



2007 Kenya AIDS Indicator Survey Preliminary Results

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Background



- First ever AIDS indicator survey in Kenya
- 2nd population-based, HIV serosurvey in Kenya
- Different from KDHS: focus on HIV and AIDS

Purpose of KAIS (i)



- Determine HIV, syphilis and herpes prevalence in adults 15-64 yrs
- Estimate HIV incidence through lab testing
Determine needs for care and treatment
- Describe socio-demographic and behavioral risk factors related to HIV, other STI

Purpose of KAIS (ii)



- Inform HIV/STI program planning and decision making in MOH and others
- Help to evaluate national response to HIV/AIDS
- Increase awareness of HIV status by returning results in the field to participants

Survey Setting



- Population-based, household survey
 - 8 Provinces
 - Urban and rural areas
 - 415 clusters sampled
 - 25 households sampled per cluster

Eligibility



- ✓ Females and males age 15-64 years
- ✓ Usual residents in sampled HH or present the night before survey
- ✓ Give informed consent to be interviewed and tested

Not Eligible



- X Children under the age of 15
- X Visitors who are not usual residents in HH and not present the night before
- X Eligible household members who do not give consent (survey interview, blood sample)

Timeline (i)



- Approved by DMS, KEMRI, CDC - June 2007
- Training in Nakuru - July 2007
- Survey launch/start of data collection - August 2007
- Data collection completed mid-December 2007

Timeline (ii)



- Data entry completed: end of January 2008
- Results component completed: mid-March 2008
- Data cleaning, merging, processing: completed mid-April 2008
- Preliminary analysis: mid-April to early May
- Statistical review: May 13-14
- Consensus Meeting: May 19-20



Variables Collected

Data Collection Tools



- Questionnaires
 - Household questionnaire- head of HH
 - Individual questionnaire- eligible individuals
 - Translated in 12 languages
- Blood sample
 - Venous blood draw (VBD)
 - DBS if VBD not possible or not acceptable (n = 58)
- Return of results form
 - Test results dispatched from central laboratory to health centers around Kenya ~6 weeks after testing
 - Data collection tool capture who returned for results

Response Rates by Residence



	Urban	Rural	Total
Household interview response rate	94.8%	97.4%	96.7%
Individual interview response rate	86%	92%	91%
Blood draw coverage (out of eligibles)	74%	83%	80%
Eligible HH (occupied)	2,918	7,107	10,025
Eligible individuals	5,367	14,483	19,840
<i>Blood draw response rate (out of interviewees)</i>	<i>86%</i>	<i>90%</i>	<i>88%</i>

Overall, blood draw uptake was higher than KDHS 2003 by 4% in rural areas and 12% in urban areas.

Response Rates by Gender



	Female	Male	Total
Individual interview response rate (out of eligibles)	94%	87%	91%
Blood draw coverage (out of eligibles)	83%	77%	80%
Eligible individuals	10,957	8,883	19,840
<i>Blood draw response rate (out of interviewees)</i>	<i>88%</i>	<i>88%</i>	<i>88%</i>

Overall, blood draw uptake was higher than KDHS 2003 by 7% among men and women.



