AIDS 2016
PRE-CONFERENCE EVENT

Three Decades of the HIV Epidemic in South Africa

Prof Geoffrey Setswe RN, DrPH

Acting Executive Director: HIV/AIDS, STI & TB (HAST) research program

Human Sciences Research Council

PEPFAR · African Health Professions Regional Collaborative for Nurses and Midwives · ANAC Association of Nurses in AIDS Care · International Council of Nurses · GILEAD · Janssen Pharmaceutical Companies of Johnson & Johnson · DENOSA · IAS · ICAP Global. Health. Action. Columbia University Mailman School of Public Health

In this presentation

- History of major events in HIV/AIDS in South Africa
- HIV prevalence and incidence in South Africa
- Biomedical interventions
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  - Antiretroviral treatment program
  - Male circumcision
- Behavioural interventions for HIV in SA
  - HIV testing
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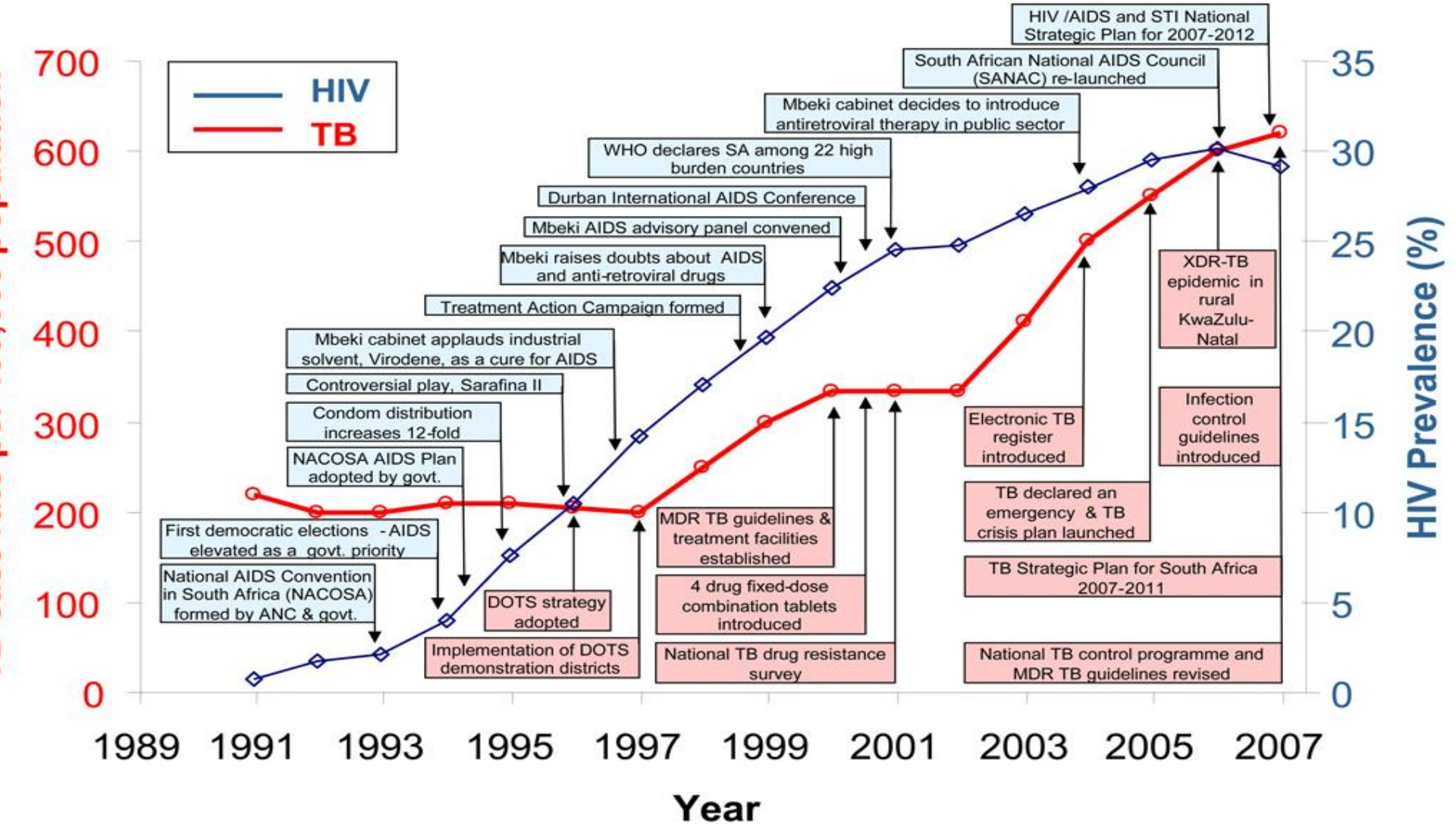
  - Multiple sexual partnerships
- Summary

Historical overview of major events in the AIDS epidemic in South Africa 1989 – 2007



Source: Abdool Karim, Churchyard, Abdool Karim & Lawn (2009) HIV infection and tuberculosis in South Africa: an urgent need to escalate the public health response. Lancet, 374(9693): 921-933

Trends in HIV Prevalence, Incidence and the number of PLHIV, 2002-2014

Year	Prevalence				Incidence	HIV population
	Women 15-49	Adult 15-49	Youth 15-24	Total population	Adult 15-49	(millions)
2002	16,7	15,8	14,1	9,0	1,64	4,09
2003	16,9	15,9	13,2	9,1	1,64	4,20
2004	17,0	15,9	12,5	9,2	1,69	4,29
2005	17,1	15,9	11,9	9,3	1,73	4,38
2006	17,3	15,9	11,5	9,4	1,69	4,48
2007	17,5	16,0	11,1	9,5	1,59	4,61
2008	17,7	16,2	10,8	9,7	1,47	4,75
2009	17,9	16,3	10,4	9,8	1,36	4,88
2010	18,0	16,5	10,1	9,9	1,29	5,02
2011	18,2	16,6	9,7	10,0	1,25	5,14
2012	18,3	16,6	9,3	10,1	1,16	5,26
2013	18,4	16,7	9,0	10,1	1,14	5,38
2014	18,5	16,8	8,7	10,2	1,11	5,51

