

General Background On HIV/AIDS

Objectives



1. Discuss the impact of the HIV/AIDS epidemic globally, in Africa and Nigeria
2. Describe the various types of HIV and the differences between them
3. Discuss how HIV is transmitted and the biological and socioeconomic factors that facilitate transmission

Epidemic Update

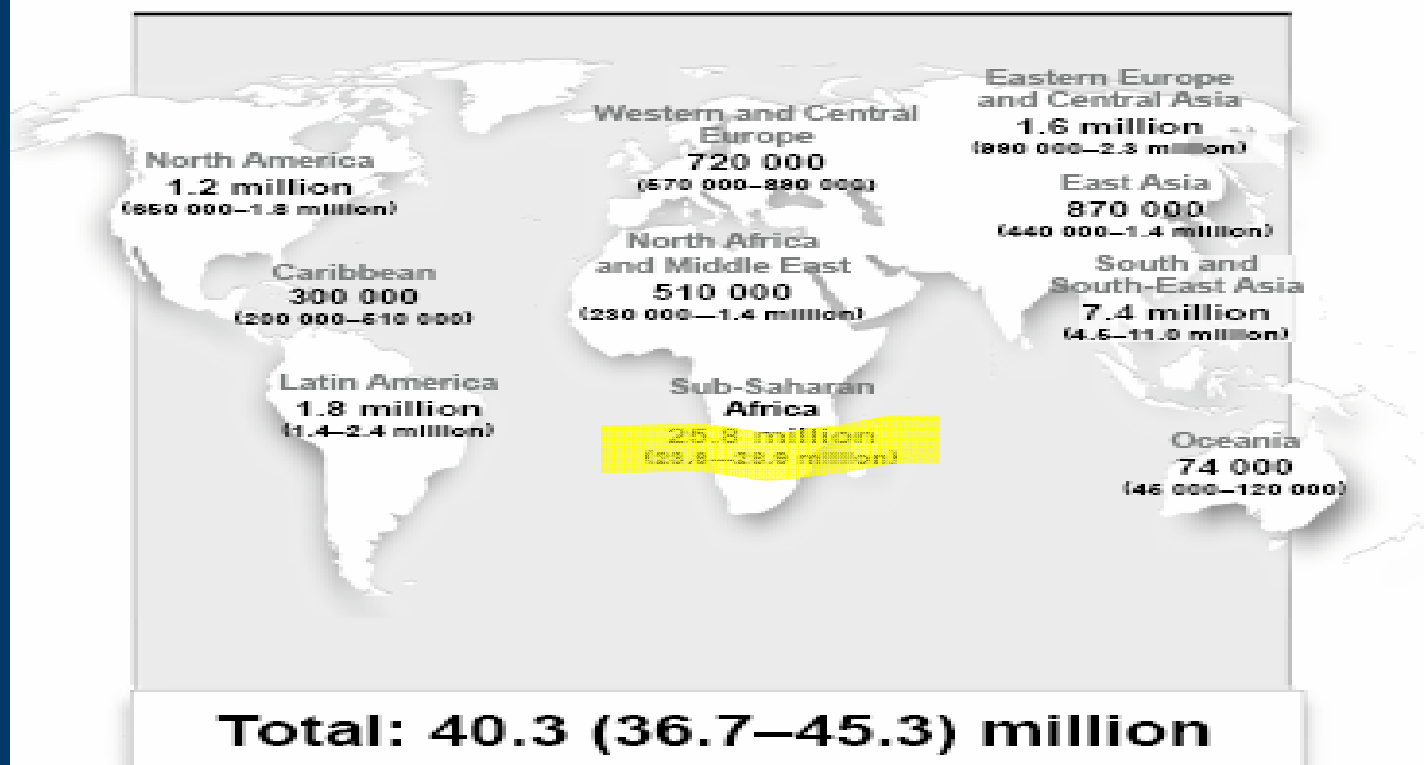


Global Picture:

- Fourth leading cause of mortality in the world
- Estimated 40 million persons living with HIV/AIDS
- About one-third are between 15-24 years old
- Most people are unaware they are infected
- Young women are more vulnerable

