



# LESOTHO

## POPULATION-BASED HIV IMPACT ASSESSMENT

LePHIA 2020



The Lesotho Population-based HIV Impact Assessment (LePHIA 2020) was a household-based national survey among adults (defined as individuals aged 15 years and older) conducted between December 2019 and March 2020 to measure the impact of the national HIV response. LePHIA 2020 offered HIV counseling and testing with return of results to the participants and collected information about uptake of HIV care and treatment services.

LePHIA 2020 was the second survey to estimate national HIV incidence and the national and district-level prevalence of HIV and viral load suppression (VLS), defined as HIV RNA <1,000 copies per milliliter (mL). The first LePHIA was conducted between November 2016 and May 2017. The results of these two surveys provide critical information about national and district-level progress toward control of the HIV epidemic.

LePHIA 2020 was led by the Government of Lesotho through the Lesotho Ministry of Health and the Lesotho Bureau of Statistics. The survey was conducted with funding from the United States (US) President's Emergency Plan for AIDS Relief (PEPFAR) and through technical assistance and partnership with the US Centers for Disease Control and Prevention (CDC).

LePHIA 2020 was implemented by ICAP at Columbia University in collaboration with Government of Lesotho institutions, including the Ministry of Health, National Reference Laboratory, Bureau of Statistics, district and referral hospitals, and local government authorities. The Government of Lesotho, local civil society organizations, and international development partners participated in the Technical Working Group to provide input on survey planning and survey implementation.

### KEY FINDINGS

HIV Indicator	Women	95% CI	Men	95% CI	Total	95% CI
<b>Annual incidence (%)</b>						
15-49 years	0.81	0.37-1.24	0.33	0.03-0.64	0.55	0.28-0.81
15-59 years	0.72	0.33-1.11	0.31	0.03-0.59	0.50	0.26-0.74
15 years and older	0.64	0.30-0.97	0.28	0.03-0.52	0.45	0.24-0.67
<b>Prevalence (%)</b>						
15-49 years	27.9	26.6-29.2	15.7	14.6-16.9	21.7	20.7-22.7
15-59 years	29.3	28.0-30.5	17.8	16.7-19.0	23.5	22.5-24.5
15 years and older	27.4	26.3-28.5	17.8	16.7-18.8	22.7	21.8-23.6
<b>Viral load suppression (%)</b>						
15-49 years	81.0	79.0-83.1	71.9	68.3-75.4	77.6	75.6-79.7
15-59 years	82.5	80.7-84.4	75.5	72.5-78.5	79.9	78.1-81.6
15 years and older	83.4	81.8-85.1	77.1	74.4-79.9	81.0	79.4-82.7

Viral load suppression is defined as HIV RNA <1,000 copies per milliliter among all HIV-positive adults.

Annual incidence of HIV among adults (ages 15 years and older) in Lesotho was 0.45%, which corresponds to approximately 5,000 new cases of HIV per year among adults. HIV incidence was 0.64% among women and 0.28% among men.

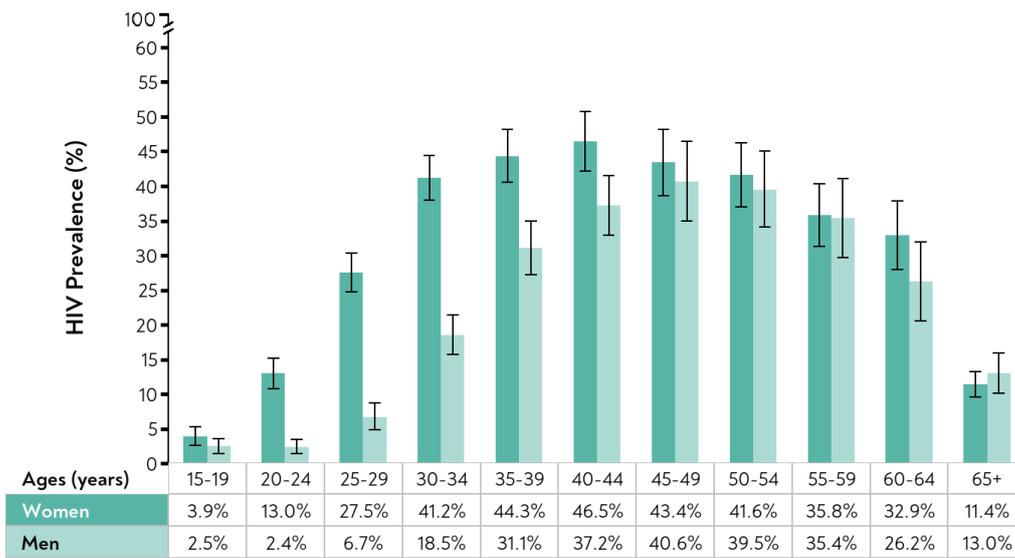
Prevalence of HIV among adults in Lesotho was 22.7%, which corresponds to approximately 324,000 adults living with HIV. HIV prevalence was markedly higher among women (27.4%) than among men (17.8%).

