

**Zimbabwe
Demographic
and Health
Survey
2005-2006**

Preliminary Report

This report summarizes the findings of the 2005-2006 Zimbabwe Demographic and Health Survey (ZDHS) carried out by the Central Statistical Office of the government of Zimbabwe. ORC Macro provided technical assistance. The 2005-06 ZDHS is part of the worldwide Demographic and Health Surveys (DHS) programme, funded by the U.S. Agency for International Development (USAID). Technical and donor support for the survey was also provided by the Ministry of Health and Child Welfare (MOH&CW), the National AIDS Council (NAC), the Zimbabwe Family Planning Council (ZNFPC), National Microbiology Reference Laboratory (NMRL), the USAID/Zimbabwe Mission, the United Nations Population Fund (UNFPA), the United Nations Development Programme (UNDP), the United Nations Children's Fund (UNICEF), the Centers for Disease Control and Prevention (CDC), and the United Kingdom Department for International Development (DFID).

Additional information about the 2005-06 ZDHS may be obtained from the Central Statistical Office, P. O. Box CY 342, Causeway, Harare, Zimbabwe (Telephone: (263-4) 793-971/2 and 797-756/7; Fax: (263-4) 794-757; E-mail: census@mweb.co.zw).

Information about the DHS programme may be obtained from the MEASURE DHS Project, ORC Macro, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705, USA; Telephone: 301-572-0200, Fax: 301-572-0999, E-mail: reports@orcmacro.com, Internet: <http://www.measuredhs.com>.

**Zimbabwe
Demographic and Health Survey
2005-2006**

Preliminary Report

**Central Statistical Office
Harare, Zimbabwe**

**MEASURE DHS
ORC Macro
Calverton, Maryland USA**

July 2006



USAID
FROM THE AMERICAN PEOPLE



CONTENTS

	Page
I. INTRODUCTION.....	1
II. SURVEY IMPLEMENTATION.....	2
A. Sample Design	2
B. Questionnaires	2
C. Training of Field Staff	3
D. Fieldwork	4
E. Data Processing.....	4
III. RESULTS	5
A. Response Rates	5
B. Characteristics of the Respondents	5
C. Fertility.....	6
D. Family Planning	8
E. Fertility Preferences.....	11
F. Maternity Care	12
G. Child Health	13
H. Infant Feeding Practices.....	17
I. Nutritional Status of Children.....	17
J. HIV/AIDS	20
K. Malaria Prevention and Treatment	26

I. INTRODUCTION

The 2005-2006 Zimbabwe Demographic and Health Survey (2005-06 ZDHS) was implemented by the Central Statistical Office (CSO) from August 2005 to March 2006. ORC Macro provided technical assistance as well as funding to the project through the Demographic and Health Surveys (DHS) programme, a USAID-funded project providing support and technical assistance in the implementation of population and health surveys in countries worldwide. Other agencies and organizations facilitating the successful implementation of the survey through technical and donor support include the Ministry of Health and Child Welfare (MOH&CW), the National AIDS Council (NAC), the Zimbabwe Family Planning Council (ZNFPC), National Microbiology Reference Laboratory (NMRL), the USAID/Zimbabwe Mission, the United Nations Population Fund (UNFPA), the United Nations Development Program (UNDP), the United Nations Children's Fund (UNICEF), the Centers for Disease Control and Prevention (CDC), and the United Kingdom Department for International Development (DFID).

While significantly expanded in content, the 2005-06 ZDHS is a follow-on to the 1999 ZDHS and provides updated estimates of basic demographic and health indicators covered in that earlier survey. In addition, data on malaria prevention and treatment, domestic violence, anaemia, and HIV/AIDS were also collected in the 2005-06 ZDHS.

This preliminary report presents a first look at selected results of the 2005-06 ZDHS. A comprehensive analysis of the data will be published in a final report which will be published during the last quarter of 2006. While considered provisional, the results presented here are not expected to differ significantly from those presented in the final report.

The primary objectives of the 2005-06 ZDHS project are to provide up-to-date information on fertility levels; nuptiality; sexual activity; fertility preferences; awareness and use of family planning methods; breastfeeding practices; nutritional status of mothers and young children; early childhood mortality and maternal mortality; maternal and child health; and awareness, behaviour, and prevalence regarding HIV/AIDS and other sexually transmitted infections.

II. SURVEY IMPLEMENTATION

A. Sample Design

The sample for the 2005-06 ZDHS was designed to provide population and health indicator estimates at the national and provincial levels. The sample design allowed for specific indicators, such as contraceptive use, to be calculated for each of the 10 provinces (Manicaland, Mashonaland Central, Mashonaland East, Mashonaland West, Matabeleland North, Matabeleland South, Midlands, Masvingo, Harare, and Bulawayo).

A representative probability sample of 10,800 households was selected for the 2005-06 ZDHS survey. The sampling frame used for the 2005-06 ZDHS was the 2004 Zimbabwe Master Sample (ZMS04) developed by CSO after the 2002 Population Census. The ZMS04 included 1,200 enumeration areas (EAs) allocated proportional to the total population and stratified by land use type. The sample was selected in two stages for the 2005-06 ZDHS. In the first stage, 400 EAs were selected with equal probability from the ZMS04 and stratified by urban and rural clusters for each of the 10 provinces. Within each of these 400 EAs, a complete household listing and mapping exercise was conducted in January 2005. In the second stage, a complete listing of households was carried out for each cluster. All private households were listed. The listing excluded people living in institutional households (army barracks, hospitals, police camps, boarding schools, etc.).¹ CSO provincial supervisors also trained provincial CSO officers to use Global Positioning System (GPS) receivers to take the coordinates of the 2005-06 ZDHS sample clusters.

All women age 15-49 and all men age 15-54 who were either permanent residents of the households in the 2005-06 ZDHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Anaemia and HIV testing was performed in each household among eligible women and men who consented to either or both tests. With the parent's or guardian's consent, children age five and under were tested for anaemia in each household. In addition, a sub-sample of one eligible woman in each household was randomly selected to be asked additional questions about domestic violence.

B. Questionnaires

Three questionnaires were used for the 2005-06 ZDHS. They are the Household Questionnaire, the Women's Questionnaire, and the Men's Questionnaire. These questionnaires were adapted to reflect the population and health issues relevant to Zimbabwe at a series of meetings with various stakeholders from government ministries and agencies, non-governmental organizations, and international donors. In addition to English, the questionnaires were translated into the two major local languages, Shona and Ndebele.

¹ In May 2005, the government of Zimbabwe implemented Operation Murambatsvina. This operation was primarily concentrated in the two major urban cities of Zimbabwe—Harare and Bulawayo—having an impact on households, sample size, and the distribution of people in the 2005-06 ZDHS. EAs were affected in Bulawayo. An approach to adjusting for the changes to the survey sample was developed. If 80 percent or more of the households were present in the dwellings in which they were listed in January 2005, then the original household listing for that EA was accepted as adequate and no new selection was done. If the difference was between 20 and 50 percent, then the entire EA was re-listed. If the difference was greater than 50 percent (i.e., that more than 50 percent of the households selected for the sample were not found within the dwellings or residential structures in which they resided in January 2005, a new EA was created that combined the affected EA with one of the neighboring EAs. In addition to the above, two EAs—one in Matabeleland North and one in Mashonaland West—no longer existed at the time of data collection. Therefore, the 2005-06 ZDHS contains a final total of 398 EAs.

The Household Questionnaire was used to list all the usual members and visitors of selected households. Some basic information was collected on the characteristics of each person listed, including his or her age, sex, education, and relationship to the head of the household. For children under age 18, survival status of the parents was determined. If a child in the household had a parent who was sick for more than three consecutive months in the 12 months preceding the survey or a parent who had died, additional questions related to support for orphans and vulnerable children were asked. Additionally, if an adult in the household was sick for more than three consecutive months in the 12 months preceding the survey or an adult in the household died, questions were asked related to support for sick people or people who have died. The Household Questionnaire was also used to identify women and men who were eligible for the individual interview. Additionally, the Household Questionnaire collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, ownership of various durable goods, and ownership and use of mosquito nets. The Household Questionnaire was also used to record height, weight, and haemoglobin measurements for children age 5-59 months.

The Women's Questionnaire was used to collect information from all women age 15-49. These women were asked questions on the following topics:

- Background characteristics (education, residential history, media exposure, etc.)
- Birth history and childhood mortality
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and infant feeding practices
- Vaccinations and childhood illnesses
- Marriage and sexual activity
- Women's work and husband's background characteristics
- Women's and children's nutritional status
- Domestic violence
- Awareness and behaviour regarding AIDS and other sexually transmitted infections (STIs)
- Adult mortality including maternal mortality.

The Men's Questionnaire was administered to all men age 15-54 in each household in the 2005-06 ZDHS sample. The Men's Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did not contain a detailed reproductive history or questions on maternal and child health or nutrition.

C. Training of Field Staff

CSO staff and a variety of experts from government ministries, NGOs, and donor organizations participated in a three-day training of trainers (TOT) conducted on April 2005. Immediately following the TOT, the pretest training and fieldwork took place in April and May 2005. For two weeks, 16 participants were trained to administer the questionnaires, take anthropometric measurements, and collect blood samples for anaemia and HIV testing. Representatives from the National Microbiology Reference Laboratory (NMRL) and CDC/Zimbabwe assisted in training participants on the finger prick for blood collection, and proper handling and storage of the dried blood spots (DBS) for HIV testing. The pretest fieldwork was conducted in two separate six-day phases, covering approximately 200 households. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires were made based on lessons drawn from the exercise.

CSO recruited and trained 112 people for the fieldwork to serve as supervisors, field editors, male and female interviewers, and reserve interviewers. Training of field staff for the main survey was

conducted during a four-week period in July 2005. The training course consisted of instruction regarding interviewing techniques and field procedures, a detailed review of items on the questionnaires, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside the 2005-06 ZDHS sample points. Field practice in anaemia testing and HIV dried blood spot collection was also carried out for persons who were assigned as team health technicians. During this period, field editors and team supervisors were provided with additional training in methods of field editing, data quality control procedures, and fieldwork coordination.

D. Fieldwork

Twelve interviewing teams carried out data collection for the 2005-06 ZDHS. Each team consisted of one team leader, one field editor, three female interviewers, three male interviewers, and one driver. Seven senior staff members from CSO coordinated and supervised fieldwork activities. One officer from the ZNFPC assisted in the field staff training and field supervision. Additional people recruited for the 2005-06 ZDHS supervisory staff included one person from each of the following organizations: the Ministry of Health and Child Welfare, UNFPA, the Musasa Project, and NMRL. Data collection took place over a six-month period, from August 2005 to January 2006. Additionally, followup data collection was conducted in March 2006 in the effort to complete callbacks and improve response rates among respondents, particularly males, in Harare and Mashonaland Central.

