



South African National HIV Prevalence, Incidence, Behaviour and Communication Survey, 2017

TOWARDS ACHIEVING THE UNAIDS 90-90-90 TARGETS





SABSSM V

To date, the HSRC and its partners have undertaken five population-based HIV and behavioural surveys, in previous surveys were conducted in

2002, 2005, 2008 & 2012

These surveys have provided an important gauge of the HIV epidemic of South Africa



HIV Surveillance

HIV surveillance has been key in monitoring the response to the HIV epidemic, ART exposure, incidence testing and Viral Load testing

HIVDR

HIV Drug Resistance

HIV drug resistance (HIVDR) testing was included in the 2017 survey for the first time in the survey series



RESEARCH METHODS

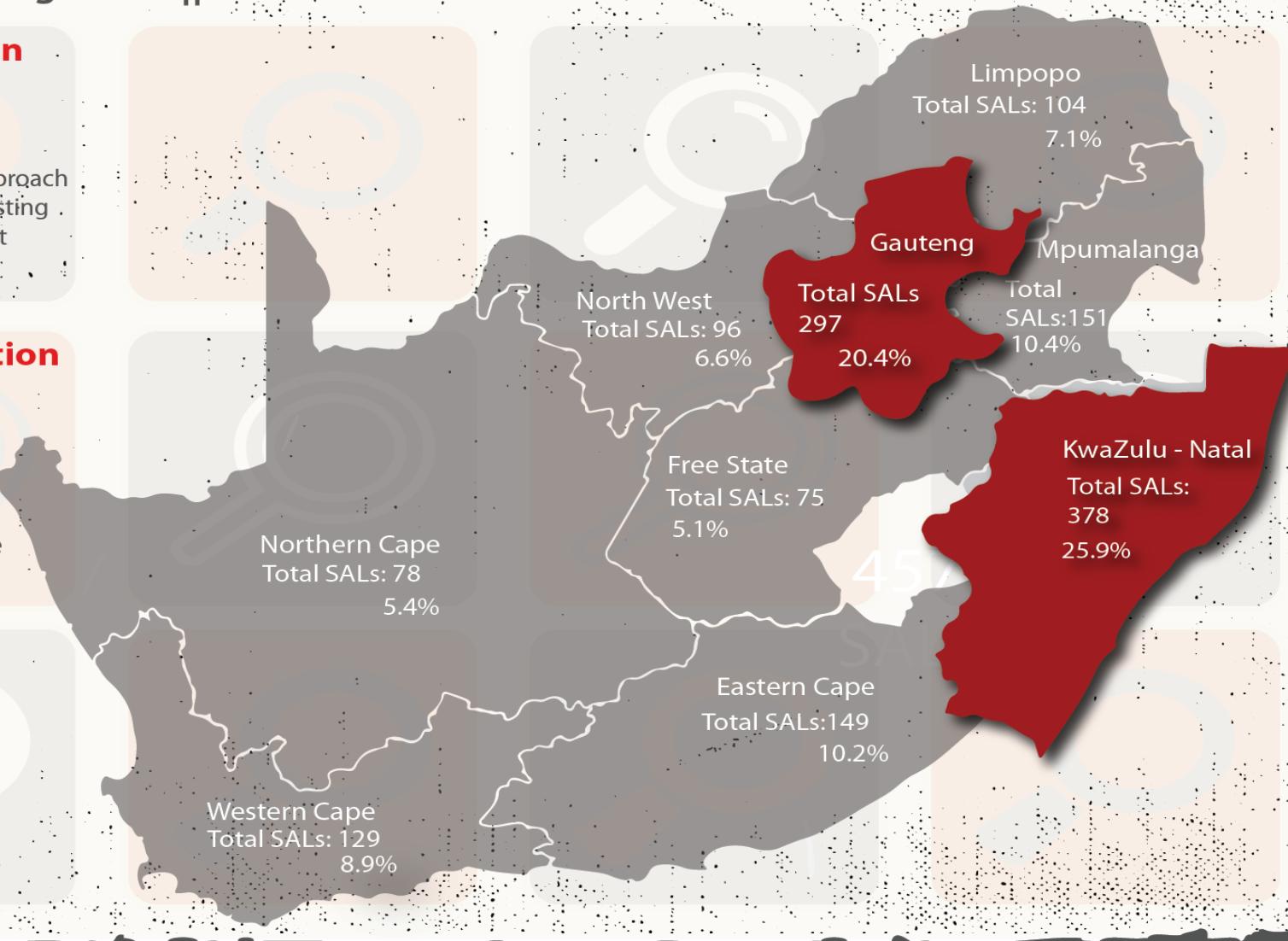
Sampling Frame || SABSSM V - National + 16 District / Metro-level estimates

Survey Design

- Cross - sectional
- Population - based
- Multi - stage stratified
- Random sampling approach
- Linked anonymous testing . with informed consent

Survey Population

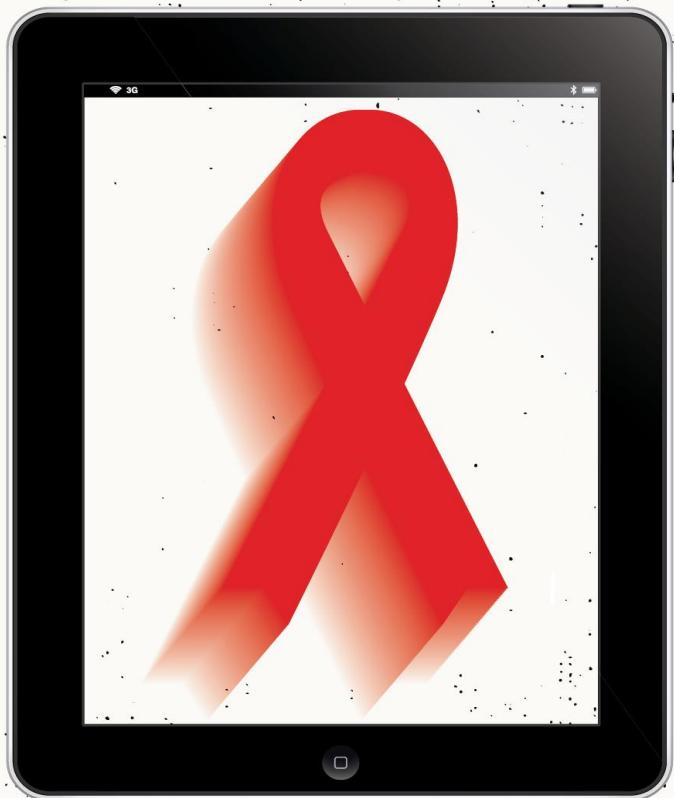
- Person of all ages
- Living in South Africa
- Members of selected households invited to participate in the survey including those living in hostels



