



Celebrating 20 years
of research towards a healthier nation

THE SIXTH SOUTH AFRICAN NATIONAL HIV PREVALENCE, INCIDENCE, AND BEHAVIOUR SURVEY (SABSSM VI)

20 YEARS OF STRATEGIC HIV AND PUBLIC HEALTH DATA

Key findings for Mpumalanga Province 17 September 2024



OVERVIEW OF PRESENTATION



- Background of the SABSSM survey series
- Main objectives of the survey
- Survey methods
- Provincial results
 - National HIV prevalence
 - Antiretroviral treatment
 - Viral load suppression
 - Progress towards 95-95-95 targets
 - Key drivers of the HIV epidemic
- Concluding remarks

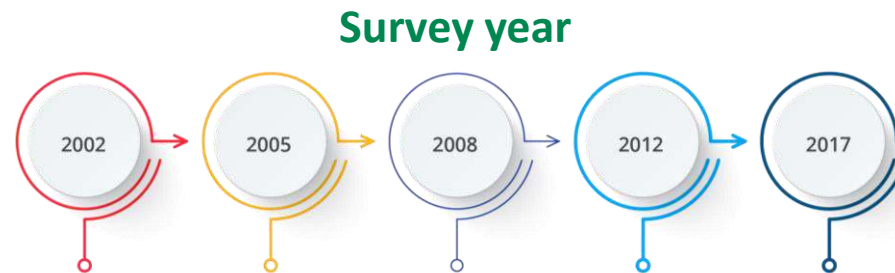
HISTORY OF THE SURVEY



- Expanded scope
- Larger sample size
- Increased biomarkers
- Take all approach



Major source of information for measuring the progress of the implementation of the South African National Strategic Plan (NSP) for HIV, STIs and TB



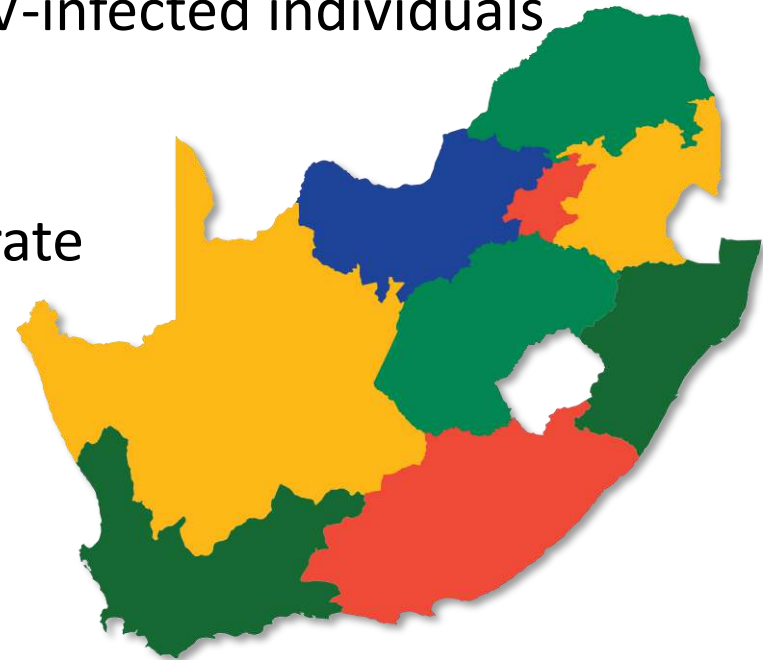
MAIN OBJECTIVES

To estimate at national, provincial and district levels (PEPFAR and NDoH priority):

- HIV prevalence (adults and children)
- Exposure to ART
- Viral load suppression in HIV-infected individuals

To estimate at the national level:

- HIV incidence (annualized rate of new HIV infections)



SURVEY METHODS

Geographic scope

- National level: 9 provinces
- District level: 27 PEPFAR and 6 National Department of Health priority districts



Mpumalanga selected districts: Ehlanzeni, Gert Sibande, Nkangala



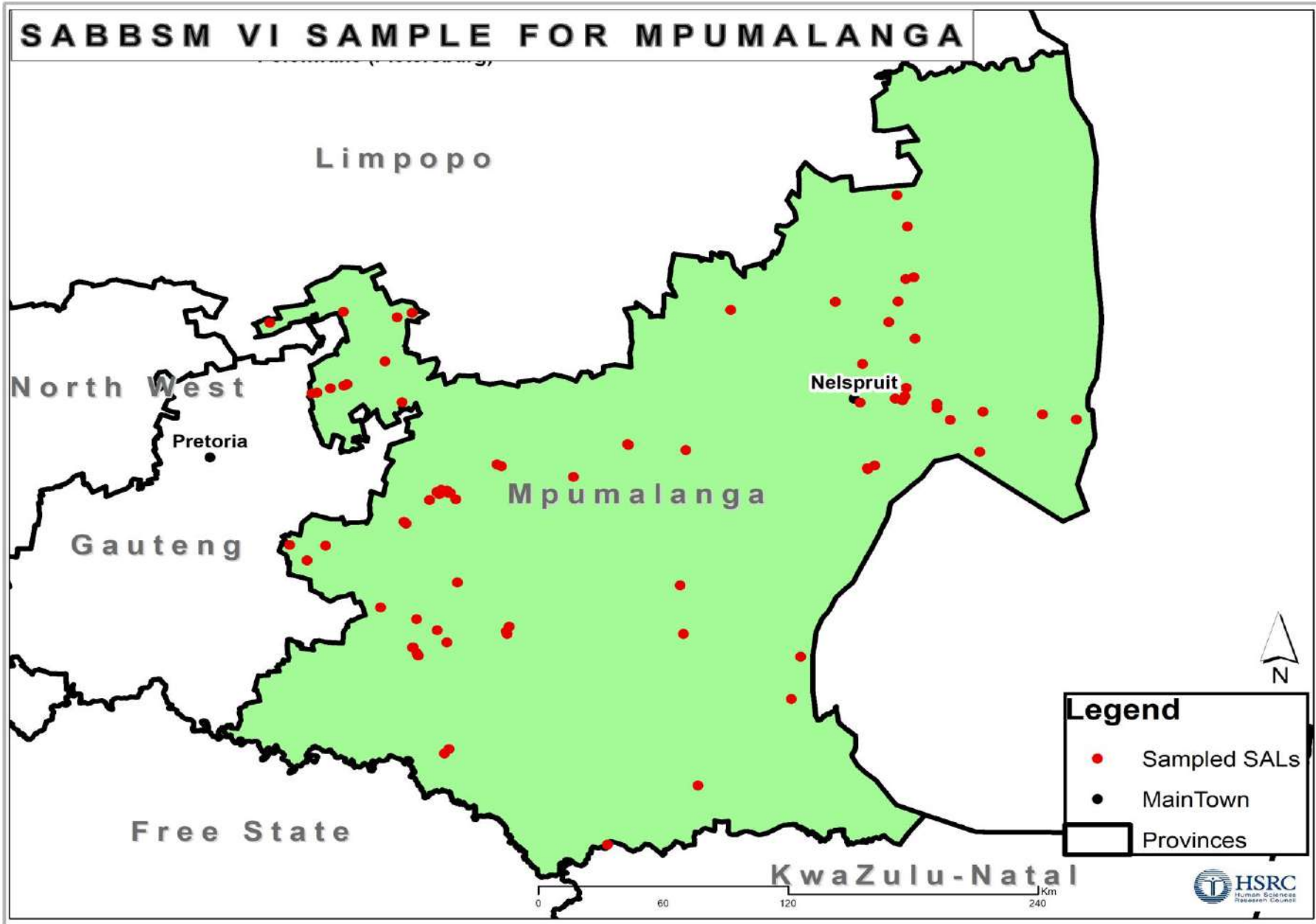
Survey design

- A cross-sectional, population-based household survey, using multi-stage stratified cluster random sampling
- The survey design and methods are validated in the five previous surveys

Survey population

- Persons of all ages living in South Africa at the time of the survey
- All members of the selected households were invited to participate
- Data collected from January 2022 to April 2023
- Expected sample size for Mpumalanga: 9 143

SABBSM VI SAMPLE FOR MPUMALANGA



QUESTIONNAIRES

Household Questionnaire



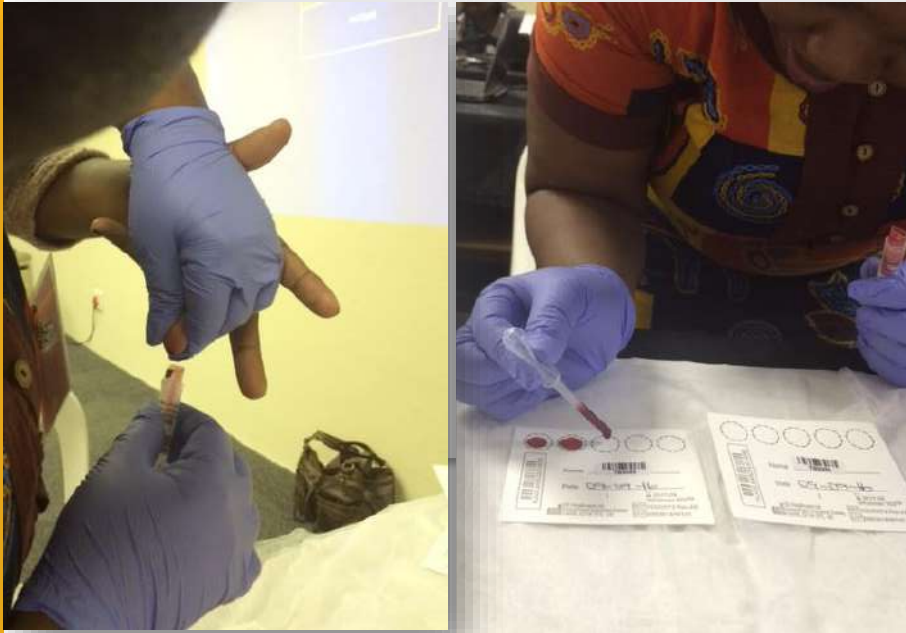
- This questionnaire was used to record a household listing of members and other household-level information

Individual Questionnaires



- Questionnaire for parent/guardian of children aged 0 to 11 years
- Questionnaire for children aged 12 to 14 years
- Questionnaire for persons aged 15 years and older

