

Lesotho - Demographic and Health Survey 2014

Lesotho Ministry of Health (MOH) - Government of Lesotho

Report generated on: June 2, 2017

Visit our data catalog at: <http://microdata.worldbank.org>

Sampling

Sampling Procedure

Sample Design

The sampling frame used for the 2014 LDHS is an updated frame from the 2006 Lesotho Population and Housing Census (PHC) provided by the Lesotho Bureau of Statistics (BOS). The sampling frame excluded nomadic and institutional populations such as persons in hotels, barracks, and prisons.

The 2014 LDHS followed a two-stage sample design and was intended to allow estimates of key indicators at the national level as well as in urban and rural areas, four ecological zones, and each of Lesotho's 10 districts. The first stage involved selecting sample points (clusters) consisting of enumeration areas (EAs) delineated for the 2006 PHC. A total of 400 clusters were selected, 118 in urban areas and 282 in rural areas.

The second stage involved systematic sampling of households. A household listing operation was undertaken in all of the selected EAs in July 2014, and households to be included in the survey were randomly selected from these lists. About 25 households were selected from each sample point, for a total sample size of 9,942 households. Because of the approximately equal sample sizes in each district, the sample is not self-weighting at the national level, and weighting factors have been added to the data file so that the results will be proportional at the national level.

For further details on sample selection, see Appendix A of the final report.

Response Rate

A total of 9,942 households were selected for the sample, of which 9,543 were occupied. Of the occupied households, 9,402 were successfully interviewed, yielding a response rate of 99%. This compares favourably to the 2009 LDHS response rate (98%).

In the interviewed households, 6,818 eligible women were identified for individual interviews; interviews were completed with 6,621 women, yielding a response rate of 97%. In the subsample of households selected for the male survey, 3,133 eligible men were identified and 2,931 were successfully interviewed, yielding a response rate of 94%. The lower response rate for men was likely due to their more frequent and longer absences from the household.

Weighting

Due to the nonproportional allocation of the sample across districts and the differential response rates, sampling weights must be used in all analyses of the 2014 LDHS results to ensure that survey results are representative at both the national and domain level.

Design weights were adjusted for household nonresponse and individual nonresponse to obtain the sampling weights for households and for women and men, respectively. Nonresponse is adjusted at the sampling stratum level. 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. 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. After adjusting for nonresponse, the sampling weights are normalised to get the final standard weights that appear in the data files. The normalisation process is aimed at obtaining a total number of unweighted cases equal to the total number of weighted cases using normalised weights at the national level, for the total number of households, women, and men. 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, and the individual man's weight. The normalised weights are relative weights that are valid for estimating means, proportions, ratios, and rates, but they are not valid for estimating population totals or for pooled data. The sampling weights for HIV testing are calculated in a similar way, but the normalization of the HIV weights is different. The individual HIV testing weights are normalized at the national level for women and men together so that HIV prevalence estimates calculated for women and men together are valid.

For further details on sampling weight, see Appendix A.4 of the final report.

Questionnaires

Overview

Three questionnaires were used for the 2014 LDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's 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 Lesotho. Input was solicited from various stakeholders representing government ministries and agencies, nongovernmental organisations, and international donors. After the preparation of the definitive questionnaires in English, the questionnaires were translated into Sesotho.

Data Collection

Data Collection Dates

Start	End	Cycle
2014-09-22	2014-12-07	N/A

Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

TRAINING OF FIELD STAFF

The MOH recruited and trained 100 people for the main fieldwork to serve as supervisors, interviewers, secondary editors, and reserve interviewers. The field staff main training took place over four weeks (6-29 August 2014) at the Khotsong Lodge in Thaba-Bosiu, Lesotho. 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, instruction in weighing and measuring children and adults, mock interviews between participants in the classroom, practice biomarker collection between participants, and practice interviews with real respondents in areas outside the 2014 sample points. In addition, participants completed limited field practice in blood pressure measurement, anthropometry, anaemia testing, and blood collection for HIV testing.

