



UGANDA

POPULATION-BASED HIV IMPACT ASSESSMENT (UPHIA 2025)



The Uganda Population-based HIV Impact Assessment (UPHIA 2025) was a national household-based survey among adults (defined as individuals aged 15 years and older) to measure the impact of the national HIV response. Conducted from July through September 2025, UPHIA 2025 offered HIV counselling and testing with return of results and collected information about uptake of HIV care and treatment services. UPHIA 2025 was the third survey in Uganda to estimate national HIV incidence, national and subnational prevalence of HIV and viral load suppression (VLS), defined as HIV RNA <1,000 copies per milliliter (mL). UPHIA 2025 also measured the prevalence of indicators for chronic non-communicable diseases. These included prevalence of elevated blood pressure (EBP), prevalence of overweight and obesity, and prevalence of raised random blood glucose (RBG). The first and second UPHIA were conducted from August 2016 through March 2017, and February 2020 through March 2021, respectively. The results of these surveys provide critical information on national and subnational progress toward HIV epidemic

control. UPHIA 2025 was led by the Government of Uganda through the Ministry of Health (MOH). The survey was conducted with funding from the United States (U.S.) President's Emergency Plan for AIDS Relief (PEPFAR) and through technical assistance and partnership with the U.S. Centers for Disease Control and Prevention (CDC). UPHIA 2025 was implemented by Makerere University School of Public Health (MakSPH) and MOH in collaboration with other Government of Uganda entities including the Uganda Virus Research Institute (UVRI) and the Uganda Bureau of Statistics (UBOS) as well as regional referral hospitals and local government authorities. The Government of Uganda and international development partners participated in the Steering Committee and Technical Working Group to provide input on survey planning and implementation. All the reported estimates were weighted to account for the survey design.

KEY FINDINGS

HIV Indicator	Women	95 % CI	Men	95 % CI	Total	95 % CI
HIV Prevalence (%)						
15 - 24 years	2.0	1.3–3.2	1.0	0.5–1.8	1.5	1.1–2.2
15 - 49 years	7.1	6.1–8.2	3.5	2.8–4.3	5.5	4.8–6.3
15 - 64 years	7.4	6.5–8.5	4.1	3.4–4.9	5.9	5.3–6.7
50+ years	8.2	6.5–10.2	7.5	5.9–9.4	7.9	6.7–9.3
15 years and above	7.3	6.4–8.3	4.1	3.5–4.9	5.9	5.2–6.6
Viral load suppression (%)						
15 - 24 years	(64.1)	(46.0–78.9)	*	*	69.3	53.2–81.8
15 - 49 years	85.2	80.1–89.1	84.0	75.1–90.2	84.8	80.5–88.3
15 - 64 years	85.9	81.3–89.6	86.6	79.6–91.5	86.1	82.2–89.3
50 + years	90.3	82.0–95.0	89.4	81.6–94.1	89.9	83.9–93.9
15 years and above	86.1	81.7–89.6	85.6	79.2–90.3	86.0	82.3–89.0

Estimates based on a denominator less than 25 survey participants have been suppressed and are indicated by an asterisk.

Estimates based on a denominator between 25 and 49 survey participants should be interpreted with caution and are included in parentheses in the table.

