



# **Kenya AIDS Response Progress Report**

**2014**

***Progress towards Zero***

**March 2014**

## **Acknowledgements**

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## Abbreviations

ANC	Antenatal care
ART	Antiretroviral therapy
KAIS	Kenya AIDS Indicators Survey
KDHS	Kenya Demographic and Health Survey
MOT	Mode of Transmission
MSM	Men Having Sex with Men
OVC	Orphans and Vulnerable Children
PWID	People Who Inject Drugs
PMTCT	Prevention of Mother to Child Transmission of HIV
SRH	Sexual and Reproductive Health
STI	Sexually Transmitted Infections
VMMC	Voluntary Medical Male Circumcision

## Introduction

### 2.1 Background

The HIV epidemic in Kenya has evolved, since the first case was diagnosed in 1984, to become one of the major causes of mortality and has placed tremendous demands on the health system and the economy. The epidemic has affected all sections of society – children, youths, adults, women and men. The country's response to this epidemic has also evolved over the years from a health sector led response to a multi-sectoral one coordinated by one national authority, one strategic framework and one monitoring and evaluation framework. The response to the epidemic has been improving in tandem with increase in availability of reliable and comprehensive data, which has enabled the country to sharpen its focus on the key HIV transmission areas and populations in order to reduce new infections.

In June 2011, Kenya's President joined other Heads of State and Government to review progress achieved in realizing the 2001 Declaration of Commitment on HIV and AIDS and the 2006 Political Declaration on HIV and AIDS. This High Level Meeting approved the UNAIDS Strategy - ***Getting to Zero 2011-2015***. The leaders expressed concern regarding the inability of majority of low- and middle-income countries to meet universal access to HIV treatment targets despite the major achievement of expansion in providing access to anti-retroviral treatment. Concern was also expressed that the number of new HIV infections was outpacing the number of people starting HIV treatment by a factor of two to one.

The leaders committed themselves to redouble efforts to achieve, by 2015, universal access to HIV prevention, treatment, care and support as a critical step towards ending the global HIV epidemic, with a view to achieving Millennium Development Goal 6, and in particular to halt and begin to reverse the spread of HIV by 2015.

This report presents the trends and status of key indicators of the HIV epidemic and the programmatic response in Kenya. This is not an evaluation of the HIV epidemic and response, but rather, a presentation of the most recent data that users can interpret and apply for various purposes.

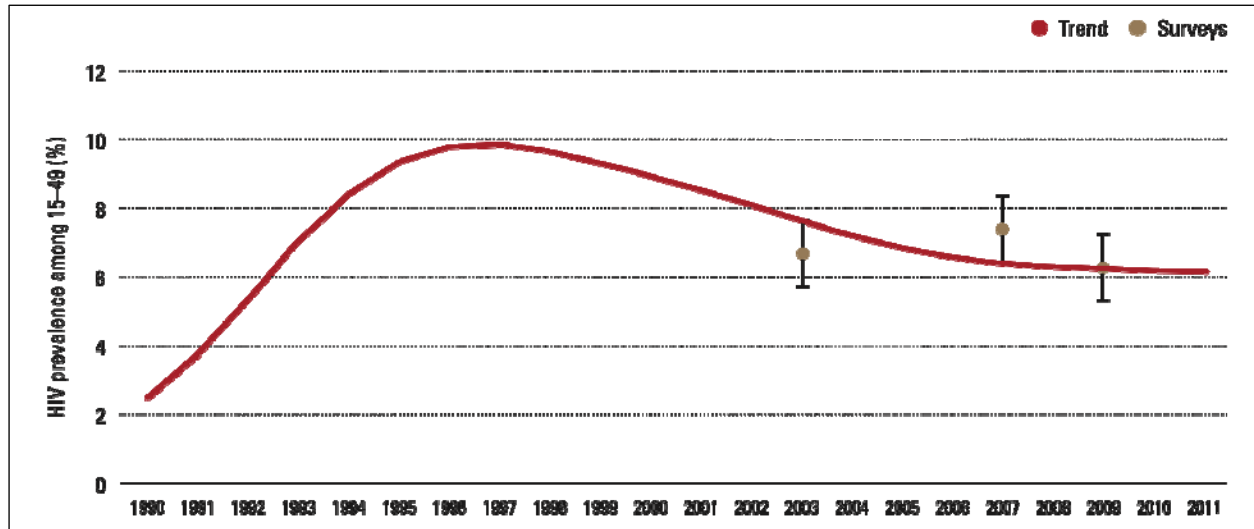
# Kenya HIV Epidemic, 2013

## 2.2 HIV prevalence

### 2.2.1 HIV Prevalence by general population

HIV prevalence in Kenya is estimated based on the Demographic and Health Survey (2003 and 2008/9), AIDS Indicator Surveys (KAIS 2007 and 2012) and Antenatal Clinic (ANC) sentinel surveillance. A trend analysis starting from 1990 shows that prevalence in the general population reached a peak of 10.5% in 1995-96, after which it declined by about 40% to reach approximately 6.7% in 2003. Since then, the prevalence has remained relatively stable. The decline of the prevalence from 1995 to 2003 is partly attributed to high AIDS related mortality while the stabilisation of the epidemic in the last 10 years is largely due to the rapid scale up of anti-retroviral therapy (ART) and reduction in the number of new infections that occurred during this period.

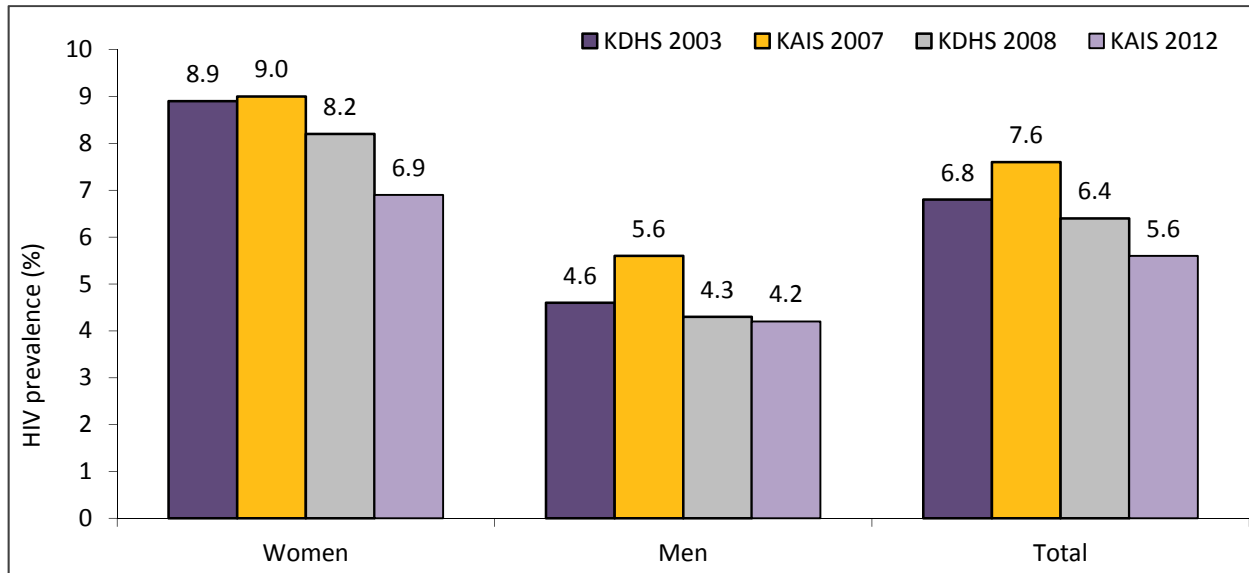
Figure 1: Trends in HIV prevalence in Kenya



Population based surveys<sup>1</sup> undertaken in the last 10 years show that HIV prevalence among women and men aged 15-49 years ranged from 6.7% in 2003 to 5.6% in 2012. Although the prevalence has taken a downward trend, women are disproportionately affected than men. The graph below shows prevalence estimates among men and women since 2003 and demonstrates the need to address the vulnerability factors increasing the risk of HIV infection among women.

<sup>1</sup> Kenya Demographic and Health Surveys and Kenya AIDS Indicator Surveys

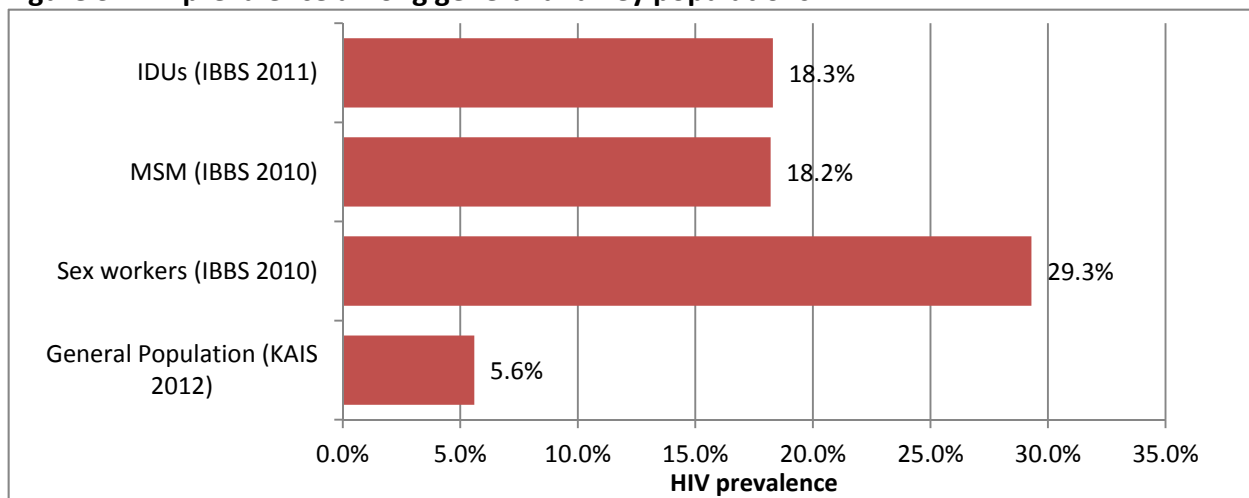
**Figure 2: HIV prevalence among the general population**



**2.2.2 Type of epidemic**

Kenya has both a generalised and a concentrated epidemic. The epidemic is deeply rooted among the general population while there is also concentration of very high prevalence among key populations. Key populations identified by the Mode of Transmission study, 2008 include sex workers and their clients, men having sex with men, and people who inject drugs among others. The figure below compares the prevalence in the general populations and among three key populations in the country.

**Figure 3: HIV prevalence among general and key populations**

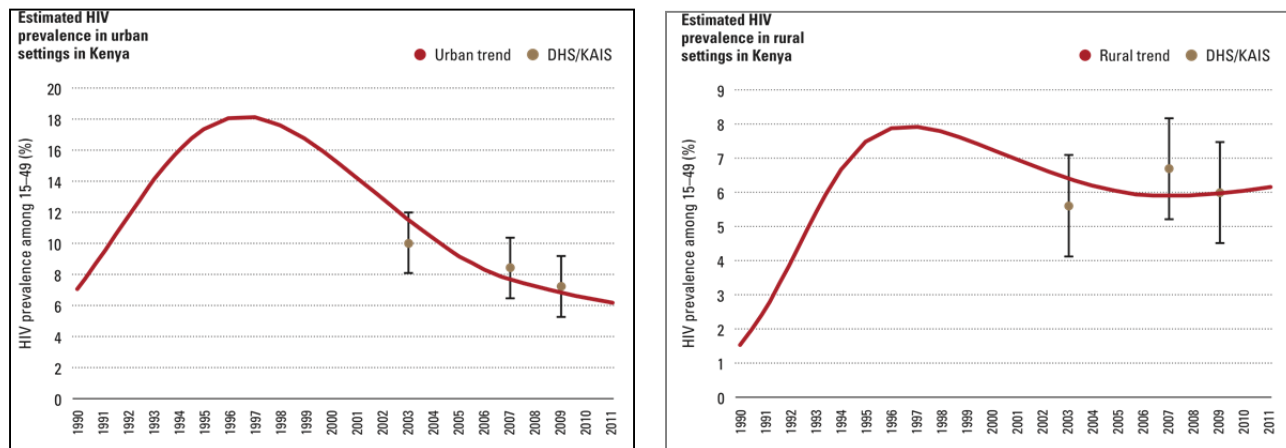




### 2.2.3 HIV prevalence by residence

HIV prevalence is higher among the general population in urban areas than those in rural areas. However, men in rural areas are more likely to be infected by HIV than men in urban areas (4.5% compared to 3.7%). Over time, the HIV prevalence in urban and rural areas has converged with only a modest different between the two<sup>2</sup>.

Figure 4: Estimated HIV prevalence in urban and rural settings in

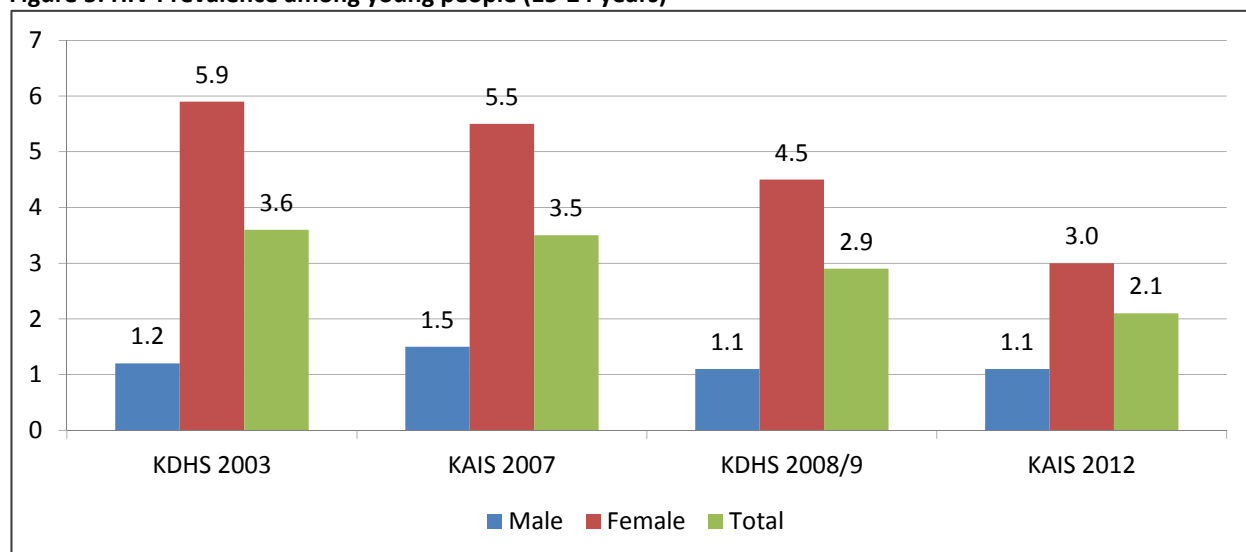


### 2.2.4 HIV prevalence among young people

The odds of being infected by HIV are higher among young women aged 15-24 years compared to young men in same age group. Prevalence among young women declined from 5.9% in 2003 to 3.0% in 2012 while prevalence among young men remained relatively stable, between 1.1 % and 1.5%, during the same period. Prevalence among young people 15-24 years would be largely attributed to new infections as opposed to the impact of the scale up of HIV treatment.

