



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 KwaZulu-Natal Province
23 September 2024



OVERVIEW OF PRESENTATION



- Background about the SABSSM survey series
- Main objectives of the survey
- Survey methods
- Provincial results
 - Response rates
 - 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

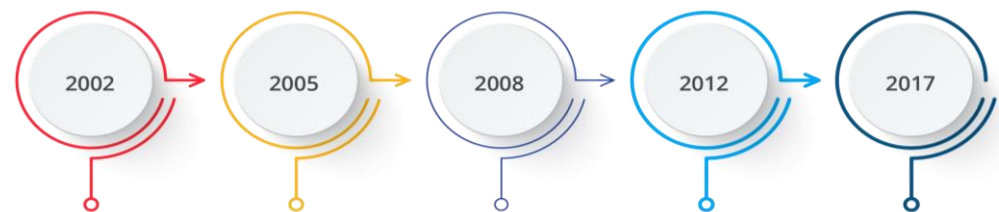


- Expanded scope
- Larger sample size
- Increased biomarkers
- Take all approach



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

Survey year



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:

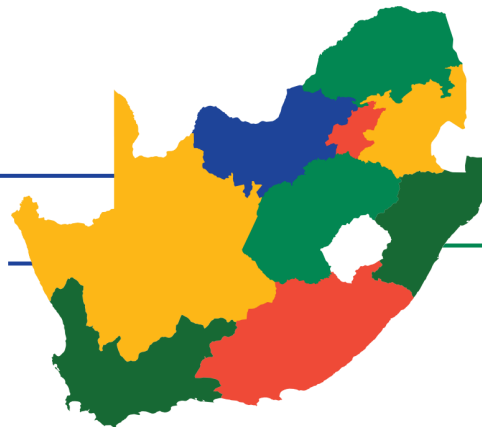
- HIV incidence (annualized rate of new HIV infections)



STUDY METHODS

Geographic scope

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



KwaZulu-Natal selected districts: eThekweni, Harry Gwala, King Cetshwayo, Ugu, uMgungundlovu, uThukela, Zululand and uMkhanyakude.



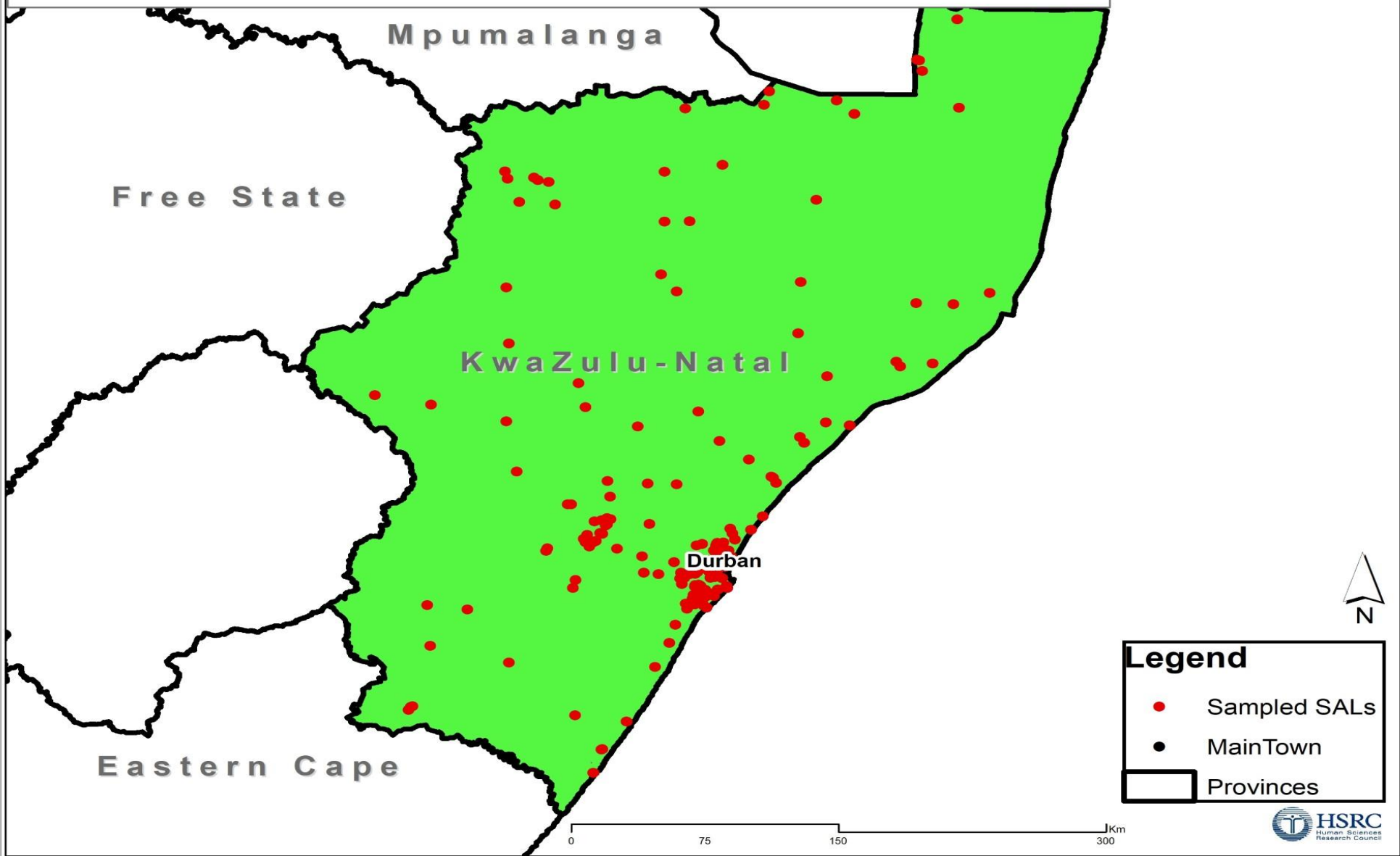
Survey design

- 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 KwaZulu-Natal: 29 608

SABBSM VI SAMPLE FOR KWAZULU-NATAL



QUESTIONNAIRES

Household Questionnaire



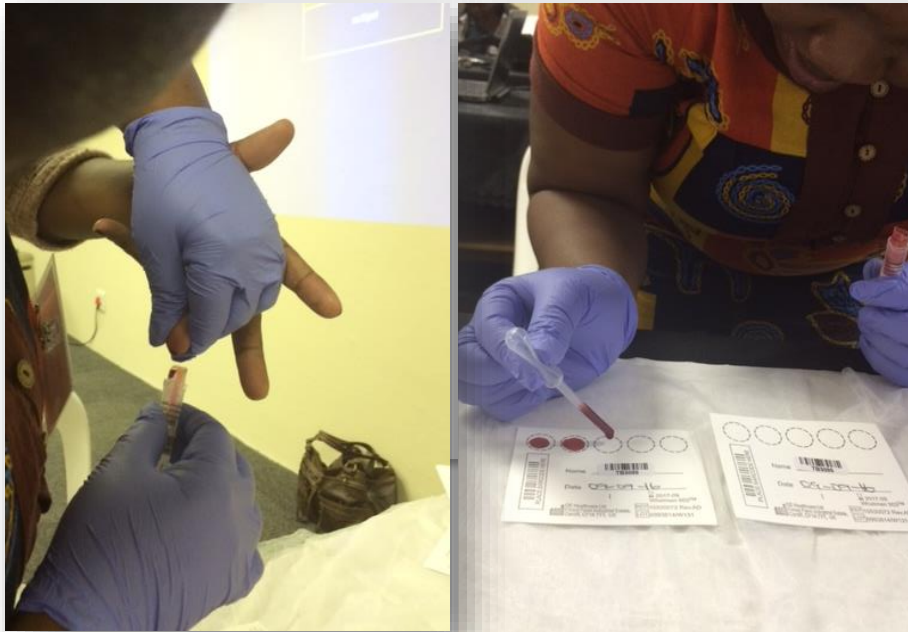
- This questionnaire was used to record a household listing of members and other household-level information

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>1000cl/ml)
Next-generation
sequencing

* Not reported in this presentation



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of research towards a healthier nation

RESULTS – KwaZulu-Natal



RESPONSE RATES

- **9 235 VPs*** were approached, where **8 481, 91.8%** were valid
- Of the valid **8 481** households, **78.2%** completed a household interview
- Of the eligible **28 830** individuals, aged **0+ years****, **93.7%** were interviewed, and **60.5%** provided blood for HIV and additional testing
- Of the **8 247** eligible **males**, aged **15+ years**, **89.5%** were interviewed, and **55.2%** provided blood for HIV and additional testing
- Of the **11 444** eligible **females**, aged **15+ years**, **94.3%** were interviewed, and **65.4%** 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, KWAZULU-NATAL PROVINCE, 2017 AND 2022



The overall provincial estimate for HIV prevalence for all ages in **2022** was

16.0%

translating to **1 980 000** people living with HIV.