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

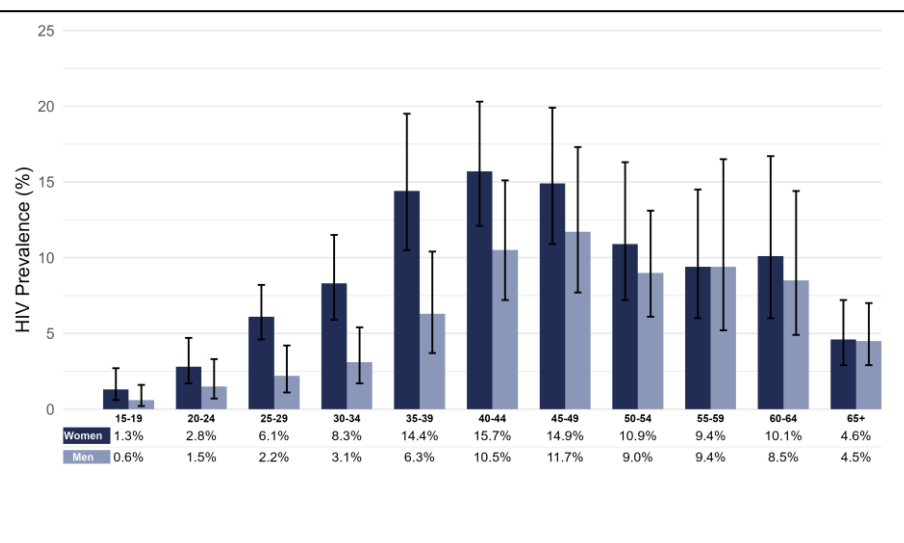
CI – Confidence Interval



The prevalence of HIV among adults aged 15 years and older in Uganda was 5.9%: 7.3% among women and 4.1% among men. This corresponds to 1,496,000 (95% CI: 1,270,000–1,722,000) adults living with HIV. From the three UPHIA surveys, the prevalence of HIV among adults aged 15 to 64 years was 6.2% in 2016/17 survey, 5.9% in 2020/21 and 5.9% in 2025^{1,2}.

The prevalence of VLS among adults aged 15 years and older living with HIV in Uganda was 86.0%: 86.1% among women and 85.6% among men. These estimates of VLS are among all adults living with HIV regardless of their knowledge of HIV or use of antiretroviral therapy (ART). From the three UPHIA surveys, the prevalence of VLS among adults aged 15 to 64 years was 59.6% in 2016/17 survey, 74.9% in 2020/21 and 86.1% in 2025^{1,2}.

HIV PREVALENCE AMONG ADULTS



HIV PREVALENCE, by AGE and SEX

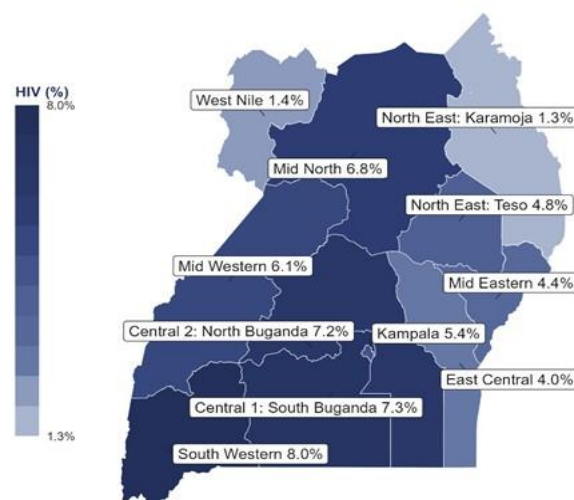
Among adults (ages 15 years and older), HIV prevalence in women ranged from 1.3% among adolescent girls aged 15-19 years to 15.7% among women aged 40-44 years.

HIV prevalence in men ranged from 0.6% in boys aged 15-19 years to 11.7% among men aged 45-49 years.

HIV PREVALENCE, by REGION

Among adults aged 15 years and older, HIV prevalence varied geographically, ranging from 1.3% in North East: Karamoja region to 8.0% in South Western region.

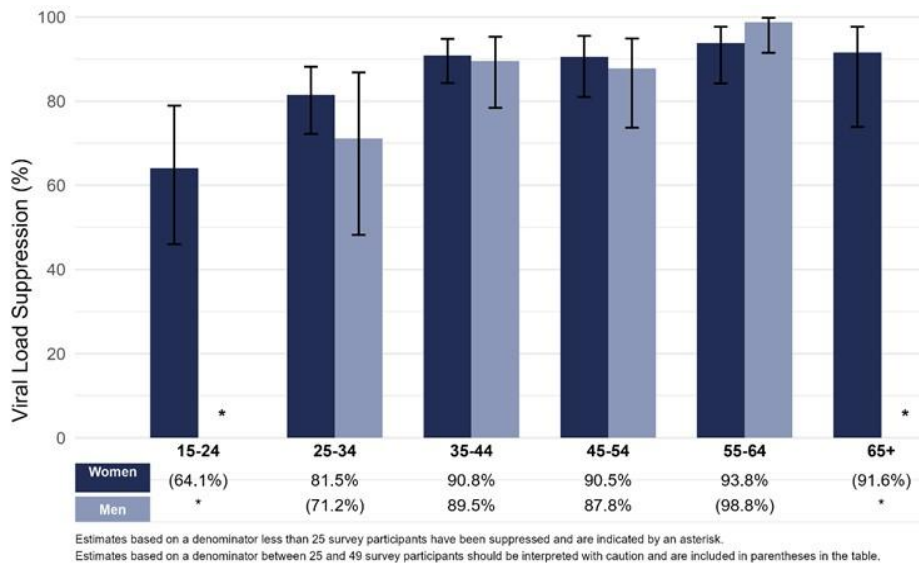
REGION	HIV PREVALENCE (%)	95% CI
Central 1: South Buganda	7.3	4.5-11.7
Central 2: North Buganda	7.2	5.5-9.5
East Central	4.0	3.1-5.1
Kampala	5.4	4.2-7.0
Mid Eastern	4.4	3.3-6.0
Mid North	6.8	5.1-9.0
Mid Western	6.1	4.1-9.0
North East: Karamoja	1.3	0.8-2.0
North East: Teso	4.8	3.9-5.8
South Western	8.0	6.4-9.9
West Nile	1.4	0.7-2.9