Prevalence of VLS among all adults living with HIV in Lesotho was 81.0%: 83.4% among women and 77.1% among men. Note that these estimates of VLS prevalence are among all adults living with HIV, regardless of their knowledge of HIV status or use of antiretroviral therapy (ART).

See [phia.icap.columbia.edu](http://phia.icap.columbia.edu) for more details.



## HIV PREVALENCE AMONG ADULTS



Error bars represent 95% CIs.

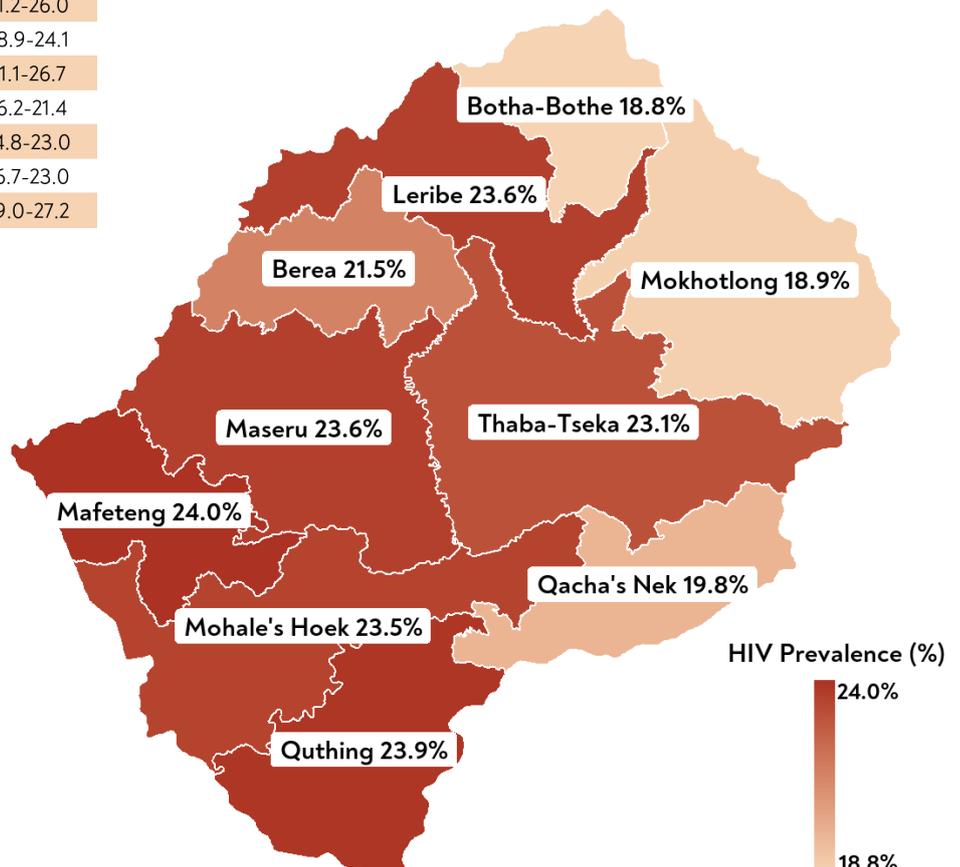
### HIV PREVALENCE, by AGE and SEX

Among adults (ages 15 years and older), HIV prevalence ranged from 3.9% for older adolescent girls aged 15-19 years to 46.5% for women aged 40-44 years, and from 2.5% for older adolescent boys aged 15-19 years to 40.6% for men aged 45-49 years. HIV prevalence was consistently higher among women than men in each 5-year age group from ages 20-24 years through 40-44 years.