FIELDWORK

Data collection was carried out by 15 field teams, each consisting of one team supervisor, two or three female interviewers, two or three male interviewers, and one driver. All interviewers on each team also served as biomarker technicians. Electronic data files containing interview results were transferred from each interviewer's PDA to the team supervisor's tablet each day. Six senior staff members from the MOH coordinated and supervised fieldwork activities. Electronic data files were transferred to the central office every few days via the secured Internet File Streaming System (IFSS). Participants in fieldwork monitoring also included two survey technical specialists from The DHS Program.

Data collection took place over a 2.5-month period, from 22 September 2014 through 7 December 2014. The substantial gap between the end of the main training and the start of fieldwork was due to concerns about team safety following political disturbances on 30 August 2014. Immediately prior to the launch, the MOH conducted a two-day refresher training course for interviewers and supervisors at MOH headquarters.

Data Collectors

Name	Abbreviation	Affiliation
Lesotho Ministry of Health (MOH)	MOH	Government of Lesotho

Data Processing

Data Editing

In this survey, instead of using paper questionnaires, interviewers used personal digital assistants (PDAs) to record responses during interviews, and team supervisors managed the data using tablet computers. The PDAs and tablets were equipped with Bluetooth technology to enable remote electronic transfer of files (e.g., 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 2014 LDHS was developed by The DHS Program using the mobile version of CSPro.

The data processing operation included secondary editing, which involved resolution of computer-identified inconsistencies and coding of open-ended questions. The data were processed by one person who took part in the main fieldwork training. Data editing was accomplished using CSPro software. Secondary editing and data processing were initiated in October 2014 and completed in February 2015.

Data Appraisal

Estimates of Sampling Error

The 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 2014 Lesotho Demographic and Health Survey (2014 LDHS) 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 2014 LDHS 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 2014 LDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed by SAS programs developed by ICF International. These programs use the Taylor linearisation 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 linearisation 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.

Note: A more detailed description of estimate of sampling error is presented in APPENDIX B of the survey report.

Other forms of Data Appraisal

Data Quality Tables

- Household age distribution
- Age distribution of eligible and interviewed women
- Age distribution of eligible and interviewed men
- Completeness of reporting
- Births by calendar years
- Reporting of age at death in days
- Sibship size and sex ratio of siblings

Note: See detailed data quality tables in APPENDIX D of the report.

Related Materials

Questionnaires

2014 Lesotho Demographic and Health Survey, Household Questionnaire

Title 2014 Lesotho Demographic and Health Survey, Household Questionnaire
 Author(s) Lesotho Ministry of Health
 Date 2014-09-01
 Country Lesotho
 Language English
 Filename Lesotho_2014_DHS_hh_questionnaire.pdf

2014 Lesotho Demographic and Health Survey, Biomarker Data Collection Form

Title 2014 Lesotho Demographic and Health Survey, Biomarker Data Collection Form
 Author(s) Lesotho Ministry of Health
 Date 2014-09-01
 Country Lesotho
 Language English
 Filename Lesotho_2014_DHS_biomarker_questionnaire.pdf

2014 Lesotho Demographic and Health Survey, Woman's Questionnaire

Title 2014 Lesotho Demographic and Health Survey, Woman's Questionnaire
 Author(s) Lesotho Ministry of Health
 Date 2014-09-01
 Country Lesotho
 Language English
 Filename Lesotho_2014_DHS_woman_questionnaire.pdf

2014 Lesotho Demographic and Health Survey, man's Questionnaire

Title 2014 Lesotho Demographic and Health Survey, man's Questionnaire
 Author(s) Lesotho Ministry of Health
 Date 2014-09-01
 Country Lesotho
 Language English
 Filename Lesotho_2014_DHS_man_questionnaire.pdf