¹ Ministry of Health, Uganda. (2019). *Uganda Population-based HIV Impact Assessment (UPHIA) 2016-2017: Final report*. Ministry of Health.

² Ministry of Health, Uganda. (2022). *Uganda Population-based HIV Impact Assessment (UPHIA) 2020-2021: Final report*. Ministry of Health. <https://phia.icap.columbia.edu/uganda-final-report-2020-2021/>

VIRAL LOAD SUPPRESSION AMONG ADULTS LIVING WITH HIV



VIRAL LOAD SUPPRESSION, by AGE and SEX

Among women, prevalence of VLS ranged from 64.1% among those aged 15-24 years to 93.8% among those aged 55-64 years.

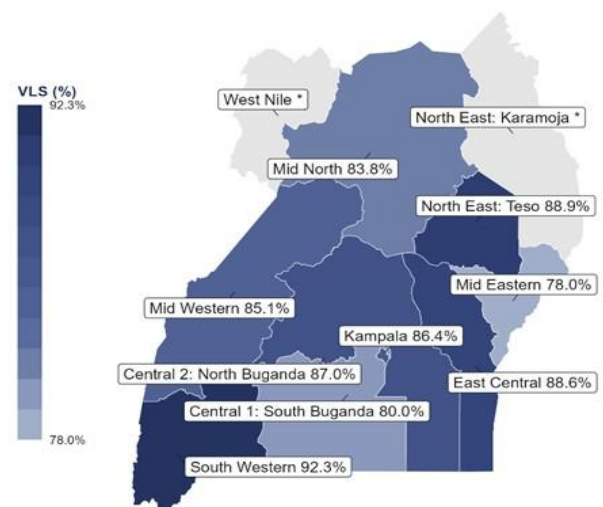
Among men, prevalence of VLS ranged from 71.2% among those aged 25-34 years to 98.8% among those aged 55-64 years.

VIRAL LOAD SUPPRESSION, by REGION

Among HIV positive adults aged 15 years and older, the prevalence of VLS ranged from 78.0% in the Mid Eastern region to 92.3% in the South Western region.

REGION	VLS (%)	95% CI
Central 1: South Buganda	80.0	73.2-85.4
Central 2: North Buganda	87.0	73.3-94.2
East Central	88.6	80.9-93.4
Kampala	86.4	69.5-94.6
Mid Eastern	78.0	59.6-89.5
Mid North	83.8	76.2-89.4
Mid Western	85.1	64.8-94.6
North East: Karamoja	*	
North East: Teso	88.9	79.9-94.2
South Western	92.3	84.4-96.3
West Nile	*	

