

HIV and AIDS

Disease Information Packets – Slide Set

Public Health Services,
Community Health Statistics

12/2012



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



Sources: - Centers for Disease Control and Prevention. Basic Information about HIV and AIDS. <http://cdc.gov/hiv/topics/basic/index.htm#spread>.

Demographic Risk Factors

- Gender
 - In 2009, males accounted for 77% of all HIV diagnoses.
- Age
 - Those under the age of 40 are more likely to become infected with the HIV virus.
 - More than half (51%) of new HIV cases were those aged 25-44 years of age, in 2009.
- Race/Ethnicity
 - Blacks and Hispanics are at a disproportionate risk of HIV infection.
 - In 2009, Blacks and Hispanic accounted for 44% and 20% of new HIV infections, respectively.



Source: U.S. Department of Health and Human Services. Statistics: Statistics Overview. <http://www.aids.gov/hiv-aids-basics/hiv-aids-101/statistics/>.

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 2009.
- 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 2009, 9% of all new HIV infections were due to intravenous drug use.



Source: U.S. Department of Health and Human Services. Statistics: Statistics Overview. <http://www.aids.gov/hiv-aids-basics/hiv-aids-101/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 gum disease, oral warts, cavities, and dry mouth.
 - Hepatitis C
 - 80% 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.



Source: U.S. Department of Health and Human Services. HIV/AIDS Basics: Opportunistic Infection. <http://aids.gov/hiv-aids-basics/staying-healthy-with-hiv-aids/potential-related-health-problems/opportunistic-infections>.

National Statistics

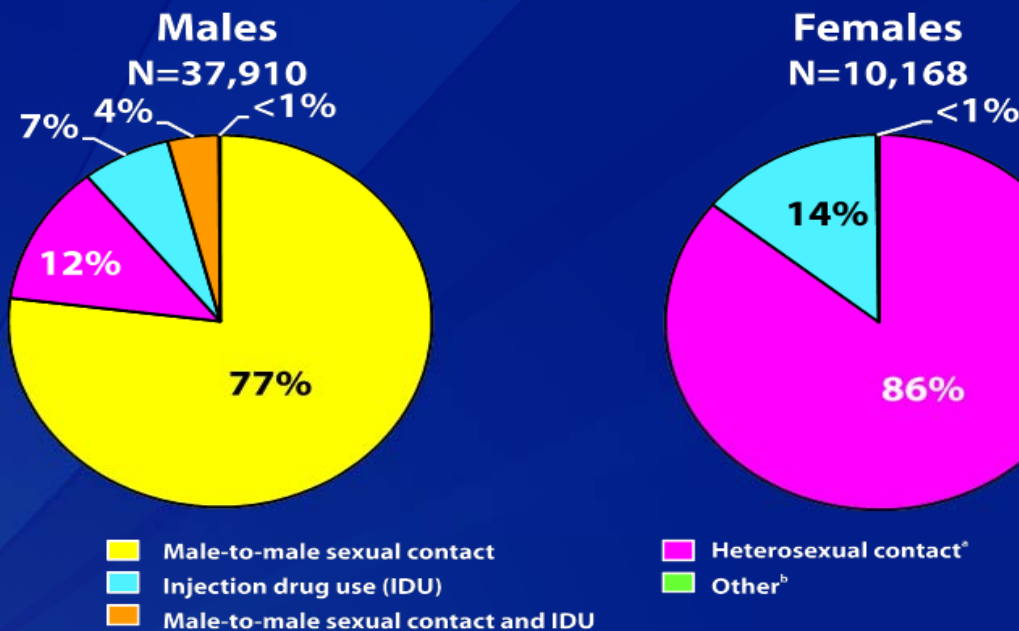
- In 2009, an estimated 1.1 million Americans were living with HIV infection, with 18% undiagnosed.
- Over 48,000 new cases of HIV infections were reported in the United States in 2009.
- In 2010, nearly 34,000 Americans were diagnosed with AIDS.