Source: Stats SA (2014) Midyear population estimates

Trend in HIV prevalence by Age

HIV prevalence, total population in 2012: 12.2% (2008: 10.6%)

6.4 million living with HIV/AIDS

Age group	2002	2005	2008	2012
2-14	5.6	3.3	2.5	2.4
15-24	9.3	10.3	8.7	7.1
25+	15.5	15.6	16.8	19.9
15-49	15.6	16.2	16.9	18.8
2+	11.4	10.8	10.9	12.6

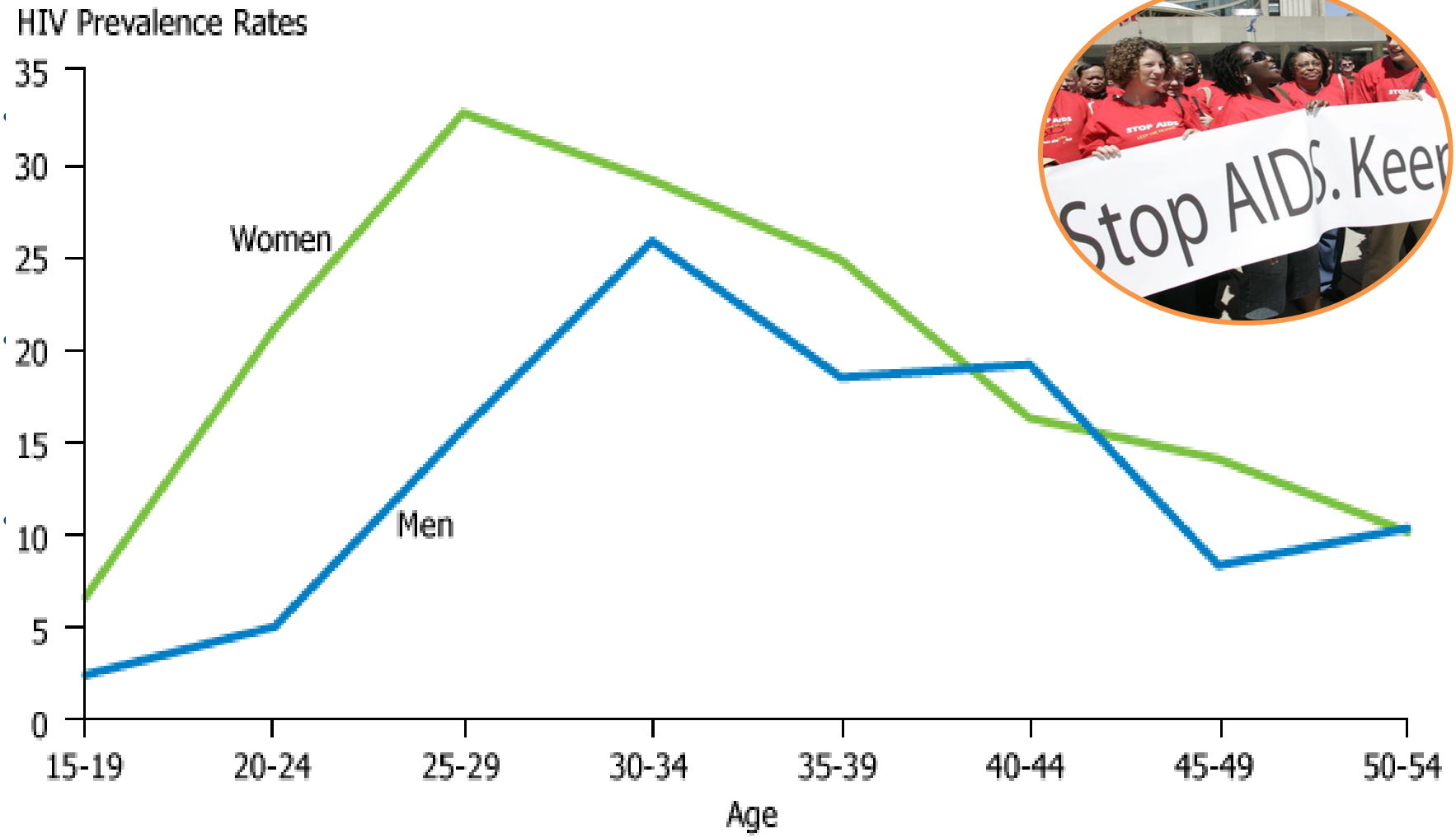
MDG2015 Target = 8.7%

2015 Target = 15.6%

- HIV prevalence among persons aged 15-24 years has declined from 10.3% in 2005 to 7.1% in 2012 – below the MDG2015 target of 8.7% = Achieved
- Among adults aged 15-49 years HIV prevalence increased from 15.6 (2002) to 18.8% (2012) – above the 2015 MDG target of 15.6%. Increase in HIV prevalence is a sign of progress rather than failure – success of the ART programme and reduced mortality.

Source: South African National HIV, Behaviour and Communication survey (2014)