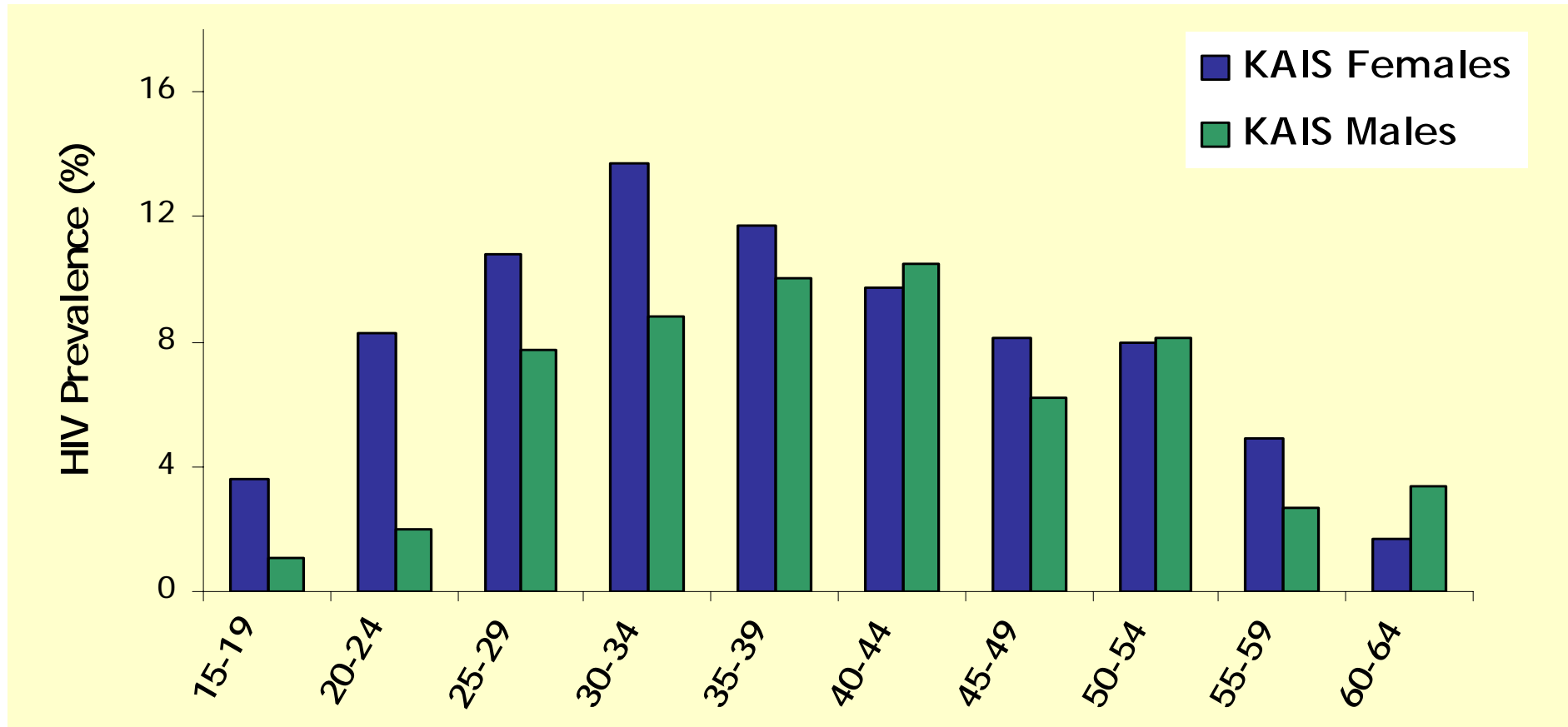
KAIS 2007: Prevalence of HIV

National HIV Prevalence



The 2007 KAIS indicates that 7.4% of Kenyans age 15–64 are infected with HIV. This means that about 1.4 million adults are living with HIV. More women are infected with HIV (8.7%) compared to men (5.6%).

HIV Prevalence by Age and Sex



Young women between ages 15 and 34 are disproportionately infected compared to young men.



