



# What is HIV?

- Human immunodeficiency virus (HIV) is a virus that attacks the human immune system by destroying white blood cells.
  - It prevents the body from fighting off infection and disease.



# What is AIDS?

- Acquired Immune Deficiency Syndrome (AIDS) is an advanced stage of HIV infection, meaning that an individual's immune system has been weakened to a point where it is difficult to fight infections.
  - Either the white blood cell count falls below a certain level or a person with HIV develops certain cancers or infections.



# How is HIV transmitted?

- The HIV virus is found in:
  - Blood
  - Semen
  - Pre-seminal fluid
  - Vaginal fluid
  - Breast milk
- HIV can be transmitted through:
  - Oral, anal, or vaginal sex with an infected individual
  - Sharing needles or syringes with an infected person
  - Exposure before or during birth
  - Breast feeding



# Demographic Risk Factors

- **Gender**
  - In 2006, males accounted for 73% of all HIV diagnoses.
- **Age**
  - Those under the age of 40 are more likely to become infected with the HIV virus.
  - More than half (53%) of new HIV cases were those aged 25-44 years of age, in 2006.
- **Race/Ethnicity**
  - Blacks and Hispanics are disproportionately diagnosed.
  - In 2006, Blacks and Hispanic accounted for 45% and 18% of new HIV infections, respectively.



# Social and Behavioral Risk Factors

- Risky Sexual Behavior

- High risk sexual contact, such as unprotected sex, increases the risk of becoming infected with the HIV virus.
- Men who have sex with men (MSM) accounted for the largest number of HIV diagnoses overall in 2006.
- Among females, most HIV diagnoses occurred in those exposed through high risk heterosexual contact.

- Injection Drug Use / Needle Sharing

- Sharing needles with an HIV infected person increases the risk of contracting the virus.
- In 2006, 12% of all new HIV infections were due to intravenous drug use.



Sources: - Centers for Disease Control and Prevention. HIV Incidence: Statistics and Surveillance. <http://www.cdc.gov/hiv/topics/surveillance/incidence.htm>. - U.S. Department of Health and Human Services. Statistics: Statistics Overview. <http://www.aids.gov/hiv-aids-basics/hiv-aids-101/overview/statistics>.

# Intermediate Outcomes

- HIV/AIDS increases the risk of other diseases and is accompanied by complications. Some of these include:
  - Wasting Syndrome
    - Causes the involuntary loss of more than 10% of a person's body weight and muscle
  - Candidiasis (Thrush)
  - Pneumonia
  - Tuberculosis (TB)
  - Invasive Cervical Cancer
  - Dementia
  - Oral Health
    - HIV infection can make a person more susceptible to oral cavities, and dry mouth.
  - Hepatitis C
    - 50% to 90% of HIV infected intravenous drug users are also infected with Hepatitis C.
  - Kidney Disease, as a complication
  - Body Fat Changes - Lipodystrophy, as a complication
    - Causes individuals to gain fat in the neck, abdomen, breasts, and face



Sources: -Klemack, Christina. "NCPAD: Disability/Condition: Benefits of Exercise for People with HIV/AIDS." The National Center on Physical Activity and Disability Home Page. [http://www.ncpad.org/disability/fact\\_sheet.php?sheet=190](http://www.ncpad.org/disability/fact_sheet.php?sheet=190). - U.S. Dept of HHS. HIV/AIDS Basics: Opportunistic Infection. <http://aids.gov/hiv-aids-basics/staying-healthy-with-hiv-aids/potential-related-health-problems/opportunistic-infections>. -CDC. Coinfection with HIV and Hepatitis C Virus. <http://www.cdc.gov/hiv/resources/factsheets/coinfection.htm>.