Global epidemiology

ADULTS AND CHILDREN ESTIMATED TO BE LIVING WITH HIV IN 2005



Global epidemiology

UNAIDS/WHO

ESTIMATED NUMBER OF ADULTS AND CHILDREN NEWLY INFECTED WITH HIV DURING 2005



Global epidemiology



ESTIMATED ADULT AND CHILD DEATHS FROM AIDS DURING 2005



Epidemic Update, continued

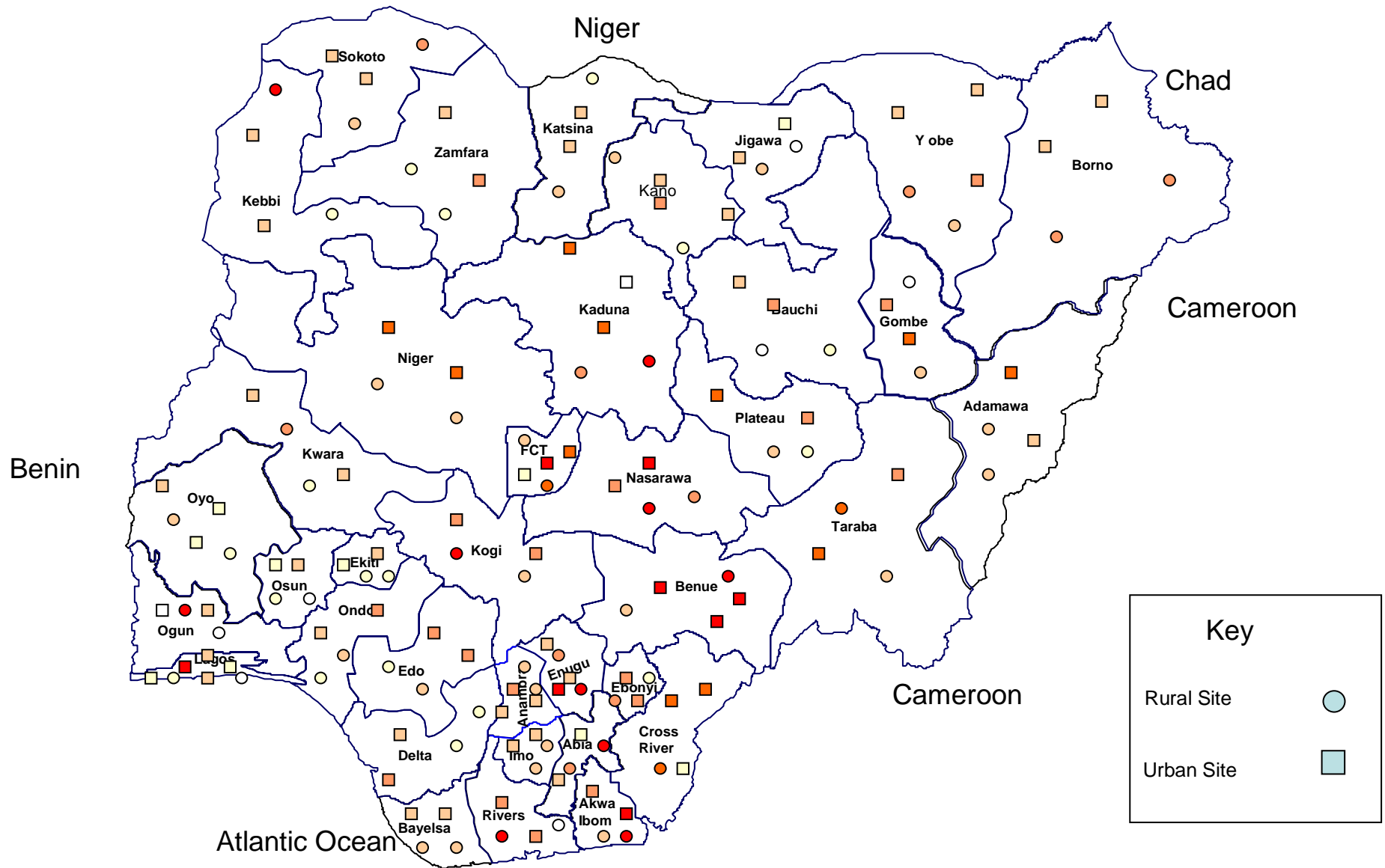


Sub-Saharan Africa:

