

This chapter presents information on HIV testing coverage among eligible survey respondents, the prevalence of HIV among those tested, and the factors associated with HIV infection in the population. The HIV prevalence data provide important information to plan the national response to the AIDS epidemic. The understanding of the distribution of HIV in the population and the analysis of social, biological, and behavioural factors associated with HIV infection offer new insights into the HIV epidemic in Lesotho that will guide more precisely targeted messages and interventions.

In Lesotho, as in most of sub-Saharan Africa with generalized HIV/AIDS epidemics, national HIV prevalence estimates have been derived primarily from sentinel surveillance among pregnant women. HIV Sentinel Surveillance was first established in 1991 at five sites throughout Lesotho. At these sites, blood taken for routine investigations among pregnant women who were presenting for their first visit and among patients with sexually transmitted diseases was anonymously tested for HIV. To reflect recent advances in surveillance methodologies in countries with generalized epidemics, the 2003 HIV Sentinel Survey focused exclusively on pregnant women. The findings from that 2003 survey were the basis for calculating the 2003 national adult prevalence rate of 29 percent. The latest HIV Sentinel survey was conducted over a period of twelve weeks from March to June 2005 at ten sites encompassing the original sites used in previous survey rounds, providing a more representative sample of regions, including urban and rural populations.

While the rate of HIV infection in pregnant women has been shown to be a reasonable proxy for the level in the combined male and female adult population in a number of settings (WHO and UNAIDS, 2000), there are several well recognised limitations in estimating the HIV rate in the general adult population from data derived exclusively from pregnant women attending selected antenatal clinics. The ANC data do not capture any information on HIV prevalence in non-pregnant women, nor in women who either do not attend a clinic for pregnancy care or receive antenatal care at facilities not represented in the surveillance system. Pregnant women are also more at risk for HIV infection than women who may be avoiding both HIV and pregnancy through the use of condoms or women who are less sexually active and are therefore less likely to become pregnant or expose themselves to HIV. There also may be biases in the ANC surveillance data because HIV infection reduces fertility and because knowledge of HIV status may influence fertility choices. Therefore, women of reproductive age who are infertile secondary to HIV cannot be incorporated in the sentinel surveys. Another contributing factor to the selection bias and non-representation of reproductive women in sentinel surveys is the established association between HIV infection and first trimester abortions. The increased rate of first trimester abortions among women at health care facilities in Lesotho is plausibly linked to increased sexually transmitted infections and HIV, which is instrumental to non-participation of the affected women in the HIV sentinel surveys. The rates among pregnant women are not a good proxy for male HIV rates.

Although the information from the ANC surveillance system has been very useful for monitoring trends in HIV levels in Lesotho, the inclusion of HIV testing in the 2004 LDHS offers the opportunity to better understand the magnitude and patterns in the infection level in the general reproductive age population that may not be assessed by routine HIV seroprevalence surveys in Lesotho. The 2004 LDHS results are in turn expected to improve the calibration of the biennial sentinel surveillance data, so that trends in HIV infection can be more accurately measured in the intervals between general population surveys.

12.1 COVERAGE OF HIV TESTING

Table 12.1 presents the coverage rates for HIV testing by the reason for not being tested, according to gender and residence. HIV tests were conducted for 81 percent of the eligible women and 68 percent of the eligible men. For both sexes combined, coverage was 75 percent.

Table 12.1 Coverage of HIV testing by sex, residence, and district													
Percent distribution of women age 15-49 and men age 15-59 eligible for HIV testing by testing status, according to residence and district (unweighted), Lesotho 2004													
Sex/Testing status	Residence		District										Total
	Urban	Rural	Butha-Buthe	Leribe	Berea	Maseru	Mafeteng	Mohale's Hoek	Quthing	Qacha's Nek	Mokhotlong	Thaba-Tseka	
WOMEN 15-49													
Tested	73.3	83.4	80.3	81.1	80.5	65.0	85.2	82.2	89.7	87.1	84.7	85.0	80.7
Refused	21.7	8.4	12.6	12.3	8.2	24.4	7.8	11.3	3.5	7.0	11.1	11.7	12.0
Absent for testing	1.8	2.7	1.5	2.1	2.1	3.8	3.6	2.8	2.6	1.2	2.0	1.5	2.4
Interviewed in survey	0.2	0.3	0.2	0.0	0.0	1.0	0.0	0.0	0.0	0.4	0.0	0.4	0.2
Not interviewed	1.6	2.4	1.2	2.1	2.1	2.7	3.6	2.8	2.6	0.8	2.0	1.1	2.2
Other/missing	3.3	5.5	5.7	4.5	9.2	6.9	3.4	3.7	4.2	4.7	2.3	1.9	4.9
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,011	2,747	406	424	390	583	384	432	310	256	307	266	3,758
MEN 15-59													
Tested	60.7	70.2	68.3	65.2	72.0	50.5	75.0	65.4	71.1	82.7	72.1	74.3	68.0
Refused	27.1	13.2	16.7	19.0	10.1	27.8	12.7	21.1	7.0	11.9	15.6	12.8	16.6
Absent for testing	5.1	7.6	5.6	8.0	5.7	7.2	6.9	7.8	11.7	2.2	6.7	7.5	7.0
Interviewed in survey	0.4	0.3	0.3	0.3	0.0	0.8	0.0	0.3	0.8	0.0	0.7	0.0	0.3
Not interviewed	4.7	7.2	5.3	7.8	5.7	6.4	6.9	7.5	10.9	2.2	5.9	7.5	6.6
Other/missing	7.2	8.9	9.4	7.8	12.2	14.5	5.4	5.8	10.2	3.1	5.6	5.3	8.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	791	2,514	360	348	386	503	332	399	256	226	269	226	3,305
TOTAL													
Tested	67.8	77.1	74.7	74.0	76.3	58.3	80.4	74.1	81.3	85.1	78.8	80.1	74.7
Refused	24.0	10.7	14.5	15.3	9.1	26.0	10.1	16.0	5.1	9.3	13.2	12.2	14.1
Absent for testing	3.2	5.0	3.4	4.8	3.9	5.3	5.2	5.2	6.7	1.7	4.2	4.3	4.6
Interviewed in survey	0.3	0.3	0.3	0.1	0.0	0.9	0.0	0.1	0.4	0.2	0.3	0.2	0.3
Not interviewed	2.9	4.7	3.1	4.7	3.9	4.4	5.2	5.1	6.4	1.5	3.8	4.1	4.3
Other/missing	5.0	7.1	7.4	6.0	10.7	10.4	4.3	4.7	6.9	3.9	3.8	3.5	6.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	1,802	5,261	766	772	776	1,086	716	831	566	482	576	492	7,063

Based on the reason for nonresponse, individuals who were not tested were divided into the following four categories:

- Those who refused testing when asked for informed consent (14 percent, overall)
- Those who were interviewed in the survey, but who were not at home at the time testing was conducted in the household (less than 1 percent)
- Those who were not at home for the testing and were never interviewed (4 percent), and

- Those who were missing test results for some other reason (e.g., a technical problem prevented taking blood) (5 percent).