<sup>2</sup> Kenya National Bureau of Statistics, 2010

**Figure 5: HIV Prevalence among young people (15-24 years)**



### 2.2.5 Estimated HIV prevalence by County

Prevalence estimates by county shows the geographical variability of the HIV burden across the country. It is estimated that HIV prevalence ranges from a high 27.1% in Homa Bay County to below 0.2% in Wajir County. Ten counties have an estimated prevalence higher than the national average, while 7 counties have prevalence of less than 2%. This variability shows the need to design programmes that address the specific underlying issues in the counties.

**Table 1: HIV prevalence by county, 2012**

County	Adult Prevalence (%)	County	Adult Prevalence (%)	County	Adult Prevalence (%)
Homabay	27.1	Kakamega	5.6	Nyandarua	3.9
Kisumu	18.7	Muranga	5.2	Isiolo	3.8
Siaya	17.8	Tharaka-Nithi	5.1	Elgeyo	3.8
Migori	13.4	Samburu	5.1	Kilifi	3.7
Mombasa	11.1	Kajiado	5	Embu	3.7
Turkana	9.9	Uasin Gishu	4.9	Bungoma	3.5
Kisii	8.9	Narok	4.9	Bomet	3.5
Nairobi	8.6	Nandi	4.8	Meru	3.3
Trans Nzoia	7.2	Kitui	4.8	Garissa	2.6
Busia	7.1	Machakos	4.7	West Pokot	2.4
Nyamira	6.9	Nyeri	4.4	Tana River	2
Taita Taveta	6.4	Kiambu	4.4	Mandera	1.3
Kwale	6.2	Kericho	4.4	Lamu	1.3

Vihiga	6	Baringo	4.2	Marsabit	1
Nakuru	5.6	Laikipia	4.1	Wajir	0.2
Makueni	5.6	Kirinyaga	4		

## 2.3 HIV and AIDS Estimate

This section provides data on HIV and AIDS estimates based on SPECTRUM/EPP modelling updated in February 2014. This data shows the trend in the number of PLHIV, new HIV infections and AIDS related deaths for all ages, adults 15 years and above and children 0-14 years from 2009 to 2013, which is the period covered by the current Kenya National HIV and AIDS Strategic Plan (KNASP III).

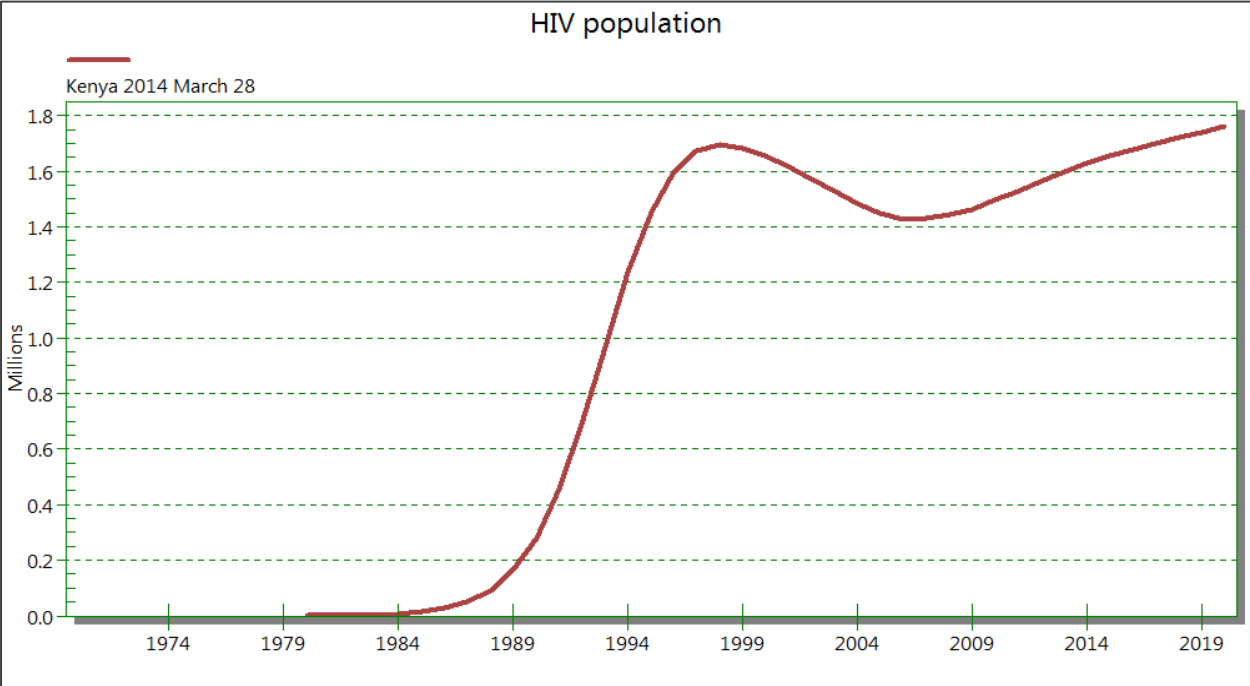
### 2.3.1 Estimated number of people living with HIV

The number of PLHIV is estimated to have increased from about 1.4 million in 2009 to 1.6 million in 2013. Women constitute about 57% of the PLHIV, while men account for 43%. About 80% to 90% of the PLHIV are adults.

	2009	2010	2011	2012	2013
<b>All Ages</b>					
Male	632,250	645,127	658,263	672,423	685,394
Female	830,379	848,038	867,588	888,023	906,948
Total	1,462,629	1,493,165	1,525,851	1,560,446	1,592,342
<b>Adults (15 yrs and above)</b>					
Male	510,059	528,730	549,616	569,727	589,651
Female	710,052	733,386	760,531	786,813	812,561
Total	1,220,112	1,262,116	1,310,147	1,356,540	1,402,212
Percentage	80	80	90	90	90
<b>Children (0-14 yrs)</b>					
Male	122,191	116,397	108,647	102,696	95,743
Female	120,326	114,652	107,057	101,210	94,388
Total	242,517	231,049	215,704	203,906	190,131
Percentage	20	20	10	10	10

Though the HIV prevalence rate has been on the decline in the last few years, the number of people living with HIV and AIDS has been on the increase, and is currently estimated at 1.6 million. This number is projected to increase due to improved survival (reduced mortality due to HIV) attributed to ART program.

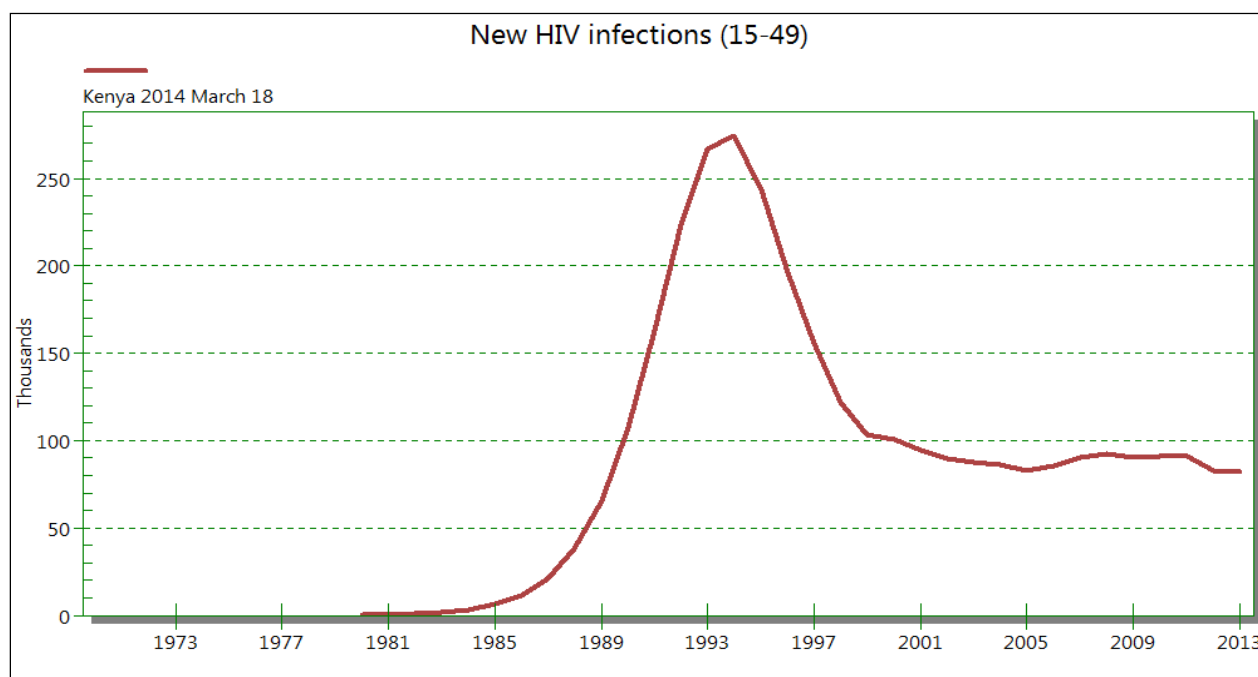
**Figure 6: Trend in estimated number of people living with HIV**



**2.3.2 New HIV infections**

Total new HIV infections are estimated to have declined by about 15% in the last five years; from about 116,000 in 2009 to around 100,000 in 2013. The figure below shows the trend in new infections among adults age 15-49 for the period up to 2013.

**Figure 7: Trend in new HIV infections**



New infections among adults contribute over 80% of the total new infections. The new infections among adults stabilised at an average of 93,000 annually over the last five years. Among children, new infections declined from about 20,000 to 11,000 annually over the same period. An estimate of new infections among men and women and children is shown in the table below.

<b>Table 3: Estimated new HIV infections</b>					
	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
<b>All Ages</b>					
Male	51,604	49,753	47,137	44,892	43,193
Female	64,746	63,047	60,577	57,057	55,309
Total	116,349	112,800	107,714	101,949	100,501
<b>Adults (15 yrs and above)</b>					
Male	41,068	41,324	41,549	37,780	37,514
Female	54,480	54,833	55,132	50,127	49,778
Total	95,548	96,157	96,681	87,907	87,291
Percentage	82	85	90	86	89
<b>Children (0-14yrs)</b>					
Male	10,536	8,429	5,588	7,113	5,679
Female	10,266	8,214	5,445	6,930	5,531
Total	20,802	16,643	11,033	14,042	11,210
Percentage	18	15	10	14	11

### 2.3.3 AIDS related deaths

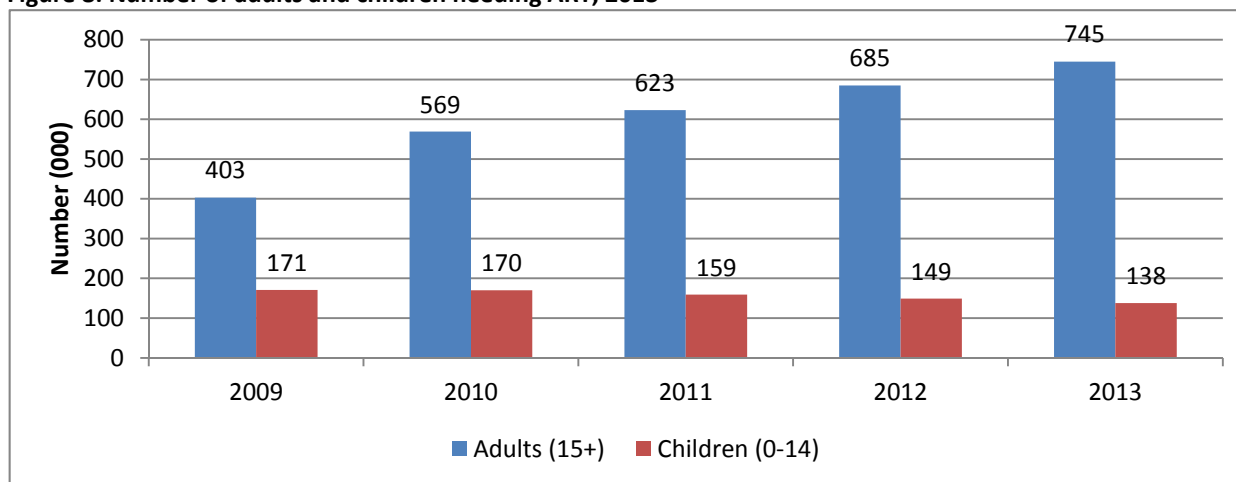
Over the last five years, annual AIDS related deaths have been on a declining trend, from about 85,000 in 2009 to 58,000 in 2013. This declining trend is reflected among both adults and children. About 80% of the AIDS related deaths occur among adults.