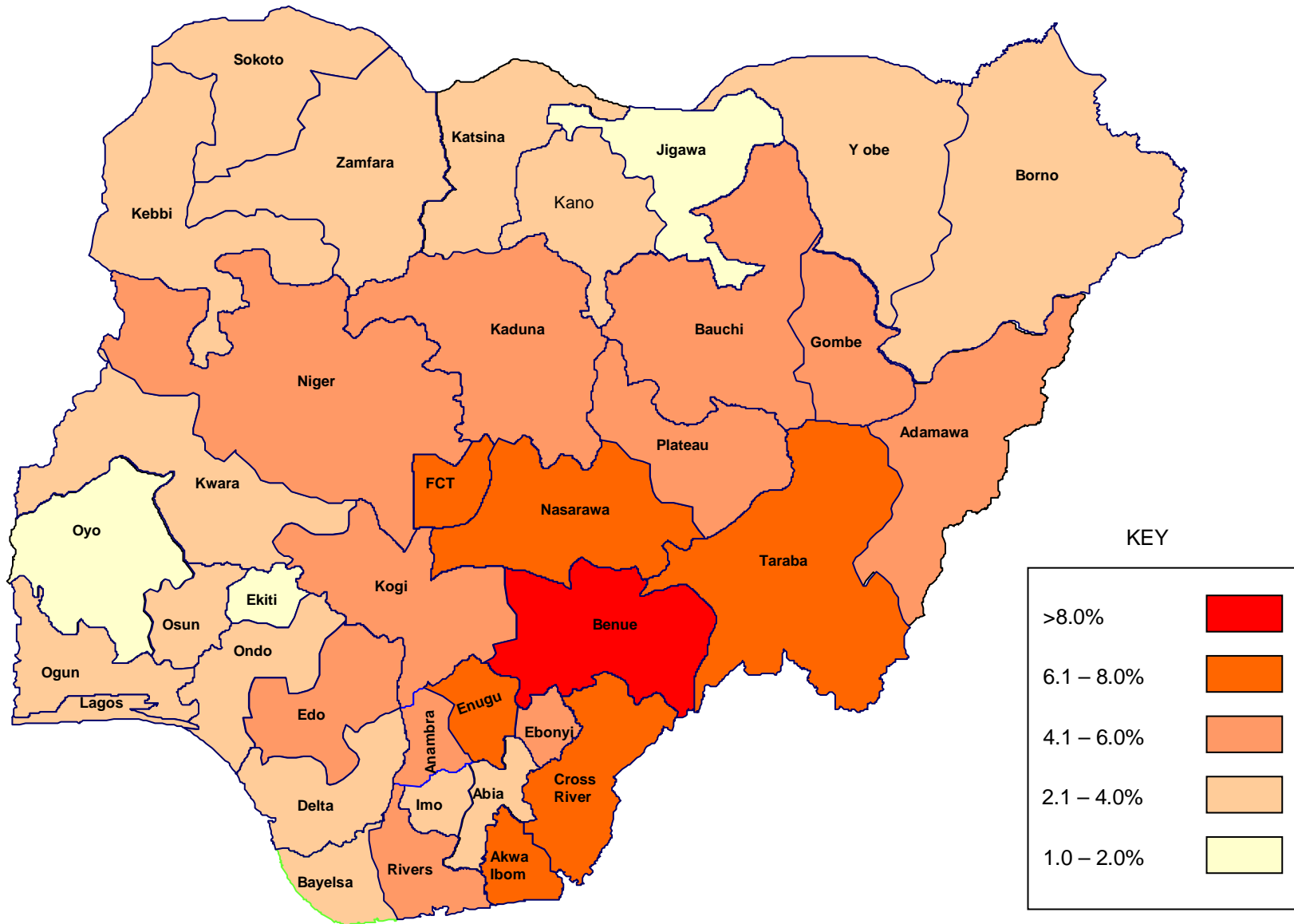
- Is the most affected region
- HIV is now the leading cause of death
- Estimated 3.2 million new HIV infections in 2005
- 26 million Africans live with HIV
- By 2010, an estimated 106 million children under age 15 are projected to have lost one or both parents, with 25 million of this group orphaned due to HIV/AIDS