Source: Centers for Disease Control and Prevention. Basic Information about HIV and AIDS. <http://cdc.gov/hiv/topics/basic/index.htm#spread>.

National Statistics

Diagnoses of HIV Infection among Adults and Adolescents, by Sex and Transmission Category, 2010—46 States and 5 U.S. Dependent Areas



Note. Data include persons with a diagnosis of HIV infection regardless of stage of disease at diagnosis. All displayed data have been statistically adjusted to account for reporting delays and missing risk-factor information, but not for incomplete reporting.
 * Heterosexual contact with a person known to have, or to be at high risk for, HIV infection.
^b Includes hemophilia, blood transfusion, perinatal exposure, and risk factor not reported or not identified.



Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance – Epidemiology of HIV Infection (through 2010). Last Updated March 12, 2012. Reprinted with permission.

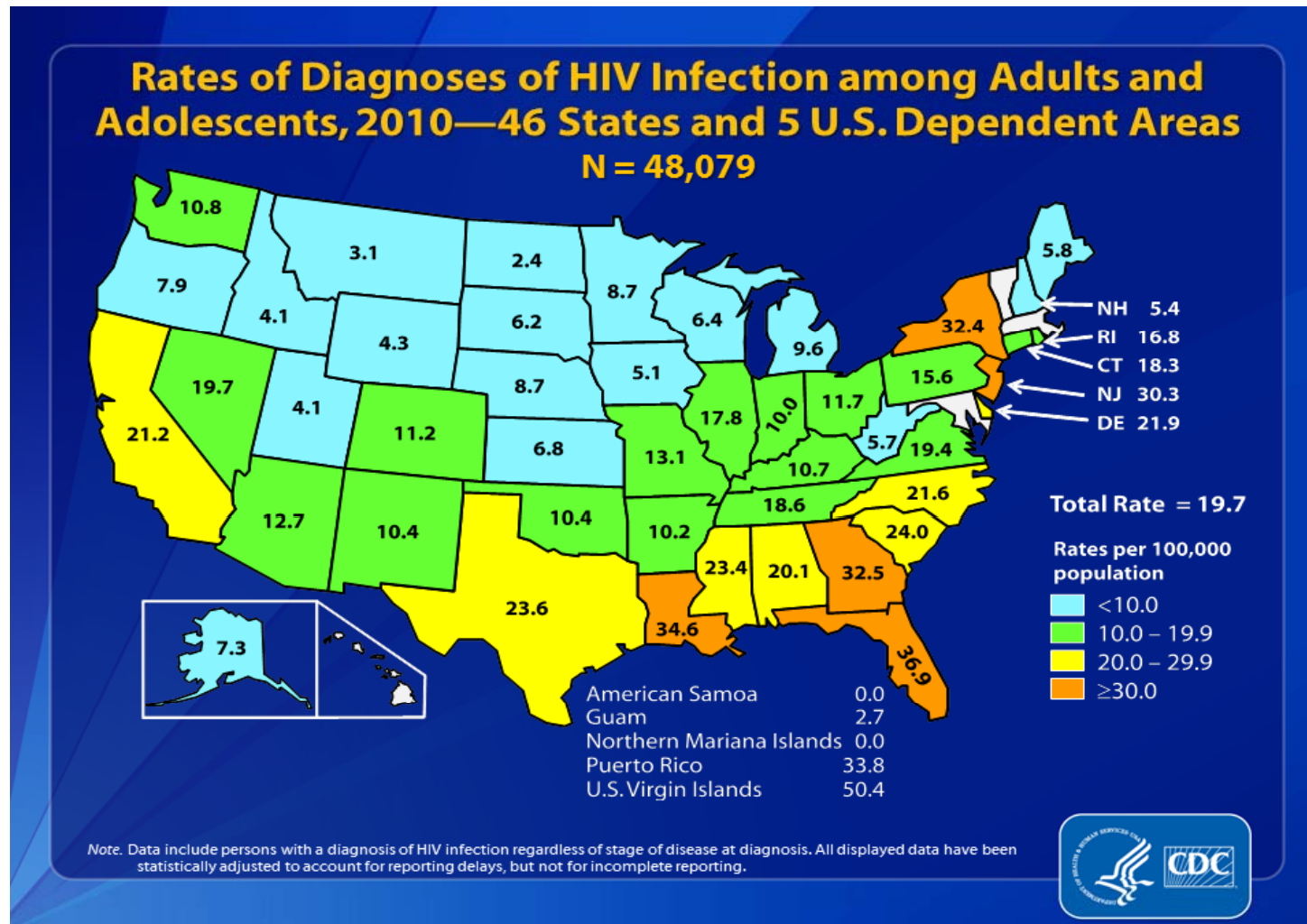
National Statistics and Disparities

- The number of newly diagnosed HIV infections was 8 times higher in Black Americans than in white Americans in 2009.
- The number of newly diagnosed HIV infections was 2-4 times higher in Hispanic Americans than in white Americans in 2009.
- In 2009, men accounted for 3 out of every 4 new HIV infections.
- In 2010, 41% of men living with HIV and 62% of women living with HIV were black.



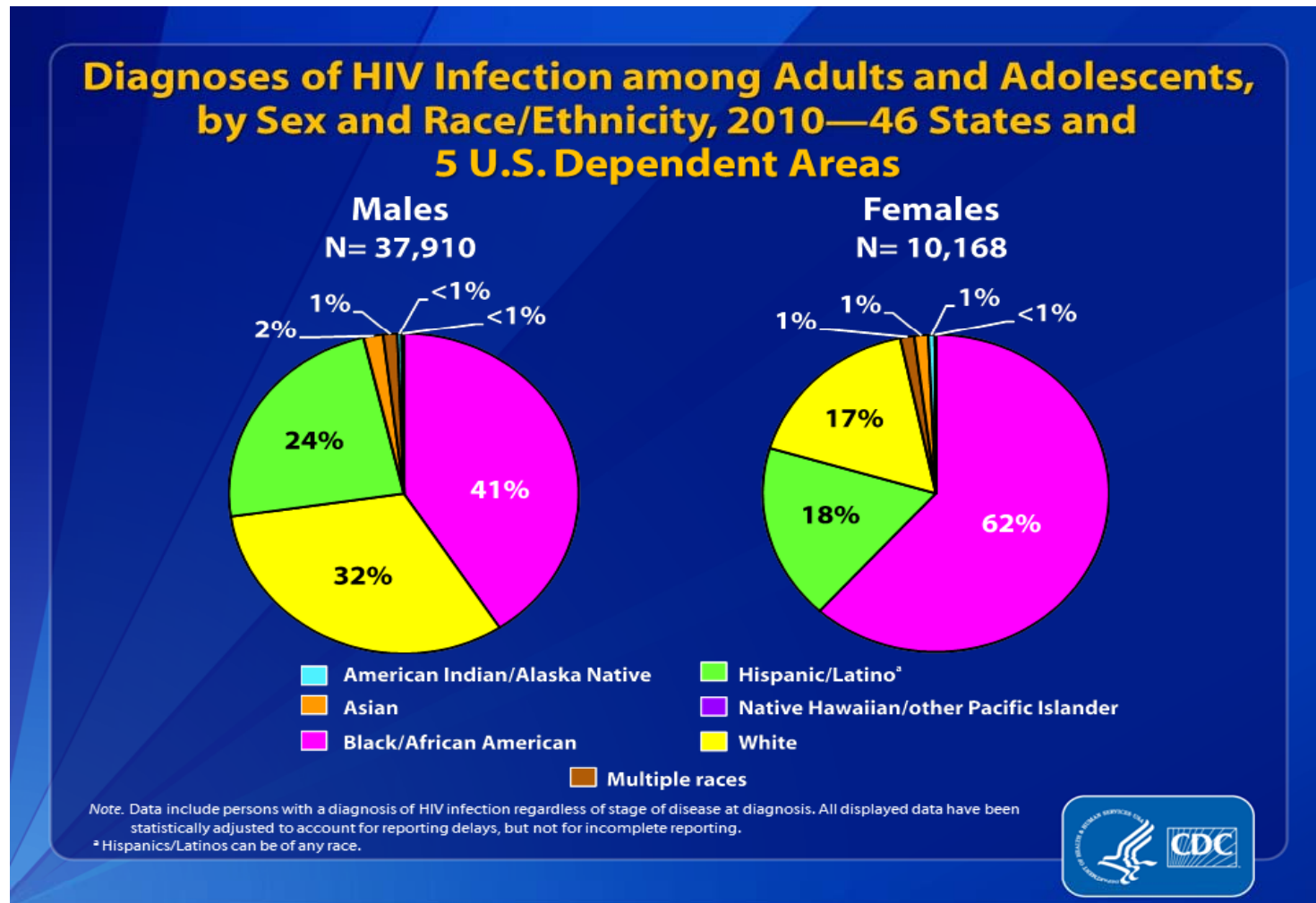
Source: Centers for Disease Control and Prevention. HIV/AIDS Basic Statistics. <http://www.cdc.gov/hiv/topics/surveillance/basic.htm#hives1>. Last updated September 17, 2012. Accessed November 21, 2012.