	2009	2010	2011	2012	2013
<b>All Ages</b>					
Male	37,608	32,390	29,687	26,410	25,801
Female	48,231	41,137	36,942	32,534	32,246
Total	85,840	73,527	66,629	58,943	58,047
<b>Adults (15 yrs and above)</b>					
Male	29,171	24,979	23,475	20,720	20,634
Female	39,929	33,841	30,824	26,930	27,156
Total	69,099	58,820	54,299	47,649	47,790
Percentage	80	80	81	80	82
<b>Children (0-14yrs)</b>					
Male	8,438	7,411	6,212	5,690	5,167
Female	8,302	7,296	6,119	5,604	5,090
Total	16,740	14,707	12,331	11,294	10,257
Percentage	20	20	19	20	18

### 2.3.4 Estimated need for ART

The number of adults in need of ART has been increasing while that of children has been declining in the last five years. As at December 2013, PLHIV needing ART were estimated at about 880,000<sup>3</sup>. Adults aged 15 years and above constituted 85% of the total number of PLHIV in need of ART.

**Figure 8: Number of adults and children needing ART, 2013**

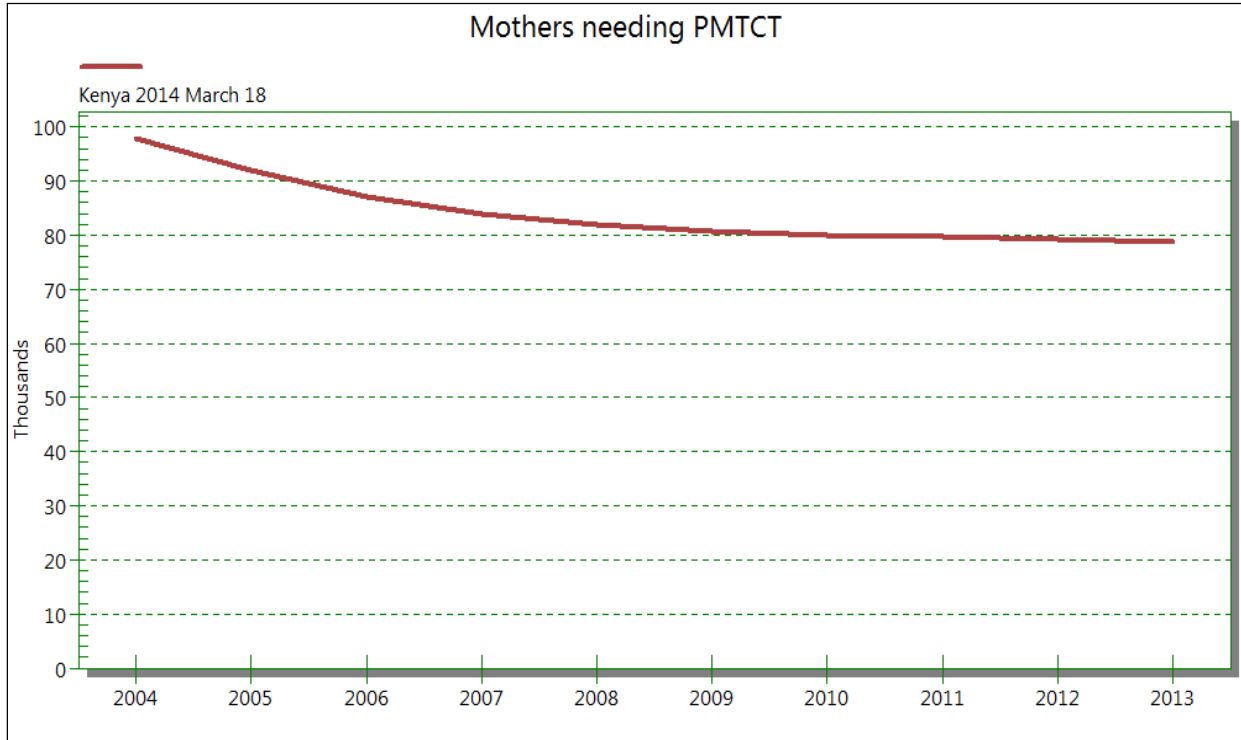


<sup>3</sup> Number of PLHIV needing ART calculated based on 2009 WHO HIV treatment guidelines

### 2.3.5 Estimated need for PMTCT

The number of women in need of PMTCT over the last 10 years is estimated at an annual average of 80,000. However, this annual need for PMTCT decreased slightly from about 98,000 in 2004 to 79,000 in 2013. This data underscores the need to address epidemic in order reduce the number of infants exposed to HIV infection.

Figure 9: Women in need of PMTCT



### 2.4 Conclusion

The data on the HIV epidemic shows a stabilising epidemic among the general population and an elevated epidemic among the key populations. However, the epidemic appears to be stabilising at a relatively higher level considering the estimated prevalence and new infections rates. Vulnerability of women (adults and young girls) to HIV infection is higher than men. Variation of the epidemic among counties also demonstrates the need to design interventions that focuses on underlying HIV risk factors in each county.

## Reducing Sexual Transmission for HIV

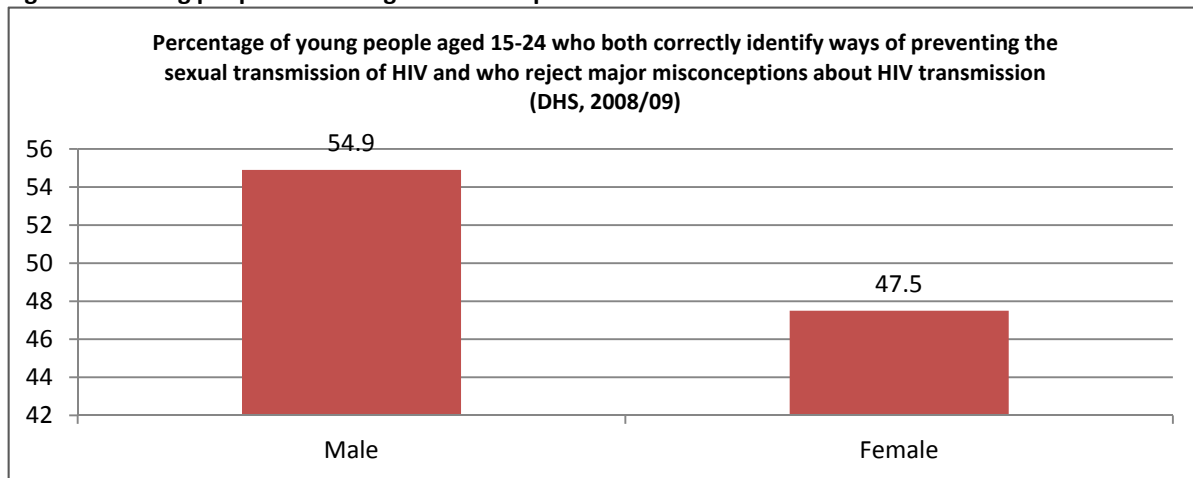
### 3.1 General population

This section provides data on key indicators for sexual transmission on HIV among the general population – adults and young people.

#### 3.1.1 Young people: Knowledge about HIV prevention

Young people need accurate and adequate knowledge about HIV prevention to make informed choices on sexual behaviour. The DHS survey of 2008/09 found out that comprehensive knowledge about HIV prevention among young people is below 50%. Young men have a high level of knowledge than young women. This shows a great need to raise awareness of HIV prevention among the youth.

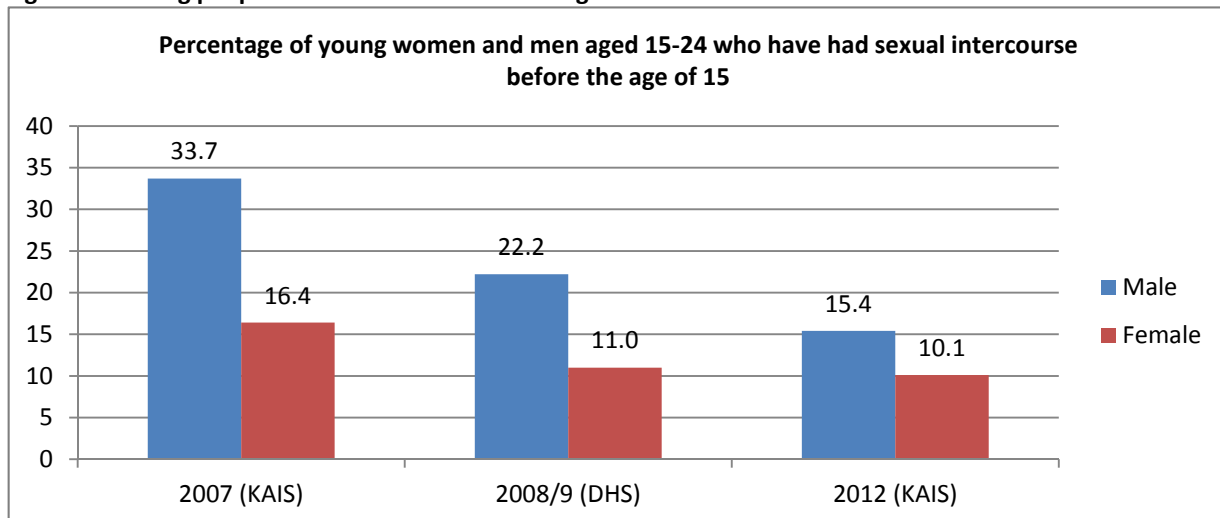
Figure 10: Young people: Knowledge about HIV prevention



#### 3.1.2 Sex before the age of 15

Delay in sex debut is a key strategy for reducing the risk of HIV infection among young people. The proportion of young persons reporting having sex before age 15 has significantly decreased since 2007. However, more young men start sex before age 15 than young girls.

Figure 11: Young people who have had sex before age 15

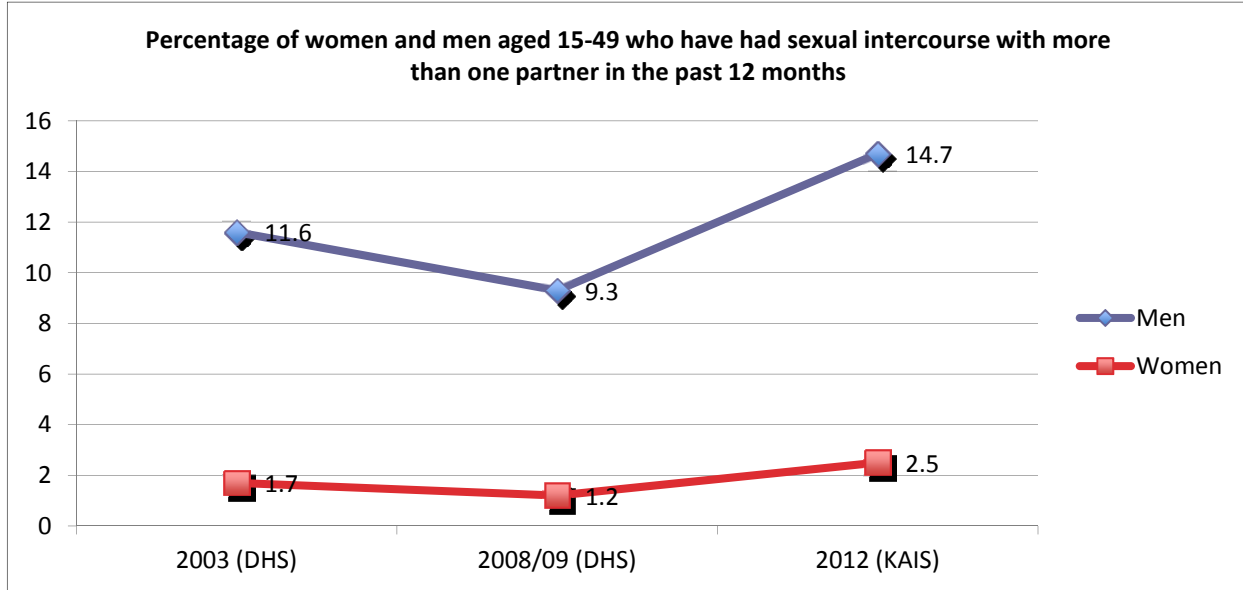




### 3.1.3 Multiple sexual partnerships

The percentage of women and men having multiple sexual partners has increased over the last 10 years. The increase has been higher among men than women. Having multiple sexual partners puts one at a high risk of HIV infection especially if the partners are not using a condom consistently and accurately.

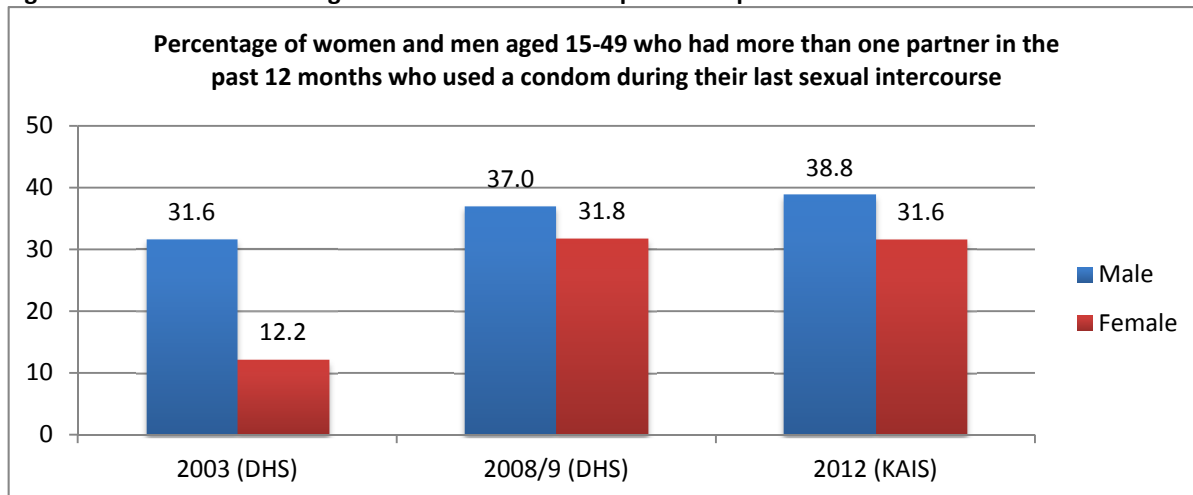
**Figure 12: Men and women with multiple sexual partners**



### 3.1.4 Condom use at last sex among people with multiple sexual partnerships

Condom use especially by men and women with multiple sexual partners is a key intervention for prevention of HIV infection. However, the use of condoms by men and women who have more than one sexual partner increased only slightly between 2008 and 2013. There is a need for effective approaches that would increase condom use among such groups to near universal to effectively reduce the risk of HIV infection.