DATA COLLECTION TOOLS AND PROCESSES

Four questionnaires were used in this survey:

- ❑ Household Questionnaire
- ❑ Parent / guardian of children aged 0 to 11 years
- ❑ Children aged 12 to 14 years
- ❑ Persons aged 15 years and older



Blood Sample Collection

- ❑ All DBS samples were tested for HIV in the laboratory using approved methods
- ❑ Those found to be positive were confirmed by doing additional tests

LABORATORY TESTING

NATIONAL HIV HOUSEHOLD SURVEY, SOUTH AFRICA 2017



Dried Blood Spot

HIV Ab screening,
Nucleic Acid Amplification test

HIV
Positive

HIV Incidence
(>2 years)

ARVs

Viral Load

HIV
Drug
Resistance



Valid Households
11,776



**HIV
Testing Responses**
61.1 %

RESPONSE RATE SOUTH AFRICA 2017



**Household
level response**
82.2 %

Blood Samples

23,923



Eligible individuals

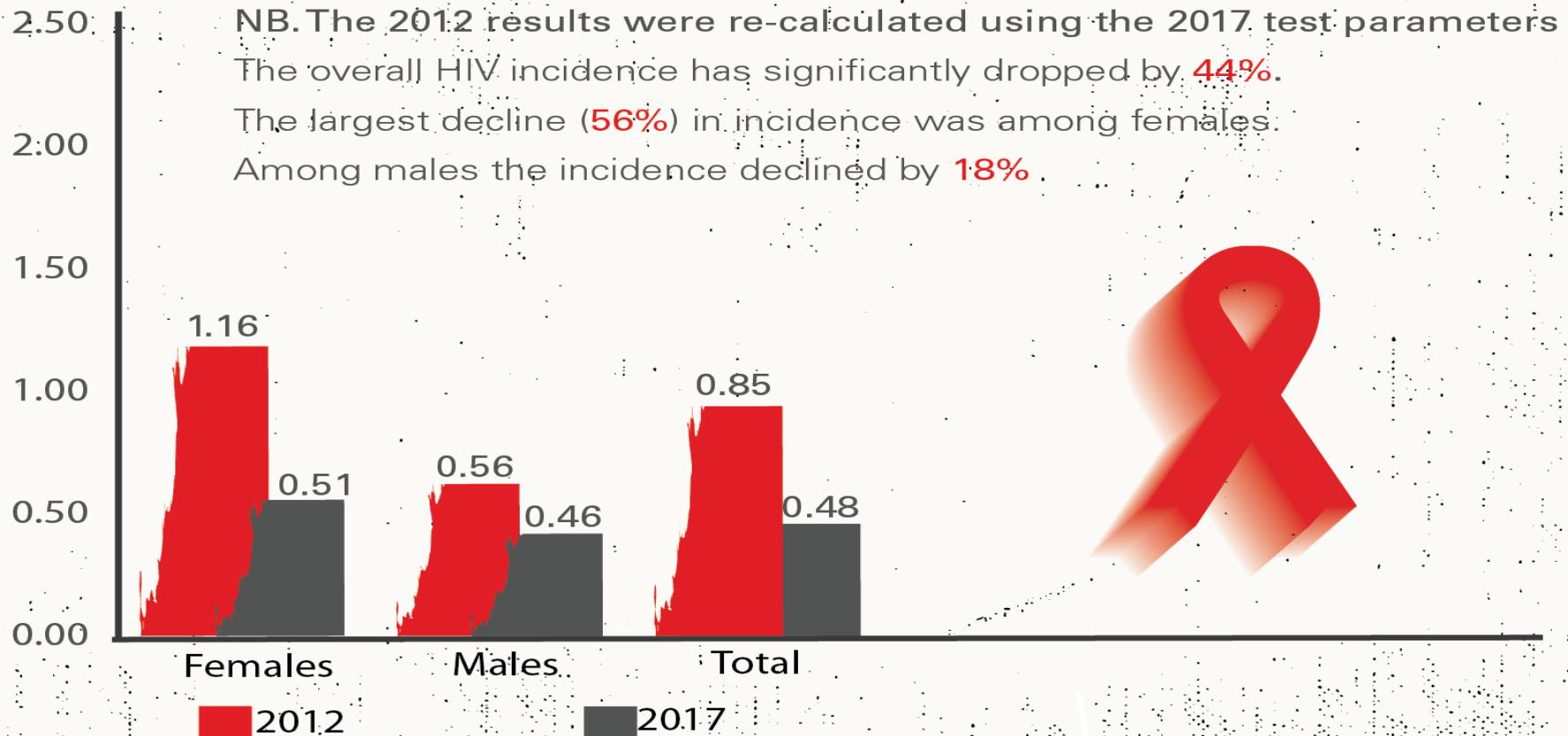
39,132


**Individual
level response**
93.6 %

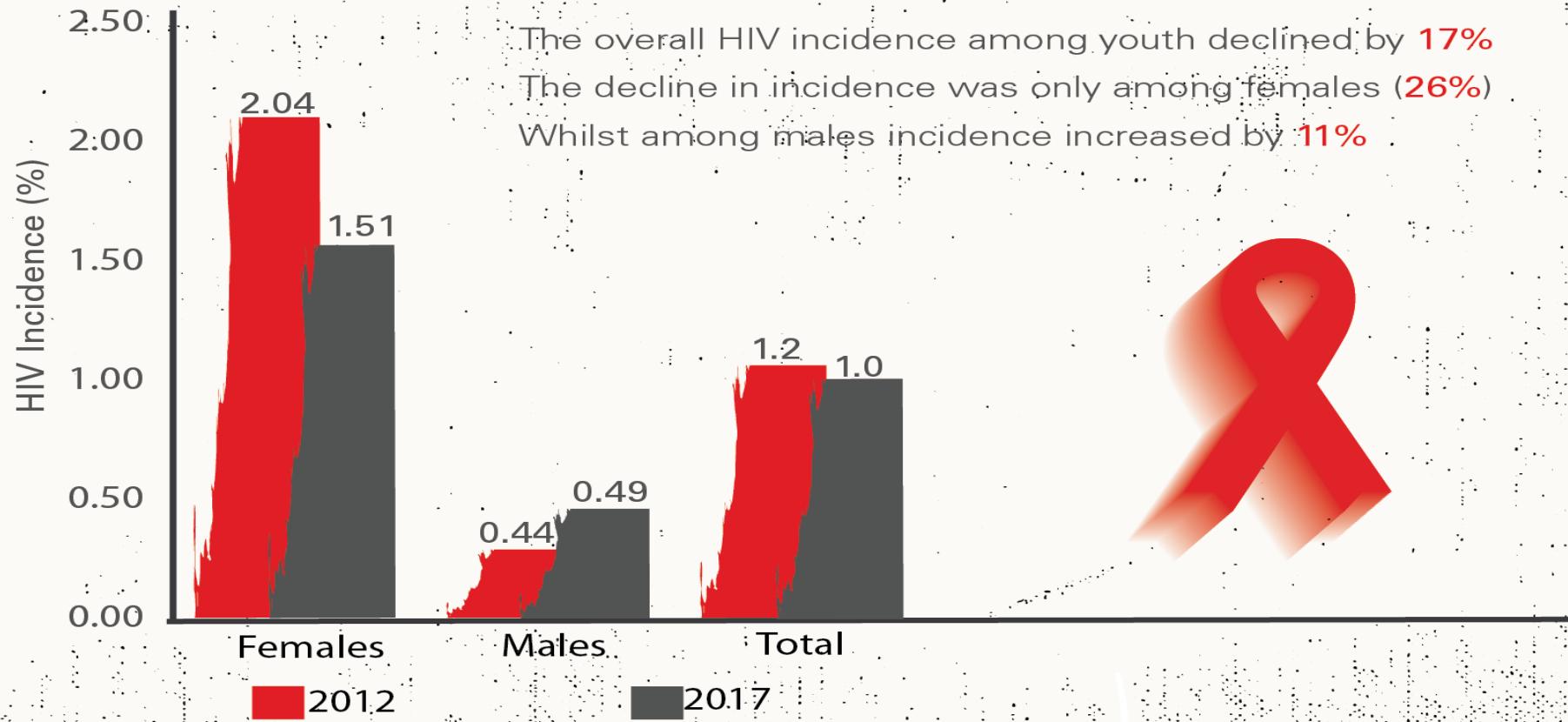
RESULTS



Changes to HIV Incidence among those aged two years and older by Sex, South Africa, 2012-2017

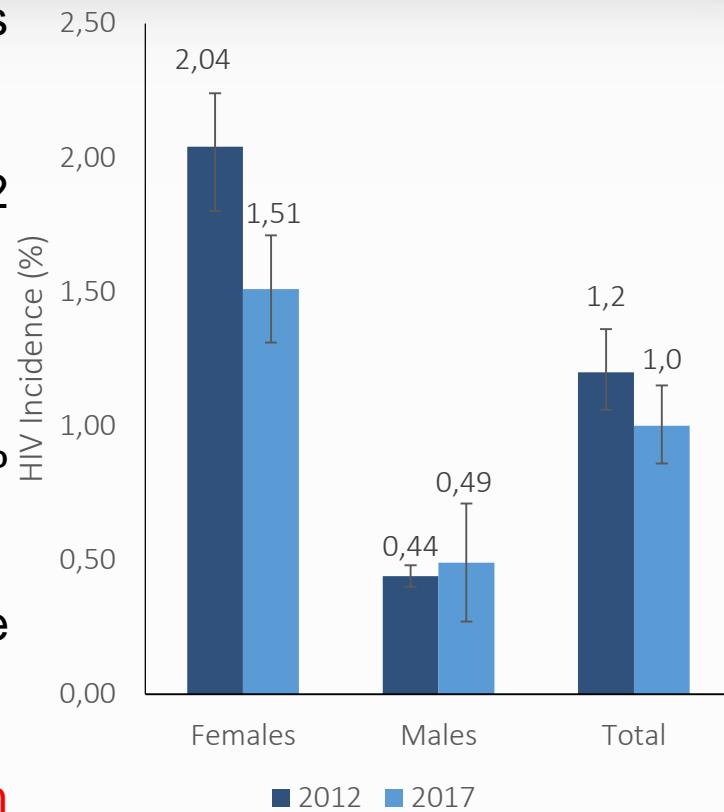


Changes to HIV Incidence among those aged 15 to 24 years by sex, South Africa, 2012-2017



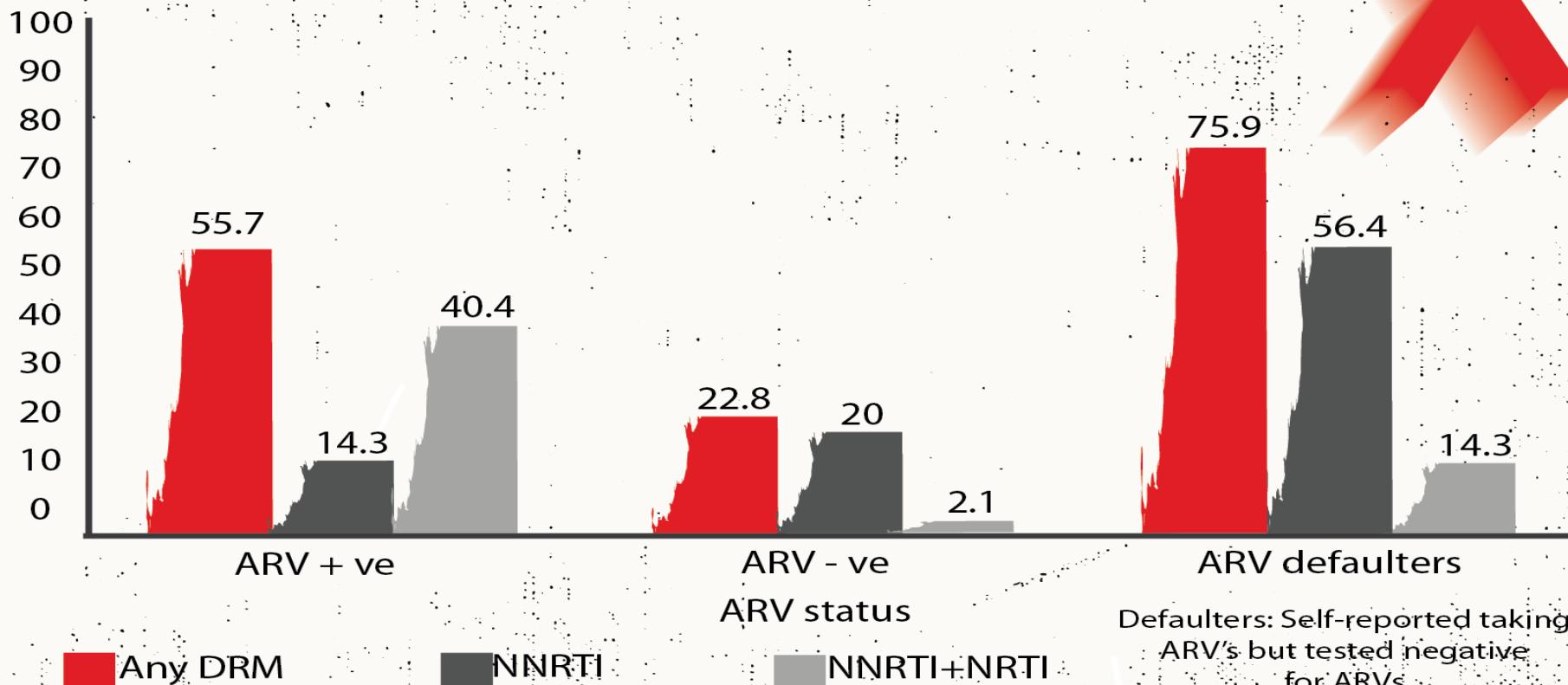
Highlights of HIV Incidence 2012 to 2017