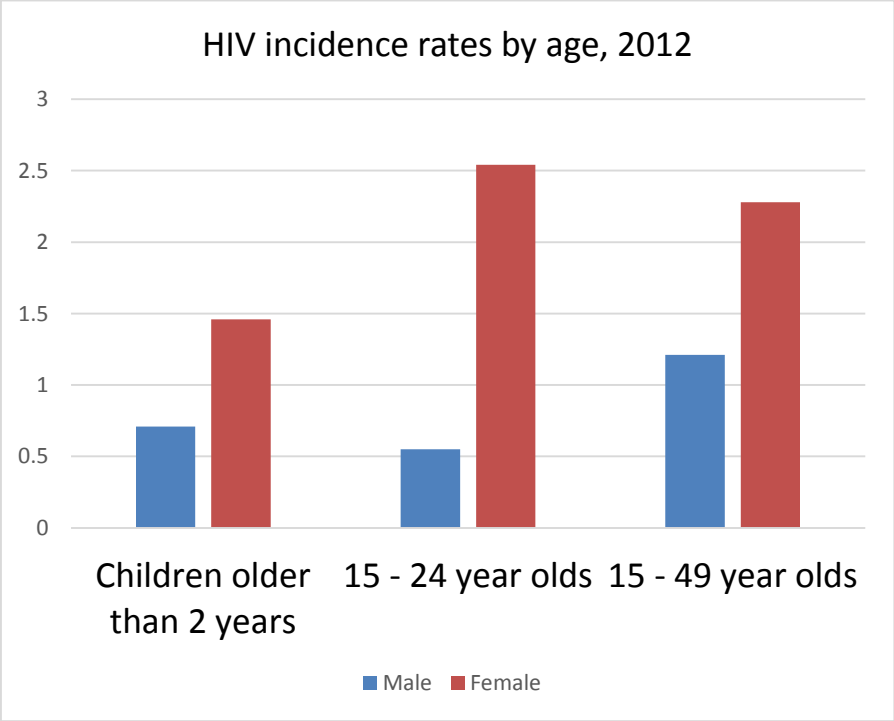
HIV disproportionately affects women in South Africa



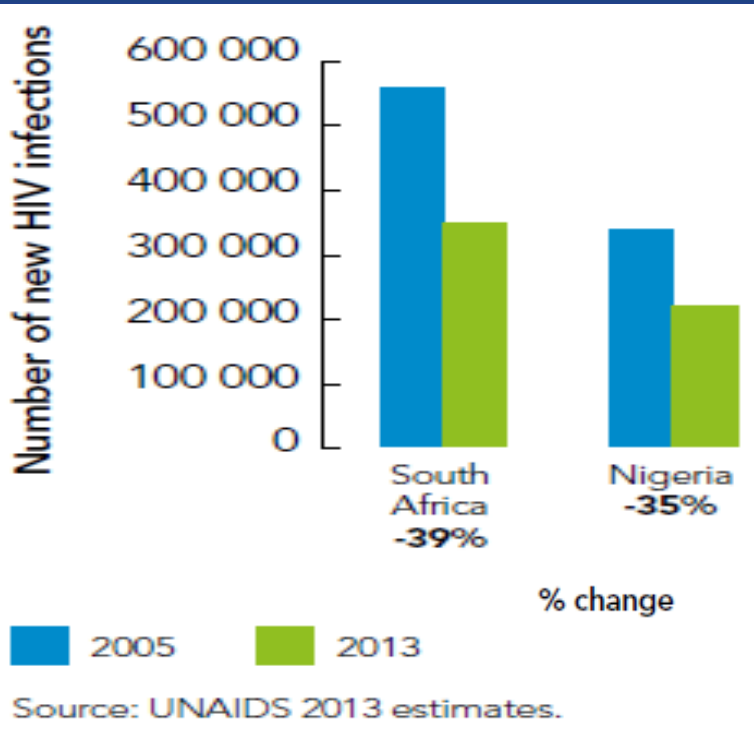
Source: South African National HIV, Behaviour and Communication survey (2012 & 2008)