KAIS HIV Prevalence by Gender & Residence

Age 15-64

	TOTAL	FEMALES	MALES
Residence	% HIV infected	% HIV infected	% HIV infected
Urban	8.9	10.8	6.2
Rural	7.0	8.2	5.5
Total	7.4	8.7	5.6

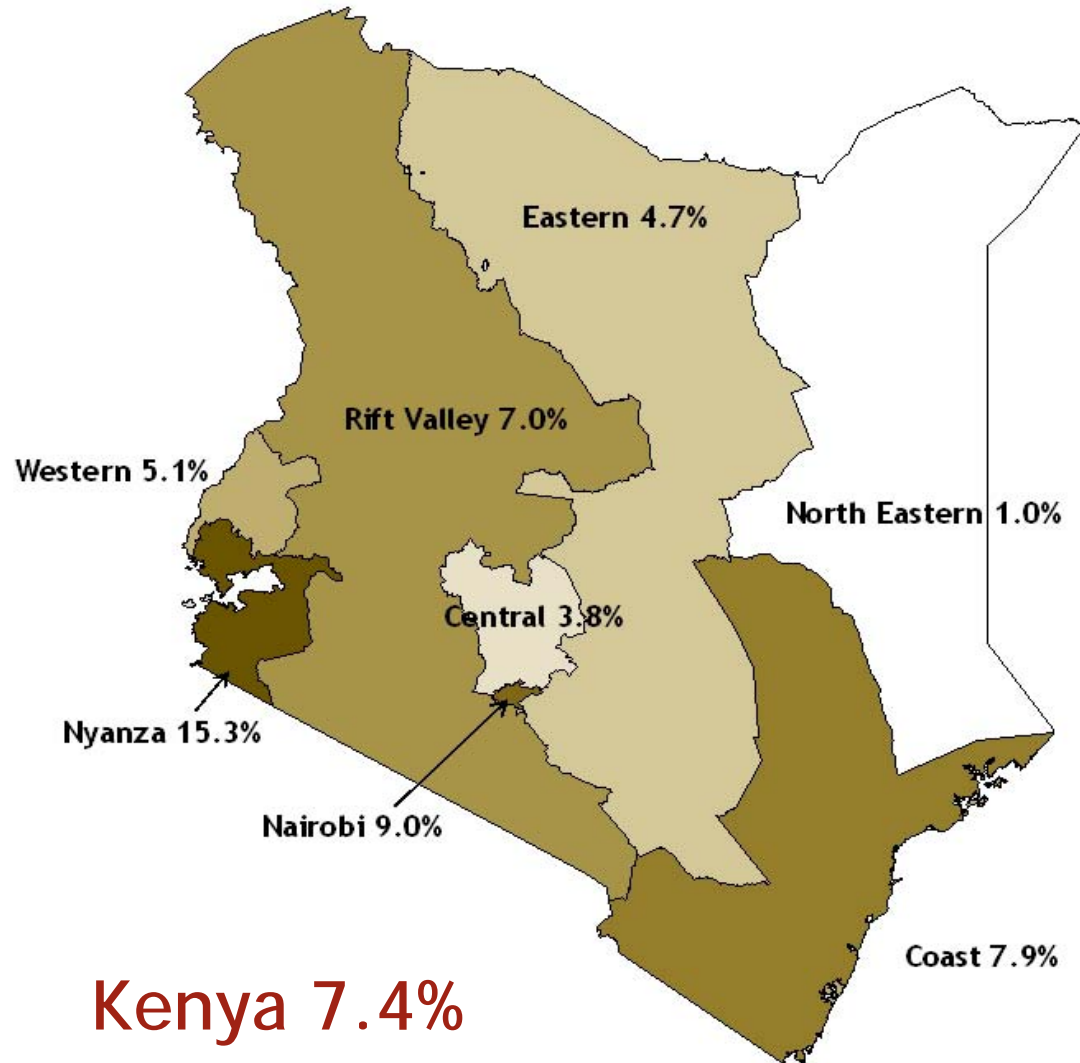
Urban areas have a higher HIV prevalence than rural areas. Since 75% of Kenyans live in rural areas, the greatest burden of HIV infection is in the rural areas.



