

# THE FIFTH SOUTH AFRICAN NATIONAL HIV PREVALENCE, INCIDENCE, BEHAVIOUR AND COMMUNICATION SURVEY, 2017 (SABSSM V<sup>1</sup>)



The Fifth South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, (SABSSM V), a population-based cross-sectional survey of households in South Africa, was designed to assess the prevalence and trends of key HIV-related indicators. The survey was conducted between January and December 2017 by the Human Sciences Research Council (HSRC) and provides information on national and sub-national progress toward HIV epidemic control in the country. This report summarizes the HIV epidemic and impact of South Africa's national HIV response. HSRC has a long history of undertaking population-based surveys on HIV, starting with the 2002 Nelson Mandela/HSRC survey on HIV/AIDS, followed by the 2005, 2008, 2012 surveys. The 2017 survey is the fifth wave of the survey.

## KEY FINDINGS

HIV Indicator		Females	95% CI <sup>2</sup>	Males	95% CI	Total	95% CI
<b>Annual Incidence (%)<sup>3</sup></b>							
Age	15-24 years	1.51	1.31-1.71	0.49	0.27-0.71	1.00	0.86-1.15
	15-49 years	0.93	0.71-1.11	0.69	0.60-0.76	0.79	0.67-0.91
	15-64 years	0.82	0.70-0.94	0.58	0.50-0.66	0.69	0.61-0.77
<b>HIV Prevalence (%)</b>							
Age	0-14 years	3.0	2.3-3.9	2.4	1.8-3.2	2.7	2.2-3.3
	15-49 years	26.3	24.5-28.2	14.8	13.3-16.5	20.6	19.2-22.0
	50-64 years	18.7	15.7-22.0	15.3	12.2-19.2	17.2	14.9-19.8
	15-64 years	25.0	23.2-26.8	14.9	13.5-16.4	20.0	18.7-21.4
Race <sup>4</sup>	Black African	20.6	19.3-22.0	12.5	11.4-13.7	16.6	15.6-17.7
	White	0.9	0.2-3.3	1.3	0.3-4.7	1.1	0.3-3.6
	Coloured	5.8	4.2-8.1	4.7	3.2-6.8	5.3	4.0-6.8
	Indian/Asian	1.3	0.4-3.7	0.4	0.2-1.1	0.8	0.4-1.9
<b>Viral load suppression (VLS) Prevalence<sup>5</sup> (%)</b>							
Age	0-14 years	48.2	33.6-63.2	56.1	42.4-68.9	51.9	41.1-62.5
	15-49 years	66.7	63.4-69.8	50.8	45.1-56.4	61.0	58.0-63.9
	50-64 years	73.6	65.7-80.2	76.9	66.1-85.0	74.9	68.5-80.4
	15-64 years	67.6	64.6-70.4	54.8	49.6-59.9	62.9	60.1-65.7

Approximately 7.9 million people of all ages (0+ years) were living with HIV (PLHIV) in South Africa in 2017. HIV prevalence among adults aged 15 to 49 years in South Africa is 20.6 percent; 26.3 percent among females and 14.8 percent among males.

1 Originally, the survey was titled the South African HIV Behavioural, Sero-status and Media Impact Survey, hence the abbreviation SABSSM.

2 95% CI (confidence interval) indicates the interval within which the true population parameter is expected to fall 95% of the time from repeated surveys with same design and based on same sampling frame

3 Testing algorithm used a Limiting-Antigen (LAG) Avidity Enzyme immunoassay in combination with ART exposure and HIV viral load, incorporating recommendations from the UNAIDS Global HIV strategic information working group and the WHO Working Group on HIV incidence measurement and data use.

4 Prevalence by race includes all age groups (0+ years)

5 VLS is defined as HIV RNA <1,000 copies/mL on dried blood spots using the Abbott m2000 HIV Real-Time System (Abbott Molecular Inc., Des Plaines, Illinois, USA).

HIV prevalence among Black Africans is 16.6 percent; followed by Coloureds (5.3 percent); Whites (1.1 percent); and Indian/Asian (0.8 percent).

