. Twenty-two percent of women and $15 \%$ of men report that they are taking medication to lower their blood pressure. Overall, $9 \%$ of women are taking medication to control their blood pressure and have a normal blood pressure level, while $13 \%$ of women are taking medication to control their blood pressure but are still hypertensive. Among men, $6 \%$ are taking medication to control their blood pressure and have normal blood pressure, and $9 \%$ are taking medication to control their blood pressure but are still hypertensive. In total, among those with hypertension, $80 \%$ of women and $87 \%$ of men have uncontrolled hypertension. Among both women and men, levels of uncontrolled hypertension are high across all ages (Figure 16.8) but generally decrease with increasing household wealth.

### 16.5 Chronic Respiratory Disease

Chronic respiratory diseases are diseases of the airways and other structures of the lung that affect the essential functions of breathing. Chronic obstructive pulmonary disease (COPD), a preventable but incurable disorder of the airways, was a leading cause of global mortality in 2015 (WHO 2017). The main cause of COPD is tobacco smoking, but in South Africa additional risk factors include biomass fuel exposure/household pollution, tuberculosis, HIV, and mining exposure (Viviers and van-Zyl Smit 2015).

Asthma, which results from inflammation and narrowing of the air passages of the lungs and leads to attacks of breathlessness and wheezing, is also a common chronic respiratory disease.

A diagnosis of COPD is not straightforward, and the disease may be misdiagnosed as asthma. Furthermore, a correct clinical diagnosis requires the use of spirometry (Viviers and van-Zyl Smit 2015), which is generally not available in local clinic settings and was not undertaken in the SADHS 2016. Instead, a series of questions related to difficulties with breathing were used to identify the prevalence of COPD and asthma symptoms.

## Shortness of breath

- Respondents have less breath when exerting themselves compared with others their age.
- In the past 12 months, respondents have woken up with a feeling of tightness in their chest, an attack of shortness of breath, or an attack of coughing.


## Asthma symptoms

In the past 12 months, respondents have experienced wheezing and shortness of breath.

## COPD symptoms

Respondents have experienced coughing with phlegm on most days for $\geq 3$ months
Sample: Women and men age 15+

Seventeen percent of women and $14 \%$ of men report experiencing less breath compared with others their age. The proportions of women and men who woke up with breathing difficulties and/or a coughing attack in the 12 months before the survey are $22 \%$ and $27 \%$, respectively. The proportions of respondents with asthma symptoms are lower ( $3 \%$ among women and $4 \%$ among men). Less than $2 \%$ of women and men have symptoms of COPD (Figure 16.9).

Figure 16.9 Self-reported symptoms of respiratory disease
Percentage of women and men age $15+$

$$
\square \text { Women } \quad \text { Men }
$$



Comparison with the SADHS 1998: The prevalence of asthma symptoms and the prevalence of COPD symptoms were both estimated in 1998; however, the questions used to produce the estimates were not the same as in 2016. Still, the prevalence of asthma symptoms appears to have declined from $9 \%$ to $3 \%$ among women and from $7 \%$ to $4 \%$ among men. The prevalence of COPD symptoms continues to be low among both women ( $3 \%$ in 1998 and $2 \%$ in 2016) and men ( $2 \%$ in both years).

## Patterns by background characteristics

- The prevalence of all breathing difficulties generally increases with age (Tables 16.10.1 and 16.10.2).
- By population group, the percentage of respondents who report having less breath when exerting themselves compared with others their age is highest among Indian/Asian women ( $25 \%$ ) and men ( $27 \%$ ). Black African women ( $23 \%$ ) and men ( $29 \%$ ) are most likely to wake up with breathing difficulties and/or a coughing attack.
- The prevalence of COPD symptoms among men declines with increasing education, from $4 \%$ among those with no education or a primary incomplete education to $0.2 \%$ among those with more than a secondary education.


### 16.6 Diabetes

Diabetes mellitus is a metabolic disorder characterised by chronic hyperglycaemia (raised blood sugar levels) that occurs because of defects in insulin secretion, insulin action, or both (Expert Committee on the Diagnosis and Classification of Diabetes Mellitus 1997). Prolonged elevated blood sugar levels, found in poorly controlled diabetes, can result in damage to the nerves, eyes, kidneys, and heart. According to WHO (2011b), different tests can be used for diagnosing diabetes: a fasting plasma glucose test, a 2-hour glucose tolerance test, and the glycated haemoglobin (HbA1c) test. An advantage of HbA1c testing is that it does not require fasting. It should be noted that these tests do not necessarily result in the same individuals being classified as diabetic (ADA 2018).

## Diabetes measurement using adjusted HbA1c

An HbA1c value of $\geq 6.5 \%$ is used to classify an individual as having impaired glucose homeostasis, an indicator of diabetes (International Expert Committee 2009). An HbA1c value between $5.7 \%$ and $6.4 \%$ classifies an individual as being pre-diabetic, as defined by the American Diabetes Association (ADA 2010).

## Calibration

HbA1c is usually measured using venous or capillary blood samples. In the SADHS 2016, HbA1c was measured using dried blood spot (DBS) specimens. To adjust HbA1c measurements for this difference in specimen type, the following equation was used: venous $=($ DBS -0.228$) / 0.9866$. This equation was developed by Affan et al. 2014 and is based on a review and metaanalysis of immunoturbidimetry studies.

## Cautions:

- There is no validated calibration factor for adjusting HbA1c results based on DBS specimen test results.
- The calibration equation used for the SADHS was not developed specifically for the South African population.
- Some diabetics who have good glucose control could have HbA1c values below 6.5\%.

In the SADHS 2016, HbA1c testing of dried blood spot (DBS) specimens was used to estimate diabetes prevalence. Among respondents who were interviewed with the adult health module, $66 \%$ of women and $59 \%$ of men age 15 and older successfully had their HbAlc measured (data not shown). The methodology used to conduct HbA1c testing is described in Chapter 1.

Standard HbA1c measurement is usually based on blood samples rather than DBS specimens. To account for this difference in specimen type, a calibration factor was applied (see box above). However, the calibration factor used has not been validated, and therefore caution must be applied in interpreting the results of the HbA1c testing. Unadjusted HbA1c results are presented in Table 16.11.1 and Table 16.11.2 but are not described in the text.

Adjusted HbA1c results are presented in Table 16.12.1 and Table 16.12.2. Thirteen percent of women and $8 \%$ of men have an adjusted HbA 1 c level of $6.5 \%$ or above, indicating that they are diabetic. Most women ( $64 \%$ ) and men ( $66 \%$ ) have an adjusted $\mathrm{HbA1c}$ measurement between $5.7 \%$ and $6.4 \%$ and are therefore classified as pre-diabetic.

The prevalence of diabetes in women and men based on self-reports ( $5 \%$ and $4 \%$, respectively) presented in Table $\mathbf{1 6 . 2}$ is lower than the prevalence indicated by HbA1c testing. Among those who have never been
diagnosed with diabetes, $10 \%$ of women and $6 \%$ of men have adjusted HbA 1 c levels indicating that they are diabetic; $67 \%$ of both women and men who reported that they were never diagnosed with diabetes have adjusted HbA 1 c levels indicating that they are pre-diabetic. Thus, a large proportion of adults are either not aware of their condition or not aware that they are at risk for diabetes.

Patterns by background characteristics

- The prevalence of diabetes (adjusted HbA1c level $\geq 6.5 \%$ ) generally increases with age (Figure 16.10), reaching a peak of $30 \%$ among women age 65 or older and $23 \%$ among men age 55-64.
- The prevalence of diabetes (adjusted HbA1c level $\geq 6.5 \%$ ) increases with increasing body mass index (BMI) (Figure 16.11), peaking at $23 \%$ among obese women and $24 \%$ among obese men.
- Among women who reported that they were on diabetes medication, $85 \%$ have an adjusted HbA1c level of $6.5 \%$ or above, indicating that their diabetes is not controlled. Similar results are observed for men.
- By province, women in Eastern Cape have the highest prevalence (18\%) of diabetes (adjusted HbA1c level $\geq 6.5 \%$ ) and women in North West and Gauteng have the lowest (9\%). Among men, the prevalence is highest in Western Cape (13\%) and lowest in North West (4\%).
- Women with no education (29\%) have a higher prevalence of diabetes (adjusted $\mathrm{HbA1c}$ level $\geq 6.5 \%$ ) than women in the other education categories ( $9 \%-21 \%$ ). Among men, the prevalence of diabetes displays a U-shaped pattern: the prevalence is higher among men with no education or a primary incomplete education ( $11 \%-12 \%$ ) and those with more than a secondary education ( $16 \%$ ) than among men in the other education categories ( $6 \%-7 \%$ ).
- While there is no discernible pattern among women, the prevalence of diabetes (adjusted HbA1c level $\geq 6.5 \%$ ) generally increases with increasing wealth among men.


### 16.7 ANAEMIA

## Anaemia prevalence

Anaemia is defined as a blood haemoglobin level of less than $11.0 \mathrm{~g} / \mathrm{dl}$ in pregnant women, less than $12.0 \mathrm{~g} / \mathrm{dl}$ in non-pregnant women, and less than $13.0 \mathrm{~g} / \mathrm{dl}$ in men. Haemoglobin levels are adjusted for altitude in primary sampling units (PSUs) above 1,000 metres and for cigarette smoking among women and men.
Sample: Women and men age 15+

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. It may arise from iron deficiency, malaria, chronic infections, hookworm and other helminths, other nutritional deficiencies, and genetic conditions. Haemoglobin levels were measured for $72 \%$ of women and $66 \%$ of men who were
interviewed with the adult health module and were eligible for biomarkers. Observed haemoglobin levels, adjusted for altitude and smoking status, indicate that the prevalence of anaemia is $31 \%$ among women and $17 \%$ among men age 15 and older (Table 16.13.1 and Table 16.13.2). Most women who are anaemic are mildly anaemic.

## Patterns by background characteristics

- The proportion of women with any anaemia is higher in the reproductive age group than among older women; specifically, $33 \%$ of women age $15-49$ are anaemic, as compared with $25 \%$ of women age 55 or older.
- In contrast with women, older men are more likely to be anaemic than younger men; $26 \%$ of men age $45-54,22 \%$ of men age $55-64$, and $30 \%$ of men age 65 and older are anaemic, compared with $10 \%-15 \%$ of men age 15-44 (Figure 16.12).
- By population group, the prevalence of anaemia is highest among Black African women (32\%) and lowest among White women (11\%) (Table 16.13.1)
- Twenty-two percent of pregnant women are moderately anaemic.
- Anaemia prevalence generally declines with increasing education among men but not women.


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Table 16.1.1 Self-assessment of health: Women
Percent distribution of women age 15 and older by their self-assessment of their health status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Health status self-assessment |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Poor | Average | Good | Excellent |  |  |
| Age |  |  |  |  |  |  |
| 15-24 | 3.9 | 24.5 | 44.5 | 27.0 | 100.0 | 1,429 |
| 25-34 | 5.3 | 28.5 | 49.5 | 16.7 | 100.0 | 1,391 |
| 35-44 | 11.4 | 34.7 | 38.9 | 15.0 | 100.0 | 1,022 |
| 45-54 | 14.5 | 37.2 | 37.7 | 10.6 | 100.0 | 866 |
| 55-64 | 21.9 | 45.6 | 26.0 | 6.5 | 100.0 | 701 |
| 65+ | 27.7 | 43.4 | 24.3 | 4.6 | 100.0 | 719 |
| Population group |  |  |  |  |  |  |
| Black African | 12.8 | 34.0 | 37.8 | 15.4 | 100.0 | 5,170 |
| White | 3.4 | 22.9 | 54.1 | 19.6 | 100.0 | 320 |
| Coloured | 8.0 | 32.5 | 47.1 | 12.3 | 100.0 | 516 |
| Indian/Asian | 7.0 | 48.0 | 26.0 | 18.9 | 100.0 | 114 |
| Other | * | * | * | * | 100.0 | 6 |
| HIV status |  |  |  |  |  |  |
| HIV positive | 16.5 | 37.6 | 34.2 | 11.7 | 100.0 | 898 |
| HIV negative ${ }^{1}$ | 11.7 | 34.4 | 38.6 | 15.3 | 100.0 | 2,894 |
| Not tested in survey | 10.1 | 31.0 | 42.0 | 16.9 | 100.0 | 2,334 |
| Residence |  |  |  |  |  |  |
| Urban | 10.4 | 32.6 | 39.9 | 17.2 | 100.0 | 3,996 |
| Non-urban | 14.5 | 35.4 | 38.0 | 12.0 | 100.0 | 2,130 |
| Province |  |  |  |  |  |  |
| Western Cape | 8.2 | 29.0 | 49.5 | 13.3 | 100.0 | 703 |
| Eastern Cape | 19.1 | 37.0 | 32.9 | 11.0 | 100.0 | 730 |
| Northern Cape | 8.1 | 33.4 | 46.7 | 11.8 | 100.0 | 127 |
| Free State | 14.8 | 39.3 | 35.9 | 10.0 | 100.0 | 325 |
| KwaZulu-Natal | 14.3 | 37.8 | 26.6 | 21.4 | 100.0 | 1,191 |
| North West | 7.7 | 32.5 | 49.1 | 10.8 | 100.0 | 398 |
| Gauteng | 7.5 | 34.1 | 39.3 | 19.2 | 100.0 | 1,534 |
| Mpumalanga | 19.5 | 30.6 | 39.7 | 10.2 | 100.0 | 473 |
| Limpopo | 9.6 | 25.7 | 52.4 | 12.4 | 100.0 | 646 |
| Education |  |  |  |  |  |  |
| No education | 29.8 | 46.9 | 19.7 | 3.6 | 100.0 | 495 |
| Primary incomplete | 22.8 | 42.9 | 27.2 | 7.1 | 100.0 | 664 |
| Primary complete | 21.4 | 40.0 | 30.1 | 8.6 | 100.0 | 293 |
| Secondary incomplete | 10.3 | 32.8 | 40.3 | 16.6 | 100.0 | 2,695 |
| Secondary complete | 5.3 | 27.1 | 47.0 | 20.6 | 100.0 | 1,328 |
| More than secondary | 2.4 | 27.4 | 50.4 | 19.9 | 100.0 | 652 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 16.2 | 37.0 | 34.8 | 12.0 | 100.0 | 1,163 |
| Second | 13.9 | 34.1 | 40.2 | 11.9 | 100.0 | 1,152 |
| Middle | 12.4 | 34.0 | 38.7 | 14.9 | 100.0 | 1,242 |
| Fourth | 11.6 | 32.4 | 35.8 | 20.2 | 100.0 | 1,258 |
| Highest | 5.8 | 30.8 | 46.2 | 17.2 | 100.0 | 1,311 |
| Total 15+ | 11.8 | 33.6 | 39.2 | 15.4 | 100.0 | 6,126 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2

Table 16.1.2 Self-assessment of health: Men
Percent distribution of men age 15 and older by their self-assessment of their health status, according to background characteristics, South Africa DHS 2016

| Background characteristic | Health status self-assessment |  |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Poor | Average | Good | Excellent |  |  |
| Age |  |  |  |  |  |  |
| 15-24 | 3.1 | 21.0 | 52.2 | 23.7 | 100.0 | 1,241 |
| 25-34 | 4.3 | 23.5 | 56.8 | 15.4 | 100.0 | 962 |
| 35-44 | 4.2 | 27.9 | 57.0 | 10.9 | 100.0 | 744 |
| 45-54 | 14.6 | 28.3 | 46.0 | 11.1 | 100.0 | 492 |
| 55-64 | 18.4 | 36.9 | 36.8 | 7.8 | 100.0 | 406 |
| 65+ | 20.7 | 38.9 | 32.7 | 7.6 | 100.0 | 364 |
| Population group |  |  |  |  |  |  |
| Black African | 8.7 | 26.9 | 49.6 | 14.8 | 100.0 | 3,534 |
| White | 2.1 | 20.8 | 58.6 | 18.5 | 100.0 | 257 |
| Coloured | 3.4 | 27.5 | 54.3 | 14.8 | 100.0 | 335 |
| Indian/Asian | 6.8 | 34.5 | 36.8 | 21.9 | 100.0 | 82 |
| Other | * | * | * | * | 100.0 | 2 |
| HIV status |  |  |  |  |  |  |
| HIV positive | 15.3 | 33.4 | 45.0 | 6.3 | 100.0 | 311 |
| HIV negative ${ }^{1}$ | 8.8 | 26.1 | 50.2 | 14.9 | 100.0 | 2,017 |
| Not tested in survey | 5.8 | 26.3 | 51.1 | 16.8 | 100.0 | 1,882 |
| Residence |  |  |  |  |  |  |
| Urban | 6.5 | 27.0 | 53.1 | 13.4 | 100.0 | 2,874 |
| Non-urban | 11.0 | 26.2 | 44.0 | 18.8 | 100.0 | 1,336 |
| Province |  |  |  |  |  |  |
| Western Cape | 2.7 | 22.4 | 60.5 | 14.4 | 100.0 | 476 |
| Eastern Cape | 13.6 | 16.8 | 48.0 | 21.6 | 100.0 | 493 |
| Northern Cape | 8.2 | 35.9 | 44.6 | 11.3 | 100.0 | 84 |
| Free State | 5.0 | 41.5 | 44.9 | 8.6 | 100.0 | 207 |
| KwaZulu-Natal | 10.4 | 38.8 | 42.0 | 8.9 | 100.0 | 683 |
| North West | 5.9 | 33.6 | 46.4 | 14.1 | 100.0 | 310 |
| Gauteng | 6.2 | 25.9 | 56.4 | 11.6 | 100.0 | 1,245 |
| Mpumalanga | 7.7 | 12.2 | 60.0 | 20.2 | 100.0 | 326 |
| Limpopo | 11.8 | 23.0 | 34.1 | 31.1 | 100.0 | 386 |
| Education |  |  |  |  |  |  |
| No education | 24.5 | 35.7 | 33.7 | 6.1 | 100.0 | 217 |
| Primary incomplete | 19.2 | 36.0 | 37.8 | 7.0 | 100.0 | 481 |
| Primary complete | 7.6 | 30.4 | 52.6 | 9.4 | 100.0 | 212 |
| Secondary incomplete | 7.6 | 23.7 | 53.1 | 15.6 | 100.0 | 1,930 |
| Secondary complete | 1.7 | 28.4 | 52.7 | 17.2 | 100.0 | 900 |
| More than secondary | 2.0 | 20.8 | 53.1 | 24.1 | 100.0 | 470 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 13.2 | 24.5 | 52.7 | 9.7 | 100.0 | 787 |
| Second | 9.3 | 23.9 | 49.4 | 17.3 | 100.0 | 839 |
| Middle | 8.6 | 29.3 | 48.6 | 13.6 | 100.0 | 894 |
| Fourth | 6.0 | 27.1 | 50.8 | 16.1 | 100.0 | 827 |
| Highest | 3.0 | 28.6 | 49.8 | 18.6 | 100.0 | 864 |
| Total 15+ | 7.9 | 26.7 | 50.2 | 15.1 | 100.0 | 4,210 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2

Table 16.2 Diagnosis and treatment of various health conditions and diseases
Percentage of women and men age 15 and older who have been diagnosed with specific health conditions or diseases, and among those diagnosed with each condition, percentage who received treatment at the time of diagnosis, South Africa DHS 2016

| Health condition/disease | Women |  |  | Men |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage who have been told by a doctor, nurse, or health worker that they had the specific condition/ disease | Among those diagnosed with the condition, percentage who received treatment at time of diagnosis | Number of women with diagnosis | Percentage who have been told by a doctor, nurse, or health worker that they had the specific condition/ disease | Among those diagnosed with the condition, percentage who received treatment at time of diagnosis | Number of men with diagnosis |
| Tuberculosis | 5.4 | 94.0 | 330 | 5.5 | 95.0 | 233 |
| High blood pressure | 22.9 | 82.7 | 1,405 | 13.0 | 86.4 | 547 |
| Heart attack/angina/chest pain | 3.8 | 67.8 | 234 | 2.2 | 69.2 | 94 |
| Cancer | 1.2 | 90.8 | 75 | 1.0 | (57.9) | 41 |
| Stroke | 1.7 | 78.0 | 104 | 1.0 | (62.3) | 42 |
| High blood cholesterol/fats in blood | 4.1 | 79.9 | 250 | 2.9 | 73.8 | 123 |
| Diabetes/blood sugar | 5.1 | 86.9 | 310 | 3.7 | 89.9 | 154 |
| Chronic bronchitis, emphysema, or COPD | 1.7 | 76.9 | 103 | 1.1 | (74.9) | 47 |
| Asthma | 4.1 | 87.9 | 249 | 3.0 | 76.8 | 124 |
| More than one condition | 11.9 | na | na | 7.3 | na | na |
| Number of respondents | 6,126 | na | na | 4,210 | na | na |

Note: Figures in parentheses are based on 25-49 unweighted cases.
na $=$ Not applicable

Table 16.3 Experience with pain
Percentage of respondents age 15 and older who experience pain or discomfort all of the time or on and off, percentage who have had pain for more than 3 months, and among those who have had pain for more than 3 months, percentage who report specific sites where they experience pain, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage experiencing pain or discomfort all of the time or on and off | Percentage experiencing pain or discomfort all of the time or on and off for more than 3 months | Number of respondents | Among respondents who have had pain or discomfort for 3 or more months, percentage who report specific sites where they feel pain: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Back | Neck or shoulder | Head, face, or teeth (dental) | Stomach <br> or abdomen | Arms, hands, hips, legs, or feet | Chest | Other | Number of respondents |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 18.3 | 11.3 | 2,670 | 23.2 | 10.9 | 14.2 | 29.3 | 20.4 | 14.3 | 3.3 | 303 |
| 25-34 | 22.7 | 13.2 | 2,353 | 28.3 | 9.4 | 14.0 | 22.9 | 23.6 | 11.6 | 7.2 | 310 |
| 35-44 | 23.3 | 16.2 | 1,766 | 27.0 | 12.0 | 10.9 | 20.6 | 39.4 | 16.3 | 1.3 | 286 |
| 45-54 | 33.1 | 22.0 | 1,358 | 37.8 | 13.0 | 10.9 | 18.0 | 49.5 | 11.5 | 0.6 | 299 |
| 55-64 | 41.1 | 29.2 | 1,106 | 30.6 | 19.2 | 6.7 | 16.0 | 60.3 | 9.4 | 1.5 | 323 |
| 65+ | 46.5 | 34.4 | 1,083 | 35.1 | 26.1 | 8.4 | 10.9 | 63.2 | 13.5 | 2.0 | 373 |
| Population group |  |  |  |  |  |  |  |  |  |  |  |
| Black African | 28.3 | 18.5 | 8,704 | 29.4 | 15.6 | 11.3 | 20.4 | 41.4 | 13.0 | 2.8 | 1,613 |
| White | 22.0 | 15.3 | 577 | 45.5 | 8.5 | 5.5 | 8.7 | 49.1 | 7.2 | 1.2 | 88 |
| Coloured | 24.7 | 19.3 | 851 | 34.5 | 18.2 | 7.8 | 14.4 | 60.9 | 11.7 | 2.5 | 164 |
| Indian/Asian | 21.8 | 13.5 | 196 |  |  |  | * | * | * |  | 26 |
| Other |  | * | 9 | nc | nc | nc | nc | nc | nc | nc | 0 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 25.5 | 15.8 | 4,210 | 30.0 | 10.7 | 7.8 | 12.4 | 40.2 | 15.3 | 2.8 | 664 |
| Female | 28.8 | 20.1 | 6,126 | 30.8 | 18.1 | 12.3 | 22.9 | 45.5 | 11.3 | 2.6 | 1,229 |
| Health insurance ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Has insurance | 24.3 | 15.0 | 1,650 | 31.2 | 16.0 | 9.6 | 10.6 | 50.3 | 10.1 | 2.9 | 248 |
| Does not have insurance | 28.1 | 18.9 | 8,686 | 30.4 | 15.5 | 10.9 | 20.5 | 42.6 | 13.1 | 2.6 | 1,645 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |  |  |
| Not employed | 27.6 | 19.4 | 6,237 | 29.7 | 16.5 | 11.6 | 20.1 | 45.6 | 13.1 | 2.8 | 1,212 |
| Employed for cash | 24.4 | 14.4 | 3,457 | 32.1 | 12.0 | 10.1 | 19.1 | 35.4 | 14.4 | 3.3 | 498 |
| Employed not for cash | 42.5 | 28.5 | 642 | 31.6 | 19.0 | 7.0 | 14.1 | 53.2 | 5.7 | 0.3 | 183 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 26.0 | 17.3 | 6,870 | 31.7 | 14.5 | 10.1 | 18.2 | 41.6 | 12.5 | 2.6 | 1,186 |
| Non-urban | 30.4 | 20.4 | 3,466 | 28.6 | 17.3 | 11.7 | 21.0 | 47.0 | 13.1 | 2.8 | 707 |
| Province |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 23.2 | 16.2 | 1,178 | 32.2 | 16.4 | 13.1 | 11.3 | 57.5 | 11.6 | 1.4 | 191 |
| Eastern Cape | 36.8 | 24.2 | 1,223 | 28.5 | 18.7 | 14.3 | 12.5 | 52.9 | 9.5 | 5.1 | 296 |
| Northern Cape | 32.3 | 26.5 | 212 | 24.4 | 22.4 | 9.3 | 21.5 | 43.5 | 24.0 | 3.7 | 56 |
| Free State | 19.9 | 12.2 | 532 | 41.1 | 22.7 | 8.5 | 17.8 | 59.6 | 25.4 | 3.6 | 65 |
| KwaZulu-Natal | 20.3 | 13.1 | 1,874 | 32.5 | 11.7 | 12.5 | 19.7 | 52.4 | 10.2 | 1.7 | 246 |
| North West | 32.7 | 21.5 | 708 | 37.1 | 19.1 | 4.6 | 19.4 | 27.8 | 19.0 | 0.7 | 152 |
| Gauteng | 26.2 | 18.0 | 2,779 | 32.7 | 11.7 | 8.5 | 20.9 | 28.4 | 11.5 | 3.5 | 501 |
| Mpumalanga | 37.4 | 24.1 | 799 | 21.0 | 16.8 | 12.8 | 36.2 | 45.2 | 13.6 | 1.4 | 193 |
| Limpopo | 29.8 | 18.6 | 1,032 | 26.2 | 16.1 | 10.2 | 15.4 | 49.5 | 11.8 | 1.2 | 192 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 43.0 | 31.1 | 712 | 32.5 | 25.1 | 10.6 | 16.2 | 62.8 | 13.3 | 0.4 | 221 |
| Primary incomplete | 39.3 | 28.5 | 1,145 | 26.3 | 18.2 | 10.7 | 17.9 | 53.3 | 17.8 | 2.0 | 327 |
| Primary complete | 32.0 | 23.0 | 504 | 33.1 | 18.9 | 17.6 | 17.4 | 57.9 | 10.9 | 0.6 | 116 |
| Secondary incomplete | 25.4 | 16.5 | 4,625 | 27.9 | 16.1 | 10.5 | 21.2 | 39.3 | 11.7 | 3.7 | 765 |
| Secondary complete | 22.8 | 14.7 | 2,228 | 37.0 | 7.7 | 8.0 | 15.8 | 32.6 | 9.3 | 3.9 | 327 |
| More than secondary | 21.4 | 12.1 | 1,122 | 34.4 | 6.3 | 13.0 | 26.6 | 28.1 | 15.2 | 0.9 | 136 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 29.8 | 20.9 | 1,950 | 25.2 | 17.1 | 9.4 | 19.1 | 46.5 | 12.0 | 3.3 | 408 |
| Second | 30.2 | 18.9 | 1,991 | 32.3 | 13.6 | 10.8 | 22.0 | 41.7 | 13.3 | 1.9 | 376 |
| Middle | 28.1 | 18.6 | 2,136 | 27.5 | 14.1 | 9.9 | 22.9 | 40.3 | 14.8 | 4.7 | 397 |
| Fourth | 26.4 | 17.7 | 2,085 | 31.0 | 16.3 | 13.8 | 16.7 | 43.2 | 15.3 | 1.3 | 369 |
| Highest | 23.4 | 15.7 | 2,175 | 38.0 | 16.6 | 9.9 | 14.9 | 46.6 | 7.8 | 1.9 | 342 |
| Total 15+ | 27.5 | 18.3 | 10,336 | 30.5 | 15.5 | 10.7 | 19.2 | 43.6 | 12.7 | 2.6 | 1,893 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc = No cases
${ }^{1}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 16.4 Experience with pain by age and sex
Percentage of respondents age 15 and older who experience pain or discomfort all of the time or on and off, percentage who have had pain for more than 3 months, and among those who have had pain for more than 3 months, percentage who report specific sites they experience pain, according to age, South Africa DHS 2016

| Age | Percentage experiencing pain or discomfort all of the time or on and off | Percentage experiencing pain or discomfort all of the time or on and off for more than 3 months | Number of respondents | Among respondents who have had pain or discomfort for 3 or more months, percentage who report specific sites they feel pain: |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Back | Neck or shoulder | Head, face, or teeth (dental) | Stomach or abdomen | Arms, hands, hips, legs, or feet | Chest | Other | Number of respondents |
| WOMEN |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 17.7 | 11.4 | 1,429 | 17.1 | 10.7 | 17.0 | 40.6 | 18.4 | 12.2 | 3.7 | 163 |
| 25-34 | 22.7 | 13.8 | 1,391 | 33.0 | 10.2 | 14.4 | 32.9 | 14.6 | 9.4 | 7.0 | 192 |
| 35-44 | 24.0 | 17.4 | 1,022 | 22.6 | 16.4 | 13.4 | 26.3 | 40.2 | 13.7 | 1.2 | 178 |
| 45-54 | 35.5 | 24.7 | 866 | 36.7 | 16.2 | 13.0 | 16.5 | 52.9 | 12.9 | 0.4 | 214 |
| 55-64 | 43.2 | 31.6 | 701 | 32.1 | 21.3 | 8.1 | 18.6 | 62.4 | 8.3 | 1.6 | 222 |
| 65+ | 47.7 | 36.2 | 719 | 37.5 | 28.8 | 9.9 | 11.2 | 68.3 | 11.8 | 2.1 | 260 |
| Total 15+ | 28.8 | 20.1 | 6,126 | 30.8 | 18.1 | 12.3 | 22.9 | 45.5 | 11.3 | 2.6 | 1,229 |
| MEN |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 19.1 | 11.2 | 1,241 | 30.5 | 11.1 | 11.0 | 16.0 | 22.7 | 16.8 | 2.9 | 139 |
| 25-34 | 22.7 | 12.2 | 962 | 20.7 | 8.1 | 13.4 | 6.5 | 38.2 | 15.2 | 7.4 | 118 |
| 35-44 | 22.4 | 14.5 | 744 | 34.2 | 4.7 | 6.8 | 11.3 | 38.0 | 20.6 | 1.4 | 108 |
| 45-54 | 28.7 | 17.3 | 492 | 40.6 | 4.9 | 5.5 | 21.7 | 41.0 | 7.8 | 1.0 | 85 |
| 55-64 | 37.5 | 25.0 | 406 | 27.3 | 14.7 | 3.5 | 10.3 | 55.9 | 12.0 | 1.2 | 101 |
| 65+ | 43.9 | 30.8 | 364 | 29.5 | 19.6 | 4.8 | 10.1 | 51.3 | 17.4 | 2.0 | 112 |
| Total 15+ | 25.5 | 15.8 | 4,210 | 30.0 | 10.7 | 7.8 | 12.4 | 40.2 | 15.3 | 2.8 | 664 |

Table 16.5 Experience with tooth or mouth pain
Percentage of respondents age 15 and older whose teeth or mouth caused pain or discomfort in the past 12 months; among those who experienced tooth or mouth pain, percentage who got treatment the last time they had the problem; and among those who have had pain or discomfort in their teeth and mouth and got treatment, percentage who report specific persons they saw for treatment, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage experiencing pain or discomfort in their teeth or mouth during the past 12 months | Number of respondents | Among respondents who experienced tooth or mouth pain in the past 12 months |  | Among respondents who have had pain or discomfort in their teeth or mouth and got treatment, percentage who report specific persons who they saw for treatment: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Percentage who |  | Public sector |  | Private sector |  | Other source |  |  |
|  |  |  | treatment the last time they had problem | Number of respondents | Dentist/ oral hygienist/ dental therapist | Medical doctor/ nurse | Dentist/ oral hygienist/ dental therapist | Medical doctor/ nurse | Traditional health practitioner | Other | Number of respondents |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 10.2 | 2,670 | 50.4 | 273 | 45.0 | 21.5 | 20.3 | 9.1 | 1.5 | 5.0 | 138 |
| 25-34 | 10.2 | 2,353 | 49.1 | 240 | 54.7 | 12.8 | 24.9 | 6.1 | 0.3 | 1.2 | 118 |
| 35-44 | 10.0 | 1,766 | 65.5 | 176 | 44.2 | 25.9 | 21.0 | 7.0 | 0.0 | 5.6 | 116 |
| 45-54 | 11.7 | 1,358 | 65.5 | 159 | 39.8 | 35.6 | 17.2 | 5.8 | 0.6 | 1.8 | 104 |
| 55-64 | 13.2 | 1,106 | 46.0 | 146 | 36.5 | 29.3 | 26.1 | 6.6 | 0.0 | 6.7 | 67 |
| 65+ | 14.2 | 1,083 | 69.0 | 154 | 41.7 | 22.7 | 27.2 | 4.2 | 1.8 | 4.0 | 106 |
| Population group |  |  |  |  |  |  |  |  |  |  |  |
| Black African | 11.0 | 8,704 | 53.9 | 955 | 49.3 | 27.2 | 15.3 | 5.2 | 0.9 | 4.3 | 515 |
| White | 12.0 | 577 | 89.4 | 69 | (15.4) | (2.5) | (72.6) | (9.6) | (0.0) | (0.0) | 62 |
| Coloured | 11.3 | 851 | 51.6 | 96 | (39.4) | (21.2) | (24.1) | (12.2) | (0.0) | (5.7) | 50 |
| Indian/Asian | 13.9 | 196 | * | 27 | * | * | * | * | * | * | 22 |
| Other | * | 9 | nc | 0 | nc | nc | nc | nc | nc | nc | 0 |
| Sex |  |  |  |  |  |  |  |  |  |  |  |
| Male | 10.9 | 4,210 | 57.5 | 459 | 50.9 | 15.3 | 23.3 | 7.5 | 1.1 | 3.2 | 264 |
| Female | 11.3 | 6,126 | 55.8 | 689 | 39.9 | 30.0 | 21.9 | 6.0 | 0.5 | 4.4 | 385 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |  |  |
| Not employed | 10.2 | 6,237 | 53.8 | 634 | 47.7 | 24.7 | 18.2 | 5.3 | 1.3 | 3.9 | 341 |
| Employed for cash | 12.1 | 3,457 | 58.9 | 419 | 44.6 | 19.9 | 26.5 | 8.5 | 0.1 | 2.8 | 247 |
| Employed not for cash | 14.8 | 642 | 64.4 | 95 | 24.7 | 36.6 | 30.0 | 6.0 | 0.0 | 8.3 | 61 |
| Health insurance ${ }^{1}$ |  |  |  |  |  |  |  |  |  |  |  |
| Has insurance | 12.0 | 1,650 | 75.9 | 198 | 23.8 | 9.2 | 57.6 | 10.9 | 0.0 | 1.4 | 150 |
| Does not have insurance | 10.9 | 8,686 | 52.5 | 950 | 50.6 | 28.4 | 11.9 | 5.3 | 1.0 | 4.6 | 498 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 10.5 | 6,870 | 60.1 | 718 | 43.6 | 19.8 | 27.7 | 7.2 | 0.4 | 2.9 | 432 |
| Non-urban | 12.4 | 3,466 | 50.5 | 430 | 45.8 | 32.4 | 12.1 | 5.3 | 1.4 | 5.9 | 217 |
| Province |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 10.8 | 1,178 | 57.9 | 127 | (30.4) | (16.5) | (45.1) | (5.8) | (0.0) | (3.8) | 74 |
| Eastern Cape | 12.3 | 1,223 | 57.4 | 151 | 40.0 | 30.6 | 16.8 | 8.0 | 0.0 | 6.4 | 87 |
| Northern Cape | 14.1 | 212 | 46.9 | 30 | 33.7 | 31.8 | 18.8 | 14.0 | 0.0 | 1.7 | 14 |
| Free State | 10.3 | 532 | 53.1 | 55 | 52.1 | 16.0 | 15.1 | 10.7 | 0.0 | 9.3 | 29 |
| KwaZulu-Natal | 10.6 | 1,874 | 62.2 | 198 | 52.3 | 23.2 | 18.3 | 7.9 | 2.6 | 0.0 | 123 |
| North West | 14.0 | 708 | 42.8 | 99 | 39.9 | 41.3 | 13.7 | 2.5 | 0.0 | 5.2 | 42 |
| Gauteng | 9.3 | 2,779 | 62.8 | 258 | 53.4 | 17.2 | 26.8 | 3.6 | 0.2 | 0.0 | 162 |
| Mpumalanga | 11.2 | 799 | 55.6 | 89 | 45.1 | 24.9 | 15.6 | 5.4 | 2.6 | 7.6 | 50 |
| Limpopo | 13.7 | 1,032 | 48.3 | 141 | 30.3 | 31.7 | 16.9 | 10.7 | 0.0 | 11.6 | 68 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 14.3 | 712 | 50.9 | 102 | 51.1 | 31.6 | 5.0 | 4.1 | 3.6 | 5.7 | 52 |
| Primary incomplete | 13.6 | 1,145 | 54.2 | 156 | 60.2 | 29.3 | 6.1 | 2.9 | 0.0 | 6.2 | 85 |
| Primary complete | 12.0 | 504 | 53.8 | 60 | (58.2) | (40.0) | (0.0) | (2.9) | (1.8) | (0.0) | 32 |
| Secondary incomplete | 10.4 | 4,625 | 53.0 | 479 | 41.2 | 30.2 | 15.6 | 8.9 | 0.8 | 5.6 | 254 |
| Secondary complete | 10.0 | 2,228 | 64.7 | 222 | 44.9 | 11.7 | 37.2 | 5.1 | 0.2 | 0.8 | 144 |
| More than secondary | 11.5 | 1,122 | 63.9 | 129 | 27.2 | 9.7 | 54.6 | 8.9 | 0.0 | 1.9 | 82 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 11.6 | 1,950 | 50.9 | 226 | 54.3 | 29.6 | 4.4 | 3.1 | 2.9 | 7.0 | 115 |
| Second | 11.9 | 1,991 | 49.3 | 237 | 42.4 | 38.9 | 8.1 | 7.9 | 0.0 | 6.0 | 117 |
| Middle | 10.6 | 2,136 | 53.8 | 226 | 51.8 | 26.3 | 16.4 | 5.3 | 1.0 | 3.3 | 122 |
| Fourth | 10.6 | 2,085 | 60.2 | 220 | 55.4 | 22.4 | 16.9 | 3.9 | 0.0 | 2.4 | 132 |
| Highest | 11.0 | 2,175 | 68.0 | 239 | 24.2 | 8.9 | 54.8 | 11.2 | 0.2 | 1.8 | 163 |
| Total 15+ | 11.1 | 10,336 | 56.5 | 1,148 | 44.4 | 24.0 | 22.5 | 6.6 | 0.8 | 3.9 | 649 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases
${ }^{1}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

Table 16.6 Main reason treatment for tooth or mouth pain was not sought
Among women and men age 15 and older who experienced pain in their teeth or mouth in the past 12 months but did not seek treatment, percentage who cited specific reasons for not seeking treatment, South Africa DHS 2016

|  | Percentage of respondents <br> who cited specific reason |  |
| :--- | :---: | :---: |
| Reason treatment not sought | Women | Men |
| No oral health service available | 2.1 | 1.6 |
| Oral health services too far | 4.9 | 5.6 |
| Oral health services too expensive/ | 11.3 | 6.7 |
| could not afford | 57.0 | 68.8 |
| Problem went away | 24.7 | 17.4 |
| Other | 100.0 | 100.0 |
| Total | 305 | 195 |
| Number of respondents |  |  |

Table 16.7.1 Blood pressure status: Women
 and among women with hypertension, percentage with hypertension controlled, according to background characteristics, South Africa DHS 2016

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Average systolic blood pressure | Average diastolic blood pressure | Number of women | Among women with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  |  | Elevated |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \end{gathered}$ | $\begin{aligned} & \text { High normal } \\ & 130-139 / \\ & 85-89 \mathrm{mmHg} \end{aligned}$ | Mildly elevated (Grade 1) $140-159 /$ $90-99 \mathrm{mmHg}$ | Moderately elevated (Grade 2) 160-179/ 100-109 mmHg | $\begin{gathered} \text { Severely } \\ \text { elevated } \\ \text { (Grade 3) } \\ 180+/ \\ 110+\mathrm{mmHg} \\ \hline \end{gathered}$ | Total |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 17.0 | 54.6 | 18.9 | 12.3 | 10.7 | 2.7 | 0.8 | 100.0 | 2.8 | 116.4 | 77.5 | 1,080 | 16.6 |
| 25-34 | 26.6 | 40.9 | 22.1 | 15.5 | 16.7 | 3.3 | 1.5 | 100.0 | 5.1 | 118.7 | 81.3 | 1,063 | 19.3 |
| 35-44 | 42.7 | 22.9 | 19.9 | 21.1 | 26.0 | 5.9 | 4.2 | 100.0 | 6.7 | 126.6 | 86.5 | 788 | 15.6 |
| 45-54 | 62.5 | 14.9 | 15.2 | 19.6 | 27.0 | 12.2 | 11.0 | 100.0 | 12.2 | 137.2 | 89.5 | 681 | 19.6 |
| 55-64 | 77.6 | 12.3 | 11.7 | 15.6 | 29.8 | 18.0 | 12.7 | 100.0 | 17.2 | 143.3 | 89.7 | 557 | 22.1 |
| 65+ | 84.3 | 9.3 | 11.8 | 14.8 | 31.9 | 17.7 | 14.4 | 100.0 | 20.3 | 148.8 | 86.2 | 606 | 24.0 |
| Population group |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Black African | 43.8 | 31.4 | 17.7 | 15.8 | 21.0 | 8.1 | 6.0 | 100.0 | 8.7 | 128.0 | 83.8 | 4,163 | 19.8 |
| White | 60.4 | 24.7 | 12.8 | 17.8 | 30.4 | 7.6 | 6.7 | 100.0 | 15.7 | 133.4 | 83.6 | 194 | 26.0 |
| Coloured | 57.4 | 19.6 | 15.3 | 20.1 | 25.4 | 12.0 | 7.6 | 100.0 | 12.3 | 134.9 | 86.6 | 326 | 21.5 |
| Indian/Asian | 46.4 | 13.6 | 28.2 | 19.6 | 26.1 | 7.2 | 5.3 | 100.0 | 7.8 | 134.0 | 86.2 | 89 | 16.9 |
| Other | * | * | * | * | * | * | * | 100.0 | * | * | * | 3 | * |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not employed | 46.3 | 29.8 | 18.1 | 15.6 | 21.7 | 8.5 | 6.3 | 100.0 | 9.7 | 129.5 | 83.6 | 3,250 | 21.0 |
| Employed for cash | 35.0 | 35.8 | 17.4 | 17.4 | 20.3 | 5.8 | 3.3 | 100.0 | 5.6 | 123.1 | 83.7 | 1,102 | 15.9 |
| Employed not for cash | 66.7 | 16.5 | 13.4 | 17.9 | 26.1 | 14.4 | 11.7 | 100.0 | 14.5 | 138.7 | 88.9 | 422 | 21.8 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 46.5 | 29.0 | 17.6 | 16.9 | 22.8 | 7.9 | 5.8 | 100.0 | 10.0 | 128.8 | 84.4 | 2,938 | 21.5 |
| Non-urban | 43.9 | 31.6 | 17.4 | 15.1 | 20.1 | 9.2 | 6.6 | 100.0 | 7.9 | 128.9 | 83.6 | 1,837 | 18.1 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 51.6 | 25.9 | 13.7 | 20.2 | 23.5 | 11.3 | 5.4 | 100.0 | 11.4 | 132.6 | 84.6 | 433 | 22.1 |
| Eastern Cape | 49.8 | 26.4 | 14.0 | 17.1 | 21.4 | 12.3 | 8.8 | 100.0 | 7.3 | 133.4 | 85.6 | 641 | 14.7 |
| Northern Cape | 52.9 | 22.9 | 15.1 | 16.5 | 22.6 | 14.8 | 8.2 | 100.0 | 7.3 | 133.1 | 86.0 | 108 | 13.8 |
| Free State | 54.4 | 23.9 | 16.3 | 17.5 | 19.4 | 13.2 | 9.8 | 100.0 | 12.1 | 132.7 | 87.1 | 271 | 22.2 |
| KwaZulu-Natal | 48.1 | 20.9 | 20.6 | 18.4 | 26.1 | 7.8 | 6.2 | 100.0 | 7.9 | 130.6 | 85.7 | 960 | 16.5 |
| North West | 40.0 | 38.5 | 17.0 | 16.1 | 17.8 | 5.4 | 5.1 | 100.0 | 11.7 | 125.5 | 81.6 | 366 | 29.2 |
| Gauteng | 42.3 | 37.1 | 18.6 | 13.0 | 20.2 | 6.2 | 4.9 | 100.0 | 11.1 | 125.3 | 83.0 | 1,073 | 26.2 |
| Mpumalanga | 45.8 | 23.0 | 19.6 | 16.1 | 26.0 | 9.1 | 6.2 | 100.0 | 4.5 | 128.7 | 86.3 | 399 | 9.9 |
| Limpopo | 34.1 | 43.8 | 17.1 | 13.7 | 16.9 | 4.8 | 3.7 | 100.0 | 8.8 | 123.4 | 79.1 | 524 | 25.7 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 75.8 | 12.0 | 12.6 | 12.7 | 30.2 | 17.8 | 14.8 | 100.0 | 13.1 | 145.0 | 88.5 | 430 | 17.3 |
| Primary incomplete | 65.6 | 16.5 | 14.5 | 17.2 | 27.2 | 13.4 | 11.3 | 100.0 | 13.8 | 139.1 | 87.5 | 582 | 21.0 |
| Primary complete | 53.5 | 24.0 | 15.1 | 21.3 | 21.0 | 7.6 | 11.0 | 100.0 | 13.9 | 132.9 | 86.3 | 242 | 25.9 |
| Secondary incomplete | 38.9 | 34.1 | 18.1 | 16.6 | 19.7 | 7.1 | 4.4 | 100.0 | 7.6 | 125.8 | 83.1 | 2,092 | 19.6 |
| Secondary complete | 35.2 | 37.4 | 20.1 | 14.8 | 19.5 | 4.8 | 3.3 | 100.0 | 7.5 | 123.0 | 82.2 | 974 | 21.4 |
| More than secondary | 39.2 | 32.8 | 19.2 | 16.8 | 21.7 | 7.5 | 2.0 | 100.0 | 8.0 | 124.7 | 82.7 | 454 | 20.4 |

Table 16.7.1-Continued

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Average systolic blood pressure | Average diastolic blood pressure | Number of women | Among women with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  | Elevated |  |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{gathered} \text { High normal } \\ 130-139 / \\ 85-89 \mathrm{mmHg} \end{gathered}$ | Mildly elevated (Grade 1) $140-159 /$ $90-99 \mathrm{mmHg}$ | Moderately elevated (Grade 2) 160-179/ 100-109 mmHg | $\begin{gathered} \text { Severely } \\ \text { elevated } \\ \text { (Grade 3) } \\ 180+/ \\ 110+\mathrm{mmHg} \\ \hline \end{gathered}$ | Total |  |  |  |  |  |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 42.3 | 30.0 | 16.1 | 17.7 | 21.7 | 8.1 | 6.4 | 100.0 | 6.1 | 128.1 | 84.8 | 988 | 14.4 |
| Second | 41.1 | 33.5 | 18.9 | 13.8 | 20.7 | 7.5 | 5.6 | 100.0 | 7.2 | 127.4 | 83.0 | 923 | 17.6 |
| Middle | 46.1 | 29.8 | 18.8 | 14.4 | 21.2 | 8.8 | 6.9 | 100.0 | 9.1 | 129.1 | 84.6 | 1,028 | 19.8 |
| Fourth | 49.6 | 27.0 | 15.7 | 18.8 | 22.4 | 9.7 | 6.4 | 100.0 | 11.1 | 130.4 | 84.8 | 954 | 22.3 |
| Highest | 48.6 | 29.8 | 18.1 | 16.3 | 23.0 | 7.8 | 4.9 | 100.0 | 12.8 | 129.1 | 83.0 | 881 | 26.3 |
| Total 15+ | 45.5 | 30.0 | 17.5 | 16.2 | 21.8 | 8.4 | 6.1 | 100.0 | 9.2 | 128.8 | 84.1 | 4,774 | 20.2 |


 ${ }_{2}^{2}$ Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension
Table 16.7.2 Blood pressure status: Men
 rding to background characteristics, South Africa DHS 2016

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Average systolic blood pressure | Average diastolic blood pressure | Number of men | Among men with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  |  | Elevated |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \end{gathered}$ | $\begin{gathered} \text { High normal } \\ 130-139 / \\ 85-89 \mathrm{mmHg} \\ \hline \end{gathered}$ | Mildly elevated (Grade 1) $140-159 /$ $90-99 \mathrm{mmHg}$ | Moderately elevated (Grade 2) 160-179/ 100-109 mmHg | Severely elevated (Grade 3) 180+/ $110+\mathrm{mmHg}$ | Total |  |  |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 20.1 | 35.2 | 28.9 | 18.6 | 13.5 | 3.0 | 0.8 | 100.0 | 2.9 | 123.6 | 77.0 | 918 | 14.6 |
| 25-34 | 33.2 | 18.7 | 23.3 | 26.8 | 23.7 | 5.5 | 2.0 | 100.0 | 2.0 | 128.2 | 84.3 | 690 | 5.9 |
| 35-44 | 50.8 | 16.8 | 17.1 | 17.8 | 27.8 | 13.1 | 7.4 | 100.0 | 2.5 | 131.7 | 89.3 | 528 | 4.9 |
| 45-54 | 55.4 | 10.4 | 16.6 | 24.9 | 28.6 | 13.0 | 6.6 | 100.0 | 7.3 | 135.4 | 89.9 | 334 | 13.2 |
| 55-64 | 73.6 | 10.2 | 9.4 | 19.1 | 36.5 | 14.7 | 10.1 | 100.0 | 12.4 | 141.8 | 90.5 | 318 | 16.8 |
| 65+ | 83.7 | 7.0 | 10.2 | 16.9 | 33.5 | 18.0 | 14.3 | 100.0 | 17.9 | 149.0 | 88.1 | 293 | 21.4 |
| Population group |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Black African | 40.9 | 21.7 | 21.2 | 21.0 | 22.9 | 8.6 | 4.7 | 100.0 | 4.8 | 130.7 | 84.2 | 2,638 | 11.7 |
| White | 65.9 | 8.7 | 18.1 | 19.7 | 36.0 | 14.4 | 3.2 | 100.0 | 12.3 | 136.4 | 86.0 | 176 | 18.7 |
| Coloured | 57.8 | 16.9 | 15.4 | 18.7 | 28.4 | 9.3 | 11.3 | 100.0 | 8.8 | 137.5 | 87.6 | 207 | 15.2 |
| Indian/Asian | (52.6) | (10.0) | (16.0) | (27.5) | (30.6) | (9.2) | (6.7) | 100.0 | (6.1) | (136.1) | (87.8) | 60 | (11.6) |
| Other | nc | nc | nc | nc | nc | nc | nc | nc | nc | nc | nc | 0 | nc |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Not employed | 42.5 | 24.1 | 20.3 | 19.7 | 21.9 | 8.6 | 5.4 | 100.0 | 6.6 | 131.5 | 83.1 | 1,650 | 15.5 |
| Employed for cash | 43.1 | 16.6 | 21.4 | 22.4 | 26.1 | 9.3 | 4.3 | 100.0 | 3.4 | 130.9 | 86.1 | 1,347 | 7.9 |
| Employed not for cash | 78.0 | 10.1 | 10.5 | 20.0 | 35.9 | 13.1 | 10.4 | 100.0 | 18.7 | 143.4 | 88.8 | 84 | 23.9 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 45.4 | 18.7 | 20.1 | 21.8 | 24.8 | 9.5 | 5.1 | 100.0 | 6.0 | 131.8 | 85.4 | 2,002 | 13.2 |
| Non-urban | 40.5 | 23.6 | 21.3 | 19.2 | 22.9 | 8.1 | 5.0 | 100.0 | 4.6 | 131.2 | 83.1 | 1,080 | 11.3 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 58.7 | 17.6 | 15.6 | 16.0 | 36.0 | 8.4 | 6.5 | 100.0 | 7.8 | 135.5 | 85.6 | 259 | 13.3 |
| Eastern Cape | 47.3 | 16.1 | 20.4 | 21.1 | 27.3 | 8.7 | 6.3 | 100.0 | 4.9 | 134.0 | 84.9 | 414 | 10.4 |
| Northern Cape | 52.3 | 16.2 | 16.7 | 21.3 | 27.3 | 12.5 | 5.9 | 100.0 | 6.5 | 135.4 | 85.7 | 68 | 12.5 |
| Free State | 48.2 | 17.3 | 20.1 | 21.0 | 25.3 | 11.0 | 5.3 | 100.0 | 6.6 | 133.5 | 85.9 | 178 | 13.6 |
| KwaZulu-Natal | 47.5 | 18.4 | 20.4 | 19.2 | 26.4 | 9.7 | 5.9 | 100.0 | 5.5 | 131.6 | 85.5 | 532 | 11.5 |
| North West | 37.0 | 26.5 | 19.8 | 24.4 | 19.5 | 7.1 | 2.8 | 100.0 | 7.6 | 129.3 | 81.8 | 271 | 20.6 |
| Gauteng | 39.5 | 20.5 | 22.1 | 23.0 | 19.5 | 9.9 | 5.0 | 100.0 | 5.1 | 130.4 | 85.3 | 830 | 12.9 |
| Mpumalanga | 46.1 | 16.6 | 20.0 | 20.5 | 28.4 | 10.6 | 3.9 | 100.0 | 3.2 | 132.8 | 86.3 | 260 | 7.0 |
| Limpopo | 28.8 | 34.1 | 23.5 | 18.6 | 16.6 | 4.0 | 3.3 | 100.0 | 4.9 | 126.6 | 79.0 | 269 | 17.1 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | 65.6 | 13.8 | 9.3 | 22.5 | 26.2 | 16.2 | 11.9 | 100.0 | 11.3 | 140.7 | 88.6 | 170 | 17.2 |
| Primary incomplete | 56.6 | 17.1 | 16.8 | 19.5 | 25.7 | 11.7 | 9.2 | 100.0 | 10.0 | 136.8 | 87.2 | 401 | 17.6 |
| Primary complete | 40.9 | 20.2 | 20.4 | 21.5 | 18.5 | 13.5 | 5.9 | 100.0 | 3.0 | 133.4 | 85.0 | 166 | 7.2 |
| Secondary incomplete | 36.9 | 24.0 | 22.6 | 21.1 | 21.7 | 7.0 | 3.6 | 100.0 | 4.6 | 129.2 | 82.8 | 1,420 | 12.6 |
| Secondary complete | 41.8 | 20.1 | 20.3 | 21.1 | 26.0 | 9.2 | 3.3 | 100.0 | 3.2 | 129.8 | 84.9 | 614 | 7.7 |
| More than secondary | 51.5 | 12.7 | 22.5 | 19.8 | 31.6 | 8.0 | 5.4 | 100.0 | 6.5 | 133.3 | 86.4 | 310 | 12.7 |

Table 16.7.2-Continued

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Average systolic blood pressure | Average diastolic blood pressure | Number of men | Among men with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  | Elevated |  |  |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \\ \hline \end{gathered}$ | High normal 130-139/ $85-89 \mathrm{mmHg}$ | Mildly elevated (Grade 1) 140-159/ $90-99 \mathrm{mmHg}$ | Moderately elevated (Grade 2) 160-179/ 100-109 mmHg | Severely elevated (Grade 3) 180+/ $110+\mathrm{mmHg}$ | Total |  |  |  |  |  |
| Wealth quintil |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 43.3 | 22.1 | 16.6 | 21.5 | 22.5 | 11.1 | 6.3 | 100.0 | 3.5 | 132.7 | 85.4 | 625 | 8.1 |
| Second | 38.8 | 21.9 | 21.2 | 22.6 | 22.8 | 6.8 | 4.6 | 100.0 | 4.6 | 130.3 | 83.4 | 645 | 11.7 |
| Middle | 39.9 | 19.8 | 24.7 | 21.6 | 22.2 | 8.4 | 3.4 | 100.0 | 6.0 | 129.7 | 83.6 | 667 | 15.1 |
| Fourth | 42.9 | 22.8 | 20.9 | 18.0 | 22.9 | 10.0 | 5.3 | 100.0 | 4.7 | 131.2 | 84.9 | 590 | 10.9 |
| Highest | 55.3 | 14.9 | 18.7 | 20.4 | 31.2 | 8.9 | 6.0 | 100.0 | 9.2 | 134.4 | 86.0 | 556 | 16.6 |
| Total 15+ | 43.7 | 20.4 | 20.5 | 20.9 | 24.1 | 9.0 | 5.1 | 100.0 | 5.5 | 131.6 | 84.6 | 3,082 | 12.6 |

 population at the time of the survey.
Table 16.8.1 Blood pressure status by health status measures: Women
 with hypertension controlled, according to health status measures, South Africa DHS 2016

| Health status measure | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Number of women | Among women with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  | Elevated |  |  |  |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { High normal } \\ & 130-139 / \\ & 85-89 \mathrm{mmHg} \end{aligned}$ | Mildly elevated (Grade 1) $140-159 /$ $90-99 \mathrm{mmHg}$ | $\begin{gathered} \text { Moderately } \\ \text { elevated } \\ \text { (Grade 2) } \\ 160-179 / \\ 100-109 \mathrm{mmHg} \\ \hline \end{gathered}$ | Severely elevated (Grade 3) 180+/ $110+\mathrm{mmHg}$ | Total |  |  |  |
| Use of tobacco products |  |  |  |  |  |  |  |  |  |  |  |
| Uses tobacco products | 59.1 | 20.0 | 17.4 | 16.1 | 25.7 | 9.0 | 11.8 | 100.0 | 12.7 | 491 | 21.4 |
| Does not use tobacco products | 43.9 | 31.1 | 17.5 | 16.2 | 21.3 | 8.3 | 5.4 | 100.0 | 8.8 | 4,284 | 20.0 |
| Use of alcohol |  |  |  |  |  |  |  |  |  |  |  |
| Drank alcohol in last |  |  |  |  |  |  |  |  |  |  |  |
| 12 months | 41.7 | 33.7 | 16.7 | 15.0 | 20.1 | 7.8 | 6.7 | 100.0 | 7.1 | 835 | 17.0 |
| Drank alcohol in last 7 days | 45.7 | 29.4 | 15.6 | 16.5 | 20.4 | 9.6 | 8.5 | 100.0 | 7.3 | 444 | 15.9 |
| Did not drink alcohol in last 7 days | 37.2 | 38.5 | 17.9 | 13.3 | 19.8 | 5.7 | 4.7 | 100.0 | 6.9 | 391 | 18.5 |
| Did not drink alcohol in last 12 months | 51.4 | 29.0 | 15.7 | 14.6 | 23.9 | 8.6 | 8.1 | 100.0 | 10.8 | 336 | 21.0 |
| Has never drunk alcohol | 45.8 | 29.2 | 17.9 | 16.6 | 22.0 | 8.5 | 5.7 | 100.0 | 9.5 | 3,603 | 20.8 |
| Consumption of salty snacks |  |  |  |  |  |  |  |  |  |  |  |
| Every day | 32.0 | 44.8 | 16.2 | 12.8 | 16.1 | 6.3 | 3.8 | 100.0 | 5.9 | 654 | 18.4 |
| At least once a week | 38.1 | 32.8 | 18.6 | 17.1 | 19.1 | 8.2 | 4.2 | 100.0 | 6.6 | 1,410 | 17.2 |
| Occasionally | 49.9 | 26.1 | 18.0 | 16.8 | 24.4 | 7.6 | 7.0 | 100.0 | 10.9 | 2,293 | 21.7 |
| Never | 66.9 | 18.7 | 13.4 | 15.1 | 25.4 | 16.4 | 10.9 | 100.0 | 14.2 | 417 | 21.2 |
| History of hypertension |  |  |  |  |  |  |  |  |  |  |  |
| Told had high blood pressure by a doctor or a nurse | 86.8 | 13.4 | 12.2 | 15.6 | 29.0 | 15.8 | 14.1 | 100.0 | 28.0 | 1,368 | 32.2 |
| Never told had high blood pressure | 28.9 | 36.7 | 19.7 | 16.4 | 18.9 | 5.5 | 2.9 | 100.0 | 1.6 | 3,407 | 5.7 |
| Nutritional status |  |  |  |  |  |  |  |  |  |  |  |
| Underweight ( $\mathrm{BMI}<18.5$ ) | 32.8 | 46.6 | 15.5 | 12.1 | 18.6 | 4.9 | 2.3 | 100.0 | 7.1 | 116 | 21.6 |
| Normal (BMI 18.5-24.9) | 33.1 | 41.4 | 18.0 | 13.9 | 16.5 | 5.6 | 4.7 | 100.0 | 6.3 | 1,349 | 19.1 |
| Overweight (BMI 25.0-29.9) | 42.7 | 31.8 | 17.4 | 14.9 | 19.9 | 9.5 | 6.6 | 100.0 | 6.7 | 1,210 | 15.8 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 58.4 | 18.0 | 17.1 | 19.5 | 27.7 | 10.1 | 7.5 | 100.0 | 13.0 | 1,871 | 22.2 |
| Not eligible (pregnant or recent birth) | 24.0 | 52.4 | 18.8 | 12.2 | 11.0 | 4.3 | 1.3 | 100.0 | 7.5 | 169 | 31.1 |
| Total 15+ | 45.5 | 30.0 | 17.5 | 16.2 | 21.8 | 8.4 | 6.1 | 100.0 | 9.2 | 4,774 | 20.2 |

Note: Total includes 59 women for whom nutritional status information was out of range or missing.

 population at the time of the survey.
${ }^{2}$ Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension
Table 16.8.2 Blood pressure status by health status measures: Men
 according to health status measures, South Africa DHS 2016

| Health status measure | Prevalence of hypertension ${ }^{1}$ | Classification of blood pressure |  |  |  |  |  |  | Normal blood pressure and taking medication | Number of men | Among men with hypertension, percentage with hypertension controlled ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Normal |  |  | Elevated |  |  | Total |  |  |  |
|  |  | $\begin{gathered} \text { Optimal } \\ <120 / \\ <80 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{gathered} \text { Normal } \\ 120-129 / \\ 80-84 \mathrm{mmHg} \\ \hline \end{gathered}$ | $\begin{aligned} & \text { High normal } \\ & 130-139 / \\ & 85-89 \mathrm{mmHg} \\ & \hline \end{aligned}$ | Mildly elevated (Grade 1) $140-159 /$ $90-99 \mathrm{mmHg}$ | $\begin{gathered} \hline \text { Moderately } \\ \text { elevated } \\ \text { (Grade 2) } \\ 160-179 / \\ 100-109 \mathrm{mmHg} \\ \hline \end{gathered}$ | Severely elevated (Grade 3) 180+1 $110+\mathrm{mmHg}$ |  |  |  |  |
| Use of tobacco products |  |  |  |  |  |  |  |  |  |  |  |
| Uses tobacco products | 45.4 | 18.6 | 18.0 | 23.7 | 22.8 | 10.0 | 6.9 | 100.0 | 5.8 | 961 | 12.8 |
| Does not use tobacco products | 42.9 | 21.2 | 21.7 | 19.6 | 24.8 | 8.5 | 4.2 | 100.0 | 5.4 | 2,120 | 12.6 |
| Use of alcohol |  |  |  |  |  |  |  |  |  |  |  |
| Drank alcohol in last |  |  |  |  |  |  |  |  |  |  |  |
| 12 months | 43.5 | 18.3 | 19.8 | 23.0 | 23.3 | 9.5 | 6.0 | 100.0 | 4.6 | 1,693 | 10.7 |
| Drank alcohol in last 7 days | 49.9 | 14.9 | 17.8 | 22.7 | 25.5 | 11.7 | 7.5 | 100.0 | 5.2 | 1,157 | 10.5 |
| Did not drink alcohol in last 7 days | 29.8 | 25.8 | 24.1 | 23.7 | 18.7 | 4.9 | 2.8 | 100.0 | 3.4 | 536 | 11.3 |
| Did not drink alcohol in last |  |  |  |  |  |  |  |  |  |  |  |
| 12 months | 41.8 | 26.9 | 18.8 | 19.5 | 22.6 | 8.6 | 3.5 | 100.0 | 7.0 | 240 | 16.8 |
| Has never drunk alcohol | 44.4 | 22.1 | 21.9 | 18.0 | 25.7 | 8.3 | 4.0 | 100.0 | 6.5 | 1,149 | 14.6 |
| Consumption of salty snacks |  |  |  |  |  |  |  |  |  |  |  |
| Every day | 26.7 | 32.7 | 25.6 | 18.1 | 18.0 | 4.7 | 0.9 | 100.0 | 3.1 | 318 | 11.8 |
| At least once a week | 38.6 | 24.4 | 21.8 | 20.0 | 23.8 | 8.1 | 1.9 | 100.0 | 4.8 | 794 | 12.5 |
| Occasionally | 45.1 | 17.1 | 20.5 | 23.0 | 23.9 | 8.7 | 6.8 | 100.0 | 5.7 | 1,595 | 12.7 |
| Never | 63.1 | 15.6 | 13.4 | 16.0 | 31.1 | 16.0 | 7.8 | 100.0 | 8.2 | 375 | 12.9 |
| History of hypertension |  |  |  |  |  |  |  |  |  |  |  |
| Told had high blood pressure by a doctor or a nurse | 87.0 | 7.5 | 11.3 | 17.7 | 34.0 | 17.2 | 12.3 | 100.0 | 23.4 | 588 | 26.9 |
| Never told had high blood pressure | 33.5 | 23.5 | 22.7 | 21.6 | 21.8 | 7.1 | 3.3 | 100.0 | 1.3 | 2,494 | 3.9 |
| Nutritional status |  |  |  |  |  |  |  |  |  |  |  |
| Underweight ( $\mathrm{BMI}<18.5$ ) | 32.4 | 37.8 | 19.9 | 15.6 | 17.2 | 6.9 | 2.6 | 100.0 | 5.8 | 289 | 17.8 |
| Normal (BMI 18.5-24.9) | 35.3 | 23.2 | 24.2 | 20.8 | 20.7 | 7.6 | 3.6 | 100.0 | 3.4 | 1,804 | 9.7 |
| Overweight (BMI 25.0-29.9) | 59.8 | 11.8 | 14.0 | 21.6 | 32.8 | 11.0 | 8.8 | 100.0 | 7.2 | 619 | 12.0 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 67.8 | 5.4 | 15.2 | 24.6 | 32.3 | 14.5 | 8.0 | 100.0 | 13.0 | 327 | 19.2 |
| Total 15+ | 43.7 | 20.4 | 20.5 | 20.9 | 24.1 | 9.0 | 5.1 | 100.0 | 5.5 | 3,082 | 12.6 |

[^26]Table 16.9.1 Blood pressure status and treatment: Women
Among women age 15 and older, prevalence of hypertension, prevalence of elevated blood pressure, percentage taking medication to lower blood pressure, percentage having normal blood pressure and taking medication, percentage hypertensive and taking medication, and among women with hypertension, percentage with uncontrolled hypertension, according to background characteristics, South Africa DHS 2016

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Prevalence of elevated blood pressure ( $\geq 140 /$ $\geq 90 \mathrm{mmHg}$ ) | Percentage taking medication to lower blood pressure | Percentage with normal blood pressure and taking medication | Percentage hypertensive and taking medication | Number of women | Among women with hypertension, percentage with uncontrolled hypertension |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |
| 15-24 | 17.0 | 14.2 | 3.9 | 2.8 | 1.1 | 1,080 | 83.4 |
| 25-34 | 26.6 | 21.4 | 7.1 | 5.1 | 2.0 | 1,063 | 80.7 |
| 35-44 | 42.7 | 36.1 | 15.1 | 6.7 | 8.5 | 788 | 84.4 |
| 45-54 | 62.5 | 50.2 | 31.8 | 12.2 | 19.5 | 681 | 80.4 |
| 55-64 | 77.6 | 60.5 | 46.5 | 17.2 | 29.3 | 557 | 77.9 |
| 65+ | 84.3 | 64.0 | 58.0 | 20.3 | 37.7 | 606 | 76.0 |
| Population group |  |  |  |  |  |  |  |
| Black African | 43.8 | 35.1 | 20.6 | 8.7 | 11.9 | 4,163 | 80.2 |
| White | 60.4 | 44.7 | 36.5 | 15.7 | 20.8 | 194 | 74.0 |
| Coloured | 57.4 | 45.0 | 33.7 | 12.3 | 21.3 | 326 | 78.5 |
| Indian/Asian | 46.4 | 38.6 | 25.6 | 7.8 | 17.8 | 89 | 83.1 |
| Other |  | * | * | * | * | 3 | * |
| Residence |  |  |  |  |  |  |  |
| Urban | 46.5 | 36.5 | 23.3 | 10.0 | 13.3 | 2,938 | 78.5 |
| Non-urban | 43.9 | 35.9 | 20.7 | 7.9 | 12.8 | 1,837 | 81.9 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 51.6 | 40.2 | 32.1 | 11.4 | 20.6 | 433 | 77.9 |
| Eastern Cape | 49.8 | 42.5 | 24.4 | 7.3 | 17.1 | 641 | 85.3 |
| Northern Cape | 52.9 | 45.6 | 22.5 | 7.3 | 15.2 | 108 | 86.2 |
| Free State | 54.4 | 42.3 | 27.7 | 12.1 | 15.6 | 271 | 77.8 |
| KwaZulu-Natal | 48.1 | 40.1 | 22.8 | 7.9 | 14.8 | 960 | 83.5 |
| North West | 40.0 | 28.4 | 23.7 | 11.7 | 12.0 | 366 | 70.8 |
| Gauteng | 42.3 | 31.2 | 21.8 | 11.1 | 10.8 | 1,073 | 73.8 |
| Mpumalanga | 45.8 | 41.3 | 13.7 | 4.5 | 9.1 | 399 | 90.1 |
| Limpopo | 34.1 | 25.3 | 14.2 | 8.8 | 5.4 | 524 | 74.3 |
| Education |  |  |  |  |  |  |  |
| No education | 75.8 | 62.7 | 45.9 | 13.1 | 32.8 | 430 | 82.7 |
| Primary incomplete | 65.6 | 51.8 | 37.5 | 13.8 | 23.7 | 582 | 79.0 |
| Primary complete | 53.5 | 39.6 | 33.1 | 13.9 | 19.3 | 242 | 74.1 |
| Secondary incomplete | 38.9 | 31.3 | 17.3 | 7.6 | 9.7 | 2,092 | 80.4 |
| Secondary complete | 35.2 | 27.7 | 13.7 | 7.5 | 6.1 | 974 | 78.6 |
| More than secondary | 39.2 | 31.2 | 15.8 | 8.0 | 7.8 | 454 | 79.6 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 42.3 | 36.2 | 17.2 | 6.1 | 11.1 | 988 | 85.6 |
| Second | 41.1 | 33.8 | 18.9 | 7.2 | 11.7 | 923 | 82.4 |
| Middle | 46.1 | 36.9 | 23.0 | 9.1 | 13.8 | 1,028 | 80.2 |
| Fourth | 49.6 | 38.5 | 25.1 | 11.1 | 14.0 | 954 | 77.7 |
| Highest | 48.6 | 35.8 | 27.6 | 12.8 | 14.8 | 881 | 73.7 |
| Total 15+ | 45.5 | 36.3 | 22.3 | 9.2 | 13.1 | 4,774 | 79.8 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ A respondent was classified as having hypertension if she had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control her blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
${ }^{2}$ Percentage with hypertension uncontrolled = prevalence of elevated blood pressure/prevalence of hypertension

Table 16.9.2 Blood pressure status and treatment: Men
Among men age 15 and older, prevalence of hypertension, prevalence of elevated blood pressure, percentage taking medication to lower blood pressure, percentage having normal blood pressure and taking medication, percentage hypertensive and taking medication, and among men with hypertension, percentage with uncontrolled hypertension, according to background characteristics, South Africa DHS 2016

| Background characteristic | Prevalence of hypertension ${ }^{1}$ | Prevalence of elevated blood pressure ( $\geq 140 /$ $\geq 90 \mathrm{mmHg}$ ) | Percentage taking prescribed medicine to lower blood pressure | Percentage with normal blood pressure and taking medication | Percentage hypertensive and taking medication | Number of men | Among men with hypertension, percentage with uncontrolled hypertension ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |
| 15-24 | 20.1 | 17.2 | 3.8 | 2.9 | 0.9 | 918 | 85.4 |
| 25-34 | 33.2 | 31.2 | 3.5 | 2.0 | 1.6 | 690 | 94.1 |
| 35-44 | 50.8 | 48.3 | 10.9 | 2.5 | 8.4 | 528 | 95.1 |
| 45-54 | 55.4 | 48.1 | 21.4 | 7.3 | 14.1 | 334 | 86.8 |
| 55-64 | 73.6 | 61.3 | 37.4 | 12.4 | 25.1 | 318 | 83.2 |
| 65+ | 83.7 | 65.8 | 50.0 | 17.9 | 32.1 | 293 | 78.6 |
| Population group |  |  |  |  |  |  |  |
| Black African | 40.9 | 36.1 | 11.9 | 4.8 | 7.1 | 2,638 | 88.3 |
| White | 65.9 | 53.6 | 38.9 | 12.3 | 26.6 | 176 | 81.3 |
| Coloured | 57.8 | 49.0 | 28.1 | 8.8 | 19.4 | 207 | 84.8 |
| Indian/Asian | (52.6) | (46.4) | (24.0) | (6.1) | (17.9) | 60 | (88.4) |
| Other | nc | nc | nc | nc | nc | 0 | nc |
| Residence |  |  |  |  |  |  |  |
| Urban | 45.4 | 39.4 | 16.6 | 6.0 | 10.6 | 2,002 | 86.8 |
| Non-urban | 40.5 | 35.9 | 11.3 | 4.6 | 6.7 | 1,080 | 88.7 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 58.7 | 50.9 | 28.3 | 7.8 | 20.5 | 259 | 86.7 |
| Eastern Cape | 47.3 | 42.4 | 13.2 | 4.9 | 8.3 | 414 | 89.6 |
| Northern Cape | 52.3 | 45.8 | 16.0 | 6.5 | 9.5 | 68 | 87.5 |
| Free State | 48.2 | 41.6 | 14.9 | 6.6 | 8.3 | 178 | 86.4 |
| KwaZulu-Natal | 47.5 | 42.0 | 15.1 | 5.5 | 9.7 | 532 | 88.5 |
| North West | 37.0 | 29.4 | 14.6 | 7.6 | 7.0 | 271 | 79.4 |
| Gauteng | 39.5 | 34.4 | 14.8 | 5.1 | 9.7 | 830 | 87.1 |
| Mpumalanga | 46.1 | 42.9 | 8.5 | 3.2 | 5.3 | 260 | 93.0 |
| Limpopo | 28.8 | 23.9 | 8.9 | 4.9 | 3.9 | 269 | 82.9 |
| Education |  |  |  |  |  |  |  |
| No education | 65.6 | 54.4 | 25.9 | 11.3 | 14.6 | 170 | 82.8 |
| Primary incomplete | 56.6 | 46.6 | 24.0 | 10.0 | 14.0 | 401 | 82.4 |
| Primary complete | 40.9 | 37.9 | 15.7 | 3.0 | 12.8 | 166 | 92.8 |
| Secondary incomplete | 36.9 | 32.3 | 10.6 | 4.6 | 6.0 | 1,420 | 87.4 |
| Secondary complete | 41.8 | 38.6 | 11.6 | 3.2 | 8.4 | 614 | 92.3 |
| More than secondary | 51.5 | 44.9 | 21.1 | 6.5 | 14.5 | 310 | 87.3 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 43.3 | 39.8 | 9.3 | 3.5 | 5.8 | 625 | 91.9 |
| Second | 38.8 | 34.3 | 10.2 | 4.6 | 5.7 | 645 | 88.3 |
| Middle | 39.9 | 33.9 | 13.9 | 6.0 | 7.9 | 667 | 84.9 |
| Fourth | 42.9 | 38.2 | 15.9 | 4.7 | 11.2 | 590 | 89.1 |
| Highest | 55.3 | 46.1 | 25.9 | 9.2 | 16.7 | 556 | 83.4 |
| Total 15+ | 43.7 | 38.2 | 14.7 | 5.5 | 9.2 | 3,082 | 87.4 |

Note: Figures in parentheses are based on 25-49 unweighted cases
nc = No cases
${ }^{1}$ A respondent was classified as having hypertension if he had a systolic blood pressure level of 140 mmHg or above or a diastolic blood pressure level of 90 mmHg or above at the time of the survey or was currently taking antihypertensive medication to control his blood pressure. The term hypertension as used in this table is not meant to represent a clinical diagnosis of the disease; rather, it provides an indication of the disease burden in the population at the time of the survey.
${ }^{2}$ Percentage with hypertension uncontrolled = prevalence of elevated blood pressure/prevalence of hypertension

Table 16.10.1 Asthma and chronic obstructive pulmonary disease symptoms: Women
Percentage of women age 15 and older with less breath when exerting themselves compared with others their age; percentage who have woken with breathing difficulties, shortness of breath, and/or a coughing attack in the past 12 months; percentage with symptoms of asthma (wheezing and shortness of breath) in the past 12 months; and percentage who have symptoms of chronic obstructive pulmonary disease (COPD), according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | With less breath when exerting themselves compared with others their age | Who have woken up with breathing difficulties, shortness of breath, and/or a coughing attack in past 12 months ${ }^{1}$ | With symptoms of asthma (wheezing and shortness of breath) in the past 12 months | With symptoms of COPD ${ }^{2}$ |  |
| Age |  |  |  |  |  |
| 15-24 | 9.5 | 18.6 | 1.6 | 1.0 | 1,429 |
| 25-34 | 11.5 | 18.9 | 2.2 | 0.6 | 1,391 |
| 35-44 | 13.8 | 19.9 | 3.3 | 2.1 | 1,022 |
| 45-54 | 18.8 | 24.1 | 3.5 | 2.4 | 866 |
| 55-64 | 27.3 | 27.2 | 6.5 | 3.3 | 701 |
| 65+ | 31.1 | 28.6 | 5.5 | 4.2 | 719 |
| Population group |  |  |  |  |  |
| Black African | 16.0 | 22.7 | 3.2 | 1.7 | 5,170 |
| White | 14.1 | 12.6 | 2.5 | 2.0 | 320 |
| Coloured | 21.6 | 19.8 | 4.5 | 4.1 | 516 |
| Indian/Asian | 24.5 | 16.2 | 6.9 | 1.3 | 114 |
| Other | * |  | * | * | 6 |
| Tobacco smoking |  |  |  |  |  |
| Daily smoker | 20.9 | 23.3 | 5.0 | 5.2 | 387 |
| Occasional smoker | 20.7 | 32.2 | 2.3 | 7.5 | 94 |
| Ex-smoker | 31.6 | 36.4 | 7.7 | 0.7 | 111 |
| Never smoked | 15.9 | 21.2 | 3.1 | 1.6 | 5,534 |
| Residence |  |  |  |  |  |
| Urban | 16.4 | 22.3 | 3.6 | 2.1 | 3,996 |
| Non-urban | 16.9 | 20.9 | 2.8 | 1.6 | 2,130 |
| Province |  |  |  |  |  |
| Western Cape | 20.3 | 17.6 | 4.2 | 4.4 | 703 |
| Eastern Cape | 22.5 | 24.1 | 3.5 | 3.4 | 730 |
| Northern Cape | 21.3 | 19.0 | 6.1 | 3.4 | 127 |
| Free State | 19.2 | 23.1 | 3.3 | 0.8 | 325 |
| KwaZulu-Natal | 16.7 | 15.2 | 5.4 | 1.1 | 1,191 |
| North West | 13.7 | 30.9 | 2.5 | 1.5 | 398 |
| Gauteng | 13.5 | 26.4 | 1.7 | 1.3 | 1,534 |
| Mpumalanga | 18.5 | 22.6 | 4.1 | 2.5 | 473 |
| Limpopo | 10.9 | 18.8 | 1.5 | 0.8 | 646 |
| Education |  |  |  |  |  |
| No education | 29.4 | 25.2 | 5.0 | 4.6 | 495 |
| Primary incomplete | 23.6 | 26.8 | 5.6 | 2.7 | 664 |
| Primary complete | 22.9 | 27.3 | 5.5 | 4.1 | 293 |
| Secondary incomplete | 14.9 | 21.4 | 3.1 | 1.8 | 2,695 |
| Secondary complete | 10.6 | 19.5 | 2.2 | 0.7 | 1,328 |
| More than secondary | 15.7 | 18.2 | 1.9 | 1.2 | 652 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 16.1 | 19.1 | 3.1 | 2.1 | 1,163 |
| Second | 16.2 | 25.4 | 2.8 | 2.0 | 1,152 |
| Middle | 15.0 | 21.0 | 3.1 | 1.5 | 1,242 |
| Fourth | 18.1 | 22.8 | 5.4 | 2.4 | 1,258 |
| Highest | 17.1 | 20.8 | 2.2 | 1.7 | 1,311 |
| Total 15+ | 16.6 | 21.8 | 3.3 | 1.9 | 6,126 |

[^27]Table 16.10.2 Asthma and chronic obstructive pulmonary disease symptoms: Men
Percentage of men age 15 and older with less breath when exerting themselves compared with others their age; percentage who have woken with breathing difficulties, shortness of breath, and/or a coughing attack in the past 12 months; percentage with symptoms of asthma (wheezing and shortness of breath) in the past 12 months; and percentage who have symptoms of chronic obstructive pulmonary disease (COPD), according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of men |  |  |  | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | With less breath when exerting themselves compared with others their age | Who have woken up with breathing difficulties, shortness of breath, and/or a coughing attack in past 12 months ${ }^{1}$ | With symptoms of asthma (wheezing and shortness of breath) in the past 12 months | With symptoms of COPD ${ }^{2}$ |  |
| Age |  |  |  |  |  |
| 15-24 | 11.9 | 27.7 | 2.8 | 1.6 | 1,241 |
| 25-34 | 12.4 | 24.3 | 3.3 | 0.3 | 962 |
| 35-44 | 11.7 | 24.1 | 2.8 | 1.3 | 744 |
| 45-54 | 16.3 | 27.6 | 3.2 | 2.2 | 492 |
| 55-64 | 21.9 | 31.2 | 5.4 | 2.1 | 406 |
| 65+ | 21.7 | 33.0 | 5.7 | 5.1 | 364 |
| Population group |  |  |  |  |  |
| Black African | 13.0 | 28.5 | 3.4 | 1.7 | 3,534 |
| White | 22.0 | 14.7 | 3.1 | 0.0 | 257 |
| Coloured | 18.6 | 22.9 | 4.6 | 2.2 | 335 |
| Indian/Asian | 27.0 | 19.7 | 3.2 | 2.9 | 82 |
| Other | * | * | * | * | 2 |
| Tobacco smoking |  |  |  |  |  |
| Daily smoker | 16.8 | 31.1 | 5.0 | 2.6 | 1,281 |
| Occasional smoker | 13.6 | 29.7 | 7.1 | 0.9 | 290 |
| Ex-smoker | 18.9 | 30.0 | 2.2 | 0.8 | 324 |
| Never smoked | 12.3 | 24.1 | 2.3 | 1.4 | 2,315 |
| Residence |  |  |  |  |  |
| Urban | 13.5 | 25.2 | 2.6 | 1.2 | 2,874 |
| Non-urban | 16.0 | 31.0 | 5.3 | 2.7 | 1,336 |
| Province |  |  |  |  |  |
| Western Cape | 19.2 | 19.8 | 4.3 | 1.3 | 476 |
| Eastern Cape | 14.3 | 33.6 | 3.2 | 1.6 | 493 |
| Northern Cape | 21.2 | 31.1 | 5.3 | 3.0 | 84 |
| Free State | 9.8 | 30.6 | 0.9 | 3.0 | 207 |
| KwaZulu-Natal | 19.9 | 23.2 | 4.0 | 1.7 | 683 |
| North West | 6.5 | 16.4 | 3.6 | 3.1 | 310 |
| Gauteng | 9.4 | 26.0 | 0.5 | 0.9 | 1,245 |
| Mpumalanga | 16.5 | 40.0 | 14.2 | 2.7 | 326 |
| Limpopo | 19.2 | 32.8 | 3.1 | 1.7 | 386 |
| Education |  |  |  |  |  |
| No education | 21.2 | 33.9 | 11.5 | 4.0 | 217 |
| Primary incomplete | 15.6 | 34.2 | 4.9 | 3.8 | 481 |
| Primary complete | 11.7 | 29.4 | 2.9 | 3.0 | 212 |
| Secondary incomplete | 13.2 | 28.3 | 3.2 | 1.3 | 1,930 |
| Secondary complete | 15.1 | 21.0 | 2.2 | 1.2 | 900 |
| More than secondary | 13.9 | 22.4 | 2.2 | 0.2 | 470 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 15.8 | 35.5 | 7.5 | 2.7 | 787 |
| Second | 13.1 | 28.2 | 2.3 | 2.0 | 839 |
| Middle | 12.0 | 30.7 | 4.4 | 2.3 | 894 |
| Fourth | 15.6 | 23.3 | 1.2 | 1.1 | 827 |
| Highest | 15.2 | 18.0 | 2.1 | 0.4 | 864 |
| Total 15+ | 14.3 | 27.1 | 3.5 | 1.7 | 4,210 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Difficulty breathing refers to tightness of chest and/or shortness of breath
${ }^{2}$ Coughing with phlegm on most days for $\geq 3$ months

Table 16.11.1 Unadjusted glycated haemoglobin levels: Women
Percentage of women age 15 and older by unadjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

| Background characteristic | Unadjusted HbA1c level |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | <5.7\% | 5.7-6.4\% | $\geq 6.5 \%$ |  |
| Age |  |  |  |  |
| 15-24 | 16.9 | 75.9 | 7.2 | 885 |
| 25-34 | 15.9 | 73.5 | 10.6 | 846 |
| 35-44 | 9.6 | 66.5 | 23.9 | 613 |
| 45-54 | 6.9 | 58.1 | 35.0 | 529 |
| 55-64 | 4.6 | 53.7 | 41.7 | 457 |
| 65+ | 1.8 | 50.3 | 47.9 | 474 |
| Currently pregnant ${ }^{1}$ |  |  |  |  |
| Pregnant | 31.4 | 61.7 | 6.9 | 100 |
| Not pregnant or not sure | 13.4 | 71.6 | 15.0 | 2,517 |
| HIV status |  |  |  |  |
| HIV positive | 10.8 | 70.5 | 18.6 | 873 |
| HIV negative ${ }^{2}$ | 10.8 | 64.4 | 24.8 | 2,807 |
| Not tested in survey | 9.3 | 55.5 | 35.1 | 124 |
| Anaemia status |  |  |  |  |
| Anaemic ${ }^{3}$ | 9.7 | 67.6 | 22.7 | 1,136 |
| Not anaemic | 11.3 | 64.6 | 24.1 | 2,632 |
| Nutritional status |  |  |  |  |
| Underweight ( $\mathrm{BMI}<18.5$ ) | 18.3 | 68.2 | 13.5 | 97 |
| Normal (BMI 18.5-24.9) | 14.4 | 71.7 | 13.9 | 1,062 |
| Overweight (BMI 25.0-29.9) | 9.7 | 70.7 | 19.6 | 981 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 6.6 | 57.8 | 35.6 | 1,483 |
| Not eligible (pregnant or recent birth) | 29.5 | 64.8 | 5.7 | 142 |
| Past diabetes diagnosis |  |  |  |  |
| Diabetes diagnosed | 0.6 | 17.5 | 82.0 | 202 |
| Treatment received | 0.7 | 12.3 | 87.0 | 173 |
| No treatment received | (0.0) | (48.1) | (51.9) | 28 |
| Diabetes not diagnosed | 11.4 | 68.3 | 20.4 | 3,590 |
| Don't know | * |  |  | 11 |
| Current medication |  |  |  |  |
| On diabetes medication | 0.0 | 10.8 | 89.2 | 90 |
| On undisclosed medication | 7.3 | 60.1 | 32.6 | 817 |
| Not on medication | 12.1 | 68.7 | 19.2 | 2,896 |
| Population group |  |  |  |  |
| Black African | 10.4 | 65.9 | 23.7 | 3,351 |
| White | 16.1 | 69.1 | 14.8 | 142 |
| Coloured | 13.9 | 60.7 | 25.4 | 263 |
| Indian/Asian | (0.0) | (56.5) | (43.5) | 44 |
| Other |  |  |  | 3 |
| Residence |  |  |  |  |
| Urban | 12.1 | 67.1 | 20.8 | 2,252 |
| Non-urban | 8.8 | 63.2 | 28.0 | 1,551 |
| Province |  |  |  |  |
| Western Cape | 12.3 | 63.9 | 23.8 | 370 |
| Eastern Cape | 8.8 | 60.4 | 30.8 | 504 |
| Northern Cape | 18.9 | 61.6 | 19.6 | 70 |
| Free State | 3.4 | 69.5 | 27.2 | 250 |
| KwaZulu-Natal | 6.8 | 67.0 | 26.2 | 729 |
| North West | 12.0 | 69.3 | 18.7 | 332 |
| Gauteng | 15.6 | 68.2 | 16.2 | 810 |
| Mpumalanga | 11.4 | 64.4 | 24.2 | 357 |
| Limpopo | 10.9 | 61.3 | 27.9 | 381 |
| Education |  |  |  |  |
| No education | 5.0 | 50.5 | 44.5 | 347 |
| Primary incomplete | 7.1 | 56.0 | 36.9 | 491 |
| Primary complete | 8.0 | 59.6 | 32.4 | 214 |
| Secondary incomplete | 11.0 | 70.1 | 18.9 | 1,680 |
| Secondary complete | 15.5 | 68.3 | 16.2 | 741 |
| More than secondary | 12.0 | 69.8 | 18.2 | 330 |
| Wealth quintile |  |  |  |  |
| Lowest | 10.3 | 66.8 | 22.9 | 849 |
| Second | 11.5 | 65.8 | 22.7 | 744 |
| Middle | 9.7 | 65.2 | 25.1 | 849 |
| Fourth | 9.9 | 65.2 | 25.0 | 736 |
| Highest | 13.0 | 64.4 | 22.6 | 624 |
| Total 15+ | 10.8 | 65.5 | 23.7 | 3,803 |

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. An HbA1c level of $6.5 \%$ or above is classified as diabetes; an HbA 1 c level between $5.7 \%$ and $6.4 \%$ is considered pre-diabetic (ADA 2010). Total includes 38 women for whom information on nutritional status is missing and 25 women for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI = Body mass index
${ }^{1}$ Restricted to women age 15-49
${ }_{2}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in
Chapter 1, Figure 1.2
${ }^{3}$ Haemoglobin level <12.0 g/dl among non-pregnant women and <11.0 g/dl among pregnant women

Table 16.11.2 Unadjusted glycated haemoglobin levels: Men
Percentage of men age 15 and older by unadjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

| Background characteristic | Unadjusted HbA1c level |  |  | Number of men |
| :---: | :---: | :---: | :---: | :---: |
|  | <5.7\% | 5.7-6.4\% | $\geq 6.5 \%$ |  |
| Age |  |  |  |  |
| 15-24 | 16.1 | 74.6 | 8.4 | 735 |
| 25-34 | 15.6 | 73.5 | 10.7 | 480 |
| 35-44 | 13.0 | 70.7 | 15.9 | 378 |
| 45-54 | 6.5 | 70.4 | 22.7 | 248 |
| 55-64 | 7.6 | 57.9 | 34.3 | 259 |
| 65+ | 2.6 | 65.6 | 31.2 | 219 |
| HIV status |  |  |  |  |
| HIV positive | 9.1 | 72.7 | 18.0 | 305 |
| HIV negative ${ }^{1}$ | 12.8 | 70.9 | 15.9 | 1,938 |
| Not tested in survey | 11.5 | 54.1 | 31.3 | 76 |
| Anaemia status |  |  |  |  |
| Anaemic ${ }^{2}$ | 8.6 | 72.2 | 19.2 | 184 |
| Not anaemic | 12.5 | 70.6 | 16.3 | 2,115 |
| Nutritional status |  |  |  |  |
| Underweight ( $\mathrm{BMI}<18.5$ ) | 19.6 | 70.3 | 9.6 | 220 |
| Normal (BMI 18.5-24.9) | 13.6 | 74.9 | 10.8 | 1,341 |
| Overweight (BMI 25.0-29.9) | 9.9 | 65.6 | 24.5 | 461 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 3.8 | 57.8 | 38.4 | 263 |
| Past diabetes diagnosis |  |  |  |  |
| Diabetes diagnosed | 0.0 | 19.4 | 80.6 | 84 |
| Treatment received | 0.0 | 19.1 | 80.9 | 75 |
| No treatment received | * |  |  | 8 |
| Diabetes not diagnosed | 12.8 | 72.4 | 14.3 | 2,212 |
| Don't know | * |  |  | 23 |
| Current medication |  |  |  |  |
| On diabetes medication | (0.0) | (10.0) | (90.0) | 46 |
| On undisclosed medication | 5.5 | 71.1 | 23.0 | 333 |
| Not on medication | 13.7 | 71.9 | 13.9 | 1,939 |
| Population group |  |  |  |  |
| Black African | 12.0 | 71.7 | 15.9 | 1,998 |
| White | 18.5 | 61.4 | 19.2 | 140 |
| Coloured | 11.2 | 65.7 | 22.7 | 150 |
| Indian/Asian | * | * | * | 31 |
| Other | nc | nc | nc | 0 |
| Residence |  |  |  |  |
| Urban | 12.3 | 71.1 | 15.9 | 1,430 |
| Non-urban | 12.1 | 69.8 | 17.9 | 889 |
| Province |  |  |  |  |
| Western Cape | 17.2 | 63.3 | 19.5 | 206 |
| Eastern Cape | 7.7 | 73.7 | 18.0 | 300 |
| Northern Cape | 26.5 | 58.8 | 14.7 | 37 |
| Free State | 4.3 | 78.4 | 16.9 | 160 |
| KwaZulu-Natal | 9.2 | 72.2 | 18.0 | 393 |
| North West | 17.2 | 70.3 | 12.5 | 230 |
| Gauteng | 12.8 | 70.6 | 15.6 | 576 |
| Mpumalanga | 17.5 | 69.6 | 12.4 | 216 |
| Limpopo | 10.5 | 67.8 | 21.8 | 202 |
| Education |  |  |  |  |
| No education | 8.9 | 68.2 | 22.9 | 146 |
| Primary incomplete | 8.5 | 66.7 | 24.3 | 321 |
| Primary complete | 7.4 | 78.4 | 14.1 | 133 |
| Secondary incomplete | 12.1 | 73.1 | 14.2 | 1,062 |
| Secondary complete | 16.6 | 70.3 | 13.0 | 430 |
| More than secondary | 14.9 | 62.1 | 21.9 | 227 |
| Wealth quintile |  |  |  |  |
| Lowest | 11.7 | 71.4 | 15.5 | 481 |
| Second | 10.8 | 73.5 | 15.4 | 483 |
| Middle | 12.2 | 72.7 | 15.0 | 504 |
| Fourth | 14.2 | 72.3 | 13.2 | 441 |
| Highest | 12.6 | 61.7 | 25.4 | 410 |
| Total 15+ | 12.2 | 70.6 | 16.7 | 2,319 |

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. An HbA1c level of $6.5 \%$ or above is classified as diabetes; an HbA1c level between $5.7 \%$ and $6.4 \%$ is considered pre-diabetic (ADA 2010). Total includes 33 men for whom information on nutritional status is missing and 20 men for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{BMI}=$ Body mass index
nc = No cases
${ }^{1}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in
Chapter 1, Figure 1.2
${ }^{2}$ Haemoglobin level <13.0 g/dl

## Table 16.12.1 Adjusted glycated haemoglobin levels: Women

Percentage of women age 15 and older by adjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

| Background characteristic | Adjusted HbA1c level |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | <5.7\% | 5.7-6.4\% | $\geq 6.5 \%$ |  |
| Age |  |  |  |  |
| 15-24 | 36.1 | 63.0 | 0.9 | 885 |
| 25-34 | 31.3 | 64.2 | 4.5 | 846 |
| 35-44 | 21.3 | 66.9 | 11.8 | 613 |
| 45-54 | 14.4 | 64.9 | 20.8 | 529 |
| 55-64 | 8.1 | 63.2 | 28.7 | 457 |
| 65+ | 5.9 | 64.0 | 30.1 | 474 |
| Currently pregnant ${ }^{1}$ |  |  |  |  |
| Pregnant | 46.6 | 50.0 | 3.4 | 100 |
| Not pregnant or not sure | 28.6 | 65.0 | 6.4 | 2,517 |
| HIV status |  |  |  |  |
| HIV positive | 22.5 | 69.1 | 8.4 | 873 |
| HIV negative ${ }^{2}$ | 22.8 | 63.1 | 14.1 | 2,807 |
| Not tested in survey | 14.9 | 58.4 | 26.7 | 124 |
| Anaemia status |  |  |  |  |
| Anaemic ${ }^{3}$ | 21.0 | 67.3 | 11.7 | 1,136 |
| Not anaemic | 23.3 | 62.9 | 13.8 | 2,632 |
| Nutritional status |  |  |  |  |
| Underweight ( BMI <18.5) | 35.8 | 61.6 | 2.6 | 97 |
| Normal (BMI 18.5-24.9) | 31.0 | 64.1 | 4.9 | 1,062 |
| Overweight (BMI 25.0-29.9) | 20.7 | 69.6 | 9.7 | 981 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 14.0 | 63.1 | 22.9 | 1,483 |
| Not eligible (pregnant or recent birth) | 48.4 | 49.0 | 2.6 | 142 |
| Past diabetes diagnosis |  |  |  |  |
| Diabetes diagnosed | 1.7 | 25.0 | 73.4 | 202 |
| Treatment received | 1.6 | 20.8 | 77.5 | 173 |
| No treatment received | (1.9) | (49.5) | (48.6) | 28 |
| Diabetes not diagnosed | 23.7 | 66.5 | 9.8 | 3,590 |
| Don't know | * | * | * | 11 |
| Current medication |  |  |  |  |
| On diabetes medication | 1.4 | 13.6 | 85.0 | 90 |
| On undisclosed medication | 14.5 | 67.1 | 18.4 | 817 |
| Not on medication | 25.4 | 65.1 | 9.5 | 2,896 |
| Population group |  |  |  |  |
| Black African | 22.0 | 65.0 | 13.1 | 3,351 |
| White | 31.0 | 63.4 | 5.6 | 142 |
| Coloured | 28.3 | 56.9 | 14.9 | 263 |
| Indian/Asian | (0.0) | (64.0) | (36.0) | 44 |
| Other | * | * | * | 3 |
| Residence |  |  |  |  |
| Urban | 24.8 | 63.7 | 11.5 | 2,252 |
| Non-urban | 19.1 | 65.2 | 15.7 | 1,551 |
| Province |  |  |  |  |
| Western Cape | 24.1 | 63.7 | 12.2 | 370 |
| Eastern Cape | 17.2 | 65.3 | 17.5 | 504 |
| Northern Cape | 35.7 | 52.7 | 11.7 | 70 |
| Free State | 11.4 | 74.9 | 13.8 | 250 |
| KwaZulu-Natal | 17.8 | 65.1 | 17.1 | 729 |
| North West | 26.5 | 64.8 | 8.6 | 332 |
| Gauteng | 28.6 | 62.1 | 9.3 | 810 |
| Mpumalanga | 27.2 | 61.3 | 11.5 | 357 |
| Limpopo | 20.8 | 64.4 | 14.8 | 381 |
| Education |  |  |  |  |
| No education | 10.3 | 60.4 | 29.4 | 347 |
| Primary incomplete | 11.9 | 66.6 | 21.4 | 491 |
| Primary complete | 16.5 | 62.3 | 21.1 | 214 |
| Secondary incomplete | 23.8 | 67.5 | 8.6 | 1,680 |
| Secondary complete | 31.1 | 59.6 | 9.3 | 741 |
| More than secondary | 28.8 | 60.6 | 10.6 | 330 |
| Wealth quintile |  |  |  |  |
| Lowest | 22.6 | 64.8 | 12.5 | 849 |
| Second | 21.2 | 65.6 | 3.2 | 744 |
| Middle | 21.9 | 65.4 | 12.7 | 849 |
| Fourth | 22.4 | 64.3 | 13.2 | 736 |
| Highest | 24.6 | 60.6 | 14.8 | 624 |
| Total 15+ | 22.5 | 64.3 | 13.2 | 3,803 |

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. Results were adjusted based on Affan et al. 2014. An HbA1c level of $6.5 \%$ or above is classified as diabetes; an HbA1c level between $5.7 \%$ and $6.4 \%$ is considered pre-diabetic (ADA 2010). Total includes 38 women for whom information on nutritional status is missing and 25 women for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{BMI}=$ Body mass index
${ }^{1}$ Restricted to women age 15-49
${ }^{2}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in
Chapter 1, Figure 1.2
${ }^{3}$ Haemoglobin level $<12.0 \mathrm{~g} / \mathrm{dl}$ among non-pregnant women and $<11.0 \mathrm{~g} / \mathrm{dl}$ among pregnant women

Table 16.12.2 Adjusted glycated haemoglobin levels: Men
Percentage of men age 15 and older by adjusted glycated haemoglobin level (HbA1c), according to background characteristics, South Africa DHS 2016

| Background characteristic | Adjusted HbA1c level |  |  | Number of men |
| :---: | :---: | :---: | :---: | :---: |
|  | <5.7\% | 5.7-6.4\% | $\geq 6.5 \%$ |  |
| Age |  |  |  |  |
| 15-24 | 32.0 | 65.1 | 2.0 | 735 |
| 25-34 | 31.9 | 64.6 | 3.4 | 480 |
| 35-44 | 26.1 | 66.9 | 6.6 | 378 |
| 45-54 | 13.7 | 74.2 | 11.7 | 248 |
| 55-64 | 15.4 | 61.4 | 23.0 | 259 |
| 65+ | 14.7 | 63.6 | 21.1 | 219 |
| HIV status |  |  |  |  |
| HIV positive | 18.6 | 74.2 | 6.9 | 305 |
| HIV negative ${ }^{1}$ | 27.0 | 64.5 | 8.0 | 1,938 |
| Not tested in survey | 15.8 | 62.9 | 18.2 | 76 |
| Anaemia status |  |  |  |  |
| Anaemic ${ }^{\text {2 }}$ | 15.9 | 76.0 | 8.1 | 184 |
| Not anaemic | 26.4 | 64.9 | 8.2 | 2,115 |
| Nutritional status |  |  |  |  |
| Underweight ( BMI <18.5) | 33.8 | 61.9 | 3.7 | 220 |
| Normal (BMI 18.5-24.9) | 28.5 | 67.1 | 3.8 | 1,341 |
| Overweight (BMI 25.0-29.9) | 20.6 | 65.6 | 13.8 | 461 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 14.0 | 61.9 | 24.1 | 263 |
| Past diabetes diagnosis |  |  |  |  |
| Diabetes diagnosed | 1.6 | 20.2 | 78.2 | 84 |
| Treatment received | 0.9 | 20.8 | 78.3 | 75 |
| No treatment received | * | * | * | 8 |
| Diabetes not diagnosed | 26.5 | 67.3 | 5.6 | 2,212 |
| Don't know | * | * | * | 23 |
| Current medication |  |  |  |  |
| On diabetes medication | (0.0) | (11.4) | (88.6) | 46 |
| On undisclosed medication | 18.0 | 70.7 | 11.0 | 333 |
| Not on medication | 27.5 | 66.2 | 5.8 | 1,939 |
| Population group |  |  |  |  |
| Black African | 25.6 | 67.0 | 7.0 | 1,998 |
| White | 36.8 | 47.3 | 15.1 | 140 |
| Coloured | 19.3 | 64.5 | 15.8 | 150 |
| Indian/Asian | * | * | * | 31 |
| Other | nc | nc | nc | 0 |
| Residence |  |  |  |  |
| Urban | 25.9 | 65.3 | 8.1 | 1,430 |
| Non-urban | 25.0 | 66.4 | 8.4 | 889 |
| Province |  |  |  |  |
| Western Cape | 27.3 | 59.6 | 13.2 | 206 |
| Eastern Cape | 18.4 | 71.2 | 9.8 | 300 |
| Northern Cape | 43.7 | 49.1 | 7.2 | 37 |
| Free State | 16.6 | 74.7 | 8.3 | 160 |
| KwaZulu-Natal | 20.2 | 69.8 | 9.4 | 393 |
| North West | 39.8 | 56.1 | 4.1 | 230 |
| Gauteng | 27.2 | 65.2 | 6.6 | 576 |
| Mpumalanga | 31.6 | 61.3 | 6.5 | 216 |
| Limpopo | 21.2 | 69.1 | 9.7 | 202 |
| Education |  |  |  |  |
| No education | 15.2 | 72.6 | 12.3 | 146 |
| Primary incomplete | 19.6 | 68.6 | 11.3 | 321 |
| Primary complete | 22.8 | 71.3 | 5.9 | 133 |
| Secondary incomplete | 24.9 | 68.7 | 5.8 | 1,062 |
| Secondary complete | 31.0 | 61.5 | 7.3 | 430 |
| More than secondary | 35.2 | 48.1 | 15.6 | 227 |
| Wealth quintile |  |  |  |  |
| Lowest | 24.7 | 69.8 | 4.1 | 481 |
| Second | 23.2 | 68.8 | 7.6 | 483 |
| Middle | 25.1 | 68.2 | 6.6 | 504 |
| Fourth | 26.5 | 66.5 | 6.5 | 441 |
| Highest | 28.7 | 53.3 | 17.6 | 410 |
| Total 15+ | 25.6 | 65.7 | 8.2 | 2,319 |

Notes: Excludes cases in which DBS specimens took 60 or more days to get from the field to the laboratory freezer. Results were adjusted based on Affan et al. 2014. An HbA1c level of $6.5 \%$ or above is classified as diabetes; an HbA1c level between $5.7 \%$ and $6.4 \%$ is considered pre-diabetic (ADA 2010). Total includes 33 men for whom information on nutritional status is missing and 20 men for whom information on anaemia is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
BMI= Body mass index
nc = No cases
${ }^{1}$ Includes a few cases with inconclusive results as per the SADHS HIV testing algorithm shown in Chapter 1, Figure 1.2
${ }^{2}$ Haemoglobin level < $13.0 \mathrm{~g} / \mathrm{dl}$

Table 16.13.1 Prevalence of anaemia in women
Percentage of women age 15 and older with anaemia, according to background characteristics, South Africa DHS 2016

| Non-pregnant | Anaemia status by haemoglobin level |  |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Any | Mild | Moderate | Severe |  |
|  | <12.0 g/dl | $10.0-11.9 \mathrm{~g} / \mathrm{dl}$ | $7.0-9.9 \mathrm{~g} / \mathrm{dl}$ | <7.0 g/dl |  |
| Background characteristic $\quad$ Pregnant | $<11.0 \mathrm{~g} / \mathrm{dl}$ | $10.0-10.9 \mathrm{~g} / \mathrm{dl}$ | 7.0-9.9 g/dl | $<7.0 \mathrm{~g} / \mathrm{dl}$ |  |
| Age |  |  |  |  |  |
| 15-24 | 33.0 | 24.2 | 8.4 | 0.5 | 975 |
| 15-19 | 34.0 | 24.1 | 9.7 | 0.2 | 475 |
| 20-24 | 32.1 | 24.2 | 7.1 | 0.8 | 500 |
| 25-34 | 33.0 | 24.3 | 8.1 | 0.7 | 946 |
| 35-44 | 33.8 | 24.1 | 8.4 | 1.4 | 702 |
| 45-54 | 29.0 | 19.4 | 8.6 | 1.0 | 588 |
| 55-64 | 24.9 | 20.5 | 4.3 | 0.2 | 497 |
| 65+ | 24.9 | 20.5 | 4.1 | 0.3 | 536 |
| Population group |  |  |  |  |  |
| Black African | 32.2 | 23.6 | 7.8 | 0.7 | 3,753 |
| White | 10.8 | 10.5 | 0.3 | 0.0 | 157 |
| Coloured | 21.6 | 16.6 | 5.0 | 0.0 | 288 |
| Indian/Asian | (29.2) | (22.3) | (7.0) | (0.0) | 44 |
| Other | * | * | * | * | 3 |
| Number of children ever born ${ }^{1}$ |  |  |  |  |  |
| 0 | 35.5 | 25.0 | 9.8 | 0.7 | 734 |
| 1 | 33.8 | 25.3 | 7.5 | 1.0 | 771 |
| 2-3 | 31.7 | 23.0 | 7.9 | 0.8 | 1,066 |
| 4-5 | 33.3 | 24.0 | 8.6 | 0.7 | 285 |
| 6+ | 28.2 | 18.9 | 9.3 | 0.0 | 71 |
| Maternity status ${ }^{1}$ |  |  |  |  |  |
| Pregnant | 39.1 | 16.9 | 22.2 | 0.0 | 109 |
| Breastfeeding | 28.9 | 24.8 | 3.8 | 0.4 | 241 |
| Neither | 33.4 | 24.4 | 8.2 | 0.9 | 2,576 |
| Cigarette use ${ }^{2}$ |  |  |  |  |  |
| Smokes cigarettes | 19.4 | 15.4 | 4.0 | 0.0 | 261 |
| Does not smoke cigarettes | 31.4 | 23.1 | 7.5 | 0.7 | 3,983 |
| Residence |  |  |  |  |  |
| Urban | 29.8 | 23.0 | 6.2 | 0.5 | 2,584 |
| Non-urban | 32.0 | 22.1 | 9.0 | 0.9 | 1,660 |
| Province |  |  |  |  |  |
| Western Cape | 23.9 | 18.6 | 5.3 | 0.0 | 421 |
| Eastern Cape | 29.7 | 22.1 | 7.1 | 0.6 | 598 |
| Northern Cape | 25.7 | 21.4 | 4.3 | 0.0 | 78 |
| Free State | 27.7 | 21.2 | 5.6 | 1.0 | 261 |
| KwaZulu-Natal | 28.9 | 22.5 | 5.1 | 1.2 | 747 |
| North West | 38.3 | 25.8 | 12.6 | 0.0 | 342 |
| Gauteng | 31.6 | 24.7 | 6.2 | 0.7 | 968 |
| Mpumalanga | 38.5 | 22.6 | 14.9 | 1.0 | 383 |
| Limpopo | 29.0 | 21.7 | 6.7 | 0.6 | 445 |
| Education |  |  |  |  |  |
| No education | 29.6 | 24.5 | 4.6 | 0.5 | 371 |
| Primary incomplete | 28.0 | 18.6 | 9.1 | 0.3 | 539 |
| Primary complete | 31.2 | 22.9 | 6.8 | 1.4 | 229 |
| Secondary incomplete | 31.9 | 23.7 | 7.4 | 0.8 | 1,890 |
| Secondary complete | 31.3 | 23.2 | 7.7 | 0.4 | 838 |
| More than secondary | 26.9 | 19.7 | 6.5 | 0.7 | 377 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 28.5 | 19.9 | 7.6 | 0.9 | 935 |
| Second | 35.1 | 24.8 | 9.2 | 1.1 | 816 |
| Middle | 32.8 | 23.8 | 8.1 | 0.9 | 918 |
| Fourth | 31.3 | 24.9 | 6.2 | 0.2 | 834 |
| Highest | 24.9 | 19.7 | 5.1 | 0.1 | 741 |
| Total 15+ | 30.6 | 22.6 | 7.3 | 0.7 | 4,244 |
| Total 15-49 | 33.3 | 24.1 | 8.4 | 0.8 | 2,927 |

[^28]Table 16.13.2 Prevalence of anaemia in men
Percentage of men age 15 and older with anaemia, according to background characteristics, South Africa DHS 2016

| Background characteristic | $\begin{gathered} \text { Any } \\ \text { anaemia } \\ <13.0 \mathrm{~g} / \mathrm{dl} \end{gathered}$ | Number of men |
| :---: | :---: | :---: |
| Age |  |  |
| 15-24 | 13.3 | 796 |
| 15-19 | 17.2 | 438 |
| 20-24 | 8.4 | 357 |
| 25-34 | 10.4 | 557 |
| 35-44 | 14.6 | 434 |
| 45-54 | 25.6 | 288 |
| 55-64 | 22.4 | 285 |
| 65+ | 29.7 | 246 |
| Population group |  |  |
| Black African | 18.0 | 2,240 |
| White | 7.8 | 151 |
| Coloured | 12.0 | 184 |
| Indian/Asian | * | 31 |
| Other | nc | 0 |
| Cigarette use ${ }^{1}$ |  |  |
| Smokes cigarettes | 13.6 | 937 |
| Does not smoke cigarettes | 18.6 | 1,669 |
| Residence |  |  |
| Urban | 16.2 | 1,661 |
| Non-urban | 17.9 | 945 |
| Province |  |  |
| Western Cape | 8.9 | 238 |
| Eastern Cape | 18.2 | 372 |
| Northern Cape | 19.8 | 46 |
| Free State | 25.6 | 168 |
| KwaZulu-Natal | 15.9 | 395 |
| North West | 17.5 | 242 |
| Gauteng | 17.2 | 683 |
| Mpumalanga | 18.1 | 233 |
| Limpopo | 13.9 | 226 |
| Education |  |  |
| No education | 25.3 | 154 |
| Primary incomplete | 26.6 | 359 |
| Primary complete | 18.3 | 142 |
| Secondary incomplete | 15.8 | 1,189 |
| Secondary complete | 13.4 | 499 |
| More than secondary | 8.5 | 264 |
| Wealth quintile |  |  |
| Lowest | 17.9 | 550 |
| Second | 19.0 | 537 |
| Middle | 19.1 | 558 |
| Fourth | 17.0 | 495 |
| Highest | 9.9 | 466 |
| Total 15+ | 16.8 | 2,606 |
| Total 15-49 | 13.7 | 1,941 |

Note: Prevalence is adjusted for altitude and for smoking status, if known, using formulas in CDC 1998. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases
${ }^{1}$ Includes manufactured cigarettes and hand-rolled cigarettes

## Key Findings

- Nutritional status of women: Approximately one-third (30\%) of women have a BMI in the normal range, $3 \%$ are underweight, 27\% are overweight (BMI of 25.0-29.9), and $41 \%$ are obese (BMI of 30 or above). Twenty percent of women are severely obese (BMI of 35 or above), a subgroup of the obese category.
- Nutritional status of men: The majority of men (59\%) have a BMI in the normal range; $10 \%$ are underweight, $20 \%$ are overweight (BMI of 25.0-29.9), and $11 \%$ are obese (BMI of 30 or above). Three percent of men are severely obese (BMI of 35 or above).
- Consumption of fruit and vegetables: $59 \%$ of adults reported that they consumed vegetables (excluding potatoes) during the day or night before the survey; $49 \%$ reported that they consumed fruit.
- Consumption of sugar-sweetened beverages: $36 \%$ of adults indicated that they consumed sugar-sweetened beverages during the day or night before the survey; the average quantity consumed was 607 ml .
- Consumption of fried foods, fast foods, salty snacks, and processed meats: On a daily basis, $10 \%$ of respondents eat fried foods, $2 \%$ eat fast food, $13 \%$ eat salty snacks, and $14 \%$ consume processed meats. Daily consumption of each of the specified foods decreases with age, is higher among respondents in urban than non-urban areas, and generally increases with increasing household wealth.
- Interest in lowering salt consumption: One in three adults (32\%) are not interested in lowering their salt consumption, $9 \%$ are interested in lowering their salt consumption within the next 6 months, $6 \%$ are interested in lowering their salt consumption within the next month, and $48 \%$ indicate that they have started lowering their salt consumption.