Reports

Lesotho 2014 Demographic and Health Survey, Report

Title Lesotho 2014 Demographic and Health Survey, Report
 Author(s) Ministry of Health, Maseru, Lesotho The DHS Program, ICF International, Rockville, Maryland, USA
 Date 2016-05-01
 Country Lesotho
 Language English

TABLES AND FIGURES	vii
FOREWORD	xv
READING AND UNDERSTANDING TABLES FROM THE 2014 LHDS	xvii
ADDITIONAL DHS PROGRAM RESOURCES	xxv
ACRONYMS AND ABBREVIATIONS	xxvii
MILLENNIUM DEVELOPMENT GOAL INDICATORS	xxx
MAP OF LESOTHO	xxx
1 INTRODUCTION AND SURVEY METHODOLOGY	1
1.1 Survey Objectives	1
1.2 Sample Design	1
1.3 Questionnaires	2
1.4 Blood Pressure Measurement, Anthropometry, Anaemia Testing, and HIV Testing	3
1.5 Pretest	4
1.6 Training of Field Staff	4
1.7 Fieldwork	5
1.8 Data Processing	5
1.9 Response Rates	5
2 HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION	7
2.1 Drinking Water Sources and Treatment	7
2.2 Sanitation	8
2.3 Exposure to Smoke Inside the Home	9
2.4 Household Wealth	10
2.5 Hand Washing	10
2.6 Household Population and Composition	11
2.7 Birth Registration	12
2.8 Children's Living Arrangements and Parental Survival	12
2.9 Education	13
2.9.1 Educational Attainment	13
2.9.2 School Attendance	13
2.10 Distance to a Health Facility	14
3 CHARACTERISTICS OF RESPONDENTS	31
3.1 Basic Characteristics of Survey Respondents	31
3.2 Education and Literacy	32
3.3 Mass Media Exposure	33
3.4 Employment	34
3.5 Occupation	34
3.6 Health Insurance Coverage	35
3.7 Tobacco Use	35
3.8 Time Away from Home	36
4 MARRIAGE AND SEXUAL ACTIVITY	57
4.1 Marital Status	57
4.2 Polygyny	58
4.3 Age at First Marriage	59
4.4 Age at First Sexual Intercourse	59
4.5 Recent Sexual Activity	60
5 FERTILITY	71
5.1 Current Fertility	71
5.2 Children Ever Born and Living	72
5.3 Birth Intervals	73
5.4 Inseparability to Pregnancy	73
5.5 Age at First Birth	74
5.6 Teenage Childbearing	75
6 FERTILITY PREFERENCES	85
6.1 Desire for Another Child	85
6.2 Ideal Family Size	86
6.3 Fertility Planning Status	87
6.4 Wanted Fertility Rates	88
7 FAMILY PLANNING	97
7.1 Contraceptive Knowledge and Use	98
7.2 Source of Modern Contraceptive Methods	99
7.3 Informed Choice	100
7.4 Discontinuation of Contraceptives	100
7.5 Demand for Family Planning	101
7.6 Contact of Nonusers with Family Planning Providers	103
8 INFANT AND CHILD MORTALITY	115
8.1 Infant and Child Mortality	116
8.2 Biodemographic Risk Factors	117
8.3 Perinatal Mortality	117
9 MATERNAL HEALTH CARE	123
9.1 Antenatal Care Coverage and Content	124
9.1.1 Skilled Providers	124
9.1.2 Timing and Number of ANC Visits	124
9.2 Components of ANC Visits	125
9.3 Protection against Neonatal Tetanus	125
9.4 Delivery Services	126
9.4.1 Institutional Deliveries	126
9.4.2 Skilled Assistance during Delivery	127
9.4.3 Delivery by Caesarean	128
9.5 Postnatal Care	128
9.5.1 Postnatal Health Check for Mothers	128
9.5.2 Postnatal Health Checks for Newborns	129
9.6 Problems in Accessing Health Care	130
10 CHILD HEALTH	143
10.1 Birth Weight	143
10.2 Vaccination of Children	144
10.3 Symptoms of Acute Respiratory Infection	145
10.4 Fever	146
10.5 Diarrhoeal Disease	146
10.5.1 Prevalence of Diarrhoea	146
10.5.2 Treatment of Diarrhoea	147
10.5.3 Feeding Practices	147
10.5.4 Knowledge of ORS Packets	148
10.5.5 Men's Knowledge of Feeding Practices during Diarrhoea	148
10.6 Disposal of Children's Stools	149
11 NUTRITION OF CHILDREN AND ADULTS	163
11.1 Nutritional Status of Children	163
11.1.1 Measurement of Nutritional Status among Young Children	163
11.1.2 Data Collection	165
11.1.3 Levels of Child Malnutrition	165
11.2 Infant and Young Child Feeding Practices	166
11.2.1 Breastfeeding	166
