



Ministry of Health

# KENYA HIV ESTIMATES

## 2015



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October 2016



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# Foreword



The Ministry of Health has adopted an evidence-informed approach for advocacy, planning, and budgeting at the National and County levels for the HIV and AIDS response. Understanding trends in the HIV epidemic and the burden in different counties is an important step in this approach. The successful implementation of the HIV prevention and treatment programme has shown positive results, with Kenya's 2015 HIV estimates clearly indicating a decline in the trajectory of the HIV epidemic

This 2015 HIV Estimates Report aims to provide an improved understanding of the HIV epidemic in Kenya, and offers important insights into the impact of various interventions. The estimates have been derived from many important data sources and benefit from national consultation and review with key stakeholders from the government, national and international organizations. The highlights of this report include a gradual decline in adult HIV incidence to an estimated 0.27% in 2015. When prevention programs achieve heightened awareness, significant changes in behaviour will occur. This is expected to lead to a significant reduction in the need for PMTCT services, as well as a reduction in the number of new HIV infections. There is therefore an urgent need to scale up prevention programmes in an effort to continue reducing HIV incidence. A positive outcome of treatment scale up is the reduction in mortality, and a corresponding reduction in the number of AIDS orphans. Although prevalence still remains high at about 5.9%, a combination of increased awareness, scale up of prevention and treatment programs will lead to a sustained decline of HIV prevalence in Kenya. However, the wide geographic variation in HIV burden directs us to redouble our efforts and commitment to further reduce the burden of HIV and AIDS.

The Estimates Report process was coordinated by a Technical Working Group on HIV estimates with experts from NACC, NASCOP, CDC, WHO, UNAIDS, UNICEF, UNFPA, KEMSA, KNBS, KEMRI, MEASURE Evaluation-PIMA, KANCO, NEPHAK, and Avenir Health under the overall coordination of National AIDS Control Council. I give particular thanks to all the experts from these organizations who worked under the leadership of Ministry of Health through NACC and NASCOP.

A handwritten signature in blue ink, appearing to read 'Muraguri', with a small blue dot above the final 'i'.

**Dr. Nicholas Muraguri**

Principal Secretary, Ministry of Health  
Government of Kenya

# Preface

The National AIDS Control Council in consultation with the national and international epidemiologists, demographers, public health experts and monitoring and evaluation specialists undertake an annual exercise to estimate the HIV burden. Avenir Health and UNAIDS continue to provide technical support to this process. The estimates are based on data from Kenya Demographic Health Surveys, Kenya AIDs Indicator Surveys, HIV Sentinel Surveillance among pregnant women, data from programmes and census. The estimates use the Estimation and Projection Package and Spectrum tools as recommended by the UNAIDS Reference Group on Estimates, Modelling and Projections.



The HIV Estimates bring forth a sound reflection on the existing nature of HIV burden and trajectory of the HIV epidemic in the form of prevalence, new infections, AIDS orphans and related deaths. With adult (15-49 years) HIV prevalence estimated at about 5.9% in 2015 and approximately 1.5 million people living with HIV, Kenya has succeeded in reducing the epidemic through focused interventions. However, fifteen Counties contribute 60% of the total national new HIV infections, and some Counties have hyper-endemic prevalence levels that compare to southern African countries. The details of these and other indicators are provided in this report. The robust estimates generated for Kenya and

“Although Kenya’s progression in the AIDS response is unambiguous, the gains need to be capitalised.”

its 47 Counties are a rich resource for county level planning, estimating the resource needs and developing strategies for scaling up high impact interventions.

Kenya must sustain its efforts and move forward in achieving national and international targets. Considering the varied nature of the epidemic across the counties, and endeavouring to implement a range of essential HIV programmes on a population wide scale based on a sound evidence base, can Kenya meet the challenge of realising zero new infections?

In order to achieve this goal and free future generations from AIDS, we require leadership, political commitment, civil society participation, knowledge capital generation, financial resources, innovations in developing new and affordable medicines and preventive technologies. We also need to tackle the fundamental drivers of the epidemic, particularly gender inequality, poverty, stigma and discrimination in family and health service settings. Doing so, will ensure we achieve our goals.

**Dr. Nduku Kilonzo**

Director, National AIDS Control Council

# Executive Summary

The National HIV Estimates process, led by the National Aids Control Council (NACC), is designed to describe the impact of the HIV and AIDS epidemic at national and county levels. Kenya HIV Estimates 2015, provides the current status of the HIV epidemic in the country and the counties on key parameters of HIV prevalence, numbers of people living with HIV (PLHIV), new HIV infections, AIDS-related mortality and treatment needs.

The 2015 national and county HIV&AIDS estimates were generated using the Estimation and Projection Package (EPP) and Spectrum software recommended by the UNAIDS Reference Group on Estimates, Modeling and Projections. The software uses data collected from antenatal clinic surveillance, population based surveys including the Kenya Demographic Health Survey 2003 and 2008/9 (KDHS) and Kenya AIDS Indicator Surveys I and II and other program data to estimate the prevalence of HIV and AIDS, and its impact on the population.

Because the data, methods and software change with each estimate process, the prevalence estimates are not directly comparable. Only the estimates produced by a single curve or model can be meaningfully compared to assess changes in HIV prevalence, and describe trends in the epidemic. This report presents trend data generated since 2000 in the current EPP and Spectrum software.

For 2015, two sets of estimates were prepared. The National estimates of Kenya by fitting prevalence curves to surveillance and survey data for urban and rural populations. The County estimates produced separate data for each of the counties by fitting prevalence curves to data for each county. The county estimates may be aggregated to produce National estimates. Final estimates were derived from the National data. The Regional estimates have been used to disaggregate the National indicators to the provincial and county levels.

## Adult HIV Prevalence

The National HIV prevalence among people aged 15-49 to be 5.9% in 2015. Although the Spectrum results show a continued decline in HIV prevalence among adult population aged 16+ years over a period of time, the decline has almost stabilized since 2008. Kenya's HIV epidemic is geographically diverse, ranging from a prevalence of 26.0% in Homa Bay County in former Nyanza region to approximately 0.4% in Wajir County in former North Eastern region. These new estimates confirm a decline in HIV prevalence among both men and women at National level. Prevalence remains higher among women at 6.5% compared to men at 4.7%.

In descending order, Counties with the highest adult HIV prevalence in 2015 included Homa Bay 26.0%; Siaya 24.8%; Kisumu 19.9%; Migori 14.3%; Mombasa 7.5%; Busia 6.7%; Nyamira 6.4%; Taita Taveta 6.3%; and Nairobi 6.1%.

## HIV prevalence among youth aged 15-24 years

National HIV prevalence among youth aged 15-24 years was at 2.26% and % 3.97% respectively, and overall HIV prevalence was 3.12%, which translate to 268,588 young people living with HIV.

## Annual New HIV Infections

There were approximately 71,034 new HIV infections among adults aged 15+ years and 6,613 new HIV infections among children aged 0-14 years in 2015. Of the total new infections in 2015, Homa Bay (10,625), Kisumu (9,699), Siaya (8,496), Migori (5,619) and Nairobi (4,981) together contribute about 51% of the total new infections and 53% of the new infections among children. In 2015, counties that have more than 1100 new HIV infections among youth aged 15-24 years are, Homa Bay (5,473), Kisumu (4,996), Siaya (4,377), Migori (2,895) Nairobi (2,282), Mombasa (1,283) and Kisii (1,178).

Young women in the age group 15-24 accounted for a third of all new HIV adult infections.

## Trends in New HIV Infections

Kenya has seen a sharp decline in HIV incidence among adults aged 15-49 from 0.41% in 2010 to 0.27 in 2015 possibly due to the scale up of various prevention programmes. In terms of absolute numbers, the new HIV infections among all adults aged 15+ years declined from 83,097 in 2010 to 77,648 in 2015, a 7% decline in the number of new annual HIV infections at national level. Among children, new infections declined from 12,358 in 2010 to 6,613 in 2015, which shows 46% decline over the period. Among young people aged 15-24 years, new infections declined from 37,566 in 2010 to 35,776 in 2015, which shows 5% decrease over the period.

## Treatment Needs

The number of HIV-positive pregnant women in need of PMTCT services in 2010 was 72,000, this need has increased to approximately 79,000 in 2015. The number of adults in need of ART has increased from 693,000 in 2010 to 1,338,000 in 2015. During the same period the ART needs among children (0-14) rose from 72,297 to 93,056.

## Deaths averted/Lives Saved Due to ART

The scale up of ART since 2004 has saved over 423,000 lives in the country by averting deaths due to AIDS-related causes.

## People Living with HIV

While the decline in HIV prevalence is encouraging, the total number of people living with HIV (PLHIV) in Kenya is estimated to be 1.5 million in 2015, this includes 98,169 children aged <15 years

and 268,588 youth aged 15 to 24 years. Children under 15 years of age account for 6% of all infections, whilst people aged 15+ years account for 94% of all infections. Youth aged 15-24 years account for 18% of all infections. Fifty-five percent of all adult HIV infections age 15+ are to be among women. This amounts to 830,243 women in the age 15+ living with HIV in Kenya.

The five high prevalence counties of Kenya account for 45% of all HIV infections in the country, these are namely Nairobi county (171,510); Homa Bay (158,077), Kisumu (144,303), Siaya (126,411) and Migori (83,603).

## **AIDS related deaths**

The 2015 HIV estimates highlight the declining trend of annual AIDS deaths in Kenya since 2003. Approximately 35,822 people died of AIDS related causes in 2015 compared to 51,314 in 2010, a 30% decline in the number of AIDS related deaths at national level. The decline is directly attributable to the wider access to ART—made available with the roll out of free ART in 2003—and the ability of the National AIDS/STI Control Programme to cover treatment needs for HIV and AIDS, co-infections and provide care services. AIDS related deaths among children 0-14 years of age were at 5,006 in 2015.

Estimates of adult AIDS related deaths are based on several assumptions and additional data sets that include: estimates of the number of adults and children who are living with HIV, and estimates of survival from the time of infection to the time of death for both adults and children living with HIV, with or without treatment. AIDS deaths are estimated based on the latest global evidence on survival time, with and without treatment, and globally recognized methods and models are used to calculate this specific indicator.

## **Orphans and Vulnerable Children**

The total number of orphans in 2015 was 2 million, a slight decline from 2.1 million in 2010. The number of all AIDS orphans also declined from 959,334 children in 2010 to 661,119 in 2015.

In conclusion, despite progress by Kenya in advancing towards National targets as reflected in the 2015 HIV estimates, much remains to be done to halt and reverse HIV. In absolute terms, a large proportion of Kenya's population is infected or affected with HIV. The spread of the epidemic must be halted, with zero new infections the principal target. The vision of eliminating the impact of the AIDS epidemic can be realized through generation of strategic, county level information and translation of this information into policy and practice by the planners, programme administrators and implementers. Data presented through Kenya HIV Estimates 2015 should act as a primary step to catalyse continued action.