- Incidence at 0.48 % ($\Rightarrow 231\ 000$ new infections annually)
- Higher incidence among females (0.51% $\Rightarrow 122\ 000$) compared to males (0.46% 109 000)
- **Youth** Incidence was 1.0 % ($\Rightarrow 88\ 000$)
- **Youth** : three times higher among females (1.51% $\Rightarrow 66\ 000$) compared to males (0.49% $\Rightarrow 22\ 000$)
- Over a third (38.0%) of all new infections come from this age group
- From 2012 to 2017 HIV incidence among **youth** declined by 17%
- The decline in incidence was only among females (26%) whilst **among males** incidence increased by 11%



HIV drug resistance by ARV status

South Africa, 2017



HIV Prevalence, 2017

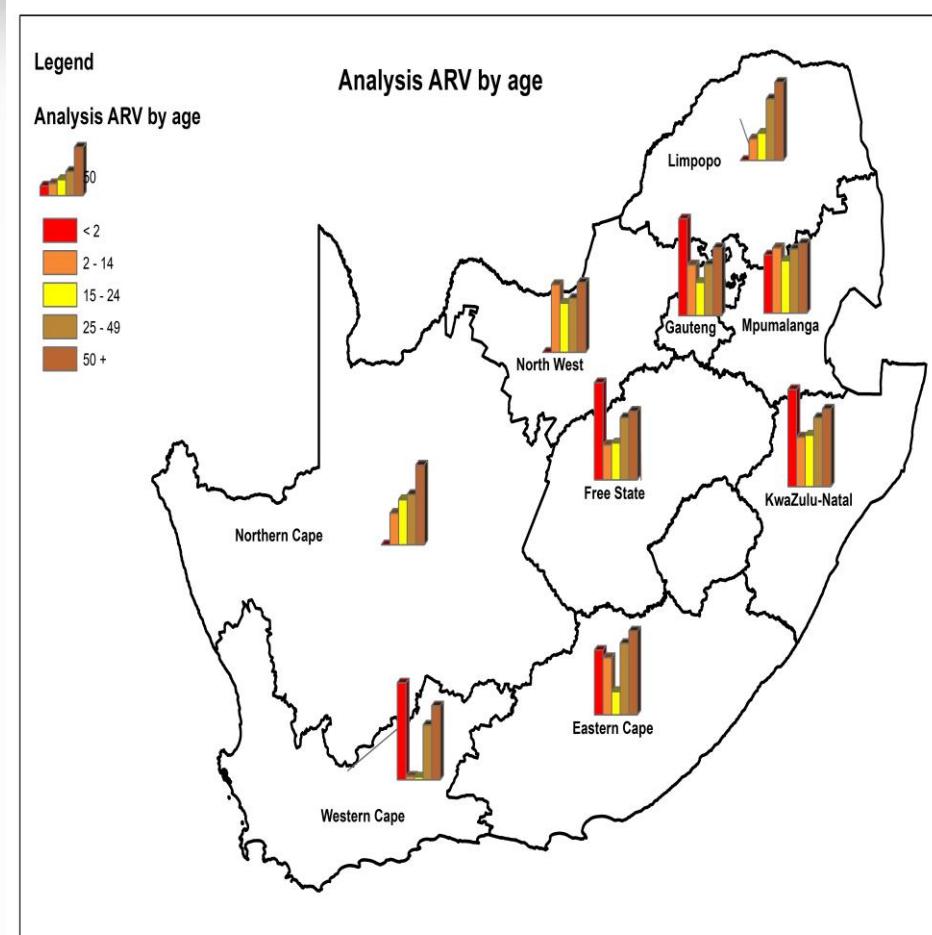
Age	HIV prevalence (%)			Total PLHIV
	Overall	Males	Females	
<2	2.8	1.8	3.8	62 000
2-14	2.7	2.5	2.9	390 000
15-24	7.9	4.8	10.9	756 000
25-49	26.4	19.4	33.3	5 588 000
50+	12.5	11.5	13.3	1 124 000
Total	14.0	10.6	17.3	7 920 000

- Numbers of people leaving with HIV continue to increase in South Africa
 - 2012: HIV prevalence was **12.2%** translating to 6.4 million people living with HIV.
- Continued HIV incidence and people living longer due to expanded access to antiretroviral contribute to this increase
- Some indications of an ageing epidemic, amongst older people

Exposure to ARVs, 2017

Age	HIV+	ART	ART%
<2	62 000	23 003	76.5
2-14	390 000	117 000	48.0
15-24	756 000	227 4000	39.1
25-49	5 588 000	3 244 000	63.1
50+	1 124 000	753 000	76.7
Total	7 920 000	4 402 000	62.3

- A considerable proportion of <2 years on treatment.
- Youth is considerably lagging behind in access to treatment irrespective of gender
- In all provinces that have infants living with HIV, a considerably high proportion of these infants is on treatment.