The HIV prevalence was **18.0%** in **2017**

translating to **1 990 000** people living with HIV.

HIV PREVALENCE BY PROVINCE, SOUTH AFRICA, 2017 AND 2022



HIV Prevalence (%)

2017 National: 14.0



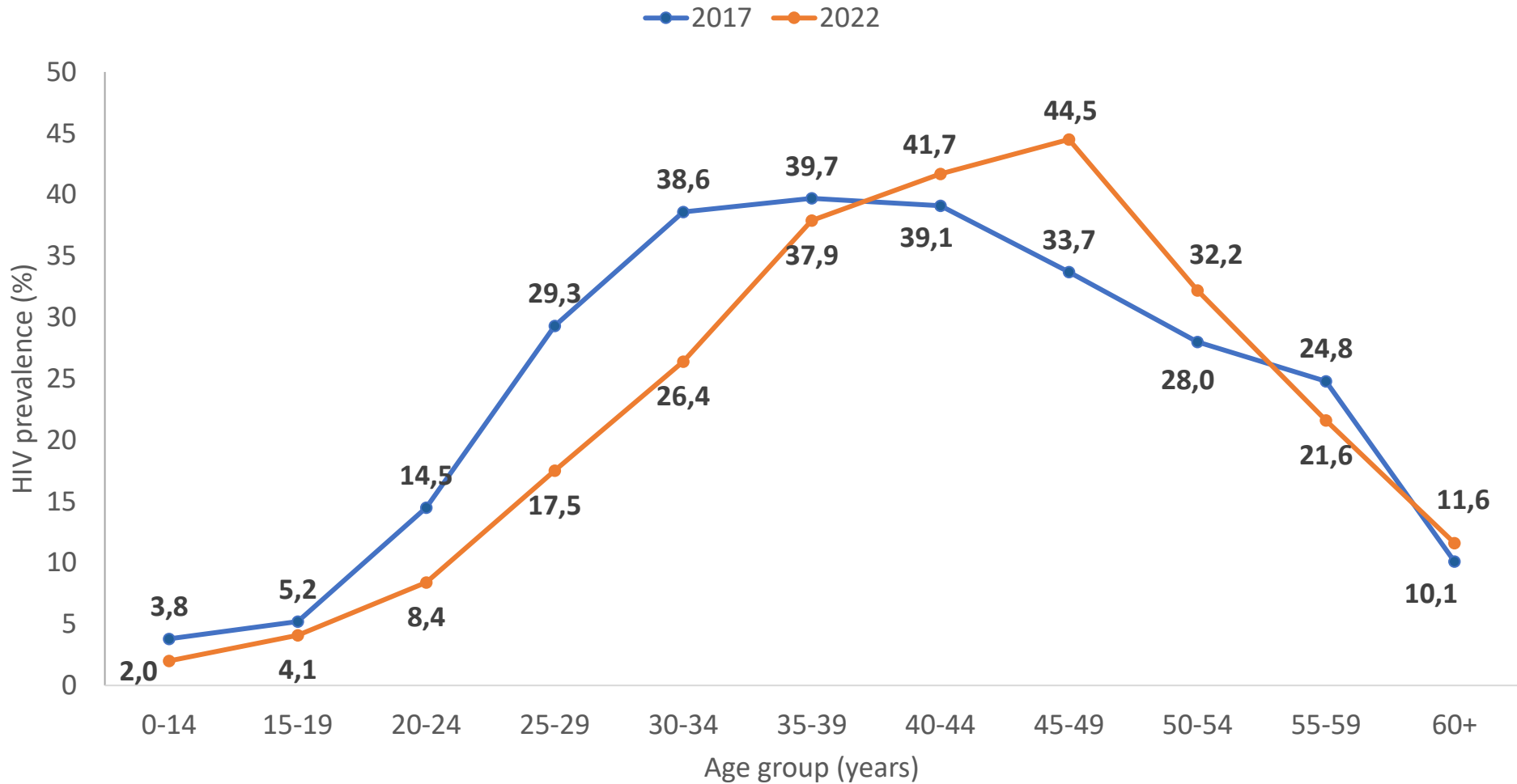
Mpumalanga	KwaZulu-Natal	Free State	Eastern Cape	North West	Gauteng	Northern Cape	Limpopo	Western Cape
19.4	18.0	17.0	15.9	14.8	12.1	8.2	10.1	8.6

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

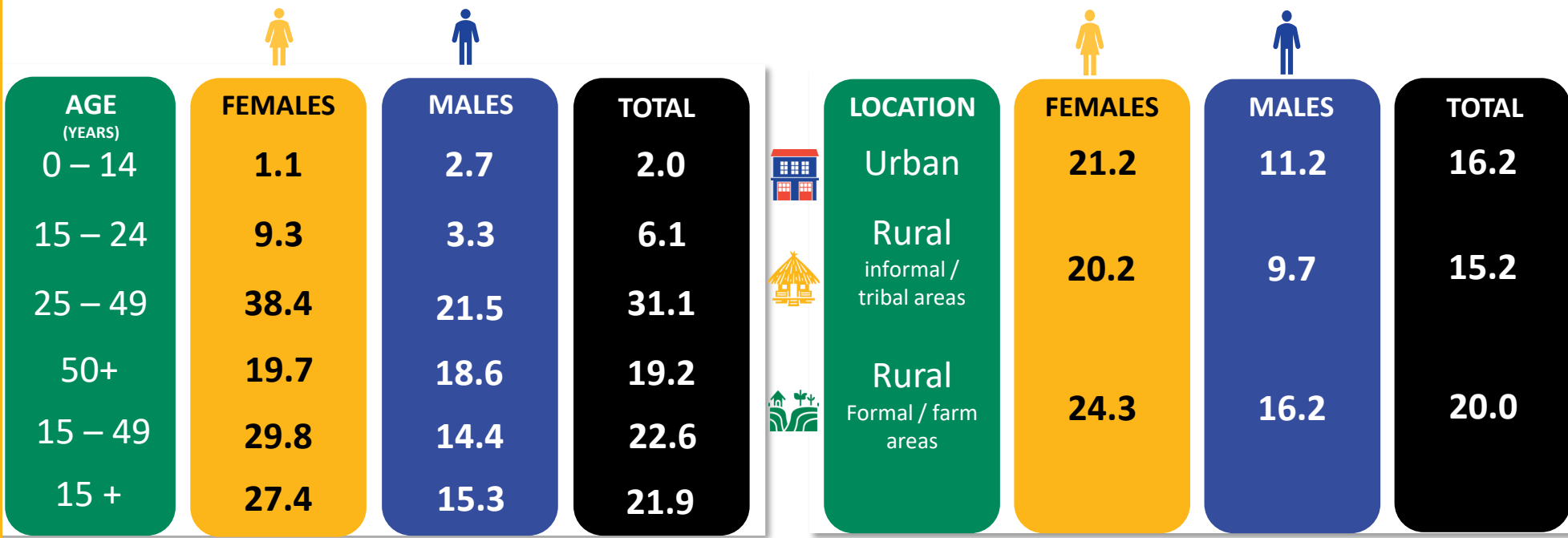
OVERALL HIV PREVALENCE, KWAZULU-NATAL PROVINCE, 2017 AND 2022