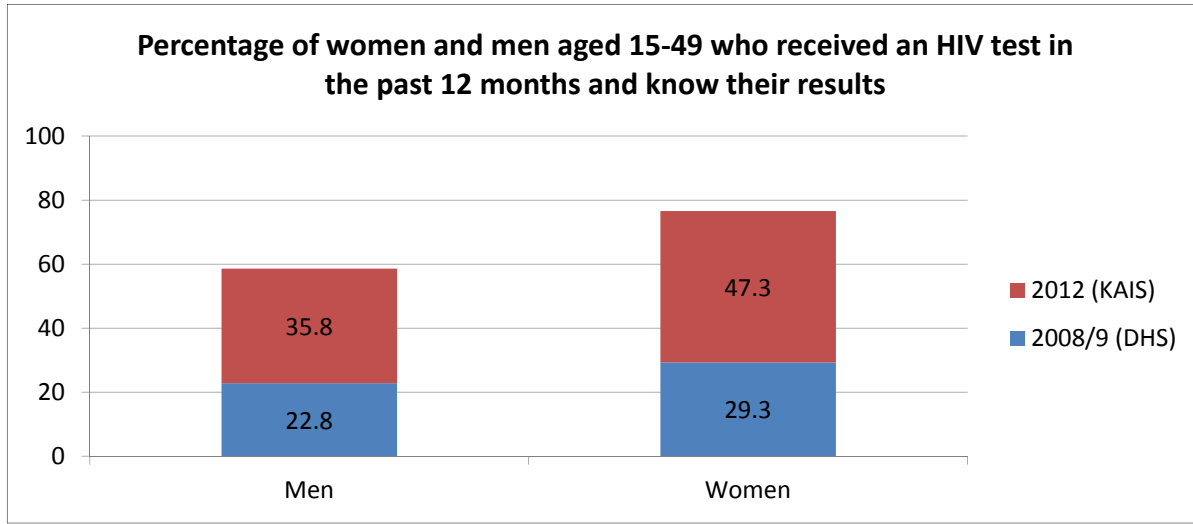
**Figure 13: Condom use among men and men with multiple sexual partners**



### 3.1.5 HIV testing in the general population

HIV counselling and testing has been a major focus of the response in Kenya with the country adopting multiple strategies including provider initiated testing and counselling, outreach testing and counselling events, home based counselling and testing, and integration of testing and counselling in ANC, STI and SRH services. The KDHS and KAIS findings show an increase in the number of people tested and receiving their results annually in the last five years. However, there were more women tested than men.

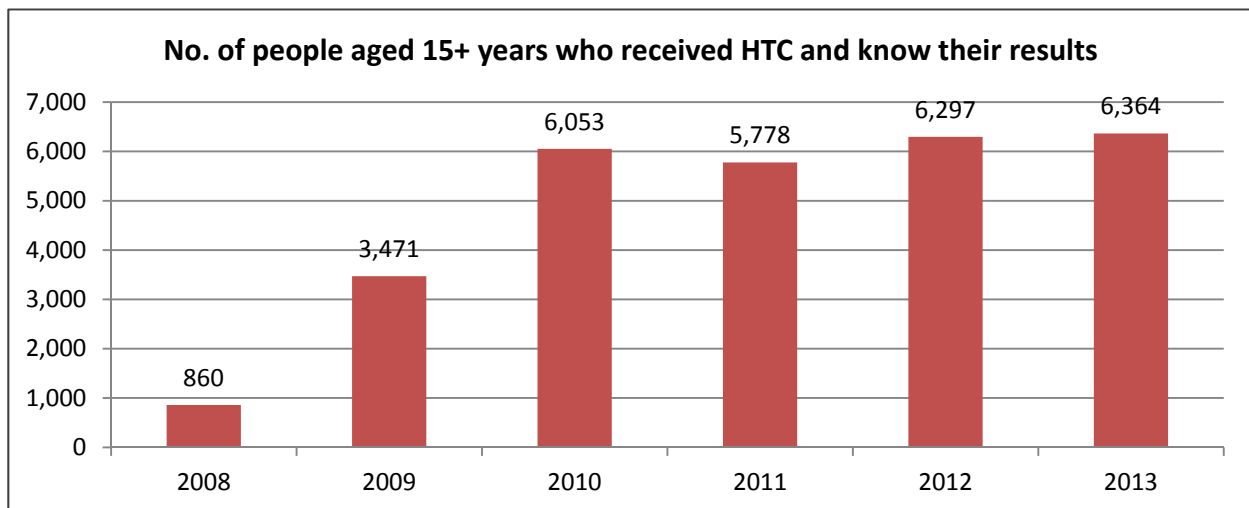
Figure 14: Men and women aged 15–49 receiving HIV test results in the last 12 months



### 3.1.6 Trends in Number of adults tested

The number of people tested for HIV annually has increased from about 860,000 in 2008 to 6.4 million in 2013 as shown below.

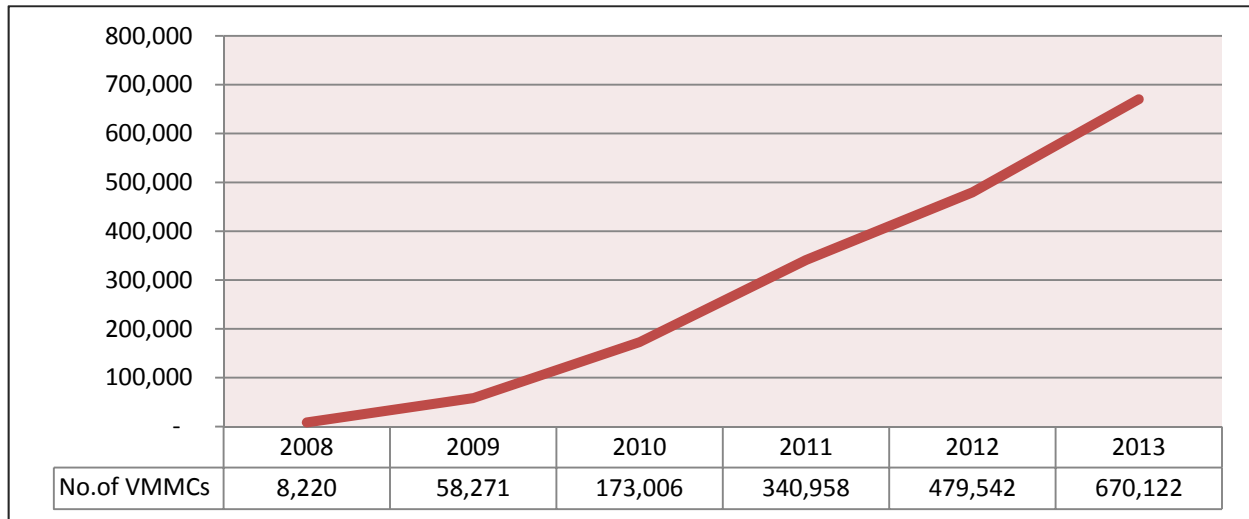
Figure 15: Number of people tested for HIV



### 3.1.7 Male circumcision

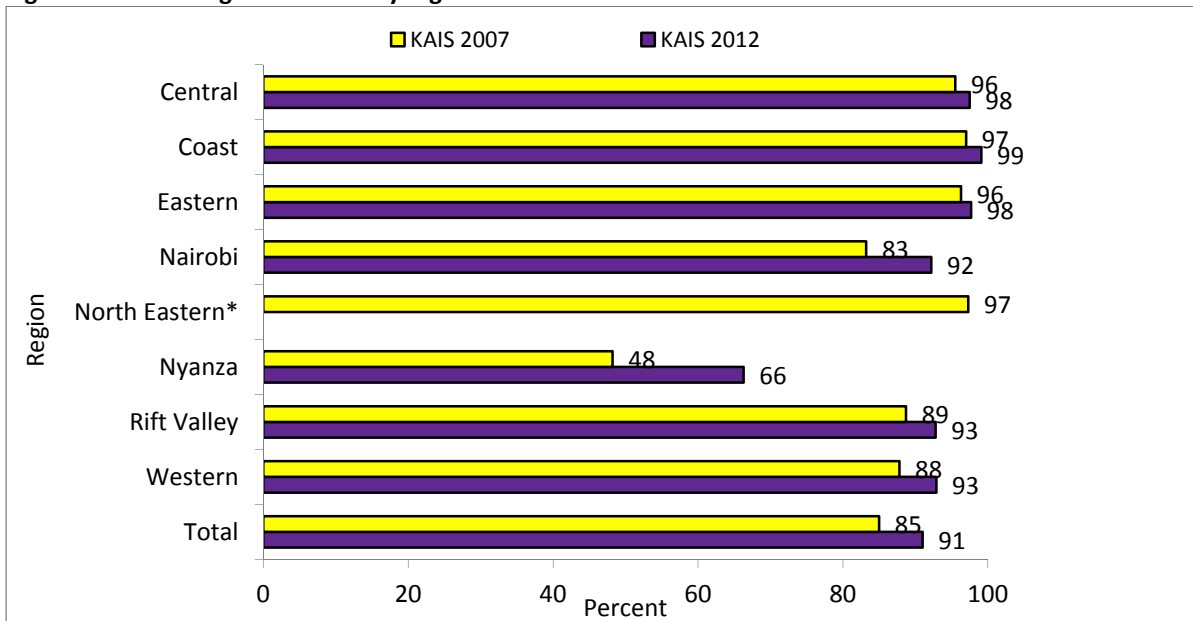
Kenya initiated Voluntary Medical Male Circumcision (VMMC) in 2008. Since then, the programme has been scaled up from about 8,000 VMMCs performed annually in 2008 to 190,000 in 2013. Over this five-year period, about 670,000 VMMCs were performed against a target of 860,000; which means 77% achievement of the target. About 50% of the males circumcised were aged 15-19 years and about 80% of the VMMCs were conducted in Nyanza region. The overall coverage of circumcision among men aged 15-49 in the country is estimated at 91%.

**Figure 16: Cumulative number of VMMCs**



The highest increase of VMMC was in Nyanza region increased from 48% to 66% in 5 years. The figure below shows regional coverage of male circumcision.

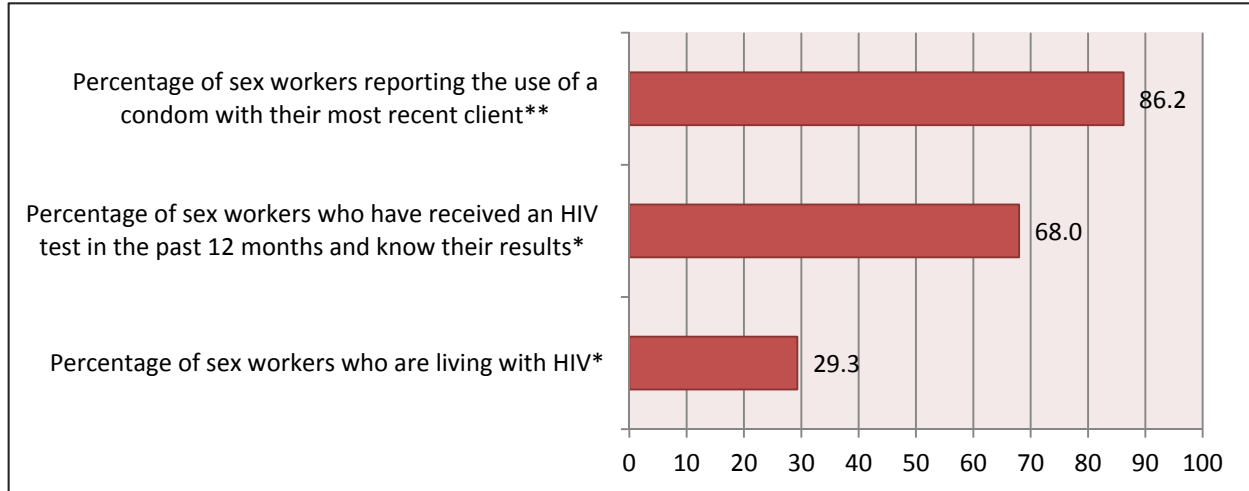
**Figure 17: Percentage of VMMCs by region**



### 3.2 Sex workers

Female sex workers are a key population with an elevated HIV prevalence of about 29.3% compared to the national average (general population). However, only about 68% of the FSWs tested for HIV and know their results in the last 3 months. Eighty six percent of sex workers reported use of condom with their most recent client.

**Figure 18: Selected indicators for HIV among female sex workers**



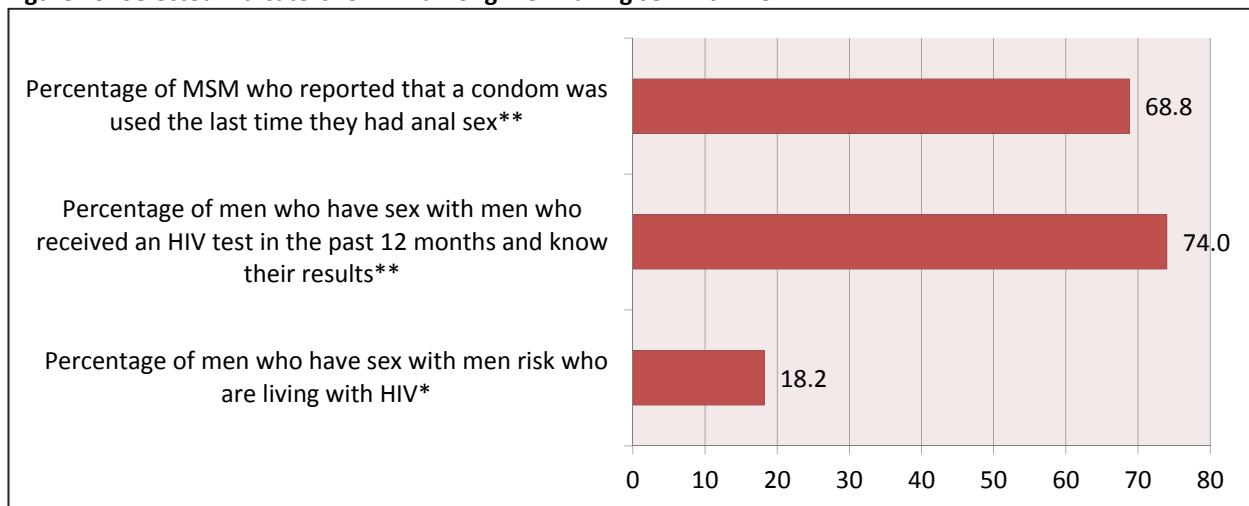
\*Data source: Integrated Bio-Behavioural Survey conducted in Nairobi and Mombasa, 2011

\*\* Data source: Polling booth survey conducted in Nairobi and Mombasa sites, 2011

### 3.3 Men Who Have Sex With Men

HIV prevalence among men having sex with men is almost three times more than the prevalence in the general population. About 18.2% of MSMs are living with HIV. The percentage of MSMs counselled and tested for HIV annually increased from a low of 35% in 2011 to 74% in 2013. However, condom use remains low although there has been an increase from 54.9% in 2011 to 68.8% in 2013.