HIV Prevalence by Province

There are considerable differences in HIV prevalence between provinces. Provinces with high prevalence include Nyanza (15.3%), Nairobi (8.9%), Coast (7.9%), and Rift Valley (7.0%). North Eastern has the lowest prevalence at 1%.

HIV Prevalence by Province



Nyanza and Rift Valley are home to one-half of HIV-infected Kenyans.

Kenya 7.4%



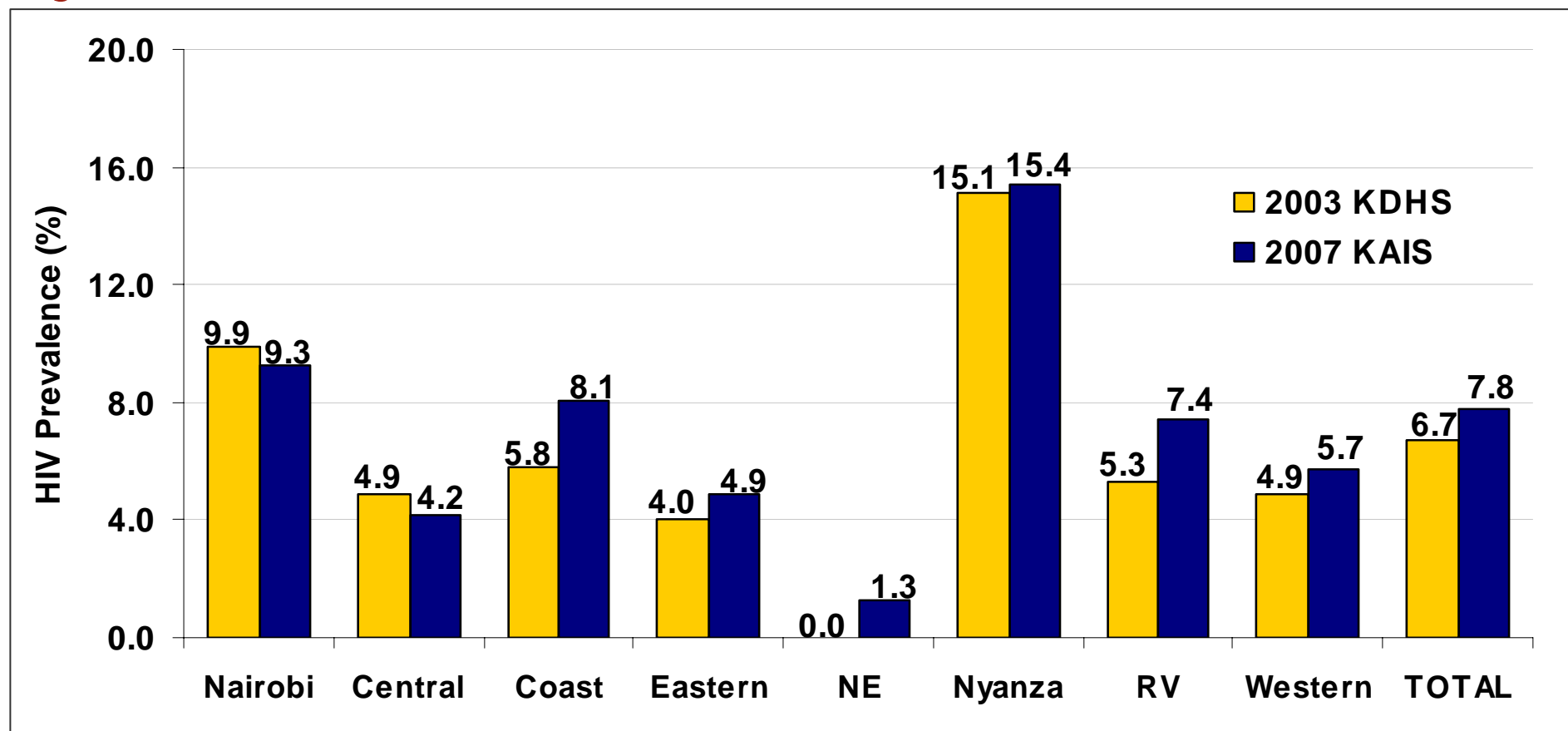
HIV Prevalence in 2003 and 2007

The KAIS shows 7.8% of adults age 15–49 are infected with HIV compared to 6.7% in the 2003 Kenya Demographic and Health Survey (KDHS). Notable increases in HIV prevalence have occurred in rural areas and among males.