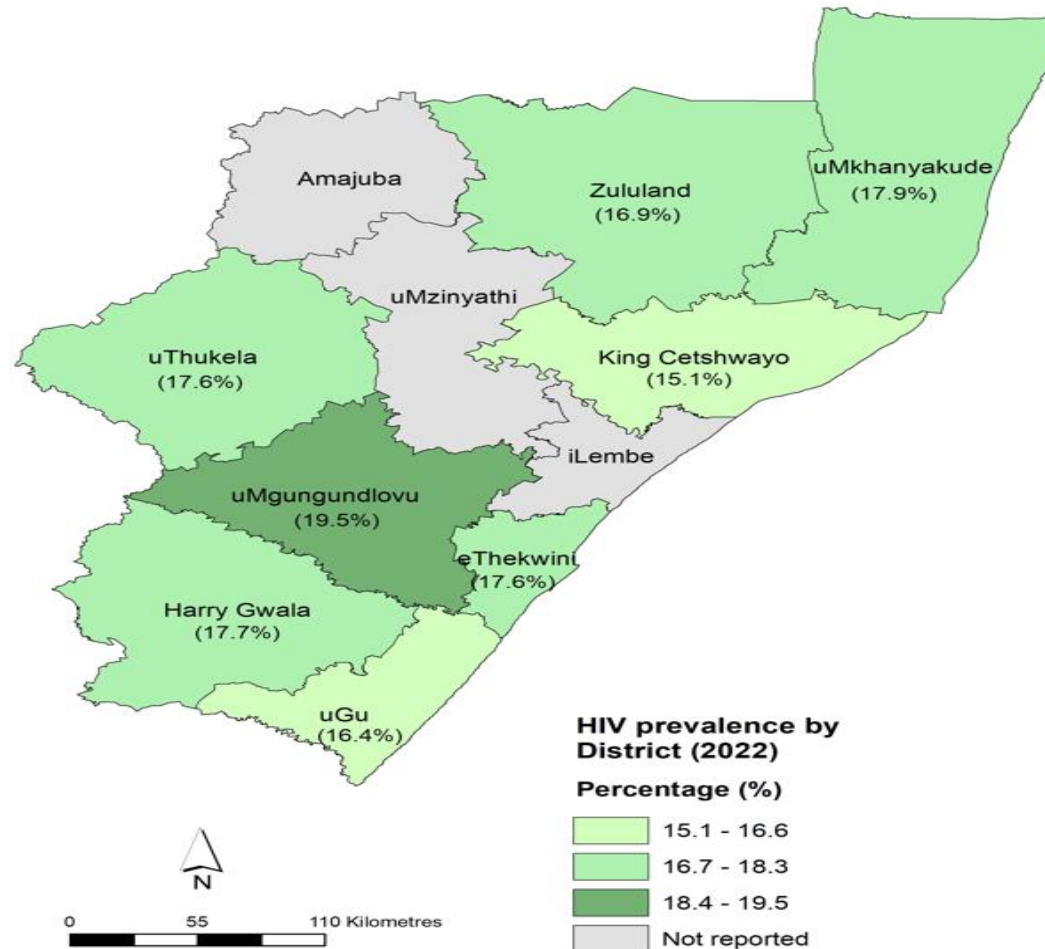
OVERALL HIV PREVALENCE, BY SEX FOR SELECTED DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

HIV Prevalence (%)

Total Females: 21.0% **Total Males: 10.9%** **Total Both Sexes: 16.0%**



OVERALL HIV PREVALENCE, BY SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 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

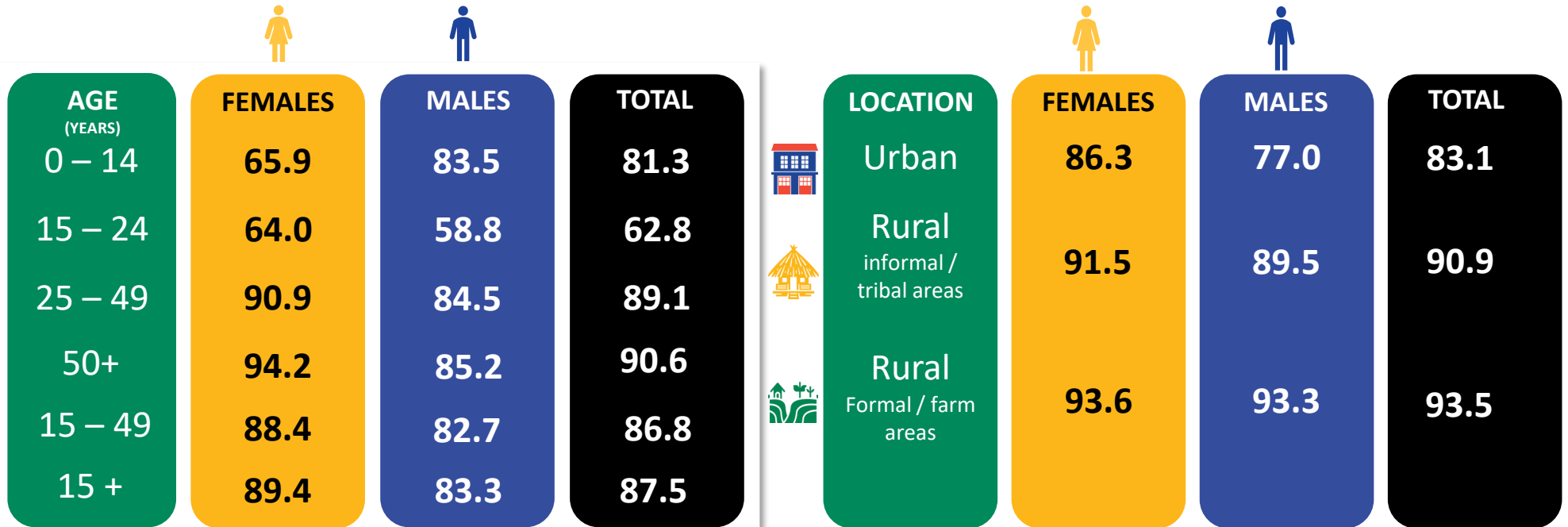


KwaZulu-Natal	Northern Cape	Eastern Cape	Mpumalanga	Free State	Limpopo	North West	Western Cape	Gauteng
87.3	86.2	83.5	81.8	81.3	80.8	78.9	76.8	73.4

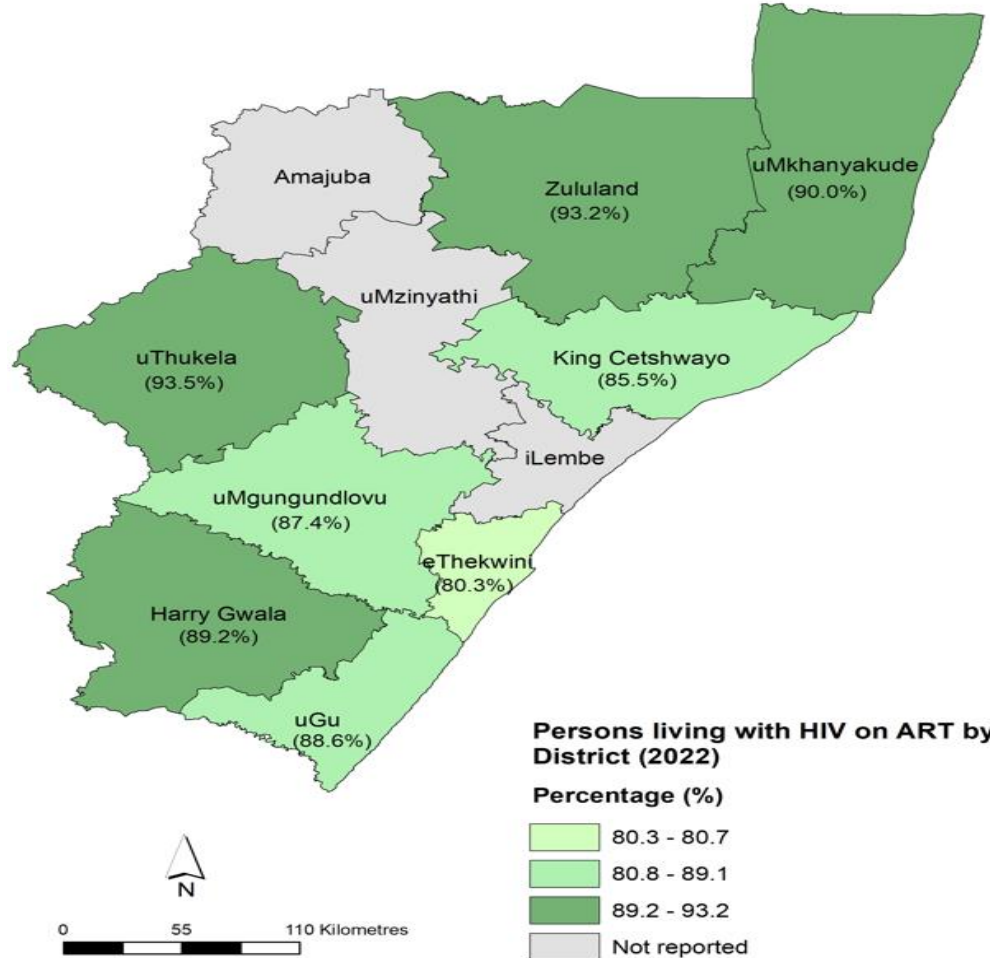
OVERALL ANTIRETROVIRAL TREATMENT, BY SEX FOR SELECTED DEMOGRAPHICS, KWAZULU- NATAL PROVINCE, 2022