SPECIMEN COLLECTION



Dried blood spot (DBS)
specimens collected by

- finger-prick
- heel-prick in infants < 24 months

SPECIMEN TESTING



Dried Blood Spot

HIV Ab testing
Two 4th Generation EIA plus confirmatory testing
Nucleic Acid Amplification test < 24 months

HIV Pos

*** HIV Incidence**
(age ≥ 2 years)
LAg assay/ RITA plus

ARVs
HPLC coupled with Tandem Mass Spectrometry

Viral Load
HIV-1 RNA on Abbott m2000 HIV Real-Time System

*** HIV Drug Resistance**
(VL > 1000 c/ml)
Next-generation sequencing

* Not reported in this presentation



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RESULTS – Mpumalanga



RESPONSE RATES

- **2 692 VPs*** were approached, where **2 479, 92.0%** were valid
- Of the valid **2 479** households, **85.0%** completed a household interview
- Of the eligible **7 420** individuals, aged **0+ years****, **98.2%** were interviewed, and **63.9%** provided blood for HIV and additional testing
- Of the **2 292** eligible **males**, aged **15+ years**, **97.1%** were interviewed, and **67.2%** provided blood for HIV and additional testing
- Of the **3 136** eligible **females**, aged **15+ years**, **98.4%** were interviewed, and **73.9%** provided blood for HIV and additional testing

*VP- A visiting point is a physical address or a dwelling where a household or a group of households can be found. It can be a house, shack, vacant stand or a hostel

** parents and guardians were interviewed on behalf of children < 12 years

OVERALL HIV PREVALENCE, MPUMALANGA, 2017 AND 2022



The overall provincial estimate for HIV prevalence for all ages in **2022** was **17.4%** translating to **890 000** people living with HIV.

The HIV prevalence was **19.4%** in **2017** translating to **860 000** people living with HIV.

HIV PREVALENCE BY PROVINCE, SOUTH AFRICA, 2017 AND 2022



HIV Prevalence (%)

2017 National: 14.0



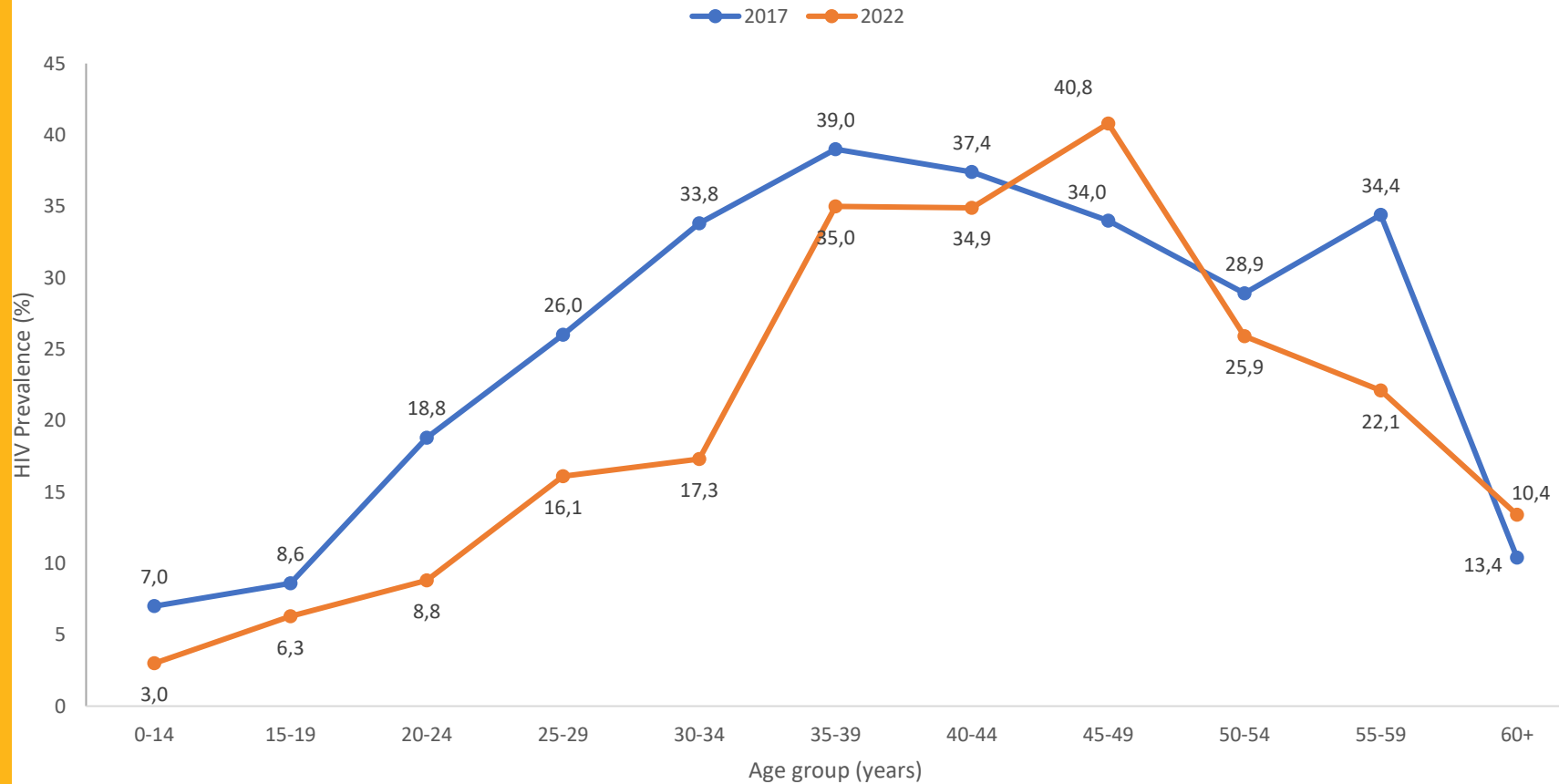
Mpumalanga	KwaZulu-Natal	Free State	Eastern Cape	North West	Gauteng	Northern Cape	Limpopo	Western Cape
19.4	18.0	17.0	15.9	14.8	12.1	8.2	10.1	8.6

2022 National: 12.7



Mpumalanga	KwaZulu-Natal	Free State	Eastern Cape	North West	Gauteng	Northern Cape	Limpopo	Western Cape
17.4	16.0	15.6	13.7	12.3	11.9	8.9	8.9	7.4