WHAT ABOUT IN NIGERIA

Geographic Distribution of Survey Sites



HIV Prevalence by state (Nigeria 2005)



Epidemic Update, continued



National and Local Data:

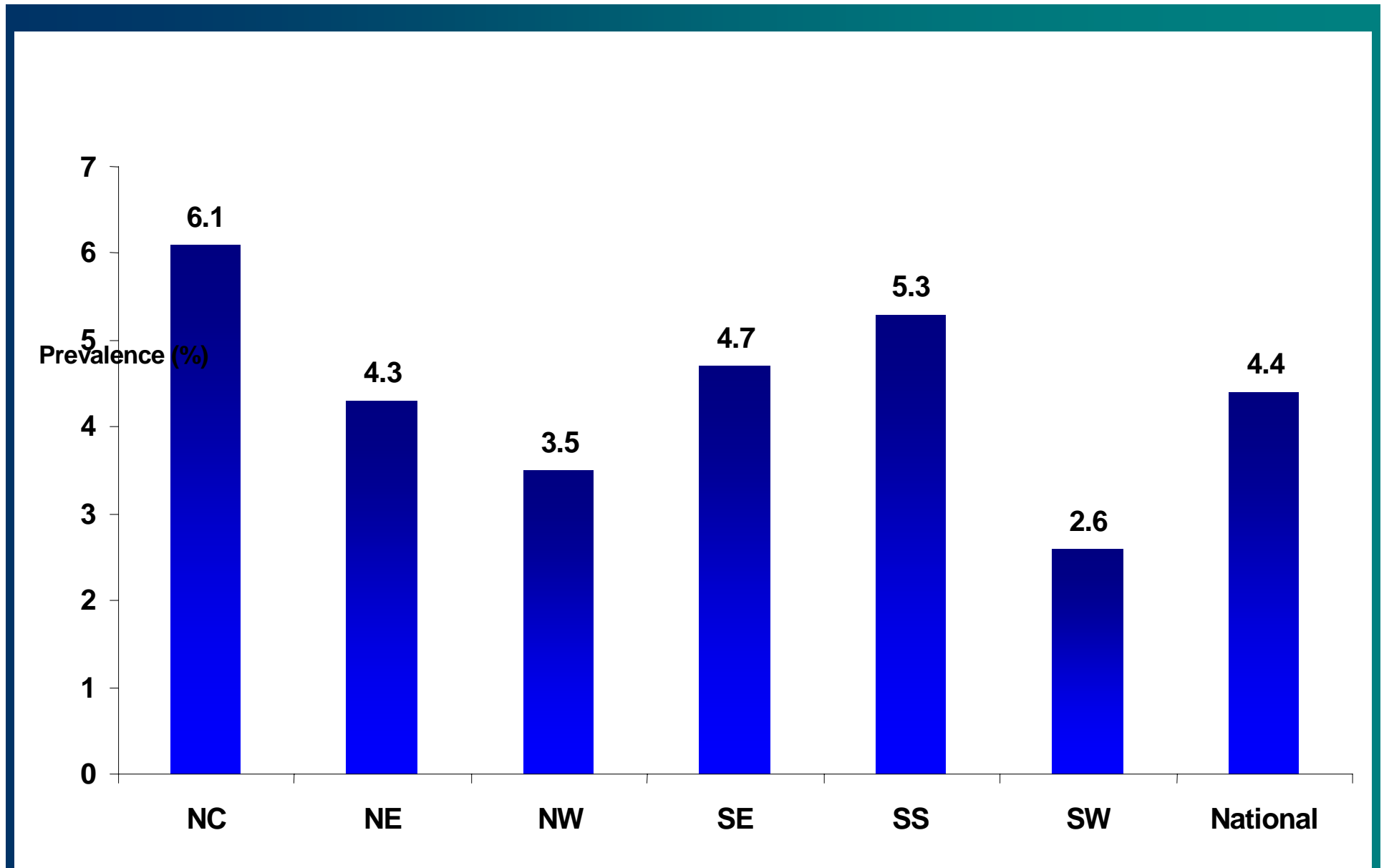
- Nigeria: Estimated 4.4% (5%-2003) National Prevalence
- Prevalence ranges from 1.6-10% (1%-12%) in various states
- Estimated 3.2-3.6 million Nigerians are HIV-infected (3rd highest worldwide next to South Africa and India)