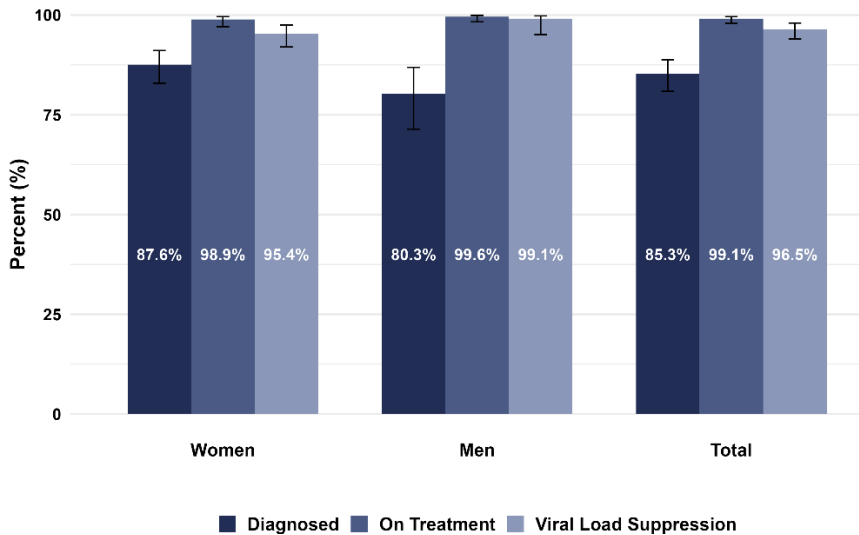
Estimates based on a denominator less than 25 survey participants have been suppressed and are indicated by an asterisk.



ACHIEVEMENT OF THE 95-95-95 TARGETS AMONG ADULTS LIVING WITH HIV

95-95-95: Treatment targets

The global and national targets for 2025 aimed for 95% of all people living with HIV to know their HIV status; 95% of all people diagnosed with HIV to receive sustained ART; and 95% of all people receiving ART to achieve VLS.



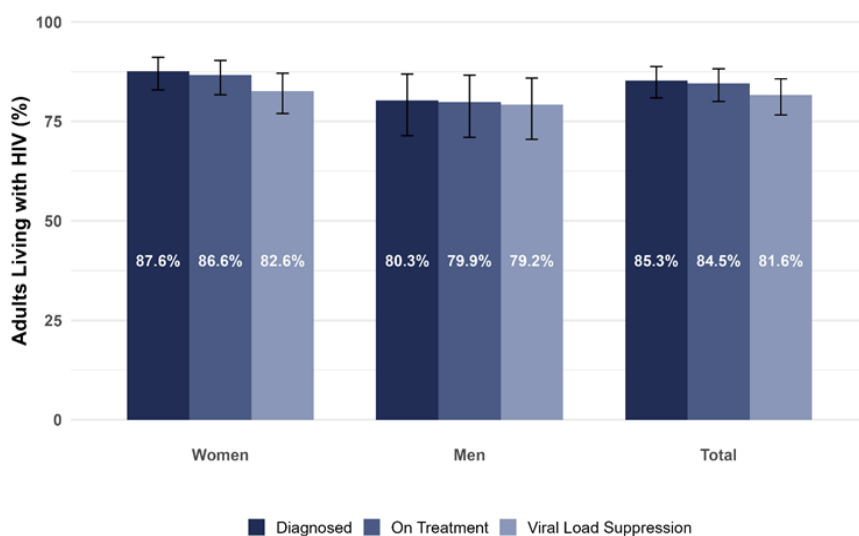
For the conditional 95-95-95, the denominator for the second and third 95 is the value of the preceding 95.

Aware: In Uganda, 85.3% of adults living with HIV aged 15 years and older were aware of their HIV positive status: 87.6% in women and 80.3% in men. Awareness was defined as self-reporting HIV positive and/or having a detectable antiretroviral (ARV) in the blood.

On Treatment: Among adults living with HIV who were aware of their status, 99.1% were on antiretroviral treatment (ART): 98.9% of women and 99.6% of men. Being on ART was defined as self-reporting current use of ART and/or having a detectable ARV in the blood.

Viral Load Suppression: Among adults who self-reported current use of ART and/or had a detectable ARV in their blood, 96.5% had VLS: 95.4% of women and 99.1% of men.