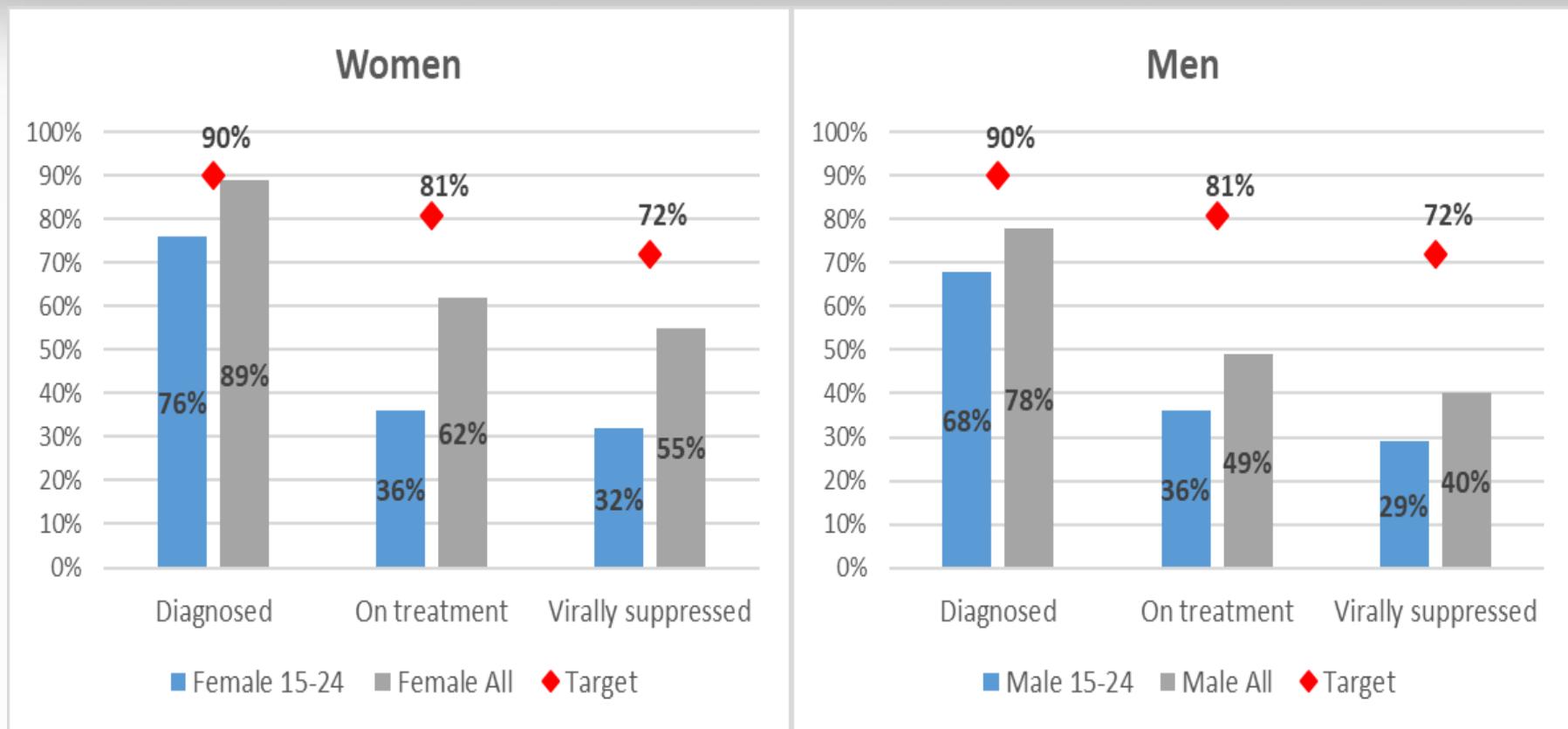
Population Viral Load Suppression, 2017

- Viral load suppression threshold of <1 000 copies of HIV per ml in DBS samples

Age	ART Exposure (%)				Viral Suppression (%)		
	Total	Total %	Males	Females	Total	Males	Females
<2	13 900	76.5	48.0	100.0	67.8	46.7	77.2
2-14	117 000	48.0	49.1	47.2	50.7	56.6	45.4
15-24	274 000	39.1	43.1	38.6	47.7	49.1	47.1
25-49	3 244 000	63.1	53.3	68.5	62.8	51.0	69.6
50+	753 000	76.7	81.5	74.0	73.2	76.4	71.2
Total	4 402 000	62.3	56.3	65.6	62.3	55.0	66.5

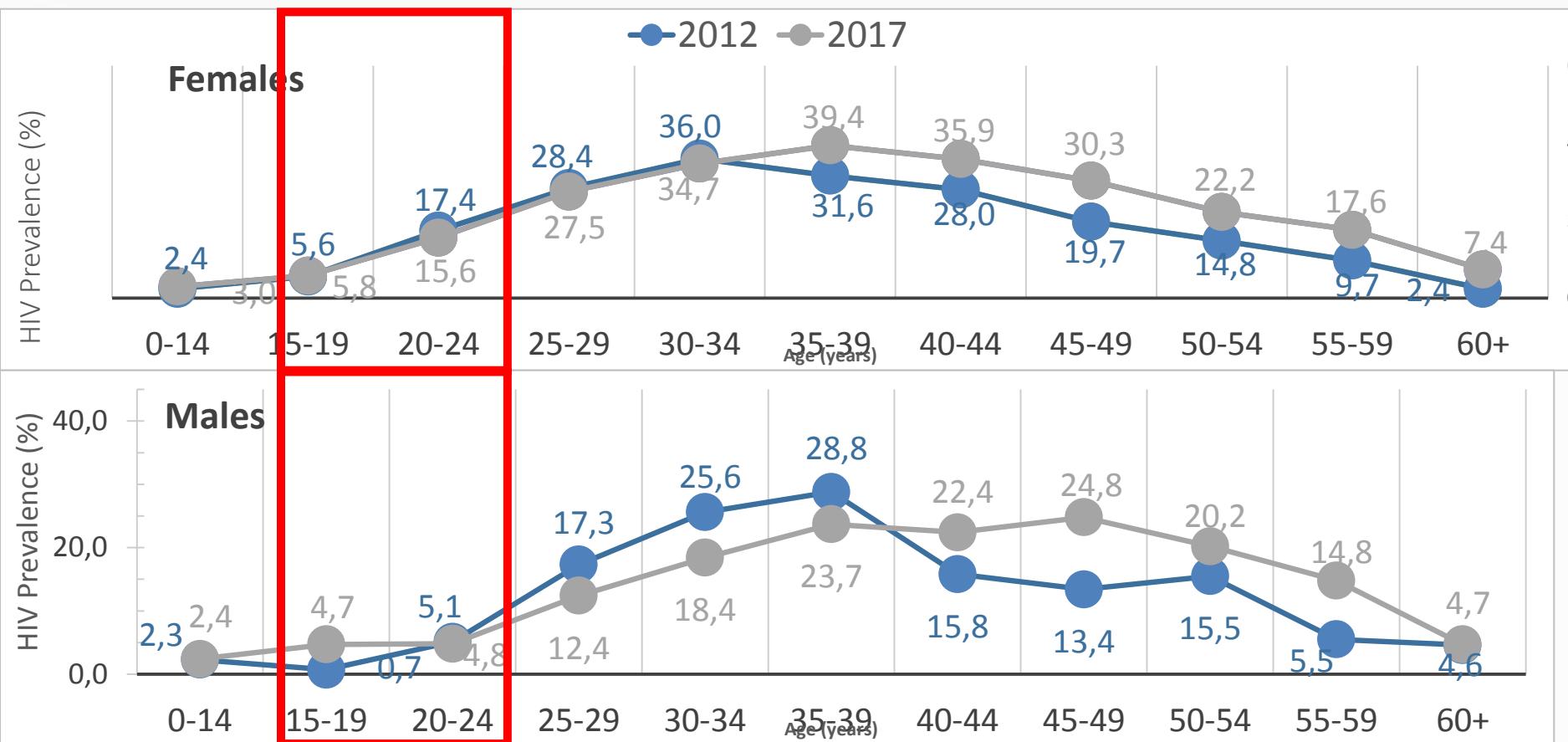
- High exposure to ARVs consistently translated to high viral suppression for both males and females
- 15 to 24 year olds show low levels of viral suppression