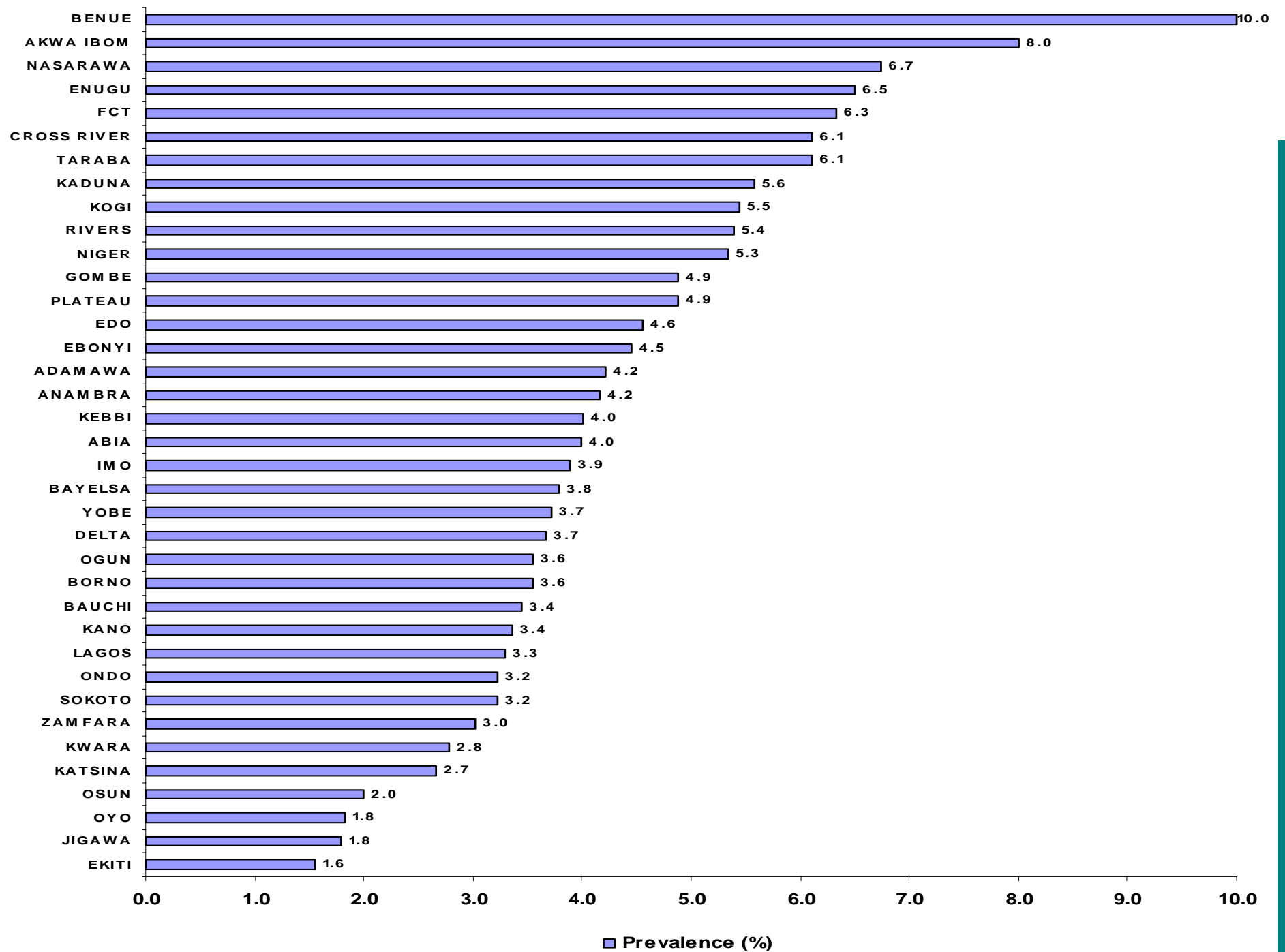
HIV estimates for Nigeria



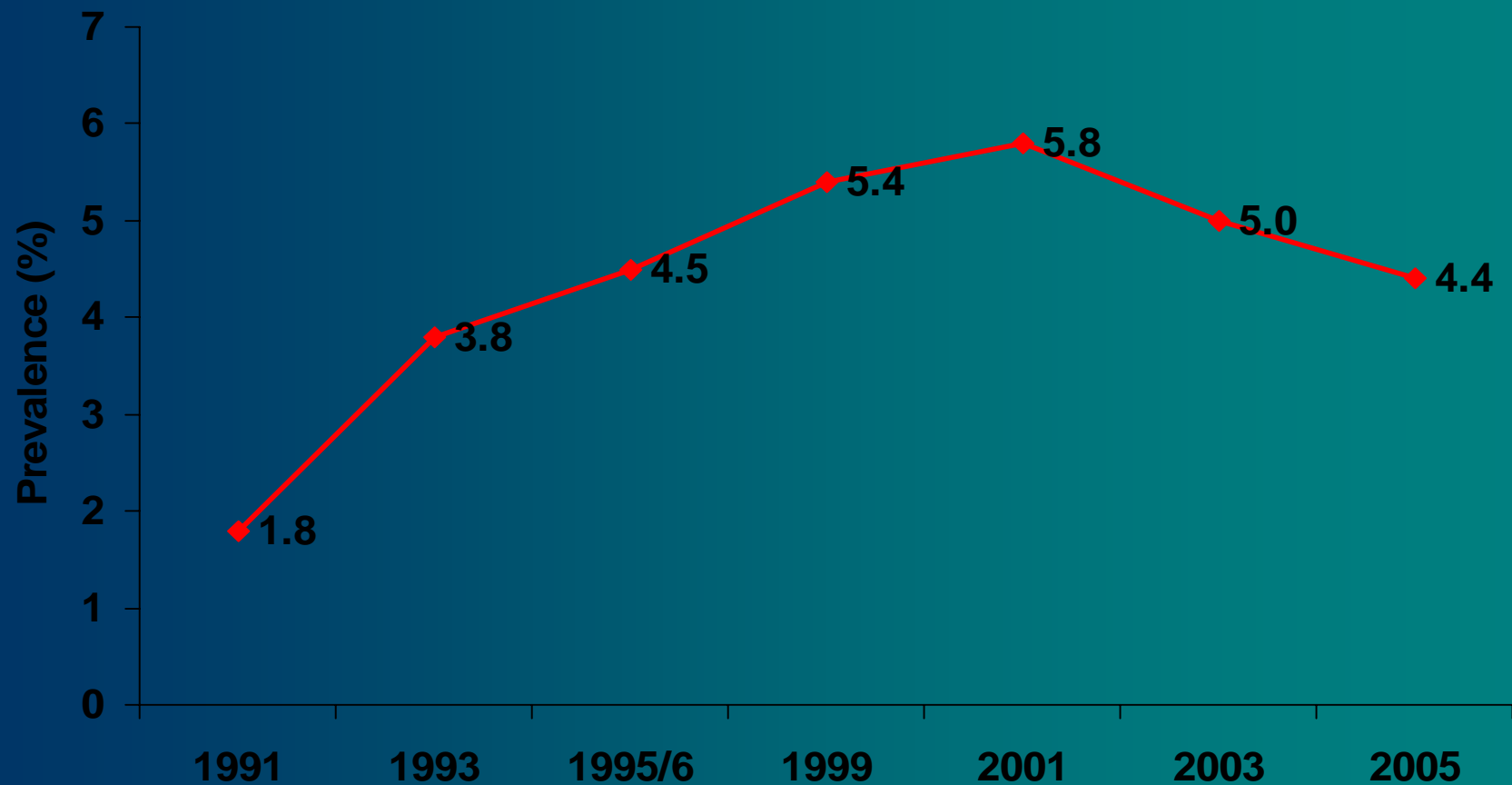
	2005	2006	2010
No. of people infected	2.86 m	2.99m	3.4m
No. of new HIV infections:			
▪ Adults	296,320	305,080	346,150
▪ Children (<15 yrs)	73,550	74,520	75,780
No. requiring ART:			
▪ Adults	412,450	456,790	538970
▪ Children (<15yrs)	94,990	98,040	106,840
Annual HIV +ve births	73,550	74,520	75,780
Cumulative deaths	1.45 m	1.70m	2.82m