National Statistics and Disparities



Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance – Epidemiology of HIV Infection (through 2010). Last Updated March 12, 2012. Reprinted with permission.

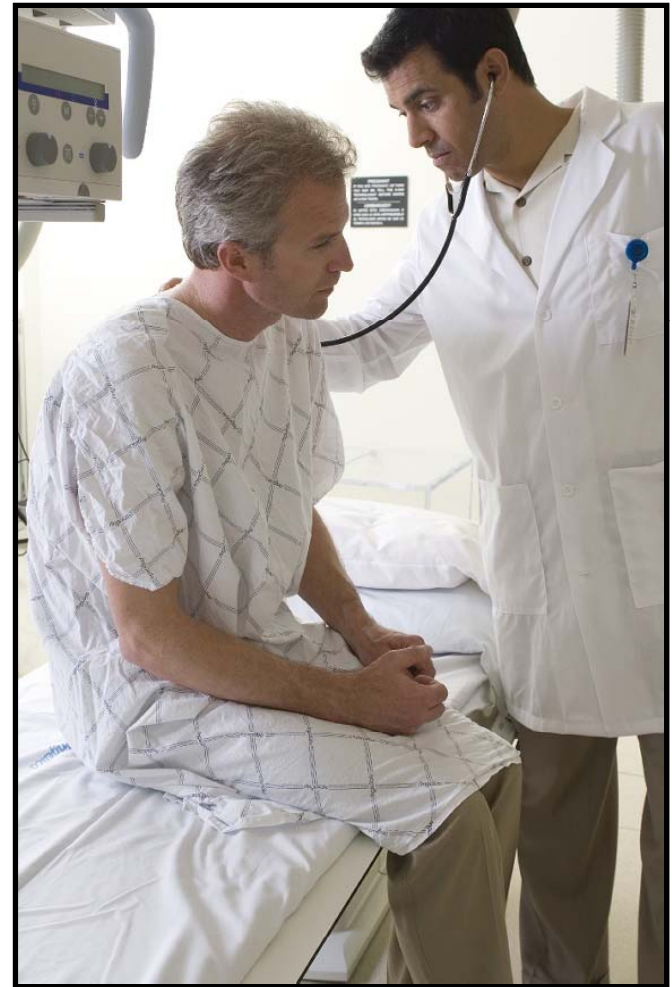
National Statistics and Disparities



Source: Centers for Disease Control and Prevention. HIV/AIDS Surveillance – Epidemiology of HIV Infection (through 2010). Last Updated March 12, 2012. Reprinted with permission.