90-90-90 Cascade: 15-24 year olds, 2017



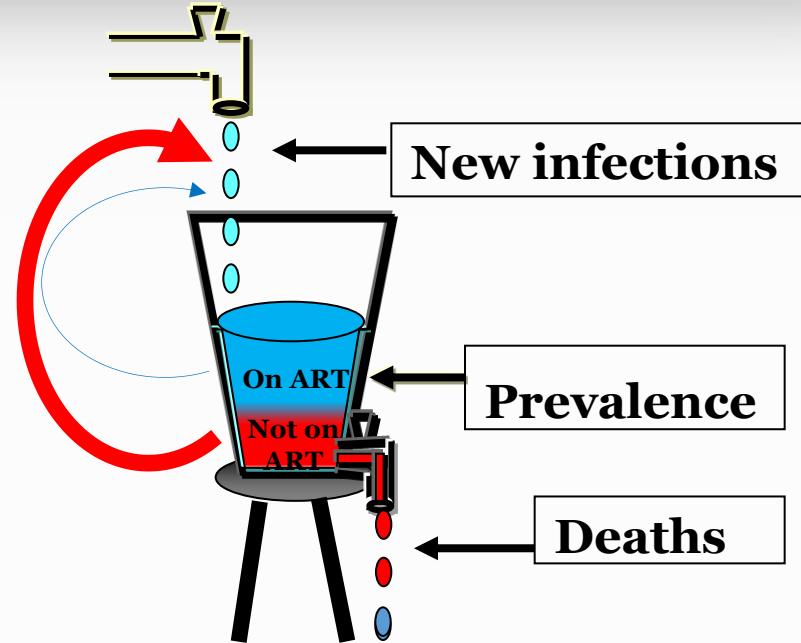
- Much less than the national average of youth that are HIV positive know their status

HIV by Age and Sex 15 to 24 years, (2012 vs 2017)



Human Beings NOT just numbers

- These are not numbers but **human beings**
- **7 919 574** human beings in South Africa are living with HIV
- **4 402 000** are on ARVs
- **2 669 000** are not on life saving ARVs
 - Most of those (60.1 %) that are HIV positive (thus needing ARVs) and not on ARVs are youth aged 15 to 24, compare this to only 23.3% among 50+
 - 77.5% of youth not on ARVs is virally unsuppressed
 - Sadly, if they are not put on treatment immediately their chances of dying due to AIDS increases everyday that we don't put them on treatment



NATIONAL KEY COUNTRY INDICATORS



National Key Country Indicators

Overall HIV Prevalence
14.0%

Overall Drug Resistance
27.4%

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
84.9%	70.6%	87.5%

For people 15 years and older

HIV Testing	Medical Male Circumcision	Condom use at last sex
75.2%	30.8%	38.9%

Nuances from National results



HIV prevalence is increasing because mortality rates are decreasing due to more people being on treatment.

HIV incidence has declined significantly by **44%**, dropping from **378 700** new infections in 2012 to **231 100** new infections in 2017.

Overall, the number of new HIV infections had dropped by **14%**, from **270 000** in 2016 to **231 000** in 2017.

However: The incidence of new HIV infections remains high, especially among females aged 15 - 24 (**1.51%**) and females aged 15 - 49 (**0.93%**). Treatment uptake had more than doubled since the 2012 survey.

More than two-thirds of males aged 15 - 24 were circumcised, with over half being medical circumcisions.

Sustained gains have been recorded for the **awareness** of HIV status and HIV-testing. Generally, **two-thirds** of people indicated that they had **been tested** during the previous 12 months. Male testing rates were now nearly equal to those for females.

PROVINCIAL AND DISTRICT KEY COUNTRY INDICATORS



Provincial and Districts results

HIV Prevalence will be presented for all ages

90 90 90 indicators will be presented for people aged 15-64

Medical Male Circumcision and Condom use at last sex will be presented for people aged 15 years and older



WESTERN CAPE Province

Overall HIV
Prevalence
8.9%

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
80.9%	67.1%	89.0%

For people 15 years and older

Medical Male Circumcision	Condom use at last sex
18.3%	28.6%

WESTERN CAPE

District Level

People aged 15 - 64

Diagnosed ART exposure (first 90) Virally suppressed (third 90)

87.8% **76.2%**

92.4%

For people 15 years and older

Medical Male Circumcision
18.5%

Condom use at last sex
35.3%

City of Cape Town

Overall HIV Prevalence
9.5%

EASTERN CAPE Province

**Overall HIV
Prevalence
15.3%**

People aged 15 - 64

Diagnosed
(first 90)

89.5%

ART exposure
(second 90)

76.7%

Virally suppressed
(third 90)

90.5%

15 years and older

Medical Male Circumcision

14.0%

15 years and older

Condom use at last sex

38.4%

EASTERN CAPE District Level

OR Tambo

People aged 15 - 64

**Overall HIV
Prevalence
17.3%**

Diagnosed
(first 90) **94.1%**

ART exposure
(second 90) **69.0%**

Virally suppressed
(third 90) **82.5%**

15 years and older
Medical Male Circumcision

11.2%

15 years and older
Condom use at last sex

42.3%

NORTHERN CAPE Province

**Overall HIV
Prevalence
8.3%**

People aged 15 - 64

Diagnosed
(first 90)

73.8%

ART exposure
(second 90)

72.2%

Virally suppressed
(third 90)

87.1%

FREESTATE Province

**Overall HIV
Prevalence
17.8%**

People aged 15 - 64

Diagnosed
(first 90)

91.8%

ART exposure
(second 90)

68.2%

Virally suppressed
(third 90)

89.8%

15 years and older

Medical Male Circumcision

36.5%

15 years and older

Condom use at last sex

41.0%

KWAZULU NATAL Province

15 years and older	
Medical Male Circumcision	29.1%
15 years and older	
Condom use at last sex	42.6%