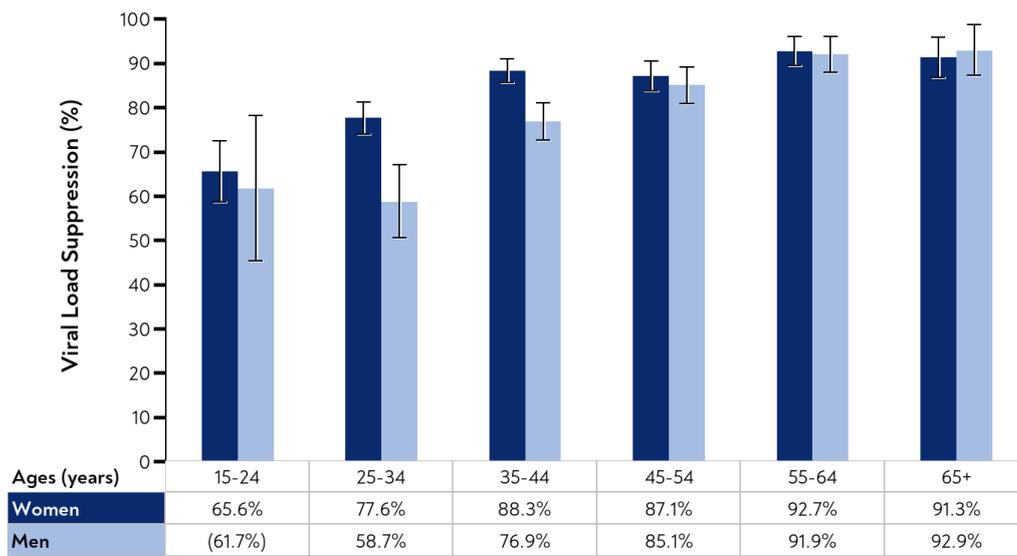
### HIV PREVALENCE, by DISTRICT

Among adults, HIV prevalence varied geographically across Lesotho, ranging from 18.8% in Botha-Bothe to 24.0% in Mafeteng.

District	HIV Prevalence (%)	95% CI
Maseru	23.6	21.7-25.6
Mafeteng	24.0	20.4-27.7
Mohale's Hoek	23.5	20.9-26.0
Leribe	23.6	21.2-26.0
Berea	21.5	18.9-24.1
Quthing	23.9	21.1-26.7
Botha-Bothe	18.8	16.2-21.4
Mokhotlong	18.9	14.8-23.0
Qacha's Nek	19.8	16.7-23.0
Thaba-Tseka	23.1	19.0-27.2



VIRAL LOAD SUPPRESSION AMONG ADULTS LIVING WITH HIV



Error bars represent 95% CIs. Estimates based on a denominator between 25 and 49 are included in parentheses and should be interpreted with caution.