Unconditional 95-95-95 cascade



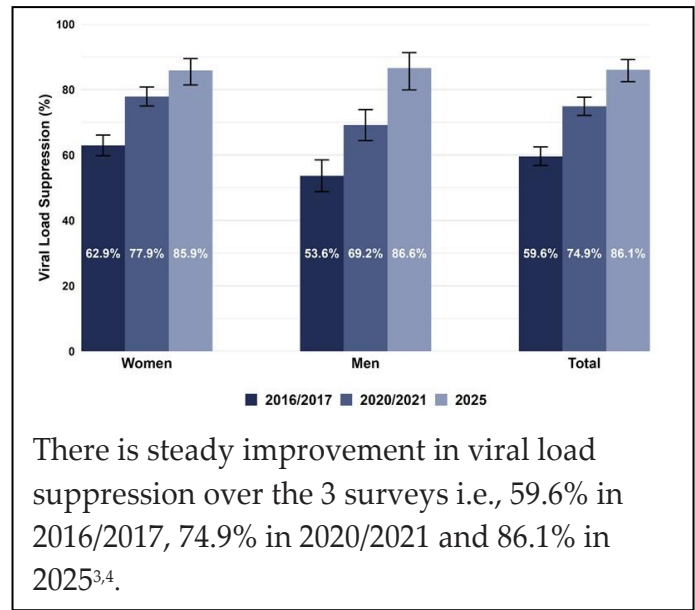
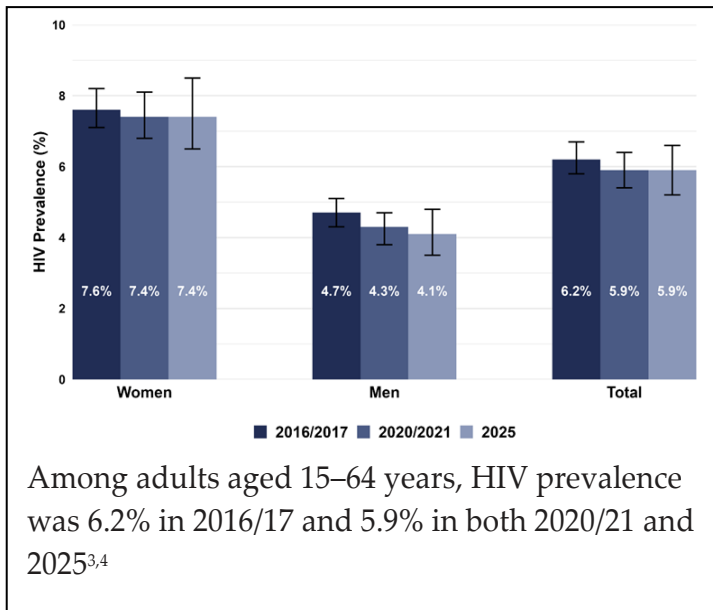
For the unconditional 95-95-95, the denominator for all three 95s is the overall population of adults living with HIV in Uganda.

Aware: Among all people living with HIV aged 15 years and older, 85.3% were aware of their HIV status.

On Treatment: Among all people living with HIV aged 15 years and older, 84.5% were aware of their status and on ART.

Viral Load Suppression: Among all people living with HIV aged 15 years and older, 81.6% were aware of their status, on ART, and virally suppressed.

TRENDS IN HIV PREVALENCE AND VLS FOR ADULTS 15-64 YEARS



The 15 to 64 years age group is used to allow comparison with UPHIA 2016/2017 in which the upper limit for inclusion was 64 years^{3,4}.

³ Ministry of Health, Uganda. (2019). *Uganda Population-based HIV Impact Assessment (UPHIA) 2016-2017: Final report*. Ministry of Health.