E. Data Processing

All questionnaires for the ZDHS were returned to the CSO central office in Harare for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing computer-identified errors. The data were processed by a team of 12 data entry clerks, 2 data editors, 2 data entry supervisors, and administrators to receive and check the blood samples received from the field. Data entry and editing were accomplished using the CSPro software. The process of office editing and data processing was initiated in September 2005 and the completed in March 2006.

Blood samples received from the field were logged in at CSO, checked, and transported to NMRL to be tested. The processing of DBS samples for HIV testing at NMRL was handled by two laboratory scientists. The DBS samples were logged into the CSPro HIV Test Tracking System (CHTTS) database, each given a laboratory number, and stored at -20°C until tested. All samples were tested on the first assay test, an ELISA, Vironostika® HIV Uni-Form II Plus O, Biomerieux. A negative result was considered negative. All positives were subjected to a second ELISA test by AniLab Systems, Finland, compatible with ELISYS 2 (a fully automated ELISA analyzer manufactured by Human of Germany). Positive samples on the second test were considered positive. If the first and second tests were discrepant, the sample was retested with tests 1 and 2. If on repeat of tests 1 and 2, both are negative, the sample was rendered negative. If both were positive, the sample was rendered positive. If there was still a discrepancy in the results after repeating tests 1 and 2, a third confirmatory test, Genetic Systems New LAV Blot I (a Western Blot by Bio-Rad France) was administered. The final result was rendered positive if the tests showed inconsistent results on the repeat ELISAs. The final result was also rendered positive if the Western Blot (WB) confirmed the result to be positive, and rendered negative if the WB confirmed it to be negative. If the results were still discordant, the sample was rendered indeterminate.

The HIV test results for the 2005-06 ZDHS were entered into a spreadsheet with a barcode as the unique identifier to the result. Data from the HIV results and linked demographic and health data will be published in the 2005-06 Final Report.

III. RESULTS

A. Response Rates

Table 1 shows response rates for the 2005-06 ZDHS. A total of 10,752 households were selected for the sample, of which 9,778 were occupied. The shortfall was largely caused by households no longer existing in the sampled clusters at the time of the interview. Of the 9,778 existing households, 9,285 were successfully interviewed, yielding a response rate of 95 percent.

In the interviewed households, 9,870 women were identified for individual interview and, of these, complete interviews were conducted with 8,907 women, yielding a response rate of 90 percent. Of the 8,761 eligible men identified, 7,175 were successfully interviewed (82 percent response rate). The principal reason for the non-response among both eligible women and men was the failure to find them at home despite repeated visits to the households. The lower response rate for men was likely due to the more frequent and longer absence of men from the household. The refusal rate in the 2005-06 ZDHS was 2 percent for women and 3 percent for men (not shown in table).

Result	Residence		Total
	Urban	Rural	
Household interviews			
Households selected	3,455	7,297	10,752
Households occupied	3,248	6,530	9,778
Households interviewed	3,056	6,229	9,285
Household response rate	94.1	95.4	95.0
Individual interviews: women			
Number of eligible women	3,763	6,107	9,870
Number of eligible women interviewed	3,203	5,704	8,907
Eligible woman response rate	85.1	93.4	90.2
Individual interviews: men			
Number of eligible men	3,421	5,340	8,761
Number of eligible men interviewed	2,459	4,716	7,175
Eligible man response rate	71.9	88.3	81.9

B. Characteristics of the Respondents

Table 2 shows the distribution of women age 15 to 49 years and men age 15 to 54 years in the 2005-06 ZDHS sample by selected background characteristics. The distribution by age shows a sharp decline in numbers of women and men with increasing age. Slightly less than half of women and men are in the 15 to 24 year age groups. Thirty-nine percent of women and 41 percent of men live in urban areas.

Education in Zimbabwe is widespread; few women and even fewer men have never attended formal education (approximately 4 percent of women and 2 percent of men). In general, men are more likely to attend school and to reach higher levels of education than women. Seventy-one percent of men attended at least some secondary school, compared with 63 percent of women.

Table 2. Background characteristics of respondents						
Percent distribution of women and men by background characteristics, Zimbabwe 2005-06						
Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	24.2	2,152	2,130	26.5	1,899	1,978
20-24	21.9	1,952	1,945	20.3	1,459	1,435
25-29	16.5	1,466	1,439	15.1	1,082	1,035
30-34	13.6	1,216	1,212	12.3	882	878
35-39	9.4	834	843	9.2	663	645
40-44	7.8	699	719	6.5	469	451
45-49	6.6	589	619	5.7	409	427
50-54	na	na	na	4.3	312	326
Marital status						
Never married	27.0	2,404	2,452	47.5	3,406	3,455
Married	56.3	5,016	4,979	45.1	3,236	3,178
Living together	1.4	127	139	2.6	184	189
Divorced/separated	8.2	730	717	3.6	258	264
Widowed	7.1	629	620	1.3	92	89
Residence						
Urban	39.3	3,502	3,203	40.5	2,904	2,459
Rural	60.7	5,405	5,704	59.5	4,271	4,716
Province						
Manicaland	11.7	1,043	1,039	11.6	829	790
Mashonaland Central	9.3	825	751	9.8	702	721
Mashonaland East	8.0	714	696	8.3	598	578
Mashonaland West	9.3	829	777	10.1	726	668
Matabeleland North	6.0	536	672	6.1	434	547
Matabeleland South	4.9	439	630	4.5	325	464
Midlands	13.4	1,193	1,128	14.0	1,003	956
Masvingo	12.8	1,137	974	11.1	800	779
Harare	16.8	1,492	1,395	17.8	1,274	1,032
Bulawayo	7.8	697	845	6.7	483	640
Education						
No education	4.3	380	380	1.5	111	124
Primary	32.6	2,902	2,971	27.3	1,956	2,113
Secondary	60.1	5,355	5,297	65.3	4,687	4,541
Higher	3.0	270	259	5.9	422	397
Religion						
Traditional	2.1	186	205	7.5	535	579
Roman Catholic	10.2	913	920	10.4	749	744
Protestant	25.6	2,283	2,257	17.0	1,219	1,218
Pentecostal	17.8	1,581	1,535	13.0	932	913
Apostolic Sect	29.9	2,659	2,672	22.4	1,605	1,603
Other Christian	5.5	494	486	3.6	255	243
Muslim	0.7	62	59	1.1	76	61
None	8.0	713	758	25.0	1,792	1,802
Other	0.2	15	15	0.2	11	12
Total	100.0	8,907	8,907	100.0	7,175	7,175

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.
na = Not applicable

C. Fertility

All women who were interviewed in the 2005-06 ZDHS were asked to report the total number of sons and daughters to whom they had ever given birth in their lifetime. To encourage reporting, women were asked separately about children still living at home, those living elsewhere, and those who had died. A complete birth history was then obtained, including information on sex, date of birth and survival status of each child and the age at death for dead children.

Table 3 shows children ever born to women by five-year age group and the current fertility for the three-year period preceding the 2005-06 ZDHS. Age-specific and total fertility rates were calculated directly from the birth history data. The sum of age-specific fertility rates (known as the total fertility rate, or TFR) is a summary measure of the level of fertility. It can be interpreted as the number of children a woman would have by the end of her child-bearing years if she were to pass through those years bearing children at the current observed age-specific rates. If fertility were to remain constant at current levels, a Zimbabwean woman would bear an average of 3.8 children in her lifetime. This represents a decline of 0.2 children in the 6 years since the 1999 ZDHS, when the TFR was 4.0 births per woman.

Figure 1 shows the declines in age-specific fertility between the 1988 and 2005-06 ZDHS surveys. Fertility declined in all age groups except the youngest, where there was an increase. Figure 1 also shows that the size of the decline increases with age.

Table 3. Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by urban-rural residence, Zimbabwe 2005-06

Age group	Residence		Total
	Urban	Rural	
15-19	70	120	99
20-24	147	248	205
25-29	130	198	172
30-34	112	164	144
35-39	51	111	86
40-44	6	59	42
45-49	0	17	13
TFR	2.6	4.6	3.8
GFR	98	163	137
CBR	28.5	32.0	31.0

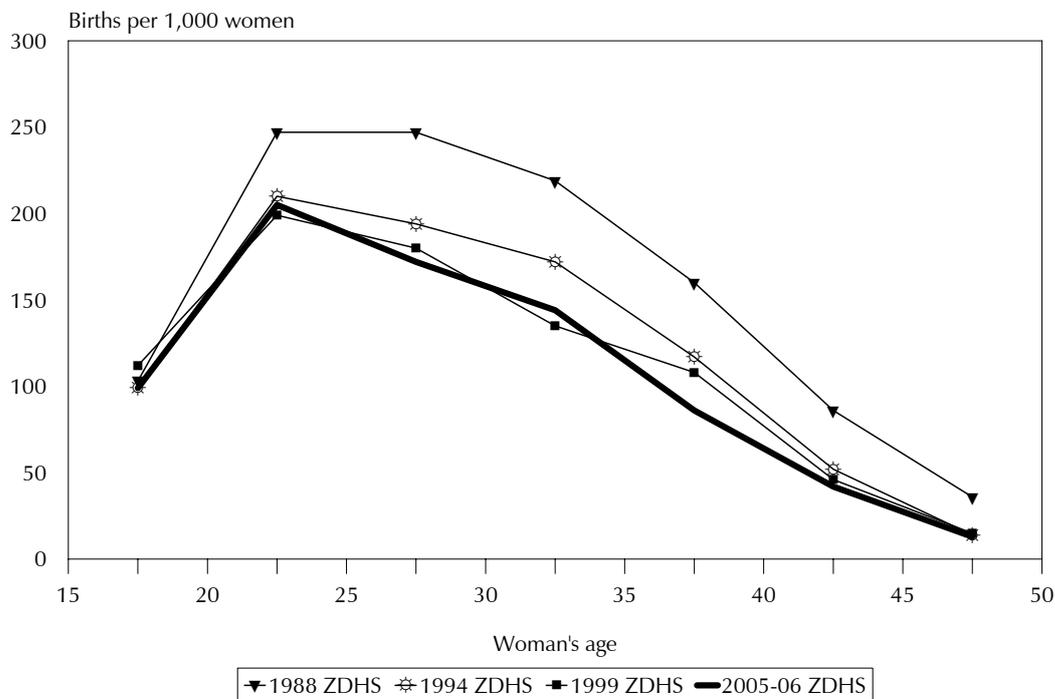
Note: Rates for age group 45-49 may be slightly biased due to truncation.