HIV incidence in South Africa

HIV incidence estimates in 2012



New HIV infections, SA, 2005

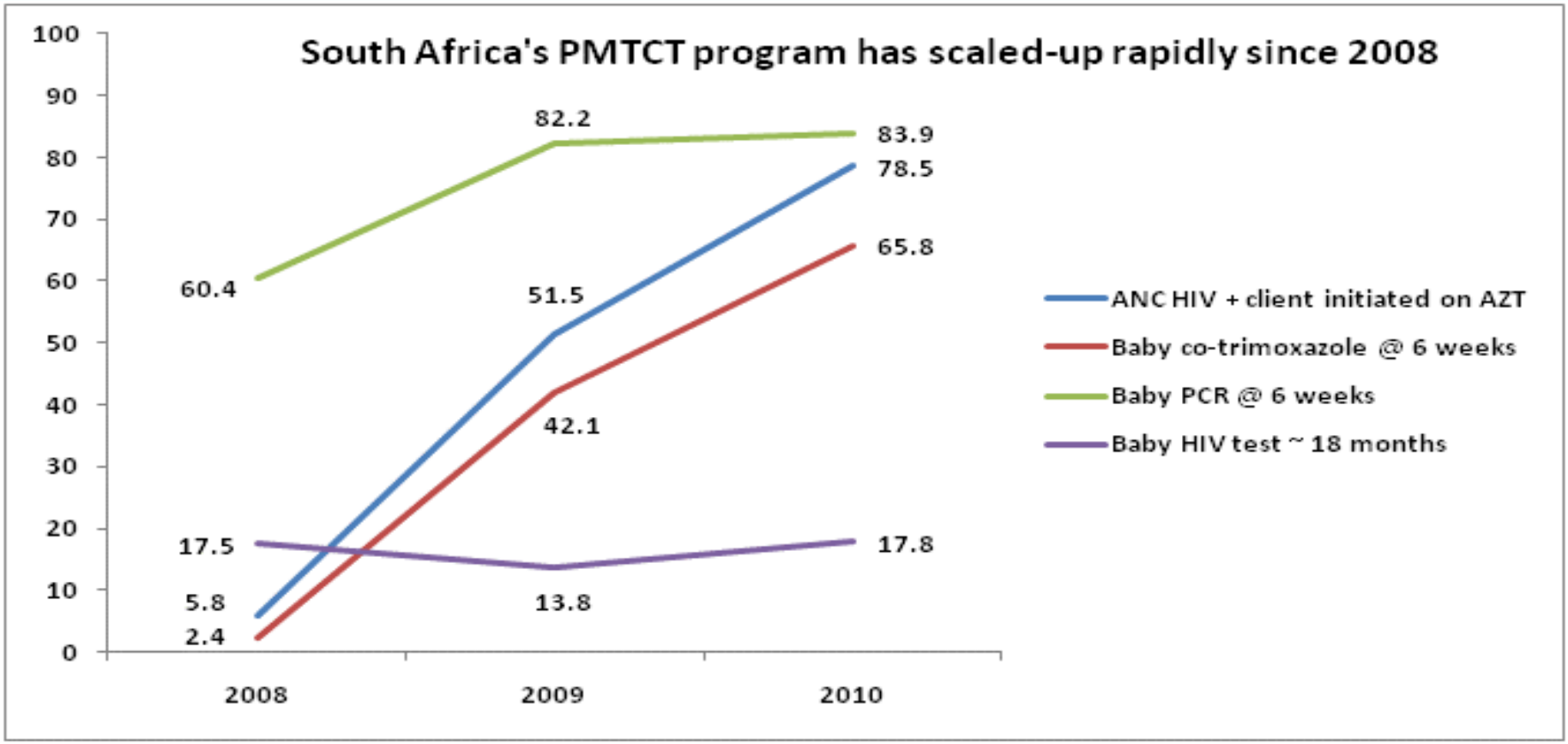


- HIV incidence among females aged 15-24 was >4 times higher than the incidence in males in the same age-group.
- HIV incidence among females aged 15-49 was 2 times higher than the incidence in males in the same age-group.
- Substantial reduction in new infections of 39% between 2005 and 2013.

Source: SABSSM 4 (2014)

Source: SANAC, (2014)

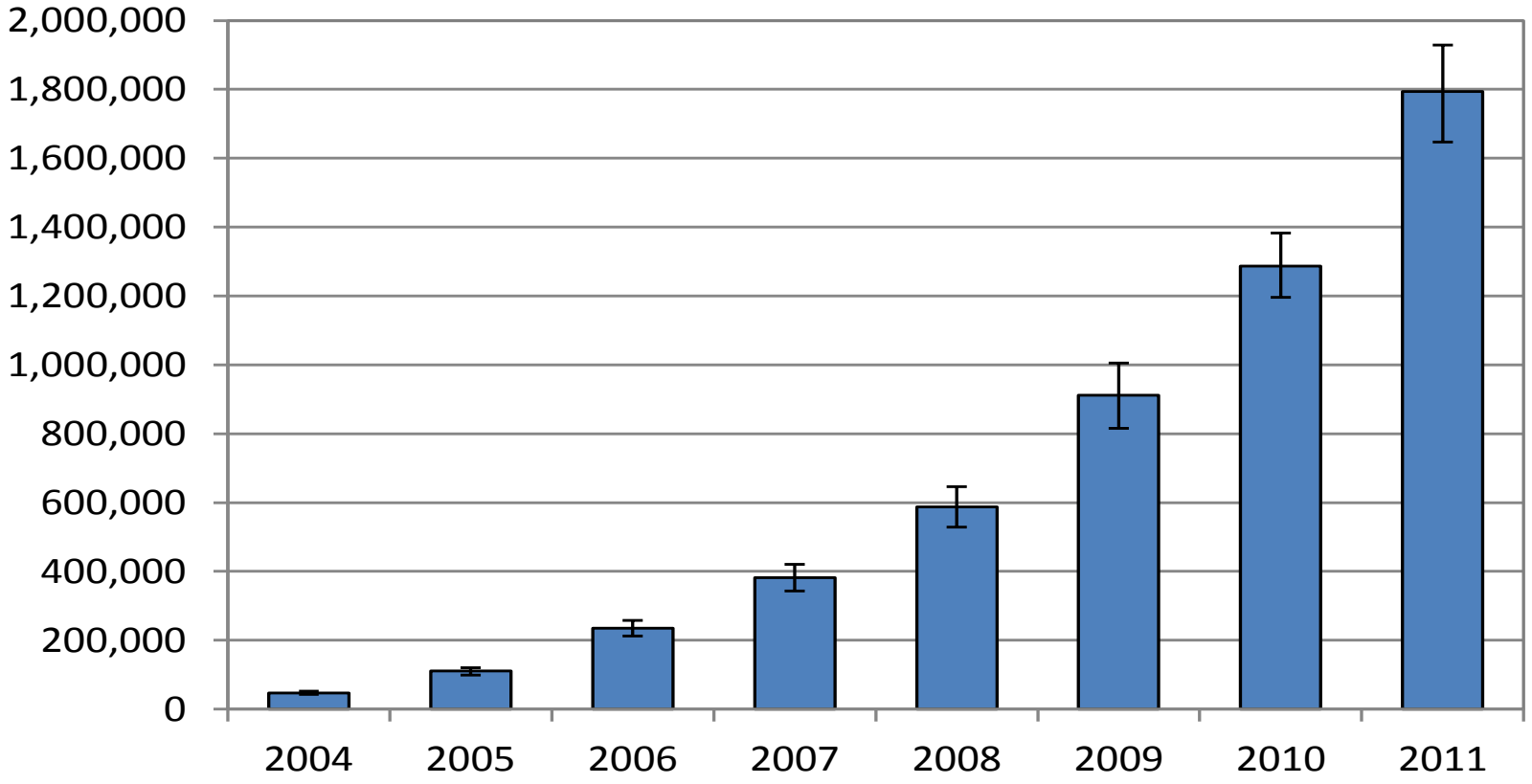
The national PMTCT programme in South Africa, 2011



- South Africa (SA) is very close to achieving the **goal of eliminating MTCT of HIV to less than 2% by 2016**.
- The SA PMTCT Evaluation showed **2.7% MTCT** at 4 - 8 weeks of age **in 2011**

Sources: DHIS (2011); SAPMTCT evaluation (2011)