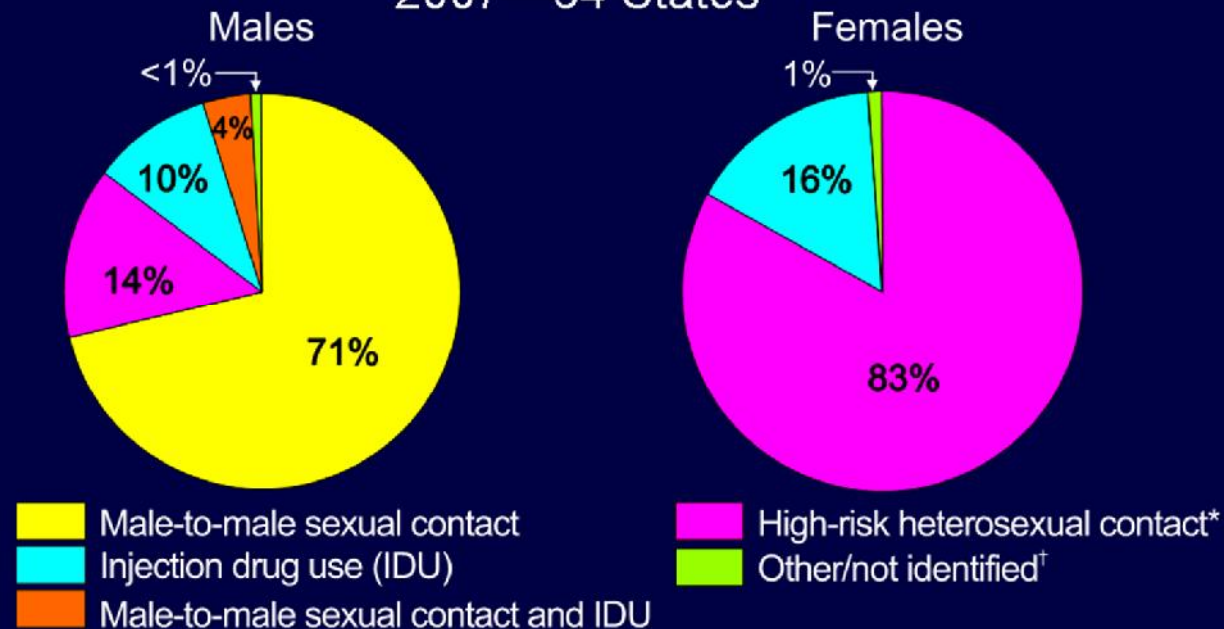
# National Statistics

- In 2006, an estimated 1.1 million Americans were living with HIV infection, with 21% undiagnosed.
- Over 56,000 new cases of HIV infections were reported in the United States in 2006.
- In 2007, nearly 37,000 Americans were diagnosed with AIDS.



# National Statistics

Percentages of HIV/AIDS Cases among Adults and Adolescents, by Sex and Transmission Category  
2007—34 States



Note. Data include persons with a diagnosis of HIV infection regardless of their AIDS status at diagnosis. Data from 34 states with confidential name-based HIV infection reporting since at least 2003. Data have been adjusted for reporting delays and missing risk-factor information.  
\*Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.  
†Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance - General Epidemiology (through 2007). Last Updated April 9, 2009. Reprinted with permission.