ART coverage (%)

Total Females: 89.1% **Total Males: 83.5%** **Total Both Sexes: 87.3%**



OVERALL ANTIRETROVIRAL TREATMENT, BY SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 2022



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	North West	Limpopo
67.8	60.0	66.2	55.3	66.3	52.2	54.6	58.7	60.8

2022 National: 81.4

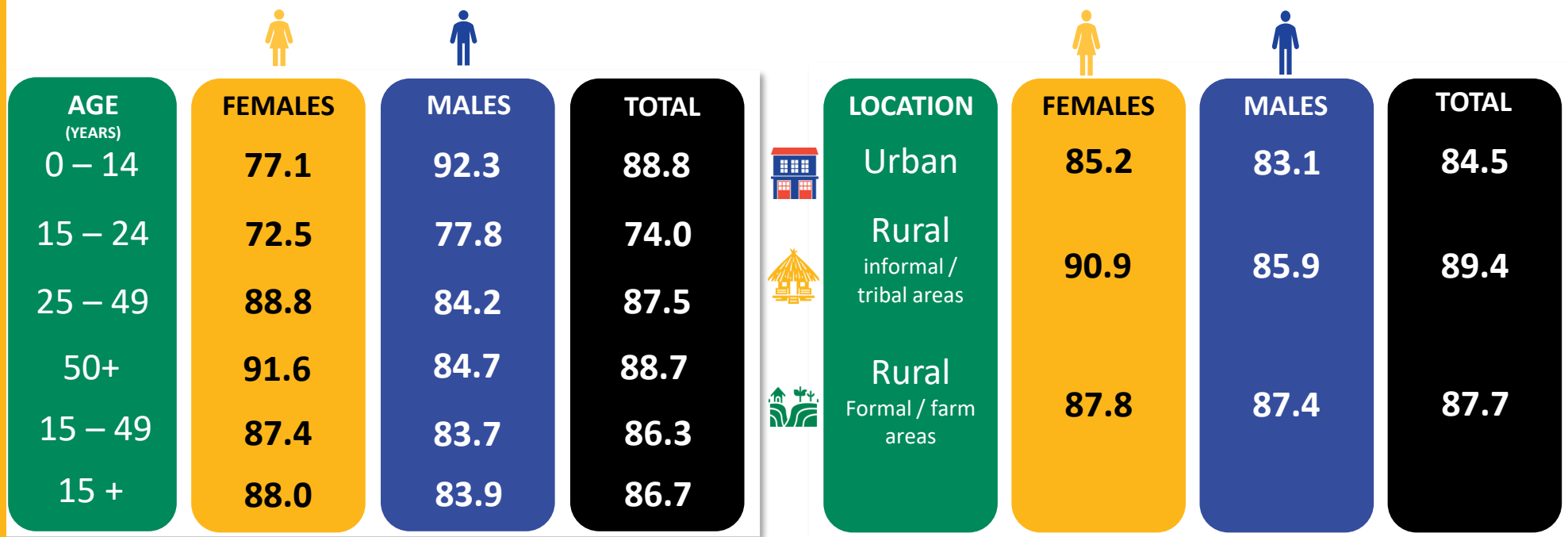


KwaZulu-Natal	Mpumalanga	Free State	Gauteng	Eastern Cape	Northern Cape	Western Cape	North West	Limpopo
86.8	82.5	81.1	79.7	79.3	78.6	78.4	77.0	77.0

OVERALL VIRAL LOAD SUPPRESSION*, BY SEX FOR SELECTED DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

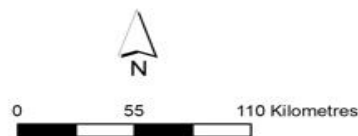
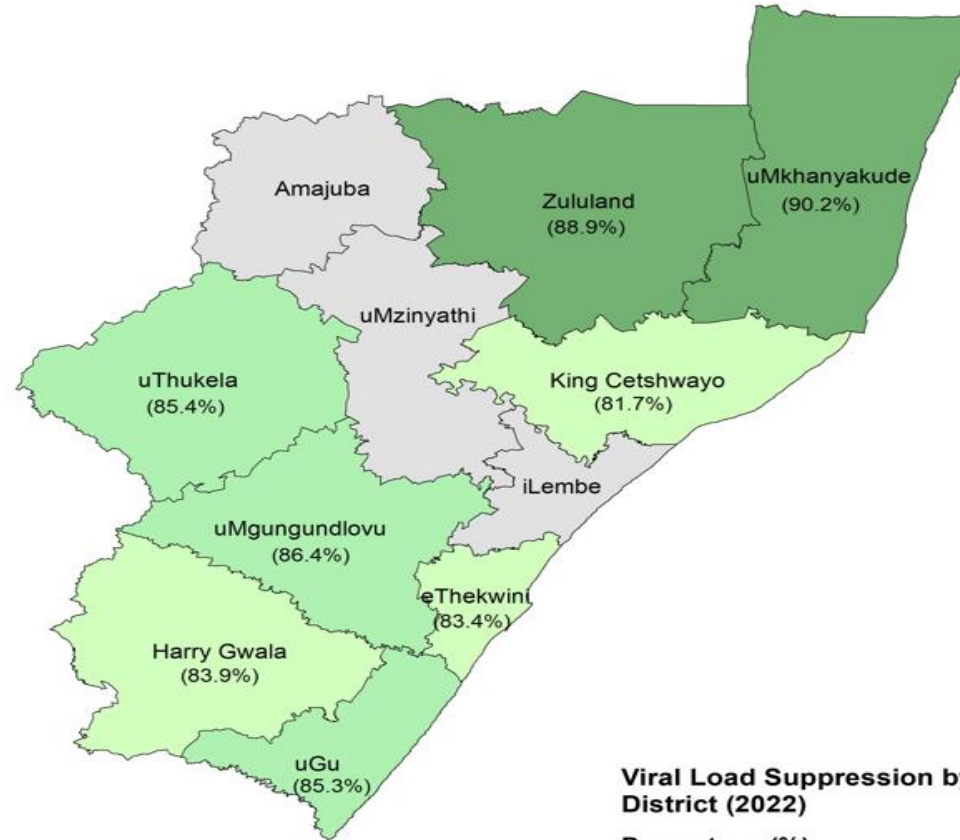
Viral load suppression (%)

Total	Total	Total
Females:	Males:	Both Sexes:
87.9%	84.7%	86.8%



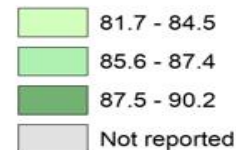
*Viral load <1,000 copies/ml

POPULATION VIRAL LOAD SUPPRESSION BY SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 2022



Viral Load Suppression by District (2022)

Percentage (%)



95-95-95 TARGETS: DEFINITIONS



First 95

Aware of/knows HIV status if tested positive in the survey and



Had self-reported being positive or



Tested positive for ART 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[‡]