HIV Prevalence by Zone (HSS 2005)





HIV Prevalence Trend (1991 - 2005)



TYPES OF HIV

HIV: Two Types Recognized



HIV-1	HIV-2
Both transmitted through sexual contact, blood, from mother to child, and cause indistinguishable AIDS	
Predominant virus 95% of HIV worldwide	Less easily transmittable
Due to high rate of replication, mutates rapidly into subtypes	Period between initial infection and illness longer than HIV-1

HIV-2



- Human retrovirus, causing similar immune deficiency due to depletion of CD4 cells
- Confined primarily to West Africa
- Compared to HIV-1:
 - Less transmissible
 - Associated with less viral burden
 - Slower rate of cell decline and clinical progression
 - Does not respond to NNRTIs (e.g. nevirapine)
- In 2003 sentinel survey in Nigeria, only 3 samples out of 27,708 were of HIV-2 (0.01% prevalence, and 0.2% of all HIV+ people)

Modes of Transmission



- **Sexual contact**
 - Male-to-female, female-to-male, male-to-male, and female-to-female. 80% of transmission
 - Worldwide, sexual transmission is the predominant mode

- **Parenteral**
 - Blood transfusion, IDU through needle-sharing, needle stick accidents. 2.8% of transmission

- **Perinatal**
 - In utero, during labor/delivery, postpartum through BF. 2.6% of transmission

- HIV cannot be transmitted by casual contact, surface contact, or insect bites

SEXUAL ACTIVITY



“Sex is free, sex is fun and you can’t get arrested by having it” - 21 yr old Thembi, South Africa, CNN

NOBODY WANTS TO TALK ABOUT IT!

- 50% of Nigerian women have started sexual activity by the age of 17. For the men-Age 20
- In the North-east and North-west Nigeria, this age is as low as 12-13 years.

Of all those who have ever had sex, 3% of women and 26% of the men have multiple sexual partners.

Socio-economic Factors Facilitating Transmission



SOCIAL MOBILITY

- Global economy
- HIV/AIDS follows routes of commerce

STIGMA AND DENIAL

- Denial prevents acknowledgment of risk
- Stigma
 - People may feel isolated and rejected
 - Prevents risk reduction efforts and care-seeking

PEOPLE IN CONFLICT

- Context of war and struggle of power spreads AIDS

Socio-economic Factors, continued



CULTURAL FACTORS

- Traditions, beliefs and practices affect understanding of health and disease and acceptance of conventional medical treatment
- Culture can create barriers which prevent people, and especially women, from taking precautions
 - For instance, pressure to breastfeed may expose more infants
 - Spousal inheritance
 - Pressure to bear children inhibits condom promotion

POVERTY

- Lack of information needed to understand and prevent HIV
- Poor nutritional status
- Commercial sex for income
- Reduced access to health care services

Socio-economic Factors, cont'd



GENDER INEQUALITIES

- In many cultures men are expected to have many sexual relationships
- Women suffer gender inequalities, often economic in nature
- Women may not feel empowered to negotiate whether sex happens at all or to negotiate condom use

DRUG USE AND ALCOHOL CONSUMPTION

- Impaired judgment
- Sharing of needles and equipment

Other risk factors



- **EARLY DEBUT OF SEXUAL ACTIVITY**
- **MULTIPLE SEXUAL PARTNERS** (unprotected sex) among males and females
 - Keep in mind, that a person who is a virgin before marriage (and/or is HIV-negative before marriage), but does not get the spouse tested, can contract HIV during marriage even if the spouse does not cheat
- **MODE OF EXPOSURE**
 - Anal sex: risk higher than vaginal

SUMMARY



THANK YOU