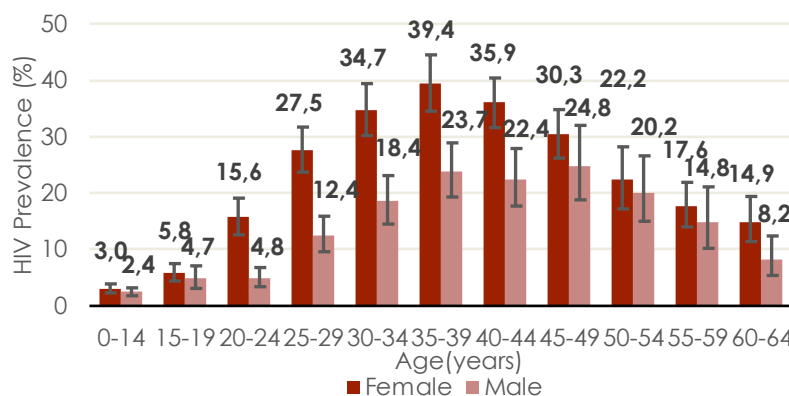
HIV annual incidence among adults aged 15 to 49 years in South Africa is 0.79 percent; 0.93 percent among females and 0.69 percent among males. This corresponds to approximately 199,700 people newly infected with HIV aged 15 to 49 years in 2017. Annual incidence in children aged 2 to 14 years is 0.13 (95% CI: 0.03-0.23).

Viral load suppression (VLS) prevalence among PLHIV aged 15 to 49 years in South Africa is 61.0 percent; 66.7 percent among females and 50.8 percent among males. Based on point estimates, VLS prevalence is lowest among 0-14 year olds at 51.9 percent.

## HIV PREVALENCE, BY AGE AND SEX

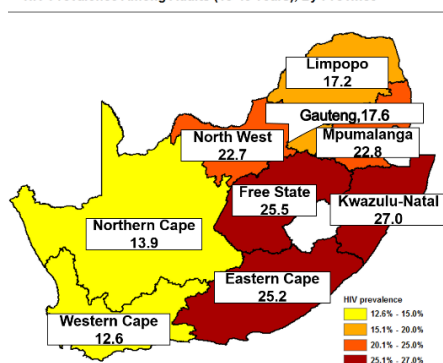
Based on point estimates, overall HIV peak prevalence occurs in 35 to 39 year-olds at 31.5 percent (females at 39.4 percent and males at 23.7 percent) but differs by sex, peaking at an older age among males (45 to 49 years) at 24.8 percent compared to females (35 to 39 years).

This disparity in HIV prevalence by sex is most pronounced among young adults: HIV prevalence among 20 to 24 year-olds is three times higher among females (15.6 percent) than males (4.8 percent).



## HIV PREVALENCE AMONG ADULTS, BY PROVINCE

HIV Prevalence Among Adults (15-49 Years), By Province



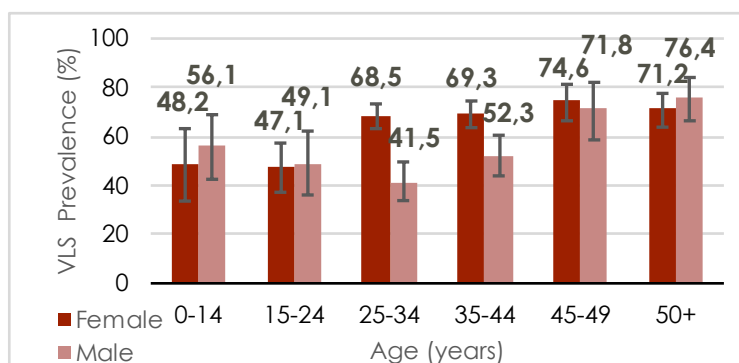
Province	Total	
	HIV+ %*	95% CI
Eastern Cape	25.2	19.8-31.5
Free State	25.5	21.7-29.7
Gauteng	17.6	14.8-20.7
KwaZulu-Natal	27.0	23.9-30.4
Limpopo	17.2	14.5-20.1
Mpumalanga	22.8	18.1-28.4
Northern Cape	13.9	11.4-16.8
North West	22.7	19.6-26.2
Western Cape	12.6	9.7-16.1

\*HIV+ % = HIV Prevalence

Among adults aged 15 to 49 years, HIV prevalence varies geographically across South Africa, ranging from 12.6 percent in Western Cape to 27.0 percent in KwaZulu-Natal.

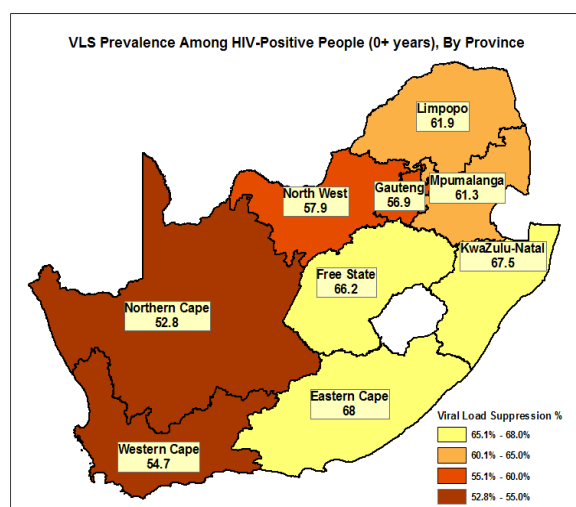
## VLS PREVALENCE AMONG ALL HIV-POSITIVE PEOPLE, BY AGE AND SEX

VLS prevalence among PLHIV in South Africa is highest among older adults: 74.6 percent among HIV positive females aged 45 to 49 years and 76.4 percent among HIV-positive males aged 50 years or older. In contrast, VLS prevalence is distinctly lower in younger adults: among PLHIV aged 15-24 years, females are lowest at 47.1 percent (males 49.1 percent), and among PLHIV aged 25-34 years males are lowest at 41.5 percent (females 68.5 percent).