OVERALL HIV PREVALENCE, BY AGE GROUP, MPUMALANGA PROVINCE, 2017 AND 2022

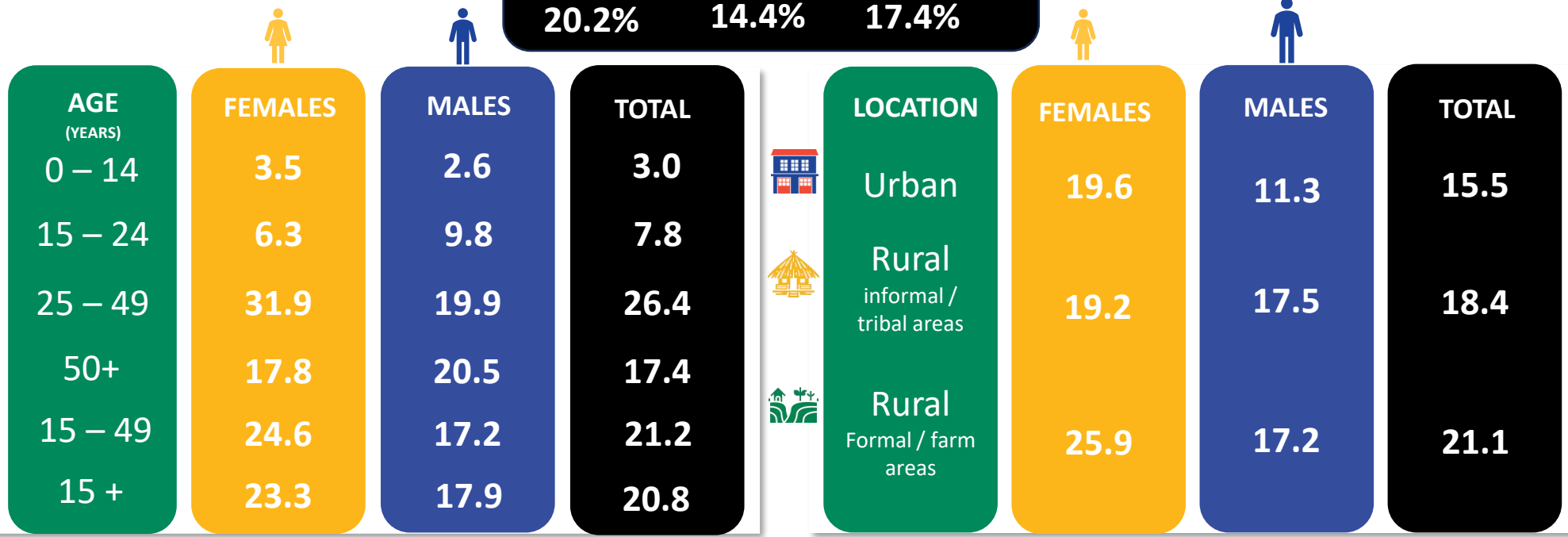


OVERALL HIV PREVALENCE, BY SEX FOR SELECTED DEMOGRAPHICS, MPUMALANGA, 2022

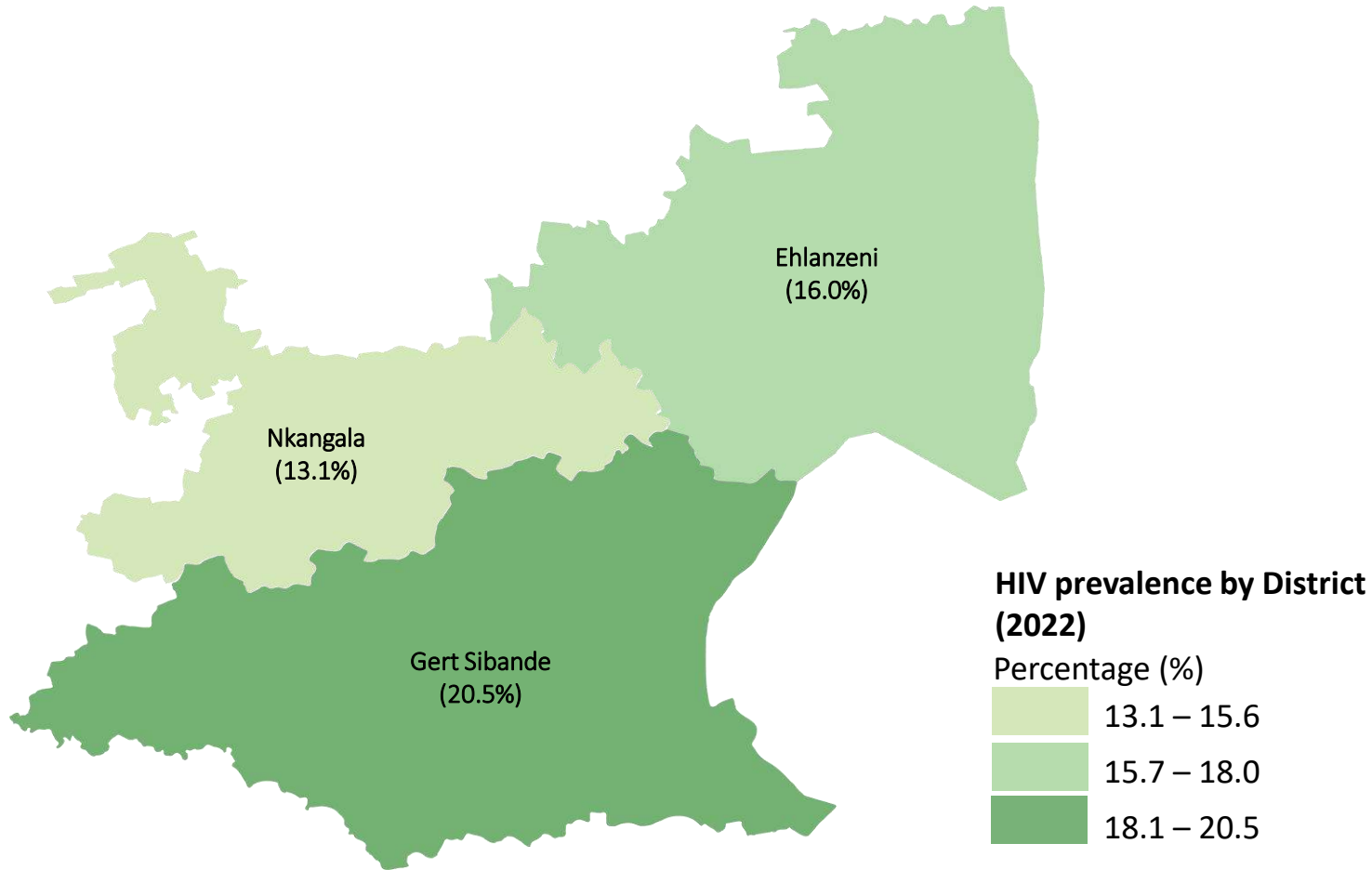


HIV Prevalence (%)

Total Females: 20.2% **Total Males: 14.4%** **Total both Sexes: 17.4%**



OVERALL HIV PREVALENCE, BY DISTRICTS, MPUMALANGA, 2022



ANTIRETROVIRAL TREATMENT COVERAGE BY PROVINCE, SOUTH AFRICA, 2017 AND 2022

ART coverage (%)

2017 National: 63.7



KwaZulu-Natal	Northern Cape	Eastern Cape	Mpumalanga	Free State	Limpopo	North West	Western Cape	Gauteng
71.2	54.9	67.8	65.4	64.7	62.8	60.7	54.4	56.0

2022 National: 80.9

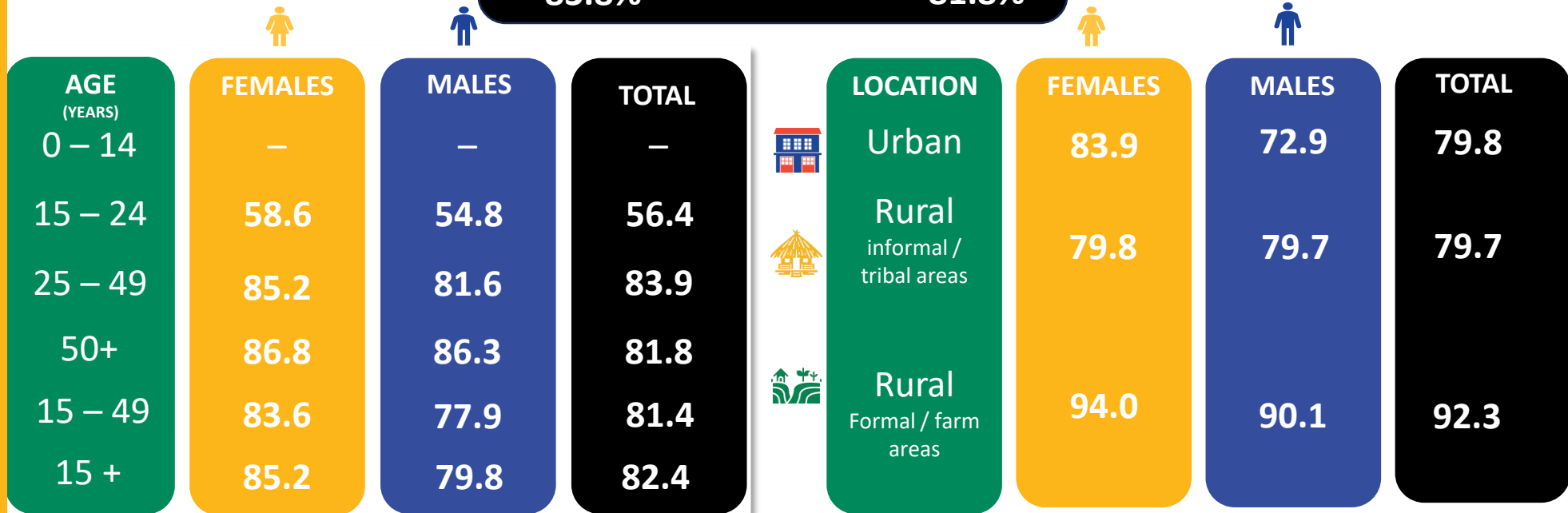


KwaZulu-Natal	Northern Cape	Eastern Cape	Mpumalanga	Free State	Limpopo	North West	Western Cape	Gauteng
87.3	86.2	83.5	81.8	81.3	80.8	78.9	76.8	73.4

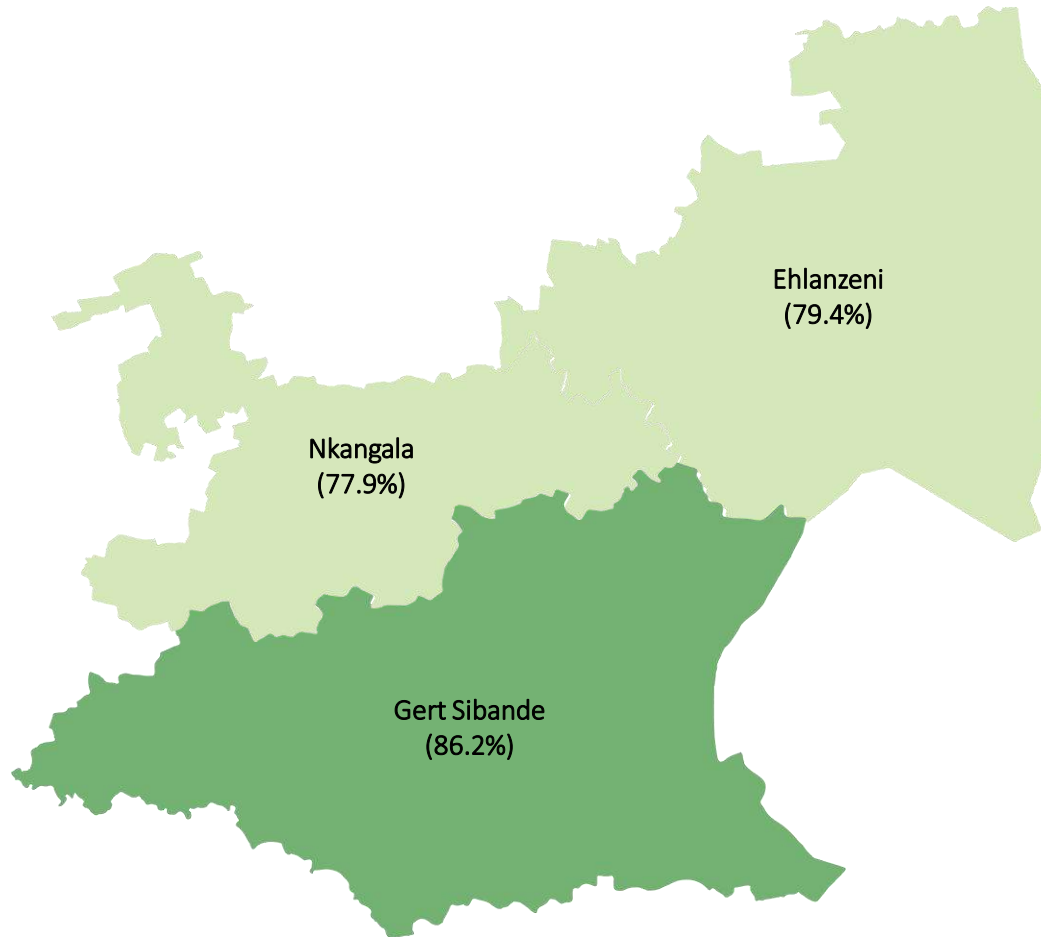
OVERALL ANTIRETROVIRAL TREATMENT, BY SEX FOR SELECTED DEMOGRAPHICS, MPUMALANGA, 2022

ART coverage (%)

Total
Females: 83.8%
Total
Males: 78.8%
Total both
Sexes: 81.8%

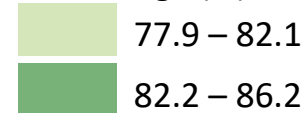


OVERALL ANTIRETROVIRAL TREATMENT COVERAGE, BY DISTRICTS, MPUMALANGA, 2022



Persons living with HIV on ART by District (2022)