**Figure 19: Selected indicators for HIV among men having sex with men**



\*Data source: Integrated Bio-behavioural Survey conducted in Nairobi in 2010

\*\* Data source: Polling booth survey conducted in Nairobi and Mombasa sites in 2013

### **3.4 Conclusion**

The data above presents a gap in HIV preventions programs. Knowledge about HIV among young people is low; while young people starting sex before age 15 has declined. But the proportion of young people starting sex before 15 years remain a concern (over 10%); men and women with multiple sexual partners are on upward trend; while less than 40% of men and women engaged in risky sex use a condom; and condom use and HIV testing among sex workers and men having sex with men is low given the high exposure of these populations to HIV infection. Indicators registering positive data include annual HIV testing counselling and voluntary medical male circumcision.

## **Reducing Transmission of HIV among People Who Inject Drugs**

### **4.1 HIV Among People Who Inject Drugs**

People Who Inject Drugs (PWIDs) are a key population in Kenya. High-level policy advocacy undertaken in the last five years succeeded in providing an enabling environment for addressing the HIV epidemic in this population. Comprehensive surveys and systems for collecting programmatic data on HIV in this population have not been adequately developed. Hence, the data presented below is drawn from small-scale surveys and programme data available from service delivery sites.

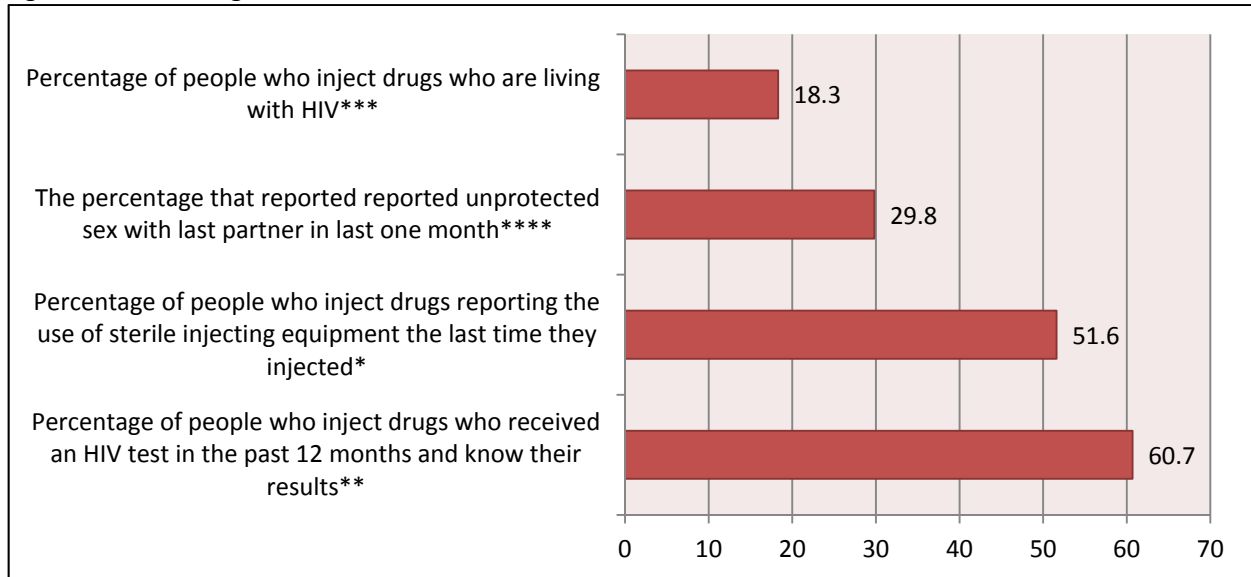
#### **4.1.1 People who inject drugs: prevention programmes**

The population of PWID is estimated at 18,327 and is concentrated in specific geographical areas particularly Nairobi and Mombasa. The Mode of HIV Transmission (MOT) study conducted in 2008 found that about 3.8% of new HIV infections occur among People Who Inject Drugs (PWIDs). Beginning 2008, the country initiated a programme to prevent HIV infections among the PWIDs mainly in Nairobi and Coast regions. Through this programme, about 271,941 needles and syringes were distributed in the past 12 months reaching about 2,000 PWIDs, which is about 135 needles and syringes per person per year. However, this programme reaches a limited number of people (about 15%) of the total estimated number of PWIDs.

#### **4.1.2 HIV among People who inject drugs (PWID): Selected indicators**

The PWID have a HIV prevalence of about 18% compared to an average of 5.6% in the general population. On the other hand, condom use and safe injecting practice are very low among this population (estimated at 29.8% and 51.6% respectively). There is a need to scale up HIV prevention programmes among this population to reduce the HIV infection.

**Figure 20: HIV among PWIDs - Selected indicators**



\*Data source: Integrated Bio-Behavioural Survey conducted by Population Council, 2010/11

\*\*Data source: Integrated Bio-Behavioural Survey conducted in Nairobi, 2011

\*\*\*Data source: Study conducted in Coast and Nairobi regions in 2011 by UNODC

\*\*\*\*Data source: Integrated Bio-Behavioural Survey conducted by Population Council, 2011

## Eliminate New HIV Infections Among Children And Reduce AIDS-Related Maternal Deaths

### 5.1 Introduction

Kenya is committed to eliminating mother to child transmission of HIV by 2015. The global strategy for eMTCT recommends implementation of a four-pronged strategy: (i) prevention of HIV among women of child bearing age, (ii) prevention of unintended pregnancies among women living with HIV, (iii) prevention of transmission from a woman living with HIV to her infant, and (iv) provision of care and treatment to women living with HIV and their children. This section provides data on the trend and status of indicators for PMTCT in the country.

#### 5.1.1 Coverage of Counselling and testing among pregnant women

The coverage of pregnant women tested for HIV increased from 68.3% to 92.2% in 5 years. This shows that Kenya has reached near universal testing for HIV of all women attending ANC

Indicator	2009	2010	2011	2012	2013
No. of pregnant women tested for HIV and received their results	961,990	1,265,447	1,276,112	1,300,927	1,363,932
Percentage coverage	68.30%	88.30%	88.10%	88.90%	92.20%

#### 5.1.2 Coverage of PMTCT ARV prophylaxis

There were about 79,000 women needing PMTCT services annually over the last five years beginning 2009 while an average of 58,000 women were offered this service annually. A review of data on women in need and those accessing PMTCT shows an average of 76% coverage of this service. The PMTCT coverage declined from 86% in 2010 to 70% in 2013 largely due to increase in demand.

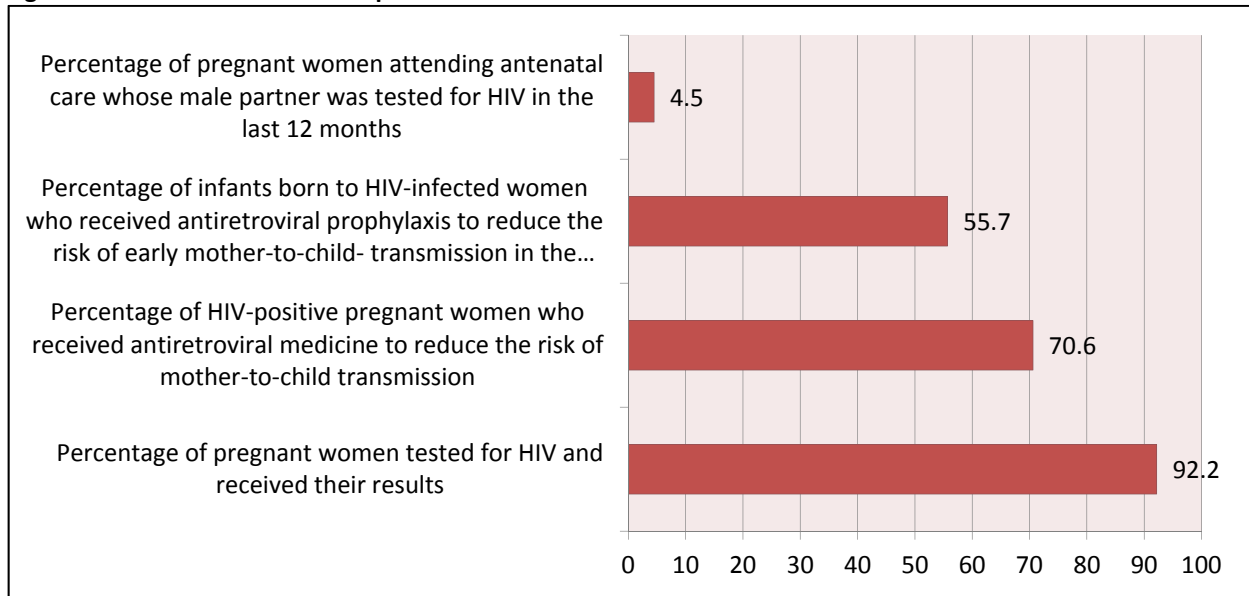
Indicator	2009	2010	2011	2012	2013
% of HIV +ve Mothers given ARV prophylaxis	59,601	61,758	60,174	52,180	55,544
Coverage	73.00%	77.20%	75.50%	65.90%	70.60%



### 5.1.3 Prevention of mother-to-child transmission

Key strategies for eMTCT include increased knowledge of PMTCT, increased male involvement, universal attendance of ANC by pregnant women, universal testing of pregnant women for HIV and provision of ARVs to reduce the risk of HIV transmission. PMTCT programme data shows that male involvement is very limited (4.5%) and about half of the pregnant women infected by HIV are given ARVs to reduce the transmission risk within 6 weeks. However, it is important to note that over 90% of women attending ANC are tested for HIV and receive their results. This data shows the need to improve male involvement, and ensure all women attending ANC are tested for HIV and those found positive are provided ARVs.

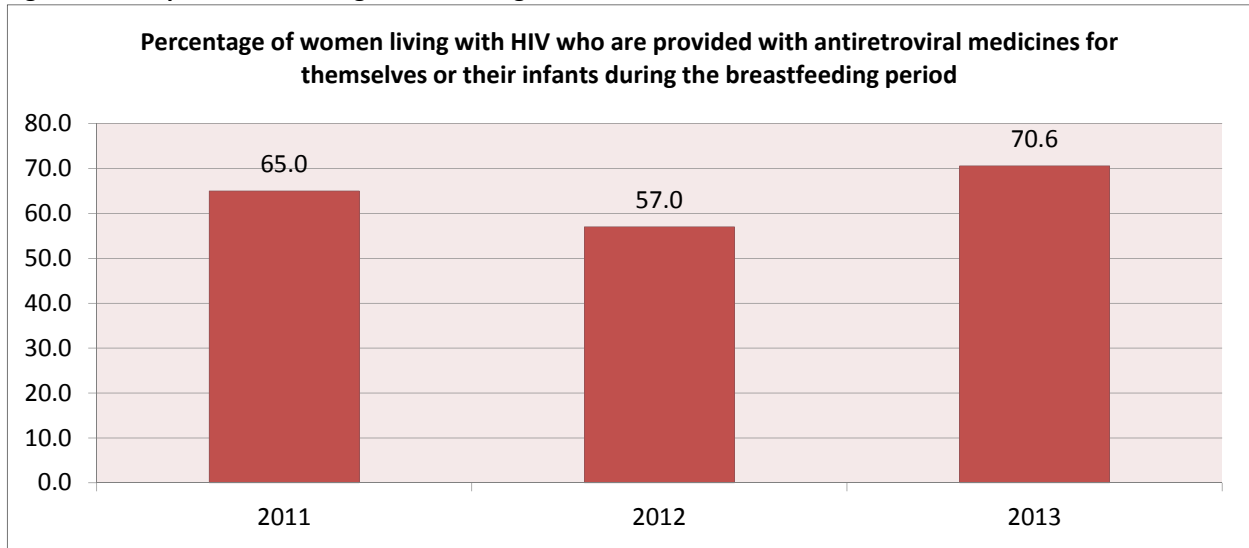
**Figure 21: Selected indicators for prevention of mother to child transmission of HIV**



### 5.1.4 Prevention of mother-to-child transmission during breastfeeding

The percentage of women or their infants given ARVs during breastfeeding to prevent HIV transmission over the last three years increased from 65% to 70.6%.