VIRAL LOAD SUPPRESSION, by AGE and SEX

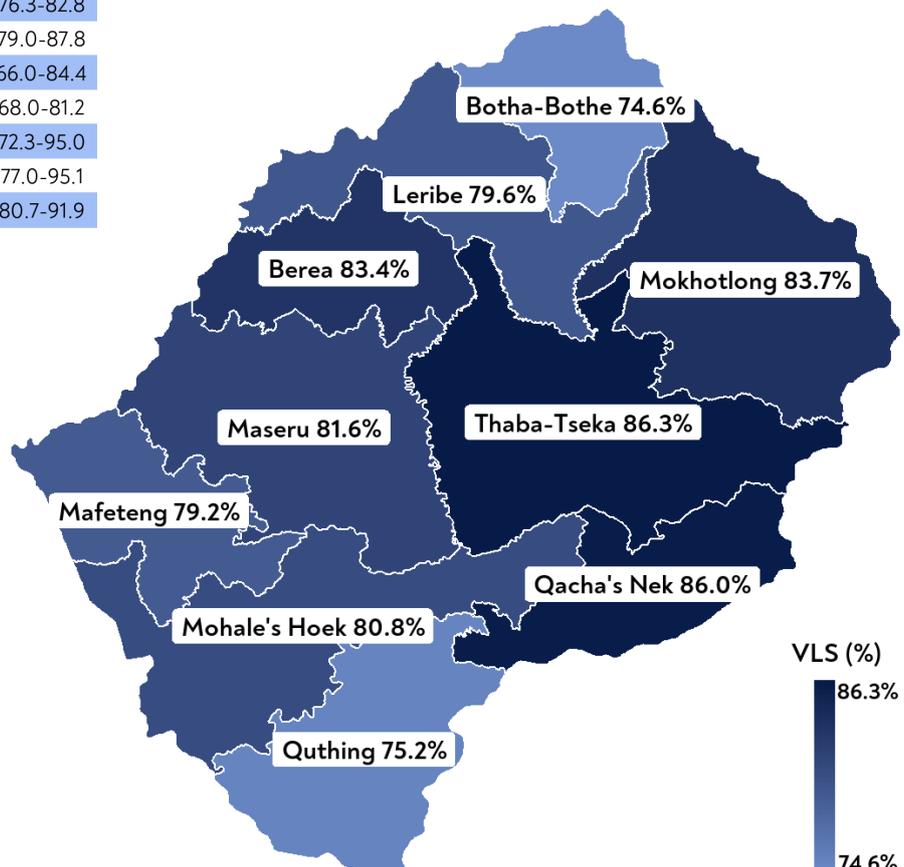
Among adults living with HIV in Lesotho, the prevalence of VLS ranged from 65.6% among women aged 15-24 years to 92.7% among women aged 55-64 years, and from 58.7% among men aged 25-34 years to 92.9% among men aged 65 years and older. VLS prevalence was higher in both sexes among those aged 35-44 years compared to those aged 25-34 years. Viral load suppression was achieved in a substantially higher proportion of women than men among those aged 25-34 and 35-44 years.

VIRAL LOAD SUPPRESSION AMONG ADULTS LIVING WITH HIV, by DISTRICT

Among adults living with HIV, prevalence of VLS ranged from 74.6% in Botha-Bothe to 86.3% in Thaba-Tseka.

District	VLS (%)	95% CI
Maseru	81.6	78.2-85.0
Mafeteng	79.2	74.5-83.9
Mohale's Hoek	80.8	76.7-84.9
Leribe	79.6	76.3-82.8
Berea	83.4	79.0-87.8
Quthing	75.2	66.0-84.4
Botha-Bothe	74.6	68.0-81.2
Mokhotlong	83.7	72.3-95.0
Qacha's Nek	86.0	77.0-95.1
Thaba-Tseka	86.3	80.7-91.9

VLS=Viral load suppression.