TThe Strategic Plan for the Prevention and Control of Non-Communicable Diseases 2013-2017 was developed by the NDoH to guide initiatives to control risk factors for selected chronic conditions (NDoH 2013b). One of the objectives of the strategic plan is to reduce the prevalence of obesity in the country. Obese ( $\mathrm{BMI} \geq 30 \mathrm{~kg} / \mathrm{m}^{2}$ ) and severely obese ( $\mathrm{BMI} \geq 35 \mathrm{~kg} / \mathrm{m}^{2}$ ) persons are at elevated risk for heart disease, diabetes, and other conditions relative to those who are not overweight or obese. The plan promotes physical activity and consumption of a balanced diet and highlights the need to reduce sugar intake. During 2016, the National Treasury released a policy paper recommending that a sugar tax be implemented (National Treasury 2016).

In terms of unhealthy diets, another specific objective outlined in the plan is to reduce salt intake. Regulations to reduce the sodium content of selected processed foods using a population-wide approach have been published, and these regulations outline a phased introduction of lower salt content in selected foods (NDoH 2016). Aimed at reducing the prevalence of hypertension and anticipating an impact on cardiovascular disease and stroke, such an approach has been recommended by WHO as cost-effective. The Salt Watch, a multisectoral coalition led by the Heart and Stroke Foundation of South Africa and supported by the NDoH, implemented a national awareness campaign during 2016 to increase knowledge about salt intake and address people's salt-related behaviours (Webster et al. 2016). Results from the SADHS 2016 provide baseline information about individuals' intention to change their salt-related behaviours and basic dietary information about salt intake that can be used for monitoring and evaluation.

This chapter reports on anthropometric measurements, including height, weight, body mass index (BMI), waist circumference, and the waist-to-height ratio (WtHR), as well as consumption of various foods and drinks and interest in lowering salt consumption among respondents age 15 and older who completed the adult health module.

### 17.1 Body Mass Index of Adults and Short Stature of Women

## Body mass index (BMI)

BMI is calculated by dividing weight in kilograms by height in metres squared $\left(\mathrm{kg} / \mathrm{m}^{2}\right)$.

| Status | BMI |
| :--- | :--- |
| Underweight | $<18.5$ |
| Normal | $18.5-24.9$ |
| Overweight | $25.0-29.9$ |
| Obese | $\geq 30.0$ |
| Severely obese | $\geq 35.0$ |

Sample: Women age 15+ who are not pregnant and who have not had a birth in the 2 months before the survey and men age 15+

Anthropometric data on height and weight were collected for all women and men age 15 and older who consented to measurements ( $82 \%$ of women and $78 \%$ of men). These data were used to calculate the body mass index (BMI).

The mean BMI is 29.2 for women and 23.6 for men. Based on BMI cutoffs, two-thirds (68\%) of women are overweight or obese, $3 \%$ are underweight, and $30 \%$ are in the normal range (Table 17.1.1 and Figure 17.1). In contrast, just under one-third of men (31\%) are overweight or obese, $10 \%$ are underweight, and the majority ( $59 \%$ ) have a BMI in the normal range (Table 17.1.2 and Figure 17.1).

Among women age $15-49$, $2 \%$ were of short stature (height below 145 cm ), which could put them at risk of difficult deliveries and poor birth outcomes.

Figure 17.1 Nutritional status of women and men


Comparison with the SADHS 1998: The mean BMI among women age 15 and older increased from 27.3 in 1998 to 29.2 in 2016. Over the same period, the prevalence of overweight or obesity among women rose from $56 \%$ to $68 \%$, while the prevalence of underweight decreased from $6 \%$ to $3 \%$. There was little change
in the mean BMI among men age 15 and older (23.4 in 1998 and 23.6 in 2016). The prevalence of overweight or obesity among men was $29 \%$ in 1998 and $31 \%$ in 2016, while the prevalence of underweight was $13 \%$ and $10 \%$, respectively.

## Patterns by background characteristics

- The prevalence of overweight or obesity was highest among women age 45-64 (81\%-82\%) and men age 65 or older (54\%).
- There was little variation by population group in the prevalence of overweight or obesity among women ( $67 \%-70 \%$ ). Among men, the prevalence of overweight or obesity was highest among Whites ( $75 \%$ ) and lowest among Black Africans (27\%).
- Among women who perceive themselves as underweight or normal, $44 \%$ and $65 \%$, respectively, are overweight or obese. Among men who perceive themselves as underweight or normal, $10 \%$ and $29 \%$, respectively, are overweight or obese.
- While the prevalence of overweight or obesity is similar among urban and non-urban women ( $68 \%$ and $66 \%$, respectively), the prevalence is modestly higher among men in urban areas than among those in non-urban areas ( $34 \%$ and $26 \%$, respectively).
- Among both women and men, the prevalence of overweight or obesity is highest in Western Cape (73\% and 44\%, respectively) (Figure 17.2 and Figure 17.3).
- One in five women (20\%) are in the severely obese category; only $3 \%$ of men are severely obese (Table 17.2).
- Severe obesity increases with increasing wealth among both men and women (Figure 17.4).
- Indian/Asian women are more likely to be of short stature ( $12 \%$ ) than women in the other population groups ( $0 \%-4 \%$ ) (Table 17.1.1).

Figure 17.2 Overweight or obesity by province: Women

Percentage of women age $15+$ with a $B M I \geq 25$


Figure 17.3 Overweight or obesity by province: Men
Percentage of men age $15+$ with a $B M I \geq 25$


Figure 17.4 Severe obesity in adults by household wealth
Percentage of women and men age 15+ who have a BMI $\geq 35$

- Women ■Men



### 17.2 Waist Circumference and Waist-to-Height Ratio

## Waist circumference

Cut-off values for assessing risk of metabolic complications are based on waist circumference.

| Respondents | Risk category |  |
| :--- | :--- | :--- |
|  | Increased risk of metabolic <br> complications | Substantially increased risk of <br> metabolic complications |
|  | $\geq 80 \mathrm{~cm}$ and $<88 \mathrm{~cm}$ | $\geq 88 \mathrm{~cm}$ |
| Men | $\geq 94 \mathrm{~cm}$ and $<102 \mathrm{~cm}$ | $\geq 102 \mathrm{~cm}$ |

## Waist-to-height ratio (WtHR)

WtHR is calculated by dividing waist circumference by height. Women and men with a WtHR $\geq 0.5$ are at risk for metabolic complications.
Sample: Women and men age 15+; excludes pregnant women and women with a birth in the 2 months preceding the survey

The presence of excess fat in the abdomen, irrespective of total body fat, is an independent predictor of cardiovascular risk and morbidity. Waist circumference provides an estimate of abdominal or visceral obesity, and both waist circumference and the waist-to-height ratio (WtHR) can be used to assess the risk of cardiovascular and coronary heart disease (Ashwell et al. 2012).

The mean waist circumference among women age 15 and older is 87.4 cm . Thirty-five percent of women have a waist circumference below $80 \mathrm{~cm}, 19 \%$ have a waist circumference between 80 cm and less than 88 cm , and $45 \%$ have a waist circumference of 88 cm or above. The mean WtHR among women is $0.55 ; 67 \%$ of women have a WtHR greater than or equal to 0.50 (Table 17.3.1). By either measure, a majority of women in South Africa are at elevated risk for metabolic complications.

The mean waist circumference among men age 15 and older is 82.4 cm . Eighty-one percent of men have a waist circumference below $94 \mathrm{~cm}, 9 \%$ have a waist circumference between 94 cm and less than 102 cm , and $10 \%$ have a waist circumference of 102 cm or above. The mean WtHR among men is 0.49 , and $35 \%$ of men have a WtHR greater than or equal to 0.50 (Table 17.3.2).

Comparison with the SADHS 1998: Mean waist circumference among women has increased since 1998, from 85.8 cm to 87.4 cm ; in accordance with this change, the proportion of women with a waist circumference of 88 cm or above has increased from $41 \%$ to $45 \%$. There has been little or no change in mean waist circumference among men ( 82.1 cm in 1998 versus 82.4 cm in 2016). The percentage of men with a waist circumference of 102 cm or above has also held steady ( $9 \%$ versus $10 \%$ ).

Patterns by background characteristics

- The proportion of both women and men with a WtHR of 0.50 or above increases with age (Figure 17.5).
- By population group, Coloured women and White men are most likely to have a WtHR of 0.50 or above ( $76 \%$ and $74 \%$, respectively) (Table 17.3.1 and Table 17.3.2).
- The percentage of women with a waist circumference of 88 cm or above is higher in Western Cape (59\%) than in other provinces ( $34 \%-55 \%$ ). Similarly, although the proportions

Figure 17.5 Waist-to-height ratio (WtHR) among adults by age

Percentage of women and men with a $W t H R \geq 0.50$

■ Women ■ Men

are much lower overall, men in Western Cape (17\%) are more likely than those in other provinces ( $6 \%$ $14 \%$ ) to have a waist circumference of 102 cm or above.

- The proportion of women with a waist circumference of 88 cm or above and the proportion of men with a waist circumference of 102 cm or above increase with increasing household wealth. The proportion of women and men with a WtHR of 0.50 or above also generally rises with household wealth, with the increase more marked among men.


### 17.3 Consumption of Fruit, Vegetables, Sugar-sweetened Beverages, and Fruit Juice

Respondents were asked about their previous day's intake of fruit, vegetables, sugar-sweetened beverages, and fruit juice using show-cards to clarify types of fruit and vegetables and types and standard quantities of drinks. For each type of drink consumed, the respondent was asked to specify the number of standard units consumed. Five in 10 respondents ( $49 \%$ ) consumed fruit and 6 in $10(59 \%)$ consumed vegetables (excluding potatoes) during the day or night before the survey (Table 17.4). Thirty-six percent of respondents reported drinking any sugar-sweetened beverage, and $14 \%$ reported drinking fruit juice (Table 17.5). Among respondents who drank sugar-sweetened beverages or fruit juice, the average quantities consumed were 607 ml and 304 ml , respectively.

## Patterns by background characteristics

- Fruit, vegetable, and fruit juice intake was similar across all age groups. However, the proportion of respondents who consumed sugar-sweetened beverages peaks among those age 20-24 (44\%) and gradually declines to $19 \%$ among those age 65 and older.
- By population group, fruit and vegetable consumption was highest among Whites ( $71 \%$ and $84 \%$, respectively) and lowest among Black Africans ( $46 \%$ and $57 \%$, respectively). Whites ( $24 \%$ ) were more likely to drink fruit juice than those in other groups ( $13 \%-20 \%$ ); Coloured women and men were most likely to consume sugar-sweetened beverages (38\%), closely followed by Black Africans (36\%).
- Women were more likely than men to consume fruit ( $51 \%$ versus $45 \%$ ), vegetables ( $64 \%$ versus $52 \%$ ), and fruit juice ( $15 \%$ versus $13 \%$ ), while men were more likely to consume sugar-sweetened beverages ( $40 \%$ versus $33 \%$ ).
- The proportion of respondents consuming fruit, vegetables, sugar-sweetened beverages, and fruit juice is higher in urban areas than non-urban areas.
- Fruit and vegetable consumption is highest in Western Cape ( $64 \%$ and $69 \%$, respectively) and lowest in Northern Cape ( $32 \%$ and $46 \%$, respectively). Respondents in North West were most likely to drink sugar-sweetened beverages (45\%), and those in Eastern Cape were least likely to do so (29\%). Among respondents who consumed sugar-sweetened beverages, those in Free State consumed much larger quantities ( $1,360 \mathrm{ml}$ on average) than those in other provinces ( $391-700 \mathrm{ml}$ ). The proportion of respondents who consumed fruit juice was highest in Western Cape (19\%) and lowest in Limpopo and Free State (11\% each).
- The proportion of respondents who consumed fruit, vegetables, sugar-sweetened beverages, and fruit juice generally increases with increasing household wealth (Figure 17.6). A similar trend is observed with respect to education.

Figure 17.6 Consumption of various foods and beverages by household wealth

Percentage of women and men age 15+ who consumed the item in the day or night before the survey
$■$ Fruit $\quad$ Vegetables $\quad$ Sugar-sweetened beverages $\quad$ Fruit juice


### 17.4 Consumption of Fried Foods, Fast Foods, Salty Snacks, and Processed Meats

Respondents were asked how often they eat fried foods, fast foods, salty snacks, and processed meats. As shown in Table 17.6, 10\% of respondents eat fried foods on a daily basis, and $37 \%$ consume them at least once a week (but not daily); $2 \%$ of respondents eat fast food on a daily basis, and $18 \%$ do so at least once a week (but not daily); $13 \%$ of respondents eat salty snacks on a daily basis, with $29 \%$ consuming them at least once a week (but not daily); and $14 \%$ of respondents consume processed meats on a daily basis, with $29 \%$ consuming them at least once a week (but not daily).

## Patterns by background characteristics

- Daily consumption of each of the specified foods generally decreases with age. For example, $32 \%$ of respondents age $15-19$ consume salty snacks on a daily basis, as compared with $4 \%$ of those age 65 and older.
- Daily consumption of each of the specified foods is higher among respondents in urban than non-urban areas. For example, $17 \%$ of respondents in urban areas consume processed meats on a daily basis, compared with $9 \%$ in non-urban areas.
- Consumption of the specified foods varies by province, especially with regard to salty snacks and processed meats. For example, 20\% of respondents in Western Cape and 9\% in KwaZulu-Natal consume salty snacks on a daily basis, while $20 \%$ of respondents in Gauteng and $6 \%$ in Northern Cape consume processed meats daily.
- Daily consumption of each of the specified foods generally increases with increasing education. Daily consumption also generally rises with increasing wealth with the exception of the highest wealth quintile.


### 17.5 Interest in Lowering Salt Consumption

Reducing salt consumption is recommended to reduce deaths from hypertension and cardiovascular diseases, particularly stroke. Respondents were asked which of five statements best described their approach towards salt consumption. As shown in Table 17.7, one in three adults ( $32 \%$ ) are not interested in lowering their salt consumption, $9 \%$ are interested in lowering their salt consumption within the next 6 months, $6 \%$ are interested in lowering their salt consumption within the next month, and $48 \%$ indicate that they have started lowering their salt consumption ( $10 \%$ within the last 6 months and $38 \%$ for 6 months or longer).

## Patterns by background characteristics

- The proportion of respondents who have already lowered their salt consumption for 6 months or longer increases with increasing age, from $28 \%$ among those age $15-24$ to $58 \%$ among those age 65 or older. Conversely, the proportion of respondents who are not interested in lowering their salt consumption decreases with age, from $40 \%$ among those age 15-24 to $21 \%$ among those age 65 and older.
- By population group, Indians/Asians are least interested in lowering their salt consumption ( $45 \%$ versus $24 \%-33 \%$ in other groups).
- A greater proportion of men than women are not interested in lowering their salt consumption (43\% versus $25 \%$ ), and a smaller proportion of men than women have lowered their salt consumption for longer than 6 months ( $30 \%$ versus $45 \%$ ).
- Respondents with elevated blood pressure as measured in the SADHS (see Chapter 16) are more likely than others to indicate that they have already lowered their salt consumption for longer than 6 months ( $45 \%$ versus $35 \%-37 \%$ ).


## LIST OF TABLES

For more information on adult nutritional status and dietary intake, see the following tables:

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- Table 17.1.2 Body mass index of men
- Table 17.2 Severe obesity among women and men
- Table 17.3.1 Waist circumference: Women
- Table 17.3.2 Waist circumference: Men
- Table 17.4 Consumption of fruit and vegetables
- Table 17.5 Consumption of sugar-sweetened beverages and fruit juice
- Table 17.6 Consumption of fried and processed foods
- Table 17.7 Approach to salt consumption

Table 17.1.1 Body mass index and short stature of women
Among women age 15 and older, percentage with height under 145 cm , mean body mass index (BMI), and percentage with specific BMI levels, according to background characteristics, South Africa DHS 2016

| Background characteristic | Height |  | Body mass index ${ }^{1}$ |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Percentage below 145 cm | Number of women | Mean body mass index (BMI) | Normal$18.5-24.9$ <br> (total <br> normal) | Underweight |  |  | Obese |  |  | Number of women |
|  |  |  |  |  | $\begin{gathered} <18.5 \\ \text { (total } \\ \text { under- } \\ \text { weight) } \\ \hline \end{gathered}$ | $\begin{gathered} \text { 17.0-18.4 } \\ \text { (mild } \\ \text { thinness) } \end{gathered}$ | ```<17 (moderate and severe thinness)``` | $\geq 25.0$ <br> (total overweight or obese) | $\begin{gathered} 25.0-29.9 \\ \text { (over- } \\ \text { weight) } \\ \hline \end{gathered}$ | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \\ \hline \end{gathered}$ |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 1.6 | 1,111 | 24.8 | 54.3 | 5.9 | 4.9 | 0.9 | 39.8 | 24.4 | 15.5 | 1,032 |
| 15-19 | 2.1 | 544 | 23.7 | 66.5 | 6.7 | 5.6 | 1.2 | 26.8 | 15.8 | 11.0 | 517 |
| 20-24 | 1.1 | 567 | 25.9 | 42.1 | 5.0 | 4.3 | 0.6 | 52.9 | 32.9 | 20.0 | 515 |
| 25-34 | 1.5 | 1,081 | 29.0 | 31.4 | 2.1 | 1.8 | 0.4 | 66.4 | 29.1 | 37.3 | 1,009 |
| 35-44 | 1.5 | 802 | 30.8 | 20.8 | 1.8 | 1.4 | 0.4 | 77.4 | 24.8 | 52.6 | 780 |
| 45-54 | 2.4 | 678 | 31.7 | 17.4 | 0.7 | 0.7 | 0.0 | 81.9 | 24.9 | 57.0 | 676 |
| 55-64 | 1.6 | 553 | 31.5 | 16.5 | 2.2 | 1.0 | 1.2 | 81.3 | 26.7 | 54.5 | 553 |
| 65+ | 7.9 | 594 | 30.4 | 23.1 | 1.5 | 1.2 | 0.3 | 75.4 | 29.6 | 45.8 | 592 |
| Population group |  |  |  |  |  |  |  |  |  |  |  |
| Black African | 2.3 | 4,209 | 29.2 | 30.0 | 2.6 | 2.1 | 0.5 | 67.4 | 26.4 | 40.9 | 4,047 |
| White | 0.0 | 193 | 28.3 | 28.9 | 1.7 | 1.7 | 0.0 | 69.4 | 38.8 | 30.6 | 188 |
| Coloured | 3.5 | 327 | 30.1 | 27.9 | 4.3 | 3.2 | 1.1 | 67.8 | 21.8 | 46.0 | 317 |
| Indian/Asian | 11.8 | 87 | 29.7 | 30.0 | 0.0 | 0.0 | 0.0 | 70.0 | 20.8 | 49.2 | 87 |
| Other | * | 3 | * | * | * | * | * | * | * | * | 3 |
| Perceived weight |  |  |  |  |  |  |  |  |  |  |  |
| Underweight | 3.4 | 429 | 25.7 | 47.0 | 9.2 | 7.2 | 2.0 | 43.9 | 20.3 | 23.5 | 419 |
| Normal | 2.6 | 3,680 | 28.3 | 32.8 | 2.3 | 1.9 | 0.4 | 64.9 | 29.6 | 35.3 | 3,532 |
| Overweight | 1.0 | 633 | 36.6 | 2.8 | 0.3 | 0.2 | 0.1 | 96.9 | 14.6 | 82.4 | 615 |
| Obese | (1.6) | 34 | (38.9) | (1.7) | (0.0) | (0.0) | (0.0) | (98.3) | (13.2) | (85.1) | 34 |
| Don't know | 0.5 | 43 | 31.1 | 25.6 | 2.9 | 1.4 | 1.5 | 71.4 | 13.3 | 58.2 | 43 |
| Waist circumference |  |  |  |  |  |  |  |  |  |  |  |
| $<80 \mathrm{~cm}$ | 2.8 | 1,646 | 22.8 | 69.7 | 7.0 | 5.6 | 1.4 | 23.3 | 19.9 | 3.4 | 1,646 |
| $80-<88 \mathrm{~cm}$ | 2.1 | 891 | 27.6 | 21.1 | 0.4 | 0.4 | 0.0 | 78.4 | 56.4 | 22.0 | 891 |
| $\geq 88 \mathrm{~cm}$ | 2.5 | 2,095 | 35.0 | 2.1 | 0.0 | 0.0 | 0.0 | 97.9 | 19.1 | 78.8 | 2,091 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 2.2 | 2,988 | 29.6 | 29.4 | 2.2 | 1.9 | 0.3 | 68.4 | 26.3 | 42.2 | 2,869 |
| Non-urban | 2.9 | 1,831 | 28.6 | 30.5 | 3.3 | 2.4 | 0.9 | 66.1 | 26.9 | 39.2 | 1,773 |
| Province |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 3.1 | 435 | 30.6 | 24.3 | 2.3 | 1.9 | 0.4 | 73.3 | 25.9 | 47.5 | 415 |
| Eastern Cape | 2.5 | 646 | 29.5 | 28.5 | 2.3 | 2.0 | 0.3 | 69.2 | 28.5 | 40.6 | 623 |
| Northern Cape | 5.4 | 109 | 27.9 | 30.0 | 8.2 | 5.6 | 2.6 | 61.8 | 26.8 | 35.0 | 106 |
| Free State | 2.4 | 271 | 29.4 | 28.1 | 3.4 | 2.6 | 0.8 | 68.5 | 24.0 | 44.5 | 265 |
| KwaZulu-Natal | 3.2 | 948 | 29.9 | 28.0 | 1.3 | 1.2 | 0.1 | 70.6 | 24.9 | 45.7 | 919 |
| North West | 2.6 | 367 | 28.6 | 27.7 | 4.6 | 3.1 | 1.4 | 67.8 | 24.8 | 43.0 | 353 |
| Gauteng | 1.8 | 1,116 | 29.2 | 33.0 | 1.5 | 1.5 | 0.0 | 65.6 | 26.7 | 38.9 | 1,065 |
| Mpumalanga | 1.0 | 411 | 28.0 | 34.2 | 3.8 | 3.1 | 0.7 | 62.0 | 28.5 | 33.5 | 393 |
| Limpopo | 2.3 | 518 | 28.1 | 31.6 | 4.2 | 2.9 | 1.3 | 64.2 | 28.0 | 36.1 | 503 |
| Education |  |  |  |  |  |  |  |  |  |  |  |
| No education | 5.6 | 421 | 29.7 | 28.7 | 2.5 | 1.6 | 0.9 | 68.8 | 25.3 | 43.5 | 417 |
| Primary incomplete | 4.6 | 580 | 30.0 | 21.8 | 2.5 | 1.9 | 0.7 | 75.6 | 26.9 | 48.7 | 571 |
| Primary complete | 1.8 | 245 | 29.3 | 29.8 | 3.3 | 2.8 | 0.5 | 66.9 | 26.7 | 40.2 | 229 |
| Secondary incomplete | 2.5 | 2,125 | 28.9 | 33.4 | 2.8 | 2.2 | 0.6 | 63.8 | 24.8 | 39.0 | 2,046 |
| Secondary complete | 1.0 | 987 | 29.1 | 29.0 | 2.3 | 2.0 | 0.3 | 68.7 | 28.9 | 39.8 | 937 |
| More than secondary | 0.3 | 460 | 29.4 | 26.6 | 2.3 | 2.1 | 0.2 | 71.1 | 29.8 | 41.3 | 443 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.1 | 987 | 27.4 | 39.7 | 3.0 | 2.4 | 0.6 | 57.3 | 27.6 | 29.7 | 946 |
| Second | 2.4 | 942 | 28.5 | 30.9 | 3.0 | 2.1 | 0.9 | 66.0 | 28.3 | 37.8 | 908 |
| Middle | 1.6 | 1,035 | 29.6 | 26.4 | 3.5 | 2.8 | 0.7 | 70.1 | 26.2 | 43.9 | 997 |
| Fourth | 2.8 | 970 | 30.1 | 27.0 | 1.9 | 1.5 | 0.4 | 71.1 | 25.8 | 45.3 | 931 |
| Highest | 2.5 | 885 | 30.7 | 24.9 | 1.6 | 1.5 | 0.0 | 73.5 | 24.6 | 48.9 | 861 |
| Total 15+ | 2.5 | 4,819 | 29.2 | 29.8 | 2.6 | 2.1 | 0.5 | 67.5 | 26.5 | 41.0 | 4,642 |
| Total 15-49 | 1.5 | 3,334 | 28.3 | 34.8 | 3.1 | 2.6 | 0.5 | 62.1 | 26.3 | 35.9 | 3,159 |

Notes: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres ( $\mathrm{kg} / \mathrm{m}^{2}$ ). Total includes 14 women for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

Table 17.1.2 Body mass index of men
Among men age 15 and older, mean body mass index (BMI) and the percentage with specific BMI levels, according to background characteristics, South Africa DHS 2016

| Background characteristic | Body mass index |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean body mass index (BMI) | Normal <br> $18.5-24.9$ <br> (total <br> normal) | Underweight |  |  | Obese |  |  | Number of men |
|  |  |  | <18.5 <br> (total underweight) | $\begin{gathered} \text { 17.0-18.4 } \\ \text { (mild } \\ \text { thinness) } \end{gathered}$ | $<17$ (moderate and severe thinness) | $\geq 25.0$ <br> (total overweight or obese) | $\begin{gathered} 25.0-29.9 \\ \text { (over- } \\ \text { weight) } \\ \hline \end{gathered}$ | $\begin{gathered} \geq 30.0 \\ \text { (obese) } \end{gathered}$ |  |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 21.3 | 73.0 | 15.8 | 12.0 | 3.8 | 11.2 | 8.9 | 2.3 | 927 |
| 15-19 | 20.9 | 70.7 | 20.7 | 14.9 | 5.8 | 8.6 | 6.1 | 2.5 | 499 |
| 20-24 | 21.8 | 75.7 | 10.2 | 8.6 | 1.6 | 14.2 | 12.2 | 2.0 | 428 |
| 25-34 | 23.3 | 66.0 | 5.9 | 4.7 | 1.2 | 28.1 | 20.5 | 7.7 | 700 |
| 35-44 | 24.6 | 56.5 | 5.4 | 4.2 | 1.1 | 38.1 | 23.3 | 14.8 | 540 |
| 45-54 | 25.0 | 49.7 | 7.6 | 6.0 | 1.5 | 42.8 | 25.7 | 17.0 | 340 |
| 55-64 | 25.8 | 36.7 | 10.1 | 8.9 | 1.2 | 53.2 | 34.2 | 19.0 | 313 |
| 65+ | 26.0 | 38.7 | 6.9 | 4.9 | 2.0 | 54.4 | 29.8 | 24.5 | 286 |
| Population group |  |  |  |  |  |  |  |  |  |
| Black African | 23.2 | 62.8 | 9.8 | 7.8 | 2.0 | 27.4 | 18.7 | 8.7 | 2,663 |
| White | 29.1 | 24.1 | 1.2 | 0.3 | 0.9 | 74.7 | 35.3 | 39.3 | 175 |
| Coloured | 24.2 | 48.0 | 11.6 | 8.3 | 3.3 | 40.4 | 26.7 | 13.7 | 207 |
| Indian/Asian | (25.9) | (41.8) | (9.7) | (4.5) | (5.2) | (48.5) | (26.5) | (22.0) | 60 |
| Other | nc | nc | nc | nc | nc | nc | nc | nc | 0 |
| Perceived weight |  |  |  |  |  |  |  |  |  |
| Underweight | 21.2 | 70.2 | 19.7 | 15.0 | 4.7 | 10.1 | 6.8 | 3.2 | 310 |
| Normal | 23.2 | 61.7 | 9.1 | 7.1 | 2.0 | 29.3 | 21.5 | 7.8 | 2,528 |
| Overweight | 30.9 | 17.8 | 0.2 | 0.2 | 0.0 | 82.0 | 27.9 | 54.1 | 225 |
| Obese | * | * | * | * | * |  | * | * | 10 |
| Don't know | (24.3) | (63.1) | (4.2) | (4.2) | (0.0) | (32.7) | (14.9) | (17.8) | 32 |
| Waist circumference |  |  |  |  |  |  |  |  |  |
| $<94 \mathrm{~cm}$ | 22.0 | 71.8 | 10.9 | 8.6 | 2.3 | 17.2 | 15.7 | 1.6 | 2,471 |
| $94-<102 \mathrm{~cm}$ | 28.2 | 8.7 | 1.0 | 1.0 | 0.0 | 90.3 | 66.4 | 23.9 | 284 |
| $\geq 102 \mathrm{~cm}$ | 33.2 | 1.6 | 1.1 | 0.5 | 0.6 | 97.3 | 18.5 | 78.8 | 297 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 23.9 | 56.7 | 9.1 | 7.2 | 1.9 | 34.2 | 20.9 | 13.3 | 2,025 |
| Non-urban | 23.0 | 63.8 | 10.1 | 7.7 | 2.5 | 26.1 | 19.3 | 6.8 | 1,080 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 24.8 | 49.3 | 7.0 | 5.8 | 1.2 | 43.7 | 29.8 | 13.9 | 261 |
| Eastern Cape | 23.3 | 67.6 | 6.8 | 4.6 | 2.1 | 25.6 | 15.8 | 9.9 | 413 |
| Northern Cape | 23.3 | 49.2 | 19.2 | 13.2 | 6.0 | 31.5 | 16.7 | 14.8 | 68 |
| Free State | 22.7 | 57.8 | 14.7 | 11.9 | 2.8 | 27.5 | 18.5 | 9.0 | 177 |
| KwaZulu-Natal | 24.2 | 57.3 | 7.5 | 5.8 | 1.7 | 35.2 | 22.6 | 12.6 | 520 |
| North West | 23.2 | 56.7 | 13.3 | 9.1 | 4.2 | 30.0 | 22.3 | 7.8 | 271 |
| Gauteng | 23.8 | 58.1 | 8.4 | 7.3 | 1.1 | 33.5 | 20.7 | 12.8 | 848 |
| Mpumalanga | 23.0 | 65.2 | 10.7 | 9.2 | 1.5 | 24.1 | 14.6 | 9.5 | 273 |
| Limpopo | 22.8 | 62.8 | 12.1 | 8.3 | 3.8 | 25.1 | 18.7 | 6.5 | 276 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 23.7 | 54.8 | 12.2 | 9.4 | 2.8 | 33.0 | 17.3 | 15.7 | 169 |
| Primary incomplete | 23.3 | 62.7 | 10.8 | 8.7 | 2.1 | 26.6 | 18.4 | 8.1 | 398 |
| Primary complete | 22.8 | 63.4 | 10.2 | 7.5 | 2.7 | 26.4 | 18.9 | 7.5 | 163 |
| Secondary incomplete | 22.7 | 64.8 | 11.5 | 9.2 | 2.4 | 23.7 | 17.3 | 6.4 | 1,437 |
| Secondary complete | 24.6 | 54.7 | 6.1 | 4.0 | 2.1 | 39.2 | 23.8 | 15.5 | 624 |
| More than secondary | 26.8 | 38.1 | 3.1 | 3.0 | 0.1 | 58.8 | 32.3 | 26.4 | 313 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 22.1 | 72.7 | 9.9 | 7.0 | 2.9 | 17.4 | 14.1 | 3.3 | 630 |
| Second | 22.6 | 65.8 | 10.1 | 7.9 | 2.2 | 24.1 | 18.8 | 5.3 | 649 |
| Middle | 23.5 | 59.6 | 9.3 | 7.5 | 1.7 | 31.2 | 21.8 | 9.3 | 677 |
| Fourth | 23.7 | 57.7 | 10.9 | 8.6 | 2.3 | 31.4 | 19.3 | 12.1 | 595 |
| Highest | 26.7 | 37.3 | 6.9 | 5.6 | 1.3 | 55.8 | 28.4 | 27.4 | 554 |
| Total 15+ | 23.6 | 59.2 | 9.5 | 7.4 | 2.1 | 31.3 | 20.3 | 11.0 | 3,105 |
| Total 15-49 | 23.0 | 65.3 | 9.6 | 7.4 | 2.2 | 25.1 | 17.2 | 7.9 | 2,353 |

Notes: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in metres ( $\mathrm{kg} / \mathrm{m}^{2}$ ). Total includes 52 men for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases

Table 17.2 Severe obesity among women and men
Percentage of women and men age 15 and older with a body mass index (BMI) $\geq 35$ (Class II and III obesity), according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  | Men |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Body mass index (BMI) $\geq 35.0$ | Number | Body mass index (BMI) $\geq 35.0$ | Number |
| Age |  |  |  |  |
| 15-24 | 5.8 | 1,032 | 0.7 | 927 |
| 15-19 | 4.5 | 517 | 1.0 | 499 |
| 20-24 | 7.1 | 515 | 0.3 | 428 |
| 25-34 | 17.4 | 1,009 | 2.3 | 700 |
| 35-44 | 26.5 | 780 | 5.0 | 540 |
| 45-54 | 29.0 | 676 | 4.8 | 340 |
| 55-64 | 29.9 | 553 | 6.2 | 313 |
| 65+ | 23.8 | 592 | 4.0 | 286 |
| Population group |  |  |  |  |
| Black African | 20.3 | 4,047 | 2.1 | 2,663 |
| White | 14.5 | 188 | 14.1 | 175 |
| Coloured | 25.7 | 317 | 6.6 | 207 |
| Indian/Asian | 18.0 | 87 | (5.4) | 60 |
| Other |  | 3 | nc | 0 |
| Perceived weight |  |  |  |  |
| Underweight | 9.5 | 419 | 0.1 | 310 |
| Normal | 15.0 | 3,532 | 1.6 | 2,528 |
| Overweight | 54.4 | 615 | 21.5 | 225 |
| Obese | (71.8) | 34 | * | 10 |
| Don't know | 39.3 | 43 | (8.1) | 32 |
| Waist circumference |  |  |  |  |
| Women: <80 cm; men: <94 cm | 0.4 | 1,646 | 0.4 | 2,471 |
| Women: $80-<88 \mathrm{~cm}$; men: |  |  |  |  |
| $94-<102 \mathrm{~cm}$ | 3.3 | 891 | 0.8 | 284 |
| Women: $\geq 88 \mathrm{~cm}$; men: $\geq 102 \mathrm{~cm}$ | 43.3 | 2,091 | 28.0 | 297 |
| Residence |  |  |  |  |
| Urban | 22.4 | 2,869 | 3.6 | 2,025 |
| Non-urban | 17.0 | 1,773 | 2.2 | 1,080 |
| Province |  |  |  |  |
| Western Cape | 26.3 | 415 | 4.7 | 261 |
| Eastern Cape | 20.1 | 623 | 2.3 | 413 |
| Northern Cape | 15.4 | 106 | 4.5 | 68 |
| Free State | 21.3 | 265 | 2.0 | 177 |
| KwaZulu-Natal | 22.6 | 919 | 5.0 | 520 |
| North West | 14.4 | 353 | 1.9 | 271 |
| Gauteng | 22.2 | 1,065 | 3.4 | 848 |
| Mpumalanga | 15.3 | 393 | 0.8 | 273 |
| Limpopo | 16.3 | 503 | 2.2 | 276 |
| Education |  |  |  |  |
| No education | 22.8 | 417 | 3.8 | 169 |
| Primary incomplete | 21.3 | 571 | 1.1 | 398 |
| Primary complete | 18.1 | 229 | 3.2 | 163 |
| Secondary incomplete | 20.6 | 2,046 | 1.7 | 1,437 |
| Secondary complete | 18.1 | 937 | 4.8 | 624 |
| More than secondary | 21.6 | 443 | 8.3 | 313 |
| Wealth quintile |  |  |  |  |
| Lowest | 12.1 | 946 | 0.4 | 630 |
| Second | 16.1 | 908 | 1.2 | 649 |
| Middle | 21.4 | 997 | 2.6 | 677 |
| Fourth | 24.2 | 931 | 2.6 | 595 |
| Highest | 28.6 | 861 | 9.5 | 554 |
| Total 15+ | 20.4 | 4,642 | 3.1 | 3,105 |
| Total 15-49 | 16.8 | 3,159 | 2.4 | 2,353 |

Notes: Table excludes pregnant women and women with a birth in the preceding 2 months. Total includes 14 women and 52 men for whom information on waist circumference is missing. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed
$\mathrm{nc}=$ No cases

Table 17.3.1 Waist circumference: Women
Among women age 15 and older, mean waist circumference, percentage with a waist circumference less than 80 centimetres (cm), percentage with a waist circumference between 80 cm and 88 cm , percentage with a waist circumference greater than or equal to 88 cm , mean waist-to-height ratio, and percentage with a waist-to-height ratio greater than or equal to 0.50 , according to background characteristics, South Africa DHS 2016

| Background characteristic | Waist circumference ${ }^{1}$ |  |  |  |  | Waist-to-height ratio (WtHR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (cm) | $<80 \mathrm{~cm}$ | 80-<88 | $\geq 88 \mathrm{~cm}$ | Number of women | Mean WtHR | Percentage with a WtHR $\geq 0.50$ | Number of women |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 75.8 | 70.5 | 14.9 | 14.6 | 1,033 | 0.48 | 33.4 | 1,033 |
| 25-34 | 85.6 | 39.0 | 21.8 | 39.1 | 1,011 | 0.54 | 62.8 | 1,010 |
| 35-44 | 90.5 | 26.9 | 20.9 | 52.2 | 784 | 0.57 | 74.1 | 784 |
| 45-54 | 93.1 | 17.1 | 21.3 | 61.6 | 681 | 0.59 | 83.4 | 680 |
| 55-64 | 93.9 | 18.4 | 18.7 | 62.9 | 557 | 0.60 | 83.9 | 557 |
| 65+ | 93.9 | 16.7 | 18.5 | 64.8 | 598 | 0.61 | 87.9 | 597 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 87.2 | 36.1 | 19.3 | 44.6 | 4,067 | 0.55 | 66.4 | 4,062 |
| White | 87.3 | 33.8 | 20.6 | 45.6 | 189 | 0.54 | 62.9 | 189 |
| Coloured | 91.4 | 26.9 | 16.2 | 56.8 | 316 | 0.58 | 75.5 | 316 |
| Indian/Asian | 83.7 | 39.2 | 26.0 | 34.8 | 90 | 0.54 | 69.9 | 90 |
| Other | * | * | + | + | 3 | * |  | 3 |
| Perceived weight |  |  |  |  |  |  |  |  |
| Underweight | 82.1 | 51.0 | 16.4 | 32.5 | 418 | 0.52 | 51.3 | 418 |
| Normal | 85.4 | 38.7 | 21.6 | 39.6 | 3,546 | 0.54 | 64.0 | 3,543 |
| Overweight | 101.3 | 8.5 | 8.6 | 82.9 | 624 | 0.64 | 91.6 | 624 |
| Obese | (105.5) | (1.7) | (11.6) | (86.7) | 34 | (0.65) | (98.3) | 34 |
| Don't know | 91.2 | 28.2 | 12.1 | 59.7 | 43 | 0.58 | 78.8 | 41 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 87.6 | 35.9 | 18.8 | 45.3 | 2,873 | 0.56 | 66.7 | 2,872 |
| Non-urban | 87.1 | 34.7 | 20.0 | 45.4 | 1,792 | 0.55 | 67.4 | 1,788 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 91.2 | 26.4 | 14.6 | 59.0 | 416 | 0.58 | 77.1 | 416 |
| Eastern Cape | 90.8 | 27.6 | 17.2 | 55.2 | 622 | 0.58 | 75.3 | 622 |
| Northern Cape | 88.1 | 33.6 | 17.7 | 48.7 | 101 | 0.57 | 70.3 | 101 |
| Free State | 88.7 | 34.1 | 14.4 | 51.5 | 265 | 0.57 | 69.7 | 265 |
| KwaZulu-Natal | 87.2 | 36.4 | 21.0 | 42.6 | 946 | 0.55 | 65.8 | 945 |
| North West | 87.2 | 32.9 | 19.3 | 47.8 | 353 | 0.55 | 70.3 | 353 |
| Gauteng | 86.2 | 38.8 | 21.0 | 40.2 | 1,065 | 0.54 | 63.4 | 1,065 |
| Mpumalanga | 83.2 | 46.9 | 18.9 | 34.2 | 393 | 0.53 | 55.3 | 392 |
| Limpopo | 85.8 | 37.5 | 21.8 | 40.6 | 502 | 0.54 | 62.5 | 500 |
| Education |  |  |  |  |  |  |  |  |
| No education | 91.3 | 26.4 | 17.8 | 55.8 | 423 | 0.59 | 79.0 | 420 |
| Primary incomplete | 91.3 | 22.6 | 21.3 | 56.1 | 575 | 0.59 | 80.2 | 575 |
| Primary complete | 89.8 | 28.6 | 23.8 | 47.6 | 229 | 0.57 | 74.4 | 228 |
| Secondary incomplete | 85.8 | 40.4 | 17.8 | 41.8 | 2,049 | 0.54 | 62.4 | 2,047 |
| Secondary complete | 86.2 | 39.3 | 19.3 | 41.4 | 946 | 0.54 | 61.8 | 946 |
| More than secondary | 87.6 | 33.0 | 22.3 | 44.7 | 444 | 0.55 | 66.4 | 444 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 84.6 | 43.1 | 20.9 | 36.0 | 960 | 0.54 | 60.9 | 959 |
| Second | 86.3 | 37.3 | 19.9 | 42.7 | 906 | 0.55 | 65.6 | 905 |
| Middle | 87.9 | 33.2 | 20.2 | 46.5 | 1,001 | 0.56 | 69.2 | 999 |
| Fourth | 88.9 | 32.2 | 18.3 | 49.5 | 934 | 0.56 | 69.8 | 934 |
| Highest | 89.6 | 31.0 | 16.6 | 52.4 | 863 | 0.57 | 69.4 | 863 |
| Total 15+ | 87.4 | 35.4 | 19.2 | 45.3 | 4,664 | 0.55 | 66.9 | 4,660 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Excludes pregnant women and women with a birth in the preceding 2 months

Table 17.3.2 Waist circumference: Men
Among men age 15 and older, mean waist circumference, percentage with a waist circumference less than 94 centimetres (cm), percentage with a waist circumference between 94 cm and 102 cm , percentage with a waist circumference greater than or equal to 102 cm , mean waist-to-height ratio, and percentage with a waist-to-height ratio greater than or equal to 0.50 , according to background characteristics, South Africa DHS 2016

| Background characteristic | Waist circumference |  |  |  |  | Waist-to-height ratio (WtHR) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mean (cm) | $<94 \mathrm{~cm}$ | 94-<102 | $\geq 102 \mathrm{~cm}$ | Number of men | Mean WtHR | Percentage with a WtHR $\geq 0.50$ | Number of men |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 73.8 | 97.7 | 0.9 | 1.4 | 896 | 0.44 | 7.9 | 895 |
| 25-34 | 80.2 | 88.2 | 7.9 | 3.9 | 698 | 0.47 | 25.2 | 698 |
| 35-44 | 84.7 | 78.1 | 11.1 | 10.8 | 542 | 0.50 | 42.6 | 540 |
| 45-54 | 88.0 | 70.5 | 13.3 | 16.1 | 338 | 0.52 | 53.7 | 338 |
| 55-64 | 91.9 | 58.9 | 18.4 | 22.7 | 317 | 0.54 | 69.3 | 316 |
| 65+ | 93.0 | 51.9 | 21.2 | 26.9 | 286 | 0.55 | 69.9 | 286 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 80.8 | 84.7 | 8.1 | 7.2 | 2,633 | 0.48 | 31.0 | 2,629 |
| White | 99.3 | 37.8 | 21.5 | 40.7 | 175 | 0.56 | 73.6 | 175 |
| Coloured | 86.8 | 69.0 | 13.9 | 17.2 | 209 | 0.51 | 49.5 | 209 |
| Indian/Asian | (85.2) | (76.8) | (12.0) | (11.2) | 60 | (0.50) | (50.0) | 60 |
| Other |  |  | nc |  | 0 | nc | nc | 0 |
| Perceived weight |  |  |  |  |  |  |  |  |
| Underweight | 78.0 | 92.6 | 4.5 | 3.0 | 306 | 0.46 | 20.8 | 305 |
| Normal | 81.3 | 83.5 | 9.2 | 7.3 | 2,504 | 0.48 | 32.8 | 2,502 |
| Overweight | 99.7 | 37.2 | 15.6 | 47.2 | 225 | 0.58 | 76.8 | 224 |
| Obese | * |  | * |  | 10 | * | * | 10 |
| Don't know | (83.6) | (84.0) | (12.3) | (3.7) | 32 | (0.50) | (42.9) | 32 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 83.2 | 78.7 | 9.7 | 11.7 | 2,012 | 0.49 | 36.9 | 2,011 |
| Non-urban | 80.8 | 85.0 | 8.7 | 6.4 | 1,064 | 0.48 | 31.6 | 1,062 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 87.4 | 68.5 | 14.2 | 17.4 | 264 | 0.51 | 48.5 | 264 |
| Eastern Cape | 82.1 | 81.0 | 8.6 | 10.4 | 408 | 0.49 | 32.8 | 408 |
| Northern Cape | 82.5 | 76.0 | 10.3 | 13.7 | 66 | 0.49 | 37.3 | 66 |
| Free State | 80.8 | 81.0 | 12.3 | 6.7 | 174 | 0.48 | 32.1 | 174 |
| KwaZulu-Natal | 81.7 | 83.5 | 9.1 | 7.4 | 529 | 0.49 | 37.2 | 529 |
| North West | 81.1 | 82.6 | 7.9 | 9.5 | 270 | 0.48 | 34.5 | 270 |
| Gauteng | 83.3 | 80.2 | 9.1 | 10.7 | 849 | 0.49 | 34.9 | 848 |
| Mpumalanga | 79.1 | 86.3 | 5.4 | 8.3 | 271 | 0.47 | 26.9 | 270 |
| Limpopo | 81.8 | 83.8 | 10.2 | 6.0 | 247 | 0.48 | 31.6 | 245 |
| Education |  |  |  |  |  |  |  |  |
| No education | 85.2 | 74.7 | 11.2 | 14.1 | 171 | 0.51 | 44.9 | 171 |
| Primary incomplete | 83.8 | 78.5 | 9.7 | 11.9 | 398 | 0.50 | 40.1 | 397 |
| Primary complete | 80.3 | 86.2 | 8.3 | 5.5 | 165 | 0.48 | 33.2 | 164 |
| Secondary incomplete | 79.1 | 88.1 | 6.4 | 5.5 | 1,415 | 0.47 | 26.8 | 1,414 |
| Secondary complete | 84.0 | 76.5 | 12.6 | 10.9 | 615 | 0.49 | 38.4 | 615 |
| More than secondary | 91.7 | 60.2 | 15.0 | 24.8 | 313 | 0.53 | 55.3 | 312 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 78.0 | 92.7 | 3.9 | 3.4 | 628 | 0.47 | 24.6 | 626 |
| Second | 79.6 | 87.8 | 6.9 | 5.3 | 644 | 0.47 | 26.3 | 643 |
| Middle | 81.9 | 83.4 | 10.8 | 5.8 | 660 | 0.48 | 36.5 | 659 |
| Fourth | 82.5 | 79.0 | 10.3 | 10.6 | 594 | 0.49 | 33.6 | 593 |
| Highest | 91.1 | 58.1 | 15.5 | 26.4 | 551 | 0.53 | 57.1 | 551 |
| Total 15+ | 82.4 | 80.8 | 9.3 | 9.8 | 3,076 | 0.49 | 35.1 | 3,073 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
nc $=$ No cases

Table 17.4 Consumption of fruit and vegetables
Percentage of respondents age 15 and older by type of foods consumed the day or night before the survey, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who ate any fruit | Percentage who ate any vegetables ${ }^{1}$ | Number of respondents |
| :---: | :---: | :---: | :---: |
| Age |  |  |  |
| 15-24 | 47.7 | 55.0 | 2,670 |
| 15-19 | 47.2 | 53.1 | 1,371 |
| 20-24 | 48.2 | 56.9 | 1,299 |
| 25-34 | 49.6 | 60.1 | 2,353 |
| 35-44 | 50.6 | 57.7 | 1,766 |
| 45-54 | 49.1 | 61.6 | 1,358 |
| 55-64 | 47.7 | 62.2 | 1,106 |
| 65+ | 47.1 | 61.1 | 1,083 |
| Population group |  |  |  |
| Black African | 46.2 | 56.8 | 8,704 |
| White | 71.4 | 83.5 | 577 |
| Coloured | 56.4 | 62.0 | 851 |
| Indian/Asian | 61.6 | 66.7 | 196 |
| Other | * | * | 9 |
| Sex |  |  |  |
| Male | 45.2 | 51.8 | 4,210 |
| Female | 51.2 | 63.8 | 6,126 |
| Employment (past 12 months) |  |  |  |
| Not employed | 45.0 | 57.2 | 6,237 |
| Employed for cash | 54.5 | 59.9 | 3,457 |
| Employed not for cash | 54.8 | 69.7 | 642 |
| Body mass index |  |  |  |
| Underweight (BMI <18.5) | 40.2 | 44.5 | 415 |
| Normal (BMI 18.5-24.9) | 45.3 | 55.2 | 3,223 |
| Overweight (BMI 25.0-29.9) | 49.1 | 59.7 | 1,862 |
| Obese ( $\mathrm{BMI} \geq 30.0$ ) | 51.8 | 66.2 | 2,247 |
| Not eligible (pregnant or recent birth) | 55.6 | 61.6 | 215 |
| Not measured in survey | 51.3 | 58.5 | 2,374 |
| Residence |  |  |  |
| Urban | 50.5 | 60.8 | 6,870 |
| Non-urban | 45.4 | 55.0 | 3,466 |
| Province |  |  |  |
| Western Cape | 63.9 | 69.2 | 1,178 |
| Eastern Cape | 44.3 | 62.5 | 1,223 |
| Northern Cape | 32.3 | 46.4 | 212 |
| Free State | 47.3 | 56.7 | 532 |
| KwaZulu-Natal | 50.1 | 58.0 | 1,874 |
| North West | 44.8 | 51.8 | 708 |
| Gauteng | 44.4 | 59.7 | 2,779 |
| Mpumalanga | 47.8 | 52.7 | 799 |
| Limpopo | 53.8 | 55.6 | 1,032 |
| Education |  |  |  |
| No education | 34.9 | 53.7 | 712 |
| Primary incomplete | 35.9 | 50.7 | 1,145 |
| Primary complete | 44.0 | 54.4 | 504 |
| Secondary incomplete | 47.4 | 55.9 | 4,625 |
| Secondary complete | 54.5 | 63.7 | 2,228 |
| More than secondary | 66.9 | 75.2 | 1,122 |
| Wealth quintile |  |  |  |
| Lowest | 37.0 | 50.4 | 1,950 |
| Second | 45.2 | 53.9 | 1,991 |
| Middle | 48.4 | 56.0 | 2,136 |
| Fourth | 52.0 | 60.6 | 2,085 |
| Highest | 59.8 | 72.3 | 2,175 |
| Total 15+ | 48.8 | 58.9 | 10,336 |

[^29]Table 17.5 Consumption of sugar-sweetened beverages and fruit juice
Percentage of respondents age 15 and older who drank any sugar-sweetened beverage (SSB) the day preceding the survey, and among respondents who drank any SSB, the average quantity consumed; and percentage of respondents who drank any fruit juice the day preceding the survey, and among respondents who drank fruit juice, the average quantity consumed, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who drank any SSB ${ }^{1}$ | Number of respondents | Among respondents who drank any SSB ${ }^{1}$ |  | Percentage who drank any fruit juice | Number of respondents | Among respondents who drank fruit juice |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Average quantity consumed (ml) | Number of respondents |  |  | Average quantity consumed (ml) | Number of respondents |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 42.1 | 2,670 | 581.7 | 1,124 | 13.9 | 2,670 | 305.8 | 370 |
| 15-19 | 39.8 | 1,371 | 494.5 | 546 | 14.0 | 1,371 | 328.0 | 191 |
| 20-24 | 44.4 | 1,299 | 664.2 | 577 | 13.8 | 1,299 | 281.9 | 179 |
| 25-34 | 42.5 | 2,353 | 681.2 | 1,001 | 16.4 | 2,353 | 311.6 | 386 |
| 35-44 | 36.5 | 1,766 | 668.7 | 645 | 12.5 | 1,766 | 329.0 | 221 |
| 45-54 | 31.0 | 1,358 | 551.1 | 421 | 14.6 | 1,358 | 283.0 | 198 |
| 55-64 | 26.9 | 1,106 | 522.8 | 297 | 12.3 | 1,106 | 285.7 | 136 |
| 65+ | 18.8 | 1,083 | 428.3 | 204 | 13.0 | 1,083 | 285.3 | 141 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 36.1 | 8,704 | 607.2 | 3,142 | 12.9 | 8,704 | 303.5 | 1,120 |
| White | 29.0 | 577 | 489.4 | 167 | 24.4 | 577 | 288.2 | 141 |
| Coloured | 37.7 | 851 | 693.0 | 321 | 17.7 | 851 | 302.9 | 151 |
| Indian/Asian | 30.2 | 196 | (484.0) | 59 | 20.1 | 196 | (377.1) | 39 |
| Other |  | 9 | * | 3 | * | 9 |  | 1 |
| Sex |  |  |  |  |  |  |  |  |
| Male | 39.9 | 4,210 | 659.1 | 1,678 | 12.5 | 4,210 | 319.5 | 527 |
| Female | 32.9 | 6,126 | 563.8 | 2,014 | 15.1 | 6,126 | 295.0 | 925 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |
| Not employed | 30.9 | 6,237 | 579.4 | 1,928 | 12.7 | 6,237 | 308.3 | 790 |
| Employed for cash | 45.0 | 3,457 | 629.7 | 1,555 | 16.4 | 3,457 | 303.1 | 566 |
| Employed not for cash | 32.6 | 642 | 695.8 | 209 | 14.9 | 642 | 271.5 | 96 |
| Body mass index |  |  |  |  |  |  |  |  |
| Underweight (BMI <18.5) | 34.9 | 415 | 791.7 | 145 | 11.9 | 415 | 483.6 | 49 |
| Normal (BMI 18.5-24.9) | 36.2 | 3,223 | 587.7 | 1,166 | 12.9 | 3,223 | 286.1 | 417 |
| Overweight |  |  |  |  |  |  |  |  |
| Obese (BMI $\geq 30.0$ ) | 33.0 | 2,247 | 611.6 | 740 | 15.5 | 2,247 | 308.7 | 349 |
| Not eligible (pregnant or recent birth) | 40.0 | 215 | 363.6 | 86 | 21.4 | 215 | (276.2) | 46 |
| Not measured in survey | 38.3 | 2,374 | 601.7 | 909 | 14.8 | 2,374 | 299.6 | 351 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 37.1 | 6,870 | 656.6 | 2,548 | 15.7 | 6,870 | 301.6 | 1,076 |
| Non-urban | 33.0 | 3,466 | 497.0 | 1,144 | 10.9 | 3,466 | 310.2 | 376 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 37.0 | 1,178 | 646.6 | 436 | 18.9 | 1,178 | 279.4 | 222 |
| Eastern Cape | 29.1 | 1,223 | 622.2 | 356 | 14.0 | 1,223 | 336.2 | 172 |
| Northern Cape | 37.3 | 212 | 700.3 | 79 | 13.6 | 212 | 344.9 | 29 |
| Free State | 29.8 | 532 | 1,359.9 | 159 | 11.1 | 532 | 379.8 | 59 |
| KwaZulu-Natal | 31.5 | 1,874 | 472.7 | 589 | 14.0 | 1,874 | 319.8 | 263 |
| North West | 45.3 | 708 | 573.1 | 321 | 12.6 | 708 | 301.2 | 90 |
| Gauteng | 36.7 | 2,779 | 625.3 | 1,021 | 14.3 | 2,779 | 294.4 | 398 |
| Mpumalanga | 41.7 | 799 | 632.5 | 333 | 13.9 | 799 | 282.9 | 111 |
| Limpopo | 38.6 | 1,032 | 391.2 | 398 | 10.5 | 1,032 | 270.7 | 109 |
| Education |  |  |  |  |  |  |  |  |
| No education | 20.5 | 712 | 502.0 | 146 | 4.5 | 712 | (294.1) | 32 |
| Primary incomplete | 27.0 | 1,145 | 555.1 | 310 | 9.0 | 1,145 | 308.1 | 103 |
| Primary complete | 31.6 | 504 | 698.1 | 160 | 8.5 | 504 | 271.6 | 43 |
| Secondary incomplete | 36.5 | 4,625 | 625.4 | 1,686 | 13.0 | 4,625 | 306.7 | 599 |
| Secondary complete | 40.8 | 2,228 | 611.5 | 909 | 17.0 | 2,228 | 308.3 | 380 |
| More than secondary | 43.0 | 1,122 | 570.4 | 482 | 26.3 | 1,122 | 296.8 | 295 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 28.0 | 1,950 | 551.2 | 545 | 8.7 | 1,950 | 313.4 | 169 |
| Second | 35.5 | 1,991 | 642.3 | 707 | 10.8 | 1,991 | 314.8 | 215 |
| Middle | 38.0 | 2,136 | 571.1 | 812 | 12.7 | 2,136 | 288.4 | 271 |
| Fourth | 37.0 | 2,085 | 620.2 | 772 | 14.7 | 2,085 | 289.8 | 307 |
| Highest | 39.3 | 2,175 | 636.3 | 856 | 22.5 | 2,175 | 313.2 | 489 |
| Total 15+ | 35.7 | 10,336 | 607.2 | 3,692 | 14.0 | 10,336 | 303.9 | 1,452 |

Note: Figures in parentheses are based on 25-49 unweighted cases An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Sugar-sweetened beverages (SSB) include fizzy drinks such as sodas or drinks such as Squash where water is added, but not diet or unsweetened cold drinks

Table 17.6 Consumption of fried and processed foods
Percentage of respondents age 15 and older who consume fried foods, fast foods, salty snacks, or processed meats every day or at least once a week, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who consume fried foods: |  | Percentage who consume fast foods: |  | Percentage who consume salty snacks: |  | Percentage who consume processed meats: |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Every day | At least once a week ${ }^{1}$ | Every day | At least once a week ${ }^{1}$ | Every day | At least once a week ${ }^{1}$ | Every day | At least once a week ${ }^{1}$ | Number of respondents |
| Age |  |  |  |  |  |  |  |  |  |
| 15-24 | 14.9 | 39.3 | 2.9 | 21.0 | 25.2 | 32.7 | 20.4 | 30.5 | 2,670 |
| 15-19 | 15.3 | 39.3 | 2.4 | 18.9 | 31.6 | 31.1 | 22.3 | 30.0 | 1,371 |
| 20-24 | 14.5 | 39.2 | 3.4 | 23.3 | 18.6 | 34.3 | 18.3 | 30.9 | 1,299 |
| 25-34 | 11.1 | 41.0 | 2.9 | 24.4 | 14.1 | 33.6 | 18.2 | 32.3 | 2,353 |
| 35-44 | 9.4 | 38.3 | 2.1 | 20.1 | 8.7 | 31.4 | 14.6 | 31.3 | 1,766 |
| 45-54 | 8.7 | 35.3 | 2.4 | 14.8 | 5.7 | 25.5 | 10.2 | 27.6 | 1,358 |
| 55-64 | 4.9 | 28.7 | 1.7 | 10.2 | 4.6 | 18.5 | 5.6 | 23.8 | 1,106 |
| 65+ | 4.4 | 26.8 | 1.3 | 8.3 | 3.5 | 16.9 | 5.4 | 19.1 | 1,083 |
| Population group |  |  |  |  |  |  |  |  |  |
| Black African | 10.1 | 35.4 | 2.3 | 17.6 | 12.6 | 27.9 | 14.5 | 28.3 | 8,704 |
| White | 8.0 | 42.9 | 3.0 | 23.1 | 6.4 | 33.3 | 11.5 | 23.9 | 577 |
| Coloured | 12.6 | 40.1 | 3.1 | 18.9 | 20.3 | 29.8 | 15.8 | 36.0 | 851 |
| Indian/Asian | 7.2 | 53.9 | 2.3 | 34.8 | 8.7 | 39.5 | 12.4 | 33.6 | 196 |
| Other | * | * | * | * | * | * | * | * | 9 |
| Sex |  |  |  |  |  |  |  |  |  |
| Male | 11.9 | 39.9 | 2.5 | 17.7 | 11.0 | 26.4 | 15.3 | 29.5 | 4,210 |
| Female | 8.9 | 34.2 | 2.4 | 18.8 | 14.0 | 30.0 | 13.7 | 28.3 | 6,126 |
| Employment (past 12 months) |  |  |  |  |  |  |  |  |  |
| Not employed | 9.6 | 33.3 | 2.1 | 16.1 | 13.6 | 26.8 | 13.4 | 27.4 | 6,237 |
| Employed for cash | 11.9 | 42.8 | 3.3 | 23.4 | 12.7 | 32.3 | 17.4 | 31.7 | 3,457 |
| Employed not for cash | 5.8 | 34.8 | 1.1 | 12.8 | 6.0 | 25.0 | 8.1 | 26.2 | 642 |
| Body mass index |  |  |  |  |  |  |  |  |  |
| Underweight (BMI <18.5) | 11.5 | 39.5 | 2.7 | 11.3 | 18.5 | 25.9 | 12.9 | 24.4 | 415 |
| Normal (BMI 18.5-24.9) | 10.8 | 36.2 | 2.4 | 16.5 | 13.6 | 27.9 | 12.7 | 28.6 | 3,223 |
| Overweight <br> (BMI 25.0-29.9) | 8.6 | 33.0 | 1.9 | 18.2 | 10.3 | 28.4 | 13.1 | 28.2 | 1,862 |
| Obese (BMI $\geq 30.0$ ) | 8.5 | 36.4 | 2.6 | 18.6 | 10.5 | 28.9 | 13.6 | 28.7 | 2,247 |
| Not eligible (pregnant or recent birth) | 6.4 | 40.1 | 0.7 | 23.9 | 21.9 | 30.4 | 18.6 | 36.3 | 215 |
| Not measured in survey | 12.1 | 39.1 | 2.7 | 21.4 | 14.1 | 29.5 | 18.4 | 29.5 | 2,374 |
| Residence |  |  |  |  |  |  |  |  |  |
| Urban | 11.5 | 38.9 | 2.9 | 21.0 | 14.1 | 29.4 | 17.3 | 30.1 | 6,870 |
| Non-urban | 7.3 | 31.9 | 1.5 | 13.2 | 10.3 | 26.9 | 8.6 | 26.0 | 3,466 |
| Province |  |  |  |  |  |  |  |  |  |
| Western Cape | 12.0 | 39.3 | 3.1 | 16.6 | 20.0 | 29.7 | 16.9 | 32.9 | 1,178 |
| Eastern Cape | 8.8 | 24.9 | 1.5 | 12.2 | 11.3 | 23.1 | 9.6 | 24.2 | 1,223 |
| Northern Cape | 6.7 | 38.2 | 1.3 | 18.1 | 13.3 | 25.0 | 6.2 | 35.5 | 212 |
| Free State | 9.6 | 38.6 | 2.4 | 18.5 | 13.2 | 30.8 | 12.8 | 29.8 | 532 |
| KwaZulu-Natal | 10.6 | 38.1 | 2.5 | 22.0 | 9.0 | 29.8 | 15.4 | 32.2 | 1,874 |
| North West | 6.8 | 40.6 | 1.2 | 16.0 | 15.7 | 35.6 | 11.5 | 33.4 | 708 |
| Gauteng | 11.6 | 38.9 | 3.6 | 22.2 | 13.4 | 27.7 | 19.7 | 26.2 | 2,779 |
| Mpumalanga | 12.4 | 41.3 | 2.1 | 23.0 | 13.0 | 34.5 | 12.5 | 37.4 | 799 |
| Limpopo | 6.1 | 30.1 | 0.5 | 8.6 | 9.5 | 24.0 | 7.1 | 18.2 | 1,032 |
| Education |  |  |  |  |  |  |  |  |  |
| No education | 4.2 | 22.0 | 2.3 | 7.3 | 4.3 | 16.0 | 4.0 | 17.7 | 712 |
| Primary incomplete | 6.5 | 26.1 | 1.5 | 9.3 | 4.8 | 19.0 | 5.5 | 20.3 | 1,145 |
| Primary complete | 5.8 | 35.4 | 1.4 | 11.6 | 9.2 | 24.4 | 8.6 | 25.8 | 504 |
| Secondary incomplete | 11.6 | 35.7 | 2.0 | 17.1 | 16.0 | 28.5 | 15.2 | 30.1 | 4,625 |
| Secondary complete | 11.5 | 43.3 | 3.1 | 24.5 | 13.7 | 33.8 | 19.4 | 32.9 | 2,228 |
| More than secondary | 10.9 | 47.0 | 4.0 | 30.7 | 13.1 | 38.0 | 19.3 | 32.1 | 1,122 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |
| Lowest | 6.3 | 26.7 | 1.0 | 10.3 | 8.3 | 20.9 | 5.0 | 20.0 | 1,950 |
| Second | 10.0 | 32.9 | 1.8 | 14.7 | 11.1 | 29.0 | 9.9 | 29.7 | 1,991 |
| Middle | 11.7 | 37.5 | 2.2 | 18.6 | 14.6 | 29.0 | 16.2 | 28.4 | 2,136 |
| Fourth | 12.7 | 39.6 | 4.1 | 19.1 | 18.0 | 29.1 | 22.3 | 32.6 | 2,085 |
| Highest | 9.6 | 44.9 | 2.9 | 28.0 | 11.7 | 34.0 | 17.5 | 32.3 | 2,175 |
| Total 15+ | 10.1 | 36.5 | 2.4 | 18.3 | 12.8 | 28.5 | 14.4 | 28.8 | 10,336 |

[^30]Table 17.7 Approach to salt consumption
Percentage of respondents age 15 and older who are not interested in lowering their salt consumption, percentage who are interested in lowering their salt consumption in the next 6 months, percentage who are interested in lowering their salt consumption in the next month, percentage who started lowering their salt consumption in the last 6 months, and percentage who have already lowered their salt consumption for longer than 6 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | Not interested in lowering salt consumption | Interested in lowering salt consumption within the next 6 months | Interested in lowering salt consumption within the next month | Have started lowering salt consumption within the last 6 months | Have already lowered salt consumption for longer than 6 months | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-24 | 39.6 | 9.1 | 6.4 | 9.0 | 28.0 | 2,670 |
| 25-34 | 35.2 | 10.3 | 7.2 | 8.6 | 34.7 | 2,353 |
| 35-44 | 30.7 | 10.9 | 7.5 | 9.0 | 36.3 | 1,766 |
| 45-54 | 27.9 | 6.2 | 5.9 | 9.4 | 46.7 | 1,358 |
| 55-64 | 24.7 | 7.3 | 6.1 | 11.3 | 46.1 | 1,106 |
| 65+ | 20.7 | 4.9 | 3.0 | 11.4 | 57.7 | 1,083 |
| Population group |  |  |  |  |  |  |
| Black African | 32.5 | 8.9 | 6.2 | 9.5 | 37.5 | 8,704 |
| White | 31.1 | 6.7 | 4.8 | 8.3 | 47.3 | 577 |
| Coloured | 24.3 | 8.2 | 8.6 | 9.9 | 43.8 | 851 |
| Indian/Asian | 45.2 | 7.2 | 4.2 | 9.6 | 32.8 | 196 |
| Other | * | * | * | * | * | 9 |
| Sex |  |  |  |  |  |  |
| Male | 42.8 | 7.3 | 5.7 | 6.8 | 29.5 | 4,210 |
| Female | 24.5 | 9.6 | 6.7 | 11.3 | 44.6 | 6,126 |
| Crisps and salty snacks |  |  |  |  |  |  |
| Never | 28.4 | 4.2 | 5.3 | 7.5 | 47.5 | 1,070 |
| Occasionally | 30.1 | 7.8 | 6.0 | 10.6 | 40.6 | 4,991 |
| Weekly | 34.3 | 10.8 | 6.3 | 10.1 | 34.4 | 2,950 |
| Daily | 36.9 | 10.9 | 8.5 | 5.6 | 32.0 | 1,324 |
| Blood pressure status |  |  |  |  |  |  |
| Optimal | 33.0 | 10.5 | 6.9 | 9.2 | 35.0 | 2,061 |
| Normal | 33.5 | 9.2 | 5.5 | 9.5 | 37.1 | 2,886 |
| Elevated | 29.2 | 7.7 | 5.8 | 9.0 | 44.6 | 2,909 |
| Not measured in survey | 32.5 | 7.6 | 7.3 | 10.2 | 35.6 | 2,480 |
| Residence |  |  |  |  |  |  |
| Urban | 30.8 | 10.1 | 6.7 | 9.4 | 37.6 | 6,870 |
| Non-urban | 34.2 | 5.9 | 5.4 | 9.6 | 40.2 | 3,466 |
| Province |  |  |  |  |  |  |
| Western Cape | 21.8 | 5.5 | 8.4 | 13.8 | 48.6 | 1,178 |
| Eastern Cape | 44.3 | 7.7 | 5.7 | 11.8 | 29.9 | 1,223 |
| Northern Cape | 33.5 | 6.8 | 8.7 | 6.2 | 24.7 | 212 |
| Free State | 34.8 | 8.8 | 9.0 | 12.3 | 34.1 | 532 |
| KwaZulu-Natal | 41.8 | 7.8 | 4.1 | 11.2 | 30.0 | 1,874 |
| North West | 32.2 | 7.5 | 8.6 | 6.4 | 42.6 | 708 |
| Gauteng | 25.3 | 13.8 | 7.0 | 7.9 | 36.3 | 2,779 |
| Mpumalanga | 36.6 | 3.0 | 4.9 | 2.4 | 50.2 | 799 |
| Limpopo | 23.8 | 6.4 | 4.5 | 9.8 | 51.3 | 1,032 |
| Education |  |  |  |  |  |  |
| No education | 26.4 | 4.1 | 4.5 | 9.4 | 49.4 | 712 |
| Primary incomplete | 32.0 | 6.0 | 3.6 | 8.5 | 44.0 | 1,145 |
| Primary complete | 31.9 | 5.6 | 8.4 | 9.3 | 39.4 | 504 |
| Secondary incomplete | 32.5 | 8.8 | 7.2 | 9.7 | 35.8 | 4,625 |
| Secondary complete | 33.3 | 11.0 | 6.5 | 9.7 | 35.8 | 2,228 |
| More than secondary | 30.7 | 10.6 | 5.3 | 9.1 | 41.7 | 1,122 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 35.4 | 5.4 | 6.0 | 10.2 | 36.4 | 1,950 |
| Second | 33.1 | 9.1 | 5.4 | 8.8 | 39.0 | 1,991 |
| Middle | 34.5 | 10.0 | 6.5 | 6.9 | 36.0 | 2,136 |
| Fourth | 28.4 | 8.7 | 6.9 | 10.4 | 40.9 | 2,085 |
| Highest | 28.8 | 9.9 | 6.7 | 11.2 | 39.9 | 2,175 |
| Total 15+ | 32.0 | 8.7 | 6.3 | 9.5 | 38.4 | 10,336 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

## Key Findings

- Tobacco use: Among respondents age 15 and older, men are more likely than women to smoke tobacco products daily or occasionally ( $37 \%$ versus $8 \%$ ).
- Smokeless tobacco use: Use of smokeless tobacco products is more common among women than men ( $6 \%$ versus $1 \%$ ).
- Alcohol use: Men are much more likely than women to have ever consumed alcohol ( $61 \%$ versus $26 \%$ ). Twentyeight percent of men and $5 \%$ of women exhibited risky drinking; that is, they consumed five or more drinks on a single occasion in the 30 days before the survey.
- Codeine-containing medications: Similar proportions of women and men reported using (14\% and $13 \%$, respectively) and misusing ( $2 \%$ each) codeine-containing medications in the past 12 months.

Tlobacco and alcohol use contribute substantially to the burden of disease in South Africa by placing people at increased risk for cardiovascular disease, respiratory disease, and cancer; also, alcohol use contributes to the additional burden of accidents and violence. The National Department of Health's National Strategic Plan for Non-Communicable Diseases has set targets to reduce tobacco smoking and alcohol use (NDoH 2013b).

The misuse of prescription medications, particularly opioids, is also a growing health concern. Among the numerous misused opioids, codeine is most commonly consumed worldwide (Van Hout 2012). In South Africa, the use and/or misuse of codeine-containing medications has been understudied, and there is no system of recording or monitoring either over-the-counter or prescription medications purchased at pharmacies and retail stores (Kramer 2010). The only recorded data come from specialised substance abuse treatment centres; however, treatment centre data do not provide information on patterns of use and/or misuse of codeine-containing medications in the general population. Therefore, the SADHS 2016 included questions on the use and misuse of codeine-containing medications in the adult health module administered to respondents age 15 and older.

### 18.1 Tobacco Use among Adults

### 18.1.1 Prevalence of Tobacco Smoking

Tobacco smoking is more common among men than women, with $8 \%$ of women and $37 \%$ of men age 15 and older currently smoking tobacco products either daily or occasionally (Tables 18.1.1 and 18.1.2). The majority of smokers are daily smokers; $6 \%$ of women and $30 \%$ of men smoke every day, and most smoke cigarettes. Among those who smoke cigarettes every day, the majority ( $75 \%$ of women and $64 \%$ of men) smoke between one and nine cigarettes each day, while a sizeable minority ( $12 \%$ of women and $18 \%$ of men) smoke 15 or more cigarettes per day (Table 18.2.1 and 18.2.2).

Comparison with the SADHS 1998: The prevalence of daily or occasional tobacco smoking has decreased since 1998, from $11 \%$ to $8 \%$ among women and from $42 \%$ to $37 \%$ among men (Figure 18.1).

## Patterns by background characteristics

- The prevalence of daily or occasional smoking increases with age, peaking at $11 \%$ among women age 45-64 and $45 \%$ among men age 45-54 (Table 18.1.1 and Table 18.1.2).
- Forty percent of Coloured women smoke daily or occasionally, more than double the prevalence of any other population group and higher than any other percentage in a background characteristic category (Table 18.1.1). One-third to one-half of men smoke daily or occasionally across all population groups (ranging from 32\% among White men to $51 \%$ among Coloured men).
- The prevalence of daily or occasional smoking is higher among urban women and men ( $11 \%$ and $40 \%$, respectively) than among their non-urban counterparts ( $2 \%$ and $33 \%$, respectively).
- Among women, the prevalence of daily or occasional smoking is highest in Northern Cape and Western Cape and lowest in Limpopo and KwaZulu-Natal. Among men, the prevalence is also highest in Northern Cape and Western Cape and is lowest in Limpopo (Figure 18.2.1 and Figure 18.2.2).
- While the prevalence of daily or occasional smoking is much lower among women than men, there is a pattern of decreasing prevalence with increasing education among women (women with a primary complete education are the only outlier in terms of this trend). The prevalence among men varies from $33 \%$ to $40 \%$, with no clear pattern across educational levels.
- Among women, the prevalence of daily or occasional smoking generally increases with increasing wealth, from $5 \%$ among those in the lowest wealth quintile to $11 \%$ among those in the highest two quintiles. The prevalence by wealth among men varies from $36 \%$ to $41 \%$ with no clear pattern.

Figure 18.1 Comparison of tobacco smoking in the SADHS 1998 and SADHS 2016

Percentage of women and men age 15+ who smoke tobacco daily or occasionally

$$
\text { ■SADHS } 1998 \text { ■ SADHS } 2016
$$



Figure 18.2.1 Prevalence of smoking by province: Women
Percentage of women age 15+ who smoke tobacco daily or occasionally


Figure 18.2.2 Prevalence of smoking by province: Men


### 18.1.2 Smokeless Tobacco Use and E-cigarette Use

Men rarely use smokeless tobacco products such as snuff, chewing tobacco, or other types of smokeless tobacco (1\%) (Table 18.3). In contrast, the percentage of women who use smokeless tobacco products ( $6 \%$ ) approaches that of women who smoke cigarettes (7\%). Among women, the most commonly used smokeless tobacco product is snuff taken by the nose (5\%).

E-cigarette use is uncommon. Two percent of women and $3 \%$ of men age 15 and older use e-cigarettes daily or occasionally (Table 18.4).

### 18.1.3 Tobacco Use during Pregnancy

Using tobacco during pregnancy increases the risk of premature birth and delivery of low birth weight babies. Three percent of women age 15-49 who had a live birth in the past 5 years reported that they smoked tobacco during the pregnancy of their last birth, and $1 \%$ reported that they had used smokeless tobacco (Table 18.5).

## Patterns by background characteristics

- Women in Western Cape were most likely to use tobacco while they were pregnant; $17 \%$ smoked tobacco and $3 \%$ used smokeless tobacco during their last pregnancy. Women in Northern Cape had the second highest prevalence ( $8 \%$ and $4 \%$, respectively).


### 18.2 Alcohol Use among Adults

### 18.2.1 Alcohol Consumption, Risky Drinking, and Problem Drinking

## Risky drinking

Drinking 5 or more standard measures of alcohol on a single occasion in the 30 days prior to the survey.
Sample: Women and men age 15+
CAGE test
The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism. Two "yes" responses to the following questions indicate the possibility of problem drinking:

- Have you ever felt you should cut down your drinking?
- Have people annoyed you by criticizing your drinking?
- Have you ever felt bad or guilty about your drinking?
- Have you ever had a drink first thing in the morning to steady your nerves or to get rid of a hangover (eye opener)?
Sample: Women and men age 15+

Alcohol consumption is more common among men than women (Table 18.6.1 and Table 18.6.2): $61 \%$ of men and $26 \%$ of women age 15 and older have ever consumed alcohol, and $37 \%$ of men and $10 \%$ of women drank alcohol within the 7 days before the survey. Additionally, men ( $28 \%$ ) are more likely than women ( $5 \%$ ) to engage in risky drinking. One in six men ( $16 \%$ ) and $3 \%$ of women show signs of problem drinking as assessed through the CAGE test.

Comparison with the SADHS 1998: The prevalence of men who have ever consumed alcohol increased slightly from $58 \%$ in 1998 to $61 \%$ in 2016 , while the prevalence among women remained unchanged ( $26 \%$ in both 1998 and 2016).

- By age, the prevalence of risky and problem drinking peaks among women age 20-24 (9\% and $4 \%$, respectively) and men age 25-34 ( $36 \%$ and $22 \%$, respectively).
- By population group, the prevalence of alcohol use in the past 7 days is highest among White women ( $36 \%$ ) and White men ( $58 \%$ ). However, the prevalence of risky and problem drinking is highest among Coloured women ( $10 \%$ and $6 \%$, respectively) and Black African men ( $28 \%$ and $17 \%$, respectively).
- By province, the prevalence of risky drinking among women ranges from a high of $11 \%$ in Northern Cape to a low of $1 \%$ in KwaZulu-Natal (Figure 18.3.1). Among men, the prevalence of risky drinking is substantial across all provinces and ranges from a high of $35 \%$ in Gauteng to a low of $21 \%$ in Limpopo (Figure 18.3.2).
- Among women, the prevalence of risky drinking and problem drinking ranges from $1 \%$ to $8 \%$ across educational levels and wealth quintiles. Among men, the prevalence of risky drinking $(23 \%-35 \%)$ and problem drinking ( $11 \%-18 \%$ ) is high across all educational levels and wealth quintiles.


### 18.2.2 Alcohol Use during Pregnancy

Only $3 \%$ of women age $15-49$ who had a live birth in the past 5 years report that they consumed alcohol during the pregnancy of their last birth (Table 18.7).

## Patterns by background characteristics

- Women in Western Cape (7\%), Eastern Cape (6\%), and Northern Cape (6\%) were most likely to consume alcohol during pregnancy.

Figure 18.3.1 Prevalence of risky drinking by province: Women
Percentage of women age 15+ who consumed 5 or more drinks on one occasion in 30 days before the survey


Figure 18.3.2 Prevalence of risky drinking by province: Men
Percentage of men age $15+$ who consumed 5 or more drinks on one occasion in 30 days before the survey


### 18.3 Use And Misuse of Codeine-containing Medications

## Misuse of codeine-containing medicines

Use of codeine-containing medications in the past 12 months for the experience or feeling rather than their medicinal effect
Sample: Women and men age 15+

Similar proportions of women and men age 15 and older reported using ( $14 \%$ and $13 \%$, respectively) and misusing ( $2 \%$ each) codeine-containing medications in the 12 months before the survey (Table 18.8.1 and Table 18.8.2).

Among women and men who reported misuse of codeine-containing medications in the past 12 months, $19 \%$ and $16 \%$, respectively, received treatment for problems related to use of medicines for non-medical purposes.

## Patterns by background characteristics

- Indian/Asian women were more likely than women in other population groups to have used (30\% versus $12 \%-14 \%$ ) and misused ( $5 \%$ versus $0.3 \%-4 \%$ ) codeine-containing medications in the past 12 months. Coloured men (21\%) and Indian/Asian men ( $20 \%$ ) were more likely than men in other population groups to have used codeine-containing medications, and Coloured men were most likely to have misused them ( $3 \%$ versus $0 \%-1 \%$ ).
- By residence, the proportion of women who used codeine-containing medications is higher among those in urban areas than among those in non-urban areas ( $17 \%$ and $9 \%$, respectively), while the proportion among men is similar in urban and non-urban areas ( $14 \%$ and $11 \%$, respectively).
- North West has the highest proportion of women who used and misused codeine-containing medications ( $25 \%$ and $5 \%$, respectively), followed by Gauteng ( $23 \%$ and $4 \%$, respectively). While only $10 \%$ of women in Western Cape report using codeine-containing medications, the level of misuse among these women is similar to that among women in North West and Gauteng (4\%). Among men, those from Northern Cape ( $32 \%$ ) are most likely to use codeine-containing medications and those from Mpumalanga are most likely to misuse them (5\%).
- Among women, use of codeine-containing medications increases with increasing household wealth, from $7 \%$ to $19 \%$; misuse of codeine-containing medications generally increases as well, peaking at $4 \%$ among those in the fourth quintile. Among men, use of codeine-containing medications also generally increases with increasing household wealth, peaking at $18 \%$ among those in the fourth wealth quintile; however, there is no clear pattern by wealth in misuse of codeine-containing medications.


## List of Tables

For more information on tobacco, alcohol, and codeine use, see the following tables:

- Table 18.1.1 Tobacco smoking: Women
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- Table 18.2.1 Average number of cigarettes smoked daily: Women
- Table 18.2.2 Average number of cigarettes smoked daily: Men
- Table 18.3 Smokeless tobacco use and any tobacco use
- Table 18.4 E-cigarette use
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- Table 18.7 Alcohol consumption during pregnancy
- Table 18.8.1 Use and misuse of codeine-containing medications: Women
- Table 18.8.2 Use and misuse of codeine-containing medications: Men

Table 18.1.1 Tobacco smoking: Women
Percentage of women age 15 and older who smoke various tobacco products, percent distribution of women by smoking frequency, and percentage who smoke daily or occasionally, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who smoke: ${ }^{1}$ |  |  | Smoking frequency |  |  |  |  | Percentage who smoke daily or occasionally | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Current smoker |  | Non-smoker |  |  |  |  |
|  | Cigarettes ${ }^{2}$ | Other type of tobacco ${ }^{3}$ | Any type of tobacco | Daily smoker | Occasional smoker ${ }^{4}$ | Exsmoker | Never smoked | Total |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 4.1 | 1.0 | 4.4 | 2.9 | 2.1 | 1.8 | 93.3 | 100.0 | 4.9 | 1,429 |
| 15-19 | 3.5 | 1.3 | 4.0 | 2.9 | 1.2 | 1.2 | 94.7 | 100.0 | 4.1 | 721 |
| 20-24 | 4.8 | 0.8 | 4.9 | 2.8 | 3.0 | 2.4 | 91.8 | 100.0 | 5.8 | 708 |
| 25-34 | 7.1 | 1.0 | 7.1 | 6.5 | 1.3 | 0.9 | 91.3 | 100.0 | 7.8 | 1,391 |
| 35-44 | 5.8 | 0.3 | 5.8 | 5.9 | 1.1 | 1.4 | 91.6 | 100.0 | 7.0 | 1,022 |
| 45-54 | 8.5 | 0.7 | 9.1 | 9.4 | 1.6 | 1.6 | 87.4 | 100.0 | 11.0 | 866 |
| 55-64 | 9.9 | 1.2 | 10.1 | 10.2 | 1.1 | 2.8 | 85.9 | 100.0 | 11.3 | 701 |
| 65+ | 6.3 | 0.2 | 6.5 | 5.8 | 2.0 | 3.4 | 88.8 | 100.0 | 7.8 | 719 |
| Population group |  |  |  |  |  |  |  |  |  |  |
| Black African | 3.0 | 0.6 | 3.1 | 2.9 | 1.2 | 1.2 | 94.7 | 100.0 | 4.1 | 5,170 |
| White | 15.0 | 0.8 | 15.0 | 14.4 | 2.5 | 6.6 | 76.5 | 100.0 | 16.8 | 320 |
| Coloured | 38.1 | 2.1 | 38.7 | 35.3 | 4.3 | 4.8 | 55.6 | 100.0 | 39.6 | 516 |
| Indian/Asian | 3.1 | 2.6 | 5.7 | 5.7 | 1.3 | 3.4 | 89.6 | 100.0 | 7.0 | 114 |
| Other |  | * | * | * | * | * |  | 100.0 |  | 6 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 9.3 | 1.1 | 9.6 | 8.7 | 2.1 | 2.2 | 87.0 | 100.0 | 10.8 | 3,996 |
| Non-urban | 1.6 | 0.3 | 1.7 | 1.8 | 0.5 | 1.1 | 96.6 | 100.0 | 2.3 | 2,130 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 25.1 | 1.1 | 25.3 | 23.5 | 2.9 | 3.2 | 70.4 | 100.0 | 26.4 | 703 |
| Eastern Cape | 6.8 | 0.7 | 6.9 | 5.6 | 1.9 | 2.0 | 90.4 | 100.0 | 7.5 | 730 |
| Northern Cape | 17.8 | 2.3 | 19.4 | 18.1 | 3.3 | 3.5 | 75.1 | 100.0 | 21.4 | 127 |
| Free State | 5.5 | 0.3 | 5.7 | 7.0 | 1.0 | 1.7 | 90.3 | 100.0 | 8.0 | 325 |
| KwaZulu-Natal | 1.9 | 0.5 | 2.1 | 1.8 | 0.4 | 0.5 | 97.2 | 100.0 | 2.3 | 1,191 |
| North West | 3.5 | 0.4 | 3.8 | 3.5 | 1.2 | 2.0 | 93.4 | 100.0 | 4.6 | 398 |
| Gauteng | 4.5 | 1.3 | 4.8 | 4.7 | 1.8 | 2.0 | 91.5 | 100.0 | 6.5 | 1,534 |
| Mpumalanga | 5.2 | 0.4 | 5.2 | 3.9 | 2.2 | 3.0 | 91.0 | 100.0 | 6.0 | 473 |
| Limpopo | 1.3 | 0.4 | 1.3 | 1.3 | 0.7 | 0.8 | 97.2 | 100.0 | 2.0 | 646 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 7.9 | 1.4 | 8.3 | 9.3 | 1.3 | 2.1 | 87.2 | 100.0 | 10.6 | 495 |
| Primary incomplete | 7.7 | 0.3 | 7.7 | 6.8 | 3.0 | 2.6 | 87.7 | 100.0 | 9.7 | 664 |
| $\begin{array}{lllllllllll}\text { Primary complete } & 4.8 & 0.1 & 4.9 & 4.3 & 0.8 & 0.1 & 94.7 & 100.0 & 5.1 & \\ \text { Secondary }\end{array}$ |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Secondary |  |  |  |  |  |  |  |  |  |  |
| More than secondary | 5.3 | 0.3 | 5.3 | 4.5 | 1.5 | 3.2 | 90.7 | 100.0 | 6.0 | 652 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 3.3 | 0.4 | 3.4 | 3.0 | 1.9 | 0.6 | 94.6 | 100.0 | 4.9 | 1,163 |
| Second | 2.7 | 0.5 | 2.7 | 2.6 | 1.4 | 0.9 | 95.1 | 100.0 | 4.1 | 1,152 |
| Middle | 6.7 | 0.6 | 6.8 | 6.1 | 1.7 | 1.8 | 90.4 | 100.0 | 7.8 | 1,242 |
| Fourth | 10.0 | 1.0 | 10.1 | 9.3 | 1.4 | 2.4 | 86.9 | 100.0 | 10.7 | 1,258 |
| Highest | 9.7 | 1.4 | 10.3 | 9.9 | 1.2 | 3.2 | 85.7 | 100.0 | 11.1 | 1,311 |
| Total 15+ | 6.6 | 0.8 | 6.8 | 6.3 | 1.5 | 1.8 | 90.3 | 100.0 | 7.8 | 6,126 |
| Total 15-49 | 5.7 | 0.8 | 5.9 | 5.2 | 1.6 | 1.4 | 91.9 | 100.0 | 6.7 | 4,300 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes daily and occasional (less than daily) use
${ }^{2}$ Includes manufactured cigarettes and hand-rolled cigarettes
${ }^{3}$ Includes pipes, cigars, cigarillos, hookah/hubbly-bubbly/water pipes, and other tobacco products
${ }^{4}$ Occasional refers to less often than daily use

Table 18.1.2 Tobacco smoking: Men
Percentage of men age 15 and older who smoke various tobacco products, percent distribution of men by smoking frequency, and percentage who smoke daily or occasionally, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who smoke: ${ }^{1}$ |  |  | Smoking frequency |  |  |  | Total | Percentage who smoke daily or occasionally | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Curren | smoker | Non- | oker |  |  |  |
|  | Cigarettes ${ }^{2}$ | Other type of tobacco ${ }^{3}$ | Any type of tobacco | Daily smoker | Occasional smoker ${ }^{4}$ | Exsmoker | Never smoked |  |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |
| 15-24 | 28.4 | 6.5 | 28.7 | 20.8 | 8.2 | 4.1 | 66.9 | 100.0 | 28.9 | 1,241 |
| 15-19 | 17.7 | 3.7 | 18.1 | 10.7 | 7.6 | 4.3 | 77.5 | 100.0 | 18.2 | 651 |
| 20-24 | 40.1 | 9.6 | 40.4 | 31.8 | 8.9 | 4.0 | 55.3 | 100.0 | 40.7 | 591 |
| 25-34 | 42.8 | 5.9 | 43.2 | 36.8 | 6.7 | 5.7 | 50.8 | 100.0 | 43.5 | 962 |
| 35-44 | 43.3 | 3.1 | 43.7 | 36.1 | 7.8 | 6.7 | 49.3 | 100.0 | 43.9 | 744 |
| 45-54 | 44.2 | 4.8 | 44.7 | 38.7 | 6.3 | 9.6 | 45.4 | 100.0 | 45.0 | 492 |
| 55-64 | 35.9 | 3.0 | 37.3 | 32.8 | 4.9 | 15.3 | 46.9 | 100.0 | 37.8 | 406 |
| 65+ | 22.9 | 4.2 | 24.7 | 21.0 | 4.0 | 16.2 | 58.9 | 100.0 | 24.9 | 364 |
| Population group |  |  |  |  |  |  |  |  |  |  |
| Black African | 35.5 | 4.9 | 36.1 | 29.2 | 7.1 | 7.5 | 56.2 | 100.0 | 36.3 | 3,534 |
| White | 31.3 | 2.5 | 31.8 | 26.1 | 6.1 | 12.2 | 55.6 | 100.0 | 32.2 | 257 |
| Coloured | 49.3 | 9.4 | 50.5 | 45.3 | 5.5 | 8.1 | 41.1 | 100.0 | 50.8 | 335 |
| Indian/Asian | 39.0 | 0.0 | 39.0 | 34.6 | 6.1 | 2.7 | 56.7 | 100.0 | 40.6 | 82 |
| Other | * | * | * | * | * | * | * | 100.0 | * | 2 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 38.9 | 4.9 | 39.2 | 32.5 | 7.0 | 6.8 | 53.8 | 100.0 | 39.5 | 2,874 |
| Non-urban | 31.0 | 5.4 | 32.5 | 26.0 | 6.6 | 9.7 | 57.6 | 100.0 | 32.6 | 1,336 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 42.5 | 7.0 | 42.9 | 36.0 | 7.2 | 9.6 | 47.3 | 100.0 | 43.2 | 476 |
| Eastern Cape | 39.4 | 3.9 | 40.1 | 29.4 | 11.6 | 11.1 | 47.8 | 100.0 | 41.0 | 493 |
| Northern Cape | 44.2 | 3.6 | 44.9 | 41.0 | 3.9 | 2.4 | 52.7 | 100.0 | 44.9 | 84 |
| Free State | 39.7 | 11.2 | 40.4 | 35.0 | 5.8 | 2.2 | 57.0 | 100.0 | 40.9 | 207 |
| KwaZulu-Natal | 34.6 | 5.1 | 34.9 | 29.1 | 6.1 | 5.6 | 59.1 | 100.0 | 35.2 | 683 |
| North West | 31.6 | 3.0 | 31.7 | 29.4 | 2.6 | 10.0 | 58.0 | 100.0 | 32.0 | 310 |
| Gauteng | 37.6 | 3.1 | 37.6 | 30.8 | 6.8 | 6.4 | 56.0 | 100.0 | 37.6 | 1,245 |
| Mpumalanga | 36.3 | 8.9 | 39.9 | 35.0 | 5.1 | 3.8 | 56.1 | 100.0 | 40.2 | 326 |
| Limpopo | 25.0 | 5.4 | 26.4 | 18.1 | 8.3 | 14.5 | 59.1 | 100.0 | 26.4 | 386 |
| Education |  |  |  |  |  |  |  |  |  |  |
| No education | 31.3 | 6.5 | 34.7 | 30.0 | 5.1 | 12.3 | 52.7 | 100.0 | 35.0 | 217 |
| Primary incomplete | 38.8 | 5.7 | 39.9 | 35.3 | 4.8 | 9.5 | 50.5 | 100.0 | 40.0 | 481 |
| Primary complete | 35.6 | 3.9 | 36.4 | 30.8 | 5.6 | 12.2 | 51.4 | 100.0 | 36.4 | 212 |
| Secondary |  |  |  |  |  |  |  |  |  | 1,930 |
| Secondary |  |  |  |  |  |  |  |  |  |  |
| More than |  |  |  |  |  |  |  |  |  |  |
| secondary | 32.0 | 2.8 | 32.5 | 25.4 | 7.1 | 12.7 | 54.8 | 100.0 | 32.5 | 470 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |
| Lowest | 39.5 | 5.7 | 40.7 | 32.6 | 8.3 | 6.9 | 52.2 | 100.0 | 40.9 | 787 |
| Second | 35.6 | 4.8 | 36.3 | 30.3 | 6.5 | 7.6 | 55.6 | 100.0 | 36.8 | 839 |
| Middle | 35.1 | 5.7 | 35.6 | 28.7 | 7.1 | 7.7 | 56.4 | 100.0 | 35.8 | 894 |
| Fourth | 37.0 | 6.0 | 37.5 | 30.8 | 6.8 | 6.8 | 55.6 | 100.0 | 37.7 | 827 |
| Highest | 35.1 | 3.1 | 35.5 | 29.9 | 5.7 | 9.4 | 54.9 | 100.0 | 35.6 | 864 |
| Total 15+ | 36.4 | 5.0 | 37.0 | 30.4 | 6.9 | 7.7 | 55.0 | 100.0 | 37.3 | 4,210 |
| Total 15-49 | 37.1 | 5.4 | 37.5 | 30.4 | 7.4 | 5.9 | 56.3 | 100.0 | 37.8 | 3,220 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes daily and occasional (less than daily) use
${ }^{2}$ Includes manufactured cigarettes and hand-rolled cigarettes
${ }^{3}$ Includes pipes, cigars, cigarillos, hookah/hubbly-bubbly/water pipes, and other tobacco products
${ }^{4}$ Occasional refers to less often than daily use

Table 18.2.1 Average number of cigarettes smoked daily: Women
Among women age 15 and older who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, South Africa DHS 2016

| Background characteristic | Average number of cigarettes smoked per day ${ }^{1}$ |  |  |  | Total | Number of women who smoke cigarettes daily ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <5 | 5-9 | 10-14 | 15+ |  |  |
| Age |  |  |  |  |  |  |
| 15-24 | (39.6) | (41.8) | (11.5) | (7.0) | 100.0 | 35 |
| 15-19 |  |  |  |  | 100.0 | 17 |
| 20-24 | * | * | * | * | 100.0 | 18 |
| 25-34 | 51.1 | 24.1 | 18.5 | 6.3 | 100.0 | 84 |
| 35-44 | 45.6 | 29.4 | 17.7 | 7.3 | 100.0 | 52 |
| 45-54 | 47.1 | 15.5 | 15.1 | 22.3 | 100.0 | 66 |
| 55-64 | 57.0 | 25.6 | 6.7 | 10.6 | 100.0 | 62 |
| 65+ | (26.0) | (46.9) | (9.9) | (17.2) | 100.0 | 32 |
| Population group |  |  |  |  |  |  |
| Black African | 58.3 | 35.6 | 5.2 | 0.9 | 100.0 | 105 |
| White | (29.1) | (7.0) | (8.9) | (55.0) | 100.0 | 42 |
| Coloured | 45.7 | 27.4 | 19.1 | 7.8 | 100.0 | 178 |
| Indian/Asian | * | * | * | * | 100.0 | 4 |
| Other | * | * | * | * | 100.0 | 1 |
| Residence |  |  |  |  |  |  |
| Urban | 46.4 | 27.7 | 14.6 | 11.3 | 100.0 | 307 |
| Non-urban | (52.9) | (26.5) | (5.5) | (15.1) | 100.0 | 24 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | (42.9) | (45.2) | (11.9) | (0.0) | 100.0 | 23 |
| Second | (49.1) | (34.5) | (9.6) | (6.8) | 100.0 | 18 |
| Middle | 51.3 | 31.6 | 9.9 | 7.2 | 100.0 | 64 |
| Fourth | 50.1 | 25.7 | 15.0 | 9.3 | 100.0 | 109 |
| Highest | 42.1 | 22.6 | 16.2 | 19.2 | 100.0 | 117 |
| Total 15+ | 46.9 | 27.6 | 13.9 | 11.6 | 100.0 | 331 |
| Total 15-49 | 47.7 | 26.2 | 17.3 | 8.7 | 100.0 | 198 |

[^31]Table 18.2.2 Average number of cigarettes smoked daily: Men
Among men age 15 and older who smoke cigarettes daily, percent distribution by average number of cigarettes smoked per day, according to background characteristics, South Africa DHS 2016

| Background characteristic | Average number of cigarettes smoked per day ${ }^{1}$ |  |  |  |  | Total | Number of men who smoke cigarettes daily ${ }^{1}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | <5 | 5-9 | 10-14 | 15-24 | $\geq 25$ |  |  |
| Age |  |  |  |  |  |  |  |
| 15-24 | 37.9 | 40.0 | 10.6 | 8.0 | 3.5 | 100.0 | 246 |
| 15-19 | 44.4 | 34.0 | 6.7 | 10.7 | 4.3 | 100.0 | 65 |
| 20-24 | 35.5 | 42.1 | 12.0 | 7.1 | 3.2 | 100.0 | 181 |
| 25-34 | 26.2 | 37.9 | 20.1 | 13.5 | 2.3 | 100.0 | 348 |
| 35-44 | 28.5 | 28.9 | 20.1 | 20.3 | 2.3 | 100.0 | 263 |
| 45-54 | 27.5 | 34.0 | 23.1 | 11.8 | 3.6 | 100.0 | 182 |
| 55-64 | 24.2 | 34.9 | 18.3 | 17.4 | 5.2 | 100.0 | 126 |
| 65+ | 23.1 | 29.4 | 21.4 | 22.8 | 3.4 | 100.0 | 69 |
| Population group |  |  |  |  |  |  |  |
| Black African | 30.8 | 38.5 | 17.2 | 11.6 | 1.9 | 100.0 | 993 |
| White | (13.5) | (7.5) | (21.4) | (46.9) | (10.8) | 100.0 | 65 |
| Coloured | 25.6 | 23.6 | 25.2 | 20.6 | 5.0 | 100.0 | 149 |
| Indian/Asian | * | * | * | * | * | 100.0 | 28 |
| Other | nc | nc | nc | nc | nc | nc | 0 |
| Residence |  |  |  |  |  |  |  |
| Urban | 27.1 | 32.6 | 21.0 | 16.0 | 3.4 | 100.0 | 909 |
| Non-urban | 33.7 | 41.8 | 11.8 | 10.6 | 2.2 | 100.0 | 325 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 23.4 | 23.2 | 26.9 | 21.9 | 4.6 | 100.0 | 167 |
| Eastern Cape | 24.4 | 33.6 | 19.8 | 16.4 | 5.7 | 100.0 | 140 |
| Northern Cape | 28.3 | 42.7 | 16.9 | 10.3 | 1.9 | 100.0 | 34 |
| Free State | 44.7 | 35.9 | 9.7 | 7.2 | 2.5 | 100.0 | 69 |
| KwaZulu-Natal | 21.6 | 46.6 | 18.3 | 8.6 | 5.0 | 100.0 | 187 |
| North West | 39.8 | 38.8 | 10.6 | 7.5 | 3.3 | 100.0 | 89 |
| Gauteng | 26.4 | 33.6 | 20.4 | 18.4 | 1.2 | 100.0 | 380 |
| Mpumalanga | 42.9 | 27.4 | 19.2 | 9.9 | 0.5 | 100.0 | 104 |
| Limpopo | 32.2 | 45.7 | 4.7 | 13.4 | 4.0 | 100.0 | 65 |
| Education |  |  |  |  |  |  |  |
| No education | 49.9 | 31.9 | 9.6 | 4.5 | 4.1 | 100.0 | 56 |
| Primary incomplete | 39.2 | 39.0 | 9.1 | 10.8 | 1.9 | 100.0 | 161 |
| Primary complete | 13.9 | 25.1 | 37.7 | 18.3 | 5.0 | 100.0 | 63 |
| Secondary |  |  |  |  |  |  |  |
| Secondary complete | 28.2 | 27.4 | 21.3 | 19.7 | 3.3 | 100.0 | 239 |
| More than secondary | 24.0 | 33.7 | 22.3 | 16.1 | 3.9 | 100.0 | 118 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 29.2 | 38.4 | 15.4 | 13.8 | 3.2 | 100.0 | 244 |
| Second | 32.3 | 39.1 | 14.8 | 11.3 | 2.6 | 100.0 | 240 |
| Middle | 25.6 | 40.0 | 20.7 | 11.9 | 1.9 | 100.0 | 248 |
| Fourth | 35.7 | 30.8 | 20.5 | 10.1 | 3.0 | 100.0 | 245 |
| Highest | 21.7 | 27.3 | 21.1 | 25.1 | 4.7 | 100.0 | 257 |
| Total 15+ | 28.8 | 35.0 | 18.5 | 14.5 | 3.1 | 100.0 | 1,234 |
| Total 15-49 | 30.4 | 34.8 | 18.4 | 13.6 | 2.9 | 100.0 | 951 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases
${ }^{1}$ Includes manufactured cigarettes and hand-rolled cigarettes

## Table 18.3 Smokeless tobacco use and any tobacco use

Percentage of women and men age 15 and older who currently use smokeless tobacco, according to type of tobacco product, and percentage who use any type of tobacco, South Africa DHS 2016

|  | Women | Men |
| :--- | ---: | ---: |
| Tobacco product |  |  |
| Snuff, by mouth | 2.3 | 0.7 |
| Snuff, by nose | 4.8 | 1.0 |
| Chewing tobacco $^{\text {Other type of smokeless tobacco }}$ | 0.3 | 0.2 |
| Any type of smokeless tobacco |  |  |
| Any type of tobacco |  |  |
| $\quad 0.0$ | 0.1 |  |
| Number | 5.7 | 1.1 |
|  | 12.6 | 38.1 |

Note: Table includes women and men who use smokeless tobacco daily or occasionally (less than daily).
${ }^{1}$ Includes snuff by mouth, snuff by nose, chewing tobacco, and other types of smokeless tobacco
${ }^{2}$ Includes all types of smokeless tobacco shown in this table plus cigarettes, pipes, cigars, cheroots, cigarillos, hookah/hubblybubbly/water pipes, and other tobacco products

## Table 18.4 E-cigarette use

Percentage of women and men age 15 and older who use e-cigarettes by frequency of use, according to background characteristics, South Africa DHS 2016

| Background characteristic | Women |  |  |  | Men |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Daily | Occasionally | Not at all | Number | Daily | Occasionally | Not at all | Number |
| Age |  |  |  |  |  |  |  |  |
| 15-24 | 0.4 | 2.1 | 97.5 | 1,429 | 0.4 | 2.4 | 97.2 | 1,241 |
| 15-19 | 0.6 | 2.9 | 96.5 | 721 | 0.0 | 2.0 | 98.0 | 651 |
| 20-24 | 0.1 | 1.3 | 98.5 | 708 | 0.8 | 2.9 | 96.3 | 591 |
| 25-34 | 1.0 | 1.5 | 97.5 | 1,391 | 1.5 | 1.7 | 96.9 | 962 |
| 35-44 | 0.2 | 1.9 | 97.8 | 1,022 | 0.6 | 1.3 | 98.1 | 744 |
| 45-54 | 0.1 | 0.7 | 99.2 | 866 | 1.9 | 1.7 | 96.4 | 492 |
| 55-64 | 0.9 | 2.0 | 97.1 | 701 | 0.4 | 1.6 | 98.0 | 406 |
| 65+ | 0.1 | 1.9 | 98.0 | 719 | 0.8 | 1.0 | 98.2 | 364 |
| Population group |  |  |  |  |  |  |  |  |
| Black African | 0.2 | 1.8 | 98.0 | 5,170 | 0.5 | 1.8 | 97.7 | 3,534 |
| White | 1.5 | 1.8 | 96.8 | 320 | 2.4 | 0.3 | 97.3 | 257 |
| Coloured | 2.4 | 0.6 | 97.0 | 516 | 4.1 | 2.1 | 93.8 | 335 |
| Indian/Asian | 2.6 | 2.3 | 95.1 | 114 | 0.0 | 1.6 | 98.4 | 82 |
| Other | * | * | * | 6 | * | * | * | 2 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 0.7 | 1.7 | 97.6 | 3,996 | 1.1 | 1.9 | 97.1 | 2,874 |
| Non-urban | 0.1 | 1.7 | 98.2 | 2,130 | 0.4 | 1.6 | 98.0 | 1,336 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 1.9 | 0.4 | 97.7 | 703 | 4.3 | 2.4 | 93.3 | 476 |
| Eastern Cape | 0.0 | 0.8 | 99.2 | 730 | 0.9 | 0.7 | 98.4 | 493 |
| Northern Cape | 0.0 | 0.7 | 99.3 | 127 | 0.4 | 0.6 | 99.1 | 84 |
| Free State | 0.3 | 2.6 | 97.1 | 325 | 0.0 | 1.4 | 98.6 | 207 |
| KwaZulu-Natal | 0.4 | 2.1 | 97.5 | 1,191 | 0.1 | 1.5 | 98.4 | 683 |
| North West | 0.0 | 0.8 | 99.2 | 398 | 0.6 | 0.7 | 98.8 | 310 |
| Gauteng | 0.3 | 2.2 | 97.5 | 1,534 | 0.2 | 1.9 | 97.9 | 1,245 |
| Mpumalanga | 0.8 | 1.6 | 97.6 | 473 | 0.6 | 1.7 | 97.7 | 326 |
| Limpopo | 0.3 | 2.6 | 97.2 | 646 | 1.3 | 3.8 | 94.9 | 386 |
| Education |  |  |  |  |  |  |  |  |
| No education | 0.0 | 1.6 | 98.4 | 495 | 1.2 | 2.1 | 96.7 | 217 |
| Primary incomplete | 0.1 | 1.4 | 98.5 | 664 | 0.7 | 1.0 | 98.3 | 481 |
| Primary complete | 0.0 | 1.5 | 98.5 | 293 | 1.6 | 0.6 | 97.7 | 212 |
| Secondary incomplete | 0.7 | 1.9 | 97.4 | 2,695 | 0.9 | 2.1 | 97.0 | 1,930 |
| Secondary complete | 0.7 | 2.2 | 97.1 | 1,328 | 0.7 | 2.3 | 97.1 | 900 |
| More than secondary | 0.1 | 0.5 | 99.4 | 652 | 1.0 | 0.5 | 98.5 | 470 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 0.0 | 1.0 | 99.0 | 1,163 | 0.3 | 1.0 | 98.8 | 787 |
| Second | 0.0 | 2.2 | 97.8 | 1,152 | 1.2 | 2.5 | 96.3 | 839 |
| Middle | 0.2 | 1.8 | 98.0 | 1,242 | 0.8 | 2.0 | 97.2 | 894 |
| Fourth | 0.8 | 1.4 | 97.8 | 1,258 | 1.1 | 2.1 | 96.8 | 827 |
| Highest | 1.2 | 2.1 | 96.7 | 1,311 | 1.0 | 1.2 | 97.8 | 864 |
| Total 15+ | 0.5 | 1.7 | 97.8 | 6,126 | 0.9 | 1.8 | 97.4 | 4,210 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 18.5 Tobacco use during pregnancy
Among women age 15-49 who had a live birth in the past 5 years, percentage who reported that they smoked tobacco during their most recent pregnancy and percentage who reported that they used smokeless tobacco during their most recent pregnancy, by frequency of use, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who smoked tobacco |  |  | Percentage who used smokeless tobacco |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Not at all | Daily | Occasionally | Not at all | Daily | Occasionally |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 97.7 | 0.8 | 1.5 | 100.0 | 0.0 | 0.0 | 100 |
| 20-34 | 97.8 | 1.5 | 0.7 | 98.9 | 0.8 | 0.3 | 1,151 |
| 35-49 | 96.0 | 2.1 | 1.9 | 97.8 | 2.0 | 0.2 | 323 |
| ANC service ${ }^{1}$ |  |  |  |  |  |  |  |
| Asked about smoking tobacco | 97.2 | 1.8 | 1.0 | 98.9 | 1.0 | 0.1 | 1,372 |
| Not asked about smoking tobacco | 98.0 | 0.0 | 2.0 | 98.9 | 0.9 | 0.2 | 112 |
| Residence |  |  |  |  |  |  |  |
| Urban | 96.3 | 2.3 | 1.4 | 98.9 | 0.7 | 0.4 | 1,021 |
| Non-urban | 99.5 | 0.3 | 0.2 | 98.5 | 1.5 | 0.0 | 552 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 83.0 | 10.1 | 6.9 | 97.1 | 2.9 | 0.0 | 129 |
| Eastern Cape | 95.9 | 2.9 | 1.2 | 98.0 | 2.0 | 0.0 | 165 |
| Northern Cape | 92.3 | 5.2 | 2.5 | 95.7 | 2.1 | 2.1 | 31 |
| Free State | 97.7 | 0.0 | 2.3 | 97.1 | 1.5 | 1.4 | 69 |
| KwaZulu-Natal | 99.5 | 0.5 | 0.0 | 100.0 | 0.0 | 0.0 | 291 |
| North West | 97.3 | 1.6 | 1.1 | 96.8 | 3.2 | 0.0 | 125 |
| Gauteng | 100.0 | 0.0 | 0.0 | 99.4 | 0.0 | 0.6 | 453 |
| Mpumalanga | 97.6 | 1.6 | 0.8 | 98.3 | 1.7 | 0.0 | 150 |
| Limpopo | 100.0 | 0.0 | 0.0 | 100.0 | 0.0 | 0.0 | 161 |
| Education |  |  |  |  |  |  |  |
| No education | * | * | * | * | * | * | 22 |
| Primary incomplete | 94.1 | 3.9 | 2.0 | 92.5 | 6.8 | 0.7 | 75 |
| Primary complete | 95.4 | 1.3 | 3.3 | 99.6 | 0.4 | 0.0 | 63 |
| Secondary incomplete | 96.7 | 2.1 | 1.2 | 98.7 | 0.9 | 0.5 | 778 |
| Secondary complete | 98.8 | 0.9 | 0.2 | 99.7 | 0.3 | 0.0 | 474 |
| More than secondary | 99.0 | 0.0 | 1.0 | 99.9 | 0.0 | 0.1 | 161 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 98.4 | 1.1 | 0.4 | 98.3 | 1.6 | 0.1 | 342 |
| Second | 98.7 | 0.2 | 1.1 | 99.2 | 0.8 | 0.0 | 370 |
| Middle | 95.7 | 2.4 | 1.9 | 98.4 | 0.6 | 1.0 | 358 |
| Fourth | 95.8 | 3.7 | 0.5 | 98.1 | 1.6 | 0.3 | 277 |
| Highest | 98.4 | 0.5 | 1.1 | 100.0 | 0.0 | 0.0 | 227 |
| Total 15-49 | 97.4 | 1.6 | 1.0 | 98.8 | 1.0 | 0.3 | 1,574 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Excludes women who did not receive ANC