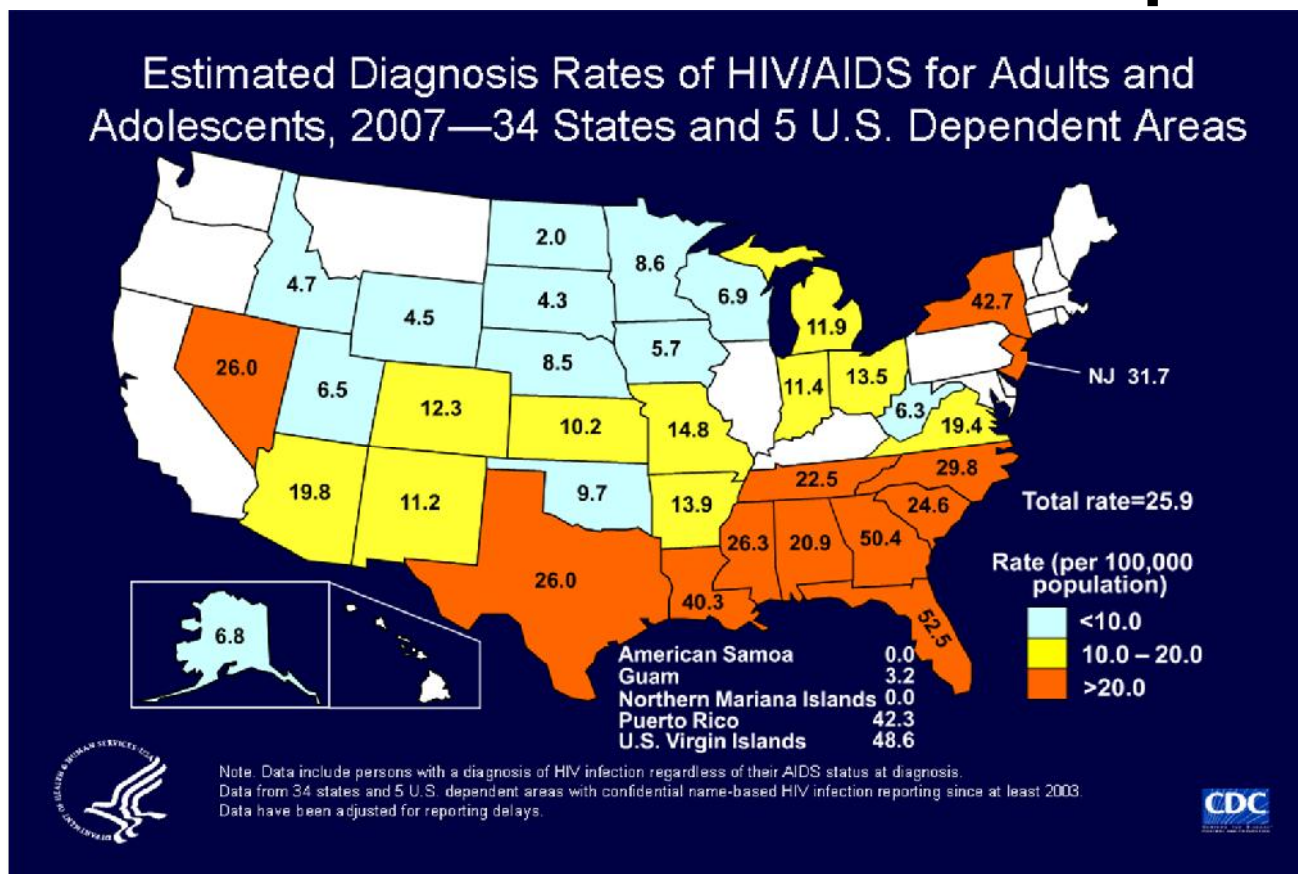


# National Statistics and Disparities

- The number of newly diagnosed HIV infections was 7 times higher in Black Americans than in white Americans in 2006.
- The number of newly diagnosed HIV infections was nearly 3 times higher in Hispanic Americans than in white Americans in 2006.
- In 2006, men accounted for nearly 3 out of every 4 cases of HIV infection.
- In 2005, 41% of men living with HIV and 65% of women living with HIV were Black.



# National Statistics and Disparities



The South-Eastern region of the United States had the highest reported diagnosis rates of HIV/AIDS for adults and adolescents in 2007.

Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance - General Epidemiology (through 2007). Last Updated April 9, 2009. Reprinted with permission.

# Costs

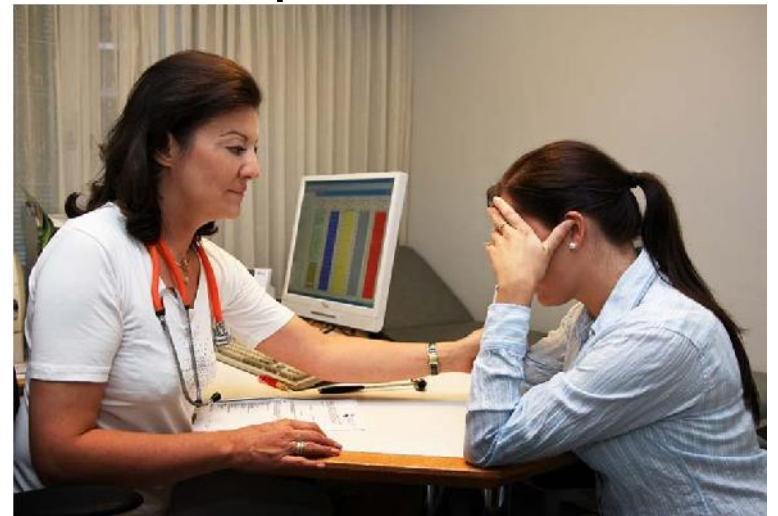
- In 2008, the United States federal government spent over \$17 billion dollars on HIV/AIDS.
  - This includes direct medical costs, prevention programs, and indirect service programs.