TFR: Total fertility rate for ages 15-49, expressed per woman

GFR: General fertility rate (births divided by the number of women age 15-44), expressed per 1,000 women

CBR: Crude birth rate, expressed per 1,000 population

Figure 1 Age-Specific Fertility Rates Zimbabwe 1988-2006



D. Family Planning

Information about knowledge and use of family planning methods was collected from female and male respondents by asking them to mention any ways or methods by which a couple can delay or avoid a pregnancy. For methods not mentioned spontaneously, a description of the method was read, and the respondents were asked if they knew of the method. For each method known, the respondent was asked if she or he had ever used it. Finally, respondents were asked if they were currently using a method, and if so, where they had obtained the method that they were using. In this report, family planning methods are grouped into two categories: modern methods (female and male sterilization, the pill, IUD, injections, implants, male condoms, female condoms, and LAM), and traditional methods (withdrawal, periodic abstinence, and natural family planning).

Tables 4.1 and 4.2 show percent distribution of currently married women and men, respectively, by contraceptive methods currently used, according to background characteristics. Overall, the 2005-06 ZDHS found that 60 percent of currently married women reported that they were currently using a method of family planning. Most women use a modern method of contraception (58.4 percent), while use of traditional methods is limited (2 percent). The most popular methods are the pill (43 percent) and injection (10 percent). Two percent of married women have been sterilized and 1 percent reported using condoms.

The contraceptive prevalence rate (CPR) in Zimbabwe has increased steadily in the last 22 years, from 38 percent in 1984 to 60 percent in 2006 (see Figure 2). Table 4.1 also shows that CPR increases with age, reaching a peak at age 25-29 years (70 percent), and then declining to nearly 37 percent among women 45-49 years. Urban and higher-educated women are not only more likely to use contraception, but are also somewhat more likely to use long-term methods (e.g., female sterilization and implant) when compared to their counterparts living in rural areas and women with a primary or no education.

There are large differences in levels of contraceptive use by residence. While the CPR for modern methods is 60 percent or more for women in Harare, Bulawayo, Mashonaland East, Midlands, Mashonaland East, Mashonaland West, and Mashonaland Central, the corresponding rate in both Matabeleland North and Matabeleland South is only 43 percent.

Table 4.1. Current use of contraception: women

Percent distribution of currently married women by contraceptive method currently used, according to background characteristics, Zimbabwe 2005-06

Background characteristic	Modern method										Traditional method					Number of women			
	Any method	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Any traditional method	Periodic abstinence	Withdrawal	Folk method		Not currently using	Total	
																			Any traditional method
Age																			
15-19	36.7	35.7	0.0	0.0	31.7	0.0	2.9	0.2	0.3	0.0	0.6	1.0	0.0	1.0	0.0	0.0	63.3	100.0	448
20-24	61.6	60.4	0.0	0.0	50.1	0.0	8.3	0.8	0.8	0.0	0.4	0.1	0.1	0.7	0.3	0.3	38.4	100.0	1,200
25-29	70.3	69.1	0.3	0.0	53.1	0.3	12.0	1.8	1.0	0.0	0.6	1.2	0.1	0.2	0.2	0.2	29.7	100.0	1,125
30-34	68.1	66.4	1.2	0.0	47.8	0.5	11.2	2.2	2.3	0.1	1.0	1.8	0.1	1.2	0.4	0.4	31.9	100.0	933
35-39	64.1	61.3	2.6	0.2	40.6	0.6	13.4	0.7	2.5	0.0	0.8	2.8	0.6	2.1	0.1	0.1	35.9	100.0	556
40-44	54.9	51.3	6.9	0.2	28.1	0.6	11.6	1.3	2.5	0.0	0.0	3.7	0.7	1.9	1.1	1.1	45.1	100.0	485
45-49	36.6	33.9	10.6	0.2	15.3	0.4	5.9	0.3	1.0	0.0	0.2	2.7	0.0	1.4	1.4	1.4	63.4	100.0	396
Residence																			
Urban	69.8	68.3	3.4	0.1	47.7	0.8	11.2	2.8	1.9	0.0	0.5	1.5	0.2	0.9	0.4	0.4	30.2	100.0	1,742
Rural	55.3	53.4	1.3	0.0	40.6	0.0	9.2	0.4	1.2	0.0	0.6	2.0	0.2	1.3	0.4	0.4	44.7	100.0	3,401
Province																			
Manicaland	52.4	51.0	1.3	0.0	37.7	0.4	10.2	0.3	1.0	0.0	0.1	1.4	0.1	1.1	0.2	0.2	47.6	100.0	599
Mashonaland Central	61.4	59.8	1.1	0.0	48.8	0.0	7.1	0.7	1.8	0.0	0.3	1.6	0.4	0.6	0.6	0.6	38.6	100.0	572
Mashonaland East	64.0	63.4	0.8	0.0	45.9	0.3	11.7	1.4	2.6	0.0	0.7	1.6	0.0	0.6	0.0	0.0	36.0	100.0	442
Mashonaland West	62.0	60.6	1.1	0.0	48.5	0.0	9.4	0.7	0.5	0.1	0.2	1.4	0.1	0.9	0.4	0.4	38.0	100.0	514
Matabeleland North	45.7	43.0	3.9	0.6	24.4	0.6	12.0	0.3	1.3	0.0	0.0	2.6	0.0	1.8	0.9	0.9	54.3	100.0	323
Matabeleland South	47.2	42.6	3.1	0.0	21.1	0.0	13.3	1.4	2.6	0.0	1.1	4.6	0.0	3.1	1.5	1.5	52.8	100.0	208
Midlands	63.4	61.1	2.7	0.0	44.9	0.2	10.1	0.8	0.9	0.0	1.5	2.3	0.6	1.4	0.3	0.3	36.6	100.0	728
Masvingo	54.1	52.0	1.1	0.0	39.0	0.0	10.0	0.4	0.6	0.0	0.9	2.1	0.0	1.7	0.4	0.4	45.9	100.0	697
Harare	71.9	70.2	1.8	0.0	53.8	0.8	8.6	2.9	2.2	0.0	0.2	1.7	0.3	1.0	0.4	0.4	28.1	100.0	760
Bulawayo	67.0	66.0	6.9	0.3	40.8	0.9	10.2	4.2	2.2	0.0	0.3	1.0	0.0	0.5	0.5	0.5	33.0	100.0	301
Education																			
No education	34.7	30.3	1.7	0.0	22.8	0.0	5.1	0.4	0.0	0.0	0.2	4.5	0.7	2.9	0.9	0.9	65.3	100.0	276
Primary	53.9	52.0	2.1	0.0	37.9	0.0	9.7	0.3	1.3	0.0	0.7	1.9	0.1	1.1	0.7	0.7	46.1	100.0	1,910
Secondary	66.0	64.6	1.5	0.1	48.7	0.4	10.4	1.6	1.3	0.0	0.5	1.4	0.2	1.1	0.2	0.2	34.0	100.0	2,788
Higher	78.4	75.6	10.3	0.6	38.1	2.7	10.5	6.6	6.7	0.0	0.0	2.8	0.9	1.3	0.7	0.7	21.6	100.0	169
Living children																			
0	4.5	3.9	0.0	0.0	2.5	0.0	0.7	0.0	0.7	0.0	0.0	0.6	0.0	0.4	0.2	0.2	95.5	100.0	463
1-2	67.4	66.3	0.5	0.1	53.4	0.3	8.8	1.6	1.2	0.0	0.4	1.1	0.1	0.8	0.2	0.2	32.6	100.0	2,422
3-4	69.8	67.7	3.4	0.1	46.6	0.6	13.2	1.3	1.6	0.1	0.9	2.1	0.4	1.2	0.5	0.5	30.2	100.0	1,363
5+	55.1	51.2	5.1	0.0	30.2	0.1	12.2	0.8	2.0	0.0	0.8	3.9	0.1	2.7	1.1	1.1	44.9	100.0	896
Total	60.2	58.4	2.0	0.1	43.0	0.3	9.9	1.2	1.4	0.0	0.5	1.8	0.2	1.2	0.4	0.4	39.8	100.0	5,143

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

Table 4.2. Current use of contraception: men

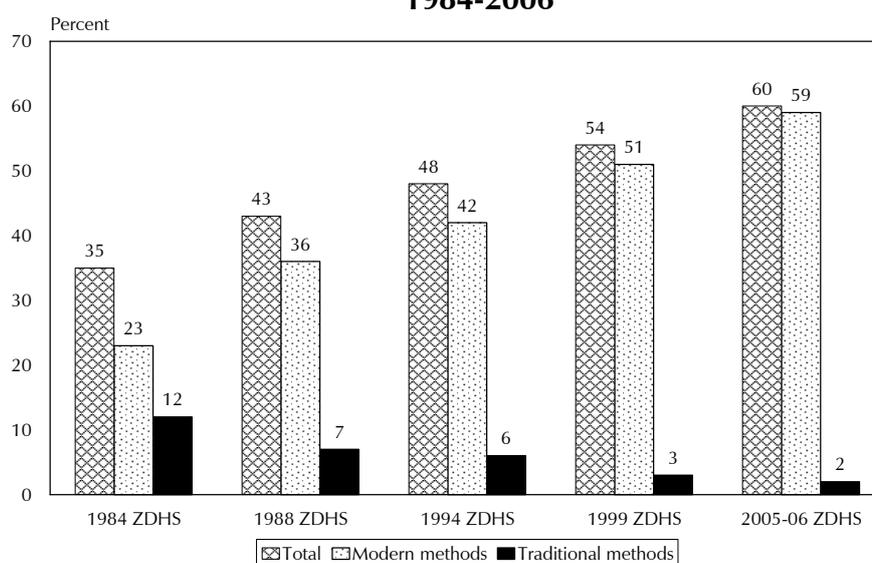
Percent distribution of currently married men by contraceptive method currently used, according to background characteristics, Zimbabwe 2005-06