Table 18.6.1 Alcohol consumption and risky drinking: Women
Percentage of women age 15 and older who ever drank alcohol, who drank alcohol in the past 12 months, who drank alcohol in the past 7 days, who consumed 5 or more drinks on at least one occasion in the past 30 days, and who show signs of problem drinking as assessed by the CAGE test, according to background characteristics, South Africa 2016

| Background characteristic | Ever drank alcohol | Drank alcohol in past 12 months | Drank alcohol in past 7 days | Consumed 5 or more drinks on at least one occasion in past 30 days ${ }^{1}$ | Show signs of problem drinking by the CAGE test ${ }^{2}$ | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-24 | 29.3 | 20.9 | 8.3 | 5.1 | 3.1 | 1,429 |
| 15-19 | 23.4 | 16.3 | 5.3 | 1.6 | 2.4 | 721 |
| 20-24 | 35.2 | 25.6 | 11.3 | 8.6 | 3.9 | 708 |
| 25-34 | 29.2 | 22.6 | 11.3 | 6.1 | 3.3 | 1,391 |
| 35-44 | 25.1 | 17.0 | 9.5 | 6.0 | 3.1 | 1,022 |
| 45-54 | 22.1 | 15.5 | 10.5 | 4.4 | 2.2 | 866 |
| 55-64 | 21.3 | 16.0 | 11.2 | 3.7 | 2.7 | 701 |
| 65+ | 20.8 | 13.1 | 9.2 | 2.0 | 1.1 | 719 |
| Population group |  |  |  |  |  |  |
| Black African | 22.2 | 15.7 | 7.7 | 4.5 | 2.6 | 5,170 |
| White | 58.2 | 48.9 | 36.1 | 4.2 | 1.6 | 320 |
| Coloured | 42.9 | 28.6 | 17.6 | 10.2 | 5.6 | 516 |
| Indian/Asian | 13.2 | 9.0 | 1.1 | 0.0 | 0.0 | 114 |
| Other | * | * | * | * | * | 6 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 22.9 | 15.9 | 8.3 | 4.4 | 2.9 | 4,048 |
| Employed for cash | 31.5 | 24.1 | 12.9 | 6.0 | 2.7 | 1,560 |
| Employed not for cash | 29.2 | 20.9 | 13.7 | 4.4 | 1.3 | 518 |
| Residence |  |  |  |  |  |  |
| Urban | 30.8 | 22.4 | 12.3 | 6.0 | 3.2 | 3,996 |
| Non-urban | 16.0 | 11.0 | 5.5 | 2.6 | 2.0 | 2,130 |
| Province |  |  |  |  |  |  |
| Western Cape | 38.1 | 27.3 | 18.0 | 9.0 | 4.8 | 703 |
| Eastern Cape | 27.7 | 19.9 | 10.1 | 4.9 | 3.3 | 730 |
| Northern Cape | 40.3 | 27.4 | 13.6 | 10.9 | 6.8 | 127 |
| Free State | 29.3 | 22.2 | 12.1 | 6.0 | 4.6 | 325 |
| KwaZulu-Natal | 12.8 | 10.1 | 4.8 | 1.4 | 1.0 | 1,191 |
| North West | 26.9 | 20.6 | 12.5 | 8.7 | 6.6 | 398 |
| Gauteng | 30.8 | 22.0 | 12.0 | 5.2 | 2.0 | 1,534 |
| Mpumalanga | 30.7 | 19.1 | 7.2 | 4.7 | 2.6 | 473 |
| Limpopo | 12.2 | 8.1 | 4.0 | 1.5 | 1.0 | 646 |
| Education |  |  |  |  |  |  |
| No education | 19.4 | 13.5 | 10.2 | 6.9 | 2.7 | 495 |
| Primary incomplete | 16.4 | 10.3 | 5.4 | 2.3 | 2.6 | 664 |
| Primary complete | 19.1 | 9.9 | 6.0 | 1.7 | 0.9 | 293 |
| Secondary incomplete | 24.6 | 17.3 | 8.2 | 5.2 | 3.5 | 2,695 |
| Secondary complete | 28.8 | 21.7 | 12.2 | 5.6 | 1.8 | 1,328 |
| More than secondary | 40.9 | 32.3 | 18.6 | 4.2 | 2.4 | 652 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 16.5 | 11.7 | 5.2 | 3.7 | 1.9 | 1,163 |
| Second | 20.3 | 14.3 | 6.9 | 3.7 | 3.6 | 1,152 |
| Middle | 24.7 | 17.6 | 8.8 | 5.5 | 3.5 | 1,242 |
| Fourth | 30.1 | 21.3 | 11.9 | 8.0 | 3.5 | 1,258 |
| Highest | 35.1 | 25.9 | 15.9 | 3.2 | 1.3 | 1,311 |
| Total 15+ | 25.7 | 18.4 | 9.9 | 4.8 | 2.7 | 6,126 |

[^32]Table 18.6.2 Alcohol consumption and risky drinking: Men
Percentage of men age 15 and older who ever drank alcohol, who drank alcohol in the past 12 months, who drank alcohol in the past 7 days, who consumed 5 or more drinks on at least one occasion in the past 30 days, and who show signs of problem drinking as assessed by the CAGE test, according to background characteristics, South Africa 2016

| Background characteristic | Ever drank alcohol | Drank alcohol in past 12 months | Drank alcohol in past 7 days | Consumed 5 or more drinks on at least one occasion in past 30 days $^{1}$ | Show signs of problem drinking by the CAGE test ${ }^{2}$ | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 15-24 | 56.4 | 49.3 | 26.3 | 20.7 | 13.0 | 1,241 |
| 15-19 | 45.6 | 38.8 | 16.6 | 11.8 | 5.8 | 651 |
| 20-24 | 68.4 | 60.8 | 37.0 | 30.5 | 20.8 | 591 |
| 25-34 | 65.5 | 60.5 | 43.4 | 36.1 | 21.5 | 962 |
| 35-44 | 68.3 | 60.1 | 40.2 | 31.8 | 18.4 | 744 |
| 45-54 | 53.9 | 47.5 | 36.7 | 27.8 | 15.5 | 492 |
| 55-64 | 64.9 | 54.3 | 45.1 | 25.7 | 14.4 | 406 |
| 65+ | 59.0 | 46.8 | 39.5 | 20.9 | 8.8 | 364 |
| Population group |  |  |  |  |  |  |
| Black African | 61.5 | 53.9 | 36.0 | 28.3 | 16.7 | 3,534 |
| White | 77.2 | 71.0 | 57.7 | 25.7 | 8.2 | 257 |
| Coloured | 52.4 | 46.0 | 34.9 | 25.6 | 15.9 | 335 |
| Indian/Asian | 39.8 | 27.0 | 12.9 | 6.2 | 7.8 | 82 |
| Other | * | * | * | * | * | 2 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 57.4 | 49.9 | 33.0 | 23.7 | 13.6 | 2,189 |
| Employed for cash | 65.7 | 58.3 | 40.5 | 32.1 | 19.3 | 1,897 |
| Employed not for cash | 65.7 | 55.5 | 48.0 | 23.8 | 6.7 | 124 |
| Residence |  |  |  |  |  |  |
| Urban | 59.8 | 54.1 | 37.9 | 29.0 | 16.0 | 2,874 |
| Non-urban | 64.6 | 53.2 | 34.5 | 24.2 | 15.8 | 1,336 |
| Province |  |  |  |  |  |  |
| Western Cape | 53.3 | 49.1 | 38.0 | 22.8 | 14.2 | 476 |
| Eastern Cape | 61.9 | 50.8 | 40.7 | 23.9 | 18.5 | 493 |
| Northern Cape | 57.8 | 47.1 | 29.0 | 23.3 | 10.7 | 84 |
| Free State | 45.5 | 42.3 | 30.6 | 25.4 | 23.0 | 207 |
| KwaZulu-Natal | 57.5 | 46.0 | 28.7 | 23.8 | 13.8 | 683 |
| North West | 79.0 | 64.4 | 32.1 | 27.2 | 13.0 | 310 |
| Gauteng | 63.6 | 60.9 | 44.3 | 35.3 | 16.8 | 1,245 |
| Mpumalanga | 60.5 | 55.0 | 31.1 | 28.8 | 17.4 | 326 |
| Limpopo | 65.9 | 52.4 | 34.7 | 20.5 | 14.5 | 386 |
| Education |  |  |  |  |  |  |
| No education | 54.0 | 42.7 | 30.5 | 22.7 | 14.3 | 217 |
| Primary incomplete | 57.8 | 45.8 | 35.6 | 22.9 | 14.3 | 481 |
| Primary complete | 54.6 | 45.8 | 32.8 | 23.1 | 10.5 | 212 |
| Secondary incomplete | 60.6 | 53.1 | 34.8 | 27.4 | 16.7 | 1,930 |
| Secondary complete | 62.3 | 56.8 | 38.2 | 28.5 | 16.7 | 900 |
| More than secondary | 72.6 | 67.7 | 48.5 | 35.1 | 16.3 | 470 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 60.1 | 50.2 | 37.3 | 25.8 | 16.0 | 787 |
| Second | 60.5 | 51.7 | 32.0 | 25.5 | 14.6 | 839 |
| Middle | 61.3 | 54.4 | 35.3 | 28.6 | 17.0 | 894 |
| Fourth | 62.2 | 55.6 | 38.2 | 32.0 | 18.3 | 827 |
| Highest | 62.5 | 56.8 | 41.4 | 25.6 | 13.9 | 864 |
| Total 15+ | 61.3 | 53.8 | 36.8 | 27.5 | 15.9 | 4,210 |

[^33]Table 18.7 Alcohol consumption during pregnancy
Percentage of women age 15-49 with a live birth in the past 5 years who reported that they drank alcohol every day, some days, or not at all during the pregnancy of their last birth, according to background characteristics, South Africa DHS 2016

| Background characteristic | Alcohol consumption during pregnancy of last birth in the past 5 years |  |  | Number of women |
| :---: | :---: | :---: | :---: | :---: |
|  | Every day | Some days | Not at all |  |
| Age |  |  |  |  |
| 15-19 | 2.3 | 0.5 | 97.3 | 100 |
| 20-34 | 0.1 | 2.8 | 97.1 | 1,151 |
| 35-49 | 0.1 | 3.8 | 96.1 | 323 |
| ANC service ${ }^{1}$ |  |  |  |  |
| Asked about use of alcohol | 0.2 | 2.8 | 97.0 | 1,376 |
| Not asked about use of alcohol | 0.7 | 5.5 | 93.8 | 109 |
| Residence |  |  |  |  |
| Urban | 0.3 | 3.5 | 96.3 | 1,021 |
| Non-urban | 0.2 | 1.7 | 98.1 | 552 |
| Province |  |  |  |  |
| Western Cape | 0.0 | 6.7 | 93.3 | 129 |
| Eastern Cape | 0.5 | 5.9 | 93.6 | 165 |
| Northern Cape | 1.3 | 4.7 | 94.0 | 31 |
| Free State | 0.0 | 5.1 | 94.9 | 69 |
| KwaZulu-Natal | 0.0 | 1.6 | 98.4 | 291 |
| North West | 0.4 | 2.8 | 96.8 | 125 |
| Gauteng | 0.5 | 1.9 | 97.6 | 453 |
| Mpumalanga | 0.0 | 2.6 | 97.4 | 150 |
| Limpopo | 0.0 | 0.4 | 99.6 | 161 |
| Education |  |  |  |  |
| No education | * | * | * | 22 |
| Primary incomplete | 1.8 | 3.8 | 94.4 | 75 |
| Primary complete | 0.0 | 0.3 | 99.7 | 63 |
| Secondary incomplete | 0.3 | 3.6 | 96.1 | 778 |
| Secondary complete | 0.0 | 2.3 | 97.7 | 474 |
| More than secondary | 0.0 | 0.8 | 99.2 | 161 |
| Wealth quintile |  |  |  |  |
| Lowest | 0.4 | 2.1 | 97.5 | 342 |
| Second | 0.0 | 2.2 | 97.8 | 370 |
| Middle | 0.7 | 3.0 | 96.3 | 358 |
| Fourth | 0.0 | 5.2 | 94.8 | 277 |
| Highest | 0.0 | 1.9 | 98.1 | 227 |
| Total 15-49 | 0.3 | 2.8 | 96.9 | 1,574 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Excludes women who did not receive ANC

Table 18.8.1 Use and misuse of codeine-containing medications: Women
Percentage of women age 15 and older who used codeine-containing medications in the past 12 months, percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, and among women who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, percentage who received treatment for problems related to their use for non-medical purposes, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who used codeinecontaining medications in the past 12 months | Percentage who used codeinecontaining medications in the past 12 months for the experience or feeling rather than medicinal effect | Number of women | Among women who used codeinecontaining medications in the past 12 months for the experience or feeling: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Percentage who received treatment for problems related to use of medicines for nonmedical purposes | Number of women |
| Age |  |  |  |  |  |
| 15-24 | 10.6 | 1.7 | 1,429 | * | 24 |
| 15-19 | 8.3 | 1.0 | 721 | * | 8 |
| 20-24 | 13.0 | 2.3 | 708 | * | 16 |
| 25-34 | 14.5 | 2.5 | 1,391 | * | 34 |
| 35-44 | 16.3 | 3.1 | 1,022 | * | 32 |
| 45-54 | 15.3 | 1.9 | 866 | * | 16 |
| 55-64 | 17.2 | 1.8 | 701 | * | 12 |
| 65+ | 12.0 | 3.0 | 719 | * | 22 |
| Population group |  |  |  |  |  |
| Black African | 13.9 | 2.2 | 5,170 | 20.6 | 114 |
| White | 11.9 | 0.3 | 320 | * |  |
| Coloured | 12.4 | 3.9 | 516 | * | 20 |
| Indian/Asian | 29.5 | 4.5 | 114 | * | 5 |
| Other | * | * | 6 | nc | 0 |
| Residence |  |  |  |  |  |
| Urban | 16.6 | 2.9 | 3,996 | 14.2 | 116 |
| Non-urban | 9.2 | 1.2 | 2,130 | (43.0) | 25 |
| Province |  |  |  |  |  |
| Western Cape | 10.4 | 4.0 | 703 | * | 28 |
| Eastern Cape | 10.2 | 1.0 | 730 | * | 8 |
| Northern Cape | 10.9 | 0.6 | 127 | * | 1 |
| Free State | 8.1 | 1.1 | 325 | * | 4 |
| KwaZulu-Natal | 11.0 | 0.9 | 1,191 | * | 11 |
| North West | 24.9 | 4.9 | 398 | (85.6) | 20 |
| Gauteng | 23.1 | 4.1 | 1,534 | * | 63 |
| Mpumalanga | 12.2 | 0.5 | 473 | * | 2 |
| Limpopo | 4.5 | 0.6 | 646 | * | 4 |
| Education |  |  |  |  |  |
| No education | 9.1 | 1.1 | 495 | * | 5 |
| Primary incomplete | 11.5 | 1.5 | 664 | * | 10 |
| Primary complete | 8.6 | 2.7 | 293 | * | 8 |
| Secondary |  |  |  |  |  |
| Secondary complete | 17.2 | 3.6 | 1,328 | (16.9) | 48 |
| More than secondary | 21.1 | 2.0 | 652 | * | 13 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 7.2 | 1.1 | 1,163 | * | 12 |
| Second | 11.3 | 1.3 | 1,152 | * | 15 |
| Middle | 13.8 | 2.0 | 1,242 | * | 25 |
| Fourth | 17.7 | 4.2 | 1,258 | (18.9) | 53 |
| Highest | 19.2 | 2.7 | 1,311 | * | 35 |
| Total 15+ | 14.0 | 2.3 | 6,126 | 19.3 | 140 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases

Table 18.8.2 Use and misuse of codeine-containing medications: Men
Percentage of men age 15 and older who used codeine-containing medications in the past 12 months, percentage who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, and among men who used codeine-containing medications in the past 12 months for the experience or feeling rather than the medicinal effect, percentage who received treatment for problems related to their use for non-medical purposes, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who used codeinecontaining medications in the past 12 months | Percentage who used codeinecontaining medications in the past 12 months for the experience or feeling rather than medicinal effect | Number of men | Among men who used codeinecontaining medications in the past 12 months for the experience or feeling: |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Percentage who received treatment for problems related to use of medicines for nonmedical purposes | Number of men |
| Age |  |  |  |  |  |
| 15-24 | 12.0 | 1.9 | 1,241 | * | 23 |
| 15-19 | 11.0 | 1.6 | 651 | * | 10 |
| 20-24 | 13.1 | 2.2 | 591 | * | 13 |
| 25-34 | 12.6 | 1.2 | 962 | * | 12 |
| 35-44 | 11.8 | 2.1 | 744 | * | 16 |
| 45-54 | 16.0 | 0.8 | 492 | * | 4 |
| 55-64 | 14.4 | 1.7 | 406 | * | 7 |
| 65+ | 13.2 | 0.3 | 364 | * | 1 |
| Population group |  |  |  |  |  |
| Black African | 12.3 | 1.4 | 3,534 | 10.9 | 50 |
| White | 9.1 | 1.1 | 257 | * | 3 |
| Coloured | 20.7 | 2.9 | 335 | * | 10 |
| Indian/Asian | 19.6 | 0.0 | 82 | nc | 0 |
| Other | * | * | 2 | nc | 0 |
| Residence |  |  |  |  |  |
| Urban | 13.6 | 1.6 | 2,874 | (18.3) | 45 |
| Non-urban | 11.4 | 1.3 | 1,336 | (11.2) | 18 |
| Province |  |  |  |  |  |
| Western Cape | 17.4 | 2.7 | 476 | * | 13 |
| Eastern Cape | 11.4 | 0.8 | 493 | * | 4 |
| Northern Cape | 31.8 | 0.2 | 84 | nc | 0 |
| Free State | 5.0 | 0.8 | 207 | * | 2 |
| KwaZulu-Natal | 15.8 | 0.8 | 683 | * | 6 |
| North West | 11.5 | 1.0 | 310 | * | 3 |
| Gauteng | 10.8 | 1.4 | 1,245 | * | 18 |
| Mpumalanga | 15.8 | 4.6 | 326 | * | 15 |
| Limpopo | 9.8 | 0.6 | 386 | * | 2 |
| Education |  |  |  |  |  |
| No education | 9.6 | 0.5 | 217 | * | 1 |
| Primary incomplete | 12.4 | 1.1 | 481 | * | 5 |
| Primary complete | 7.8 | 1.0 | 212 | * | 2 |
| Secondary incomplete | 11.1 | 0.9 | 1,930 | * | 18 |
| Secondary complete | 16.4 | 2.7 | 900 | * | 24 |
| More than secondary | 18.2 | 2.5 | 470 | * | 12 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 7.3 | 0.9 | 787 | * | 7 |
| Second | 10.9 | 1.9 | 839 | * | 16 |
| Middle | 11.6 | 0.7 | 894 | * | 7 |
| Fourth | 18.1 | 2.1 | 827 | * | 18 |
| Highest | 16.4 | 1.7 | 864 | * | 15 |
| Total 15+ | 12.9 | 1.5 | 4,210 | 16.3 | 62 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases

## Key Findings

- Employment and earnings: About half of in-union women ( $47 \%$ ) and $79 \%$ of in-union men age $15-49$ were employed in the 12 months before the survey. Almost all employed women (97\%) and men (more than 99\%) received cash earnings. Similar proportions of in-union women (95\%) and men (93\%) who had cash earnings decided solely or jointly with their spouse on the use of their own cash earnings.
- Ownership of house: $28 \%$ of women and $19 \%$ of men age 15-49 own a house. About half of women (56\%) and men (49\%) who own a house have their name on the title or deed.
- Other assets: Over half of women (54\%) and men (57\%) have a bank account they use. About 9 in 10 women and men own a cellphone.
- Participation in decision making: $87 \%$ of in-union women participate either alone or jointly with their partners in decisions about their own health care, visits to their family, and major household purchases. Two in five women (41\%) make decisions alone about their own health care.
- Attitudes towards wife beating: 6\% of women and 9\% of men believe that a husband is justified in beating his wife in at least one of five specified circumstances.
- Negotiating sexual relations: $72 \%$ of in-union women age 15-49 report that they can say no to their partners if they do not want to have sexual intercourse, and $77 \%$ say that they can ask their partners to use a condom.
- Child discipline: About 4 in 10 women (41\%) and 1 in 4 men ( $26 \%$ ) with co-resident children physically disciplined their children with a hand or implement in the 12 months preceding the survey.

TThis chapter explores women's empowerment in terms of employment, earnings, control over earnings, and magnitude of earnings relative to those of their partners. While the chapter focuses on women, data on specific indicators are also presented for men. (Note that in-union women and men include both those who say they are married and those who say they are living with a partner as if married.) Comparisons of indicators among men and women help to identify gender disparities and provide a context for women's empowerment. The chapter also provides information on child discipline.

### 19.1 In-union Women's and Men’s Employment

## Employment

Respondents are considered to be employed if they have done any work other than their housework in the 12 months before the survey.
Sample: In-union women and men age 15-49

## Earning cash for employment

Respondents are asked if they are paid for their labour in cash or in-kind. Only those who receive payment in cash only or in cash and in-kind are considered to earn cash for their employment.
Sample: In-union women and men age 15-49 employed in the 12 months before the survey

A higher proportion of in-union men (79\%) were employed than in-union women (47\%) (Table 19.1). In-union women and men who were employed predominantly received cash earnings ( $97 \%$ of women and more than $99 \%$ of men). Less than $1 \%$ of employed men and $2 \%$ of employed women were not paid. Among both inunion women and men, the percentage employed generally rises with age (Figure 19.1).

Figure 19.1 Employment by age
Percentage of in-union women and men who were employed at any time in the 12 months before the survey


Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

### 19.2 Control over Women’s Earnings

## Control over one's own cash earnings

Respondents are considered to have control over their own earnings if they participate in decisions alone or jointly with their spouse about how their own earnings will be used.
Sample: In-union women and men age 15-49 who received cash earnings for employment during the 12 months before the survey

To assess women's autonomy, in-union women who earned cash for their work in the 12 months before the survey were asked who the main decision maker was with regard to the use of their earnings. About two-thirds ( $64 \%$ ) of in-union women who earn cash decide with their partners how they use their earnings, and about one-third (31\%) independently make decisions about the use of their earnings. Only $5 \%$ reported that their partners mainly decide on the use of their cash earnings (Table 19.2.1 and Figure 19.2).

Over half of in-union women who are employed earn less than their partners (53\%), $20 \%$ earn more than their partners, and $15 \%$ earn about the same as their partners. One in $10(9 \%)$ women who have cash earnings are in a union with a partner who has no earnings.

Figure 19.2 Control over women's earnings

Percent distribution of in-union women with cash earnings in the 12 months before the survey


Note: In-union women include those who are currently married or living together with a partner as if married.

## Patterns by background characteristics

- Women living in urban and non-urban areas were equally likely to have control over the use of their own earnings ( $95 \%$ each). However, urban women were less likely than non-urban women to make these decisions alone ( $29 \%$ versus $38 \%$ ).
- By province, women's control of their own cash earnings ranged from a low of $89 \%$ in Mpumalanga to a high of $99 \%$ in Northern Cape.
- There were slight differences in women's control over their cash earnings by education and household wealth. Generally, however, less educated women and women in the lower wealth quintiles reported more independent control over the use of their earnings, while better educated women and women in the higher quintiles were more likely to report making joint decisions with their partners.
- Women in the lowest wealth quintile (62\%) and women in North West, Mpumalanga, and Limpopo ( $65 \%-68 \%$ ) were most likely to earn less than their partners, and women with five or more children ( $34 \%$ ) and those with no children ( $29 \%$ ) were most likely to earn more than their partners.


### 19.3 Control over Men’s Earnings

Overall, $93 \%$ of in-union men who receive cash earnings report having decision-making control over the use of their earnings; one in five men (21\%) said they make independent decisions about the use of their cash earnings, while $72 \%$ said they make these decisions jointly with their partners. Seven percent of men said that their earnings are mainly controlled by their partner (Table 19.2.2).

In-union women whose partners have earnings were also asked who decides how their partners' earnings are used; the proportion of women who reported that this decision was made jointly was the same as among men ( $72 \%$ ). However, a smaller proportion of women ( $13 \%$ ) than men ( $21 \%$ ) reported that it was mainly the man who made the decision, and a higher proportion of women ( $14 \%$ ) than men ( $7 \%$ ) said that the woman mainly controlled her partner's earnings.

Employed women were more likely to control their own earnings independently if they earned more than their partner ( $38 \%$ ) or their partner did not work or earn cash ( $40 \%$ ). Similarly, women who earned more than their partner were more likely to control their partner's earnings without the partner's involvement. Women who earned about the same as their partner were most likely to jointly decide on the use of their
own earnings and those of their partner. Women who did not work were least likely to have control over their partner's earnings (Table 19.3).

### 19.4 Women’s and Men’s Ownership of Assets

## Ownership of a house

Respondents who own a house, whether alone or jointly with someone else
Sample: Women and men age 15-49

A higher proportion of women age 15-49 (28\%) than men age 15-49 (19\%) own a house alone or jointly with someone else (Figure 19.3). Sole house ownership is also more common among women (20\%) than among men (14\%) (Table 19.4.1 and Table 19.4.2).

Among those who own a house, whether alone or jointly with someone else, $56 \%$ of women and $49 \%$ of men report that their name is on the house title or deed, while $5 \%$ of women and $2 \%$ of men say their name is not on the title or deed. A higher proportion of men than women who own a house report that they do not have a title or deed for the house ( $46 \%$ versus $36 \%$ ) (Table 19.5.1 and Table 19.5.2).

Over half of women (54\%) and men (57\%) have an account in a bank or other financial institution that they themselves use. Approximately 9 in 10 women (91\%) and men (89\%) own a cellphone. About a third of women (33\%) and men (37\%) who own a cellphone use it for financial transactions (Table 19.6.1 and Table 19.6.2).

## Patterns by background characteristics

- House ownership increases with age, from 5\% among women and 2\% among men age 15-19 to 63\% among women and 54\% among men age 45-49 (Table 19.4.1 and Table 19.4.2).
- The relationship of house ownership with education and wealth is nonlinear. For example, women with no education ( $42 \%$ ), those with a primary incomplete education ( $46 \%$ ), and those with more than a secondary education (35\%) are more likely than women in the other education categories (23-30\%) to own a house.
- House ownership does not differ by residence among either women or men. However, $60 \%$ of women in urban areas who own a house report that the house has a title or deed and their name is on it, as compared with $49 \%$ of women in non-urban areas. The opposite is true among men; $44 \%$ of men in urban areas who own a house report that the house has a title or deed and their name is on it, compared with $61 \%$ of men in non-urban areas (Table 19.5.1 and Table 19.5.2).
- Although house ownership does not vary greatly according to province, there are variations by province in the proportion of women and men who own a house and report that the house has a title or deed and their name is on it. For example, the proportion of women who own a house and report that the house has a title or deed and their name is on it ranges from $47 \%$ each in Limpopo, Eastern Cape, and North West to $73 \%$ in Western Cape. Among men, the proportion ranges from $28 \%$ in Eastern Cape to $90 \%$ in North West.
- Use of a bank account rises rapidly with age among both women and men, peaking at age 35-39. Only $17 \%$ of women and $15 \%$ of men age $15-19$ have a bank account they use, as compared with $68 \%$ of women and 75\% of men age 35-39 (Table 19.6.1 and Table 19.6.2).
- Women and men living in urban areas are more likely to have bank accounts ( $60 \%$ and $65 \%$, respectively) than those living in non-urban areas ( $41 \%$ and $39 \%$, respectively).
- Possession and use of a bank account, ownership of a cellphone, and use of a cellphone for financial transactions all generally increase with increasing education and wealth.


### 19.5 Participation in Decision Making

## Participation in major household decisions

Women are considered to participate in household decisions if they make decisions alone or jointly with their husband/partner in all three of the following areas: (1) their own health care, (2) major household purchases, and (3) visits to their family or relatives.
Sample: In-union women age 15-49
Men are considered to participate in household decisions if they make decisions alone or jointly with their wife/partner in both of the following areas: (1) their own health care and (2) major household purchases.

Sample: In-union men age 15-49

A majority (87\%) of in-union women age $15-49$ participate in all three specified household decisions, either alone or jointly with their partners. Women are about equally likely to participate in each of the three decisions ( $92 \%-94 \%$ each) (Table 19.7 and Table 19.8.1). Forty-one percent of women make decisions about their own health care alone, $27 \%$ make independent decisions about visits to family or relatives, and $19 \%$ make independent decisions about major

Figure 19.4 Women's participation in decision making


Note: In-union women include those who are currently married or living together with a partner as if married. household purchases. Only $3 \%$ of in-union women do not participate in any of the three decisions (Table 19.8.1 and Figure 19.4).

Similarly, $85 \%$ of in-union men age 15-49 participate in both of the decisions they were asked about; $92 \%$ participate in decisions about their own health care and $88 \%$ in decisions about major household purchases. Five percent of in-union men do not participate in either decision (Table 19.8.2).

## Patterns by background characteristics

- In-union women's participation in all three decisions tends to increase with age and number of children. For example, $82 \%$ of women with no children participate in all three decisions, as compared with $87 \%-90 \%$ of women with any children (Table 19.8.1).
- In-union women's participation in decisions varies by residence; $89 \%$ of women in urban areas participate in all three decisions, compared with $82 \%$ of women in non-urban areas. Similarly, in-
union men in urban areas are more likely to participate in both specified decisions than those in nonurban areas ( $88 \%$ and $73 \%$, respectively) (Table 19.8.2).
- Women's and men's participation in household decisions varies greatly by province. The proportion of women who participate in all three decisions ranges from $72 \%$ in Limpopo to $92 \%$ each in Free State and Northern Cape, while the proportion of men participating in both specified decisions ranges from $75 \%$ in Free State to $93 \%$ each in Western Cape and Mpumalanga.


### 19.6 Attitudes toward Wife Beating

## Attitudes toward wife beating

Respondents are asked if they agree that a husband is justified in hitting or beating his wife under each of the following five circumstances: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer "yes" in at least one circumstance, they are considered to have attitudes justifying wife beating.
Sample: Women and men age 15-49
The SADHS 2016 collected information on women's and men's attitudes toward wife beating in five separate circumstances to gain more insight into the extent to which domestic abuse is accepted.

Overall, $6 \%$ of women and $9 \%$ of men age 15-49 agree that a husband is justified in beating his wife in at least one of the five specified circumstances. Among both women and men, neglecting the children is the most acceptable reason for wife beating; $4 \%$ of women and $6 \%$ of men believe that a husband is justified in beating his wife if she neglects the children (Table 19.9.1 and Table 19.9.2).

## Patterns by background characteristics

- Wife beating is more acceptable in non-urban areas than urban areas; $8 \%$ of women and $15 \%$ of men in non-urban areas agree that wife beating is justified in at least one of the five specified circumstances, as compared with $4 \%$ of women and $7 \%$ of men in urban areas.
- Acceptance of wife beating among women varies widely across provinces. One in 10 women in Northern Cape ( $12 \%$ ), Eastern Cape ( $11 \%$ ), and Limpopo ( $10 \%$ ) agree that wife beating is justified in at least one of the five specified circumstances, compared with $3 \%$ each of women in KwaZulu-Natal and Gauteng.
- Acceptance of wife beating generally decreases with increasing wealth; women and men in the highest wealth quintile are less likely than those in the other wealth quintiles to agree that a husband is justified in beating his wife in at least one of the five specified circumstances.


### 19.7 Negotiating Sexual Relations

To assess women's ability to negotiate safer sexual relations with their partners, women were asked whether they could say no to their partners if they do not want to have sexual intercourse and whether they could ask their partners to use a condom.

In South Africa, $72 \%$ of in-union women age 15-49 report that they can say no to their partners if they do not want to have sexual intercourse, and $77 \%$ report that they can ask their partners to use a condom (Table 19.10).

### 19.8 Child Discipline

## Child discipline

Respondents living with one or more of their children less than age 18 are asked if they have done the following in the past 12 months to discipline or punish their children: hit or slapped them with a hand or hit or beat them using a belt, spoon, stick, shoe, or any other implement.
Sample: Women and men age 15-49 who have one or more children (age 017) living with them

Corporal punishment is outlawed in public life in South Africa, that is, in schools (South African Schools Act 84 of 1996); alternative care settings, including foster care settings; and early childhood development centres. However, corporal punishment is still not prohibited in the home. Under common law, parents have the power "to inflict moderate and reasonable chastisement on a child." ${ }^{1}$

Forty-one percent of women and $26 \%$ of men age $15-49$ with one or more children less than age 18 living with them physically disciplined or punished their children, either with a hand or with another implement, during the 12 months preceding the survey (Table 19.11.1 and Table 19.11.2). Women and men were slightly more likely to hit or slap their children ( $32 \%$ and $21 \%$, respectively) than to hit or beat them using a belt, spoon, stick, shoe, or other implement ( $30 \%$ and $19 \%$, respectively).

## Patterns by background characteristics

- Women who reside in non-urban areas are more likely than their urban counterparts to punish their children with either a hand or another implement ( $45 \%$ versus $38 \%$ ). The difference between nonurban and urban men in use of corporal punishment to discipline children is small $(28 \%$ and $26 \%$, respectively).
- The percentage of women who use either a hand or another implement to punish their children ranges from $29 \%$ in Limpopo to $53 \%$ in Eastern Cape.
- There is no clear relationship between corporal punishment and education or wealth among either women or men.

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Table 19.1 Employment and cash earnings of in-union women and men
Percentage of in-union women and men age 15-49 who were employed at any time in the past 12 months and percent distribution of in-union women and men employed in the past 12 months by type of earnings, according to age, South Africa DHS 2016

|  | Among in-union respondents: |  | Percent distribution of in-union respondents employed in the past 12 months, by type of earnings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age | Percentage employed in past 12 months | Number of respondents | Cash only | Cash and in-kind | In-kind only | Not paid | Total | Number of respondents |
| WOMEN |  |  |  |  |  |  |  |  |
| 15-19 | (13.1) | 44 | * | * | * | * | 100.0 | 6 |
| 20-24 | 25.7 | 271 | 96.9 | 0.8 | 1.4 | 0.9 | 100.0 | 70 |
| 25-29 | 43.2 | 514 | 95.6 | 1.5 | 0.5 | 2.4 | 100.0 | 222 |
| 30-34 | 47.9 | 688 | 96.1 | 2.3 | 0.0 | 1.5 | 100.0 | 329 |
| 35-39 | 53.2 | 575 | 93.2 | 3.1 | 0.2 | 3.5 | 100.0 | 306 |
| 40-44 | 52.6 | 507 | 93.6 | 4.0 | 0.1 | 2.3 | 100.0 | 267 |
| 45-49 | 53.6 | 450 | 94.1 | 2.8 | 0.0 | 3.1 | 100.0 | 241 |
| Total 15-49 | 47.3 | 3,050 | 94.7 | 2.7 | 0.2 | 2.4 | 100.0 | 1,441 |
| MEN |  |  |  |  |  |  |  |  |
| 15-19 | * | 1 | nc | nc | nc | nc | nc | 0 |
| 20-24 | (59.8) | 42 | * | * | * | * | 100.0 | 25 |
| 25-29 | 76.6 | 127 | 99.8 | 0.2 | 0.0 | 0.0 | 100.0 | 97 |
| 30-34 | 80.8 | 219 | 99.6 | 0.0 | 0.4 | 0.0 | 100.0 | 177 |
| 35-39 | 79.9 | 212 | 98.9 | 0.9 | 0.0 | 0.2 | 100.0 | 169 |
| 40-44 | 78.7 | 215 | 96.4 | 3.6 | 0.0 | 0.0 | 100.0 | 170 |
| 45-49 | 81.1 | 172 | 97.1 | 2.1 | 0.0 | 0.8 | 100.0 | 140 |
| Total 15-49 | 78.7 | 988 | 97.8 | 1.9 | 0.1 | 0.2 | 100.0 | 778 |
| 50-59 | 64.1 | 288 | 96.7 | 1.7 | 0.2 | 1.4 | 100.0 | 185 |
| Total 15-59 | 75.4 | 1,276 | 97.6 | 1.9 | 0.1 | 0.4 | 100.0 | 962 |

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. $\mathrm{nc}=$ No cases

Table 19.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings
Percent distribution of in-union women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how the woman's cash earnings are used and by whether she earned more or less than her partner, according to background characteristics, South Africa DHS 2016

| Background characteristic | Person who decides how the woman's cash earnings are used: |  |  |  |  | Woman's cash earnings compared with partner's cash earnings: |  |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly woman | Woman and partner jointly | Mainly partner | Not asked ${ }^{1}$ | Total | More | Less | About the same | Partner has no earnings | Don't know | Not asked ${ }^{1}$ |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | * | * | * | * | * | * | 100.0 | 6 |
| 20-24 | 35.5 | 59.5 | 4.6 | 0.3 | 100.0 | 19.3 | 48.7 | 20.5 | 11.1 | 0.0 | 0.3 | 100.0 | 68 |
| 25-29 | 25.3 | 68.8 | 6.0 | 0.0 | 100.0 | 23.4 | 52.6 | 13.6 | 8.7 | 1.7 | 0.0 | 100.0 | 216 |
| 30-34 | 27.4 | 66.3 | 4.7 | 1.7 | 100.0 | 21.6 | 56.6 | 14.5 | 4.4 | 1.1 | 1.7 | 100.0 | 324 |
| 35-39 | 29.4 | 66.0 | 4.4 | 0.2 | 100.0 | 16.3 | 57.3 | 14.4 | 8.6 | 3.3 | 0.2 | 100.0 | 295 |
| 40-44 | 28.7 | 66.4 | 4.9 | 0.0 | 100.0 | 18.6 | 50.3 | 18.5 | 9.9 | 2.7 | 0.0 | 100.0 | 260 |
| 45-49 | 45.0 | 52.4 | 2.3 | 0.4 | 100.0 | 20.8 | 47.4 | 13.5 | 14.0 | 4.0 | 0.4 | 100.0 | 234 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 27.3 | 60.5 | 7.0 | 5.2 | 100.0 | 28.9 | 38.3 | 18.7 | 8.9 | 0.0 | 5.2 | 100.0 | 107 |
| 1-2 | 27.5 | 68.1 | 4.3 | 0.2 | 100.0 | 19.5 | 54.9 | 14.9 | 7.9 | 2.6 | 0.2 | 100.0 | 815 |
| 3-4 | 37.0 | 58.8 | 4.2 | 0.0 | 100.0 | 17.9 | 53.4 | 16.1 | 10.2 | 2.4 | 0.0 | 100.0 | 436 |
| 5+ | 52.9 | 40.7 | 6.4 | 0.0 | 100.0 | 33.9 | 46.7 | 1.4 | 13.8 | 4.3 | 0.0 | 100.0 | 45 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 29.3 | 65.7 | 4.3 | 0.6 | 100.0 | 20.9 | 52.0 | 16.2 | 8.0 | 2.3 | 0.6 | 100.0 | 1,108 |
| Non-urban | 38.3 | 56.3 | 5.4 | 0.0 | 100.0 | 17.6 | 56.2 | 11.4 | 12.1 | 2.8 | 0.0 | 100.0 | 295 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 21.2 | 72.6 | 4.5 | 1.7 | 100.0 | 19.0 | 48.7 | 22.1 | 8.5 | 0.0 | 1.7 | 100.0 | 280 |
| Eastern Cape | 39.0 | 55.0 | 5.4 | 0.5 | 100.0 | 20.9 | 50.3 | 13.3 | 11.4 | 3.5 | 0.5 | 100.0 | 129 |
| Northern Cape | 29.6 | 68.9 | 0.5 | 0.9 | 100.0 | 12.7 | 53.3 | 22.6 | 6.3 | 4.2 | 0.9 | 100.0 | 25 |
| Free State | 15.5 | 80.2 | 4.3 | 0.0 | 100.0 | 10.2 | 50.0 | 24.8 | 13.1 | 1.8 | 0.0 | 100.0 | 59 |
| KwaZulu-Natal | 29.6 | 61.5 | 8.9 | 0.0 | 100.0 | 22.4 | 48.9 | 17.2 | 9.6 | 1.9 | 0.0 | 100.0 | 129 |
| North West | 29.0 | 67.8 | 2.5 | 0.7 | 100.0 | 10.1 | 65.4 | 8.1 | 13.7 | 2.1 | 0.7 | 100.0 | 98 |
| Gauteng | 34.7 | 62.9 | 2.4 | 0.0 | 100.0 | 25.7 | 48.8 | 14.7 | 7.0 | 3.8 | 0.0 | 100.0 | 485 |
| Mpumalanga | 32.8 | 56.0 | 11.2 | 0.0 | 100.0 | 16.6 | 67.5 | 4.1 | 8.7 | 3.0 | 0.0 | 100.0 | 100 |
| Limpopo | 44.9 | 49.3 | 5.0 | 0.8 | 100.0 | 14.1 | 68.0 | 7.9 | 8.4 | 0.8 | 0.8 | 100.0 | 99 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | * | * | * | * | 100.0 | * | * | * | * | * | * | 100.0 | 19 |
| Primary incomplete | 54.4 | 42.6 | 3.0 | 0.0 | 100.0 | 21.6 | 53.0 | 4.5 | 15.7 | 5.2 | 0.0 | 100.0 | 57 |
| Primary complete | (53.7) | (41.7) | (4.7) | (0.0) | 100.0 | (14.5) | (46.5) | (11.2) | (14.9) | (12.9) | (0.0) | 100.0 | 49 |
| Secondary incomplete | 32.3 | 62.0 | 5.6 | 0.0 | 100.0 | 16.5 | 58.8 | 10.0 | 11.6 | 3.0 | 0.0 | 100.0 | 446 |
| Secondary complete | 29.6 | 65.4 | 4.9 | 0.0 | 100.0 | 21.7 | 52.9 | 15.8 | 8.4 | 1.2 | 0.0 | 100.0 | 480 |
| More than secondary | 23.8 | 71.3 | 3.0 | 2.0 | 100.0 | 23.7 | 46.1 | 23.5 | 3.3 | 1.4 | 2.0 | 100.0 | 352 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 41.4 | 52.9 | 5.8 | 0.0 | 100.0 | 14.8 | 61.5 | 6.5 | 15.2 | 2.1 | 0.0 | 100.0 | 140 |
| Second | 38.4 | 55.2 | 6.4 | 0.0 | 100.0 | 19.9 | 51.5 | 13.5 | 11.4 | 3.6 | 0.0 | 100.0 | 220 |
| Middle | 41.9 | 54.3 | 3.8 | 0.0 | 100.0 | 20.6 | 52.0 | 15.1 | 9.1 | 3.2 | 0.0 | 100.0 | 278 |
| Fourth | 30.6 | 64.8 | 4.1 | 0.5 | 100.0 | 24.2 | 51.2 | 13.5 | 7.7 | 2.9 | 0.5 | 100.0 | 285 |
| Highest | 19.1 | 75.6 | 4.0 | 1.2 | 100.0 | 19.2 | 52.6 | 19.4 | 6.4 | 1.2 | 1.2 | 100.0 | 480 |
| Total | 31.2 | 63.7 | 4.5 | 0.5 | 100.0 | 20.2 | 52.9 | 15.1 | 8.9 | 2.4 | 0.5 | 100.0 | 1,403 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on $25-49$
unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Question not asked because respondents are in same-sex unions

Table 19.2.2 Control over men's cash earnings
Percent distributions of in-union men age 15-49 who receive cash earnings and of in-union women age 15-49 whose partners receive cash earnings, by person who decides how the man's cash earnings are used, according to background characteristics, South Africa DHS 2016

| Background characteristic | Men |  |  |  |  |  |  | Women |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Person who decides how the man's cash earnings are used: |  |  |  |  | Total | Number of men | Person who decides how the man's cash earnings are used: |  |  |  |  | Total | Numberofwomen |
|  | Mainly partner | Man and partner jointly | Mainly man | Other | Not asked ${ }^{1}$ |  |  | Mainly woman | Woman and partner jointly | Mainly partner | Other | Not asked ${ }^{1}$ |  |  |
| Age |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15-19 | nc | nc | nc | nc | nc | nc | 0 | (14.0) | (59.9) | (26.1) | (0.0) | (0.0) | 100.0 | 41 |
| 20-24 | * | * | * | * | * | 100.0 | 25 | 14.8 | 63.8 | 21.0 | 0.3 | 0.1 | 100.0 | 252 |
| 25-29 | 4.2 | 70.3 | 25.6 | 0.0 | 0.0 | 100.0 | 97 | 13.3 | 74.2 | 12.5 | 0.0 | 0.0 | 100.0 | 480 |
| 30-34 | 5.7 | 76.4 | 17.7 | 0.2 | 0.0 | 100.0 | 176 | 14.3 | 73.0 | 11.3 | 0.0 | 1.3 | 100.0 | 661 |
| 35-39 | 6.2 | 71.6 | 22.2 | 0.0 | 0.0 | 100.0 | 169 | 12.5 | 75.0 | 12.3 | 0.0 | 0.3 | 100.0 | 542 |
| 40-44 | 8.0 | 67.9 | 24.1 | 0.0 | 0.0 | 100.0 | 170 | 13.9 | 74.0 | 12.1 | 0.0 | 0.0 | 100.0 | 465 |
| 45-49 | 8.3 | 73.6 | 15.8 | 0.0 | 2.4 | 100.0 | 139 | 18.4 | 68.5 | 12.1 | 0.6 | 0.4 | 100.0 | 403 |
| Number of living children |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 0 | 3.2 | 63.1 | 30.1 | 0.0 | 3.6 | 100.0 | 92 | 13.5 | 68.7 | 14.7 | 0.0 | 3.1 | 100.0 | 243 |
| 1-2 | 4.5 | 75.5 | 19.8 | 0.1 | 0.0 | 100.0 | 374 | 12.3 | 73.6 | 13.7 | 0.0 | 0.3 | 100.0 | 1,566 |
| 3-4 | 9.7 | 70.5 | 19.8 | 0.0 | 0.0 | 100.0 | 235 | 17.6 | 70.3 | 11.9 | 0.2 | 0.0 | 100.0 | 877 |
| 5+ | 11.7 | 69.7 | 18.7 | 0.0 | 0.0 | 100.0 | 75 | 17.8 | 72.2 | 9.4 | 0.7 | 0.0 | 100.0 | 156 |
| Residence |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Urban | 6.2 | 73.1 | 20.1 | 0.0 | 0.5 | 100.0 | 597 | 13.5 | 74.2 | 11.5 | 0.1 | 0.6 | 100.0 | 2,131 |
| Non-urban | 7.9 | 68.1 | 23.7 | 0.2 | 0.0 | 100.0 | 179 | 16.7 | 65.8 | 17.4 | 0.1 | 0.0 | 100.0 | 712 |
| Province |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 5.2 | 76.1 | 15.9 | 0.0 | 2.8 | 100.0 | 119 | 12.4 | 78.2 | 7.0 | 0.6 | 1.7 | 100.0 | 421 |
| Eastern Cape | 9.7 | 70.7 | 19.6 | 0.0 | 0.0 | 100.0 | 60 | 23.6 | 60.7 | 15.1 | 0.0 | 0.6 | 100.0 | 253 |
| Northern Cape | 4.2 | 81.0 | 14.8 | 0.0 | 0.0 | 100.0 | 15 | 16.5 | 73.4 | 9.8 | 0.0 | 0.4 | 100.0 | 59 |
| Free State | (8.4) | (68.6) | (23.0) | (0.0) | (0.0) | 100.0 | 22 | 10.2 | 84.0 | 5.8 | 0.0 | 0.0 | 100.0 | 137 |
| KwaZulu-Natal | 14.3 | 63.5 | 22.1 | 0.0 | 0.0 | 100.0 | 74 | 15.6 | 71.5 | 12.9 | 0.0 | 0.0 | 100.0 | 335 |
| North West | 3.6 | 63.7 | 32.2 | 0.5 | 0.0 | 100.0 | 83 | 9.3 | 76.8 | 13.1 | 0.0 | 0.8 | 100.0 | 197 |
| Gauteng | 5.9 | 75.5 | 18.6 | 0.0 | 0.0 | 100.0 | 278 | 14.2 | 73.6 | 12.2 | 0.0 | 0.0 | 100.0 | 995 |
| Mpumalanga | 4.4 | 76.1 | 19.5 | 0.0 | 0.0 | 100.0 | 70 | 10.8 | 65.1 | 24.1 | 0.0 | 0.0 | 100.0 | 215 |
| Limpopo | 7.3 | 63.7 | 29.0 | 0.0 | 0.0 | 100.0 | 54 | 15.9 | 63.2 | 19.9 | 0.3 | 0.7 | 100.0 | 231 |
| Education |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No education | (5.7) | (67.1) | (27.2) | (0.0) | (0.0) | 100.0 | 20 | 28.3 | 62.0 | 9.7 | 0.0 | 0.0 | 100.0 | 74 |
| Primary incomplete | 12.5 | 67.6 | 19.9 | 0.0 | 0.0 | 100.0 | 51 | 20.9 | 57.3 | 21.7 | 0.0 | 0.0 | 100.0 | 165 |
| Primary complete | (17.7) | (57.1) | (25.2) | (0.0) | (0.0) | 100.0 | 35 | 22.2 | 64.2 | 12.6 | 0.9 | 0.0 | 100.0 | 127 |
| Secondary incomplete | 6.3 | 74.5 | 19.1 | 0.1 | 0.0 | 100.0 | 293 | 12.6 | 72.4 | 14.6 | 0.2 | 0.2 | 100.0 | 1,191 |
| Secondary complete | 4.2 | 73.4 | 22.3 | 0.0 | 0.0 | 100.0 | 242 | 14.8 | 75.6 | 9.5 | 0.0 | 0.0 | 100.0 | 831 |
| More than secondary | 6.7 | 70.3 | 20.6 | 0.0 | 2.4 | 100.0 | 135 | 11.3 | 74.2 | 12.6 | 0.0 | 2.0 | 100.0 | 455 |
| Wealth quintile |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Lowest | 10.6 | 69.2 | 20.2 | 0.0 | 0.0 | 100.0 | 118 | 20.8 | 63.8 | 15.4 | 0.0 | 0.0 | 100.0 | 444 |
| Second | 7.8 | 65.8 | 26.1 | 0.3 | 0.0 | 100.0 | 159 | 13.7 | 69.3 | 16.9 | 0.1 | 0.0 | 100.0 | 570 |
| Middle | 3.7 | 77.2 | 19.2 | 0.0 | 0.0 | 100.0 | 165 | 15.6 | 70.7 | 13.4 | 0.2 | 0.1 | 100.0 | 596 |
| Fourth | 6.1 | 70.8 | 23.0 | 0.0 | 0.0 | 100.0 | 145 | 14.8 | 74.3 | 10.3 | 0.2 | 0.4 | 100.0 | 536 |
| Highest | 6.1 | 75.2 | 16.9 | 0.0 | 1.7 | 100.0 | 189 | 9.4 | 79.3 | 10.0 | 0.0 | 1.3 | 100.0 | 697 |
| Total 15-49 | 6.6 | 72.0 | 20.9 | 0.1 | 0.4 | 100.0 | 775 | 14.3 | 72.1 | 13.0 | 0.1 | 0.4 | 100.0 | 2,843 |
| 50-59 | 9.0 | 71.3 | 19.7 | 0.0 | 0.0 | 100.0 | 182 | na | na | na | na | na | na | na |
| Total 15-59 | 7.1 | 71.8 | 20.7 | 0.0 | 0.3 | 100.0 | 957 | na | na | na | na | na | na | na |

Notes: In-union women and men include those who are currently married or living together with a partner as if married. Figures in parentheses are based on $25-$ 49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
$\mathrm{nc}=$ No cases
na $=$ Not applicable
${ }^{1}$ Question not asked because respondents are in same-sex unions
Table 19.3 Women's control over their own earnings and over those of their partners
Percent distribution of in-union women age 15-49 with cash earnings in the last 12 months by person who decides how the woman's cash earnings are used and percent distribution of in-union women age 15-49 whose partners have cash earnings by person who decides how the man's cash earnings are used, according to the relation between woman's and man's cash earnings, South Africa DHS 2016

| Women's earnings relative to partner's earnings | Person who decides how the woman's cash earnings are used: |  |  |  |  | Number of women | Person who decides how the man's cash earnings are used: |  |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mainly woman | Woman and partner jointly | Mainly man | Not asked ${ }^{1}$ | Total |  | Mainly woman | Man and partner jointly | Mainly man | Other | Not asked ${ }^{1}$ |  |  |
| More than partner | 38.2 | 58.6 | 3.2 | 0.0 | 100.0 | 283 | 28.6 | 65.4 | 6.0 | 0.0 | 0.0 | 100.0 | 283 |
| Less than partner | 31.4 | 63.8 | 4.8 | 0.0 | 100.0 | 742 | 12.4 | 77.6 | 10.0 | 0.0 | 0.0 | 100.0 | 742 |
| Same as partner | 14.4 | 81.1 | 4.5 | 0.0 | 100.0 | 213 | 7.9 | 87.2 | 4.9 | 0.0 | 0.0 | 100.0 | 213 |
| Partner has no cash earnings or did not work | 40.2 | 56.5 | 3.3 | 0.0 | 100.0 | 123 | na | na | na | na | na | na | 0 |
| Woman worked but has no cash earnings | na | na | na | na | na | 0 | (25.6) | (68.4) | (5.9) | (0.0) | (0.0) | 100.0 | 37 |
| Woman did not work | na | na | na | na | na | 0 | 12.6 | 69.9 | 17.1 | 0.2 | 0.3 | 100.0 | 1,527 |
| Total ${ }^{2}$ | 31.2 | 63.7 | 4.5 | 0.5 | 100.0 | 1,403 | 14.3 | 72.1 | 13.0 | 0.1 | 0.4 | 100.0 | 2,843 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

${ }^{1}$ Question not asked because respondents are in same-sex unions
${ }_{2}$ Includes cases where a woman does not know whether she earned

Table 19.4.1 Ownership of assets: Women
Percent distribution of women age 15-49 by ownership of housing, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who own a house: |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alone | Jointly | Alone and jointly | Percentage who do not own a house |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 1.3 | 1.5 | 1.8 | 95.5 | 100.0 | 1,427 |
| 20-24 | 3.3 | 2.1 | 3.2 | 91.5 | 100.0 | 1,415 |
| 25-29 | 5.1 | 5.7 | 5.7 | 83.5 | 100.0 | 1,444 |
| 30-34 | 9.2 | 9.6 | 11.6 | 69.7 | 100.0 | 1,333 |
| 35-39 | 15.0 | 13.8 | 12.3 | 58.9 | 100.0 | 1,072 |
| 40-44 | 25.0 | 14.1 | 17.8 | 43.2 | 100.0 | 941 |
| 45-49 | 28.6 | 15.8 | 18.6 | 37.0 | 100.0 | 883 |
| Residence |  |  |  |  |  |  |
| Urban | 10.8 | 7.9 | 9.1 | 72.3 | 100.0 | 5,731 |
| Non-urban | 10.5 | 8.2 | 9.1 | 72.2 | 100.0 | 2,783 |
| Province |  |  |  |  |  |  |
| Western Cape | 10.4 | 7.7 | 13.0 | 68.9 | 100.0 | 995 |
| Eastern Cape | 8.0 | 8.2 | 5.2 | 78.5 | 100.0 | 938 |
| Northern Cape | 10.2 | 12.7 | 4.3 | 72.7 | 100.0 | 173 |
| Free State | 10.3 | 11.1 | 9.1 | 69.5 | 100.0 | 442 |
| KwaZulu-Natal | 12.9 | 3.6 | 11.1 | 72.4 | 100.0 | 1,616 |
| North West | 9.5 | 11.4 | 4.8 | 74.3 | 100.0 | 570 |
| Gauteng | 11.1 | 9.3 | 10.3 | 69.3 | 100.0 | 2,284 |
| Mpumalanga | 9.8 | 10.8 | 5.1 | 74.2 | 100.0 | 671 |
| Limpopo | 10.1 | 5.9 | 8.4 | 75.6 | 100.0 | 824 |
| Education |  |  |  |  |  |  |
| No education | 21.3 | 9.3 | 11.2 | 58.3 | 100.0 | 168 |
| Primary incomplete | 20.5 | 12.1 | 13.4 | 54.1 | 100.0 | 447 |
| Primary complete | 12.6 | 8.2 | 9.2 | 70.0 | 100.0 | 327 |
| Secondary incomplete | 9.3 | 6.1 | 7.4 | 77.3 | 100.0 | 4,195 |
| Secondary complete | 10.0 | 9.2 | 9.3 | 71.5 | 100.0 | 2,369 |
| More than secondary | 11.1 | 11.1 | 13.2 | 64.6 | 100.0 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 14.3 | 6.3 | 7.7 | 71.7 | 100.0 | 1,648 |
| Second | 10.1 | 6.8 | 8.8 | 74.3 | 100.0 | 1,715 |
| Middle | 10.1 | 7.7 | 7.2 | 75.0 | 100.0 | 1,805 |
| Fourth | 9.9 | 7.5 | 7.3 | 75.3 | 100.0 | 1,763 |
| Highest | 9.0 | 12.0 | 14.8 | 64.2 | 100.0 | 1,583 |
| Total | 10.7 | 8.0 | 9.1 | 72.3 | 100.0 | 8,514 |

Table 19.4.2 Ownership of assets: Men
Percent distribution of men age 15-49 by ownership of housing, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who own a house: |  |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alone | Jointly | Alone and jointly | Percentage who do not own a house |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 0.6 | 1.2 | 0.0 | 98.3 | 100.0 | 647 |
| 20-24 | 4.7 | 1.5 | 0.8 | 93.0 | 100.0 | 588 |
| 25-29 | 7.8 | 2.5 | 1.3 | 88.4 | 100.0 | 506 |
| 30-34 | 13.3 | 5.6 | 2.9 | 78.1 | 100.0 | 450 |
| 35-39 | 17.1 | 10.2 | 5.5 | 67.2 | 100.0 | 395 |
| 40-44 | 22.5 | 10.9 | 6.1 | 60.5 | 100.0 | 345 |
| 45-49 | 33.8 | 13.2 | 7.3 | 45.7 | 100.0 | 271 |
| Residence |  |  |  |  |  |  |
| Urban | 11.9 | 5.0 | 3.1 | 80.0 | 100.0 | 2,203 |
| Non-urban | 10.6 | 5.7 | 2.0 | 81.7 | 100.0 | 999 |
| Province |  |  |  |  |  |  |
| Western Cape | 17.3 | 4.1 | 2.5 | 76.1 | 100.0 | 328 |
| Eastern Cape | 7.6 | 3.8 | 1.9 | 86.7 | 100.0 | 362 |
| Northern Cape | 13.9 | 6.9 | 5.9 | 73.3 | 100.0 | 61 |
| Free State | 7.2 | 3.9 | 6.3 | 82.6 | 100.0 | 159 |
| KwaZulu-Natal | 10.1 | 2.7 | 3.4 | 83.7 | 100.0 | 521 |
| North West | 12.2 | 6.7 | 3.4 | 77.6 | 100.0 | 237 |
| Gauteng | 10.8 | 6.8 | 2.2 | 80.3 | 100.0 | 984 |
| Mpumalanga | 12.4 | 6.2 | 2.4 | 79.0 | 100.0 | 263 |
| Limpopo | 14.8 | 5.9 | 1.8 | 77.5 | 100.0 | 288 |
| Education |  |  |  |  |  |  |
| No education | 25.8 | 3.0 | 5.7 | 65.6 | 100.0 | 62 |
| Primary incomplete | 11.8 | 8.4 | 2.6 | 77.2 | 100.0 | 219 |
| Primary complete | 13.2 | 4.1 | 1.8 | 81.0 | 100.0 | 166 |
| Secondary incomplete | 9.9 | 3.8 | 1.7 | 84.6 | 100.0 | 1,637 |
| Secondary complete | 12.3 | 5.7 | 3.1 | 78.8 | 100.0 | 773 |
| More than secondary | 13.4 | 10.0 | 6.5 | 70.1 | 100.0 | 345 |
| Wealth quintile 13.2 |  |  |  |  |  |  |
| Lowest | 13.2 | 3.7 | 1.6 | 81.6 | 100.0 | 618 |
| Second | 10.0 | 5.3 | 2.4 | 82.3 | 100.0 | 682 |
| Middle | 13.6 | 4.6 | 1.8 | 80.0 | 100.0 | 715 |
| Fourth | 9.6 | 3.9 | 2.5 | 84.0 | 100.0 | 653 |
| Highest | 10.8 | 9.3 | 6.0 | 73.8 | 100.0 | 534 |
| Total 15-49 | 11.5 | 5.2 | 2.7 | 80.6 | 100.0 | 3,202 |
| 50-59 | 34.2 | 19.5 | 12.6 | 33.7 | 100.0 | 416 |
| Total 15-59 | 14.1 | 6.9 | 3.8 | 75.2 | 100.0 | 3,618 |

Table 19.5.1 Ownership of title or deed for house: Women
Among women age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the woman's name appears on the title or deed, according to background characteristics, South Africa DHS 2016

| Background characteristic | House has a title or deed and: |  | Does not have a title/deed | Don't know ${ }^{1}$ | Total | Number of women who own a house ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Woman's name is on title/deed | Woman's name is not on title/deed |  |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | 59.5 | 1.4 | 37.8 | 1.3 | 100.0 | 64 |
| 20-24 | 53.4 | 3.0 | 41.5 | 2.2 | 100.0 | 120 |
| 25-29 | 36.3 | 4.9 | 53.5 | 5.3 | 100.0 | 239 |
| 30-34 | 46.8 | 7.2 | 42.5 | 3.5 | 100.0 | 404 |
| 35-39 | 53.6 | 5.8 | 37.0 | 3.6 | 100.0 | 440 |
| 40-44 | 62.0 | 3.1 | 31.3 | 3.6 | 100.0 | 535 |
| 45-49 | 67.2 | 3.3 | 27.4 | 2.1 | 100.0 | 556 |
| Residence |  |  |  |  |  |  |
| Urban | 59.5 | 2.8 | 35.4 | 2.3 | 100.0 | 1,587 |
| Non-urban | 48.6 | 8.1 | 38.1 | 5.2 | 100.0 | 772 |
| Province |  |  |  |  |  |  |
| Western Cape | 72.5 | 1.8 | 23.4 | 2.4 | 100.0 | 309 |
| Eastern Cape | 47.2 | 3.8 | 44.0 | 5.0 | 100.0 | 201 |
| Northern Cape | 60.3 | 11.8 | 25.0 | 2.8 | 100.0 | 47 |
| Free State | 57.8 | 2.9 | 38.6 | 0.7 | 100.0 | 135 |
| KwaZulu-Natal | 51.8 | 2.3 | 40.6 | 5.4 | 100.0 | 446 |
| North West | 47.4 | 21.0 | 28.1 | 3.5 | 100.0 | 146 |
| Gauteng | 56.7 | 2.9 | 37.9 | 2.6 | 100.0 | 701 |
| Mpumalanga | 60.0 | 6.5 | 30.6 | 2.8 | 100.0 | 173 |
| Limpopo | 46.7 | 5.5 | 45.3 | 2.6 | 100.0 | 201 |
| Education |  |  |  |  |  |  |
| No education | 60.7 | 4.9 | 32.7 | 1.7 | 100.0 | 70 |
| Primary incomplete | 52.8 | 2.8 | 38.3 | 6.1 | 100.0 | 205 |
| Primary complete | 47.2 | 2.3 | 43.3 | 7.1 | 100.0 | 98 |
| Secondary incomplete | 54.9 | 3.9 | 37.7 | 3.5 | 100.0 | 954 |
| Secondary complete | 58.1 | 5.1 | 34.3 | 2.5 | 100.0 | 675 |
| More than secondary | 58.0 | 6.4 | 34.0 | 1.6 | 100.0 | 357 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 39.4 | 3.4 | 53.6 | 3.6 | 100.0 | 467 |
| Second | 51.9 | 4.7 | 40.3 | 3.1 | 100.0 | 440 |
| Middle | 54.6 | 7.8 | 33.4 | 4.2 | 100.0 | 450 |
| Fourth | 61.6 | 4.4 | 30.4 | 3.6 | 100.0 | 435 |
| Highest | 69.5 | 2.8 | 25.7 | 2.1 | 100.0 | 567 |
| Total | 56.0 | 4.5 | 36.3 | 3.3 | 100.0 | 2,359 |

[^35]${ }^{2}$ Includes alone, joint, or alone and joint ownership

Table 19.5.2 Ownership of title or deed for house: Men
Among men age 15-49 who own a house, percent distribution by whether the house owned has a title or deed and whether or not the man's name appears on the title or deed, according to background characteristics, South Africa DHS 2016

| Background characteristic | House has a title or deed and: |  | Does not have a title/deed | Don't know ${ }^{1}$ | Total | Number of men who own a house ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Man's name is on title/deed | Man's name is not on title/deed |  |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | * | * | * | * | 100.0 | 11 |
| 20-24 | (36.7) | (9.7) | (49.7) | (3.9) | 100.0 | 41 |
| 25-29 | 45.3 | 0.0 | 52.9 | 1.8 | 100.0 | 58 |
| 30-34 | 55.0 | 1.7 | 37.3 | 6.0 | 100.0 | 99 |
| 35-39 | 52.3 | 0.7 | 46.4 | 0.5 | 100.0 | 129 |
| 40-44 | 44.1 | 4.1 | 51.7 | 0.1 | 100.0 | 136 |
| 45-49 | 54.1 | 1.8 | 40.1 | 4.0 | 100.0 | 147 |
| Residence |  |  |  |  |  |  |
| Urban | 44.0 | 2.7 | 50.4 | 2.9 | 100.0 | 440 |
| Non-urban | 60.9 | 1.6 | 36.2 | 1.4 | 100.0 | 182 |
| Province |  |  |  |  |  |  |
| Western Cape | (68.1) | (2.2) | (25.6) | (4.1) | 100.0 | 78 |
| Eastern Cape | 27.8 | 2.1 | 65.1 | 5.0 | 100.0 | 48 |
| Northern Cape | 69.3 | 4.1 | 26.7 | 0.0 | 100.0 | 16 |
| Free State | 52.5 | 2.1 | 43.5 | 1.9 | 100.0 | 28 |
| KwaZulu-Natal | 33.9 | 2.1 | 63.2 | 0.8 | 100.0 | 85 |
| North West | 90.1 | 0.0 | 9.9 | 0.0 | 100.0 | 53 |
| Gauteng | 30.5 | 3.3 | 62.4 | 3.8 | 100.0 | 194 |
| Mpumalanga | 86.9 | 0.0 | 13.1 | 0.0 | 100.0 | 55 |
| Limpopo | 43.9 | 4.0 | 50.4 | 1.6 | 100.0 | 65 |
| Education |  |  |  |  |  |  |
| No education | * | * | * | * | 100.0 | 21 |
| Primary incomplete | 44.0 | 1.6 | 52.8 | 1.5 | 100.0 | 50 |
| Primary complete | (33.6) | (9.2) | (47.6) | (9.6) | 100.0 | 32 |
| Secondary incomplete | 49.7 | 0.4 | 48.0 | 1.9 | 100.0 | 252 |
| Secondary complete | 51.1 | 3.9 | 41.4 | 3.7 | 100.0 | 163 |
| More than secondary | 52.5 | 3.5 | 43.3 | 0.7 | 100.0 | 103 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 34.1 | 0.8 | 62.0 | 3.2 | 100.0 | 114 |
| Second | 53.2 | 0.9 | 44.2 | 1.7 | 100.0 | 121 |
| Middle | 47.0 | 2.7 | 47.8 | 2.5 | 100.0 | 143 |
| Fourth | 57.1 | 3.5 | 33.7 | 5.7 | 100.0 | 105 |
| Highest | 53.4 | 3.8 | 42.9 | 0.0 | 100.0 | 140 |
| Total 15-49 | 49.0 | 2.4 | 46.2 | 2.5 | 100.0 | 622 |
| 50-59 | 64.1 | 2.3 | 31.6 | 2.0 | 100.0 | 276 |
| Total 15-59 | 53.6 | 2.4 | 41.7 | 2.3 | 100.0 | 898 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes men whose house has a title/deed, but they do not know if their name is on it, and men who do not know if the house has a title/deed
${ }_{2}^{2}$ Includes alone, joint, or alone and joint ownership

Table 19.6.1 Ownership and use of bank accounts and cellphones: Women
Percentage of women age 15-49 who have and use an account in a bank or other financial institution and percentage who own a cellphone, and among women who own a cellphone, percentage who use it for financial transactions, according to background characteristics, South Africa DHS 2016

| Background characteristic | Have and use a bank account | Own a cellphone | Number of women | Use cellphone for financial transactions | Number of women who own a cellphone |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| 15-19 | 17.3 | 76.7 | 1,427 | 12.2 | 1,094 |
| 20-24 | 49.7 | 92.9 | 1,415 | 30.9 | 1,315 |
| 25-29 | 62.2 | 96.1 | 1,444 | 36.9 | 1,387 |
| 30-34 | 65.3 | 94.7 | 1,333 | 40.4 | 1,262 |
| 35-39 | 67.8 | 94.4 | 1,072 | 40.8 | 1,012 |
| 40-44 | 62.2 | 92.6 | 941 | 33.9 | 871 |
| 45-49 | 63.2 | 93.5 | 883 | 30.6 | 825 |
| Residence |  |  |  |  |  |
| Urban | 60.2 | 92.3 | 5,731 | 35.9 | 5,289 |
| Non-urban | 41.0 | 89.0 | 2,783 | 25.0 | 2,476 |
| Province |  |  |  |  |  |
| Western Cape | 65.9 | 87.9 | 995 | 36.8 | 875 |
| Eastern Cape | 50.3 | 91.1 | 938 | 28.3 | 854 |
| Northern Cape | 47.3 | 82.7 | 173 | 29.3 | 143 |
| Free State | 52.2 | 90.4 | 442 | 33.1 | 400 |
| KwaZulu-Natal | 43.1 | 89.6 | 1,616 | 32.2 | 1,448 |
| North West | 51.7 | 89.7 | 570 | 26.9 | 512 |
| Gauteng | 62.0 | 94.7 | 2,284 | 35.7 | 2,163 |
| Mpumalanga | 52.8 | 94.4 | 671 | 31.6 | 633 |
| Limpopo | 46.8 | 89.6 | 824 | 28.0 | 739 |
| Education |  |  |  |  |  |
| No education | 21.6 | 79.8 | 168 | 11.9 | 134 |
| Primary incomplete | 29.9 | 80.2 | 447 | 10.8 | 358 |
| Primary complete | 25.8 | 80.4 | 327 | 11.6 | 263 |
| Secondary incomplete | 39.1 | 88.0 | 4,195 | 21.1 | 3,689 |
| Secondary complete | 74.3 | 98.0 | 2,369 | 43.8 | 2,322 |
| More than secondary | 92.6 | 99.0 | 1,008 | 64.4 | 998 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 28.8 | 83.3 | 1,648 | 15.3 | 1,373 |
| Second | 45.8 | 91.6 | 1,715 | 25.4 | 1,572 |
| Middle | 54.2 | 90.8 | 1,805 | 32.7 | 1,639 |
| Fourth | 62.0 | 92.3 | 1,763 | 34.5 | 1,628 |
| Highest | 79.6 | 98.1 | 1,583 | 52.5 | 1,553 |
| Total | 53.9 | 91.2 | 8,514 | 32.5 | 7,765 |

Table 19.6.2 Ownership and use of bank accounts and cellphones: Men
Percentage of men age 15-49 who have and use an account in a bank or other financial institution and percentage who own a cellphone, and among men who own a cellphone, percentage who use it for financial transactions, according to background characteristics, South Africa DHS 2016

| Background characteristic | Have and use a bank account | Own a cellphone | Number of men | Use cellphone for financial transactions | Number of men who own a cellphone |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |
| 15-19 | 15.1 | 74.6 | 647 | 10.1 | 483 |
| 20-24 | 53.8 | 89.1 | 588 | 31.6 | 524 |
| 25-29 | 67.9 | 91.4 | 506 | 46.8 | 462 |
| 30-34 | 72.0 | 94.7 | 450 | 49.1 | 426 |
| 35-39 | 75.0 | 93.4 | 395 | 46.9 | 369 |
| 40-44 | 71.8 | 92.8 | 345 | 42.3 | 320 |
| 45-49 | 73.0 | 92.5 | 271 | 43.1 | 251 |
| Residence |  |  |  |  |  |
| Urban | 65.0 | 90.3 | 2,203 | 43.0 | 1,990 |
| Non-urban | 39.3 | 84.6 | 999 | 23.8 | 845 |
| Province |  |  |  |  |  |
| Western Cape | 67.5 | 84.4 | 328 | 40.9 | 277 |
| Eastern Cape | 42.4 | 80.6 | 362 | 27.5 | 292 |
| Northern Cape | 59.2 | 78.5 | 61 | 29.8 | 48 |
| Free State | 34.9 | 86.5 | 159 | 23.8 | 137 |
| KwaZulu-Natal | 44.2 | 84.5 | 521 | 26.5 | 441 |
| North West | 65.6 | 91.7 | 237 | 22.3 | 217 |
| Gauteng | 68.3 | 92.7 | 984 | 48.1 | 912 |
| Mpumalanga | 64.2 | 95.5 | 263 | 55.6 | 251 |
| Limpopo | 45.7 | 90.5 | 288 | 28.1 | 261 |
| Education |  |  |  |  |  |
| No education | 55.6 | 89.5 | 62 | 23.4 | 56 |
| Primary incomplete | 30.4 | 77.9 | 219 | 15.0 | 171 |
| Primary complete | 42.7 | 80.5 | 166 | 23.4 | 134 |
| Secondary incomplete | 42.7 | 84.7 | 1,637 | 26.2 | 1,387 |
| Secondary complete | 82.7 | 96.4 | 773 | 53.5 | 745 |
| More than secondary | 91.0 | 99.4 | 345 | 65.5 | 343 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 38.9 | 84.4 | 618 | 26.3 | 522 |
| Second | 50.0 | 86.6 | 682 | 27.6 | 591 |
| Middle | 56.8 | 86.8 | 715 | 38.9 | 620 |
| Fourth | 60.9 | 89.7 | 653 | 42.0 | 586 |
| Highest | 82.2 | 96.8 | 534 | 52.2 | 517 |
| Total 15-49 | 57.0 | 88.5 | 3,202 | 37.3 | 2,835 |
| 50-59 | 61.0 | 87.9 | 416 | 27.5 | 366 |
| Total 15-59 | 57.4 | 88.5 | 3,618 | 36.2 | 3,201 |

Table 19.7 Participation in decision making
Percent distribution of in-union women and in-union men age 15-49 by person who usually makes decisions about various issues, South Africa DHS 2016

| Decision | Mainly woman | Woman and man jointly | Mainly man | Someone else | Other | Not asked ${ }^{1}$ | Total | Number of respondents |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| WOMEN |  |  |  |  |  |  |  |  |
| Own health care | 41.1 | 52.8 | 5.4 | 0.1 | 0.2 | 0.4 | 100.0 | 3,050 |
| Major household purchases | 18.7 | 73.2 | 7.4 | 0.2 | 0.1 | 0.4 | 100.0 | 3,050 |
| Visits to her family or relatives | 26.7 | 66.7 | 5.7 | 0.3 | 0.2 | 0.4 | 100.0 | 3,050 |
| MEN |  |  |  |  |  |  |  |  |
| Own health care | 7.2 | 64.1 | 28.0 | 0.3 | 0.1 | 0.3 | 100.0 | 988 |
| Major household purchases | 11.1 | 73.3 | 14.5 | 0.8 | 0.0 | 0.3 | 100.0 | 988 |

Note: In-union women and men include those who are currently married or living together with a partner as if married.
${ }^{1}$ Question not asked because respondents are in same-sex unions

Table 19.8.1 Women's participation in decision making by background characteristics
Percentage of in-union women age 15-49 who usually make specific decisions either by themselves or jointly with their partner, by background characteristics, South Africa DHS 2016

| Background characteristic | Specific decisions |  |  | All three decisions | None of the three decisions | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Woman's own health care | Making major household purchases | Visits to her family or relatives |  |  |  |
| Age |  |  |  |  |  |  |
| 15-19 | (86.1) | (85.2) | (82.7) | (80.9) | (12.1) | 44 |
| 20-24 | 89.1 | 85.5 | 90.8 | 80.2 | 4.9 | 271 |
| 25-29 | 94.0 | 92.0 | 92.8 | 86.6 | 3.2 | 514 |
| 30-34 | 93.7 | 91.1 | 92.4 | 86.9 | 4.0 | 688 |
| 35-39 | 94.0 | 93.1 | 94.7 | 88.1 | 2.1 | 575 |
| 40-44 | 96.0 | 94.2 | 94.9 | 90.3 | 1.8 | 507 |
| 45-49 | 95.0 | 93.1 | 95.3 | 88.5 | 1.7 | 450 |
| Employment (past 12 months) |  |  |  |  |  |  |
| Not employed | 91.9 | 89.6 | 91.9 | 84.3 | 4.1 | 1,608 |
| Employed for cash | 96.1 | 94.5 | 95.5 | 90.7 | 1.7 | 1,403 |
| Employed not for cash | (96.4) | (91.4) | (81.3) | (79.4) | (2.4) | 38 |
| Number of living children |  |  |  |  |  |  |
| 0 | 89.8 | 86.5 | 86.9 | 82.0 | 8.5 | 262 |
| 1-2 | 93.5 | 91.9 | 93.2 | 87.3 | 3.3 | 1,667 |
| 3-4 | 95.4 | 93.0 | 95.6 | 88.0 | 1.2 | 947 |
| $5+$ | 95.4 | 93.8 | 94.1 | 89.5 | 1.4 | 174 |
| Residence |  |  |  |  |  |  |
| Urban | 95.1 | 92.5 | 94.1 | 89.0 | 3.0 | 2,259 |
| Non-urban | 90.5 | 90.2 | 91.4 | 82.1 | 3.0 | 790 |
| Province |  |  |  |  |  |  |
| Western Cape | 95.1 | 93.3 | 95.2 | 90.3 | 2.5 | 454 |
| Eastern Cape | 91.9 | 87.4 | 91.6 | 80.6 | 2.9 | 275 |
| Northern Cape | 94.7 | 95.3 | 96.2 | 91.6 | 1.9 | 66 |
| Free State | 95.8 | 95.7 | 95.1 | 92.2 | 2.2 | 146 |
| KwaZulu-Natal | 94.7 | 92.0 | 92.5 | 88.0 | 3.0 | 361 |
| North West | 95.5 | 95.0 | 94.9 | 90.2 | 2.0 | 215 |
| Gauteng | 96.6 | 93.6 | 94.9 | 90.7 | 2.4 | 1,035 |
| Mpumalanga | 89.0 | 87.5 | 88.6 | 81.7 | 6.9 | 244 |
| Limpopo | 83.6 | 85.6 | 89.3 | 72.4 | 4.0 | 254 |
| Education |  |  |  |  |  |  |
| No education | 96.8 | 94.2 | 96.0 | 88.9 | 0.5 | 83 |
| Primary incomplete | 84.8 | 86.1 | 88.6 | 78.0 | 7.3 | 185 |
| Primary complete | 97.5 | 93.8 | 95.9 | 91.1 | 1.0 | 142 |
| Secondary incomplete | 93.4 | 91.8 | 93.2 | 86.3 | 2.7 | 1,297 |
| Secondary complete | 95.1 | 93.0 | 94.0 | 88.9 | 2.5 | 875 |
| More than secondary | 94.9 | 91.2 | 93.7 | 88.8 | 4.0 | 469 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 92.5 | 90.3 | 93.1 | 85.2 | 3.2 | 505 |
| Second | 92.2 | 90.0 | 91.8 | 82.6 | 2.7 | 610 |
| Middle | 94.3 | 93.6 | 93.9 | 89.5 | 2.9 | 637 |
| Fourth | 95.0 | 92.9 | 94.9 | 89.1 | 2.4 | 569 |
| Highest | 94.9 | 92.3 | 93.5 | 89.0 | 3.6 | 729 |
| Total | 93.9 | 91.9 | 93.4 | 87.2 | 3.0 | 3,050 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases.

Table 19.8.2 Men's participation in decision making by background characteristics
Percentage of in-union men age 15-49 who usually make specific decisions either alone or jointly with their partner, by background characteristics, South Africa DHS 2016

| Background characteristic | Specific decisions |  | Both decisions | Neither of the two decisions | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Man's own health | Making major household purchases |  |  |  |
| Age |  |  |  |  |  |
| 15-19 | * | * | * | * | 1 |
| 20-24 | (82.1) | (75.0) | (73.3) | (16.2) | 42 |
| 25-29 | 86.8 | 85.0 | 78.9 | 7.1 | 127 |
| 30-34 | 93.3 | 91.6 | 89.4 | 4.5 | 219 |
| 35-39 | 96.3 | 89.5 | 87.0 | 1.2 | 212 |
| 40-44 | 92.7 | 88.1 | 84.7 | 3.8 | 215 |
| 45-49 | 91.7 | 85.7 | 83.8 | 6.4 | 172 |
| Employment (past 12 months) |  |  |  |  |  |
| Not employed | 90.3 | 89.9 | 87.2 | 7.0 | 210 |
| Employed for cash | 92.6 | 87.2 | 84.1 | 4.2 | 775 |
| Employed not for cash | * | * | * | * | 2 |
| Number of living children |  |  |  |  |  |
| 0 | 92.8 | 86.5 | 85.1 | 5.7 | 112 |
| 1-2 | 91.8 | 87.4 | 84.5 | 5.3 | 493 |
| 3-4 | 91.3 | 89.7 | 85.4 | 4.4 | 286 |
| $5+$ | 95.5 | 85.9 | 84.1 | 2.6 | 96 |
| Residence |  |  |  |  |  |
| Urban | 93.3 | 91.1 | 88.1 | 3.7 | 765 |
| Non-urban | 88.2 | 76.6 | 73.4 | 8.6 | 223 |
| Province |  |  |  |  |  |
| Western Cape | 94.5 | 94.6 | 93.3 | 4.1 | 136 |
| Eastern Cape | 90.7 | 79.1 | 78.4 | 8.7 | 69 |
| Northern Cape | 98.8 | 80.0 | 80.0 | 1.2 | 19 |
| Free State | 81.1 | 79.1 | 74.8 | 14.5 | 35 |
| KwaZulu-Natal | 89.7 | 87.1 | 83.7 | 6.9 | 96 |
| North West | 87.7 | 68.4 | 62.4 | 6.4 | 91 |
| Gauteng | 92.7 | 93.1 | 89.1 | 3.4 | 395 |
| Mpumalanga | 94.1 | 94.3 | 92.8 | 4.4 | 84 |
| Limpopo | 97.0 | 77.5 | 76.3 | 1.9 | 62 |
| Education |  |  |  |  |  |
| No education | (82.7) | (93.4) | (81.6) | (5.6) | 36 |
| Primary incomplete | 77.8 | 73.7 | 73.1 | 21.6 | 86 |
| Primary complete | 94.3 | 81.0 | 77.7 | 2.4 | 50 |
| Secondary incomplete | 94.0 | 88.6 | 86.2 | 3.5 | 387 |
| Secondary complete | 94.8 | 90.3 | 87.2 | 2.1 | 282 |
| More than secondary | 92.1 | 90.2 | 86.5 | 4.2 | 146 |
| Wealth quintile |  |  |  |  |  |
| Lowest | 84.7 | 84.5 | 80.1 | 10.8 | 175 |
| Second | 89.6 | 86.0 | 80.7 | 5.1 | 204 |
| Middle | 95.8 | 85.5 | 84.7 | 3.3 | 215 |
| Fourth | 96.9 | 90.5 | 90.2 | 2.8 | 177 |
| Highest | 92.8 | 92.4 | 88.1 | 2.9 | 217 |
| Total 15-49 | 92.1 | 87.8 | 84.8 | 4.8 | 988 |
| 50-59 | 86.3 | 81.2 | 78.0 | 10.6 | 288 |
| Total 15-59 | 90.8 | 86.3 | 83.3 | 6.1 | 1,276 |

Notes: In-union men include men who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 19.9.1 Attitude toward wife beating: Women
Percentage of all women age $15-49$ who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, South Africa DHS 2016

| Background characteristic | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 1.4 | 2.8 | 2.6 | 5.2 | 0.7 | 7.2 | 1,427 |
| 20-24 | 0.9 | 2.5 | 1.8 | 4.2 | 1.4 | 5.6 | 1,415 |
| 25-29 | 1.4 | 2.5 | 2.4 | 3.8 | 1.0 | 6.0 | 1,444 |
| 30-34 | 0.6 | 1.6 | 1.7 | 3.0 | 0.5 | 4.1 | 1,333 |
| 35-39 | 0.5 | 1.5 | 1.6 | 2.9 | 0.5 | 4.2 | 1,072 |
| 40-44 | 0.7 | 2.2 | 2.7 | 4.1 | 1.7 | 6.5 | 941 |
| 45-49 | 0.9 | 1.9 | 1.8 | 3.3 | 1.1 | 4.6 | 883 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | 1.2 | 2.4 | 2.1 | 4.2 | 1.1 | 5.8 | 5,233 |
| Employed for cash | 0.6 | 1.9 | 2.1 | 3.1 | 0.8 | 5.0 | 3,183 |
| Employed not for cash | 1.1 | 2.1 | 2.7 | 8.6 | 0.7 | 8.8 | 98 |
| Number of living children |  |  |  |  |  |  |  |
| $0$ | 1.0 | 2.2 | 2.2 | 4.0 | 0.9 | 5.7 | 2,436 |
| $1-2$ | 0.9 | 2.3 | 2.2 | 3.8 | 0.9 | 5.5 | 4,155 |
| 3-4 | 0.9 | 2.0 | 1.8 | 3.4 | 0.9 | 4.8 | 1,629 |
| 5+ | 1.6 | 2.5 | 2.2 | 5.4 | 2.5 | 8.1 | 294 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 1.0 | 2.2 | 1.8 | 4.0 | 0.8 | 5.6 | 4,992 |
| Married or living together | 0.9 | 2.0 | 2.4 | 3.3 | 1.0 | 5.2 | 3,050 |
| Divorced/separated/widowed | 0.9 | 3.1 | 2.8 | 5.7 | 1.9 | 6.8 | 472 |
| Residence |  |  |  |  |  |  |  |
| Urban | 0.7 | 1.4 | 1.6 | 3.0 | 0.7 | 4.2 | 5,731 |
| Non-urban | 1.4 | 3.9 | 3.2 | 5.5 | 1.5 | 8.2 | 2,783 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 0.9 | 1.9 | 2.3 | 3.8 | 1.2 | 5.7 | 995 |
| Eastern Cape | 2.4 | 4.9 | 5.3 | 9.0 | 1.9 | 11.1 | 938 |
| Northern Cape | 1.6 | 3.6 | 3.4 | 8.7 | 2.3 | 11.6 | 173 |
| Free State | 0.9 | 1.7 | 2.2 | 3.9 | 0.6 | 5.5 | 442 |
| KwaZulu-Natal | 0.5 | 1.7 | 1.5 | 1.8 | 0.6 | 3.0 | 1,616 |
| North West | 0.5 | 2.6 | 1.6 | 4.4 | 1.5 | 6.2 | 570 |
| Gauteng | 0.8 | 0.8 | 0.9 | 1.7 | 0.4 | 2.6 | 2,284 |
| Mpumalanga | 0.4 | 2.1 | 1.8 | 4.2 | 0.3 | 5.8 | 671 |
| Limpopo | 1.3 | 4.1 | 3.1 | 6.3 | 2.2 | 10.0 | 824 |
| Education |  |  |  |  |  |  |  |
| No education | 1.6 | 2.9 | 2.2 | 2.8 | 2.2 | 6.8 | 168 |
| Primary incomplete | 2.4 | 4.4 | 4.9 | 6.9 | 1.9 | 11.1 | 447 |
| Primary complete | 2.4 | 4.0 | 4.7 | 6.9 | 1.9 | 8.2 | 327 |
| Secondary incomplete | 1.0 | 2.7 | 2.8 | 4.9 | 1.2 | 6.7 | 4,195 |
| Secondary complete | 0.7 | 1.4 | 0.7 | 2.5 | 0.6 | 3.7 | 2,369 |
| More than secondary | 0.2 | 0.5 | 0.3 | 0.6 | 0.1 | 1.1 | 1,008 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 1.9 | 4.0 | 3.2 | 5.6 | 1.9 | 8.0 | 1,648 |
| Second | 1.0 | 2.5 | 2.8 | 4.8 | 0.9 | 6.9 | 1,715 |
| Middle | 0.6 | 1.8 | 1.7 | 3.4 | 0.4 | 4.9 | 1,805 |
| Fourth | 0.6 | 1.9 | 1.8 | 3.9 | 1.1 | 4.9 | 1,763 |
| Highest | 0.7 | 0.7 | 1.0 | 1.6 | 0.5 | 2.8 | 1,583 |
| Total | 1.0 | 2.2 | 2.1 | 3.8 | 1.0 | 5.5 | 8,514 |

Table 19.9.2 Attitude toward wife beating: Men
Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, South Africa DHS 2016

| Background characteristic | Husband is justified in hitting or beating his wife if she: |  |  |  |  | Percentage who agree with at least one specified reason | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Burns the food | Argues with him | Goes out without telling him | Neglects the children | Refuses to have sexual intercourse with him |  |  |
| Age |  |  |  |  |  |  |  |
| 15-19 | 2.2 | 6.6 | 3.2 | 8.9 | 1.5 | 14.0 | 647 |
| 20-24 | 2.4 | 4.2 | 3.2 | 11.0 | 2.7 | 12.9 | 588 |
| 25-29 | 1.3 | 3.3 | 4.0 | 5.9 | 1.0 | 8.7 | 506 |
| 30-34 | 1.1 | 3.1 | 2.9 | 2.9 | 0.7 | 6.1 | 450 |
| 35-39 | 2.2 | 3.3 | 6.3 | 2.8 | 2.6 | 8.1 | 395 |
| 40-44 | 1.4 | 1.9 | 4.4 | 3.4 | 1.6 | 5.1 | 345 |
| 45-49 | 0.4 | 0.5 | 2.2 | 2.2 | 0.4 | 3.1 | 271 |
| Employment (past 12 months) |  |  |  |  |  |  |  |
| Not employed | 1.7 | 5.1 | 4.4 | 7.9 | 1.6 | 11.4 | 1,541 |
| Employed for cash | 1.7 | 2.4 | 3.1 | 4.3 | 1.6 | 7.2 | 1,652 |
| Employed not for cash |  |  | * | * | * | * | 8 |
| Number of living children |  |  |  |  |  |  |  |
| 0 | 2.4 | 5.0 | 3.5 | 8.0 | 1.8 | 11.9 | 1,644 |
| 1-2 | 1.2 | 2.4 | 3.7 | 4.9 | 1.3 | 7.2 | 1,017 |
| 3-4 | 0.2 | 2.9 | 4.0 | 2.4 | 1.6 | 4.7 | 414 |
| 5+ | 1.3 | 0.9 | 5.8 | 2.6 | 0.9 | 5.8 | 127 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 2.2 | 4.6 | 3.9 | 7.5 | 2.0 | 11.4 | 2,073 |
| Married or living together | 0.8 | 2.0 | 3.4 | 2.8 | 0.8 | 4.7 | 988 |
| Divorced/separated/widowed | 1.2 | 3.5 | 4.0 | 6.7 | 0.7 | 8.8 | 141 |
| Residence |  |  |  |  |  |  |  |
| Urban | 1.2 | 2.2 | 2.7 | 4.2 | 1.1 | 6.6 | 2,203 |
| Non-urban | 2.7 | 7.1 | 6.0 | 10.1 | 2.6 | 14.9 | 999 |
| Province |  |  |  |  |  |  |  |
| Western Cape | 0.5 | 0.6 | 1.4 | 2.9 | 1.4 | 5.0 | 328 |
| Eastern Cape | 0.9 | 4.6 | 5.5 | 7.2 | 1.2 | 10.6 | 362 |
| Northern Cape | 0.7 | 2.6 | 2.6 | 7.6 | 0.9 | 9.8 | 61 |
| Free State | 1.4 | 3.7 | 3.2 | 10.3 | 1.0 | 13.0 | 159 |
| KwaZulu-Natal | 3.6 | 7.7 | 5.2 | 7.4 | 2.2 | 13.3 | 521 |
| North West | 2.6 | 5.4 | 5.8 | 8.3 | 3.0 | 11.4 | 237 |
| Gauteng | 0.8 | 1.5 | 2.9 | 3.4 | 1.0 | 5.7 | 984 |
| Mpumalanga | 0.7 | 0.9 | 1.6 | 0.9 | 0.1 | 2.8 | 263 |
| Limpopo | 3.9 | 7.9 | 4.8 | 14.9 | 3.7 | 19.0 | 288 |
| Education |  |  |  |  |  |  |  |
| No education | 3.8 | 6.3 | 4.5 | 8.2 | 1.1 | 10.6 | 62 |
| Primary incomplete | 3.3 | 7.1 | 6.9 | 9.1 | 3.6 | 12.1 | 219 |
| Primary complete | 3.0 | 5.4 | 4.0 | 5.4 | 1.0 | 9.6 | 166 |
| Secondary incomplete | 1.8 | 4.7 | 4.6 | 7.5 | 2.1 | 11.6 | 1,637 |
| Secondary complete | 0.8 | 1.6 | 1.8 | 3.3 | 0.5 | 4.8 | 773 |
| More than secondary | 1.2 | 0.7 | 1.7 | 3.2 | 0.7 | 5.8 | 345 |
| Wealth quintile |  |  |  |  |  |  |  |
| Lowest | 2.3 | 7.5 | 6.4 | 9.7 | 1.8 | 14.6 | 618 |
| Second | 3.5 | 5.0 | 5.8 | 8.4 | 3.3 | 12.7 | 682 |
| Middle | 1.1 | 2.4 | 2.0 | 4.6 | 0.7 | 7.6 | 715 |
| Fourth | 0.9 | 2.8 | 2.8 | 6.0 | 1.6 | 7.7 | 653 |
| Highest | 0.3 | 0.5 | 1.4 | 0.8 | 0.4 | 2.5 | 534 |
| Total 15-49 | 1.7 | 3.7 | 3.7 | 6.1 | 1.6 | 9.2 | 3,202 |
| 50-59 | 0.1 | 2.7 | 3.1 | 3.4 | 0.5 | 6.0 | 416 |
| Total 15-59 | 1.5 | 3.6 | 3.6 | 5.7 | 1.5 | 8.9 | 3,618 |

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 19.10 Ability to negotiate sexual relations with partner
Percentage of in-union women age $15-49$ who can say no to their partner if they do not want to have sexual intercourse, and percentage who can ask their partner to use a condom, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who can say no to their partner if they do not want to have sexual intercourse | Percentage who can ask their partner to use a condom | Number of women |
| :---: | :---: | :---: | :---: |
| Age |  |  |  |
| 15-24 | 76.5 | 80.0 | 315 |
| 15-19 | (71.4) | (74.0) | 44 |
| 20-24 | 77.3 | 81.0 | 271 |
| 25-29 | 69.1 | 77.8 | 514 |
| 30-39 | 72.4 | 76.4 | 1,263 |
| 40-49 | 72.6 | 75.2 | 957 |
| Residence |  |  |  |
| Urban | 72.7 | 78.0 | 2,259 |
| Non-urban | 71.1 | 72.8 | 790 |
| Province |  |  |  |
| Western Cape | 78.3 | 80.7 | 454 |
| Eastern Cape | 80.5 | 79.2 | 275 |
| Northern Cape | 78.4 | 80.7 | 66 |
| Free State | 76.4 | 83.2 | 146 |
| KwaZulu-Natal | 73.9 | 74.9 | 361 |
| North West | 77.2 | 74.1 | 215 |
| Gauteng | 65.1 | 73.6 | 1,035 |
| Mpumalanga | 76.2 | 78.3 | 244 |
| Limpopo | 68.4 | 77.0 | 254 |
| Education |  |  |  |
| No education | 60.8 | 66.6 | 83 |
| Primary incomplete | 69.3 | 66.3 | 185 |
| Primary complete | 75.0 | 78.7 | 142 |
| Secondary incomplete | 73.4 | 75.7 | 1,297 |
| Secondary complete | 73.4 | 79.6 | 875 |
| More than secondary | 69.9 | 78.9 | 469 |
| Wealth quintile |  |  |  |
| Lowest | 69.0 | 71.3 | 505 |
| Second | 72.1 | 75.5 | 610 |
| Middle | 73.2 | 78.7 | 637 |
| Fourth | 75.9 | 79.3 | 569 |
| Highest | 71.2 | 77.4 | 729 |
| Total | 72.3 | 76.6 | 3,050 |

Notes: In-union women include women who are currently married or living together with a partner as if married. Figures in parentheses are based on 25-49 unweighted cases

Table 19.11.1 Child discipline: Women
Percentage of women age $15-49$ with one or more children less than age 18 living with them who have physically disciplined or punished their children, according to background characteristics, South Africa DHS 2016

| Background characteristic | In the past 12 months: |  |  | Number of women with one or more children less than age 18 living with them |
| :---: | :---: | :---: | :---: | :---: |
|  | Hit or slapped child with hand | Hit or beat child with an implement ${ }^{1}$ | Hit, slapped, or beat child with either a hand or an implement ${ }^{1}$ |  |
| Age |  |  |  |  |
| 15-19 | 20.6 | 16.1 | 26.4 | 148 |
| 20-24 | 28.8 | 25.2 | 37.0 | 647 |
| 25-29 | 36.6 | 34.5 | 45.9 | 963 |
| 30-34 | 35.9 | 33.8 | 45.1 | 937 |
| 35-39 | 32.5 | 30.0 | 41.9 | 802 |
| 40-44 | 29.7 | 27.5 | 36.2 | 664 |
| 45-49 | 24.2 | 26.3 | 34.2 | 452 |
| Employment (past 12 months) |  |  |  |  |
| Not employed | 31.1 | 30.7 | 39.7 | 2,636 |
| Employed for cash | 33.0 | 28.4 | 41.6 | 1,922 |
| Employed not for cash | 33.6 | 41.1 | 47.6 | 55 |
| Number of living children |  |  |  |  |
| 1-2 | 31.0 | 26.9 | 38.8 | 3,017 |
| 3-4 | 34.7 | 35.6 | 44.5 | 1,346 |
| $5+$ | 28.5 | 35.4 | 41.5 | 250 |
| Residence |  |  |  |  |
| Urban | 31.0 | 25.9 | 38.4 | 2,994 |
| Non-urban | 33.7 | 37.2 | 44.6 | 1,619 |
| Province |  |  |  |  |
| Western Cape | 40.3 | 16.9 | 42.6 | 541 |
| Eastern Cape | 44.1 | 33.6 | 53.4 | 512 |
| Northern Cape | 26.5 | 25.7 | 36.6 | 105 |
| Free State | 30.3 | 26.4 | 33.9 | 248 |
| KwaZulu-Natal | 30.7 | 47.3 | 51.0 | 801 |
| North West | 36.8 | 30.8 | 41.5 | 335 |
| Gauteng | 27.1 | 22.7 | 31.5 | 1,207 |
| Mpumalanga | 34.8 | 42.7 | 47.1 | 384 |
| Limpopo | 20.3 | 21.4 | 28.8 | 482 |
| Education |  |  |  |  |
| No education | 39.1 | 41.1 | 49.3 | 94 |
| Primary incomplete | 35.3 | 38.6 | 44.5 | 282 |
| Primary complete | 31.0 | 35.9 | 46.4 | 172 |
| Secondary incomplete | 29.8 | 29.1 | 38.8 | 2,128 |
| Secondary complete | 32.2 | 28.8 | 39.7 | 1,355 |
| More than secondary | 36.6 | 27.3 | 44.2 | 582 |
| Wealth quintile |  |  |  |  |
| Lowest | 32.8 | 35.9 | 43.8 | 887 |
| Second | 31.8 | 33.2 | 41.4 | 948 |
| Middle | 29.2 | 31.1 | 38.7 | 1,012 |
| Fourth | 35.9 | 28.9 | 45.4 | 942 |
| Highest | 30.0 | 19.3 | 33.2 | 824 |
| Total | 31.9 | 29.9 | 40.6 | 4,613 |

${ }^{1}$ Implements include belt, spoon, stick, or shoe

Table 19.11.2 Child discipline: Men
Percentage of men age 15-49 with one or more children less than age 18 living with them who have physically disciplined or punished their children, according to background characteristics, South Africa DHS 2016

| Background characteristic | In the past 12 months: |  |  | Number of men with one or more children less than 18 living with them |
| :---: | :---: | :---: | :---: | :---: |
|  | Hit or slapped child with hand | Hit or beat child with an implement ${ }^{1}$ | Hit, slapped, or beat child with either a hand or an implement ${ }^{1}$ |  |
| Age |  |  |  |  |
| 15-19 | * | * | * | 3 |
| 20-24 | * | * | * | 17 |
| 25-29 | 26.5 | 17.6 | 30.3 | 79 |
| 30-34 | 17.5 | 16.2 | 19.5 | 142 |
| 35-39 | 17.9 | 17.0 | 25.3 | 133 |
| 40-44 | 24.9 | 23.7 | 29.8 | 123 |
| 45-49 | 17.7 | 19.1 | 27.0 | 100 |
| Employment (past 12 months) |  |  |  |  |
| Not employed | 22.8 | 12.9 | 24.6 | 133 |
| Employed for cash | 20.1 | 20.3 | 26.7 | 463 |
| Employed not for cash |  | * | * | 1 |
| Number of living children |  |  |  |  |
| $1-2$ | 22.0 | 18.8 | 28.2 | 325 |
| 3-4 | 18.4 | 15.4 | 21.1 | 210 |
| 5+ | 21.4 | 28.2 | 32.9 | 63 |
| Residence |  |  |  |  |
| Urban | 21.9 | 17.4 | 25.5 | 446 |
| Non-urban | 17.1 | 22.3 | 28.1 | 152 |
| Province |  |  |  |  |
| Western Cape | 31.2 | 21.0 | 34.9 | 102 |
| Eastern Cape | 13.1 | 21.1 | 31.4 | 48 |
| Northern Cape | 10.6 | 8.3 | 14.1 | 13 |
| Free State | (10.7) | (6.7) | (15.4) | 25 |
| KwaZulu-Natal | 21.7 | 21.4 | 26.5 | 80 |
| North West | 12.1 | 11.7 | 22.6 | 45 |
| Gauteng | 20.1 | 16.1 | 22.8 | 195 |
| Mpumalanga | 17.1 | 20.0 | 20.0 | 56 |
| Limpopo | (29.0) | (35.5) | (39.1) | 33 |
| Education |  |  |  |  |
| No education | * | * | * | 21 |
| Primary incomplete | (23.9) | (12.0) | (30.0) | 50 |
| Primary complete | (29.8) | (28.9) | (29.8) | 27 |
| Secondary incomplete | 11.0 | 13.5 | 18.4 | 221 |
| Secondary complete | 24.5 | 23.6 | 30.8 | 187 |
| More than secondary | 28.6 | 19.1 | 30.7 | 91 |
| Wealth quintile |  |  |  |  |
| Lowest | 20.9 | 26.6 | 29.0 | 100 |
| Second | 20.4 | 16.8 | 28.1 | 117 |
| Middle | 13.8 | 14.0 | 20.5 | 116 |
| Fourth | 23.1 | 13.9 | 26.5 | 109 |
| Highest | 24.1 | 21.6 | 27.1 | 157 |
| Total 15-49 | 20.7 | 18.6 | 26.2 | 598 |
| 50-59 | 18.8 | 18.5 | 23.6 | 109 |
| Total 15-59 | 20.4 | 18.6 | 25.8 | 707 |

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Implements include belt, spoon, stick, or shoe

## Key Findings

- Partner violence: One in four (26\%) ever-partnered women age 18 or older have experienced physical, sexual, or emotional violence committed by a partner in their lifetime. The most common form of violence experienced by women is physical violence (21\%); 17\% of women have experienced emotional violence, and $6 \%$ have experienced sexual violence.
- Controlling behaviours: $19 \%$ of ever-partnered women report that their current or most recent partner has displayed three or more controlling behaviours.
- Injuries due to partner violence: 37\% of ever-partnered women who have experienced physical or sexual violence by their current or most recent partner have had injuries as a result.

Gender-based violence, defined by the United Nations as any act of violence that results in physical, sexual, or psychological harm or suffering to women, girls, men, and boys, as well as threats of such acts, coercion, or the arbitrary deprivation of liberty, is acknowledged worldwide as a violation of basic human rights. Increasing research has highlighted the health burdens, intergenerational effects, and demographic consequences of such violence (United Nations 2006). Despite many constitutional protections, gender-based violence remains persistent and widespread in South Africa (DWCPD 2014). Violence against women occurs across groups defined by socioeconomic status, race, age, and religion. In South Africa, research on this pandemic by academia, government, and nongovernmental organisations continues to provide substantive information about the nature, scope, and dimensions of the problem. Data on violence against women in South Africa are generally based on police reports or obtained through victimisation surveys, both of which are often considered to be under-reported.

This chapter focuses on domestic or intimate partner violence, a form of gender-based violence. In South Africa, intimate partner violence is a persistent societal problem that has its roots in a highly patriarchal culture that asserts male dominance. Additional factors shown to be associated with the experience and/or perpetration of domestic violence include witnessing of parental violence, experiences of child abuse, poverty, and relationship-level factors such as conflicts. Among women, the health effects of experiences of intimate partner violence include increased risk of HIV/AIDS and other sexually transmitted infections, injuries, depression, suicidality, and posttraumatic stress disorder.

Prevention of and reductions in levels of domestic violence have been placed on the national transformation agenda as one of the country's priorities. Legal frameworks such as the 1998 Domestic Violence Act No. 116 were formulated to curb the problem. This legislation protects women from domestic violence by providing accessible legal instruments aiming to prevent further incidents of abuse within domestic relationships.

The SADHS implemented the domestic violence module ${ }^{1}$ in all households. One woman age 18 or older per household was selected at random to be eligible for the module. If the selected woman was age 18-49, the module was implemented as part of the full Woman's Questionnaire or the full Woman's Questionnaire and the adult health module. If the selected woman was age 50 or older, the module was implemented in conjunction with background sections of the Woman's Questionnaire and the adult health module; for these older women, some information (e.g., birth history, information on sexual activity, and information on women's empowerment) was not collected. In estimating indicators, specially constructed weights were applied to adjust for the selection of only one woman per household. The use of these weights ensures that the subsample of women who were interviewed with the domestic violence module is representative nationally, for urban and non-urban areas, and at the provincial level.

Overall, 8,720 women age 18 and older were selected for the domestic violence module. Of these women, 7,759 were interviewed with the Woman's Questionnaire and/or the adult health module. Privacy must be obtained before the domestic violence module can be administered. Overall, privacy was obtained and the interview with the module was completed for 6,620 women, including 5,865 (weighted) ever-partnered women. The overall response rate for the domestic violence module was $76 \%$ (data not shown). Among women who agreed to be interviewed, $85 \%$ completed the module.

### 20.1 Measurement of Intimate Partner Violence

Violence committed by a current partner (among currently partnered women) or the most recent partner (among formerly partnered women) was measured by asking all ever-partnered women if their partner ever did the following to them ${ }^{2}$ :

Physical violence: push you, shake you, or throw something at you; kick you, drag you, or beat you up; try to choke you or burn you on purpose; or threaten or attack you with a knife, gun, or any other weapon

Sexual violence: physically force you to have sexual intercourse with him even when you did not want to, physically force you to perform any other sexual acts you did not want to, or force you with threats or in any other way to perform sexual acts you did not want to

Emotional violence: say or do something to humiliate you in front of others, threaten to hurt or harm you or someone close to you, or insult you or make you feel bad about yourself

In this chapter, partnered women include women who are in a union (those who are married or living with a man as if married) and women who said they have a boyfriend, partner, or fiancé.

### 20.2 Women’s Experience of Physical, Sexual, or Emotional Violence by Any Partner

Physical violence by any partner
Percentage of women who have ever experienced any physical violence (committed by any partner).
Sample: Ever-partnered women age 18 and older

[^36]
## Sexual violence by any partner

Percentage of women who have ever experienced any sexual violence (committed by any partner).
Sample: Ever-partnered women age 18 and older

## Emotional violence by any partner

Percentage of women who have ever experienced any emotional violence (committed by any partner).
Sample: Ever-partnered women age 18 and older

One in five ( $21 \%$ ) ever-partnered women age 18 and older have ever experienced physical violence by any partner, $6 \%$ have ever experienced sexual violence by any partner, and $17 \%$ have ever experienced emotional violence by any partner (Table 20.1). Overall, $26 \%$ of ever-partnered women have experienced physical, sexual, or emotional violence by a partner.

## Patterns by background characteristics

- Women age 25-64 are more likely to have experienced physical, sexual, or emotional violence from any partner than younger women (age 18-24) or women age 65 and older.
- Women who are divorced or separated (45\%) are more likely than women in any other marital status group ( $21 \%-35 \%$ ) to have experienced any form of violence by a partner (Figure 20.1). Notably, however, women who are living together

Figure 20.1 Experience of physical, sexual, or emotional violence among ever-partnered women age 18+ by marital status
$■$ Never married $■$ Married $■$ Living together $■$ Divorced/separated $■$ Widowed
with a partner are more than twice as likely as married women to have ever experienced physical violence ( $31 \%$ versus $14 \%$ ) or sexual violence ( $10 \%$ versus $4 \%$ ).

- The percentage of women who have experienced physical, sexual, or emotional violence by a partner does not vary by residence but does vary by province, from $19 \%$ in KwaZulu-Natal to $38 \%$ in Eastern Cape.
- Although the relationship is not linear, women's likelihood of having experienced physical, sexual, or emotional violence by any partner tends to decline with increasing education and household wealth.

Information on experiences with physical violence only and sexual violence only is presented in Table 20.2.

### 20.2.1 Age at first experience of sexual violence by any partner

Among ever-partnered women age 18 and older, $0.3 \%$ experienced sexual violence from a partner by age $15,1 \%$ by age 18 , and $3 \%$ by age 22 . Ninety-four percent of ever-partnered women have not experienced sexual violence by a partner (Table 20.3).

### 20.3 Women’s Experience of Violence by Any Partner in the Past 12 Months

In the 12 months before the survey, $9 \%$ of everpartnered women age 18 and older experienced emotional violence, $8 \%$ experienced physical violence, and $2 \%$ experienced sexual violence. Overall, $13 \%$ of women experienced emotional, physical, or sexual violence by a partner in the past year (Table 20.4).

## Patterns by background characteristics

- Women's recent experience of physical, sexual, or emotional violence tends to decline with age, from $15 \%-17 \%$ among women age $18-44$ to $4 \%$ among women age 65 and over.
- By province, the proportion of women recently experiencing physical, sexual, or emotional violence by a partner ranged from $7 \%$ in Limpopo to $18 \%$ in North West (Figure 20.2).

Figure 20.2 Partner violence by province
Percentage of ever-partnered women age 18 and older who have experienced physical, sexual, or emotional violence committed by any partner in the past 12 months


### 20.4 Controlling Behaviours by Most Recent Partner

## Controlling behaviours

Percentage of women whose current partner (if currently partnered) or most recent partner (if formerly partnered) demonstrates at least one of the following controlling behaviours: is jealous or angry if she talks to other men, frequently accuses her of being unfaithful, does not permit her to meet her female friends, tries to limit her contact with her family, and insists on knowing where she is at all times.
Sample: Ever-partnered women age 18 and older

Attempts by male partners to closely control and monitor their female partners' behaviour are important warning signs and correlates of violence in a relationship. A series of questions were included in the SADHS 2016 to elicit the degree of controlling behaviours exercised by respondents' partners. Because the concentration of behaviours is more significant than the display of any single behaviour, the proportion of women whose partners display at least three of the specified behaviours is also discussed.

Forty percent of ever-partnered women age 18 and older report that their current (or most recent) partner is jealous or angry if they talk to other men, and $31 \%$ report that he insists on knowing where they are at all times. Twenty-one percent report that their partners frequently accuse them of being unfaithful, $15 \%$ say that he does not permit them to meet their female friends, and $8 \%$ report that he tries to limit their contact with their families. Overall, $19 \%$ of ever-partnered women report that their current (or most recent) partner has displayed three or more of the behaviours described above, while half (51\%) report that their partner has not displayed any controlling behaviours (Table 20.5).

## Patterns by background characteristics

- Controlling behaviours are more common in the youngest age group: 24\% of women age 18-24 report that their partners demonstrate three or more controlling behaviours, as compared with $15 \%-16 \%$ of women age $45-64$ and $11 \%$ of women age 65 and older.
- Women's reports of their partners' controlling behaviours vary by province. Overall, the percentage of ever-partnered women whose partner displays at least three of the specified behaviours ranges from 15\% each in Limpopo and Western Cape to 28\% in Free State.
- Married women (12\%) are much less likely than never-married women (23\%), women who are living together with their partner ( $25 \%$ ), and divorced or separated women $(28 \%)$ to report that their current or most recent partner displays at least three of the specified behaviours.
- The percentage of women with a partner who displays three or more controlling behaviours declines with increasing wealth, from $22 \%$ each among those in the lowest and second wealth quintiles to $12 \%$ among those in the highest wealth quintile.
- Women's reports of controlling behaviours by their partner vary greatly by whether or not they are afraid of their partner. Fourteen percent of women who say that they are never afraid of their partner report at least three controlling behaviours, as compared with $60 \%$ of women who say that they are afraid of their partner most of the time.