Source: U.S. Department of Health and Human Services. Federal Resources: Federal Opportunities, How We're Spending.  
<http://www.aids.gov/federal-resources/funding-opportunities/how-were-spending>.

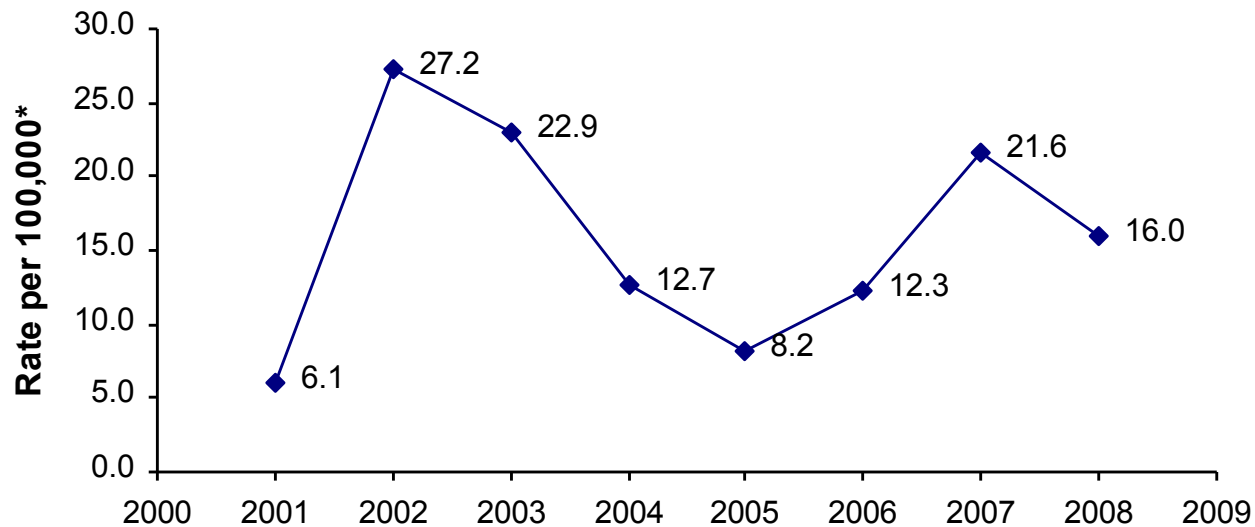
# Local Statistics

- Between April 17, 2006 and December 31, 2008, a total of 3,847 new HIV infections were reported in San Diego County.
- In 2008, a total of 391 cases of AIDS were reported in San Diego County.
- Among males, 83% of all new HIV infections reported between April 17, 2006 and December 31, 2008 occurred in men who have sex with men (MSM).
- Among women, 65% of all HIV infections reported between April 17, 2006 and December 31, 2008 were transmitted through heterosexual contact.