Background characteristic	Modern method											Traditional				Number of men					
	Any modern method						Male sterilization					Any traditional method					Total				
	Any method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Dia-phragm	LAM	Any traditional method	Periodic abstinence	Withdrawal	Folk method	Not currently using						
Age																					
15-19	14.6	0.0	0.0	14.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	85.4	100.0	8	
20-24	54.3	0.0	0.0	45.4	0.0	1.6	0.0	6.3	0.0	0.0	0.0	0.3	0.3	0.2	0.5	0.5	0.3	45.7	100.0	311	
25-29	70.7	0.0	0.0	60.3	0.8	5.4	0.8	2.4	0.0	0.2	0.0	0.9	0.5	0.3	0.2	0.2	0.3	29.3	100.0	692	
30-34	76.2	0.0	0.0	60.5	0.4	8.7	1.0	3.7	0.0	0.0	0.0	1.0	0.5	0.1	0.1	0.1	0.5	23.8	100.0	755	
35-39	77.7	0.3	1.0	55.3	0.2	11.9	1.7	5.0	0.1	0.2	0.1	0.2	0.5	1.2	0.2	0.2	0.7	22.3	100.0	581	
40-44	77.5	2.2	0.7	50.9	0.6	11.0	2.3	6.4	0.0	0.5	0.2	0.5	0.7	2.0	0.2	0.2	0.7	22.5	100.0	414	
45-49	65.1	4.8	0.4	39.7	0.3	7.2	0.4	5.9	0.4	0.0	0.4	0.0	6.1	4.6	1.3	1.3	4.6	34.9	100.0	369	
50-54	57.5	5.1	0.3	33.9	0.4	6.4	0.3	6.8	0.0	0.2	0.0	0.2	4.1	2.6	1.5	1.5	2.6	42.5	100.0	288	
Residence																					
Urban	75.2	2.3	0.6	52.1	0.7	8.4	2.3	6.7	0.1	0.1	0.1	0.1	2.0	1.2	0.3	0.3	1.2	24.8	100.0	1,397	
Rural	67.4	0.6	0.2	52.7	0.3	7.5	0.1	3.3	0.1	0.2	0.1	0.2	2.5	1.7	0.5	0.5	1.7	32.6	100.0	2,022	
Province																					
Manicaland	69.3	2.0	1.0	47.7	0.1	9.3	0.3	4.1	0.0	0.5	0.0	0.5	4.4	2.9	0.7	0.7	2.9	30.7	100.0	367	
Mashonaland Central	70.4	0.8	0.2	60.5	0.0	5.2	0.2	2.0	0.0	0.2	0.0	0.2	1.3	0.5	0.2	0.2	0.5	29.6	100.0	363	
Mashonaland East	58.2	0.0	0.0	43.7	1.1	8.8	0.0	3.2	0.0	0.5	0.0	0.5	0.9	0.5	0.4	0.4	0.5	41.8	100.0	283	
Mashonaland West	77.7	0.9	1.3	62.0	0.2	6.7	0.3	4.1	0.0	0.1	0.0	0.1	2.0	0.9	0.9	0.9	0.9	22.3	100.0	380	
Matabeleland North	60.3	0.8	0.0	41.5	0.5	9.3	1.2	5.7	0.0	0.0	0.0	0.0	1.3	0.7	0.3	0.3	0.7	39.7	100.0	212	
Matabeleland South	52.6	0.0	0.0	37.2	0.0	3.9	0.9	10.0	0.0	0.0	0.0	0.0	0.6	0.0	0.6	0.6	0.0	47.4	100.0	117	
Midlands	67.0	1.1	0.0	51.5	0.3	7.0	1.4	3.4	0.0	0.0	0.0	0.0	2.5	1.9	0.4	0.4	1.9	33.0	100.0	487	
Masvingo	76.4	1.2	0.3	58.0	0.0	8.5	0.2	3.7	0.4	0.2	0.4	0.2	3.9	3.0	0.6	0.6	3.0	23.6	100.0	378	
Harare	79.9	1.3	0.1	58.9	1.0	9.7	1.8	5.1	0.1	0.0	0.1	0.0	1.9	1.5	0.0	0.0	1.5	20.1	100.0	628	
Bulawayo	66.9	4.8	0.7	33.4	1.1	6.3	4.4	13.8	0.0	0.0	0.0	0.0	2.3	1.2	0.3	0.3	1.2	33.1	100.0	205	
Education																					
No education	53.0	1.4	0.0	31.4	0.0	4.8	0.0	1.4	0.0	1.6	0.0	0.0	12.4	9.7	2.7	2.7	9.7	47.0	100.0	81	
Primary	64.9	1.4	0.3	48.6	0.2	7.5	0.1	3.9	0.1	0.1	0.1	0.1	2.8	2.0	0.6	0.6	2.0	35.1	100.0	1,036	
Secondary	73.4	0.8	0.3	55.8	0.6	8.0	1.2	4.9	0.0	0.2	0.0	0.2	1.6	0.9	0.3	0.3	0.9	26.6	100.0	2,033	
Higher	76.3	3.8	1.1	48.3	0.6	8.7	3.3	7.6	0.3	0.0	0.3	0.0	2.6	1.8	0.3	0.3	1.8	23.7	100.0	270	
Living Children																					
0	70.4	1.9	0.1	50.3	0.7	7.3	1.4	6.4	0.1	0.1	0.1	0.1	2.1	1.4	0.4	0.4	1.4	29.6	100.0	1,009	
1-2	71.6	0.7	0.7	53.6	0.4	8.2	0.9	4.3	0.0	0.2	0.0	0.2	2.3	1.4	0.6	0.6	1.4	28.4	100.0	1,367	
3-4	71.6	0.6	0.2	55.2	0.3	8.0	1.1	3.5	0.1	0.0	0.1	0.0	2.5	2.2	0.1	0.1	2.2	28.4	100.0	692	
5+	65.4	1.6	0.3	48.9	0.1	7.5	0.4	3.7	0.0	0.6	0.0	0.6	2.4	0.9	0.4	0.4	0.9	34.6	100.0	351	
Total	70.6	1.3	0.4	52.5	0.4	7.8	1.0	4.7	0.1	0.2	0.1	0.2	2.3	1.5	0.4	0.4	1.5	29.4	100.0	3,419	

Note: If more than one method is used, only the most effective method is considered in this tabulation.

LAM = Lactational amenorrhoea method

**Figure 2 Contraceptive Use among
Currently Married Women 15-49,
1984-2006**



E. Fertility Preferences

In order to assess future fertility preferences, respondents in the 2005-06 ZDHS were asked whether they wanted to have another child, and if so, how soon. Table 5 indicates that 42 percent of currently married women age 15-49 years stated that they want no more children, while almost one-third of women want to space their next birth.

Fertility preferences are closely related to the number of living children a woman has. In general, as the number of living children increases, the desire to want another child decreases. As observed in Table 5, the desire to have another child, whether sooner or later, decreases from 87 percent among currently married women without any children to 10 percent among women with six or more living children. Seventy-seven percent of women with six or more children say they do not want another child, while only 1 percent of women with no children would prefer not to have any children.

Table 5. Fertility preferences by number of living children

Percent distribution of currently married women by desire for children, according to number of living children, Zimbabwe 2005-06

Desire for children	Number of living children ¹							Total
	0	1	2	3	4	5	6+	
Have another soon ²	77.1	19.0	14.1	10.6	6.5	8.6	2.4	15.6
Have another later ³	7.8	58.5	38.5	28.0	14.6	14.0	7.3	32.1
Have another, undecided when	1.9	1.6	1.7	0.6	1.0	0.4	0.3	1.2
Undecided	5.3	4.3	6.1	6.4	4.4	3.6	4.2	5.1
Want no more	1.0	15.3	37.8	50.1	68.2	68.2	77.0	42.3
Sterilized ⁴	0.0	0.1	1.0	2.8	4.1	4.2	5.5	2.1
Declare infecund	6.9	1.3	0.7	1.2	1.0	0.8	2.9	1.5
Missing	0.0	0.1	0.2	0.4	0.3	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	276	1,228	1,299	825	585	398	532	5,143

¹ Includes current pregnancy

² Wants next birth within 2 years

³ Wants to delay next birth for 2 or more years

⁴ Includes both male and female sterilization

F. Maternity Care

Proper care during pregnancy and delivery are important for the health of both the mother and the baby. In the 2005-06 ZDHS, women who had given birth in the five years preceding the survey were asked a number of questions about maternal care. For the last live birth in that period, the mothers were asked whether they had received tetanus toxoid injections while pregnant, and whether they had obtained antenatal care during the pregnancy. For each birth in the same period, the mothers were also asked what type of assistance they received at the time of delivery. Table 6 summarizes information on the coverage of these maternal health services.

Antenatal Care

Antenatal care from a trained provider is important in order to monitor the pregnancy and reduce the risks for the mother and child during pregnancy and at delivery. According to the 2005-06 ZDHS results, 95 percent of women who gave birth in the five years preceding the survey received antenatal care from a trained health professional at least once. Coverage of antenatal care is slightly higher in urban areas than in rural areas (96 percent and 94 percent, respectively). Antenatal care is more common among higher-educated women and is almost universal for women with higher than secondary education.

Tetanus Toxoid

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 a failure to observe hygienic procedures during delivery. Table 6 indicates that 81 percent of mothers received at least one tetanus toxoid injection during pregnancy. Women who are first-time mothers, below the age of 35 years, who live in urban areas, as well as those with a secondary education are more likely to receive tetanus toxoid injections during pregnancy (81 percent or higher). At least 80 percent of mothers in all provinces except Manicaland, Matabeleland North, Matabeleland South, Midlands, and Masvingo received a tetanus toxoid injection. Manicaland is the province with the lowest percentage of women receiving a tetanus toxoid injection during pregnancy (74 percent).

Iron Supplements

Maternal anaemia is a common cause of both maternal and neonatal mortality. For this reason, women are given iron supplements during pregnancy. The results of the 2005-06 ZDHS indicate that in the five years preceding the survey, less than half of pregnant women (43 percent) received iron supplements. Women living in urban areas are less likely to receive iron supplements during pregnancy than women living in rural areas (41 and 44 percent, respectively). Pregnant women living in Harare are least likely to receive iron supplements (29 percent).

Delivery Care

Access to proper medical attention during delivery can reduce the risk of complications and infections that may lead to death or serious illness for the mother and/or baby. Table 6 shows that 80 percent of women were assisted by a trained health professional at their last birth. This is a decline from 83 percent observed in the 1999 ZDHS. Sixty-eight percent of pregnant women delivered in a health facility.

Differentials by mothers' background characteristics are generally similar to that for antenatal care. There is a marked difference in the percentage of women in urban and rural areas who were assisted by a trained health professional at delivery (96 and 73 percent, respectively). As with tetanus toxoid coverage and antenatal care, higher-educated women are more likely than others to receive medically trained assistance during delivery. Infants are most likely to be delivered by a trained health professional in Bulawayo and Harare (96 percent or higher). Seventy-five percent or more births in other provinces were assisted by a trained health person, except in Manicaland (73 percent) and Matabeleland North (72 percent).