Percentage (%)



VIRAL LOAD SUPPRESSION BY PROVINCE, SOUTH AFRICA, 2017 AND 2022

Viral load suppression (%)

2017 National: 61.6



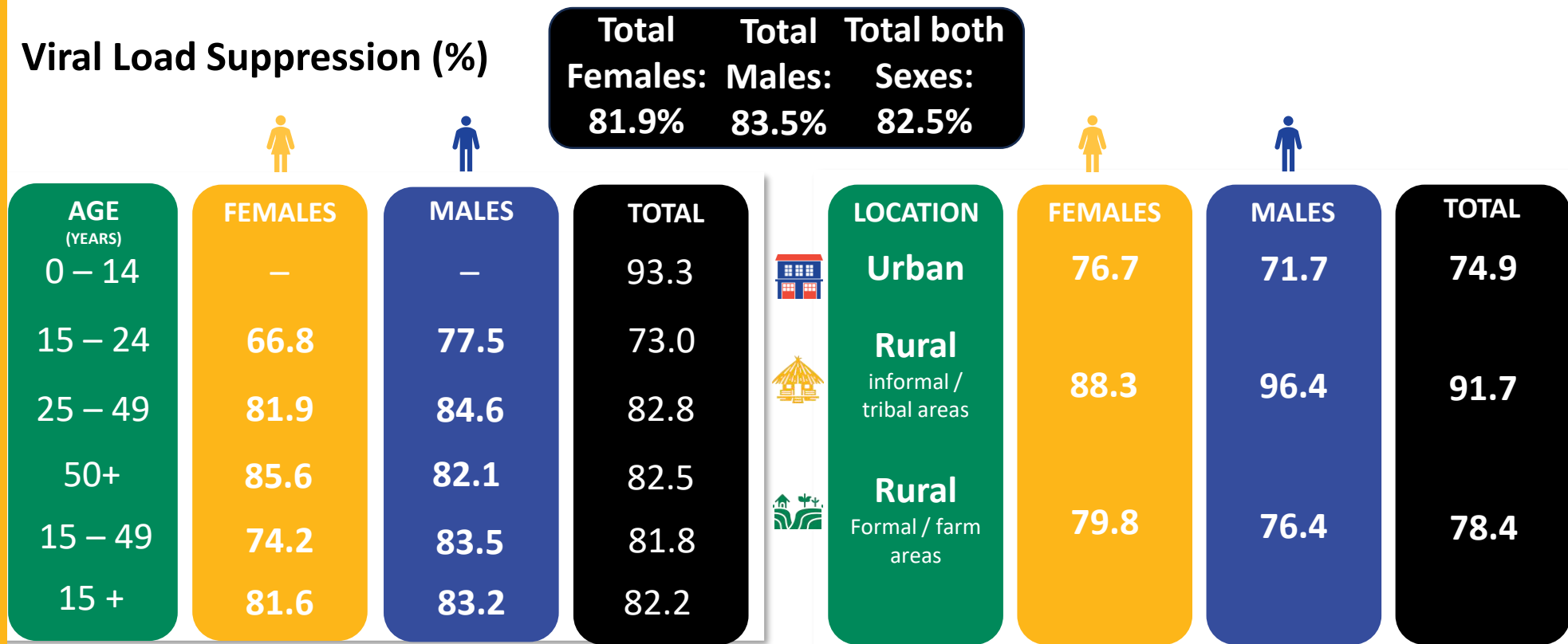
KwaZulu-Natal	Mpumalanga	Free State	Gauteng	Eastern Cape	Northern Cape	Western Cape	Limpopo	North West
67.8	60.0	66.2	55.3	66.3	52.2	54.6	60.8	58.7

2022 National: 81.4



KwaZulu-Natal	Mpumalanga	Free State	Gauteng	Eastern Cape	Northern Cape	Western Cape	Limpopo	North West
86.8	82.5	81.1	79.7	79.3	78.6	78.4	77.0	77.0

OVERALL VIRAL LOAD SUPPRESSION*, BY SEX FOR SELECTED DEMOGRAPHICS, MPUMALANGA, 2022



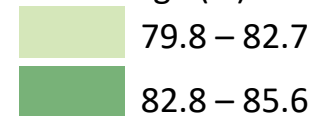
*Viral load <1,000 copies/ml

OVERALL POPULATION VIRAL LOAD SUPPRESSION BY DISTRICTS, MPUMALANGA, 2022



Viral Load Suppression by District (2022)

Percentage (%)



95-95-95 TARGETS: DEFINITIONS



First 95

Aware/knows status if
tested positive in the
survey and



Had self-reported
being positive or



Tested positive for
ARVs in the survey or



Self-reported using
ART



Second 95

On ART*



Tested positive for
ARVs in the survey



Self-reported using
ART

*among those who know HIV status



Third 95

Virally
suppressed‡

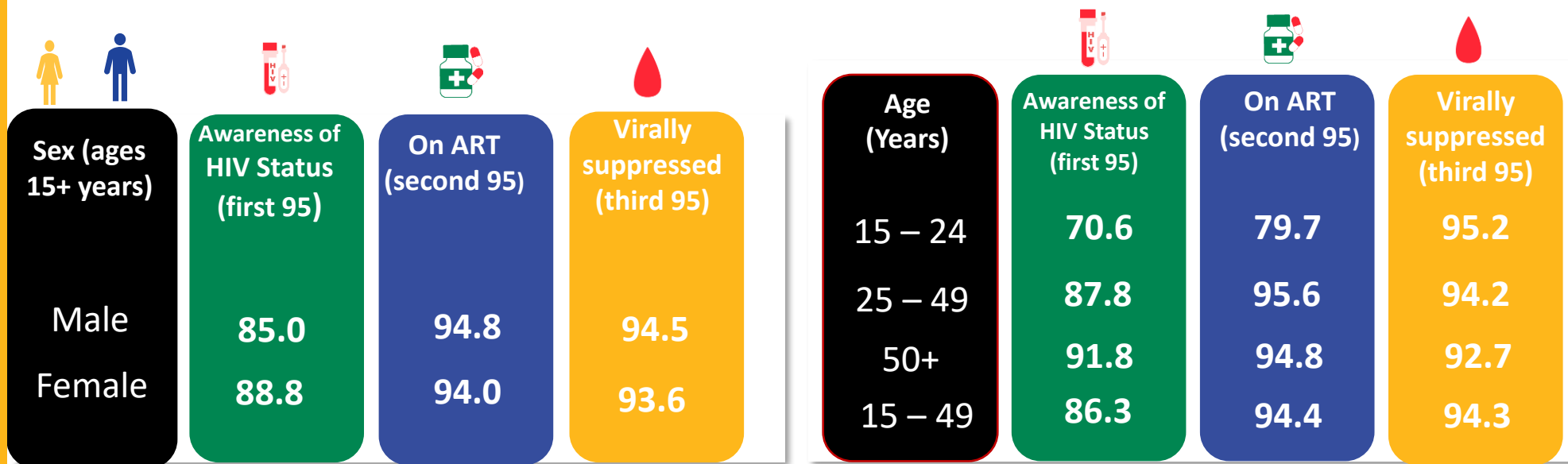


Viral load <1000
copies/ml

‡ among those on ART

95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY SELECTED DEMOGRAPHICS, MPUMALANGA, 2022

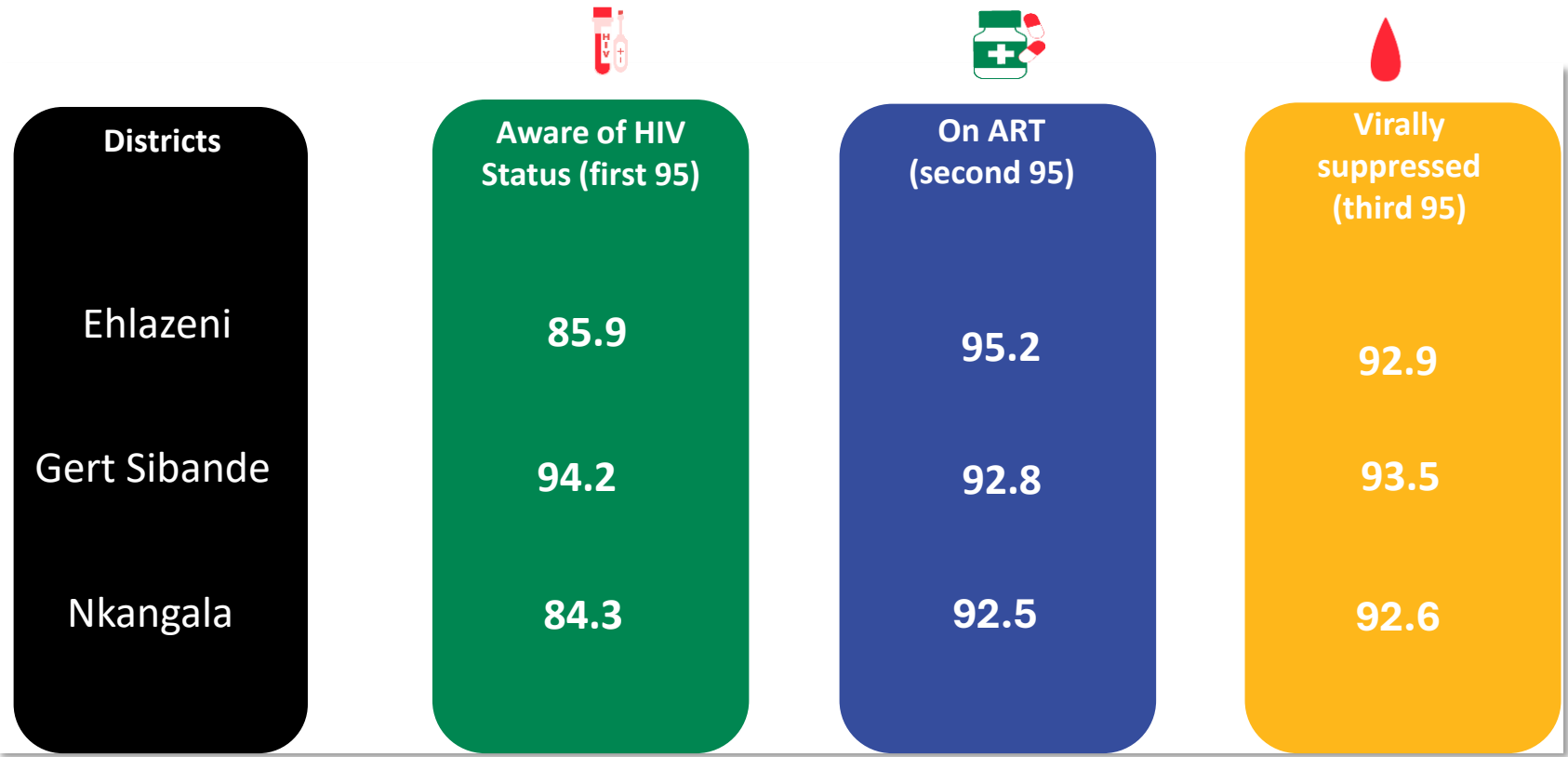
Overall, MP (Ages 15+ Years) **87.3%** **Aware of HIV Status (First 95)** | **94.5%** **On ART (Second 95)** | **94.0%** **Virally suppressed (Third 95)**