### 20.5 Prevalence of Violence by Most Recent Partner

Violence by current or most recent partner
Percentage of women who have experienced any of the specified acts of physical, sexual, or emotional violence committed by their current partner (if currently partnered) or most recent partner (if formerly partnered), ever and in the 12 months preceding the survey.
Sample: Ever-partnered women age 18 and older

One in five (21\%) ever-partnered women have experienced physical, sexual, or emotional violence committed by their current or most recent partner (Table 20.6). Thirteen percent of women reported experiencing physical, sexual, or emotional violence in the 12 months preceding the survey.

Fourteen percent of ever-partnered women reported physical violence by their current (or most recent) partner, and a similar proportion reported emotional violence. Sexual violence was reported by $4 \%$ of women. Data on specific acts of physical and sexual violence experienced by women ever and in the past 12 months are shown in Figure 20.3.

Figure 20.3 Forms of violence
Percentage of ever-partnered women age 18 and older who have ever experienced specfic acts of violence by their partner

| Pushed her, shook her, or threw something at her | 13 | - Ever |
| :---: | :---: | :---: |
|  | 7 | - Past 12 |
| Kicked her, dragged her, or beat her up | 8 |  |
|  | 4 |  |
| Tried to choke her or burn her on purpose | 2 |  |
|  | 1 |  |
| Threatened her or attacked her with a knife, gun, or other weapon | 3 |  |
|  | 1 |  |
| Physically forced her to have sexual intercourse with him when she did not want to | 4 |  |
|  | 2 |  |
| Physically forced her to perform any other sexual acts she did not want to | 2 |  |
|  | 1 |  |
| Forced her with threats or in any other way to perform sexual acts she did not want to | 2 |  |
|  | 1 |  |

## Patterns by background characteristics of ever-partnered women

- Women age 55-64 (24\%) were somewhat more likely than women in the other age groups ( $17 \%-22 \%$ ) to report having ever experienced physical, sexual, or emotional violence by their current or most recent partner (Table 20.7).
- The prevalence of physical, sexual, or emotional violence by a current or most recent partner increases with number of living children, from $15 \%$ among women with no children to $32 \%$ among women with five or more children.
- The percentage of women who have ever experienced physical, sexual, or emotional violence by their current or most recent partner increases from $24 \%$ among those with no education to $31 \%$ among those with a primary complete education before declining sharply to $13 \%$ among those with more than a secondary education.
- Experience of physical, sexual, or emotional violence is most common among women in the lowest wealth quintile ( $27 \%$ ) and least common among women in the highest quintile ( $14 \%$ ).

Patterns by partner's characteristics and empowerment indicators of ever-in-union women

- In-union women whose husbands/partners had more than a secondary education were less likely to report physical, sexual, or emotional violence than in-union women whose husbands had less or no education (10\% versus 15\%-25\%) (Table 20.8).
- Ever-in-union women's experience of physical, sexual, or emotional violence varies greatly with their husbands'/ partners' alcohol consumption,


## Figure 20.4 Violence by partner's alcohol consumption

Percentage of ever-in-union women age 18 and older who have ever experienced physical, sexual, or emotional violence by their current or most recent husband/partner


Note: Figures in parentheses are based on 25-49 unweighted cases. from $13 \%$ among women whose husbands/partners do not drink alcohol to $25 \%$ among women whose husbands/partners sometimes drink alcohol and $65 \%$ among those whose husbands/partners are often drunk (Figure 20.4).

- The prevalence of physical, sexual, or emotional violence increases with the number of controlling behaviours displayed by a woman's husband/partner, from $7 \%$ among women whose husband/partner displays no controlling behaviours to $78 \%$ among those whose husband/partner displays all five controlling behaviours.
- Women who said that their mother was abused by their father or their mother's boyfriend (39\%) were more likely than those who said that their mother did not suffer such abuse ( $18 \%$ ) to report physical, sexual, or emotional violence committed by their own husband/partner.
- Women's experience of physical, sexual, or emotional violence by their husband/partner varies greatly according to their fear of their husband/partner, from $14 \%$ among those who are never afraid of their husband/partner to $77 \%$ among those who are afraid of him most of the time.


### 20.6 Injuries to Women due to Partner Violence

## Injuries due to partner violence

Percentage of women who have the following types of injuries from partner violence: cuts, bruises, or aches; eye injuries, sprains, dislocations, or burns; or deep wounds, broken bones, broken teeth, or any other serious injury
Sample: Ever-partnered women age 18 and older who have experienced physical or sexual violence committed by their current partner (if currently partnered) or most recent partner (if formerly partnered)

Women who experience violence perpetrated by partners suffer different physical health effects that include injuries. Thirty-seven percent of ever-partnered women who have ever experienced physical or sexual violence by their current or most recent partner reported having had injuries as a result (Table 20.9).

Cuts, bruises, or aches are the most common types of injuries (34\%) reported by women who have ever experienced spousal physical or sexual violence. Nonetheless, a significant proportion of women who have experienced partner violence also report having eye injuries, sprains, dislocations, or burns (18\%) and injuries such as deep wounds, broken bones, and broken teeth (11\%).

### 20.7 Violence Initiated by Women against Partners

## Initiation of physical violence by women

Percentage of women who have ever hit, slapped, kicked, or done anything else to physically hurt their current (if currently partnered) or most recent (if formerly partnered) partner at times when he was not already beating or physically hurting them.
Sample: Ever-partnered women age 18 and older

Four percent of ever-partnered women age 18 and older reported that they hit, slapped, kicked, or did something else to physically hurt their current or most recent partner when he was not already beating or physically hurting them. Three percent of women had engaged in such violence in the 12 months before the survey (Table 20.10). Findings are comparable among ever-in-union women (Table 20.11).

## Patterns by background characteristics of ever-partnered women

- Women's perpetration of violence is closely associated with their own experience of physical violence by their partner: $20 \%$ of women who had ever experienced violence by their partner and $23 \%$ who experienced violence in the past 12 months had initiated violence against their current (or most recent) partner, as compared with $2 \%$ of women who had not experienced physical violence by their partner (Table 20.10).
- Women from Western Cape (8\%) were more likely to have ever initiated physical violence against their current or most recent partner than women from other provinces ( $2 \%-6 \%$ ).
- Women living together with their partner were more likely than women in the other marital status categories to have ever initiated physical violence against their partner ( $9 \%$ versus $3 \%-5 \%$ ).


## Patterns by partner's characteristics and empowerment indicators of ever-in-union women

- Women whose husband/partner is often drunk are more likely than those whose husband/partner does not drink to have initiated physical violence (Table 20.11).
- The percentage of women who initiate violence against their husband/partner varies with the number of controlling behaviours he displays; $1 \%$ of women whose husband/partner displays no controlling behaviours have ever initiated physical violence, as compared with $19 \%$ of women whose husband/partner displays all five controlling behaviours.
- Initiation of violence is more common among women who report that their father or mother's boyfriend beat their mother ( $10 \%$ ) than among those with no such history ( $3 \%$ ).
- Women who are afraid of their husband/partner most of the time are much more likely than those who are never afraid of their husband/partner to have ever initiated physical violence.


## List of Tables

For more information on domestic violence, see the following tables:

- Table 20.1 Experience of physical, sexual, or emotional violence by any partner
- Table 20.2 Experience of different forms of violence
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- Table 20.4 Violence by any partner in the last 12 months
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- Table 20.8 Spousal violence by husband's characteristics and empowerment indicators
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- Table 20.11 Violence by women against their husband/partner by husband's/partner's characteristics and empowerment indicators

Table 20.1 Experience of physical, sexual, or emotional violence by any partner
Percentage of ever-partnered women age 18 and older who have ever experienced any physical, sexual, or emotional violence committed by any partner, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who have ever experienced physical violence by any partner | Percentage who have experienced sexual violence by any partner | Percentage who have experienced emotional violence by any partner | Percentage who have experienced physical or sexual violence by any partner | Percentage who have experienced emotional, physical, or sexual violence by any partner | Number of everpartnered women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |
| 18-24 | 17.6 | 5.2 | 14.1 | 18.3 | 23.4 | 1,041 |
| 25-34 | 22.2 | 6.7 | 19.2 | 23.3 | 29.3 | 1,569 |
| 35-44 | 21.7 | 7.0 | 17.6 | 22.8 | 27.2 | 1,116 |
| 45-54 | 21.4 | 5.6 | 18.3 | 22.1 | 27.4 | 771 |
| 55-64 | 21.8 | 6.8 | 19.3 | 22.5 | 27.1 | 667 |
| 65+ | 16.7 | 5.6 | 13.0 | 16.9 | 20.0 | 701 |
| Residence |  |  |  |  |  |  |
| Urban | 20.2 | 6.3 | 16.4 | 20.9 | 25.5 | 3,829 |
| Non-urban | 20.9 | 6.1 | 18.5 | 22.0 | 27.7 | 2,035 |
| Province |  |  |  |  |  |  |
| Western Cape | 21.3 | 4.0 | 19.6 | 21.3 | 26.0 | 671 |
| Eastern Cape | 31.4 | 6.5 | 24.0 | 31.8 | 37.9 | 743 |
| Northern Cape | 18.7 | 4.5 | 16.0 | 19.8 | 23.3 | 126 |
| Free State | 21.4 | 7.5 | 20.7 | 22.0 | 28.0 | 326 |
| KwaZulu-Natal | 13.7 | 3.1 | 13.0 | 14.1 | 19.3 | 1,078 |
| North West | 29.5 | 11.8 | 27.5 | 31.5 | 37.3 | 409 |
| Gauteng | 17.7 | 8.0 | 12.5 | 18.8 | 22.6 | 1,464 |
| Mpumalanga | 26.4 | 7.0 | 21.3 | 27.9 | 33.4 | 443 |
| Limpopo | 14.2 | 5.1 | 12.8 | 15.3 | 20.3 | 605 |
| Marital status |  |  |  |  |  |  |
| Never married | 18.4 | 4.8 | 15.8 | 19.1 | 24.7 | 2,243 |
| Married | 14.3 | 4.1 | 13.7 | 15.5 | 20.7 | 1,894 |
| Living together | 31.3 | 10.1 | 22.8 | 32.1 | 34.8 | 689 |
| Divorced/separated | 39.7 | 16.4 | 34.4 | 40.3 | 45.1 | 338 |
| Widowed | 23.8 | 8.0 | 16.7 | 24.3 | 28.8 | 701 |
| Number of living children ${ }^{1}$ |  |  |  |  |  |  |
| 0 | 15.7 | 4.0 | 10.9 | 16.7 | 20.1 | 771 |
| 1-2 | 21.4 | 6.7 | 18.4 | 22.2 | 28.0 | 2,339 |
| 3-4 | 20.2 | 6.2 | 18.3 | 21.5 | 27.2 | 911 |
| 5+ | 35.0 | 9.7 | 21.0 | 35.7 | 38.5 | 149 |
| Employment |  |  |  |  |  |  |
| Employed for cash | 22.1 | 7.4 | 17.5 | 23.2 | 27.0 | 1,798 |
| Employed not for cash | 17.8 | 12.9 | 18.2 | 22.9 | 29.4 | 61 |
| Not employed | 19.8 | 5.6 | 17.0 | 20.4 | 25.8 | 4,005 |
| Education |  |  |  |  |  |  |
| No education | 21.4 | 4.7 | 15.3 | 21.9 | 26.0 | 497 |
| Primary incomplete | 23.8 | 7.3 | 18.2 | 24.7 | 28.5 | 614 |
| Primary complete | 30.8 | 5.2 | 23.8 | 32.0 | 37.2 | 256 |
| Secondary incomplete | 23.0 | 7.5 | 19.8 | 24.0 | 29.7 | 2,289 |
| Secondary complete | 17.3 | 6.1 | 14.1 | 18.0 | 22.3 | 1,464 |
| More than secondary | 12.1 | 3.2 | 13.1 | 12.4 | 17.7 | 745 |
| Wealth quintile |  |  |  |  |  |  |
| Lowest | 26.4 | 7.4 | 21.1 | 27.7 | 32.2 | 1,096 |
| Second | 21.2 | 6.0 | 17.4 | 22.1 | 27.9 | 1,202 |
| Middle | 21.1 | 6.3 | 18.4 | 21.9 | 26.8 | 1,181 |
| Fourth | 21.5 | 6.0 | 16.5 | 21.8 | 26.8 | 1,162 |
| Highest | 12.8 | 5.7 | 12.8 | 13.7 | 18.3 | 1,223 |
| Total 18+ | 20.5 | 6.2 | 17.1 | 21.3 | 26.2 | 5,865 |
| Total 18-49 | 20.6 | 6.2 | 17.1 | 21.5 | 26.8 | 4,169 |

${ }^{1}$ Available for women age 18-49 only

Table 20.2 Experience of different forms of violence
Percentage of women age 18 and older who have ever experienced different forms of violence by any partner according to current age, South Africa DHS 2016

| Age | Physical <br> violence only | Sexual <br> violence only | Physical and <br> sexual <br> violence | Physical or <br> sexual <br> violence | Number of <br> women |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $18-24$ | 13.0 | 0.7 | 4.6 | 18.3 | 1,041 |
| $25-34$ | 16.6 | 1.1 | 5.6 | 23.3 | 1,569 |
| $35-44$ | 15.8 | 1.0 | 5.9 | 22.8 | 1,116 |
| $45-54$ | 16.6 | 0.8 | 4.8 | 22.1 | 771 |
| $55-64$ | 15.6 | 0.7 | 6.2 | 22.5 | 667 |
| $65+$ | 11.3 | 0.2 | 5.4 | 16.9 | 701 |
| Total 18+ | 15.0 | 0.8 | 5.4 | 21.3 | 5,865 |

## Table 20.3 Age at first experience of sexual violence

Percentage of women age 18 and older who experienced sexual violence by any partner by specific exact ages, according to current age and current marital status, South Africa DHS 2016

| Background characteristic | Percentage who first experienced sexual violence by any partner by exact age: |  |  |  |  | Percentage who have not experienced sexual violence | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 10 | 12 | 15 | 18 | 22 |  |  |
| Age |  |  |  |  |  |  |  |
| 18-24 | 0.0 | 0.0 | 0.0 | 1.6 | na | 94.8 | 1,041 |
| 25-34 | 0.7 | 0.7 | 1.1 | 2.0 | 3.0 | 93.3 | 1,569 |
| 35-44 | 0.0 | 0.0 | 0.0 | 0.8 | 2.0 | 93.0 | 1,116 |
| 45-54 | 0.1 | 0.1 | 0.1 | 0.4 | 1.4 | 94.4 | 771 |
| 55-64 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 93.2 | 667 |
| 65+ | 0.0 | 0.0 | 0.1 | 1.1 | 1.6 | 94.4 | 701 |
| Marital status |  |  |  |  |  |  |  |
| Never married | 0.4 | 0.4 | 0.4 | 1.2 | 2.3 | 95.2 | 2,243 |
| Married | 0.1 | 0.1 | 0.3 | 1.0 | 1.8 | 95.9 | 1,894 |
| Living together | 0.1 | 0.2 | 0.7 | 2.1 | 4.9 | 89.9 | 689 |
| Divorced/separated | 0.0 | 0.0 | 0.1 | 0.5 | 4.8 | 83.6 | 338 |
| Widowed | 0.0 | 0.0 | 0.1 | 0.7 | 2.0 | 92.0 | 701 |
| Total 18+ | 0.2 | 0.2 | 0.3 | 1.1 | 2.5 | 93.8 | 5,865 |
| na $=$ Not applicable |  |  |  |  |  |  |  |

Table 20.4 Violence by any partner in the last 12 months
Percentage of ever-partnered women age 18 and older who have experienced emotional, physical, or sexual violence by any partner in the past 12 months, according to background characteristics, South Africa DHS 2016

| Background characteristic | Emotional violence | Physical violence | Sexual violence | Physical and sexual | Physical and sexual and emotional | Physical or sexual | Physical or sexual or emotional | Number of ever-partnered women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |
| 18-24 | 8.8 | 10.3 | 3.2 | 2.0 | 0.9 | 11.6 | 15.1 | 1,041 |
| 25-34 | 11.7 | 9.8 | 3.1 | 2.1 | 1.7 | 10.8 | 16.7 | 1,569 |
| 35-44 | 10.4 | 8.6 | 2.7 | 0.9 | 0.9 | 10.4 | 15.0 | 1,116 |
| 45-54 | 9.7 | 5.8 | 1.9 | 1.4 | 1.3 | 6.3 | 11.6 | 771 |
| 55-64 | 7.2 | 6.1 | 1.0 | 0.7 | 0.6 | 6.4 | 8.8 | 667 |
| 65+ | 3.1 | 1.6 | 0.3 | 0.2 | 0.1 | 1.6 | 4.3 | 701 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 8.9 | 8.0 | 2.2 | 1.4 | 1.1 | 8.8 | 12.9 | 3,829 |
| Non-urban | 9.5 | 7.3 | 2.5 | 1.4 | 1.0 | 8.5 | 13.3 | 2,035 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 10.7 | 8.6 | 0.7 | 0.7 | 0.6 | 8.6 | 13.6 | 671 |
| Eastern Cape | 11.6 | 12.6 | 2.2 | 1.9 | 0.9 | 13.0 | 17.2 | 743 |
| Northern Cape | 7.3 | 5.1 | 1.9 | 1.1 | 0.7 | 5.8 | 10.2 | 126 |
| Free State | 11.1 | 9.1 | 1.9 | 1.4 | 1.2 | 9.6 | 14.5 | 326 |
| KwaZulu-Natal | 7.4 | 5.7 | 1.9 | 1.1 | 0.8 | 6.5 | 10.0 | 1,078 |
| North West | 12.8 | 7.3 | 4.9 | 1.3 | 1.3 | 10.9 | 18.3 | 409 |
| Gauteng | 8.2 | 8.2 | 3.0 | 1.9 | 1.5 | 9.3 | 13.2 | 1,464 |
| Mpumalanga | 10.2 | 7.8 | 2.7 | 1.2 | 1.0 | 9.3 | 15.0 | 443 |
| Limpopo | 5.5 | 3.5 | 1.5 | 0.8 | 0.7 | 4.1 | 7.1 | 605 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 9.4 | 8.9 | 2.2 | 1.5 | 1.0 | 9.6 | 14.1 | 2,243 |
| Married | 8.6 | 5.3 | 1.9 | 0.8 | 0.7 | 6.5 | 11.4 | 1,894 |
| Living together | 15.5 | 15.3 | 4.8 | 3.3 | 2.4 | 16.8 | 21.5 | 689 |
| Divorced/separated | 8.2 | 7.7 | 3.6 | 1.6 | 1.3 | 9.7 | 12.9 | 338 |
| Widowed | 3.8 | 3.0 | 0.8 | 0.5 | 0.5 | 3.3 | 5.6 | 701 |
| Education |  |  |  |  |  |  |  |  |
| No education | 5.5 | 4.5 | 1.1 | 0.6 | 0.6 | 4.9 | 8.2 | 497 |
| Primary incomplete | 8.9 | 8.1 | 2.8 | 1.3 | 1.0 | 9.5 | 12.1 | 614 |
| Primary complete | 12.2 | 12.2 | 1.1 | 0.5 | 0.3 | 12.7 | 16.8 | 256 |
| Secondary incomplete | 11.1 | 9.6 | 3.0 | 1.8 | 1.3 | 10.7 | 16.1 | 2,289 |
| Secondary complete | 8.6 | 7.7 | 2.7 | 1.7 | 1.3 | 8.7 | 12.8 | 1,464 |
| More than secondary | 5.7 | 2.5 | 0.4 | 0.2 | 0.2 | 2.7 | 6.7 | 745 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 12.9 | 13.4 | 3.5 | 2.8 | 2.1 | 14.0 | 18.7 | 1,096 |
| Second | 9.7 | 7.8 | 2.9 | 1.4 | 0.9 | 9.3 | 14.3 | 1,202 |
| Middle | 9.6 | 8.0 | 2.3 | 1.6 | 1.3 | 8.8 | 12.6 | 1,181 |
| Fourth | 6.2 | 6.7 | 1.7 | 0.8 | 0.6 | 7.6 | 10.7 | 1,162 |
| Highest | 7.5 | 3.3 | 1.3 | 0.4 | 0.4 | 4.2 | 9.4 | 1,223 |
| Total 18+ | 9.1 | 7.7 | 2.3 | 1.4 | 1.0 | 8.7 | 13.0 | 5,865 |
| Total 18-49 | 10.2 | 9.1 | 2.9 | 1.7 | 1.2 | 10.3 | 15.0 | 4,169 |

Note: Any partner includes all current, most recent, and former partners.

Table 20.5 Control exercised by partners
Percentage of ever-partnered women age 18 and older whose partners have ever demonstrated specific types of controlling behaviours, according to background characteristics, South Africa DHS 2016

| Background characteristic | Percentage of women whose partner: |  |  |  |  |  |  | Number of everpartnered women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Is jealous or angry if she talks to other men | Frequently accuses her of being unfaithful | Does not permit her to meet her female friends | Tries to limit her contact with her family | Insists on knowing where she is at all times | Displays 3 or more of the specific behaviours | Displays none of the specific behaviours |  |
| Age |  |  |  |  |  |  |  |  |
| 18-24 | 52.5 | 27.8 | 15.8 | 6.9 | 38.3 | 23.9 | 38.9 | 1,041 |
| 25-34 | 43.4 | 23.0 | 16.6 | 6.6 | 34.4 | 21.7 | 45.6 | 1,569 |
| 35-44 | 44.5 | 21.6 | 17.7 | 9.3 | 32.7 | 22.0 | 46.4 | 1,116 |
| 45-54 | 31.2 | 18.6 | 11.9 | 8.2 | 26.4 | 15.6 | 58.8 | 771 |
| 55-64 | 32.3 | 17.3 | 13.0 | 8.6 | 26.6 | 15.4 | 59.6 | 667 |
| 65+ | 21.9 | 13.7 | 8.5 | 6.1 | 18.5 | 11.0 | 70.9 | 701 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 38.9 | 21.3 | 14.6 | 7.4 | 30.2 | 19.3 | 52.6 | 3,829 |
| Non-urban | 41.4 | 21.2 | 14.8 | 7.8 | 32.3 | 19.5 | 47.8 | 2,035 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 26.5 | 17.2 | 10.4 | 8.8 | 20.9 | 15.2 | 65.4 | 671 |
| Eastern Cape | 44.7 | 31.7 | 15.0 | 8.9 | 35.5 | 23.7 | 44.0 | 743 |
| Northern Cape | 24.5 | 17.7 | 13.1 | 9.4 | 23.6 | 16.5 | 65.9 | 126 |
| Free State | 42.1 | 30.3 | 20.1 | 12.2 | 38.1 | 27.7 | 48.6 | 326 |
| KwaZulu-Natal | 43.3 | 15.6 | 16.7 | 5.3 | 33.0 | 17.8 | 48.2 | 1,078 |
| North West | 45.0 | 23.5 | 17.3 | 5.8 | 39.7 | 20.3 | 40.0 | 409 |
| Gauteng | 39.7 | 20.6 | 14.7 | 6.7 | 29.3 | 19.9 | 52.5 | 1,464 |
| Mpumalanga | 45.5 | 23.4 | 15.0 | 8.5 | 32.1 | 19.4 | 45.9 | 443 |
| Limpopo | 36.6 | 17.5 | 10.4 | 7.9 | 27.5 | 15.2 | 53.5 | 605 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 46.8 | 26.5 | 15.3 | 6.7 | 35.0 | 22.6 | 43.9 | 2,243 |
| Married | 29.9 | 13.2 | 10.8 | 6.0 | 23.7 | 12.3 | 60.5 | 1,894 |
| Living together | 50.1 | 22.8 | 20.1 | 9.1 | 36.9 | 24.8 | 40.5 | 689 |
| Divorced/separated | 46.0 | 30.1 | 21.8 | 15.5 | 38.0 | 27.8 | 45.7 | 338 |
| Widowed | 30.7 | 20.4 | 14.1 | 9.0 | 28.1 | 18.4 | 60.1 | 701 |
| Number of living children ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 0 | 46.0 | 25.4 | 13.3 | 6.8 | 31.2 | 18.9 | 45.5 | 771 |
| 1-2 | 45.1 | 23.1 | 16.7 | 6.6 | 35.4 | 22.2 | 44.7 | 2,339 |
| 3-4 | 43.4 | 23.4 | 16.7 | 9.9 | 34.1 | 22.9 | 47.1 | 911 |
| 5+ | 48.0 | 24.7 | 15.9 | 11.8 | 30.4 | 21.6 | 45.1 | 149 |
| Employment |  |  |  |  |  |  |  |  |
| Employed for cash | 43.3 | 22.4 | 15.5 | 6.9 | 33.0 | 21.2 | 47.9 | 1,798 |
| Employed not for cash | 51.3 | 32.4 | 28.5 | 15.6 | 50.5 | 36.7 | 25.2 | 61 |
| Not employed | 38.0 | 20.5 | 14.1 | 7.7 | 29.7 | 18.2 | 52.6 | 4,005 |
| Education |  |  |  |  |  |  |  |  |
| No education | 26.3 | 12.9 | 10.1 | 6.8 | 20.4 | 12.2 | 65.0 | 497 |
| Primary incomplete | 36.3 | 19.6 | 13.2 | 8.7 | 27.2 | 17.4 | 55.3 | 614 |
| Primary complete | 45.1 | 28.9 | 19.2 | 9.7 | 35.0 | 25.0 | 47.0 | 256 |
| Secondary incomplete | 43.8 | 24.9 | 16.5 | 9.0 | 35.8 | 22.8 | 46.2 | 2,289 |
| Secondary complete | 42.6 | 22.5 | 14.9 | 5.9 | 31.8 | 20.6 | 48.5 | 1,464 |
| More than secondary | 31.9 | 11.9 | 11.1 | 4.8 | 22.8 | 10.6 | 58.4 | 745 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 45.3 | 26.7 | 16.7 | 11.1 | 32.7 | 22.2 | 45.3 | 1,096 |
| Second | 42.7 | 22.1 | 16.3 | 8.1 | 33.2 | 22.4 | 47.9 | 1,202 |
| Middle | 43.6 | 22.8 | 15.3 | 6.3 | 33.5 | 20.3 | 46.2 | 1,181 |
| Fourth | 42.2 | 23.5 | 14.1 | 6.9 | 32.8 | 19.7 | 48.4 | 1,162 |
| Highest | 25.9 | 11.9 | 11.0 | 5.6 | 22.8 | 12.4 | 65.8 | 1,223 |
| Woman afraid of husband/partner |  |  |  |  |  |  |  |  |
| Afraid most of the time | 77.4 | 62.8 | 46.6 | 30.9 | 72.1 | 60.2 | 10.2 | 298 |
| Sometimes afraid | 57.0 | 35.5 | 26.7 | 16.5 | 45.4 | 35.1 | 35.1 | 826 |
| Never afraid | 34.4 | 16.2 | 10.5 | 4.5 | 25.8 | 14.0 | 56.2 | 4,741 |
| Total 18+ | 39.8 | 21.3 | 14.7 | 7.5 | 30.9 | 19.3 | 50.9 | 5,865 |
| Total 18-49 | 45.0 | 23.6 | 16.0 | 7.5 | 34.2 | 21.7 | 45.4 | 4,169 |

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
${ }^{1}$ Available for ever-partnered women age 18-49 only

Table 20.6 Forms of partner violence
Percentage of ever-partnered women age 18 and older who have experienced various forms of violence ever or in the 12 months preceding the survey committed by their current or most recent partners, South Africa DHS 2016

| Type of violence experienced | Ever experienced | Experienced in the past 12 months | Frequency in the past 12 months |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  |  | Often | Sometimes |
| Physical violence |  |  |  |  |
| Any physical violence | 13.9 | 7.6 | 1.6 | 5.9 |
| Pushed her, shook her, or threw something at her | 13.0 | 6.9 | 1.4 | 5.6 |
| Kicked her, dragged her, or beat her up | 7.9 | 4.2 | 1.1 | 3.0 |
| Tried to choke her or burn her on purpose | 2.4 | 1.1 | 0.4 | 0.7 |
| Threatened her or attacked her with a knife, gun, or other weapon | 2.5 | 0.9 | 0.2 | 0.7 |
| Sexual violence |  |  |  |  |
| Any sexual violence | 4.0 | 2.3 | 0.6 | 1.7 |
| Physically forced her to have sexual intercourse with him when she did not want to | 3.5 | 2.0 | 0.5 | 1.5 |
| Physically forced her to perform any other sexual acts she did not want to | 1.7 | 0.7 | 0.3 | 0.5 |
| Forced her with threats or in any other way to perform sexual acts she did not want to | 1.7 | 0.8 | 0.3 | 0.6 |
| Emotional violence |  |  |  |  |
| Any emotional violence | 14.1 | 9.1 | 2.1 | 7.0 |
| Said or did something to humiliate her in front of others | 8.6 | 5.5 | 1.3 | 4.2 |
| Threatened to hurt or harm her or someone she cared about | 5.7 | 3.3 | 0.8 | 2.5 |
| Insulted her or made her feel bad about herself | 9.5 | 6.3 | 1.4 | 5.0 |
| Any form of physical and/or sexual violence | 14.9 | 8.5 | 1.9 | 6.6 |
| Any form of emotional or physical or sexual violence | 20.5 | 12.9 | 3.1 | 9.8 |
| Number of ever-partnered women age 18+ | 5,865 | 5,865 | 5,865 | 5,865 |

Note: Includes current partner for currently partnered women and most recent partner for previously partnered women.

Table 20.7 Partner violence by background characteristics
Percentage of ever-partnered women age 18 and older who have ever experienced emotional, physical, or sexual violence committed by their current or most recent partner, according to background characteristics, South Africa DHS 2016

| Background characteristic | Emotional violence | Physical violence | Sexual violence | Physical and sexual | Physical and sexual and emotional | Physical or sexual | Physical or sexual or emotional | Number of ever-partnered women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Age |  |  |  |  |  |  |  |  |
| 18-24 | 10.6 | 12.3 | 3.2 | 2.5 | 1.3 | 13.1 | 17.4 | 1,041 |
| 25-34 | 14.4 | 13.2 | 3.9 | 2.9 | 2.3 | 14.2 | 21.5 | 1,569 |
| 35-44 | 14.4 | 13.1 | 3.7 | 2.0 | 1.9 | 14.7 | 20.1 | 1,116 |
| 45-54 | 16.0 | 14.4 | 3.7 | 3.0 | 2.8 | 15.1 | 21.4 | 771 |
| 55-64 | 17.9 | 18.6 | 4.9 | 4.0 | 3.0 | 19.5 | 24.4 | 667 |
| 65+ | 12.2 | 14.2 | 4.9 | 4.6 | 3.6 | 14.5 | 18.5 | 701 |
| Residence |  |  |  |  |  |  |  |  |
| Urban | 13.7 | 13.8 | 3.8 | 3.0 | 2.3 | 14.6 | 20.1 | 3,829 |
| Non-urban | 14.8 | 14.2 | 4.3 | 3.1 | 2.4 | 15.4 | 21.2 | 2,035 |
| Province |  |  |  |  |  |  |  |  |
| Western Cape | 17.6 | 15.5 | 2.5 | 2.5 | 2.1 | 15.5 | 22.4 | 671 |
| Eastern Cape | 21.4 | 24.2 | 4.5 | 4.0 | 3.1 | 24.7 | 31.4 | 743 |
| Northern Cape | 12.1 | 13.2 | 3.7 | 2.7 | 1.8 | 14.3 | 18.2 | 126 |
| Free State | 17.4 | 15.2 | 4.4 | 3.5 | 3.0 | 16.1 | 22.6 | 326 |
| KwaZulu-Natal | 10.7 | 9.3 | 2.3 | 1.9 | 1.1 | 9.8 | 15.0 | 1,078 |
| North West | 18.0 | 14.5 | 7.2 | 4.4 | 4.3 | 17.4 | 24.6 | 409 |
| Gauteng | 10.5 | 12.8 | 4.8 | 3.7 | 2.6 | 13.9 | 18.3 | 1,464 |
| Mpumalanga | 15.4 | 15.0 | 3.9 | 2.3 | 2.2 | 16.5 | 22.9 | 443 |
| Limpopo | 10.7 | 8.8 | 3.5 | 2.3 | 1.9 | 10.0 | 14.9 | 605 |
| Marital status |  |  |  |  |  |  |  |  |
| Never married | 12.6 | 12.0 | 3.0 | 2.3 | 1.6 | 12.6 | 18.6 | 2,243 |
| Married | 12.0 | 10.3 | 2.7 | 1.6 | 1.5 | 11.4 | 16.9 | 1,894 |
| Living together | 17.5 | 20.6 | 5.4 | 4.6 | 3.6 | 21.4 | 25.9 | 689 |
| Divorced/separated | 26.3 | 24.0 | 10.2 | 7.5 | 6.8 | 26.7 | 32.8 | 338 |
| Widowed | 15.2 | 18.6 | 6.1 | 5.3 | 3.6 | 19.4 | 24.9 | 701 |
| Number of living children ${ }^{1}$ |  |  |  |  |  |  |  |  |
| 0 | 8.6 | 10.7 | 2.6 | 1.5 | 0.3 | 11.7 | 15.4 | 771 |
| 1-2 | 13.5 | 13.1 | 3.3 | 2.3 | 1.7 | 14.1 | 20.0 | 2,339 |
| 3-4 | 16.1 | 12.5 | 4.3 | 3.2 | 3.1 | 13.6 | 21.4 | 911 |
| $5+$ | 19.4 | 26.4 | 8.0 | 5.8 | 5.7 | 28.6 | 32.3 | 149 |
| Employment |  |  |  |  |  |  |  |  |
| Employed for cash | 12.6 | 12.2 | 4.0 | 2.5 | 1.8 | 13.7 | 18.5 | 1,798 |
| Employed not for cash | 4.5 | 14.7 | 7.4 | 2.3 | 2.3 | 19.8 | 21.2 | 61 |
| Not employed | 14.9 | 14.7 | 3.9 | 3.3 | 2.6 | 15.3 | 21.3 | 4,005 |
| Education |  |  |  |  |  |  |  |  |
| No education | 14.3 | 17.6 | 3.5 | 2.9 | 2.5 | 18.2 | 23.6 | 497 |
| Primary incomplete | 16.2 | 19.7 | 5.8 | 4.6 | 4.0 | 20.8 | 24.6 | 614 |
| Primary complete | 20.8 | 24.3 | 3.9 | 2.6 | 1.6 | 25.7 | 31.4 | 256 |
| Secondary incomplete | 15.6 | 14.6 | 4.9 | 3.7 | 2.8 | 15.8 | 22.2 | 2,289 |
| Secondary complete | 11.7 | 11.0 | 3.4 | 2.6 | 2.1 | 11.8 | 16.6 | 1,464 |
| More than secondary | 10.0 | 6.8 | 1.0 | 0.6 | 0.2 | 7.2 | 13.4 | 745 |
| Wealth quintile |  |  |  |  |  |  |  |  |
| Lowest | 18.4 | 20.5 | 5.5 | 4.4 | 3.7 | 21.6 | 26.5 | 1,096 |
| Second | 13.2 | 13.6 | 3.9 | 2.9 | 1.9 | 14.7 | 20.3 | 1,202 |
| Middle | 14.8 | 14.0 | 4.2 | 3.3 | 2.9 | 14.9 | 20.6 | 1,181 |
| Fourth | 13.7 | 14.4 | 2.9 | 2.2 | 1.8 | 15.1 | 21.3 | 1,162 |
| Highest | 10.7 | 7.8 | 3.4 | 2.4 | 1.6 | 8.8 | 14.4 | 1,223 |
| Total 18+ | 14.1 | 13.9 | 4.0 | 3.0 | 2.3 | 14.9 | 20.5 | 5,865 |
| Total 18-49 | 13.4 | 13.0 | 3.6 | 2.5 | 1.9 | 14.1 | 19.9 | 4,169 |

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
Available for ever-partnered women age 18-49 only

Table 20.8 Spousal violence by husband's characteristics and empowerment indicators
Percentage of ever-in-union women age 18 and older who have ever experienced emotional, physical, or sexual violence committed by their current or most recent husband/partner, according to the husband/partner's characteristics and women's empowerment indicators, South Africa DHS 2016

| Background characteristic | Emotional violence | Physical violence | Sexual violence | Physical and sexual | Physical and sexual and emotional | Physical or sexual | Physical or sexual or emotional | Number of ever-in-union women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Husband's/partner's education ${ }^{1}$ |  |  |  |  |  |  |  |  |
| No education | 17.3 | 13.5 | 3.0 | 2.5 | 2.3 | 14.0 | 20.1 | 244 |
| Primary incomplete | 16.9 | 16.4 | 2.3 | 2.3 | 2.1 | 16.4 | 22.7 | 276 |
| Primary complete | 8.8 | 10.3 | 0.9 | 0.5 | 0.5 | 10.8 | 14.8 | 107 |
| Secondary incomplete | 16.9 | 18.1 | 6.1 | 4.7 | 3.8 | 19.5 | 25.0 | 866 |
| Secondary complete | 10.2 | 9.5 | 2.5 | 0.8 | 0.8 | 11.3 | 15.7 | 622 |
| More than secondary | 7.9 | 4.3 | 0.3 | 0.1 | 0.1 | 4.5 | 9.7 | 395 |
| Don't know | 13.3 | 19.6 | 5.2 | 4.5 | 4.0 | 20.3 | 24.7 | 72 |
| Husband's/partner's alcohol consumption |  |  |  |  |  |  |  |  |
| Drinks alcohol but is never drunk | (13.9) | (3.1) | (0.0) | (0.0) | (0.0) | (3.1) | (13.9) | 2,154 37 |
| Is sometimes drunk | 16.7 | 16.5 | 4.4 | 2.9 | 2.6 | 17.9 | 24.7 | 1,072 |
| Is often drunk | 45.9 | 53.8 | 20.0 | 17.3 | 12.4 | 56.6 | 64.9 | 354 |
| Don't know |  | * | * | * |  |  |  | 5 |
| Husband's/partner's drug usage |  |  |  |  |  |  |  |  |
| Does not use drugs | 13.9 | 13.9 | 4.0 | 2.8 | 2.3 | 15.0 | 20.3 | 3,502 |
| Sometimes uses drugs | (21.1) | (23.9) | (9.3) | (9.3) | (3.7) | (23.9) | (29.8) | 42 |
| Often uses drugs | 58.5 | 68.1 | 23.9 | 23.2 | 17.2 | 68.9 | 76.1 | 53 |
| Don't know | (77.0) | (66.3) | (44.1) | (40.1) | (40.1) | (70.3) | (82.0) | 24 |
| Spousal education difference ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Husband better educated | 12.7 | 12.6 | 2.9 | 2.1 | 1.9 | 13.5 | 18.1 | 783 |
| Wife better educated | 14.7 | 16.2 | 4.3 | 3.4 | 2.5 | 17.1 | 22.0 | 858 |
| Both equally educated | 12.1 | 9.1 | 2.6 | 1.3 | 1.2 | 10.5 | 16.5 | 755 |
| Neither educated | 19.0 | 13.6 | 3.9 | 3.6 | 3.6 | 13.8 | 22.6 | 116 |
| Don't know | 13.3 | 19.6 | 5.2 | 4.5 | 4.0 | 20.3 | 24.7 | 72 |
| Spousal age difference ${ }^{1}$ |  |  |  |  |  |  |  |  |
| Wife older | 12.4 | 16.5 | 3.4 | 3.1 | 3.1 | 16.7 | 19.2 | 294 |
| Wife is same age | 13.7 | 18.2 | 3.3 | 1.6 | 0.2 | 19.8 | 24.1 | 168 |
| Wife 1-4 years younger | 12.8 | 12.5 | 3.7 | 2.7 | 2.1 | 13.6 | 19.0 | 934 |
| Wife 5-9 years younger | 12.2 | 10.0 | 3.0 | 1.4 | 1.3 | 11.6 | 16.9 | 729 |
| Wife 10 or more years younger | 17.4 | 14.8 | 3.6 | 3.3 | 3.2 | 15.1 | 22.0 | 456 |
| Number of marital control behaviours displayed by husband/partner ${ }^{2}$ |  |  |  |  |  |  |  |  |
|  | 3.8 | 4.4 | 1.1 | 0.5 | 0.3 | 5.0 | 6.8 | 2,001 |
| 1-2 | 16.0 | 17.8 | 2.4 | 1.6 | 1.4 | 18.7 | 25.5 | 993 |
| 3-4 | 43.8 | 39.0 | 14.9 | 11.0 | 8.6 | 42.9 | 58.1 | 477 |
| 5 | 66.5 | 64.9 | 32.7 | 31.4 | 26.4 | 66.2 | 77.9 | 151 |
| Number of decisions in which women participate ${ }^{3}$ |  |  |  |  |  |  |  |  |
| 0 | 7.1 | 7.4 | 0.0 | 0.0 | 0.0 | 7.4 | 8.4 | 46 |
| 1-2 | 21.4 | 20.4 | 7.3 | 6.5 | 3.2 | 21.2 | 29.4 | 174 |
| 3 | 12.2 | 12.9 | 3.2 | 1.9 | 1.8 | 14.2 | 19.3 | 1,589 |
| Number of reasons for which wife beating is justified ${ }^{4}$ |  |  |  |  |  |  |  |  |
| 0 | 13.2 | 13.1 | 3.5 | 2.5 | 2.1 | 14.0 | 19.3 | 1,981 |
| 1-2 | 35.5 | 36.5 | 13.5 | 4.5 | 4.5 | 45.4 | 59.8 | 85 |
| 3-4 | (32.0) | (16.6) | (25.0) | (0.0) | (0.0) | (41.6) | (59.8) | 24 |
| 5 |  | * | * | * | * | * | * | 12 |
| Father/mother's boyfriend beat mother |  |  |  |  |  |  |  |  |
| Yes | 27.4 | 29.4 | 9.7 | 8.0 | 5.4 | 31.1 | 39.3 | 507 |
| No | 12.6 | 12.1 | 3.8 | 2.7 | 2.4 | 13.2 | 18.1 | 2,929 |
| Don't know | 19.5 | 23.3 | 3.2 | 2.4 | 1.9 | 24.1 | 29.9 | 186 |
| Woman afraid of husband/partner |  |  |  |  |  |  |  |  |
| Afraid most of the time | 58.5 | 66.2 | 31.7 | 27.5 | 24.4 | 70.4 | 77.0 | 205 |
| Sometimes afraid | 31.6 | 31.5 | 11.9 | 8.2 | 6.2 | 35.2 | 43.7 | 526 |
| Never afraid | 8.9 | 8.5 | 1.3 | 0.9 | 0.6 | 9.0 | 13.7 | 2,891 |
| Total 18+ | 15.0 | 15.1 | 4.6 | 3.4 | 2.8 | 16.3 | 21.7 | 3,622 |

[^37]Table 20.9 Injuries to women due to violence by partner
Percentage of ever-partnered women age 18 and older who have experienced specific types of violence committed by their current or most recent partner by types of injuries resulting from the violence, according to the type of violence, South Africa DHS 2016

|  |  | Coep wounds, broken <br> Cones, broken teeth, | Number of ever- <br> partnered women who <br> have experienced <br> physical or sexual <br> violence |
| :--- | :---: | :---: | :---: | :---: |
| Type of violence experienced | aches |  |  |

Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
${ }^{1}$ Excludes women who reported violence only in response to a direct question on violence during pregnancy
${ }^{2}$ Includes in the past 12 months

Table 20.10 Violence by women against their partner by women's background characteristics
Percentage of ever-partnered women who have committed physical violence against their current or most recent partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, South Africa DHS 2016

| Background characteristic | Percentage who committed physical violence against their partner |  | Number of ever-partnered women |
| :---: | :---: | :---: | :---: |
|  | Ever ${ }^{1}$ | Past 12 months |  |
| Woman's experience of partner physical violence |  |  |  |
| Ever | 19.6 | 14.4 | 816 |
| In the past 12 months | 23.1 | 21.2 | 443 |
| Never | 1.8 | 1.4 | 5,048 |
| Age |  |  |  |
| 18-24 | 4.6 | 4.6 | 1,041 |
| 25-34 | 5.6 | 4.1 | 1,569 |
| 35-44 | 5.3 | 3.7 | 1,116 |
| 45-54 | 2.4 | 1.7 | 771 |
| 55-64 | 3.1 | 2.1 | 667 |
| 65+ | 2.2 | 0.8 | 701 |
| Residence |  |  |  |
| Urban | 5.0 | 3.7 | 3,829 |
| Non-urban | 2.9 | 2.1 | 2,035 |
| Province |  |  |  |
| Western Cape | 7.5 | 5.7 | 671 |
| Eastern Cape | 4.4 | 2.9 | 743 |
| Northern Cape | 3.9 | 3.4 | 126 |
| Free State | 4.2 | 2.7 | 326 |
| KwaZulu-Natal | 2.8 | 2.0 | 1,078 |
| North West | 5.8 | 4.2 | 409 |
| Gauteng | 4.3 | 3.3 | 1,464 |
| Mpumalanga | 4.3 | 3.5 | 443 |
| Limpopo | 1.9 | 1.8 | 605 |
| Marital status |  |  |  |
| Never married | 4.5 | 3.5 | 2,243 |
| Married | 2.7 | 1.9 | 1,894 |
| Living together | 8.5 | 7.1 | 689 |
| Divorced/separated | 5.2 | 3.9 | 338 |
| Widowed | 2.9 | 1.4 | 701 |
| Number of living children ${ }^{2}$ |  |  |  |
| 0 | 4.8 | 3.8 | 771 |
| 1-2 | 5.2 | 4.2 | 2,339 |
| 3-4 | 4.2 | 3.0 | 911 |
| 5+ | 4.4 | 3.5 | 149 |
| Employment |  |  |  |
| Employed for cash | 4.7 | 3.3 | 1,798 |
| Employed not for cash | 14.3 | 8.9 | 61 |
| Not employed | 3.9 | 3.0 | 4,005 |
| Education |  |  |  |
| No education | 3.2 | 2.3 | 497 |
| Primary incomplete | 3.8 | 3.0 | 614 |
| Primary complete | 4.6 | 2.7 | 256 |
| Secondary incomplete | 4.7 | 3.9 | 2,289 |
| Secondary complete | 5.1 | 3.6 | 1,464 |
| More than secondary | 2.3 | 0.9 | 745 |
| Wealth quintile |  |  |  |
| Lowest | 3.4 | 2.6 | 1,096 |
| Second | 5.4 | 3.9 | 1,202 |
| Middle | 3.8 | 2.6 | 1,181 |
| Fourth | 3.9 | 3.1 | 1,162 |
| Highest | 4.6 | 3.5 | 1,223 |
| Total 18+ | 4.2 | 3.2 | 5,865 |
| Total 18-49 | 4.9 | 3.8 | 4,169 |

[^38]Table 20.11 Violence by women against their husband/partner by husband's/partner's characteristics and empowerment indicators
Percentage of ever-in-union women who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting them, ever and in the past 12 months, according to husband's/partner's characteristics and women's empowerment indicators, South Africa DHS 2016

| Background characteristic | Percentage who committed physical violence against their husband/partner |  | Number of ever-in-union women |
| :---: | :---: | :---: | :---: |
|  | Ever ${ }^{1}$ | Past 12 months |  |
| Husband's/partner's education ${ }^{2}$ |  |  |  |
| No education | 6.2 | 5.4 | 244 |
| Primary incomplete | 2.8 | 2.0 | 276 |
| Primary complete | 1.3 | 1.3 | 107 |
| Secondary incomplete | 5.9 | 4.7 | 866 |
| Secondary complete | 4.8 | 3.5 | 622 |
| More than secondary | 1.1 | 0.3 | 395 |
| Don't know | 0.6 | 0.6 | 72 |
| Husband's/partner's alcohol consumption |  |  |  |
| Does not drink alcohol | 2.0 | 1.3 | 2,154 |
| Drinks alcohol but is never drunk | (0.0) | (0.0) | 37 |
| Is sometimes drunk | 5.4 | 4.4 | 1,072 |
| Is often drunk | 13.2 | 8.8 | 354 |
| Don't know | * | * | 5 |
| Husband's/partner's drug usage |  |  |  |
| Does not use drugs | 3.9 | 2.8 | 3,502 |
| Sometimes uses drugs | (2.7) | (2.7) | 42 |
| Often uses drugs | 17.3 | 11.1 | 53 |
| Don't know | (3.5) | (3.5) | 24 |
| Spousal education difference ${ }^{2}$ |  |  |  |
| Husband better educated | 4.1 | 3.5 | 783 |
| Wife better educated | 5.0 | 3.8 | 858 |
| Both equally educated | 4.0 | 2.8 | 755 |
| Neither educated | 3.7 | 2.1 | 116 |
| Don't know | 0.6 | 0.6 | 72 |
| Spousal age difference ${ }^{2}$ |  |  |  |
| Wife older | 5.2 | 4.3 | 294 |
| Wife is same age | 2.6 | 2.3 | 168 |
| Wife 1-4 years younger | 5.1 | 4.5 | 934 |
| Wife 5-9 years younger | 3.5 | 2.0 | 729 |
| Wife 10 or more years younger | 3.7 | 2.4 | 456 |
| Number of controlling behaviours displayed by husband/partner ${ }^{3}$ |  |  |  |
| 0 | 1.3 | 1.2 | 2,001 |
| 1-2 | 4.3 | 3.0 | 993 |
| 3-4 | 10.4 | 6.9 | 477 |
| 5 | 18.5 | 14.1 | 151 |
| Number of decisions in which women participate ${ }^{4}$ |  |  |  |
| 0 | 1.6 | 1.6 | 46 |
| 1-2 | 9.9 | 7.8 | 174 |
| 3 | 4.6 | 3.4 | 1,589 |
| Number of reasons for which wife beating is justified ${ }^{5}$ |  |  |  |
| 0 | 4.6 | 3.5 | 1,981 |
| 1-2 | 13.0 | 12.4 | 85 |
| 3-4 | (5.0) | (5.0) | 24 |
| 5 |  |  | 12 |
| Father/mother's boyfriend beat mother |  |  |  |
| Yes | 10.1 | 6.0 | 507 |
| No | 3.1 | 2.5 | 2,929 |
| Don't know | 2.9 | 1.5 | 186 |
| Woman afraid of husband/partner |  |  |  |
| Afraid most of the time | 15.8 | 13.4 | 205 |
| Sometimes afraid | 8.5 | 7.3 | 526 |
| Never afraid | 2.4 | 1.4 | 2,891 |
| Total 18+ | 4.1 | 3.0 | 3,622 |

Note: Husband/partner refers to the current husband/partner for in-union women and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on 2549 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
${ }^{1}$ Includes in the past 12 months
${ }^{2}$ Includes only women who are currently in a union
${ }^{3}$ According to the wife's report. See Table 20.5 for list of behaviours.
${ }^{4}$ According to the wife's report. Restricted to women age 18-49 who are currently in a union. See Table
19.8.1 for list of decisions.
${ }^{5}$ According to the wife's report. Restricted to women age 18-49. See Table 19.9.1 for list of reasons.

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## A. 1 Introduction

The South Africa Demographic and Health Survey 2016 (SADHS 2016) is the third DHS conducted in South Africa and follows surveys carried out in 1998 and 2003. The SADHS 2016 was designed to provide up-to-date information on key indicators needed to track progress in South Africa's health programmes. These indicators include fertility and childhood mortality levels, pregnancy-related mortality, fertility preferences and contraceptive use, utilisation of maternal and child health services, children's nutritional status and child feeding practices, behaviour towards the risk of HIV infection, and measures of physical and sexual violence against women. In addition, among adults age 15 and older, use of tobacco and alcohol; the prevalence of malnutrition, hypertension, anaemia, diabetes, and HIV; and other indicators relevant to adult health were assessed.

To obtain these data, a nationally representative sample of 15,000 dwelling units (DUs) was selected; all residential households in the selected DUs were eligible to be included in the survey. In all sampled households, all women age 15-49 who are usual members of the households or who stayed in the households on the night before the interview were eligible for interviews. In addition, in a subsample of the DUs (every second DU), all men age $15-59$ who are usual members of the households or who stayed in the households on the night before the interview were eligible for interviews. In this same subsample, all women and men age 15 and older who are usual members of the selected households and those who spent the night before the survey in the selected households were eligible to complete a module on adult health and to have biomarker measurements and tests. Finally, in all households in selected DUs, one woman age 18 or older was randomly selected for a module on domestic violence. Also, for each child age $0-5$ whose biological mother did not live in the household, a guardian was eligible to complete the Caregiver's Questionnaire.

The survey was designed to provide representative estimates for main demographic and health indicators for the country as a whole, for urban and non-urban areas separately, and for each of the nine provinces in South Africa: Western Cape, Eastern Cape, Northern Cape, Free State, KwaZulu-Natal, North West, Gauteng, Mpumalanga, and Limpopo.

## A. 2 Sample Frame

The sampling frame used for the SADHS 2016 is the Master Sample Frame (MSF) prepared by Statistics South Africa (Stats SA); the MSF was compiled from the Census 2011 frame. The latter is a list of 103,576 enumeration areas (EAs) that cover the whole country. An EA is a geographic area consisting of a convenient number of DUs that serve as counting units for the census. The MSF is a list of 71,241 primary sampling units (PSUs). For each PSU, the MSF contains information about location (province, district, and municipality), type of residence (urban, traditional, or farm), and estimated number of residential households.

An MSF PSU can be an EA, a group of small EAs, or part of an EA. In preparation for the MSF, out-ofscope EAs were removed from the frame. These out-of-scope areas were defined as institutional EAs and EAs that had zero DU counts at the time of the Census 2011. Furthermore, EAs with a very small number of households were excluded from the frame, which has been adjusted for during the sampling weight adjustment for under-coverage. Households in the excluded EAs accounted for less than $1 \%$ of households in the population. Moreover, all of the identified large EAs were conceptually split into one or more PSUs of equal size depending on the number of DUs in the EA. Finally, small EAs with DU counts of between

20 and 99 were pooled with neighbouring EAs that had the same geographical characteristics to form a new PSU.

Administratively, South Africa is divided into nine provinces; each province is subdivided into districts, and each district is subdivided into municipalities. Based on the MSF, Table A. 1 shows the household distribution by province and by type of residence. In South Africa, about $68.3 \%$ of households are in urban areas and $31.7 \%$ in non-urban areas. Provinces such as Western Cape and Gauteng are predominantly urban $(92.9 \%$ and $97.6 \%$ of households in these provinces, respectively, are in urban areas). The percentage of urban households declines to $20.1 \%$ in Limpopo. The share of households in a province relative to the overall number of households in South Africa varies from 2.1\% in Northern Cape to 27.7\% in Gauteng.

## Table A. 1 Household distribution

Distribution of residential households in the master sample frame (MSF) by province and type of residence, percentage that each province contributes to the total household number, and percentage of each province that is urban, South Africa DHS 2016

| Province | Household distribution |  |  |  | Percentage province contributes to the total number of households | Percentage of province that is urban |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Traditional | Farm | Total |  |  |
| Western Cape | 1,573,327 | 0 | 121,125 | 1,694,452 | 11.3 | 92.9 |
| Eastern Cape | 898,926 | 787,414 | 46,669 | 1,733,009 | 11.6 | 51.9 |
| Northern Cape | 221,798 | 51,190 | 36,417 | 309,405 | 2.1 | 71.7 |
| Free State | 706,846 | 74,017 | 55,377 | 836,240 | 5.6 | 84.5 |
| KwaZulu-Natal | 1,462,527 | 965,339 | 193,573 | 2,621,439 | 17.5 | 55.8 |
| North West | 507,582 | 485,114 | 99,404 | 1,092,100 | 7.3 | 46.5 |
| Gauteng | 4,052,302 | 38,851 | 61,416 | 4,152,569 | 27.7 | 97.6 |
| Mpumalanga | 509,360 | 494,865 | 93,350 | 1,097,575 | 7.3 | 46.4 |
| Limpopo | 289,194 | 1,058,781 | 91,998 | 1,439,973 | 9.6 | 20.1 |
| South Africa | 10,221,862 | 3,955,571 | 799,329 | 14,976,762 | 100.0 | 68.3 |

Source: MSF list prepared by Stats SA.

Table A. 2 indicates the distribution of the MSF PSUs and their average size (number of households) by province and by type of residence. There are a total of 71,241 PSUs in the MSF, 45,651 in urban areas, 22,214 in traditional areas, and 3,376 in farms. The average PSU size is 210 households; urban and farm PSUs are larger in size (averages of 224 and 237 households, respectively), whereas traditional PSUs have a smaller size (an average of 178 households).

| Distribution of primary sampling units (PSUs) and households in the master sample frame (MSF) by province and residence, South Africa DHS 2016 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Province | Number of PSUs |  |  |  | Average number of households per PSU |  |  |  |
|  | Urban | Traditional | Farm | Total | Urban | Traditional | Farm | Total |
| Western Cape | 7,251 | 0 | 368 | 7,619 | 217 | na | 329 | 222 |
| Eastern Cape | 4,626 | 4,636 | 247 | 9,509 | 194 | 170 | 189 | 182 |
| Northern Cape | 1,209 | 283 | 284 | 1,776 | 183 | 181 | 128 | 174 |
| Free State | 3,707 | 453 | 361 | 4,521 | 191 | 163 | 153 | 185 |
| KwaZulu-Natal | 6,482 | 4,917 | 760 | 12,159 | 226 | 196 | 255 | 216 |
| North West | 2,434 | 2,471 | 305 | 5,210 | 209 | 196 | 326 | 210 |
| Gauteng | 16,177 | 220 | 234 | 16,631 | 250 | 177 | 262 | 250 |
| Mpumalanga | 2,451 | 2,849 | 385 | 5,685 | 208 | 174 | 242 | 193 |
| Limpopo | 1,314 | 6,385 | 432 | 8,131 | 220 | 166 | 213 | 177 |
| South Africa | 45,651 | 22,214 | 3,376 | 71,241 | 224 | 178 | 237 | 210 |

Source: The MSF list, prepared by Stats SA.
na $=$ Not applicable

## A. 3 Sample Design and Implementation

The sample for the SADHS 2016 is a stratified sample selected in two stages from the MSF. Stratification was achieved by separating each province into urban, traditional, and farm areas. In total, 26 sampling
strata were created (since there are no traditional areas in Western Cape). Samples were selected independently in each sampling stratum by a two-stage selection. Implicit stratification and proportional allocation were achieved at each of the lower administrative levels within a given sampling stratum by sorting the sampling frame according to administrative units at different levels in each stratum and using probability proportional to size selection at the first stage of sampling.

In the first stage, 750 PSUs were selected (468 in urban areas, 224 in traditional areas, and 58 in farm areas) with probability proportional to PSU size and with independent selection in each sampling stratum; the sample allocation is shown in Table A.3. A listing operation was carried out in all of the selected PSUs, and the resulting lists of DUs served as a sampling frame for the selection of DUs in the second stage. Before the listing activities, informal or congested PSUs were identified so that a segmentation process could be administered. These PSUs were divided into segments of about 20 DUs each, with only one segment selected at random for the survey. Therefore, a cluster in the SADHS 2016 was either a PSU or a segment of a PSU.

In the second stage of selection, a fixed number of 20 DUs per cluster was selected with an equal probability systematic selection from the newly created household listing. In segmented PSUs, if the segment contained 20 DUs or fewer, all DUs in the selected segment were eligible for the survey. In segments with more than 20 DUs, 20 DUs were randomly selected and were eligible for the survey. The survey interviewer interviewed only the households in the pre-selected DUs. No replacements and no changes of the pre-selected DUs were allowed in the implementing stages in order to prevent bias.

Table A. 3 shows the allocation of clusters and households according to province and place of residence, and Table A. 4 shows the expected number of completed women's and men's interviews according to province and place of residence. To ensure that the survey precision is comparable across provinces, a power allocation was used to allocate between provinces and between different types of residence within each province. The survey was expected to be conducted in about 15,000 residential households, 9,360 in urban areas, 4,480 in traditional areas, and 1,160 in farms. The sample was expected to result in about 10,335 completed interviews with women age 15-49 and about 4,573 completed interviews with men age 15-59.

Table A. 3 Sample allocation of clusters and households
Sample allocation of clusters and households by province, according to residence, South Africa DHS 2016

| Province | Allocation of clusters |  |  |  | Allocation of households |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Traditional | Farm | Total | Urban | Traditional | Farm | Total |
| Western Cape | 78 | 0 | 6 | 84 | 1,560 | 0 | 120 | 1,680 |
| Eastern Cape | 42 | 38 | 4 | 84 | 840 | 760 | 80 | 1,680 |
| Northern Cape | 50 | 12 | 8 | 70 | 1,000 | 240 | 160 | 1,400 |
| Free State | 68 | 6 | 6 | 80 | 1,360 | 120 | 120 | 1,600 |
| KwaZulu-Natal | 52 | 34 | 8 | 94 | 1,040 | 680 | 160 | 1,880 |
| North West | 36 | 36 | 8 | 80 | 720 | 720 | 160 | 1,600 |
| Gauteng | 90 | 4 | 4 | 98 | 1,800 | 80 | 80 | 1,960 |
| Mpumalanga | 36 | 36 | 8 | 80 | 720 | 720 | 160 | 1,600 |
| Limpopo | 16 | 58 | 6 | 80 | 320 | 1,160 | 120 | 1,600 |
| South Africa | 468 | 224 | 58 | 750 | 9,360 | 4,480 | 1,160 | 15,000 |

Table A. 4 Sample allocation of completed interviews with women and men
Sample allocation of expected number of completed interviews with women and men by province, according to residence South Africa DHS 2016

| Province | Women age 15-49 |  |  |  | Men age 15-59 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Traditional | Farm | Total | Urban | Traditional | Farm | Total |
| Western Cape | 1,075 | 0 | 82 | 1,157 | 476 | 0 | 36 | 512 |
| Eastern Cape | 579 | 524 | 56 | 1,159 | 256 | 232 | 25 | 513 |
| Northern Cape | 690 | 165 | 110 | 965 | 305 | 73 | 48 | 426 |
| Free State | 937 | 82 | 82 | 1,101 | 415 | 36 | 36 | 487 |
| KwaZulu-Natal | 716 | 469 | 110 | 1,295 | 317 | 207 | 48 | 572 |
| North West | 496 | 496 | 110 | 1,102 | 220 | 220 | 48 | 488 |
| Gauteng | 1,240 | 56 | 56 | 1,352 | 549 | 25 | 25 | 599 |
| Mpumalanga | 496 | 496 | 110 | 1,102 | 220 | 220 | 48 | 488 |
| Limpopo | 221 | 799 | 82 | 1,102 | 98 | 354 | 36 | 488 |
| South Africa | 6,450 | 3,087 | 798 | 10,335 | 2,856 | 1,367 | 350 | 4,573 |

The sample allocations in Table A. 4 were derived using information obtained from the SADHS 2003; the average number of women age 15-49 per household was 1.03 , the average number of men age 15-59 per household was 1.01 , the household completion rate was $75.9 \%$, the women's individual completion rate was $88.4 \%$, and the men's individual completion rate was $79.3 \%$.

Table A. 5 and Table A. 6 present the interview response rates in the SADHS 2016 for women and men, respectively, by urban and non-urban residence and province. Overall, the number of completed interviews was lower than the expected number for both women and men. Tables A.7, A.8, A.9, and A. 10 present response rates for HIV testing by background characteristics.

## A. 4 Sample Probabilities and Sampling Weights

Due to the nonproportional allocation of the sample to the different survey domains and to their urban and non-urban areas, sampling weights will be required for any analysis using the SADHS 2016 data to ensure the actual representativeness of the survey results at the national level and as well as the domain level. Since the SADHS 2016 sample is a two-stage stratified cluster sample, sampling weights were based on sampling probabilities calculated separately for each sampling stage and for each cluster, where:

$$
\begin{array}{ll}
P_{1 h i}: & \text { first-stage sampling probability of the } i^{\text {th }} \text { cluster in stratum } h \\
P_{2 h i}: & \text { second-stage sampling probability within the } i^{\text {th }} \text { cluster (household selection) }
\end{array}
$$

The following describes the calculation of these probabilities:
Let $a_{h}$ be the number of clusters selected in stratum $h, M_{h i}$ the number of households according to the MSF in the $i^{\text {th }}$ cluster, and $\sum_{h}^{\prime} M_{h i}$ the total number of households in stratum $h$. The probability of selecting the $i^{\text {th }}$ cluster in stratum $h$ in the SADHS 2016 sample is calculated as follows:

$$
\frac{a_{h} M_{h i}}{\sum_{h} M_{h i}}
$$

If the PSU is segmented, let $b_{h i}=1 / S_{h i}$ where $S_{h i}$ is the number of created segments in PSU $i$; otherwise, $b_{h i}=1$. Then the probability of selecting cluster $i$ in the sample is:

$$
P_{l h i}=\frac{a_{h} M_{h i}}{\sum M_{h i}} \times b_{h i}
$$

Let $L_{h i}$ be the number of households listed in the household listing operation in cluster $i$ in stratum $h$, and let $g_{h i}$ be the number of households selected in that cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$
P_{2 h i}=\frac{g_{h i}}{L_{h i}}
$$

The overall selection probability for each household in cluster $i$ of stratum $h$ in the SADHS 2016 is therefore the product of the two stages' selection probabilities:

$$
P_{h i}=P_{1 h i} \times P_{2 h i}
$$

The design weight for each household in cluster $i$ of stratum $h$ is the inverse of its overall selection probability:

$$
W_{h i}=1 / P_{h i}
$$

Since the men's survey was conducted in half of the households, the design weight for the men's survey was calculated by multiplying the full sample design weight $W_{h i}$ by 2 . Design weights were adjusted for household nonresponse and individual nonresponse to obtain the sampling weights for households and for women age 15-49 and men age 15-59, respectively. The nonresponse adjustment was done using stratumlevel adjustment factors. The differences of the household sampling weight and the individual sampling weights are introduced by individual nonresponse. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate by stratum. For the women's individual sampling weight, the household sampling weight is multiplied by the inverse of the women's individual response rate by stratum. Finally, for the men's individual sampling weight, the household sampling weight for the male subsample is multiplied by the inverse of the men's individual response rate by stratum.

In addition to the standard weights for women age $15-49$ and men age $15-59$, separate weights were calculated for the adult health module that accounted for nonresponse among women age 15 and older and men age 15 and older. Moreover, a special weight was calculated for the domestic violence module to account for within-household selection and for nonresponse to the module. Special weights were also calculated for HIV and HbA1c tests to account for nonresponse with respect to these tests. The final sampling weights are normalised in order to give a total number of weighted cases that equals the total number of unweighted cases at the national level. Normalisation is done by multiplying the sampling weight by the estimated total sampling fraction obtained from the survey for the household weight, the individual woman's weight, the individual man's weight, and the other weights mentioned above except for the sampling weights for HIV testing. In the case of the latter, the weights are normalised at the national level for women and men together so that HIV prevalence estimates calculated for women and men together are valid. The normalised weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals or pooled data.

Table A. 5 Sample implementation: Women
Percent distribution of households and eligible women age 15-49 by results of the household and individual interviews, and household, eligible women, and overall women response rates, according to residence and province (unweighted), South Africa DHS 2016

| Result | Residence |  | Province |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Western Cape | Eastern Cape | Northern Cape | Free State | KwaZuluNatal | North West | Gauteng | Mpumalanga | Limpopo |  |
| Selected households |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed (C) | 68.7 | 78.8 | 56.9 | 80.7 | 65.4 | 70.2 | 78.9 | 75.4 | 64.3 | 76.1 | 83.6 | 72.5 |
| Household present but no competent respondent at home (HP) | 8.7 | 2.5 | 12.9 | 2.7 | 5.7 | 11.1 | 5.4 | 2.3 | 9.5 | 4.5 | 3.2 | 6.4 |
| Postponed (P) | 0.8 | 0.2 | 1.9 | 0.8 | 0.4 | 0.4 | 0.3 | 0.5 | 0.3 | 0.5 | 0.2 | 0.6 |
| Refused (R) | 9.3 | 2.5 | 13.0 | 3.4 | 8.0 | 6.5 | 6.9 | 4.0 | 10.2 | 5.2 | 2.7 | 6.7 |
| Dwelling not found (DNF) | 0.5 | 1.1 | 1.0 | 0.1 | 0.4 | 0.4 | 0.8 | 0.7 | 1.4 | 1.2 | 0.4 | 0.7 |
| Household absent (HA) | 3.8 | 4.0 | 2.2 | 4.6 | 7.7 | 2.4 | 3.1 | 6.4 | 3.6 | 4.2 | 1.5 | 3.9 |
| Dwelling vacant/address not a dwelling (DV) | 5.9 | 8.7 | 8.4 | 6.8 | 10.0 | 6.4 | 3.3 | 8.3 | 6.7 | 6.5 | 7.3 | 6.9 |
| Dwelling destroyed (DD) | 0.4 | 0.9 | 0.6 | 0.7 | 0.9 | 0.5 | 0.9 | 1.1 | 0.7 | 0.1 | 0.1 | 0.6 |
| Other ( O ) | 1.9 | 1.3 | 3.2 | 0.2 | 1.6 | 2.2 | 0.6 | 1.2 | 3.4 | 1.6 | 0.9 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 9,547 | 5,745 | 1,703 | 1,747 | 1,396 | 1,606 | 1,968 | 1,631 | 1,947 | 1,652 | 1,642 | 15,292 |
| Household response rate (HRR) ${ }^{1}$ | 78.1 | 92.6 | 66.4 | 92.0 | 81.9 | 79.2 | 85.6 | 90.9 | 75.1 | 87.0 | 92.7 | 83.4 |
| Eligible women |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed (EWC) | 82.0 | 92.3 | 69.9 | 87.8 | 82.2 | 85.5 | 91.8 | 90.6 | 78.7 | 90.6 | 93.0 | 86.2 |
| Not at home (EWNH) | 9.8 | 4.1 | 18.2 | 8.0 | 5.0 | 10.3 | 5.2 | 3.5 | 10.8 | 4.6 | 3.9 | 7.5 |
| Postponed (EWP) | 0.8 | 0.2 | 1.9 | 0.5 | 0.1 | 0.6 | 0.2 | 0.8 | 0.3 | 0.1 | 0.7 | 0.5 |
| Refused (EWR) | 6.1 | 2.5 | 8.8 | 2.1 | 10.3 | 2.0 | 2.0 | 4.4 | 9.6 | 3.6 | 1.9 | 4.6 |
| Partly completed (EWPC) | 0.1 | 0.0 | 0.1 | 0.0 | 0.2 | 0.1 | 0.1 | 0.1 | 0.0 | 0.1 | 0.1 | 0.1 |
| Incapacitated (EWI) | 0.9 | 0.6 | 0.7 | 1.3 | 1.8 | 1.0 | 0.5 | 0.4 | 0.6 | 0.7 | 0.4 | 0.8 |
| Other (EWO) | 0.2 | 0.2 | 0.3 | 0.3 | 0.2 | 0.5 | 0.3 | 0.2 | 0.0 | 0.3 | 0.1 | 0.2 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of women | 5,858 | 4,020 | 939 | 1,185 | 873 | 999 | 1,482 | 953 | 1,096 | 1,163 | 1,188 | 9,878 |
| Eligible women response rate (EWRR) ${ }^{2}$ | 82.0 | 92.3 | 69.9 | 87.8 | 82.2 | 85.5 | 91.8 | 90.6 | 78.7 | 90.6 | 93.0 | 86.2 |
| Overall women response rate (OWRR) ${ }^{3}$ | 64.0 | 85.4 | 46.4 | 80.8 | 67.3 | 67.7 | 78.6 | 82.3 | 59.1 | 78.8 | 86.2 | 71.9 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:
$\frac{100 \text { * } \mathrm{C}}{\mathrm{C}+\mathrm{HP}+\mathrm{P}+\mathrm{R}+\mathrm{DNF}}$
${ }^{2}$ The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC)
${ }^{3}$ The overall women response rate (OWRR) is calculated as
OWRR $=$ HRR * EWRR/100

Table A. 6 Sample implementation: Men
Percent distribution of households and eligible men age 15-59 by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to residence and province (unweighted), South Africa DHS 2016

| Result | Residence |  | Province |  |  |  |  |  |  |  |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban | Non-urban | Western Cape | Eastern Cape | Northern Cape | Free State | KwaZuluNatal | North West | Gauteng | Mpumalanga | Limpopo |  |
| Selected households |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed (C) | 68.2 | 77.9 | 56.5 | 79.8 | 64.7 | 68.4 | 77.0 | 73.7 | 64.7 | 76.6 | 84.3 | 71.8 |
| Household present but no competent respondent at home (HP) | 8.6 | 2.6 | 11.7 | 2.8 | 6.4 | 11.1 | 5.7 | 2.6 | 9.2 | 5.0 | 2.7 | 6.4 |
| Postponed (P) | 0.8 | 0.2 | 2.2 | 0.9 | 0.3 | 0.2 | 0.2 | 0.9 | 0.2 | 0.2 | 0.1 | 0.6 |
| Refused (R) | 9.5 | 2.5 | 14.8 | 2.8 | 7.9 | 6.8 | 7.3 | 3.7 | 9.9 | 4.5 | 3.5 | 6.9 |
| Dwelling not found (DNF) | 0.5 | 1.3 | 1.1 | 0.0 | 0.7 | 0.7 | 0.8 | 0.6 | 1.2 | 1.3 | 0.4 | 0.8 |
| Household absent (HA) | 4.0 | 3.9 | 1.9 | 5.1 | 6.9 | 2.4 | 3.5 | 7.1 | 3.9 | 3.9 | 1.5 | 4.0 |
| Dwelling vacant/address not a dwelling (DV) | 6.1 | 9.2 | 8.5 | 7.8 | 11.0 | 7.2 | 3.4 | 9.1 | 6.8 | 6.9 | 6.4 | 7.3 |
| Dwelling destroyed (DD) | 0.4 | 1.0 | 0.5 | 0.6 | 0.3 | 0.7 | 1.1 | 1.1 | 0.8 | 0.1 | 0.1 | 0.6 |
| Other (O) | 1.9 | 1.4 | 2.8 | 0.2 | 1.7 | 2.4 | 0.9 | 1.2 | 3.2 | 1.6 | 1.0 | 1.7 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of sampled households | 4,751 | 2,872 | 849 | 863 | 692 | 803 | 988 | 814 | 969 | 828 | 817 | 7,623 |
| Household response rate (HRR) ${ }^{1}$ | 77.8 | 92.2 | 65.5 | 92.5 | 80.9 | 78.3 | 84.6 | 90.5 | 75.9 | 87.4 | 92.6 | 83.1 |
| Eligible men |  |  |  |  |  |  |  |  |  |  |  |  |
| Completed (EMC) | 67.5 | 81.6 | 49.5 | 74.7 | 69.9 | 68.3 | 80.7 | 85.1 | 67.8 | 76.6 | 78.6 | 73.1 |
| Not at home (EMNH) | 19.0 | 10.8 | 31.1 | 16.5 | 10.3 | 23.4 | 14.3 | 6.8 | 17.4 | 11.4 | 13.1 | 15.8 |
| Postponed (EMP) | 1.2 | 0.5 | 3.6 | 1.6 | 0.0 | 0.8 | 0.3 | 1.8 | 0.0 | 0.2 | 0.9 | 0.9 |
| Refused (EMR) | 10.2 | 4.9 | 15.1 | 4.1 | 17.8 | 3.7 | 3.4 | 5.2 | 12.5 | 10.0 | 4.8 | 8.1 |
| Partly completed (EMPC) | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.2 | 0.0 | 0.2 | 0.0 | 0.2 | 0.1 |
| Incapacitated (EMI) | 1.6 | 1.6 | 0.7 | 3.0 | 1.9 | 2.4 | 0.9 | 1.0 | 1.6 | 1.3 | 1.7 | 1.6 |
| Other (EMO) | 0.4 | 0.5 | 0.0 | 0.2 | 0.2 | 1.4 | 0.2 | 0.2 | 0.5 | 0.5 | 0.7 | 0.4 |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Number of men | 2,996 | 1,956 | 444 | 636 | 428 | 492 | 649 | 503 | 614 | 607 | 579 | 4,952 |
| Eligible men response rate (EMRR) ${ }^{2}$ | 67.5 | 81.6 | 49.5 | 74.7 | 69.9 | 68.3 | 80.7 | 85.1 | 67.8 | 76.6 | 78.6 | 73.1 |
| Overall men response rate (OMRR) ${ }^{3}$ | 52.5 | 75.3 | 32.4 | 69.1 | 56.5 | 53.5 | 68.3 | 77.0 | 51.4 | 67.0 | 72.8 | 60.7 |

${ }^{1}$ Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$
100 \text { * C }
$$

$C+H P+P+R+D N F$

[^39]Table A. 7 Coverage of HIV testing by social and demographic characteristics: Women
Percent distribution of interviewed women age $15-49$ by HIV testing status, according to social and demographic characteristics (unweighted), South Africa DHS 2016

| Characteristic | HIV test status |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ | Refused to provide blood | Absent at the time of blood collection | Other/missing ${ }^{2}$ |  |  |
| Marital status |  |  |  |  |  |  |
| Never married | 66.1 | 22.0 | 8.9 | 2.9 | 100.0 | 2,573 |
| Ever had sexual intercourse | 67.9 | 21.0 | 8.3 | 2.7 | 100.0 | 2,081 |
| Never had sexual intercourse | 58.5 | 26.2 | 11.6 | 3.7 | 100.0 | 492 |
| Married/living together | 63.3 | 25.1 | 7.5 | 4.2 | 100.0 | 1,361 |
| Divorced or separated | 66.9 | 16.6 | 9.8 | 6.7 | 100.0 | 163 |
| Widowed | 56.3 | 31.3 | 10.4 | 2.1 | 100.0 | 96 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 70.3 | 24.3 | 0.0 | 5.4 | 100.0 | 37 |
| In non-polygynous union | 62.3 | 25.6 | 7.8 | 4.2 | 100.0 | 1,264 |
| Not currently in union | 65.9 | 22.0 | 9.0 | 3.1 | 100.0 | 2,832 |
| Don't know | 78.3 | 13.3 | 5.0 | 3.3 | 100.0 | 60 |
| Ever had sexual intercourse |  |  |  |  |  |  |
| Yes | 65.9 | 22.6 | 8.1 | 3.4 | 100.0 | 3,699 |
| No | 58.5 | 26.3 | 11.5 | 3.6 | 100.0 | 494 |
| Currently pregnant |  |  |  |  |  |  |
| Pregnant | 71.9 | 20.9 | 4.3 | 2.9 | 100.0 | 139 |
| Not pregnant or not sure | 64.8 | 23.1 | 8.7 | 3.5 | 100.0 | 4,054 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 66.2 | 22.0 | 8.0 | 3.8 | 100.0 | 2,232 |
| 1-2 | 65.6 | 23.4 | 7.8 | 3.2 | 100.0 | 895 |
| 3-4 | 62.6 | 23.6 | 10.2 | 3.6 | 100.0 | 420 |
| $5+$ | 61.8 | 25.5 | 10.2 | 2.5 | 100.0 | 646 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than 1 month at a time | 62.4 | 25.4 | 8.9 | 3.2 | 100.0 | 503 |
| Away only for less than 1 month at a time | 64.1 | 23.7 | 9.2 | 3.0 | 100.0 | 1,458 |
| Not away | 66.2 | 22.0 | 8.0 | 3.8 | 100.0 | 2,232 |
| Population group |  |  |  |  |  |  |
| Black African | 67.9 | 21.0 | 8.1 | 3.1 | 100.0 | 3,651 |
| White | 43.1 | 38.2 | 11.8 | 6.9 | 100.0 | 102 |
| Coloured | 48.2 | 33.5 | 11.9 | 6.3 | 100.0 | 394 |
| Indian/Asian | 31.8 | 59.1 | 6.8 | 2.3 | 100.0 | 44 |
| Total 15-49 | 65.0 | 23.0 | 8.5 | 3.5 | 100.0 | 4,193 |

[^40]Table A. 8 Coverage of HIV testing by social and demographic characteristics: Men
Percent distribution of interviewed men age $15-49$ by HIV testing status, according to social and demographic characteristics (unweighted), South Africa DHS 2016

| Characteristic | HIV test status |  |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ | Refused to provide blood | Absent at the time of blood collection | Other/missing ${ }^{2}$ |  |  |
| Marital status |  |  |  |  |  |  |
| Never married | 60.3 | 25.5 | 10.4 | 3.8 | 100.0 | 2,161 |
| Ever had sexual intercourse | 60.1 | 25.1 | 11.0 | 3.7 | 100.0 | 1,736 |
| Never had sexual intercourse | 61.2 | 26.8 | 8.0 | 4.0 | 100.0 | 425 |
| Married/living together | 53.6 | 30.1 | 9.7 | 6.6 | 100.0 | 890 |
| Divorced or separated | 65.7 | 23.2 | 6.1 | 5.1 | 100.0 | 99 |
| Widowed | 58.6 | 27.6 | 3.4 | 10.3 | 100.0 | 29 |
| Type of union |  |  |  |  |  |  |
| In polygynous union | 70.6 | 11.8 | 5.9 | 11.8 | 100.0 | 17 |
| In non-polygynous union | 53.2 | 30.5 | 9.8 | 6.5 | 100.0 | 871 |
| Not currently in union | 60.6 | 25.4 | 10.1 | 3.9 | 100.0 | 2,289 |
| Don't know | 100.0 | 0.0 | 0.0 | 0.0 | 100.0 | 2 |
| Ever had sexual intercourse |  |  |  |  |  |  |
| Yes | 58.2 | 26.7 | 10.3 | 4.8 | 100.0 | 2,753 |
| No | 61.3 | 26.8 | 8.0 | 4.0 | 100.0 | 426 |
| Circumcised |  |  |  |  |  |  |
| Yes | 58.5 | 25.7 | 11.1 | 4.6 | 100.0 | 1,787 |
| No | 58.8 | 27.9 | 8.6 | 4.8 | 100.0 | 1,385 |
| Don't know | 42.9 | 42.9 | 14.3 | 0.0 | 100.0 | 7 |
| Times slept away from home in past 12 months |  |  |  |  |  |  |
| None | 56.7 | 28.0 | 10.3 | 5.0 | 100.0 | 1,853 |
| 1-2 | 60.4 | 22.1 | 12.3 | 5.2 | 100.0 | 439 |
| 3-4 | 60.7 | 26.6 | 9.5 | 3.2 | 100.0 | 252 |
| 5+ | 62.0 | 26.1 | 7.7 | 4.1 | 100.0 | 635 |
| Time away in past 12 months |  |  |  |  |  |  |
| Away for more than 1 month at a time | 59.1 | 29.0 | 7.3 | 4.6 | 100.0 | 411 |
| Away only for less than 1 month at a time | 62.2 | 23.1 | 10.6 | 4.2 | 100.0 | 915 |
| Not away | 56.7 | 28.0 | 10.3 | 5.0 | 100.0 | 1,853 |
| Population group |  |  |  |  |  |  |
| Black African | 60.3 | 25.2 | 9.8 | 4.7 | 100.0 | 2,807 |
| White | 60.5 | 29.6 | 7.4 | 2.5 | 100.0 | 81 |
| Coloured | 41.0 | 39.0 | 13.9 | 6.0 | 100.0 | 251 |
| Indian/Asian | 42.1 | 50.0 | 7.9 | 0.0 | 100.0 | 38 |
| Total 15-49 | 58.6 | 26.7 | 10.0 | 4.7 | 100.0 | 3,178 |
| 50-59 | 62.2 | 24.6 | 8.4 | 4.8 | 100.0 | 439 |
| Total 15-59 | 59.0 | 26.5 | 9.8 | 4.7 | 100.0 | 3,618 |

[^41]Table A. 9 Coverage of HIV testing by sexual behaviour characteristics: Women
Percent distribution of interviewed women age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), South Africa DHS 2016

| Sexual behaviour characteristic | HIV test status |  |  |  | Total | Number of women |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ | Refused to provide blood | Absent at the time of blood collection | Other/missing ${ }^{2}$ |  |  |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <14 | 66.4 | 20.8 | 8.8 | 4.0 | 100.0 | 125 |
| 14-15 | 68.1 | 20.1 | 8.3 | 3.4 | 100.0 | 551 |
| 16-17 | 66.6 | 22.4 | 7.9 | 3.1 | 100.0 | 1,308 |
| 18-19 | 64.7 | 23.5 | 8.2 | 3.6 | 100.0 | 974 |
| 20+ | 64.4 | 24.9 | 7.3 | 3.3 | 100.0 | 627 |
| Missing | 64.9 | 17.5 | 12.3 | 5.3 | 100.0 | 114 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 63.7 | 24.8 | 8.2 | 3.3 | 100.0 | 947 |
| 2 | 65.5 | 23.5 | 8.4 | 2.7 | 100.0 | 754 |
| 3-4 | 68.1 | 21.1 | 7.8 | 3.0 | 100.0 | 1,187 |
| 5-9 | 66.4 | 20.3 | 8.6 | 4.8 | 100.0 | 547 |
| 10+ | 74.8 | 18.3 | 3.8 | 3.1 | 100.0 | 131 |
| Don't know | 53.4 | 28.6 | 10.5 | 7.5 | 100.0 | 133 |
| Multiple sexual partners in past 12 months |  |  |  |  |  |  |
| 0 | 63.9 | 24.4 | 8.0 | 3.7 | 100.0 | 488 |
| 1 | 66.0 | 22.5 | 8.0 | 3.5 | 100.0 | 3,018 |
| 2+ | 68.4 | 18.7 | 10.9 | 2.1 | 100.0 | 193 |
| Non-marital, non-cohabiting partners in past 12 months ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 62.9 | 25.4 | 7.5 | 4.2 | 100.0 | 1,749 |
| 1 | 68.7 | 20.1 | 8.4 | 2.8 | 100.0 | 1,792 |
| 2+ | 67.1 | 19.0 | 11.4 | 2.5 | 100.0 | 158 |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 66.3 | 21.2 | 9.4 | 3.0 | 100.0 | 1,453 |
| Did not use condom | 66.0 | 23.2 | 7.1 | 3.7 | 100.0 | 1,758 |
| No sexual intercourse in past |  |  |  |  |  |  |
| Condom use at last sexual intercourse with a non-marital, noncohabiting partner in past 12 months ${ }^{3}$ |  |  |  |  |  |  |
| Used condom | 67.1 | 20.5 | 9.6 | 2.8 | 100.0 | 1,133 |
| Did not use condom | 70.6 | 19.5 | 7.2 | 2.7 | 100.0 | 817 |
| No sexual intercourse with any nonmarital, non-cohabiting partners in past 12 months | 62.9 | 25.4 | 7.5 | 4.2 | 100.0 | 1,749 |
| Prior HIV testing |  |  |  |  |  |  |
| Ever tested | 66.4 | 22.0 | 8.2 | 3.4 | 100.0 | 3,327 |
| Received results | 66.4 | 21.9 | 8.2 | 3.5 | 100.0 | 3,269 |
| Did not receive results | 67.2 | 25.9 | 6.9 | 0.0 | 100.0 | 58 |
| Never tested | 61.3 | 27.7 | 7.3 | 3.8 | 100.0 | 372 |
| Total 15-49 | 65.9 | 22.6 | 8.1 | 3.4 | 100.0 | 3,699 |

[^42]Table A. 10 Coverage of HIV testing by sexual behaviour characteristics: Men
Percent distribution of interviewed men age 15-49 who ever had sexual intercourse by HIV test status, according to sexual behaviour characteristics (unweighted), South Africa DHS 2016

| Sexual behaviour characteristic | HIV test status |  |  |  | Total | Number of men |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | DBS tested ${ }^{1}$ | Refused to provide blood | Absent at the time of blood collection | Other/missing ${ }^{2}$ |  |  |
| Age at first sexual intercourse |  |  |  |  |  |  |
| <14 | 61.3 | 27.9 | 7.9 | 2.9 | 100.0 | 240 |
| 14-15 | 58.7 | 26.9 | 10.0 | 4.4 | 100.0 | 588 |
| 16-17 | 57.5 | 26.7 | 10.6 | 5.1 | 100.0 | 972 |
| 18-19 | 59.1 | 25.4 | 10.2 | 5.3 | 100.0 | 599 |
| 20+ | 55.5 | 27.8 | 11.6 | 5.1 | 100.0 | 335 |
| Missing | 57.9 | 26.3 | 15.8 | 0.0 | 100.0 | 19 |
| Number of lifetime partners |  |  |  |  |  |  |
| 1 | 62.7 | 24.1 | 8.5 | 4.7 | 100.0 | 212 |
| 2 | 56.4 | 28.9 | 8.8 | 5.9 | 100.0 | 273 |
| 3-4 | 62.2 | 23.2 | 11.3 | 3.2 | 100.0 | 564 |
| 5-9 | 56.7 | 26.3 | 11.2 | 5.8 | 100.0 | 654 |
| 10+ | 60.7 | 24.6 | 9.8 | 4.8 | 100.0 | 764 |
| Don't know | 45.1 | 39.9 | 10.5 | 4.5 | 100.0 | 286 |
| Multiple sexual partners in past 12 months |  |  |  |  |  |  |
| 0 | 58.8 | 28.5 | 7.2 | 5.4 | 100.0 | 221 |
| 1 | 56.3 | 27.8 | 10.8 | 5.0 | 100.0 | 1,997 |
| 2+ | 65.0 | 21.5 | 9.7 | 3.7 | 100.0 | 534 |
| Don't know | 0.0 | 100.0 | 0.0 | 0.0 | 100.0 | 1 |
| Non-marital, non-cohabiting partners in past 12 months ${ }^{3}$ |  |  |  |  |  |  |
| 0 | 54.4 | 30.0 | 9.3 | 6.3 | 100.0 | 967 |
| 1 | 58.9 | 25.8 | 11.1 | 4.2 | 100.0 | 1,329 |
| 2+ | 64.1 | 22.3 | 10.3 | 3.3 | 100.0 | 457 |
| Condom use at last sexual intercourse in past 12 months |  |  |  |  |  |  |
| Used condom | 60.0 | 25.2 | 10.8 | 4.0 | 100.0 | 1,422 |
| Did not use condom | 55.8 | 28.3 | 10.3 | 5.7 | 100.0 | 1,110 |
| No sexual intercourse in past 12 months | 58.8 | 28.5 | 7.2 | 5.4 | 100.0 | 221 |
| Condom use at last sexual intercourse with a non-marital, non-cohabiting partner in past 12 months ${ }^{3}$ |  |  |  |  |  |  |
| Used condom | 61.0 | 24.6 | 10.5 | 3.8 | 100.0 | 1,247 |
| Did not use condom | 58.4 | 25.6 | 11.7 | 4.3 | 100.0 | 539 |
| No sexual intercourse with any nonmarital, non-cohabiting partners in past 12 months | 54.4 | 30.0 | 9.3 | 6.3 | 100.0 | 967 |
| Paid for sexual intercourse in past 12 months |  |  |  |  |  |  |
| Yes | 58.8 | 35.0 | 3.8 | 2.5 | 100.0 | 80 |
| Used condom | 57.4 | 35.3 | 4.4 | 2.9 | 100.0 | 68 |
| Did not use condom | 66.7 | 33.3 | 0.0 | 0.0 | 100.0 | 12 |
| No (no paid sexual intercourse/no sexual intercourse in last 12 months) | 58.2 | 26.4 | 10.5 | 4.9 | 100.0 | 2,673 |
| Prior HIV testing 20.5 |  |  |  |  |  |  |
| Ever tested | 58.9 | 25.5 | 10.9 | 4.7 | 100.0 | 2,086 |
| Received results | 58.8 | 25.6 | 10.9 | 4.6 | 100.0 | 2,029 |
| Did not receive results | 61.4 | 19.3 | 8.8 | 10.5 | 100.0 | 57 |
| Never tested | 55.9 | 30.6 | 8.5 | 4.9 | 100.0 | 667 |
| Total 15-49 | 58.2 | 26.7 | 10.3 | 4.8 | 100.0 | 2,752 |
| 50-59 | 62.3 | 24.8 | 8.3 | 4.6 | 100.0 | 432 |
| Total 15-59 | 58.7 | 26.4 | 10.0 | 4.8 | 100.0 | 3,185 |

[^43]TThe estimates from a sample survey are affected by two types of errors: nonsampling errors and sampling errors. Nonsampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the SADHS 2016 to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the SADHS 2016 is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

Sampling error is usually measured in terms of the standard error for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in $95 \%$ of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the SADHS 2016 sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF. These programs use the Taylor linearization method to estimate variances for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r=y / x$, where $y$ represents the total sample value for variable $y$, and $x$ represents the total number of cases in the group or subgroup under consideration. The variance of $r$ is computed using the formula given below, with the standard error being the square root of the variance:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1-f}{x^{2}} \sum_{h=1}^{H}\left[\frac{m_{h}}{m_{h}-1}\left(\sum_{i=1}^{m_{h}} z_{h i}^{2}-\frac{z_{h}^{2}}{m_{h}}\right)\right]
$$

in which

$$
z_{h i}=y_{h i}-r x_{h i}, \text { and } z_{h}=y_{h}-r x_{h}
$$

where $h$
represents the stratum which varies from 1 to $H$, is the total number of clusters selected in the $h^{\text {th }}$ stratum, is the sum of the weighted values of variable $y$ in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, is the sum of the weighted number of cases in the $i^{\text {th }}$ cluster in the $h^{\text {th }}$ stratum, and is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers all but one cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the SADHS 2016 there were 746 non-empty clusters. Hence, 746 replications were created. The variance of a rate $r$ is calculated as follows:

$$
S E^{2}(r)=\operatorname{var}(r)=\frac{1}{k(k-1)} \sum_{i=1}^{k}\left(r_{i}-r\right)^{2}
$$

in which

$$
r_{i}=k r-(k-1) r_{(i)}
$$

where $r$ is the estimate computed from the full sample of 746 clusters,
$r_{(i)} \quad$ is the estimate computed from the reduced sample of 745 clusters ( $i^{\text {th }}$ cluster excluded), and
$k \quad$ is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the SADHS 2016 are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and non-urban areas, and for each of the 9 provinces. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B. 2 through B. 14 present the value of the statistic (R), its standard error (SE), the number of unweighted ( N ) and weighted (WN) cases, the design effect (DEFT), the relative standard error ( $\mathrm{SE} / \mathrm{R}$ ), and the $95 \%$ confidence limits ( $\mathrm{R} \pm 2 \mathrm{SE}$ ), for each selected variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1 ).

The confidence interval (e.g., as calculated for ideal number of children) can be interpreted as follows: the overall average from the national sample is 2.596 and its standard error is 0.024 . Therefore, to obtain the $95 \%$ confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., $2.596 \pm$ $2 \times 0.024$. There is a high probability ( $95 \%$ ) that the true ideal number of children is between 2.548 and 2.644 .

For the total sample, the value of the DEFT, averaged over all variables, is 1.56 . This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.56 over that in an equivalent simple random sample.

Table B. 1 List of selected variables for sampling errors, South Africa DHS 2016

| Variable | Estimate | Base population |
| :--- | :--- | :--- |
|  | POPULATION |  |
| Population using safely managed drinking water services | Proportion de jure population |  |
| Population using safely managed sanitation services | Proportion de jure population |  |
| Population with access to electricity | Proportion de jure population |  |
| Population with primary reliance on clean fuels | Proportion | de jure population |


| WOMEN |  |  |
| :---: | :---: | :---: |
| Urban residence | Proportion | Women 15-49 |
| Literacy | Proportion | Women 15-49 |
| No education | Proportion | Women 15-49 |
| Secondary or higher education | Proportion | Women 15-49 |
| Never-in-union (never married or lived with a partner) | Proportion | Women 15-49 |
| In-union (married or living with a partner) | Proportion | Women 15-49 |
| In a union before age 15 (women 20-24) | Proportion | Women 20-24 |
| In a union before age 18 (women 20-24) | Proportion | Women 20-24 |
| In a union before age 18 (women 20-49) | Proportion | Women 20-49 |
| Had sexual intercourse before age 18 | Proportion | Women 20-49 |
| Currently pregnant | Proportion | Women 15-49 |
| Currently using any method | Proportion | Sexually active women 15-49 |
| Currently using a modern method | Proportion | Sexually active women 15-49 |
| Currently using pill | Proportion | Sexually active women 15-49 |
| Currently using condoms | Proportion | Sexually active women 15-49 |
| Currently using injectables - 3 months | Proportion | Sexually active women 15-49 |
| Currently using injectables - 2 months | Proportion | Sexually active women 15-49 |
| Currently using implants | Proportion | Sexually active women 15-49 |
| Currently using female sterilisation | Proportion | Sexually active women 15-49 |
| Currently using withdrawal | Proportion | Sexually active women 15-49 |
| Currently using IUD | Proportion | Sexually active women 15-49 |
| Using public sector source | Proportion | Current users of modern method |
| Demand satisfied by modern methods | Proportion | In-union women 15-49 |
| Want no more children | Proportion | In-union women 15-49 |
| Want to delay next birth at least 2 years | Proportion | In-union women 15-49 |
| Ideal number of children | Mean | Women 15-49 |
| Mothers protected against tetanus for last birth | Proportion | Women with a live birth in last 5 years |
| Births with skilled attendant at delivery | Proportion | Births occurring 1-59 months before survey |
| Had diarrhoea in the last 2 weeks | Proportion | Children under 5 |
| Treated with ORS | Proportion | Children under 5 with diarrhoea in past 2 weeks |
| Treated with clinic-recommended homemade fluid (RHF) | Proportion | Children under 5 with diarrhoea in past 2 weeks |
| Sought treatment for diarrhoea | Proportion | Children under 5 with diarrhoea in past 2 weeks |
| Ever had vaccination card | Proportion | Children 12-23 months |
| Vaccination card seen | Proportion | Children 12-23 months |
| Received BCG vaccination | Proportion | Children 12-23 months |
| Received DTaP-IPV-Hib vaccination (3 doses) | Proportion | Children 12-23 months |
| Received HepB vaccination (3 doses) | Proportion | Children 12-23 months |
| Received birth dose polio 0 vaccination | Proportion | Children 12-23 months |
| Received oral polio vaccination (non-birth dose) | Proportion | Children 12-23 months |
| Received pneumococcal vaccination (3 doses) | Proportion | Children 12-23 months |
| Received rotavirus vaccination (2 doses) | Proportion | Children 12-23 months |
| Received measles vaccination | Proportion | Children 12-23 months |
| Received all basic vaccinations | Proportion | Children 12-23 months |
| Received all age appropriate vaccinations (12-23 months) | Proportion | Children 12-23 months |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | Proportion | Children 24-35 months |
| Received measles 2 vaccination (children 24-35) | Proportion | Children 24-35 months |
| Received all age appropriate vaccinations (24-35 months) | Proportion | Children 24-35 months |
| Height-for-age (-2SD) | Proportion | Children under 5 who are measured |
| Weight-for-height (-2SD) | Proportion | Children under 5 who are measured |
| Weight-for-age (+2SD) | Proportion | Children under 5 who are measured |
| Weight-for-age (-2SD) | Proportion | Children under 5 who are measured |
| Body Mass Index (BMI) <18.5 | Proportion | Women 15+ who were measured |
| Body Mass Index (BMI) $\geq 25$ | Proportion | Women 15+ who were measured |
| Body Mass Index (BMI) $\geq 35$ | Proportion | Women 15+ who were measured |
| Waist $\geq 88 \mathrm{~cm}$ | Proportion | Women 15+ who were measured |
| Waist for height ratio $\geq 0.5$ | Proportion | Women $15+$ who were measured |
| Prevalence of anaemia (children 6-59 months) | Proportion | Children 6-59 months who were tested |
| Prevalence of anaemia (women 15+) | Proportion | Women 15+ who were measured |
| Had 2+ sexual partners in past 12 months | Proportion | Women 15-49 |
| Condom use at last sex | Proportion | Women 15-49 with non-marital, non-cohabiting partner in past 12 months |
| Abstinence among never-in-union youth (never had sex) | Proportion | Never-in-union women 15-24 |
| Had an HIV test and received results in past 12 months | Proportion | Women 15-49 |
| Cervical cancer screening | Proportion | Women 30-59 years |
| Asthma symptoms | Proportion | Women 15+ |
| COPD symptoms | Proportion | Women 15+ |
| Hypertension (>140/90 or taking hypertensive medication) | Proportion | Women 15+ who were measured |
| Current smoking (daily or occassional) | Proportion | Women 15+ |
| Drank alcohol in past 12 months | Proportion | Women 15+ |
| Risky alcohol intake (>5 or more drinks) | Proportion | Women 15+ |
| Show signs of problem drinking by the CAGE test | Proportion | Women 15+ |
| Codeine-containing medication misuse | Proportion | Women 15+ |

## Table B.1-Continued

| Variable | Estimate | Base population |
| :--- | :--- | :--- |
|  | WOMEN |  |
| Physical, sexual, or emotional violence by a partner in the previous |  |  |
| 12 months | Proportion | Ever-partnered women 18+ |
| Physical violence by a current or former partner in the previous |  |  |
| 12 months | Proportion | Ever-partnered women 18+ |
| Sexual violence by a current or former partner in the previous |  |  |
| 12 months | Proportion | Ever-partnered women 18+ |
| Emotional violence by a current or former partner in the previous |  |  |
| 12 months | Proportion | Ever-partnered women 18+ |
| Mobile phone ownership | Proportion | Women 15-49 |
| Bank account ownership | Proportion | Women 15-49 |
| Internet use in past 12 months | Proportion | Women 15-49 |
| Total fertility rate (last 3 years) | Rate | Women-years of exposure to childbearing |
| Neonatal mortality rate ${ }^{1}$ | Rate | Children exposed to the risk of mortality |
| Post-neonatal mortality rate ${ }^{1}$ | Rate | Children exposed to the risk of mortality |
| Infant mortality rate | Rate | Children exposed to the risk of mortality |
| Child mortality rate ${ }^{1}$ | Rate | Children exposed to the risk of mortality |
| Under-5 mortality rate ${ }^{1}$ | Rate | Children exposed to the risk of mortality |
| HIV prevalence among women 15-49 | Proportion | Interviewed women with Dried Blood Spot (DBS) specimen tested at the lab |
| HIV prevalence among pregnant women 15-49 | Proportion | Interviewed pregnant women 15-49 with DBS tested at the lab |
| HIV prevalence among young women 15-24 | Proportion | Interviewed women 15-24 with DBS tested at the lab |
| HIV prevalence among women 15+ | Proportion | Interviewed women 15+ with DBS tested at the lab |


| MEN |  |  |
| :---: | :---: | :---: |
| Urban residence | Proportion | Men 15-49 |
| Literacy | Proportion | Men 15-49 |
| No education | Proportion | Men 15-49 |
| Secondary or higher education | Proportion | Men 15-49 |
| Never-in-union (never married or lived with a partner) | Proportion | Men 15-49 |
| In-union (married or living with a partner) | Proportion | Men 15-49 |
| Had first sexual intercourse before age 18 | Proportion | Men 20-49 |
| Want no more children | Proportion | In-union men 15-49 |
| Want to delay birth at least 2 years | Proportion | In-union men 15-49 |
| Ideal number of children | Mean | Men 15-49 |
| Body Mass Index (BMI) < 18.5 | Proportion | Men $15+$ who were measured |
| Body Mass Index (BMI) $\geq 25$ | Proportion | Men 15+ who were measured |
| Body Mass Index (BMI) $\geq 30$ | Proportion | Men 15+ who were measured |
| Waist $\geq 102 \mathrm{~cm}$ | Proportion | Men 15+ who were measured |
| Waist for height ratio $\geq 0.5$ | Proportion | Men 15+ who were measured |
| Current smoking (daily or occassional) | Proportion | Men 15+ |
| Drank alcohol in past 12 months | Proportion | Men 15+ |
| Risky alcohol intake (>5 or more drinks) | Proportion | Men 15+ |
| Show signs of problem drinking by the CAGE test | Proportion | Men 15+ |
| Codeine-containing medication misuse | Proportion | Men 15+ |
| Prevalence of anaemia | Proportion | Men $15+$ who were measured |
| Had 2+ sexual partners in past 12 months | Proportion | Men 15-49 |
| Condom use at last sex | Proportion | Men 15-49 with non-marital, non-cohabiting partners in past 12 months |
| Abstinence among never-in-union youth (never had sex) | Proportion | Never-in-union men 15-24 |
| Had paid sex in past 12 months | Proportion | Men 15-49 |
| Had HIV test and received results in past 12 months | Proportion | Men 15-49 |
| Circumcised | Proportion | Men 15-49 |
| Asthma symptoms | Proportion | Men 15+ |
| COPD symptoms | Proportion | Men 15+ |
| Hypertension (>140/90 or taking hypertensive medication) | Proportion | Men 15+ who were measured |
| Mobile phone ownership | Proportion | Men 15-49 |
| Bank account ownership | Proportion | Men 15-49 |
| Internet use in past 12 months | Proportion | Men 15-49 |
| HIV prevalence among men 15-49 | Proportion | Interviewed men with Dried Blood Spot (DBS) specimen tested at the lab |
| HIV prevalence among young men 15-24 | Proportion | Interviewed men 15-24 with DBS tested at the lab |
| HIV prevalence among men $15+$ | Proportion | Interviewed men 15+ with DBS tested at the lab |
| WOMEN and MEN |  |  |
| HIV prevalence among respondents 15-49 | Proportion | Interviewed women and men 15-49 with DBS tested at the lab |
| HIV prevalence among respondents 15-24 | Proportion | Interviewed women and men 15-24 with DBS tested at the lab |
| HIV prevalence among respondents $15+$ | Proportion | Interviewed women and men 15+ with DBS tested at the lab |

${ }^{1}$ The mortality rates are calculated for 5 years before the survey for the national, urban, and non-urban samples and for 10 years before the survey for the provincial samples

Table B. 2 Sampling errors: National sample, South Africa DHS 2016

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.904 | 0.008 | 37925 | 37205 | 2.274 | 0.009 | 0.888 | 0.921 |
| Population using safely managed sanitation services | 0.810 | 0.011 | 37925 | 37205 | 2.617 | 0.013 | 0.789 | 0.831 |
| Population with access to electricity | 0.908 | 0.011 | 37925 | 37205 | 3.379 | 0.013 | 0.885 | 0.931 |
| Population with primary reliance on clean fuels | 0.785 | 0.012 | 37925 | 37205 | 2.429 | 0.016 | 0.760 | 0.810 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.673 | 0.011 | 8514 | 8514 | 2.261 | 0.017 | 0.650 | 0.696 |
| Literacy | 0.963 | 0.003 | 8514 | 8514 | 1.612 | 0.003 | 0.957 | 0.970 |
| No education | 0.020 | 0.002 | 8514 | 8514 | 1.383 | 0.106 | 0.016 | 0.024 |
| Secondary or higher education | 0.889 | 0.006 | 8514 | 8514 | 1.707 | 0.007 | 0.878 | 0.901 |
| Never-in-union (never married or lived with a partner) | 0.586 | 0.008 | 8514 | 8514 | 1.542 | 0.014 | 0.570 | 0.603 |
| In-union (married or living with a partner) | 0.358 | 0.008 | 8514 | 8514 | 1.560 | 0.023 | 0.342 | 0.374 |
| In a union before age 15 (women 20-24) | 0.009 | 0.004 | 1408 | 1415 | 1.520 | 0.416 | 0.002 | 0.017 |
| In a union before age 18 (women 20-24) | 0.036 | 0.007 | 1408 | 1415 | 1.473 | 0.204 | 0.021 | 0.050 |
| In a union before age 18 (women 20-49) | 0.065 | 0.004 | 7009 | 7087 | 1.396 | 0.063 | 0.056 | 0.073 |
| Had sexual intercourse before age 18 | 0.488 | 0.009 | 7009 | 7087 | 1.548 | 0.019 | 0.469 | 0.506 |
| Currently pregnant | 0.039 | 0.003 | 8514 | 8514 | 1.457 | 0.078 | 0.033 | 0.045 |
| Currently using any method | 0.596 | 0.010 | 4116 | 4364 | 1.317 | 0.017 | 0.576 | 0.617 |
| Currently using a modern method | 0.593 | 0.010 | 4116 | 4364 | 1.307 | 0.017 | 0.573 | 0.613 |
| Currently using pill | 0.073 | 0.006 | 4116 | 4364 | 1.482 | 0.083 | 0.061 | 0.085 |
| Currently using condoms | 0.156 | 0.009 | 4116 | 4364 | 1.562 | 0.057 | 0.138 | 0.173 |
| Currently using injectables - 3 months | 0.175 | 0.008 | 4116 | 4364 | 1.290 | 0.044 | 0.160 | 0.191 |
| Currently using injectables - 2 months | 0.073 | 0.005 | 4116 | 4364 | 1.330 | 0.074 | 0.062 | 0.083 |
| Currently using implants | 0.041 | 0.004 | 4116 | 4364 | 1.290 | 0.098 | 0.033 | 0.049 |
| Currently using female sterilisation | 0.057 | 0.005 | 4116 | 4364 | 1.481 | 0.094 | 0.046 | 0.068 |
| Currently using withdrawal | 0.003 | 0.001 | 4116 | 4364 | 1.417 | 0.377 | 0.001 | 0.006 |
| Currently using IUD | 0.012 | 0.002 | 4116 | 4364 | 1.495 | 0.216 | 0.007 | 0.016 |
| Using public sector source | 0.803 | 0.011 | 4004 | 4076 | 1.749 | 0.014 | 0.781 | 0.825 |
| Demand satisfied by modern methods | 0.797 | 0.008 | 5033 | 5115 | 1.438 | 0.010 | 0.781 | 0.813 |
| Want no more children | 0.580 | 0.013 | 2841 | 3050 | 1.367 | 0.022 | 0.554 | 0.605 |
| Want to delay next birth at least 2 years | 0.092 | 0.007 | 2841 | 3050 | 1.303 | 0.077 | 0.078 | 0.106 |
| Ideal number of children | 2.596 | 0.024 | 8485 | 8493 | 1.562 | 0.009 | 2.548 | 2.644 |
| Mothers protected against tetanus for last birth | 0.352 | 0.014 | 3036 | 3036 | 1.579 | 0.039 | 0.324 | 0.379 |
| Births with skilled attendant at delivery | 0.967 | 0.004 | 3548 | 3572 | 1.193 | 0.004 | 0.959 | 0.975 |
| Had diarrhoea in the last 2 weeks | 0.103 | 0.007 | 3413 | 3444 | 1.374 | 0.069 | 0.089 | 0.118 |
| Treated with ORS | 0.514 | 0.034 | 350 | 356 | 1.263 | 0.066 | 0.446 | 0.582 |
| Treated with clinic-recommended homemade fluid (RHF) | 0.725 | 0.030 | 350 | 356 | 1.280 | 0.042 | 0.665 | 0.786 |
| Sought treatment for diarrhoea | 0.630 | 0.034 | 350 | 356 | 1.287 | 0.053 | 0.563 | 0.698 |
| Ever had vaccination card | 0.981 | 0.006 | 670 | 677 | 1.013 | 0.006 | 0.969 | 0.992 |
| Vaccination card seen | 0.663 | 0.026 | 670 | 677 | 1.400 | 0.039 | 0.612 | 0.715 |
| Received BCG vaccination | 0.925 | 0.012 | 670 | 677 | 1.219 | 0.013 | 0.900 | 0.950 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.649 | 0.025 | 670 | 677 | 1.360 | 0.039 | 0.598 | 0.700 |
| Received HepB vaccination (3 doses) | 0.650 | 0.024 | 670 | 677 | 1.295 | 0.037 | 0.602 | 0.698 |
| Received birth dose polio 0 vaccination | 0.923 | 0.014 | 670 | 677 | 1.320 | 0.015 | 0.896 | 0.950 |
| Received oral polio vaccination (non-birth dose) | 0.776 | 0.022 | 670 | 677 | 1.324 | 0.028 | 0.733 | 0.819 |
| Received pneumococcal vaccination (3 doses) | 0.619 | 0.027 | 670 | 677 | 1.433 | 0.044 | 0.565 | 0.673 |
| Received rotavirus vaccination (2 doses) | 0.701 | 0.024 | 670 | 677 | 1.362 | 0.035 | 0.653 | 0.750 |
| Received measles vaccination | 0.861 | 0.017 | 670 | 677 | 1.246 | 0.019 | 0.828 | 0.895 |
| Received all basic vaccinations | 0.612 | 0.025 | 670 | 677 | 1.315 | 0.041 | 0.562 | 0.662 |
| Received all age appropriate vaccinations (12-23 months) | 0.526 | 0.027 | 670 | 677 | 1.359 | 0.050 | 0.473 | 0.579 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.481 | 0.027 | 676 | 660 | 1.355 | 0.055 | 0.428 | 0.534 |
| Received measles 2 vaccination (children 24-35) | 0.592 | 0.026 | 676 | 660 | 1.331 | 0.043 | 0.541 | 0.644 |
| Received all age appropriate vaccinations (24-35 months) | 0.418 | 0.027 | 676 | 660 | 1.371 | 0.063 | 0.365 | 0.471 |
| Height-for-age (-2SD) | 0.274 | 0.016 | 1468 | 1404 | 1.280 | 0.059 | 0.242 | 0.307 |
| Weight-for-height (-2SD) | 0.025 | 0.005 | 1449 | 1384 | 1.154 | 0.197 | 0.015 | 0.034 |
| Weight-for-height (+2SD) | 0.133 | 0.011 | 1449 | 1384 | 1.160 | 0.082 | 0.111 | 0.155 |
| Weight-for-age (-2SD) | 0.059 | 0.009 | 1479 | 1416 | 1.393 | 0.147 | 0.042 | 0.076 |
| Body Mass Index (BMI) <18.5 | 0.026 | 0.003 | 4844 | 4642 | 1.075 | 0.096 | 0.021 | 0.031 |
| Body Mass Index (BMI) $\geq 25$ | 0.675 | 0.010 | 4844 | 4642 | 1.391 | 0.014 | 0.656 | 0.695 |
| Body Mass Index (BMI) $\geq 35$ | 0.204 | 0.009 | 4844 | 4642 | 1.501 | 0.044 | 0.186 | 0.221 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.453 | 0.011 | 4852 | 4664 | 1.522 | 0.024 | 0.431 | 0.475 |
| Waist for height ratio $\geq 0.5$ | 0.669 | 0.010 | 4846 | 4660 | 1.484 | 0.015 | 0.649 | 0.689 |
| Prevalence of anaemia (children 6-59 months) | 0.613 | 0.021 | 1137 | 1094 | 1.365 | 0.035 | 0.570 | 0.656 |
| Prevalence of anaemia (women 15+) | 0.306 | 0.011 | 4431 | 4244 | 1.513 | 0.035 | 0.285 | 0.328 |
| Had 2+ sexual partners in past 12 months | 0.045 | 0.003 | 8514 | 8514 | 1.229 | 0.061 | 0.040 | 0.051 |
| Condom use at last sex | 0.576 | 0.032 | 394 | 387 | 1.279 | 0.055 | 0.513 | 0.640 |
| Abstinence among never-in-union youth (never had sex) | 0.374 | 0.012 | 2621 | 2508 | 1.300 | 0.033 | 0.349 | 0.398 |
| Had an HIV test and received results in past 12 months | 0.585 | 0.008 | 8514 | 8514 | 1.469 | 0.013 | 0.570 | 0.601 |
| Cervical cancer screening | 0.522 | 0.015 | 2880 | 2918 | 1.568 | 0.028 | 0.493 | 0.551 |
| Asthma symptoms | 0.033 | 0.003 | 6126 | 6126 | 1.418 | 0.098 | 0.027 | 0.040 |
| COPD symptoms | 0.019 | 0.002 | 6126 | 6126 | 1.305 | 0.119 | 0.015 | 0.024 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.455 | 0.011 | 5003 | 4774 | 1.530 | 0.024 | 0.433 | 0.476 |
| Current smoking (daily or occassional) | 0.078 | 0.006 | 6126 | 6126 | 1.655 | 0.073 | 0.067 | 0.090 |
| Drank alcohol in past 12 months | 0.184 | 0.007 | 6126 | 6126 | 1.459 | 0.039 | 0.170 | 0.199 |
| Risky alcohol intake (>5 or more drinks) | 0.048 | 0.004 | 6126 | 6126 | 1.412 | 0.080 | 0.041 | 0.056 |