# Local Statistics

## HIV Infection Rates\* by Year of Case Report, San Diego County 2000-2008



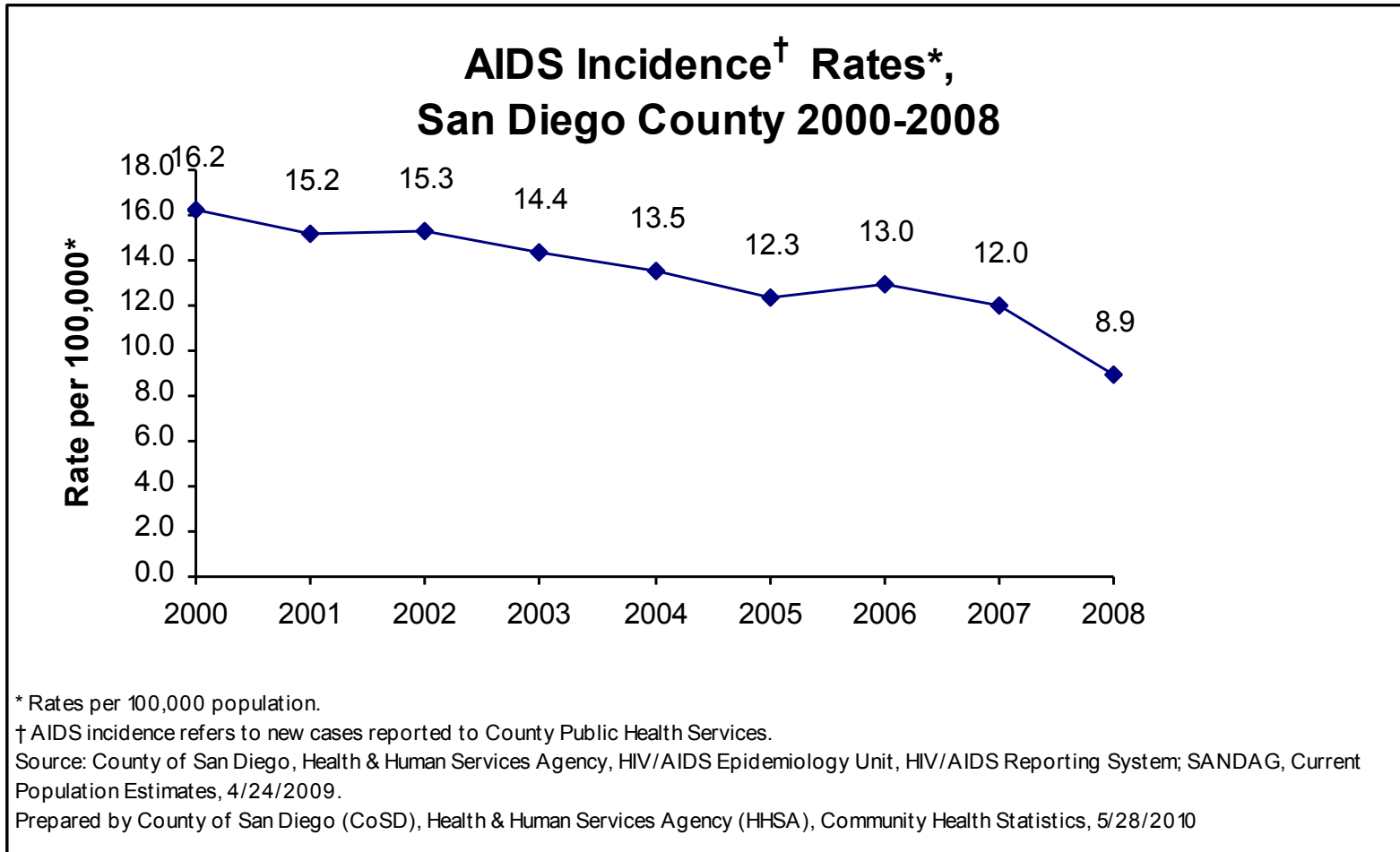
Note: Changes in rates for HIV are primarily due to changes in HIV reporting. HIV reporting by non-name code began in a pilot in 2001 but they are only included here if the case was reascertained to add name via a confirmed antibody test or viral load test collected after April 16, 2006. Date of report reflects a new case for the local health jurisdiction, not necessarily the first HIV positive test for that case.

\* Rates per 100,000 population. Note: Annual fluctuation in numbers and rates are likely an artifact of reporting, not actual variations.

† HIV Rates refer to name-based reports to CoSD PHS, beginning 4/17/2006. Report date may not reflect the first HIV positive test for that case.

Source: County of San Diego, Health & Human Services Agency, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 4/24/2009. Prepared by County of San Diego (CoSD), Health & Human Services Agency (HHSA), Community Health Statistics, 5/28/2010.