## VLS PREVALENCE AMONG ALL HIV-POSITIVE PEOPLE<sup>6</sup>, BY PROVINCE

The VLS geographic pattern is quite similar to HIV prevalence with the lowest VLS prevalence among PLHIV at 52.8 percent (95% CI: 40.0-65.2) in Northern Cape and the highest VLS prevalence among PLHIV at 68.0 percent (95% CI: 60.5-74.7) in Eastern Cape in the second lowest HIV prevalence and second highest HIV prevalence provinces, respectively.



## ATTAINMENT OF THE 90-90-90 TARGETS (AMONG HIV-POSITIVE ADULTS<sup>7</sup>) BY SEX

**90-90-90:** UNAIDS set targets that by 2020, 90 percent of all PLHIV will know their HIV status; 90 percent of all people with diagnosed HIV infection will receive sustained antiretroviral therapy (ART); and 90 percent of all people receiving ART will have viral suppression.

### DIAGNOSED<sup>1</sup>

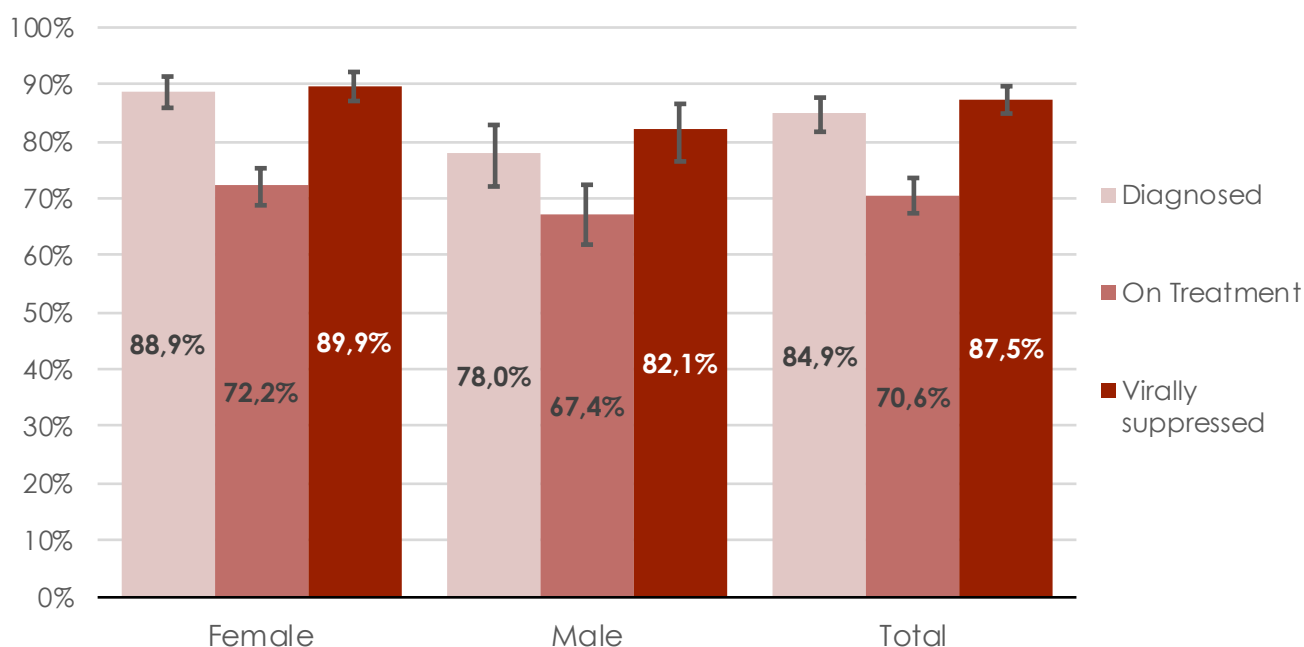
In South Africa, 84.9 percent of PLHIV aged 15 to 64 years know their HIV status: 88.9 percent of HIV-positive females and 78.0 percent of HIV-positive males know their status.