2003 KDHS and 2007 KAIS HIV Prevalence by Province



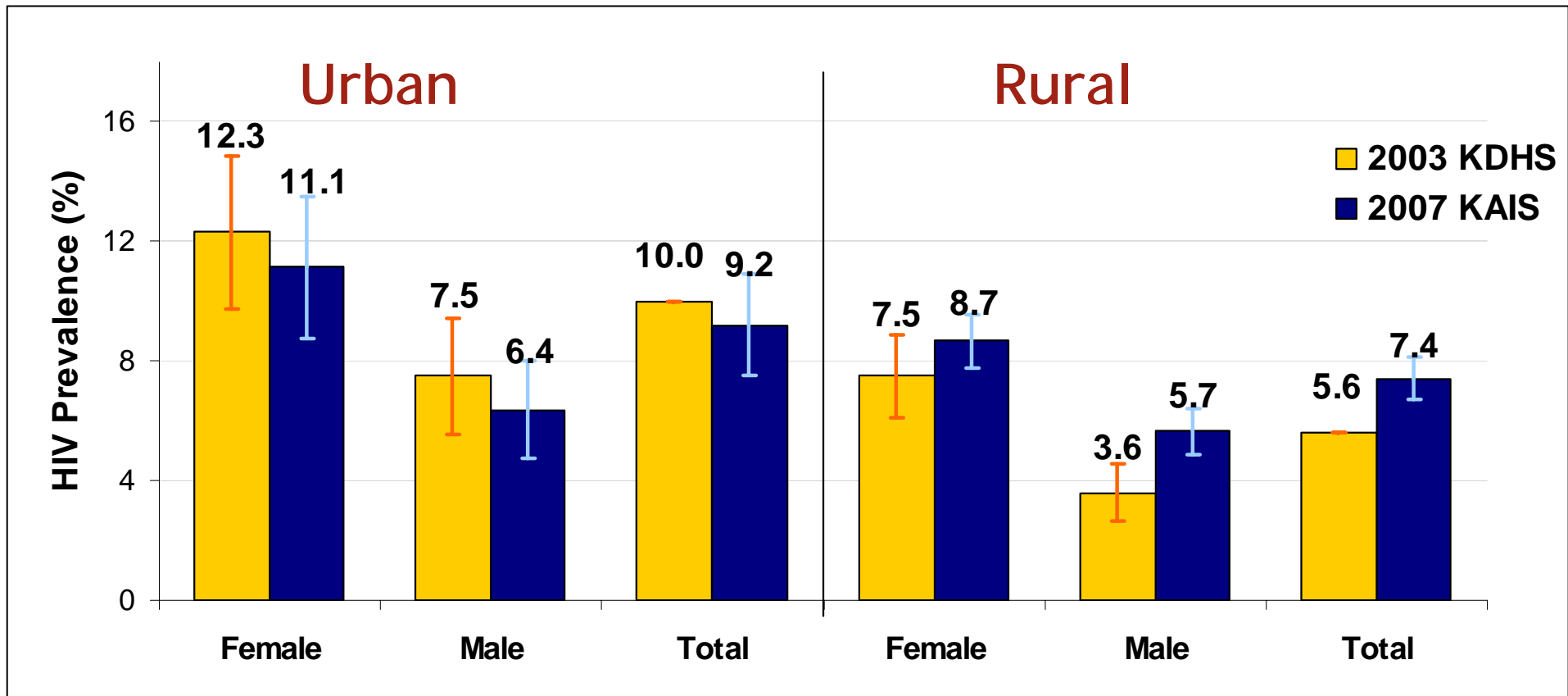
Ages 15-49



2003 KDHS and 2007 KAIS HIV Prevalence by Gender & Residence



Age 15-49



Proportionately more urban residents have HIV than rural residents, though prevalence apparent increase in rural areas.

KAIS HIV Prevalence by Gender & Province



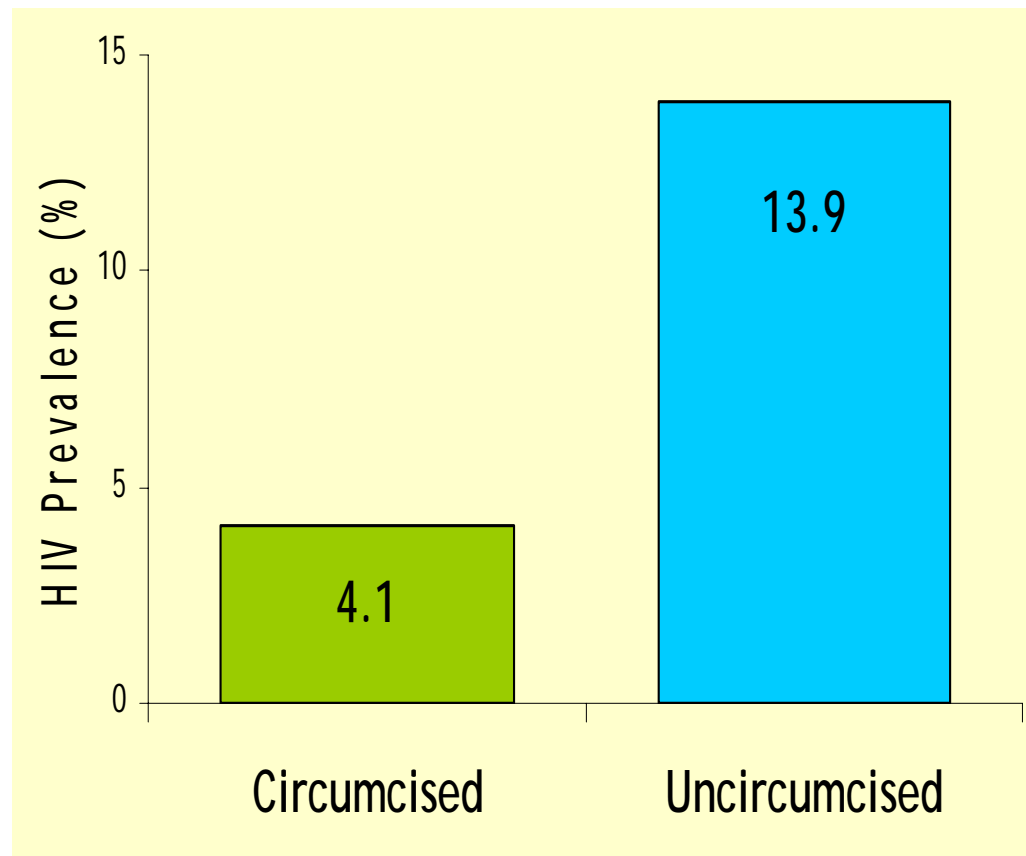
Age 15-64

	TOTAL	FEMALES	MALES
	% HIV infected	% HIV infected	% HIV infected
Total	7.4	8.7	5.6
Nairobi	9.0	10.7	6.6
Central	3.8	4.0	3.5
Coast	7.9	9.2	6.1
Eastern	4.7	6.4	2.5
NE*	1.0	1.0	1.1
Nyanza	15.3	17.7	12.0
Rift Valley	7.0	8.2	5.5
Western	5.1	5.7	4.3



Male Circumcision and HIV Prevalence

Over 80% of men age 15-64 in all provinces except Nyanza (48.8%) are circumcised. HIV prevalence among uncircumcised males is more than three times higher than among circumcised males.