Refusal is the most important reason for non-response on the HIV testing component among both women (12 percent) and men (17 percent). Absence accounts for more than one-fifth of the male non-response and just over 12 percent of the female non-response.

Table 12.1 shows that rural residents are more likely to be tested than their urban counterparts (77 percent and 68 percent, respectively). There also were strong differences in HIV testing coverage rates by district. Among both sexes, Qacha's Nek had the highest rate of testing (85 percent), followed by Quthing (81 percent), and Thaba-Tseka and Mafeteng (80 percent each). Response rates exceeded 70 percent in all other districts except Maseru (58 percent). Refusal is the primary reason for nonresponse in all districts except Quthing, where the primary reason for nonresponse is absence of respondents.

Table 12.2 shows coverage rates for HIV testing by age group, gender, ecological zone, education, and wealth. If HIV status influenced participation in the testing, coverage would be expected to decline with age because HIV levels increase sharply with age before levelling off or declining at the older ages. For both men and women, the variation in the coverage rate for testing exhibits no clear pattern. The lowest coverage is seen among women 40-44 (76 percent) and among men the same age (61 percent), while the highest is among women 30-34 (85 percent) and among men 50-54 (68 percent).

Among both men and women, those with an incomplete primary education are the most likely to have been tested, while men and women with at least some secondary education were least likely to be tested. Similarly, those in the highest quintile of the wealth index were the least likely to be tested and have the highest levels of refusal (20 percent for women and 27 percent for men).

To further explore whether nonresponse might have an effect on the HIV seroprevalence results, an analysis was undertaken of the relationships between participation in the HIV testing and a number of other characteristics related to HIV risk. The descriptive tables that were examined in that analysis are included in Appendix A (Tables A.3-A.6).

The variation in response rates with these measures is again reassuring, as coverage rates are frequently but not uniformly higher among those groups considered to be at higher risk for HIV. For example, response rates are slightly higher among those who have had sex than among those who have not. Among both women and men, response rates are highest among those who are divorced or separated. Among women, coverage for HIV testing is slightly higher among those who reported having not had any sex in the 12 months preceding the survey than among those who had sex whether higher risk or not. Women who had no sexual partners in the 12 months preceding the survey have higher response rates than those who had multiple partners. The response rate for HIV testing is higher among women who did not use a condom at last higher-risk sexual encounter than those who did.

Among men, the coverage rate for HIV testing is higher among uncircumcised than circumcised men. Different from women, men who had three or more regular or higher-risk sexual partners in the past 12 months have higher response rates than those with one, two, or no partners. Similarly to women, the response rate for HIV testing is higher among men who did not use a condom at last higher-risk sexual encounter than those who did.

Table 12.2 Coverage of HIV testing by background characteristics

Percent distribution of women age 15-49 and men age 15-59 eligible for HIV testing by testing status, according to selected background characteristics (unweighted), Lesotho 2004

Background characteristic	Testing status								Total	Number
	Tested		Refused		Absent for testing		Other/missing			
	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed	Inter-viewed	Not inter-viewed		
WOMEN										
Age										
15-19	80.4	0.3	9.1	1.7	0.1	3.0	3.2	2.3	100.0	947
20-24	82.3	0.4	9.4	0.5	0.3	2.1	2.5	2.4	100.0	752
25-29	76.8	0.2	13.2	1.8	0.2	3.8	2.0	2.0	100.0	551
30-34	85.4	0.2	9.3	0.9	0.2	0.7	2.1	1.2	100.0	432
35-39	80.1	0.8	13.3	1.1	0.0	1.1	1.6	2.1	100.0	376
40-44	76.2	0.3	13.6	0.8	0.5	2.4	3.9	2.4	100.0	382
45-49	80.5	0.0	9.7	1.9	0.6	0.6	5.0	1.6	100.0	318
Ecological zone										
Lowlands	77.7	0.2	13.7	1.1	0.2	2.3	2.8	2.0	100.0	1,673
Foothills	78.0	0.2	9.4	2.3	0.2	3.4	3.0	3.6	100.0	533
Mountains	83.1	0.4	8.5	1.3	0.3	1.9	3.0	1.5	100.0	1,169
Senqu River Valley	86.7	0.8	6.3	0.5	0.3	1.3	2.1	2.1	100.0	383
Education										
No education	78.5	0.9	4.7	2.8	0.0	1.9	0.9	10.3	100.0	107
Primary, incomplete	84.3	0.5	5.7	1.3	0.2	2.4	3.2	2.4	100.0	1,203
Primary, complete	82.8	0.1	9.7	0.9	0.2	1.4	3.2	1.6	100.0	989
Secondary+	75.6	0.3	16.0	1.3	0.3	2.6	2.4	1.5	100.0	1,459
Wealth quintile										
Lowest	91.4	0.0	5.0	0.0	0.2	0.0	3.4	0.0	100.0	582
Second	90.3	0.0	6.1	0.0	0.1	0.0	3.5	0.0	100.0	710
Middle	88.5	0.0	9.5	0.0	0.0	0.0	1.9	0.0	100.0	619
Fourth	83.9	0.0	12.5	0.0	0.7	0.0	2.9	0.0	100.0	728
Highest	76.5	0.0	20.1	0.0	0.2	0.0	3.1	0.0	100.0	899
Total	80.4	0.3	10.7	1.3	0.2	2.2	2.8	2.1	100.0	3,758
MEN										
Age										
15-19	70.3	0.3	10.9	3.6	0.2	6.6	3.3	4.7	100.0	888
20-24	66.6	0.3	11.6	4.1	0.8	7.3	3.9	5.4	100.0	613
25-29	64.8	0.5	14.4	2.7	0.0	9.7	3.6	4.3	100.0	443
30-34	69.5	0.3	14.0	2.2	0.3	6.4	2.0	5.3	100.0	357
35-39	66.4	0.0	16.0	3.7	0.4	7.1	1.5	4.9	100.0	268
40-44	61.4	1.5	17.8	3.6	0.5	6.1	3.0	6.1	100.0	197
45-49	64.8	0.0	19.2	3.1	0.5	2.6	5.2	4.7	100.0	193
50-54	71.7	0.5	11.0	2.1	0.0	5.2	3.7	5.8	100.0	191
55-59	68.4	0.0	13.5	2.6	0.0	1.9	6.5	7.1	100.0	155
Ecological zone										
Lowlands	64.7	0.5	15.9	2.7	0.3	6.9	3.9	5.0	100.0	1,470
Foothills	61.6	0.2	15.1	5.6	0.0	5.6	4.3	7.6	100.0	484
Mountains	71.7	0.3	11.0	2.8	0.4	6.7	2.5	4.4	100.0	1,023
Senqu River Valley	76.5	0.3	5.8	3.7	0.6	6.4	2.4	4.3	100.0	328
Education										
No education	66.6	0.4	10.7	4.3	0.0	7.3	3.3	7.4	100.0	700
Primary, incomplete	71.9	0.4	9.9	3.0	0.4	5.5	3.9	5.0	100.0	1,360
Primary, complete	66.9	0.2	13.6	3.2	0.2	9.1	3.0	3.7	100.0	405
Secondary+	61.8	0.4	20.7	2.9	0.6	6.7	3.0	4.0	100.0	840
Wealth quintile										
Lowest	86.6	0.0	9.6	0.0	0.4	0.0	3.5	0.0	100.0	543
Second	85.4	0.0	11.2	0.0	0.2	0.0	3.3	0.0	100.0	553
Middle	81.9	0.0	13.6	0.0	0.5	0.0	4.0	0.0	100.0	551
Fourth	78.0	0.0	16.4	0.0	0.5	0.0	5.1	0.0	100.0	568
Highest	68.4	0.0	27.0	0.0	0.3	0.0	4.3	0.0	100.0	582
Total	67.6	0.4	13.3	3.3	0.3	6.6	3.4	5.1	100.0	3,305