Table B.2-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Show signs of problem drinking by the CAGE test | 0.027 | 0.002 | 6126 | 6126 | 1.176 | 0.089 | 0.023 | 0.032 |
| Codeine-containing medication misuse 0.023 0.003 6126 6126 1.723 0.144 0.016 0.030 <br> Physical, sexual, or emotional violence by a partner in the previous        0.050 |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.077 | 0.005 | 5925 | 5865 | 1.554 | 0.070 | 0.067 | 0.088 |
| Sexual violence by a current or former partner in the previous 12 months | 0.023 | 0.003 | 5925 | 5865 | 1.479 | 0.125 | 0.017 | 0.029 |
| Emotional violence by a current or former partner in the previous |  |  |  |  |  |  |  |  |
| Mobile phone ownership | 0.912 | 0.005 | 8514 | 8514 | 1.530 | 0.005 | 0.903 | 0.921 |
| Bank account ownership | 0.539 | 0.010 | 8514 | 8514 | 1.872 | 0.019 | 0.519 | 0.559 |
| Internet use in past 12 months | 0.474 | 0.011 | 8514 | 8514 | 2.035 | 0.023 | 0.452 | 0.496 |
| Total fertility rate (last 3 years) | 2.643 | 0.067 | 24188 | 24284 | 1.227 | 0.025 | 2.509 | 2.777 |
| Neonatal mortality (last 0-4 years) | 21.029 | 3.808 | 3552 | 3577 | 1.443 | 0.181 | 13.412 | 28.645 |
| Post-neonatal mortality (last 0-4 years) | 14.443 | 2.538 | 3542 | 3580 | 1.284 | 0.176 | 9.366 | 19.520 |
| Infant mortality (last 0-4 years) | 35.472 | 4.506 | 3558 | 3584 | 1.381 | 0.127 | 26.459 | 44.484 |
| Child mortality (last 0-4 years) | 6.827 | 1.421 | 3572 | 3587 | 1.087 | 0.208 | 3.986 | 9.669 |
| Under-five mortality (last 0-4 years) | 42.057 | 4.645 | 3571 | 3596 | 1.313 | 0.110 | 32.766 | 51.347 |
| HIV prevalence among women 15-49 | 0.273 | 0.013 | 2726 | 2485 | 1.488 | 0.047 | 0.248 | 0.299 |
| HIV prevalence among pregnant women 15-49 | 0.280 | 0.069 | 100 | 97 | 1.526 | 0.248 | 0.141 | 0.419 |
| HIV prevalence among young women 15-24 | 0.116 | 0.015 | 935 | 832 | 1.407 | 0.127 | 0.087 | 0.146 |
| HIV prevalence among women 15+ | 0.233 | 0.010 | 4067 | 3600 | 1.515 | 0.043 | 0.212 | 0.253 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.688 | 0.013 | 3179 | 3202 | 1.599 | 0.019 | 0.662 | 0.714 |
| Literacy | 0.949 | 0.006 | 3179 | 3202 | 1.469 | 0.006 | 0.938 | 0.961 |
| No education | 0.019 | 0.003 | 3179 | 3202 | 1.276 | 0.161 | 0.013 | 0.026 |
| Secondary or higher education | 0.860 | 0.008 | 3179 | 3202 | 1.378 | 0.010 | 0.843 | 0.877 |
| Never-in-union (never married or lived with a partner) | 0.647 | 0.013 | 3179 | 3202 | 1.591 | 0.021 | 0.620 | 0.674 |
| In-union (married or living with a partner) | 0.309 | 0.013 | 3179 | 3202 | 1.533 | 0.041 | 0.283 | 0.334 |
| Had first sexual intercourse before age 18 | 0.579 | 0.015 | 2474 | 2555 | 1.557 | 0.027 | 0.548 | 0.610 |
| Want no more children | 0.452 | 0.024 | 890 | 988 | 1.456 | 0.054 | 0.404 | 0.501 |
| Want to delay birth at least 2 years | 0.106 | 0.014 | 890 | 988 | 1.390 | 0.135 | 0.078 | 0.135 |
| Ideal number of children | 3.165 | 0.053 | 3145 | 3162 | 1.527 | 0.017 | 3.059 | 3.270 |
| Body Mass Index (BMI) <18.5 | 0.095 | 0.007 | 3275 | 3105 | 1.244 | 0.069 | 0.082 | 0.108 |
| Body Mass Index (BMI) $\geq 25$ | 0.313 | 0.013 | 3275 | 3105 | 1.555 | 0.041 | 0.288 | 0.339 |
| Body Mass Index (BMI) $\geq 35$ | 0.031 | 0.005 | 3275 | 3105 | 1.522 | 0.153 | 0.022 | 0.040 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.098 | 0.008 | 3224 | 3076 | 1.547 | 0.083 | 0.082 | 0.115 |
| Waist for height ratio $\geq 0.5$ | 0.351 | 0.013 | 3219 | 3073 | 1.538 | 0.037 | 0.325 | 0.377 |
| Current smoking (daily or occassional) | 0.373 | 0.011 | 4210 | 4210 | 1.414 | 0.028 | 0.352 | 0.394 |
| Drank alcohol in past 12 months | 0.538 | 0.012 | 4210 | 4210 | 1.556 | 0.022 | 0.514 | 0.562 |
| Risky alcohol intake (>5 or more drinks) | 0.275 | 0.011 | 4210 | 4210 | 1.599 | 0.040 | 0.253 | 0.297 |
| Show signs of problem drinking by the CAGE test | 0.159 | 0.009 | 4210 | 4210 | 1.581 | 0.056 | 0.142 | 0.177 |
| Codeine-containing medication misuse | 0.015 | 0.003 | 4210 | 4210 | 1.392 | 0.175 | 0.010 | 0.020 |
| Prevalence of anaemia | 0.168 | 0.010 | 2769 | 2606 | 1.297 | 0.057 | 0.149 | 0.187 |
| Had 2+ sexual partners in past 12 months | 0.170 | 0.010 | 3179 | 3202 | 1.466 | 0.058 | 0.150 | 0.189 |
| Condom use at last sex | 0.653 | 0.027 | 535 | 544 | 1.310 | 0.041 | 0.599 | 0.707 |
| Abstinence among never-in-union youth (never had sex) | 0.307 | 0.019 | 1268 | 1191 | 1.432 | 0.060 | 0.270 | 0.344 |
| Had paid sex in past 12 months | 0.029 | 0.004 | 3179 | 3202 | 1.303 | 0.134 | 0.021 | 0.037 |
| Had HIV test and received results in past 12 months | 0.446 | 0.014 | 3179 | 3202 | 1.610 | 0.032 | 0.417 | 0.474 |
| Circumcised | 0.570 | 0.015 | 3179 | 3202 | 1.722 | 0.027 | 0.539 | 0.600 |
| Asthma symptoms | 0.035 | 0.004 | 4210 | 4210 | 1.257 | 0.102 | 0.028 | 0.042 |
| COPD symptoms | 0.017 | 0.003 | 4210 | 4210 | 1.263 | 0.149 | 0.012 | 0.022 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.437 | 0.013 | 3253 | 3082 | 1.461 | 0.029 | 0.412 | 0.463 |
| Mobile phone ownership | 0.885 | 0.008 | 3179 | 3202 | 1.497 | 0.010 | 0.868 | 0.902 |
| Bank account ownership | 0.570 | 0.013 | 3179 | 3202 | 1.529 | 0.024 | 0.543 | 0.596 |
| Internet use in past 12 months | 0.520 | 0.015 | 3179 | 3202 | 1.692 | 0.029 | 0.490 | 0.550 |
| HIV prevalence among men 15-49 | 0.144 | 0.014 | 1863 | 2199 | 1.777 | 0.101 | 0.115 | 0.173 |
| HIV prevalence among young men 15-24 | 0.034 | 0.010 | 852 | 924 | 1.608 | 0.292 | 0.014 | 0.055 |
| HIV prevalence among men 15+ | 0.133 | 0.011 | 2517 | 2984 | 1.669 | 0.085 | 0.110 | 0.155 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.212 | 0.010 | 4589 | 4685 | 1.685 | 0.048 | 0.192 | 0.233 |
| HIV prevalence among respondents 15-24 | 0.073 | 0.009 | 1787 | 1755 | 1.435 | 0.121 | 0.055 | 0.091 |
| HIV prevalence among respondents 15+ | 0.187 | 0.008 | 6584 | 6584 | 1.709 | 0.044 | 0.171 | 0.204 |

Table B. 3 Sampling errors: Urban sample, South Africa DHS 2017

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.985 | 0.004 | 21206 | 23656 | 2.701 | 0.004 | 0.977 | 0.994 |
| Population using safely managed sanitation services | 0.778 | 0.016 | 21206 | 23656 | 2.811 | 0.020 | 0.747 | 0.810 |
| Population with access to electricity | 0.936 | 0.013 | 21206 | 23656 | 3.970 | 0.014 | 0.910 | 0.963 |
| Population with primary reliance on clean fuels | 0.913 | 0.013 | 21206 | 23656 | 3.025 | 0.014 | 0.887 | 0.939 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 1 | 0 | 4805 | 5731 | na | 0 |  | 1 |
| Literacy | 0.972 | 0.004 | 4805 | 5731 | 1.816 | 0.004 | 0.963 | 0.981 |
| No education | 0.016 | 0.002 | 4805 | 5731 | 1.371 | 0.155 | 0.011 | 0.021 |
| Secondary or higher education | 0.912 | 0.007 | 4805 | 5731 | 1.826 | 0.008 | 0.897 | 0.927 |
| Never-in-union (never married or lived with a partner) | 0.553 | 0.011 | 4805 | 5731 | 1.510 | 0.020 | 0.531 | 0.574 |
| In-union (married or living with a partner) | 0.394 | 0.011 | 4805 | 5731 | 1.545 | 0.028 | 0.372 | 0.416 |
| In a union before age 15 (women 20-24) | 0.012 | 0.006 | 801 | 951 | 1.483 | 0.478 | 0.001 | 0.023 |
| In a union before age 18 (women 20-24) | 0.032 | 0.009 | 801 | 951 | 1.505 | 0.292 | 0.013 | 0.051 |
| In a union before age 18 (women 20-49) | 0.058 | 0.005 | 4036 | 4856 | 1.389 | 0.088 | 0.048 | 0.068 |
| Had sexual intercourse before age 18 | 0.476 | 0.012 | 4036 | 4856 | 1.525 | 0.025 | 0.452 | 0.500 |
| Currently pregnant | 0.041 | 0.004 | 4805 | 5731 | 1.471 | 0.103 | 0.032 | 0.049 |
| Currently using any method | 0.596 | 0.013 | 2464 | 3137 | 1.319 | 0.022 | 0.570 | 0.622 |
| Currently using a modern method | 0.591 | 0.013 | 2464 | 3137 | 1.307 | 0.022 | 0.566 | 0.617 |
| Currently using pill | 0.078 | 0.008 | 2464 | 3137 | 1.407 | 0.098 | 0.063 | 0.093 |
| Currently using condoms | 0.155 | 0.012 | 2464 | 3137 | 1.577 | 0.074 | 0.132 | 0.178 |
| Currently using injectables - 3 months | 0.161 | 0.009 | 2464 | 3137 | 1.264 | 0.058 | 0.142 | 0.179 |
| Currently using injectables - 2 months | 0.067 | 0.007 | 2464 | 3137 | 1.337 | 0.101 | 0.053 | 0.080 |
| Currently using implants | 0.041 | 0.005 | 2464 | 3137 | 1.263 | 0.123 | 0.031 | 0.051 |
| Currently using female sterilisation | 0.068 | 0.007 | 2464 | 3137 | 1.408 | 0.105 | 0.053 | 0.082 |
| Currently using withdrawal | 0.004 | 0.002 | 2464 | 3137 | 1.363 | 0.426 | 0.001 | 0.008 |
| Currently using IUD | 0.014 | 0.003 | 2464 | 3137 | 1.429 | 0.245 | 0.007 | 0.020 |
| Using public sector source | 0.766 | 0.016 | 2270 | 2761 | 1.777 | 0.021 | 0.735 | 0.798 |
| Demand satisfied by modern methods | 0.800 | 0.011 | 2826 | 3450 | 1.446 | 0.014 | 0.779 | 0.822 |
| Want no more children | 0.578 | 0.016 | 1774 | 2259 | 1.360 | 0.028 | 0.546 | 0.610 |
| Want to delay next birth at least 2 years | 0.097 | 0.009 | 1774 | 2259 | 1.268 | 0.092 | 0.079 | 0.115 |
| Ideal number of children | 2.480 | 0.032 | 4791 | 5720 | 1.590 | 0.013 | 2.416 | 2.543 |
| Mothers protected against tetanus for last birth | 0.346 | 0.020 | 1607 | 1942 | 1.667 | 0.057 | 0.306 | 0.385 |
| Births with skilled attendant at delivery | 0.979 | 0.005 | 1863 | 2281 | 1.282 | 0.005 | 0.970 | 0.988 |
| Had diarrhoea in the last 2 weeks | 0.090 | 0.009 | 1797 | 2204 | 1.352 | 0.100 | 0.072 | 0.109 |
| Treated with ORS | 0.534 | 0.051 | 156 | 199 | 1.286 | 0.095 | 0.433 | 0.636 |
| Treated with clinic-recommended homemade fluid (RHF) | 0.730 | 0.042 | 156 | 199 | 1.228 | 0.057 | 0.646 | 0.813 |
| Sought treatment for diarrhoea | 0.655 | 0.049 | 156 | 199 | 1.287 | 0.074 | 0.557 | 0.752 |
| Ever had vaccination card | 0.991 | 0.005 | 344 | 416 | 0.944 | 0.005 | 0.982 | 1.001 |
| Vaccination card seen | 0.639 | 0.036 | 344 | 416 | 1.369 | 0.056 | 0.568 | 0.711 |
| Received BCG vaccination | 0.927 | 0.018 | 344 | 416 | 1.285 | 0.019 | 0.892 | 0.963 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.627 | 0.034 | 344 | 416 | 1.308 | 0.055 | 0.558 | 0.696 |
| Received HepB vaccination (3 doses) | 0.629 | 0.033 | 344 | 416 | 1.243 | 0.052 | 0.563 | 0.694 |
| Received birth dose polio 0 vaccination | 0.933 | 0.019 | 344 | 416 | 1.388 | 0.020 | 0.896 | 0.971 |
| Received oral polio vaccination (non-birth dose) | 0.769 | 0.029 | 344 | 416 | 1.264 | 0.038 | 0.711 | 0.827 |
| Received pneumococcal vaccination (3 doses) | 0.605 | 0.035 | 344 | 416 | 1.335 | 0.059 | 0.534 | 0.676 |
| Received rotavirus vaccination (2 doses) | 0.689 | 0.034 | 344 | 416 | 1.363 | 0.050 | 0.620 | 0.757 |
| Received measles vaccination | 0.861 | 0.024 | 344 | 416 | 1.251 | 0.027 | 0.814 | 0.909 |
| Received all basic vaccinations | 0.590 | 0.034 | 344 | 416 | 1.272 | 0.058 | 0.522 | 0.658 |
| Received all age appropriate vaccinations (12-23 months) | 0.515 | 0.035 | 344 | 416 | 1.296 | 0.069 | 0.445 | 0.586 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.455 | 0.038 | 345 | 414 | 1.420 | 0.084 | 0.378 | 0.532 |
| Received measles 2 vaccination (children 24-35) | 0.577 | 0.036 | 345 | 414 | 1.358 | 0.063 | 0.505 | 0.650 |
| Received all age appropriate vaccinations (24-35 months) | 0.393 | 0.037 | 345 | 414 | 1.411 | 0.095 | 0.319 | 0.468 |
| Height-for-age (-2SD) | 0.257 | 0.027 | 642 | 713 | 1.480 | 0.105 | 0.203 | 0.312 |
| Weight-for-height (-2SD) | 0.024 | 0.007 | 626 | 698 | 1.100 | 0.286 | 0.010 | 0.037 |
| Weight-for-height (+2SD) | 0.132 | 0.017 | 626 | 698 | 1.181 | 0.128 | 0.098 | 0.166 |
| Weight-for-age (-2SD) | 0.058 | 0.012 | 652 | 721 | 1.254 | 0.200 | 0.035 | 0.081 |
| Body Mass Index (BMI) <18.5 | 0.022 | 0.003 | 2536 | 2869 | 1.093 | 0.149 | 0.015 | 0.028 |
| Body Mass Index (BMI) $\geq 25$ | 0.684 | 0.013 | 2536 | 2869 | 1.359 | 0.019 | 0.658 | 0.710 |
| Body Mass Index (BMI) $\geq 35$ | 0.224 | 0.013 | 2536 | 2869 | 1.482 | 0.056 | 0.199 | 0.249 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.453 | 0.015 | 2525 | 2873 | 1.535 | 0.034 | 0.422 | 0.483 |
| Waist for height ratio $\geq 0.5$ | 0.667 | 0.014 | 2524 | 2872 | 1.492 | 0.021 | 0.639 | 0.695 |
| Prevalence of anaemia (children 6-59 months) | 0.622 | 0.036 | 464 | 539 | 1.534 | 0.059 | 0.549 | 0.695 |
| Prevalence of anaemia (women 15+) | 0.298 | 0.014 | 2240 | 2584 | 1.421 | 0.047 | 0.270 | 0.325 |
| Had 2+ sexual partners in past 12 months | 0.046 | 0.004 | 4805 | 5731 | 1.174 | 0.077 | 0.039 | 0.053 |
| Condom use at last sex | 0.612 | 0.041 | 229 | 263 | 1.283 | 0.068 | 0.529 | 0.694 |
| Abstinence among never-in-union youth (never had sex) | 0.384 | 0.017 | 1393 | 1579 | 1.293 | 0.044 | 0.350 | 0.418 |
| Had an HIV test and received results in past 12 months | 0.571 | 0.010 | 4805 | 5731 | 1.468 | 0.018 | 0.550 | 0.592 |
| Cervical cancer screening | 0.577 | 0.020 | 1665 | 1973 | 1.655 | 0.035 | 0.537 | 0.617 |
| Asthma symptoms | 0.036 | 0.005 | 3361 | 3996 | 1.407 | 0.126 | 0.027 | 0.045 |
| COPD symptoms | 0.021 | 0.003 | 3361 | 3996 | 1.313 | 0.155 | 0.014 | 0.027 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.465 | 0.015 | 2601 | 2938 | 1.513 | 0.032 | 0.435 | 0.494 |
| Current smoking (daily or occassional) | 0.108 | 0.008 | 3361 | 3996 | 1.581 | 0.078 | 0.091 | 0.125 |
| Drank alcohol in past 12 months | 0.224 | 0.010 | 3361 | 3996 | 1.432 | 0.046 | 0.203 | 0.244 |

Table B.3-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Risky alcohol intake (>5 or more drinks) | 0.060 | 0.005 | 3361 | 3996 | 1.327 | 0.090 | 0.049 | 0.071 |
| Show signs of problem drinking by the CAGE test | 0.032 | 0.003 | 3361 | 3996 | 1.138 | 0.109 | 0.025 | 0.038 |
| Codeine-containing medication misuse | 0.029 | 0.005 | 3361 | 3996 | 1.671 | 0.167 | 0.019 | 0.039 |
| Physical, sexual, or emotional violence by a partner in the previous |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.080 | 0.007 | 3302 | 3829 | 1.585 | 0.094 | 0.065 | 0.095 |
| Sexual violence by a current or former partner in the previous 12 months | 0.022 | 0.004 | 3302 | 3829 | 1.383 | 0.161 | 0.015 | 0.029 |
| Emotional violence by a current or former partner in the previous |  |  |  |  |  |  |  |  |
| 12 months | 0.089 | 0.007 | 3302 | 3829 | 1.409 | 0.078 | 0.075 | 0.103 |
| Mobile phone ownership | 0.923 | 0.006 | 4805 | 5731 | 1.586 | 0.007 | 0.911 | 0.935 |
| Bank account ownership | 0.602 | 0.014 | 4805 | 5731 | 1.932 | 0.023 | 0.575 | 0.629 |
| Internet use in past 12 months | 0.560 | 0.015 | 4805 | 5731 | 2.064 | 0.026 | 0.531 | 0.590 |
| Total fertility rate (last 3 years) | 2.432 | 0.084 | 13745 | 16446 | 1.213 | 0.034 | 2.264 | 2.600 |
| Neonatal mortality (last 0-4 years) | 18.780 | 5.397 | 1871 | 2289 | 1.528 | 0.287 | 7.986 | 29.574 |
| Post-neonatal mortality (last 0-4 years) | 14.941 | 3.638 | 1865 | 2295 | 1.323 | 0.243 | 7.665 | 22.216 |
| Infant mortality (last 0-4 years) | 33.720 | 6.460 | 1873 | 2294 | 1.464 | 0.192 | 20.801 | 46.640 |
| Child mortality (last 0-4 years) | 4.520 | 1.475 | 1879 | 2301 | 1.223 | 0.326 | 1.571 | 7.469 |
| Under-five mortality (last 0-4 years) | 38.088 | 6.462 | 1878 | 2301 | 1.404 | 0.170 | 25.164 | 51.011 |
| HIV prevalence among women 15-49 | 0.274 | 0.018 | 1390 | 1667 | 1.496 | 0.065 | 0.238 | 0.309 |
| HIV prevalence among young women 15-24 | 0.116 | 0.021 | 449 | 530 | 1.406 | 0.183 | 0.074 | 0.159 |
| HIV prevalence among women 15+ | 0.238 | 0.014 | 2029 | 2353 | 1.516 | 0.060 | 0.209 | 0.266 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 1 | 0 | 1768 | 2203 | na | 0 | 1 | 1 |
| Literacy | 0.964 | 0.007 | 1768 | 2203 | 1.544 | 0.007 | 0.951 | 0.978 |
| No education | 0.017 | 0.004 | 1768 | 2203 | 1.327 | 0.244 | 0.008 | 0.025 |
| Secondary or higher education | 0.894 | 0.010 | 1768 | 2203 | 1.403 | 0.012 | 0.873 | 0.914 |
| Never-in-union (never married or lived with a partner) | 0.603 | 0.018 | 1768 | 2203 | 1.561 | 0.030 | 0.567 | 0.639 |
| In-union (married or living with a partner) | 0.347 | 0.017 | 1768 | 2203 | 1.481 | 0.048 | 0.314 | 0.381 |
| Had first sexual intercourse before age 18 | 0.581 | 0.020 | 1464 | 1854 | 1.566 | 0.035 | 0.540 | 0.621 |
| Want no more children | 0.454 | 0.029 | 564 | 765 | 1.388 | 0.064 | 0.395 | 0.512 |
| Want to delay birth at least 2 years | 0.094 | 0.017 | 564 | 765 | 1.395 | 0.183 | 0.060 | 0.128 |
| Ideal number of children | 3.084 | 0.071 | 1742 | 2168 | 1.559 | 0.023 | 2.942 | 3.226 |
| Body Mass Index (BMI) <18.5 | 0.091 | 0.009 | 1742 | 2025 | 1.257 | 0.098 | 0.073 | 0.109 |
| Body Mass Index (BMI) $\geq 25$ | 0.342 | 0.018 | 1742 | 2025 | 1.567 | 0.054 | 0.305 | 0.378 |
| Body Mass Index (BMI) $\geq 35$ | 0.036 | 0.007 | 1742 | 2025 | 1.437 | 0.184 | 0.023 | 0.049 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.117 | 0.012 | 1718 | 2012 | 1.531 | 0.102 | 0.093 | 0.140 |
| Waist for height ratio $\geq 0.5$ | 0.369 | 0.018 | 1716 | 2011 | 1.576 | 0.050 | 0.332 | 0.406 |
| Current smoking (daily or occassional) | 0.395 | 0.014 | 2324 | 2874 | 1.373 | 0.035 | 0.367 | 0.423 |
| Drank alcohol in past 12 months | 0.541 | 0.015 | 2324 | 2874 | 1.421 | 0.027 | 0.511 | 0.570 |
| Risky alcohol intake (>5 or more drinks) | 0.290 | 0.015 | 2324 | 2874 | 1.569 | 0.051 | 0.261 | 0.320 |
| Show signs of problem drinking by the CAGE test | 0.160 | 0.012 | 2324 | 2874 | 1.562 | 0.074 | 0.136 | 0.184 |
| Codeine-containing medication misuse | 0.016 | 0.004 | 2324 | 2874 | 1.363 | 0.225 | 0.009 | 0.023 |
| Prevalence of anaemia | 0.162 | 0.013 | 1426 | 1661 | 1.318 | 0.082 | 0.135 | 0.188 |
| Had 2+ sexual partners in past 12 months | 0.160 | 0.013 | 1768 | 2203 | 1.443 | 0.079 | 0.135 | 0.185 |
| Condom use at last sex | 0.670 | 0.036 | 268 | 353 | 1.266 | 0.054 | 0.597 | 0.743 |
| Abstinence among never-in-union youth (never had sex) | 0.282 | 0.028 | 594 | 694 | 1.504 | 0.099 | 0.226 | 0.338 |
| Had paid sex in past 12 months | 0.033 | 0.005 | 1768 | 2203 | 1.251 | 0.162 | 0.022 | 0.043 |
| Had HIV test and received results in past 12 months | 0.466 | 0.019 | 1768 | 2203 | 1.614 | 0.041 | 0.427 | 0.504 |
| Circumcised | 0.571 | 0.020 | 1768 | 2203 | 1.688 | 0.035 | 0.531 | 0.611 |
| Asthma symptoms | 0.026 | 0.004 | 2324 | 2874 | 1.196 | 0.151 | 0.018 | 0.034 |
| COPD symptoms | 0.012 | 0.003 | 2324 | 2874 | 1.147 | 0.214 | 0.007 | 0.017 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.454 | 0.017 | 1728 | 2002 | 1.456 | 0.038 | 0.419 | 0.489 |
| Mobile phone ownership | 0.903 | 0.011 | 1768 | 2203 | 1.563 | 0.012 | 0.882 | 0.925 |
| Bank account ownership | 0.650 | 0.018 | 1768 | 2203 | 1.614 | 0.028 | 0.613 | 0.686 |
| Internet use in past 12 months | 0.580 | 0.020 | 1768 | 2203 | 1.700 | 0.034 | 0.541 | 0.620 |
| HIV prevalence among men 15-49 | 0.154 | 0.020 | 953 | 1508 | 1.728 | 0.132 | 0.113 | 0.194 |
| HIV prevalence among young men 15-24 | 0.047 | 0.017 | 358 | 530 | 1.511 | 0.362 | 0.013 | 0.080 |
| HIV prevalence among men $\mathbf{1 5 +}^{+}$ | 0.139 | 0.016 | 1276 | 2042 | 1.619 | 0.113 | 0.108 | 0.171 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.217 | 0.014 | 2343 | 3176 | 1.681 | 0.066 | 0.188 | 0.245 |
| HIV prevalence among respondents 15-24 | 0.081 | 0.014 | 807 | 1060 | 1.419 | 0.168 | 0.054 | 0.109 |
| HIV prevalence among respondents $15+$ | 0.192 | 0.012 | 3305 | 4395 | 1.710 | 0.061 | 0.168 | 0.215 |

[^44]Table B. 4 Sampling errors: Non-urban sample, South Africa DHS 2017

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.763 | 0.021 | 16719 | 13549 | 2.628 | 0.027 | 0.721 | 0.805 |
| Population using safely managed sanitation services | 0.866 | 0.010 | 16719 | 13549 | 1.760 | 0.011 | 0.846 | 0.885 |
| Population with access to electricity | 0.859 | 0.021 | 16719 | 13549 | 3.257 | 0.025 | 0.816 | 0.901 |
| Population with primary reliance on clean fuels | 0.561 | 0.023 | 16719 | 13549 | 2.534 | 0.041 | 0.515 | 0.608 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0 | 0 | 3709 | 2783 | na | na | 0 | 0 |
| Literacy | 0.945 | 0.005 | 3709 | 2783 | 1.248 | 0.005 | 0.936 | 0.954 |
| No education | 0.028 | 0.004 | 3709 | 2783 | 1.434 | 0.140 | 0.020 | 0.035 |
| Secondary or higher education | 0.842 | 0.009 | 3709 | 2783 | 1.483 | 0.011 | 0.824 | 0.860 |
| Never-in-union (never married or lived with a partner) | 0.656 | 0.013 | 3709 | 2783 | 1.642 | 0.020 | 0.630 | 0.681 |
| In-union (married or living with a partner) | 0.284 | 0.012 | 3709 | 2783 | 1.614 | 0.042 | 0.260 | 0.308 |
| In a union before age 15 (women 20-24) | 0.004 | 0.003 | 607 | 464 | 0.948 | 0.582 | 0 | 0.009 |
| In a union before age 18 (women 20-24) | 0.043 | 0.011 | 607 | 464 | 1.323 | 0.255 | 0.021 | 0.064 |
| In a union before age 18 (women 20-49) | 0.079 | 0.007 | 2973 | 2231 | 1.320 | 0.083 | 0.066 | 0.092 |
| Had sexual intercourse before age 18 | 0.514 | 0.014 | 2973 | 2231 | 1.476 | 0.026 | 0.487 | 0.541 |
| Currently pregnant | 0.036 | 0.004 | 3709 | 2783 | 1.183 | 0.101 | 0.028 | 0.043 |
| Currently using any method | 0.599 | 0.013 | 1652 | 1227 | 1.086 | 0.022 | 0.572 | 0.625 |
| Currently using a modern method | 0.596 | 0.013 | 1652 | 1227 | 1.080 | 0.022 | 0.570 | 0.622 |
| Currently using pill | 0.060 | 0.009 | 1652 | 1227 | 1.599 | 0.156 | 0.041 | 0.078 |
| Currently using condoms | 0.156 | 0.011 | 1652 | 1227 | 1.220 | 0.070 | 0.134 | 0.178 |
| Currently using injectables - 3 months | 0.214 | 0.013 | 1652 | 1227 | 1.267 | 0.060 | 0.188 | 0.239 |
| Currently using injectables - 2 months | 0.087 | 0.009 | 1652 | 1227 | 1.246 | 0.099 | 0.070 | 0.104 |
| Currently using implants | 0.040 | 0.006 | 1652 | 1227 | 1.192 | 0.144 | 0.028 | 0.051 |
| Currently using female sterilisation | 0.030 | 0.005 | 1652 | 1227 | 1.181 | 0.165 | 0.020 | 0.040 |
| Currently using withdrawal | 0.002 | 0.001 | 1652 | 1227 | 0.830 | 0.510 | 0 | 0.003 |
| Currently using IUD | 0.006 | 0.002 | 1652 | 1227 | 1.216 | 0.381 | 0.001 | 0.011 |
| Using public sector source | 0.880 | 0.011 | 1734 | 1315 | 1.399 | 0.012 | 0.858 | 0.902 |
| Demand satisfied by modern methods | 0.790 | 0.011 | 2207 | 1665 | 1.278 | 0.014 | 0.767 | 0.812 |
| Want no more children | 0.586 | 0.018 | 1067 | 790 | 1.160 | 0.030 | 0.551 | 0.621 |
| Want to delay next birth at least 2 years | 0.079 | 0.010 | 1067 | 790 | 1.265 | 0.132 | 0.058 | 0.100 |
| Ideal number of children | 2.836 | 0.035 | 3694 | 2772 | 1.453 | 0.012 | 2.766 | 2.907 |
| Mothers protected against tetanus for last birth | 0.362 | 0.015 | 1429 | 1094 | 1.178 | 0.041 | 0.333 | 0.392 |
| Births with skilled attendant at delivery | 0.946 | 0.006 | 1685 | 1291 | 1.118 | 0.007 | 0.933 | 0.959 |
| Had diarrhoea in the last 2 weeks | 0.127 | 0.011 | 1616 | 1240 | 1.336 | 0.086 | 0.105 | 0.149 |
| Treated with ORS | 0.489 | 0.042 | 194 | 157 | 1.194 | 0.085 | 0.405 | 0.572 |
| Treated with clinic-recommended homemade fluid (RHF) | 0.720 | 0.044 | 194 | 157 | 1.393 | 0.062 | 0.631 | 0.809 |
| Sought treatment for diarrhoea | 0.600 | 0.043 | 194 | 157 | 1.249 | 0.072 | 0.514 | 0.686 |
| Ever had vaccination card | 0.963 | 0.013 | 326 | 261 | 1.176 | 0.013 | 0.938 | 0.988 |
| Vaccination card seen | 0.702 | 0.035 | 326 | 261 | 1.420 | 0.051 | 0.631 | 0.773 |
| Received BCG vaccination | 0.921 | 0.015 | 326 | 261 | 1.009 | 0.016 | 0.892 | 0.950 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.684 | 0.036 | 326 | 261 | 1.424 | 0.053 | 0.612 | 0.756 |
| Received HepB vaccination (3 doses) | 0.684 | 0.035 | 326 | 261 | 1.371 | 0.051 | 0.614 | 0.754 |
| Received birth dose polio 0 vaccination | 0.906 | 0.019 | 326 | 261 | 1.220 | 0.021 | 0.868 | 0.945 |
| Received oral polio vaccination (non-birth dose) | 0.787 | 0.032 | 326 | 261 | 1.419 | 0.040 | 0.724 | 0.851 |
| Received pneumococcal vaccination (3 doses) | 0.642 | 0.042 | 326 | 261 | 1.622 | 0.066 | 0.557 | 0.726 |
| Received rotavirus vaccination (2 doses) | 0.721 | 0.032 | 326 | 261 | 1.297 | 0.044 | 0.658 | 0.785 |
| Received measles vaccination | 0.861 | 0.022 | 326 | 261 | 1.170 | 0.025 | 0.818 | 0.905 |
| Received all basic vaccinations | 0.646 | 0.035 | 326 | 261 | 1.360 | 0.055 | 0.575 | 0.717 |
| Received all age appropriate vaccinations (12-23 months) | 0.544 | 0.040 | 326 | 261 | 1.469 | 0.073 | 0.464 | 0.624 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.525 | 0.029 | 331 | 246 | 1.055 | 0.056 | 0.466 | 0.584 |
| Received measles 2 vaccination (children 24-35) | 0.617 | 0.031 | 331 | 246 | 1.150 | 0.050 | 0.555 | 0.679 |
| Received all age appropriate vaccinations (24-35 months) | 0.460 | 0.033 | 331 | 246 | 1.202 | 0.072 | 0.394 | 0.527 |
| Height-for-age (-2SD) | 0.292 | 0.018 | 826 | 691 | 1.068 | 0.061 | 0.256 | 0.327 |
| Weight-for-height (-2SD) | 0.025 | 0.007 | 823 | 686 | 1.272 | 0.271 | 0.012 | 0.039 |
| Weight-for-height (+2SD) | 0.134 | 0.014 | 823 | 686 | 1.176 | 0.104 | 0.106 | 0.161 |
| Weight-for-age (-2SD) | 0.060 | 0.013 | 827 | 695 | 1.622 | 0.214 | 0.034 | 0.086 |
| Body Mass Index (BMI) <18.5 | 0.033 | 0.004 | 2308 | 1773 | 1.076 | 0.121 | 0.025 | 0.041 |
| Body Mass Index (BMI) $\geq 25$ | 0.661 | 0.014 | 2308 | 1773 | 1.426 | 0.021 | 0.633 | 0.689 |
| Body Mass Index (BMI) $\geq 35$ | 0.170 | 0.011 | 2308 | 1773 | 1.358 | 0.063 | 0.149 | 0.192 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.454 | 0.014 | 2327 | 1792 | 1.391 | 0.032 | 0.425 | 0.482 |
| Waist for height ratio $\geq 0.5$ | 0.674 | 0.013 | 2322 | 1788 | 1.360 | 0.020 | 0.648 | 0.700 |
| Prevalence of anaemia (children 6-59 months) | 0.604 | 0.023 | 673 | 555 | 1.161 | 0.037 | 0.559 | 0.649 |
| Prevalence of anaemia (women 15+) | 0.320 | 0.016 | 2191 | 1660 | 1.639 | 0.052 | 0.287 | 0.353 |
| Had 2+ sexual partners in past 12 months | 0.044 | 0.004 | 3709 | 2783 | 1.283 | 0.098 | 0.036 | 0.053 |
| Condom use at last sex | 0.501 | 0.046 | 165 | 123 | 1.167 | 0.091 | 0.410 | 0.592 |
| Abstinence among never-in-union youth (never had sex) | 0.356 | 0.017 | 1228 | 929 | 1.242 | 0.048 | 0.322 | 0.390 |
| Had an HIV test and received results in past 12 months | 0.615 | 0.010 | 3709 | 2783 | 1.307 | 0.017 | 0.594 | 0.636 |
| Cervical cancer screening | 0.408 | 0.018 | 1215 | 945 | 1.249 | 0.043 | 0.373 | 0.443 |
| Asthma symptoms | 0.028 | 0.004 | 2765 | 2130 | 1.244 | 0.139 | 0.020 | 0.036 |
| COPD symptoms | 0.016 | 0.003 | 2765 | 2130 | 1.063 | 0.156 | 0.011 | 0.022 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.439 | 0.015 | 2402 | 1837 | 1.459 | 0.034 | 0.409 | 0.468 |
| Current smoking (daily or occassional) | 0.023 | 0.003 | 2765 | 2130 | 1.071 | 0.133 | 0.017 | 0.029 |
| Drank alcohol in past 12 months | 0.110 | 0.007 | 2765 | 2130 | 1.253 | 0.068 | 0.095 | 0.125 |

Table B.4-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Risky alcohol intake (>5 or more drinks) | 0.026 | 0.005 | 2765 | 2130 | 1.494 | 0.173 | 0.017 | 0.035 |
| Show signs of problem drinking by the CAGE test | 0.020 | 0.003 | 2765 | 2130 | 1.107 | 0.148 | 0.014 | 0.026 |
| Codeine-containing medication misuse | 0.012 | 0.002 | 2765 | 2130 | 1.176 | 0.206 | 0.007 | 0.017 |
| Physical, sexual, or emotional violence by a partner in the previous |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.073 | 0.007 | 2623 | 2035 | 1.298 | 0.090 | 0.060 | 0.086 |
| Sexual violence by a current or former partner in the previous 12 months | 0.025 | 0.005 | 2623 | 2035 | 1.622 | 0.196 | 0.015 | 0.035 |
| Emotional violence by a current or former partner in the previous |  |  |  |  |  |  |  |  |
| Mobile phone ownership | 0.890 | 0.007 | 3709 | 2783 | 1.374 | 0.008 | 0.876 | 0.904 |
| Bank account ownership | 0.410 | 0.013 | 3709 | 2783 | 1.625 | 0.032 | 0.383 | 0.436 |
| Internet use in past 12 months | 0.298 | 0.012 | 3709 | 2783 | 1.608 | 0.041 | 0.273 | 0.322 |
| Total fertility rate (last 3 years) | 3.098 | 0.101 | 10443 | 7838 | 1.123 | 0.033 | 2.896 | 3.300 |
| Neonatal mortality (last 0-4 years) | 25.034 | 4.531 | 1681 | 1288 | 1.126 | 0.181 | 15.973 | 34.096 |
| Post-neonatal mortality (last 0-4 years) | 13.571 | 2.854 | 1677 | 1285 | 1.025 | 0.210 | 7.864 | 19.279 |
| Infant mortality (last 0-4 years) | 38.606 | 5.097 | 1685 | 1290 | 1.045 | 0.132 | 28.412 | 48.799 |
| Child mortality (last 0-4 years) | 11.123 | 2.988 | 1693 | 1286 | 0.982 | 0.269 | 5.147 | 17.100 |
| Under-five mortality (last 0-4 years) | 49.300 | 5.989 | 1693 | 1296 | 1.040 | 0.121 | 37.321 | 61.278 |
| HIV prevalence among women 15-49 | 0.272 | 0.013 | 1336 | 818 | 1.033 | 0.046 | 0.247 | 0.297 |
| HIV prevalence among young women 15-24 | 0.116 | 0.016 | 486 | 301 | 1.094 | 0.137 | 0.084 | 0.148 |
| HIV prevalence among women 15+ | 0.223 | 0.010 | 2038 | 1247 | 1.101 | 0.046 | 0.203 | 0.243 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0 | 0 | 1411 | 999 | na | na | 0 | 0 |
| Literacy | 0.916 | 0.011 | 1411 | 999 | 1.435 | 0.012 | 0.895 | 0.938 |
| No education | 0.026 | 0.005 | 1411 | 999 | 1.104 | 0.180 | 0.017 | 0.035 |
| Secondary or higher education | 0.786 | 0.015 | 1411 | 999 | 1.388 | 0.019 | 0.756 | 0.817 |
| Never-in-union (never married or lived with a partner) | 0.746 | 0.018 | 1411 | 999 | 1.561 | 0.024 | 0.709 | 0.782 |
| In-union (married or living with a partner) | 0.223 | 0.018 | 1411 | 999 | 1.638 | 0.081 | 0.187 | 0.259 |
| Had first sexual intercourse before age 18 | 0.575 | 0.018 | 1010 | 701 | 1.147 | 0.031 | 0.540 | 0.611 |
| Want no more children | 0.447 | 0.040 | 326 | 223 | 1.449 | 0.090 | 0.367 | 0.527 |
| Want to delay birth at least 2 years | 0.149 | 0.026 | 326 | 223 | 1.296 | 0.172 | 0.098 | 0.200 |
| Ideal number of children | 3.340 | 0.062 | 1403 | 994 | 1.172 | 0.019 | 3.216 | 3.465 |
| Body Mass Index (BMI) <18.5 | 0.101 | 0.009 | 1533 | 1080 | 1.106 | 0.084 | 0.084 | 0.118 |
| Body Mass Index (BMI) $\geq 25$ | 0.261 | 0.015 | 1533 | 1080 | 1.374 | 0.059 | 0.230 | 0.292 |
| Body Mass Index (BMI) $\geq 35$ | 0.022 | 0.006 | 1533 | 1080 | 1.495 | 0.257 | 0.011 | 0.033 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.064 | 0.008 | 1506 | 1064 | 1.209 | 0.120 | 0.048 | 0.079 |
| Waist for height ratio $\geq 0.5$ | 0.316 | 0.015 | 1503 | 1062 | 1.269 | 0.048 | 0.286 | 0.347 |
| Current smoking (daily or occassional) | 0.326 | 0.014 | 1886 | 1336 | 1.313 | 0.043 | 0.298 | 0.355 |
| Drank alcohol in past 12 months | 0.532 | 0.021 | 1886 | 1336 | 1.790 | 0.039 | 0.491 | 0.573 |
| Risky alcohol intake (>5 or more drinks) | 0.242 | 0.013 | 1886 | 1336 | 1.313 | 0.054 | 0.216 | 0.268 |
| Show signs of problem drinking by the CAGE test | 0.158 | 0.012 | 1886 | 1336 | 1.391 | 0.074 | 0.135 | 0.181 |
| Codeine-containing medication misuse | 0.013 | 0.003 | 1886 | 1336 | 1.203 | 0.240 | 0.007 | 0.019 |
| Prevalence of anaemia | 0.179 | 0.012 | 1343 | 945 | 1.150 | 0.067 | 0.155 | 0.203 |
| Had 2+ sexual partners in past 12 months | 0.191 | 0.014 | 1411 | 999 | 1.339 | 0.073 | 0.163 | 0.219 |
| Condom use at last sex | 0.621 | 0.036 | 267 | 190 | 1.200 | 0.058 | 0.549 | 0.692 |
| Abstinence among never-in-union youth (never had sex) | 0.342 | 0.021 | 674 | 497 | 1.139 | 0.061 | 0.300 | 0.384 |
| Had paid sex in past 12 months | 0.020 | 0.004 | 1411 | 999 | 1.073 | 0.199 | 0.012 | 0.028 |
| Had HIV test and received results in past 12 months | 0.402 | 0.017 | 1411 | 999 | 1.302 | 0.042 | 0.368 | 0.436 |
| Circumcised | 0.567 | 0.021 | 1411 | 999 | 1.558 | 0.036 | 0.525 | 0.608 |
| Asthma symptoms | 0.053 | 0.007 | 1886 | 1336 | 1.403 | 0.137 | 0.038 | 0.067 |
| COPD symptoms | 0.027 | 0.005 | 1886 | 1336 | 1.456 | 0.202 | 0.016 | 0.038 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.405 | 0.016 | 1525 | 1080 | 1.302 | 0.040 | 0.372 | 0.438 |
| Mobile phone ownership | 0.846 | 0.013 | 1411 | 999 | 1.298 | 0.015 | 0.821 | 0.871 |
| Bank account ownership | 0.393 | 0.017 | 1411 | 999 | 1.273 | 0.042 | 0.360 | 0.426 |
| Internet use in past 12 months | 0.387 | 0.024 | 1411 | 999 | 1.849 | 0.062 | 0.339 | 0.435 |
| HIV prevalence among men 15-49 | 0.123 | 0.012 | 910 | 691 | 1.149 | 0.102 | 0.098 | 0.148 |
| HIV prevalence among young men 15-24 | 0.018 | 0.006 | 494 | 394 | 1.044 | 0.347 | 0.006 | 0.031 |
| HIV prevalence among men $15+$ | 0.119 | 0.011 | 1241 | 943 | 1.176 | 0.091 | 0.098 | 0.141 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.204 | 0.009 | 2246 | 1509 | 1.091 | 0.046 | 0.185 | 0.222 |
| HIV prevalence among respondents 15-24 | 0.061 | 0.008 | 980 | 696 | 1.070 | 0.135 | 0.044 | 0.077 |
| HIV prevalence among respondents $15+$ | 0.178 | 0.007 | 3279 | 2189 | 1.102 | 0.041 | 0.163 | 0.193 |

[^45]Table B. 5 Sampling errors: Western Cape sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.993 | 0.003 | 3294 | 4071 | 1.146 | 0.003 | 0.987 | 1 |
| Population using safely managed sanitation services | 0.824 | 0.026 | 3294 | 4071 | 1.999 | 0.032 | 0.772 | 0.877 |
| Population with access to electricity | 0.991 | 0.004 | 3294 | 4071 | 1.141 | 0.004 | 0.984 | 0.999 |
| Population with primary reliance on clean fuels | 0.989 | 0.004 | 3294 | 4071 | 1.057 | 0.004 | 0.982 | 0.996 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.978 | 0.006 | 656 | 995 | 1.125 | 0.007 | 0.965 | 0.991 |
| Literacy | 0.991 | 0.003 | 656 | 995 | 0.910 | 0.003 | 0.984 | 0.998 |
| No education | 0.015 | 0.005 | 656 | 995 | 1.072 | 0.341 | 0.005 | 0.025 |
| Secondary or higher education | 0.924 | 0.014 | 656 | 995 | 1.356 | 0.015 | 0.896 | 0.952 |
| Never-in-union (never married or lived with a partner) | 0.491 | 0.022 | 656 | 995 | 1.141 | 0.045 | 0.446 | 0.536 |
| In-union (married or living with a partner) | 0.456 | 0.022 | 656 | 995 | 1.142 | 0.049 | 0.412 | 0.501 |
| In a union before age 15 (women 20-24) | 0.009 | 0.009 | 91 | 136 | 0.906 | 0.978 | 0 | 0.028 |
| In a union before age 18 (women 20-24) | 0.046 | 0.022 | 91 | 136 | 0.999 | 0.479 | 0.002 | 0.090 |
| In a union before age 18 (women 20-49) | 0.041 | 0.009 | 550 | 835 | 1.103 | 0.229 | 0.022 | 0.059 |
| Had sexual intercourse before age 18 | 0.389 | 0.026 | 550 | 835 | 1.270 | 0.068 | 0.336 | 0.441 |
| Currently pregnant | 0.033 | 0.008 | 656 | 995 | 1.095 | 0.232 | 0.018 | 0.048 |
| Currently using any method | 0.627 | 0.030 | 342 | 525 | 1.162 | 0.049 | 0.566 | 0.688 |
| Currently using a modern method | 0.624 | 0.030 | 342 | 525 | 1.153 | 0.048 | 0.564 | 0.685 |
| Currently using pill | 0.044 | 0.010 | 342 | 525 | 0.943 | 0.238 | 0.023 | 0.065 |
| Currently using condoms | 0.138 | 0.021 | 342 | 525 | 1.150 | 0.156 | 0.095 | 0.181 |
| Currently using injectables - 3 months | 0.154 | 0.023 | 342 | 525 | 1.173 | 0.149 | 0.108 | 0.200 |
| Currently using injectables - 2 months | 0.056 | 0.015 | 342 | 525 | 1.219 | 0.271 | 0.026 | 0.087 |
| Currently using implants | 0.070 | 0.014 | 342 | 525 | 0.998 | 0.198 | 0.042 | 0.097 |
| Currently using female sterilisation | 0.113 | 0.016 | 342 | 525 | 0.946 | 0.143 | 0.081 | 0.146 |
| Currently using withdrawal | 0.003 | 0.003 | 342 | 525 | 1.026 | 0.999 | 0 | 0.009 |
| Currently using IUD | 0.025 | 0.010 | 342 | 525 | 1.164 | 0.397 | 0.005 | 0.044 |
| Using public sector source | 0.780 | 0.037 | 321 | 499 | 1.575 | 0.047 | 0.707 | 0.853 |
| Demand satisfied by modern methods | 0.853 | 0.019 | 379 | 584 | 1.045 | 0.022 | 0.815 | 0.891 |
| Want no more children | 0.642 | 0.029 | 295 | 454 | 1.043 | 0.045 | 0.583 | 0.700 |
| Want to delay next birth at least 2 years | 0.118 | 0.019 | 295 | 454 | 1.001 | 0.159 | 0.081 | 0.156 |
| Ideal number of children | 2.322 | 0.069 | 656 | 995 | 1.314 | 0.030 | 2.184 | 2.460 |
| Mothers protected against tetanus for last birth | 0.061 | 0.018 | 182 | 276 | 1.006 | 0.292 | 0.025 | 0.096 |
| Births with skilled attendant at delivery | 0.992 | 0.006 | 206 | 313 | 0.929 | 0.006 | 0.980 | 1.003 |
| Had diarrhoea in the last 2 weeks | 0.054 | 0.016 | 202 | 306 | 1.032 | 0.301 | 0.021 | 0.086 |
| Ever had vaccination card | 1 | 0 | 36 | 54 | na | 0 | 1 | 1 |
| Vaccination card seen | 0.760 | 0.067 | 36 | 54 | 0.943 | 0.088 | 0.626 | 0.894 |
| Received BCG vaccination | 0.914 | 0.044 | 36 | 54 | 0.942 | 0.048 | 0.826 | 1.002 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.700 | 0.077 | 36 | 54 | 1.012 | 0.110 | 0.545 | 0.854 |
| Received HepB vaccination (3 doses) | 0.643 | 0.081 | 36 | 54 | 1.019 | 0.126 | 0.480 | 0.805 |
| Received birth dose polio 0 vaccination | 0.881 | 0.065 | 36 | 54 | 1.210 | 0.074 | 0.750 | 1.011 |
| Received oral polio vaccination (non-birth dose) | 0.914 | 0.044 | 36 | 54 | 0.942 | 0.048 | 0.826 | 1.002 |
| Received pneumococcal vaccination (3 doses) | 0.604 | 0.076 | 36 | 54 | 0.937 | 0.126 | 0.451 | 0.756 |
| Received rotavirus vaccination (2 doses) | 0.666 | 0.082 | 36 | 54 | 1.048 | 0.124 | 0.501 | 0.830 |
| Received measles vaccination | 0.776 | 0.058 | 36 | 54 | 0.841 | 0.075 | 0.660 | 0.893 |
| Received all basic vaccinations | 0.677 | 0.079 | 36 | 54 | 1.018 | 0.117 | 0.518 | 0.835 |
| Received all age appropriate vaccinations (12-23 months) | 0.490 | 0.080 | 36 | 54 | 0.957 | 0.162 | 0.331 | 0.649 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.544 | 0.087 | 37 | 57 | 1.078 | 0.161 | 0.369 | 0.718 |
| Received measles 2 vaccination (children 24-35) | 0.705 | 0.079 | 37 | 57 | 1.071 | 0.113 | 0.547 | 0.864 |
| Received all age appropriate vaccinations (24-35 months) | 0.435 | 0.095 | 37 | 57 | 1.184 | 0.219 | 0.244 | 0.626 |
| Height-for-age (-2SD) | 0.229 | 0.062 | 50 | 64 | 0.946 | 0.272 | 0.104 | 0.354 |
| Weight-for-height (-2SD) | 0.017 | 0.017 | 49 | 63 | 0.927 | 0.991 | 0 | 0.051 |
| Weight-for-height (+2SD) | 0.143 | 0.047 | 49 | 63 | 0.974 | 0.331 | 0.049 | 0.238 |
| Weight-for-age (-2SD) | 0.119 | 0.042 | 50 | 64 | 0.951 | 0.355 | 0.035 | 0.204 |
| Body Mass Index (BMI) < 18.5 | 0.023 | 0.008 | 284 | 415 | 0.901 | 0.351 | 0.007 | 0.039 |
| Body Mass Index (BMI) $\geq 25$ | 0.733 | 0.029 | 284 | 415 | 1.082 | 0.039 | 0.676 | 0.791 |
| Body Mass Index (BMI) $\geq 35$ | 0.263 | 0.025 | 284 | 415 | 0.936 | 0.094 | 0.213 | 0.312 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.590 | 0.033 | 285 | 416 | 1.115 | 0.055 | 0.525 | 0.655 |
| Waist for height ratio $\geq 0.5$ | 0.771 | 0.026 | 285 | 416 | 1.045 | 0.034 | 0.719 | 0.823 |
| Prevalence of anaemia (children 6-59 months) | 0.613 | 0.069 | 42 | 53 | 0.937 | 0.112 | 0.476 | 0.750 |
| Prevalence of anaemia (women 15+) | 0.239 | 0.030 | 288 | 421 | 1.180 | 0.125 | 0.179 | 0.299 |
| Had 2+ sexual partners in past 12 months | 0.025 | 0.005 | 656 | 995 | 0.905 | 0.222 | 0.014 | 0.036 |
| Had an HIV test and received results in past 12 months | 0.620 | 0.018 | 656 | 995 | 0.963 | 0.029 | 0.584 | 0.657 |
| Cervical cancer screening | 0.828 | 0.029 | 246 | 359 | 1.203 | 0.035 | 0.770 | 0.886 |
| Asthma symptoms | 0.042 | 0.011 | 474 | 703 | 1.167 | 0.257 | 0.020 | 0.063 |
| COPD symptoms | 0.044 | 0.010 | 474 | 703 | 1.034 | 0.222 | 0.024 | 0.063 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.516 | 0.035 | 297 | 433 | 1.195 | 0.067 | 0.447 | 0.586 |
| Current smoking (daily or occassional) | 0.264 | 0.029 | 474 | 703 | 1.453 | 0.112 | 0.205 | 0.323 |
| Drank alcohol in past 12 months | 0.273 | 0.023 | 474 | 703 | 1.113 | 0.084 | 0.227 | 0.318 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.090 | 0.014 | 474 | 703 | 1.077 | 0.157 | 0.062 | 0.118 |
| Show signs of problem drinking by the CAGE test | 0.048 | 0.010 | 474 | 703 | 1.022 | 0.210 | 0.028 | 0.068 |
| Codeine-containing medication misuse | 0.040 | 0.010 | 474 | 703 | 1.060 | 0.238 | 0.021 | 0.059 |
| Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.136 | 0.019 | 475 | 671 | 1.221 | 0.142 | 0.097 | 0.174 |

(Continued...)

Table B.5-Continued

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.086 | 0.017 | 475 | 671 | 1.294 | 0.194 | 0.052 | 0.119 |
| Sexual violence by a current or former partner in the previous 12 months | 0.007 | 0.004 | 475 | 671 | 0.903 | 0.480 | 0 | 0.015 |
| Emotional violence by a current or former partner in the previous 12 months | 0.107 | 0.016 | 475 | 671 | 1.121 | 0.149 | 0.075 | 0.139 |
| Mobile phone ownership | 0.879 | 0.020 | 656 | 995 | 1.576 | 0.023 | 0.839 | 0.919 |
| Bank account ownership | 0.659 | 0.024 | 656 | 995 | 1.283 | 0.036 | 0.612 | 0.707 |
| Internet use in past 12 months | 0.626 | 0.030 | 656 | 995 | 1.563 | 0.047 | 0.567 | 0.685 |
| Total fertility rate (last 3 years) | 2.088 | 0.191 | 1874 | 2848 | 1.088 | 0.091 | 1.706 | 2.469 |
| Infant mortality (last 0-9 years) | 38.956 | 18.716 | 432 | 649 | 1.349 | 0.480 | 1.524 | 76.387 |
| Child mortality (last 0-9 years) | 4.190 | 2.937 | 426 | 643 | 0.920 | 0.701 | 0 | 10.065 |
| Under-five mortality (last 0-9 years) | 42.983 | 18.570 | 432 | 649 | 1.314 | 0.432 | 5.842 | 80.124 |
| HIV prevalence among women 15-49 | 0.182 | 0.038 | 150 | 249 | 1.192 | 0.207 | 0.107 | 0.258 |
| HIV prevalence among young women 15-24 | 0.067 | 0.046 | 31 | 51 | 1.015 | 0.694 | 0 | 0.159 |
| HIV prevalence among women $15+$ | 0.131 | 0.028 | 249 | 413 | 1.299 | 0.212 | 0.076 | 0.187 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.946 | 0.022 | 186 | 328 | 1.306 | 0.023 | 0.903 | 0.990 |
| Literacy | 0.969 | 0.014 | 186 | 328 | 1.087 | 0.014 | 0.942 | 0.997 |
| No education | 0.006 | 0.006 | 186 | 328 | 1.020 | 0.996 | 0 | 0.017 |
| Secondary or higher education | 0.925 | 0.021 | 186 | 328 | 1.088 | 0.023 | 0.883 | 0.967 |
| Never-in-union (never married or lived with a partner) | 0.533 | 0.035 | 186 | 328 | 0.968 | 0.067 | 0.462 | 0.603 |
| In-union (married or living with a partner) | 0.415 | 0.034 | 186 | 328 | 0.937 | 0.082 | 0.348 | 0.483 |
| Had first sexual intercourse before age 18 | 0.542 | 0.039 | 159 | 279 | 0.976 | 0.071 | 0.464 | 0.619 |
| Want no more children | 0.575 | 0.065 | 76 | 136 | 1.134 | 0.113 | 0.445 | 0.705 |
| Want to delay birth at least 2 years | 0.023 | 0.016 | 76 | 136 | 0.941 | 0.711 | 0 | 0.055 |
| Ideal number of children | 2.610 | 0.135 | 185 | 327 | 1.284 | 0.052 | 2.340 | 2.880 |
| Body Mass Index (BMI) < 18.5 | 0.070 | 0.031 | 152 | 261 | 1.501 | 0.443 | 0.008 | 0.132 |
| Body Mass Index (BMI) $\geq 25$ | 0.437 | 0.056 | 152 | 261 | 1.395 | 0.128 | 0.325 | 0.549 |
| Body Mass Index (BMI) $\geq 35$ | 0.047 | 0.021 | 152 | 261 | 1.238 | 0.452 | 0.005 | 0.089 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.174 | 0.040 | 154 | 264 | 1.291 | 0.228 | 0.094 | 0.253 |
| Waist for height ratio $\geq 0.5$ | 0.485 | 0.056 | 154 | 264 | 1.379 | 0.115 | 0.373 | 0.597 |
| Current smoking (daily or occassional) | 0.432 | 0.035 | 280 | 476 | 1.177 | 0.081 | 0.362 | 0.502 |
| Drank alcohol in past 12 months | 0.491 | 0.042 | 280 | 476 | 1.393 | 0.085 | 0.408 | 0.575 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.228 | 0.030 | 280 | 476 | 1.177 | 0.130 | 0.169 | 0.287 |
| Show signs of problem drinking by the CAGE test | 0.142 | 0.024 | 280 | 476 | 1.127 | 0.166 | 0.095 | 0.189 |
| Codeine-containing medication misuse | 0.027 | 0.012 | 280 | 476 | 1.226 | 0.441 | 0.003 | 0.051 |
| Prevalence of anaemia | 0.089 | 0.025 | 140 | 238 | 1.053 | 0.284 | 0.039 | 0.140 |
| Had 2+ sexual partners in past 12 months | 0.113 | 0.031 | 186 | 328 | 1.346 | 0.278 | 0.050 | 0.176 |
| Had paid sex in past 12 months | 0.004 | 0.004 | 186 | 328 | 0.896 | 0.997 | 0 | 0.013 |
| Had HIV test and received results in past 12 months | 0.557 | 0.046 | 186 | 328 | 1.266 | 0.083 | 0.464 | 0.649 |
| Circumcised | 0.442 | 0.050 | 186 | 328 | 1.378 | 0.114 | 0.342 | 0.543 |
| Asthma symptoms | 0.043 | 0.013 | 280 | 476 | 1.056 | 0.299 | 0.017 | 0.069 |
| COPD symptoms | 0.013 | 0.006 | 280 | 476 | 0.918 | 0.471 | 0.001 | 0.026 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.587 | 0.053 | 151 | 259 | 1.321 | 0.091 | 0.481 | 0.694 |
| Mobile phone ownership | 0.844 | 0.032 | 186 | 328 | 1.196 | 0.038 | 0.780 | 0.908 |
| Bank account ownership | 0.675 | 0.045 | 186 | 328 | 1.295 | 0.066 | 0.585 | 0.764 |
| Internet use in past 12 months | 0.617 | 0.049 | 186 | 328 | 1.358 | 0.079 | 0.520 | 0.715 |
| HIV prevalence among men 15-49 | 0.173 | 0.070 | 74 | 206 | 1.574 | 0.407 | 0.032 | 0.314 |
| HIV prevalence among young men 15-24 | 0 | 0 | 32 | 86 | na | na | 0 | 0 |
| HIV prevalence among men $15+$ | 0.112 | 0.045 | 121 | 340 | 1.549 | 0.400 | 0.023 | 0.202 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.178 | 0.042 | 224 | 454 | 1.648 | 0.238 | 0.094 | 0.263 |
| HIV prevalence among respondents 15-24 | 0.025 | 0.017 | 63 | 137 | 0.885 | 0.704 | 0 | 0.060 |
| HIV prevalence among respondents 15+ | 0.123 | 0.029 | 370 | 754 | 1.718 | 0.240 | 0.064 | 0.182 |

[^46]Table B. 6 Sampling errors: Eastern Cape sample, South Africa DHS 2017

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.713 | 0.040 | 5108 | 4728 | 2.640 | 0.056 | 0.633 | 0.792 |
| Population using safely managed sanitation services | 0.850 | 0.022 | 5108 | 4728 | 2.215 | 0.026 | 0.806 | 0.895 |
| Population with access to electricity | 0.800 | 0.045 | 5108 | 4728 | 3.336 | 0.056 | 0.711 | 0.889 |
| Population with primary reliance on clean fuels | 0.677 | 0.036 | 5108 | 4728 | 2.316 | 0.053 | 0.605 | 0.749 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.519 | 0.027 | 1041 | 938 | 1.715 | 0.051 | 0.466 | 0.572 |
| Literacy | 0.951 | 0.009 | 1041 | 938 | 1.303 | 0.009 | 0.933 | 0.968 |
| No education | 0.015 | 0.004 | 1041 | 938 | 1.038 | 0.264 | 0.007 | 0.022 |
| Secondary or higher education | 0.837 | 0.019 | 1041 | 938 | 1.653 | 0.023 | 0.799 | 0.875 |
| Never-in-union (never married or lived with a partner) | 0.636 | 0.019 | 1041 | 938 | 1.250 | 0.029 | 0.599 | 0.673 |
| In-union (married or living with a partner) | 0.293 | 0.017 | 1041 | 938 | 1.185 | 0.057 | 0.259 | 0.326 |
| In a union before age 15 (women 20-24) | 0.003 | 0.003 | 180 | 161 | 0.786 | 1.007 | 0 | 0.010 |
| In a union before age 18 (women 20-24) | 0.034 | 0.014 | 180 | 161 | 1.052 | 0.422 | 0.005 | 0.062 |
| In a union before age 18 (women 20-49) | 0.057 | 0.008 | 839 | 754 | 1.013 | 0.143 | 0.040 | 0.073 |
| Had sexual intercourse before age 18 | 0.586 | 0.020 | 839 | 754 | 1.146 | 0.033 | 0.547 | 0.625 |
| Currently pregnant | 0.033 | 0.008 | 1041 | 938 | 1.476 | 0.246 | 0.017 | 0.050 |
| Currently using any method | 0.610 | 0.022 | 461 | 410 | 0.955 | 0.036 | 0.567 | 0.654 |
| Currently using a modern method | 0.610 | 0.022 | 461 | 410 | 0.955 | 0.036 | 0.567 | 0.654 |
| Currently using pill | 0.034 | 0.008 | 461 | 410 | 0.890 | 0.220 | 0.019 | 0.050 |
| Currently using condoms | 0.115 | 0.017 | 461 | 410 | 1.158 | 0.150 | 0.081 | 0.150 |
| Currently using injectables - 3 months | 0.228 | 0.019 | 461 | 410 | 0.953 | 0.082 | 0.191 | 0.266 |
| Currently using injectables - 2 months | 0.104 | 0.014 | 461 | 410 | 0.960 | 0.131 | 0.077 | 0.131 |
| Currently using implants | 0.049 | 0.011 | 461 | 410 | 1.075 | 0.222 | 0.027 | 0.070 |
| Currently using female sterilisation | 0.064 | 0.012 | 461 | 410 | 1.023 | 0.182 | 0.041 | 0.088 |
| Currently using withdrawal | 0 | 0 | 461 | 410 | na | na | 0 | 0 |
| Currently using IUD | 0.010 | 0.004 | 461 | 410 | 0.935 | 0.430 | 0.001 | 0.019 |
| Using public sector source | 0.876 | 0.018 | 560 | 501 | 1.260 | 0.020 | 0.841 | 0.911 |
| Demand satisfied by modern methods | 0.813 | 0.017 | 687 | 616 | 1.121 | 0.021 | 0.780 | 0.847 |
| Want no more children | 0.605 | 0.029 | 309 | 275 | 1.042 | 0.048 | 0.547 | 0.663 |
| Want to delay next birth at least 2 years | 0.070 | 0.016 | 309 | 275 | 1.069 | 0.222 | 0.039 | 0.101 |
| Ideal number of children | 2.288 | 0.052 | 1037 | 934 | 1.217 | 0.023 | 2.183 | 2.392 |
| Mothers protected against tetanus for last birth | 0.292 | 0.024 | 377 | 335 | 1.029 | 0.083 | 0.243 | 0.340 |
| Births with skilled attendant at delivery | 0.927 | 0.014 | 450 | 398 | 1.163 | 0.016 | 0.899 | 0.956 |
| Had diarrhoea in the last 2 weeks | 0.094 | 0.014 | 432 | 382 | 1.012 | 0.151 | 0.065 | 0.122 |
| Sought treatment for diarrhoea | 0.638 | 0.080 | 40 | 36 | 1.046 | 0.125 | 0.479 | 0.798 |
| Ever had vaccination card |  | 0 | 90 | 81 | na | 0 | 1 | 1 |
| Vaccination card seen | 0.798 | 0.054 | 90 | 81 | 1.267 | 0.068 | 0.690 | 0.905 |
| Received BCG vaccination | 0.962 | 0.019 | 90 | 81 | 0.928 | 0.019 | 0.925 | 0.999 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.743 | 0.057 | 90 | 81 | 1.221 | 0.076 | 0.630 | 0.856 |
| Received HepB vaccination (3 doses) | 0.722 | 0.061 | 90 | 81 | 1.274 | 0.084 | 0.601 | 0.843 |
| Received birth dose polio 0 vaccination | 0.942 | 0.026 | 90 | 81 | 1.069 | 0.028 | 0.889 | 0.995 |
| Received oral polio vaccination (non-birth dose) | 0.910 | 0.029 | 90 | 81 | 0.972 | 0.032 | 0.851 | 0.969 |
| Received pneumococcal vaccination (3 doses) | 0.687 | 0.057 | 90 | 81 | 1.152 | 0.082 | 0.574 | 0.801 |
| Received rotavirus vaccination (2 doses) | 0.837 | 0.037 | 90 | 81 | 0.943 | 0.044 | 0.763 | 0.911 |
| Received measles vaccination | 0.886 | 0.037 | 90 | 81 | 1.102 | 0.042 | 0.812 | 0.960 |
| Received all basic vaccinations | 0.709 | 0.054 | 90 | 81 | 1.117 | 0.076 | 0.602 | 0.817 |
| Received all age appropriate vaccinations (12-23 months) | 0.573 | 0.054 | 90 | 81 | 1.020 | 0.094 | 0.466 | 0.681 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.468 | 0.058 | 86 | 74 | 1.061 | 0.125 | 0.351 | 0.584 |
| Received measles 2 vaccination (children 24-35) | 0.562 | 0.057 | 86 | 74 | 1.041 | 0.101 | 0.449 | 0.676 |
| Received all age appropriate vaccinations (24-35 months) | 0.447 | 0.058 | 86 | 74 | 1.065 | 0.130 | 0.331 | 0.564 |
| Height-for-age (-2SD) | 0.248 | 0.036 | 225 | 210 | 1.119 | 0.146 | 0.175 | 0.320 |
| Weight-for-height (-2SD) | 0.015 | 0.007 | 225 | 210 | 0.925 | 0.497 | 0 | 0.030 |
| Weight-for-height (+2SD) | 0.204 | 0.026 | 225 | 210 | 0.961 | 0.128 | 0.152 | 0.256 |
| Weight-for-age (-2SD) | 0.034 | 0.016 | 226 | 211 | 1.239 | 0.483 | 0.001 | 0.066 |
| Body Mass Index (BMI) <18.5 | 0.023 | 0.006 | 682 | 623 | 1.033 | 0.256 | 0.011 | 0.035 |
| Body Mass Index (BMI) $\geq 25$ | 0.692 | 0.025 | 682 | 623 | 1.409 | 0.036 | 0.642 | 0.742 |
| Body Mass Index (BMI) $\geq 35$ | 0.201 | 0.020 | 682 | 623 | 1.315 | 0.100 | 0.161 | 0.242 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.552 | 0.025 | 681 | 622 | 1.298 | 0.045 | 0.502 | 0.601 |
| Waist for height ratio $\geq 0.5$ | 0.753 | 0.021 | 681 | 622 | 1.254 | 0.028 | 0.711 | 0.794 |
| Prevalence of anaemia (children 6-59 months) | 0.591 | 0.045 | 179 | 168 | 1.091 | 0.076 | 0.502 | 0.681 |
| Prevalence of anaemia (women 15+) | 0.297 | 0.021 | 653 | 598 | 1.191 | 0.072 | 0.254 | 0.339 |
| Had 2+ sexual partners in past 12 months | 0.062 | 0.010 | 1041 | 938 | 1.289 | 0.156 | 0.042 | 0.081 |
| Condom use at last sex | 0.546 | 0.075 | 65 | 58 | 1.199 | 0.137 | 0.396 | 0.695 |
| Had an HIV test and received results in past 12 months | 0.593 | 0.017 | 1041 | 938 | 1.142 | 0.029 | 0.558 | 0.628 |
| Cervical cancer screening | 0.522 | 0.031 | 367 | 333 | 1.169 | 0.058 | 0.461 | 0.584 |
| Asthma symptoms | 0.035 | 0.007 | 798 | 730 | 1.009 | 0.187 | 0.022 | 0.048 |
| COPD symptoms | 0.034 | 0.007 | 798 | 730 | 1.064 | 0.202 | 0.020 | 0.047 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.498 | 0.022 | 701 | 641 | 1.143 | 0.043 | 0.455 | 0.542 |
| Current smoking (daily or occassional) | 0.075 | 0.015 | 798 | 730 | 1.558 | 0.194 | 0.046 | 0.104 |
| Drank alcohol in past 12 months | 0.199 | 0.020 | 798 | 730 | 1.439 | 0.102 | 0.158 | 0.240 |
| Risky alcohol intake (>5 or more drinks) | 0.049 | 0.007 | 798 | 730 | 0.948 | 0.148 | 0.034 | 0.063 |
| Show signs of problem drinking by the CAGE test | 0.033 | 0.007 | 798 | 730 | 1.163 | 0.221 | 0.019 | 0.048 |
| Codeine-containing medication misuse | 0.010 | 0.003 | 798 | 730 | 0.970 | 0.337 | 0.003 | 0.017 |

Table B.6-Continued

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Physical, sexual, or emotional violence by a partner in the previous |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.126 | 0.016 | 803 | 743 | 1.326 | 0.123 | 0.095 | 0.157 |
| Sexual violence by a current or former partner in the previous 12 months | 0.022 | 0.008 | 803 | 743 | 1.499 | 0.353 | 0.007 | 0.038 |
| Emotional violence by a current or former partner in the previous 12 months | 0.116 | 0.015 | 803 | 743 | 1.367 | 0.133 | 0.085 | 0.147 |
| Mobile phone ownership | 0.911 | 0.012 | 1041 | 938 | 1.331 | 0.013 | 0.887 | 0.934 |
| Bank account ownership | 0.503 | 0.021 | 1041 | 938 | 1.348 | 0.042 | 0.461 | 0.545 |
| Internet use in past 12 months | 0.405 | 0.024 | 1041 | 938 | 1.605 | 0.060 | 0.356 | 0.454 |
| Total fertility rate (last 3 years) | 2.916 | 0.164 | 2958 | 2664 | 0.978 | 0.056 | 2.588 | 3.244 |
| Infant mortality (last 0-9 years) | 50.251 | 7.410 | 896 | 796 | 0.980 | 0.147 | 35.430 | 65.072 |
| Child mortality (last 0-9 years) | 14.076 | 4.230 | 881 | 781 | 0.974 | 0.301 | 5.615 | 22.537 |
| Under-five mortality (last 0-9 years) | 63.620 | 8.965 | 898 | 797 | 1.039 | 0.141 | 45.689 | 81.550 |
| HIV prevalence among women 15-49 | 0.302 | 0.027 | 384 | 264 | 1.129 | 0.088 | 0.249 | 0.355 |
| HIV prevalence among young women 15-24 | 0.156 | 0.036 | 139 | 96 | 1.166 | 0.231 | 0.084 | 0.228 |
| HIV prevalence among women 15+ | 0.226 | 0.020 | 621 | 429 | 1.192 | 0.089 | 0.186 | 0.266 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.471 | 0.026 | 411 | 362 | 1.043 | 0.055 | 0.419 | 0.522 |
| Literacy | 0.939 | 0.017 | 411 | 362 | 1.402 | 0.018 | 0.906 | 0.972 |
| No education | 0.019 | 0.008 | 411 | 362 | 1.226 | 0.439 | 0.002 | 0.035 |
| Secondary or higher education | 0.801 | 0.027 | 411 | 362 | 1.353 | 0.033 | 0.747 | 0.854 |
| Never-in-union (never married or lived with a partner) | 0.789 | 0.021 | 411 | 362 | 1.050 | 0.027 | 0.747 | 0.831 |
| In-union (married or living with a partner) | 0.192 | 0.021 | 411 | 362 | 1.057 | 0.107 | 0.151 | 0.233 |
| Had first sexual intercourse before age 18 | 0.626 | 0.029 | 289 | 255 | 1.022 | 0.047 | 0.568 | 0.685 |
| Want no more children | 0.524 | 0.054 | 77 | 69 | 0.938 | 0.102 | 0.417 | 0.631 |
| Want to delay birth at least 2 years | 0.108 | 0.035 | 77 | 69 | 0.981 | 0.324 | 0.038 | 0.177 |
| Ideal number of children | 3.119 | 0.092 | 410 | 361 | 1.102 | 0.029 | 2.936 | 3.303 |
| Body Mass Index (BMI) <18.5 | 0.068 | 0.014 | 466 | 413 | 1.217 | 0.210 | 0.039 | 0.096 |
| Body Mass Index (BMI) $\geq 25$ | 0.256 | 0.024 | 466 | 413 | 1.158 | 0.092 | 0.209 | 0.303 |
| Body Mass Index (BMI) $\geq 35$ | 0.023 | 0.007 | 466 | 413 | 1.029 | 0.314 | 0.008 | 0.037 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.104 | 0.015 | 462 | 408 | 1.028 | 0.140 | 0.075 | 0.133 |
| Waist for height ratio $\geq 0.5$ | 0.328 | 0.024 | 462 | 408 | 1.088 | 0.072 | 0.281 | 0.376 |
| Current smoking (daily or occassional) | 0.410 | 0.021 | 554 | 493 | 1.027 | 0.052 | 0.367 | 0.453 |
| Drank alcohol in past 12 months | 0.508 | 0.027 | 554 | 493 | 1.281 | 0.054 | 0.454 | 0.563 |
| Risky alcohol intake (>5 or more drinks) | 0.239 | 0.022 | 554 | 493 | 1.216 | 0.092 | 0.195 | 0.283 |
| Show signs of problem drinking by the CAGE test | 0.185 | 0.026 | 554 | 493 | 1.584 | 0.142 | 0.132 | 0.237 |
| Codeine-containing medication misuse | 0.008 | 0.004 | 554 | 493 | 0.954 | 0.446 | 0.001 | 0.016 |
| Prevalence of anaemia | 0.182 | 0.023 | 421 | 372 | 1.196 | 0.124 | 0.136 | 0.227 |
| Had 2+ sexual partners in past 12 months | 0.180 | 0.021 | 411 | 362 | 1.110 | 0.117 | 0.138 | 0.222 |
| Condom use at last sex | 0.604 | 0.057 | 76 | 65 | 1.001 | 0.094 | 0.491 | 0.717 |
| Had paid sex in past 12 months | 0.017 | 0.006 | 411 | 362 | 1.006 | 0.373 | 0.004 | 0.030 |
| Had HIV test and received results in past 12 months | 0.456 | 0.030 | 411 | 362 | 1.210 | 0.065 | 0.397 | 0.516 |
| Circumcised | 0.727 | 0.029 | 411 | 362 | 1.312 | 0.040 | 0.669 | 0.785 |
| Asthma symptoms | 0.032 | 0.006 | 554 | 493 | 0.857 | 0.199 | 0.020 | 0.045 |
| COPD symptoms | 0.016 | 0.005 | 554 | 493 | 0.969 | 0.320 | 0.006 | 0.027 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.473 | 0.031 | 467 | 414 | 1.352 | 0.066 | 0.410 | 0.535 |
| Mobile phone ownership | 0.806 | 0.021 | 411 | 362 | 1.058 | 0.026 | 0.765 | 0.847 |
| Bank account ownership | 0.424 | 0.027 | 411 | 362 | 1.095 | 0.063 | 0.370 | 0.477 |
| Internet use in past 12 months | 0.376 | 0.032 | 411 | 362 | 1.333 | 0.085 | 0.312 | 0.439 |
| HIV prevalence among men 15-49 | 0.082 | 0.018 | 274 | 247 | 1.061 | 0.215 | 0.047 | 0.117 |
| HIV prevalence among young men 15-24 | 0.037 | 0.016 | 146 | 130 | 1.019 | 0.431 | 0.005 | 0.069 |
| HIV prevalence among men 15+ | 0.087 | 0.015 | 389 | 350 | 1.030 | 0.170 | 0.057 | 0.116 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.196 | 0.018 | 658 | 512 | 1.147 | 0.091 | 0.160 | 0.231 |
| HIV prevalence among respondents 15-24 | 0.088 | 0.017 | 285 | 226 | 1.037 | 0.198 | 0.053 | 0.123 |
| HIV prevalence among respondents 15+ | 0.163 | 0.014 | 1010 | 779 | 1.203 | 0.086 | 0.135 | 0.191 |

na $=$ Not applicable

Table B. 7 Sampling errors: Northern Cape sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.995 | 0.002 | 3346 | 784 | 0.931 | 0.002 | 0.991 | 0.999 |
| Population using safely managed sanitation services | 0.880 | 0.026 | 3346 | 784 | 2.219 | 0.029 | 0.828 | 0.931 |
| Population with access to electricity | 0.928 | 0.018 | 3346 | 784 | 2.057 | 0.020 | 0.892 | 0.965 |
| Population with primary reliance on clean fuels | 0.874 | 0.026 | 3346 | 784 | 1.952 | 0.030 | 0.821 | 0.926 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.718 | 0.026 | 718 | 173 | 1.557 | 0.037 | 0.665 | 0.770 |
| Literacy | 0.964 | 0.007 | 718 | 173 | 1.038 | 0.007 | 0.950 | 0.979 |
| No education | 0.027 | 0.007 | 718 | 173 | 1.077 | 0.241 | 0.014 | 0.040 |
| Secondary or higher education | 0.858 | 0.020 | 718 | 173 | 1.500 | 0.023 | 0.819 | 0.897 |
| Never-in-union (never married or lived with a partner) | 0.554 | 0.026 | 718 | 173 | 1.422 | 0.048 | 0.502 | 0.607 |
| In-union (married or living with a partner) | 0.379 | 0.026 | 718 | 173 | 1.458 | 0.070 | 0.326 | 0.432 |
| In a union before age 15 (women 20-24) | 0 | 0 | 99 | 23 | na | na | 0 | 0 |
| In a union before age 18 (women 20-24) | 0.029 | 0.016 | 99 | 23 | 0.920 | 0.535 | 0 | 0.061 |
| In a union before age 18 (women 20-49) | 0.073 | 0.012 | 591 | 142 | 1.108 | 0.163 | 0.049 | 0.096 |
| Had sexual intercourse before age 18 | 0.416 | 0.024 | 591 | 142 | 1.202 | 0.059 | 0.367 | 0.464 |
| Currently pregnant | 0.031 | 0.006 | 718 | 173 | 0.971 | 0.204 | 0.018 | 0.043 |
| Currently using any method | 0.549 | 0.030 | 339 | 82 | 1.110 | 0.055 | 0.489 | 0.609 |
| Currently using a modern method | 0.546 | 0.030 | 339 | 82 | 1.112 | 0.055 | 0.486 | 0.606 |
| Currently using pill | 0.054 | 0.014 | 339 | 82 | 1.119 | 0.254 | 0.027 | 0.082 |
| Currently using condoms | 0.115 | 0.019 | 339 | 82 | 1.102 | 0.167 | 0.076 | 0.153 |
| Currently using injectables - 3 months | 0.217 | 0.021 | 339 | 82 | 0.956 | 0.099 | 0.174 | 0.260 |
| Currently using injectables - 2 months | 0.056 | 0.013 | 339 | 82 | 1.052 | 0.235 | 0.030 | 0.082 |
| Currently using implants | 0.049 | 0.011 | 339 | 82 | 0.941 | 0.226 | 0.027 | 0.071 |
| Currently using female sterilisation | 0.050 | 0.013 | 339 | 82 | 1.077 | 0.256 | 0.024 | 0.075 |
| Currently using withdrawal | 0.003 | 0.003 | 339 | 82 | 0.946 | 1.005 | 0 | 0.008 |
| Currently using IUD | 0.003 | 0.003 | 339 | 82 | 1.043 | 1.003 | 0 | 0.010 |
| Using public sector source | 0.879 | 0.018 | 331 | 81 | 0.985 | 0.020 | 0.844 | 0.915 |
| Demand satisfied by modern methods | 0.790 | 0.021 | 422 | 103 | 1.077 | 0.027 | 0.747 | 0.833 |
| Want no more children | 0.681 | 0.031 | 268 | 66 | 1.073 | 0.045 | 0.620 | 0.743 |
| Want to delay next birth at least 2 years | 0.067 | 0.016 | 268 | 66 | 1.027 | 0.235 | 0.035 | 0.098 |
| Ideal number of children | 2.423 | 0.075 | 714 | 172 | 1.316 | 0.031 | 2.273 | 2.572 |
| Mothers protected against tetanus for last birth | 0.303 | 0.033 | 253 | 61 | 1.150 | 0.110 | 0.237 | 0.370 |
| Births with skilled attendant at delivery | 0.976 | 0.009 | 286 | 69 | 1.003 | 0.009 | 0.958 | 0.994 |
| Had diarrhoea in the last 2 weeks | 0.081 | 0.019 | 278 | 67 | 1.130 | 0.235 | 0.043 | 0.119 |
| Ever had vaccination card | 1 | 0 | 51 | 12 | na | 0 | 1 | 1 |
| Vaccination card seen | 0.754 | 0.067 | 51 | 12 | 1.110 | 0.089 | 0.619 | 0.888 |
| Received BCG vaccination | 0.958 | 0.029 | 51 | 12 | 1.040 | 0.031 | 0.899 | 1.017 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.806 | 0.062 | 51 | 12 | 1.111 | 0.077 | 0.683 | 0.930 |
| Received HepB vaccination (3 doses) | 0.783 | 0.061 | 51 | 12 | 1.051 | 0.078 | 0.661 | 0.905 |
| Received birth dose polio 0 vaccination | 0.903 | 0.040 | 51 | 12 | 0.971 | 0.045 | 0.823 | 0.984 |
| Received oral polio vaccination (non-birth dose) | 0.845 | 0.057 | 51 | 12 | 1.127 | 0.068 | 0.730 | 0.960 |
| Received pneumococcal vaccination (3 doses) | 0.757 | 0.062 | 51 | 12 | 1.020 | 0.081 | 0.633 | 0.880 |
| Received rotavirus vaccination (2 doses) | 0.770 | 0.063 | 51 | 12 | 1.064 | 0.082 | 0.644 | 0.896 |
| Received measles vaccination | 0.849 | 0.051 | 51 | 12 | 1.021 | 0.061 | 0.746 | 0.952 |
| Received all basic vaccinations | 0.754 | 0.066 | 51 | 12 | 1.085 | 0.087 | 0.622 | 0.885 |
| Received all age appropriate vaccinations (12-23 months) | 0.649 | 0.073 | 51 | 12 | 1.088 | 0.113 | 0.502 | 0.795 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.561 | 0.060 | 53 | 12 | 0.850 | 0.108 | 0.440 | 0.682 |
| Received measles 2 vaccination (children 24-35) | 0.628 | 0.056 | 53 | 12 | 0.809 | 0.090 | 0.515 | 0.741 |
| Received all age appropriate vaccinations (24-35 months) | 0.464 | 0.072 | 53 | 12 | 1.009 | 0.155 | 0.320 | 0.607 |
| Height-for-age (-2SD) | 0.214 | 0.042 | 104 | 25 | 1.063 | 0.195 | 0.131 | 0.298 |
| Weight-for-height (-2SD) | 0.021 | 0.014 | 100 | 24 | 1.021 | 0.689 | 0 | 0.050 |
| Weight-for-height (+2SD) | 0.046 | 0.021 | 100 | 24 | 1.019 | 0.455 | 0.004 | 0.088 |
| Weight-for-age (-2SD) | 0.084 | 0.032 | 104 | 25 | 1.210 | 0.380 | 0.020 | 0.147 |
| Body Mass Index (BMI) <18.5 | 0.082 | 0.012 | 435 | 106 | 0.939 | 0.151 | 0.057 | 0.106 |
| Body Mass Index (BMI) $\geq 25$ | 0.618 | 0.024 | 435 | 106 | 1.015 | 0.038 | 0.571 | 0.666 |
| Body Mass Index (BMI) $\geq 35$ | 0.154 | 0.017 | 435 | 106 | 0.993 | 0.111 | 0.120 | 0.189 |
| Waist $\geq 88 \mathrm{~cm}$ (B) | 0.487 | 0.026 | 417 | 101 | 1.075 | 0.054 | 0.435 | 0.540 |
| Waist for height ratio $\geq 0.5$ | 0.703 | 0.021 | 417 | 101 | 0.934 | 0.030 | 0.662 | 0.745 |
| Prevalence of anaemia (children 6-59 months) | 0.484 | 0.082 | 51 | 13 | 1.229 | 0.169 | 0.321 | 0.647 |
| Prevalence of anaemia (women 15+) | 0.257 | 0.038 | 312 | 78 | 1.572 | 0.149 | 0.181 | 0.334 |
| Had 2+ sexual partners in past 12 months | 0.018 | 0.005 | 718 | 173 | 1.064 | 0.293 | 0.008 | 0.029 |
| Had an HIV test and received results in past 12 months | 0.523 | 0.025 | 718 | 173 | 1.361 | 0.049 | 0.473 | 0.574 |
| Cervical cancer screening | 0.539 | 0.033 | 263 | 62 | 1.073 | 0.061 | 0.473 | 0.605 |
| Asthma symptoms | 0.061 | 0.011 | 529 | 127 | 1.061 | 0.181 | 0.039 | 0.083 |
| COPD symptoms | 0.034 | 0.008 | 529 | 127 | 1.052 | 0.245 | 0.017 | 0.050 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.529 | 0.028 | 444 | 108 | 1.197 | 0.054 | 0.472 | 0.585 |
| Current smoking (daily or occassional) | 0.214 | 0.025 | 529 | 127 | 1.422 | 0.119 | 0.163 | 0.265 |
| Drank alcohol in past 12 months | 0.274 | 0.028 | 529 | 127 | 1.428 | 0.101 | 0.219 | 0.330 |
| Risky alcohol intake (>5 or more drinks) | 0.109 | 0.016 | 529 | 127 | 1.190 | 0.148 | 0.077 | 0.141 |
| Show signs of problem drinking by the CAGE test | 0.068 | 0.012 | 529 | 127 | 1.135 | 0.183 | 0.043 | 0.093 |
| Codeine-containing medication misuse | 0.006 | 0.003 | 529 | 127 | 0.993 | 0.541 | 0 | 0.013 |
| Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.102 | 0.014 | 552 | 126 | 1.058 | 0.134 | 0.075 | 0.129 |
| Physical violence by a current or former partner in the previous 12 months | 0.051 | 0.011 | 552 | 126 | 1.223 | 0.226 | 0.028 | 0.073 |

Table B.7-Continued

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Sexual violence by a current or former partner in the previous 12 months | 0.019 | 0.011 | 552 | 126 | 1.841 | 0.572 | 0 | 0.040 |
| Emotional violence by a current or former partner in the previous 12 months | 0.073 | 0.011 | 552 | 126 | 0.988 | 0.149 | 0.052 | 0.095 |
| Mobile phone ownership | 0.827 | 0.021 | 718 | 173 | 1.492 | 0.026 | 0.784 | 0.869 |
| Bank account ownership | 0.473 | 0.028 | 718 | 173 | 1.514 | 0.060 | 0.416 | 0.529 |
| Internet use in past 12 months | 0.409 | 0.030 | 718 | 173 | 1.636 | 0.073 | 0.349 | 0.469 |
| Total fertility rate (last 3 years) | 2.656 | 0.199 | 2030 | 488 | 1.107 | 0.075 | 2.258 | 3.054 |
| Infant mortality (last 0-9 years) | 43.194 | 10.459 | 593 | 144 | 1.100 | 0.242 | 22.275 | 64.112 |
| Child mortality (last 0-9 years) | 8.032 | 3.554 | 574 | 140 | 0.931 | 0.442 | 0.924 | 15.139 |
| Under-five mortality (last 0-9 years) | 50.879 | 11.513 | 595 | 145 | 1.085 | 0.226 | 27.852 | 73.905 |
| HIV prevalence among women 15-49 | 0.135 | 0.026 | 183 | 49 | 1.023 | 0.192 | 0.083 | 0.187 |
| HIV prevalence among young women 15-24 | 0.057 | 0.033 | 61 | 17 | 1.106 | 0.584 | 0 | 0.123 |
| HIV prevalence among women 15+ | 0.126 | 0.022 | 278 | 75 | 1.084 | 0.172 | 0.083 | 0.169 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.729 | 0.032 | 251 | 61 | 1.128 | 0.043 | 0.666 | 0.793 |
| Literacy | 0.963 | 0.011 | 251 | 61 | 0.899 | 0.011 | 0.941 | 0.984 |
| No education | 0.038 | 0.012 | 251 | 61 | 1.023 | 0.327 | 0.013 | 0.062 |
| Secondary or higher education | 0.805 | 0.032 | 251 | 61 | 1.291 | 0.040 | 0.740 | 0.869 |
| Never-in-union (never married or lived with a partner) | 0.663 | 0.037 | 251 | 61 | 1.223 | 0.055 | 0.590 | 0.736 |
| In-union (married or living with a partner) | 0.316 | 0.035 | 251 | 61 | 1.193 | 0.111 | 0.245 | 0.386 |
| Had first sexual intercourse before age 18 | 0.585 | 0.042 | 207 | 50 | 1.219 | 0.072 | 0.501 | 0.669 |
| Want no more children | 0.404 | 0.062 | 79 | 19 | 1.113 | 0.153 | 0.280 | 0.528 |
| Want to delay birth at least 2 years | 0.097 | 0.038 | 79 | 19 | 1.118 | 0.386 | 0.022 | 0.172 |
| Ideal number of children | 2.831 | 0.090 | 245 | 59 | 0.951 | 0.032 | 2.652 | 3.011 |
| Body Mass Index (BMI) <18.5 | 0.192 | 0.027 | 284 | 68 | 1.148 | 0.140 | 0.139 | 0.246 |
| Body Mass Index (BMI) $\geq 25$ | 0.315 | 0.027 | 284 | 68 | 0.983 | 0.086 | 0.261 | 0.370 |
| Body Mass Index (BMI) $\geq 35$ | 0.045 | 0.013 | 284 | 68 | 1.080 | 0.295 | 0.019 | 0.072 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.137 | 0.026 | 274 | 66 | 1.239 | 0.188 | 0.086 | 0.189 |
| Waist for height ratio $\geq 0.5$ | 0.373 | 0.036 | 274 | 66 | 1.222 | 0.096 | 0.301 | 0.444 |
| Current smoking (daily or occassional) | 0.449 | 0.031 | 353 | 84 | 1.177 | 0.070 | 0.387 | 0.511 |
| Drank alcohol in past 12 months | 0.471 | 0.036 | 353 | 84 | 1.347 | 0.076 | 0.399 | 0.542 |
| Risky alcohol intake (>5 or more drinks) | 0.233 | 0.031 | 353 | 84 | 1.377 | 0.133 | 0.171 | 0.295 |
| Show signs of problem drinking by the CAGE test | 0.107 | 0.024 | 353 | 84 | 1.464 | 0.226 | 0.059 | 0.155 |
| Codeine-containing medication misuse | 0.002 | 0.002 | 353 | 84 | 0.870 | 1.006 | 0 | 0.006 |
| Prevalence of anaemia | 0.198 | 0.032 | 187 | 46 | 1.115 | 0.161 | 0.134 | 0.262 |
| Had 2+ sexual partners in past 12 months | 0.085 | 0.017 | 251 | 61 | 0.977 | 0.203 | 0.050 | 0.119 |
| Had paid sex in past 12 months | 0.031 | 0.012 | 251 | 61 | 1.132 | 0.400 | 0.006 | 0.056 |
| Had HIV test and received results in past 12 months | 0.376 | 0.047 | 251 | 61 | 1.542 | 0.126 | 0.281 | 0.471 |
| Circumcised | 0.349 | 0.047 | 251 | 61 | 1.557 | 0.135 | 0.254 | 0.443 |
| Asthma symptoms | 0.053 | 0.013 | 353 | 84 | 1.125 | 0.254 | 0.026 | 0.080 |
| COPD symptoms | 0.030 | 0.009 | 353 | 84 | 1.046 | 0.318 | 0.011 | 0.049 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.523 | 0.040 | 287 | 68 | 1.344 | 0.076 | 0.444 | 0.603 |
| Mobile phone ownership | 0.785 | 0.026 | 251 | 61 | 0.989 | 0.033 | 0.733 | 0.836 |
| Bank account ownership | 0.592 | 0.037 | 251 | 61 | 1.174 | 0.062 | 0.519 | 0.665 |
| Internet use in past 12 months | 0.503 | 0.042 | 251 | 61 | 1.320 | 0.083 | 0.419 | 0.586 |
| HIV prevalence among men 15-49 | 0.104 | 0.033 | 108 | 42 | 1.110 | 0.316 | 0.038 | 0.169 |
| HIV prevalence among young men 15-24 | 0.018 | 0.019 | 46 | 18 | 0.954 | 1.055 | 0 | 0.055 |
| HIV prevalence among men 15+ | 0.098 | 0.031 | 152 | 60 | 1.269 | 0.313 | 0.037 | 0.160 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.121 | 0.026 | 291 | 92 | 1.351 | 0.214 | 0.069 | 0.172 |
| HIV prevalence among respondents 15-24 | 0.036 | 0.022 | 107 | 35 | 1.185 | 0.595 | 0 | 0.079 |
| HIV prevalence among respondents $15+$ | 0.114 | 0.022 | 430 | 135 | 1.465 | 0.198 | 0.069 | 0.159 |

[^47]Table B. 8 Sampling errors: Free State sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.972 | 0.012 | 3813 | 1967 | 2.040 | 0.012 | 0.948 | 0.996 |
| Population using safely managed sanitation services | 0.864 | 0.021 | 3813 | 1967 | 1.836 | 0.024 | 0.822 | 0.907 |
| Population with access to electricity | 0.943 | 0.018 | 3813 | 1967 | 2.229 | 0.019 | 0.907 | 0.978 |
| Population with primary reliance on clean fuels | 0.916 | 0.017 | 3813 | 1967 | 1.682 | 0.018 | 0.883 | 0.949 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.863 | 0.015 | 854 | 442 | 1.283 | 0.018 | 0.833 | 0.893 |
| Literacy | 0.986 | 0.005 | 854 | 442 | 1.204 | 0.005 | 0.976 | 0.996 |
| No education | 0.011 | 0.005 | 854 | 442 | 1.343 | 0.443 | 0.001 | 0.020 |
| Secondary or higher education | 0.901 | 0.016 | 854 | 442 | 1.592 | 0.018 | 0.868 | 0.933 |
| Never-in-union (never married or lived with a partner) | 0.565 | 0.019 | 854 | 442 | 1.137 | 0.034 | 0.527 | 0.604 |
| In-union (married or living with a partner) | 0.330 | 0.018 | 854 | 442 | 1.148 | 0.056 | 0.293 | 0.367 |
| In a union before age 15 (women 20-24) | 0.010 | 0.009 | 147 | 76 | 1.173 | 0.992 | 0 | 0.028 |
| In a union before age 18 (women 20-24) | 0.010 | 0.009 | 147 | 76 | 1.173 | 0.992 | 0 | 0.028 |
| In a union before age 18 (women 20-49) | 0.068 | 0.011 | 715 | 371 | 1.142 | 0.159 | 0.046 | 0.089 |
| Had sexual intercourse before age 18 | 0.474 | 0.024 | 715 | 371 | 1.258 | 0.050 | 0.427 | 0.521 |
| Currently pregnant | 0.025 | 0.006 | 854 | 442 | 1.156 | 0.248 | 0.013 | 0.037 |
| Currently using any method | 0.511 | 0.035 | 384 | 200 | 1.368 | 0.068 | 0.441 | 0.581 |
| Currently using a modern method | 0.511 | 0.035 | 384 | 200 | 1.368 | 0.068 | 0.441 | 0.581 |
| Currently using pill | 0.032 | 0.009 | 384 | 200 | 0.973 | 0.273 | 0.015 | 0.050 |
| Currently using condoms | 0.118 | 0.021 | 384 | 200 | 1.263 | 0.176 | 0.076 | 0.160 |
| Currently using injectables - 3 months | 0.242 | 0.024 | 384 | 200 | 1.086 | 0.098 | 0.195 | 0.290 |
| Currently using injectables - 2 months | 0.027 | 0.008 | 384 | 200 | 0.933 | 0.285 | 0.012 | 0.043 |
| Currently using implants | 0.042 | 0.010 | 384 | 200 | 0.971 | 0.236 | 0.022 | 0.062 |
| Currently using female sterilisation | 0.039 | 0.011 | 384 | 200 | 1.148 | 0.291 | 0.016 | 0.062 |
| Currently using withdrawal | 0 | 0 | 384 | 200 | na | na | 0 | 0 |
| Currently using IUD | 0 | 0 | 384 | 200 | na | na | 0 | 0 |
| Using public sector source | 0.867 | 0.019 | 351 | 184 | 1.042 | 0.022 | 0.829 | 0.904 |
| Demand satisfied by modern methods | 0.784 | 0.023 | 449 | 234 | 1.175 | 0.029 | 0.739 | 0.830 |
| Want no more children | 0.594 | 0.030 | 278 | 146 | 1.019 | 0.051 | 0.534 | 0.654 |
| Want to delay next birth at least 2 years | 0.062 | 0.017 | 278 | 146 | 1.153 | 0.270 | 0.028 | 0.095 |
| Ideal number of children | 2.202 | 0.047 | 850 | 440 | 1.043 | 0.022 | 2.108 | 2.297 |
| Mothers protected against tetanus for last birth | 0.407 | 0.036 | 279 | 145 | 1.229 | 0.089 | 0.335 | 0.480 |
| Births with skilled attendant at delivery | 0.963 | 0.013 | 318 | 164 | 1.072 | 0.013 | 0.937 | 0.988 |
| Had diarrhoea in the last 2 weeks | 0.058 | 0.014 | 303 | 156 | 1.045 | 0.242 | 0.030 | 0.086 |
| Ever had vaccination card | 0.989 | 0.011 | 49 | 25 | 0.736 | 0.011 | 0.967 | 1.011 |
| Vaccination card seen | 0.813 | 0.056 | 49 | 25 | 1.008 | 0.069 | 0.701 | 0.925 |
| Received BCG vaccination | 0.978 | 0.022 | 49 | 25 | 1.053 | 0.023 | 0.934 | 1.022 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.848 | 0.052 | 49 | 25 | 1.021 | 0.062 | 0.743 | 0.953 |
| Received HepB vaccination (3 doses) | 0.876 | 0.048 | 49 | 25 | 1.017 | 0.055 | 0.780 | 0.972 |
| Received birth dose polio 0 vaccination | 0.978 | 0.022 | 49 | 25 | 1.053 | 0.023 | 0.934 | 1.022 |
| Received oral polio vaccination (non-birth dose) | 0.958 | 0.030 | 49 | 25 | 1.039 | 0.031 | 0.898 | 1.018 |
| Received pneumococcal vaccination (3 doses) | 0.772 | 0.057 | 49 | 25 | 0.946 | 0.074 | 0.658 | 0.885 |
| Received rotavirus vaccination (2 doses) | 0.893 | 0.043 | 49 | 25 | 0.979 | 0.049 | 0.806 | 0.980 |
| Received measles vaccination | 0.907 | 0.041 | 49 | 25 | 0.988 | 0.045 | 0.824 | 0.989 |
| Received all basic vaccinations | 0.795 | 0.058 | 49 | 25 | 1.006 | 0.073 | 0.679 | 0.911 |
| Received all age appropriate vaccinations (12-23 months) | 0.713 | 0.063 | 49 | 25 | 0.975 | 0.088 | 0.587 | 0.839 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.578 | 0.073 | 59 | 30 | 1.102 | 0.127 | 0.431 | 0.724 |
| Received measles 2 vaccination (children 24-35) | 0.734 | 0.064 | 59 | 30 | 1.060 | 0.087 | 0.606 | 0.863 |
| Received all age appropriate vaccinations (24-35 months) | 0.545 | 0.075 | 59 | 30 | 1.114 | 0.137 | 0.396 | 0.695 |
| Height-for-age (-2SD) | 0.335 | 0.039 | 142 | 72 | 0.955 | 0.116 | 0.257 | 0.413 |
| Weight-for-height (-2SD) | 0.046 | 0.018 | 137 | 70 | 1.009 | 0.393 | 0.010 | 0.081 |
| Weight-for-height (+2SD) | 0.170 | 0.034 | 137 | 70 | 1.043 | 0.200 | 0.102 | 0.238 |
| Weight-for-age (-2SD) | 0.080 | 0.025 | 145 | 74 | 1.132 | 0.317 | 0.029 | 0.131 |
| Body Mass Index (BMI) <18.5 | 0.034 | 0.008 | 523 | 265 | 0.963 | 0.224 | 0.019 | 0.049 |
| Body Mass Index (BMI) $\geq 25$ | 0.685 | 0.023 | 523 | 265 | 1.144 | 0.034 | 0.639 | 0.732 |
| Body Mass Index (BMI) $\geq 35$ | 0.213 | 0.018 | 523 | 265 | 1.017 | 0.085 | 0.177 | 0.249 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.515 | 0.025 | 524 | 265 | 1.131 | 0.048 | 0.465 | 0.564 |
| Waist for height ratio $\geq 0.5$ | 0.697 | 0.023 | 523 | 265 | 1.144 | 0.033 | 0.651 | 0.743 |
| Prevalence of anaemia (children 6-59 months) | 0.536 | 0.054 | 130 | 66 | 1.210 | 0.101 | 0.427 | 0.644 |
| Prevalence of anaemia (women 15+) | 0.277 | 0.021 | 515 | 261 | 1.056 | 0.075 | 0.236 | 0.318 |
| Had 2+ sexual partners in past 12 months | 0.042 | 0.007 | 854 | 442 | 1.052 | 0.173 | 0.027 | 0.056 |
| Condom use at last sex | 0.474 | 0.082 | 34 | 18 | 0.945 | 0.173 | 0.310 | 0.638 |
| Had an HIV test and received results in past 12 months | 0.583 | 0.019 | 854 | 442 | 1.118 | 0.032 | 0.545 | 0.621 |
| Cervical cancer screening | 0.511 | 0.031 | 320 | 161 | 1.094 | 0.060 | 0.449 | 0.572 |
| Asthma symptoms | 0.033 | 0.010 | 647 | 325 | 1.362 | 0.291 | 0.014 | 0.052 |
| COPD symptoms | 0.008 | 0.003 | 647 | 325 | 0.918 | 0.402 | 0.002 | 0.014 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.544 | 0.019 | 536 | 271 | 0.901 | 0.036 | 0.506 | 0.583 |
| Current smoking (daily or occassional) | 0.080 | 0.015 | 647 | 325 | 1.389 | 0.185 | 0.050 | 0.110 |
| Drank alcohol in past 12 months | 0.222 | 0.021 | 647 | 325 | 1.275 | 0.094 | 0.180 | 0.264 |
| Risky alcohol intake (>5 or more drinks) | 0.060 | 0.010 | 647 | 325 | 1.097 | 0.171 | 0.040 | 0.081 |
| Show signs of problem drinking by the CAGE test | 0.046 | 0.009 | 647 | 325 | 1.080 | 0.194 | 0.028 | 0.063 |
| Codeine-containing medication misuse | 0.011 | 0.004 | 647 | 325 | 1.039 | 0.383 | 0.003 | 0.020 |
| Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.145 | 0.017 | 616 | 326 | 1.165 | 0.114 | 0.112 | 0.178 |

(Continued...)