Background characteristic	Percentage with antenatal care from health professional ¹	Percentage given at least one tetanus toxoid injection	Percentage given iron tablets/syrup during pregnancy	Number of women	Percentage delivered by a health professional ¹	Percentage delivered in a health facility	Number of births
Mother's age at birth							
<20	93.3	81.1	43.0	766	80.2	68.0	1,070
20-34	95.2	81.4	42.7	2,905	80.8	69.4	3,668
35+	92.0	76.1	44.2	428	70.0	56.0	492
Birth order							
1	95.8	83.6	44.7	1,236	86.3	78.3	1,654
2-3	95.4	81.8	42.0	1,764	82.4	69.7	2,207
4-5	93.8	79.8	43.2	715	70.7	56.8	886
6+	87.4	69.0	40.5	384	60.9	44.0	484
Residence							
Urban	96.2	85.0	41.4	1,284	96.2	92.7	1,513
Rural	93.7	78.9	43.6	2,815	73.0	57.8	3,718
Province							
Manicaland	88.9	73.7	39.2	497	73.1	60.0	679
Mashonaland Central	94.9	83.5	40.1	457	80.5	60.7	585
Mashonaland East	96.9	90.5	31.5	319	79.9	67.0	387
Mashonaland West	94.5	88.1	44.0	413	75.5	60.2	519
Matabeleland North	93.1	76.8	51.0	263	72.0	57.5	340
Matabeleland South	95.1	79.0	53.4	184	77.9	63.8	243
Midlands	94.1	77.2	43.0	584	76.4	63.9	774
Masvingo	96.3	78.8	56.0	609	75.1	66.8	790
Harare	96.0	80.6	28.5	566	96.3	91.5	666
Bulawayo	96.0	86.1	54.5	207	96.3	94.3	248
Education							
No education	94.1	68.3	47.1	166	52.5	34.2	213
Primary	91.7	75.5	41.8	1,443	69.3	51.6	1,922
Secondary	96.0	85.4	42.8	2,383	87.5	79.5	2,972
Higher	98.6	70.5	54.1	106	98.6	97.8	124
Total	94.5	80.8	42.9	4,099	79.7	67.9	5,231

¹ Doctor, nurse, midwife, or auxiliary midwife

G. Child Health

The 2005-06 ZDHS collected data on a number of key child health indicators, including childhood mortality rates, immunization of young children, infant feeding practices, and treatment practices when a child is ill.

Early Childhood Mortality

Infant and child mortality rates are basic indicators of a country's socioeconomic situation and quality of life. Estimates of childhood mortality are based on information collected in the birth history section of the questionnaire administered to individual women. Table 7 presents estimates for three successive five-year periods prior to the 2005-06 ZDHS. The rates are estimated directly from the information in the birth history on a child's birth date, survivorship status, and the age at death for children who died. All rates are expressed per 1,000 live births, except for child mortality, which is expressed per 1,000 children surviving to 12 months of age.

For the five years immediately preceding the survey (approximately calendar years 2001-2005), the infant mortality rate is 60 deaths per 1,000 live births, and the neonatal rate was 24 deaths per 1,000 births. The estimate of child mortality (age 12 months to 4 years) is 24 per 1,000 live children. The overall under-five mortality rate for the same period is 82 per 1,000. A comparison of the neonatal and post-neonatal rates indicate that 73 percent of early childhood deaths in Zimbabwe take place before a child's first birthday, with 29 percent occurring during the first month of life.

A comparison of mortality estimates obtained from the 2005-06 ZDHS with the estimates from the 1999 ZDHS for the period 0-4 years preceding the survey show the rates have decreased for all categories, except postneonatal mortality, which has remained at 36 deaths per 1,000 live births. The largest rate decrease is seen in the drop in under-five mortality from 102 in the 1999 to 82 in 2006.

Years preceding the survey	Neonatal mortality (NN)	Post-neonatal mortality ¹ (PNN)	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
0-4	24	36	60	24	82
5-9	18	19	37	17	54
10-14	20	21	40	18	58

¹ Computed as the difference between the infant and neonatal mortality rates

Vaccination of Children

In the 2005-06 ZDHS, mothers were asked to show the interviewer the health cards of all children born since August 2000 where immunization dates are recorded. The interviewer then copied from the cards the dates of each vaccination received. If a child never received a health card, or the mother was unable to show the card to the interviewer, the child's vaccination information was based on the mother's recall. Questions were asked for each vaccine type. A child was considered fully vaccinated if he or she had received a BCG vaccination against tuberculosis; three doses of DPT vaccine to prevent diphtheria, pertussis, and tetanus; at least three doses of polio vaccine; and one dose of measles vaccine. The results presented here are based on both health card information and, for those children without a card, information provided by the mother.

Table 8 pertains to children age 12 to 23 months, the age by which they should have received all vaccinations. Mothers were able to produce health cards for 72 percent of these children. Based on both the health cards and the mothers' reports, 53 percent of children have received all of the recommended vaccinations; 21 percent have not received any vaccinations. The remaining 26 percent of children were partially vaccinated. Three-quarters of children received BCG and the first dose of DPT and polio vaccine. Sixty-three percent of children completed the required three doses of the DPT vaccine, while 66

percent received three doses of the polio vaccine. Coverage of vaccination against measles is slightly lower (66 percent).

In the 1999 ZDHS, the number of children who received all of the recommended vaccinations was 67 percent. That value has declined by 21 percent in the six-year period. Of equal concern is the trend in the increasing percentage of children who have not received any vaccinations. In 1999, only 12 percent of children received none of the recommended vaccinations. The 2005-06 ZDHS found the percentage of children with no vaccinations to be 21 percent, a 75 percent increase from 1999.

Table 8. Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card seen, by background characteristics, Zimbabwe 2005-06

Background characteristic	BCG	DPT				Polio				Measles	All including DPT 4 and polio 4 ¹	All ¹	No vaccinations	Percentage with a vaccination card	Number of children
		1	2	3	4	1	2	3	4						
Sex															
Male	72.6	75.2	70.4	62.4	8.1	74.8	71.6	65.8	16.1	63.3	51.4	7.1	22.9	69.3	532
Female	79.2	78.7	73.4	63.2	10.3	79.8	75.9	66.4	16.5	68.2	53.8	8.5	18.9	75.5	487
Birth order															
1	78.8	79.5	74.0	64.8	9.3	80.7	76.2	69.3	14.0	72.8	57.5	7.2	18.4	73.7	330
2-3	78.5	79.1	75.9	66.4	8.9	80.2	77.4	69.2	19.2	67.3	54.7	7.3	18.9	74.9	443
4-5	69.0	68.8	66.1	57.6	13.7	69.5	67.4	60.1	18.4	61.3	49.5	13.7	28.4	68.3	157
6+	62.1	70.5	53.5	46.8	2.2	63.1	56.2	49.3	6.3	38.5	29.2	1.7	27.5	61.2	89
Residence															
Urban	79.0	78.6	75.0	68.8	10.4	80.4	78.0	73.3	17.3	71.6	58.0	8.7	18.8	74.6	309
Rural	74.3	76.1	70.5	60.2	8.6	75.8	71.7	62.9	15.8	63.1	50.2	7.3	21.9	71.3	710
Province															
Manicaland	61.4	60.7	58.5	50.2	2.6	63.6	61.6	55.9	18.0	54.5	41.2	2.6	35.7	64.3	137
Mashonaland Central	81.3	78.6	68.4	60.8	10.2	80.8	71.4	65.3	21.0	72.0	56.6	9.5	17.8	78.4	111
Mashonaland East	94.6	93.8	91.0	85.6	3.6	94.6	93.0	84.5	17.4	87.3	79.6	2.5	5.4	68.7	77
Mashonaland West	70.5	70.5	68.9	66.1	12.7	70.5	69.8	66.6	11.9	64.9	56.3	11.2	27.0	71.0	90
Matabeleland North	84.9	90.2	86.7	68.2	8.6	90.2	86.7	71.9	8.0	70.1	49.9	5.2	9.8	81.8	54
Matabeleland South	75.0	77.8	72.9	59.2	15.9	77.8	75.5	64.2	22.5	63.2	49.5	14.8	21.0	79.0	46
Midlands	74.7	73.4	68.9	57.9	10.7	73.8	69.0	57.6	11.1	55.9	42.6	7.9	22.4	74.2	155
Masvingo	72.4	80.9	73.1	62.1	9.4	77.6	74.8	67.0	17.8	63.6	50.2	8.1	18.0	71.9	170
Harare	77.3	77.1	70.3	61.7	9.6	78.2	73.9	67.3	16.2	68.5	51.3	7.9	21.8	67.2	123
Bulawayo	83.1	83.1	81.9	77.2	14.3	83.1	81.9	80.5	20.4	76.5	71.8	13.0	16.9	79.0	56
Education															
No education	(54.6)	(73.1)	(52.5)	(45.1)	(5.1)	(54.6)	(54.6)	(44.7)	(7.2)	(30.3)	(21.0)	(5.1)	(26.9)	(50.5)	41
Primary	76.1	74.9	70.6	60.4	10.0	76.3	71.6	62.8	15.6	59.8	49.9	8.7	21.7	71.9	348
Secondary	76.3	77.6	73.2	64.5	9.1	78.7	75.3	68.5	17.5	70.8	55.3	7.7	20.6	73.7	604
Higher	(90.2)	(90.2)	(87.1)	(82.8)	(7.3)	(90.2)	(90.2)	(87.1)	(9.6)	(80.1)	(72.8)	(0.0)	(9.8)	(78.8)	27
Total	75.7	76.9	71.8	62.8	9.2	77.2	73.6	66.1	16.3	65.6	52.6	7.7	21.0	72.3	1,019

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

¹ BCG, measles and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

² BCG, measles and four doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

Childhood Acute Respiratory Infection, Fever, and Diarrhoea

Acute respiratory infection (ARI), fever, and dehydration from diarrhoea are important contributing causes of childhood morbidity and mortality in developing countries. In the 2005-06 ZDHS, for each child under five years of age, mothers were asked if the child had experienced an episode of diarrhoea, a cough accompanied by short, rapid breathing (symptoms of ARI), or fever in the two weeks preceding the survey. Information was also collected on the percentage of episodes in which mothers sought treatment for their children.

Table 9 shows that of all children with symptoms of ARI or fever, only 29 percent were taken to a health care provider for treatment. Children showing symptoms of ARI or fever were likely to be taken for treatment at a health institution if the mother had a higher than secondary education (46 percent). Mothers living in urban areas were more likely to seek treatment for ARIs or fever and diarrhoea than those in rural areas (37 and 27 percent, respectively for ARI, and 39 and 29 percent, respectively for diarrhoea). Overall, 76 percent of children with diarrhoea were given oral rehydration therapy (ORT).