95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY DISTRICT, MPUMALANGA, 2022

Overall, MP
(Ages 15+ Years)

87.3% Aware of HIV Status (First 95)	94.5% On ART (Second 95)	94.0% Virally suppressed (Third 95)
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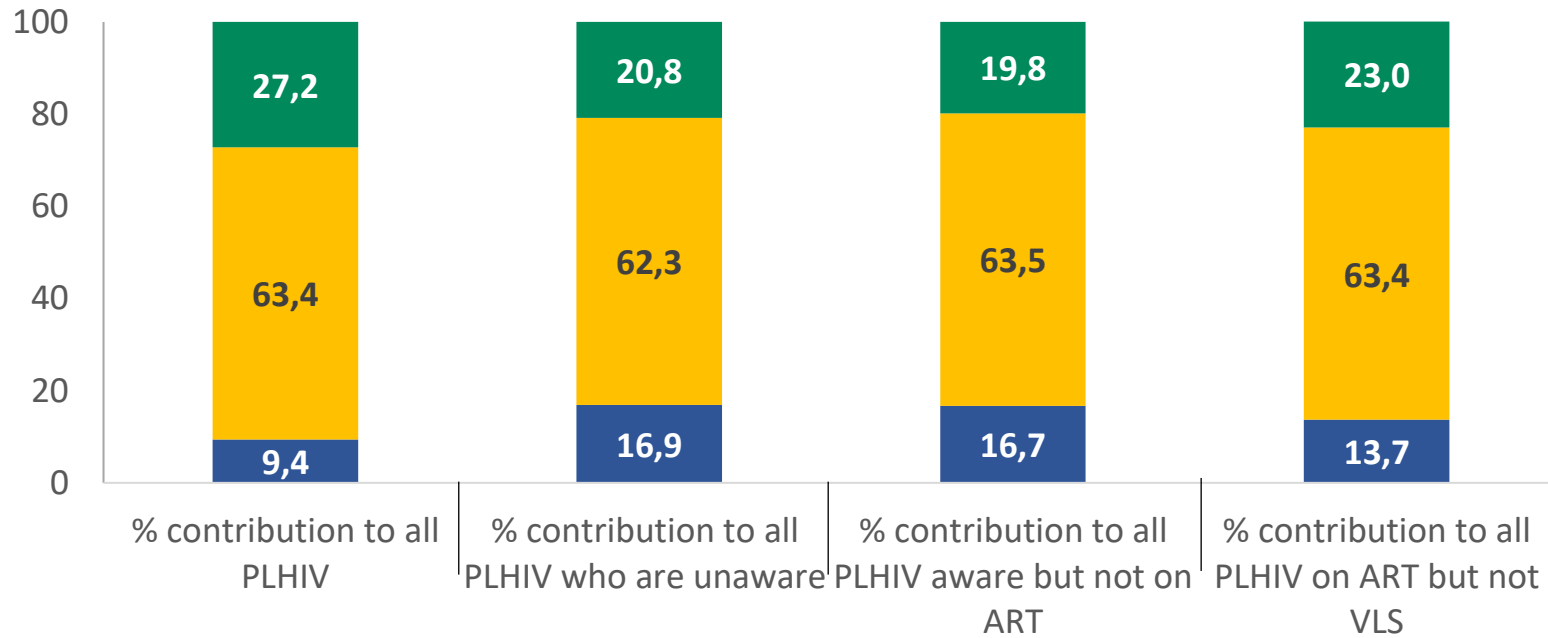


GAPS IN 95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY AGE, MPUMALANGA, 2022



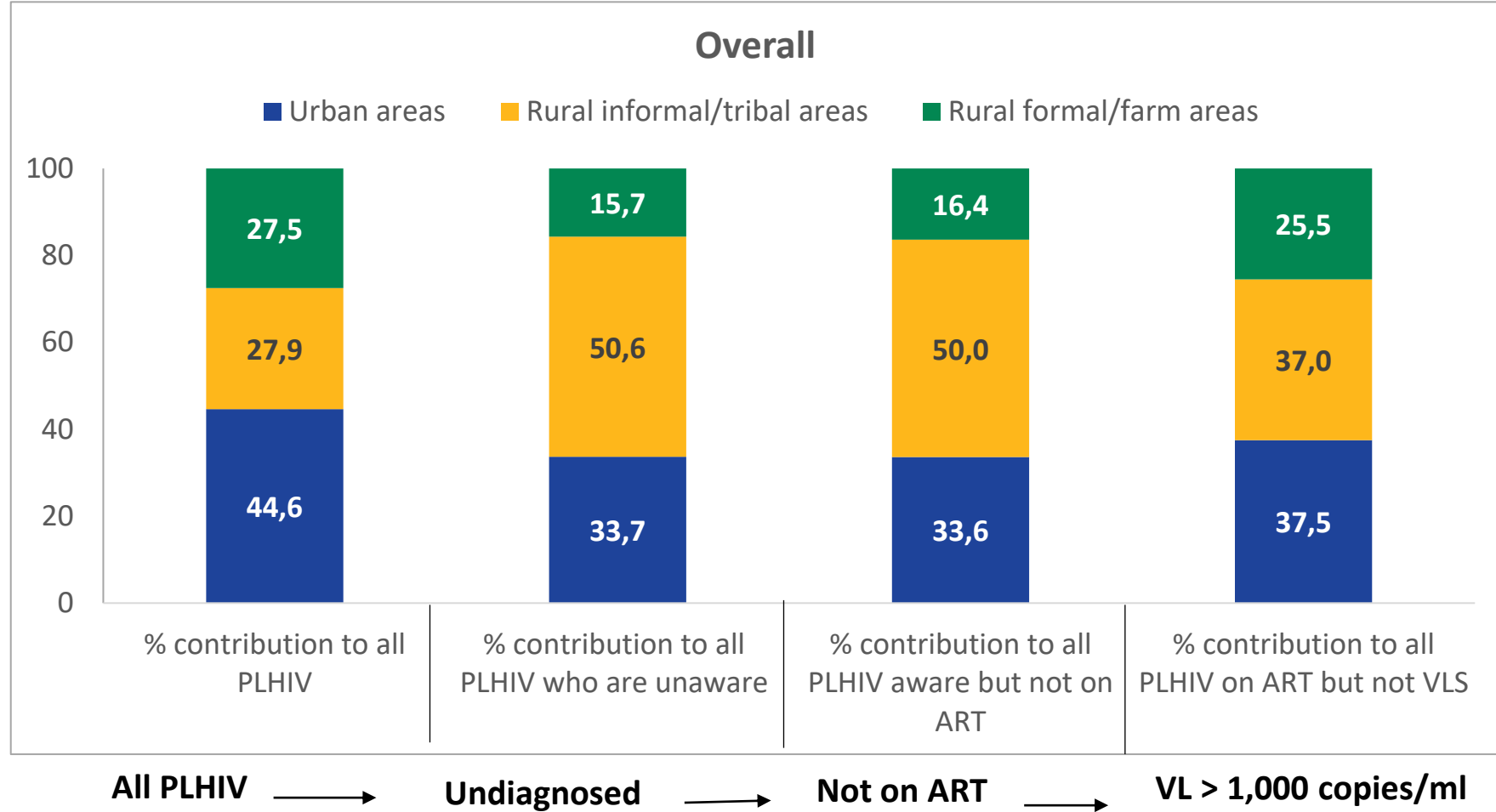
Overall

■ 15 to 24 years ■ 25 to 49 years ■ 50 years and older



All PLHIV → Undiagnosed → Not on ART → VL > 1,000 copies/ml

GAPS IN 95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY LOCALITY, MPUMALANGA, 2022





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KEY DRIVERS OF THE HIV EPIDEMIC



SEXUAL DEBUT BEFORE THE AGE OF 15 YEARS AMONG YOUTH AGED 15–24 YEARS BY PROVINCE, SOUTH AFRICA, 2017 AND 2022

Early sexual debut (%)

2017 National: 13.0



Western Cape	Eastern Cape	Gauteng	Free State	North West	Limpopo	KwaZulu-Natal	Northern Cape	Mpumalanga
14.0	15.8	14.8	13.7	12.0	13.5	8.2	11.4	13.3

2022 National: 11.2

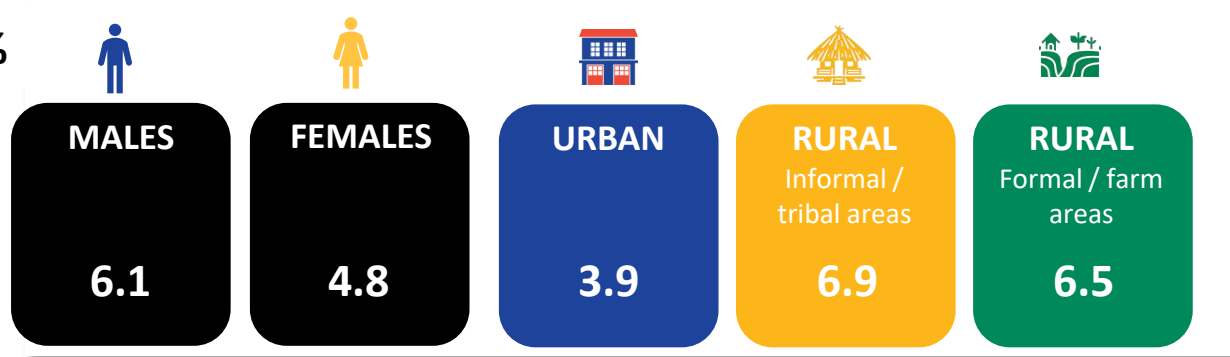


Western Cape	Eastern Cape	Gauteng	Free State	North West	Limpopo	KwaZulu-Natal	Northern Cape	Mpumalanga
16.3	15.3	13.2	9.2	8.8	8.7	8.6	8.0	5.4