## **Sustained action needed for 'Getting to Zero'**

The evidence presented above shows that Kenya is on track to achieve the global targets of 'Zero New Infections, Zero AIDS-related deaths and Zero discrimination'. Sustaining prevention focus and

intensity in the areas where significant declines in HIV incidence have been achieved is critical to consolidate these gains. Emerging epidemics must be addressed effectively, and prevention efforts intensified in high prevalence areas. With increasing treatment coverage and a decline in AIDS-related deaths, a significant number of people are likely to require first and second line ART treatment in the coming years. A major challenge for the HIV programme will be to ensure that the treatment requirements of people living with HIV are fully met without sacrificing the needs of prevention.

# Background

Kenya has a number of information sources for HIV prevalence levels and trends. Four national surveys, the Kenya Demographic and Health Survey of 2003<sup>1</sup> (KDHS 2003), the Kenya AIDS Indicator Survey 2007<sup>2</sup> (KAIS 2007), the Kenya Demographic and Health Survey of 2008/9<sup>3</sup> and the Kenya AIDS Indicator Survey 2012<sup>4</sup> provide good estimates of national prevalence for those four years and the trend between those years. Antenatal clinic surveillance has been conducted since 1990, starting with 13 sites and expanding to 44 sites today. ANC surveillance provides information on trends at surveillance sites particularly in the period before the first survey in 2003. The new estimates for 2015 are based on the four national surveys and surveillance data through 2015.

HIV testing among pregnant women at PMTCT sites has now reached high coverage and may be useful for tracking National trends in the future. This data has not been used in this report due to uncertainties about comparability with ANC estimates. We do expect this issue to be addressed so that prevalence estimates from PMTCT testing can be used in the future.

Kenya produces annual estimates of HIV prevalence and key indicators. The last estimate was prepared in 2013<sup>5</sup>. This paper describes the process to use the new information to prepare national estimates for 2015, and describes the results for key indicators.

## Methods

The methods used to estimate National HIV prevalence in Kenya have changed over time in response to the data available. Before the first National survey, smooth prevalence curves were fit to individual surveillance sites to determine trends at those sites, and then these trends were aggregated by weighting them by the population represented by each site. When the first National survey became available the National trend was adjusted to match the survey findings in 2003<sup>6</sup>. Now that four surveys are available they can be used to adjust not only the level but also the trend in prevalence from 2003 to 2012. The national projection was validated by comparing the estimated total mortality with deaths estimates from vital statistics (adjusted for undercount) (Annex Figure 1) and by comparing the estimated age-specific prevalence with survey estimates (Annex Figure 2).

Annual fluctuations in surveillance and survey data are smoothed by fitting a curve. Although the final curve may not be an exact match for the point estimates from any one survey, it should lie within the confidence bounds of all survey estimates.

1 Central Bureau of Statistics (CBS) [Kenya], Ministry of Health (MOH) [Kenya], and ORC Macro. 2004. *Kenya Demographic and Health Survey 2003*. Calverton, Maryland" CBS, MOH and ORC Macro.

2 National AIDS and STD Control Programme, Ministry of Health, Kenya. July 2008. *Kenya AIDS Indicator Survey 2007: Preliminary Report*. Nairobi, Kenya.

3 KNBS [Kenya] 2009. *Kenya Demographic and Health Survey 2008-09 Preliminary Report*. Calverton, Maryland. KNBS, NACC, NASCOP, NPHLS, KMRI, NCAPD, ICF Macro, September 2009.

4 National AIDS and STI Control Programme, Kenya AIDS Indicator Survey 2012, Preliminary Report, September 2013

5 NACC and NASCOP. National HIV Indicators for Kenya: 2011. Nairobi, NACC and NASCOP, March 2012.

6 National AIDS Control Council (NACC) and National AIDS and STD Control Programme (NASCOP) 2007. National HIV Prevalence in Kenya. Nairobi: NACC and NASCOP.

UNAIDS has supported the development of a number of tools to make National estimates. For Kenya the relevant tools are the Estimation and Projection Package (EPP) and Spectrum<sup>7,8</sup>. EPP is used to fit smooth prevalence curves to surveillance and survey data separately for urban and rural areas. These curves are then combined into a single National curve. The incidence implied by the national prevalence curve is then transferred to Spectrum where it is combined with additional information on the age structure of incidence and program coverage (ART, PMTCT, cotrimoxazole for children) to estimate indicators of interest such as the number of people living with HIV, the number of new infections, AIDS deaths and the need for ART, PMTCT and cotrimoxazole.

ART need was derived by combining the estimated number of new adult HIV infections with information about progression in CD4 counts, the mother-to-child transmission rate and service statistics to estimate the need for services. For adult ART, eligibility for treatment was a CD4 count of less than 200 cells/ $\mu$ l through 2006, less than 250 cells/ $\mu$ l from 2007-2009, CD4 count of less than 350 cells/ $\mu$ l in 2010-2014, and CD4 count of less than 500 cells/ $\mu$ l in 2014-2016. Spectrum tracks adults living with HIV by CD4 count based on assumed rates of progression to lower CD4 counts, AIDS mortality by CD4 count and initiation of ART<sup>9</sup>. The parameters of the model were set to reproduce the CD4 count distribution of the population living with HIV who were not on ART, as reported by the 2007 KAIS (Annex Figure 3).

For children, eligibility for treatment is based on Kenyan guidelines as updated in 2008 which include all children living with HIV under the age of 18 months, children 19-59 months with CD4 per cent under 25 and children older than 5 years with CD4 counts below 350. The child model in Spectrum follows children from HIV infection to death based on survival patterns, which are dependent on time of infection (peripartum, 6-12 months, 13-24 months, >24 months)<sup>10</sup>.

Spectrum calculates the number of children infected through mother-to-child transmission using program data on the number of women receiving PMTCT services by regimen and the latest estimates of the probability of transmission for each option<sup>11</sup>.

There are uncertainties inherent in these estimates based on the error of measuring HIV prevalence through population surveys and the uncertainty in the assumptions used for time of progression, the distribution of new infections by age and sex, mother-to-child transmission rates, and the effectiveness of treatment. In order to quantify this uncertainty we performed 1000 Monte Carlo projections using randomly selected values for these assumptions with ranges indicated by the sources. The results provide plausibility bounds around each estimate.

7 Stover J, Brown T, Marston M. Updates to the Spectrum/Estimation and Projection Package (EPP) model to estimate HIV trends for adults and children (2012) *Sex Trans Infect* 2012;88:i11-ii16. doi:10.1136/sextrans-2012-050640

8 Futures Institute, AIM: A Computer Program for Making HIV/AIDS Projections and Examining The Demographic and Social Impacts of AIDS, Glastonbury, CT: Futures Institute, January 2014.

9 Futures Institute, AIM: A Computer Program for Making HIV/AIDS Projections and Examining The Demographic and Social Impacts of AIDS, Glastonbury, CT: Futures Institute, January 2014.

10 Futures Institute, AIM: A Computer Program for Making HIV/AIDS Projections and Examining The Demographic and Social Impacts of AIDS, Glastonbury, CT: Futures Institute, January 2014.

11 Rollins N, Mahy M, Becquet R, Kuhn L, Creek T, Mofenson L. Estimates of peripartum and postnatal mother-to-child transmission probabilities of HIV for use in Spectrum and other population-based models *Sex Trans Infect* 2012;88:i44-i51.

To measure the impact of treatment in terms of lives saved, the spectrum model compares this scenario to a hypothetical situation in which no one is placed on ART. The difference in the number of AIDS deaths between the two projections is the estimated impact of treatment. A similar approach was used to measure the impact of PMTCT scale-up.

The downward revision regarding the children's data in the new HIV estimates is due to global changes in the methods of how the number of children living with HIV is calculated and the adjustment has also been applied to estimates for earlier years. There are two primary changes in the calculations that have led to the downward revision, which are new research on the probability of a mother transmitting to her child and newly-available data on the age at which children initiated ART.

Unlike in 2014, when two sets of projections were prepared separately for national and regional projections, this year a single set of regional projections were prepared. The Regional estimates have been aggregated to produce national estimates, and also used to disaggregate the regional indicators to the county levels.

County estimates of key indicators were prepared by disaggregating the National indicators, first to the former province level, and then disaggregating the provincial total to the Counties within each former province. Separate Spectrum files were prepared for each province and prevalence trends were fit to surveillance and survey data. Population projections for each province were based on total fertility rates and mortality indicators from KDHS and adjusted to match census estimates by county.

For each of the key indicators the National estimates were distributed to each province on the basis of that province's proportion of the total.

Estimates of prevalence by County were prepared by examining surveillance and survey cluster data from 2003 to 2015. For each County the prevalence trend was determined by one of five options: 1) overall average across all data points, 2) a linear trend fit to all data points, 3) the most recent value, 4) the latest KAIS estimate or 5) the latest KDHS estimate. The prevalence estimate for 2015 for each County was multiplied by the population 15-49 in the County to estimate the number of adults living with HIV aged 15-49. The number of adults living with HIV aged 15+ in each County was adjusted so that the total across all Counties in a province would equal the provincial total. Values for other indicators were first distributed by County according to the number of HIV+ adults and then adjusted to match the county totals.

## Results

Table I shows the results for key indicators for 2015. These estimates are similar to those produced in previous years.