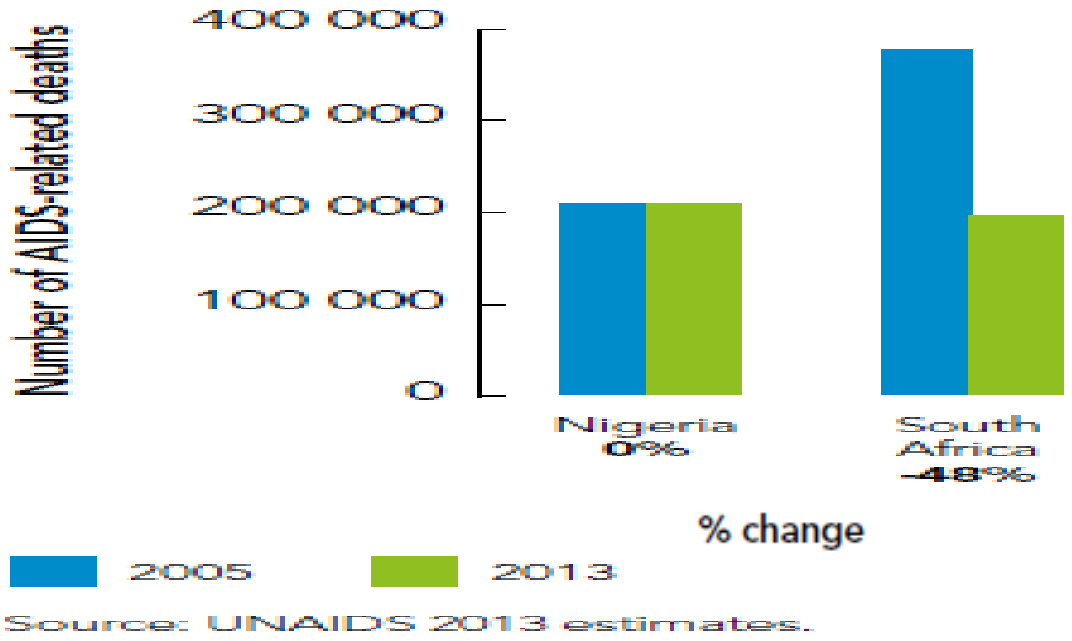
ART rollout in South Africa



- SA has the largest ART programme the world, with accelerated uptake of 65.5% (2012)
- SA made substantial progress in achieving universal access for all who need ART.
- % of eligible adults and children receiving ART leapt from **58.3%** in 2010, to **75.2%** in 2011 and 3.3m were on ART in 2015.
- ART coverage for HIV positive pregnant women also leapt from **87.3% to 99%**.

Source: Johnson, SAJHIVMED (2012)

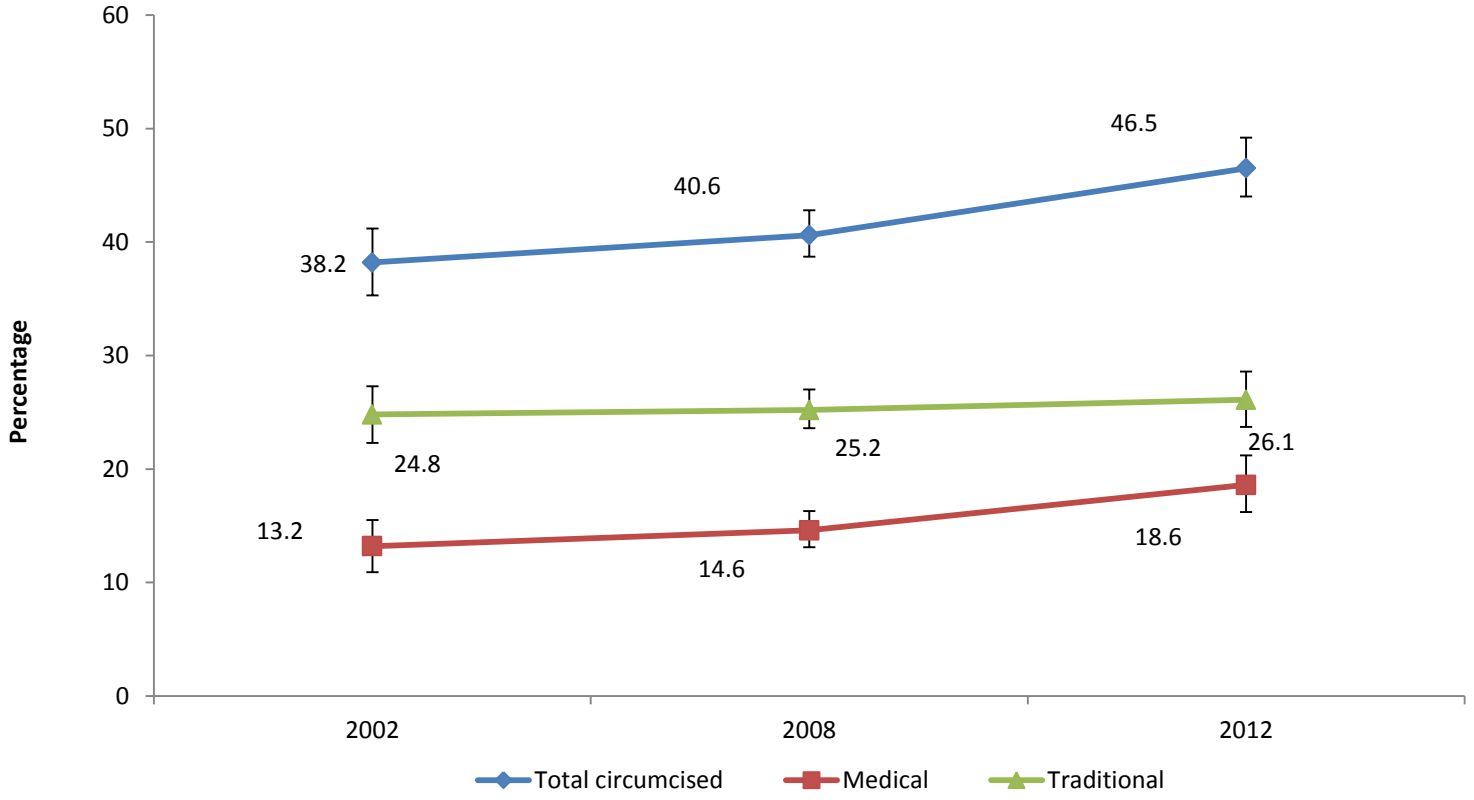
Impact of the ART programme on AIDS-related deaths in South Africa, 2005 and 2013



- SA had substantial reduction of 48% in AIDS-related mortality (2013) ...
- South Africa is on course to achieve the NSP 2016 target of initiating at least 80% of eligible patients on ART, having **75% alive and on treatment** five years after initiation.