11.2.2 Exclusive Breastfeeding	167
11.2.3 Median Duration of Breastfeeding	167
11.2.4 Complementary Feeding	168
11.2.5 Minimum Acceptable Diet	169
11.3 Anaemia Prevalence in Children	171
11.4 Micronutrient Intake and Supplementation among Children	172
11.5 Presence of Iodised Salt in Households	172
11.6 Adult Nutritional Status	172
11.6.1 Nutritional Status of Women	172
11.6.2 Nutritional Status of Men	173
11.7 Anaemia Prevalence in Adults	174
11.8 Micronutrient Intake among Mothers	174
12 HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOUR	191
12.1 HIV/AIDS Knowledge, Transmission, and Prevention Methods	192
12.2 Knowledge about Mother-to-Child Transmission	193
12.3 HIV/AIDS Attitudes	194
12.3.1 Attitudes towards People Living with HIV/AIDS	194
12.3.2 Attitudes towards Negotiating Safer Sexual Relations with Husbands	195
12.3.3 Attitudes towards Condom Education for Young People	195
12.4 Multiple Sexual Partners	195
12.5 Paid Sex	196
12.6 Coverage of HIV Testing Services	197
12.6.1 Awareness of HIV Testing Services and Experience with HIV Testing	197
12.6.2 HIV Testing of Pregnant Women	198
12.6.3 Reasons for Not Getting Tested for HIV	199
12.7 Male Circumcision	199
12.8 Self-reporting of Sexually Transmitted Infections	200
12.9 Injections	201
12.10 HIV/AIDS-Related Knowledge and Behaviour among Young People	201
12.10.1 Knowledge	201
12.10.2 First Sex	201
12.10.3 Premarital Sex	202
12.10.4 Multiple Sexual Partners	202
12.10.5 Age-mixing in Sexual Relationships	202
12.10.6 Coverage of HIV Testing Services	203
13 HIV PREVALENCE	235
13.1 Coverage Rates for HIV Testing	235
13.2 HIV Prevalence	236
13.2.1 HIV Prevalence by Age and Sex	236
13.2.2 HIV Prevalence by Sexual Risk Behaviour	239
13.2.3 HIV Prevalence among Young People	239
13.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk	240
13.2.5 HIV Prevalence among Couples	240
13.3 HIV Incidence	240
14 WOMEN'S EMPOWERMENT	255
14.1 Married Women's and Men's Employment	255
14.2 Control over Women's Earnings	256
14.3 Control over Men's Earnings	257
14.4 Women's and Men's Ownership of Assets	258
14.5 Women's Participation in Decision Making	258
14.6 Attitudes towards Wife Beating	259
15 ADULT AND MATERNAL MORTALITY	277
15.1 Data	277
15.2 Direct Estimates of Adult Mortality	278
15.3 Trends in Adult Mortality	279
15.4 Direct Estimates of Maternal Mortality	280
16 TUBERCULOSIS	285
16.1 Respondents' Knowledge of Tuberculosis	285
16.1.1 Awareness of Tuberculosis and Knowledge that Tuberculosis Can Be Cured	285
16.1.2 Knowledge of Symptoms Associated with Tuberculosis	286
16.1.3 Knowledge of the Cause of Tuberculosis and Its Mode of Transmission	286
16.2 Self-reported Symptoms, Diagnosis, and Treatment	287
16.2.1 Self-reported Tuberculosis Symptoms	287
16.2.2 Treatment Seeking for Tuberculosis Symptoms	287
16.2.3 Tuberculosis Diagnosis and Treatment	288
16.3 Attitudes towards Those Treated for Tuberculosis	288
17 NONCOMMUNICABLE DISEASES	301
17.1 Knowledge of Breast Cancer	301
17.2 Breast Self-examination and Clinical Exam	302
17.3 Knowledge of and Experience with Cervical Cancer Exam	302
17.4 Knowledge and History of Diabetes	303
17.5 History of High Blood Pressure	303
17.6 Blood Pressure Status	304
REFERENCES	319
APPENDIX A SAMPLE DESIGN	321
A.1 Introduction	321
A.2 Sample Frame	321
A.3 Sample Design and Implementation	322
A.4 Sample Probabilities and Sampling Weights	324
APPENDIX B ESTIMATES OF SAMPLING ERRORS	333
APPENDIX C HIV TESTING METHODOLOGY	373
APPENDIX D DATA QUALITY TABLES	377
APPENDIX E PERSONS INVOLVED IN THE 2014 LESOTHO DEMOGRAPHIC AND HEALTH SURVEY	383
APPENDIX F QUESTIONNAIRES	387