**Table I. National HIV estimates for 2015**

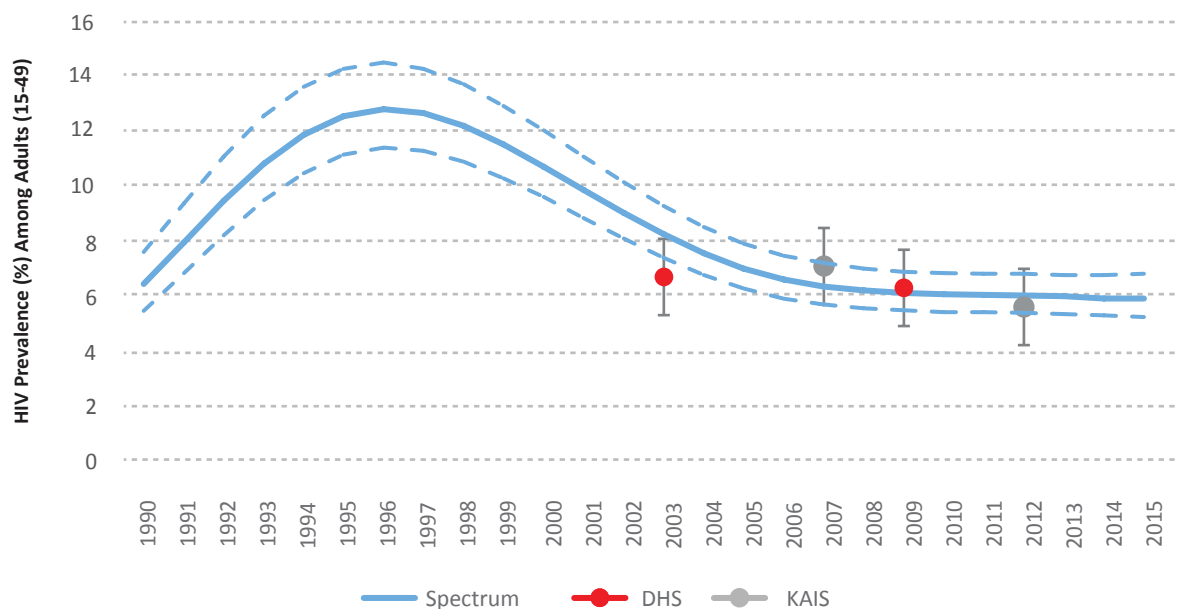
Indicator	2015
People living with HIV (all ages)	1.5 (1.3 - 1.7) million
Annual new HIV infections (all ages)	77,600 (58,533 - 111,870)
Annual AIDS-related deaths (all ages)	35,800 (27,000-47,000)
HIV prevalence (adults aged 15-49)	5.91% (5.23-6.84 %)
HIV incidence (adults 15-49)	0.35% (0.26-0.51%)
Adult 15+ living with HIV	1,420,000 (1,250,000-1,620,000)
Annual new HIV infections (Adult 15+)	71,000 (54,000-101,000)
Annual AIDS-related deaths (Adult 15+)	30,800 (23,300-40,500)
Adult 15+ need for ART	1,240,000 (1,110,000-1,400,000)
Children (0-14 years) living with HIV	98,200 (82,200-117,300)
Annual new HIV infections (Children 0-14)	6,610 (4,080-9,910)
Annual AIDS-related deaths (Children 0-14)	5,000 (3,510-6,760)
Children (0-14 years) need for ART	93,100 (79,600-110,000)
HIV prevalence (young adults 15-24); male	2.26 (1.64-3.19)
HIV prevalence (young adults 15-24); female	3.97 (3.26-5.12)
Annual new HIV infections (young adults 15-24); male	12,500 (8,270-19,000)
Annual new HIV infections (young adults 15-24); female	23,300 (17,400-33,000)
Annual AIDS deaths (young adults 15-24)	3,850 (2,650-5,750)
Adolescents living with HIV (10-19)	133,000 (114,000-162,000)
Annual new HIV infections (adolescents 10-19)	18,000 (10,500-29,500)
Annual AIDS deaths (adolescents 10-19)	2,790 (2,110 - 3,710)
Mothers needing PMTCT	79,500 (70,100 - 91,200)
EMTCT rate	8.3%

## Adult HIV Prevalence

National adult HIV prevalence is the estimated percent population of the country, aged between 15-49 years, positive for HIV infection within a particular time period. Adult HIV prevalence is a significant indicator for determining the level and spread of the HIV epidemic amongst the adult population of the country.

The national adult HIV prevalence trend indicates that the HIV prevalence peaked at a level of 10-11% in the mid-1990s followed by a progressive decline in the subsequent years. The HIV prevalence was about 6% in 2006 and has been relatively stable at that level during the following years (Figure 1).

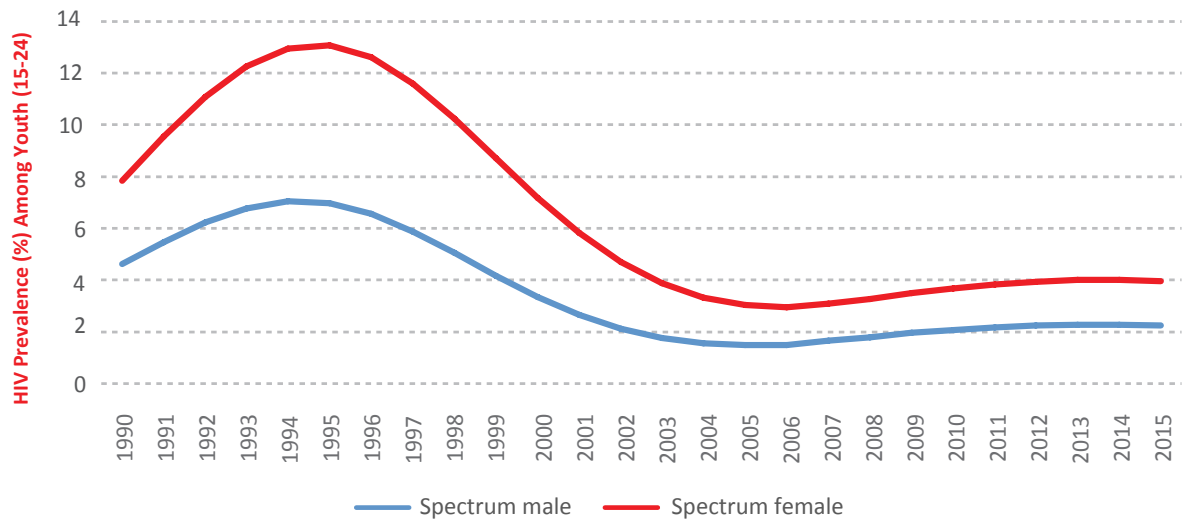
Figure 1. HIV Prevalence Trend for Adults (15-49 years)



## Youth HIV Prevalence

Comparable to the adult prevalence, the national HIV prevalence trend among youth shows that the HIV prevalence peaked at a level of 12-13% among females and 6-7% among males in mid-1990s. The HIV prevalence declined to about 3% among females and 1.5% among males in 2006 and has stabilized since then (Figure 2).

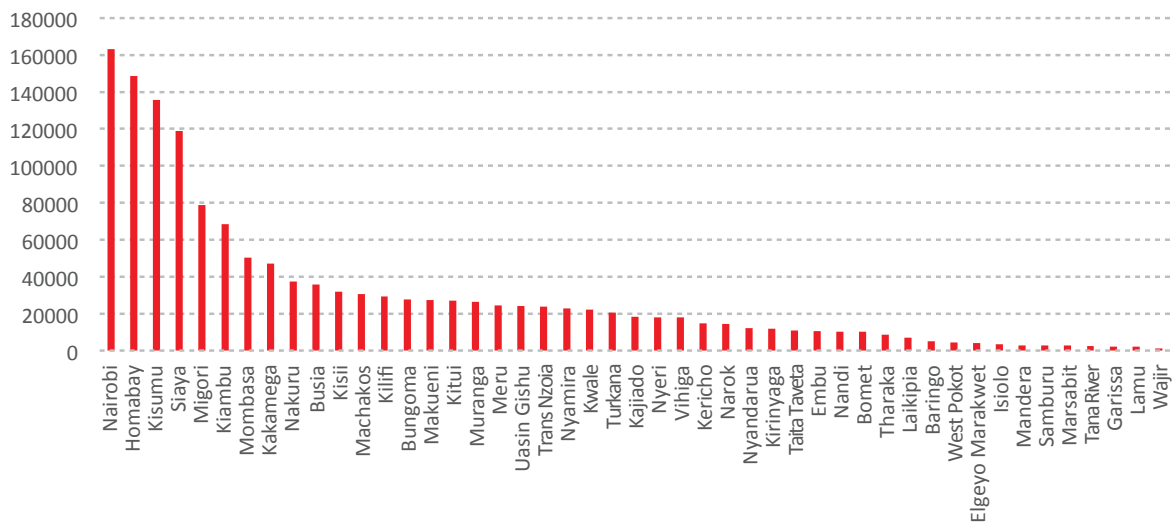
Figure 2. HIV Prevalence Trend for Youth (15-24 years)



### Adults aged 15+ years living with HIV

Total number of People Living with HIV in Kenya were 1,517,705 in 2015. Of those living with HIV, about 65% live in eleven of the 47 counties, namely, Nairobi (163,287), Homa Bay (148,657), Kisumu (135,703), Siaya (118,877), Migori (78,621), Kiambu (68,349), Mombasa (50,328), Kakamega (46,939), Nakuru (37,324), Busia (35,588) and Kisii (31,987). Figure 3 shows the number of adults aged 15+ years living with HIV.

Figure 3. Adults aged 15+ living with HIV across the counties



## Youth aged 15-24 years living with HIV

Of the total number of people living with HIV in Kenya, 268,588 (18%) were among youth aged 15-24 years in 2015. More than (55%) of those youth living with HIV from six high HIV prevalence counties in Kenya, namely Homa Bay (34,812), Kisumu (31,779), Siaya (27,838), Migori (18,411) Nairobi (23,671) and Mombasa (10,105). Figure 4 shows the number of youth aged 15-24 years living with HIV.

Figure 4. Youth aged 15-24 years living with HIV across the counties



## Children 0-14 years living with HIV

Of the total number of people living with HIV, 98,169 (6%) were children 0-14 years of age in 2015. About half of the children living with HIV were from 8 out of the 47 counties, namely, Homa Bay (9,420), Kisumu (8,600), Nairobi (8,223), Siaya (7,533), Migori (4,982), Mombasa (3,982), Kakamega (3,905) and Nakuru (3,893). Figure 5 shows the number of children aged 0-14 years living with HIV.

Figure 5. Children aged 0-14 years living with HIV across the counties

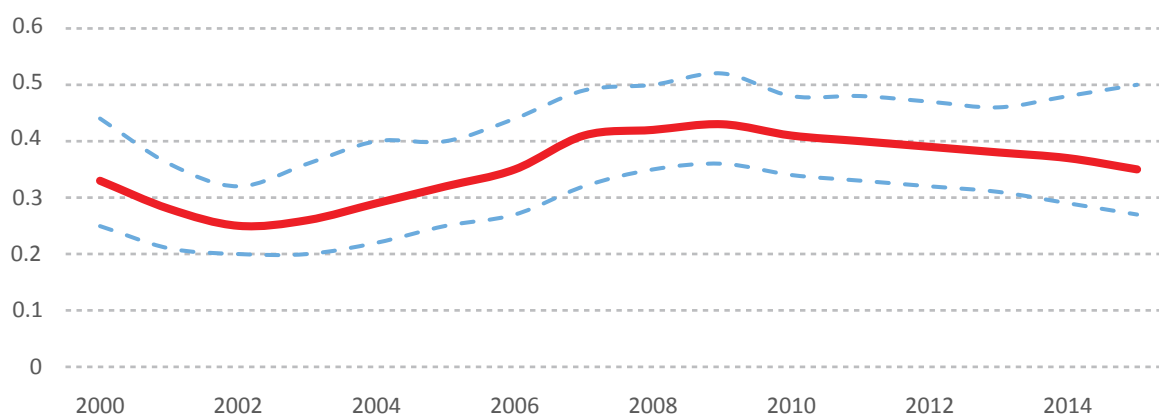


## Annual New HIV Infections among Adults aged 15+ years

Prevalence trends are used to estimate National adult incidence over time by incorporating the effects of AIDS mortality, non-AIDS mortality and population aging. Those calculations indicate that the annual number of new HIV infections increased steadily to a peak in the mid-1990s before declining sharply to about 100,000 per year by 2004 and then declining again the last two years from approximately 85,000 to 78,000 in 2015 (Figure 6).