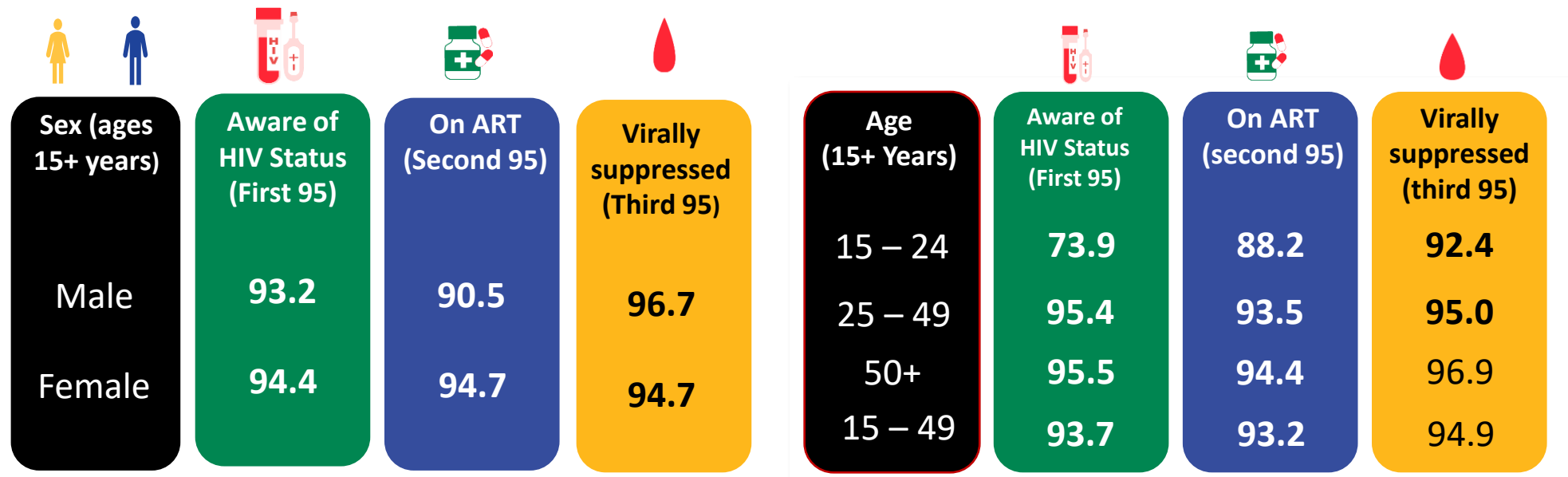


Viral load <1000 copies/ml

[‡] among those on ART

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

Overall, KZN (Ages 15+ Years) **94.0%** Aware of HIV Status (First 95) | **93.4%** On ART (Second 95) | **95.3%** Virally suppressed (Third 95)



95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 2022

Overall, KZN

(Ages 15+
Years)

94.0%

Aware of HIV Status (First 95)

93.4%

On ART (Second 95)

95.3%

Virally suppressed (Third 95)