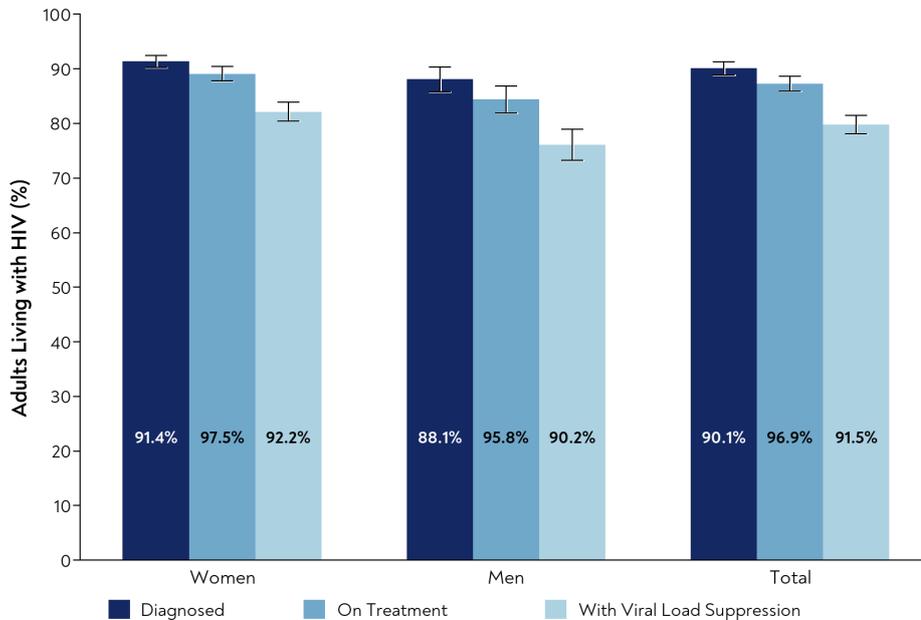


## ACHIEVEMENT OF THE 90-90-90 TARGETS AMONG ADULTS LIVING WITH HIV

**90-90-90: Treatment targets to help end the HIV epidemic**

The Joint United Nations Programme on HIV/AIDS (UNAIDS) set the 90-90-90 targets with the aim that by 2020, 90% of all people living with HIV would know their HIV status; 90% of all people with diagnosed HIV infection would receive sustained ART; and 90% of all people receiving ART would have VLS.

## ACHIEVEMENT OF THE 90-90-90 TARGETS, by SEX



**Diagnosed:** In Lesotho, 90.1% of adults (15 years and older) living with HIV were aware of their HIV status: 91.4% of women and 88.1% of men. Individuals were classified as aware if they reported their HIV-positive status or had a detectable antiretroviral (ARV) in their blood.

**On Treatment:** Among adults living with HIV who were aware of their status, 96.9% were on ART: 97.5% of women and 95.8% of men. Individuals were classified as being on ART if they reported current ART use or had a detectable ARV in their blood.

**Viral Load Suppression:** Among adults who were on ART, 91.5% had VLS: 92.2% of women and 90.2% of men.

\* Percentages shown in the graph refer to the conditional 90-90-90 targets described in the text to the right. The heights of the bars represent the unconditional percentages for each indicator among all people living with HIV. Error bars represent 95% CIs.

## CONCLUSIONS

- Lesotho has now met all 90-90-90 targets among adults (ages 15 years and older) living with HIV. The country has surpassed the overall target for 2020 to have more than 73% of all adults living with HIV achieving VLS.
- Since LePHIA 2016-2017, Lesotho has achieved the following progress among adults aged 15-59 years:
  - A 55% reduction in HIV incidence
  - A substantial increase in prevalence of VLS
- Although the country's HIV program has made great strides, gaps remain. For instance, HIV prevalence was higher among women than men. It was more than five times higher among young women aged 20-24 years than among their male counterparts. In addition, VLS among young people remained below the UNAIDS targets, regardless of sex.
- Moving forward, Lesotho is well positioned to reach the UNAIDS 95-95-95 targets by 2025 and to achieve the UNAIDS goal of ending the AIDS epidemic by 2030. The country can reach these targets by continuing the expansion of HIV diagnostic services and access to life-saving ART, and performing ongoing surveillance to detect increases in HIV incidence and responding in a timely manner.

## RESPONSE RATES AND HIV TESTING METHODS

Of 10,282 eligible households, 93.2% completed a household interview. Among 17,590 eligible adults aged 15 and older (10,147 women and 7,443 men), 87.3% were interviewed and tested for HIV (90.2% of women, 83.3% of men). The overall response rate for adults was 81.3% (84.0% of women, 77.6% of men).

HIV testing was conducted in each household using a serological rapid diagnostic testing algorithm based on national guidelines, with laboratory confirmation of seropositive samples using a supplemental assay. For confirmed HIV-positive samples, laboratory-based testing was conducted for quantitative evaluation of viral load and qualitative detection of ARVs (efavirenz, nevirapine, lopinavir, and dolutegravir). A laboratory-based incidence testing algorithm (HIV-1 limiting antigen-avidity assay with correction for viral load and detectable ARVs) was used to distinguish recent from long-term infection. Incidence estimates were obtained using the formula recommended by the World Health Organization Incidence Working Group and Consortium for Evaluation and Performance of Incidence Assays. Survey weights were utilized for all estimates.