(SA GAPR, 2011; DHIS, 2012))

Trends in self-reported circumcision by type, South Africa 2002-2012



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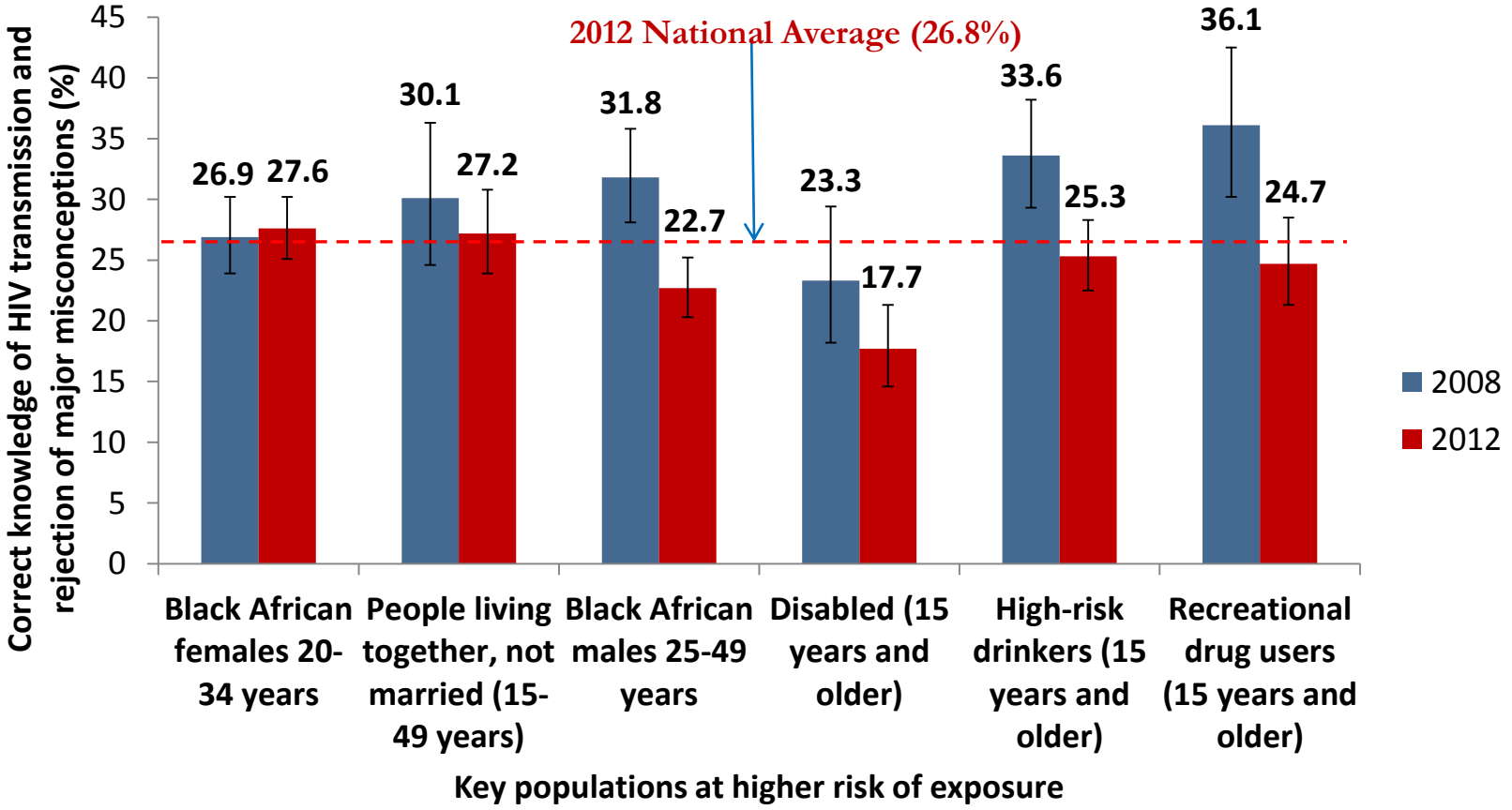
Correct HIV knowledge among key populations, South Africa