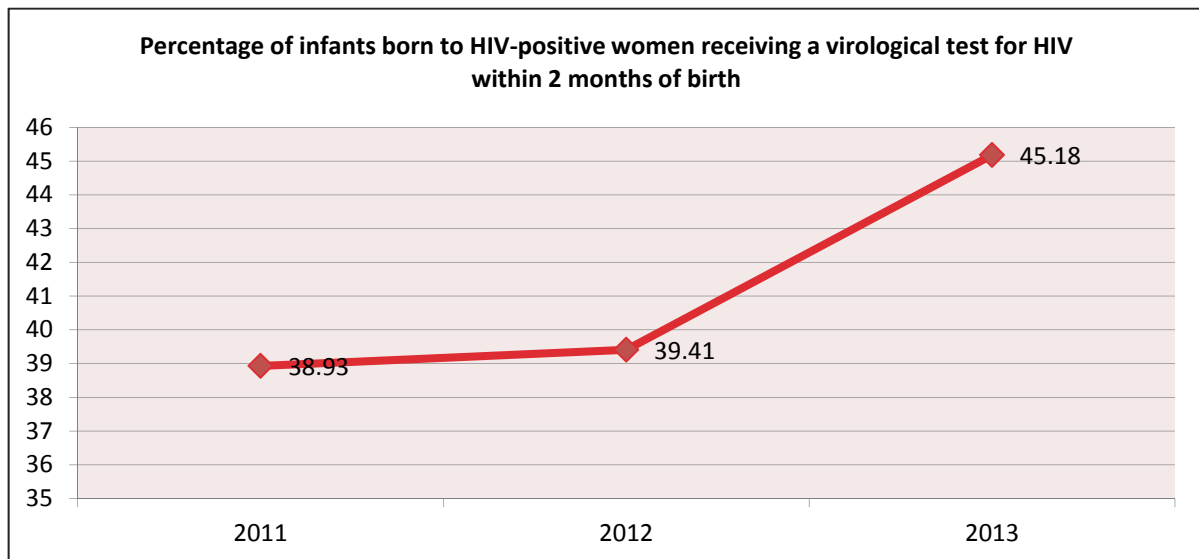
**Figure 22: HIV prevention during breastfeeding**



### 5.1.5 Early infant diagnosis

Early infant diagnosis, especially within 2 months is a key strategy for reducing the risk of MTCT. Over the last three years, Kenya scaled up early infant diagnosis to reach 45% of infants annually by 2013. However, the early infant diagnosis still remains low and there is need for scale up strategies to be put in place.

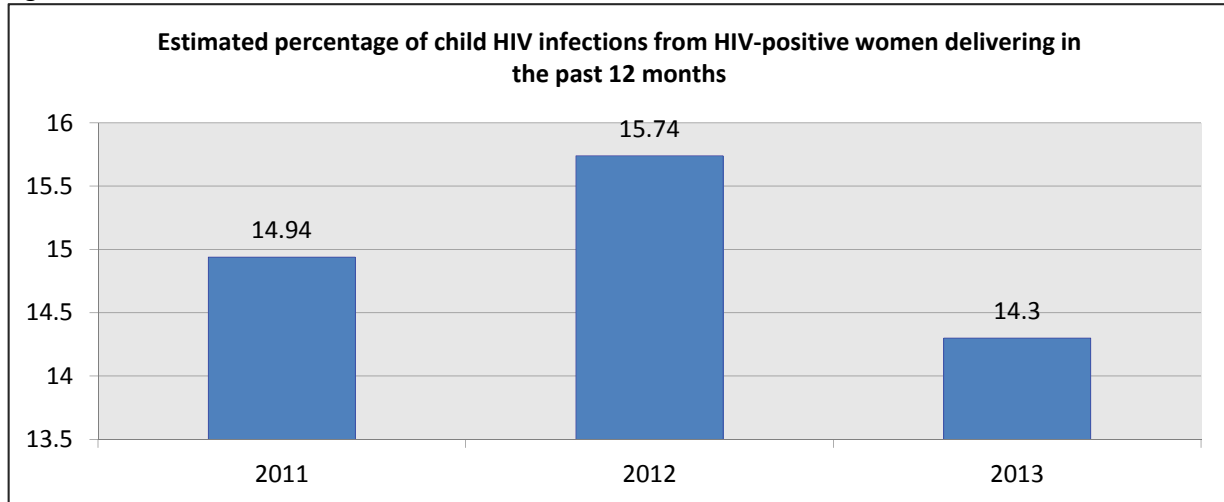
**Figure 23: Coverage of early infant diagnosis**



### 5.1.6 Mother-to-child transmission of HIV

Child HIV infection from HIV positive mothers has remained largely stable at about 14% in the last three years. This trend needs to be reversed if Kenya is to achieve the global target of eliminating mother to child transmission of HIV.

Figure 24: Child HIV infection



### 5.2 Conclusion

The data shows that the country scaled up PMTCT in the last five years. However, the scale is still far from eliminating mother to child transmission of HIV. HIV infection among children remained stable at 14% and only about half of women tested HIV positive were given ARVs to prevent the risk of transmission.

## Reaching People Living With HIV with Lifesaving Antiretroviral Treatment

### 6.1 Introduction

Kenya has a target of reaching 1million PLHIV with lifesaving anti-retroviral treatment by 2013. The coverage of Anti-retroviral Therapy (ART) programme has been scaled up rapidly over the last 10 years. The number of PLHIV reached increased from about 6,000 in 2003 to about 656,000 in 2013. Some of the steps taken to scale up ART include increased allocation of funding to ART, expansion of the health system through set up of ART sites, deployment and training of healthcare workers, increased awareness on HIV treatment, focus on reduction of HIV stigma, increased HIV testing and counselling to improve case detection, continuous update of the HIV treatment protocols in line with WHO recommendations, improved HIV commodity quantification and forecasting and strengthened TB/HIV co-infection. The data in this section shows the trend in the coverage of the ART in the last five year covered by the KNASP III.

#### 6.1.1 HIV treatment: anti-retroviral therapy

Kenya has tremendously scaled up HIV treatment and care the last 10 years to each about 80% of those in need. The table below shows the coverage of ART over a five-year period.

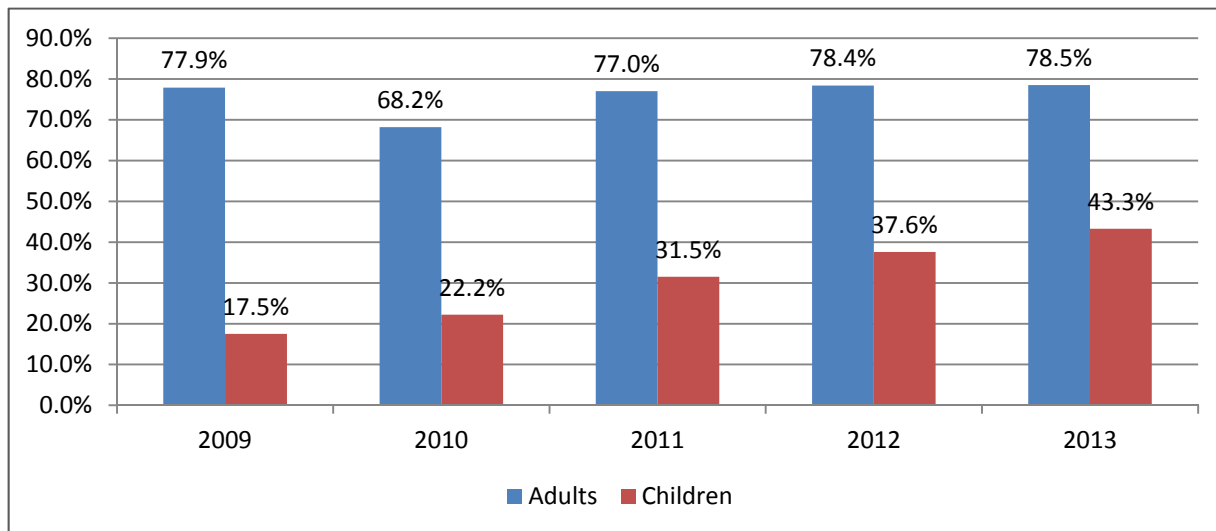
<b>Table 7: ART Coverage</b>						
<b>Indicator</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>
Number of ART Sites	731	943	1137	1405	1829	1829
Total PLHIV on ART	237,881	336,980	468,717	538,983	604,000	656,359
Number of adults on ART	230,059	315,558	396,525	490,437	548,561	596,228
Coverage	63.8%	77.9%	68.2%	77.0%	78.4%	78.5%
Number of children on ART	20,517	28,370	36,096	48,547	55,439	60,141
Coverage	16.0%	17.5%	22.2%	31.5%	37.6%	43.3%

*Data sources: MFL/ NASCOP health facilities inventory, KDHS 2008/9, HIS Reports, LMU/LMIS*

From 2008 to date, Kenya has rapidly expanded the health system to provide ART services. Consequently, the eligible PLHIV on ART increased from 64% in 2008 to about 80% in 2013. The country also established and rapidly scaled up paediatric ART from 16% in 2008 to 43% in 2013. This coverage is calculated based on the 2009 WHO guidelines and the denominator is the total number of PLHIV in need of ART. If the country adopts the 2013 WHO recommended HIV treatment guidelines, the coverage of ART will reduce as more adults and children become eligible for treatment.

The figure below shows the trend in the coverage of ART in Kenya comparing adult and children. The percentage of eligible PLHIV on ART has remained relatively stable at about 80% while the enrolment of children on the programme has expanded rapidly over the last five years.

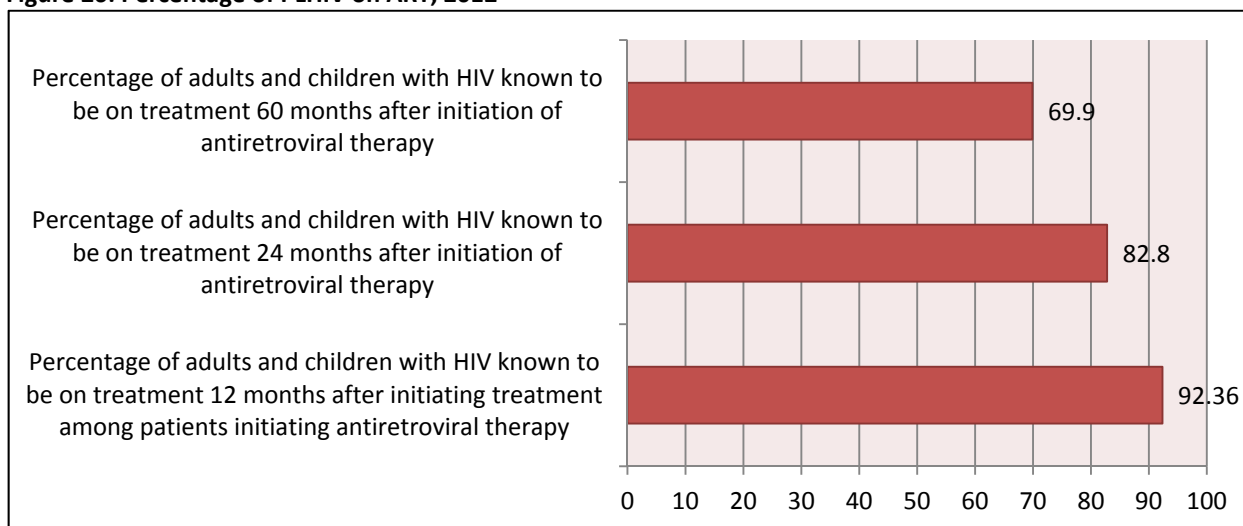
**Figure 25: Percentage of eligible adults and children on ART**



### 6.1.2 Twelve-month retention on anti-retroviral therapy

The quality of the ART services is measured against the rate of retention of PLHIV on ART. The percentage of PLHIV initiated on ART known to be in treatment reduces with time progression. The retention rate is higher in the first 12 months (about 92%) and reduced to about 70% at month 60. This data shows a need to establish robust measures to reduce loss to follow up and mortality among PLHIV on ART.

**Figure 26: Percentage of PLHIV on ART, 2012**

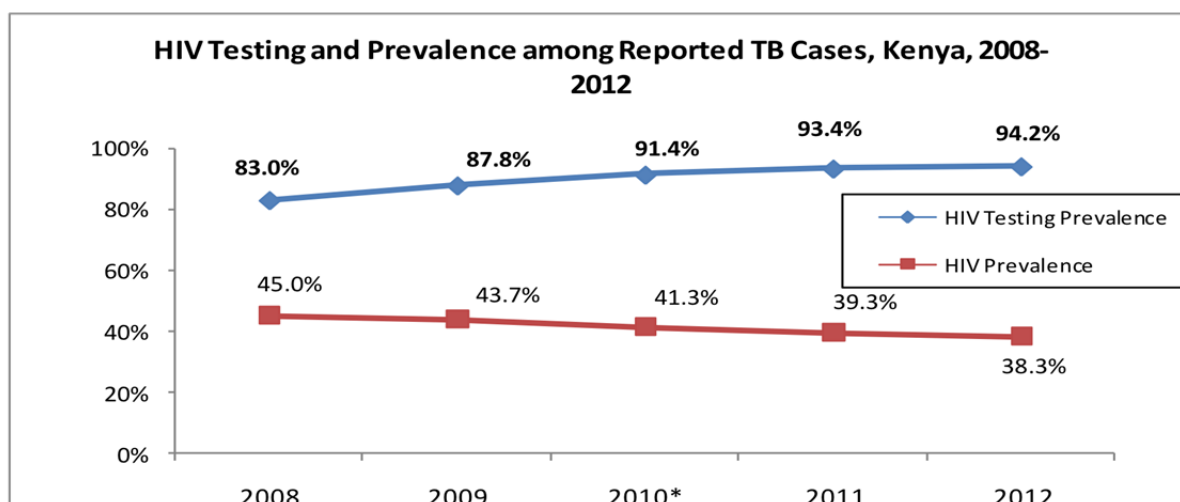


### 6.1.3 Co-management of tuberculosis and HIV treatment

Kenya has a target of reducing TB deaths in PLWHIV by 50% BY 2015. In order to achieve this target, the 5Is operational materials have developed and rolled out and the WHO recommendation that all HIV/TB co-infections be initiated on ART has been adopted and is being implemented.

- (i) Testing for HIV in TB patients was 94% in 2012 up from 93% in 2011 while co-infection rate declined by one point to 38%. The program is now focused on achieving universal targets on ART uptake.