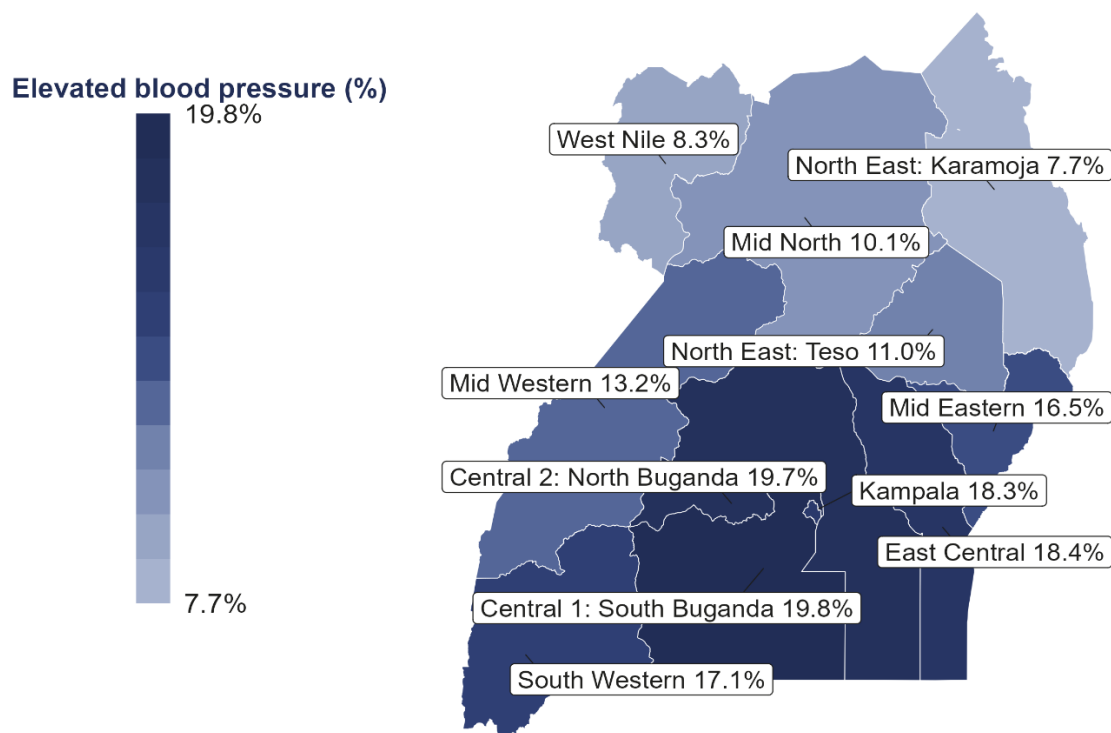
⁴ Ministry of Health, Uganda. (2022). *Uganda Population-based HIV Impact Assessment (UPHIA) 2020-2021: Final report*. Ministry of Health. <https://phia.icap.columbia.edu/uganda-final-report-2020-2021/>

PREVALENCE OF ELEVATED BLOOD PRESSURE, BY HIV STATUS, BY AGE GROUP, AND REGION

The prevalence of elevated blood pressure among all adults aged 15 years and above was 15.5% with 18.0% among PLHIV and 15.2% among HIV negative adults.

Elevated blood pressure increased with each older age group. The prevalence among young adults 15-24 years was 3.9%. It increased to 10.3% for ages 25-34 and doubled to 21.0% for age group 35-44 years. At ages 45-54, the prevalence was 30.3% and 39.0% in the age group 55-64. The highest prevalence was among those aged 65 years and above 44.4%

Among all adults 15 years and above, prevalence of elevated blood pressure was lowest in North East: Karamoja at 7.7% and highest in Central 1: South Buganda at 19.8% (see map below).



Blood pressure was measured directly during the household visit. Three readings were taken, 3 minutes apart after the participant had rested, and the average of the last two readings was used in the analysis. Elevated blood pressure was defined as a systolic blood pressure of 140 mmHg or higher, or a diastolic blood pressure of 90 mmHg or higher per national guidelines⁵.

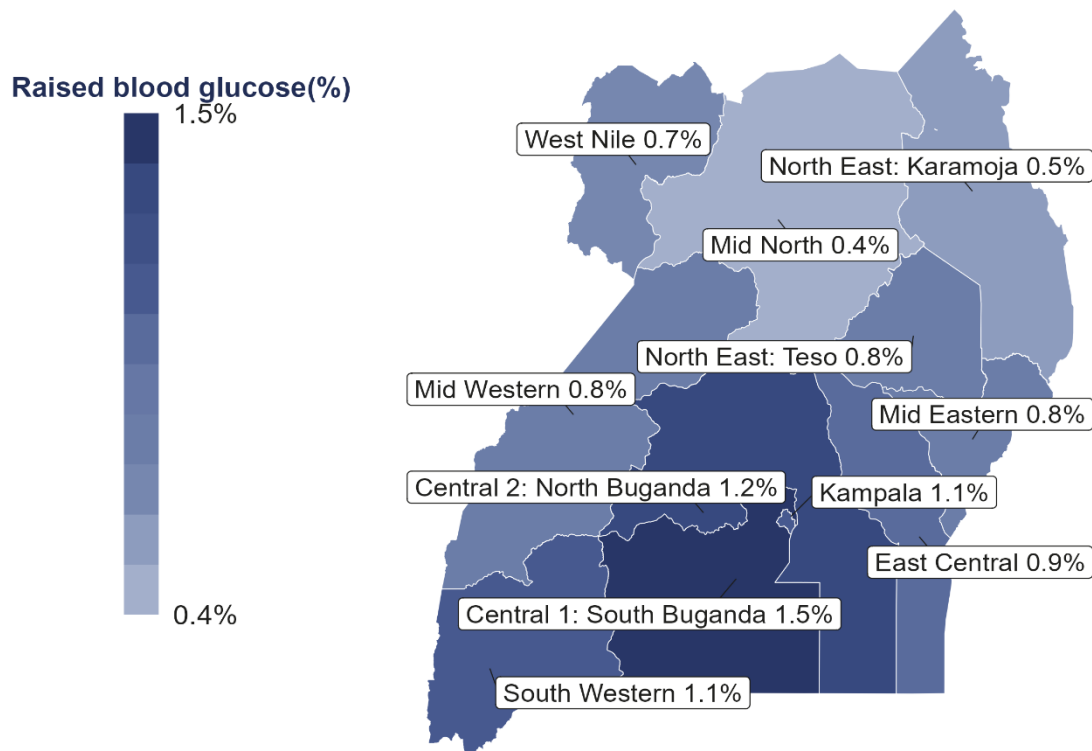
⁵ Ministry of Health, Uganda Clinical Guidelines 2023, National Guidelines for Management of Common Conditions.