This trend implies that HIV incidence has declined from 0.62% (0.57 - 0.69%) in 2003 to about 0.35% (0.26 - 0.51%) in 2015. Since 2007, new HIV infections stabilized at a level of about 90,000 per year.

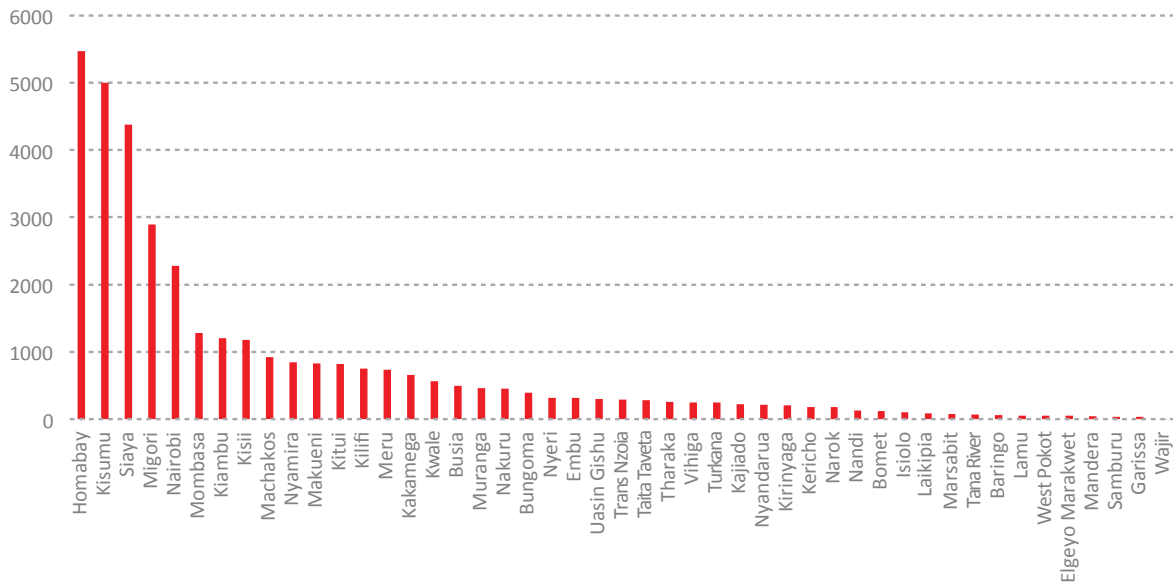
Figure 6. Trend of Adult 15+ HIV Incidence Rates



## Annual New HIV Infections among Youth Aged 15-24 years

Total annual new HIV infections in Kenya were 77,648, with young people contributing 35,776 (46%). New HIV infections among the youth are concentrated in the high HIV prevalence counties in Kenya. Counties with high HIV infections were Homa Bay (5,473), Kisumu (4,996), Siaya (4,377), Migori (2,895) Nairobi (2,282), Mombasa (1,283), Kiambu 1,199 and Kisii (1,178) contribute to 66% of new infections among youth aged 15-24 years in 2015. Figure 7 shows the annual new HIV infections among youth aged 15-24 years across the counties.

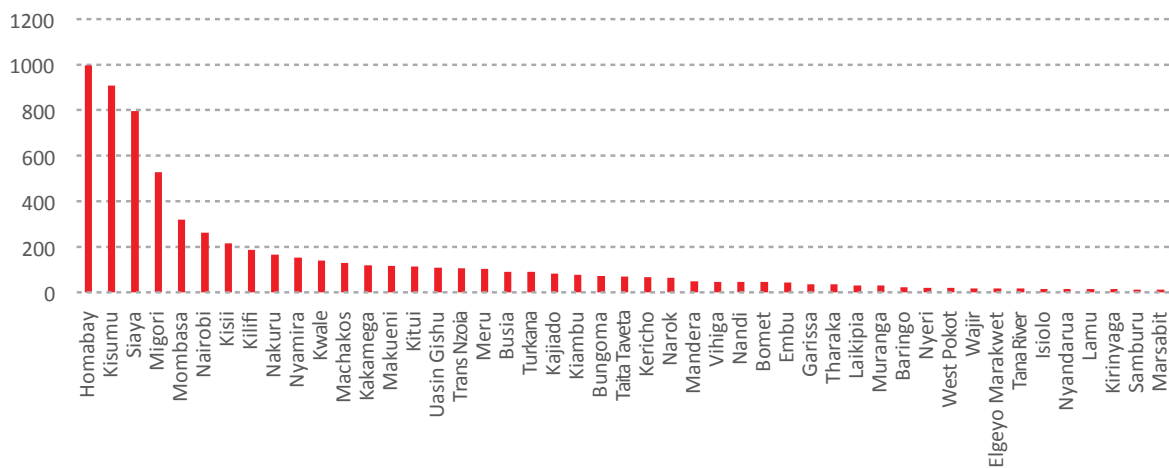
Figure 7. Annual New HIV Infections among Youth Aged 15-24 Years across the Counties



## Annual New HIV Infections among Children Aged 0-14 years

There were 6,613 new HIV infections among children aged 0-14 years in Kenya which was about 9% of all new HIV infections in 2015. These new HIV infections among the children were concentrated in the High prevalent counties in Kenya. Counties with high HIV infections were Homa Bay (996), Kisumu (909), Siaya (796), Migori (527), Mombasa (319), Nairobi (262) and Kisii (214) contribute to 61 % of new infections among children aged 0-14 years in 2015. Figure 8 shows the annual new HIV infections among children aged 0-14 years across the counties.

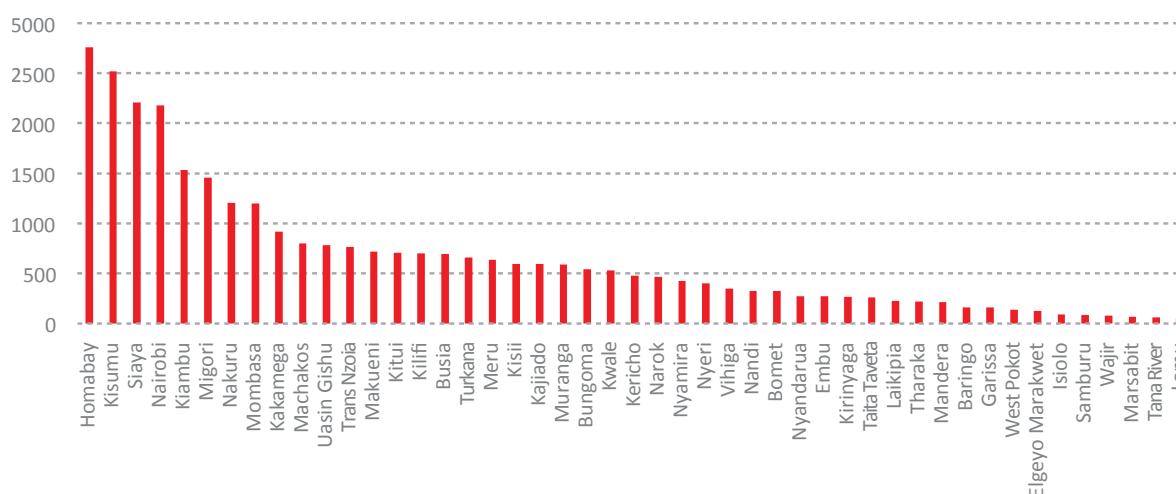
Figure 8. Annual New HIV Infections among Children Aged 0-14 Years across the Counties



## Annual AIDS-related Deaths among Adults Aged 15+

Annual AIDS-related deaths in Kenya were 35,822 in 2015. Of the annual deaths, 30,817 (86%) were adults aged 15 years and over. About half of these deaths (52%) occurred in nine of the 47 counties, namely, Homa Bay (2,759), Kisumu (2,518), Siaya (2,206), Nairobi (2,177), Kiambu (1,530), Migori (1,459), Nakuru (1,204), Mombasa (1,199) and Kakamega (916). Figure 9 shows the number of annual AIDS-related deaths among adults aged 15+ across the counties.

Figure 9. Annual AIDS-related Deaths among Adults aged 15+ across the Counties



## Annual AIDS-related Deaths among Youth Aged 15-24 years

There were 3,850 AIDS-related deaths among youth aged 15-24 years in Kenya which was about 11% of all total AIDS-related deaths in 2015. More than half (56%) of these deaths occurred in nine of the 47 counties, namely, Homa Bay (414), Kisumu (378), Siaya (331), Nairobi (267), Migori (219), Mombasa (159), Nakuru (137), Kakamega (135) and Busia (102). Figure 10 shows the number of annual AIDS-related deaths among youth aged 15-24 years across the counties.

Figure 10. Annual AIDS-related Deaths among Youth Aged 15-24 years across the Counties



## Annual AIDS-related Deaths among Children Aged 0-14 years

There were 5,006 AIDS-related deaths among children aged 0-14 years in Kenya which was about 14% of all total AIDS-related deaths in 2015. Half of these deaths occurred in seven of the 47 counties, namely, Homa Bay (548), Kisumu (501), Siaya (439), Migori (290), Nairobi (260), Mombasa (253) and Nakuru (202). Figure 11 shows the number of annual AIDS-related deaths among children aged 0-14 years across the counties.