SEXUAL DEBUT BEFORE THE AGE OF 15 YEARS AMONG YOUTH AGED 15–24 YEARS, BY DEMOGRAPHICS, MPUMALANGA, 2022

Early sexual debut (%)

Overall, MP: 5.4%



MULTIPLE SEXUAL PARTNERS IN THE LAST 12 MONTHS AMONG PEOPLE AGED 15+ YEARS BY PROVINCE, SOUTH AFRICA, 2017 AND 2022

Multiple sexual partners (%)

2017 National: 10.8



Eastern Cape

10.9

Limpopo

12.0

KwaZulu-Natal

9.4

North West

11.1

Northern Cape

11.0

Free State

13.0

Gauteng

12.8

Western Cape

7.6



Mpumalanga

7.9

2022 National: 8.9

Eastern Cape

11.9

Limpopo

11.4

KwaZulu-Natal

11.0

North West

9.5

Northern Cape

8.4

Free State

7.8

Gauteng

7.8

Western Cape

6.7



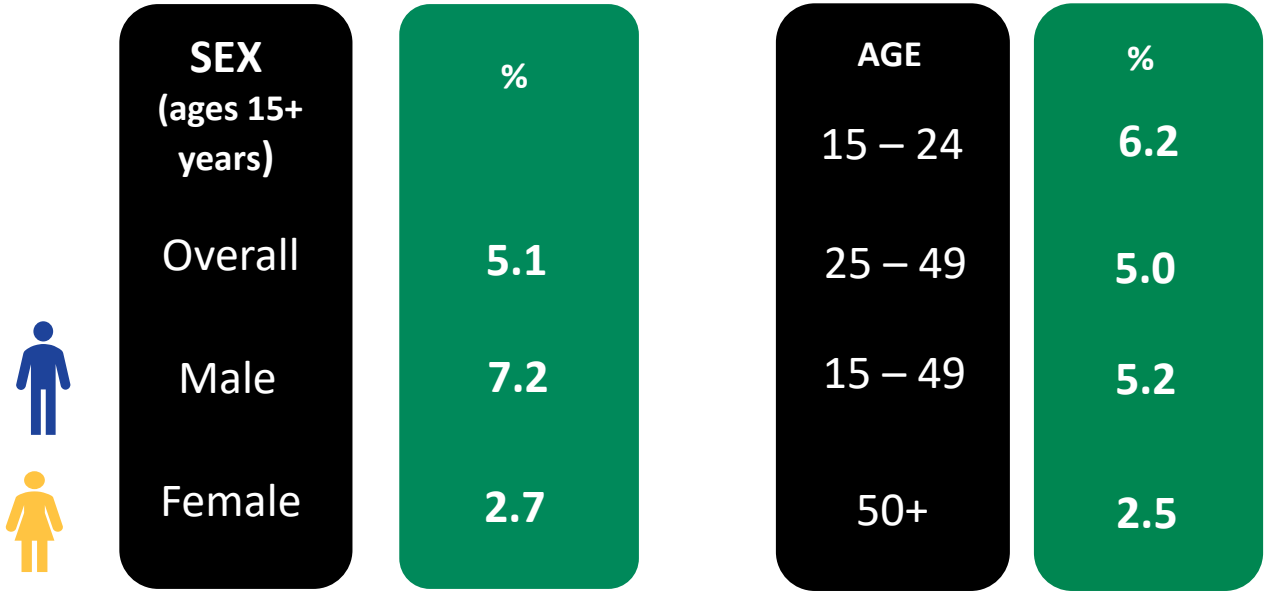
Mpumalanga

5.1

MULTIPLE SEXUAL PARTNERS IN THE LAST 12 AMONG PEOPLE AGED 15+ YEARS, BY SEX AND AGE, MPUMALANGA, 2022

Multiple sexual partners (%)

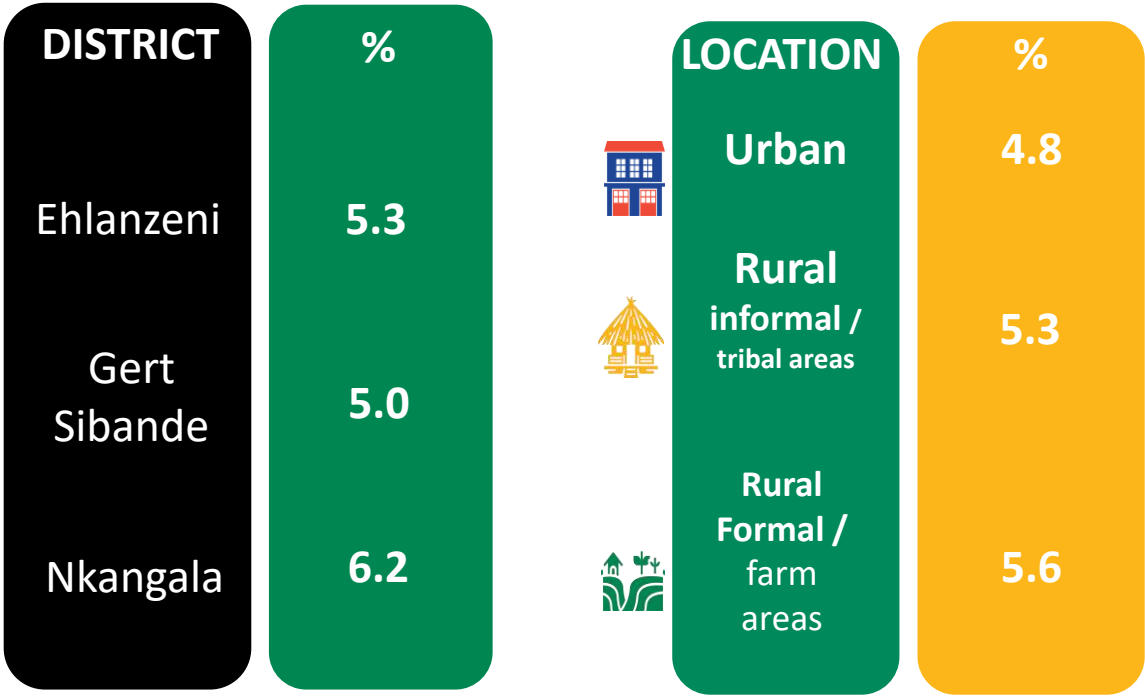
Overall, MP: 5.1%



MULTIPLE SEXUAL PARTNERS IN THE LAST 12 MONTHS AMONG PEOPLE AGED 15+ YEARS, BY SELECTED DEMOGRAPHICS, MPUMALANGA, 2022

Multiple sexual partners (%)

Overall, MP: 5.1%



CONDOM USE DURING MOST RECENT SEXUAL ENCOUNTER AMONG PEOPLE AGED 15+ YEARS BY PROVINCE, SOUTH AFRICA, 2017 AND 2022



Condom use at last sexual encounter (%)

2017 National: 39.0



Mpumalanga

Free State

Eastern Cape

Northern Cape

KwaZulu-Natal

North West

Gauteng

Limpopo

Western Cape

46.3

42.5

38.1

39.2

44.9

44.7

36.3

41.6

26.6

2022 National: 31.8



Mpumalanga

Free State

Eastern Cape

Northern Cape

KwaZulu-Natal

North West

Gauteng

Limpopo

Western Cape

46.1

34.8

34.7

30.4

32.8

32.2

30.3

29.8

22.1

CONSISTENCY OF CONDOM USE WITH THE MOST RECENT SEXUAL PARTNER AMONG PEOPLE AGED 15+ YEARS BY PROVINCE, SOUTH AFRICA, 2022

Condom use (%)



	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	National
Every time:	13.4	21.7	17.7	22.7	17.7	21.4	20.0	24.6	20.1	19.5
Almost every time:	5.3	5.4	7.6	8.9	9.3	3.6	4.7	11.0	4.4	6.3
Sometimes:	16.5	24.7	22.4	19.3	27.8	24.4	21.6	32.0	22.5	23.5
Never:	64.9	48.2	52.3	49.2	45.2	50.7	53.8	32.4	53.0	50.7

CONSISTENCY OF CONDOM USE WITH THE MOST RECENT SEXUAL PARTNER AMONG PEOPLE AGED 15+ YEARS BY DISTRICTS, MPUMALANGA, 2022

Condom use (%)

	Ehlanzeni	Gert Sibande	Nkangala
Every time:	18.0	24.6	32.2
Almost every time:	12.5	12.7	9.4
Sometimes:	32.4	29.1	19.0
Never:	37.1	33.7	39.4

SELF-REPORTED CIRCUMCISION AMONG MALES AGED 15+ YEARS BY PROVINCE, SOUTH AFRICA, 2017 AND 2022

Male circumcision (%)

2017 National: 60.0



Limpopo	Eastern Cape	Mpumalanga	Gauteng	North West	Free State	KwaZulu-Natal	Western Cape	Northern Cape
81.3	80.5	63.7	64.4	50.9	57.2	38.3	52.0	39.2