Note: This table provides data only at the household level.

12.2 HIV PREVALENCE

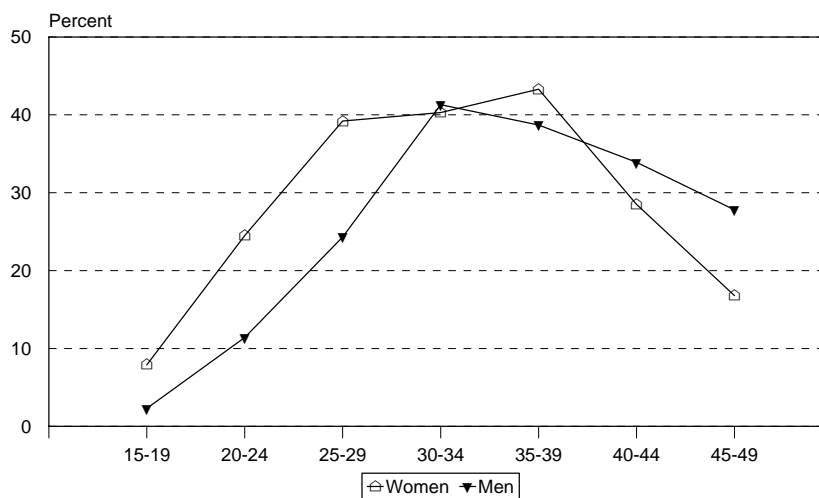
12.2.1 HIV Prevalence by Socioeconomic Characteristics

Results from the 2004 LDHS indicate that 24 percent of adults age 15-49 in Lesotho are infected with HIV (Table 12.3). HIV prevalence in women age 15-49 is 26 percent, while for men 15-59, it is 19 percent. Figure 12.1 shows that, for both sexes, rates of infection rise with age, peaking at 43 percent among women in their late 30s and 41 percent among men age 30-34. HIV prevalence is substantially higher among women than men under age 30, while, at ages 40-49, the pattern reverses and prevalence among men exceeds the level among women.

Age	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
15-19	7.9	729	2.3	615	5.3	1,343
20-24	24.5	613	11.4	411	19.2	1,025
25-29	39.2	446	24.3	300	33.2	746
30-34	40.3	380	41.3	254	40.7	635
35-39	43.3	317	38.7	186	41.6	503
40-44	28.5	300	33.9	127	30.1	427
45-49	16.8	245	27.8	119	20.4	364
50-54	na	na	16.2	139	16.2	139
55-59	na	na	16.6	104	16.6	104
Total age 15-49	26.4	3,031	19.3	2,012	23.5	5,043
Total age 15-59	na	na	18.9	2,255	23.2	5,286

Note: "HIV positive" refers to HIV-1 only.
na = Not applicable

Figure 12.1 HIV Prevalence by Age Group and Sex



LDHS 2004

To evaluate the effects of non-response bias, HIV prevalence rates among non-tested women and men were predicted based on multivariate statistical models derived from information for those who were tested (Mishra et al., 2005). For purposes of this analysis, the nontested groups were divided according to whether they were interviewed in the 2004 LDHS or not. Predictions for the “noninterviewed, nontested” group were based on a limited set of demographic and socioeconomic variables (only from the household questionnaire), while predictions for the “interviewed, nontested” group used additional sociodemographic and behavioural characteristics for which information was obtained in the individual interviews.¹

The results of this analysis show that the predicted HIV prevalence rates among nontested women (26.9 percent) and men (20.3 percent) derived from this analysis are only slightly higher than the prevalence rates observed among tested women (26.4 percent) and men (18.9 percent). Thus, adjusting the observed prevalence rates to take into account the predicted rates among non-tested women and men makes little difference in the rates. The adjusted HIV prevalence rates for all eligible women and men are 26.2 percent and 19.1 percent, respectively, which are well within the error margins of the observed prevalence rates based on tested respondents.

Because few HIV-infected children survive into their teenage years, infected youth represent more recent cases of HIV infection and serve as an important indicator for detecting trends in both prevalence and incidence. Youth are also not likely to have a long-standing history of engaging in behaviour associated with risk of HIV infection. Therefore, the HIV status among youth is a proxy for newly infected individuals. Prevalence among women age 15-24 in the LDHS is 15 percent, compared with 6 percent among men, for an overall prevalence in youth of 11 percent (See Table 12.10).

Table 12.4 presents the variation in HIV rates for women and men age 15-49 with a number of socioeconomic characteristics. Prevalence in urban women is 33 percent compared with 24 percent for rural women, for a 1.4 urban-rural relative risk of HIV infection. The urban-rural differential is somewhat less marked among men: 22 percent of urban men are infected compared with 19 percent of rural men. Differences across the other residential categories are generally not large. Among the four zones, Lowlands has the highest rates of infection for both females and males (28 and 20 percent, respectively). Looking at the districts, Leribe has the highest infection rate among both women and men, while Thaba-Tseka, Mokhotlong, and Mohale’s Hoek have the lowest for women, and Butha-Buthe and Mokhotlong have the lowest for men.