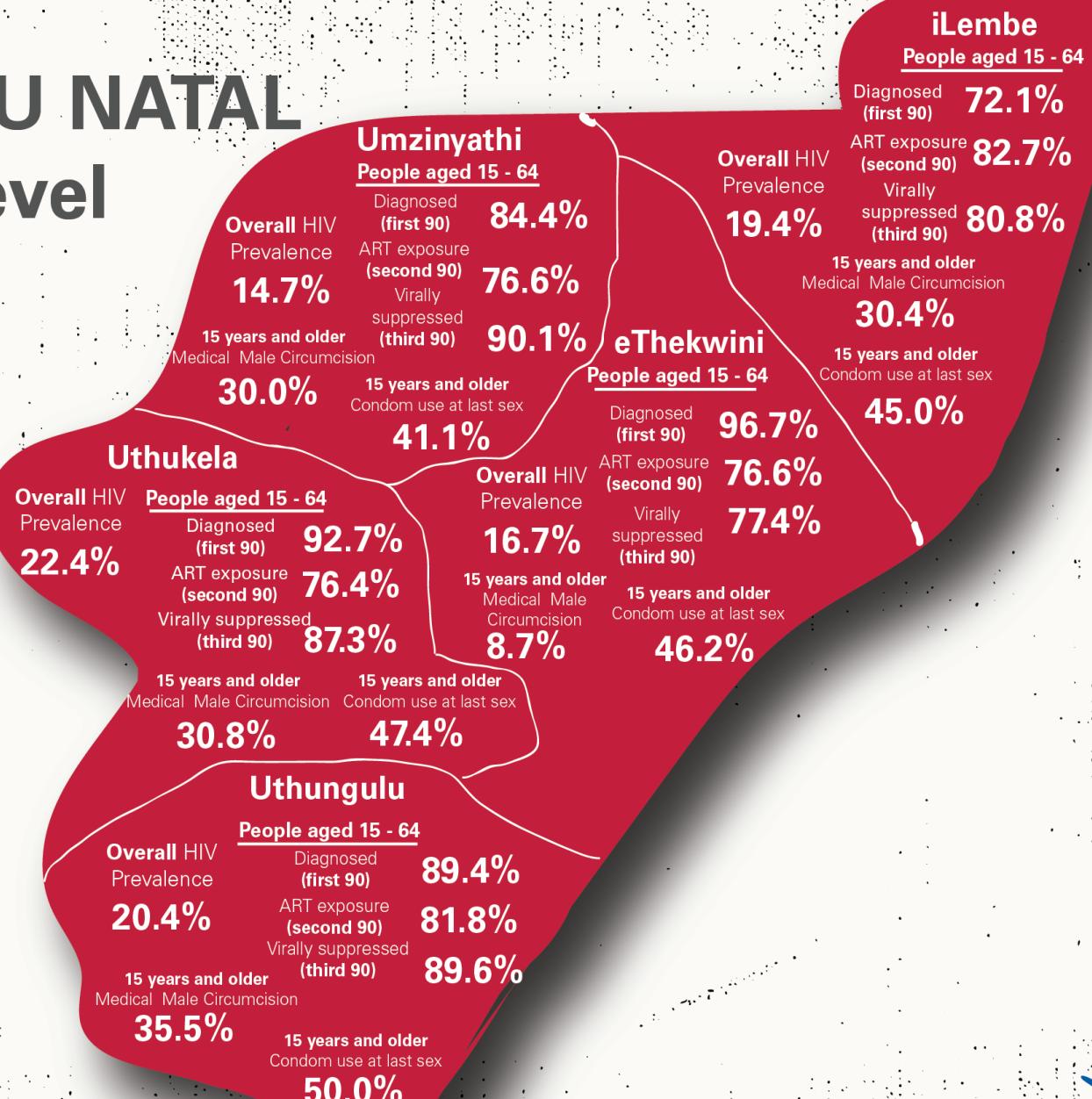
People aged 15 - 64

Diagnosed (first 90)	86.2%
ART exposure (second 90)	79.3%
Virally suppressed (third 90)	85.7%