Lesotho 2014 Demographic and Health Survey, Key Findings

Title Lesotho 2014 Demographic and Health Survey, Key Findings
 Author(s) The DHS Program
 Date 2016-05-01
 Country Lesotho
 Language English
 Filename <http://www.dhsprogram.com/pubs/pdf/SR230/SR230.pdf>

Fast Facts from The 2014 Lesotho Demographic and Health Survey

Title Fast Facts from The 2014 Lesotho Demographic and Health Survey
 Author(s) The DHS Program
 Date 2016-05-01
 Country Lesotho
 Language English
 Filename <http://www.dhsprogram.com/pubs/pdf/DM84/DM84.pdf>

HIV Prevalence in Lesotho

Title HIV Prevalence in Lesotho
 Author(s) The DHS Program
 Date 2016-05-01
 Country Lesotho
 Language English
 Filename <http://www.dhsprogram.com/pubs/pdf/DM85/DM85.pdf>

Results from the 2014 Lesotho Demographic and Health Survey, Fact Sheet

Title Results from the 2014 Lesotho Demographic and Health Survey, Fact Sheet
 Author(s) The DHS Program
 Date 2016-05-01
 Country Lesotho
 Language English
 Filename <http://www.dhsprogram.com/pubs/pdf/HF57/HF57.pdf>

Other materials

Survey Presentations

Title Survey Presentations
 Author(s) The DHS Program
 Date 2016-05-01
 Country Lesotho
 Language English
 Filename <http://www.dhsprogram.com/pubs/pdf/PPT47/PPT47.zip>

Standard Recode Manual for DHS 6

Title Standard Recode Manual for DHS 6

subtitle Version 1.0

Author(s) MEASURE DHS

Date 2013-03-22

Language English

Filename http://www.dhsprogram.com/pubs/pdf/DHSG4/Recode6_DHS_22March2013_DHSG4.pdf

Standard Recode Map DHS-VI - Data Dictionary

Title Standard Recode Map DHS-VI - Data Dictionary

Author(s) MEASURE DHS

Date 2012-01-26

Language English

Filename http://www.dhsprogram.com/pubs/pdf/DHSG4/Recode6_Map_22March2013_DHSG4.pdf