PREVALENCE OF RAISED BLOOD GLUCOSE, BY HIV STATUS, BY AGE GROUP, AND REGION

The prevalence of raised blood glucose among all adults aged 15 years and above was 0.9% with 1.0% among PLHIV and 0.9% among HIV negative adults.

Raised blood glucose increased with age. The prevalence among young people aged 15-24 years was 0.1%. It increased to 0.8% for ages 25-34 and to 1.3% for ages 35-44. At ages 45-54, the prevalence was 2.4%, and it increased to 3.0% for age group 55-64 years. Among those aged 65 years the prevalence was 1.5%.

Among all adults 15 years and above, prevalence of raised blood glucose was lowest in Mid North at 0.4% and highest in Central 1: South Buganda at 1.5% (See map below).



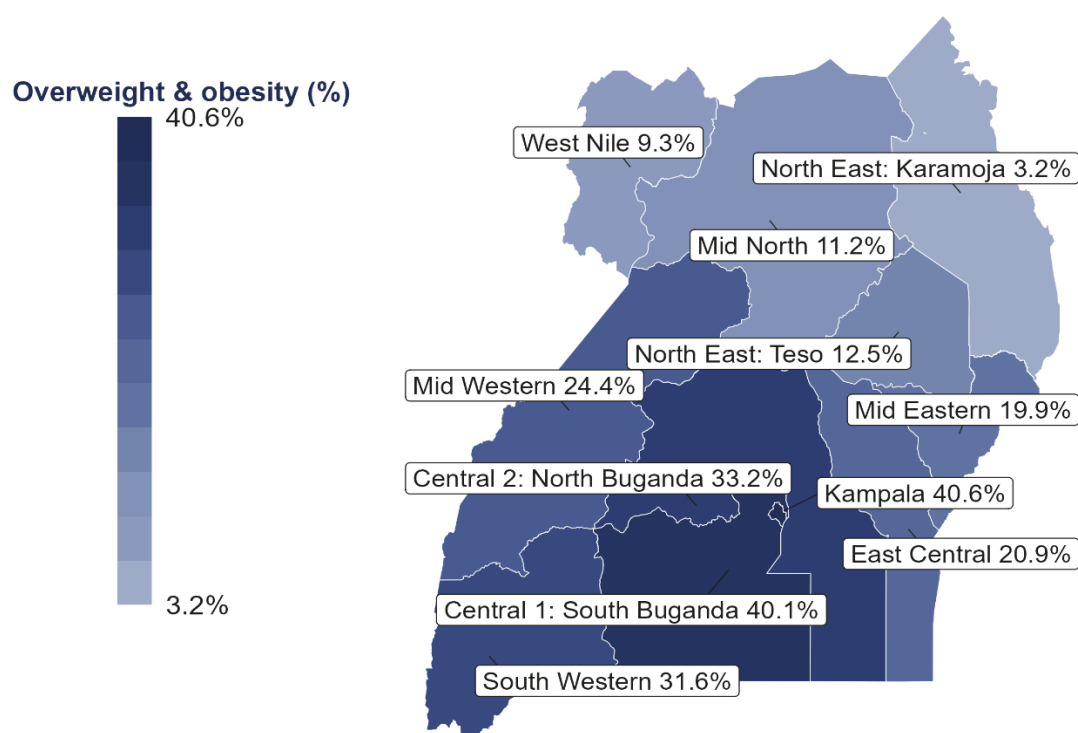
Random (*i.e., fasting and non-fasting*) blood glucose was measured directly at the household using a glucometer. Raised blood glucose was defined as a random blood glucose of 11.1 mmol/L or higher.