Districts

eThekweni

Harry Gwala

King Cetshwayo

Ugu

uMgungundlovu

uThukela

Zululand

uMkhanyakude

**Aware of HIV Status
(first 95)**

90.6

97.1

91.9

97.2

94.5

97.2

96.4

94.1

**On ART
(second 95)**

88.9

91.7

95.0

91.1

92.2

97.0

97.0

95.6

**Virally suppressed
(third 95)**

94.8

91.0

90.9

91.2

93.7

91.5

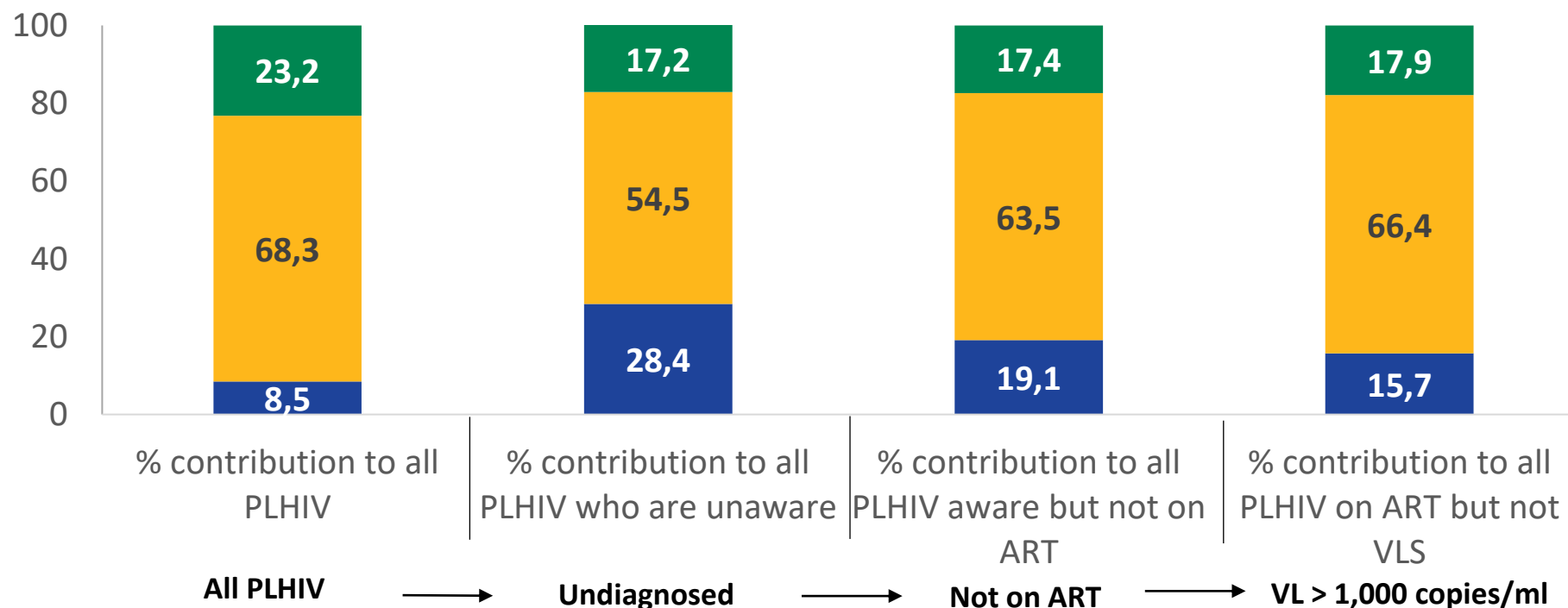
94.0

95.5

GAPS IN 95-95-95 TARGETS FOR PEOPLE AGED 15+ YEARS LIVING WITH HIV, BY AGE GROUPS, KWAZULU-NATAL PROVINCE, 2022

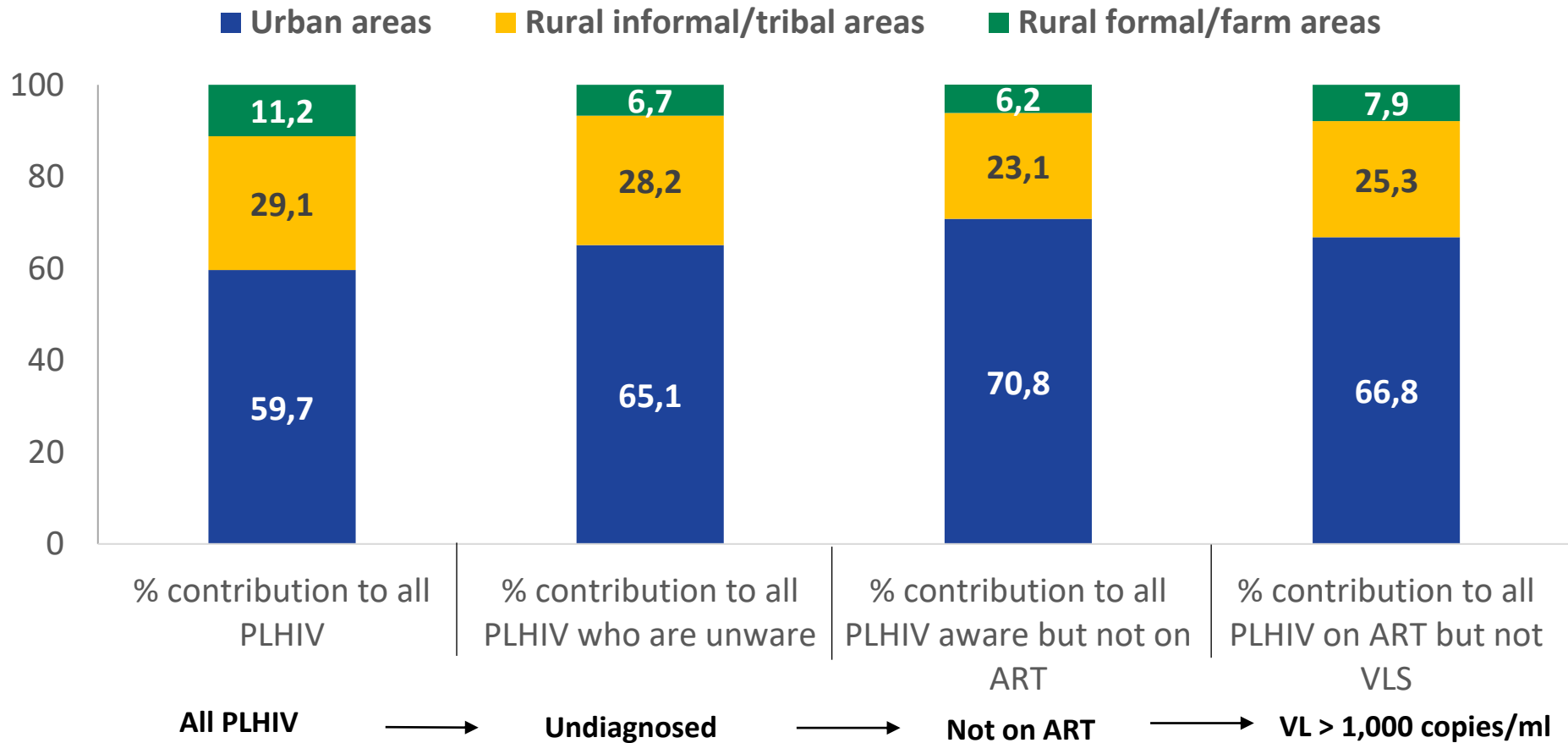
Overall

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



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

Overall



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



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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

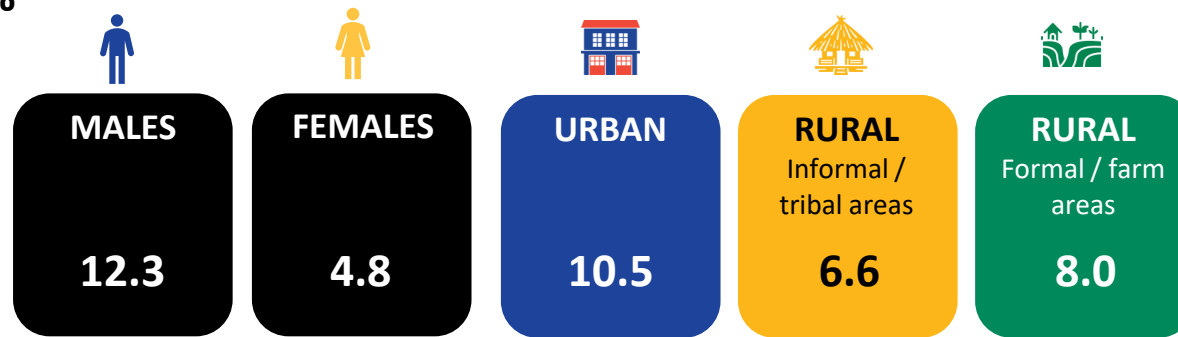


Western Cape	Eastern Cape	Gauteng	Free State	North West	Limpopo	KwaZulu-Natal	Northern Cape	Mpumalanga
16.3	15.3	13.2	9.2	8.8	8.7	8.6	8.0	5.4

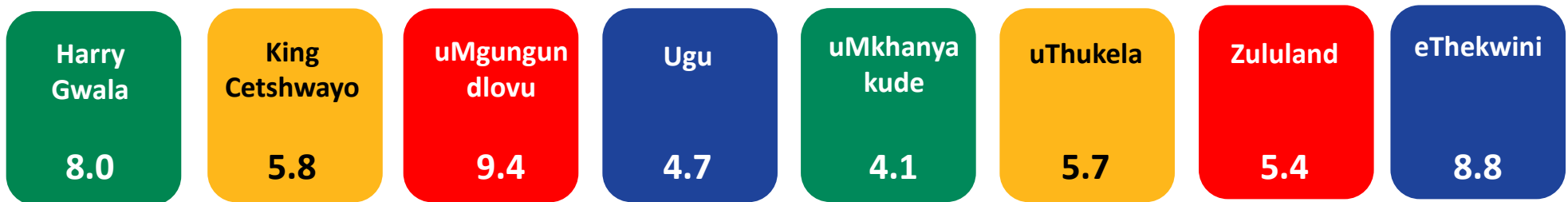
SEXUAL DEBUT BEFORE THE AGE OF 15 YEARS AMONG YOUTH AGED 15–24 YEARS, BY SELECTED DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

Early sexual debut (%)

Overall, KZN: 8.6%



DISTRICTS



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

Multiple sexual partners (%)

2017 National: 10.8



Eastern Cape	Limpopo	KwaZulu-Natal	North West	Northern Cape	Free State	Gauteng	Western Cape	Mpumalanga
10.9	12.0	9.4	11.1	11.0	13.0	12.8	7.6	7.9

2022 National: 8.9



Eastern Cape	Limpopo	KwaZulu-Natal	North West	Northern Cape	Free State	Gauteng	Western Cape	Mpumalanga
11.9	11.4	11.0	9.5	8.4	7.8	7.8	6.7	5.1

MULTIPLE SEXUAL PARTNERS IN THE LAST 12 MONTHS AMONG PEOPLE AGED 15+ YEARS, BY SEX AND AGE, KWAZULU-NATAL PROVINCE, 2022

Multiple sexual partners (%)

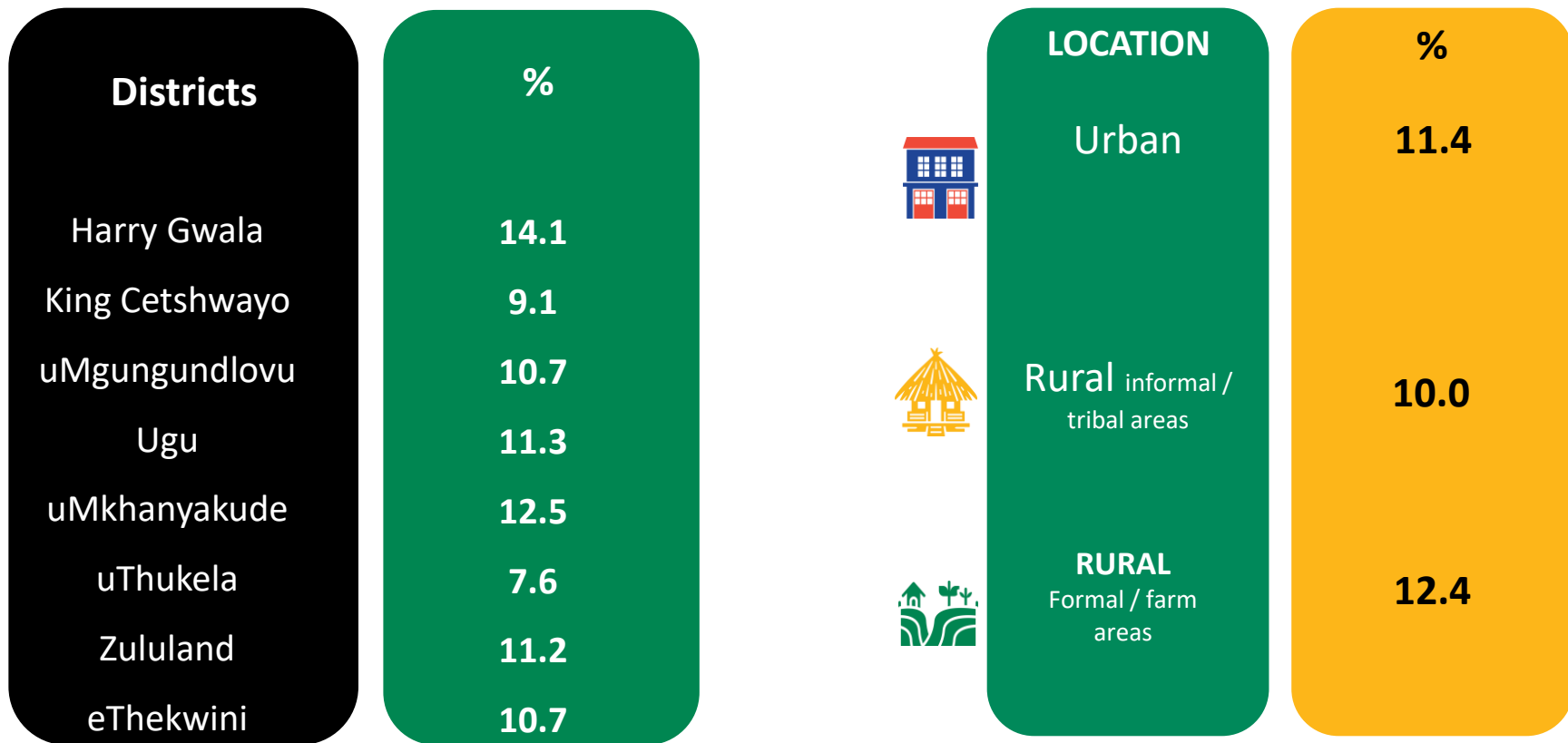
Overall, KZN: 11.0%



MULTIPLE SEXUAL PARTNERS IN THE LAST 12 MONTHS AMONG PEOPLE AGED 15+ YEARS, BY SELECTED DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