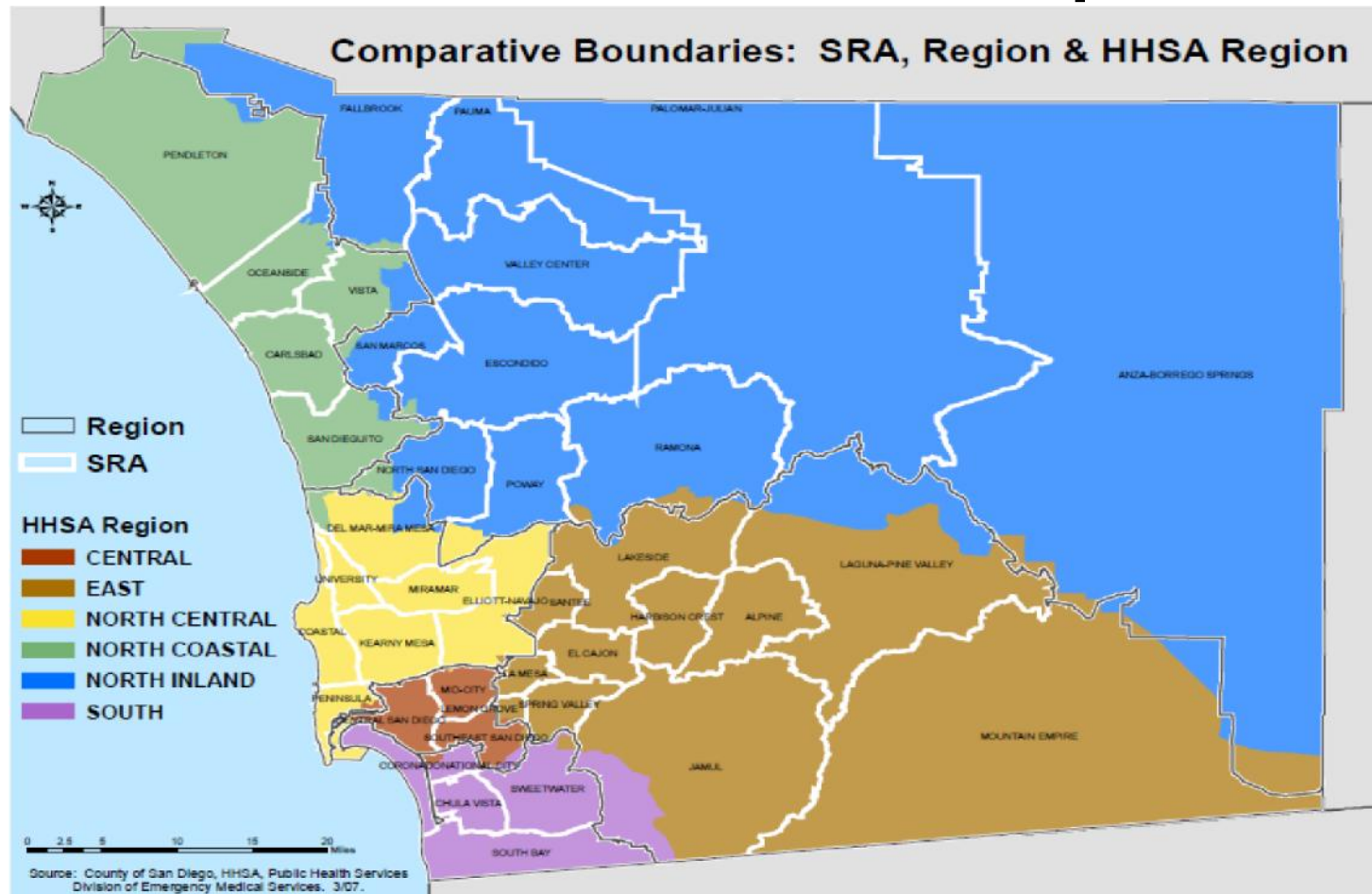
# Local Statistics



# Local Statistics and Disparities

- Of the new HIV infections reported between April 17, 2006 and December 31, 2008, 90% of the cases were males.
- In 2008, the rate of newly diagnosed AIDS cases among Blacks was nearly 3 times the rate for Whites in San Diego County.
- In 2008, the rate of newly diagnosed AIDS cases among Hispanics was higher than the rate for Whites in San Diego County.