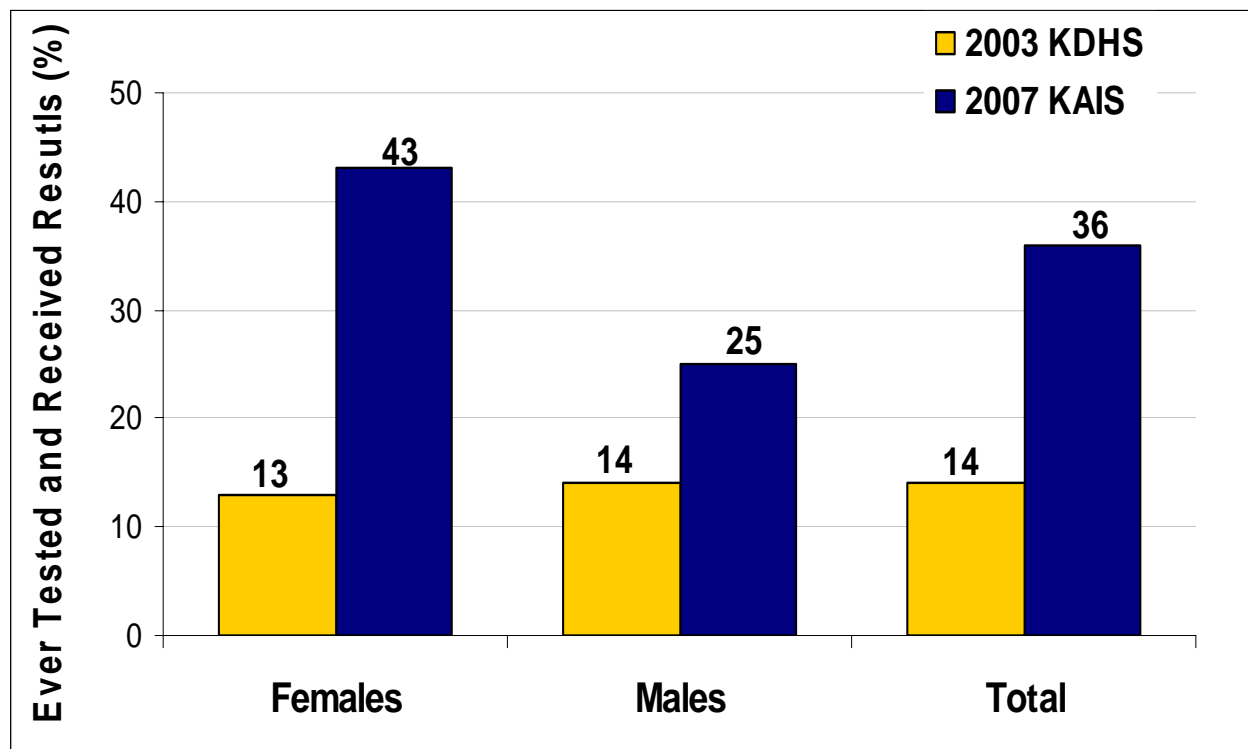


HIV Testing & Knowledge of HIV Status among KAIS Participants



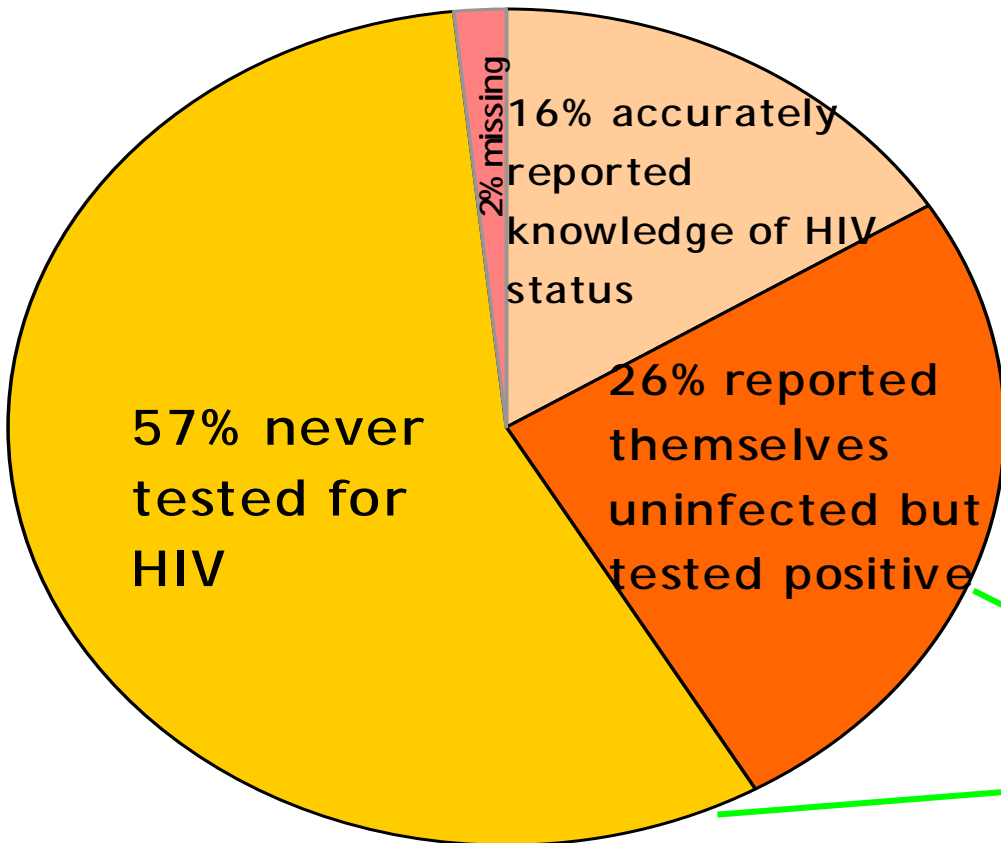
HIV Testing

About one in three (35.6%) adults age 15–64 have ever tested for HIV and received test results. The 2007 KAIS shows an increase in HIV testing among women and men age 15–49 between 2003 and 2007.



HIV testing in 2003 and 2007 (age 15-49)

Accurate Knowledge of HIV Status among KAIS HIV-Infected Participants



Up to 83% of HIV-infected participants did not know HIV status.

Denominator: All HIV infected participants

Reasons for Not Testing



- Most common reason for not testing (among both sexes): *Low perception of risk (61%)*
- 16% didn't want to know test results or were afraid others would know the results
- 14% unaware of test for HIV or of where to get tested
- 5% cited distance to testing site as the major barrier
- Infrequent barriers:
 - Cost of test
 - No access/availability of treatment

Need to Expand Testing



- More than half of Kenyan women never tested for HIV; 75% OF Kenyan men never tested
- As many as 4 out of 5 HIV–infected Kenyans do not know they are infected
- Target groups: rural residents, those with little education; those outside Nairobi; older ages
- Critical barrier: perception of risk

HIV Testing at ANC



- 90% of women who had a recent birth (within last 4 years) attended ANC
- 57% of those attending ANC tested for HIV
- Among HIV–infected women with recent birth, 47% were tested in ANC
- Clear and dramatic increase in coverage of HIV testing among ANC clinic attendees over the last 4 years

Need for Family Planning among HIV-Infected Females



24% desire no more children ever/in next 2 yrs and use modern contraception

72% desire no more children ever/in next 2 yrs

Nearly 50% of all HIV-infected females have an unmet need for family planning

28% desire (more) children in next 2 years

Denominator: All HIV-infected women age 15-49 answering family planning module



HIV Care and Treatment

Antiretroviral Therapy (ART)



An estimated 392,000 HIV infected adults need antiretroviral therapy or ART. The 2007 KAIS shows that only 35% of those in need of ART were on treatment by Sept 2007. Currently Over 212,000 (54%) are on ART as at the end of June 2008.



~ **(392,000)**
Kenyan adults
need ART

138,000 on ART (Sept 2007)

212,000 on ART (Currently)

~ **254,000** not on ART (Sept 2007)

180,000 not on ART (Currently)