Table B.8-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | ( N$)$ | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.091 | 0.012 | 616 | 326 | 1.044 | 0.133 | 0.067 | 0.115 |
| Sexual violence by a current or former partner in the previous 12 months | 0.019 | 0.005 | 616 | 326 | 0.977 | 0.280 | 0.009 | 0.030 |
| Emotional violence by a current or former partner in the previous 12 months | 0.111 | 0.014 | 616 | 326 | 1.075 | 0.123 | 0.084 | 0.138 |
| Mobile phone ownership | 0.904 | 0.012 | 854 | 442 | 1.227 | 0.014 | 0.879 | 0.929 |
| Bank account ownership | 0.522 | 0.025 | 854 | 442 | 1.443 | 0.047 | 0.473 | 0.571 |
| Internet use in past 12 months | 0.453 | 0.023 | 854 | 442 | 1.323 | 0.050 | 0.408 | 0.498 |
| Total fertility rate (last 3 years) | 2.375 | 0.191 | 2423 | 1255 | 1.095 | 0.080 | 1.994 | 2.757 |
| Infant mortality (last 0-9 years) | 52.649 | 10.125 | 623 | 327 | 1.066 | 0.192 | 32.398 | 72.900 |
| Child mortality (last 0-9 years) | 11.338 | 4.869 | 629 | 330 | 1.124 | 0.429 | 1.601 | 21.075 |
| Under-five mortality (last 0-9 years) | 63.390 | 10.614 | 626 | 329 | 1.047 | 0.167 | 42.161 | 84.619 |
| HIV prevalence among women 15-49 | 0.281 | 0.029 | 315 | 123 | 1.128 | 0.102 | 0.224 | 0.339 |
| HIV prevalence among young women 15-24 | 0.133 | 0.033 | 103 | 42 | 0.979 | 0.248 | 0.067 | 0.198 |
| HIV prevalence among women 15+ | 0.241 | 0.022 | 491 | 191 | 1.124 | 0.090 | 0.197 | 0.284 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.885 | 0.020 | 295 | 159 | 1.085 | 0.023 | 0.845 | 0.926 |
| Literacy | 0.959 | 0.013 | 295 | 159 | 1.127 | 0.014 | 0.933 | 0.985 |
| No education | 0.012 | 0.006 | 295 | 159 | 0.956 | 0.511 | 0 | 0.024 |
| Secondary or higher education | 0.838 | 0.025 | 295 | 159 | 1.144 | 0.029 | 0.789 | 0.887 |
| Never-in-union (never married or lived with a partner) | 0.720 | 0.026 | 295 | 159 | 0.979 | 0.036 | 0.669 | 0.771 |
| In-union (married or living with a partner) | 0.220 | 0.024 | 295 | 159 | 0.986 | 0.108 | 0.172 | 0.267 |
| Had first sexual intercourse before age 18 | 0.640 | 0.037 | 210 | 112 | 1.108 | 0.057 | 0.567 | 0.714 |
| Want no more children | 0.448 | 0.059 | 68 | 35 | 0.972 | 0.132 | 0.329 | 0.566 |
| Want to delay birth at least 2 years | 0.063 | 0.038 | 68 | 35 | 1.273 | 0.602 | 0 | 0.139 |
| Ideal number of children | 2.637 | 0.084 | 294 | 158 | 1.040 | 0.032 | 2.468 | 2.806 |
| Body Mass Index (BMI) <18.5 | 0.147 | 0.020 | 328 | 177 | 1.018 | 0.135 | 0.107 | 0.187 |
| Body Mass Index (BMI) $\geq 25$ | 0.275 | 0.026 | 328 | 177 | 1.057 | 0.095 | 0.223 | 0.327 |
| Body Mass Index (BMI) $\geq 35$ | 0.020 | 0.009 | 328 | 177 | 1.105 | 0.429 | 0.003 | 0.037 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.067 | 0.016 | 322 | 174 | 1.110 | 0.231 | 0.036 | 0.098 |
| Waist for height ratio $\geq 0.5$ | 0.321 | 0.029 | 321 | 174 | 1.097 | 0.089 | 0.264 | 0.378 |
| Current smoking (daily or occassional) | 0.409 | 0.033 | 384 | 207 | 1.294 | 0.080 | 0.344 | 0.474 |
| Drank alcohol in past 12 months | 0.423 | 0.038 | 384 | 207 | 1.510 | 0.090 | 0.347 | 0.499 |
| Risky alcohol intake (>5 or more drinks) | 0.254 | 0.024 | 384 | 207 | 1.065 | 0.093 | 0.207 | 0.302 |
| Show signs of problem drinking by the CAGE test | 0.230 | 0.025 | 384 | 207 | 1.141 | 0.107 | 0.181 | 0.279 |
| Codeine-containing medication misuse | 0.008 | 0.004 | 384 | 207 | 0.972 | 0.565 | 0 | 0.016 |
| Prevalence of anaemia | 0.256 | 0.034 | 311 | 168 | 1.357 | 0.131 | 0.188 | 0.323 |
| Had 2+ sexual partners in past 12 months | 0.226 | 0.037 | 295 | 159 | 1.529 | 0.166 | 0.151 | 0.301 |
| Condom use at last sex | 0.714 | 0.061 | 65 | 36 | 1.082 | 0.086 | 0.592 | 0.837 |
| Had paid sex in past 12 months | 0.049 | 0.013 | 295 | 159 | 1.054 | 0.272 | 0.022 | 0.075 |
| Had HIV test and received results in past 12 months | 0.521 | 0.031 | 295 | 159 | 1.077 | 0.060 | 0.458 | 0.584 |
| Circumcised | 0.558 | 0.030 | 295 | 159 | 1.025 | 0.053 | 0.499 | 0.618 |
| Asthma symptoms | 0.009 | 0.005 | 384 | 207 | 1.041 | 0.574 | 0 | 0.018 |
| COPD symptoms | 0.030 | 0.009 | 384 | 207 | 1.027 | 0.300 | 0.012 | 0.047 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.482 | 0.030 | 330 | 178 | 1.086 | 0.062 | 0.422 | 0.542 |
| Mobile phone ownership | 0.865 | 0.017 | 295 | 159 | 0.864 | 0.02 | 0.831 | 0.900 |
| Bank account ownership | 0.349 | 0.032 | 295 | 159 | 1.139 | 0.091 | 0.286 | 0.413 |
| Internet use in past 12 months | 0.551 | 0.034 | 295 | 159 | 1.181 | 0.062 | 0.482 | 0.619 |
| HIV prevalence among men 15-49 | 0.172 | 0.030 | 216 | 109 | 1.149 | 0.172 | 0.113 | 0.232 |
| HIV prevalence among young men 15-24 | 0.059 | 0.023 | 98 | 51 | 0.963 | 0.392 | 0.013 | 0.105 |
| HIV prevalence among men $15+$ | 0.172 | 0.024 | 290 | 147 | 1.090 | 0.141 | 0.124 | 0.221 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.230 | 0.022 | 531 | 232 | 1.222 | 0.097 | 0.185 | 0.275 |
| HIV prevalence among respondents 15-24 | 0.092 | 0.020 | 201 | 92 | 0.976 | 0.217 | 0.052 | 0.132 |
| HIV prevalence among respondents $15+$ | 0.211 | 0.017 | 781 | 338 | 1.195 | 0.083 | 0.176 | 0.246 |

na $=$ Not applicable

Table B. 9 Sampling errors: KwaZulu-Natal sample, South Africa DHS 2017

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.860 | 0.025 | 5476 | 6939 | 1.984 | 0.029 | 0.811 | 0.909 |
| Population using safely managed sanitation services | 0.856 | 0.022 | 5476 | 6939 | 2.210 | 0.025 | 0.812 | 0.899 |
| Population with access to electricity | 0.893 | 0.028 | 5476 | 6939 | 2.619 | 0.031 | 0.837 | 0.948 |
| Population with primary reliance on clean fuels | 0.762 | 0.032 | 5476 | 6939 | 2.106 | 0.042 | 0.698 | 0.827 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.520 | 0.029 | 1360 | 1616 | 2.125 | 0.055 | 0.462 | 0.578 |
| Literacy | 0.965 | 0.006 | 1360 | 1616 | 1.149 | 0.006 | 0.954 | 0.976 |
| No education | 0.031 | 0.006 | 1360 | 1616 | 1.363 | 0.208 | 0.018 | 0.043 |
| Secondary or higher education | 0.878 | 0.012 | 1360 | 1616 | 1.376 | 0.014 | 0.854 | 0.903 |
| Never-in-union (never married or lived with a partner) | 0.757 | 0.020 | 1360 | 1616 | 1.677 | 0.026 | 0.718 | 0.796 |
| In-union (married or living with a partner) | 0.223 | 0.019 | 1360 | 1616 | 1.705 | 0.086 | 0.185 | 0.262 |
| In a union before age 15 (women 20-24) | 0 | 0 | 260 | 306 | na | na | 0 | 0 |
| In a union before age 18 (women 20-24) | 0.004 | 0.004 | 260 | 306 | 1.051 | 0.980 | 0 | 0.013 |
| In a union before age 18 (women 20-49) | 0.031 | 0.006 | 1088 | 1313 | 1.224 | 0.206 | 0.018 | 0.044 |
| Had sexual intercourse before age 18 | 0.384 | 0.021 | 1088 | 1313 | 1.435 | 0.055 | 0.342 | 0.427 |
| Currently pregnant | 0.035 | 0.005 | 1360 | 1616 | 1.022 | 0.146 | 0.025 | 0.045 |
| Currently using any method | 0.650 | 0.020 | 552 | 685 | 0.967 | 0.030 | 0.610 | 0.689 |
| Currently using a modern method | 0.647 | 0.020 | 552 | 685 | 0.974 | 0.031 | 0.607 | 0.687 |
| Currently using pill | 0.063 | 0.012 | 552 | 685 | 1.112 | 0.182 | 0.040 | 0.087 |
| Currently using condoms | 0.221 | 0.030 | 552 | 685 | 1.683 | 0.135 | 0.161 | 0.280 |
| Currently using injectables - 3 months | 0.198 | 0.023 | 552 | 685 | 1.361 | 0.117 | 0.152 | 0.244 |
| Currently using injectables - 2 months | 0.034 | 0.008 | 552 | 685 | 1.031 | 0.235 | 0.018 | 0.050 |
| Currently using implants | 0.048 | 0.009 | 552 | 685 | 0.957 | 0.182 | 0.030 | 0.065 |
| Currently using female sterilisation | 0.062 | 0.016 | 552 | 685 | 1.542 | 0.255 | 0.031 | 0.094 |
| Currently using withdrawal | 0.003 | 0.003 | 552 | 685 | 1.226 | 0.980 | 0 | 0.008 |
| Currently using IUD | 0.013 | 0.005 | 552 | 685 | 0.998 | 0.374 | 0.003 | 0.022 |
| Using public sector source | 0.802 | 0.023 | 615 | 755 | 1.405 | 0.028 | 0.757 | 0.848 |
| Demand satisfied by modern methods | 0.804 | 0.014 | 772 | 940 | 0.951 | 0.017 | 0.777 | 0.831 |
| Want no more children | 0.608 | 0.035 | 288 | 361 | 1.211 | 0.058 | 0.538 | 0.677 |
| Want to delay next birth at least 2 years | 0.057 | 0.015 | 288 | 361 | 1.078 | 0.258 | 0.028 | 0.087 |
| Ideal number of children | 2.474 | 0.051 | 1357 | 1612 | 1.252 | 0.021 | 2.371 | 2.576 |
| Mothers protected against tetanus for last birth | 0.411 | 0.026 | 467 | 555 | 1.129 | 0.063 | 0.359 | 0.463 |
| Births with skilled attendant at delivery | 0.964 | 0.009 | 555 | 654 | 1.007 | 0.009 | 0.947 | 0.982 |
| Had diarrhoea in the last 2 weeks | 0.137 | 0.018 | 538 | 636 | 1.188 | 0.132 | 0.101 | 0.173 |
| Sought treatment for diarrhoea | 0.564 | 0.064 | 67 | 87 | 1.053 | 0.113 | 0.436 | 0.692 |
| Ever had vaccination card | 0.947 | 0.021 | 117 | 135 | 0.996 | 0.022 | 0.905 | 0.989 |
| Vaccination card seen | 0.638 | 0.058 | 117 | 135 | 1.261 | 0.091 | 0.522 | 0.754 |
| Received BCG vaccination | 0.913 | 0.026 | 117 | 135 | 0.972 | 0.028 | 0.861 | 0.965 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.653 | 0.059 | 117 | 135 | 1.298 | 0.090 | 0.535 | 0.771 |
| Received HepB vaccination (3 doses) | 0.625 | 0.059 | 117 | 135 | 1.263 | 0.094 | 0.507 | 0.742 |
| Received birth dose polio 0 vaccination | 0.922 | 0.025 | 117 | 135 | 0.998 | 0.028 | 0.871 | 0.973 |
| Received oral polio vaccination (non-birth dose) | 0.716 | 0.051 | 117 | 135 | 1.186 | 0.071 | 0.614 | 0.818 |
| Received pneumococcal vaccination (3 doses) | 0.638 | 0.058 | 117 | 135 | 1.261 | 0.091 | 0.522 | 0.754 |
| Received rotavirus vaccination (2 doses) | 0.686 | 0.052 | 117 | 135 | 1.163 | 0.075 | 0.582 | 0.789 |
| Received measles vaccination | 0.894 | 0.033 | 117 | 135 | 1.118 | 0.036 | 0.829 | 0.960 |
| Received all basic vaccinations | 0.624 | 0.060 | 117 | 135 | 1.292 | 0.096 | 0.505 | 0.744 |
| Received all age appropriate vaccinations (12-23 months) | 0.601 | 0.060 | 117 | 135 | 1.280 | 0.101 | 0.480 | 0.721 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.472 | 0.051 | 91 | 106 | 0.955 | 0.109 | 0.370 | 0.575 |
| Received measles 2 vaccination (children 24-35) | 0.591 | 0.055 | 91 | 106 | 1.034 | 0.092 | 0.482 | 0.701 |
| Received all age appropriate vaccinations (24-35 months) | 0.460 | 0.053 | 91 | 106 | 0.979 | 0.114 | 0.355 | 0.565 |
| Height-for-age (-2SD) | 0.285 | 0.031 | 227 | 283 | 0.917 | 0.107 | 0.224 | 0.346 |
| Weight-for-height (-2SD) | 0.025 | 0.011 | 208 | 266 | 1.003 | 0.431 | 0.003 | 0.047 |
| Weight-for-height (+2SD) | 0.183 | 0.028 | 208 | 266 | 1.029 | 0.154 | 0.126 | 0.239 |
| Weight-for-age (-2SD) | 0.038 | 0.016 | 219 | 281 | 1.269 | 0.418 | 0.006 | 0.070 |
| Body Mass Index (BMI) < 18.5 | 0.013 | 0.004 | 749 | 919 | 0.921 | 0.291 | 0.006 | 0.021 |
| Body Mass Index (BMI) $\geq 25$ | 0.706 | 0.021 | 749 | 919 | 1.264 | 0.030 | 0.664 | 0.749 |
| Body Mass Index (BMI) $\geq 35$ | 0.226 | 0.017 | 749 | 919 | 1.113 | 0.075 | 0.192 | 0.260 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.426 | 0.025 | 778 | 946 | 1.404 | 0.058 | 0.376 | 0.476 |
| Waist for height ratio $\geq 0.5$ | 0.658 | 0.022 | 777 | 945 | 1.277 | 0.033 | 0.614 | 0.701 |
| Prevalence of anaemia (children 6-59 months) | 0.417 | 0.052 | 161 | 189 | 1.159 | 0.125 | 0.312 | 0.521 |
| Prevalence of anaemia (women 15+) | 0.289 | 0.020 | 637 | 747 | 1.109 | 0.071 | 0.248 | 0.329 |
| Had 2+ sexual partners in past 12 months | 0.052 | 0.007 | 1360 | 1616 | 1.198 | 0.139 | 0.038 | 0.067 |
| Condom use at last sex | 0.578 | 0.068 | 67 | 84 | 1.109 | 0.117 | 0.443 | 0.713 |
| Had an HIV test and received results in past 12 months | 0.583 | 0.016 | 1360 | 1616 | 1.229 | 0.028 | 0.550 | 0.616 |
| Cervical cancer screening | 0.477 | 0.028 | 450 | 565 | 1.193 | 0.059 | 0.421 | 0.533 |
| Asthma symptoms | 0.054 | 0.011 | 968 | 1191 | 1.573 | 0.212 | 0.031 | 0.077 |
| COPD symptoms | 0.011 | 0.004 | 968 | 1191 | 1.220 | 0.378 | 0.003 | 0.019 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.481 | 0.019 | 794 | 960 | 1.044 | 0.039 | 0.444 | 0.518 |
| Current smoking (daily or occassional) | 0.023 | 0.006 | 968 | 1191 | 1.308 | 0.277 | 0.010 | 0.035 |
| Drank alcohol in past 12 months | 0.101 | 0.013 | 968 | 1191 | 1.318 | 0.126 | 0.076 | 0.127 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.014 | 0.004 | 968 | 1191 | 1.086 | 0.288 | 0.006 | 0.023 |
| Show signs of problem drinking by the CAGE test | 0.010 | 0.003 | 968 | 1191 | 0.966 | 0.315 | 0.004 | 0.016 |
| Codeine-containing medication misuse | 0.009 | 0.004 | 968 | 1191 | 1.147 | 0.379 | 0.002 | 0.017 |

Table B.9-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Physical, sexual, or emotional violence by a partner in the previous |  |  |  |  |  |  |  |  |
| Physical violence by a current or former partner in the previous 12 months | 0.057 | 0.010 | 786 | 1078 | 1.219 | 0.177 | 0.037 | 0.077 |
| Sexual violence by a current or former partner in the previous 12 months | 0.019 | 0.005 | 786 | 1078 | 1.014 | 0.259 | 0.009 | 0.029 |
| Emotional violence by a current or former partner in the previous 12 months | 0.074 | 0.011 | 786 | 1078 | 1.149 | 0.145 | 0.053 | 0.096 |
| Mobile phone ownership | 0.896 | 0.010 | 1360 | 1616 | 1.198 | 0.011 | 0.876 | 0.915 |
| Bank account ownership | 0.431 | 0.024 | 1360 | 1616 | 1.792 | 0.056 | 0.383 | 0.479 |
| Internet use in past 12 months | 0.415 | 0.029 | 1360 | 1616 | 2.175 | 0.070 | 0.357 | 0.474 |
| Total fertility rate (last 3 years) | 2.484 | 0.154 | 3844 | 4587 | 1.065 | 0.062 | 2.175 | 2.793 |
| Infant mortality (last 0-9 years) | 40.331 | 7.039 | 1085 | 1293 | 1.080 | 0.175 | 26.252 | 54.409 |
| Child mortality (last 0-9 years) | 3.660 | 1.906 | 1068 | 1270 | 0.978 | 0.521 | 0 | 7.472 |
| Under-five mortality (last 0-9 years) | 43.843 | 6.960 | 1086 | 1294 | 1.037 | 0.159 | 29.922 | 57.764 |
| HIV prevalence among women 15-49 | 0.373 | 0.032 | 428 | 486 | 1.354 | 0.085 | 0.310 | 0.437 |
| HIV prevalence among young women 15-24 | 0.219 | 0.035 | 159 | 181 | 1.069 | 0.161 | 0.149 | 0.290 |
| HIV prevalence among women $15+$ | 0.314 | 0.025 | 615 | 700 | 1.347 | 0.080 | 0.264 | 0.365 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.524 | 0.035 | 471 | 521 | 1.523 | 0.067 | 0.453 | 0.594 |
| Literacy | 0.970 | 0.008 | 471 | 521 | 1.026 | 0.008 | 0.953 | 0.986 |
| No education | 0.034 | 0.009 | 471 | 521 | 1.092 | 0.267 | 0.016 | 0.053 |
| Secondary or higher education | 0.834 | 0.023 | 471 | 521 | 1.315 | 0.027 | 0.788 | 0.879 |
| Never-in-union (never married or lived with a partner) | 0.794 | 0.021 | 471 | 521 | 1.120 | 0.026 | 0.752 | 0.836 |
| In-union (married or living with a partner) | 0.185 | 0.021 | 471 | 521 | 1.157 | 0.112 | 0.143 | 0.226 |
| Had first sexual intercourse before age 18 | 0.578 | 0.031 | 353 | 389 | 1.161 | 0.053 | 0.517 | 0.639 |
| Want no more children | 0.454 | 0.059 | 93 | 96 | 1.126 | 0.129 | 0.337 | 0.571 |
| Want to delay birth at least 2 years | 0.149 | 0.038 | 93 | 96 | 1.033 | 0.258 | 0.072 | 0.225 |
| Ideal number of children | 3.602 | 0.132 | 456 | 505 | 1.234 | 0.037 | 3.338 | 3.866 |
| Body Mass Index (BMI) < 18.5 | 0.075 | 0.012 | 464 | 520 | 0.956 | 0.157 | 0.051 | 0.098 |
| Body Mass Index (BMI) $\geq 25$ | 0.352 | 0.031 | 464 | 520 | 1.404 | 0.089 | 0.289 | 0.415 |
| Body Mass Index (BMI) $\geq 35$ | 0.050 | 0.015 | 464 | 520 | 1.452 | 0.297 | 0.020 | 0.079 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.074 | 0.015 | 475 | 529 | 1.258 | 0.204 | 0.044 | 0.105 |
| Waist for height ratio $\geq 0.5$ | 0.372 | 0.030 | 475 | 529 | 1.334 | 0.080 | 0.313 | 0.431 |
| Current smoking (daily or occassional) | 0.352 | 0.026 | 603 | 683 | 1.349 | 0.075 | 0.300 | 0.405 |
| Drank alcohol in past 12 months | 0.460 | 0.028 | 603 | 683 | 1.363 | 0.060 | 0.404 | 0.515 |
| Risky alcohol intake (>5 or more drinks) | 0.238 | 0.019 | 603 | 683 | 1.113 | 0.081 | 0.200 | 0.277 |
| Show signs of problem drinking by the CAGE test | 0.138 | 0.019 | 603 | 683 | 1.379 | 0.140 | 0.100 | 0.177 |
| Codeine-containing medication misuse | 0.008 | 0.004 | 603 | 683 | 0.997 | 0.444 | 0.001 | 0.016 |
| Prevalence of anaemia | 0.159 | 0.020 | 371 | 395 | 1.026 | 0.127 | 0.119 | 0.199 |
| Had 2+ sexual partners in past 12 months | 0.136 | 0.019 | 471 | 521 | 1.208 | 0.140 | 0.098 | 0.175 |
| Condom use at last sex | 0.735 | 0.065 | 66 | 71 | 1.190 | 0.089 | 0.604 | 0.866 |
| Had paid sex in past 12 months | 0.022 | 0.006 | 471 | 521 | 0.955 | 0.293 | 0.009 | 0.035 |
| Had HIV test and received results in past 12 months | 0.449 | 0.029 | 471 | 521 | 1.251 | 0.064 | 0.391 | 0.506 |
| Circumcised | 0.428 | 0.035 | 471 | 521 | 1.512 | 0.081 | 0.359 | 0.497 |
| Asthma symptoms | 0.040 | 0.009 | 603 | 683 | 1.092 | 0.217 | 0.023 | 0.058 |
| COPD symptoms | 0.017 | 0.008 | 603 | 683 | 1.452 | 0.456 | 0.001 | 0.032 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.475 | 0.025 | 479 | 532 | 1.076 | 0.052 | 0.426 | 0.524 |
| Mobile phone ownership | 0.845 | 0.021 | 471 | 521 | 1.257 | 0.025 | 0.803 | 0.887 |
| Bank account ownership | 0.442 | 0.029 | 471 | 521 | 1.250 | 0.065 | 0.384 | 0.499 |
| Internet use in past 12 months | 0.408 | 0.032 | 471 | 521 | 1.407 | 0.078 | 0.344 | 0.472 |
| HIV prevalence among men 15-49 | 0.192 | 0.025 | 274 | 363 | 1.057 | 0.131 | 0.142 | 0.243 |
| HIV prevalence among young men 15-24 | 0.037 | 0.016 | 141 | 191 | 1.021 | 0.439 | 0.005 | 0.070 |
| HIV prevalence among men 15+ | 0.175 | 0.021 | 359 | 485 | 1.050 | 0.121 | 0.133 | 0.217 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.296 | 0.026 | 702 | 850 | 1.514 | 0.088 | 0.244 | 0.348 |
| HIV prevalence among respondents 15-24 | 0.126 | 0.021 | 300 | 372 | 1.088 | 0.166 | 0.084 | 0.168 |
| HIV prevalence among respondents 15+ | 0.257 | 0.021 | 974 | 1186 | 1.470 | 0.080 | 0.216 | 0.298 |

na $=$ Not applicable

Table B. 10 Sampling errors: North West sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.959 | 0.010 | 3712 | 2534 | 1.525 | 0.010 | 0.940 | 0.978 |
| Population using safely managed sanitation services | 0.771 | 0.029 | 3712 | 2534 | 2.091 | 0.037 | 0.713 | 0.828 |
| Population with access to electricity | 0.926 | 0.017 | 3712 | 2534 | 1.925 | 0.018 | 0.893 | 0.960 |
| Population with primary reliance on clean fuels | 0.816 | 0.037 | 3712 | 2534 | 2.471 | 0.046 | 0.742 | 0.891 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.443 | 0.063 | 863 | 570 | 3.716 | 0.143 | 0.317 | 0.570 |
| Literacy | 0.938 | 0.008 | 863 | 570 | 0.981 | 0.009 | 0.922 | 0.955 |
| No education | 0.027 | 0.007 | 863 | 570 | 1.272 | 0.261 | 0.013 | 0.041 |
| Secondary or higher education | 0.846 | 0.019 | 863 | 570 | 1.527 | 0.022 | 0.808 | 0.883 |
| Never-in-union (never married or lived with a partner) | 0.552 | 0.030 | 863 | 570 | 1.754 | 0.054 | 0.493 | 0.612 |
| In-union (married or living with a partner) | 0.377 | 0.032 | 863 | 570 | 1.931 | 0.085 | 0.313 | 0.441 |
| In a union before age 15 (women 20-24) | 0.008 | 0.008 | 119 | 83 | 1.013 | 1.025 | 0 | 0.025 |
| In a union before age 18 (women 20-24) | 0.110 | 0.041 | 119 | 83 | 1.429 | 0.377 | 0.027 | 0.192 |
| In a union before age 18 (women 20-49) | 0.078 | 0.016 | 730 | 489 | 1.624 | 0.207 | 0.045 | 0.110 |
| Had sexual intercourse before age 18 | 0.512 | 0.025 | 730 | 489 | 1.373 | 0.050 | 0.461 | 0.563 |
| Currently pregnant | 0.037 | 0.008 | 863 | 570 | 1.284 | 0.223 | 0.020 | 0.053 |
| Currently using any method | 0.589 | 0.024 | 466 | 325 | 1.073 | 0.042 | 0.540 | 0.638 |
| Currently using a modern method | 0.588 | 0.024 | 466 | 325 | 1.070 | 0.042 | 0.539 | 0.636 |
| Currently using pill | 0.119 | 0.020 | 466 | 325 | 1.362 | 0.172 | 0.078 | 0.160 |
| Currently using condoms | 0.163 | 0.019 | 466 | 325 | 1.086 | 0.114 | 0.126 | 0.200 |
| Currently using injectables - 3 months | 0.169 | 0.018 | 466 | 325 | 1.024 | 0.105 | 0.133 | 0.204 |
| Currently using injectables - 2 months | 0.064 | 0.016 | 466 | 325 | 1.429 | 0.253 | 0.032 | 0.097 |
| Currently using implants | 0.027 | 0.008 | 466 | 325 | 1.104 | 0.308 | 0.010 | 0.043 |
| Currently using female sterilisation | 0.037 | 0.012 | 466 | 325 | 1.356 | 0.323 | 0.013 | 0.060 |
| Currently using withdrawal | 0.002 | 0.002 | 466 | 325 | 0.905 | 1.015 | 0 | 0.005 |
| Currently using IUD | 0.008 | 0.004 | 466 | 325 | 1.045 | 0.534 | 0 | 0.017 |
| Using public sector source | 0.778 | 0.023 | 423 | 292 | 1.140 | 0.030 | 0.732 | 0.824 |
| Demand satisfied by modern methods | 0.805 | 0.030 | 528 | 363 | 1.731 | 0.037 | 0.745 | 0.865 |
| Want no more children | 0.568 | 0.031 | 307 | 215 | 1.083 | 0.054 | 0.507 | 0.629 |
| Want to delay next birth at least 2 years | 0.092 | 0.025 | 307 | 215 | 1.535 | 0.276 | 0.041 | 0.143 |
| Ideal number of children | 2.700 | 0.058 | 858 | 567 | 1.253 | 0.022 | 2.583 | 2.816 |
| Mothers protected against tetanus for last birth | 0.406 | 0.028 | 344 | 244 | 1.103 | 0.070 | 0.349 | 0.463 |
| Births with skilled attendant at delivery | 0.960 | 0.011 | 395 | 282 | 1.108 | 0.011 | 0.939 | 0.981 |
| Had diarrhoea in the last 2 weeks | 0.164 | 0.023 | 378 | 269 | 1.247 | 0.138 | 0.119 | 0.209 |
| Sought treatment for diarrhoea | 0.579 | 0.089 | 56 | 44 | 1.446 | 0.154 | 0.401 | 0.758 |
| Ever had vaccination card | 1 | 0 | 73 | 59 | na | 0 | 1 | 1 |
| Vaccination card seen | 0.657 | 0.067 | 73 | 59 | 1.314 | 0.102 | 0.522 | 0.791 |
| Received BCG vaccination | 0.945 | 0.032 | 73 | 59 | 1.297 | 0.034 | 0.881 | 1.009 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.650 | 0.066 | 73 | 59 | 1.286 | 0.101 | 0.518 | 0.782 |
| Received HepB vaccination (3 doses) | 0.640 | 0.065 | 73 | 59 | 1.252 | 0.101 | 0.511 | 0.769 |
| Received birth dose polio 0 vaccination | 0.986 | 0.015 | 73 | 59 | 1.144 | 0.015 | 0.956 | 1.015 |
| Received oral polio vaccination (non-birth dose) | 0.744 | 0.079 | 73 | 59 | 1.680 | 0.106 | 0.586 | 0.902 |
| Received pneumococcal vaccination (3 doses) | 0.517 | 0.092 | 73 | 59 | 1.716 | 0.179 | 0.332 | 0.701 |
| Received rotavirus vaccination (2 doses) | 0.654 | 0.066 | 73 | 59 | 1.288 | 0.101 | 0.522 | 0.786 |
| Received measles vaccination | 0.850 | 0.039 | 73 | 59 | 1.013 | 0.046 | 0.773 | 0.928 |
| Received all basic vaccinations | 0.557 | 0.047 | 73 | 59 | 0.873 | 0.084 | 0.464 | 0.650 |
| Received all age appropriate vaccinations (12-23 months) | 0.437 | 0.070 | 73 | 59 | 1.317 | 0.161 | 0.297 | 0.578 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.461 | 0.057 | 85 | 58 | 1.057 | 0.125 | 0.346 | 0.576 |
| Received measles 2 vaccination (children 24-35) | 0.681 | 0.068 | 85 | 58 | 1.337 | 0.099 | 0.546 | 0.816 |
| Received all age appropriate vaccinations (24-35 months) | 0.319 | 0.070 | 85 | 58 | 1.369 | 0.220 | 0.179 | 0.459 |
| Height-for-age (-2SD) | 0.274 | 0.029 | 165 | 128 | 0.809 | 0.105 | 0.217 | 0.332 |
| Weight-for-height (-2SD) | 0.059 | 0.022 | 166 | 128 | 1.273 | 0.381 | 0.014 | 0.103 |
| Weight-for-height (+2SD) | 0.079 | 0.025 | 166 | 128 | 1.299 | 0.316 | 0.029 | 0.129 |
| Weight-for-age (-2SD) | 0.126 | 0.039 | 169 | 130 | 1.728 | 0.308 | 0.048 | 0.204 |
| Body Mass Index (BMI) < 18.5 | 0.046 | 0.012 | 517 | 353 | 1.320 | 0.266 | 0.021 | 0.070 |
| Body Mass Index (BMI) $\geq 25$ | 0.678 | 0.030 | 517 | 353 | 1.460 | 0.044 | 0.617 | 0.738 |
| Body Mass Index (BMI) $\geq 35$ | 0.144 | 0.027 | 517 | 353 | 1.711 | 0.184 | 0.091 | 0.197 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.478 | 0.030 | 516 | 353 | 1.353 | 0.062 | 0.418 | 0.538 |
| Waist for height ratio $\geq 0.5$ | 0.703 | 0.026 | 516 | 353 | 1.276 | 0.037 | 0.652 | 0.755 |
| Prevalence of anaemia (children 6-59 months) | 0.684 | 0.036 | 141 | 114 | 1.014 | 0.052 | 0.612 | 0.755 |
| Prevalence of anaemia (women 15+) | 0.383 | 0.055 | 499 | 342 | 2.518 | 0.144 | 0.273 | 0.494 |
| Had 2+ sexual partners in past 12 months | 0.077 | 0.009 | 863 | 570 | 1.042 | 0.123 | 0.058 | 0.096 |
| Condom use at last sex | 0.570 | 0.066 | 59 | 44 | 1.020 | 0.116 | 0.437 | 0.702 |
| Had an HIV test and received results in past 12 months | 0.614 | 0.015 | 863 | 570 | 0.932 | 0.025 | 0.583 | 0.645 |
| Cervical cancer screening | 0.507 | 0.037 | 283 | 198 | 1.238 | 0.073 | 0.433 | 0.581 |
| Asthma symptoms | 0.025 | 0.009 | 581 | 398 | 1.315 | 0.338 | 0.008 | 0.043 |
| COPD symptoms | 0.015 | 0.006 | 581 | 398 | 1.234 | 0.414 | 0.003 | 0.028 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.400 | 0.049 | 537 | 366 | 2.322 | 0.123 | 0.302 | 0.499 |
| Current smoking (daily or occassional) | 0.046 | 0.011 | 581 | 398 | 1.301 | 0.245 | 0.024 | 0.069 |
| Drank alcohol in past 12 months | 0.206 | 0.017 | 581 | 398 | 1.014 | 0.083 | 0.172 | 0.240 |
| Risky alcohol intake (>5 or more drinks) | 0.087 | 0.014 | 581 | 398 | 1.209 | 0.163 | 0.058 | 0.115 |
| Show signs of problem drinking by the CAGE test | 0.066 | 0.009 | 581 | 398 | 0.916 | 0.143 | 0.047 | 0.085 |

(Continued...)

Table B.10-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Codeine-containing medication misuse | 0.049 | 0.012 | 581 | 398 | 1.349 | 0.246 | 0.025 | 0.073 |
| Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.183 | 0.034 | 589 | 409 | 2.099 | 0.184 | 0.116 | 0.250 |
| Physical violence by a current or former partner in the previous 12 months | 0.073 | 0.010 | 589 | 409 | 0.938 | 0.138 | 0.053 | 0.093 |
| Sexual violence by a current or former partner in the previous 12 months | 0.049 | 0.017 | 589 | 409 | 1.916 | 0.349 | 0.015 | 0.083 |
| Emotional violence by a current or former partner in the previous 12 months | 0.128 | 0.021 | 589 | 409 | 1.521 | 0.164 | 0.086 | 0.170 |
| Mobile phone ownership | 0.897 | 0.020 | 863 | 570 | 1.955 | 0.023 | 0.857 | 0.938 |
| Bank account ownership | 0.517 | 0.027 | 863 | 570 | 1.601 | 0.053 | 0.462 | 0.572 |
| Internet use in past 12 months | 0.414 | 0.026 | 863 | 570 | 1.545 | 0.063 | 0.362 | 0.466 |
| Total fertility rate (last 3 years) | 3.069 | 0.238 | 2473 | 1643 | 1.402 | 0.078 | 2.592 | 3.545 |
| Infant mortality (last 0-9 years) | 55.010 | 7.887 | 789 | 530 | 0.904 | 0.143 | 39.237 | 70.784 |
| Child mortality (last 0-9 years) | 11.042 | 4.069 | 791 | 533 | 1.080 | 0.369 | 2.904 | 19.181 |
| Under-five mortality (last 0-9 years) | 65.445 | 8.142 | 790 | 531 | 0.880 | 0.124 | 49.161 | 81.729 |
| HIV prevalence among women 15-49 | 0.296 | 0.029 | 339 | 161 | 1.167 | 0.098 | 0.238 | 0.354 |
| HIV prevalence among young women 15-24 | 0.089 | 0.030 | 104 | 48 | 1.086 | 0.343 | 0.028 | 0.150 |
| HIV prevalence among women $15+$ | 0.252 | 0.026 | 504 | 228 | 1.351 | 0.104 | 0.200 | 0.305 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.416 | 0.063 | 379 | 237 | 2.458 | 0.151 | 0.290 | 0.541 |
| Literacy | 0.946 | 0.017 | 379 | 237 | 1.422 | 0.018 | 0.913 | 0.979 |
| No education | 0.027 | 0.010 | 379 | 237 | 1.196 | 0.369 | 0.007 | 0.047 |
| Secondary or higher education | 0.782 | 0.028 | 379 | 237 | 1.304 | 0.035 | 0.726 | 0.837 |
| Never-in-union (never married or lived with a partner) | 0.540 | 0.036 | 379 | 237 | 1.410 | 0.067 | 0.467 | 0.612 |
| In-union (married or living with a partner) | 0.385 | 0.047 | 379 | 237 | 1.879 | 0.123 | 0.291 | 0.479 |
| Had first sexual intercourse before age 18 | 0.626 | 0.026 | 322 | 201 | 0.974 | 0.042 | 0.573 | 0.678 |
| Want no more children | 0.362 | 0.055 | 133 | 91 | 1.316 | 0.152 | 0.252 | 0.472 |
| Want to delay birth at least 2 years | 0.078 | 0.030 | 133 | 91 | 1.270 | 0.380 | 0.019 | 0.138 |
| Ideal number of children | 3.262 | 0.111 | 378 | 237 | 1.524 | 0.034 | 3.041 | 3.483 |
| Body Mass Index (BMI) < 18.5 | 0.133 | 0.017 | 435 | 271 | 1.042 | 0.127 | 0.099 | 0.167 |
| Body Mass Index (BMI) $\geq 25$ | 0.300 | 0.024 | 435 | 271 | 1.086 | 0.079 | 0.253 | 0.348 |
| Body Mass Index (BMI) $\geq 35$ | 0.019 | 0.006 | 435 | 271 | 0.976 | 0.336 | 0.006 | 0.032 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.095 | 0.014 | 434 | 270 | 0.975 | 0.145 | 0.067 | 0.122 |
| Waist for height ratio $\geq 0.5$ | 0.345 | 0.029 | 434 | 270 | 1.288 | 0.085 | 0.286 | 0.404 |
| Current smoking (daily or occassional) | 0.320 | 0.026 | 504 | 310 | 1.266 | 0.082 | 0.267 | 0.372 |
| Drank alcohol in past 12 months | 0.644 | 0.054 | 504 | 310 | 2.532 | 0.084 | 0.535 | 0.753 |
| Risky alcohol intake (>5 or more drinks) | 0.272 | 0.025 | 504 | 310 | 1.244 | 0.091 | 0.223 | 0.321 |
| Show signs of problem drinking by the CAGE test | 0.130 | 0.019 | 504 | 310 | 1.258 | 0.145 | 0.092 | 0.168 |
| Codeine-containing medication misuse | 0.010 | 0.008 | 504 | 310 | 1.841 | 0.830 | 0 | 0.026 |
| Prevalence of anaemia | 0.175 | 0.020 | 385 | 242 | 1.047 | 0.115 | 0.135 | 0.215 |
| Had 2+ sexual partners in past 12 months | 0.184 | 0.037 | 379 | 237 | 1.870 | 0.203 | 0.109 | 0.259 |
| Condom use at last sex | 0.529 | 0.080 | 55 | 44 | 1.169 | 0.151 | 0.370 | 0.688 |
| Had paid sex in past 12 months | 0.011 | 0.006 | 379 | 237 | 1.135 | 0.553 | 0 | 0.023 |
| Had HIV test and received results in past 12 months | 0.443 | 0.033 | 379 | 237 | 1.309 | 0.075 | 0.376 | 0.510 |
| Circumcised | 0.489 | 0.047 | 379 | 237 | 1.835 | 0.097 | 0.394 | 0.583 |
| Asthma symptoms | 0.036 | 0.011 | 504 | 310 | 1.343 | 0.310 | 0.014 | 0.058 |
| COPD symptoms | 0.031 | 0.013 | 504 | 310 | 1.650 | 0.412 | 0.005 | 0.057 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.370 | 0.029 | 436 | 271 | 1.257 | 0.079 | 0.312 | 0.429 |
| Mobile phone ownership | 0.917 | 0.014 | 379 | 237 | 0.954 | 0.015 | 0.890 | 0.944 |
| Bank account ownership | 0.656 | 0.028 | 379 | 237 | 1.158 | 0.043 | 0.599 | 0.712 |
| Internet use in past 12 months | 0.500 | 0.063 | 379 | 237 | 2.443 | 0.126 | 0.374 | 0.627 |
| HIV prevalence among men 15-49 | 0.155 | 0.028 | 290 | 165 | 1.324 | 0.182 | 0.098 | 0.211 |
| HIV prevalence among young men 15-24 | 0.011 | 0.008 | 107 | 61 | 0.788 | 0.724 | 0 | 0.027 |
| HIV prevalence among men 15+ | 0.155 | 0.026 | 383 | 212 | 1.416 | 0.169 | 0.103 | 0.208 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.225 | 0.017 | 629 | 326 | 1.022 | 0.076 | 0.191 | 0.259 |
| HIV prevalence among respondents 15-24 | 0.045 | 0.015 | 211 | 109 | 1.041 | 0.330 | 0.015 | 0.075 |
| HIV prevalence among respondents 15+ | 0.205 | 0.015 | 887 | 440 | 1.117 | 0.074 | 0.175 | 0.236 |

[^48]Table B. 11 Sampling errors: Gauteng sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.988 | 0.009 | 3791 | 9293 | 2.999 | 0.009 | 0.971 | 1.005 |
| Population using safely managed sanitation services | 0.714 | 0.033 | 3791 | 9293 | 2.339 | 0.046 | 0.647 | 0.780 |
| Population with access to electricity | 0.917 | 0.029 | 3791 | 9293 | 3.556 | 0.032 | 0.859 | 0.975 |
| Population with primary reliance on clean fuels | 0.913 | 0.026 | 3791 | 9293 | 3.076 | 0.028 | 0.862 | 0.965 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.979 | 0.005 | 863 | 2284 | 0.930 | 0.005 | 0.970 | 0.988 |
| Literacy | 0.96 | 0.010 | 863 | 2284 | 1.508 | 0.011 | 0.940 | 0.980 |
| No education | 0.016 | 0.005 | 863 | 2284 | 1.158 | 0.314 | 0.006 | 0.025 |
| Secondary or higher education | 0.912 | 0.015 | 863 | 2284 | 1.551 | 0.016 | 0.883 | 0.942 |
| Never-in-union (never married or lived with a partner) | 0.499 | 0.020 | 863 | 2284 | 1.155 | 0.039 | 0.460 | 0.539 |
| In-union (married or living with a partner) | 0.453 | 0.020 | 863 | 2284 | 1.204 | 0.045 | 0.412 | 0.494 |
| In a union before age 15 (women 20-24) | 0.019 | 0.013 | 151 | 377 | 1.199 | 0.706 | 0 | 0.046 |
| In a union before age 18 (women 20-24) | 0.041 | 0.021 | 151 | 377 | 1.311 | 0.520 | 0 | 0.083 |
| In a union before age 18 (women 20-49) | 0.074 | 0.011 | 754 | 1973 | 1.133 | 0.146 | 0.052 | 0.096 |
| Had sexual intercourse before age 18 | 0.537 | 0.023 | 754 | 1973 | 1.240 | 0.042 | 0.492 | 0.582 |
| Currently pregnant | 0.055 | 0.009 | 863 | 2284 | 1.182 | 0.167 | 0.036 | 0.073 |
| Currently using any method | 0.580 | 0.023 | 553 | 1430 | 1.097 | 0.040 | 0.534 | 0.626 |
| Currently using a modern method | 0.575 | 0.023 | 553 | 1430 | 1.085 | 0.040 | 0.529 | 0.620 |
| Currently using pill | 0.097 | 0.015 | 553 | 1430 | 1.177 | 0.153 | 0.067 | 0.127 |
| Currently using condoms | 0.149 | 0.019 | 553 | 1430 | 1.244 | 0.127 | 0.111 | 0.186 |
| Currently using injectables - 3 months | 0.160 | 0.016 | 553 | 1430 | 1.027 | 0.100 | 0.128 | 0.192 |
| Currently using injectables - 2 months | 0.071 | 0.012 | 553 | 1430 | 1.144 | 0.177 | 0.046 | 0.096 |
| Currently using implants | 0.031 | 0.009 | 553 | 1430 | 1.165 | 0.276 | 0.014 | 0.049 |
| Currently using female sterilisation | 0.053 | 0.012 | 553 | 1430 | 1.215 | 0.219 | 0.030 | 0.076 |
| Currently using withdrawal | 0.005 | 0.003 | 553 | 1430 | 1.080 | 0.634 | 0 | 0.012 |
| Currently using IUD | 0.011 | 0.006 | 553 | 1430 | 1.316 | 0.523 |  | 0.023 |
| Using public sector source | 0.750 | 0.032 | 409 | 1085 | 1.486 | 0.043 | 0.686 | 0.814 |
| Demand satisfied by modern methods | 0.774 | 0.023 | 532 | 1400 | 1.266 | 0.030 | 0.729 | 0.820 |
| Want no more children | 0.549 | 0.029 | 395 | 1035 | 1.164 | 0.053 | 0.491 | 0.608 |
| Want to delay next birth at least 2 years | 0.098 | 0.016 | 395 | 1035 | 1.064 | 0.162 | 0.066 | 0.130 |
| Ideal number of children | 2.642 | 0.064 | 861 | 2281 | 1.414 | 0.024 | 2.514 | 2.770 |
| Mothers protected against tetanus for last birth | 0.405 | 0.041 | 310 | 842 | 1.472 | 0.101 | 0.324 | 0.487 |
| Births with skilled attendant at delivery | 0.976 | 0.009 | 370 | 1013 | 0.992 | 0.009 | 0.958 | 0.994 |
| Had diarrhoea in the last 2 weeks | 0.086 | 0.016 | 358 | 980 | 1.128 | 0.188 | 0.054 | 0.119 |
| Sought treatment for diarrhoea | 0.732 | 0.087 | 34 | 85 | 1.107 | 0.119 | 0.557 | 0.906 |
| Ever had vaccination card | 0.995 | 0.005 | 66 | 180 | 0.560 | 0.005 | 0.986 | 1.005 |
| Vaccination card seen | 0.551 | 0.069 | 66 | 180 | 1.119 | 0.125 | 0.414 | 0.689 |
| Received BCG vaccination | 0.926 | 0.034 | 66 | 180 | 1.053 | 0.036 | 0.859 | 0.993 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.536 | 0.064 | 66 | 180 | 1.043 | 0.120 | 0.407 | 0.665 |
| Received HepB vaccination (3 doses) | 0.587 | 0.058 | 66 | 180 | 0.958 | 0.099 | 0.471 | 0.704 |
| Received birth dose polio 0 vaccination | 0.915 | 0.037 | 66 | 180 | 1.088 | 0.041 | 0.841 | 0.989 |
| Received oral polio vaccination (non-birth dose) | 0.685 | 0.057 | 66 | 180 | 0.990 | 0.082 | 0.572 | 0.798 |
| Received pneumococcal vaccination (3 doses) | 0.574 | 0.068 | 66 | 180 | 1.116 | 0.119 | 0.437 | 0.710 |
| Received rotavirus vaccination (2 doses) | 0.671 | 0.065 | 66 | 180 | 1.132 | 0.098 | 0.540 | 0.801 |
| Received measles vaccination | 0.877 | 0.043 | 66 | 180 | 1.069 | 0.049 | 0.792 | 0.963 |
| Received all basic vaccinations | 0.519 | 0.065 | 66 | 180 | 1.042 | 0.124 | 0.390 | 0.649 |
| Received all age appropriate vaccinations (12-23 months) | 0.457 | 0.068 | 66 | 180 | 1.087 | 0.148 | 0.322 | 0.592 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.448 | 0.072 | 69 | 185 | 1.204 | 0.161 | 0.304 | 0.592 |
| Received measles 2 vaccination (children 24-35) | 0.501 | 0.068 | 69 | 185 | 1.128 | 0.136 | 0.365 | 0.637 |
| Received all age appropriate vaccinations (24-35 months) | 0.363 | 0.069 | 69 | 185 | 1.197 | 0.191 | 0.225 | 0.502 |
| Height-for-age (-2SD) | 0.342 | 0.056 | 114 | 303 | 1.331 | 0.165 | 0.229 | 0.455 |
| Weight-for-height (-2SD) | 0.013 | 0.011 | 114 | 297 | 1.100 | 0.862 | 0 | 0.035 |
| Weight-for-height (+2SD) | 0.112 | 0.032 | 114 | 297 | 1.022 | 0.284 | 0.049 | 0.176 |
| Weight-for-age (-2SD) | 0.058 | 0.023 | 115 | 304 | 1.102 | 0.391 | 0.013 | 0.104 |
| Body Mass Index (BMI) <18.5 | 0.015 | 0.006 | 397 | 1065 | 1.048 | 0.435 | 0.002 | 0.027 |
| Body Mass Index (BMI) $\geq 25$ | 0.656 | 0.026 | 397 | 1065 | 1.090 | 0.040 | 0.603 | 0.708 |
| Body Mass Index (BMI) $\geq 35$ | 0.222 | 0.028 | 397 | 1065 | 1.333 | 0.127 | 0.166 | 0.278 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.402 | 0.032 | 397 | 1065 | 1.314 | 0.081 | 0.338 | 0.467 |
| Waist for height ratio $\geq 0.5$ | 0.634 | 0.030 | 397 | 1065 | 1.244 | 0.048 | 0.573 | 0.694 |
| Prevalence of anaemia (children 6-59 months) | 0.740 | 0.062 | 93 | 249 | 1.419 | 0.084 | 0.616 | 0.864 |
| Prevalence of anaemia (women 15+) | 0.316 | 0.029 | 364 | 968 | 1.159 | 0.091 | 0.258 | 0.373 |
| Had 2+ sexual partners in past 12 months | 0.036 | 0.006 | 863 | 2284 | 0.955 | 0.168 | 0.024 | 0.048 |
| Condom use at last sex | 0.616 | 0.098 | 31 | 83 | 1.102 | 0.159 | 0.420 | 0.812 |
| Had an HIV test and received results in past 12 months | 0.541 | 0.022 | 863 | 2284 | 1.289 | 0.040 | 0.497 | 0.585 |
| Cervical cancer screening | 0.438 | 0.043 | 277 | 748 | 1.437 | 0.098 | 0.352 | 0.524 |
| Asthma symptoms | 0.017 | 0.005 | 561 | 1534 | 0.963 | 0.308 | 0.007 | 0.028 |
| COPD symptoms | 0.013 | 0.006 | 561 | 1534 | 1.197 | 0.437 | 0.002 | 0.025 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.423 | 0.032 | 402 | 1073 | 1.283 | 0.075 | 0.360 | 0.487 |
| Current smoking (daily or occassional) | 0.065 | 0.012 | 561 | 1534 | 1.190 | 0.191 | 0.040 | 0.090 |
| Drank alcohol in past 12 months | 0.220 | 0.021 | 561 | 1534 | 1.183 | 0.094 | 0.179 | 0.262 |
| Risky alcohol intake (>5 or more drinks) | 0.052 | 0.011 | 561 | 1534 | 1.181 | 0.212 | 0.030 | 0.075 |
| Show signs of problem drinking by the CAGE test | 0.020 | 0.006 | 561 | 1534 | 1.025 | 0.306 | 0.008 | 0.032 |

(Continued...)

Table B. 11 -Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Codeine-containing medication misuse <br> Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.041 | 0.011 | 561 | 1534 | 1.326 | 0.271 | 0.019 | 0.063 |
|  | 0.132 | 0.020 | 574 | 1464 | 1.431 | 0.154 | 0.091 | 0.172 |
| Physical violence by a current or former partner in the previous 12 months | 0.082 | 0.015 | 574 | 1464 | 1.348 | 0.189 | 0.051 | 0.112 |
| Sexual violence by a current or former partner in the previous 12 months | 0.03 | 0.008 | 574 | 1464 | 1.077 | 0.255 | 0.015 | 0.046 |
| Emotional violence by a current or former partner in the previous 12 months | 0.082 | 0.014 | 574 | 1464 | 1.210 | 0.169 | 0.054 | 0.110 |
| Mobile phone ownership | 0.947 | 0.010 | 863 | 2284 | 1.301 | 0.011 | 0.927 | 0.967 |
| Bank account ownership | 0.620 | 0.028 | 863 | 2284 | 1.684 | 0.045 | 0.565 | 0.676 |
| Internet use in past 12 months | 0.571 | 0.028 | 863 | 2284 | 1.678 | 0.050 | 0.515 | 0.628 |
| Total fertility rate (last 3 years) | 2.584 | 0.167 | 2491 | 6574 | 0.989 | 0.065 | 2.250 | 2.919 |
| Infant mortality (last 0-9 years) | 41.661 | 2.489 | 677 | 1847 | 0.993 | 0.275 | 18.787 | 64.535 |
| Child mortality (last 0-9 years) | 4.078 | 11.561 | 693 | 1884 | 1.279 | 0.610 | 0 | 9.055 |
| Under-five mortality (last 0-9 years) | 45.569 | 5.571 | 694 | 1886 | 1.025 | 0.254 | 22.448 | 68.691 |
| HIV prevalence among women 15-49 | 0.253 | 0.030 | 217 | 690 | 1.019 | 0.119 | 0.193 | 0.313 |
| HIV prevalence among young women 15-24 | 0.042 | 0.028 | 66 | 222 | 1.120 | 0.661 | 0 | 0.098 |
| HIV prevalence among women 15+ | 0.244 | 0.026 | 292 | 905 | 1.022 | 0.106 | 0.192 | 0.295 |
|  | MEN |  |  |  |  |  |  |  |
| Urban residence | 0.983 | 0.004 | 371 | 984 | 0.594 | 0.004 | 0.974 | 0.991 |
| Literacy | 0.963 | 0.013 | 371 | 984 | 1.309 | 0.013 | 0.938 | 0.989 |
| No education | 0.013 | 0.007 | 371 | 984 | 1.149 | 0.529 | 0 | 0.026 |
| Secondary or higher education | 0.902 | 0.019 | 371 | 984 | 1.223 | 0.021 | 0.864 | 0.940 |
| Never-in-union (never married or lived with a partner) | 0.541 | 0.035 | 371 | 984 | 1.363 | 0.065 | 0.470 | 0.612 |
| In-union (married or living with a partner) | 0.402 | 0.032 | 371 | 984 | 1.247 | 0.079 | 0.338 | 0.466 |
| Had first sexual intercourse before age 18 | 0.559 | 0.039 | 321 | 851 | 1.399 | 0.070 | 0.482 | 0.637 |
| Want no more children | 0.434 | 0.049 | 150 | 395 | 1.215 | 0.114 | 0.335 | 0.532 |
| Want to delay birth at least 2 years | 0.112 | 0.031 | 150 | 395 | 1.199 | 0.277 | 0.050 | 0.174 |
| Ideal number of children | 3.198 | 0.130 | 365 | 967 | 1.316 | 0.041 | 2.937 | 3.459 |
| Body Mass Index (BMI) < 18.5 | 0.084 | 0.016 | 329 | 848 | 1.042 | 0.193 | 0.051 | 0.116 |
| Body Mass Index (BMI) $\geq 25$ | 0.335 | 0.035 | 329 | 848 | 1.339 | 0.106 | 0.265 | 0.406 |
| Body Mass Index (BMI) $\geq 35$ | 0.034 | 0.012 | 329 | 848 | 1.199 | 0.357 | 0.010 | 0.059 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.107 | 0.022 | 330 | 849 | 1.308 | 0.208 | 0.063 | 0.152 |
| Waist for height ratio $\geq 0.5$ | 0.349 | 0.034 | 329 | 848 | 1.305 | 0.099 | 0.280 | 0.417 |
| Current smoking (daily or occassional) | 0.376 | 0.025 | 470 | 1245 | 1.107 | 0.066 | 0.326 | 0.425 |
| Drank alcohol in past 12 months | 0.609 | 0.023 | 470 | 1245 | 1.043 | 0.039 | 0.563 | 0.656 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.353 | 0.028 | 470 | 1245 | 1.284 | 0.080 | 0.296 | 0.410 |
| Show signs of problem drinking by the CAGE test | 0.168 | 0.022 | 470 | 1245 | 1.295 | 0.133 | 0.123 | 0.212 |
| Codeine-containing medication misuse | 0.014 | 0.006 | 470 | 1245 | 1.058 | 0.406 | 0.003 | 0.026 |
| Prevalence of anaemia | 0.172 | 0.026 | 267 | 683 | 1.122 | 0.153 | 0.119 | 0.225 |
| Had 2+ sexual partners in past 12 months | 0.173 | 0.023 | 371 | 984 | 1.151 | 0.131 | 0.128 | 0.218 |
| Condom use at last sex | 0.678 | 0.063 | 67 | 170 | 1.088 | 0.093 | 0.552 | 0.803 |
| Had paid sex in past 12 months | 0.046 | 0.011 | 371 | 984 | 0.974 | 0.232 | 0.024 | 0.067 |
| Had HIV test and received results in past 12 months | 0.410 | 0.036 | 371 | 984 | 1.415 | 0.088 | 0.338 | 0.483 |
| Circumcised | 0.598 | 0.036 | 371 | 984 | 1.415 | 0.060 | 0.526 | 0.670 |
| Asthma symptoms | 0.005 | 0.003 | 470 | 1245 | 0.901 | 0.591 | 0 | 0.011 |
| COPD symptoms | 0.009 | 0.005 | 470 | 1245 | 1.050 | 0.503 | 0 | 0.018 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.395 | 0.033 | 319 | 830 | 1.196 | 0.083 | 0.329 | 0.460 |
| Mobile phone ownership | 0.927 | 0.020 | 371 | 984 | 1.483 | 0.022 | 0.887 | 0.967 |
| Bank account ownership | 0.683 | 0.035 | 371 | 984 | 1.438 | 0.051 | 0.613 | 0.753 |
| Internet use in past 12 months | 0.609 | 0.036 | 371 | 984 | 1.435 | 0.060 | 0.536 | 0.682 |
| HIV prevalence among men 15-49 | 0.149 | 0.037 | 163 | 675 | 1.304 | 0.245 | 0.076 | 0.223 |
| HIV prevalence among young men 15-24 | 0.063 | 0.043 | 48 | 188 | 1.218 | 0.687 | 0 | 0.150 |
| HIV prevalence among men $\mathbf{1 5 +}^{+}$ | 0.142 | 0.029 | 219 | 883 | 1.225 | 0.204 | 0.084 | 0.201 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.202 | 0.024 | 380 | 1365 | 1.151 | 0.118 | 0.154 | 0.249 |
| HIV prevalence among respondents 15-24 | 0.052 | 0.025 | 114 | 410 | 1.181 | 0.475 | 0.003 | 0.101 |
| HIV prevalence among respondents 15+ | 0.194 | 0.020 | 511 | 1788 | 1.167 | 0.105 | 0.153 | 0.235 |

Table B. 12 Sampling errors: Mpumalanga sample, South Africa DHS 2017

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.901 | 0.026 | 4509 | 3011 | 2.516 | 0.029 | 0.848 | 0.954 |
| Population using safely managed sanitation services | 0.790 | 0.022 | 4509 | 3011 | 1.764 | 0.028 | 0.747 | 0.834 |
| Population with access to electricity | 0.834 | 0.043 | 4509 | 3011 | 3.360 | 0.052 | 0.748 | 0.920 |
| Population with primary reliance on clean fuels | 0.642 | 0.049 | 4509 | 3011 | 2.846 | 0.076 | 0.545 | 0.740 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.422 | 0.038 | 1054 | 671 | 2.508 | 0.091 | 0.345 | 0.498 |
| Literacy | 0.948 | 0.008 | 1054 | 671 | 1.105 | 0.008 | 0.933 | 0.963 |
| No education | 0.030 | 0.006 | 1054 | 671 | 1.171 | 0.204 | 0.018 | 0.043 |
| Secondary or higher education | 0.867 | 0.015 | 1054 | 671 | 1.471 | 0.018 | 0.836 | 0.897 |
| Never-in-union (never married or lived with a partner) | 0.565 | 0.020 | 1054 | 671 | 1.315 | 0.036 | 0.525 | 0.605 |
| In-union (married or living with a partner) | 0.364 | 0.022 | 1054 | 671 | 1.474 | 0.060 | 0.320 | 0.408 |
| In a union before age 15 (women 20-24) | 0.019 | 0.011 | 178 | 114 | 1.107 | 0.592 | 0 | 0.042 |
| In a union before age 18 (women 20-24) | 0.048 | 0.016 | 178 | 114 | 1.003 | 0.336 | 0.016 | 0.080 |
| In a union before age 18 (women 20-49) | 0.095 | 0.010 | 861 | 553 | 1.016 | 0.107 | 0.075 | 0.115 |
| Had sexual intercourse before age 18 | 0.556 | 0.019 | 861 | 553 | 1.144 | 0.035 | 0.517 | 0.594 |
| Currently pregnant | 0.041 | 0.006 | 1054 | 671 | 1.059 | 0.158 | 0.028 | 0.054 |
| Currently using any method | 0.621 | 0.031 | 553 | 356 | 1.505 | 0.050 | 0.559 | 0.684 |
| Currently using a modern method | 0.619 | 0.031 | 553 | 356 | 1.496 | 0.050 | 0.558 | 0.681 |
| Currently using pill | 0.061 | 0.011 | 553 | 356 | 1.112 | 0.185 | 0.039 | 0.084 |
| Currently using condoms | 0.198 | 0.023 | 553 | 356 | 1.338 | 0.114 | 0.153 | 0.244 |
| Currently using injectables - 3 months | 0.170 | 0.019 | 553 | 356 | 1.206 | 0.113 | 0.132 | 0.209 |
| Currently using injectables - 2 months | 0.105 | 0.017 | 553 | 356 | 1.273 | 0.158 | 0.072 | 0.138 |
| Currently using implants | 0.035 | 0.010 | 553 | 356 | 1.233 | 0.275 | 0.016 | 0.054 |
| Currently using female sterilisation | 0.034 | 0.010 | 553 | 356 | 1.341 | 0.304 | 0.013 | 0.055 |
| Currently using withdrawal | 0.002 | 0.002 | 553 | 356 | 1.050 | 1.007 | 0 | 0.006 |
| Currently using IUD | 0.006 | 0.003 | 553 | 356 | 0.976 | 0.550 | 0 | 0.012 |
| Using public sector source | 0.793 | 0.021 | 546 | 346 | 1.234 | 0.027 | 0.751 | 0.836 |
| Demand satisfied by modern methods | 0.815 | 0.017 | 666 | 424 | 1.158 | 0.021 | 0.781 | 0.850 |
| Want no more children | 0.555 | 0.027 | 366 | 244 | 1.045 | 0.049 | 0.501 | 0.609 |
| Want to delay next birth at least 2 years | 0.097 | 0.017 | 366 | 244 | 1.066 | 0.170 | 0.064 | 0.130 |
| Ideal number of children | 2.921 | 0.053 | 1049 | 668 | 1.208 | 0.018 | 2.814 | 3.028 |
| Mothers protected against tetanus for last birth | 0.404 | 0.029 | 421 | 278 | 1.228 | 0.072 | 0.346 | 0.462 |
| Births with skilled attendant at delivery | 0.964 | 0.010 | 501 | 332 | 1.096 | 0.010 | 0.945 | 0.984 |
| Had diarrhoea in the last 2 weeks | 0.107 | 0.018 | 469 | 309 | 1.258 | 0.168 | 0.071 | 0.142 |
| Sought treatment for diarrhoea | 0.693 | 0.065 | 47 | 33 | 0.998 | 0.095 | 0.562 | 0.824 |
| Ever had vaccination card | 0.981 | 0.014 | 94 | 61 | 0.967 | 0.014 | 0.954 | 1.008 |
| Vaccination card seen | 0.635 | 0.063 | 94 | 61 | 1.238 | 0.099 | 0.510 | 0.761 |
| Received BCG vaccination | 0.857 | 0.037 | 94 | 61 | 1.027 | 0.043 | 0.783 | 0.931 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.619 | 0.062 | 94 | 61 | 1.223 | 0.101 | 0.494 | 0.744 |
| Received HepB vaccination (3 doses) | 0.676 | 0.061 | 94 | 61 | 1.229 | 0.090 | 0.554 | 0.798 |
| Received birth dose polio 0 vaccination | 0.871 | 0.036 | 94 | 61 | 1.041 | 0.041 | 0.799 | 0.943 |
| Received oral polio vaccination (non-birth dose) | 0.797 | 0.047 | 94 | 61 | 1.073 | 0.059 | 0.704 | 0.891 |
| Received pneumococcal vaccination (3 doses) | 0.588 | 0.068 | 94 | 61 | 1.312 | 0.115 | 0.453 | 0.724 |
| Received rotavirus vaccination (2 doses) | 0.656 | 0.061 | 94 | 61 | 1.210 | 0.092 | 0.535 | 0.778 |
| Received measles vaccination | 0.750 | 0.052 | 94 | 61 | 1.111 | 0.069 | 0.647 | 0.853 |
| Received all basic vaccinations | 0.555 | 0.065 | 94 | 61 | 1.258 | 0.118 | 0.424 | 0.686 |
| Received all age appropriate vaccinations (12-23 months) | 0.495 | 0.067 | 94 | 61 | 1.293 | 0.136 | 0.361 | 0.630 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.474 | 0.073 | 96 | 63 | 1.420 | 0.155 | 0.327 | 0.620 |
| Received measles 2 vaccination (children 24-35) | 0.579 | 0.060 | 96 | 63 | 1.174 | 0.103 | 0.460 | 0.699 |
| Received all age appropriate vaccinations (24-35 months) | 0.425 | 0.070 | 96 | 63 | 1.375 | 0.165 | 0.285 | 0.566 |
| Height-for-age (-2SD) | 0.215 | 0.028 | 232 | 151 | 0.927 | 0.128 | 0.160 | 0.270 |
| Weight-for-height (-2SD) | 0.005 | 0.005 | 235 | 152 | 0.930 | 0.837 | 0 | 0.015 |
| Weight-for-height (+2SD) | 0.085 | 0.015 | 235 | 152 | 0.848 | 0.182 | 0.054 | 0.116 |
| Weight-for-age (-2SD) | 0.047 | 0.014 | 237 | 154 | 1.022 | 0.299 | 0.019 | 0.075 |
| Body Mass Index (BMI) < 18.5 | 0.038 | 0.008 | 587 | 393 | 1.050 | 0.218 | 0.021 | 0.055 |
| Body Mass Index (BMI) $\geq 25$ | 0.620 | 0.026 | 587 | 393 | 1.297 | 0.042 | 0.568 | 0.672 |
| Body Mass Index (BMI) $\geq 35$ | 0.153 | 0.015 | 587 | 393 | 0.986 | 0.096 | 0.124 | 0.183 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.342 | 0.019 | 586 | 393 | 0.965 | 0.055 | 0.304 | 0.380 |
| Waist for height ratio $\geq 0.5$ | 0.553 | 0.025 | 585 | 392 | 1.195 | 0.045 | 0.503 | 0.602 |
| Prevalence of anaemia (children 6-59 months) | 0.701 | 0.045 | 180 | 115 | 1.139 | 0.064 | 0.611 | 0.791 |
| Prevalence of anaemia (women 15+) | 0.385 | 0.027 | 571 | 383 | 1.345 | 0.071 | 0.330 | 0.440 |
| Had 2+ sexual partners in past 12 months | 0.066 | 0.009 | 1054 | 671 | 1.129 | 0.131 | 0.049 | 0.083 |
| Condom use at last sex | 0.530 | 0.056 | 72 | 44 | 0.951 | 0.106 | 0.418 | 0.643 |
| Had an HIV test and received results in past 12 months | 0.616 | 0.018 | 1054 | 671 | 1.191 | 0.029 | 0.580 | 0.652 |
| Cervical cancer screening | 0.560 | 0.032 | 307 | 212 | 1.128 | 0.057 | 0.496 | 0.624 |
| Asthma symptoms | 0.041 | 0.010 | 705 | 473 | 1.336 | 0.244 | 0.021 | 0.061 |
| COPD symptoms | 0.025 | 0.007 | 705 | 473 | 1.125 | 0.266 | 0.012 | 0.038 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.458 | 0.031 | 594 | 399 | 1.537 | 0.069 | 0.395 | 0.521 |
| Current smoking (daily or occassional) | 0.060 | 0.015 | 705 | 473 | 1.709 | 0.255 | 0.030 | 0.091 |
| Drank alcohol in past 12 months | 0.191 | 0.017 | 705 | 473 | 1.133 | 0.088 | 0.158 | 0.225 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.047 | 0.010 | 705 | 473 | 1.233 | 0.208 | 0.028 | 0.067 |
| Show signs of problem drinking by the CAGE test | 0.026 | 0.006 | 705 | 473 | 1.013 | 0.233 | 0.014 | 0.038 |

Table B.12-Continued

| Variable | Value (R) | Standard error (SE) | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Codeine-containing medication misuse <br> Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.005 | 0.003 | 705 | 473 | 0.926 | 0.484 | 0 | 0.010 |
|  | 0.150 | 0.017 | 649 | 443 | 1.241 | 0.116 | 0.115 | 0.185 |
| Physical violence by a current or former partner in the previous 12 months | 0.078 | 0.014 | 649 | 443 | 1.364 | 0.184 | 0.050 | 0.107 |
| Sexual violence by a current or former partner in the previous 12 months | 0.027 | 0.007 | 649 | 443 | 1.061 | 0.251 | 0.013 | 0.040 |
| Emotional violence by a current or former partner in the previous 12 months | 0.102 | 0.013 | 649 | 443 | 1.103 | 0.128 | 0.076 | 0.129 |
| Mobile phone ownership | 0.944 | 0.008 | 1054 | 671 | 1.173 | 0.009 | 0.927 | 0.960 |
| Bank account ownership | 0.528 | 0.023 | 1054 | 671 | 1.502 | 0.044 | 0.482 | 0.575 |
| Internet use in past 12 months | 0.391 | 0.027 | 1054 | 671 | 1.764 | 0.068 | 0.338 | 0.445 |
| Total fertility rate (last 3 years) | 2.979 | 0.170 | 2986 | 1910 | 0.952 | 0.057 | 2.640 | 3.318 |
| Infant mortality (last 0-9 years) | 53.473 | 8.093 | 948 | 620 | 1.014 | 0.151 | 37.287 | 69.659 |
| Child mortality (last 0-9 years) | 17.790 | 5.163 | 925 | 606 | 0.933 | 0.290 | 7.465 | 28.116 |
| Under-five mortality (last 0-9 years) | 70.312 | 9.399 | 951 | 622 | 1.016 | 0.134 | 51.514 | 89.111 |
| HIV prevalence among women 15-49 | 0.340 | 0.035 | 383 | 211 | 1.431 | 0.102 | 0.271 | 0.410 |
| HIV prevalence among young women 15-24 | 0.199 | 0.062 | 147 | 79 | 1.863 | 0.312 | 0.075 | 0.323 |
| HIV prevalence among women 15+ | 0.300 | 0.030 | 517 | 278 | 1.480 | 0.100 | 0.240 | 0.360 |
|  | MEN |  |  |  |  |  |  |  |
| Urban residence | 0.521 | 0.037 | 413 | 263 | 1.519 | 0.072 | 0.446 | 0.596 |
| Literacy | 0.925 | 0.017 | 413 | 263 | 1.318 | 0.019 | 0.891 | 0.959 |
| No education | 0.041 | 0.013 | 413 | 263 | 1.345 | 0.320 | 0.015 | 0.068 |
| Secondary or higher education | 0.835 | 0.021 | 413 | 263 | 1.127 | 0.025 | 0.793 | 0.876 |
| Never-in-union (never married or lived with a partner) | 0.638 | 0.029 | 413 | 263 | 1.215 | 0.045 | 0.581 | 0.696 |
| In-union (married or living with a partner) | 0.319 | 0.030 | 413 | 263 | 1.300 | 0.094 | 0.259 | 0.379 |
| Had first sexual intercourse before age 18 | 0.614 | 0.034 | 325 | 211 | 1.248 | 0.055 | 0.546 | 0.681 |
| Want no more children | 0.459 | 0.037 | 125 | 84 | 0.837 | 0.082 | 0.384 | 0.534 |
| Want to delay birth at least 2 years | 0.124 | 0.028 | 125 | 84 | 0.959 | 0.229 | 0.067 | 0.180 |
| Ideal number of children | 2.754 | 0.155 | 413 | 263 | 1.433 | 0.056 | 2.444 | 3.065 |
| Body Mass Index (BMI) < 18.5 | 0.107 | 0.016 | 429 | 273 | 1.044 | 0.146 | 0.076 | 0.138 |
| Body Mass Index (BMI) $\geq 25$ | 0.241 | 0.022 | 429 | 273 | 1.051 | 0.090 | 0.198 | 0.284 |
| Body Mass Index (BMI) $\geq 35$ | 0.008 | 0.004 | 429 | 273 | 0.894 | 0.490 | 0 | 0.015 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.083 | 0.019 | 425 | 271 | 1.388 | 0.224 | 0.046 | 0.120 |
| Waist for height ratio $\geq 0.5$ | 0.269 | 0.026 | 424 | 270 | 1.225 | 0.098 | 0.216 | 0.321 |
| Current smoking (daily or occassional) | 0.402 | 0.028 | 515 | 326 | 1.301 | 0.070 | 0.345 | 0.458 |
| Drank alcohol in past 12 months | 0.550 | 0.034 | 515 | 326 | 1.534 | 0.061 | 0.482 | 0.617 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.288 | 0.029 | 515 | 326 | 1.450 | 0.101 | 0.230 | 0.346 |
| Show signs of problem drinking by the CAGE test | 0.174 | 0.022 | 515 | 326 | 1.339 | 0.129 | 0.129 | 0.219 |
| Codeine-containing medication misuse | 0.046 | 0.012 | 515 | 326 | 1.313 | 0.265 | 0.021 | 0.070 |
| Prevalence of anaemia | 0.181 | 0.026 | 368 | 233 | 1.279 | 0.142 | 0.130 | 0.233 |
| Had 2+ sexual partners in past 12 months | 0.181 | 0.028 | 413 | 263 | 1.498 | 0.157 | 0.124 | 0.238 |
| Condom use at last sex | 0.678 | 0.076 | 70 | 48 | 1.349 | 0.113 | 0.526 | 0.831 |
| Had paid sex in past 12 months | 0.027 | 0.009 | 413 | 263 | 1.063 | 0.312 | 0.010 | 0.045 |
| Had HIV test and received results in past 12 months | 0.497 | 0.029 | 413 | 263 | 1.166 | 0.058 | 0.440 | 0.555 |
| Circumcised | 0.499 | 0.038 | 413 | 263 | 1.530 | 0.076 | 0.424 | 0.575 |
| Asthma symptoms | 0.142 | 0.028 | 515 | 326 | 1.819 | 0.198 | 0.086 | 0.198 |
| COPD symptoms | 0.027 | 0.008 | 515 | 326 | 1.116 | 0.295 | 0.011 | 0.043 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.461 | 0.033 | 405 | 260 | 1.326 | 0.071 | 0.395 | 0.527 |
| Mobile phone ownership | 0.955 | 0.012 | 413 | 263 | 1.204 | 0.013 | 0.930 | 0.979 |
| Bank account ownership | 0.642 | 0.026 | 413 | 263 | 1.113 | 0.041 | 0.589 | 0.694 |
| Internet use in past 12 months | 0.472 | 0.036 | 413 | 263 | 1.444 | 0.075 | 0.401 | 0.543 |
| HIV prevalence among men 15-49 | 0.157 | 0.026 | 263 | 193 | 1.176 | 0.169 | 0.104 | 0.210 |
| HIV prevalence among young men 15-24 | 0.036 | 0.017 | 116 | 79 | 1.000 | 0.480 | 0.001 | 0.071 |
| HIV prevalence among men 15+ | 0.165 | 0.024 | 325 | 232 | 1.154 | 0.144 | 0.117 | 0.212 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.253 | 0.021 | 646 | 404 | 1.247 | 0.084 | 0.210 | 0.295 |
| HIV prevalence among respondents 15-24 | 0.117 | 0.038 | 263 | 158 | 1.901 | 0.324 | 0.041 | 0.193 |
| HIV prevalence among respondents 15+ | 0.238 | 0.018 | 842 | 510 | 1.253 | 0.077 | 0.202 | 0.275 |

Table B. 13 Sampling errors: Limpopo sample, South Africa DHS 2017

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| POPULATION |  |  |  |  |  |  |  |  |
| Population using safely managed drinking water services | 0.838 | 0.030 | 4876 | 3880 | 2.417 | 0.036 | 0.777 | 0.899 |
| Population using safely managed sanitation services | 0.895 | 0.013 | 4876 | 3880 | 1.568 | 0.015 | 0.868 | 0.922 |
| Population with access to electricity | 0.982 | 0.005 | 4876 | 3880 | 1.163 | 0.005 | 0.973 | 0.992 |
| Population with primary reliance on clean fuels | 0.440 | 0.033 | 4876 | 3880 | 2.087 | 0.075 | 0.374 | 0.506 |
| WOMEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.183 | 0.027 | 1105 | 824 | 2.309 | 0.147 | 0.129 | 0.237 |
| Literacy | 0.968 | 0.006 | 1105 | 824 | 1.055 | 0.006 | 0.957 | 0.979 |
| No education | 0.012 | 0.004 | 1105 | 824 | 1.094 | 0.304 | 0.005 | 0.019 |
| Secondary or higher education | 0.913 | 0.012 | 1105 | 824 | 1.458 | 0.014 | 0.889 | 0.938 |
| Never-in-union (never married or lived with a partner) | 0.610 | 0.022 | 1105 | 824 | 1.488 | 0.036 | 0.566 | 0.653 |
| In-union (married or living with a partner) | 0.309 | 0.017 | 1105 | 824 | 1.188 | 0.054 | 0.276 | 0.342 |
| In a union before age 15 (women 20-24) | 0.005 | 0.005 | 183 | 137 | 0.992 | 0.997 | 0 | 0.016 |
| In a union before age 18 (women 20-24) | 0.043 | 0.016 | 183 | 137 | 1.085 | 0.378 | 0.011 | 0.076 |
| In a union before age 18 (women 20-49) | 0.105 | 0.013 | 881 | 657 | 1.233 | 0.122 | 0.079 | 0.130 |
| Had sexual intercourse before age 18 | 0.509 | 0.019 | 881 | 657 | 1.146 | 0.038 | 0.471 | 0.548 |
| Currently pregnant | 0.026 | 0.005 | 1105 | 824 | 0.987 | 0.181 | 0.017 | 0.036 |
| Currently using any method | 0.539 | 0.027 | 466 | 351 | 1.168 | 0.050 | 0.485 | 0.593 |
| Currently using a modern method | 0.530 | 0.027 | 466 | 351 | 1.152 | 0.050 | 0.476 | 0.583 |
| Currently using pill | 0.076 | 0.014 | 466 | 351 | 1.125 | 0.182 | 0.048 | 0.103 |
| Currently using condoms | 0.111 | 0.017 | 466 | 351 | 1.157 | 0.152 | 0.077 | 0.145 |
| Currently using injectables - 3 months | 0.129 | 0.019 | 466 | 351 | 1.190 | 0.144 | 0.092 | 0.166 |
| Currently using injectables - 2 months | 0.147 | 0.016 | 466 | 351 | 0.998 | 0.111 | 0.115 | 0.180 |
| Currently using implants | 0.028 | 0.009 | 466 | 351 | 1.232 | 0.338 | 0.009 | 0.047 |
| Currently using female sterilisation | 0.026 | 0.008 | 466 | 351 | 1.098 | 0.314 | 0.010 | 0.042 |
| Currently using withdrawal | 0.007 | 0.004 | 466 | 351 | 1.034 | 0.575 | 0 | 0.015 |
| Currently using IUD | 0.009 | 0.005 | 466 | 351 | 1.034 | 0.496 | 0 | 0.018 |
| Using public sector source | 0.879 | 0.019 | 448 | 333 | 1.252 | 0.022 | 0.841 | 0.918 |
| Demand satisfied by modern methods | 0.741 | 0.022 | 598 | 450 | 1.223 | 0.030 | 0.697 | 0.785 |
| Want no more children | 0.524 | 0.033 | 335 | 254 | 1.193 | 0.062 | 0.459 | 0.589 |
| Want to delay next birth at least 2 years | 0.115 | 0.020 | 335 | 254 | 1.172 | 0.178 | 0.074 | 0.156 |
| Ideal number of children | 3.300 | 0.050 | 1103 | 822 | 1.220 | 0.015 | 3.200 | 3.401 |
| Mothers protected against tetanus for last birth | 0.315 | 0.026 | 403 | 301 | 1.140 | 0.084 | 0.263 | 0.368 |
| Births with skilled attendant at delivery | 0.978 | 0.007 | 467 | 347 | 0.978 | 0.007 | 0.963 | 0.992 |
| Had diarrhoea in the last 2 weeks | 0.120 | 0.017 | 455 | 338 | 1.117 | 0.144 | 0.086 | 0.155 |
| Sought treatment for diarrhoea | 0.571 | 0.070 | 56 | 41 | 1.014 | 0.122 | 0.431 | 0.710 |
| Ever had vaccination card | 0.945 | 0.031 | 94 | 69 | 1.135 | 0.033 | 0.883 | 1.007 |
| Vaccination card seen | 0.732 | 0.054 | 94 | 69 | 1.127 | 0.074 | 0.624 | 0.841 |
| Received BCG vaccination | 0.929 | 0.025 | 94 | 69 | 0.952 | 0.027 | 0.878 | 0.980 |
| Received DTaP-IPV-Hib vaccination (3 doses) | 0.711 | 0.061 | 94 | 69 | 1.236 | 0.085 | 0.589 | 0.832 |
| Received HepB vaccination (3 doses) | 0.663 | 0.061 | 94 | 69 | 1.204 | 0.092 | 0.540 | 0.785 |
| Received birth dose polio 0 vaccination | 0.934 | 0.025 | 94 | 69 | 0.955 | 0.026 | 0.885 | 0.984 |
| Received oral polio vaccination (non-birth dose) | 0.795 | 0.046 | 94 | 69 | 1.025 | 0.058 | 0.704 | 0.887 |
| Received pneumococcal vaccination (3 doses) | 0.669 | 0.063 | 94 | 69 | 1.239 | 0.094 | 0.543 | 0.794 |
| Received rotavirus vaccination (2 doses) | 0.677 | 0.059 | 94 | 69 | 1.179 | 0.088 | 0.559 | 0.796 |
| Received measles vaccination | 0.887 | 0.044 | 94 | 69 | 1.338 | 0.049 | 0.799 | 0.974 |
| Received all basic vaccinations | 0.667 | 0.060 | 94 | 69 | 1.184 | 0.090 | 0.547 | 0.787 |
| Received all age appropriate vaccinations (12-23 months) | 0.549 | 0.064 | 94 | 69 | 1.214 | 0.117 | 0.420 | 0.677 |
| Received DTaP-IPV-Hib vaccination 4 (children 24-35) | 0.510 | 0.055 | 100 | 74 | 1.103 | 0.108 | 0.400 | 0.621 |
| Received measles 2 vaccination (children 24-35) | 0.641 | 0.053 | 100 | 74 | 1.101 | 0.083 | 0.535 | 0.747 |
| Received all age appropriate vaccinations (24-35 months) | 0.465 | 0.054 | 100 | 74 | 1.083 | 0.116 | 0.357 | 0.573 |
| Height-for-age (-2SD) | 0.219 | 0.034 | 209 | 168 | 1.123 | 0.153 | 0.152 | 0.287 |
| Weight-for-height (-2SD) | 0.041 | 0.014 | 215 | 173 | 1.063 | 0.340 | 0.013 | 0.069 |
| Weight-for-height (+2SD) | 0.079 | 0.019 | 215 | 173 | 0.984 | 0.239 | 0.041 | 0.117 |
| Weight-for-age (-2SD) | 0.049 | 0.016 | 214 | 173 | 1.116 | 0.320 | 0.018 | 0.080 |
| Body Mass Index (BMI) <18.5 | 0.042 | 0.009 | 670 | 503 | 1.121 | 0.207 | 0.024 | 0.059 |
| Body Mass Index (BMI) $\geq 25$ | 0.642 | 0.022 | 670 | 503 | 1.184 | 0.034 | 0.598 | 0.686 |
| Body Mass Index (BMI) $\geq 35$ | 0.163 | 0.017 | 670 | 503 | 1.159 | 0.101 | 0.130 | 0.196 |
| Waist $\geq 88 \mathrm{~cm}$ | 0.406 | 0.020 | 668 | 502 | 1.045 | 0.049 | 0.366 | 0.446 |
| Waist for height ratio $\geq 0.5$ | 0.625 | 0.021 | 665 | 500 | 1.093 | 0.033 | 0.584 | 0.666 |
| Prevalence of anaemia (children 6-59 months) | 0.594 | 0.042 | 160 | 128 | 1.097 | 0.071 | 0.509 | 0.679 |
| Prevalence of anaemia (women 15+) | 0.290 | 0.021 | 592 | 445 | 1.143 | 0.073 | 0.247 | 0.332 |
| Had 2+ sexual partners in past 12 months | 0.033 | 0.006 | 1105 | 824 | 1.058 | 0.171 | 0.022 | 0.045 |
| Condom use at last sex | 0.608 | 0.102 | 35 | 27 | 1.206 | 0.167 | 0.404 | 0.811 |
| Had an HIV test and received results in past 12 months | 0.632 | 0.019 | 1105 | 824 | 1.332 | 0.031 | 0.593 | 0.670 |
| Cervical cancer screening | 0.433 | 0.030 | 367 | 279 | 1.158 | 0.069 | 0.373 | 0.493 |
| Asthma symptoms | 0.015 | 0.005 | 863 | 646 | 1.128 | 0.311 | 0.006 | 0.024 |
| COPD symptoms | 0.008 | 0.003 | 863 | 646 | 1.007 | 0.373 | 0.002 | 0.015 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.341 | 0.020 | 698 | 524 | 1.129 | 0.059 | 0.300 | 0.381 |
| Current smoking (daily or occassional) | 0.020 | 0.006 | 863 | 646 | 1.206 | 0.286 | 0.009 | 0.032 |
| Drank alcohol in past 12 months | 0.081 | 0.013 | 863 | 646 | 1.362 | 0.156 | 0.056 | 0.106 |
| Risky alcohol intake (>5 or more drinks) | 0.015 | 0.006 | 863 | 646 | 1.372 | 0.382 | 0.003 | 0.026 |
| Show signs of problem drinking by the CAGE test | 0.010 | 0.004 | 863 | 646 | 1.082 | 0.372 | 0.002 | 0.017 |

(Continued...)

Table B.13-Continued

| Variable | Value (R) | $\begin{aligned} & \text { Standard } \\ & \text { error } \\ & \text { (SE) } \\ & \hline \end{aligned}$ | Number of cases |  | Design effect (DEFT) | Relative error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
|  |  |  | (N) | ed (WN) |  |  | R-2SE | R+2SE |
| WOMEN |  |  |  |  |  |  |  |  |
| Codeine-containing medication misuse | 0.006 | 0.003 | 863 | 646 | 0.980 | 0.432 | 0.001 | 0.011 |
| Physical, sexual, or emotional violence by a partner in the previous 12 months | 0.071 | 0.010 | 881 | 605 | 1.102 | 0.134 | 0.052 | 0.090 |
| Physical violence by a current or former partner in the previous 12 months | 0.035 | 0.007 | 881 | 605 | 1.180 | 0.209 | 0.020 | 0.049 |
| Sexual violence by a current or former partner in the previous 12 months | 0.015 | 0.004 | 881 | 605 | 0.965 | 0.268 | 0.007 | 0.022 |
| Emotional violence by a current or former partner in the previous 12 months | 0.055 | 0.009 | 881 | 605 | 1.110 | 0.155 | 0.038 | 0.072 |
| Mobile phone ownership | 0.896 | 0.010 | 1105 | 824 | 1.065 | 0.011 | 0.877 | 0.916 |
| Bank account ownership | 0.468 | 0.024 | 1105 | 824 | 1.564 | 0.050 | 0.421 | 0.515 |
| Internet use in past 12 months | 0.352 | 0.018 | 1105 | 824 | 1.271 | 0.052 | 0.316 | 0.389 |
| Total fertility rate (last 3 years) | 3.099 | 0.133 | 3108 | 2314 | 0.841 | 0.043 | 2.833 | 3.364 |
| Infant mortality (last 0-9 years) | 23.678 | 5.051 | 928 | 684 | 0.996 | 0.213 | 13.575 | 33.781 |
| Child mortality (last 0-9 years) | 10.462 | 4.005 | 904 | 669 | 1.017 | 0.383 | 2.452 | 18.471 |
| Under-five mortality (last 0-9 years) | 33.892 | 7.356 | 930 | 685 | 1.103 | 0.217 | 19.180 | 48.603 |
| HIV prevalence among women 15-49 | 0.145 | 0.021 | 327 | 250 | 1.102 | 0.148 | 0.102 | 0.188 |
| HIV prevalence among young women 15-24 | 0.028 | 0.015 | 125 | 96 | 0.988 | 0.522 | 0 | 0.057 |
| HIV prevalence among women $15+$ | 0.129 | 0.016 | 500 | 380 | 1.078 | 0.125 | 0.097 | 0.161 |
| MEN |  |  |  |  |  |  |  |  |
| Urban residence | 0.218 | 0.034 | 402 | 288 | 1.665 | 0.158 | 0.149 | 0.286 |
| Literacy | 0.874 | 0.026 | 402 | 288 | 1.560 | 0.030 | 0.822 | 0.926 |
| No education | 0.007 | 0.004 | 402 | 288 | 0.972 | 0.575 | 0 | 0.015 |
| Secondary or higher education | 0.879 | 0.018 | 402 | 288 | 1.082 | 0.020 | 0.843 | 0.914 |
| Never-in-union (never married or lived with a partner) | 0.753 | 0.023 | 402 | 288 | 1.064 | 0.030 | 0.707 | 0.799 |
| In-union (married or living with a partner) | 0.214 | 0.020 | 402 | 288 | 0.978 | 0.094 | 0.174 | 0.254 |
| Had first sexual intercourse before age 18 | 0.540 | 0.036 | 288 | 207 | 1.210 | 0.066 | 0.469 | 0.611 |
| Want no more children | 0.357 | 0.053 | 89 | 62 | 1.030 | 0.147 | 0.252 | 0.462 |
| Want to delay birth at least 2 years | 0.230 | 0.048 | 89 | 62 | 1.069 | 0.208 | 0.134 | 0.326 |
| Ideal number of children | 3.631 | 0.113 | 399 | 286 | 0.987 | 0.031 | 3.404 | 3.857 |
| Body Mass Index (BMI) < 18.5 | 0.121 | 0.021 | 388 | 276 | 1.257 | 0.172 | 0.079 | 0.163 |
| Body Mass Index (BMI) $\geq 25$ | 0.251 | 0.021 | 388 | 276 | 0.970 | 0.085 | 0.209 | 0.294 |
| Body Mass Index (BMI) $\geq 35$ | 0.022 | 0.009 | 388 | 276 | 1.172 | 0.398 | 0.004 | 0.039 |
| Waist $\geq 102 \mathrm{~cm}$ | 0.060 | 0.013 | 348 | 247 | 1.058 | 0.225 | 0.033 | 0.087 |
| Waist for height ratio $\geq 0.5$ | 0.316 | 0.026 | 346 | 245 | 1.023 | 0.081 | 0.265 | 0.367 |
| Current smoking (daily or occassional) | 0.264 | 0.023 | 547 | 386 | 1.198 | 0.086 | 0.219 | 0.309 |
| Drank alcohol in past 12 months | 0.524 | 0.023 | 547 | 386 | 1.076 | 0.044 | 0.478 | 0.570 |
| Risky alcohol intake ( $>5$ or more drinks) | 0.205 | 0.021 | 547 | 386 | 1.240 | 0.105 | 0.162 | 0.248 |
| Show signs of problem drinking by the CAGE test | 0.145 | 0.019 | 547 | 386 | 1.232 | 0.128 | 0.108 | 0.182 |
| Codeine-containing medication misuse | 0.006 | 0.003 | 547 | 386 | 0.901 | 0.496 | 0 | 0.012 |
| Prevalence of anaemia | 0.139 | 0.019 | 319 | 226 | 0.966 | 0.134 | 0.102 | 0.177 |
| Had 2+ sexual partners in past 12 months | 0.237 | 0.022 | 402 | 288 | 1.053 | 0.095 | 0.192 | 0.281 |
| Condom use at last sex | 0.574 | 0.048 | 94 | 68 | 0.929 | 0.083 | 0.478 | 0.669 |
| Had paid sex in past 12 months | 0.030 | 0.011 | 402 | 288 | 1.278 | 0.362 | 0.008 | 0.052 |
| Had HIV test and received results in past 12 months | 0.350 | 0.026 | 402 | 288 | 1.085 | 0.074 | 0.298 | 0.402 |
| Circumcised | 0.858 | 0.019 | 402 | 288 | 1.085 | 0.022 | 0.821 | 0.896 |
| Asthma symptoms | 0.031 | 0.008 | 547 | 386 | 1.091 | 0.260 | 0.015 | 0.048 |
| COPD symptoms | 0.017 | 0.006 | 547 | 386 | 1.162 | 0.376 | 0.004 | 0.030 |
| Hypertension (>140/90 or taking hypertensive medication) | 0.288 | 0.024 | 379 | 269 | 1.017 | 0.082 | 0.240 | 0.335 |
| Mobile phone ownership | 0.905 | 0.017 | 402 | 288 | 1.143 | 0.018 | 0.872 | 0.939 |
| Bank account ownership | 0.457 | 0.027 | 402 | 288 | 1.068 | 0.058 | 0.404 | 0.510 |
| Internet use in past 12 months | 0.537 | 0.034 | 402 | 288 | 1.348 | 0.063 | 0.470 | 0.604 |
| HIV prevalence among men 15-49 | 0.053 | 0.022 | 201 | 199 | 1.352 | 0.404 | 0.010 | 0.096 |
| HIV prevalence among young men 15-24 | 0.009 | 0.009 | 118 | 120 | 1.012 | 0.973 | 0 | 0.027 |
| HIV prevalence among men 15+ | 0.054 | 0.018 | 279 | 274 | 1.340 | 0.336 | 0.018 | 0.091 |
| WOMEN and MEN |  |  |  |  |  |  |  |  |
| HIV prevalence among respondents 15-49 | 0.104 | 0.015 | 528 | 450 | 1.095 | 0.140 | 0.075 | 0.133 |
| HIV prevalence among respondents 15-24 | 0.018 | 0.008 | 243 | 216 | 0.918 | 0.441 | 0.002 | 0.033 |
| HIV prevalence among respondents 15+ | 0.098 | 0.012 | 779 | 654 | 1.115 | 0.121 | 0.074 | 0.121 |

Table B. 14 Sampling errors for adult and pregnancy-related mortality rates, South Africa DHS 2016

| Variable | Value (R) | Standard Error (SE) | Number of cases |  | Design Effect (DEFT) | Relative Error (SE/R) | Confidence limits |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Unweighted (N) | $\begin{gathered} \text { Weighted } \\ \text { (NW) } \\ \hline \end{gathered}$ |  |  | $\begin{aligned} & \text { Lower } \\ & \text { (R-2SE) } \end{aligned}$ | $\begin{gathered} \text { Upper } \\ \text { (R+2SE) } \\ \hline \end{gathered}$ |
| WOMEN |  |  |  |  |  |  |  |  |
| Adult mortality rates |  |  |  |  |  |  |  |  |
| 15-19 | 1.02 | 0.40 | 9284 | 9179 | 1.19 | 0.39 | 0.23 | 1.81 |
| 20-24 | 3.65 | 0.94 | 11882 | 11875 | 1.66 | 0.26 | 1.78 | 5.52 |
| 25-29 | 4.48 | 0.77 | 12466 | 12297 | 1.25 | 0.17 | 2.93 | 6.03 |
| 30-34 | 9.82 | 1.37 | 10962 | 11034 | 1.44 | 0.14 | 7.08 | 12.55 |
| 35-39 | 9.13 | 1.42 | 8749 | 8555 | 1.34 | 0.16 | 6.30 | 11.96 |
| 40-44 | 11.39 | 1.92 | 6121 | 5930 | 1.37 | 0.17 | 7.55 | 15.23 |
| 45-49 | 8.32 | 1.70 | 4060 | 3899 | 1.17 | 0.20 | 4.92 | 11.72 |
| 15-49 (age-adjusted) | 6.34 | 0.46 | 63523 | 62768 | 1.35 | 0.07 | 5.42 | 7.27 |
| Adult mortality probabilities |  |  |  |  |  |  |  |  |
| ${ }_{35}$ q $_{15} 2016$ | 212.79 | 14.29 | 63523 | 62768 | 1.79 | 0.07 | 184.21 | 241.37 |
| ${ }_{35}$ q15 $^{1998}$ | 102.93 | 7.24 | 123738 | 122701 | 1.54 | 0.07 | 88.45 | 117.40 |
| Pregnancy-related mortality rates |  |  |  |  |  |  |  |  |
| 15-19 | 0.00 | 0.00 | 9284 | 9179 | na | na | 0.00 | 0.00 |
| 20-24 | 0.36 | 0.19 | 11882 | 11875 | 1.09 | 0.53 | 0.00 | 0.74 |
| 25-29 | 0.58 | 0.29 | 12466 | 12297 | 1.33 | 0.50 | 0.00 | 1.16 |
| 30-34 | 0.46 | 0.21 | 10962 | 11034 | 1.01 | 0.45 | 0.05 | 0.88 |
| 35-39 | 0.76 | 0.46 | 8749 | 8555 | 1.54 | 0.61 | 0.00 | 1.67 |
| 40-44 | 1.22 | 0.71 | 6121 | 5930 | 1.56 | 0.58 | 0.00 | 2.63 |
| 45-49 | 0.11 | 0.11 | 4060 | 3899 | 0.66 | 1.00 | 0.00 | 0.33 |
| 15-49 (age-adjusted) | 0.47 | 0.12 | 63523 | 62768 | 1.37 | 0.25 | 0.24 | 0.71 |
| Pregnancy-related mortality ratio (PRMR) 2016 | 536.29 | 133.08 | 63523 | 62768 | 1.37 | 0.25 | 270.12 | 802.46 |
| Pregnancy-related mortality ratio (PRMR) 1998 | 150.34 | 36.55 | 123738 | 122701 | 1.03 | 0.24 | 77.24 | 223.45 |
| MEN |  |  |  |  |  |  |  |  |
| Adult mortality rates |  |  |  |  |  |  |  |  |
| 15-19 | 1.60 | 0.46 | 8991 | 8774 | 1.07 | 0.29 | 0.69 | 2.52 |
| 20-24 | 2.46 | 0.53 | 11469 | 11306 | 1.15 | 0.22 | 1.39 | 3.53 |
| 25-29 | 6.24 | 1.02 | 12044 | 11814 | 1.34 | 0.16 | 4.20 | 8.29 |
| 30-34 | 7.60 | 1.13 | 10689 | 10305 | 1.31 | 0.15 | 5.33 | 9.86 |
| 35-39 | 9.49 | 1.43 | 8280 | 8277 | 1.33 | 0.15 | 6.63 | 12.35 |
| 40-44 | 13.64 | 1.94 | 5601 | 5616 | 1.21 | 0.14 | 9.75 | 17.52 |
| 45-49 | 12.23 | 2.13 | 3768 | 3580 | 1.16 | 0.17 | 7.98 | 16.49 |
| 15-49 (age-adjusted) | 6.90 | 0.51 | 60841 | 59673 | 1.24 | 0.08 | 5.87 | 7.92 |
| Adult mortality probabilities |  |  |  |  |  |  |  |  |
| ${ }_{35}$ 1 $_{15} 2016$ | 234.04 | 15.92 | 60841 | 59673 | 1.49 | 0.07 | 202.21 | 265.87 |
| ${ }_{35}$ q15 $_{15} 1998$ | 212.56 | 11.70 | 118032 | 116590 | 1.75 | 0.06 | 189.17 | 235.95 |

na $=$ Not applicable

Table C. 1 Household age distribution
Single-year age distribution of the de facto household population by sex (weighted), South Africa DHS 2016

| Age | Female |  | Male |  | Age | Female |  | Male |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent |  | Number | Percent | Number | Percent |
| 0 | 351 | 1.8 | 356 | 2.0 | 37 | 228 | 1.2 | 236 | 1.3 |
| 1 | 375 | 1.9 | 419 | 2.4 | 38 | 233 | 1.2 | 232 | 1.3 |
| 2 | 355 | 1.8 | 410 | 2.3 | 39 | 234 | 1.2 | 193 | 1.1 |
| 3 | 435 | 2.2 | 401 | 2.3 | 40 | 223 | 1.2 | 237 | 1.3 |
| 4 | 423 | 2.2 | 448 | 2.5 | 41 | 270 | 1.4 | 236 | 1.3 |
| 5 | 370 | 1.9 | 391 | 2.2 | 42 | 221 | 1.1 | 190 | 1.1 |
| 6 | 399 | 2.1 | 422 | 2.4 | 43 | 230 | 1.2 | 197 | 1.1 |
| 7 | 339 | 1.7 | 398 | 2.2 | 44 | 187 | 1.0 | 202 | 1.1 |
| 8 | 360 | 1.9 | 408 | 2.3 | 45 | 181 | 0.9 | 196 | 1.1 |
| 9 | 370 | 1.9 | 405 | 2.3 | 46 | 224 | 1.2 | 186 | 1.0 |
| 10 | 343 | 1.8 | 397 | 2.2 | 47 | 221 | 1.1 | 131 | 0.7 |
| 11 | 354 | 1.8 | 386 | 2.2 | 48 | 208 | 1.1 | 169 | 1.0 |
| 12 | 353 | 1.8 | 348 | 2.0 | 49 | 181 | 0.9 | 132 | 0.7 |
| 13 | 329 | 1.7 | 296 | 1.7 | 50 | 195 | 1.0 | 137 | 0.8 |
| 14 | 322 | 1.7 | 328 | 1.8 | 51 | 156 | 0.8 | 153 | 0.9 |
| 15 | 293 | 1.5 | 303 | 1.7 | 52 | 194 | 1.0 | 120 | 0.7 |
| 16 | 357 | 1.8 | 368 | 2.1 | 53 | 164 | 0.8 | 152 | 0.9 |
| 17 | 333 | 1.7 | 345 | 1.9 | 54 | 164 | 0.8 | 100 | 0.6 |
| 18 | 331 | 1.7 | 350 | 2.0 | 55 | 157 | 0.8 | 122 | 0.7 |
| 19 | 345 | 1.8 | 329 | 1.9 | 56 | 177 | 0.9 | 133 | 0.8 |
| 20 | 316 | 1.6 | 332 | 1.9 | 57 | 178 | 0.9 | 113 | 0.6 |
| 21 | 322 | 1.7 | 291 | 1.6 | 58 | 156 | 0.8 | 112 | 0.6 |
| 22 | 342 | 1.8 | 367 | 2.1 | 59 | 143 | 0.7 | 100 | 0.6 |
| 23 | 309 | 1.6 | 300 | 1.7 | 60 | 120 | 0.6 | 114 | 0.6 |
| 24 | 343 | 1.8 | 270 | 1.5 | 61 | 155 | 0.8 | 101 | 0.6 |
| 25 | 326 | 1.7 | 303 | 1.7 | 62 | 132 | 0.7 | 105 | 0.6 |
| 26 | 358 | 1.8 | 273 | 1.5 | 63 | 137 | 0.7 | 96 | 0.5 |
| 27 | 340 | 1.8 | 260 | 1.5 | 64 | 134 | 0.7 | 94 | 0.5 |
| 28 | 318 | 1.6 | 296 | 1.7 | 65 | 100 | 0.5 | 66 | 0.4 |
| 29 | 357 | 1.8 | 302 | 1.7 | 66 | 126 | 0.7 | 81 | 0.5 |
| 30 | 303 | 1.6 | 321 | 1.8 | 67 | 95 | 0.5 | 75 | 0.4 |
| 31 | 310 | 1.6 | 276 | 1.6 | 68 | 99 | 0.5 | 72 | 0.4 |
| 32 | 306 | 1.6 | 301 | 1.7 | 69 | 83 | 0.4 | 59 | 0.3 |
| 33 | 310 | 1.6 | 282 | 1.6 | 70+ | 1,060 | 5.5 | 528 | 3.0 |
| 34 | 308 | 1.6 | 218 | 1.2 | Don't know | 92 | 0.5 | 172 | 1.0 |
| 35 | 279 | 1.4 | 236 | 1.3 |  |  |  |  |  |
| 36 | 264 | 1.4 | 246 | 1.4 | Total | 19,407 | 100.0 | 17,721 | 100.0 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women
De facto household population of women age 10-54, number and percent distribution of interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by 5-year age groups, South Africa DHS 2016

|  | Household <br> population of <br> women age 10-54 |  | Number | Percentage |
| :--- | :---: | :---: | :---: | :---: |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na $=$ Not applicable

Table C.2.2 Age distribution of eligible and interviewed men
De facto household population of men age 10-64, number and percent distribution of interviewed men age 15-59, and percentage of eligible men who were interviewed (weighted), by 5-year age groups, South Africa DHS 2016

| Age group | Household population of men age 10-64 | Interviewed men age 15-59 |  | Percentage of eligible men interviewed |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Number | Percentage |  |
| 10-14 | 902 | na | na | na |
| 15-19 | 834 | 669 | 18.6 | 80.3 |
| 20-24 | 789 | 590 | 16.4 | 74.7 |
| 25-29 | 732 | 500 | 13.9 | 68.3 |
| 30-34 | 678 | 449 | 12.5 | 66.3 |
| 35-39 | 549 | 379 | 10.5 | 69.0 |
| 40-44 | 496 | 347 | 9.6 | 70.0 |
| 45-49 | 369 | 260 | 7.2 | 70.4 |
| 50-54 | 306 | 212 | 5.9 | 69.3 |
| 55-59 | 294 | 199 | 5.5 | 67.6 |
| 60-64 | 262 | na | na | na |
| 15-59 | 5,047 | 3,605 | 100.0 | 71.4 |

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both the household population of men and interviewed men are household weights. Age is based on the Household Questionnaire
na $=$ Not applicable

Table C. 3 Completeness of reporting
Percentage of observations missing information for selected demographic and health questions (weighted), South Africa DHS 2016

| Subject | Reference group | Percentage with information missing | Number of cases |
| :---: | :---: | :---: | :---: |
| Birth date | Births in the 15 years preceding the survey |  |  |
| Day only |  | 0.37 | 9,577 |
| Day and month |  | 0.82 | 9,577 |
| Day, month, and year |  | 0.29 | 9,577 |
| Age at death | Deceased children born in the 15 years preceding the survey | 0.00 | 489 |
| Age/date at first union ${ }^{1}$ | Ever-in-union women age 15-49 Ever-in-union men age 15-59 | $\begin{aligned} & 0.03 \\ & 0.07 \end{aligned}$ | $\begin{aligned} & 3,522 \\ & 1,475 \end{aligned}$ |
| Respondent's education | Women age 15-49 <br> Men age 15-59 | $\begin{aligned} & 0.00 \\ & 0.00 \end{aligned}$ | $\begin{aligned} & 8,514 \\ & 3,618 \end{aligned}$ |
| Diarrhoea in past 2 weeks | Living children age 0-59 months | 6.02 | 3,444 |
| Anthropometry of children Height Weight Height or weight | Living children age 0-59 months (from the Biomarker Questionnaire) | $\begin{aligned} & 28.48 \\ & 28.44 \\ & 29.04 \end{aligned}$ | $\begin{aligned} & 2,007 \\ & 2,007 \\ & 2,007 \end{aligned}$ |
| Anthropometry of women Height Weight Height or weight | Women age 15+ (from the Biomarker Questionnaire) | $\begin{aligned} & 30.58 \\ & 30.90 \\ & 31.03 \end{aligned}$ | $\begin{aligned} & 6,986 \\ & 6,986 \\ & 6,986 \end{aligned}$ |
| Anthropometry of men Height Weight Height or weight | Men age 15+ (from the Biomarker Questionnaire) | $\begin{aligned} & 43.08 \\ & 43.43 \\ & 43.46 \end{aligned}$ | $\begin{aligned} & 5,791 \\ & 5,791 \\ & 5,791 \end{aligned}$ |
| Anaemia |  |  |  |
| Children | Living children age 6-59 months (from the Biomarker Questionnaire) | 40.8 | 1,848 |
| Women | Women age 15+ (from the Biomarker Questionnaire) | 39.33 | 6,986 |
| Men | Men age 15+ (from the Biomarker Questionnaire) | 52.84 | 5,791 |

${ }^{1}$ Both year and age missing

## Table C. 4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living, dead, and total children (weighted), South Africa DHS 2016

|  | Number of births |  |  | Percentage with year and month of birth given |  |  | Sex ratio at birth ${ }^{1}$ |  |  | Calendar year ratio ${ }^{2}$ |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| year | Living | Dead | Total | Living | Dead | Total | Living | Dead | Total | Living | Dead | Total |
| 2016 | 462 | 16 | 478 | 100.0 | 100.0 | 100.0 | 108.1 | 84.8 | 107.2 | na | na | na |
| 2015 | 688 | 27 | 714 | 100.0 | 100.0 | 100.0 | 100.8 | 80.1 | 99.9 | na | na | na |
| 2014 | 666 | 18 | 683 | 100.0 | 93.9 | 99.8 | 111.7 | 268.8 | 114.1 | 97.4 | 63.4 | 96.1 |
| 2013 | 679 | 29 | 708 | 99.4 | 94.0 | 99.2 | 96.8 | 216.7 | 99.9 | 99.4 | 115.1 | 100.0 |
| 2012 | 700 | 33 | 733 | 100.0 | 91.0 | 99.6 | 109.8 | 186.1 | 112.4 | 103.0 | 112.3 | 103.4 |
| 2011 | 681 | 29 | 711 | 99.8 | 96.1 | 99.6 | 110.0 | 210.6 | 112.9 | 100.4 | 83.0 | 99.5 |
| 2010 | 657 | 38 | 695 | 99.2 | 80.6 | 98.2 | 124.7 | 86.3 | 122.2 | 101.2 | 100.0 | 101.1 |
| 2009 | 618 | 47 | 664 | 99.8 | 87.1 | 98.9 | 108.3 | 210.2 | 113.2 | 96.5 | 112.3 | 97.5 |
| 2008 | 623 | 45 | 668 | 99.1 | 81.2 | 97.9 | 125.9 | 174.2 | 128.6 | 105.8 | 115.0 | 106.4 |
| 2007 | 560 | 32 | 591 | 99.3 | 79.1 | 98.2 | 101.9 | 118.7 | 102.7 | 89.9 | 66.1 | 88.2 |
| 2012-2016 | 3,195 | 122 | 3,316 | 99.9 | 95.2 | 99.7 | 105.1 | 150.2 | 106.5 | na | na | na |
| 2007-2011 | 3,138 | 191 | 3,329 | 99.4 | 84.5 | 98.6 | 114.0 | 151.6 | 115.9 | na | na | na |
| 2002-2006 | 2,606 | 167 | 2,774 | 99.2 | 84.8 | 98.4 | 110.1 | 114.7 | 110.3 | na | na | na |
| 1997-2001 | 1,926 | 102 | 2,028 | 99.3 | 80.1 | 98.3 | 109.0 | 166.6 | 111.3 | na | na | na |
| <1997 | 2,297 | 193 | 2,489 | 96.6 | 82.1 | 95.5 | 103.1 | 120.4 | 104.3 | na | na | na |
| All | 13,162 | 775 | 13,936 | 99.0 | 85.1 | 98.2 | 108.4 | 136.1 | 109.7 | na | na | na |

[^49]Table C. 5 Reporting of age at death in days
Distribution of reported deaths under age 1 month by age at death in days and percentage of neonatal deaths reported to occur at age 0-6 days, for 5 -year periods of birth preceding the survey (weighted), South Africa DHS 2016

| Age at death (days) | Number of years preceding the survey |  |  |  | $\begin{aligned} & \text { Total } \\ & 0-19 \\ & \hline \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| <1 | 47 | 54 | 46 | 13 | 159 |
| 1 | 11 | 5 | 5 | 3 | 24 |
| 2 | 3 | 2 | 0 | 2 | 7 |
| 3 | 4 | 3 | 0 | 3 | 10 |
| 4 | 1 | 6 | 1 | 0 | 8 |
| 5 | 1 | 4 | 0 | 3 | 8 |
| 6 | 0 | 3 | 0 | 0 | 3 |
| 7 | 3 | 1 | 0 | 1 | 5 |
| 8 | 0 | 0 | 0 | 1 | 1 |
| 9 | 0 | 0 | 0 | 0 | 0 |
| 10 | 0 | 2 | 0 | 0 | 2 |
| 11 | 0 | 1 | 0 | 0 | 1 |
| 12 | 0 | 0 | 0 | 0 | 0 |
| 13 | 0 | 0 | 0 | 0 | 0 |
| 14 | 6 | 5 | 4 | 1 | 17 |
| 15 | 0 | 1 | 0 | 4 | 5 |
| 16 | 0 | 0 | 0 | 0 | 0 |
| 17 | 0 | 0 | 0 | 0 | 0 |
| 18 | 0 | 1 | 1 | 0 | 2 |
| 19 | 1 | 0 | 0 | 1 | 1 |
| 20 | 0 | 2 | 0 | 0 | 2 |
| 21 | 1 | 3 | 1 | 0 | 5 |
| 22 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 0 | 0 | 0 | 0 |
| 24 | 0 | 0 | 0 | 0 | 0 |
| 25 | 0 | 0 | 0 | 0 | 0 |
| 26 | 0 | 0 | 0 | 0 | 0 |
| 27 | 0 | 0 | 0 | 0 | 0 |
| 28 | 0 | 0 | 0 | 0 | 0 |
| 29 | 0 | 0 | 0 | 0 | 0 |
| 30 | 0 | 0 | 0 | 0 | 0 |
| Total 0-30 | 78 | 92 | 59 | 31 | 261 |
| Percentage early neonatal ${ }^{1}$ | 85.4 | 82.5 | 89.3 | 75.3 | 84.1 |

$1 \leq 6$ days $/ \leq 30$ days

Table C. 6 Reporting of age at death in months
Distribution of reported deaths under age 2 years by age at death in months and percentage of infant deaths reported to occur at less than age 1 month, for 5 -year periods of birth preceding the survey (weighted), South Africa DHS 2016

| Age at death (months) | Number of years preceding the survey |  |  |  | $\begin{aligned} & \text { Total } \\ & 0-19 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-4 | 5-9 | 10-14 | 15-19 |  |
| $<1{ }^{\text {a }}$ | 78 | 92 | 59 | 31 | 261 |
| 1 | 2 | 8 | 8 | 4 | 23 |
| 2 | 6 | 4 | 4 | 6 | 20 |
| 3 | 12 | 9 | 13 | 1 | 36 |
| 4 | 9 | 3 | 10 | 2 | 23 |
| 5 | 3 | 6 | 6 | 3 | 18 |
| 6 | 2 | 18 | 5 | 3 | 27 |
| 7 | 0 | 7 | 3 | 3 | 13 |
| 8 | 3 | 13 | 3 | 4 | 23 |
| 9 | 2 | 7 | 4 | 2 | 14 |
| 10 | 1 | 1 | 1 | 1 | 4 |
| 11 | 2 | 2 | 0 | 1 | 6 |
| 12 | 4 | 8 | 8 | 8 | 27 |
| 13 | 0 | 0 | 2 | 0 | 2 |
| 14 | 1 | 2 | 0 | 0 | 3 |
| 15 | 0 | 1 | 0 | 0 | 1 |
| 16 | 1 | 0 | 0 | 0 | 1 |
| 17 | 0 | 0 | 1 | 0 | 1 |
| 18 | 1 | 1 | 1 | 3 | 6 |
| 19 | 0 | 0 | 0 | 0 | 0 |
| 20 | 0 | 0 | 0 | 1 | 1 |
| 21 | 0 | 0 | 0 | 0 | 0 |
| 22 | 0 | 0 | 0 | 0 | 0 |
| 23 | 0 | 4 | 0 | 0 | 4 |
| Total 0-11 | 121 | 171 | 117 | 59 | 468 |
| Percentage neonatal ${ }^{1}$ | 64.5 | 54.2 | 50.8 | 52.0 | 55.7 |

${ }^{\text {a }}$ Includes deaths under 1 month reported in days
<1 month/<1 year