Differences in infection levels are not large across educational categories, although having attended school is related to somewhat lower infection levels among both women and men. One-third of employed women and one-fourth of employed men are HIV infected, compared with 23 percent of unemployed women and 16 percent of unemployed men. The variation between HIV status and wealth is not uniform. The lowest HIV rates for women are found among those in the lowest wealth quintile, while for men the reverse is true.

The variation in HIV levels by religious denomination is not large. For example, among women who profess a religious affiliation, the rate varies from 25 percent for Roman Catholics to 28 percent among Anglicans, while for men it ranges from 17 percent among other Christians to 21 percent among Anglicans. Seventeen percent of men who indicated they have no religion affiliation are HIV positive.

¹ Variables for predicting prevalence in the “not-interviewed, not-tested” group included age, education, wealth index, residence, and geographic region. Additional variables for predicting prevalence in the “interviewed, not-tested” group included marital union, childbirth in last five years (women only), work status, media exposure, religion, circumcision (men only), STI or STI symptoms in last 12 months, alcohol use, cigarette smoking/tobacco use, age at first sex, number of sex partners in last 12 months, condom use at last sex in last 12 months, paid for sex (for men), higher-risk sex in last 12 months, willingness to care for a family member with AIDS, number of times slept away in last 12 months (men only), away for more than one month in last 12 months (men only), and participation in household decisionmaking (women only).

Table 12.4 HIV prevalence by socioeconomic characteristics

Percentage HIV positive among women and men age 15-49 who were tested, by background characteristics, Lesotho 2004

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Residence						
Urban	33.0	735	22.0	407	29.1	1,142
Rural	24.3	2,295	18.6	1,606	21.9	3,901
Ecological zone						
Lowlands	28.0	1,843	20.4	1,235	25.0	3,078
Foothills	24.2	333	16.9	231	21.2	565
Mountains	23.3	663	17.7	427	21.1	1,090
Senqu River Valley	25.1	192	17.6	119	22.2	311
District						
Butha-Buthe	25.3	195	12.4	128	20.2	323
Leribe	30.6	433	28.3	270	29.7	704
Berea	25.2	356	22.3	269	24.0	625
Maseru	29.9	796	18.8	522	25.5	1,318
Mafeteng	25.8	324	15.6	222	21.6	546
Mohale's Hoek	20.9	298	20.4	204	20.7	502
Quthing	25.7	198	18.9	115	23.2	312
Qacha's Nek	25.2	99	13.9	69	20.6	168
Mokhotlong	20.6	153	13.0	97	17.7	250
Thaba-Tseka	20.5	179	14.5	116	18.2	295
Education						
No education	30.4	70	26.8	312	27.4	382
Primary, incomplete	26.0	941	16.7	879	21.5	1,820
Primary, complete	27.1	793	18.3	280	24.8	1,073
Secondary+	26.0	1,226	19.5	542	24.0	1,768
Respondent currently working						
Currently working	32.8	1,148	25.6	615	30.3	1,763
Not currently working	22.5	1,868	16.3	1,383	19.9	3,251
Wealth quintile						
Lowest	19.6	430	18.3	336	19.0	767
Second	27.9	565	16.8	380	23.4	945
Middle	25.5	543	23.7	425	24.7	967
Fourth	27.3	648	21.6	444	25.0	1,093
Highest	28.9	832	14.8	415	24.2	1,247
Religion						
Roman Catholic Church	25.1	1,321	20.4	926	23.2	2,247
Lesotho Evangelical Church	27.4	645	18.3	449	23.7	1,094
Anglican Church	28.4	292	20.8	170	25.6	463
Other Christian	26.6	724	16.8	336	23.5	1,060
No religion	*	25	16.7	114	19.2	139
Total	26.4	3,031	19.3	2,012	23.5	5,043

Note: "HIV positive" refers to HIV-1 only. Total includes 29 cases missing data on whether currently working. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

12.2.2 HIV Prevalence by Other Sociodemographic Characteristics

HIV prevalence is closely related to marital status among both women and men age 15-49 (Table 12.5). As expected, rates are high among both widows (47 percent) and widowers (38 percent). Levels are also high among those who are divorced or separated (56 percent for women and 36 percent for men). Among currently married women, the rate is 27 percent, somewhat lower than the level among currently married men of 33 percent.

Sociodemographic characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Marital status						
Currently married/in union	26.9	1,604	32.9	743	28.8	2,346
Widowed	47.3	254	(38.3)	25	46.5	279
Divorced/separated	55.9	181	36.1	83	49.7	264
Never in union	14.9	979	8.7	1,145	11.5	2,125
Ever had sex	24.2	503	11.4	746	16.6	1,249
Never had sex	5.0	477	3.7	400	4.4	876
Type of unions						
In polygynous union	na	na	(32.8)	36	na	na
Not in polygynous union	na	na	32.9	707	na	na
Not currently in union	na	na	11.3	1,270	na	na
Pregnancy status						
Pregnant	23.0	201	na	na	na	na
Not pregnant/not sure	26.7	2,817	na	na	na	na
Times away from home in past 12 months						
None	na	na	18.0	1,136	na	na
1-2	na	na	19.8	313	na	na
3-4	na	na	21.1	208	na	na
5+	na	na	20.7	299	na	na
Away for more than 1 month						
Away for more than 1 month	na	na	21.0	409	na	na
Away for less than 1 month	na	na	19.2	413	na	na
Never away	na	na	18.0	1,136	na	na
Total	26.4	3,031	19.3	2,012	23.5	5,043

Note: "HIV positive" refers to HIV-1 only. Totals include 29 women and men missing data on marital status and 55 men missing data on whether away from home for more than one month. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

HIV rates are lowest for respondents who have never been in union. Among women who are sexually active but have never been in a marital union, prevalence is 24 percent, almost as high as the level found among married women and roughly double the level among males (11 percent) who report they have not yet married but have been sexually active.

Four percent of individuals who say they have never had sex are HIV positive. These findings are likely a result of a number of factors, including reluctance to report sexual activity and nonsexual transmission of AIDS.

Information on the type of marital union is available only for men. The results indicate that the HIV rate for the small number of men reporting a polygynous union is virtually identical to the rate for men in a monogamous union (33 percent each).

HIV prevalence among women who are currently pregnant is 23 percent, slightly lower than the rate among women who are not pregnant or are unsure of their pregnancy status (27 percent). The rate among pregnant women provides a useful benchmark to compare with rates in pregnant women tested during sentinel surveillance.

The survey results show that HIV rates vary slightly with two measures of mobility for men. The HIV prevalence rate increases with the length of stay away from home and the frequency of the times away from home.

12.2.3 HIV Prevalence by Sexual Behaviour

Table 12.6 examines the prevalence of HIV infection by sexual behaviour indicators among respondents who have ever had sexual intercourse. In reviewing these results, it is important to remember that responses about sexual risk behaviours may be subject to reporting bias. Also, a number of the indicators relate to sexual behaviour in the 12 months preceding the survey, so these indicators may not adequately reflect lifetime sexual risk.