2022 National: 63.7

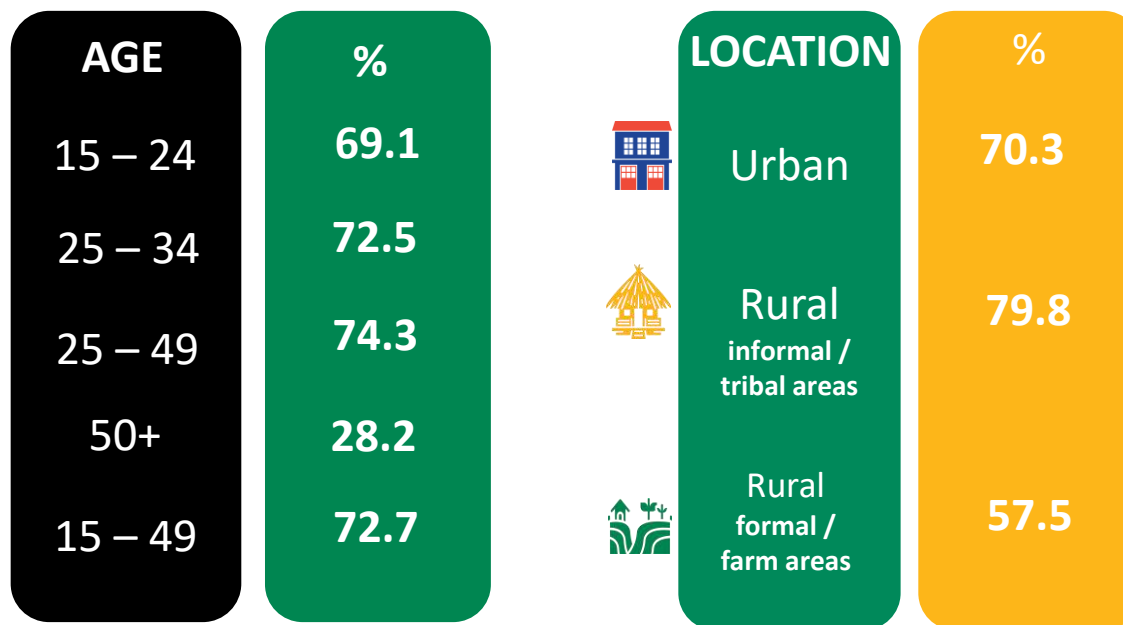


Limpopo	Eastern Cape	Mpumalanga	Gauteng	North West	Free State	KwaZulu-Natal	Western Cape	Northern Cape
87.7	77.2	71.8	64.0	60.8	59.2	54.6	50.9	35.6

SELF-REPORTED CIRCUMCISION AMONG MALES AGED 15+ YEARS BY DEMOGRAPHICS, MPUMALANGA 2022

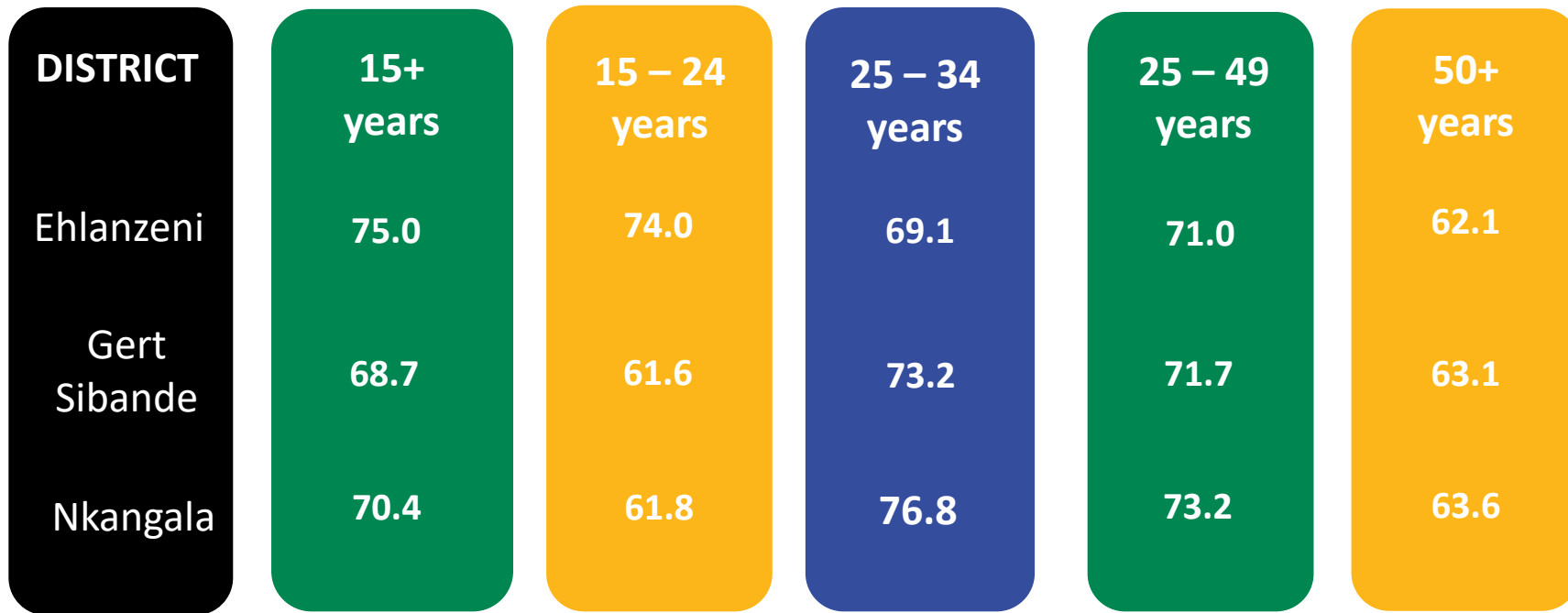
Male circumcision (%)

Overall, MP: 71.8%



SELF-REPORTED CIRCUMCISION AMONG MALES AGED 15+ YEARS BY AGE AND DISTRICTS, MPUMALANGA, 2022

Male circumcision (%)
Overall, MP: 71.8%



SELF-REPORTED CIRCUMCISION TYPE AMONG MALES AGED 15+ YEARS BY PROVINCE, SOUTH AFRICA, 2022



Medical circumcision (%)

2022 National: 60.0



KwaZulu-Natal	Free State	Northern Cape	Gauteng	Mpumalanga	North West	Western Cape	Limpopo	Eastern Cape
87.6	72.4	71.4	70.6	68.1	66.0	46.3	46.0	14.3

Traditional circumcision (%)

2022 National: 39.2

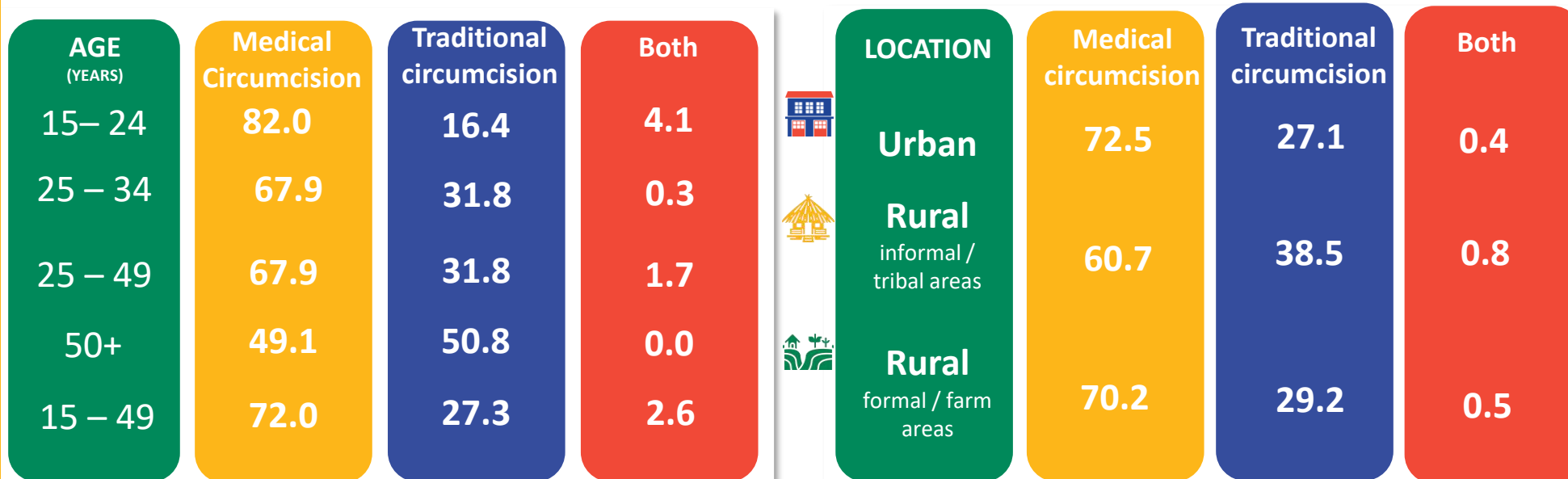


KwaZulu-Natal	Free State	Northern Cape	Gauteng	Mpumalanga	North West	Western Cape	Limpopo	Eastern Cape
11.8	26.4	28.6	28.7	31.4	33.5	53.5	52.0	85.0

Both Total: 0.6

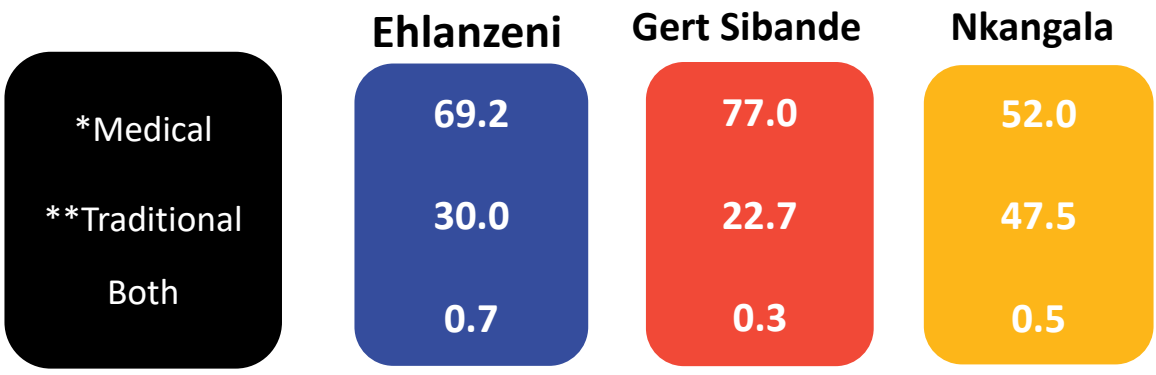
SELF-REPORTED CIRCUMCISION TYPE AMONG MALES AGED 15+ YEARS, BY DEMOGRAPHICS, MPUMALANGA, 2022