### VIRALLY SUPPRESSED

Among PLHIV aged 15 to 64 years currently on ART, 87.5 percent are virally suppressed: 89.9 percent of HIV-positive females and 82.1 percent of HIV-positive males who are on ART are virally suppressed.

### ON TREATMENT

Among PLHIV aged 15 to 64 years who know their HIV status, 70.6 percent are on ART: 72.2 percent of HIV-positive females and 67.4 percent of HIV-positive males who know their HIV status are on ART<sup>8</sup>.



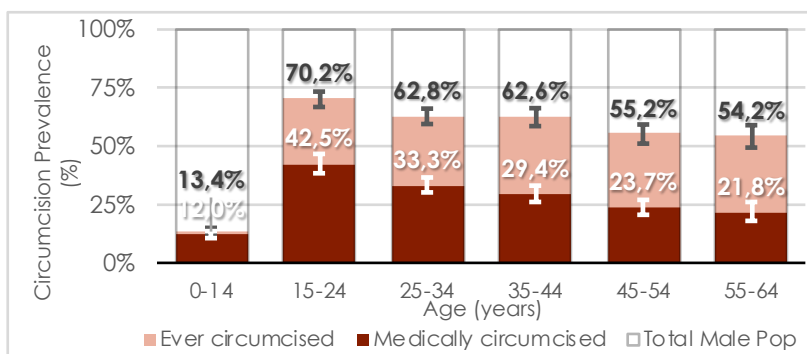
6 All PLHIV aged 0+ years

7 PLHIV aged 15-64 years

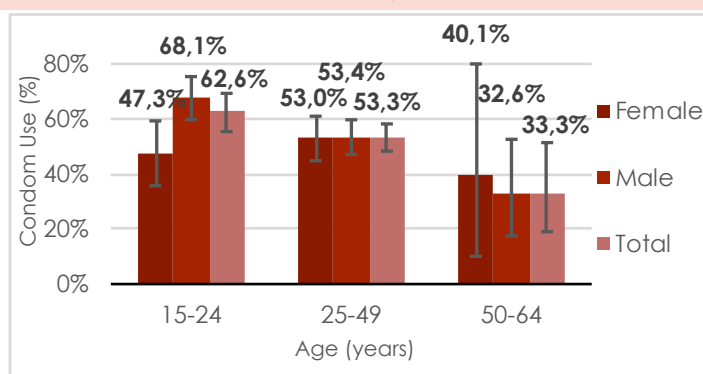
8 On ART is defined as having laboratory detected ART metabolites and does not include self-reported treatment

## MALE CIRCUMCISION PREVALENCE BY AGE

Overall, 31.8 percent of males aged 15-64 years old reported being medically circumcised. Forty-three percent of males 15-24 were medically circumcised while males 0-14 and 55-64 years had the lowest prevalence of medical circumcision at 12.0 and 21.8 percent, respectively. Of 13.4% of circumcised males aged 0-14 years, 89.9% were medically circumcised.



## CONDOM USE AT LAST SEX, AMONG THOSE WITH MORE THAN ONE PARTNER IN THE LAST YEAR



Among individuals aged 15-64 years with two or more sexual partners in the last year, 55.6% self-reported condom use at last sex. Of those aged 25-49 years, both males (53.0%) and females (53.4%) had similar proportions of condom use. Sixty-eight percent of young males (15-24 years) with multiple partners reported condom use at last sex compared to 47.3% of females of the same age. Only 33.3 percent of older adults (50-64) years with multiple partners used condoms at last sex.

## CONCLUSIONS

- Progress is being made towards the UNAIDS 90-90-90 targets. By 2017, South Africa had attained 85-71-86, emphasising the need to get more PLHIV on treatment.
- The burden of HIV continues to disproportionately affect different geographical regions and high risk groups, especially Black Africans, adolescent girls and young women.
- HIV incidence has decreased from the 2012 estimates, yet remains high, particularly among female youth aged 15-24 years.
- Over two-thirds of males aged 15-24 years are circumcised, over half of these are medical circumcisions.
- Further analyses on additional key drivers of the epidemic including the impact of HIV communications programmes will be available in subsequent reports.

## RESPONSE RATES AND HIV TESTING

Of 11,743 valid households, 82.2 percent completed a household interview. Of 13,669 eligible women, aged 15-64 years, 94.3 percent were interviewed and 67.7 percent provided blood for HIV and additional testing. Of 10,801 eligible men, aged 15-64 years, 89.5 percent were interviewed and 58.4 percent provided blood for HIV and additional testing. Of 11,845 eligible children aged 0 to 14 years, 56.0 percent were tested for HIV.

## ACKNOWLEDGEMENTS AND DISCLAIMERS

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