For women and especially men, Table 12.6 shows that early sexual debut (younger than age 15) is associated with lower HIV prevalence. HIV prevalence rates generally rise with the age at sexual debut. This pattern is somewhat unexpected in view of the assumption that early sexual debut would be associated with a longer average period of sexual activity and thus, greater exposure to the transmission of the HIV virus. It may reflect the fact that individuals initiating sex at very young ages are concentrated in groups with lower HIV prevalence (e.g., they live in rural areas or are age 40 and older).

The 2004 LDHS respondents were considered to have had a higher-risk sexual encounter if they had had intercourse with a nonmarital, noncohabiting partner. Women who reported they had a higher-risk sexual encounter in the preceding 12 months are somewhat more likely to be HIV infected compared with those who were sexually active but did not have a higher-risk partner (38 and 27 percent, respectively). The opposite was true for men (22 and 28 percent, respectively).

Among women, HIV prevalence tends to increase with the number of sexual partners in the last 12 months. For both men and women, there is no clear pattern between HIV prevalence and number of higher-risk partners. Data for men show that HIV prevalence increases with increasing number of lifetime sexual partners. This information is not available for women.

Among men, those who paid for sex more than 12 months preceding the survey have higher HIV prevalence (45 percent) than either those who have never paid for sex (22 percent), or those who paid for sex in the past 12 months (29 percent).

Table 12.6 HIV prevalence by sexual behaviour

Percentage HIV positive among women and men age 15-49 who ever had sex and were tested for HIV, by sexual behaviour, Lesotho 2004

Sexual behaviour characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age at first sex						
< 15	25.4	189	8.1	180	17.0	369
15-17	29.6	980	18.7	562	25.6	1,542
18-19	30.8	689	30.5	350	30.7	1,039
20+	33.2	478	27.5	500	30.2	978
Missing	31.1	216	44.2	21	32.3	237
Higher-risk sexual intercourse in past 12 months						
Had higher-risk sexual intercourse	37.6	783	22.1	921	29.2	1,704
Had sexual intercourse, not higher risk	27.4	1,347	28.3	488	27.6	1,836
No sexual intercourse in past 12 months	26.7	421	15.2	203	23.0	625
Number of sexual partners in past 12 months						
0	27.3	409	14.0	190	23.1	599
1	30.0	1,899	23.8	948	28.0	2,848
2	38.9	217	25.6	338	30.8	555
3+	*	14	22.9	119	26.0	132
Number of higher-risk sexual partners¹ in past 12 months						
0	27.4	1,756	24.3	678	26.5	2,434
1	37.7	705	23.0	613	30.9	1,318
2	32.1	71	19.5	201	22.8	272
3+	*	6	22.3	105	24.9	111
Condom use						
Ever used condom	34.2	1,085	22.7	903	29.0	1,989
Never used condom	27.6	1,466	23.6	709	26.3	2,175
Condom use at last sexual intercourse in past 12 months						
Used condom	36.6	403	7.3	141	29.0	543
Did not use condom	29.9	1,724	*	5	29.8	1,729
Condom use at last higher-risk sexual intercourse in past 12 months						
Used condom	39.0	321	17.7	442	26.7	763
Did not use condom	36.6	462	26.1	479	31.3	941
Number of lifetime partners						
1	na	na	13.5	319	na	na
2-3	na	na	19.7	420	na	na
4-5	na	na	25.6	325	na	na
6-10	na	na	25.7	289	na	na
11-15	na	na	31.2	65	na	na
16-20	na	na	(36.3)	60	na	na
21+	na	na	34.4	67	na	na
Paid for sexual intercourse²						
In past 12 months	na	na	(29.2)	31	na	na
More than 12 months ago	na	na	44.8	73	na	na
Never	na	na	21.8	1,497	na	na
Condom use at last paid sex						
Used condom	na	na	(40.4)	53	na	na
Did not use condom	na	na	39.8	52	na	na
Total 15-49	30.4	2,551	23.1	1,613	27.6	4,164

Note: "HIV positive" refers to HIV-1 only. "Higher-risk sexual intercourse" refers to sexual intercourse with a partner who was not a spouse and who did not live with the respondent. Total includes cases with missing information. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

¹ Partner who was not a spouse, who did not live with the respondent, and who was one of the last three sexual partners in the past 12 months.

² Includes men who reported having a prostitute as one of their last three sexual partners in the past 12 months.

na = Not applicable

Information was obtained in the 2004 LDHS on ever use of condoms and on the use of condoms during the last sexual encounter in the 12 month period preceding the survey. Condoms are an effective way of preventing the transmission of HIV and other STIs. Although this would suggest that HIV rates should be lower among condom users, there are a number of factors that may influence the direction of the relationship. For example, condom use rates may be higher among individuals who are infected because they are seeking to protect an uninfected partner. Also, reported condom use is assumed to be “correct condom use” when in fact it may be incorrect use, and as a result not a protective mechanism against HIV infection. Thus, it is not surprising that the associations between condom use and infection levels are not uniform in Table 12.6. Any condom use and condom use at the most recent sexual encounter are associated with higher levels of HIV infection among women and lower rates among men. There is no association between condom use at the last higher risk sexual encounter and the HIV rate for women, while for men the HIV rate is lower among those who used a condom in the most recent higher-risk encounter than among men who did not use a condom. Condom use is not associated with HIV infection rates among the small number of men who report they paid their partner the last time they had sex.

12.2.4 HIV Prevalence by Other Characteristics Related to HIV Risk

Table 12.7 presents the variation in HIV prevalence with a number of other characteristics related to HIV risk among men and women who have ever had sex. As expected, women and men with a history of an STI or STI symptoms have higher rates of HIV infection than those with none. HIV prevalence is higher among both women and men who report ever drinking alcohol than among those who never drank alcohol. Among women who ever drank, HIV prevalence is higher (43 percent) among those who said they had not drunk in the past three months than among those who had had an alcoholic drink recently (34 percent). Among men who ever drank, the pattern is reversed with men who recently drank (27 percent) having a slightly higher prevalence than those who did not drink alcohol (23 percent) in the past three months.

Both women and men who have been tested for HIV in the past are more likely to be HIV infected than those who have never been tested. Among women who have ever had sex, the level of HIV infection is 39 percent among those who have ever been tested for HIV in the past, compared with 30 percent among those who have never been tested. Among men, 36 percent of those previously tested are HIV positive, compared with 22 percent of those who have never been tested.

Characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Sexually transmitted infection in past 12 months						
Had STI or STI symptoms	43.9	416	30.4	216	39.3	631
No STI, no symptoms	27.9	2,099	22.0	1,369	25.6	3,468
Use of alcohol						
Drank alcohol						
In past 3 months	33.9	425	26.8	727	29.4	1,152
Ever, not in past 3 months	42.5	332	23.0	246	34.2	578
Never drank alcohol	27.3	1,765	18.7	624	25.1	2,389
HIV testing status						
Ever tested	38.7	420	36.0	186	37.9	606
Never tested	29.6	1,963	21.6	1,337	26.3	3,300
Total	30.4	2,551	23.1	1,613	27.6	4,164

Note: "HIV positive" refers to HIV-1 only. Totals include 64 cases missing information on presence of an STI or STI symptoms, 44 cases missing information on use of alcohol, and 258 cases missing information on HIV testing status.

Although the individual's HIV status is associated with prior HIV testing, the above results indicate that many individuals who are HIV positive have not been tested. Table 12.8 shows that nearly four out of five of those infected with HIV (79 percent of infected women and 78 percent of infected men) do not know their HIV status, either because they were never tested or because they were tested and did not receive their results. For women, 17 percent of those who are HIV infected have been tested and know their results for their last test, compared with 10 percent of those who are HIV negative. For men, there is a similar pattern: 16 percent of those who are HIV infected know their results for their last test, compared with 7 percent of those who are HIV negative.

HIV testing status	Women		Men		Total	
	HIV positive	HIV negative	HIV positive	HIV negative	HIV positive	HIV negative
Ever tested and know results of last test	16.8	9.8	16.2	6.5	16.6	8.4
Ever tested, does not know results	3.6	2.3	1.4	0.9	2.9	1.7
Never tested	75.3	80.4	76.6	85.6	75.7	82.6
Missing	4.4	7.5	5.7	7.0	4.8	7.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	799	2,231	387	1,625	1,187	3,856

12.2.5 HIV Prevalence and Male Circumcision

Lack of circumcision is considered a risk factor for HIV infection for men, in part because of physiological differences that increase the susceptibility to HIV infection among uncircumcised men. The 2004 LDHS obtained information on male circumcision status (see Chapter 10), and Table 12.9 examines the relationship between HIV prevalence and male circumcision status.

The relationship between male circumcision and HIV levels in Lesotho does not conform to the expected pattern of higher rates among uncircumcised men than circumcised men. The HIV rate is in fact substantially higher among circumcised men (23 percent) than among men who are not circumcised (15 percent). Moreover, the pattern of higher infection rates among circumcised men compared with uncircumcised men is virtually uniform across the various subgroups for which results are shown in the table. This finding could be explained by the Lesotho custom to conduct male circumcision later in life, when the individuals have already been exposed to the risk of HIV infection. (Additional analysis is necessary to better understand the unexpected pattern in Table 12.9.)

Table 12.9 HIV prevalence by circumcision: men

Among men age 15-59 who were tested for HIV, percentage HIV positive among circumcised and uncircumcised men, according to background characteristics, Lesotho 2004

Background characteristic	Circumcised men		Uncircumcised men	
	Percentage HIV positive	Number	Percentage HIV positive	Number
Age				
15-19	2.5	129	2.3	482
20-24	13.9	219	8.7	189
25-29	24.7	183	24.2	115
30-34	34.4	161	52.8	93
35-39	39.9	113	36.9	73
40-44	33.2	66	(31.2)	55
45-49	26.8	79	(30.8)	39
50-54	26.0	71	6.2	67
55-59	10.4	65	(27.0)	38
Residence				
Urban	28.6	162	17.3	279
Rural	21.8	925	14.5	872
Ecological zone				
Lowlands	25.4	548	16.2	819
Foothills	23.0	155	7.8	100
Mountains	18.9	299	14.9	178
Senqu River Valley	19.2	84	14.4	54
District				
Butha-Buthe	18.5	88	5.3	58
Leribe	34.0	119	22.6	198
Berea	27.4	142	16.9	148
Maseru	22.9	205	14.8	360
Mafeteng	19.7	122	13.2	120
Mohale's Hoek	25.6	129	13.4	98
Quthing	18.8	89	15.3	45
Qacha's Nek	19.2	44	12.2	34
Mokhotlong	14.0	75	7.2	34
Thaba-Tseka	17.3	74	11.1	54
Education				
No education	26.0	311	27.5	85
Primary, incomplete	20.4	515	11.9	474
Primary, complete	25.0	118	13.7	174
Secondary+	22.8	143	17.0	417
Wealth quintile				
Lowest	20.0	269	13.3	113
Second	18.9	247	13.7	183
Middle	28.2	225	18.6	246
Fourth	28.4	199	17.3	291
Highest	18.7	146	12.2	317
Religion				
Roman Catholic Church	22.7	476	17.7	570
Lesotho Evangelical Church	24.4	229	12.3	250
Anglican Church	23.7	91	17.4	107
Other Christian	22.7	211	9.7	176
No religion	17.8	71	(16.7)	46
Total	22.8	1,087	15.2	1,151

Note: "HIV positive" refers to HIV-1 only. Figures in parentheses are based on 25-49 unweighted cases.

12.2.6 HIV Prevalence and Youth

Generally, cases of HIV infection among youths age 15-24 represent more recent infections and serve as an important indirect measure for assessing trends in incidence. Table 12.10 shows HIV prevalence among youth according to several socioeconomic and risk behaviour indicators. One in nine persons age 15-24 in Lesotho is HIV positive. HIV prevalence among young women is 15 percent while among young men it is 6 percent. The higher prevalence among women compared with men the same age may be because some younger women are in sexual relationships with older men, who are likely to be infected with HIV because of a longer period of exposure. The HIV rate rises rapidly with age among both females and males because the proportion of youth who have initiated sexual activity, and thus become exposed to the possible transmission of the HIV virus, has increased.

Among young women, urban residence is related to higher infection rates than rural residence. Among young men, however, the urban and rural HIV rates are virtually identical, and clearly lower than those for women. Looking at zonal differences in HIV prevalence rates, among young women, prevalence ranges from 13 percent in Mountains to 17 percent in Lowlands, while for young men it ranges from 5 percent in Lowlands to 9 percent in Senqu River Valley.

Youth who have ever been in a marital union are more likely to be HIV positive than other youth. HIV rates do not differ significantly according to whether or not the youth has engaged in higher-risk sex (i.e., sex with a nonmarital, noncohabiting partner) in the past 12 months. HIV prevalence generally rises with the total number of sexual partners the young person has had and the number of higher-risk partners. Ever use of condoms and condom use during the first sexual encounter are associated with higher HIV prevalence, while condom use at the last sexual encounter during the 12 months preceding the survey is related to lower HIV levels.