Circumcision type (%)	Medical circumcision	Traditional circumcision	Both
	68.1%	31.4%	0.6%



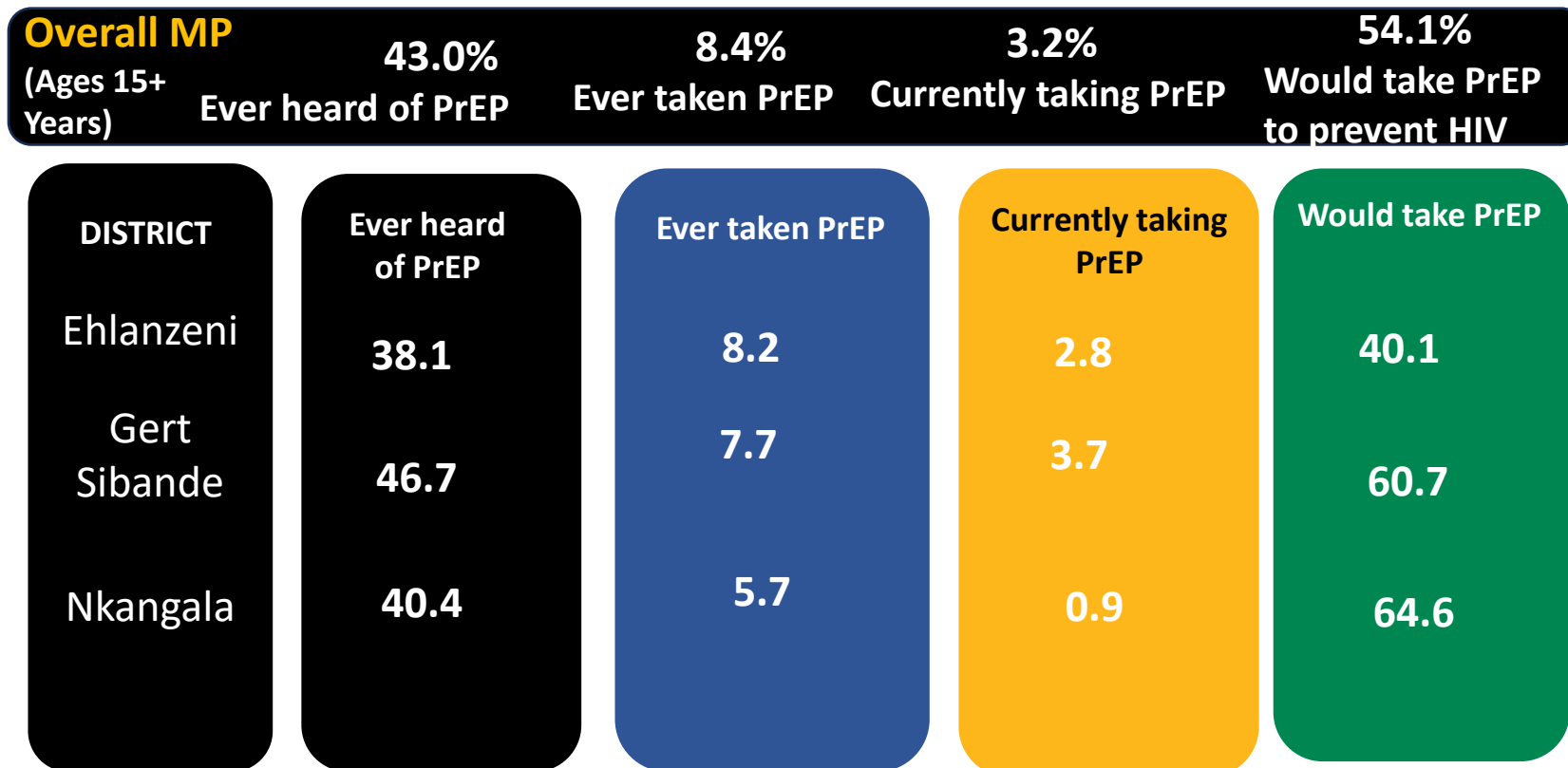
SELF-REPORTED CIRCUMCISION TYPE AMONG MALES AGED 15+ YEARS BY DISTRICTS, MPUMALANGA, 2022

Circumcision type (%)



* self-reported male circumcision performed by a healthcare provider
 ** self-reported male circumcision not performed by a healthcare provider

AWARENESS AND UPTAKE OF PRE-EXPOSURE PROPHYLAXIS (PREP) AMONG PEOPLE AGED 15+ YEARS*, MPUMALANGA, 2022

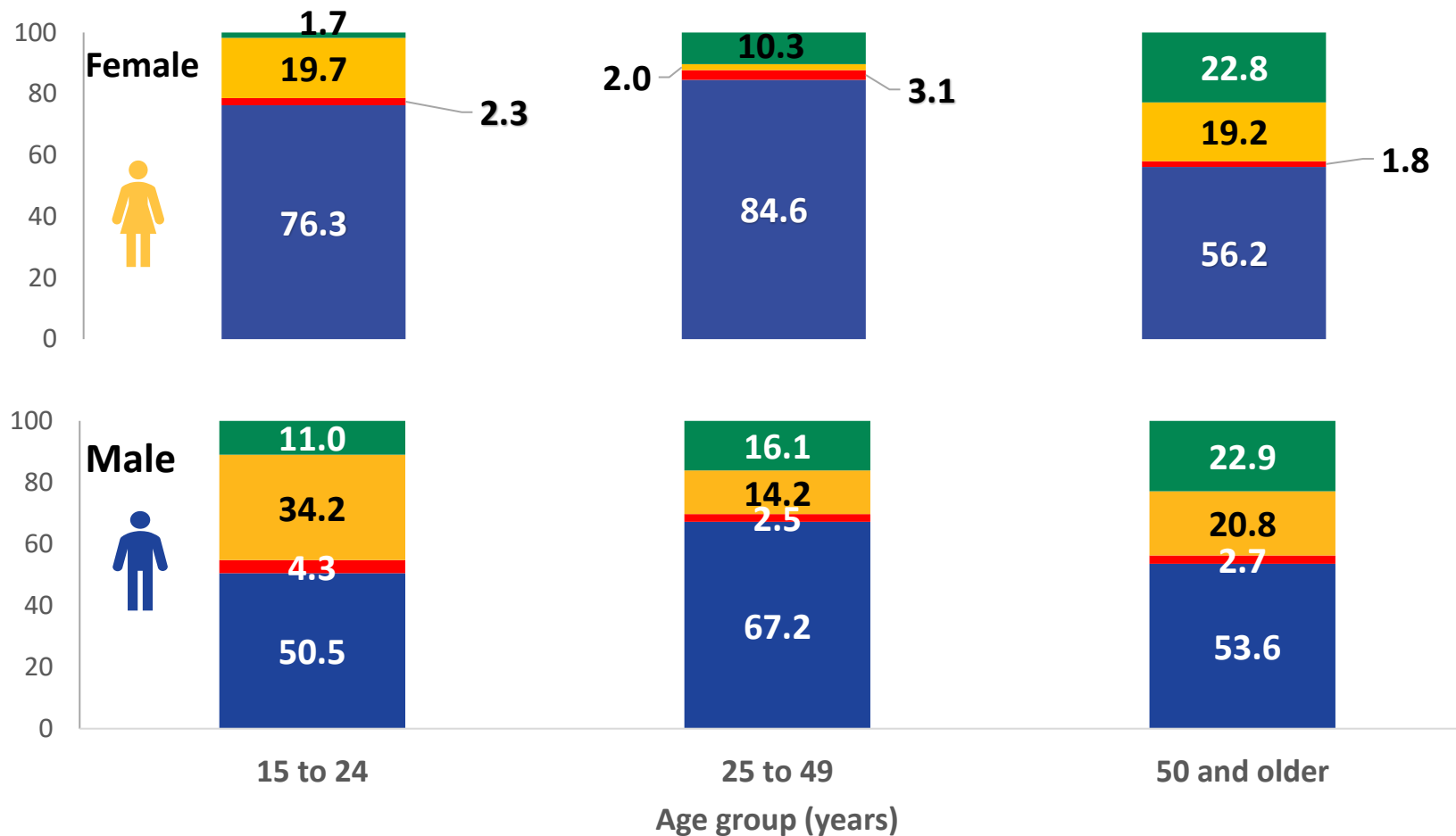


*People aged 15+ years who were HIV-negative or newly diagnosed HIV-positive in the survey



HIV TESTING AMONG PEOPLE AGED 15+ YEARS, BY AGE GROUPS, MPUMALANGA, 2022

- Tested in past 3 years & received results
- Tested but did not receive result
- Never tested
- Tested > 3 years ago



CONCLUSIONS



- A shift in the HIV epidemic curve towards older age categories signals a stabilizing epidemic.
- Disparities in the burden of HIV remain with HIV prevalence 1.5-fold higher among males aged 15–24 years (9.8%) compared to females (6.3%) and 1.6-fold higher among females aged 25–49 years (31.9%) compared to males of the same age group (19.9%).
- There has been an increase in ART coverage and viral load suppression rates between the 2017 and 2022 surveys.
- Circumcision rates among males increased with age, with medical circumcision being the highest compared to traditional circumcision.
- PrEP awareness (43.0%) and uptake (3.2%) was universally low across districts. Willingness to take PrEP was also relatively low (54.1%).

Actions for consideration



- A long-term strategy to care for individuals in an aging HIV epidemic.
- Heightened focus on campaigns such as U=U and other strategies to promote uptake and sustained use of ART, especially among young people and adult men.
- Tailored interventions to address the health inequalities affect testing and treatment rates at district levels
- Continued focus on increasing VMMC uptake among uncircumcised males aged 15 years and older.
- Enhancing accurate public awareness of effective HIV prevention measures including, regular HIV testing, condom use and PrEP.

THANK YOU



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CONSORTIUM AND PARTNERS



U.S. Centers for Disease Control and Prevention (CDC)

South African Medical Research Council (SAMRC)

- National Institute for Communicable Diseases (NICD)
- University of Cape Town (UCT)
- National Department of Health (NDoH)
- South African National AIDS Council (SANAC)
- United Nations Children's Fund (UNICEF)
- United States Agency for International Development (USAID)



science & innovation

Department:
Science and Innovation
REPUBLIC OF SOUTH AFRICA



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