Table 9. Treatment for acute respiratory infection, fever, and diarrhoea

Among children under five years who were sick with a cough accompanied by short, rapid breathing, which are symptoms of acute respiratory infection (ARI) or fever in the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, and among children under five years who were sick with diarrhoea during the two weeks preceding the survey, percentage for whom treatment was sought from a health facility or provider, by background characteristics, Zimbabwe 2005-06

Background characteristic	Children with symptoms of ARI or with fever		Children with diarrhoea		
	Percentage for whom treatment was sought from a health facility/provider ¹	Number with ARI/fever	Percentage for whom treatment was sought from a health facility/provider ¹	Percentage given any ORT ²	Number with diarrhoea
Age in months					
<6	25.5	83	(12.4)	(59.3)	34
6-11	27.7	98	35.5	67.4	115
12-23	31.2	169	35.2	79.6	199
24-35	29.1	140	29.8	79.5	125
36-47	37.1	157	38.4	75.4	78
48-59	20.9	117	14.0	80.4	54
Sex					
Male	28.0	378	30.8	77.3	324
Female	30.7	387	32.1	73.8	281
Residence					
Urban	36.6	172	39.1	83.8	129
Rural	27.3	592	29.3	73.4	476
Province					
Manicaland	25.9	98	24.2	78.9	91
Mashonaland Central	25.5	83	28.4	78.0	59
Mashonaland East	(20.2)	53	(21.9)	(79.6)	46
Mashonaland West	28.5	89	38.4	78.7	68
Matabeleland North	37.5	38	(43.8)	(61.4)	31
Matabeleland South	(39.4)	28	33.9	67.1	34
Midlands	23.4	161	27.9	72.1	93
Masvingo	37.1	103	35.5	73.2	115
Harare	37.3	98	30.7	82.8	55
Bulawayo	*	14	*	*	14
Education					
No education	(29.2)	39	22.0	84.5	29
Primary	27.1	309	28.1	71.4	250
Secondary	30.7	405	33.9	77.4	316
Higher	*	11	59.6	100.0	10
Total	29.4	764	31.4	75.6	606

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 pharmacy, shop, and traditional practitioner

² Includes ORS, recommended home fluid, and increased fluids

H. Infant Feeding Practices

Breast milk contains all the nutrients needed by children in the first 6 months of life. Supplementing breast milk before the child is 4 months of age is discouraged, because it increases the likelihood of contamination, hence putting the infant at risk of diarrhoeal disease. At a later stage of the baby's development, breast milk should be supplemented by other liquids and eventually by solid or mushy food to provide adequate nourishment.

The 2005-06 ZDHS collected data on infant feeding for all children born in the five years preceding the survey. As shown in Table 10, 22 percent of mothers surveyed exclusively breastfed their children through the first 6 months of life. Sixteen percent of infants age 6 months and less are given plain water only, while 30 percent of children in the same age group are given other milk in addition to breast milk. By age 6-9 months, 79 percent are fed complementary food. Seven percent of infants are fed using a bottle with a nipple.

Table 10. Breastfeeding status by age

Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Zimbabwe 2005-06

Age in months	Breastfeeding and consuming:						Total	Number of children	Percentage using a bottle with a nipple ¹	Number of children
	Not breast-feeding	Exclusively breastfed	Plain water only	Water-based liquids/juice	Other milk	Complementary food				
<2	1.9	40.6	20.4	3.0	20.7	13.4	100.0	134	1.0	137
2-3	0.8	17.0	19.3	1.5	36.7	24.7	100.0	189	3.5	189
4-5	3.2	14.3	8.2	0.0	29.2	45.1	100.0	190	4.1	194
6-7	0.7	0.6	7.1	0.0	18.0	73.5	100.0	184	8.3	186
8-9	1.3	1.3	3.2	0.0	9.9	84.4	100.0	166	6.1	175
10-11	4.8	0.0	1.7	0.0	5.7	87.8	100.0	158	6.5	165
12-15	10.1	1.1	3.1	0.1	3.9	81.7	100.0	387	9.0	402
16-19	28.0	0.0	3.1	0.7	0.6	67.6	100.0	298	8.0	308
20-23	71.6	0.0	0.2	0.0	0.6	27.6	100.0	290	4.9	309
24-27	90.3	0.0	0.0	0.0	0.0	9.7	100.0	284	2.0	327
28-31	98.6	0.0	0.0	0.0	0.0	1.4	100.0	208	2.1	286
32-35	98.6	0.0	0.0	0.0	0.0	1.4	100.0	234	1.4	324
<6	2.0	22.2	15.5	1.4	29.7	29.3	100.0	513	3.1	520
6-9	1.0	0.9	5.2	0.0	14.2	78.7	100.0	350	7.2	361

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children classified as breastfeeding and consuming plain water only, consume no supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, water-based liquids/juice, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and water-based liquids and who do not receive complementary foods are classified in the water-based 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 Based on all children under three years

I. Nutritional Status of Children

Anthropometric indicators for young children were collected in the 2005-06 ZDHS to provide outcome measures of nutritional status. As recommended by the World Health Organization (WHO), evaluation of nutritional status in this report is based on the comparison of these three indices for the population of children in a survey with those reported for a reference population of well-nourished children. The indices are expressed as standard deviation units from the median for the reference group. Children who fall more than two standard deviations (-2 SD) below the reference median are regarded as moderately malnourished, while those who fall more than three standard deviations (-3 SD) below the reference median are considered severely malnourished. Marked differences, especially with regard to height-for-age and weight-for-age are often seen between different subgroups of children within a country.

Table 11 shows nutritional status for children under five years, according to three anthropometric indices by background characteristics. The table shows that for all the indices the percentages below -2 SD and -3 SD first increase with age and then decline among children age three years and older. Rural children in comparison with their urban counterparts make up a larger proportion of those who are below both -2 SD and -3 SD.

Height-for-age is the measure of linear growth. A child who is below minus two standard deviations from the reference mean for height-for-age is considered short for his/her age, or stunted, a condition reflecting the cumulative effect of chronic malnutrition. The percentage of stunted children (below -2 SD) is 29 percent. Males are more likely to be stunted (31 percent) than females (28 percent). In 1999, the percentage of stunted children was 27 percent. Thirty-one percent of stunted children are found in rural areas, while 24 percent live in urban areas. More than one-third (35 percent) of the children in the Mashonaland Central and Manicaland provinces are stunted. While seven of the ten provinces have seen an increase in stunting since the 1999 ZDHS, the level of stunting in Mashonaland Central has increased by 38 percent. The only provinces to observe a decrease in the level of stunting over the seven-year period were Mashonaland West (27 percent) and Masvingo (29 percent). Manicaland's level of stunting remained at 35 percent.

Weight-for-height describes current nutritional status. A child who is below minus two standard deviations from the reference mean for weight-for-height is considered too thin for his/her height, or wasted, a condition reflecting acute or recent nutritional deficit. Overall, wasting is 6 percent of children in the 2005-06 ZDHS. This is the same percentage that was observed in the 1999 ZDHS. In Mashonaland Central (6 percent), Mashonaland East (11 percent), Mashonaland West (9 percent), and Masvingo (7 percent) the levels of children wasting decreased since 1999 (7, 13, 19, and 9 percent, respectively). In Manicaland (5 percent), Matabeleland South (4 percent), and Bulawayo (5 percent) the percentages increased since 1999 (4, 6, and 1 percent, respectively). Wasting levels remained the same in Matabeleland North (6 percent) and Harare (4 percent) for the seven-year period.

Weight-for-age is a composite index of weight-for-height and height-for-age, and thus does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for his/her age because s/he is stunted, wasted or both. Weight-for-age is an overall indicator of a population's nutritional health. Seventeen percent of children in Zimbabwe are below two standard deviations for weight-for-age. This is an increase from 13 percent observed in the 1999 ZDHS. In six provinces—Mashonaland Central, Mashonaland East, Midlands, Masvingo, Harare, and Bulawayo—the percent of children below two standard deviations for weight-for-age has increased by at least 28 percent since 1999. Midlands, Harare, and Bulawayo have all seen at least a 70 percent increase in the level of children who are malnourished. In Mashonaland West (16 percent), Matabeleland South (16 percent), and Matabeleland North (14 percent), the percentages decreased during the same time period. In 1999, the levels were at 17, 19, and 15 percent, respectively. In Manicaland, the percentage remained the same (16 percent).

Table 11. Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Zimbabwe 2005-06

Background characteristic	Height-for-age		Weight-for-height		Weight-for-age		Number of children
	Percentage below -3 SD	Percentage below -2 SD ¹	Percentage below -3 SD	Percentage below -2 SD ¹	Percentage below -3 SD	Percentage below -2 SD ¹	
Age in months							
<6	1.1	7.8	0.7	5.1	0.4	2.1	382
6-9	5.2	16.9	0.3	5.6	1.1	10.5	312
10-11	8.8	26.8	1.4	8.3	4.4	18.4	145
12-23	15.5	39.6	1.6	9.3	4.1	20.9	931
24-35	13.4	30.4	1.6	6.9	4.9	21.0	970
36-47	13.9	31.7	1.4	5.4	3.3	16.8	1,028
48-59	9.6	29.2	1.2	4.8	2.5	15.5	1,092
Sex							
Male	11.7	31.2	1.5	6.7	3.4	17.1	2,441
Female	11.2	27.6	1.1	6.1	3.0	16.2	2,419
Residence							
Urban	9.9	23.8	0.8	4.5	2.0	11.3	1,186
Rural	11.9	31.2	1.5	7.0	3.6	18.4	3,674
Province							
Manicaland	14.7	34.9	0.8	5.4	2.8	16.2	643
Mashonaland Central	11.5	34.8	0.9	6.2	3.8	22.3	577
Mashonaland East	15.2	30.8	3.4	11.1	6.0	21.2	419
Mashonaland West	9.0	27.1	2.8	9.4	3.3	15.6	464
Matabeleland North	8.1	28.0	0.7	5.9	3.2	15.9	376
Matabeleland South	8.9	27.7	0.5	3.9	1.9	14.4	271
Midlands	10.2	27.3	0.4	5.3	2.0	16.9	764
Masvingo	12.6	28.9	2.2	7.1	3.5	16.7	653
Harare	11.4	25.1	0.4	3.9	2.8	10.2	490
Bulawayo	9.3	23.9	1.6	5.4	4.1	13.8	203
Education²							
No education	9.8	33.9	1.3	8.9	5.1	20.2	186
Primary	10.3	30.0	1.3	7.2	3.2	17.5	1,520
Secondary	10.9	28.0	1.1	5.7	2.8	14.9	2,339
Higher	3.7	12.1	0.0	1.0	0.6	1.6	91
Missing	0.0	0.0	0.0	0.0	0.0	0.0	1
Mother's age							
15-19	12.1	25.1	1.2	6.5	2.8	16.9	259
20-24	10.3	26.9	1.8	7.0	3.2	15.6	1,225
25-29	11.5	29.0	0.7	5.6	2.9	15.8	1,100
30-34	10.1	32.0	1.0	6.7	3.9	17.3	844
35-49	9.3	28.4	1.0	5.6	2.0	13.9	710
Mother's status							
Mother interviewed	10.4	28.7	1.1	6.2	2.9	15.9	3,880
Mother not interviewed, but in household	11.3	28.0	2.9	8.8	4.1	14.4	258
Mother not interviewed, not in household ³	16.7	33.7	2.0	6.8	4.6	21.5	720
Total	11.4	29.4	1.3	6.4	3.2	16.6	4,860

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the NCHS/CDC/WHO International Reference Population. The percentage of children who are more than three or more than two standard deviations below the median of the International Reference Population (-3 SD and -2 SD) are shown by background characteristics. Table is based on children who have a valid date of birth (month and year) and valid height and weight measurements.