Table 12.10 HIV prevalence among young people

Percentage HIV positive among women and men age 15-24 who were tested for HIV, by selected characteristics, Lesotho 2004

Background characteristic	Women		Men		Total	
	Percentage HIV positive	Number	Percentage HIV positive	Number	Percentage HIV positive	Number
Age						
15-17	6.1	446	0.7	388	3.6	835
18-19	10.7	282	5.1	227	8.2	509
20-22	22.9	421	7.9	259	17.2	680
23-24	27.9	192	17.4	153	23.3	345
Residence						
Urban	21.4	273	4.7	160	15.2	433
Rural	13.9	1,069	6.2	866	10.5	1,935
Ecological zone						
Lowlands	17.0	791	4.6	626	11.5	1,417
Foothills	13.8	154	8.1	124	11.3	278
Mountains	12.9	302	7.7	213	10.8	515
Senqu River Valley	13.5	95	9.3	63	11.8	158
District						
Butha-Buthe	14.8	90	3.5	68	10.0	158
Leribe	21.5	183	7.1	120	15.8	303
Berea	12.1	166	6.9	136	9.7	301
Maseru	18.4	325	6.4	249	13.2	574
Mafeteng	14.8	148	2.6	140	8.9	288
Mohale's Hoek	13.2	138	7.1	113	10.5	251
Quthing	13.8	100	10.5	59	12.6	159
Qacha's Nek	17.1	46	4.1	37	11.4	83
Mokhotlong	6.0	69	5.2	45	5.7	114
Thaba-Tseka	11.4	76	5.3	61	8.7	137
Marital status						
Currently married/in union	19.1	446	19.8	77	19.2	523
Widowed	*	7	*	1	*	9
Divorced/separated	(66.7)	46	*	4	(64.3)	50
Ever had sex	17.2	373	6.1	559	10.5	932
Never had sex	4.7	463	2.8	380	3.9	843
Higher-risk sexual intercourse in last 12 months						
Had higher-risk sex	24.3	307	8.3	488	14.5	795
Had sex, not higher risk	20.4	387	9.7	51	19.2	439
No sex in past 12 months	8.3	648	3.2	486	6.1	1,134
Number of partners in last 12 months³						
0	8.3	645	3.3	482	6.1	1,127
1	20.7	640	7.7	338	16.2	978
2	41.7	49	9.1	140	17.4	189
3+	*	1	11.5	60	11.5	61
Number of higher-risk sexual partners in last 12 months¹						
0	12.9	1,032	3.9	533	9.8	1,565
1	22.9	278	7.0	307	14.6	586
2	42.2	24	10.6	123	15.7	146
3+	*	0	10.5	57	10.5	57
Any condom use²						
Used condom	23.9	409	8.0	385	16.2	794
Never used condom	11.7	933	4.7	641	8.9	1,574
Condom use at past sex in past 12 months¹						
Used condom at last sex	19.5	175	7.3	141	14.1	315
No condom use at last sex	23.0	515	17.9	5	23.0	520
Condom used at first sexual intercourse¹						
Used condom at first sex intercourse	17.8	229	7.3	141	13.8	370
No condom use at last sexual intercourse	15.0	1,113	5.8	885	10.9	1,998
Total	15.4	1,342	6.0	1,026	11.3	2,368

Note: "HIV positive" refers to HIV-1 only. "Higher-risk sexual intercourse" refers to sexual intercourse with a partner who was not a spouse and who did not live with the respondent. Totals include 12 cases with missing information on marital status, 13 cases missing data on number of partners in past 12 months, and 13 cases missing data in number of higher-risk sexual partners in past 12 months. An asterisk indicates that a figure is based on 25-49 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

¹ Respondents who had sex in the past 12 months

² Respondents who have ever had sex

12.2.7 HIV Prevalence among Cohabiting Couples

Nearly 600 couples were tested for HIV in the 2004 LDHS. Results shown in Table 12.11 indicate that, for 66 percent of cohabiting couples, both partners are HIV negative, while in 20 percent of couples, both partners are HIV positive. Thirteen percent of couples are discordant, that is, one partner is infected and the other not. This means that of couples in which at least one partner is HIV positive, 40 percent are discordant. The variation in the level of couple HIV infection by background characteristics generally conforms to the patterns observed with respect to the variation in individual seroprevalence rates (e.g., the infection rate is higher among urban than rural couples).

Table 12.11 HIV prevalence among couples						
Among cohabiting couples both of whom were tested, percent distribution by results of HIV testing, according to background characteristics, Lesotho 2004						
Background characteristic	Both HIV positive	Man positive, woman negative	Woman positive, man negative	Both HIV negative	Total	Number
Woman's age						
15-19	(9.3)	(15.1)	(0.5)	(75.2)	100.0	41
20-29	23.3	9.5	6.5	60.8	100.0	254
30-39	24.2	6.6	4.2	65.0	100.0	168
40-49	11.5	8.9	2.3	77.3	100.0	117
Man's age						
15-19	*	*	*	*	100.0	3
20-29	13.9	11.0	5.6	69.5	100.0	154
30-39	26.8	8.7	5.1	59.4	100.0	216
40-49	23.0	9.6	3.4	63.9	100.0	120
50-59	11.6	4.3	2.9	81.2	100.0	88
Residence						
Urban	34.9	5.6	3.6	55.9	100.0	117
Rural	16.4	9.8	4.8	69.0	100.0	463
Ecological zone						
Lowlands	24.5	6.7	4.5	64.3	100.0	322
Foothills	13.2	12.8	2.3	71.8	100.0	67
Mountains	15.7	12.5	3.8	68.0	100.0	160
Senqu River Valley	13.4	5.2	13.4	68.0	100.0	31
District						
Butha-Buthe	11.6	4.7	5.4	78.3	100.0	33
Leribe	26.5	13.4	6.3	53.8	100.0	83
Berea	18.8	4.7	2.4	74.1	100.0	76
Maseru	26.8	7.3	5.0	61.0	100.0	143
Mafeteng	(20.7)	(5.4)	(1.3)	(72.6)	100.0	46
Mohale's Hoek	20.7	13.7	2.9	62.7	100.0	64
Quthing	(11.5)	(7.7)	(10.4)	(70.5)	100.0	32
Qacha's Nek	14.8	6.8	9.7	68.7	100.0	23
Mokhotlong	7.7	13.8	5.2	73.3	100.0	41
Thaba-Tseka	(14.4)	(10.8)	(0.4)	(74.4)	100.0	39
Woman's education						
No education	*	*	*	*	100.0	20
Primary, incomplete	17.6	9.8	4.7	67.9	100.0	203
Primary, complete	17.7	10.6	3.0	68.7	100.0	181
Secondary+	24.1	6.4	5.4	64.1	100.0	177
Man's education						
No education	10.6	17.2	4.9	67.4	100.0	96
Primary, incomplete	18.0	9.1	2.9	70.0	100.0	231
Primary, complete	11.7	6.9	10.5	70.9	100.0	67
Secondary+	28.8	6.3	4.4	60.5	100.0	90
Wealth quintile						
Lowest	12.0	11.0	4.4	72.6	100.0	121
Second	16.0	8.2	7.9	67.9	100.0	130
Middle	17.2	15.7	3.7	63.4	100.0	102
Fourth	27.2	6.6	1.0	65.2	100.0	118
Highest	29.3	3.7	5.3	61.7	100.0	109
Total	20.2	8.9	4.5	66.4	100.0	580
Note: "HIV positive" refers to HIV-1 only. An asterisk indicates that a figure is based on 25-49 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.						