**Overall HIV
Prevalence**
18.1%

KWAZULU NATAL

District level



NORTH WEST Province

Overall HIV
Prevalence
14.5%

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
77.6%	64.8%	90.8%

For people 15 years and older

Medical Male Circumcision	Condom use at last sex
28.1%	43.6%

NORTH WEST District Level

Bojanala Platinum

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
87.7%	69.5%	86.2%

Overall HIV
Prevalence

16.0%

For people 15 years and older

Medical Male
Circumcision

25.2%

Condom use
at last sex

41.6%

GAUTENG Province

15 years and older
Medical Male Circumcision
43.6%

People aged 15 - 64

Diagnosed
(first 90)
86.9%

ART exposure
(second 90)
60.9%

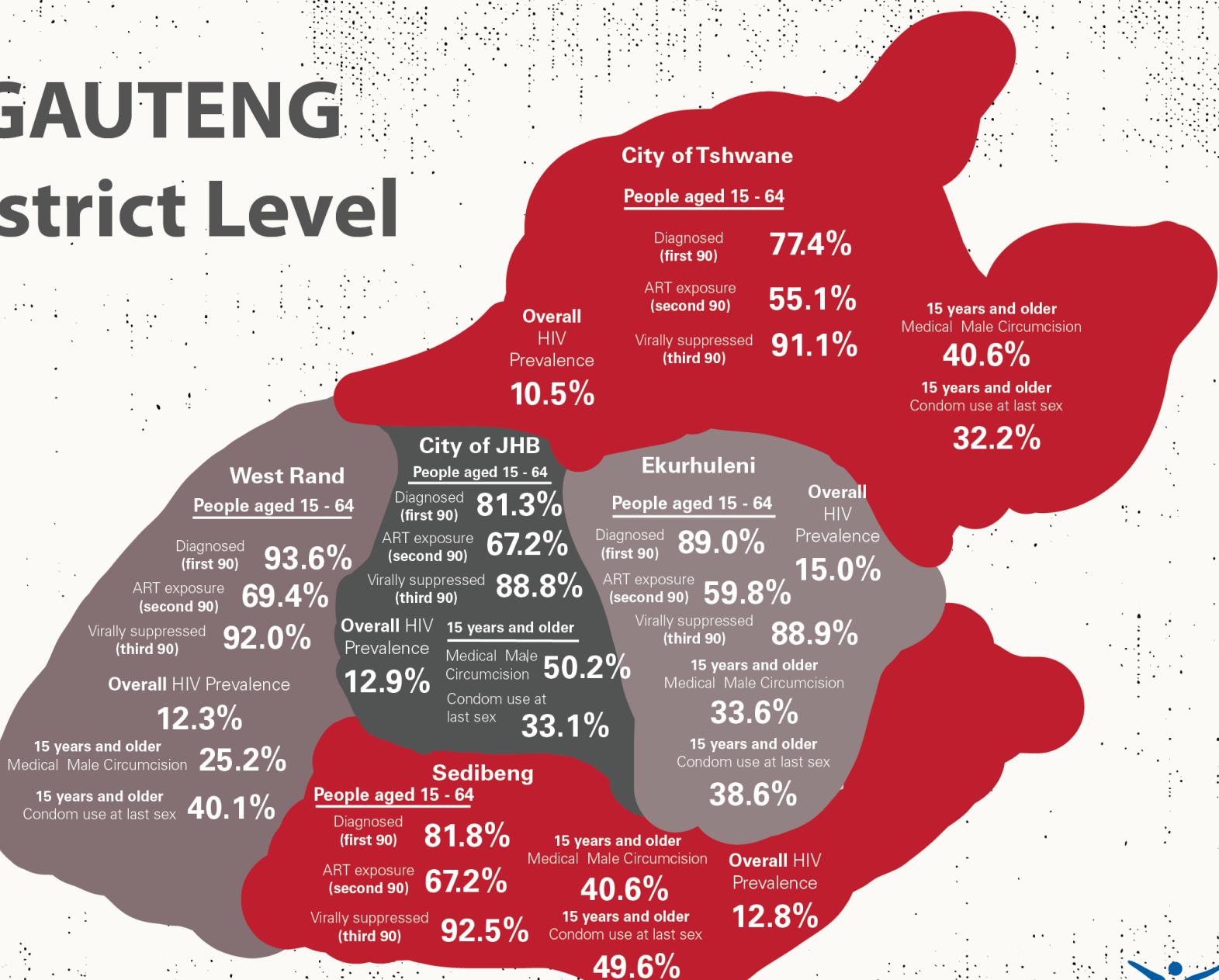
Virally suppressed
(third 90)
87.6%

**Overall HIV
Prevalence**
12.5%

15 years and older
Condom use at last sex
36.9%

GAUTENG

District Level



MPUMALANGA

Province

Overall HIV
Prevalence

17.3%

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
84.3%	73.1%	83.0%

For people 15 years and older

Medical Male Circumcision
35.8%

Condom use at last sex
46.3%

MPUMALANGA

District Level

Gert Sibande

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
81.2%	81.2%	77.0%

Overall HIV
Prevalence

22.9%

For people 15 years and older

Medical Circumcision	Condom use at last sex
38.3%	49.3%

Ehlanzeni

Overall HIV
Prevalence
20.0%

People aged 15 - 64

Diagnosed (first 90)	ART exposure (second 90)	Virally suppressed (third 90)
90.6%	73.2%	84.9%

For people 15 years and older

Medical Circumcision	Condom use at last sex
38.0	46.8

LIMPOPO Province

Overall HIV
Prevalence
10.9%

People aged 15 - 64

Diagnosed (first 90)	75.9%
ART exposure (second 90)	67.8%
Virally suppressed (third 90)	87.6%

15 years and older Medical Male Circumcision	26.4%
15 years and older Condom use at last sex	41.2%

LIMPOPO District Level

HIV
Prevalence
7.5%

15 years and older
Medical Male Circumcision
8.7%

SEKHUKHUNE

People aged 15 - 64

Diagnosed (first 90)	88.6%
ART exposure (second 90)	67.6%
Virally suppressed (third 90)	80.6%

15 years and older
Condom use at last sex
39.9%



Nuances among provinces and districts

- HIV prevalence and behavioural data for the additional selected districts were presented for the first time, yielding 16 districts in total.
- HIV prevalence has increased in all provinces and certain rankings have changed.
- Eastern Cape displayed the fourth highest HIV prevalence and now ranks higher than Gauteng and North West province.
- HIV prevalence remains high in eThekweni (KZN) and Ekurhuleni (Gauteng).
- Four districts in Mpumalanga and KwaZulu-Natal accounted for a fifth of people living with HIV in the 16 selected districts.
- Overall, VL suppression detected in the laboratory tests was below 65% for all people living with HIV, irrespective of whether they were on treatment.

BEHAVIOURAL MEASURES:

Sexual
Partnerships



Age disparate relationships

Age-disparate relationships among adolescent males and females aged 15–19, South Africa, 2002–2017



Overall, the prevalence of HIV was 7.5% among all respondents who reported being in an age-disparate relationship, with females having higher HIV prevalence (11.7%) than males (3.7%). HIV prevalence among people who were in relationships was higher among respondents aged 15–19 who reported having a partner more than five years older than themselves (16.5%) than those whose partners were aged within five years (5.4%).

Intimate Partner Violence

The most commonly reported acts of IPV among both sexes were:



7.4% vs. 2.8%

Arms twisted || Hair pulled



12.9%

Pushed || Shaken
Objects thrown



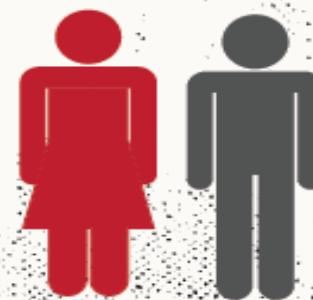
8.5% vs. 2.9%

Females || Kicked,
dragged, beaten up



3.5% vs 1.4% having been forced to have sex against their will

Compared to people who were not violent towards their partners, among males the difference in HIV status was significant: 28.6% vs 14.1%; p=0.001.



BEHAVIOURAL MEASURES:

Perceptions,
Knowledge &
SBCC



Social and Behavioural

Change Communication programmes' exposure, reach and behavioural outcomes



15.7 million people

Approximately 15.7 million people (46.6%) were exposed to between 5 and 15 SBCC programmes (moderate exposure).

An estimated population of 5.7 million people (16.8% of respondents) indicated that they had heard, seen, watched or participated in 16 or more of the 43 programmes that were listed and assessed in the survey (high exposure).

5.7 million people



92.5% SBCC exposure
HIV tested

78.7% Within the last year
HIV tested

55.6% Medically circumcised
males

68.5% Rejected HIV
transmission myths

15.4% Two or more
sexual partners



ACKNOWLEDGEMENTS



science
& technology

Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA



unicef



U.S. President's Emergency Plan for AIDS Relief (PEPFAR) through the U.S. CDC (Cooperative Agreement #GH001629)
Department of Science and Technology, South African National AIDS Council, Global Fund, Right to Care, UNICEF, Joint
United Nations Programme on HIV and AIDS, Soul City, LoveLife

The findings and conclusions in this presentation are those of the author(s) and do not necessarily represent the official position of the CDC. The mark "CDC" is owned by the US Dept. of Health and Human Services and is used with permission. Use of this logo is not an endorsement by HHS or CDC of any particular product, service, or enterprise.

THANK YOU