# Local Statistics and Disparities



**From 2000 to 2008, the Central region had the highest rates of HIV infections in all of San Diego County.**

# Prevention

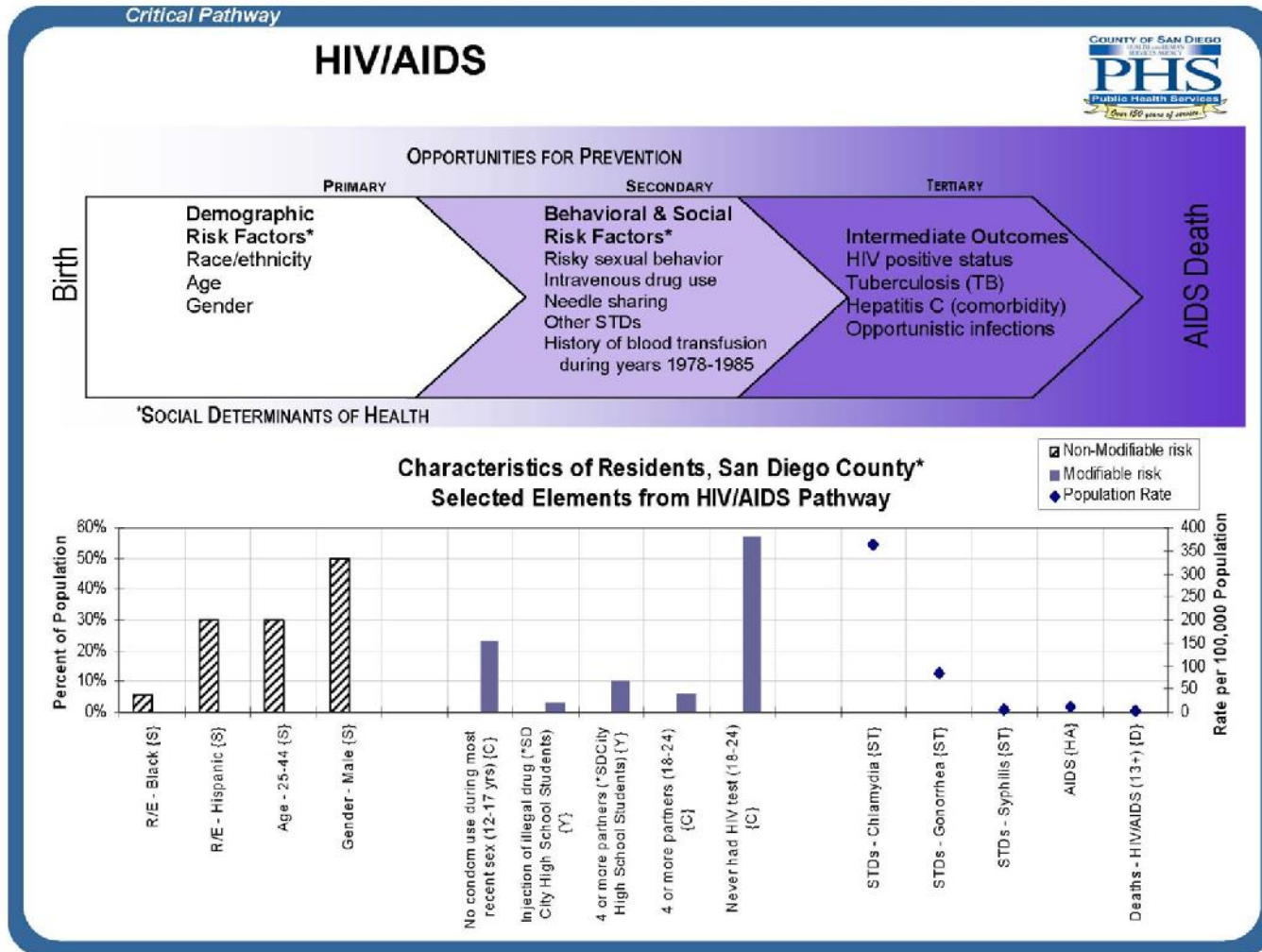
- Safer Sex Practices
  - Use condoms to reduce HIV transmission.
  - When used correctly, condoms can be 98% effective in preventing the transmission of HIV1.
- Do not share needles or syringes with others.
- Seek prenatal treatment if you are pregnant.
  - There are medications available that can greatly reduce the chance of transmitting the HIV virus to the baby.

# Prevention

- Seek treatment for STDs
  - Treatment of STDs reduces the risk of transmitting or becoming infected with HIV.
- Get an HIV test
  - Early testing and intervention can help prevent the spread and progression of the disease.
  - About 21% of those infected do not know they have HIV.



# Critical Pathway to HIV/AIDS



04/09 County of San Diego ■ Health and Human Services Agency ■ Public Health Services ■ Community Health Statistics Unit ■ www.SDHealthStatistics.com ■ (619)285-6479

# Contact Us

County of San Diego  
Health and Human Services Agency

Public Health Services  
Community Health Statistics

(619)285-6479

[www.SDHealthStatistics.com](http://www.SDHealthStatistics.com)