Multiple sexual partners (%)

Overall, KZN: 11.0%



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 SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 2022

Condom use (%)

	Harry Gwala	King Cetshwayo	uMgungundlovu	Ugu	uMkhanyakude	uThukela	Zululand	eThekwiini
Every time:	20.8	15.3	19.2	17.4	15.5	16.5	17.9	15.3
Almost every time:	6.4	5.1	8.0	11.2	6.4	11.4	10.0	9.7
Sometimes:	27.7	26.9	26.0	33.0	27.6	31.8	30.7	27.8
Never:	45.1	52.7	46.8	38.5	50.5	40.3	41.3	47.2

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

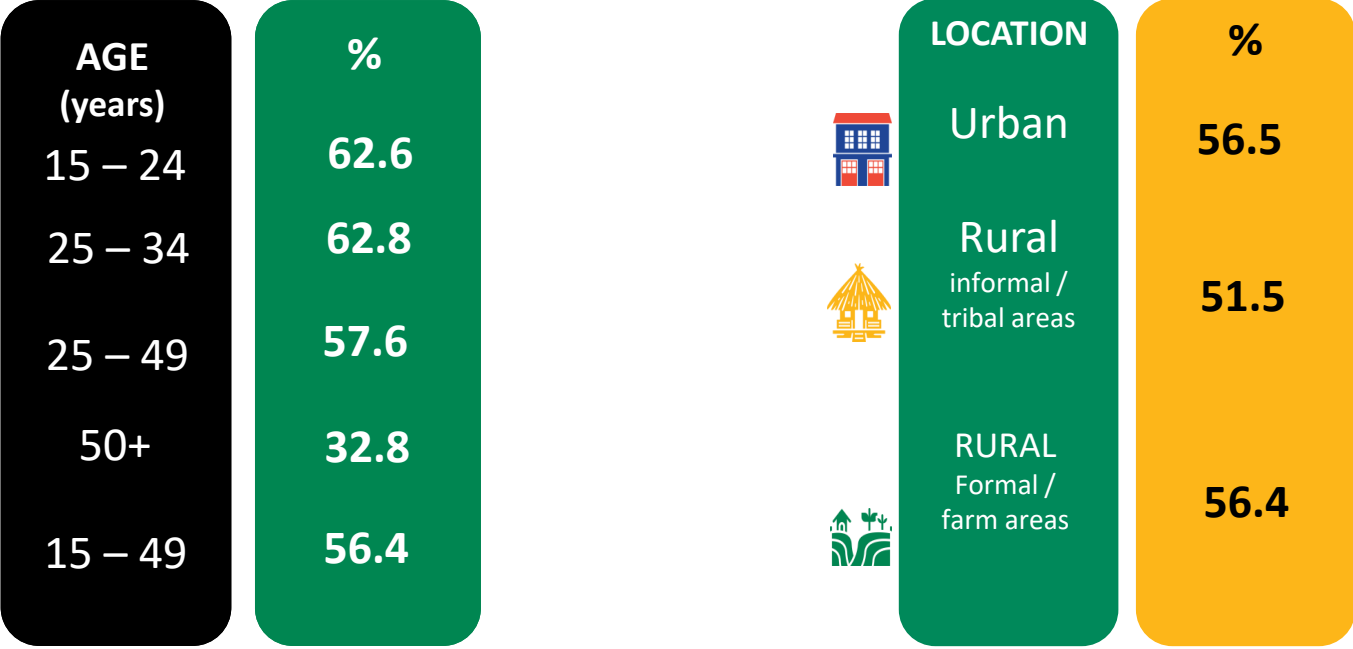


Limpopo	Eastern Cape	Mpumalanga	Gauteng	North West	Free State	KwaZulu-Natal	Western Cape	Northern Cape
87.7	77.2	71.8	64.0	60.8	59.2	54.6	50.9	35.6

SELF-REPORTED CIRCUMCISION AMONG MALES AGED 15+ YEARS BY SELECTED DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

Male circumcision (%)

Overall, KZN: 54.6%



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

Male circumcision (%)

Overall, KZN: 54.6%

Districts	15+	15 – 24	25 – 34	25 – 49	50+
Harry Gwala	66.7	70.1	69.3	69.7	50.1
King Cetshwayo	61.7	72.5	65.7	63.9	37.4
uMgungundlovu	55.3	65.6	64.8	57.7	35.0
Ugu	53.5	51.6	68.7	61.6	30.8
uMkhanyakude	55.8	68.0	60.9	55.7	25.3
uThukela	59.6	79.5	65.6	54.8	29.4
Zululand	59.8	71.0	67.9	59.8	35.1
eThekweni	52.2	55.3	65.1	60.7	29.0

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: 0.8

SELF-REPORTED CIRCUMCISION TYPE AMONG MALES AGED 15+ YEARS, BY DEMOGRAPHICS, KWAZULU-NATAL PROVINCE, 2022

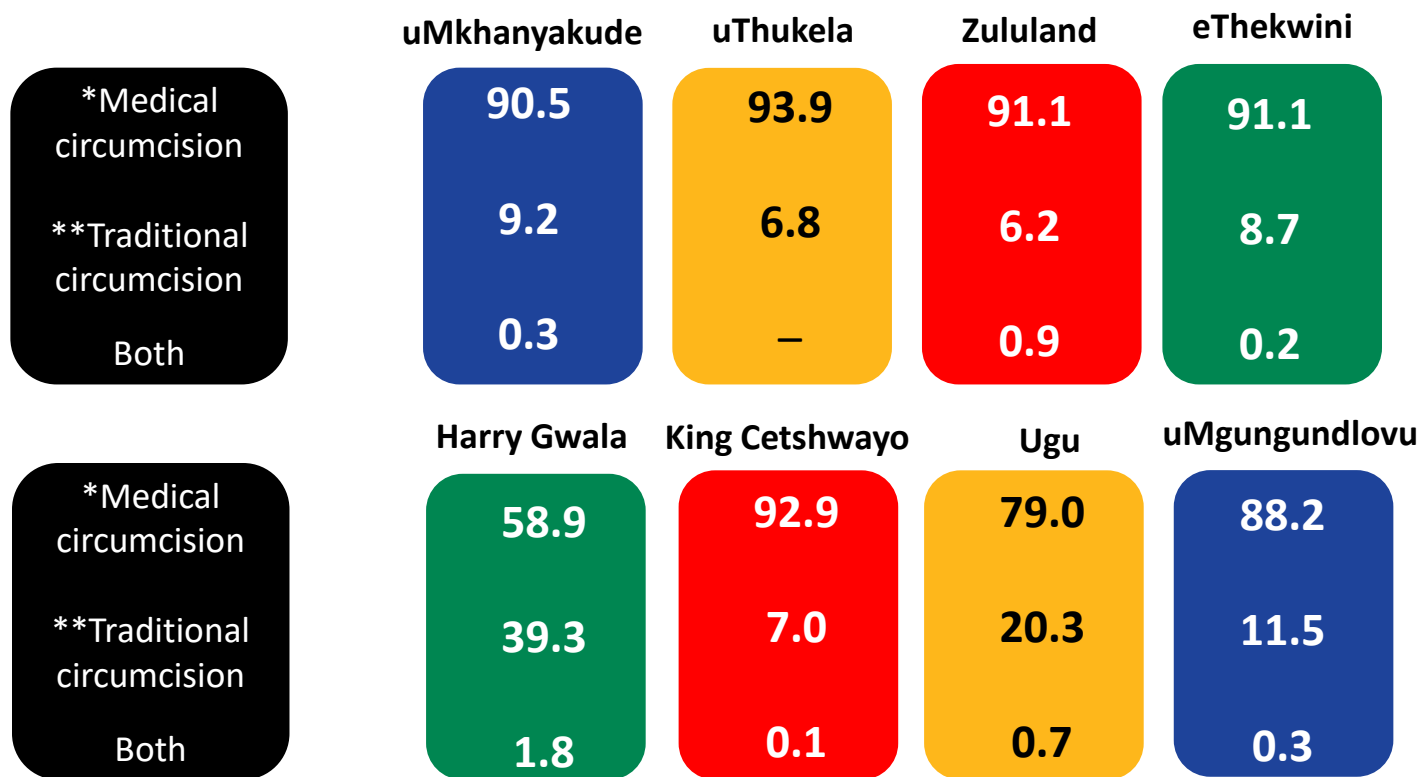
Circumcision type (%)	Medical circumcision 87.6%	Traditional circumcision 11.8%	Both 0.5%
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AGE (YEARS)	Medical Circumcision	Traditional circumcision	Both	LOCATION	Medical circumcision	Traditional circumcision	Both
15– 24	95.3	4.7	0.1	Urban 	88.0	11.6	0.4
25 – 34	90.2	9.5	0.3	Rural informal / tribal areas 	87.4	11.9	0.7
25 – 49	86.8	12.6	0.5	Rural Formal / farm areas 	85.7	13.7	0.6
50+	67.9	30.4	1.7				
15 – 49	90.0	9.6	0.4				