Table C. 7 Height and weight data completeness and quality for children
Among children under age 5 (age 0-59 months) who were eligible for anthropometry, percentage with incomplete or missing height and/or weight measurements and/or date of birth; percentage with out-of-range height-for-age, and/or weight-for-height, and/or weight-for-age data; and percentage with valid data, according to background characteristics (unweighted), South Africa DHS 2016

| Background characteristic | Percentage with data missing or incomplete: |  |  | Percentage with out-of-range data for ${ }^{4}$ : |  |  | Percentage with valid data for ${ }^{8}$ : |  |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { children } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Height ${ }^{1}$ | Weight ${ }^{2}$ | Age in months ${ }^{3}$ | Height-forage ${ }^{5}$ | Weight-forheight ${ }^{6}$ | Weight-forage $^{7}$ | Height-forage | Weight-forheight | Weight-forage |  |
| Age in months |  |  |  |  |  |  |  |  |  |  |
|  | 23.3 | 22.7 | 0.0 | 2.8 | 5.1 | 2.3 | 73.9 | 71.0 | 75.0 | 176 |
| 6-8 | 35.2 | 34.1 | 0.0 | 4.4 | 4.4 | 2.2 | 60.4 | 60.4 | 63.7 | 91 |
| 9-11 | 21.3 | 21.3 | 2.2 | 1.1 | 1.1 | 0.0 | 76.4 | 76.4 | 77.5 | 89 |
| 12-17 | 23.6 | 25.0 | 0.5 | 1.0 | 3.8 | 1.0 | 75.0 | 70.7 | 73.6 | 208 |
| 18-23 | 26.1 | 26.7 | 0.0 | 1.1 | 3.3 | 1.1 | 72.8 | 69.4 | 72.2 | 180 |
| 24-35 | 27.1 | 25.9 | 1.5 | 1.2 | 1.0 | 0.2 | 71.2 | 71.5 | 73.4 | 410 |
| 36-47 | 26.8 | 27.2 | 2.3 | 0.2 | 0.5 | 0.0 | 71.4 | 72.1 | 71.2 | 437 |
| 48-59 | 23.3 | 23.8 | 1.6 | 0.7 | 1.8 | 0.0 | 74.8 | 74.1 | 75.1 | 433 |
| Sex |  |  |  |  |  |  |  |  |  |  |
| Male | 26.5 | 26.5 | 1.2 | 1.5 | 2.1 | 0.7 | 71.4 | 70.5 | 72.2 | 1,027 |
| Female | 24.6 | 24.7 | 1.4 | 0.8 | 2.0 | 0.4 | 73.7 | 72.7 | 74.0 | 997 |
| Mother's interview status |  |  |  |  |  |  |  |  |  |  |
| Interviewed | 22.5 | 22.7 | 0.1 | 1.1 | 2.4 | 0.5 | 76.3 | 74.2 | 76.7 | 1,447 |
| Not interviewed but in household | 60.4 | 59.0 | 2.8 | 0.5 | 1.4 | 0.5 | 38.2 | 38.2 | 39.6 | 217 |
| Not interviewed and not in the household ${ }^{9}$ | 16.7 | 16.9 | 5.3 | 1.7 | 1.1 | 0.8 | 78.1 | 81.4 | 78.6 | 360 |
| Residence |  |  |  |  |  |  |  |  |  |  |
| Urban | 35.2 | 34.6 | 0.4 | 1.0 | 2.5 | 0.6 | 63.8 | 62.2 | 64.8 | 1,006 |
| Non-urban | 16.0 | 16.7 | 2.2 | 1.3 | 1.7 | 0.5 | 81.1 | 80.8 | 81.2 | 1,018 |
| Province |  |  |  |  |  |  |  |  |  |  |
| Western Cape | 56.1 | 56.1 | 0.9 | 0.0 | 0.9 | 0.0 | 43.9 | 43.0 | 43.9 | 114 |
| Eastern Cape | 18.6 | 18.9 | 0.7 | 0.7 | 0.7 | 0.0 | 80.4 | 80.4 | 80.7 | 280 |
| Northern Cape | 30.7 | 30.1 | 0.0 | 1.3 | 3.9 | 2.0 | 68.0 | 65.4 | 68.0 | 153 |
| Free State | 22.0 | 22.0 | 0.5 | 1.6 | 4.3 | 0.0 | 76.3 | 73.7 | 78.0 | 186 |
| KwaZulu-Natal | 19.2 | 23.4 | 1.7 | 2.4 | 4.5 | 1.0 | 78.0 | 71.5 | 75.3 | 291 |
| North West | 18.0 | 17.1 | 0.5 | 1.5 | 1.0 | 0.5 | 80.5 | 81.0 | 82.4 | 205 |
| Gauteng | 41.5 | 41.0 | 1.0 | 0.5 | 1.5 | 0.5 | 57.0 | 57.0 | 57.5 | 200 |
| Mpumalanga | 20.1 | 18.7 | 1.7 | 1.0 | 1.3 | 0.7 | 77.6 | 78.6 | 79.3 | 299 |
| Limpopo | 26.0 | 24.7 | 3.0 | 0.7 | 1.0 | 0.3 | 70.6 | 72.6 | 72.3 | 296 |
| Mother's education |  |  |  |  |  |  |  |  |  |  |
| No education | 12.1 | 12.1 | 3.0 | 3.0 | 0.0 | 0.0 | 81.8 | 87.9 | 84.8 | 33 |
| Primary incomplete | 14.3 | 14.3 | 1.1 | 1.1 | 3.3 | 2.2 | 84.6 | 82.4 | 83.5 | 91 |
| Primary complete | 22.7 | 22.7 | 0.0 | 0.0 | 3.0 | 0.0 | 77.3 | 74.2 | 77.3 | 66 |
| Secondary incomplete | 25.2 | 25.5 | 0.5 | 1.2 | 1.9 | 0.1 | 73.5 | 71.8 | 74.3 | 844 |
| Secondary complete | 30.3 | 29.6 | 0.2 | 0.9 | 3.2 | 0.9 | 68.6 | 66.1 | 69.2 | 439 |
| More than secondary | 41.1 | 41.6 | 0.0 | 0.5 | 1.6 | 0.5 | 58.4 | 56.3 | 57.9 | 190 |
| Missing | 100.0 | 100.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1 |
| Total | 25.5 | 25.6 | 1.3 | 1.1 | 2.1 | 0.5 | 72.5 | 71.6 | 73.1 | 2,024 |

${ }^{1}$ Child's height in centimetres is missing, child was not present, child refused, and "other" result codes
${ }^{2}$ Child's weight in kilograms is missing, child was not present, child refused, and "other" result codes
${ }^{3}$ Incomplete date of birth; a complete date of birth is month/day/year or month/year
${ }^{4}$ Cases with missing or incomplete data are not considered to be out-of-range cases
${ }^{5}$ Out-of-range cases for height-for-age are defined as more than 6 standard deviations (SD) above or below the standard population median (Z-scores) based on the WHO Child Growth Standards
${ }^{6}$ Out-of-range cases for weight-for-height are defined as more than 5 SD above or below the standard population median (Z-scores) based on the WHO Child Growth Standards
${ }^{7}$ Out-of-range cases for weight-for-age are defined as more than 6 SD below or 5 SD above the standard population median (Z-scores) based on the WHO Child Growth Standards
${ }^{8}$ No missing data, incomplete data, or out of range data
${ }^{9}$ Includes children whose mothers are deceased

Table C. 8 Completeness of information on siblings
Completeness of data on survival status of sisters and brothers reported by interviewed women, age of living siblings, and age at death (AD) and years since death (YSD) of dead siblings (unweighted), South Africa DHS 2016

|  | Sisters |  | Brothers |  | All siblings |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Number | Percent | Number | Percent |
| All siblings | 13,135 | 100.0 | 12,929 | 100.0 | 26,064 | 100.0 |
| Living | 11,585 | 88.2 | 11,033 | 85.3 | 22,618 | 86.8 |
| Dead | 1,486 | 11.3 | 1,814 | 14.0 | 3,300 | 12.7 |
| Survival status unknown | 64 | 0.5 | 82 | 0.6 | 146 | 0.6 |
| Living siblings | 11,585 | 100.0 | 11,033 | 100.0 | 22,618 | 100.0 |
| Age reported | 11,581 | 100.0 | 11,028 | 100.0 | 22,609 | 100.0 |
| Age missing | 4 | 0.0 | 5 | 0.0 | 9 | 0.0 |
| Dead siblings | 1,486 | 100.0 | 1,814 | 100.0 | 3,300 | 100.0 |
| AD and YSD reported | 1,486 | 100.0 | 1,813 | 99.9 | 3,299 | 100.0 |
| Missing only AD | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Missing only YSD | 0 | 0.0 | 0 | 0.0 | 0 | 0.0 |
| Missing AD and YSD | 0 | 0.0 | 1 | 0.1 | 1 | 0.0 |

Table C. 9 Sibship size and sex ratio of siblings
Mean sibship size and sex ratio of siblings at birth, South Africa DHS 2016

| Age of respondents | Mean sibship <br> size $^{1}$ | Sex ratio of <br> siblings at <br> birth $^{2}$ |
| :--- | :---: | :---: |
| $15-19$ | 3.5 | 104.6 |
| $20-24$ | 3.7 | 94.7 |
| $25-29$ | 4.0 | 92.9 |
| $30-34$ | 4.1 | 96.5 |
| $35-39$ | 4.2 | 100.3 |
| $40-44$ | 4.1 | 10.5 |
| $45-49$ | 4.4 | 97.4 |
| Total | 4.0 | 98.3 |

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## INTRODUCTION

Hello. My name is $\qquad$ I am working with Statistics South Africa. We are
conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER
DATE $\qquad$
RESPONDENT AGREES
RESPONDENT DOES NOT AGREE
TO BE INTERVIEWED . . 1
TO BE INTERVIEWED . . $2 \longrightarrow$ END


HOUSEHOLD SCHEDULE


|  |  |  |  |  | IF AGE 0-17 YEARS |  |  |  | IF AGE 0-5 |  | IF AGE 5 YEARS OR OLDER |  | IF AGE 5-24 YEARS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{array}{\|c\|} \hline \text { LINE } \\ \text { NO. } \end{array}$ | ELIGIBILITY |  |  |  | SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS |  |  |  | ELIGIBILITY |  | EVER ATTENDED SCHOOL |  | CURRENT/RECENT SCHOOL ATTENDANCE |  |
|  | 9 | 9A | 10 | 11 | 12 | 13 | 14 | 15 | 15A | 15B | 16 | 17 | 18 | 19 |
|  | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> WOMEN <br> AGE <br> 15-49 <br> OR, IF <br> HOUSE- <br> HOLD <br> SELEC- <br> TED FOR <br> MALE <br> SURVEY <br> BIO- <br> MARKERS, <br> CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> WOMEN <br> AGE <br> 15 AND <br> OLDER | CIRCLE <br> LINE <br> NUMBER <br> OF ALL <br> WOMEN <br> AGE <br> 18 AND <br> OLDER | IF HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS <br> CIRCLE LINE NUMBER OF ALL MEN AGE 15 AND OLDER | IF HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS <br> CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5 | Is <br> (NAME)'s biological mother alive? | Does (NAME)'s biological mother usually live in this household or was she a guest last night? <br> IF YES: What is her name? <br> RECORD <br> MOTHER'S <br> LINE <br> NUMBER. <br> IF NO, RECORD '00'. | Is (NAME)'s biological father alive? | Does (NAME)'s biological father usually live in this household or was he a guest last night? <br> IF YES: What is his name? <br> RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'. | CHECK 13: <br> IF MOTHER <br> LIVES IN <br> HOUSE- <br> HOLD, <br> SKIP TO 16. <br> IF MOTHER HAS <br> DIED OR <br> DOES <br> NOT <br> LIVE IN <br> THE <br> HOUSE- <br> HOLD, <br> CIRCLE <br> LINE <br> NUMBER <br> OF CHILD. | Who is the primary caregiver of (NAME)? <br> RECORD CAREGIVER'S LINE NUMBER. | Has (NAME) ever attended an educational institution? | What is the highest level of education that (NAME) has attended? <br> What is the highest grade (NAME) completed at that level? | Did (NAME) attend an educational institution at any time during the 2016 academic year? | During [this/that] academic year, what level and grade [is/was] (NAME) attending? |
| 01 | 01 | 01 | 01 | 01 | $\begin{array}{cc} \text { Y } & \text { N DK } \\ 1 & 2 \\ & \nabla^{8} \\ \text { GO TO } 14 \end{array}$ | $\square$ | $\left\lvert\, \begin{array}{ccc} \text { Y } & \text { N DK } \\ 1 & 2 & \nabla^{8} \\ \text { GO } & & \downarrow 0 \\ 15 A \end{array}\right.$ |  | 01 | LINE NO. | $\begin{array}{lr} \mathrm{Y} & \mathrm{~N} \\ 1 & 2 \\ & \downarrow \\ \text { GO TO } & \end{array}$ | $\begin{array}{l\|l\|} \hline & \\ \hline \end{array}$ | $\begin{array}{lr} \mathrm{Y} & \mathrm{~N} \\ 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ |  |
| 02 | 02 | 02 | 02 | 02 | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 14 \end{array}$ |  |  |  | 02 |  | $\begin{array}{lr} 1 & 2 \\ & \downarrow \\ \text { GO TO } & 20 \end{array}$ | $\begin{array}{l\|l\|} \hline & \\ \hline \end{array}$ | $\begin{array}{lr} 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ |  |
| 03 | 03 | 03 | 03 | 03 | $\begin{array}{cc} 1 & 2 \\ \text { GO TO } 14 \end{array}$ |  | $\boldsymbol{r r}_{1} \quad 2 \nabla^{8}$ |  | 03 |  | $\begin{array}{lr} 1 & \stackrel{2}{\downarrow} \\ \text { GO TO } 20 \end{array}$ |  | $\begin{array}{lr} 1 & \stackrel{2}{\downarrow} \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ |  |
| 04 | 04 | 04 | 04 | 04 | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 14 \end{array}$ |  |  |  | 04 | $1$ | $\begin{array}{lr} 1 & \stackrel{2}{\downarrow} \\ \text { GO TO } 20 \end{array}$ |  | $\begin{array}{lr} 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ | $\square$ |
| 05 | 05 | 05 | 05 | 05 | $\begin{array}{cc} 1 & 2 \\ \text { GO TO } 14 \end{array}$ | $\square$ |  |  | 05 | I |  |  |  | $\square$ |
| 06 | 06 | 06 | 05 | 06 | $\begin{array}{ll} 1 & 2 \nabla^{8} \\ \text { GO TO } 14 \end{array}$ | $\begin{array}{l\|l\|} \hline & \\ \hline \end{array}$ |  |  | 06 | $1$ | $\begin{array}{cr} 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ |  | $\begin{array}{lr} 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ | $\square$ |
| 07 | 07 | 07 | 07 | 07 | $\begin{array}{cc} 1 & 2 \square^{8} \\ \text { GO TO } 14 \end{array}$ |  |  |  | 07 |  | $\begin{array}{cr} 1 & 2 \\ & \downarrow \\ \text { GO TO } 20 \end{array}$ |  | $\begin{array}{cr} 1 & 2 \\ & \downarrow \\ \text { GO TO } & 20 \end{array}$ | , |

## CODES FOR Qs. 17 AND 19: EDUCATION

## PRE-PRIMARY SCHOOL

(USE '00' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q. 01=GRADE R/GRADE 0/RECEPTION

## RIMARY SCHOOL

YEAR PRIMARY SCHOOL COMPLETED
(USE '10' FOR Q. 17 ONLY. THIS CODE IS NOT ALLOWED FOR Q.
1=GRADE 1/SUB A/CLASS 1
2=GRADE 2/SUB B/CLASS 2
3=GRADE 3/STANDARD 1/AET 1 (KHA RI GUDE SANLI)
14=GRADE 4/STANDARD 2
15=GRADE 5/STANDARD 3/AET 2
16=GRADE 6 /STANDARD 4
17=GRADE 7/STANDARD 5/AET 3

SECONDARY SCHOOL
20=LESS THAN 1 YEAR SECONDARY SCHOOL COMPLETED
21=GRADE 8/STANDARD 6/FORM 1/NTC 1/N1/NC (V) LEVEL
22=GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2/N2/NC (V) LEVEL 3
23=GRADE 10/STANDARD 8/FORM 3/NTC 3/N3/NC (V) LEVEL 4
24=GRADE 11/STANDARD 9/FORM 4
STERTIFICATE OR DIPLOMA
26=GRADE 12/STANDARD 10/FORM 5/MATRIC
27=N4/NTC4
$27=$ N4/NTC4
$28=$ N5/NTC5
$28=$ N $5 /$ NTC
$29=$ N $/$ NTC 6

HIGHER EDUCATION
30=FURTHER STUDIES INCOMPLETE OR ONGOING
31=CERTIFICATE OR DIPLOMA WITH GRADE 12/
STANDARD 10 COMPLETED
32=HIGHER DIPLOMA (TECHNIKON
UNIVERSITY OF TECHNOLOGY)
33=POST HIGHER DIPLOMA (TECHNIKON)
UNIVERSITY OF TECHNOLOGY MASTERS, DOCTORAL)
34=BACHELORS DEGREE/BACHELORS DEGREE
AND POST GRADUATE DIPLOMA
36=HIGHER DEGREE (MASTERS, DOCTORATE)
$8=$ DON'T KNOW

|  | IF AGE 5 YEARS OR OLDER |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\left\|\begin{array}{c} \text { LINE } \\ \text { NO. } \end{array}\right\|$ | PROBLEM OF VISION | PROBLEM OF HEARING | PROBLEM OF WALKING | PROBLEM OF REMEMBERING | PROBLEM WITH SELF-CARE | PROBLEM OF COMMUNICATING | GOVERNMENT GRANTS |  |
|  | 20 | 21 | 22 | 23 | 24 | 25 | $26 \quad 27$ |  |
|  | Does (NAME) have difficulty seeing, even if wearing glasses? <br> IF NO, CIRCLE "0". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot see at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT SEE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8". | Does (NAME) have difficulty hearing, even if wearing a hearing aid? <br> IF NO, CIRCLE "0". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot hear at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT HEAR AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8". | Does (NAME) have difficulty walking a kilometre or climbing a flight of steps? <br> IF NO, CIRCLE " 0 ". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot walk or climb steps at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT WALK OR CLIMB AT ALL, CIRCLE " 3 ". IF DON'T KNOW CIRCLE " 8 ". | Does (NAME) have difficulty remembering or concentrating? <br> IF NO, CIRCLE " 0 ". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot remember or concentrate at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT REMEMBER OR CONCENTRATE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8". | Does (NAME) have difficulty with self-care such as washing all over or dressing? <br> IF NO, CIRCLE " 0 ". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot do at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT DO AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE " 8 ". | Does (NAME) have difficulty communicating in (his/her) usual language? For example, understanding others or others understanding (him/her)? <br> IF NO, CIRCLE " 0 ". <br> IF YES, PROBE: With some difficulty, with a lot of difficulty, or cannot communicate at all? <br> IF WITH SOME DIFFICULTY, CIRCLE "1". IF WITH A LOT OF DIFFICULTY, CIRCLE "2". IF CANNOT COMMUNICATE AT ALL, CIRCLE "3". IF DON'T KNOW CIRCLE "8". | Does <br> (NAME) receive any social grant, old age grant, or social relief assistance from the government ? | What type of government grant does (NAME) receive? |
| 01 | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{ccccc} \mathrm{N} & \mathrm{YS} & \mathrm{YA} & \mathrm{YT} & \mathrm{DK} \\ 0 & 1 & 2 & 3 & 8 \end{array}$ | $\begin{array}{lc} \mathrm{Y} & \mathrm{~N} \\ 1 & 2 \\ & \downarrow \\ & \text { NEXT } \\ \hline \end{array}$ |  |
| 02 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{ll} 1 & \\ & \\ & \downarrow \\ \text { NEXT LINE } \end{array}$ |  |
| 03 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{ll} 1 & 2 \\ & \downarrow \\ \text { NEXT LINE } \end{array}$ |  |
| 04 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{ll} 1 & 2 \\ & \downarrow \\ \text { NEXT LINE } \end{array}$ |  |
| 05 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{ll} 1 & \\ & \\ & \downarrow \\ \text { NEXT LINE } \end{array}$ |  |
| 06 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3\end{array}$ | $\begin{array}{ll} 1 & 2 \\ & \downarrow \\ & \\ \text { NEXT LINE } \end{array}$ |  |
| 07 | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3\end{array}$ | $\begin{array}{lllll}0 & 1 & 2 & 3 & 8\end{array}$ | $\begin{array}{ll} 1 & 2 \\ & \downarrow \\ & \\ \text { NEXT LINE } \end{array}$ |  |
|  |  |  |  |  |  | CODES FOR <br> 01 = OLD AG <br> $02=$ DISABIL <br> $03=$ CHILD S <br> $04=$ CARE $D$ <br> $05=$ FOSTER <br> $06=$ WAR VE <br> $07=\operatorname{IN}-$ AID + <br> (60 <br> $08=1$ N-AID + <br> $09=1$ N-AID + <br> $10=$ SOCIAL <br> $98=$ DON'T K | 2. 27 : GOVT G <br> (60-74; R1500 <br> Y (18-59; R15 <br> JPPORT (0-17 <br> PENDENCY ( 0 <br> CHILD (<22; R <br> ERAN (60+; R <br> OLD AGE <br> -74; R1850; 75 <br> DISABILITY (18 <br> WAR VETERA <br> ELIEF OF DIS <br> NOW | RANTS <br> 75+; R1520) <br> 0) <br> R350) <br> 17; R1500) <br> 90) <br> 520) <br> ; R1870) <br> 59; R1850) <br> (60+; R1870) <br> TRESS |

LOOK AT THE LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD GO TO. CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN IN COLUMN 9A OF THE HOUSEHOLD SCHEDULE. THIS IS THE COLUMN NUMBER YOU SHOULD GO TO. FOLLOW THE SELECTED ROW AND COLUMN TO THE CELL WHERE THEY MEET AND CIRCLE THE NUMBER IN THE CELL. THIS IS THE NUMBER OF THE WOMAN SELECTED FOR THE HOUSEHOLD RELATIONS QUESTIONS FROM THE LIST OF ELIGIBLE WOMEN IN COLUMN 9A OF THE HOUSEHOLD SCHEDULE. WRITE the name and line number of the selected woman in the space below the table.

EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER IS ‘716’ AND THE HOUSEHOLD SCHEDULE COLUMN 9A SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE WOMAN'S INTERVIEW (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE.

| LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER | TOTAL NUMBER OF ELIGIBLE WOMEN IN HOUSEHOLD SCHEDULE COLUMN 9A |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
| 0 | 1 | 2 | 2 | 4 | 3 | 6 | 5 | 4 |
| 1 | 1 | 1 | 3 | 1 | 4 | 1 | 6 | 5 |
| 2 | 1 | 2 | 1 | 2 | 5 | 2 | 7 | 6 |
| 3 | 1 | 1 | 2 | 3 | 1 | 3 | 1 | 7 |
| 4 | 1 | 2 | 3 | 4 | 2 | 4 | 2 | 8 |
| 5 | 1 | 1 | 1 | 1 | 3 | 5 | 3 | 1 |
| 6 | 1 | 2 | 2 | 2 | 4 | 6 | 4 | 2 |
| 7 | 1 | 1 | 3 | 3 | 5 | 1 | 5 | 3 |
| 8 | 1 | 2 | 1 | 4 | 1 | 2 | 6 | 4 |
| 9 | 1 | 1 | 2 | 1 | 2 | 3 | 7 | 5 |
| NAME OF SELECTED WOMAN |  |  |  |  |  |  |  |  |
| HOUSEHOLD LINE NUMBER OF SELECTED WOMAN |  |  |  |  |  |  |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 101 | What is the main source of drinking water for members of your household? |  |  |
| 102 | What is the main source of water used by your household for other purposes such as cooking and handwashing? |  | $\nrightarrow 106$ |
| 103 | Where is that water source located? |  | $\xrightarrow{\longrightarrow} 05$ |
| 104 | How long does it take to go there, get water, and come back? | MINUTES . . . . . . . . . . . . . . . . . . <br> DON'T KNOW . . . . . . . . . . . . . . . . . . . . . . . . . . . . 998 |  |
| 105 | CHECK 101 AND 102: CODE '14' OR '21' CIRCLED? <br> YES | NO | $\rightarrow 107$ |
| 106 | In the past two weeks, was the water from this source not available for at least one full day? |  |  |
| 107 | Do you do anything to the water to make it safer to drink? |  | $\xrightarrow{\rightarrow} 109$ |

HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 108 | What do you usually do to make the water safer to drink? <br> Anything else? <br> RECORD ALL MENTIONED. |  |  |
| 109 | What kind of toilet facility do members of your household usually use? <br> IF NOT POSSIBLE TO DETERMINE, ASK PERMISSION TO OBSERVE THE FACILITY. |  | $\longrightarrow 113$ |
| 110 | Do you share this toilet facility with other households? | $\begin{array}{lll} \text { YES } & \ldots & \text {. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } \end{array}$ | $\longrightarrow 112$ |
| 111 | Including your own household, how many households use this toilet facility? |  |  |
| 112 | Where is this toilet facility located? |  |  |
| 113 | What type of energy/fuel does your household mainly use for cooking? |  | $\rightarrow 116$ |
| 114 | Is the cooking usually done in the house, in a separate building, or outdoors? |  | $\rightarrow \rightarrow 116$ |
| 115 | Do you have a separate room which is used as a kitchen? |  |  |
| 116 | How many rooms in this household are used for sleeping? | ROOMS |  |

HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 116A | What type of energy/fuel does your household mainly use for heating/warming? | ELECTRICITY FROM MAINS ELECTRICITY FROM GENERATOR ELECTRICITY FROM OTHER SOURCE SOLAR ENERGY GAS PARAFFIN COAL WOOD STRAW/SHRUBS/GRASS AGRICULTURAL CROP ANIMAL DUNG <br> NO HEATING/WARMING IN HOUSEHOLD OTHER $\qquad$ | 01 <br> 02 <br> 03 <br> 04 <br> 05 <br> 06 <br> 07 <br> 08 <br> 09 <br> 10 <br> 11 <br> 95 <br> 96 |  |
| 117 | Does this household own any livestock, herds, other farm animals, or poultry? | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 120$ |
| 118 | How many of the following animals does this household own? <br> IF NONE, RECORD '00'. <br> IF 95 OR MORE, RECORD ' 95 '. <br> IF UNKNOWN, RECORD '98'. <br> a) Cattle? <br> b) Horses, donkeys, or mules? <br> c) Goats? <br> d) Sheep? <br> e) Pigs? <br> f) Chickens or other poultry? | a) CATTLE <br> b) HORSES/DONKEYS/MULES <br> c) GOATS <br> d) SHEEP <br> e) PIGS <br> f) CHICKENS/POULTRY |  |  |
| 120 | CHECK 113 AND 116A: CODE '01' CIRCLED IN EITHER? <br> NO $\square$ | YES $\square$ |  | $\longrightarrow 121$ |
| 121A | Does your household have electricity that is connected to the mains? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 121 | Does your household have any of the following in working condition: <br> b) A radio? <br> c) A television? <br> d) A landline telephone? <br> e) A desktop or laptop computer? <br> f) A refrigerator? <br> g) A vacuum cleaner or floor polisher? <br> h) A microwave oven? <br> i) An electric or gas stove? <br> j) A washing machine? |  | $\begin{aligned} & \mathrm{NO} \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \\ & 2 \end{aligned}$ |  |
| 122 | Does any member of this household own any of the following in working condition: <br> a) A watch? <br> b) A cell phone? <br> c) A bicycle? <br> d) A motorcycle or motor scooter? <br> e) An animal-drawn cart? <br> f) A car, bakkie, van or truck? <br> g) A boat with a motor? | YES | NO <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 <br> 2 |  |
| 124 | How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less often than once a month, or never? | DAILY <br> WEEKLY <br> MONTHLY <br> LESS OFTEN THAN ONCE A MONTH <br> NEVER | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \end{aligned}$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 124A | How is the refuse or rubbish in this household mainly collected or removed? <br> PROBE: How often is it removed? | ```REMOVED BY LOCAL AUTHORITY/PRIVATE COMPANY AT LEAST ONCE A WEEK ..... 01 REMOVED BY LOCAL AUTHORITY/PRIVATE COMPANY LESS OFTEN THAN ONCE A WEEK 02 REMOVED BY COMMUNITY MEMBERS, CONTRACTED BY THE MUNICIPALITY AT LEAST ONCE A WEEK REMOVED BY COMMUNITY MEMBERS, CONTRACTED BY THE MUNICIPALITY LESS OFTEN THAN ONCE A WEEK ....... . 04 REMOVED BY COMMUNITY MEMBERS AT LEAST ONCE A WEEK REMOVED BY COMMUNITY MEMBERS LESS OFTEN THAN ONCE A WEEK . . . . . . . 06 COMMUNAL REFUSE DUMP . . . . . . . . . . . . . . . . 07 COMMUNAL CONTAINER/CENTRAL COLLECTION POINT ..................... . 08 OWN REFUSE DUMP . . . . . . . . . . . . . . . . . . . . . . 09 OWN REFUSE BURNED . ........................ . 10 NO RUBBISH DISPOSAL/DUMP OR LEAVE ANYWHERE ............................... 11 OTHER``` $\qquad$ <br> ```96None``` |  |
| 124B | Do you know where you can get forms to apply for a government grant such as a child or old-age grant? |  | $\rightarrow$ 124D |
| 124C | Where can you obtain forms? <br> RECORD ALL MENTIONED. |  |  |
| 124D | In the past 12 months, did any adult (18 years and above) in this household go hungry because there wasn't enough food? |  |  |
| 124E | In the past 12 months, did any child (17 years or younger) in this household go hungry because there wasn't enough food? |  <br> NOT APPLICABLE/NO CHILDREN IN HOUSEHOLD 6 |  |

ADDITIONAL HOUSEHOLD CHARACTERISTICS

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 139 | We would like to learn about the places that households use to wash their hands. Can you please show me where members of your household most often wash their hands? | OBSERVED, FIXED PLACE OBSERVED, MOBILE NOT OBSERVED, NOT IN DWELLING/YARD/PLOT NOT OBSERVED, NO PERMISSION TO SEE NOT OBSERVED, OTHER REASON | $\rightarrow 141 \mathrm{~A}$ |
| 140 | OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING. <br> RECORD OBSERVATION. |  |  |
| 141 | OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT AT THE PLACE FOR HANDWASHING. <br> RECORD OBSERVATION. | ```SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) ........ A ASH, MUD, SAND NONE``` |  |
| 141A | OBSERVE TYPE OF DWELLING RECORD OBSERVATION. | DWELLING/HOUSE OR BRICK/CONCRETE BLOCK STRUCTURE ON A SEPARATE STAND/ YARD/FARM <br> TRADITIONAL DWELLING/HUT STRUCTURE MADE OF TRADITIONAL MATERIALS <br> FLAT OR APARTMENT IN BLOCK OF FLATS CLUSTER HOUSE IN COMPLEX <br> TOWN HOUSE/SEMI-DETACHED HOUSE <br> in Complex <br> SEMI-DETACHED HOUSE <br> DWELLING/HOUSE/FLAT/ROOM IN BACKYARD INFORMAL DWELLING/SHACK IN BACKYARD INFORMAL DWELLING/SHACK NOT IN BACKYARD (E.G., IN AN INFORMAL/SQUATTER SETTLEMENT OR ON FARM) ROOM/FLATLET ON A PROPERTY OR LARGER DWELLING/SERVANTS' QUARTERS/ GRANNY FLAT CARAVAN OR TENT OTHER $\qquad$ 96 |  |
| 142 | OBSERVE MAIN MATERIAL OF THE FLOOR OF THE DWELLING. <br> RECORD OBSERVATION. |  |  |
| 143 | OBSERVE MAIN MATERIAL OF THE ROOF OF THE DWELLING <br> RECORD OBSERVATION. |  |  |


INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

## COMMENTS ABOUT INTERVIEW:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$
$\qquad$

SUPERVISOR'S OBSERVATIONS


FIELDWORKER VISITS




WEIGHT, HEIGHT AND HAEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5


WEIGHT, HEIGHT AND HAEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

|  |  | CHILD 4 |  | CHILD 5 |  | CHILD 6 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 102 | CHECK LIST OF CHILDREN ELIGIBLE FOR BIOMARKERS: <br> RECORD LINE NUMBER AND NAME. | LINE NUMBER NAME |  | LINE NUMBER NAME |  | LINE NUMBER <br> NAME |  |


| 103 | What is (NAME)'s date of birth? | DAY <br> MONTH <br> YEAR | DAY <br> MONTH | DAY <br> MONTH |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 104 | CHECK 103: CHILD BORN BETWEEN 2011-2016? | YES <br> NO <br> (SKIP TO | YES NO <br> (SKIP TO | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ <br> (SKIP TO |  |
| 104A | RECORD NAME OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD. | NAME | NAME | NAME |  |
| 104B | ASK CONSENT FOR ANTHROPOMETRY FROM PARENT/OTHER ADULT. | PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM. |  |  |  |
| 104C | CIRCLE THE CODE AND SIGN YOUR NAME. |  | GRANTED $\ldots \ldots . .$. 1  <br> $($ SIGN $)$   <br> REFUSED $\ldots \ldots .$. 2  <br> NOT PRESENT/OTHER. 3  | GRANTED $\ldots \ldots .$. 1  <br> (SIGN)   <br> REFUSED $\ldots \ldots .$. 2  <br> NOT PRESENT/OTHER. 3  |  |
| 105 | WEIGHT IN KILOGRAMS. | KG. <br> NOT PRESENT REFUSED OTHER | KG. <br> NOT PRESENT REFUSED OTHER | KG. <br> NOT PRESENT REFUSED OTHER |  |
| 106 | HEIGHT IN CENTIMETRES. | CM. <br> NOT PRESENT REFUSED OTHER (SKIP TO | CM. $\square$ <br> NOT PRESENT REFUSED OTHER <br> (SKIP TO | CM. $\square$ <br> NOT PRESENT REFUSED OTHER (SKIP TO | $\begin{array}{r} 7 \\ 94 \\ 95- \\ 96- \end{array}$ |
| 107 | MEASURED LYING DOWN OR STANDING UP? | LYING DOWN STANDING UP | LYING DOWN STANDING UP | LYING DOWN STANDING UP | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |
| 108 | MEASURER: ENTER YOUR FIELDWORKER NUMBER. |  |  |  |  |
| 109 | CHECK 103: CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR 5 PREVIOUS MONTHS? | 0-5 MONTHS <br> (SKIP TO <br> OLDER | 0-5 MONTHS <br> (SKIP TO <br> OLDER | 0-5 MONTHS <br> (SKIP TO <br> OLDER |  |
| 111 | ASK CONSENT FOR ANAEMIA TEST FROM PARENT/OTHER ADULT. | PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM. |  |  |  |
| 112 | CIRCLE THE CODE AND SIGN YOUR NAME. | $\qquad$ <br> (SIGN) <br> REFUSED <br> NOT PRESENT/OTH | $\qquad$ <br> REFUSED <br> NOT PRESENT/OT | GRANTED $\qquad$ <br> (SIGN) REFUSED NOT PRESENT/OT | $\left.\begin{array}{l} 1 \\ 2 \\ 2 \end{array}\right]$ |
| 113 | RECORD HAEMOGLOBIN LEVEL HERE AND IN THE CHILD HEALTH INFORMATIONAL BROCHURE. | G/DL <br> NOT PRESENT REFUSED OTHER | G/DL <br> NOT PRESENT REFUSED OTHER | G/DL <br> NOT PRESENT REFUSED OTHER |  |
| 114 | GO BACK TO 103 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 201. |  |  |  |  |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95


| 202A | CHECK 202: AGE | 15-17 YEARS $\ldots \ldots \ldots \ldots$. $18-95$ YEARS $\ldots \ldots \ldots \ldots$ $($ SKIP TO 202 C$)$ | $\begin{aligned} & \text { 15-17 YEARS } \ldots \ldots \ldots \ldots \\ & 18-95 \text { YEARS } \ldots \ldots \ldots \ldots\end{aligned}$ $($ SKIP TO 202 C$)$ | 15-17 YEARS $\ldots \ldots \ldots \ldots$ $18-95$ YEARS $\ldots \ldots \ldots \ldots$ $($ SKIP TO 202C) |
| :---: | :---: | :---: | :---: | :---: |
| 202B | CHECK 202: MARITAL STATUS | $\begin{aligned} & \text { NEVER IN UNION . . . . . . . . } 1 \\ & (\text { SKIP TO 202E) } \\ & \text { OTHER . . . . . . . . . . . . . . . } 2 \end{aligned}$ | $\begin{aligned} & \text { NEVER IN UNION . . . . . . . } \quad 1 \\ & \end{aligned}$ |  |





|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |


| 205 | WEIGHT IN KILOGRAMS. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 206 | HEIGHT IN CENTIMETRES. |  |  |  |
| 206A | WAIST CIRCUMFERENCE IN CENTIMETRES. |  |  |  |
| 207 | MEASURER: ENTER YOUR FIELDWORKER NUMBER. | FIELDWORKER NUMBER | FIELDWORKER NUMBER | $\square$ <br> FIELDWORKER NUMBER |
| 208 | CHECK 202: AGE | 15-17 YEARS $\quad \ldots \ldots \ldots \ldots$. $18-95$ YEARS $\ldots \ldots \ldots$ $($ SKIP TO 210$)$ | 15-17 YEARS <br> $18-95$ YEARS <br> $\ldots \ldots \ldots \ldots$.$($ SKIP TO 210$)$ | 15-17 YEARS <br> $18-95$ YEARS <br> $\ldots \ldots \ldots \ldots \ldots$$($ SKIP TO 210$)$ |
| 209 | CHECK 202: <br> MARITAL STATUS |  |  |  |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |

ADULT RESPONDENT CONSENT FOR BLOODPRESSUREMEASUREMENT







WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |





WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |





MINOR RESPONDENT CONSENT FOR HBA1C TESTING

| M 1 1 $N$ O R R | 261 | ASK CONSENT FOR HBA1C TESTING FROM MINOR RESPONDENT. | PROVIDE MINOR RESPONDENT WITH CONSENT FORM. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 262 | CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER. |  |  |  |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |


| A <br> R <br> R <br> E <br> N <br> T | 263 | ASK CONSENT FOR HIV TESTING FROM PARENT/ADULT. | PROVIDE PARENT/RESPONSIBLE | ULT WITH CONSENT FORM. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 264 | CIRCLE THE CODE AND SIGN YOUR NAME. |  |  |  |





|  |  | WOMAN 1 | WOMAN 2 | WOMAN 3 |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME | NAME |


| 271 | PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S). |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 272 | ADDITIONAL TESTS. | IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. | IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. | IF ADULT RESPONDENT, CHECK 254; IF MINOR RESPONDENT, CHECK 268 AND 270. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. |
| 273 | RECORD HAEMOGLOBIN LEVEL HERE AND IN THE ADULT HEALTH INFORMATIONAL BROCHURE. |  |  |  |
| 274 | HBA1C TESTING: <br> PLACE BAR CODE LABEL. | PUT THE 1ST BAR CODE LABEL HERE. <br> NOT PRESENT ....... 99994 <br> REFUSED .............. . . 99995 <br> OTHER ................. . 99996 |  |  |
| 275 | HIV TESTING: <br> PLACE BAR CODE LABEL. | PUT THE 2ND BAR CODE LABEL HERE. <br> NOT PRESENT . . . . . . 99994 <br> REFUSED . . . . . . . . . . . . 99995 <br> OTHER . . . . . . . . . . . . . . 99996 |  |  |
| 275A | OFFER HIV SELFTEST KIT TO RESPONDENT WHO CONSENTED TO HIV TESTING. |  |  |  |
| 276 | CHECK 274 AND 275: AT LEAST ONE BAR CODE LABEL PRESENT? | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR WOMEN AGE 15-95

|  |  | WOMAN 1 |  |  |  |  | WOMAN 2 |  |  |  |  |  | WOMAN 3 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NAME FROM LIST. | NAME |  |  |  |  | NAME |  |  |  |  |  | NAME |  |  |  |  |
| 277 | Please show me all the prescribed medicines that you take regularly or daily. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | DRUG <br> NAME |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUGG <br> NAME |  |  |  |  |
|  | RECORD ALL MEDICATION/DRUG | DRUG <br> NAME |  |  |  |  | DRUG NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRUG |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUG NAME |  |  |  |  |
|  |  | DRUG NAME |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRUG <br> NAME |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRUUG NAME |  |  |  |  | DRUG NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRUG NAME |  |  |  |  | DRUG NAME |  |  |  |  |  | DRUG NAME |  |  |  |  |
|  |  | DRUG NAME |  |  |  |  | DRUG NAME |  |  |  |  |  | DRUG NAME |  |  |  |  |
|  |  | DRUUG NAME |  |  |  |  | DRÜG NAME |  |  |  |  |  | DRUG NAME |  |  |  |  |
|  |  | DRUG NAME |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRUG NAME |  |  |  |  | DRUG <br> NAME |  |  |  |  |  | DRUG <br> NAME |  |  |  |  |
|  |  | DRÜG NAME |  |  |  |  | DRUGG NAME |  |  |  |  |  | DRUG <br> NAME $\qquad$ <br> ADDITIONAL QUESTIONNAIRE; |  |  |  |  |
| 278 | GO BACK TO 202 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, GO TO 301. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95


| 302A | CHECK 302: AGE | 15-17 YEARS $\ldots \ldots . .$. 1 <br> $18-95$ YEARS .......... 2 <br> (SKIP TO 302C)  |  | 15-17 YEARS . . . . . . . . . .1 <br> 18-95 YEARS . . . . . . .$\left.\begin{array}{c}2 \\ \text { (SKIP TO 302C) }\end{array}\right]$ |
| :---: | :---: | :---: | :---: | :---: |
| 302B | CHECK 302: MARITAL STATUS |  |  |  |
| ADULT RESPONDENT CONSENT FOR ANTHROPOMETRY |  |  |  |  |
| 302C | ASK CONSENT FOR ANTHROPOMETRY. | PROVIDE ADULT RESPONDENT WITH CONSENT FORM. |  |  |
| 302D | CIRCLE THE CODE AND SIGN YOUR NAME. |  |  |  |


| 302E | RECORD NAME OF PARENT/ADULT RESPONSIBLE FOR MINOR. | NAME | NAME | NAME |
| :---: | :---: | :---: | :---: | :---: |
| PARENTAL/RESPONSIBLE ADULT CONSENT FOR ANTHROPOMETRY |  |  |  |  |
| 302F | ASK CONSENT FOR ANTHROPOMETRY. | PROVIDE PARENT/RESPONSIBLE ADULT WITH PARENTAL CONSENT FORM. |  |  |
| 302G | CIRCLE THE CODE AND SIGN YOUR NAME. |  |  |  |



|  |  | MAN 1 | MAN 2 | MAN 3 |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME FROM LIST. | NAME | NAME | NAME |
| 305 | WEIGHT IN KILOGRAMS. |  |  |  |
| 306 | HEIGHT IN CENTIMETRES. |  |  |  |
| 306A | WAIST <br> CIRCUMFERENCE <br> IN CENTIMETRES. |  |  |  |
| 307 | MEASURER: ENTER YOUR FIELDWORKER NUMBER. | FIELDWORKER NUMBER | FIELDWORKER NUMBER | FIELDWORKER NUMBER |
| 308 | CHECK 302: AGE |  | $\begin{array}{rrr} \text { 15-17 YEARS } & \ldots . . . . . . . & 1 \\ \text { 18-95 YEARS .......... } & 2 \\ \\ (\text { SKIP TO } 310) \end{array}$ |  |
| 309 | CHECK 302: <br> MARITAL STATUS |  | NEVER IN UNION . . . . . . . $\begin{aligned} & 1 \\ & (\text { SKIP TO } 313) \\ & \longleftrightarrow\end{aligned}$ OTHER . . . . . . . . . . . . . | NEVER IN UNION $\ldots \ldots \ldots$. $($ SKIP TO 313$)$ OTHER $\ldots \ldots$ O . . . . . . . . . . . |




MINOR RESPONDENT CONSENT FOR BLOODPRESSUREMEASUREMENT



|  |  | MAN 1 | MAN 2 | MAN 3 |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME FROM LIST. | NAME | NAME | NAME |
| 322 | Before this survey, has your blood pressure ever been checked? | YES . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . 2 | $\begin{array}{lll} \text { YES } \ldots \ldots \\ \text { NO . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } & 1 \\ 2 \end{array}$ |  |
| 323 | Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure? |  |  |  |
| 324 | To lower your blood pressure, are you now taking a prescribed medicine? |  |  |  |
| 325 | CHECK THAT IT | AS BEEN AT LEAST 3 MINUTES BE | FORE TAKING THE SECOND BLOOD | PRESSURE MEASUREMENT |
| 326 | May I take your blood pressure at this time? |  |  |  |
| 327 | RECORD TIME OF SECOND BP READING. | - $\square$ | HOURS <br> MINUTES <br> $-$ $\square$ | MINUTES <br>   |
| 328 | TAKE THE SECOND BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE AND PULSE (HEART RATE). |  |  |  |



WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95

|  |  | MAN 1 | MAN 2 |  |
| :--- | :--- | :---: | :---: | :---: |
|  | NAME FROM LIST. | NAME | NAN 3 |  |





WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING,
AND RECORDING OF MEDICINES FOR MEN AGE 15-95




| M L N O R R | 361 | ASK CONSENT FOR HBA1C TESTING FROM MINOR RESPONDENT. | PROVIDE MINOR RESPONDENT W | H CONSENT FORM. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| O | 362 | CIRCLE THE CODE, SIGN YOUR NAME, AND ENTER YOUR FIELDWORKER NUMBER. |  |  |  |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95

|  |  | MAN 1 | MAN 2 |  |
| :--- | :--- | :--- | :--- | :--- |
|  | NAME FROM LIST. | NAME | NAME |  |



| - | 365 | ASK CONSENT FOR HIV TESTING FROM MINOR RESPONDENT. | PROVIDE MINOR RESPONDENT WITH CONSENT FORM. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| P P c O N S S E N T | 366 | CIRCLE THE CODE AND SIGN YOUR NAME. | GRANTED $\ldots \ldots \ldots \ldots$   <br> MINOR RESPONDENT <br> REFUSED $\ldots \ldots \ldots$   <br> (SIGN) <br> (IF REFUSED, SKIP TO 371)   |  |  |



| MINOR RESPONDENT CONSENT FOR ADDITIONAL TESTING |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 369 | ASK CONSENT FOR ADDITIONAL <br> TESTING FROM MINOR RESPONDENT. | PROVIDE MINOR RESPONDENT W | H CONSENT FORM. |  |
| c <br> O <br> O <br> N <br> S <br> E <br> N <br> N | 370 | CIRCLE THE CODE AND SIGN YOUR NAME. |  |  |  |


|  |  | MAN 1 | MAN 2 |  |
| :--- | :--- | :---: | :---: | :---: |
|  | NAME FROM LIST. | NAME |  |  |


| 371 | PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S). |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| 372 | ADDITIONAL TESTS. | IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. | IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. | IF ADULT RESPONDENT, CHECK 354; IF MINOR RESPONDENT, CHECK 368 AND 370. <br> IF CONSENT HAS NOT BEEN GRANTED, WRITE "NO ADDITIONAL TESTS" ON THE FILTER PAPER. |
| 373 | RECORD <br> HAEMOGLOBIN <br> LEVEL HERE AND <br> IN THE ADULT <br> HEALTH <br> INFORMATIONAL BROCHURE. |  |  |  |
| 374 | HBA1C TESTING: <br> PLACE BAR CODE LABEL. |  | PUT THE 1ST BAR CODE LABEL HERE. <br> NOT PRESENT . . . . . . 99994 <br> REFUSED . . . . . . . . . . . 99995 <br> OTHER . . . . . . . . . . . . . 99996 | PUT THE 1ST BAR CODE LABEL HERE. <br> NOT PRESENT . ..... 99994 <br> REFUSED . . . . . . . . . . . 99995 <br> OTHER . . . . . . . . . . . . . . 99996 |
| 375 | HIV TESTING: <br> PLACE BAR CODE LABEL. |  |  |  |
| 375A | OFFER HIV SELFTEST KIT TO RESPONDENT WHO CONSENTED TO HIV TESTING. |  | TEST KIT ACCEPTED $\ldots$ 1  <br> TEST KIT REFUSED . . . . 2   <br> TEST KIT NOT OFFERRED 3   <br> NOT PRESENT $\ldots \ldots \ldots$ $\ldots$ 3 <br> OTHER $\quad \ldots . . . . . . . .$. 6   |  |
| 376 | CHECK 374 AND 375: AT LEAST ONE BAR CODE LABEL PRESENT? | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. | IF CONSENT GRANTED FOR EITHER TEST, PUT 3RD BAR CODE LABEL ON THE RESPONDENT'S FILTER PAPER CARD AND THE 4TH BAR CODE ON THE TRANSMITTAL FORM. |

WEIGHT, HEIGHT, WAIST, BLOOD PRESSURE, HAEMOGLOBIN MEASUREMENT, BLOOD COLLECTION FOR HBA1C AND HIV TESTING, AND RECORDING OF MEDICINES FOR MEN AGE 15-95


FIELDWORKER'S OBSERVATIONS
TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS



## INTRODUCTION AND CONSENT (PARENT/GUARDIAN

100B
Hello. My name is $\qquad$ . I am working with Statistics South Africa. We are conducting a survey
about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to (NAME OF MINOR) about her health and well-being. The questions usually take about 45 to 60 minutes. All of the answers (NAME OF MINOR) gives will be confidential and will not be shared with anyone other than members of our survey team. (NAME OF MINOR) doesn't have to be in the survey, but we hope you will agree to allow (NAME OF MINOR) to answer the questions since (NAME OF MINOR)'s views are important

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview with (NAME OF MINOR) now?
SIGNATURE OF INTERVIEWER $\qquad$ DATE $\qquad$

PARENT/GUARDIAN AGREES MINOR MAY BE INTERVIEWED . .

PARENT/GUARDIAN DOES NOT AGREE TO ALLOW MINOR TO BE INTERVIEWED . . $2 \longrightarrow$ END

## INTRODUCTION AND CONSENT (RESPONDENT)

100C
Hello. My name is $\qquad$ . I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. You household was selected for the survey. The questions usually take about 45 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this information sheet

## GIVE INFORMATION SHEET

Do you have any questions?
May I begin the interview now?
SIGNATURE OF INTERVIEWER $\qquad$ DATE $\qquad$
RESPONDENT AGREES
TO BE INTERVIEWED ..

RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . $2 \longrightarrow$ END

SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 101 | RECORD THE TIME. | HOURS <br> MINUTES |  |
| 102 | How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD '00’ YEARS. |  | $\xrightarrow{\longrightarrow} 105$ |
| 103 | Just before you moved here, where did you live? <br> PROBE: Is that a city, a town, a rural area, a farm, a tribal area, or an informal settlement? |  |  |
| 104 | Before you moved here, which province did you live in? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 105 | On what day, month, and year were you born? | DAY <br> DON'T KNOW DAY <br> MONTH <br> DON'T KNOW MONTH <br> YEAR <br> DON'T KNOW YEAR |  |
| 106 | How old were you at your last birthday? <br> COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT. IF AGE 95 OR OLDER, RECORD 95. |  |  |
| 106A | Which population group do you consider yourself: black, white, coloured, Indian or something else? |  |  |
| 107 | Have you ever attended an educational institution? |  | $\rightarrow 111$ |
| 108 | What is the highest level you attended: primary, secondary, or higher than secondary? |  |  |
| 109 | What is the highest grade or form you completed at that level? | PRIMARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ......... 00 <br> GRADE 1/SUB A/CLASS 1 .................. 11 <br> GRADE 2/SUB B/CLASS 2 .................. 12 <br> GRADE 3/STANDARD 1/ <br> AET 1 (KHA RI GUDE, SANLI) . . . . . . . . . . . 13 <br> GRADE 4/STANDARD 2 .................... 14 <br> GRADE 5/STANDARD 3/AET 2 .............. 15 <br> GRADE 6 /STANDARD 4 .................... 16 <br> GRADE 7/STANDARD 5/AET 3 <br> SECONDARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ......... 20 <br> GRADE 8/STANDARD 6/FORM 1/NTC $1 /$ <br> N1/NC (V) LEVEL 2 <br> GRADE 9/STANDARD 7/FORM 2/AET 4/NTC $2 /$ <br> N2/NC (V) LEVEL 3 <br> GRADE 10/STANDARD 8/FORM 3/NTC 3/ <br> N3/NC (V) LEVEL 4 <br> GRADE 11/STANDARD 9/FORM 4 <br> CERTIFICATE OR DIPLOMA WITH LESS THAN <br> GRADE 12/STANDARD 10 COMPLETED . . 25 <br> GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 <br> N4/NTC4 <br> N5/NTC5 <br> 28 <br> N6/NTC6 <br> HIGHER EDUCATION <br> FURTHER STUDIES INCOMPLETE OR ONGOI 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ <br> STANDARD 10 COMPLETED ............. 31 <br> HIGHER DIPLOMA (TECHNIKON/ <br> U. OF TECHNOLOGY) <br> POST HIGHER DIPLOMA (TECHNIKON/ <br> U. TECHNOLOGY MASTERS, DOCTORAL) 33 <br> BACHELORS DEGREE/BACHELORS DEGREE <br> AND POST GRADUATE DIPLOMA ..... 34 <br> HONOURS DEGREE <br> HIGHER DEGREE (MASTERS, DOCTORATE . . |  |
| 110 | CHECK 108: | GHER | $\rightarrow 113$ |


| NO. | QUESTIONS AND FILTERS | CODIN |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 111 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me? | CANNOT READ AT A ABLE TO READ ONLY <br> THE SENTENCE . ABLE TO READ WHO NO CARD WITH REQ LANGUAGE <br> BLIND/VISUALLY IMP | 1 <br> 2 3 <br> 4 <br> 5 |  |
| 112 | CHECK 111: $\begin{array}{r} \text { CODE '2', '3' } \\ \text { OR '4' } \\ \text { CIRCLED } \downarrow \end{array}$ | OR '5' <br> RCLED |  | $\rightarrow 114$ |
| 113 | Do you read a newspaper or magazine at least once a week, less than once a week or not at all? | AT LEAST ONCE A W LESS THAN ONCE A NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 114 | Do you listen to the radio at least once a week, less than once a week or not at all? | AT LEAST ONCE A W LESS THAN ONCE A NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 115 | Do you watch television at least once a week, less than once a week or not at all? | AT LEAST ONCE A W LESS THAN ONCE A NOT AT ALL | 1 2 3 |  |
| 116 | Do you own a cell phone? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 118$ |
| 117 | Do you use your cell phone for any financial transactions? | $\begin{array}{ll} \text { YES } & . \\ \text { NO } & . \end{array}$ |  |  |
| 118 | Do you have an account in a bank or other financial institution that you yourself use? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 119 | Have you ever used the internet? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 124$ |
| 120 | In the last 12 months, have you used the internet? <br> IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE. | YES <br> NO |  | $\longrightarrow 124$ |
| 121 | During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all? | ALMOST EVERY DAY <br> AT LEAST ONCE A W LESS THAN ONCE A NOT AT ALL | 1 2 3 4 |  |
| 124 | In the last 12 months, how many times have you been away from home for one or more nights? | NUMBER OF TIMES <br> NONE | $00$ | $\longrightarrow 126$ |
| 125 | In the last 12 months, have you been away from home for more than one month at a time? | $\begin{array}{ll} \text { YES } \\ \text { NO } & . \end{array}$ | 1 2 |  |
| 126 | CHECK 106: AGE OF RESPONDENT <br> AGE 15-49 | AGE 50 <br> ABOVE |  | $\rightarrow 701$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about all the births you have had during your life. Have you ever given birth? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 206$ |
| 202 | Do you have any sons or daughters to whom you have given birth who are now living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 204$ |
| 203 | a) How many sons live with you? <br> b) And how many daughters live with you? <br> IF NONE, RECORD '00'. | a) SONS AT HOME <br> b) DAUGHTERS AT HOME |  |  |
| 204 | Do you have any sons or daughters to whom you have given birth who are alive but do not live with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 206$ |
| 205 | a) How many sons are alive but do not live with you? <br> b) And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | a) SONS ELSEWHERE <br> b) DAUGHTERS ELSEWHERE |  |  |
| 206 | Have you ever given birth to a boy or girl who was born alive but later died? <br> IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time? | YES <br> NO |  | $\longrightarrow 208$ |
| 207 | a) How many boys have died? <br> b) And how many girls have died? <br> IF NONE, RECORD '00'. | a) BOYS DEAD <br> b) GIRLS DEAD |  |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'. | TOTAL BIRTHS |  |  |
| 209 | CHECK 208: <br> Just to make sure that I have this right: you have had in | L $\qquad$ births during your life. Is that correct? |  |  |
| 210 | CHECK 208: | IRTHS $\square$ |  | $\rightarrow 226$ |

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE ROWS. IF THERE ARE MORE THAN 6 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW


SECTION 2. REPRODUCTION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 222 | Have you had any live births since the birth of (NAME OF LAST BIRTH)? |  |  |  |
| 223 | COMPARE 208 WITH NUMBER OF BIRTHS IN BIRTH <br> NUMBERS <br> ARE SAME | $\begin{array}{r} \text { FORY } \\ \text { NUMBERS ARE } \\ \text { DIFFERENT } \\ \text { (PROBE AND RECONCILE) } \end{array}$ |  |  |
| 224 | CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2011-2016 | NUMBER OF BIRTHS <br> NONE | $\underset{0}{\square}$ |  |
| 226 | Are you pregnant now? | YES <br> NO <br> UNSURE | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\xrightarrow{ } \rightarrow 230$ |
| 227 | How many months pregnant are you? <br> RECORD NUMBER OF COMPLETED MONTHS. <br> ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS. | MONTHS |  |  |
| 228 | When you got pregnant, did you want to get pregnant at that time? | $\begin{array}{ll} \text { YES } & \ldots . . \\ \text { NO } & \ldots . . . \end{array}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 230$ |
| 229 | CHECK 208: TOTAL NUMBER OF BIRTHS <br> ONE OR MORE $\square$ <br> a) Did you want to have a baby later on or did you not want any more children? <br> NONE <br> b) Did you want to have a baby later on or did you not want any children? | LATER <br> NO MORE/NONE | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 230 | Have you ever had a pregnancy that miscarried, was terminated, or ended in a stillbirth? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 239$ |
| 231 | When did the last such pregnancy end? | MONTH <br> YEAR | $-1$ |  |
| 232 | CHECK 231: <br> LAST PREGNANCY ENDED IN 2011-2016 | LAST PREGNANCY ENDED IN 2010 OR $\square$ EARLIER |  | $\begin{array}{r} \longrightarrow 233 \mathrm{~A} \\ \longrightarrow 239 \end{array}$ |

SECTION 2. REPRODUCTION


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 236D | Where did you get the drug? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVT. HOSPITAL <br> GOVT. CLINIC/COMMUNITY HEALTH COMMUNITY HEALTH WORKER . . . <br> OTHER PUBLIC SECTOR <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC <br> CHEMIST/PHARMACY <br> PRIVATE DOCTOR . . . . . . . . . . . . . . <br> OTHER PRIVATE MEDICAL SECTOR <br> (SPECIFY) <br> OTHER SOURCE <br> BACKSTREET ABORTION $\qquad$ <br> TRADITIONAL HEALER. <br> OTHER $\qquad$ | 11 <br> 12 <br> 13 <br> 16 <br> 21 <br> 22 <br> 23 <br> 26 <br> 31 <br> 32 <br> 96 |  |
| 236E | We have spoken about pregnancy losses that occurred since 2011. Did you have any miscarriages, terminations, or stillbirths that ended before 2011? | YES NO |  | $\begin{array}{\|l} \longrightarrow \\ \\ \\ \\ \end{array} 238$ |
| 237 | Did you have any miscarriages, terminations or stillbirths that ended before 2011? | YES <br> NO |  | $\longrightarrow 239$ |
| 238 | When did the last such pregnancy that terminated before 2011 end? | MONTH <br> YEAR |  |  |
| 239 | When did your last menstrual period start? <br> (DATE, IF GIVEN) | DAYS AGO $\ldots \ldots \ldots . .$. 1 <br> WEEKS AGO $\ldots \ldots \ldots \ldots \ldots$ 2 <br> MONTHS AGO $\ldots \ldots \ldots \ldots .$. 3 <br> YEARS AGO $\ldots \ldots \ldots \ldots .$. 4 <br> IN MENOPAUSE/ <br> HAS HAD HYSTERECTOMY <br> BEFORE LAST BIRTH <br> NEVER MENSTRUATED | 994 <br> 995 <br> 996 |  |
| 240 | From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant? | YES <br> NO <br> DON'T KNOW | 1 2 8 | $\text { } 242$ |
| 241 | Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? | JUST BEFORE HER PERIOD <br> BEGINS <br> DURING HER PERIOD <br> RIGHT AFTER HER <br> PERIOD HAS ENDED <br> HALFWAY BETWEEN <br> TWO PERIODS <br> OTHER $\qquad$ | $\begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ 4 \\ -\quad 6 \\ \hline 8 \end{array}$ |  |
| 242 | After the birth of a child, can a woman become pregnant before her menstrual period has returned? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |

## SECTION 3. CONTRACEPTION

| 301 | Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? MARK ALL METHODS DECLARED BY THE RESPONDENT. <br> FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)? |  |
| :---: | :---: | :---: |
| 01 | Female Sterilisation/Tubal Ligation/Tubes Cut/Tubes Binded. PROBE: Women can have an operation to avoid having any more children. |  |
| 02 | Male Sterilisation/Vasectomy/Tubes Cut/Tubes Binded. <br> PROBE: Men can have an operation to avoid having any more children. |  |
| 03 | IUD. <br> PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years. |  |
| 04 | Injectables/Depo. <br> PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. |  |
| 05 | Implants/Norplant/Jadelle. <br> PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. |  |
| 06 | Pill. <br> PROBE: Women can take a pill every day to avoid becoming pregnant. |  |
| 07 | Male Condom. <br> PROBE: Men can put a rubber sheath on their penis before sexual intercourse. |  |
| 08 | Female Condom. <br> PROBE: Women can place a sheath in their vagina before sexual intercourse. |  |
| 09 | Emergency Contraception. <br> PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. |  |
| 10 | Rhythm Method. <br> PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant. |  |
| 11 | Withdrawal. <br> PROBE: Men can be careful and pull out before climax. |  |
| 12 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES, MODERN METHOD $\qquad$ <br> (SPECIFY) <br> YES, TRADITIONAL METHOD $\qquad$ <br> (SPECIFY) <br> NO $\qquad$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 302 | CHECK 226: <br> NOT PREGNANT OR UNSURE | PREGNANT $\square$ | 312 |
| 303 | Are you or your partner currently doing something or using any method to delay or avoid getting pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . .  | $\longrightarrow 312$ |
| 304 | Which method are you using? <br> RECORD ALL MENTIONED. <br> IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST. |  | $\rightarrow 309$ |
| 307 | In what facility did the sterilisation take place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. | ```PUBLIC SECTOR GOVT. HOSPITAL .......................... }1 GOVT. HEALTH CLINIC/COMMUNITY HEALTH CENTRE ...................... . . }1 OTHER PUBLIC SECTOR``` $\qquad$ ```None \\ PRIVATE MEDICAL SECTOR \\ PRIVATE HOSPITAL/CLINIC . . . . . . . . . . . . . . 21 \\ PRIVATE DOCTOR'S ROOM ................. 22 \\ OTHER PRIVATE MEDICAL SECTOR ``` $\qquad$ ```None \\ (SPECIFY) \\ OTHER ``` $\qquad$ <br> ```96 (SPECIFY)None``` |  |
| 308 | In what month and year was the sterilisation performed? |  | $\square \rightarrow 310$ |
| 309 | Since what month and year have you been using (CURRENT METHOD) without stopping? <br> PROBE: For how long have you been using (CURRENT METHOD) now without stopping? |  |  |
| 310 | CHECK 308 AND 309, 215 AND 231: ANY BIRTH OR PR START OF USE OF CONTRACEPTION IN 308 OR 309 <br> GO BACK TO <br> YEAR AT START <br> (MUST BE AFTER | NANCY TERMINATION AFTER MONTH AND YEAR OF <br> YES <br> OR 309, PROBE AND RECORD MONTH AND CONTINUOUS USE OF CURRENT METHOD ST BIRTH OR PREGNANCY TERMINATION). |  |


| 311 | CHECK 308 AND 309: <br> ENTER CODE FOR INTERVIEW IN THE MONTH BACK TO TH | HOD USED IN MON ENDAR AND IN E DATE STARTED U <br> EN CONTINUE | ENT <br> INT <br> MON | E FOR <br> IN T <br> K TO <br> (SK | IETHOD USED IN CALENDAR AND NUARY 2011. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 312 | I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. <br> USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2011. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. |  |  |  |  |  |
|  |  | COLUMN 1 | COLUMN 2 |  | COLUMN 3 |  |
| 312A | MONTH AND YEAR OF START OF INTERVAL OF USE OR NON-USE. |  |  | $\square$ | MONTH |  |
| 312B | Between (EVENT) in (MONTH/YEAR) and (EVENT) in (MONTH/YEAR), did you or your partner use any method of contraception? | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2  <br>  $($ SKIP TO $312 I)$   |  |  | YES $\ldots \ldots \ldots \ldots \ldots$ 1  <br> NO $\ldots \ldots \ldots \ldots \ldots$ 2  <br>  $($ SKIP TO 3121$)$   |  |
| 312C | Which method was that? | METHOD CODE | METHOD CODE |  | METHOD CODE |  |
| 312D | How many months after (EVENT) in (MONTH/YEAR) did you start to use (METHOD)? <br> CIRCLE '95' IF RESPONDENT GIVES THE DATE OF STARTING TO USE THE METHOD. |  |  |  |  |  |
| 312E | RECORD MONTH AND YEAR RESPONDENT STARTED USING METHOD. |  | MONTH |  | MONTH     <br> M     <br> YEAR     <br> YEAR     |  |
| 312F | For how many months did you use (METHOD)? <br> CIRCLE '95' IF RESPONDENT GIVES THE DATE OF TERMINATION OF USE. | MONTHS $\square$ <br> (SKIP TO 312H) <br> DATE GIVEN |  |  | MONTHS <br> (SKIP TO 312H) <br> DATE GIVEN |  |
| 312G | RECORD MONTH AND YEAR RESPONDENT STOPPED USING METHOD. |  |  |  | MONTH     <br> M     <br>      <br> YEAR     |  |
| 312 H | Why did you stop using (METHOD)? | REASON STOPPED | REASON STOPPED |  | REASON STOPPED |  |
| 3121 |  | GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313. | GO BACK TO 312A IN NEXT COLUMN; OR, IF NO MORE GAPS, GO TO 313. |  | GO BACK TO 312A IN NEW QUESTIONNAIRE; OR, IF NO MORE GAPS, GO TO 313. |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 313 | CHECK THE CALENDAR FOR USE OF ANY CONTRAC NO METHOD USED $\square$ | IVE METHOD IN ANY MONTH <br> ANY METHOD USED $\square$ | 315 |
| 314 | Have you ever used anything or tried in any way to delay or avoid getting pregnant? |  | $\square 326$ |
| 315 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  | $\begin{array}{\|} \longrightarrow 326 \\ \longrightarrow 319 \\ \longrightarrow 329 \end{array}$ |
| 316 | You first started using (CURRENT METHOD) in (DATE FROM 309). Where did you get it at that time? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. |  |  |
| 317 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  | $\begin{aligned} & \longrightarrow 323 \\ & \longrightarrow 322 \\ & \longrightarrow 323 \end{aligned}$ |

## SECTION 3. CONTRACEPTION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 318 | At that time, were you told about side effects or problems you might have with the method? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . .   | $\begin{array}{\|l} \longrightarrow 321 \\ \longrightarrow 320 \end{array}$ |
| 319 | When you got sterilized, were you told about side effects or problems you might have with the method? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 321$ |
| 320 | Were you ever told by a nurse or health care worker about side effects or problems you might have with the method? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . .   | $\longrightarrow 322$ |
| 321 | Were you told what to do if you experienced side effects or problems? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 322 | CHECK 318 AND 319: <br> ANY <br> YES' <br> a) At that time, were you told about other methods of family planning that you could use? <br> OTHER <br> b) When you obtained (CURRENT METHOD FROM 315) from (SOURCE OF METHOD FROM 307 OR 316), were you told about other methods of family planning that you could use? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 324$ |
| 323 | Were you ever told by a nurse or health care worker about other methods of family planning that you could use? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . |  |
| 324 | CHECK 304: <br> CIRCLE METHOD CODE: <br> IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST. |  | $\begin{array}{\|l} \square \\ \\ \\ \\ \\ \rightarrow 329 \\ \rightarrow 329 \end{array}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 325 | Where did you obtain (CURRENT METHOD) the last time? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVT. HOSPITAL <br> GOVT. HEALTH CLINIC/COMMUNITY <br> HEALTH CENTRE ........................ 12 <br> MOBILE CLINIC ................................. 13 <br> CHW ......................................... 14 <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC ................. 21 <br> CHEMIST/PHARMACY ........................ 22 <br> PRIVATE DOCTOR ............................ 23 <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> (SPECIFY) <br> OTHER SOURCE <br> WORKPLACE/WORKPLACE CLINIC ......... <br> COMMUNITY CENTER, LIBRARY OR <br> OTHER PUBLIC PLACE . . . . . . . . . . . . . . . . . 32 <br> SHOP........................................... . . 33 <br> CHURCH ................................... 34 <br> FRIEND/RELATIVE .............................. 35 <br> OTHER $\qquad$ | $\rightarrow 329$ |
| 326 | Do you know of a place where you can obtain a method of family planning? | YES $\ldots$ <br> NO $\ldots$ . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ |  |
| 329 | CHECK 202: LIVING CHILDREN <br> a) In the last 12 months, have you visited a health facility for care for yourself or your children? <br> b) In the last 12 months, have you visited a health facility for care for yourself? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 | $\rightarrow 401$ |
| 330 | Did any staff member at the health facility speak to you about family planning methods? | YES $\quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots$ NO $\ldots \ldots \ldots \ldots$ |  |





SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 428 | How much did (NAME) weigh? <br> RECORD WEIGHT IN KILOGRAMS FROM ROAD TO HEALTH BOOKLET OR OTHER HEALTH CARD, IF AVAILABLE. | KG FROM BOOKLET/CARD $\square$ $\square$ <br> KG FROM RECALL | KG FROM BOOKLET/CARD $\square$ <br> KG FROM RECALL <br> 2 $\square$ $\square$ |
| 429 | Who assisted with the delivery of (NAME)? <br> PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. <br> IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY. | ```HEALTH PERSONNEL DOCTOR/GYNAECOLOGIST A NURSE/MIDWIFE B OTHER PERSON TRADITIONAL BIRTH ATTENDANT .......... C RELATIVE/FRIEND ....... D OTHER``` $\qquad$ ```NoneNone ``` | HEALTH PERSONNEL <br> DOCTOR/GYNAECOLOGIST A <br> NURSE/MIDWIFE <br> OTHER PERSON <br> TRADITIONAL BIRTH <br> ATTENDANT . . . . . . . . . C <br> RELATIVE/FRIEND . . . . . . D <br> OTHER $\qquad$ <br> (SPECIFY) <br> NO ONE ASSISTED . $\qquad$ |
| 430 | Where did you give birth to (NAME)? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. |  |  |
| 431 | How long after (NAME) was delivered did you stay there? <br> IF LESS THAN ONE DAY, RECORD HOURS; <br> IF LESS THAN ONE WEEK, RECORD DAYS. | HOURS DAYS <br> WEEKS |  |
| 431A | Was (NAME) discharged at the same time as you? |  |  |

SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | LAST BIRTH |  | NEXT-TO-LAST BIRTH NAME |
| :---: | :---: | :---: | :---: | :---: |
| 431B | How long after (NAME) was delivered did (NAME) stay at the facility? <br> IF LESS THAN ONE DAY, RECORD HOURS; <br> IF LESS THAN ONE WEEK, RECORD DAYS. | HOURS $\ldots . .$. 1 <br> DAYS $\ldots . .$. 2 <br> WEEKS $\ldots . .$. 3 <br> DON'T KNOW $\ldots .$.  |   <br>   <br>   <br> 998 |  |
| 432 | Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out? | YES $\ldots \ldots \ldots \ldots$ <br> NO $\ldots \ldots \ldots \ldots$ <br>   <br>   <br>  (SKIP | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \ldots & 2 \\ 434) \longleftarrow & \end{array}$ | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1   <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2   <br>  $($ SKIP TO 434)    |
| 433 | When was the decision made to have the caesarean section? Was it before or after your labor pains started? | BEFORE <br> AFTER | $\begin{array}{ll} \ldots & \\ \ldots . . & 1 \\ \ldots & 2 \end{array}$ | BEFORE . . . . . . . . . . . . . . . . . . . . . 1 <br> AFTER . . . . . . . . . . . . . 2 |
| 434 | Immediately after the birth, was (NAME) put on your chest? | $$ | $\begin{array}{lc} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ 434 B) \Leftarrow & \\ \ldots \ldots & 8 \end{array}$ |  |
| 434A | Was (NAME)'s bare skin touching your bare skin? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 8 \end{array}$ |  |
| 434B | CHECK 430: PLACE OF DELIVERY | CODE <br> 11, 12, OR 96 CIRCLED <br> (SKIP TO 449) | OTHER |  |
| 435 | I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility? | YES <br> NO <br> (SKIP | $\begin{array}{ll} \ldots \ldots & 1 \\ \cdots \cdots & 2 \\ 438) \leftarrow & \end{array}$ |  |
| 436 | How long after delivery did the first check take place? <br> IF LESS THAN ONE DAY, RECORD HOURS; <br> IF LESS THAN ONE WEEK, RECORD DAYS. | HOURS $\ldots \ldots$. 1  <br> DAYS $\ldots \ldots .$. 2  <br> WEEKS $\ldots \ldots$. 3 <br> DON'T KNOW $\ldots .$.  |   <br>   <br>   |  |
| 437 | Who checked on your health at that time? <br> PROBE FOR MOST QUALIFIED PERSON. | HEALTH PERSONNEL <br> DOCTOR/GYNAEC <br> NURSE/MIDWIFE <br> OTHER PERSON <br> TRADITIONAL BIRT ATTENDANT COMMUNITY HEAL WORKER.... . <br> OTHER $\qquad$ | $\begin{array}{ll} \text { OLOGIST } & 11 \\ \ldots . . . & 12 \\ & \\ \text { H } & \\ \ldots . . . . & 21 \\ \text { TH } & \\ \ldots . . . . & 22 \\ & \\ \hline \text { IFY } 96 \end{array}$ |  |







SECTION 4. PREGNANCY AND POSTNATAL CARE

| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME $\qquad$ |
| :---: | :---: | :---: | :---: |
| 462 | Have you had sexual intercourse since the birth of (NAME)? | YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1   <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ 2   <br>  (SKIP TO 464)    |  |
| 463 | For how many months after the birth of (NAME) did you not have sexual intercourse? | MONTHS $\square$ <br> DON'T KNOW | MONTHS <br> DON'T KNOW |
| 464 | Did you ever breastfeed (NAME)? |  |  |
| 465 | CHECK 404: IS CHILD LIVING? | $\begin{array}{r} \text { LIVING } \square \\ (\text { SKIP TO } 470) \longleftarrow(\text { SKIP TO 471) } \\ \square \end{array}$ |  |
| 466 | How long after birth did you first put (NAME) to the breast for feeding? <br> IF LESS THAN 1 HOUR, RECORD '00' HOURS; IF LESS THAN 24 HOURS, RECORD HOURS; OTHERWISE, RECORD DAYS. | IMMEDIATELY ................ 000 <br> HOURS DAYS |  |
| 467 | In the first three days after delivery, was (NAME) given anything to drink other than breast milk? |  |  |
| 468 | CHECK 404: IS CHILD LIVING? |  $\begin{array}{r} \text { DEAD } \square \\ (\mathrm{SKIP} \mathrm{TO} \mathrm{471)} \longleftarrow \end{array}$ |  <br> DEAD (SKIP TO 471) |
| 469 | Are you still breastfeeding (NAME)? |  |  |
| 469A | For how many months did you breastfeed (NAME)? | MONTHS <br> DON'T KNOW <br> 98 |  |
| 470 | Did (NAME) drink anything from a bottle with a teat yesterday or last night? |  |  |
| 471 |  | GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501A. | GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501A. |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 501A | CHECK 215 IN THE BIRTH HISTORY: ANY BIRTHS IN 2013-2016? <br> ONE OR MORE BIRTHS IN 2013-2016 $\square$ NO BIRTHS IN 2013-2016 $\square$ |  |  | $\rightarrow 601$ |
| 502A | RECORD THE NAME AND BIRTH HISTORY NUMBER FROM 212 OF THE LAST CHILD BORN IN 2013-2016. |  |  |  |
| 503A | $\qquad$ |  |  | $\rightarrow$ 501B |
| 504A | Do you have a Road to Health booklet/card or other document where (NAME)'s vaccinations are written down? | YES, HAS ONLY A BOOKLET $\ldots . . . . . . . . . .$. 1  <br> YES, HAS ONLY ANOTHER DOCUMENT $\ldots$ 2 <br> YES, HAS BOOKLET AND OTHER DOCUMENT 3  <br> NO, NO BOOKLET AND NO OTHER DOCUMENT 4  |  | $\begin{aligned} & \longrightarrow 507 \mathrm{~A} \\ & \longrightarrow 507 \mathrm{~A} \end{aligned}$ |
| 505A | Did you ever have a Road to Health booklet for (NAME)? |  |  | $\rightarrow$ 505A2 |
| 505A1 | What happened to (NAME)'s Road to Health booklet? | BOOKLET WITH RELATIVE <br> BOOKLET MISPLACED OR LOST <br> BOOKLET STOLEN <br> BOOKLET HELD AS COLLATERAL/RANSOM <br> BOOKLET DESTROYED <br> OTHER $\qquad$ |  | $\rightarrow 506 \mathrm{~A}$ |
| 505A2 | Why don't you have a Road to Health booklet for (NAME)? |  |  |  |
| 506A | CHECK 504A: <br> CODE '2' CIRCLED <br> CODE '4' CIRCLED |  |  | $\rightarrow$ 511A |
| 506A1 | May I see the document where (NAME)'s vaccinations are written down? | YES, OTHER DOCUMENT SEEN $\ldots . . . . .$. 1 <br> NO DOCUMENT SEEN $\ldots . . . . . . . . . . . . . . . . . . . . . . . . ~$ 2 |  | $\begin{array}{\|l} \longrightarrow 508 \mathrm{~A} \\ \\ 511 \mathrm{~A} \end{array}$ |
| 507A | May I see the Road to Health booklet or other document where (NAME)'s vaccinations are written down? | YES, ONLY BOOKLET SEEN ................ 1 <br> YES, ONLY OTHER DOCUMENT SEEN ..... 2 <br> YES, BOOKLET AND OTHER DOCUMENT SEEN 3 <br> NO BOOKLET AND NO OTHER DOCUMENT SEEN 4 |  | $\begin{aligned} & \longrightarrow 508 \mathrm{~A} \\ & \longrightarrow 508 \mathrm{~A} \end{aligned}$ |
| 507A1 | Where is (NAME)'s Road to Health booklet? | BOOKLET WITH RELATIVE <br> BOOKLET MISPLACED OR LOST . . . . . ...... 2 <br> BOOKLET STOLEN <br> BOOKLET HELD AS COLLATERAL/RANSOM .. 4 <br> BOOKLET AT HEALTH FACILITY $\ldots . . . . . .$. <br> OTHER $\qquad$ |  |  |
| 507A2 |  |  |  | $\rightarrow$ 511A |



SECTION 5A. CHILD IMMUNISATION (LAST BIRTH)

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
|  | NAME OF LAST BIRTH | BIRTH HISTORY NUMBER |  |
| 511A | Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns? |  | $\begin{array}{\|l} \longrightarrow 526 \mathrm{~A} \\ \longrightarrow 501 \mathrm{~B} \end{array}$ |
| 512A | Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? |  |  |
| 514A | Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? |  | $\rightarrow$ 517A |
| 515A | Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? |  |  |
| 516A | How many times did (NAME) receive the oral polio vaccine? | NUMBER OF TIMES |  |
| 517A | Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough? |  | $\rightarrow$ 518A1 |
| 518A | How many times did (NAME) receive the DTPcombination vaccine? |  |  |
| 518A1 | Has (NAME) ever received a hepatitis B vaccination, that is, an injection given in the right thigh to prevent hepatitis B? |  | $\xrightarrow{\rightarrow} 519 \mathrm{~A}$ |
| 518A2 | How many times did (NAME) receive the hepatitis B vaccine? | NUMBER OF TIMES |  |
| 519A | Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia? |  | $\rightarrow 521 \mathrm{~A}$ |
| 520A | How many times did (NAME) receive the pneumococcal vaccine? | NUMBER OF TIMES |  |
| 521A | Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea? |  | $\xrightarrow{\rightarrow} 523 \mathrm{~A}$ |
| 522A | How many times did (NAME) receive the rotavirus vaccine? | NUMBER OF TIMES |  |
| 523A | Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles? |  | $\xrightarrow{\rightarrow} 525 \mathrm{~A}$ |
| 524A | How many times did (NAME) receive the measles vaccine? | NUMBER OF TIMES |  |
| 525A | Did (NAME) ever miss getting a vaccination or get a vaccination late? |  | $\xrightarrow{\rightarrow} 501 \mathrm{~B}$ |
| 526A | CHECK 508A AND 511A: <br> CHILD RECEIVED AT LEAST ONE VACCINATION <br> a) What was the reason for (NAME) missing the vaccination or getting it late? <br> PROBE: Any other reason? <br> CHILD RECEIVED RECEIVED NO $\square$ <br> What is the reason (NAME) has not received any vaccinations? <br> PROBE: Any other reason? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 501B | CHECK 215 IN THE BIRTH HISTORY: ANY MORE BIRT MORE BIRTHS IN 2013-2016 $\square$ NO | N 2013-2016? <br> E BIRTHS IN 2013-2016 | $\rightarrow 601$ |
| 502B | RECORD THE NAME AND BIRTH HISTORY NUMBER 2016. <br> NAME OF NEXT-TO- <br> LAST BIRTH | M 212 OF THE NEXT-TO-LAST CHILD BORN IN 2013- <br> BIRTH HISTORY NUMBER |  |
| 503B | CHECK 216 FOR CHILD: <br> LIVING | DEAD | $\rightarrow$ 527B |
| 504B | Do you have a Road to Health booklet/card or other document where (NAME)'s vaccinations are written down? |  | $\begin{array}{r} \longrightarrow 507 \mathrm{~B} \\ \longrightarrow 507 \mathrm{~B} \end{array}$ |
| 505B | Did you ever have a Road to Health booklet for (NAME)? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO 2  | $\longrightarrow$ 505B2 |
| 505B1 | What happened to (NAME)'s Road to Health booklet? |  | $\rightarrow 506 \mathrm{~B}$ |
| 505B2 | Why don't you have a Road to Health booklet for (NAME)? |  |  |
| 506B | CHECK 504B: <br> CODE '2' CIRCLED | CODE '4' CIRCLED | $\rightarrow$ 511B |
| 506B1 | May I see the document where (NAME)'s vaccinations are written down? |  | $\begin{array}{\|l} \longrightarrow 508 \mathrm{~B} \\ \longrightarrow 511 \mathrm{~B} \end{array}$ |
| 507B | May I see the Road to Health booklet or other document where (NAME)'s vaccinations are written down? | $\begin{array}{llll}\text { YES, ONLY BOOKLET SEEN } \ldots \ldots . . . . . . & 1 \\ \text { YES, ONLY OTHER DOCUMENT SEEN } & \ldots . & 2 \\ \text { YES, BOOKLET AND OTHER DOCUMENT SEEN } & 3 \\ \text { NO BOOKLET AND NO OTHER DOCUMENT SEEN } & 4\end{array}$ | $\begin{array}{r} \longrightarrow 508 \mathrm{~B} \\ \longrightarrow 508 \mathrm{~B} \end{array}$ |
| 507B1 | Where is (NAME)'s Road to Health booklet? |  |  |
| 507B2 | CHECK 507B: <br> CODE '2' CIRCLED | CODE '4' CIRCLED | $\rightarrow$ 511B |

PHOTOGRAPH VACCINATION PAGE OF BOOKLET OR OTHER DOCUMENT WHERE VACCINATIONS ARE WRITTEN.
COPY DATES FROM THE BOOKLET.
WRITE '44' IN 'DAY' COLUMN IF BOOKLET SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

BCG

ORAL POLIO VACCINE (OPV) 0 (BIRTH DOSE) ORAL POLIO VACCINE (OPV) 1

ROTAVIRUS (RV) 1

DTAP-IPV-HIB 1
HEPATITIS B (HEP B) 1

PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 1

DTAP-IPV-HIB 2
HEPATITIS B (HEP B) 2

DTAP-IPV-HIB 3

HEPATITIS B (HEP B) 3
PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 2

ROTAVIRUS (RV) 2
MEASLES 1

PNEUMOCOCCAL CONJUGATE VACCINE (PCV) 3

DTAP-IPV-HIB 4

MEASLES 2

VITAMIN A (MOST RECENT)

| DAY MONTH |  | YEAR |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |  |  |  |


| 509B | CHECK 508B: 'BCG' TO 'MEASLES 2' ALL RECORDED? $\mathrm{NO} \square$ | YES | $\rightarrow$ 525B |
| :---: | :---: | :---: | :---: |
| 510B | In addition to what is recorded on (this document/these documents), did (NAME) receive any other vaccinations, including vaccinations received in immunisation campaigns? <br> RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 508B THAT ARE NOT RECORDED AS HAVING BEEN GIVEN. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
|  | NAME OF NEXT-TO- <br> LAST BIRTH | BIRTH HISTORY NUMBER |  |  |
| 511B | Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns? | YES <br> NO DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\begin{array}{\|l} \longrightarrow 526 \mathrm{~B} \\ \longrightarrow 527 \mathrm{~B} \end{array}$ |
| 512B | Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 514B | Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\xrightarrow{\rightarrow} 517 \mathrm{~B}$ |
| 515B | Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? | FIRST TWO WEEKS LATER | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 516B | How many times did (NAME) receive the oral polio vaccine? | NUMBER OF TIMES |  |  |
| 517B | Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow$ 518B1 |
| 518B | How many times did (NAME) receive the DTPcombination vaccine? | NUMBER OF TIMES |  |  |
| 518B1 | Has (NAME) ever received a hepatitis B vaccination, that is, an injection given in the right thigh to prevent hepatitis B ? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\square$ 519B |
| 518B2 | How many times did (NAME) receive the hepatitis B vaccine? | NUMBER OF TIMES |  |  |
| 519B | Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia? | YES <br> NO <br> DON'T KNOW | 1 2 8 | $\xrightarrow{\square} 521 \mathrm{~B}$ |
| 520B | How many times did (NAME) receive the pneumococcal vaccine? | NUMBER OF TIMES |  |  |
| 521B | Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea? | YES <br> NO <br> DON'T KNOW | 1 2 8 | $\xrightarrow{\square} 523 \mathrm{~B}$ |
| 522B | How many times did (NAME) receive the rotavirus vaccine? | NUMBER OF TIMES |  |  |
| 523B | Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow$ 525B |
| 524B | How many times did (NAME) receive the measles vaccine? | NUMBER OF TIMES |  |  |

SECTION 5B. CHILD IMMUNISATION (NEXT-TO-LAST BIRTH)

| No. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
|  | NAME OF NEXT-TO- <br> LAST BIRTH $\qquad$ | BIRTH HISTORY NUMBER . . . . . . . . $\square$ |  |
| 525B | Did (NAME) ever miss getting a vaccination or get a vaccination late? |  | $\xrightarrow{ }$ 526B |
| 526B | CHECK 508B AND 511B: <br> CHILD RECEIVED AT LEAST ONE VACCINATION <br> a) What was the reason for (NAME) missing the vaccination or getting it late? <br> PROBE: Any other reason? <br> CHILD RECEIVED RECEIVED NO $\square$ <br> b) What is the reason (NAME) has not received any vaccinations? <br> PROBE: Any other reason? | CLINIC OUT OF STOCK ...................... A <br> NOT AWARE OF NEED FOR A VACCINATION B <br> FEAR OF SIDE EFFECTS <br> DID NOT KNOW WHERE TO GO <br> TOO BUSY TO TAKE CHILD <br> NO MONEY FOR TRANSPORT <br> CHILD WAS ILL <br> RESPONDENT WAS ILL ......................... H <br> OTHER $\qquad$ $\qquad$ |  |
| 527B | CHECK 215 IN BIRTH HISTORY: ANY MORE BIRTHS | 13-2016? <br> NO MORE BIRTHS <br> IN 2013-2016 $\square$ | $\rightarrow 601$ |


| 601 | ONE OR MORE BIRTHS <br> IN 2011-2016 |  |  |
| :---: | :---: | :---: | :---: |
| 602 | CHECK 215: RECORD THE BIRTH HISTORY NUMBER IN 603 AND THE NAME AND SURVIVAL STATUS IN 604 FOR EACH BIRTH IN 2011-2016. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. IF THERE ARE MORE THAN 2 BIRTHS, USE LAST COLUMN OF ADDITIONAL QUESTIONNAIRE(S). <br> Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.) |  |  |
| 603 | BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY. | LAST BIRTH <br> BIRTH <br> HISTORY <br> NUMBER | NEXT-TO-LAST BIRTH <br> BIRTH <br> HISTORY <br> NUMBER . . . . . . . . . . |
| 604 | FROM 212 AND 216: | NAME | NAME |
| 605 | In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |
| 607 | Was (NAME) given any drug for intestinal worms in the last six months? <br> IF RESPONDENT SAYS NO, CHECK ROAD TO HEALTH BOOKLET. | YES $\ldots$ | YES $\ldots$ |
| 608 | Has (NAME) had diarrhoea/loose stools in the last 2 weeks? |  |  |
| 609 | CHECK 469: CURRENTLY BREASTFEEDING? |  | MUCH LESS . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS $\ldots \ldots \ldots$ 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . . . . 4 <br> NOTHING TO DRINK $\ldots \ldots$. 5 <br> DON'T KNOW . . . . . . . . . . . 8 |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 610 | When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less? |  | MUCH LESS . . . . . . . . . . . . . . . 1 <br> SOMEWHAT LESS . . . . . . . 2 <br> ABOUT THE SAME . . . . . . . . . 3 <br> MORE . . . . . . . . . . . . . 4 <br> STOPPED FOOD . . . . . . . 5 <br> NEVER GAVE FOOD . . . . . . 6 <br> DON'T KNOW . . . . . . . . . 8 |
| 611 | Did you seek advice or treatment for the diarrhoea from any source? | YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br>  $($ SKIP TO 615)  | YES $\ldots \ldots \ldots \ldots \ldots \ldots$ 1 <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2 <br>    <br>  $($ SKIP TO 615)  |
| 612 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD ' $X$ ' AND WRITE THE NAME OF THE PLACE(S). | ```PUBLIC SECTOR GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC .......... C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR``` $\qquad$ ```None \\ PRIVATE MEDICAL SECTOR \\ PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY ..... G PRIVATE DOCTOR . . . . . . . . H OTHER PRIVATE MEDICAL SECTOR ``` $\qquad$ ```None \\ OTHER SOURCE \\ SUPERMARKET/SHOP . . . . . J \\ TRADITIONAL \\ HEALER ............... K \\ MARKET .................. L \\ OTHER ``` $\qquad$ <br> ```XNone``` |  |
| 613 | CHECK 612: |  |  |
| 614 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 612. | FIRST PLACE .......... | FIRST PLACE $\ldots . . . . .$. |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH |  | NEXT-TO-LAST BIRTH |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 615 | Was (NAME) given any of the following at any time since (NAME) started having the diarrhoea: <br> a) A fluid made from a special packet called Sorol or Rehidrat? <br> b) A clinic-recommended sugar-salt solution? <br> c) Zinc tablets or syrup? | a) FLUID FROM ORS PACKET .. 1 <br> b) HOMEMADE FLUID...... 1 <br> c) ZINC ........ 1 | NO DK <br>   <br> 2 8 <br> 2 8 <br> 2 8 | YES <br> a) FLUID FROM ORS PACKET .. 1 <br> b) HOMEMADE FLUID..... 1 <br> c) $\mathrm{ZINC} \ldots . . . .1$ | NO <br> 2 <br> 2 2 | DK <br> 8 <br> 8 <br> 8 |
| 616 | CHECK 615: <br> ANY 'YES' ALL 'NO' $\square$ OR 'DK' <br> a) Was anything <br> b) Was anything else given to given to treat the treat the diarrhoea? diarrhoea? | YES <br> NO <br> (SKIP <br> DON'T KNOW | $\begin{array}{ll} \ldots & 1 \\ \ldots & 2 \\ 3) \leftarrow & \\ \ldots & 8 \end{array}$ | YES <br> NO <br> (SKIP <br> DON'T KNOW |  | $\frac{1}{2-}$ |
| 617 | CHECK 615: <br> ANY 'YES' <br> a) What else was given to treat the diarrhoea? <br> Anything else? <br> ALL 'NO' OR 'DK' <br> b) What was given to treat the diarrhoea? <br> Anything else? | PILL OR SYRUP <br> ANTIBIOTIC <br> ANTIMOTILITY <br> OTHER (NOT ANTIB <br> OR ANTIMOTILIT <br> UNKNOWN PILL <br> OR SYRUP <br> INJECTION <br> ANTIBIOTIC <br> NON-ANTIBIOTIC <br> UNKNOWN <br> INJECTION <br> (IV) INTRAVENOUS <br> HOME REMEDY/ <br> HERBAL MEDICINE <br> OTHER |  | PILL OR SYRUP <br> ANTIBIOTIC ANTIMOTILITY OTHER (NOT ANTIB OR ANTIMOTILIT UNKNOWN PILL OR SYRUP <br> INJECTION <br> ANTIBIOTIC NON-ANTIBIOTIC UNKNOWN INJECTION <br> (IV) INTRAVENOUS <br> HOME REMEDY/ <br> HERBAL MEDICINE <br> OTHER | TIC | A <br> B <br> C <br> D <br> $E$ $F$ <br> G <br> H <br> I <br> X |
| 618 | Has (NAME) been ill with a fever at any time in the last 2 weeks? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots & 1 \\ \ldots & 2 \\ \ldots & 8 \end{array}$ | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |
| 620 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots & 1 \\ \ldots & 2 \\ \ldots . & 8 \end{array}$ | YES <br> NO <br> DON'T KNOW |  | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |
| 621 | Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks? | $\begin{array}{ll} \text { YES } & \ldots \\ \text { NO } & \ldots \ldots \end{array} \begin{gathered} \\ \\ \text { DON'T KNOW } \\ \text { (SKIP } \\ \ldots \end{gathered}$ | 23) |  | . | $\begin{gathered} 1 \\ 2- \\ \hline 8- \end{gathered}$ |
| 622 | Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? | CHEST ONLY NOSE ONLY BOTH OTHER $\qquad$ (SPEC DON'T KNOW (SKIP T | $\begin{array}{ll} \ldots . & 1 \\ \cdots \cdots & 2- \\ \cdots \cdots & 3 \\ & 6- \\ \ldots \ldots & 8- \\ 324) \longleftarrow & \end{array}$ |  | 24) | $\begin{aligned} & 1- \\ & 2- \\ & 3- \\ & 6- \\ & 8- \\ & \hline \end{aligned}$ |
| 623 | CHECK 618: HAD FEVER? | $\begin{array}{ll}\text { YES } & \text { NO OR } \\ \square \\ \square & \end{array}$ | $\begin{aligned} & \text { DK } \square \\ & 546) \longleftarrow \end{aligned}$ | $\begin{array}{ll}\text { YES } \\ \square & \text { NO O } \\ \square & \end{array}$ |  |  |


| NO. | QUESTIONS AND FILTERS | LAST BIRTH <br> NAME | NEXT-TO-LAST BIRTH <br> NAME |
| :---: | :---: | :---: | :---: |
| 624 | Did you seek advice or treatment for the illness from any source? |  | YES $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 1    <br> NO $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$ 2    <br>  (SKIP TO 629)     |
| 625 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD ' $X$ ' AND WRITE THE NAME OF THE PLACE(S). | ```PUBLIC SECTOR GOVERNMENT HOSPITAL . . A GOVERNMENT CLINIC/ COMM. HEALTH CENTRE B MOBILE CLINIC . . . . . . . . . C COMM. HEALTH WORKER . . D OTHER PUBLIC SECTOR``` $\qquad$ ```None \\ PRIVATE MEDICAL SECTOR \\ PRIVATE HOSPITAL/CLINIC F CHEMIST/PHARMACY ..... G PRIVATE DOCTOR . . . . . . . H OTHER PRIVATE MEDICAL SECTOR \\ (SPECIFY) \\ OTHER SOURCE \\ SUPERMARKET/SHOP . . . . J J \\ TRADITIONAL \\ HEALER ................ K \\ MARKET ................... L \\ OTHER ``` $\qquad$ <br> ```XNone``` |  |
| 626 | CHECK 625: |  |  |
| 627 | Where did you first seek advice or treatment? <br> USE LETTER CODE FROM 625. | FIRST PLACE .......... | FIRST PLACE |
| 628 | How many days after the illness began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY RECORD ‘00’. | DAYS | DAYS $\square$ |
| 629 | At any time during the illness, did (NAME) take any drugs for the illness? |  |  |


|  |  | LAST BIRTH | NEXT-TO-LAST BIRTH |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | NAME | NAME |
| 630 | What drugs did (NAME) take? <br> Any other drugs? <br> RECORD ALL MENTIONED. | ANTIMALARIAL DRUGS <br> COARTEM/ARTEMISININ COMBINATION <br> THERAPY (ACT) ..... A <br> OTHER ANTIMALARIAL $\qquad$ <br> (SPECIFY) <br> ANTIBIOTIC DRUGS <br> PILL/SYRUP $\qquad$ <br> INJECTION/IV $\qquad$ <br> OTHER DRUGS <br> ASPIRIN $\qquad$ <br> PARACETAMOL/PANADO .. F <br> BRUFEN <br> PONSTAN $\qquad$ <br> OTHER $\qquad$ X | ANTIMALARIAL DRUGS <br> COARTEM/ARTEMISININ COMBINATION <br> THERAPY (ACT) ..... A <br> OTHER ANTIMALARIAL $\qquad$ <br> ANTIBIOTIC DRUGS <br> PILL/SYRUP <br> INJECTION/IV $\qquad$ <br> OTHER DRUGS <br> ASPIRIN $\qquad$ <br> PARACETAMOL/PANADO .. F <br> BRUFEN ............... G <br> PONSTAN ............... H <br> OTHER $\qquad$ X |
| 646 |  | GO BACK TO 604 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 647. | GO TO 604 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 647. |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 647 | CHECK 615(a), ALL COLUMNS: <br> NO CHILD RECEIVED FLUID FROM ORS PACKET | ANY CHILD RECEIVED FLUID FROM ORS PACKET | $\rightarrow$ 648B |
| 648 | Have you ever heard of a special product called Sorol or Rehidrat that you can get for the treatment of diarrhoea? | YES <br> NO |  |
| 648A | CHECK 224: <br> ONE OR MORE BIRTHS <br> IN 2011-2016 | NO BIRTHS IN <br> 2011-2016 $\square$ | $\rightarrow 648 \mathrm{C}$ |
| 648B | CHECK 615(b), ALL COLUMNS: <br> NO CHILD RECEIVED <br> CLINIC RECOMMENDED SUGAR-SALT SOLUTION | ANY CHILD RECEIVED <br> CLINIC RECOMMENDED SUGAR-SALT SOLUTION | $\rightarrow 649$ |
| 648C | Have you ever heard from a health care worker about a sugar-salt solution that can be made at home for the treatment of diarrhoea? | YES <br> NO |  |
| 649 | CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILD RESPONDENT | B BORN IN 2014-2016 LIVING WITH THE <br> NONE $\square$ | 701 |

Now I would like to ask you about liquids or foods that (NAME FROM 649) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods. Did (NAME FROM 649) drink or eat:
a) Plain water?

|  | Fruit juice or squashes? |
| :---: | :---: |
|  | Milk such as tinned, powdered, or fresh animal milk? IF YES: How many times did (NAME) drink milk? <br> IF 7 OR MORE TIMES, RECORD '7'. |
|  | Infant formula? <br> IF YES: How many times did (NAME) drink infant formula? <br> IF 7 OR MORE TIMES, RECORD '7'. |
|  | ) Coke, Stoney, Dixi Cola, Jive or other sugary drinks? |
|  | Any other liquids? |
|  | Yogurt, amasi, maas or custard? <br> IF YES: How many times did (NAME) eat yogurt, amasi, maas or custard? <br> IF 7 OR MORE TIMES, RECORD '7'. |


|  | YES | NO | DK |
| :---: | :---: | :---: | :---: |
| a) | 1 | 2 | 8 |
| b) | 1 | 2 | 8 |

h) Any Purity, Cerelac, Ace or other commercially
fortified baby cereal or porridge?
k) White potatoes, white sweet potatoes, white yams, or any other foods made from roots?

m) Ripe mangoes, ripe papayas, or orange melon?

| n) Any other fruits or vegetables such as oranges, apples, bananas, guava, green melon, pineapples, avocados, or mushrooms? | n) | 1 | 2 | 8 |
| :---: | :---: | :---: | :---: | :---: |
| o) Liver, kidney, heart, or other organ meats? | o) | 1 | 2 | 8 |
| p) Any meat, such as beef, pork, lamb, goat, chicken, or duck? | p) | 1 | 2 | 8 |
| q) Eggs? | q) | 1 | 2 | 8 |
| r) Fresh, dried or tinned fish or shellfish? | r) | 1 | 2 | 8 |
| s) Any foods made from beans, peas, lentils, or nuts? | s) | 1 | 2 | 8 |
| t) Cheese or other food made from milk? | t) | 1 | 2 | 8 |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
|  | u) Any oils, fats, butter, or foods made with any of these? | u) $\ldots \ldots . \ldots . .$. . 1 | 8 |  |
|  | v) Any sugary foods such as chocolates, sweets, candies, pastries, cakes or biscuits? | v) ................. 1 $2$ | $8$ |  |
|  | va) Any salty snacks such as Nik Naks, Simba, Flings, or Spookies? |  | 8 |  |
|  | w) Any other solid, semi-solid, or soft food? | w) $\ldots \ldots \ldots \ldots .12$ | 8 |  |
| 651 | CHECK 650 (CATEGORIES 'g' THROUGH 'w'): <br> NOT A SINGLE 'YES' | T ONE 'YES' |  | $\rightarrow 653$ |
| 652 | Did (NAME FROM 649) eat any solid, semi-solid, or soft foods yesterday during the day or at night? <br> IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat? | YES <br> (GO BACK TO 650 TO RECOR FOOD EATEN YESTERDA <br> (THEN CONTINUE TO 653) <br> NO |  | $\longrightarrow 653 \mathrm{~A}$ |
| 653 | How many times did (NAME FROM 649) eat solid, semisolid, or soft foods yesterday during the day or at night? <br> IF 7 OR MORE TIMES, RECORD ' 7 '. | NUMBER OF TIMES DON'T KNOW | 8 |  |
| 653A | CHECK 215: CHILD AGE 6 MONTHS OR OLDER? <br> YES $\square$ | $\mathrm{NO} \square$ |  | $\rightarrow 654$ |
| 653B | Has (NAME FROM 649) ever eaten liver? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} . & 1 \\ \therefore & 2 \end{array}$ | $\longrightarrow 654$ |
| 653C | In the last four weeks, how many times has (NAME FROM 649) eaten liver? | NUMBER OF TIMES <br> DON'T KNOW |  |  |
| 654 | The last time (NAME FROM 649) passed stools, what was done to dispose of the stools? | CHILD USED TOILET OR LATRINE PUT/RINSED <br> INTO TOILET OR LATRINE <br> PUT/RINSED <br> INTO DRAIN, DITCH, RIVER OR STREAM <br> THROWN INTO GARBAGE <br> BURIED <br> LEFT IN THE OPEN <br> OTHER | $\begin{array}{ll} \ldots & 01 \\ \ldots & 02 \\ \ldots & \\ & 03 \\ \ldots & 04 \\ \ldots & 05 \\ \ldots & 06 \\ & \\ & 96 \\ \hline \end{array}$ |  |

SECTION 7. MARRIAGE AND SEXUAL ACTIVITY

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 701 | Are you currently married or living together with someone as if married? | YES, CURRENTLY MARRIED YES, LIVING WITH A PARTNER NO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\rightarrow 701 \mathrm{~B}$ |
| 701A | Do you have a regular boyfriend/partner or fiancé? | YES $\mathrm{NO}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 702$ |
| 701B | Is this person a man or a woman? | MAN <br> WOMAN <br> INTERSEX OR TRANSGENDERED | 1 2 3 |  |
| 701C | CHECK 701: RESPONDENT'S CURRENT MARITAL STA $701=3$ | S <br> 1 OR 2 |  | $\rightarrow$ 703A |
| 702 | Have you ever been married or lived together with someone as if married? | YES, FORMERLY MARRIED YES, LIVED WITH A PARTNER NO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\longrightarrow 703 \mathrm{~A}$ |
| 703 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED DIVORCED SEPARATED |  |  |
| 703A | CHECK 106: AGE OF RESPONDENT <br> AGE 15-49 | GE 50 BOVE |  | $\rightarrow 901$ |
| 703B | CHECK 701 AND 702: EVER MARRIED OR LIVED WITH $702 \text { = } 1 \text { OR } 2$ $701 \text { = } 1 \text { OR } 2$  $701 \text { = } 3 \text { AND }$ | PARTNER? $=3$ $\square$ |  | $\begin{array}{r} \longrightarrow 709 \\ \longrightarrow 713 \end{array}$ |
| 704 | Is your (spouse/partner) living with you now or is he/she staying elsewhere? | LIVING WITH HER STAYING ELSEWHERE |  |  |
| 705 | RECORD THE SPOUSE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE/SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. | NAME <br> LINE NO. |  |  |
| 705A | CHECK 701B: SEX OF SPOUSE/PARTNER <br> SPOUSE/PARTNER IS MALE (701B = 1) | SPOUSE/PARTNER IS FEMALE OR INTERSEX (701B = 2 OR 3) |  | $\longrightarrow 709$ |
| 706 | Does your (husband/partner) have other wives or does he live with other women as if married? | YES <br> NO <br> DON'T KNOW | 1 2 8 | $\xrightarrow{\longrightarrow} 709$ |
| 707 | Including yourself, in total, how many wives or live-in partners does he have? | TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS <br> DON'T KNOW | $\begin{aligned} & \\ & \hline \\ & 98 \end{aligned}$ |  |
| 708 | Are you the first, second, ... wife? | RANK . . . . . . . . . . . . . . . . . . . . . |  |  |




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 724 | CHECK 106: <br> AGE 15-24 |  |  |  | 727 |
| 725 | CHECK 701: <br> NOT CURRENTLY MARRIED/ CURRENTLY MARRIED/ LIVING WITH A SPOUSE LIVING WITH A SPOUSE |  |  |  | 727 |
| 726 | In the past 12 months have you had sex or been sexually involved with anyone because he gave you or told you he would give you gifts, cash, or anything else? | $\begin{array}{ll} \text { YES } & . \\ \text { NO } & . \end{array}$ |  |  |  |
| 727 | In total, with how many different people have you had sexual intercourse in your lifetime? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'. | NUMBER OF PARTNERS <br> IN LIFETIME <br> DON'T KNOW |  | $\begin{aligned} & \square \\ & \hline 98 \end{aligned}$ |  |
| 731 | PRESENCE OF OTHERS DURING THIS SECTION. | CHILDREN < 10 MALE ADULTS FEMALE ADULTS | YES | NO 2 2 2 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 801 | CHECK 304: <br> NEITHER STERILISED | HE OR SHE STERILISED | $\rightarrow 813$ |
| 802 | CHECK 226: <br> PREGNANT | T PREGNANT OR UNSURE | $\rightarrow 804$ |
| 803 | Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children? | HAVE ANOTHER CHILD NO MORE UNDECIDED/DON'T KNOW | $\begin{aligned} & \longrightarrow 805 \\ & \longrightarrow 812 \end{aligned}$ |
| 804 | Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children? | HAVE (A/ANOTHER) CHILD NO MORE/NONE SAYS SHE CAN'T GET PREGNANT UNDECIDED/DON'T KNOW | $\begin{array}{\|} \longrightarrow 807 \\ \longrightarrow 813 \\ \longrightarrow 811 \end{array}$ |
| 805 | CHECK 226: <br> NOT PREGNANT OR UNSURE $\downarrow$ <br> a) How long would you like to wait from now before the birth of (a/another) child? <br> PREGNANT <br> b) After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? |  |  |
| 806 | CHECK 226: <br> NOT PREGNANT <br> OR UNSURE | PREGNANT | 812 |
| 807 | CHECK 303: USING A CONTRACEPTIVE METHOD? | CURRENTLY <br> USING | >13 |
| 808 | CHECK 805: <br> '24' OR MORE MONTHS <br> NOT OR '02' OR MORE YEARS | '00-23' MONTHS OR '00-01' YEAR | $\rightarrow 812$ |
| 809 | CHECK 714: <br> DAYS, WEEKS OR <br> MONTHS AGO |  | $\begin{aligned} & \longrightarrow 811 \\ & \longrightarrow 811 \end{aligned}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 810 | CHECK 804: <br> WANTS TO HAVE A/ANOTHER CHILD <br> a) You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? <br> Any other reason? <br> WANTS NO MORE/ <br> b) You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? <br> Any other reason? |  |  |
| 811 | CHECK 303: USING A CONTRACEPTIVE METHOD? | YES, $\square$ <br> RENTLY USING | 813 |
| 812 | Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future? |  |  |
| 813 | CHECK 216: <br> HAS LIVING CHILDREN <br> a) If you could go back to <br> ;b) If you could choose the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? <br> PROBE FOR A NUMERIC RESPONSE. |  | $\longrightarrow 815$ $\longrightarrow 815$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 814 | How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl? | NUMBER . . <br> OTHER $\qquad$ | GIRL $\square$ <br> ECIFY) |  | $96$ |  |
| 815 | In the last six months have you: <br> a) Heard about family planning on the radio? <br> b) Seen anything about family planning on the television? <br> c) Read about family planning in a newspaper or magazine? <br> d) Heard about family planning from a community health worker? | a) RADIO <br> b) TELEVISION <br> c) NEWSPAPER OR <br> d) COMMUNITY HE | INE | YES <br> 1 <br> 1 <br> 1 <br> 1 | NO <br> 2 <br> 2 <br> 2 <br> 2 |  |
| 815A | CHECK Q18 IN HOUSEHOLD QUESTIONNAIRE: <br> YES, CURRENTLY <br> NO, NOT CUR ATTENDING SCHOOL <br> ATTENDING | NTLY HOOL |  |  |  | $\rightarrow 817$ |
| 815 | e) Heard about family planning at school? | e) SCHOOL | , | YES | NO 2 |  |
| 817 | CHECK 701, 701A AND 701B: | NO, NOT IN OR, BUT NOT WI |  |  |  | $\rightarrow 901$ |
| 818 | CHECK 303: USING A CONTRACEPTIVE METHOD? | NOT ENTLY USING |  |  |  | $\begin{aligned} & \rightarrow 820 \\ & \rightarrow 822 \end{aligned}$ |
| 819 | Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together? | MAINLY RESPONDE MAINLY HUSBAND/ JOINT DECISION OTHER $\qquad$ |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 6 \end{aligned}$ | $\rightarrow 821$ |
| 820 | Would you say that not using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together? | MAINLY RESPONDE MAINLY HUSBAND/PA JOINT DECISION <br> OTHER $\qquad$ |  |  | $\begin{array}{r} 1 \\ 2 \\ 3 \\ 6 \end{array}$ |  |
| 821 | CHECK 304: <br> NEITHER ARE STERILISED | HE OR SHE ARE STERILISED |  |  |  | $\rightarrow 901$ |
| 822 | Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want? | SAME NUMBER <br> MORE CHILDREN <br> FEWER CHILDREN DON'T KNOW |  |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 8 \end{aligned}$ |  |

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 901 | CHECK 701 AND 701A: <br> CURRENTLY MARRIED/ LIVING WITH SOMEONE OR HAS A REGULAR PARTNER/BOYFRIEND | NOT IN UNION $\square$ OR NO REGULAR TNER/BOYFRIEND | $\rightarrow 909$ |
| 902 | How old was your (spouse/partner) on his/her last birthday? | AGE IN COMPLETED YEARS |  |
| 903 | Did your (spouse/partner) ever attend an educational institution? |  | $\rightarrow 906$ |
| 904 | What was the highest level he/she attended: primary, secondary, or higher than secondary? |  | $\rightarrow 906$ |
| 905 | What was the highest grade or form he/she completed at that level? | PRIMARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ......... 00 <br> GRADE 1/SUB A/CLASS 1 ................... 11 <br> GRADE 2/SUB B/CLASS 2 .................. 12 <br> GRADE 3/STANDARD 1/ <br> AET 1 (KHA RI GUDE, SANLI) . . . . . . . . . . . 13 <br> GRADE 4/STANDARD 2 ..................... 14 <br> GRADE 5/STANDARD 3/AET 2 .............. 15 <br> GRADE 6 /STANDARD 4 .................... 16 <br> GRADE 7/STANDARD 5/AET 3 .............. 17 <br> SECONDARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ......... 20 <br> GRADE 8/STANDARD 6/FORM 1/NTC 1/ <br> N1/NC (V) LEVEL 2 <br> GRADE 9/STANDARD 7/FORM 2/AET 4/NTC $2 /$ <br> N2/NC (V) LEVEL 3 <br> GRADE 10/STANDARD 8/FORM 3/NTC 3/ <br> N3/NC (V) LEVEL 4 . . . . . . . . . . . . . . . . . 23 <br> GRADE 11/STANDARD 9/FORM 4 ......... 24 <br> CERTIFICATE OR DIPLOMA WITH LESS THAN <br> GRADE 12/STANDARD 10 COMPLETED . . 25 <br> GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 <br> N4/NTC4 ..................................... 27 <br> $\begin{array}{lll}\text { N5/NTC5 } & \text {. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . } 28 \\ \text { N6/NTC6 } & 29\end{array}$ <br> HIGHER EDUCATION <br> FURTHER STUDIES INCOMPLETE <br> OR ONGOING .......................... 30 <br> CERTIFICATE OR DIPLOMA WITH GRADE 12/ <br> STANDARD 10 COMPLETED <br> HIGHER DIPLOMA (TECHNIKON/ <br> U. OF TECHNOLOGY) <br> POST HIGHER DIPLOMA (TECHNIKON/ <br> U. TECHNOLOGY MASTERS, DOCTORAL) 33 <br> BACHELORS DEGREE/BACHELORS DEGREE <br> AND POST GRADUATE DIPLOMA .. 34 <br> HONOURS DEGREE .................. 35 <br> HIGHER DEGREE (MASTERS, DOCTORATE) 36 <br> DON'T KNOW |  |
| 906 | Has your (spouse/partner) done any work in the last 7 days? |  | $\rightarrow 908$ |
| 907 | Has your (spouse/partner) done any work in the last 12 months? |  | $\rightarrow 909$ |
| 908 | What is your (spouse's/partner's) occupation? That is, what kind of work does he/she mainly do? |  |  |
| 909 | Aside from your own housework, have you done any work in the last seven days? |  | $\rightarrow 913$ |