PREVALENCE OF OVERWEIGHT AND OBESITY, BY HIV STATUS, BY AGE GROUP, AND REGION

The prevalence of overweight and obesity among all adults aged 15 years and above was 24.8% with 26.8% among PLHIV and 24.6% among HIV negative adults.

Overweight and obesity increased with age up to 35-44 years, then declined. The prevalence among young people aged 15-24 years was 11.4%. It more than doubled to 29.8% for ages 25-34 and reached its highest level of 38.0% in the age group 35-44. At ages 45-54, the prevalence was 37.4%, and it fell to 29.8% in the age group 55-64. Among those aged 65 years and above, prevalence was 23.3%.

Among all adults 15 years and above, prevalence of overweight/obesity was lowest in North East: Karamoja at 3.2% and highest in Kampala at 40.6% (See map below).



Height and weight were measured directly during the household visit. Body mass index (BMI) was calculated as weight in kilograms divided by height in meters squared (kg/m^2). Overweight was defined as a BMI of 25.0 to 29.9 kg/m^2 , and obesity as a BMI of 30.0 kg/m^2 or higher. In this report, overweight and obesity are combined and defined as a BMI of 25.0 kg/m^2 or higher.

CONCLUSIONS

- The first 95% target, awareness among PLHIV, remains unachieved, at 85.3%. The second 95%, treatment among those aware, is sustained having been achieved in UPHIA 2020/2021. The third 95% target, VLS among those on treatment, was achieved.
- The primary gap in the HIV treatment cascade remains identifying PLHIV who are unaware of their HIV status. Once diagnosed, PLHIV demonstrate high levels of treatment uptake and viral load suppression.
- Viral load suppression among adults living with HIV has improved substantially across the three UPHIA surveys, although VLS remains lower among younger adults. Continued efforts are needed to improve viral load suppression among young people.
- HIV prevalence among adults aged 15-64 years did not change between this UPHIA round and in 2020/21; the estimated prevalence was 5.9% in both 2020/21 and 2025.
- Non communicable disease indicators varied by region, with prevalence in Central 1: South Buganda, Central 2: North Buganda, Kampala, and South Western regions appearing higher than in other regions, though the difference could have been due to chance. Nationally, prevalence of elevated blood pressure and overweight/obesity appeared higher among PLHIV than HIV-negative adults, but this difference could also have been due to chance. Prevalence of raised blood glucose was similar between the two groups.

RESPONSE RATES AND HIV TESTING METHODS

- Of 6,283 eligible households, 94.4% completed a household interview.
- Among 14,678 eligible adults (8,317 women and 6,361 men), a total of 13,801 adults participated in the individual interviews: interview response rates were 96.2% for women and 91.2% for men.
- Among those interviewed, 13,477 (7,824 women and 5,653 men) also had their blood drawn and tested for HIV: 97.8 % of women and 97.4 % of men. The overall response rate for blood draw was 86.7%: 88.8% for women and 83.9% for men.
- Among those interviewed, 13,513 (7,848 women and 5,665 men) also had their blood pressure and anthropometry measurement taken: 98.1 % of women and 97.6 % of men. The overall response rate for blood pressure and anthropometry was 86.9%: 89.1% for women and 84.1% for men.
- Among those interviewed, 13,478 (7,827 women and 5,651 men) consented to a finger-prick and had their random blood glucose measured: 97.9 % of women and 97.4 % of men. The overall response rate for random blood glucose was 86.7%: 88.9% for women and 83.9% for men.
- HIV testing was conducted in each household using a serological rapid diagnostic testing algorithm based on Uganda's 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 (atazanavir, efavirenz, dolutegravir, lamivudine, and tenofovir).
- Survey weights were utilized for all estimates.