HIV Care and Treatment



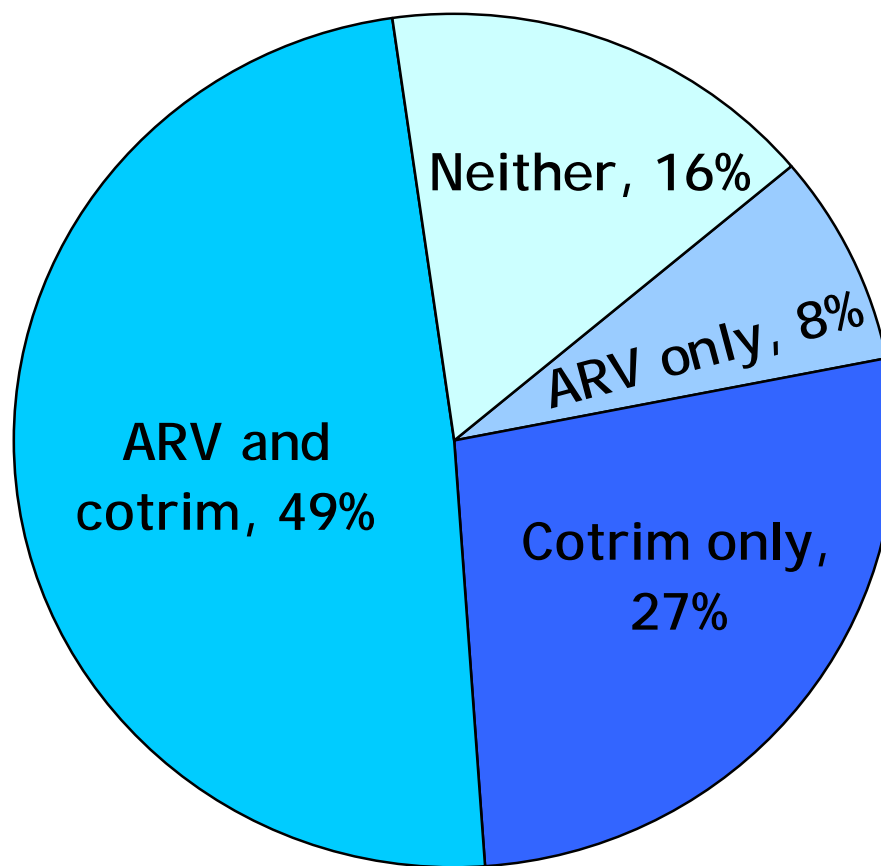
Cotrimoxazole/Septrin

KAIS estimates that about 1.4 million HIV infected Kenyans need to take daily cotrimoxazole medication to prevent common infections. Only 12% of HIV infected adults are currently taking Septrin. The Ministry of Health recommends that all HIV infected persons take daily cotrimoxazole medication.



Among those with Known HIV: Reported ART & Cotrimoxazole Uptake

Care and treatment coverage for those who know their HIV status is very good



Denominator: Self-reported & lab-confirmed HIV infected participants

Indicators of Sexual Behavior



Indicator	1993 KDHS	1998 KDHS	2003 KDHS	2007 KAIS
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15-19 y/o who had sex by age 15 (%)

Women	15.8	15.0	14.5	11.1
Men		31.7	30.9	21.7

Median age at fist sex (years)

Women (20-49)	16.8	16.7	17.8	17
Men (20-54)		16.8	17.1	17

Had more than one sex partner in last 12 months (%)

Women		4.2	1.8	1.7
Men		24.1	11.9	11.9



Indicators of Sexual Behavior (continued)

Indicator	1993 KDHS	1998 KDHS	2003 KDHS	2007 KAIS
Sexually active in the last four weeks (%)				
Women	58.3	51.6	47.6	59.0
Men		55.5	47.0	57.3
Using a condom at last higher risk sex (%)				
Women		15.1	23.9	35.0
Men		42.5	46.5	51.8

Prevalence of Genital Herpes



- Over a third of adults age 15–64 have genital herpes. Genital herpes is a common STI that increases the risk of getting HIV. HIV infected adults are two and a half times more likely to have genital herpes compared to those who are not infected

Genital Herpes and HIV Co-infection



Percent with genital herpes

Age 15-64	Total	Females	Males
Total	35.4	42.3	26.1
HIV-Positive	81.0	84.2	74.5
HIV-Negative	31.7	38.3	23.2

Summary Points



- KAIS is the most current and comprehensive picture of the HIV epidemic in Kenya
- HIV is still a challenge in Kenya
- Rural areas are facing an increased burden of HIV, especially among men
- HIV testing has more than doubled, but work still remains: 80% of HIV-infected Kenyan adults do not know their status
- HIV care and treatment coverage is good among those who know their status

Summary



- With almost 80% of HIV–infected persons unaware of their HIV infection, testing is the biggest barrier to scale–up of HIV prevention, care and treatment
- PMTCT coverage is good
- Care and treatment coverage is good among those with diagnosed HIV infection
- HIV incidence has not gone down; prevention of new infections still critical

Collaborating Institutions



2007 KAIS is a Ministry of Health Survey

- NASCOP, MOH (lead implementer, results, IEC)
- NPHLS, MOH (sample collection, lab testing)
- KNBS (sampling, interviews, data management)
- KEMRI (ethical clearance, sample collection, QA)
- NCAPD (mobilization, advocacy)
- NACC (coordination, stakeholder involvement, mobilization)
- CDC Kenya/Atlanta (lead technical assistance, funding)
- USAID Kenya (funding partner)
- UNAIDS/WHO Kenya (technical assistance, funding)



For additional information on the results of the 2007 Kenya AIDS Indicator Survey, please contact:

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The 2007 KAIS was conducted by the National AIDS Control Council (NACC), Ministry of Health (MoH) National AIDS Control Program (NAS COP), Kenya National Bureau of Statistics (KNBS), National Public Health Laboratory Services (NPHLS), Kenya Medical Research Institute (KEMRI), National Coordinating Agency for Population and Development (NCAPD), U.S. Centers for Disease Control and Prevention (CDC), United States Agency for International Development (USAID), Kenya and UNAIDS/WHO-Kenya.