Figure 11. Annual AIDS-related Deaths among Youth Aged 15-24 years across the Counties



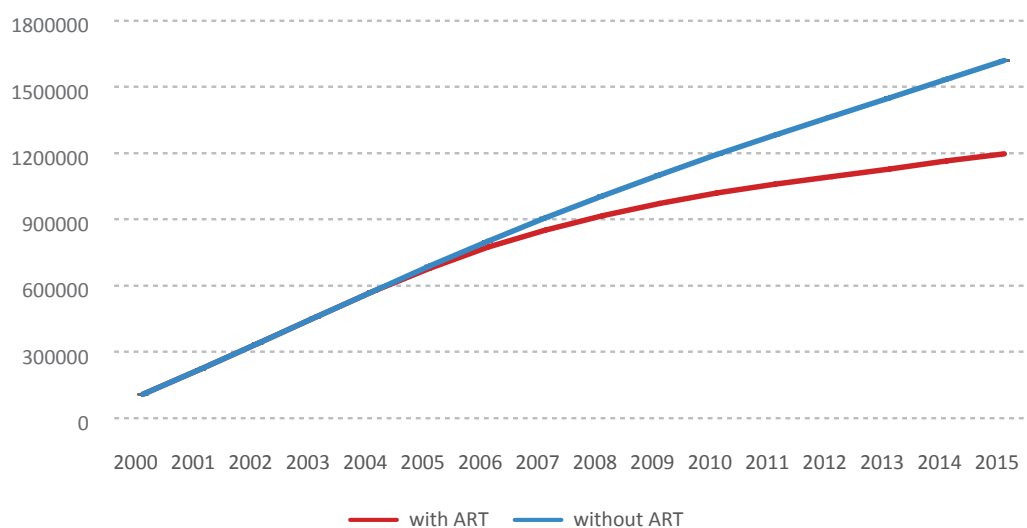
### Need for Treatment

The number of adults in need of ART has almost doubled from 620,439 in 2010 to 1,245,107 in 2015. Correspondingly, the ART need increased among children aged 0-14 years, from 72,297 to 93,056. Among HIV-positive pregnant women, about 79,477 were in need of PMTCT in 2015, a slight increase from 72,451 in 2010. The EMTCT rate (final transmission rate including breastfeeding), has declined by half from 17% in 2010 to 8% in 2015.

### Impact

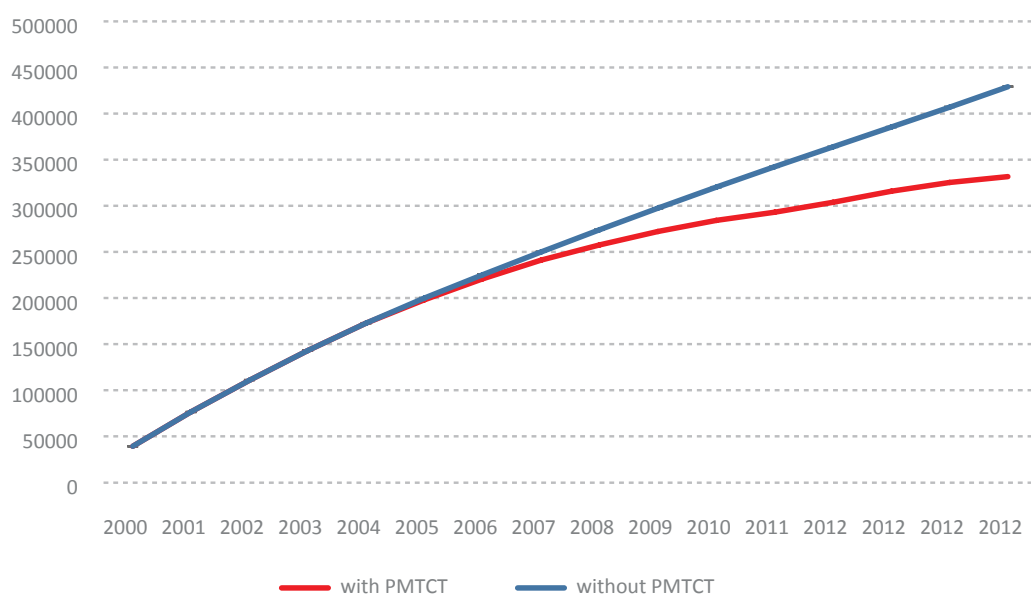
In total, there have been approximately 423,000 AIDS deaths averted since the scale-up of ART in 2004 through to 2015. As indicated in Figure 12, cumulatively an estimated 2 million AIDS deaths have been averted from 2000 to 2015 due to the scale up of ART.

Figure 12. Cumulative HIV Related Deaths Averted by ART



The program to prevent mother-to-child transmission of HIV has been scaling up rapidly in the past few years. 59,214 pregnant women living with HIV in 2015 received received ARV prophylaxis to prevent HIV transmission to their new born children. This represents about 75% of those pregnant women living with HIV who were in need of HIV prophylaxis. As a result of the scale up of this program since 2004, about 97,400 child HIV infections have been averted through 2015 due to PMTC (Figure 13).

Figure 13. Cumulative number of Child Infections Averted by PMTCT



## Annex Table 1, 2, and 3 below show the full set of indicators.

### County HIV Estimates

County estimates are summarized in Table 2. HIV epidemic is geographically diverse across counties, with the incidence rates for 2015 ranging from 2.0% in Homa Bay County in former Nyanza region to approximately 0.01% in Wajir County in former North Eastern region.

Table 2. County HIV Estimates for 2015

Countries	TOTAL		ADULTS (15+)					CHILDREN (0-14)				
	Population	People Living with LHIV	HIV Prevalence	Living with HIV	New HIV infections annually	HIV-related Deaths	Need for ART	Living with HIV	New HIV infections annually	HIV-related Deaths	Need for ART	Need for PMTCT
Kenya	44,156,577	1,517,707	5.91	1,419,537	71,034	30,817	1,245,106	98,170	6,613	5,004	93,056	79,475
Nairobi	4,232,087	171,510	6.1	163,287	4,719	2,177	148,999	8,223	262	260	8,336	7,008
Mombasa	1,145,259	54,310	7.5	50,328	2,426	1,199	44,756	3,982	319	253	3,670	3,146
Kwale	792,698	23,902	5.9	22,149	1,068	528	19,697	1,752	140	111	1,615	1,384
Kilifi	1,353,042	31,630	4.5	29,311	1,413	698	26,065	2,319	186	147	2,138	1,832
Lamu	123,842	2,319	3.5	2,149	104	51	1,911	170	14	11	157	134
Taita Taveta	347,195	11,788	6.3	10,924	527	260	9,714	864	69	55	797	683
Tana River	292,885	2,792	1.9	2,587	125	62	2,301	205	16	13	189	162
Garissa	423,931	2,534	0.9	2,159	55	162	1,923	375	36	31	271	143
Mandera	697,922	3,385	0.8	2,884	73	216	2,570	501	48	42	362	190
Wajir	450,385	1,278	0.4	1,089	28	82	970	189	18	16	137	72
Embu	554,079	11,141	3.3	10,430	596	273	9,224	711	44	30	691	487
Marsabit	312,698	2,841	1.4	2,659	152	70	2,352	181	11	8	176	124
Meru	1,455,849	26,019	2.9	24,358	1,392	637	21,541	1,661	102	69	1,613	1,137
Isiolo	153,875	3,616	3.8	3,385	193	89	2,994	231	14	10	224	158
Makueni	949,298	29,370	5.1	27,495	1,571	719	24,315	1,875	115	78	1,820	1,283
Kitui	1,086,599	28,918	4.4	27,072	1,547	708	23,941	1,846	113	77	1,792	1,263
Machakos	1,179,215	32,611	4.5	30,529	1,744	798	26,998	2,082	128	87	2,021	1,424
Tharaka	392,094	9,093	3.9	8,512	486	223	7,528	580	36	24	564	397
Nyeri	782,864	18,662	3.4	17,973	1,124	402	15,763	689	20	20	1,020	514
Nyandarua	673,000	12,754	3	12,283	768	275	10,772	471	14	14	663	351
Kiambu	1,831,800	70,971	5.6	68,349	4,273	1,530	59,944	2,621	76	77	1,747	1,955
Muranga	1,063,721	27,245	4.2	26,238	1,640	587	23,011	1,006	29	30	1,011	751
Kirinyaga	596,030	12,323	3.1	11,868	742	266	10,408	455	13	13	629	340
West Pokot	626,832	4,790	1.5	4,338	93	140	3,948	452	19	23	383	268
Turkana	1,045,579	22,523	4	20,396	438	658	18,563	2,127	90	110	1,802	1,261

Table 2. County HIV Estimates for 2015 continued...

Counties	Adult ART coverage		Children ART coverage		Adult (15-49) PREVALENCE		PROPHYLAXIS		ADOLESCENTS (10-19)			YOUNG ADULTS (15-24)		
	Adults receiving ART	Adults ART coverage (%)	Children receiving ART	Children ART Coverage (%)	Male	Female	Maternal Prophylaxis	Coverage	Living with HIV	New HIV infections annually	HIV-related Deaths	Living with HIV	New HIV infections annually	HIV-related Deaths
Kenya	826,097	66%	71,547	77%	5.5	6.3	59,214	75%	133,455	18,004	2,793	268,586	35,776	3,853
Nairobi	118,022	79%	6,125	73%	4.7	7.6	6,798	97%	10,758	1,035	175	23,671	2,282	267
Mombasa	36,657	82%	2,616	71%	4.6	10.7	2,048	65%	5,005	681	120	10,105	1,283	159
Kwale	6,322	32%	654	40%	3.5	8.3	737	53%	2,203	300	53	4,447	565	70
Kilifi	16,395	63%	1,733	81%	2.7	6.4	1,502	82%	2,915	397	70	5,885	747	92
Lamu	911	48%	125	80%	2.1	4.9	94	70%	214	29	5	432	55	7
Taita Taveta	3,945	41%	367	46%	3.8	8.9	407	60%	1,086	148	26	2,193	278	34
Tana River	815	35%	91	48%	1.2	2.7	106	66%	257	35	6	519	66	8
Garissa	871	45%	58	21%	0.4	1.6	78	55%	364	17	19	489	31	21
Mandera	62	2%	2	1%	0.3	1.3	12	6%	487	23	26	653	42	28
Wajir	21	2%	1	1%	0.2	0.8	2	3%	184	9	10	246	16	10
Embu	6,275	68%	611	88%	2	4.5	418	86%	1,087	167	20	2,215	315	30
Marsabit	1,344	57%	127	72%	0.9	2	105	85%	277	43	5	565	80	8
Meru	13,751	64%	1,511	94%	1.7	3.9	1,104	97%	2,538	391	46	5,172	736	70
Isiolo	1,594	53%	190	85%	2.2	5.2	110	70%	353	54	6	719	102	10
Makueni	13,719	56%	1,527	84%	3	6.9	673	52%	2,865	441	52	5,838	831	79
Kitui	14,076	59%	1,747	97%	2.6	6	763	60%	2,821	435	51	5,748	818	78
Machakos	18,397	68%	1,873	93%	2.7	6.1	1,019	72%	3,181	490	58	6,482	923	88
Tharaka	5,679	75%	524	93%	2.3	5.3	266	67%	887	137	16	1,807	257	24
Nyeri	13,837	88%	934	92%	1.8	5	508	99%	795	93	15	1,854	315	24
Nyandarua	5,669	53%	607	92%	1.6	4.4	337	96%	543	63	10	1,267	216	17
Kiambu	23,887	40%	1,600	92%	2.9	8.2	1,951	100%	3,022	353	57	7,051	1,199	93
Muranga	10,007	43%	926	92%	2.2	6.2	465	62%	1,160	135	22	2,707	460	36
Kirinyaga	8,090	78%	576	92%	1.6	4.6	318	94%	525	61	10	1,224	208	16
West Pokot	1,407	36%	137	36%	1.3	2.2	148	55%	470	28	15	717	53	16
Turkana	5,019	27%	606	34%	3.4	5.7	578	46%	2,210	133	69	3,370	249	75