¹ Includes children who are below -3 SD

² For women who were not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers were not listed in the household schedule

³ Includes children whose mothers are deceased

J. HIV/AIDS

The HIV/AIDS epidemic is a serious threat to Zimbabwe's social and economic development. The 2005-06 ZDHS included a series of questions that addressed respondents' knowledge about AIDS and their awareness of modes of HIV transmission, and behaviours that can prevent the spread of HIV.

The 2005-06 ZDHS also included anonymous HIV testing. All women and men who were eligible for the individual interview were asked if they would consent to give a blood sample for HIV testing. The dried blood spot (DBS) method of specimen collection was chosen for the 2005-06 ZDHS. Barcodes labels were placed on the DBS card, the corresponding questionnaire for the respondent, and the blood transmittal sheet for the cluster. A one-use, disposable lancet was used to perform a finger prick, allowing the interviewer to collect 5 drops of blood on specialized filter paper cards, also known as the DBS card. The field teams dried the DBS cards overnight and packaged them with desiccants and humidity indicator cards to maintain a dry and low-humidity environment for the DBS cards. ZDHS supervisors collected the DBS samples from the field teams about every 10 days. The samples were transported to CSO to be logged in electronically. After that process, samples were transported to the National Microbiology Reference Laboratory (NMRL) to be logged in, stored and tested. Initial findings related to the HIV test results for adults are presented below. A more detailed analysis of the results will be included in the final report.

Knowledge of HIV/AIDS

Table 12 shows levels of knowledge of HIV and AIDS among women and men. The percentage of women and men who have ever heard of HIV/AIDS is very high (98 percent and 99 percent, respectively). While knowledge of HIV/AIDS is virtually universal in all subgroups, there is greater variability in the percentage of women and men who believe there is a way to avoid HIV/AIDS.

Among women, those with no education and those living in Masvingo are the least likely to believe that HIV/AIDS can be avoided. Uneducated women and men living in Matabeleland South are least likely to believe that there is a way to avoid AIDS.

Table 12. Knowledge of HIV/AIDS

Percentage of women and men who have heard of HIV/AIDS and believe there is a way to avoid HIV/AIDS, by background characteristics, Zimbabwe 2005-06

Background characteristic	Women			Men		
	Has heard of HIV/AIDS	Believes there is a way to avoid HIV/AIDS	Number	Has heard of HIV/AIDS	Believes there is a way to avoid HIV/AIDS	Number
Age						
15-19	96.5	81.0	2,152	97.9	85.7	1,899
20-24	97.9	86.6	1,952	99.5	90.9	1,459
25-29	98.6	89.1	1,466	99.7	94.0	1,082
30-39	98.5	88.4	2,050	99.8	94.5	1,545
40-49	98.5	84.6	1,287	99.9	87.7	878
50-59	na	na	na	99.7	89.9	312
Marital status						
Never married	97.2	84.8	2,404	98.6	87.7	3,406
Married or living together	98.0	85.8	5,143	99.8	92.7	3,419
Divorced/separated/widowed	98.5	87.5	1,360	99.6	92.2	350
Residence						
Urban	99.2	91.7	3,502	99.8	95.1	2,904
Rural	97.0	81.9	5,405	98.8	87.0	4,271
Province						
Manicaland	98.7	84.5	1,043	98.8	89.7	829
Mashonaland Central	94.6	83.5	825	98.4	90.3	702
Mashonaland East	98.7	90.5	714	98.6	90.5	598
Mashonaland West	96.5	78.3	829	99.3	97.3	726
Matabeleland North	99.8	90.5	536	99.7	70.3	434
Matabeleland South	89.1	79.3	439	99.0	40.2	325
Midlands	98.8	89.1	1,193	99.2	95.3	1,003
Masvingo	99.6	76.4	1,137	99.4	96.6	800
Harare	98.4	88.9	1,492	99.7	97.5	1,274
Bulawayo	99.9	97.7	697	100.0	92.6	483
Education						
No education	95.5	74.9	380	96.5	60.7	111
Primary	96.2	78.4	2,902	98.1	83.2	1,956
Secondary	98.9	90.0	5,355	99.7	93.4	4,687
Higher	99.5	96.3	270	100.0	96.2	422
Total	97.9	85.8	8,907	99.2	90.3	7,175

na= Not applicable

Condom Use

Condoms can reduce the risk of sexually transmitted infections, including HIV, when used correctly and consistently. It is against this background that information on condom use was collected in the 2005-06 ZDHS.

Tables 13.1 and 13.2 show the level of condom use among respondents who were sexually active during the 12 months prior to the survey by sex, type of partner, and by background characteristics. The results indicate of the three types of partners, both women and men were most likely to use condoms with non-cohabiting partners (46 percent and 71 percent, respectively). In contrast, women and men were least likely to use condoms with a spouse or cohabiting partner (4 percent and 8 percent, respectively). Overall, 8 percent of women and 24 percent of men reported using a condom with any partner.

Condom use with any partner is highest among women and men age 15-19; never married; or divorced, separated, or widowed. The proportions of women and men who used condoms with a non-cohabiting partner, or a spouse or cohabiting partner are higher in urban than in the rural areas. Moreover, for both sexes, condom use generally increases with level of education.

Tables 13.1 and 13.2 also show that of the three types of partners, both women and men were most likely to use condoms with non-cohabiting partners. Condom use with any partner is highest among women and men age 15-19 years of age.

Table 13.1 Use of condoms by type of partner: women						
Among women who have had sexual intercourse in the past year, percentage who used a condom during last sexual intercourse with spouse or cohabiting partner, with non-cohabiting partner, and with any partner, by background characteristics, Zimbabwe 2005-06						
Background characteristic	Spouse or cohabiting partner		Non-cohabiting partner		Any partner	
	Percent	Number	Percent	Number	Percent	Number
Age						
15-19	2.4	460	40.1	150	11.2	603
20-24	2.4	1,244	41.3	198	7.6	1,436
25-29	2.6	1,162	53.2	103	6.7	1,259
30-39	5.6	1,515	53.0	155	9.9	1,662
40-49	3.7	855	42.3	67	6.5	920
Marital status						
Never married	9.1	7	44.3	344	43.8	350
Married or living together	3.2	5,003	(26.3)	30	3.2	5,018
Divorced/separated/widowed	12.0	225	49.2	300	33.4	512
Residence						
Urban	4.4	1,773	55.2	351	12.7	2,107
Rural	3.1	3,463	35.4	323	5.8	3,772
Province						
Manicaland	3.9	610	(48.0)	58	7.7	667
Mashonaland Central	2.6	590	(71.6)	35	6.3	623
Mashonaland East	3.9	440	(36.0)	36	6.3	472
Mashonaland West	3.7	528	(66.2)	55	9.7	581
Matabeleland North	3.3	320	25.4	71	7.3	390
Matabeleland South	6.0	205	29.5	76	12.1	279
Midlands	3.1	754	34.2	62	5.5	813
Masvingo	2.3	719	(38.1)	54	4.5	770
Harare	4.3	772	51.6	124	10.7	888
Bulawayo	5.1	296	57.5	103	18.3	397
Education						
No education	1.6	264	*	19	3.8	283
Primary	2.7	1,935	33.9	184	5.2	2,106
Secondary	4.0	2,861	50.3	447	10.2	3,292
Higher	9.5	175	(58.5)	24	15.5	199
Total	3.6	5,235	45.7	674	8.3	5,879

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 13.2 Use of condoms by type of partner: men

Among men who have had sexual intercourse in the past year, percentage who used a condom during last sexual intercourse with spouse or cohabiting partner, with non-cohabiting partner, and with any partner, by background characteristics, Zimbabwe 2005-06

Background characteristic	Spouse or cohabiting partner		Non-cohabiting partner		Any partner	
	Percent	Number	Percent	Number	Percent	Number
Age						
15-19	*	11	53.2	331	52.7	342
20-24	8.4	315	75.6	593	51.1	854
25-29	5.9	695	77.7	310	22.9	913
30-39	7.4	1,341	81.7	221	13.6	1,456
40-49	8.6	783	61.6	73	10.8	817
50-59	8.5	283	*	13	10.4	290
Marital status						
Never married	*	12	69.4	1,044	69.0	1,057
Married or living together	7.3	3,364	78.1	304	8.1	3,384
Divorced/separated/widowed	22.5	51	69.9	192	59.5	231
Residence						
Urban	8.6	1,394	82.7	674	29.1	1,923
Rural	7.0	2,033	62.2	866	21.1	2,748
Province						
Manicaland	8.8	375	76.6	145	24.9	491
Mashonaland Central	7.5	364	79.0	154	24.8	483
Mashonaland East	5.5	282	72.6	85	20.0	357
Mashonaland West	6.3	381	78.1	167	23.7	498
Matabeleland North	8.6	213	44.6	129	20.4	323
Matabeleland South	15.1	114	67.5	68	34.3	180
Midlands	4.7	485	58.7	186	17.4	642
Masvingo	8.4	377	60.2	186	22.0	525
Harare	7.4	630	84.3	269	26.2	831
Bulawayo	12.8	207	79.3	152	39.8	343
Education						
No education	0.6	81	*	12	6.5	89
Primary	7.1	1,043	50.9	379	16.9	1,349
Secondary	7.9	2,034	77.4	1,072	28.4	2,902
Higher	10.3	269	87.6	77	25.1	331
Total	7.7	3,427	71.2	1,540	24.4	4,671

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

HIV Testing

Most of the current information on national HIV prevalence in Zimbabwe derives from surveillance of the level of HIV in special populations, such as women attending antenatal clinics, sex workers, or individuals treated at health facilities for sexually transmitted infections. However, these surveillance data results do not provide an estimate of the HIV prevalence among the general population. It was therefore decided to test a representative sample of women age 15-49 years and men age 15-54 years through the 2005-06 ZDHS.

Coverage of HIV Testing

Table 14 shows percent distribution of women age 15-49 years and men age 15-54 years eligible for HIV testing by residence and province. Coverage of the HIV testing was higher in rural areas (78 percent) than in urban areas (58 percent). Similarly, a larger proportion of women (76 percent) consented to HIV testing than men (63 percent). Refusals were highest among urban men: of the 3,421 men age 15-54 years and eligible for HIV testing in the urban areas, 22 percent refused to provide blood for the tests.