Discordance is more common among couples in which the woman or man is age 20-29, rural couples, couples in which the woman lives in Senqu River Valley and the man lives in Mokhotlong, and couples in which the man has a low level of education.

12.2.8 Nutrition Status, Anaemia Level, and HIV Status

As described in Chapter 10, anthropometric measures and anaemia levels were collected for women in the 2004 LDHS. Table 12.12 considers the relationship between the body mass index (BMI) derived from the weight data and a woman's HIV status. The results show only a minor difference in the mean BMI between HIV-positive and HIV-negative women. The percentages of HIV-positive and HIV-negative women falling into specific BMI levels are virtually identical, except for a slightly greater tendency for HIV-positive women to fall into the overweight category and a slightly lower tendency to fall into the obese category compared with HIV-negative women.

Woman's HIV status	Mean BMI	BMI (kg/m ²) ¹							Number of women	
		18.5-24.9 (normal)	<18.5 (thin)	17.0-18.4 (mildly thin)	16.0-16.9 (moderately thin)	<16.0 (severely thin)	≥25.0 (overweight or obese)	25.0-29.9 (overweight)		≥30.0 (obese)
HIV positive	24.7	53.6	5.5	3.6	1.4	0.5	40.8	27.4	13.4	706
HIV negative	25.0	53.7	5.9	4.1	1.1	0.7	40.5	24.3	16.1	1,986
Total	25.1	52.0	5.7	3.9	1.1	0.7	42.3	26.2	16.1	3,144

Table 12.13 presents women's anaemia level according to their HIV status. Women infected with the HIV virus are more likely to be anaemic than women who are not infected (33 and 22 percent, respectively). The degree of anaemia varies somewhat with the woman's HIV status: 11 percent of HIV-positive women are moderately or severely anaemic compared with 6 percent of HIV-negative women. Although the type or cause of anaemia was not investigated in the 2004 LDHS, this relationship between any anaemia and HIV status is consistent with that between anaemia resulting from chronic disease and HIV status.

Woman's HIV status	Any anaemia	Anaemia status ¹			Number of women
		Mild anaemia	Moderate anaemia	Severe anaemia	
HIV positive	32.6	21.9	9.4	1.2	680
HIV negative	21.8	15.6	5.4	0.8	1,919
Total	24.8	17.4	6.5	0.9	2,703

12.2.9 HIV Prevalence and Fertility

HIV infection is assumed to have an inhibiting effect on a woman's fertility. Table 12.14 shows age-specific fertility rates and the total fertility rate according to the women's HIV status. The total fertility rate among HIV-negative women is 3.9 births per woman, 26 percent higher than the rate of 3.1 births among HIV-positive women. Looking at urban-rural residence, rural HIV-positive women have a markedly lower TFR than rural HIV-negative women (3.5 compared with 4.5 births). On the other hand, HIV-positive women living in urban areas have a somewhat higher TFR than urban HIV-negative women (2.2 compared with 2.0 births). Considering the age-specific patterns, fertility is higher among HIV-negative women in all but the youngest and oldest age groups.

Age group	HIV status								
	HIV positive			HIV negative			Total		
	Urban	Rural	Total	Urban	Rural	Total	Urban	Rural	Total
15-19	99	101	100	43	112	99	52	111	99
20-24	117	147	137	105	232	202	109	209	182
25-29	123	169	152	96	210	179	109	195	168
30-34	26	126	95	32	157	125	29	145	113
35-39	55	79	72	61	124	108	59	107	94
40-44	22	35	32	59	57	57	50	51	51
45-49	0	36	29	0	15	12	0	18	15
TFR ¹	2.2	3.5	3.1	2.0	4.5	3.9	2.0	4.2	3.6

Note: "HIV positive" refers to HIV-1 only. Rates for age group 45-49 may be slightly biased because of truncation.
¹ TFR: Total fertility rate for ages 15-49, expressed per woman

12.2.10 HIV Prevalence and Child Mortality

Table 12.15 shows early childhood mortality rates by mother's HIV status. Except for neonatal mortality, children of mothers who are HIV positive have higher early childhood mortality rates compared with children born to mothers who are HIV negative. For example, child mortality is more than twice as high for children who are born to urban mothers who are HIV positive as children born to urban mothers who are HIV negative. Also, postneonatal mortality for children of rural HIV-positive women is almost twice as high (57 per 1,000) as children of rural women who are HIV negative (29 per 1,000).

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN) ¹	Infant mortality (₁ q ₀)	Child mortality (₄ q ₁)	Under-five mortality (₅ q ₀)
Urban	23	37	60	34	92
HIV-positive mother	21	41	62	49	108
HIV-negative mother	25	34	59	23	80
Rural	51	36	88	20	106
HIV-positive mother	40	57	97	27	121
HIV-negative mother	55	29	84	18	100

Note: "HIV positive" refers to HIV-1 only.
¹ Computed as the difference between the infant and neonatal mortality rates

12.3 DISTRIBUTION OF THE HIV BURDEN IN LESOTHO

An accurate estimation of HIV prevalence is necessary to assess the scope of the AIDS epidemic in Lesotho and to track trends over time. Sentinel surveillance data from ANC clinics and from individuals seeking medical treatment for STIs and other established HIV-associated conditions such as tuberculosis, have been the principal source of information on HIV prevalence in Lesotho.

With the inclusion of HIV testing in the 2004 LDHS, Lesotho has joined several other countries in sub-Saharan Africa in expanding the tools employed in monitoring the scope of the AIDS epidemic to include a nationally representative population-based survey. Ideally, the seroprevalence data from the LDHS survey will be examined and used to create a more accurate set of assumptions to use in estimating prevalence rates from future sentinel surveillance data. Indeed, UNAIDS and WHO suggest that population-based surveys “should definitely be used to calibrate the results of routine surveillance systems” (WHO and UNAIDS, 2000). The availability of population-based seroprevalence data from the 2004 LDHS enhances the body of information available on the HIV/AIDS epidemic in Lesotho.