Countries	TOTAL		ADULTS (15+)					CHILDREN (0-14)				Need for PMTCT
	Population	People Living with LHIV	HIV Prevalence	Living with HIV	New HIV infections annually	HIV-related Deaths	Need for ART	Living with HIV	New HIV infections annually	HIV-related Deaths	Need for ART	
Trans Nzoia	1,001,005	26,164	5.2	23,693	508	765	21,564	2,471	105	128	2,094	1,465
Narok	1,039,837	15,890	3.1	14,390	309	464	13,097	1,501	64	78	1,272	890
Nandi	920,445	11,215	2.4	10,155	218	328	9,243	1,059	45	55	897	628
Nakuru	1,959,880	41,217	4.1	37,324	801	1,204	33,971	3,893	165	202	3,298	2,307
Elgeyo Marakwet	452,360	4,381	1.9	3,968		128	3,611	414	18	21	351	245
Laikipia	487,934	7,770	3.2	7,036	151	227	6,404	734	31	38	622	435
Kericho	926,903	16,382	3.5	14,835	318	479	13,502	1,547	66	80	1,311	917
Kajiado	840,127	20,268	4.7	18,354	394	592	16,705	1,914	81	99	1,622	1,135
Bomet	885,163	11,144	2.5	10,092	217	326	9,185	1,052	45	55	892	624
Baringo	679,256	5,586	1.6	5,059	109	163	4,604	528	22	27	447	313
Samburu	273,804	2,965	2.2	2,685	58	87	2,444	280	12	15	237	166
Uasin Gishu	1,092,803	26,771	4.7	24,243	520	782	22,065	2,528	107	131	2,142	1,499
Bungoma	1,526,641	30,091	2.8	27,780	1,145	542	25,136	2,311	71	105	1,942	1,508
Kakamega	1,843,320	50,844	4	46,939	1,935	916	42,472	3,905	119	177	3,281	2,548
Busia	825,931	38,549	6.7	35,588	1,467	695	32,202	2,961	90	134	2,488	1,932
Vihiga	615,734	19,381	4.7	17,892	737	349	16,189	1,489	45	68	1,251	971
Siaya	963,007	126,411	24.8	118,877	7,700	2,206	100,218	7,533	796	439	7,770	7,846
Kisii	1,317,407	34,014	4.7	31,987	2,072	594	26,966	2,027	214	118	2,091	2,111
Migori	1,048,602	83,603	14.3	78,621	5,093	1,459	66,280	4,982	527	290	5,139	5,189
Kisumu	1,107,755	144,303	19.9	135,703	8,790	2,518	114,403	8,600	909	501	8,870	8,957
Homa Bay	1,101,901	158,077	26	148,657	9,629	2,759	125,323	9,420	996	548	9,716	9,812
Nyamira	683,979	24,357	6.4	22,905	1,484	425	19,310	1,452	153	84	1,497	1,512

Counties	Adult ART coverage		Children ART coverage		Adult (15-49) PREVALENCE		PROPHYLAXIS		ADOLESCENTS (10-19)			YOUNG ADULTS (15-24)		
	Adults receiving ART	Adults ART coverage (%)	Children receiving ART	Children ART Coverage (%)	Male	Female	Maternal Prophylaxis	Coverage	Living with HIV	New HIV infections annually	HIV-related Deaths	Living with HIV	New HIV infections annually	HIV-related Deaths
Trans Nzoia	14,584	68%	1,884	90%	4.4	7.4	850	58%	2,567	154	80	3,915	289	87
Narok	5,814	44%	623	49%	2.6	4.3	689	77%	1,559	94	49	2,378	175	53
Nandi	8,305	90%	843	94%	2.1	3.5	621	99%	1,100	66	34	1,678	124	37
Nakuru	25,903	76%	2,299	70%	3.5	5.8	2,291	99%	4,044	243	126	6,167	455	137
Elgeyo Marakwet	1,836	51%	174	50%	1.7	2.8	245	100%	430	26	13	656	48	15
Laikipia	6,189	97%	618	99%	2.8	4.6	399	92%	762	46	24	1,163	86	26
Kericho	12,017	89%	1,308	100%	2.9	4.9	813	89%	1,608	97	50	2,451	181	54
Kajiado	6,875	41%	573	35%	4	6.6	1,013	89%	1,989	119	62	3,033	224	67
Bomet	7,353	80%	738	83%	2.1	3.5	534	86%	1,094	66	34	1,668	123	37
Baringo	2,668	58%	277	62%	1.4	2.3	278	89%	548	33	17	836	62	19
Samburu	827	34%	162	68%	1.8	3.1	93	56%	291	17	9	444	33	10
Uasin Gishu	21,912	99%	1,713	80%	4	6.7	1,022	68%	2,627	158	82	4,006	295	89
Bungoma	17,526	70%	1,778	92%	2.1	3.4	1,494	99%	2,883	120	85	4,143	388	80
Kakamega	29,948	71%	2,988	91%	3	4.9	2,503	98%	4,871	203	143	7,001	656	135
Busia	25,766	80%	2,047	82%	5	8.3	1,701	88%	3,693	154	108	5,308	497	102
Vihiga	10,773	67%	1,248	100%	3.5	5.8	773	80%	1,857	77	54	2,669	250	51
Siaya	62,901	63%	5,803	75%	22.8	26.4	4,500	57%	12,253	2,355	190	27,838	4,377	331
Kisii	21,215	79%	1,974	94%	4.3	5	1,530	72%	3,297	634	51	7,491	1,178	89
Migori	50,390	76%	4,537	88%	13.1	15.2	4,647	90%	8,104	1,557	126	18,411	2,895	219
Kisumu	77,561	68%	6,286	71%	18.3	21.2	5,339	60%	13,988	2,688	217	31,779	4,996	378
Homa Bay	78,466	63%	7,341	76%	24	27.8	6,639	68%	15,323	2,945	238	34,812	5,473	414
Nyamira	10,496	54%	1,065	71%	5.9	6.9	693	46%	2,361	454	37	5,364	843	64

## Annexes

Annex Table I. Indicators for Adults 15+ (2000-2015) Kenya

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>HIV population</b>																
Total	1,552,300	1,477,221	1,396,232	1,317,157	1,244,712	1,189,640	1,156,059	1,151,551	1,159,959	1,183,315	1,214,341	1,252,541	1,295,934	1,338,767	1,379,686	1,419,536
Male	696,642	659,073	619,349	580,993	546,095	519,342	502,522	498,847	501,302	510,568	523,306	538,968	554,103	566,837	578,082	589,293
Female	855,658	818,148	776,883	736,163	698,617	670,298	653,537	652,704	658,657	672,746	691,035	713,573	741,831	771,930	801,603	830,243
Prevalence	9.52	8.78	8.06	7.38	6.77	6.28	5.93	5.73	5.61	5.56	5.54	5.54	5.57	5.58	5.59	5.58
<b>New HIV infections</b>																
Total	40,702	35,112	33,002	36,238	40,757	46,610	54,277	65,662	69,128	73,128	70,739	72,354	72,354	72,644	72,337	71,034
Male	17,843	15,404	14,492	15,912	17,881	20,429	23,751	28,682	30,203	31,963	30,942	31,669	31,690	31,839	31,725	31,167
Female	22,860	19,708	18,510	20,326	22,876	26,182	30,526	36,980	38,926	41,165	39,796	40,685	40,664	40,805	40,611	39,867
Incidence	0.29	0.24	0.22	0.23	0.25	0.27	0.31	0.36	0.37	0.37	0.35	0.35	0.34	0.33	0.32	0.3
<b>Annual AIDS deaths among those on ART</b>																
Total	97,951	104,635	109,162	111,476	110,614	100,467	87,899	71,266	62,531	52,025	42,156	36,442	30,779	30,987	31,833	30,817
Male	46,885	49,644	51,338	51,974	51,190	46,353	40,440	32,814	28,618	23,842	19,476	17,252	17,614	19,891	20,976	20,133
Female	51,066	54,991	57,824	59,501	59,424	54,114	47,459	38,452	33,913	28,184	22,680	19,190	13,165	11,096	10,857	10,684
AIDS 45q15	0.24217	0.2525	0.25816	0.25928	0.25408	0.23044	0.20172	0.16389	0.14208	0.11622	0.0919	0.07679	0.06216	0.05992	0.05878	0.05425
<b>Annual AIDS deaths among those not on ART</b>																
Total	0	0	0	0	376	2,271	3,842	6,030	6,027	7,343	8,112	8,562	8,722	7,482	7,560	8,958
Male	0	0	0	0	199	1,203	2,040	3,196	3,196	3,885	4,219	4,231	3,397	3,044	3,302	4,148
Female	0	0	0	0	177	1,068	1,803	2,835	2,830	3,458	3,893	4,331	5,325	4,438	4,258	4,810
<b>Annual AIDS deaths among those not on ART</b>																
Total	97,951	104,635	109,162	111,476	110,238	98,196	84,056	65,236	56,504	44,682	34,044	27,880	22,057	23,506	24,273	21,859
Male	46,885	49,644	51,338	51,974	50,990	45,149	38,400	29,618	25,422	19,956	15,257	13,021	14,217	16,847	17,674	15,985
Female	51,066	54,991	57,824	59,501	59,247	53,046	45,656	35,618	31,082	24,726	18,787	14,859	7,841	6,659	6,599	5,874

**Annex Table 2. Indicators for children Kenya**

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
<b>HIV population</b>																
Total	173,519	179,598	183,421	185,048	184,270	180,601	174,741	167,523	158,104	149,309	139,027	126,709	119,004	113,140	105,424	98,169
Male	87,691	90,744	92,656	93,460	93,053	91,186	88,225	84,599	79,860	75,437	70,264	64,078	60,237	57,325	53,479	49,870
Female	85,828	88,855	90,765	91,587	91,217	89,415	86,515	82,924	78,244	73,872	68,763	62,631	58,767	55,816	51,945	48,299
<b>New HIV infections</b>																
Total	39,449	37,152	34,609	32,111	29,301	25,537	22,602	20,732	15,865	14,814	12,358	8,546	10,949	12,121	8,975	6,613
Male	19,991	18,828	17,539	16,272	14,847	12,938	11,449	10,499	8,032	7,500	6,257	4,328	5,545	6,138	4,549	3,352
Female	19,457	18,325	17,070	15,839	14,454	12,599	11,153	10,232	7,832	7,314	6,102	4,218	5,404	5,983	4,426	3,261
<b>Annual AIDS deaths</b>																
Total	22,939	22,671	22,083	21,261	20,161	18,435	16,752	15,344	11,895	10,197	9,158	7,988	7,202	6,659	5,987	5,006
Male	11,615	11,478	11,178	10,760	10,202	9,326	8,462	7,729	5,980	5,123	4,590	3,985	3,578	3,302	2,961	2,456
Female	11,324	11,194	10,905	10,501	9,959	9,109	8,290	7,615	5,915	5,074	4,568	4,004	3,624	3,357	3,026	2,550