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HIV testing in South Africa

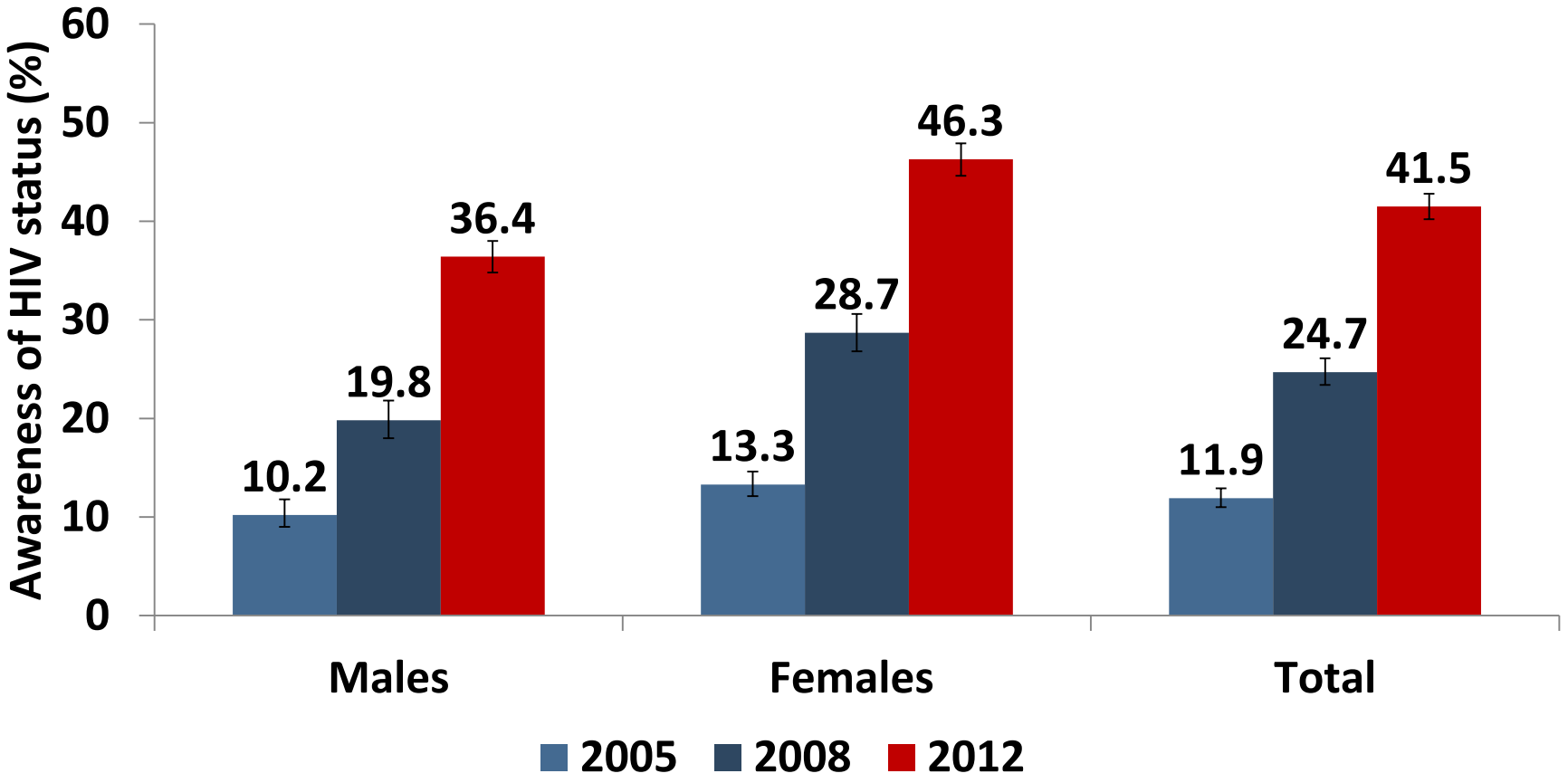
- There has been a dramatic increase in HCT in South Africa since 2010.
- NDOH data shows that 8,978,177 people were tested for HIV in 2012/13. This represents around 66.2% of the intended NSP target.
- The 2012 National HIV Communication Survey (NCS) reported that 10.6 million people were tested for HIV in the past 12 months and declared that 64.3% of all South Africans have ever been tested

Source: NCS (2013)

2015 Target of 49.1% was achieved

Source: Shisana, Rehle, Simbayi, et al (2014); 3rd NCS (2013)

Awareness of HIV status among those who tested in the last 12 months, by sex (15 years and older) in South Africa



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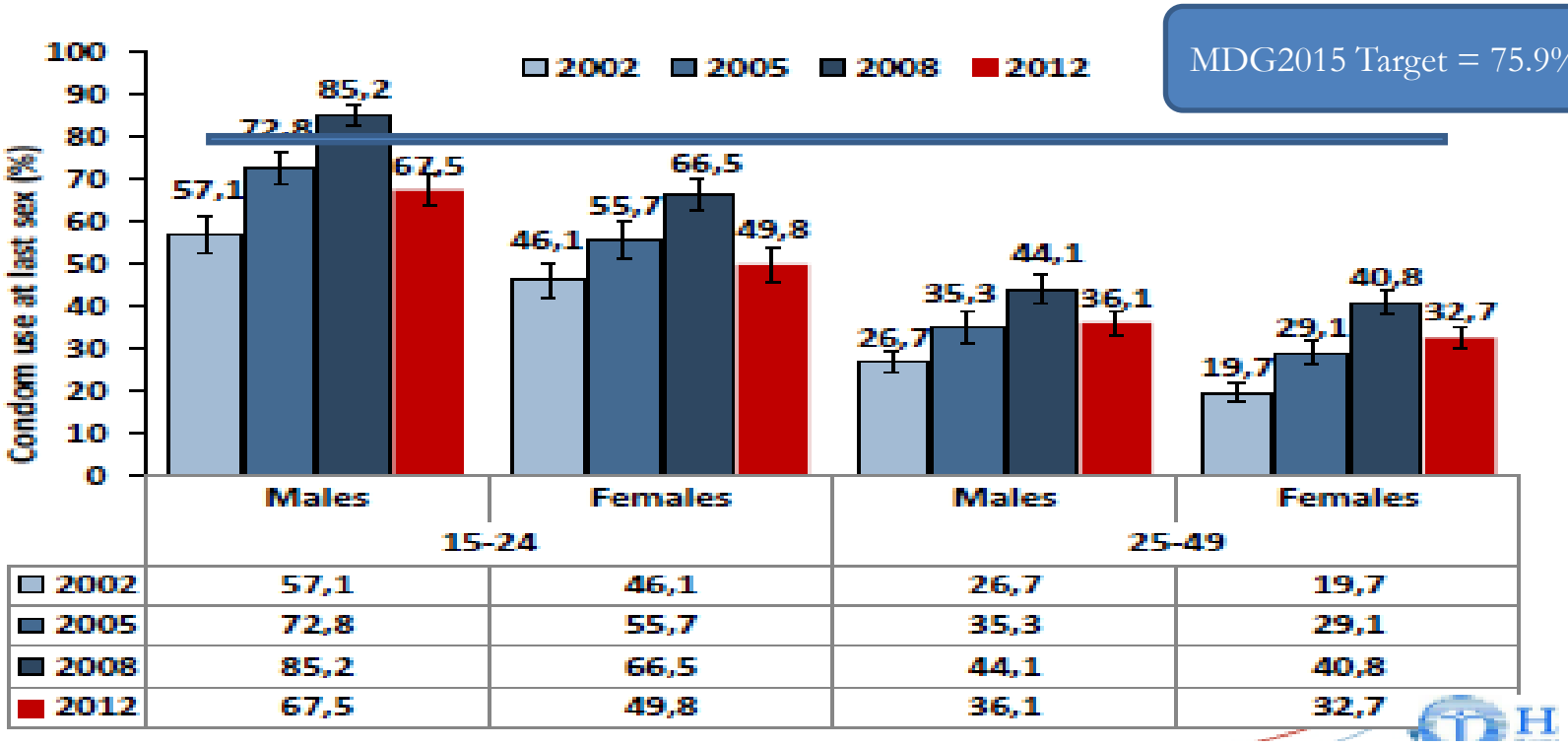
Condom use at last high risk sex

