

# Dynamics of HIV epidemic in Sub-Saharan Africa: Who are we leaving behind in treatment?

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## Background

- Sub-Saharan Africa carries the heaviest burden of people living with HIV globally.
- Access to life prolonging antiretroviral treatment varies considerably between countries and within country.
- Estimated proportion of those knowing their HIV and accessing treatment ranges from 87% in Zimbabwe to 91% in Tanzania.
- Generally, women are more likely to access treatment compared to males.
- An exception in few countries such as Zambia and eSwatini where males are 11.1% and 17.2% more likely to access treatment than females respectively.



### Country targets by age (90-90-90)

Age	Zimbabwe			eSwatini			Zambia			Tanzania		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
15-24	50.1	83.7	85.4	66.1	81.7	76.4	40.2	80.0	71.3	39.1	87.7	82.2
25-34	66.0	79.8	82.5	82.4	83.7	90.3	60.8	77.2	88.7	42.0	83.2	87.4
35-49	79.9	87.4	85.8	89.5	88.8	94.1	73.8	87.4	89.8	56.9	91.5	86.1

- The older you get the more likely you are to know HIV positive status
- Similar pattern in all these countries
- Youth in Zambia and Tanzania least likely to know their HIV positive status
- The older you get the more likely you are to be diagnosed and put on treatment
- Similar pattern exists with viral suppression

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

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HIV Drug Resistance

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

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SABSSM V



Valid Households

level response

93.6 %

#### HIV Testing Respons RESPONSE RATE 61.1 % SOUTH AFRICA 2017

**Blood Samples** 

23,923

Eligible individuals 39,132

Household

level response

82.2 %







## **HIV Prevalence, 2017**

	HIV p	revalence	Total PLHIV	
Age	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



## Highlights of HIV Incidence 2012 to 2017

- Incidence at 0.48 % (=> 231 000 new infections 2,50 annually)
- Higher incidence among females (0.51% =>122 000) compared to males (0.46% 109 000)
- Youth Incidence was 1.0 % (=>88 000)
- ncidence (% Youth : three times higher among females (1.51% ≧ => 66 000) compared to males (0.49% => 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%





# **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.



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

	A	<b>RT Expos</b>	Viral Suppression (%)					
Age	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	
Ligh averaging to ADV/a consistently translated to high viral aupproasion for both								

 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

# National Key Country Indicators

Overall HIV Prevalence **14.0%** 

Overall Drug Resistance 27.4%

#### People aged 15 - 64

Diagnosed<br/>(first 90)ART exposure<br/>(second 90)Virally suppressed<br/>(third 90)84.9%70.6%87.5%

#### For people 15 years and older

HIVTesting

75.2%

Medical Male Circumcision **30.8%**  Condom use at last sex

38.9%



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



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





- 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



# **Some Concluding Remarks**

- We have left our youth behind and are failing them, only 39% on treatment
- We need to do a lot more, consistently, than what we have done so far, if we are to end the scourge of HIV epidemic
- Putting people on treatment is saving lives demonstrating progressive success with a challenge still persistent among youth.
- Prevention of new infections especially among those younger than 35 years and youth in particular is a serious challenge that we face
- We need to invigorate, strengthen and sustain HIV prevention programs to stop continuing transmission of HIV
- More detailed analyses of the Youth in South Africa will be presented on Tuesday, 12h45 to 13h45 Lunchtime Satellite Youth At Risk @ SYON 1







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, Centre for Communication Impact, Soul City, LoveLife

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