**Annex Table 3. Treatment Indicators Kenya**

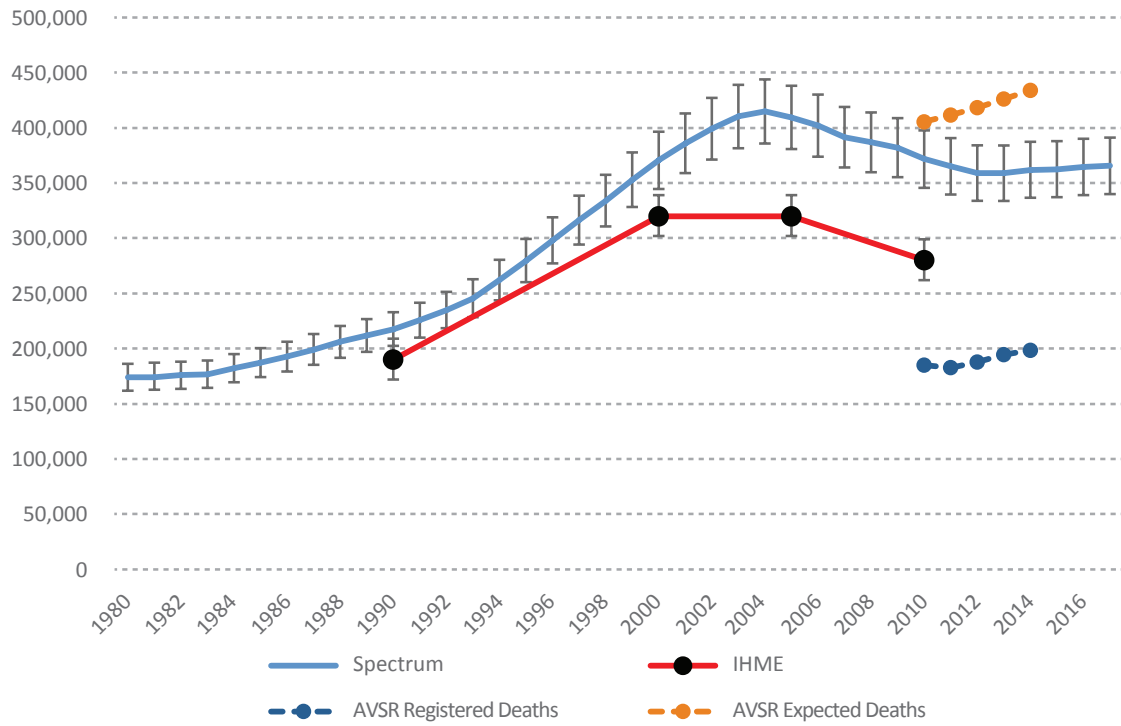
	2000	2001	2002	2003	2004	2005	2006	2007
<b>Total need for ART (15+)</b>								
Total	182,229	192,961	199,078	200,751	199,654	204,106	215,980	347,095
Male	85,399	89,605	91,655	91,692	90,499	91,745	96,320	153,510
Female	96,829	103,355	107,424	109,059	109,155	112,360	119,660	193,585
<b>Total receiving ART (15+)</b>								
Male								
Number	0	0	0	2,749	10,981	23,800	52,971	74,023
Percent	0	0	0	3	12.1	25.9	55	48.2
Female								
Number	0	0	0	3,499	13,979	30,293	67,418	94,211
Percent	0	0	0	3.2	12.8	27	56.3	48.7
<b>ART coverage of eligible population (15+)</b>								
Total	0	0	0	3.11	12.5	26.5	55.74	48.47
Male	0	0	0	3	12.13	25.94	54.99	48.22
Female	0	0	0	3.21	12.81	26.96	56.34	48.67
<b>ART coverage of all HIV+ adults (15+)</b>								
Total	0	0	0	0.49	2.05	4.61	10.43	14.56
Male	0	0	0	0.49	2.06	4.66	10.58	14.8
Female	0	0	0	0.49	2.04	4.58	10.32	14.37
<b>HIV+ adults (15+)</b>								
Total	1,514,760.56	1,436,726.46	1,356,694.26	1,280,934.54	1,217,176.28	1,172,849.53	1,153,804.84	1,155,754.79
Male	677,857.39	639,211.01	600,171.17	563,544.44	532,718.80	510,931.89	500,684.47	500,074.47
Female	836,903.17	797,515.45	756,523.08	717,390.10	684,457.47	661,917.64	653,120.37	655,680.32
Children needing cotrimoxazole (0-14)	246,381	230,584	213,647	196,718	181,123	168,046	157,476	148,985
<b>Children receiving cotrimoxazole (0-14)</b>								
Number	0	0	0	0	0	0	0	18,919
Percent	0	0	0	0	0	0	0	12.4
Total coverage for cotrimoxazole (0-14)	0	0	0	0	0	0	0	12.08
Children needing ART (0-14)	102,651	97,808	92,174	86,017	79,016	71,428	65,789	62,571
<b>Children receiving ART (0-14)</b>								
Number	0	0	0	0	0	1,977	8,333	16,668
Percent	0	0	0	0	0	2.6	12.3	26.1
ART coverage of eligible population (0-14)	0	0	0	0	0	2.77	12.67	26.64
ART coverage of all HIV+ children (0-14)	0	0	0	0	0	1.11	4.87	10.24

**Annex Table 3. Treatment Indicators Kenya (continued...)**

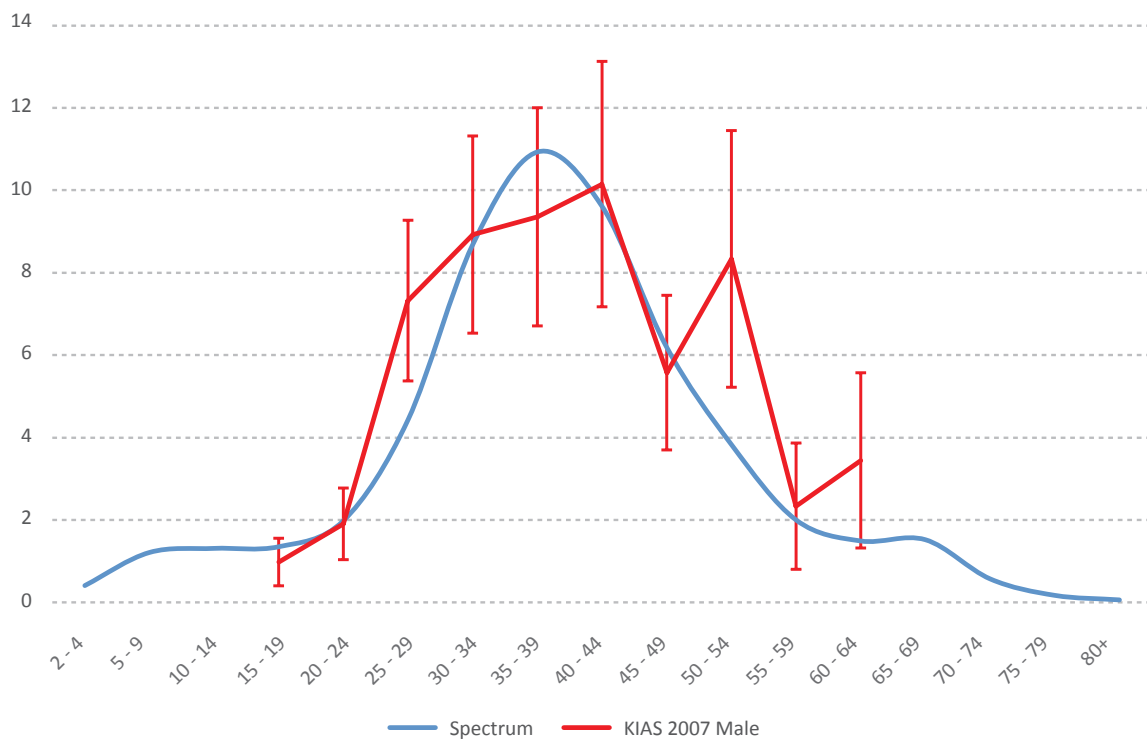
	2008	2009	2010	2011	2012	2013	2014	2015
<b>Total need for ART (15+)</b>								
Total	368,829	397,983	620,439	661,515	709,529	756,196	1,196,148	1,245,107
Male	162,429	174,665	269,803	286,087	300,691	313,017	484,640	498,010
Female	206,400	223,318	350,636	375,428	408,838	443,179	711,508	747,096
<b>Total receiving ART (15+)</b>								
<b>Male</b>								
Number	101,203	138,541	172,209	166,748	186,509	196,756	217,548	260,194
Percent	62.3	79.3	63.8	58.3	62	62.9	44.9	52.2
<b>Female</b>								
Number	128,856	177,018	224,317	323,689	362,050	399,472	471,608	560,020
Percent	62.4	79.3	64	86.2	88.6	90.1	66.3	75
<b>ART coverage of eligible population (15+)</b>								
Total	62.38	79.29	63.91	74.14	77.31	78.85	57.61	65.87
Male	62.31	79.32	63.83	58.29	62.03	62.86	44.89	52.25
Female	62.43	79.27	63.97	86.22	88.56	90.14	66.28	74.96
<b>ART coverage of all HIV+ adults (15+)</b>								
Total	19.64	26.32	32.15	38.49	41.64	43.87	49.24	57.78
Male	20	26.8	32.42	30.51	33.28	34.37	37.27	44.15
Female	19.36	25.96	31.94	44.48	47.83	50.77	57.8	67.45
<b>HIV+ adults (15+)</b>								
Total	1,171,636.69	1,198,827.85	1,233,441.04	1,274,237.54	1,317,350.36	1,359,226.25	1,399,611.08	1,440,361.70
Male	505,934.88	516,937.27	531,137.36	546,535.56	560,469.91	572,459.70	583,687.82	595,957.22
Female	665,701.81	681,890.58	702,303.69	727,701.98	756,880.45	786,766.55	815,923.26	844,404.49
Children needing cotrimoxazole (0-14)	143,097	146,214	148,848	144,128	140,820	145,833	151,048	150,441
<b>Children receiving cotrimoxazole (0-14)</b>								
Number	36,001	45,603	54,337	55,804	71,630	79,677	86,806	82,501
Percent	24.8	32.3	35.9	38.2	50.4	57.1	57.1	55
Total coverage for cotrimoxazole (0-14)	3.91	3.66	3.27	3.08	3.63	3.67	3.69	3.52
Children needing ART (0-14)	61,202	67,611	72,297	72,313	76,183	84,821	88,793	93,056
<b>Children receiving ART (0-14)</b>								
Number	20,577	28,370	36,096	48,548	55,438	60,141	66,070	73,767
Percent	33.6	46.3	48.8	68.8	74.9	76.8	72.3	85.5
ART coverage of eligible population (0-14)	33.62	41.96	49.93	67.14	72.77	70.9	74.41	79.27
ART coverage of all HIV+ children (0-14)	13.39	19.68	27.17	39.52	47.76	55.03	64.9	75.14