Condom use at last sex <u>by age and sex</u>, South Africa 2002-2012

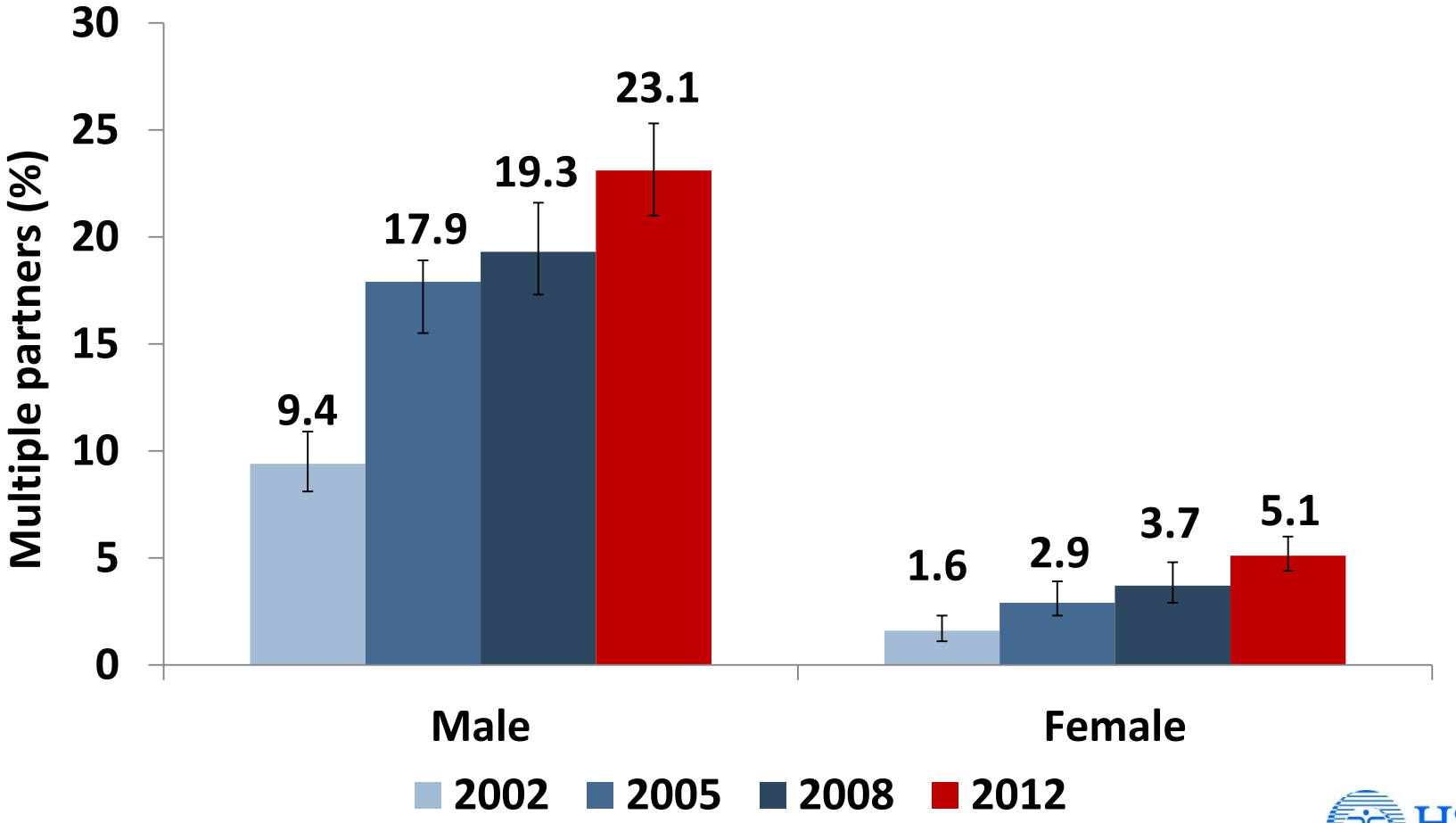


	Males 15-24	Females 15-24	Males 25-49	Females 25-49
2002	57,1	46,1	26,7	19,7
2005	72,8	55,7	35,3	29,1
2008	85,2	66,5	44,1	40,8
2012	67,5	49,8	36,1	32,7

- Condom use at last sex declined in people aged 15-24 years by 17%.
- Condom use at last sex also declined by 8% in people aged 25-49 years.

Source: SABSSM 4(2014)

Multiple sexual partnerships (15-49 years) in South Africa



Summary

- Worldwide, South Africa has the largest number of PLHIV, representing one quarter of the disease burden in sub-Saharan Africa.
- HIV incidence is decreasing in some target groups but not in young women.

- South Africa has the world's largest antiretroviral treatment programme and is very close to achieving the goal of eliminating MTCT of HIV

- By 2015, South Africa had made substantial progress in halting and beginning to reverse the spread of HIV/AIDS with over **66% knowing their HIV status** and **80% of eligible patients on ART**

- The most remarkable changes in HIV prevention behaviour in South Africa over the last 20 years has been the dramatic increase in HCT and condom use at first sex which are partly responsible for reductions in HIV prevalence in the age group 15-24 and incidence rate among adults aged 15 – 49 years.

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NursingHIV 2016 Planning Group:

ICAP at Columbia University

Democratic Nursing Organization of South Africa (DENOSA)

Association of Nurses in AIDS Care (ANAC)

International Council of Nurses (ICN)

African Regional Collaboration (ARC)

Health Resources and Services Administration (HRSA)

Supported by:

United States Centers for Disease Control and Prevention (CDC)

Janssen Global Public Health

Gilead Sciences