SELF-REPORTED CIRCUMCISION TYPE AMONG MALES AGED 15+ YEARS BY SELECTED DISTRICTS, KWAZULU-NATAL PROVINCE, 2022

Circumcision type (%)

DISTRICT



*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*, KWAZULU-NATAL PROVINCE, 2022



Overall, KZN
(Ages 15+ Years) **44.8%** Ever heard of PrEP **6.7%** Ever taken PrEP **2.5%** Currently taken PrEP **63.2%** Would take PrEP to prevent HIV

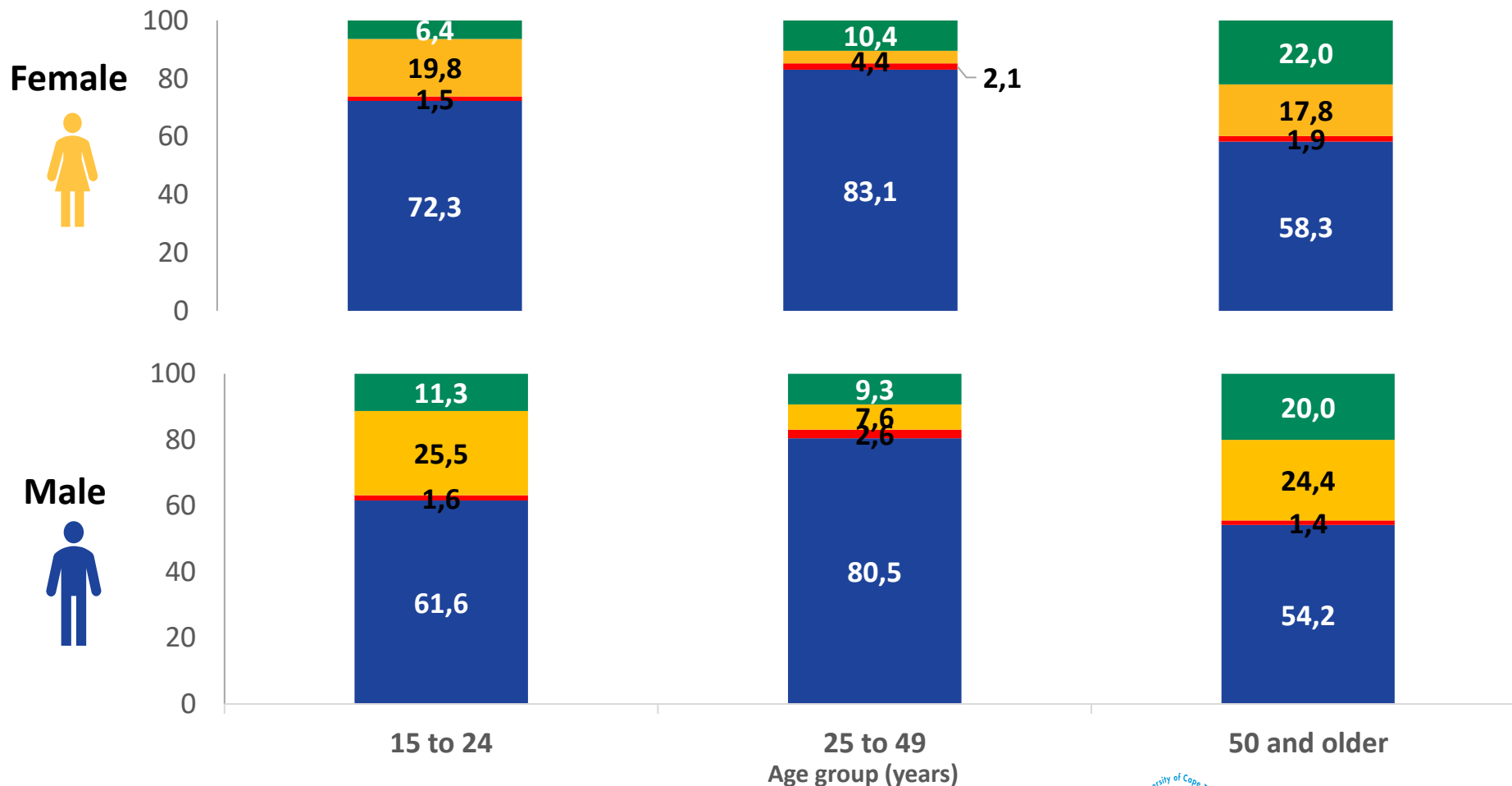
Districts	Ever heard of PrEP	Ever taken PrEP	Curr. taking PrEP	Would take PrEP
Harry Gwala	51.3	9.3	4.7	60.5
King Cetshwayo	45.7	6.7	2.5	55.3
uMgungundlovu	48.9	7.1	2.2	58.5
Ugu	46.7	6.4	3.4	59.0
uMkhanyakude	40.2	4.9	2.5	56.2
uThukela	41.2	7.0	3.2	57.9
Zululand	52.3	9.7	3.8	64.6
eThekweni	49.7	9.1	2.5	56.8

*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, KWAZULU-NATAL PROVINCE, 2022

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



CONCLUSIONS



- KZN is among the provinces with highest HIV prevalence nationally, but also the strongest program performance across the clinical cascade and population viral load suppression.
- 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 approximately 3-fold higher among young females (9.8%) aged 15–24 years compared to young males (3.3%); and among those aged 25–49 years, nearly 2-fold higher among women (38.4%) than among men (21.5%).
- ART coverage has increased markedly from 71.2% in 2017 to 87.3% in 2022, but remains low among youth aged 15–24 years (62.8%).
- Subpopulations over-represented within gaps in the clinical cascade include: adolescent and youth of both sexes aged 15–24 years and PLHIV residing in urban areas.
- In 2022, prevalence of circumcision among males aged 15–49 years was 59.4% falling below the national target; 87.6% of circumcised men had medical circumcision
- PrEP awareness (44.8%) and ever-use (6.7%) was universally low across districts; however, willingness to take PrEP was fairly high (63.2%).

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.
- Addressing health inequalities and combining prevention strategies to address specific HIV prevalence and treatment rates of concern at district levels.
- Enhancing prevention efforts that target groups disproportionately affected by the drivers of HIV infection such as women and young people.
- Continued focus on increasing uptake of circumcision among 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



Celebrating 20 years
of research towards a healthier nation



CONSORTIUM AND PARTNERS



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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)
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