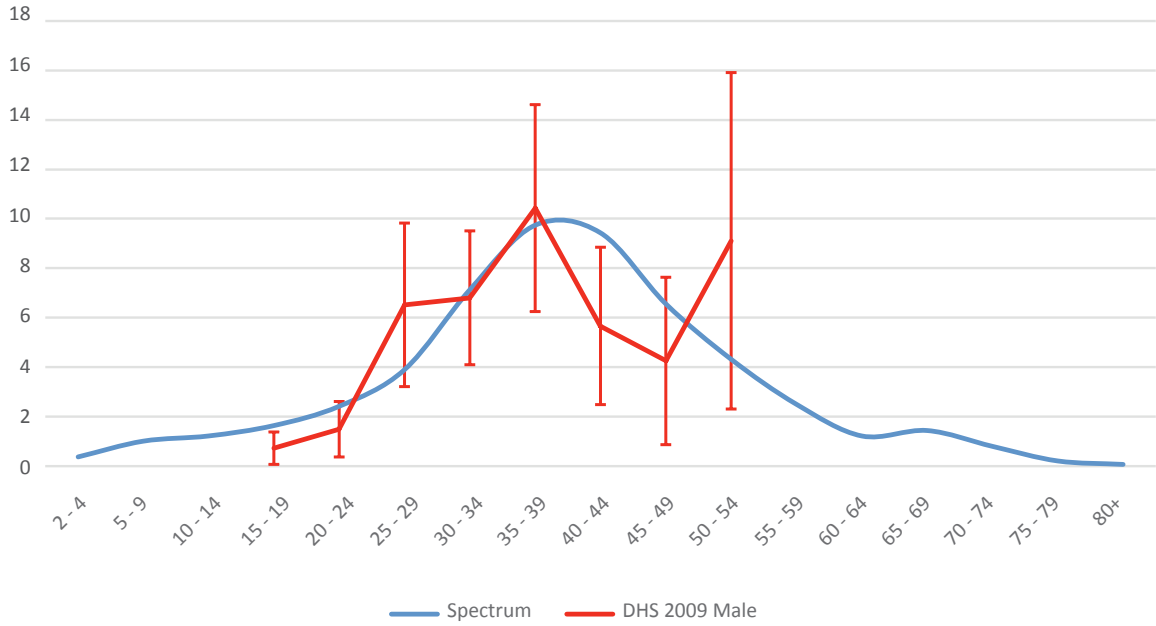
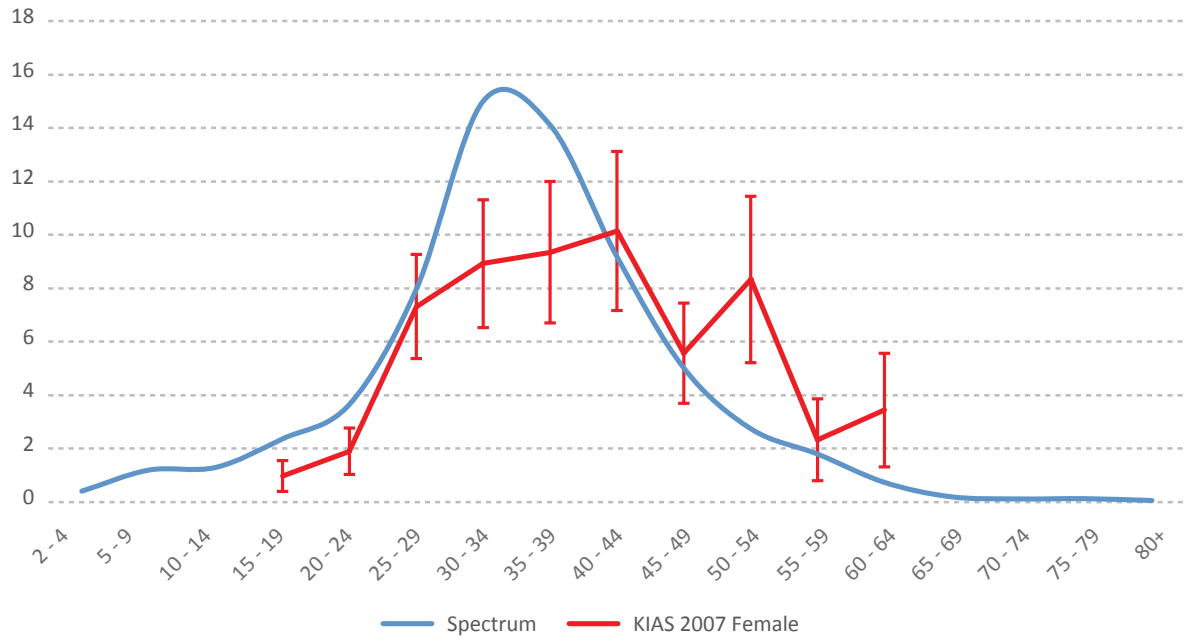
# Annex

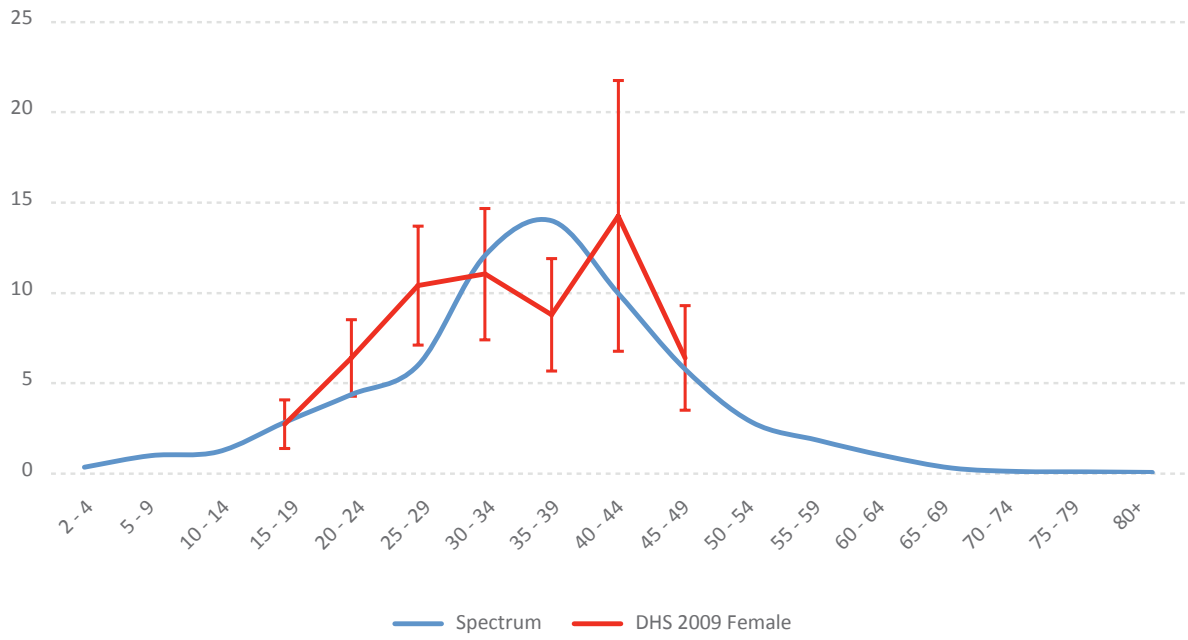
Annex Figure 1. Spectrum Estimate of All-Cause Mortality Compared to Vital Statistics

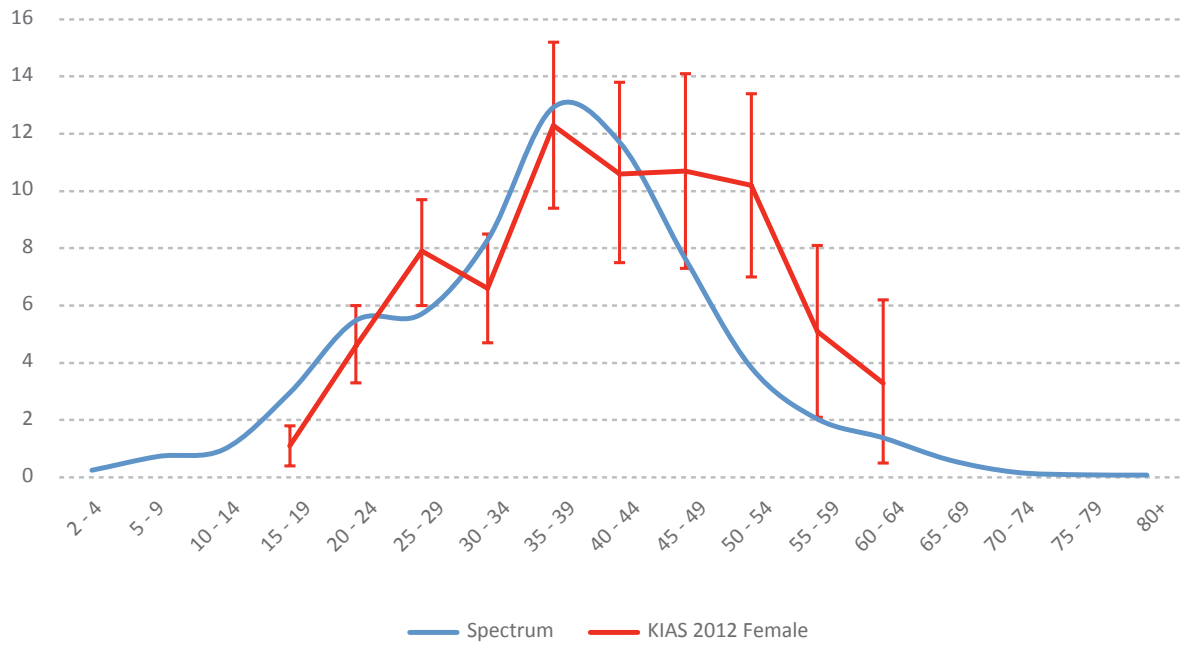


Annex Figure 2. Spectrum estimates of prevalence by age compared to survey estimates.









Annex Figure 3. Distribution of HIV+ Adults not on ART in 2012