Table 14. Coverage of HIV testing			
Percent distribution of women age 15-49 and men age 15-54 eligible for HIV testing by testing status, according to residence (unweighted), Zimbabwe 2005-06			
Testing status	Residence		Total
	Urban	Rural	
WOMEN			
Tested	65.1	82.6	75.9
Refused to provide blood	18.8	9.8	13.2
Absent/other			
Interviewed	1.2	1.0	1.1
Not interviewed	14.9	6.6	9.8
Total	100.0	100.0	100.0
Number	3,763	6,107	9,870
MEN			
Tested	49.4	72.4	63.4
Refused to provide blood	21.7	14.6	17.4
Absent/other			
Interviewed	0.8	1.3	1.1
Not interviewed	28.1	11.7	18.1
Total	100.0	100.0	100.0
Number	3,421	5,340	8,761
TOTAL			
Tested	57.6	77.8	70.0
Refused to provide blood	20.2	12.1	15.2
Absent/other			
Interviewed	1.0	1.1	1.1
Not interviewed	21.2	9.0	13.7
Total	100.0	100.0	100.0
Number	7,184	11,447	18,631

HIV Prevalence

The adult HIV prevalence observed in the 2005-06 ZDHS is 18 percent. This figure is based on a representative sample of women age 15-49 years and men age 15-54 years that provided blood for HIV testing during the survey. Twenty-one percent of women are HIV positive, and 15 percent of men are HIV positive.

HIV Prevalence by Age

Table 15 shows HIV prevalence by age and sex. Among people age 15-19 years of age, the proportions of HIV positive women and men are 6 percent and 3 percent, respectively. HIV prevalence increases with age for both sexes, and peaks at age 30-34 years for women and 35-39 years for men. HIV prevalence is higher for women than men in every age group from 15 to 39 years of age; while, HIV prevalence is higher among men than women in the ages above 40 years.

Age	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-19	6.2	1,682	3.1	1,692	4.6	3,375
20-24	16.3	1,518	5.8	1,247	11.6	2,765
25-29	28.8	1,150	13.1	907	21.9	2,057
30-34	35.4	955	29.5	716	32.9	1,671
35-39	34.5	656	32.1	546	33.4	1,201
40-44	25.7	529	32.9	404	28.9	934
45-49	18.0	458	26.0	335	21.4	793
50-54	na	na	20.0	253	20.0	253
Total age 15-49	21.1	6,947	14.5	5,848	18.1	12,796
Total men age 15-54	na	na	14.8	6,102	18.1	13,049

na = Not applicable

HIV Prevalence by Socioeconomic Characteristics

Table 16 shows HIV prevalence by socioeconomic characteristics. HIV prevalence is similar among urban and rural areas (19 and 18 percent, respectively). Among men HIV prevalence declines as one's educational level increases; whereas for women the prevalence rates are relatively the same for all levels of education (between 20 and 22 percent) except for women with higher than secondary education (16 percent). Overall, HIV prevalence declines as the level of education increases.

HIV prevalence by province shows that Matabeleland South has the highest prevalence rate with 21 percent, followed by Manicaland with 20 percent. The lowest prevalence is observed in Masvingo with 15 percent, followed by Midlands with 16 percent.

Table 16. HIV prevalence by socioeconomic characteristics

Percentage HIV positive among interviewed women and men age 15-49 who were tested, by background characteristics, Zimbabwe 2005-06

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Residence						
Urban	21.6	2,670	15.7	2,319	18.9	4,990
Rural	20.8	4,277	13.8	3,529	17.6	7,806
Province						
Manicaland	22.3	823	16.6	693	19.7	1,516
Mashonaland Central	22.9	665	13.8	617	18.5	1,282
Mashonaland East	21.3	560	14.4	488	18.0	1,048
Mashonaland West	22.5	666	15.4	604	19.1	1,270
Matabeleland North	22.8	421	14.4	349	19.0	770
Matabeleland South	24.6	345	15.6	259	20.8	604
Midlands	20.1	935	11.5	809	16.1	1,744
Masvingo	17.3	898	12.1	654	15.1	1,552
Harare	21.1	1,169	17.3	1,052	19.3	2,221
Bulawayo	19.6	466	12.8	324	16.8	789
Education						
No education	20.0	301	23.4	61	20.6	362
Primary	22.4	2,263	15.0	1,550	19.4	3,813
Secondary	20.7	4,194	14.3	3,936	17.6	8,131
Higher	15.8	189	12.8	302	14.0	490
Total	21.1	6,947	14.5	5,848	18.1	12,796

K. Malaria

Malaria is one of the leading causes of death in developing countries. The 2005-06 ZDHS collected data on measures to prevent malaria including the use of mosquito nets among women and children, and prophylactic use of antimalarial drugs.

Use of Mosquito Nets

Table 17 shows that 34 percent of households in urban areas are in possession of at least one mosquito net compared with 13 percent in rural areas. Sixteen percent of children under 5 years in urban areas slept under a mosquito net the night before the survey compared with 3 percent in rural areas. In urban areas, 8 percent of children under 5 years were reported to have slept under an insecticide treated net (ITN) the night before the survey compared with 2 percent in rural areas.

Malaria Treatment during Pregnancy

The 2005-06 ZDHS also collected data on malaria treatment during pregnancy. WHO recommendations to prevent malaria during pregnancy include intermittent preventive treatment (IPT) with at least two doses of an effective antimalarial drug, such as sulfadoxine-pyrimethamine (SP), during routine antenatal clinic visits. Table 17 shows that 49 percent of women in rural areas took antimalarial drugs for malaria prevention during the last pregnancy in the 5 years preceding the survey compared with 23 percent in urban areas. Five percent of women in rural areas also received IPT during an antenatal visit compared with 2 percent in urban areas.

Treatment of Children with Fever

Table 17 shows that among children under five years with fever in the two weeks preceding the survey, 6 percent of children in rural areas and nearly 2 percent of children in urban areas took antimalarial drugs. Among children with fever, 4 percent in rural areas and nearly 2 percent in urban areas took antimalarial drugs the same day or next day after developing a fever.

Table 17. Malaria indicator			
Possession and use of mosquito nets, malaria treatment during pregnancy, and treatment of children with fever, by urban-rural residence, Zimbabwe 2005-2006			
Malaria indicators	Residence		Total
	Urban	Rural	
Mosquito net			
Percentage of household with at least one mosquito net (treated or untreated)	34.4	12.8	20.3
Percentage of children under five who slept under a mosquito net the night before the survey	16.3	3.2	6.7
Percentage of children under five who slept under an insecticide treated net (ITN) the night before the interview	7.6	2.4	3.8
Malaria treatment during pregnancy			
Percentage of last births in the five years preceding the survey for which the mother took antimalarial drugs for prevention during the pregnancy	23.1	49.0	40.9
Percentage of last births in the five years preceding the survey for which the mother got intermittent preventive treatment (IPT) during an antenatal visit	2.4	5.5	4.6
Treatment of fever			
Among children under five with fever in the two weeks preceding the survey, percentage who took antimalarial drugs	1.6	5.9	4.7
Among children under five with fever in the two weeks preceding the survey, percentage who took antimalarial drugs the same day/next day after developing fever	1.6	4.2	3.4
Number of household	3,201	6,084	9,285
Number of children under five years of age	1,535	4,233	5,768
Number of last births in the five years preceding the survey	1,284	2,815	4,099
Number of living children under age five years with fever in the two weeks preceding the survey	102	265	367

¹ An Insecticide Treated Net (ITN) is a permanent net that does not require any treatment, a pre-treated net obtained within the last six months or a net that has been soaked with insecticide within the past six months.

² Intermittent preventive treatment (IPT) is treatment with at least two doses of PS/Fansidar during antenatal visits.

References

Central Statistical Office [Zimbabwe] and Macro International Inc. 2000. *Zimbabwe Demographic and Health Survey 1999*. Calverton, Maryland: Central Statistical Office and Macro International Inc.

DeMaeyer, E. 1989. *Preventing and controlling iron deficiency anaemia through primary health care: A guide health administrators and programme managers*. Geneva: World Health Organization.

MEASURE DHS Preliminary Reports

Turkey 1998	December	1998	(English)
Ghana 1998	May	1999	(English)
Guatemala 1997	June	1999	(espagnol)
Guinea 1999	October	1999	(French)
Kazakhstan 1999	December	1999	(English/Russian)
Tanzania 1999	February	2000	(English)
Zimbabwe 1999	March	2000	(English)
Bangladesh 1999-2000	June	2000	(English)
Egypt 2000	June	2000	(English)
Ethiopia 2000	August	2000	(English)
Haiti 2000	September	2000	(French)
Cambodia 2000	November	2000	(English)
Turkmenistan 2000	January	2001	(English)
Malawi 2000	February	2001	(English)
Rwanda 2000	February	2001	(French)
Armenia 2000	March	2001	(English)
Gabon 2000	March	2001	(French)
Uganda 2001	May	2001	(English)
Mauritania 2001	July	2001	(French)
Nepal 2001	August	2001	(English)
Mali 2001	December	2001	(French)
Nicaragua 2001	December	2001	(Spanish)
Benin 2001	February	2002	(French)
Éritrea 2002	September	2002	(English)
Zambia 2002	October	2002	(English)
Jordan 2002	November	2002	(English)
Dominican Republic 2002	January	2003	(Spanish)
Uzbekistan 2002	May	2003	(English)
Indonesia 2003	August	2003	(English)
Nigeria 2003	October	2003	(English)
Kenya 2003	December	2003	(English)
Indonesia (young adult) 2002	December	2003	(English)
Jayapura City, Indonesia (young adult) 2002	December	2003	(English)
Philippines 2003	January	2004	(English)
Bolivia 2003	March	2004	(Spanish)
Mozambique 2003	April	2004	(English)
Burkina Faso 2002-03	May	2004	(French)
Ghana 2003	June	2004	(English)
Morocco 2003-04	June	2004	(French)
Bangladesh 2004	September	2004	(English)
Cameroon 2004	October	2004	(French)
Madagascar 2003-04	October	2004	(French)
South Africa 2003-04	December	2004	(English)
Chad 2004	February	2005	(French)
Kenya (SPA) 2004	March	2005	(English)
Peru Continuous 2004-05	April	2005	(Spanish)
Tanzania 2004-05	May	2005	(English)
Uganda (AIS) 2004-05	June	2005	(English)
Senegal 2005	July	2005	(French)
Malawi 2004	August	2005	(English)
Guinea 2005	August	2005	(French)
Lesotho 2004	October	2005	(English)
Egypt 2005	September	2005	(English)
Rwanda 2005	November	2005	(French)
Ethiopia 2005	November	2005	(English)
Moldova 2005	November	2005	(English/Romanian)
Vietnam (AIS) 2005	February	2006	(English/Vietnamese)
Armenia 2005	March	2006	(English)
Congo (Brazzaville) 2005	March	2006	(French)
Côte d'Ivoire (AIS) 2005	June	2006	(French)
Cambodia 2005	July	2006	(English)
Zimbabwe 2005-06	August	2006	(English)

MEASURE DHS Preliminary Reports are distributed to a limited number of recipients needing early access to survey findings and are not available for general distribution. The national implementing agency is responsible for in-country distribution; MEASURE DHS is responsible for external distribution. Publication of MEASURE DHS final reports meant for general distribution is expected 9 to 12 months after publication of the preliminary report.