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 910 | As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work? |  | $\rightarrow 913$ |
| 911 | Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason? |  | $\rightarrow 913$ |
| 912 | Have you done any work in the last 12 months? | YES $\ldots \ldots . \ldots . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . ~$ 1 <br> NO 2 | $\rightarrow 913 \mathrm{~A}$ |
| 913 | What is your occupation? That is, what kind of work do you mainly do? |  |  |
| 913A | CHECK 106: AGE OF RESPONDENT <br> AGE 15-49 | AGE 50 | $\rightarrow 1202$ |
| 913B | CHECK 909, 910, 911, AND 912: ANY YES? <br> YES $\square$ | NO $\square$ | $\rightarrow 917$ |
| 914 | Do you do this work for a member of your family, for someone else, or are you self-employed? | FOR FAMILY MEMBER $\ldots \ldots$  <br> FOR SOMEONE ELSE $\ldots \ldots$  <br> SELF-EMPLOYED . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> 2  |  |
| 915 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? |  |  |
| 916 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| 917 | CHECK 701, 701A AND 701B: <br> CURRENTLY MARRIED/ <br> LIVING WITH A MAN, OR HAS REGULAR MALE PARTNER/BOYFRIEND | NOT IN UNION OR NOT IN UNION $\square$ WITH A MAN | $\rightarrow 925$ |
| 918 | CHECK 916: $\begin{array}{r} \text { CODE '1' OR '2' } \\ \text { CIRCLED } \downarrow \end{array}$ | OTHER | $\rightarrow 921$ |
| 919 | Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly? |  |  |
| 920 | Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same? |  | $\rightarrow 922$ |
| 921 | Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly? |  |  |

SECTION 9. SPOUSE'S BACKGROUND AND WOMAN'S WORK

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIE |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 922 | Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else? | RESPONDENT HUSBAND/PARTNER RESPONDENT AND HUSBAND/PARTNER JOINTLY SOMEONE ELSE OTHER | $\ldots \ldots \ldots$ 1 <br> $\ldots \ldots \ldots$ 2 <br> $\ldots \ldots \ldots$ 3 <br> $\ldots \ldots \ldots$ 4 <br> $\ldots \ldots .$. 6 |  |
| 923 | Who usually makes decisions about making major household purchases? | RESPONDENT HUSBAND/PARTNER RESPONDENT AND HUSBAND/PARTNER JOINTLY SOMEONE ELSE OTHER |   <br> $\ldots \ldots \ldots$ 1 <br> $\ldots \ldots \ldots$ 2 <br> $\ldots \ldots \ldots$ 3 <br> $\ldots \ldots \ldots$ 4 <br> $\ldots \ldots .$. 6 |  |
| 924 | Who usually makes decisions about visits to your family or relatives? | RESPONDENT HUSBAND/PARTNER RESPONDENT AND HUSBAND/PARTNER JOINTLY SOMEONE ELSE OTHER | $\ldots \ldots \ldots$ 1 <br> $\ldots \ldots \ldots$ 2 <br> $\ldots \ldots \ldots$ 3 <br> $\ldots \ldots \ldots$ 4 <br> $\ldots \ldots .$. 6 |  |
| 925 | Do you own this or any other house either alone or jointly with someone else? | ALONE ONLY <br> JOINTLY ONLY <br> BOTH ALONE AND JOINTLY <br> DOES NOT OWN | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots & 3 \\ \ldots \ldots \ldots & 4 \end{array}$ | $\longrightarrow 931$ |
| 926 | Do you have a title deed or documents for any house you own? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots & 8 \end{array}$ | $\xrightarrow{\longrightarrow} 931$ |
| 927 | Is your name on the title deed or documents? | YES <br> NO DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 931 | PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT) |  | PRES./  <br> NOT NOT <br> LISTEN. PRES. <br> 2 3 <br> 2 3 <br> 2 3 <br> 2 3 |  |
| 932 | In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> a) If she goes out without telling him? <br> b) If she neglects the children? <br> c) If she argues with him? <br> d) If she refuses to have sex with him? <br> e) If she burns the food? |  | NO DK <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 933 | CHECK 217 AND 218: <br> ONE OR MORE CHILDREN LESS THAN AGE 18 LIVING WITH HER | CHILDREN OR NO CHILDREN LESS THAN AGE 18 LIVING WITH HER |  | $\rightarrow 1001$ |
| 934 | Now I would like to ask you questions about how you discipline or punish your (child/children). In the past 12 months, have you ever: <br> a) Hit or slapped your (child/children) with your hand to punish or discipline the child? <br> b) Hit or beat your (child/children) using a belt, spoon, stick, shoe or any other implement to punish or discipline the child? | a) HIT WITH HAND $\qquad$ <br> b) HIT WITH IMPLEMENT $\qquad$ | YES NO  <br>   <br> 1 2 <br> $\ldots$. 1 |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1001 | Now I would like to talk about something else. Have you ever heard of HIV or AIDS? |  | $\rightarrow 1042$ |
| 1008 | Can HIV be transmitted from a mother to her baby: <br> a) During pregnancy? <br> b) During delivery? <br> c) By breastfeeding? |   YES NO DK <br> a) DURING PREGNANCY $\ldots$ 1 2 8  <br> b) DURING DELIVERY $\ldots \ldots$ 1 2 8  <br> c) BREASTFEEDING $\ldots \ldots$ 1 2 8  |  |
| 1009 | CHECK 1008: <br> AT LEAST ONE 'YES' | OTHER | $\rightarrow 1011$ |
| 1010 | Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby? |  |  |
| 1011 | CHECK 208 AND 215: $\text { LAST BIRTH IN } \square$ | NO BIRTHS $\square$ <br> LAST BIRTH IN <br> 2013 OR EARLIER $\square$ | $\begin{aligned} & \longrightarrow 1027 \\ & \longrightarrow 1027 \end{aligned}$ |
| 1012 | CHECK 408 FOR LAST BIRTH: | NO <br> ANTENATAL $\square$ CARE | $\rightarrow 1020$ |
| 1013 | CHECK FOR PRESENCE OF OTHERS. BEFORE CON | NG, MAKE EVERY EFFORT TO ENSURE PRIVACY. |  |
| 1014 | During any of the antenatal visits for your last birth were you given any information about: <br> a) Babies getting HIV from their mother? <br> b) Things that you can do to prevent getting HIV? <br> c) Getting tested for HIV? |   YES NO DK <br> a) HIV FROM MOTHER $\quad \ldots$ 1 2 8  <br> b) THINGS TO DO $\ldots \ldots \ldots$ 1 2 8  <br> c) TESTED FOR HIV $\ldots \ldots$ 1 2 8  |  |
| 1015 | Were you offered a test for HIV as part of your antenatal care? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 1016 | I don't want to know the results, but were you tested for HIV as part of your antenatal care? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 1020$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1017 | Where was the test done? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL $\qquad$ <br> GOVERNMENT CLINIC/COMMUNITY <br> HEALTH CENTRE ....................... 12 <br> MOBILE/TEMPORARY HCT SERVICES ..... 13 <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR ..................... 21 <br> NEW START TESTING SITE .................. 22 <br> CHEMIST/PHARMACY ........................ 23 <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> OTHER SOURCE <br> HOME ......................................... 31 <br> WORKPLACE ................................. 32 <br> CORRECTIONAL FACILITY ................. 33 <br> OTHER $\qquad$ 96 |  |
| 1018 | I don't want to know the results, but did you get the results of the test? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\rightarrow 1020$ |
| 1019 | All women are supposed to receive counselling after being tested. After you were tested, did you receive counselling? |  |  |
| 1020 | CHECK 430 FOR LAST BIRTH: <br> ANY CODE <br> '21-36' CIRCLED | OTHER | $\rightarrow 1024$ |
| 1021 | Between the time you went for delivery but before the baby was born, were you offered an HIV test? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 1022 | I don't want to know the results, but were you tested for HIV at that time? |  | $\rightarrow 1024$ |
| 1023 | I don't want to know the results, but did you get the results of the test? |  | $\rightarrow 1025$ |
| 1024 | CHECK 1016: YES | NO OR $\square$ <br> NOT ASKED | $\rightarrow 1027$ |
| 1025 | Have you been tested for HIV since that time you were tested during your pregnancy? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . .   | $\rightarrow 1028$ |
| 1026 | How many months ago was your most recent HIV test? | MONTHS AGO $\square$ <br> TWO OR MORE YEARS | $\xrightarrow{\square} 1033$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1027 | I don't want to know the results, but have you ever been tested for HIV? |  | $\rightarrow 1031$ |
| 1028 | How many months ago was your most recent HIV test? | MONTHS AGO $\qquad$ $\square$ <br> TWO OR MORE YEARS |  |
| 1029 | I don't want to know the results, but did you get the results of the test? |  |  |
| 1030 | Where was the test done? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . . . 11 <br> GOVERNMENT CLINIC/COMMUNITY <br> HEALTH CENTRE ...................... 12 <br> MOBILE/TEMPORARY HCT SERVICES ..... 13 <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR .................... 21 <br> NEW START TESTING SITE ................. 22 <br> CHEMIST/PHARMACY ........................ 23 <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> (SPECIFY) <br> OTHER SOURCE <br> HOME ........................................ 31 <br> CORRECTIONAL FACILITY ...................... 33 <br> OTHER $\qquad$ 96 | $\underbrace{\rightarrow 1033}$ |
| 1031 | Do you know of a place where people can go to get an HIV test? |  | $\rightarrow 1033$ |
| 1032 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . . . A <br> GOVERNMENT CLINIC/COMMUNITY <br> HEALTH CENTRE .................... B <br> MOBILE/TEMPORARY HCT SERVICES ..... C <br> OTHER PUBLIC SECTOR $\qquad$ <br> (SPECIFY) <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR <br> NEW START TESTING SITE ................. F <br> CHEMIST/PHARMACY ....................... G <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ H <br> (SPECIFY) <br> OTHER $\qquad$ X <br> (SPECIFY) |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1050 | Where did you go? <br> Any other place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). | ```PUBLIC SECTOR GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . A GOVERNMENT CLINIC/COMMUNITY HEALTH CENTRE ................... B MOBILE/TEMPORARY HCT SERVICES ..... C OTHER PUBLIC SECTOR``` $\qquad$ ```None \\ PRIVATE MEDICAL SECTOR \\ PRIVATE HOSPITAL/CLINIC/ PRIVATE DOCTOR E \\ NEW START TESTING SITE ``` $\qquad$ <br> ```CHEMIST/PHARMACY``` $\qquad$ <br> ```G \\ OTHER PRIVATE MEDICAL SECTOR``` $\qquad$ ```None \\ OTHER SOURCE \\ SHOP ...................................... I \\ TRADITIONAL HERBALIST . . . . . . . . . . . . . . . . . . J \\ TRADITIONAL HEALER ``` $\qquad$ <br> ```OTHER``` $\qquad$ <br> ```XNone``` |  |
| 1053 |  | NION OR NO REGULAR PARTNER/BOYFRIEND IN UNION/PARTNERED WITH A MAN | 1101 |
| 1054 | Can you say no to your (husband/partner) if you do not want to have sexual intercourse? |  |  |
| 1055 | Could you ask your (husband/partner) to use a condom if you wanted him to? |  |  |


| NO. |  |  |  |  |  | CODING CA | TEGORIES | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1101 | Now I would like to ask you some questions about your brothers and sisters, that is, all of the children born to your biological mother, including those who are living with you, those living elsewhere and those who have died. How many children did your mother give birth to, including you? |  |  |  |  | BER OF BIRTHS OGICAL MOTHER | то |  |
| 1102 | How many births did your mother have before you were born? |  |  |  | BIRTH |  |  | $\rightarrow 1201$ |
| 1103 |  |  |  |  | NUMBER OF PRECEDING BIRTHS |  |  |  |
| 1104 | What was the name given to your oldest (next oldest) brother or sister? | (1) | (2) | (3) |  | (4) | (5) | (6) |
| 1105 | Is (NAME) male or female? | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | MALE FEMALE |  | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ | $\begin{array}{ll} \text { MALE } & 1 \\ \text { FEMALE } & 2 \end{array}$ |
| 1106 | Is (NAME) still alive? | $\left.\begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 11084 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (2) \end{array}\right]$ | $\left.\begin{array}{ccc} \text { YES } \ldots . & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 11084 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (3) \end{array}\right]$ | $\begin{gathered} \text { YES ... } \\ \text { NO ... } \\ \text { GO TO } 11 \\ \text { DK ... } \\ \text { GO TO } \end{gathered}$ | $\left.\begin{array}{c} 1 \\ 2 \\ 108 \\ 8 \\ 8 \\ (4) \end{array}\right]$ | $\left.\begin{array}{ccc} \left.\begin{array}{ccc} \text { YES } & \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 11084 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (5) \end{array}\right] \end{array}\right]$ | $\left.\begin{array}{ccc} \begin{array}{c} \text { YES } \end{array} \ldots & 1 \\ \text { NO } & \ldots & 2 \\ \text { GO TO } & 11084 \\ \text { DK } & \ldots & 8 \\ \text { GO TO } & (6) \end{array}\right]$ |  |
| 1107 | How old is (NAME)? |   <br> GO TO (2)  |   <br> GO TO (3)  |   <br> GO TO  |  |   <br> GO TO (5)  |   <br> GO TO (6)  |   <br> GO TO (7)  |
| 1108 | How many years ago did (NAME) die? |  |  |  |  |  |  | $7$ |
| 1109 | How old was (NAME) when he/she died? <br> IF DON'T KNOW, PROBE TO GET AN ESTIMATE. |  |  | IF MALE DIED BEF 12 YEARS OF AGE GO TO 11 |  |  |  | DIED BEFORE <br> 12 YEARS <br> OF AGE <br> GO TO 1114 |
| 1110 | Was (NAME) pregnant when she died? | $\left.\begin{array}{c} \text { YES . . . } \\ \text { GO TO } 1113 \\ \text { NO } \ldots . \end{array}\right]$ | $\left.\begin{array}{c} \text { YES . . . } \\ \text { GO TO } 11134 \\ \text { NO } \ldots . \end{array}\right]$ | $\begin{gathered} \text { YES . . } \\ \text { GO TO } 11 \\ \text { NO . . . } \end{gathered}$ | $\left.\begin{array}{c} 1 \\ 113 \\ 2 \end{array}\right]$ | $\left.\begin{array}{c} \text { YES . . . } \\ \text { GO TO } 1113 \\ \text { NO } \ldots . \end{array}\right]$ | $\left.\begin{array}{c} \text { YES } \ldots . \\ \text { GO TO } 11134 \\ \text { NO } \ldots . \end{array}\right]$ | $\left.\begin{array}{c} \text { YES } \ldots \\ \text { GO TO } 1113 \\ \text { NO } \ldots . \end{array}\right]$ |
| 1111 | Did (NAME) die during childbirth? | $\left.\begin{array}{c}\text { YES . . . } \\ \text { GO TO } \\ \text { 1113 } \\ \text { NO }\end{array}\right]$ | $\left.\begin{array}{c}\text { YES . . . } \\ \text { GO TO } 1113 \\ \text { NO } \ldots 3^{4}\end{array}\right]$ | $\begin{gathered} \text { YES . . . } \\ \text { GO TO } 11 \\ \text { NO . . } \end{gathered}$ | $\left.\begin{array}{c} 1 \\ 113 \\ 2 \end{array}\right]$ | $\left.\begin{array}{ccc} \text { YES } \ldots & 1 \\ \text { GO TO } & 1113 \\ \text { NO } \ldots & 2 \end{array}\right]$ | $\left.\begin{array}{ccc}\text { YES } \ldots & 1 \\ \text { GO TO } & 1113 \\ \text { NO } & \ldots & 2\end{array}\right]$ | $\begin{gathered} \text { YES ... } \\ \text { GO TO } 1113 \\ \text { NO } \ldots . \end{gathered}$ |
| 1112 | Did (NAME) die within two months after the end of a pregnancy or childbirth? | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO . . . } & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO . . } & 2 \end{array}$ | $\begin{aligned} & \text { YES . . } \\ & \text { NO . . } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } \ldots . & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO . . . } & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO . . . } & 2 \end{array}$ |
| 1113 | How many live born children did (NAME) give birth to during her lifetime? |  |  |  |  |  |  | $1$ |
| 1114 | Was (NAME)'s death due to an accident or violence? | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } \ldots . & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } \ldots & 2 \end{array}$ | YES NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } \ldots & 2 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } & 1 \end{array}$ | $\begin{array}{lll} \text { YES . . } & 1 \\ \text { NO } \ldots & 2 \end{array}$ |
| IF NO MORE BROTHERS OR SISTERS, GO TO NEXT SECTION. |  |  |  |  |  |  |  |  |

SECTION 12. TOBACCO AND ALCOHOL

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1201 | CHECK COVER SHEET: IS HOUSEHOLD SELECTED FOR MALE SURVEY AND BIOMARKERS OR IS RESPONDENT AGE 50 OR OLDER AND SELECTED FOR HOUSEHOLD RELATIONS MODULE? <br> NO <br> YES |  |  | $\rightarrow 1501$ |
| 1202 | Would you say your health is poor, average, good, or excellent? | POOR <br> AVERAGE <br> GOOD <br> EXCELLENT |  |  |
| 1203 | Do you personally think you are underweight, normal weight, overweight, or obese? | UNDERWEIGHT NORMAL WEIGHT OVERWEIGHT OBESE DON'T KNOW |  |  |
| 1204 | Do you currently smoke tobacco every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL |  | $\begin{array}{\|} \longrightarrow 1207 \\ \longrightarrow 1206 \end{array}$ |
| 1205 | In the past, have you smoked tobacco every day? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1208$ |
| 1206 | In the past, have you ever smoked tobacco every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{array}{ll} \text {. . . . . . . . . . . } & 1 \\ \ldots & 2 \\ \ldots & \text {. . . . . . . . . . } \\ \hline \end{array}$ | $\rightarrow 1209$ |
| 1207 | On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Manufactured cigarettes? <br> b) Hand-rolled cigarettes? <br> c) Pipes full of tobacco? <br> d) Cigars or cigarillos? <br> e) Number of hookah, hubbly-bubbly or water pipe sessions? <br> f) Any others? | a) MANUFACT. CIGARETTES <br> b) HAND-ROLLED CIGARETTES <br> c) PIPES FULL OF TOBACCO <br> d) CIGARS OR CIGARILLOS <br> e) WATER PIPE SESSIONS <br> f) OTHERS | NUMBER DAILY | $\rightarrow 1209$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGOR | RIES | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1208 | On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Manufactured cigarettes? <br> b) Hand-rolled cigarettes? <br> c) Pipes full of tobacco? <br> d) Cigars or cigarillos? <br> e) Number of hookah, hubbly-bubbly or water pipe sessions? <br> f) Any others? | a) MANUFACT. CIGARETTES <br> b) HAND-ROLLED CIGARETTES <br> c) PIPES FULL OF TOBACCO <br> d) CIGARS OR CIGARILLOS <br> e) WATER PIPE SESSIONS <br> f) OTHERS | NUMBER WEEKLY |  |
| 1209 | Do you currently use snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{aligned} & \rightarrow 1211 \\ & \rightarrow 1212 \end{aligned}$ |
| 1210 | In the past, have you used snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL |  | $\rightarrow 1213$ |
| 1211 | On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Snuff, by mouth? <br> b) Snuff, by nose? <br> c) Chewing tobacco? <br> d) Any others? | a) SNUFF, BY MOUTH <br> b) SNUFF, BY NOSE <br> c) CHEWING TOBACCO <br> d) ANY OTHERS | TIMES DAILY | $\prod_{\longrightarrow 1213}$ |
| 1212 | On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Snuff, by mouth? <br> b) Snuff, by nose? <br> c) Chewing tobacco? <br> d) Any others? | a) SNUFF, BY MOUTH <br> b) SNUFF, BY NOSE <br> c) CHEWING TOBACCO <br> d) ANY OTHERS | TIMES WEEKLY |  |

SECTION 12. TOBACCO AND ALCOHOL

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1213 | CHECK 106: AGE OF RESPONDENT <br> AGE 15-49 | AGE 50 ABOVE |  | $\longrightarrow 1220$ |
| 1214 | CHECK 224: <br> LIVE BIRTH SINCE JANUARY 2011? YES | NO |  | $\rightarrow 1220$ |
| 1215 | CHECK 212 AND 215: <br> (NAME OF YOUNGEST CHILD) |  |  |  |
| 1216 | CHECK 1204 AND 1206: <br> CURRENTLY SMOKES TOBACCO <br> YES OR SMOKED IN THE PAST? | NO |  | $\rightarrow 1218$ |
| 1217 | During your pregnancy with (NAME) how often did you smoke tobacco: every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 1218 | CHECK 1209 AND 1210: <br> CURRENTLY USES SMOKELESS YES TOBACCO OR USED IN THE PAST? | NO |  | $\rightarrow 1220$ |
| 1219 | During your pregnancy with (NAME) how often did you use smokeless tobacco: every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | 1 <br> 2 <br> 3 |  |
| 1220 | Do you currently work in a job where other people smoke tobacco around you? | YES <br> NO <br> NOT CURRENTLY WORKING | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 1221 | Have you ever worked in a job where you were regularly exposed to smoke, dust, fumes or strong smells? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1223$ |
| 1222 | How many years did you work at a job where you were regularly exposed to smoke, dust, fumes or strong smells? <br> IF LESS THAN 1 YEAR, RECORD '00'. | YEARS |  |  |
| 1223 | Do you currently use e-cigarettes every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 1224 | Have you ever consumed a drink that contains alcohol such as beer, wine, ciders, spirits, or sorghum beer? PROBE: Even one drink? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 1301$ |
| 1225 | Was this within the last 12 months? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 1233$ |
| 1226 | In the last 12 months, how frequently have you had at least one drink? <br> PROBE: Five or more days a week, 1-4 days a week, 13 days a month, or less often than once a month? | 5 OR MORE DAYS A WEEK <br> 1-4 DAYS PER WEEK <br> 1-3 DAYS A MONTH <br> LESS OFTEN THAN ONCE A MONTH | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \end{aligned}$ |  |

SECTION 12. TOBACCO AND ALCOHOL


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1301 | Now I would like to ask you some questions about the foo USE SHOWCARD. | hat you eat. There are no right or wrong answers. |  |
| 1304 | How often do you usually eat fried foods such as hot chips, fried fish, fried chicken, fried meat, vetkoek or doughnuts? |  |  |
| 1305 | How often do you eat fast-foods or take-away foods from places like Chicken Licken, KFC, Captain DoRego's, Steers, Nando's, McDonalds, pizza delivery, etc? |  |  |
| 1306 | How often do you eat chips such as a packet of crispy chips or similar salty snacks such as Doritos, cheese curls, salted nuts, salty biscuits, etc? |  |  |
| 1307 | How often do you eat processed meat such as polony, viennas, meat pies, or sausage rolls? |  |  |
| 1308 | Which of the following statements best describes your approach towards salt consumption: <br> 1) I am not interested in lowering salt in my food. <br> 2) I am interested in lowering salt in my food within the next six months. <br> 3) I am interested in lowering salt in my food within the next month. <br> 4) I have started lowering salt within the last six months. <br> 5) I have already lowered my salt intake for longer than six months. |  |  |
| 1309 | Yesterday, how many types of fruit did you eat? <br> USE SHOWCARD. IF NONE, RECORD '00'. | TYPES OF FRUIT ............... $\square^{\square}$ |  |
| 1310 | Yesterday, how many types of vegetables, excluding potatoes, did you eat? <br> USE SHOWCARD. IF NONE, RECORD '00'. | TYPES OF VEGETABLES ........ $\square$ |  |
| 1311 | Yesterday, did you drink any sugar-sweetened drinks? Sugar-sweetened drinks include fizzy drinks like Coke or drinks like Squash where water is added, but not diet or unsweetened cold drinks. |  | $\rightarrow 1312$ |
| 1311A | How many and what size sugar-sweetened drinks did you drink? <br> PROBE FOR BEVERAGE NUMBER AND SIZE. | 200 ML GLASS <br> A $\square$ <br> 330 ML CAN OR BOTTLE $\qquad$ B $\square$ <br> 500 ML BOTTLE <br> C $\square$ <br> 1 L BOTTLE $\qquad$ D $\square$ <br> 2 L BOTTLE $\qquad$ E $\square$ |  |
| 1312 | Yesterday, did you drink any fruit juice? |  | $\rightarrow 1401$ |
| 1312A | How many and what size fruit juices did you drink? <br> PROBE FOR BEVERAGE NUMBER AND SIZE. | 200 ML JUICE CARTON <br> 200 ML GLASS |  |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1408 | How many years ago was your last Pap smear? | WITHIN THE LAST 3 YEAR 4-5 YEARS AGO 6-10 YEARS AGO MORE THAN 10 YEARS AG DON'T KNOW/DON'T REME | BER |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 8 \end{aligned}$ |  |
| 1409 | The last time you had a Pap smear, did you get the result of the test? | YES <br> NO <br> DON'T KNOW/DON'T REM | BER |  | 1 2 8 |  |
| 1410 | Has a doctor, nurse or health worker ever told you that you have TB? | YES <br> NO <br> DON'T KNOW |  |  | 1 2 8 | $\xrightarrow{\longrightarrow} 1413$ |
| 1411 | When was the last time you were told you had TB? | IN THE LAST 12 MONTHS MORE THAN 12 MONTHS | $0$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 1412 | Did you get medical treatment the last time you had TB? | YES <br> NO <br> DON'T KNOW/DON'T REM | BER |  | 1 2 8 |  |
| 1413 | Has a doctor, nurse or health worker told you that you have or have had any of the following conditions: <br> a) High blood pressure? <br> b) Heart attack or angina/chest pains? <br> c) Cancer? <br> d) Stroke? <br> e) High blood cholesterol or fats in the blood? <br> f) Diabetes or blood sugar? <br> g) Chronic bronchitis, emphysema, or COPD? <br> h) Asthma? | a) HIGH BLOOD PRESS. <br> b) HEART ATTACK <br> c) CANCER <br> d) STROKE <br> e) HIGH BLOOD CHOLEST <br> f) DIABETES <br> g) CHRONIC BRONCHITIS <br> h) ASTHMA | YES $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ | $\begin{gathered} \mathrm{NO} \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \\ 2 \end{gathered}$ | $\begin{gathered} \text { DK } \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \end{gathered}$ |  |
| 1414 | CHECK 1413: <br> ANY QUESTION a-h = YES? | YES $\square$ NO |  |  |  | $\rightarrow 1432$ |
| 1415 | CHECK 1413a: <br> RESPONDENT HAS HAD HIGH BLOOD PRESSURE. | $1413 \mathrm{a}=\mathrm{YES} \square \quad \begin{aligned} & \text { 1413a } \\ & \mathrm{NO} \mathrm{O} \end{aligned}$ | K |  |  | $\longrightarrow 1417$ |
| 1416 | Did you receive medical treatment for high blood pressure at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REM | MBER |  | 1 2 8 |  |
| 1417 | CHECK 1413b: <br> RESPONDENT HAS HAD HEART ATTACK OR ANGINA. | $1413 \mathrm{~b}=\mathrm{YES} \square \quad \begin{aligned} & 1413 \mathrm{~b} \\ & \mathrm{NO} \mathrm{Ol} \end{aligned}$ | K |  |  | $\rightarrow 1419$ |
| 1418 | Did you receive medical treatment for the heart attack, angina/chest pains at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REM | BER |  |  |  |
| 1419 | CHECK 1413c: <br> RESPONDENT HAS HAD CANCER. | $1413 c=Y E S$ $\square$ $\begin{aligned} & 1413 \mathrm{c} \\ & \text { NO O } \end{aligned}$ | K |  |  | $\rightarrow 1421$ |
| 1420 | Did you receive medical treatment for the cancer at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REM | MBER |  |  |  |
| 1421 | CHECK 1413d: <br> RESPONDENT HAS HAD STROKE. | $1413 \mathrm{~d}=\mathrm{YES} \square \quad \begin{aligned} & \text { 1413d } \\ & \mathrm{NO} \mathrm{O} \end{aligned}$ | K |  |  | $\rightarrow 1423$ |
| 1422 | Did you receive medical treatment for the stroke at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REM | BBER |  | 1 2 8 |  |

SECTION14. HEALTH CARE


SECTION14. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1440 | When you cough, do you usually bring up phlegm from your chest? |  | $\longrightarrow 1443$ |
| 1441 | Have you brought up phlegm every day for at least three months during the last year? |  | $\longrightarrow 1443$ |
| 1442 | For how many years have you brought up phlegm in this way? <br> IF LESS THAN 1 YEAR, RECORD '00'. | YEARS |  |
| 1443 | Are you currently troubled by pain or discomfort, either all the time or on and off? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . .   | $\longrightarrow 1446$ |
| 1444 | Have you had this pain or discomfort for more than 3 months? |  | $\rightarrow 1446$ |
| 1445 | Where do you feel this pain or discomfort? <br> RECORD ALL MENTIONED. |  |  |
| 1446 | In the last 12 months, did your teeth or your mouth cause you any pain or discomfort? |  | $\rightarrow 1450$ |
| 1447 | Did you get treatment the last time that you had the problem? |  | $\longrightarrow 1449$ |
| 1448 | Who did you see for treatment? <br> RECORD ALL MENTIONED. |  |  |
| 1449 | What was the main reason that you did not get treatment? |  |  |
| 1450 | Now I would like to ask you about any medication you take. Do you use any medication daily or regularly that has been prescribed by a doctor or nurse? |  | $\longrightarrow 1455$ |
| 1451 | How many different prescribed medications do you use daily or regularly? | NUMBER OF MEDICINES . . . . . . . . . $\square$ |  |

## SECTION14. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1452 | Who pays for most of these medications? |  | $\left[\begin{array}{l} {\left[\begin{array}{l}  \\ \rightarrow 1455 \end{array}\right.} \\ \longrightarrow 1455 \end{array}\right.$ |
| 1453 | In the last 12 months, have you ever been sent away from the clinic without a medication because they did not have stock? |  | $\longrightarrow 1455$ |
| 1454 | How many times has this happened to you in the last 12 months? <br> PROBE FOR ESTIMATE OF NUMBER OF TIMES. | NUMBER OF TIMES |  |
| 1455 | In the last 12 months, have you used any medications containing codeine to treat a medical condition? <br> USE THE SHOWCARD. | YES $\ldots$ | $\xrightarrow{\square} 1500$ |
| 1457 | In the last 12 months, have you used any of these medications for the experience or feeling it gave you rather than for their medicinal effect? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . .   | $\rightarrow 1500$ |
| 1458 | In the last 12 months, which codeine-containing medications have you used for the experience or feeling rather than for their medical effect? <br> RECORD ALL MENTIONED. |  |  |
| 1459 | In the last 12 months, have you received treatment for your problems related to the use of codeine-containing medications for non-medical purposes? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . .   |  |

SECTION 15: HOUSEHOLD RELATIONS


| NO. | QUESTIONS AND FILTERS |  | CODING CATEGORIES |  |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1505 | A Did your (last) partner ever do any of the following things to you: |  | B How often did this happen during the last 12 months: often, only sometimes, or not at all? |  |  |  |  |
|  |  | EVER |  | OFTEN | SOMETIMES | NOT IN LAST 12 MONTHS |  |
|  | a) slap you, push you, shake you, or throw something at you? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\longrightarrow$ | 1 | 2 | 3 |  |
|  | e) kick you, drag you, or beat you up? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\rightarrow$ | 1 | 2 | 3 |  |
|  | f) try to choke you or burn you on purpose? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\rightarrow$ | 1 | 2 | 3 |  |
|  | g) threaten or attack you with a knife, gun, or other weapon? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\rightarrow$ | $1$ | $2$ | 3 |  |
|  | h) physically force you to have sexual intercourse with him when you did not want to? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\rightarrow$ | 1 | 2 | 3 |  |
|  | i) physically force you to perform any other sexual acts you did not want to? <br> j) force you with threats or in any other way to perform sexual acts you did not want to? | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \end{array}$ | $\rightarrow$ | $1$ | $2$ | $3$ |  |
|  |  | $\begin{array}{ll} \text { YES } & 1 \\ \text { NO } & 2 \\ & \downarrow \end{array}$ | $\longrightarrow$ | 1 | 2 | 3 |  |
| 1506 | AT LEAST ONE <br> NOT A SINGLE <br> 'YES' $\square$ <br> 'YES' |  |  |  |  |  | $\longrightarrow 1511$ |
| 1508 | Did the following ever happen as a result of what y partner did to you: <br> a) You had cuts, bruises, or aches? <br> b) You had eye injuries, sprains, dislocations, or bu <br> c) You had deep wounds, broken bones, broken te other serious injury? | ur (last) <br> s? <br> h, or any |  |  |  | $\begin{array}{lll} \ldots \ldots . & 1 \\ \ldots \ldots . & 2 \\ & & \\ \ldots \ldots . & 1 \\ \ldots \ldots & 2 \\ & & \\ \ldots \ldots . & 1 \\ \ldots \ldots . & 2 \end{array}$ |  |
| 1511 | Does (did) your (last) partner drink alcohol? |  |  | N'T KNOW |  | $\begin{array}{lll} \ldots & \ldots & 1 \\ \ldots & \\ \ldots & . & \\ \hline \end{array}$ | $\rightarrow$ 1512A |
| 1512 | How often does (did) he get drunk: often, only sometimes, or never? |  |  | TEN METIMES VER |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 1512A | Does (did) your (last) partner take drugs? |  |  | N'T KNOW |  |  | $\xrightarrow{\rightarrow} 1512 \mathrm{C}$ |
| 1512B | How often does (did) he take drugs: often, only sometimes, or never? |  |  | TEN <br> METIMES VER |  | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1512C | Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) partner at times when he was not already beating or physically hurting you? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 1513$ |
| 1512D | In the last 12 months, how often have you done this to your (last) partner: often, only sometimes, or not at all? | OFTEN . . . . . . . . . . . . . . . . . . . . . . 1 <br> SOMETIMES . . . . . . . . . . . . . . . 2 <br> NOT AT ALL . ................. 3 |  |
| 1513 | Are (Were) you afraid of your (last) partner: most of the time, sometimes, or never? | MOST OF THE TIME AFRAID $\ldots$  <br> SOMETIMES AFRAID $\ldots$ 1 <br> NEVER AFRAID . . . . . . . . . . . . . . . . 2  |  |
| 1514 | CHECK 709: <br> OTHER <br> MARRIED OR LIVED WITH OR NOT ASKED MORE THAN | MAN <br> NCE | $\rightarrow 1515$ |
| 1514A | So far we have been talking about the behaviour of your (current/last) partner. Now I want to ask you about the behaviour of any previous partner. Have you had a previous partner? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\begin{aligned} & \longrightarrow \text { 1515Aa } \\ & \longrightarrow \text { 1516A } \end{aligned}$ |
| 1515 | A So far we have been talking about the behaviour of your (current/last) partner. Now I want to ask you about the behaviour of any previous partner. <br> a) Did any previous partner ever hit, slap, kick, or do anything else to hurt you physically? <br> b) Did any previous partner physically force you to have sexual intercourse against your will? <br> c) Did any previous partner physically force you to perform any other sexual acts against your will? <br> d) Did any previous partner humiliate, threaten, belittle, insult or try to exert excessive control over you in any way? <br> e) Did any previous partner refuse to give you enough money for household expenses or contribute towards household expenses? | B How long ago did this last happen? |  |
| 1516A | CHECK 1505A (h-j) and 1515A(b, c) <br> AT LEAST ONE $\square$ NOT A 'YES' SINGLE 'YES' $\square$ |  | $\rightarrow 1516$ |
| 1516B | How old were you the first time you were forced to have sexual intercourse or perform any other sexual acts by (your/any) partner? | AGE IN COMPLETED YEARS $\square$ <br> DON'T KNOW |  |
| 1516 | CHECK 701, 701A, 701B, 702 AND 1502A: <br> EVER IN UNION OR HAD A BOYFRIEND <br> a) From the time you were 15 years old has anyone other than (your/any) partner hit you, slapped you, kicked you, or done anything else to hurt you physically? <br> NEVER IN UNION $\square$ OR HAD A BOYFRIEND <br> b) From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . REFUSED TO ANSWER/ NO ANSWER . . . . . . . . . . . . . . . 3 | $\xrightarrow{\longrightarrow} 1518 \mathrm{~A}$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1517 | Who has hurt you in this way? <br> Anyone else? <br> RECORD ALL MENTIONED. |  |  |
| 1518 | In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all? |  |  |
| 1518A | CHECK 106: AGE OF RESPONDENT <br> AGE 50 <br> AGE 18-49 AND ABOVE |  | 1522 |
| 1519 |  |  | $\longrightarrow 1522$ |
| 1519A | CHECK 701, 701A, 701B, 702 AND 15O2A: |  | $\rightarrow$ 1520A |
| 1520 | Has a partner ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 1520A | Has any one else ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 |  |
| 1521A | CHECK 1520 AND 1520A: <br> NEITHER 1520 |  | 1522 |
| 1521 | Who has done any of these things to physically hurt you while you were pregnant? <br> Anyone else? <br> RECORD ALL MENTIONED. | CURRENT HUSBAND/PARTNER . . . A MOTHER/STEP-MOTHER . . . . . . . . . B FATHER/STEP-FATHER ........... C SISTER/BROTHER .................. D DAUGHTER/SON .................... E OTHER RELATIVE . . . . . . . . . . . . . . . . F FORMER HUSBAND/PARTNER ... G CURRENT BOYFRIEND ........... H FORMER BOYFRIEND .............. I MOTHER-IN-LAW .................... J FATHER-IN-LAW .................... K OTHER IN-LAW . . . . . . . . . . . . . . . . . . L TEACHER .......................... M EMPLOYER/SOMEONE AT WORK . N POLICE/SOLDIER . . . . . . . . . . . . . . . O NEIGHBOUR . . . . . . . . . . . . . . . . . . . P <br> OTHER $\qquad$ X |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1522 | CHECK 701, 701A, 701B, 702 AND 1502A: <br> EVER IN UNION OR HAD A BOYFRIEND <br> a) Now I want to ask you about things that may have been done to you by someone other than (your/any) partner. <br> At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse when you did not want to? <br> NEVER IN UNION $\square$ OR HAD A BOYFRIEND <br> b) At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse when you did not want to? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 NO . . . . . . . . REFUSED TO ANSWER/ NO ANSWER . . . . . . . . . . . . . . . 3 | $\overbrace{1522 \mathrm{C}}$ |
| 1522A | How old were you the first time this happened? | AGE IN COMPLETED YEARS $\square$ DON'T KNOW $\qquad$ |  |
| 1522B | Who was the person who was forcing you the very first time this happened? | FATHER/STEP-FATHER . . . . ..... . 04 BROTHER/STEP-BROTHER ...... 05 OTHER RELATIVE . . . . . . . . . . . . . . . . 06 IN-LAW . . . . . . . . . . . . . . . . . . . . . . 07 OWN FRIEND/ACQUAINTANCE ... 08 FAMILY FRIEND . . . . . . . . . . . . . . . . 09 TEACHER . . . . . . . . . . . . . . . . . . . . . 10 EMPLOYER/SOMEONE AT WORK . 11 POLICE/SOLDIER . . . . . . . . . . . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . . . . . . . . . . . . . . . . 14 NEIGHBOUR . . . . . . . . . . . . . . . . . . . . . 15 <br> OTHER $\qquad$ 96 (SPECIFY) |  |
| 1522C | At any time in your life, as a child or as an adult, has anyone (other than any partner) ever forced you in any way to perform any other sexual acts when you did not want to? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 NO . . . . . . . . . . . . . . 2 REFUSED TO ANSWER/ NO ANSWER . . . . . . . . . . . . . . . . . 3 |  |
| 1522D | How old were you the first time this happened? | AGE IN COMPLETED YEARS $\square$ DON'T KNOW $\qquad$ |  |
| 1523 | Who was the person who was forcing you the very first time this happened? | FATHER/STEP-FATHER . . . . . . . . . 04 BROTHER/STEP-BROTHER ...... 05 OTHER RELATIVE . . . . . . . . . . . . . . . . 06 IN-LAW ............................. . . 07 OWN FRIEND/ACQUAINTANCE ... 08 <br> FAMILY FRIEND . . . . . . . . . . . . . . . . . . 09 <br> TEACHER . . . . . . . . . . . . . . . . . . . . . 10 <br> EMPLOYER/SOMEONE AT WORK . 11 <br> POLICE/SOLDIER . . . . . . . . . . . . . . . 12 <br> PRIEST/RELIGIOUS LEADER . . . . . . 13 <br> STRANGER . . . . . . . . . . . . . . . . . . . . 14 <br> NEIGHBOUR . . . . . . . . . . . . . . . . . . . . 15 <br> OTHER $\qquad$ 96 |  |
| 1523A | CHECK 1522: EVER FORCED TO HAVE SEXUAL INTERCOUR <br> YES NO |  | $\rightarrow 1526$ |



INTERVIEWER'S OBSERVATIONS

## TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

INSTRUCTIONS
ONLY ONE CODE SHOULD APPEAR IN ANY BOX. COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

```
B BIRTHS
P PREGNANCIES
C MISCARRIAGES
A INDUCED ABORTIONS
S STILLBIRTHS
O NO METHOD
1 FEMALE STERILISATION
2 MALE STERILISATION
3 IUD
4 INJECTABLES - 3 MONTH DEPO
5 INJECTABLES - 2 MONTH NUR-ISTERATE
6 IMPLANTS
7 PILL
8 ~ M A L E ~ C O N D O M ~
9 FEMALE CONDOM
E EMERGENCY CONTRACEPTION
L RHYTHM METHOD
M WITHDRAWAL
X OTHER MODERN METHOD
Y OTHER TRADITIONAL METHOD
```

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE
0 INFREQUENT SEX/HUSBAND AWAY
1 BECAME PREGNANT WHILE USING
2 WANTED TO BECOME PREGNANT
3 HUSBAND/PARTNER DISAPPROVED
4 WANTED MORE EFFECTIVE METHOD
5 SIDE EFFECTS/HEALTH CONCERNS
6 LACK OF ACCESS/TOO FAR
7 COSTS TOO MUCH
8 INCONVENIENT TO USE
F UP TO GOD/FATALISTIC
A DIFFICULT TO GET PREGNANT/MENOPAUSAL
D MARITAL DISSOLUTION/SEPARATION
X OTHER

Z DON'T KNOW

COL. 1 COL. 2



| 100A | CHECK RESPONDENT'S AGE AND MARITAL STATUS IN HOUSEHOLD QUESTIONNAIRE. |  |  |
| :--- | ---: | ---: | ---: |
|  | AGE 18 AND ABOVE |  |  |
| AGE 15-17 |  |  |  |
|  | $\square$ | $\square$ | 100 C |

## INTRODUCTION AND CONSENT (PARENT/GUARDIAN)

100B
Hello. My name is $\qquad$ I am working with Statistics South Africa, We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to (NAME OF MINOR) about his health and well-being. The questions usually take about 30 to 40 minutes. All of the answers (NAME OF MINOR) gives will be confidential and will not be shared with anyone other than members of our survey team. (NAME OF MINOR) doesn't have to be in the survey, but we hope you will agree to allow (NAME OF MINOR) to answer the questions since (NAME OF MINOR)'s views are important.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.

Do you have any questions?
May I begin the interview with (NAME OF MINOR) now?

SIGNATURE OF INTERVIEWER $\qquad$ DATE $\qquad$
PARENT/GUARDIAN AGREES PARENT/GUARDIAN DOES NOT AGREE MINOR MAY BE INTERVIEWED . $\begin{array}{llll} & 1 \\ \downarrow\end{array} \quad$ TO ALLOW MINOR TO BE INTERVIEWED. $.2 \longrightarrow$ END

## INTRODUCTION AND CONSENT (RESPONDENT)

100C
Hello. My name is $\qquad$ . I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 40 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this information sheet.
GIVE INFORMATION SHEET.
Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER $\qquad$ DATE $\qquad$
RESPONDENT AGREES TO BE INTERVIEWED . . 1

SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 101 | RECORD THE TIME. | HOURS <br> MINUTES |  |
| 102 | How long have you been living continuously in (NAME OF CURRENT CITY, TOWN OR VILLAGE OF RESIDENCE)? <br> IF LESS THAN ONE YEAR, RECORD ‘00’ YEARS. |  | $\xrightarrow{\rightarrow} 105$ |
| 103 | Just before you moved here, where did you live? <br> PROBE: Is that a city, a town, a rural area, a farm, a tribal area, or an informal settlement? |  |  |
| 104 | Before you moved here, which province did you live in? |  |  |

SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 105 | On what day, month, and year were you born? |  |  |
| 106 | How old were you at your last birthday? <br> COMPARE AND CORRECT 105 AND/OR 106 IF INCONSISTENT. IF AGE 95 OR OLDER, RECORD 95. | AGE IN COMPLETED YEARS ....... $\square$ |  |
| 106A | Which population group do you consider yourself: black, white, coloured, Indian or something else? |  |  |
| 107 | Have you ever attended an educational institution? |  | $\longrightarrow 111$ |
| 108 | What is the highest level you attended: primary, secondary, or higher than secondary? |  |  |
| 109 | What is the highest grade or form you completed at that level? | PRIMARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ........ 00 <br> GRADE 1/SUB A/CLASS 1 ................. 11 <br> GRADE 2/SUB B/CLASS 2 ................. 12 <br> GRADE 3/STANDARD 1/ <br> AET 1 (KHA RI GUDE, SANLI) . . . . . . . . . . 13 <br> GRADE 4/STANDARD 2 .................... 14 <br> GRADE 5/STANDARD 3/AET 2 ............ 15 <br> GRADE 6 /STANDARD 4 ..................... 16 <br> GRADE 7/STANDARD 5/AET 3 ............ 17 <br> SECONDARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ........ 20 <br> GRADE 8/STANDARD 6/FORM 1/NTC $1 /$ <br> N1/NC (V) LEVEL 2 <br> GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2 / <br> N2/NC (V) LEVEL 3 <br> GRADE 10/STANDARD 8/FORM 3/NTC 3/ <br> N3/NC (V) LEVEL 4 ................... . 23 <br> GRADE 11/STANDARD 9/FORM 4 ........ 24 <br> CERTIFICATE OR DIPLOMA WITH LESS THAN <br> GRADE 12/STANDARD 10 COMPLETED .. 25 <br> GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 <br> N4/NTC4 <br> .................................. . 27 <br> N5/NTC5 ................................... 28 <br> N6/NTC6 ................................... 29 <br> HIGHER EDUCATION <br> FURTHER STUDIES INCOMPLETE OR ONGOIN 30 CERTIFICATE OR DIPLOMA WITH GRADE 12/ <br> STANDARD 10 COMPLETED ........... 31 <br> HIGHER DIPLOMA (TECHNIKON/ <br> U. OF TECHNOLOGY) <br> POST HIGHER DIPLOMA (TECHNIKON/ <br> U. TECHNOLOGY MASTERS, DOCTORAL) 33 <br> BACHELORS DEGREE/BACHELORS DEGREE <br> AND POST GRADUATE DIPLOMA ..... 34 <br> HONOURS DEGREE ....................... 35 <br> HIGHER DEGREE (MASTERS, DOCTORATE . . 36 |  |
| 110 | CHECK 108: <br> PRIMARY OR $\square$ SECONDARY | GHER | $\rightarrow 113$ |

SECTION 1. RESPONDENT'S BACKGROUND

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 111 | Now I would like you to read this sentence to me. <br> SHOW CARD TO RESPONDENT. <br> IF RESPONDENT CANNOT READ WHOLE SENTENCE, PROBE: Can you read any part of the sentence to me? |  |  |
| 112 | CHECK 111: $\begin{array}{r} \text { CODE '2', '3' } \\ \text { OR '4' } \\ \text { CIRCLED } \end{array}$ | ' OR '5' <br> RCLED | $\rightarrow 114$ |
| 113 | Do you read a newspaper or magazine at least once a week, less than once a week or not at all? |  |  |
| 114 | Do you listen to the radio at least once a week, less than once a week or not at all? |  |  |
| 115 | Do you watch television at least once a week, less than once a week or not at all? |  |  |
| 116 | Do you own a cell phone? |  | $\longrightarrow 118$ |
| 117 | Do you use your cell phone for any financial transactions? |  |  |
| 118 | Do you have an account in a bank or other financial institution that you yourself use? |  |  |
| 119 | Have you ever used the internet? |  | $\rightarrow 124$ |
| 120 | In the last 12 months, have you used the internet? <br> IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE. |  | $\longrightarrow 124$ |
| 121 | During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week, or not at all? |  |  |
| 124 | In the last 12 months, how many times have you been away from home for one or more nights? | NUMBER OF TIMES $\square$ <br> NONE | $\rightarrow 126$ |
| 125 | In the last 12 months, have you been away from home for more than one month at a time? |  |  |
| 126 | CHECK 106: AGE OF RESPONDENT AGE 15-59 | AGE 60 <br> ABOVE | $\rightarrow 401$ |

SECTION 2. REPRODUCTION

| NO. | QUESTIONS AND FILTERS | CODING CATEG |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 201 | Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman? | YES <br> NO <br> DON'T KNOW |  | $\xrightarrow{\rightarrow} 206$ |
| 202 | Do you have any sons or daughters that you have fathered who are now living with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\longrightarrow 204$ |
| 203 | a) How many sons live with you? <br> b) And how many daughters live with you? <br> IF NONE, RECORD '00'. | a) SONS AT HOME <br> b) DAUGHTERS AT HOME |  |  |
| 204 | Do you have any sons or daughters that you have fathered who are alive but do not live with you? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\longrightarrow 206$ |
| 205 | a) How many sons are alive but do not live with you? <br> b) And how many daughters are alive but do not live with you? <br> IF NONE, RECORD '00'. | a) SONS ELSEWHERE <br> b) DAUGHTERS ELSEWHERE |  |  |
| 206 | Have you ever fathered a son or a daughter who was born alive but later died? <br> IF NO, PROBE: Any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time? | YES <br> NO <br> DON'T KNOW |  | $\xrightarrow{ } \rightarrow 208$ |
| 207 | a) How many boys have died? <br> b) And how many girls have died? <br> IF NONE, RECORD '00'. | a) BOYS DEAD <br> b) GIRLS DEAD |  |  |
| 208 | SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'. | TOTAL CHILDREN |  |  |
| 209 | CHECK 208: | HAS HAD ONLY $\square$ ONE CHILD |  | $\begin{aligned} & \longrightarrow 211 \\ & \longrightarrow 301 \end{aligned}$ |
| 210 | Did all of the children you have fathered have the same biological mother? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 211 | CHECK 208: <br> a) How old were you when your first child was born? <br> b) How old were you when your child was born? | AGE IN YEARS |  |  |
| 212 | CHECK 203 AND 205: <br> AT LEAST ONE LIVING CHILD | NO LIVING $\square$ CHILDREN |  | $\rightarrow 301$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 213 | CHECK 203 AND 205: <br> MORE THAN ONE <br> ONLY ONE LIVING CHILD LIVING CHILD <br> a) How old is your <br> b) How old is your child? youngest child? | AGE IN YEARS |  |  |
| 214 | CHECK 213: <br> (YOUNGEST) CHILD IS $\square$ AGE 0-2 YEARS | ST) CHILD IS $\square$ S OR OLDER |  | 220 |
| 215 | CHECK 203 AND 205: <br> MORE THAN ONE LIVING CHILD ONLY ONE LIVING CHILD $\square$ <br> a) What is the name of <br> b) What is the name of your youngest child? your child? | (NAME OF (YOUNGEST) CHILD) |  |  |
| 216 | When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups? | YES <br> NO <br> DON'T KNOW | 1 2 8 | 218 |
| 217 | Were you ever present during any of those antenatal check-ups? | PRESENT <br> NOT PRESENT | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 218 | Was (NAME) born in a hospital or health facility? | HOSPITAL/HEALTH FACILITY . . . . . . . . OTHER | 1 2 |  |
| 219 | When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all? | MORE THAN USUAL ABOUT THE SAME LESS THAN USUAL NOTHING TO DRINK DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 8 \end{aligned}$ |  |
| 220 | CHECK 203: $\begin{array}{r} \text { AT LEAST ONE } \\ \text { CHILD LIVING WITH HIM } \end{array}$ | NO CHILDREN $\square$ LIVING WITH HIM |  | 301 |
| 221 | Do you have at least one child who is biologically yours and is less than age 18 who lives with you? | YES <br> NO | 1 |  |

## SECTION 3. CONTRACEPTION

| 301 | Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Which ways or methods have you heard about? MARK ALL METHODS DECLARED BY THE RESPONDENT. <br> FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)? |  |
| :---: | :---: | :---: |
| 01 | Female Sterilisation/Tubal Ligation/Tubes Cut/Tubes Binded. <br> PROBE: Women can have an operation to avoid having any more children. |  |
| 02 | Male Sterilisation/Vasectomy/Tubes Cut/Tubes Binded. <br> PROBE: Men can have an operation to avoid having any more children. |  |
| 03 | IUD. <br> PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse which can prevent pregnancy for one or more years. |  |
| 04 | Injectables/Depo. <br> PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months. |  |
| 05 | Implants/Norplant/Jadelle. <br> PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years. |  |
| 06 | Pill. <br> PROBE: Women can take a pill every day to avoid becoming pregnant. |  |
| 07 | Male Condom. <br> PROBE: Men can put a rubber sheath on their penis before sexual intercourse. |  |
| 08 | Female Condom. <br> PROBE: Women can place a sheath in their vagina before sexual intercourse. |  |
| 09 | Emergency Contraception. <br> PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. |  |
| 10 | Rhythm Method. <br> PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant. |  |
| 11 | Withdrawal. <br> PROBE: Men can be careful and pull out before climax. |  |
| 12 | Have you heard of any other ways or methods that women or men can use to avoid pregnancy? | YES, MODERN METHOD $\qquad$ A <br> (SPECIFY) YES, TRADITIONAL METHOD $\qquad$ $\square$ <br> (SPECIFY) <br> NO $\qquad$ |

SECTION 3. CONTRACEPTION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 302 | In the last six months have you: <br> a) Heard about family planning on the radio? <br> b) Seen anything about family planning on the television? <br> c) Read about family planning in a newspaper or magazine? <br> d) Heard about family planning from a community health worker? | a) RADIO <br> b) TELEVISION <br> c) NEWSPAPER OR MAGAZ <br> d) COMMUNITY HEALTH W |  YES <br> $\ldots \ldots .$. 1 <br> $\ldots \ldots .$. 1 <br> INE $\ldots$. 1 <br>   <br> ORKER 1 | NO <br> 2 <br> 2 <br> 2 <br> 2 |  |
| 302A | CHECK Q18 IN HOUSEHOLD QUESTIONNAIRE: <br> YES, CURRENTLY <br> NO, NOT CURRENTLY ATTENDING SCHOOL ATTENDING SCHOOL |  |  |  | 303 |
| 302 | e) Heard about family planning at school? | e) SCHOOL | ...... ${ }^{\text {YES }} 1$ | NO 2 |  |
| 303 | In the last few months, have you discussed family planning with a health worker or health professional? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |  |
| 304 | Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 | 306 |
| 305 | Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods? | JUST BEFORE HER PERIOD DURING HER PERIOD RIGHT AFTER HER PERIOD HALFWAY BETWEEN TWO P <br> OTHER $\qquad$ DON'T KNOW | BEGINS <br> HAS ENDED ERIODS <br> CIFY) | $\begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ \\ -\quad 6 \end{array}$ |  |
| 306 | After the birth of a child, can a woman become pregnant before her menstrual period has returned? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 |  |
| 307 | I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. <br> a) Contraception is a woman's concern and a man should not have to worry about it. <br> b) Women who use contraception may become promiscuous. | a) CONTRACEPTION WOMAN'S CONCERN <br> b) WOMEN MAY BECOME PROMISCUOUS |  DIS- <br> AGREE AGREE <br> 1 2 <br> 1 2 | DK <br> 8 <br> 8 |  |

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 401 | Are you currently married or living together with someone as if married? | YES, CURRENTLY MARRIED YES, LIVING WITH A PARTNER NO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\rightarrow$ 401B |
| 401A | Do you have a regular girlfriend/partner or fiancée? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \end{array}$ | $\rightarrow 402$ |
| 401B | Is this person a woman or a man? | WOMAN <br> MAN <br> INTERSEX OR TRANSGENDERED | $\begin{array}{ll} \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \end{array}$ |  |
| 401C | CHECK 401: RESPONDENT'S CURRENT MARITAL STA $401=3 \square 401$ | S <br> 1 OR 2 |  | $\rightarrow 403 \mathrm{~A}$ |
| 402 | Have you ever been married or lived together with a someone as if married? | YES, FORMERLY MARRIED YES, LIVED WITH A PARTNER NO | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\rightarrow 403 \mathrm{~A}$ |
| 403 | What is your marital status now: are you widowed, divorced, or separated? | WIDOWED DIVORCED <br> SEPARATED | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots & 3 \end{array}$ |  |
| 403A | CHECK 106: AGE OF RESPONDENT <br> AGE 15-59 | AGE 60 $\square$ |  | $\rightarrow 601$ |
| 403B | CHECK 401 AND 402: $401=1 \text { OR } 2 \downarrow$ $402=1 \text { OR } 2$ $401=3 \text { AND } 4$ | 3 $\square$ |  | $\begin{aligned} & \longrightarrow 410 \\ & \longrightarrow 413 \end{aligned}$ |
| 404 | Is your (spouse/partner) living with you now or is she/he staying elsewhere? | LIVING WITH HIM STAYING ELSEWHERE | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots & 2 \end{array}$ |  |
| 404A | CHECK 401B: SEX OF SPOUSE/PARTNER <br> SPOUSE/PARTNER IS MALE OR INTERSEX ( $401 \mathrm{~b}=2$ OR 3 ) | ARTNER IS FEMALE (401B = 1) |  | $\longrightarrow 405$ |
| 404B | RECORD THE SPOUSE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. | NAME $\qquad$ <br> LINE NO. |  | $\xrightarrow{ } \rightarrow 410$ |
| 405 | Do you have other wives or do you live with other women as if married? | YES (MORE THAN ONE WIFE) NO (ONLY ONE WIFE) ...... | $\begin{array}{ll}  & \\ \ldots \ldots \ldots & 1 \\ \ldots \ldots \end{array}$ | $\rightarrow 407$ |
| 406 | Altogether, how many wives or live-in partners do you have? | TOTAL NUMBER OF WIVES AND LIVE-IN PARTNERS |  |  |
| 407 | CHECK 405: <br> ONE WIFE/ <br> PARTNER <br> a) Please tell me the name of (your wife/the woman you are living with as if married). <br> MORE THAN ONE WIFE/ PARTNER <br> b) Please tell me the name of each of your wives or each woman you are living with as if married. <br> RECORD THE NAME AND THE LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE FOR EACH WIFE AND LIVE-IN PARTNER. <br> IF A WOMAN IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'. <br> ASK 408 FOR EACH PERSON. | NAME LINE <br> NUMBER  <br>    <br>    | 408 <br> How old was (NAME) on her last birthday? <br> AGE |  |




| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 425 | CHECK 419 (ALL COLUMNS): <br> AT LEAST ONE PARTNER IS A SEX WORKER | NO PARTNERS ARE SEX WORKERS |  | $\rightarrow 427$ |
| 426 | CHECK 419 AND 417 (ALL COLUMNS): <br> CONDOM USED WITH EVERY SEX WORKER | OTHER |  | $\longrightarrow 430$ $\longrightarrow 431$ |
| 427 | In the last 12 months, did you pay anyone in exchange for having sexual intercourse? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 | $\longrightarrow 429$ |
| 428 | Have you ever paid anyone in exchange for having sexual intercourse? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 | $\longrightarrow 431$ |
| 429 | The last time you paid someone in exchange for having sexual intercourse, was a condom used? | YES <br> NO |  | $\longrightarrow 431$ |
| 430 | Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months? |  |  |  |
| 431 | In the past 12 months have you given any gifts or other goods in order to have sex or to become sexually involved with anyone? |  |  | $\longrightarrow 433$ |
| 432 | Have you ever given any gifts or other goods in order to have sex or to become sexually involved with anyone? |  |  |  |
| 433 | In total, with how many different people have you had sexual intercourse in your lifetime? <br> IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, RECORD '95'. |  |  |  |
| 434 | CHECK 417: MOST RECENT PARTNER (FIRST COLUMN) <br> NOT ASKED $\begin{array}{r} \text { CONDOM } \\ \text { USED } \end{array}$ <br> NO CONDOM |  |  | $\begin{aligned} & \rightarrow 438 \\ & \longrightarrow 438 \end{aligned}$ |
| 437 | The last time you had sex did you or your partner use any method other than a condom to avoid or prevent a pregnancy? |  |  | $\begin{array}{\|l} \longrightarrow 439 \\ \longrightarrow 440 \end{array}$ |
| 438 | The last time you had sex did you or your partner use any method to avoid or prevent a pregnancy? |  |  | $\longrightarrow 440$ |
| 439 | What method did you or your partner use? <br> PROBE: Did you or your partner use any other method to prevent pregnancy? <br> RECORD ALL MENTIONED. |  |  | $\rightarrow \rightarrow 501$ |
| 440 | Do you know of a place where you can obtain a method of family planning? | YES NO |  |  |

SECTION 5. FERTILITY PREFERENCES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |
| :---: | :---: | :---: |
| 501 <br> REGU | CHECK 401, 401A AND 401B: <br> CURRENTLY MARRIED OR NOT IN UNION LIVING WITH A WOMAN OR HAS FEMALE PARTNER/GIRLFRIEND | TH A WOMAN |
| 502 | CHECK 439: <br> MAN NOT STERILISED | MAN <br> STERILISED |
| 503 | CHECK 407: <br> ONE WIFE/ PARTNER | MORE THAN $\square$ ONE WIFE/ PARTNER |
| 504 | Is your (wife/partner) currently pregnant? | YES <br> NO <br> DON'T KNOW |
| 505 | Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not to have any more children? | HAVE ANOTHER CHILD NO MORE UNDECIDED/DON'T KNOW |
| 506 | After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? |  |
| 507 | CHECK 208: <br> HAS FATHERED CHILDREN <br> a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? <br> HAS NOT <br> FATHERED <br> CHILDREN <br> b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children? | HAVE (A/ANOTHER) CHILD <br> NO MORE/NONE <br> SAYS COUPLE CAN'T GET PREGNANT <br> WIFE/PARTNER STERILIZED <br> UNDECIDED/DON'T KNOW |
| 508 | CHECK 208: <br> HAS FATHERED CHILDREN <br> a) How long would you like <br> b) How long would you like to wait from now before to wait from now before the birth of another the birth of a child? child? |  |
| 509 | Are any of your (wives/partners) currently pregnant? | YES <br> NO <br> DON'T KNOW |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 510 | Now I have some questions about the future. After the (child/children) you and your (wives/partners) are expecting now, would you like to have another child, or would you prefer not to have any more children? |  | $\square 514$ |
| 511 | After the birth of the child you are expecting now, how long would you like to wait before the birth of another child? |  | $\square \rightarrow 514$ |
| 512 | CHECK 208: <br> HAS FATHERED CHILDREN <br> a) Now I have some questions about the future. Would you like to have another child, or would you prefer not to have any more children? <br> HAS NOT FATHERED CHILDREN <br> b) Now I have some questions about the future. Would you like to have a child, or would you prefer not to have any children? |  | $\square \rightarrow 514$ |
| 513 | CHECK 208: <br> HAS FATHERED CHILDREN $\square$ <br> a) How long would you like to wait from now before the birth of another child? <br> HAS NOT FATHERED CHILDREN <br> b) How long would you like to wait from now before the birth of a child? |  |  |
| 514 | CHECK 203 AND 205: <br> HAS LIVING <br> a) If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? <br> NO LIVING CHILDREN <br> b) If you could choose exactly the number of children to have in your whole life, how many would that be? |  | $\begin{array}{\|c} \longrightarrow 601 \\ \\ \\ \longrightarrow 601 \end{array}$ |
| 515 | How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl? |  |  |

SECTION 6. EMPLOYMENT AND GENDER ROLES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 601 | Have you done any work in the last seven days? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 604$ |
| 602 | Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . .  | $\longrightarrow 604$ |
| 603 | Have you done any work in the last 12 months? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . $\quad 1$ <br> NO . . . . . . . . . . . . . . .  | $\longrightarrow 604 \mathrm{~A}$ |
| 604 | What is your occupation? That is, what kind of work do you mainly do? |  |  |
| 604A | CHECK 106: AGE OF RESPONDENT <br> AGE 15-59 | GE 60 <br> ABOVE | $\rightarrow 901$ |
| 604B | CHECK 601, 602, 603: ANY YES? <br> YES | $\mathrm{NO}$ | $\rightarrow 607$ |
| 605 | Do you usually work throughout the year, or do you work seasonally, or only once in a while? |  |  |
| 606 | Are you paid in cash or kind for this work or are you not paid at all? |  |  |
| $607$ <br> RE | CHECK 401, 401A AND 401B: <br> CURRENTLY MARRIED OR <br> LIVING WITH A WOMAN OR HAS AR FEMALE PARTNER/GIRLFRIEND | NOT IN UNION OR IN UNION, $\square$ OT WITH A WOMAN | $\rightarrow 612$ |
| 608 | CHECK 606: <br> CODE '1' OR '2' $\square$ CIRCLED | OTHER $\square$ | $\rightarrow 610$ |
| 609 | Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly? | $\qquad$ |  |
| 610 | Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else? |  |  |
| 611 | Who usually makes decisions about making major household purchases? |  |  |

SECTION 6. EMPLOYMENT AND GENDER ROLES

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 612 | Do you own this or any other house either alone or jointly with someone else? | ALONE ONLY JOINTLY ONLY BOTH ALONE AND JOINTLY DOES NOT OWN | $\begin{array}{cc} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots & 3 \\ \ldots \ldots . & 4 \end{array}$ | $\longrightarrow 618$ |
| 613 | Do you have a title deed or documents for any house you own? | YES <br> NO <br> DON'T KNOW | $\begin{array}{ll} \ldots . . & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots . & 8 \end{array}$ | $\rightarrow 618$ |
| 614 | Is your name on the title deed or documents? | YES <br> NO DON'T KNOW | $\begin{array}{ll} \ldots . . & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots . & 8 \end{array}$ |  |
| 618 | In your opinion, is a husband justified in hitting or beating his wife in the following situations: <br> a) If she goes out without telling him? <br> b) If she neglects the children? <br> c) If she argues with him? <br> d) If she refuses to have sex with him? <br> e) If she burns the food? |  | NO DK <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 <br> 2 8 |  |
| 619 | CHECK 203 AND 221: <br> ONE OR MORE CHILDREN LESS THAN AGE 18 LIVING | CHILDREN OR NO CHILDREN LESS THAN AGE 18 LIVING WITH HIM |  | $\rightarrow 701$ |
| 620 | Now I would like to ask you questions about how you discipline or punish your (child/children). In the past 12 months, have you ever: <br> a) Hit or slapped your (child/children) with your hand to punish or discipline the child? <br> b) Hit or beat your (child/children) using a belt, spoon, stick, shoe or any other implement to punish or discipline the child? | a) HIT WITH HAND $\qquad$ <br> b) HIT WITH IMPLEMENT | $\begin{array}{cc} \text { YES } & \text { NO } \\ 1 & 2 \\ 1 & 2 \end{array}$ |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 701 | Now I would like to talk about something else. Have you ever heard of HIV or AIDS? |  | $\rightarrow 727$ |
| 708 | Can HIV be transmitted from a mother to her baby: <br> a) During pregnancy? <br> b) During delivery? <br> c) By breastfeeding? |  YES NO DK <br> a) DURING PREGNANCY . . 1 2 8 <br> b) DURING DELIVERY $\ldots \ldots$ 1 2 8 <br> c) BREASTFEEDING $\ldots .$. 1 2 8 |  |
| 709 | CHECK 708: <br> AT LEAST ONE 'YES' | OTHER | $\rightarrow 711$ |
| 710 | Are there any special drugs that a doctor or a nurse can give to a woman infected with HIV to reduce the risk of transmission to the baby? |  |  |
| 711 | CHECK FOR PRESENCE OF OTHERS. BEFORE CON | NG, MAKE EVERY EFFORT TO ENSURE PRIVACY. |  |
| 712 | I don't want to know the results, but have you ever been tested for HIV? |  | $\rightarrow 716$ |
| 713 | How many months ago was your most recent HIV test? | MONTHS AGO $\square$ <br> TWO OR MORE YEARS |  |
| 714 | I don't want to know the results, but did you get the results of the test? |  |  |
| 715 | Where was the test done? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 96 AND WRITE THE NAME OF THE PLACE. |  | $\rightarrow 718$ |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 716 | Do you know of a place where people can go to get an HIV test? |  | $\longrightarrow 718$ |
| 717 | Where is that? <br> Any other place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . . . A <br> GOVERNMENT CLINIC/COMMUNITY <br> HEALTH CENTRE ...................... B <br> MOBILE/TEMPORARY HCT SERVICES ...... C <br> OTHER PUBLIC SECTOR $\qquad$ <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR <br> NEW START TESTING SITE $\qquad$ <br> CHEMIST/PHARMACY ........................ G <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> OTHER $\qquad$ X |  |
| 718 | Have you heard of test kits people can use to test themselves for HIV? |  | $\longrightarrow 727$ |
| 719 | Have you ever tested yourself for HIV using a self-test kit? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO . . . . . . . . . . . . . .   |  |
| 727 | CHECK 701: <br> HEARD ABOUT <br> HIV OR AIDS <br> a) Apart from HIV, have you heard about other infections that can be transmitted through sexual contact? <br> NOT HEARD ABOUT $\square$ HIV OR AIDS <br> b) Have you heard about infections that can be transmitted through sexual contact? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO 2  |  |
| 728 | CHECK 414: <br> HAS HAD SEXUAL INTERCOURSE | EVER HAD SEXUAL $\square$ INTERCOURSE | $\rightarrow 738$ |
| 729 | CHECK 727: HEARD ABOUT OTHER SEXUALLY TRANS <br> YES $\square$ | TTED INFECTIONS? <br> NO $\square$ | $\rightarrow 731$ |
| 730 | Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact? |  |  |
| 731 | Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis? |  |  |
| 732 | Sometimes men have a sore or ulcer on or near their penis. During the last 12 months, have you had a sore or ulcer on or near your penis? |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 733 | CHECK 730, 731 AND 732: <br> HAS HAD AN INFECTION (ANY 'YES') | HAS NOT HAD AN $\square$ INFECTION OR DOES NOT KNOW | $\rightarrow 738$ |
| 734 | The last time you had (PROBLEM FROM 730/731/732), did you seek any kind of advice or treatment? |  | $\rightarrow 738$ |
| 735 | Where did you go? <br> Any other place? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). | PUBLIC SECTOR <br> GOVERNMENT HOSPITAL . . . . . . . . . . . . . . . . . A <br> GOVERNMENT CLINIC/COMMUNITY <br> HEALTH CENTRE ...................... B <br> MOBILE/TEMPORARY HCT SERVICES ...... C <br> OTHER PUBLIC SECTOR $\qquad$ <br> PRIVATE MEDICAL SECTOR <br> PRIVATE HOSPITAL/CLINIC/ <br> PRIVATE DOCTOR <br> NEW START TESTING SITE F <br> CHEMIST/PHARMACY $\qquad$ <br> OTHER PRIVATE MEDICAL SECTOR $\qquad$ <br> OTHER SOURCE <br> SHOP <br> TRADITIONAL HERBALIST $\qquad$ <br> TRADITIONAL HEALER $\qquad$ <br> OTHER $\qquad$ X |  |
| 738 | Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised? |  | $901$ |
| 739 | How old were you when you got circumcised? | AGE IN COMPLETED YEARS <br> DURING CHILDHOOD (<5 YEARS) <br> DON'T KNOW |  |
| 740 | Who did the circumcision? |  |  |

SECTION 9. TOBACCO AND ALCOHOL

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 901 | Would you say your health is poor, average, good, or excellent? | POOR <br> AVERAGE <br> GOOD <br> EXCELLENT | $\begin{array}{ll} \ldots \ldots & \ldots \\ \ldots \ldots & 1 \\ \ldots \ldots & 2 \\ \ldots \ldots & 3 \\ \ldots & \ldots \end{array}$ |  |
| 902 | Do you personally think you are underweight, normal weight, overweight, or obese? | UNDERWEIGHT <br> NORMAL WEIGHT <br> OVERWEIGHT <br> OBESE <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 8 \end{aligned}$ |  |
| 903 | Do you currently smoke tobacco every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 904 | In the past, have you smoked tobacco every day? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\xrightarrow{\longrightarrow} 907$ |
| 905 | In the past, have you ever smoked tobacco every day, some days, or not at all? | EVERY DAY <br> SOME DAYS <br> NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\rightarrow 908$ |
| 906 | On average, how many of the following products do you currently smoke each day? Also, let me know if you use the product, but not every day. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Manufactured cigarettes? <br> b) Hand-rolled cigarettes? <br> c) Pipes full of tobacco? <br> d) Cigars or cigarillos? <br> e) Number of hookah, hubbly-bubbly or water pipe sessions? <br> f) Any others? | a) MANUFACT. CIGARETTES <br> b) HAND-ROLLED CIGARETTES <br> c) PIPES FULL OF TOBACCO <br> d) CIGARS OR CIGARILLOS <br> e) WATER PIPE SESSIONS <br> f) OTHERS | NUMBER DAILY <br> PI | $\rightarrow 908$ |
| 907 | On average, how many of the following products do you currently smoke each week? Also, let me know if you use the product, but not every week. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Manufactured cigarettes? <br> b) Hand-rolled cigarettes? <br> c) Pipes full of tobacco? <br> d) Cigars or cigarillos? <br> e) Number of hookah, hubbly-bubbly or water pipe sessions? <br> f) Any others? | a) MANUFACT. CIGARETTES <br> b) HAND-ROLLED CIGARETTES <br> c) PIPES FULL OF TOBACCO <br> d) CIGARS OR CIGARILLOS <br> e) WATER PIPE SESSIONS <br> f) OTHERS | UMBER WEEKLY |  |

SECTION 9. TOBACCO AND ALCOHOL

| NO. | QUESTIONS AND FILTERS | CODING CATE |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 908 | Do you currently use snuff, chewing tobacco, or other smokeless tobacco product every day, some days, or not at all? | EVERY DAY SOME DAYS NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\begin{array}{\|l} \longrightarrow \\ \longrightarrow \end{array} 910$ |
| 909 | In the past, have you used snuff, chewing tobacco or other smokeless tobacco products every day, some days, or not at all? | EVERY DAY SOME DAYS NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ | $\mapsto \rightarrow 912$ |
| 910 | On average, how many times a day do you use the following products? Also, let me know if you use the product, but not every day. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY DAY, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Snuff, by mouth? <br> b) Snuff, by nose? <br> c) Chewing tobacco? <br> d) Any others? | a) SNUFF, BY MOUTH <br> b) SNUFF, BY NOSE <br> c) CHEWING TOBACCO <br> d) ANY OTHERS | TIMES DAILY |  |
| 911 | On average, how many times a week do you use the following products? Also, let me know if you use the product, but not every week. <br> IF RESPONDENT REPORTS USING THE PRODUCT BUT NOT EVERY WEEK, RECORD '888'. IF THE PRODUCT IS NOT USED AT ALL, RECORD '000'. <br> a) Snuff, by mouth? <br> b) Snuff, by nose? <br> c) Chewing tobacco? <br> d) Any others? | a) SNUFF, BY MOUTH <br> b) SNUFF, BY NOSE <br> c) CHEWING TOBACCO <br> d) ANY OTHERS | TIMES WEEKLY |  |
| 912 | Do you currently work in a job where other people smoke around you? | YES <br> NO <br> NOT CURRENTLY WORKING | $\begin{array}{ll} \ldots \ldots \ldots & 1 \\ \ldots \ldots \ldots & 2 \\ \ldots \ldots \ldots & 3 \end{array}$ |  |
| 913 | Have you ever worked in a job where you were regularly exposed to smoke, dust, fumes or strong smells? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{array}{ll}  & \\ \ldots \ldots \ldots & 1 \\ \ldots \ldots & 2 \end{array}$ | $\rightarrow 915$ |
| 914 | How many years did you work at a job where you were regularly exposed to smoke, dust, fumes or strong smells? <br> IF LESS THAN 1 YEAR, RECORD '00'. | YEARS |  |  |
| 915 | Do you currently use e-cigarettes every day, some days, or not at all? | EVERY DAY SOME DAYS NOT AT ALL | $\begin{aligned} & 1 \\ & 2 \\ & 3 \end{aligned}$ |  |
| 916 | Have you ever consumed a drink that contains alcohol such as beer, wine, ciders, spirits, or sorghum beer? PROBE: Even one drink? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1001$ |

SECTION 9. TOBACCO AND ALCOHOL

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 917 | Was this within the last 12 months? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\rightarrow 1001$ |
| 918 | In the last 12 months, how frequently have you had at least one drink? <br> PROBE: Five or more days a week, 1-4 days a week, 13 days a month, or less often than once a month? | 5 OR MORE DAYS A WEEK <br> 1-4 DAYS PER WEEK <br> 1-3 DAYS A MONTH <br> LESS OFTEN THAN ONCE A MONTH | 1 2 3 4 |  |
| 919 | During each of the last 7 days, how many standard drinks did you have? <br> USE SHOWCARD. RECORD TOTAL NUMBER OF DRINKS CONSUMED EACH DAY STARTING WITH THE DAY BEFORE THE DAY OF THE INTERVIEW AND PROCEEDING BACKWARDS. <br> IF NONE, RECORD '00'. | MONDAY <br> TUESDAY <br> WEDNESDAY <br> THURSDAY <br> FRIDAY <br> SATURDAY <br> SUNDAY |  |  |
| 919H | During the last 7 days, how many standard home-made beers or other homemade alcohol did you have? <br> USE SHOWCARD. | NUMBER OF HOME-MADE BEERS |  |  |
| 9191 | CHECK 918 AND 919: CODE 3 OR 4 RECORDED IN 918 919? <br> NO | ND CONSUMED 0-1 DRINKS IN THE LAS YES |  | $\longrightarrow 1001$ |
| 920 | Have you ever felt that you should cut down on your drinking? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 |  |
| 921 | Have people annoyed you by criticizing your drinking? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |
| 922 | Have you ever felt bad or guilty about your drinking? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 |  |
| 923 | Have you ever had a drink first thing in the morning to steady your nerves or get rid of a hangover? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  |  |
| 923A | CHECK 919: FIVE OR MORE DRINKS IN ONE DAY DURING LAST 7 DAYS? <br> NO | YES |  | $\rightarrow 1001$ |
| 924 | In the past 30 days, have you consumed five or more standard drinks on at least one occasion? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | 1 2 |  |

SECTION 10. FAT, SALT, SUGAR, FRUIT AND VEGETABLE CONSUMPTION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1001 | Now I would like to ask you some questions about the foo USE SHOWCARD. | at you eat. There are no right or wrong answers. |  |
| 1004 | How often do you usually eat fried foods such as hot chips, fried fish, fried chicken, fried meat, vetkoek or doughnuts? |  |  |
| 1005 | How often do you eat fast-foods or take-away foods from places like Chicken Licken, KFC, Captain DoRego's, Steers, Nando's, McDonalds, pizza delivery, etc? |  |  |
| 1006 | How often do you eat chips such as a packet of crispy chips or similar salty snacks such as Doritos, cheese curls, salted nuts, salty biscuits, etc? |  |  |
| 1007 | How often do you eat processed meat such as polony, viennas, meat pies, or sausage rolls? |  |  |
| 1008 | Which of the following statements best describes your approach towards salt consumption: <br> 1) I am not interested in lowering salt in my food. <br> 2) I am interested in lowering salt in my food within the next six months. <br> 3) I am interested in lowering salt in my food within the next month. <br> 4) I have started lowering salt within the last six months. <br> 5) I have already lowered my salt intake for longer than six months. |  |  |
| 1009 | Yesterday, how many types of fruit did you eat? <br> USE SHOWCARD. IF NONE, RECORD '00'. | TYPES OF FRUIT . . . . . . . . . . . . . . $\quad \square$ |  |
| 1010 | Yesterday, how many types of vegetables, excluding potatoes, did you eat? <br> USE SHOWCARD. IF NONE, RECORD '00'. | TYPES OF VEGETABLES ....... |  |
| 1011 | Yesterday, did you drink any sugar-sweetened drinks? Sugar-sweetened drinks include fizzy drinks like Coke or drinks like Squash where water is added, but not diet or unsweetened cold drinks. |  | $\rightarrow 1012$ |
| 1011A | How many and what size sugar-sweetened drinks did you drink? <br> PROBE FOR BEVERAGE NUMBER AND SIZE. | 200 ML GLASS <br> A $\square$ <br> 330 ML CAN OR BOTTLE <br> B $\square$ <br> 500 ML BOTTLE <br> C $\square$ <br> 1 L BOTTLE $\qquad$ $\square$ <br> 2 L BOTTLE $\qquad$ E $\square$ |  |
| 1012 | Yesterday, did you drink any fruit juice? |  | $\rightarrow 1101$ |
| 1012A | How many and what size fruit juices did you drink? <br> PROBE FOR BEVERAGE NUMBER AND SIZE. | 200 ML JUICE CARTON $\ldots . .$ $\square$ <br> 200 ML GLASS $\square$ |  |

SECTION 11. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  |  | SKIP |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1101 | Are you covered by Medical Aid, Medical Benefit Scheme, Provident Scheme, or Hospital Plan that helps you pay for health care or drug services? | YES NO |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 1102 | During the last month, have you received health, medical, or dental care without staying overnight? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ |  | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1104$ |
| 1103 | Where have you received health, medical, or dental care? <br> PROBE: Anywhere else? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). | PUBLIC SECTOR <br> GOVERNMENT HOSPIT <br> GOVERNMENT CLINIC/C <br> HEALTH CENTRE <br> OTHER PUBLIC SECTOR <br> PRIVATE MEDICAL SECTO <br> PRIVATE HOSPITAL/CLI <br> PRIVATE DOCTOR <br> CHEMIST/PHARMACY <br> DENTIST/ORAL HYGIEN <br> DENTAL THERAPIST <br> OTHER PRIVATE MEDIC <br> OTHER SOURCE <br> WORKPLACE HEALTH S <br> TRADITIONAL HEALER <br> TRADITIONAL HERBALI <br> FAITH HEALER ....... <br> OTHER $\qquad$ | OMMUNITY <br> ECIFY) <br> IC/ <br> T/ <br> L SECTOR <br> ECIFY) <br> RVICE <br> . . . . . . . . . . . <br> ECIFY) | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> I <br> J K <br> X |  |
| 1104 | During the last month, have you had any visits by a home-based care giver or a community-based care giver? | YES <br> NO <br> DON'T KNOW |  |  |  |
| 1105 | Has a doctor, nurse or other health worker ever told you that you have TB? | YES <br> NO <br> DON'T KNOW |  | 1 2 8 | $\xrightarrow{\longrightarrow} 1108$ |
| 1106 | When was the last time you were told you had TB? | IN THE LAST 12 MONTHS MORE THAN 12 MONTHS A | O |  |  |
| 1107 | Did you get medical treatment the last time you had TB? | YES <br> NO <br> DON'T KNOW/DON'T REME | ER | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 1108 | Has a doctor, nurse or other health worker told you that you have or have had any of the following conditions: <br> a) High blood pressure? <br> b) Heart attack or angina/chest pains? <br> c) Cancer? <br> d) Stroke? <br> e) High blood cholesterol or fats in the blood? <br> f) Diabetes or blood sugar? <br> g) Chronic bronchitis, emphysema, or COPD? <br> h) Asthma? | a) HIGH BLOOD PRESS. <br> b) HEART ATTACK <br> c) CANCER <br> d) STROKE <br> e) HIGH BLOOD CHOLEST <br> f) DIABETES <br> g) CHRONIC BRONCHITIS <br> h) ASTHMA | YES NO <br>   <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 <br> 1 2 | $\begin{gathered} \text { DK } \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \end{gathered}$ |  |
| 1109 | CHECK 1108: <br> ANY QUESTION a-h = YES? |  |  |  | $\longrightarrow 1127$ |

SECTION 11. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1110 | CHECK 1108a: <br> RESPONDENT HAS HAD HIGH BLOOD PRESSURE. | $1108 a=\text { YES }$ $1108 a=$ <br> NO OR DK | 1112 |
| 1111 | Did you receive medical treatment for high blood pressure at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1112 | CHECK 1108b: <br> RESPONDENT HAS HAD HEART ATTACK OR ANGINA. | $1108 \mathrm{~b}=\mathrm{YES} \square$ $1108 b=$ <br> NO OR DK $\square$ | 1114 |
| 1113 | Did you receive medical treatment for the heart attack, angina/chest pains at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1114 | CHECK 1108c: <br> RESPONDENT HAS HAD CANCER. | $1108 \mathrm{c}=\mathrm{YES}$ 1108c = <br> NO OR DK $\square$ | 1116 |
| 1115 | Did you receive medical treatment for the cancer at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1116 | CHECK 1108d: <br> RESPONDENT HAS HAD STROKE. | $\begin{aligned} & 1108 \mathrm{~d}=\mathrm{YES} \downarrow \begin{array}{l} 1108 \mathrm{~d}= \\ \text { NO OR DK } \end{array} \square \end{aligned}$ | 1118 |
| 1117 | Did you receive medical treatment for the stroke at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1118 | CHECK 1108e: <br> RESPONDENT HAS HAD HIGH BLOOD CHOLESTEROL. | $1108 \mathrm{e}=\mathrm{YES} \downarrow \begin{aligned} & 1108 \mathrm{e}= \\ & \text { NO OR DK } \end{aligned} \square$ | 1120 |
| 1119 | Did you receive medical treatment for high blood cholesterol or fats in the blood at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1120 | CHECK 1108f: <br> RESPONDENT HAS HAD DIABETES. | $\begin{array}{ll} 1108 \mathrm{f}=\mathrm{YES} \downarrow \\ \square & \begin{array}{l} 1108 \mathrm{f}= \\ \text { NO OR DK } \end{array} \end{array}$ | 1122 |
| 1121 | Did you receive medical treatment for the diabetes or blood sugar at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1122 | CHECK 1108g: <br> RESPONDENT HAS HAD CHRONIC BRONCHITIS. | $1108 \mathrm{~g}=\mathrm{YES}$ $\square$ $1108 \mathrm{~g}=$ NO OR DK $\square$ | 1124 |
| 1123 | Did you receive medical treatment for chronic bronchitis, emphysema, or COPD at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1124 | CHECK 1108h: <br> RESPONDENT HAS HAD ASTHMA. | $\begin{aligned} & 1108 \mathrm{~h}=\mathrm{YES} \square \begin{array}{l} 1108 \mathrm{~h}= \\ \text { NO OR DK } \end{array} \end{aligned}$ | 1127 |
| 1125 | Did you receive medical treatment for asthma at the time of the diagnosis? | YES <br> NO <br> DON'T KNOW/DON'T REMEMBER |  |
| 1127 | Compared with other people your age, do you feel you have less breath when exerting yourself? <br> PROBE: By exercising or moving a lot? | YES <br> NO <br> DON'T KNOW |  |
| 1128 | During the last 12 months, have you had wheezing when you breathe? | YES <br> NO <br> DON'T KNOW | 1131 |

SECTION 11. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 1129 | Were you also short of breath when the wheezing noise was present? |  |  |
| 1130 | Have you had the wheezing when you did not have a cold? |  |  |
| 1131 | Have you woken up with a feeling of tightness in your chest at any time in the last 12 months? |  |  |
| 1132 | Have you been woken by an attack of shortness of breath at any time in the last 12 months? |  |  |
| 1133 | Have you been woken by an attack of coughing at any time in the last 12 months? |  |  |
| 1134 | Do you usually cough on most days? |  | $\xrightarrow{\longrightarrow} 1138$ |
| 1135 | When you cough, do you usually bring up phlegm from your chest? |  | $\xrightarrow{\rightarrow} 1138$ |
| 1136 | Have you brought up phlegm every day for at least three months during the last year? |  | $\xrightarrow{\rightarrow} 1138$ |
| 1137 | For how many years have you brought up phlegm in this way? <br> IF LESS THAN 1 YEAR, RECORD '00'. | YEARS . . . . . . . . . . . . . . . . . . . . |  |
| 1138 | Are you currently troubled by pain or discomfort, either all the time or on and off? |  | $\longrightarrow 1141$ |
| 1139 | Have you had this pain or discomfort for more than 3 months? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 <br> NO 2 | $\longrightarrow 1141$ |
| 1140 | Where do you feel this pain or discomfort? <br> RECORD ALL MENTIONED. | BACK PAIN ..................................... A <br> NECK OR SHOULDER PAIN . . . ................ B <br> HEADACHE, FACIAL OR DENTAL PAIN ....... C <br> STOMACH ACHE OR ABDOMINAL PAIN ....... D <br> PAIN IN ARMS, HANDS, HIPS, LEGS OR FEET . . E <br> CHEST PAIN . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . F <br> OTHER $\qquad$ |  |
| 1141 | In the last 12 months, did your teeth or your mouth cause you any pain or discomfort? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 1145$ |
| 1142 | Did you get treatment the last time that you had the problem? | YES . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 2 | $\longrightarrow 1144$ |
| 1143 | Who did you see for treatment? <br> RECORD ALL MENTIONED. | ```PUBLIC SECTOR DENTIST/ORAL HYGIENIST/DENTAL THERAPIST A MEDICAL DOCTOR/NURSE B PRIVATE MEDICAL SECTOR DENTIST/ORAL HYGIENIST/DENTAL THERAPIST C MEDICAL DOCTOR/NURSE D OTHER SOURCE TRADITIONAL HEALER OTHER``` | $\prod^{\longrightarrow} 1145$ |

SECTION 11. HEALTH CARE

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 1144 | What was the main reason that you did not get treatment? | NO ORAL HEALTH SERVICE AVAILABLE ORAL HEALTH SERVICES TOO FAR ORAL HEALTH SERVICES TOO EXPENSI COULD NOT AFFORD PROBLEM WENT AWAY OTHER | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 6 \end{aligned}$ |  |
| 1145 | Now I would like to ask you about any medication you take. Do you use any medicine daily or regularly that has been prescribed by a doctor or nurse? | YES <br> NO | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1150$ |
| 1146 | How many different prescribed medications do you use daily or regularly? | NUMBER OF MEDICINES |  |  |
| 1147 | Who pays for most of these medications? | RESPONDENT <br> FAMILY/FRIEND: <br> MEDICAL AID <br> EMPLOYER <br> PROVIDED BY PUBLIC CLINIC OR HOSPI <br> OTHER | $\begin{aligned} & 1 \\ & 2 \\ & 3 \\ & 4 \\ & 5 \\ & 6 \end{aligned}$ | $\left[\begin{array}{l} \rightarrow 1150 \\ \rightarrow 1150 \end{array}\right.$ |
| 1148 | In the last 12 months, have you ever been sent away from the clinic without a medication because they did not have stock? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1150$ |
| 1149 | How many times has this happened to you in the last 12 months? <br> PROBE FOR ESTIMATE OF NUMBER OF TIMES. | NUMBER OF TIMES |  |  |
| 1150 | In the last 12 months, have you used any medications containing codeine to treat a medical condition? <br> USE THE SHOWCARD. | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ | $\rightarrow 1155$ |
| 1152 | In the last 12 months, have you used any of these medications for the experience or feeling it gave you rather than for their medicinal effect? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ | $\rightarrow 1155$ |
| 1153 | In the last 12 months, which codeine-containing medications have you used for the experience or feeling rather than for their medical effect? <br> RECORD ALL MENTIONED. | BRONCLEER/LENAZINE FORTE <br> ACTIFED DRY COUGH <br> BENYLIN SYRUP WITH CODEINE <br> LENADOL/ADCO-DOL PAIN TABLETS <br> NUROFEN PLUS <br> MYPRODOL <br> STILPANE <br> SYNDOL <br> OTHER | $\begin{gathered} \mathrm{A} \\ \mathrm{~B} \\ \mathrm{C} \\ \mathrm{D} \\ \mathrm{E} \\ \mathrm{~F} \\ \mathrm{G} \\ \mathrm{H} \\ \mathrm{X} \end{gathered}$ |  |
| 1154 | In the last 12 months, have you received treatment for your problems related to the use of codeine-containing medications for non-medical purposes? | $\begin{aligned} & \text { YES } \\ & \text { NO } \end{aligned}$ | $\begin{aligned} & 1 \\ & 2 \end{aligned}$ |  |
| 1155 | RECORD THE TIME. | HOURS <br> MINUTES |  |  |

INTERVIEWER'S OBSERVATIONS

## TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT INTERVIEW:
$\qquad$

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS


## INTRODUCTION AND CONSENT

Hello. My name is $\qquad$ . I am working with Statistics South Africa. We are conducting a survey about health and other topics all over South Africa. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to talk to you about (CHILD'S NAME FROM COVERSHEET)'s health and well-being. The questions usually take about 10-15 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER $\qquad$ DATE $\qquad$



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 107 | What is your relationship to (NAME)? |  |  |
| 108 | Why is (NAME)'s biological mother not living with (NAME)? | MOTHER DIED <br> MOTHER WORKS ELSEWHERE/ <br> SEEKS EMPLOYMENT ELSEWHERE <br> MOTHER SENT CHILD HERE FOR CARE ......... 3 <br> MOTHER IN HOSPITAL <br> ........................ 4 <br> OTHER $\qquad$ |  |




## SECTION 2. CHILD IMMUNISATION

| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 511A | Did (NAME) ever receive any vaccinations to prevent (NAME) from getting diseases, including vaccinations received in immunisation campaigns? |  | $\begin{array}{\|l} \longrightarrow 526 A \\ \\ \longrightarrow 602 \end{array}$ |
| 512A | Has (NAME) ever received a BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar? |  |  |
| 514A | Has (NAME) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio? |  | $\longrightarrow 517 \mathrm{~A}$ |
| 515A | Did (NAME) receive the first oral polio vaccine in the first two weeks after birth or later? |  |  |
| 516A | How many times did (NAME) receive the oral polio vaccine? | NUMBER OF TIMES |  |
| 517A | Has (NAME) ever received a DTP-combination vaccination, also known as a pentavalent vaccination? That is, an injection given in the left thigh or left arm to prevent diphtheria, tetanus, and whooping cough? |  | $\rightarrow$ 518A1 |
| 518A | How many times did (NAME) receive the DTP-combination vaccine? | NUMBER OF TIMES |  |
| 518A1 | Has (NAME) ever received a hepatitis $B$ vaccination, that is, an injection given in the right thigh to prevent hepatitis $B$ ? |  | $\rightarrow 519 \mathrm{~A}$ |
| 518A2 | How many times did (NAME) receive the hepatitis B vaccine? | NUMBER OF TIMES |  |
| 519A | Has (NAME) ever received a pneumococcal vaccination, that is, an injection in the right thigh to prevent pneumonia? |  | $\rightarrow 521 \mathrm{~A}$ |
| 520A | How many times did (NAME) receive the pneumococcal vaccine? | NUMBER OF TIMES |  |
| 521A | Has (NAME) ever received a rotavirus vaccination, that is, syrup in the mouth to prevent diarrhoea? |  | $\xrightarrow{\rightarrow} 523 \mathrm{~A}$ |
| 522A | How many times did (NAME) receive the rotavirus vaccine? | NUMBER OF TIMES ..................... |  |
| 523A | Has (NAME) ever received a measles vaccination, that is, an injection in the left thigh or right arm to prevent measles? |  | $\longrightarrow 525 \mathrm{~A}$ |
| 524A | How many times did (NAME) receive the measles vaccine? | NUMBER OF TIMES |  |
| 525A | Did (NAME) ever miss getting a vaccination or get a vaccination late? |  | $\xrightarrow{ } 602$ |
| 526A | CHECK 508A AND 511A: <br> CHILD RECEIVED AT LEAST ONE VACCINATION <br> a) What was the reason for (NAME) missing the vaccination or getting it late? <br> PROBE: Any other <br> CHILD RECEIVED RECEIVED NO $\square$ <br> b) What is the reason (NAME) has not received any vaccinations? <br> PROBE: Any other reason? reason? | CLINIC OUT OF STOCK <br> NOT AWARE OF NEED FOR A VACCINATION <br> FEAR OF SIDE EFFECTS <br> DID NOT KNOW WHERE TO GO <br> TOO BUSY TO TAKE CHILD <br> NO MONEY FOR TRANSPORT <br> CHILD WAS ILL <br> RESPONDENT WAS ILL <br> OTHER |  |


| SECTION 3. CHILD HEALTH |  |  |  |
| :---: | :---: | :---: | :---: |
| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| 602 | Now I would like to ask some questions about (NAME)'s health |  |  |
| 605 | In the last six months, was (NAME) given a vitamin A dose like [this/any of these]? <br> SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS. |  |  |
| 607 | Was (NAME) given any drug for intestinal worms in the last six months? <br> IF RESPONDENT SAYS NO, CHECK ROAD TO HEALTH BOOKLET. |  |  |
| 608 | Has (NAME) had diarrhoea/loose stools in the last 2 weeks? |  | $\rightarrow 618$ |
| 609 | Now I would like to know how much (NAME) was given to drink during the diarrhoea. Was (NAME) given less than usual to drink, about the same amount, or more than usual to drink? <br> IF LESS, PROBE: Was (NAME) given much less than usual to drink or somewhat less? |  |  |
| 610 | When (NAME) had diarrhoea, was (NAME) given less than usual to eat, about the same amount, more than usual, or nothing to eat? <br> IF LESS, PROBE: Was (NAME) given much less than usual to eat or somewhat less? |  |  |
| 611 | Did you seek advice or treatment for the diarrhoea from any source? |  | $\longrightarrow 615$ |



| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 620 | Has (NAME) had an illness with a cough at any time in the last 2 weeks? |  |  |
| 621 | Has (NAME) had fast, short, rapid breaths or difficulty breathing at any time in the last 2 weeks? |  | $\rightarrow 623$ |
| 622 | Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose? |  |  |
| 623 | CHECK 618: HAD FEVER $\text { YES } \square$ <br> DON | NO OR KNOW | $\rightarrow 631$ |
| 624 | Did you seek advice or treatment for the illness from any source? |  | $\rightarrow 631$ |
| 625 | Where did you seek advice or treatment? <br> Anywhere else? <br> PROBE TO IDENTIFY THE TYPE OF SOURCE. <br> IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, RECORD 'X' AND WRITE THE NAME OF THE PLACE(S). |  |  |
| 626 | CHECK 625: <br> TWO OR MORE CODES CIRCLED | ONLY ONE <br> CODE CIRCLED | $\rightarrow 628$ |
| 627 | Where did you first seek advice or treatment? USE LETTER CODE FROM 625. | FIRST PLACE $\quad . . . . . . . . . . . . . . . . . . . . . . . . . .$. |  |
| 628 | How many days after the illness began did you first seek advice or treatment for (NAME)? <br> IF THE SAME DAY RECORD '00'. | DAYS |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES |  | SKIP |
| :---: | :---: | :---: | :---: | :---: |
| 629 | At any time during the illness, did (NAME) take any drugs for the illness? | YES <br> NO <br> DON'T KNOW |  | $\longrightarrow 631$ |
| 630 | What drugs did (NAME) take? <br> Any other drugs? <br> RECORD ALL MENTIONED. | ANTIMALARIAL DRUGS <br> COARTEM/ARTEMISININ COMBINATION <br> THERAPY (ACT) <br> OTHER ANTIMALARIAL <br> (SPECIFY) <br> ANTIBIOTIC DRUGS <br> PILL/SYRUP <br> INJECTION/IV <br> OTHER DRUGS <br> ASPIRIN <br> PARACETAMOL/PANADO <br> BRUFEN <br> PONSTAN <br> OTHER | A <br> B <br> C <br> D <br> E <br> F <br> G <br> H <br> X <br> Z |  |
| 631 | CHECK 104: CHILD BORN IN 2014-2016? <br> YES | NO $\square$ |  | $\rightarrow 655$ |
| 654 | The last time (NAME) passed stools, what was done to dispose of the stools? | CHILD USED TOILET OR LATRINE PUT/RINSED INTO TOILET OR LATRINE PUT/RINSED INTO DRAIN, DITCH RIVER OR STREAM THROWN INTO GARBAGE BURIED <br> LEFT IN THE OPEN <br> OTHER | 01 <br> 02 <br> 03 <br> 04 <br> 05 <br> 06 <br> 96 |  |
| 655 | I do not want to know if (NAME) has HIV, I just want to know if you know (NAME)'s HIV status. Do you know (NAME)'s HIV status? | YES <br> NO <br> DON'T KNOW | $\begin{aligned} & 1 \\ & 2 \\ & 8 \end{aligned}$ |  |
| 656 | RECORD THE TIME. | HOURS <br> MINUTES |  |  |

INTERVIEWER'S OBSERVATIONS
TO BE FILLED IN AFTER COMPLETING BIOMARKERS

SUPERVISOR'S OBSERVATIONS

STATS SA
SA MRC
LANGUAGE OF
QUESTIONNAIRE
ENGLISH


## INSTRUCTIONS

We are collecting information on the SADHS field staff. Please fill in the information below. The information will be part of the survey data files. Your name will not be in the data files; your information will remain anonymous. If there is any question you do not want to answer you may skip it and go to the next question.


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 109 | What is the highest level of school you attended: primary, secondary, or higher than secondary? |  |  |
| 110 | What is the highest grade or form you completed at that level? | PRIMARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ........ 00 <br> GRADE 1/SUB A/CLASS 1 ................. 11 <br> GRADE 2/SUB B/CLASS 2 ................. 12 <br> GRADE 3/STANDARD $1 /$ <br> AET 1 (KHA RI GUDE, SANLI) . . . . . . . . . . 13 <br> GRADE 4/STANDARD 2 .................... 14 <br> GRADE 5/STANDARD 3/AET 2 ............ 15 <br>  <br> GRADE 7/STANDARD 5/AET 3 <br> SECONDARY SCHOOL <br> LESS THAN 1 YEAR COMPLETED ........ 20 <br> GRADE 8/STANDARD 6/FORM 1/NTC 1/ <br> N1/NC (V) LEVEL 2 . . . . . . . . . . . . . . . . 21 <br> GRADE 9/STANDARD 7/FORM 2/AET 4/NTC 2 / <br> N2/NC (V) LEVEL 3 <br> GRADE 10/STANDARD 8/FORM 3/NTC $3 /$ <br> N3/NC (V) LEVEL 4 .................. . 23 <br> GRADE 11/STANDARD 9/FORM 4 ........ 24 <br> CERTIFICATE OR DIPLOMA WITH LESS THAN <br> GRADE 12/STANDARD 10 COMPLETED . . 25 <br> GRADE 12/STANDARD 10/FORM 5/MATRIC . . 26 <br> N4/NTC4 <br> N5/NTC5 .................................. 28 <br> HIGHER EDUCATION <br> FURTHER STUDIES INCOMPLETE OR ONGOII 30 CERTIFICATE OR DIPLOMA WITH GRADE $12 /$ <br> STANDARD 10 COMPLETED ........... 31 <br> HIGHER DIPLOMA (TECHNIKON/ <br> U. OF TECHNOLOGY) <br> POST HIGHER DIPLOMA (TECHNIKON/ <br> U. TECHNOLOGY MASTERS, DOCTORAL) 33 <br> BACHELORS DEGREE/BACHELORS DEGREE <br> AND POST GRADUATE DIPLOMA ..... 34 <br> HONOURS DEGREE $\ldots . . . . . . . . . . . . . . .$. HIGHER DEGREE (MASTERS, DOCTORATE) 36 |  |
| 112 | Which population group do you consider yourself: black, white, coloured, Indian or something else? |  |  |
| 113 | What languages can you speak? <br> RECORD ALL LANGUAGES YOU CAN SPEAK. |  |  |


| NO. | QUESTIONS AND FILTERS | CODING CATEGORIES | SKIP |
| :---: | :---: | :---: | :---: |
| 114 | What is your mother tongue/native language (language spoken at home growing up)? |  |  |
| 115 | Have you ever worked on a SADHS survey prior to this one? |  |  |
| 116 | Have you ever worked on any other survey prior to this one (not a SADHS)? |  |  |
| 117 | Were you already working for STATS SA or SA MRC at the time you were employed to work on this SADHS? |  | $\begin{array}{\|l\|}  \\ \\ \\ \end{array}$ |
| 118 | Are you a permanent or temporary employee of STATS SA or SA MRC? |  |  |
| 119 | If you have comments, please write them here. |  |  |

## ADDITIONAL DHS PROGRAM RESOURCES

The DHS Program Website - Download free DHS DHSprogram.com reports, standard documentation, key indicator data, and training tools, and view announcements.


STATcompiler - Build custom tables, graphs, and Statcompiler.com maps with data from 90 countries and thousands of indicators.


DHS Program Mobile App - Access key DHS indicators for 90 countries on your mobile device (Apple, Android, or Windows).

Search DHS Program in your iTunes or Google Play store


DHS Program User Forum - Post questions about userforum.DHSprogram.com DHS data, and search our archive of FAQs.


Tutorial Videos - Watch interviews with experts
www.youtube.com/DHSProgram and learn DHS basics, such as sampling and weighting, downloading datasets, and how to read DHS tables.

Datasets - Download DHS datasets for analysis.
DHSprogram.com/Data


Spatial Data Repository - Download
spatialdata.DHSprogram.com
geographically-linked health and demographic data for mapping in a geographic information system (GIS).

Social Media - Follow The DHS Program and join the conversation. Stay up to date through:

| Facebook <br> www.facebook.com/DHSprogram |  | Twitter www.twitter.com/ DHSprogram |  |
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[^0]:    ${ }^{1}$ Western Cape does not have traditional residential geotype PSUs, so only two substrata are applicable.

[^1]:    ${ }^{2}$ Four PSUs were dropped from the sample: one was vacant, two were non-accessible due to refusals, and one was an industrial area.
    ${ }^{3}$ There were 26 informal, unstructured PSUs in the SADHS sample.

[^2]:    ${ }^{4}$ The subsample of adults interviewed with the adult health module included all men age 15-59 and all women age 15-49 in those households selected for the male survey.

[^3]:    ${ }^{1}$ Includes coal, wood, straw/shrubs/grass, agricultural crops, and animal dung
    ${ }^{2}$ Includes electricity and gas

[^4]:    ${ }^{1}$ Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent
    ${ }^{2}$ Cleansing agents other than soap include locally available materials such as ash, mud, or sand
    ${ }^{3}$ Includes households with soap only as well as those with soap and another cleansing agent

[^5]:    ${ }^{1}$ If a person was reported to have difficulty in more than one domain, only the highest level of difficulty is shown
    ${ }^{2}$ Restricted to the household population age 18-59

[^6]:    Note: Education categories refer to the highest level of education attended, whether or not that level was completed na $=$ Not applicable

[^7]:    ${ }^{1}$ Completed 7th grade/standard 5/AET 3 at the primary level
    ${ }^{2}$ Completed 12th grade/standard 10/form 5/matric at the secondary level

[^8]:    Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

[^9]:    ${ }^{1}$ Excludes women who had sexual intercourse within the last 4 weeks
    ${ }^{2}$ Excludes women who are not in a union

[^10]:    Note: Figures in parentheses are based on 25-49 unweighted cases.
    ${ }^{1}$ Excludes men who had sexual intercourse within the last 4 weeks
    ${ }^{2}$ Excludes men who are not in a union

[^11]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[^12]:    Notes: If more than one method is used, only the most effective method is considered in this tabulation. Figures in parentheses are based on 25-49 unweighted cases.
    1 In-union women include women who are currently married or living together with a partner as if married

[^13]:    Notes: Figures are based on life table calculations using information on episodes of use that occurred 3-62 months preceding the survey. Figures in parentheses are based on 125-249 unweighted cases.
    ${ }^{1}$ Includes male sterilisation, IUD, female condom, emergency contraception, rhythm, and withdrawal
    ${ }^{2}$ Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
    ${ }^{3}$ Includes lack of access/too far, costs too much, and inconvenient to use
    ${ }^{4}$ Reasons for discontinuation are mutually exclusive and add to the total given in this column
    ${ }^{5}$ A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave
    "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation
    ${ }^{6}$ All episodes of use occurring within the 5 years preceding the survey are included. Episodes of use include both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation

[^14]:    ${ }^{1}$ Personal communication from Dr. Lesley Bamford based on the Department of Health District Health Information System, accessed on 16 November 2017.

[^15]:    ${ }^{1}$ Stillbirths are foetal deaths in pregnancies lasting 7 or more months

[^16]:    ${ }^{1}$ Effective 1 December 2015, DTaP-IPV-Hib was replaced with DTaP-IPV-Hib-HepB.
    ${ }^{2}$ Effective 1 December 2015, the recommended schedule of childhood vaccinations changed, and children born after that date should receive the first dose of the measles vaccine at 6 months and the second dose at 12 months. However, given the timing of the SADHS fieldwork, children eligible for the new vaccination schedule would be too young to be part of the 12-23 or 24-35 month age cohorts for whom data are presented in this chapter.

[^17]:    
    
    
    vaccine

    1 Polio 0 is the polio vaccination given at birth
    ${ }^{1}$ BCG, three doses of DTaP-IPV-Hib, and one dose of measles vaccine
    ${ }^{4}$ BCG, two doses of oral polio vaccine, three doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and one dose of measles vaccine
    BCG, two doses of oral polio vaccine, four doses of DTaP-IPV-Hib, three doses of HepB, three doses of pneumococcal vaccine, two doses of rotavirus vaccine, and two doses of measles vaccine

[^18]:    CHW = Community health worker
    ${ }^{1}$ Symptoms of ARI consist of short, rapid breathing that is chest-related and/or difficult breathing that is chest-related

[^19]:    ${ }^{1}$ Includes households in which salt could not be tested for technical or logistical reasons

[^20]:    ${ }^{1}$ Includes "don't know"

[^21]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[^22]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4)
    lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

[^23]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

[^24]:    ${ }^{1}$ Expressed per 1,000 population
    a Small discrepancies in totals can result from rounding
    ${ }^{\text {b }}$ Age-adjusted rate

[^25]:    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Health insurance includes medical aid, a medical benefit scheme, a provident scheme, or a hospital plan that helps pay for health care or drug services

[^26]:    Note: Total includes 43 men for whom nutritional status information was out of range or missing.
    
     ${ }_{2}$ Percentage with hypertension controlled = normal blood pressure and taking medication/prevalence of hypertension

[^27]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Difficulty breathing refers to tightness of chest and/or shortness of breath
    ${ }^{2}$ Coughing with phlegm on most days for $\geq 3$ months

[^28]:    Notes: Prevalence is adjusted for altitude and for smoking status, if known, using formulas in CDC 1998. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25
    unweighted cases and has been suppressed.
    ${ }^{1}$ Restricted to women age 15-49
    ${ }^{2}$ Includes manufactured cigarettes and hand-rolled cigarettes

[^29]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Excludes potatoes

[^30]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed
    ${ }^{1}$ Excludes respondents who reported daily consumption

[^31]:    Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed
    ${ }^{1}$ Includes manufactured cigarettes and hand-rolled cigarettes

[^32]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Respondents who consumed $0-1$ drinks in the 7 days before the interview and who reported drinking 3 or fewer days per month over the past 12 months were assumed not to have consumed 5 or more drinks in the past 30 days
    2 The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism Two "yes" responses indicate the possibility of alcoholism and should be investigated further.

[^33]:    Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Respondents who consumed 0-1 drinks in the 7 days before the interview and who reported drinking 3 or fewer days per month over the past 12 months were assumed not to have consumed 5 or more drinks in the past 30 days
    ${ }^{2}$ The CAGE (Concern/Cut-down, Anger, Guilt, and Eye-Opener) test is used to screen for problem drinking and alcoholism. Two "yes" responses indicate the possibility of alcoholism and should be investigated further.

[^34]:    ${ }^{1}$ A 2017 High Court decision held that the common law defence of "moderate and reasonable chastisement" was unconstitutional; this is still to be confirmed in legislation, however, and the judgment has been appealed (Global Initiative to End Corporal Punishment of Children 2017).

[^35]:    ${ }^{1}$ Includes women whose house has a title/deed, but they do not know if their name is on it, and women who do not know if the house has a title/deed

[^36]:    ${ }^{1}$ The domestic violence module was referred to as the household relations module in the SADHS Woman's Questionnaire.
    ${ }^{2}$ The domestic violence module was designed with the intention of capturing violence against women by current and past partners and persons other than partners. However, due to a skip error in the CAPI program, data on non-partner violence are not available.

[^37]:    Note: Husband/partner refers to the current husband/partner for women currently in a union and the most recent husband/partner for divorced, separated, or widowed women. Figures in parentheses are based on $25-49$ unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
    ${ }^{1}$ Includes only women who are currently in a union
    ${ }^{2}$ According to the wife's report. See Table 20.5 for list of behaviours
    ${ }^{3}$ According to the wife's report. Restricted to women age 18-49 who are currently in a union. See Table 19.8.1 for list of decisions
    ${ }^{4}$ According to the wife's report. Restricted to women age 18-49. See Table 19.9.1 for list of reasons.

[^38]:    Note: Partner refers to the current partner for currently partnered women and the most recent partner for previously partnered women.
    ${ }^{1}$ Includes in the past 12 months
    ${ }^{2}$ Available for ever-partnered women age 18-49 only

[^39]:    ${ }^{2}$ The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC)
    ${ }^{3}$ The overall men response rate (OMRR) is calculated as:

    $$
    \text { OMRR }=\text { HRR * EMRR/100 }
    $$

[^40]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.

[^41]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a final result, i.e., positive, negative, or inconclusive
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc

[^42]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or inconclusive.
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
    ${ }^{3}$ Any partner who was not a spouse and did not live with the respondent

[^43]:    ${ }^{1}$ Includes all dried blood spot (DBS) specimens tested at the lab and for which there is a result, i.e., positive, negative, or inconclusive
    ${ }^{2}$ Includes (1) other results of blood collection (e.g., technical problem in the field), (2) lost specimens, (3) non-corresponding bar codes, and (4) other lab results such as blood not tested for technical reason, not enough blood to complete the algorithm, etc.
    ${ }^{3}$ Any partner who was not a spouse and did not live with the respondent

[^44]:    na $=$ Not applicable

[^45]:    na $=$ Not applicable

[^46]:    na $=$ Not applicable

[^47]:    na $=$ Not applicable

[^48]:    na $=$ Not applicable

[^49]:    na $=$ Not applicable
    ${ }^{1}\left(B_{m} / B_{f}\right) \times 100$, where $B_{m}$ and $B_{f}$ are the numbers of male and female births, respectively
    ${ }^{2}\left[2 B_{x} /\left(B_{x-1}+B_{x+1}\right)\right] \times 100$, where $B_{x}$ is the number of births in calendar year $x$

[^50]:    ${ }^{1}$ Includes the respondent
    ${ }^{2}$ Excludes the respondent