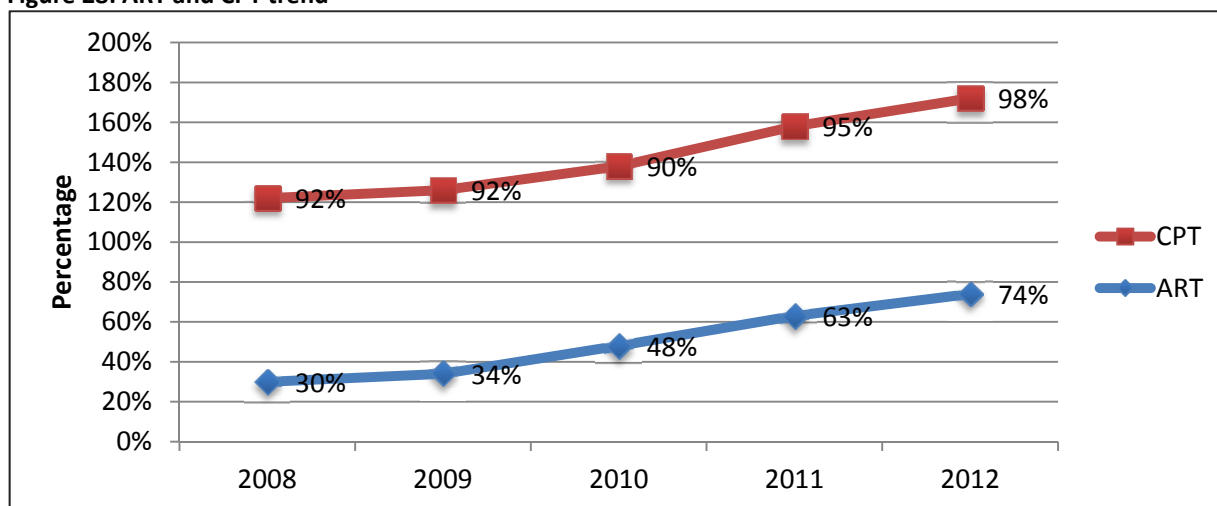
**Figure 27: TB testing in HIV positive patients**



*Data source: Division of Leprosy, Tuberculosis and Lung Disease, Kenya, 2012 Annual Report*

- (ii) ART/CPT uptake trend: The percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV increased from 56.4 in 2011 to 82.8%. CPT and ART uptake was at 98% in 2012 up from 74% in 2011.

**Figure 28: ART and CPT trend**



*Data source: Division of Leprosy, Tuberculosis and Lung Disease, Kenya, 2012 Annual Report*

The ART programme in Kenya has rapidly expanded. Adult ART has been expanded at a faster pace than paediatric ART. Management of HIV/TB co-infection has also been scaled up over the last five years.

However, the rate of retention of PLHIV on ART tends to reduce with progression of time. Overall, there is need to match the scale up of ART with quality.

## Socio-economic impact of HIV

### 7.1 Introduction

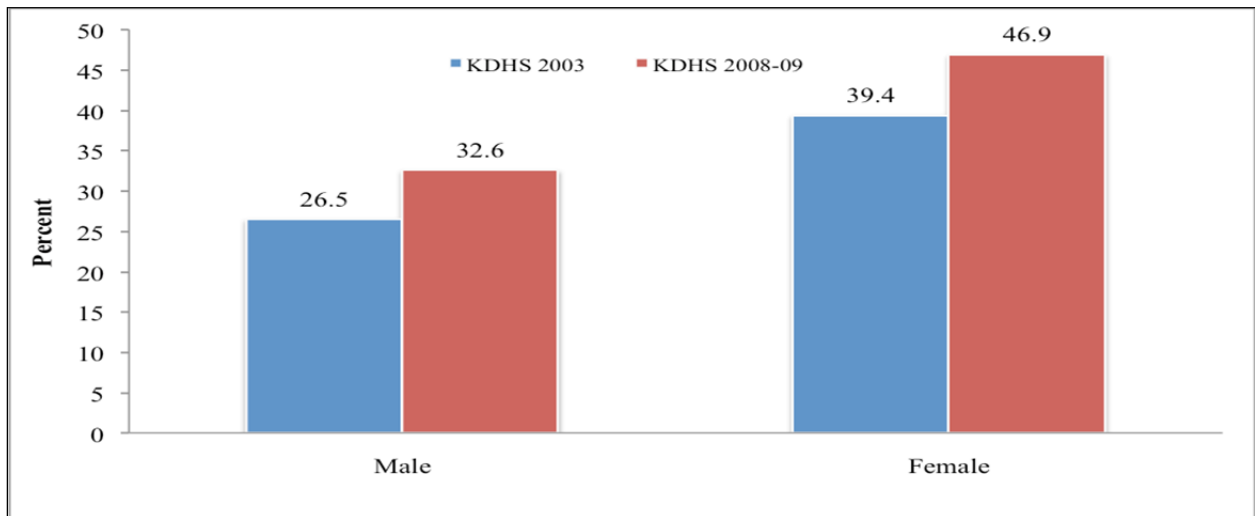
The socio-economic impact of the HIV epidemic is reflected in the increase in number of orphans and vulnerable children, single-parent headed households, erosion of household incomes and inaccessibility to basic needs, stigma and discrimination of persons infected and affected by HIV; all resulting in deepening poverty and added constraints to economic growth.

#### 7.1.1 Eliminating Stigma and Discrimination

Stigma and discrimination is a key obstacle to the uptake of HIV services. In Kenya, stigma and discrimination affects ability of PLHIV and key populations – sex workers, injecting drug users and men having sex with men among others– who contribute a significant proportion of HIV infection access to HIV services.

Although the percentage of men and women expressing an accepting attitude towards PLHIV has been increasing, it still remains low to have optimal enabling environment for the national response to HIV. HIV stigma is higher among men than women. For instance, the percentage of men expressing accepting attitude to PLHIV increased from 27% in 2003 to 33% in 2009 while for women the percentage increased from 39.4% in 2003 to 47% in 2009.

**Figure 29: Accepting attitudes towards those living with HIV**



#### 7.1.2 2013 Estimates for OVC

A key impact of the HIV epidemic is the increased number of Orphans and Vulnerable Children (OVCs) resulting from AIDS related mortality over the years. The projected number of AIDS related deaths of about 60,000 annually up to 2020 shows that with the current level of interventions, the number of OVCs is set to rise over time. The table below shows the number of OVCs in the country between 2009 and 2013, which is the period of the current national strategic plan.



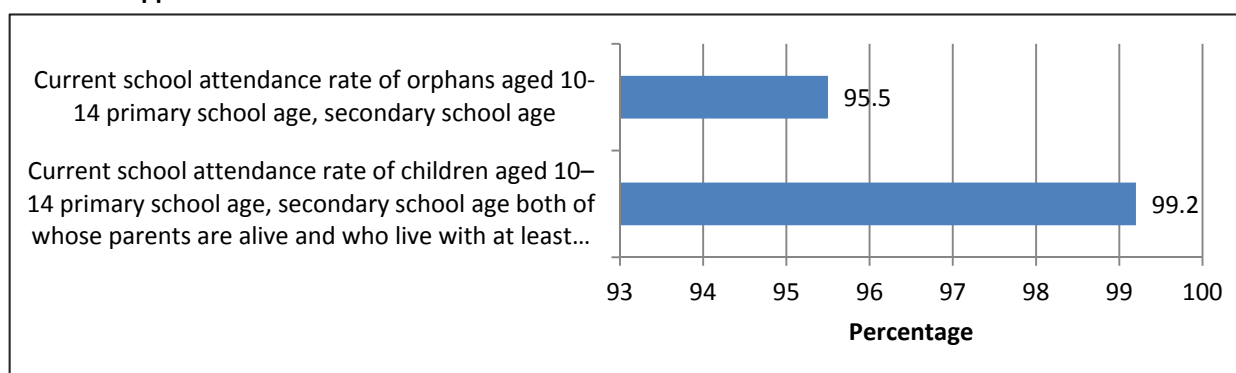
**Table 8: OVCs estimates**

	2009	2010	2011	2012	2013
<b>Maternal orphans</b>					
AIDS	893,514	844,763	791,378	732,932	674,219
Non-AIDS	505,900	512,701	519,569	526,524	533,135
Total	1,399,413	1,357,463	1,310,947	1,259,456	1,207,354
<b>Paternal orphans</b>					
AIDS	1,015,574	963,513	907,740	846,927	784,284
Non-AIDS	912,558	927,848	944,076	960,898	978,573
Total	1,928,133	1,891,360	1,851,817	1,807,825	1,762,857
<b>Double orphans</b>					
AIDS	520,932	488,962	452,542	413,115	373,584
Non-AIDS	105,462	107,431	109,517	111,904	114,492
Total	626,394	596,393	562,059	525,019	488,076
<b>Total orphans</b>	<b>2,701,152</b>	<b>2,652,431</b>	<b>2,600,706</b>	<b>2,542,263</b>	<b>2,482,134</b>
<b>All AIDS orphans</b>	<b>1,458,103</b>	<b>1,385,075</b>	<b>1,307,921</b>	<b>1,223,377</b>	<b>1,136,851</b>

### 7.1.3 Orphans non-orphans school attendance

The school attendance of OVCs, a measure of access of to basic needs, is over 90%. This could largely be attributed to the “free” primary education policy and the cash transfer programme. The table below shows the status of the key indicators for support to OVCs.

**Table 30: Support to OVCs**



## 7.2 Conclusion

The data shows that stigma and discrimination of people infected and affected by HIV remains high in the country. However, a stigma index study to be carried out in 2014 will provide updated data.

Secondly, the number of OVCs is likely to continue increasing given the level of projected new HIV infection.

## Financing the HIV Response in Kenya

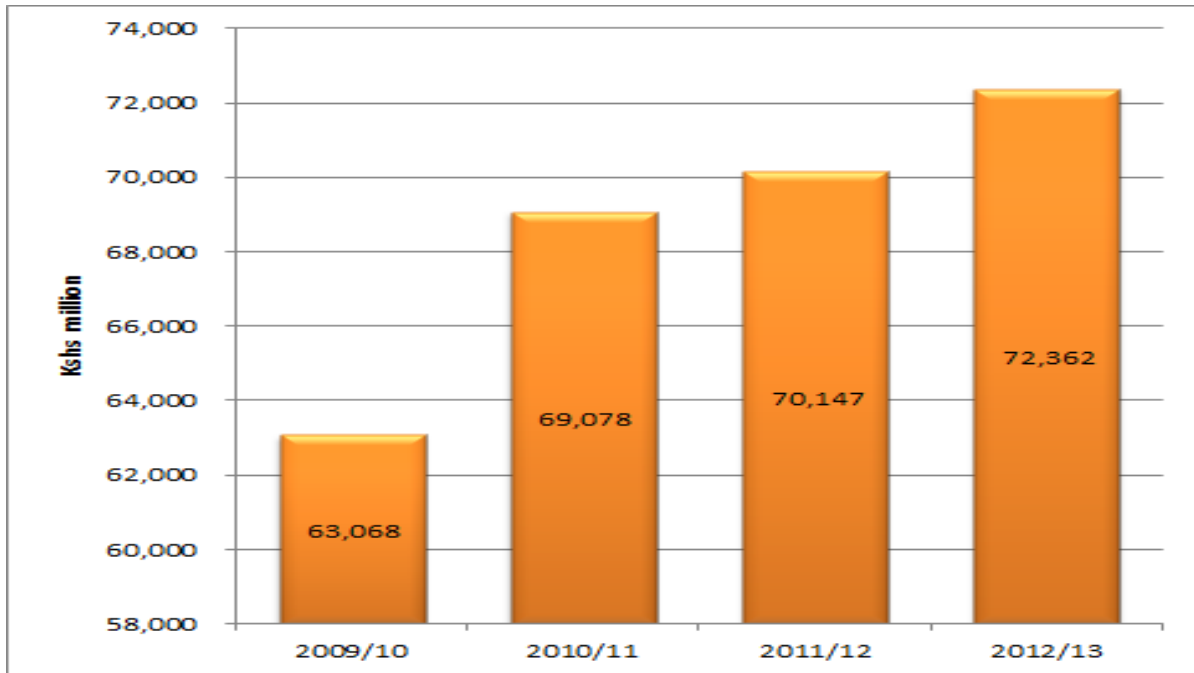
### 8.1 Introduction

There has been tremendous focus on advocacy for sustainable financing of the HIV response in Kenya in the last 5 years. A financing strategy for the response has been developed and discussed at highest levels of government. An HIV investment case is also being developed to provide further evidence on the need to increase domestic funding for the response. Data in this section shows the relevance of this dialogue and the need to establish a sustainable financing strategy in the long run.

#### 8.1.1 Trends of AIDS spending from all sources

The total spending on the HIV response from 2009 to 2013 increased from Kshs63 billion to Kshs72 billion respectively. The figure below shows a slight increase in the year-on-year funding for the response.

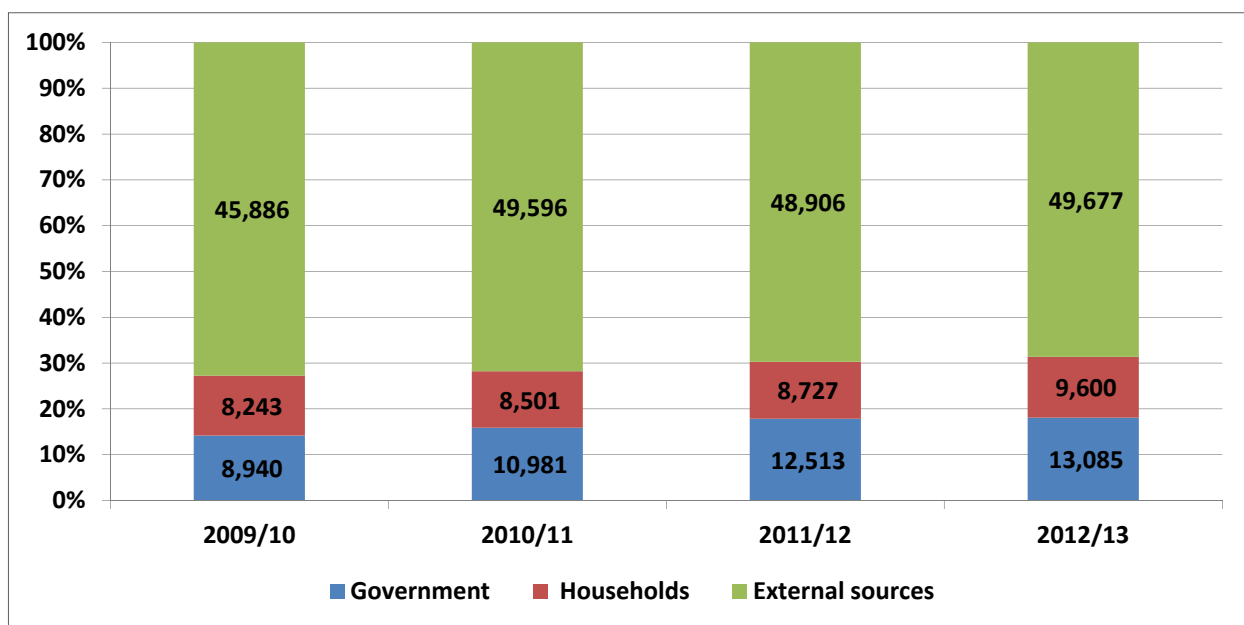
Figure 31: Trend in Total HIV spending



#### 8.1.2 AIDS spending by source

During the period 2009-2013, external funding sources contributed over 70% of total spending while Government of Kenya funding was about 17% and funding from private or household sources was at 13%. Although the proportion of government funding has remained relatively stable (about 17%) since 2010, the amount of funding increased from Kshs8 billion to Kshs13 billion while funding from external sources increased from Kshs45 billion to Kshs49 billion.

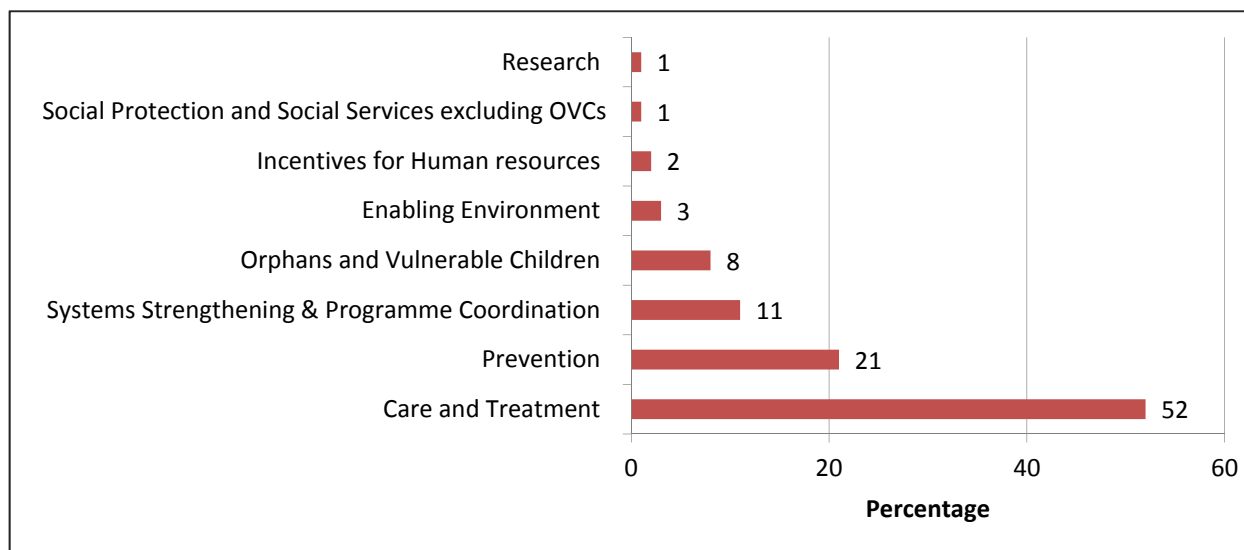
**Figure 32: Percentage spending by source of funding**



### 8.1.3 AIDS spending by categories

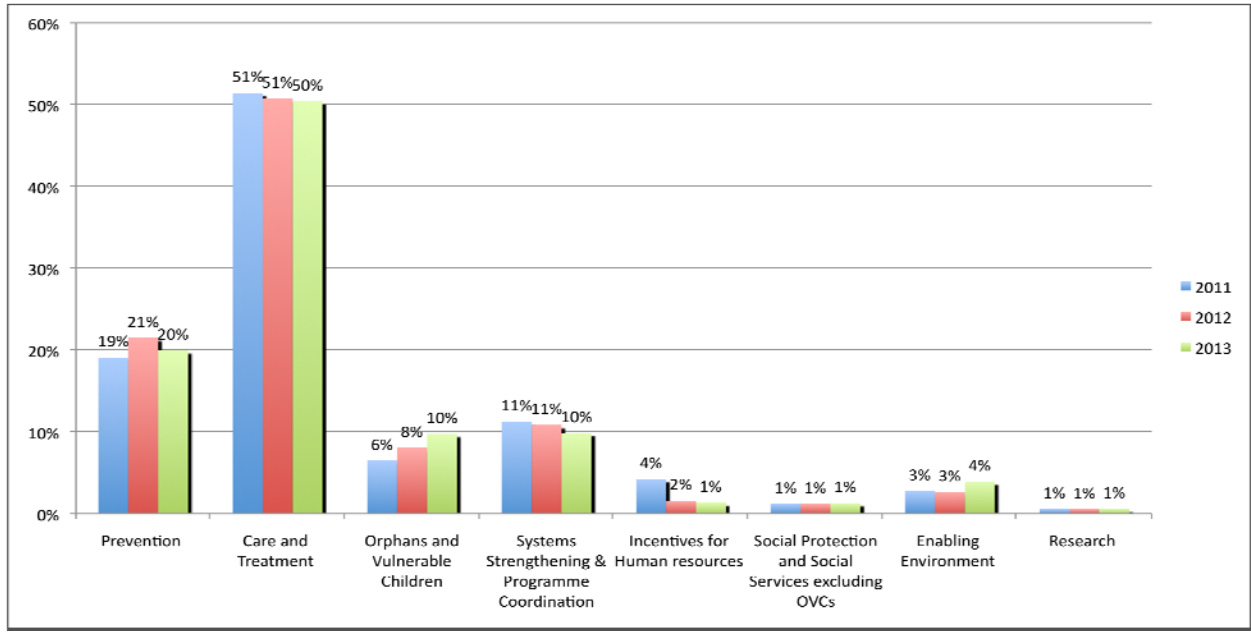
The spending of the HIV funding on programmes is expected to reflect the country’s priorities in fighting the HIV epidemic. About 50% of the funding was spent on HIV treatment and care followed by HIV prevention.

**Figure 33: Percentage of total expenditure by categories 2009-2013**



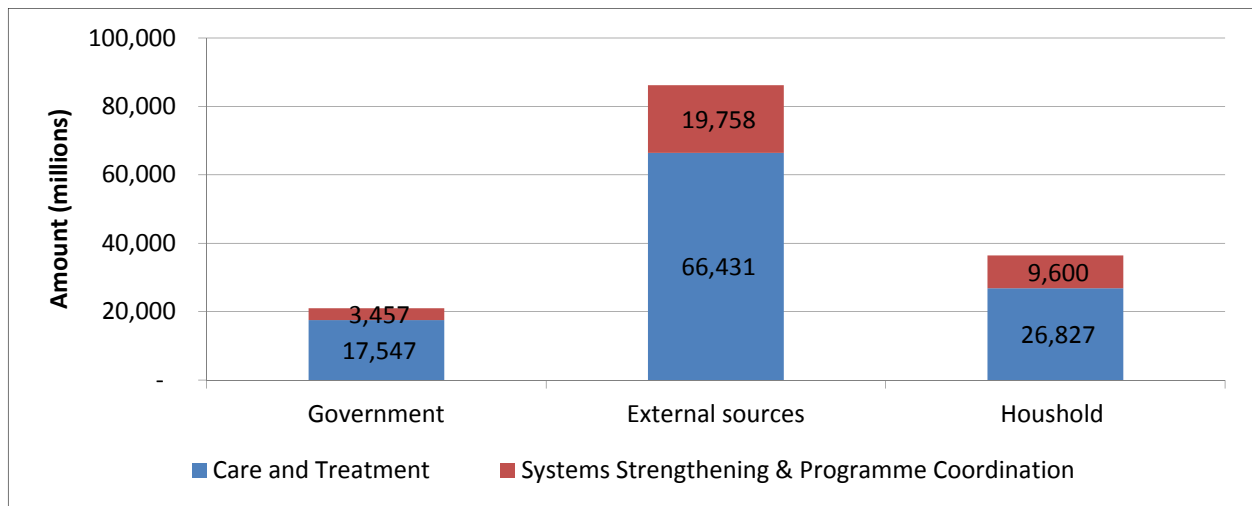
An analysis of the trend in funding by categories shows that the country spends about 50% of the total funding on HIV treatment and care followed by HIV prevention and health systems/programme coordination.

**Figure 34: Total annual spending by category, 2011 - 2013**



Health systems strengthening contribute significantly to provision of effective HIV treatment and care. A combination of HIV treatment and care and health systems strengthening spending constitutes the highest spending category. Over 50% of the funding for these programmes is from external sources reflecting the potential threat to sustainability of these programmes in the long run.

**Figure 35: Spending on HIV treatment and care and health systems**



## **8.2 Conclusion**

The HIV funding in the country would be reaching its optimal level. The funding increased by only about Kshs9 billion over the last five years. Annual increase year-on-year was about Kshs2 billion. Most of the funding is from external sources, which may not increase in the coming years given the impact of the world economic crisis.

Although the data presented in this report may not include all the indicators and may have gaps in some of the indicators for the epidemic and the response, it is adequate to demonstrate the state of the HIV epidemic and the response in Kenya. The data demonstrates the need to focus on both the effectiveness of HIV programmes in order to ensure the response is delivered at optimal cost and sustainable financing of the response.

## Annex

### Annex 1: Kenya report on Global AIDS Response Progress Report (GARPR) indicators, 2013

	Global AIDS Response Progress Report (GARPR) Indicators	2013
	<b>Target 1.</b> <b>Reduce sexual transmission of HIV by 50% by 2015</b> <b>General population</b>	
1.1	Percentage of young women and men aged 15–24 who correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission*	Women: 47.5 Men: 54.9 DHS-2008/9
1.2	Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15	Women: 10.1 Men: 15.4 KAIS 2012
1.3	Percentage of adults aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months	Women: 2.5 Men: 14.7 KAIS 2012
1.4	Percentage of adults aged 15–49 who had more than one sexual partner in the past 12 months who report the use of a condom during their last intercourse*	Women: 31.6 Men: 38.8 KAIS 2012
1.5	Percentage of women and men aged 15-49 who received an HIV test in the past 12 months and know their results	Women: 47.3 Men: 35.8 KAIS 2012
1.6	Percentage of young people aged 15-24 who are living with HIV*	Women: 3.0 Men: 1.1
	<b>Sex workers</b>	
1.7	Percentage of sex workers reached with HIV prevention programmes	
1.8	Percentage of sex workers reporting the use of a condom with their most recent client	FSWs: 86.2
1.9	Percentage of sex workers who have received an HIV test in the past 3 months and know their results	FSWs: 68.0 IBBS, 2011
1.10	Percentage of sex workers who are living with HIV	FSWs: 29.3 IBBS, 2011
	<b>Men who have sex with men</b>	
1.11	Percentage of men who have sex with men reached with HIV prevention programmes	
1.12	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	68.8
1.13	Percentage of men who have sex with men that have received an HIV test in the past 12 months and know their results	74.0

	<b>Global AIDS Response Progress Report (GARPR) Indicators</b>	<b>2013</b>
1.14	Percentage of men who have sex with men who are living with HIV	18.2 IBBS, 2013
	<b>Target 2.</b> <b>Reduce transmission of HIV among people who inject drugs by 50% by 2015</b>	
2.1	Number of syringes distributed per person who injects drugs per year by needle and syringe programmes	15 Programme Data 2013
2.2	Percentage of people who inject drugs who report the use of a condom at last sexual intercourse	
2.3	Percentage of people who inject drugs who reported using sterile injecting equipment the last time they injected	51.6 IBBS, 2011
2.4	Percentage of people who inject drugs that have received an HIV test in the past 12 months and know their results	60.7 IBBS, 2011
2.5	Percentage of people who inject drugs who are living with HIV	18.3 IBBS, 2011
	<b>Target 3.</b> <b>Eliminate new HIV infections among children by 2015 and substantially reduce AIDS-related maternal deaths**</b>	
3.1	Percentage of HIV-positive pregnant women who receive antiretrovirals to reduce the risk of mother-to-child transmission	55.7
3.2	Percentage of women living with HIV receiving antiretroviral medicines for themselves or their infants during breastfeeding	70.6
3.3	Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	45.2
3.4	Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months	14.3
	<b>Target 4.</b> <b>Reach 15 million people living with HIV with lifesaving antiretroviral treatment by 2015</b>	
4.1	Percentage of adults and children currently receiving antiretroviral therapy*	Adults: 78.5 Children: 43.3 Programme Data, 2013
4.2	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	92.3 Programme Data, 2012
	<b>Target 5.</b> <b>Reduce tuberculosis deaths in people living with HIV by 50% by 2015</b>	
5.1	Percentage of estimated HIV-positive incident TB cases that received treatment for	82.8



	Global AIDS Response Progress Report (GARPR) Indicators	2013
	both TB and HIV	Programme Data, 2012
	<b>Target 6.</b> Close the global AIDS resource gap by 2015 and reach annual global investment of US\$ 22–24 billion in low- and middle-income countries	
6.1	Domestic and international AIDS spending by categories and financing sources	By source of funding International: 71% Government: 17% Household: 13%  By category Care and treatment: 50% Prevention: 20% Others: 30% NASA, 2013
	<b>Target 7.</b> Eliminating gender inequalities	
7.1	Proportion of ever-married or partnered women aged 15–49 who experienced physical or sexual violence from a male intimate partner in the past 12 months <i>All indicators with sex-disaggregated data can be used to measure progress towards target 7</i>	31.7
	<b>Target 8.</b> Eliminating stigma and discrimination	
8.1	Discriminatory attitudes towards people living with HIV	Women: 46.9 Men: 32.6 DHS2008/9
	<b>Target 9.</b> Eliminate travel restrictions	
9.1	<i>Travel restriction data is collected directly by the Human Rights and Law Division at UNAIDS HQ, no reporting needed</i>	
	<b>Target 10.</b> Strengthening HIV integration	
10.1	Current school attendance among orphans and non-orphans aged 10–14*	95.5%
10.2	Proportion of the poorest households who received external economic support in the last 3 months	

\* Millennium Development Goals indicator

\*\* The *Global Plan towards the elimination of new HIV infections among children by 2015 and keeping their mothers alive* defines this target as: 1. Reduce the number of new HIV infections among children by 90%

2. Reduce the number of AIDS-related maternal deaths by 50%