Costs

- In 2009, the lifetime costs of treating HIV was an estimated \$355,000 per person.



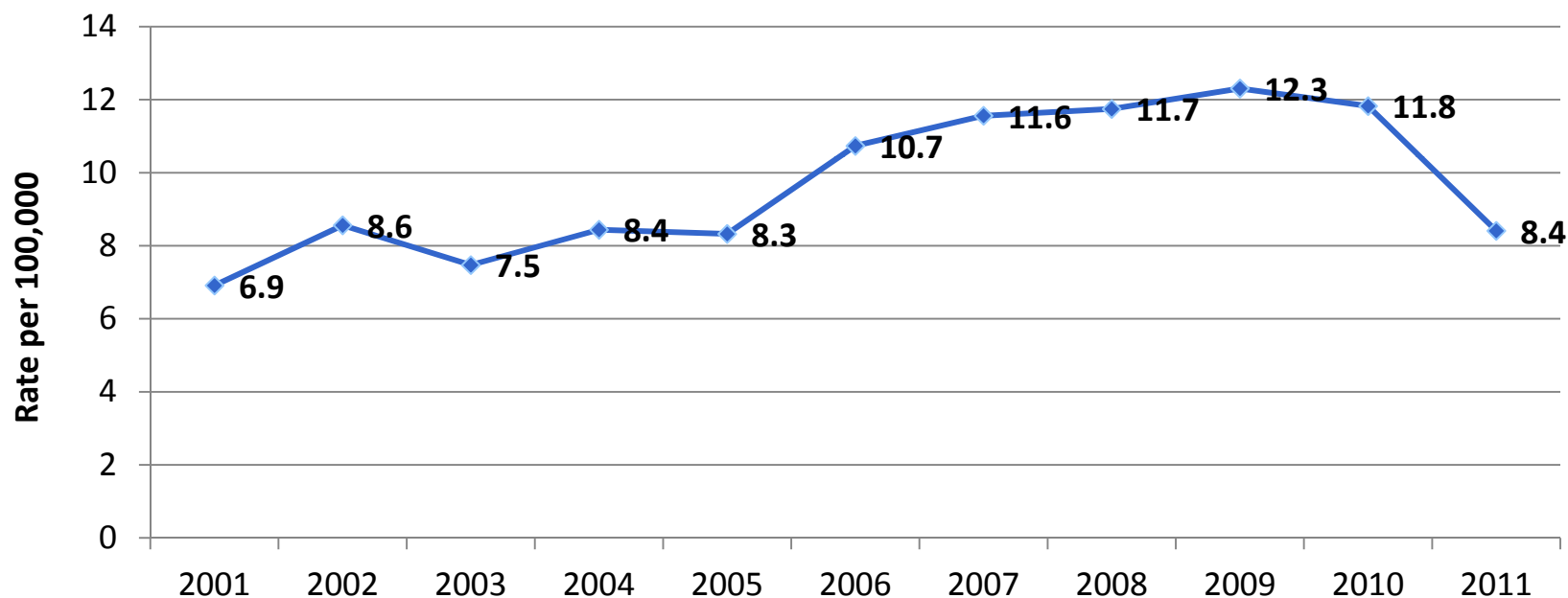
Source: U.S. Department of Health and Human Services Agency. National HIV/AIDS Strategy for the United States, 2010. <http://aids.gov/federal-resources/national-hiv-aids-strategy/nhas.pdf>. Accessed November 21, 2012.

Local Statistics

- Between 2009 and 2011, a total of 1,020 new HIV infections were diagnosed in San Diego County.
- Between 2009 and 2011, a total of 892 AIDS diagnoses were reported in San Diego County.
- Among males, 82% of all new HIV infections reported between 2007 and 2011 were transmitted by men who have sex with men (MSM).
- Among females, 72% of all new HIV infections reported between 2007 and 2011 were transmitted through heterosexual contact.

Local Statistics

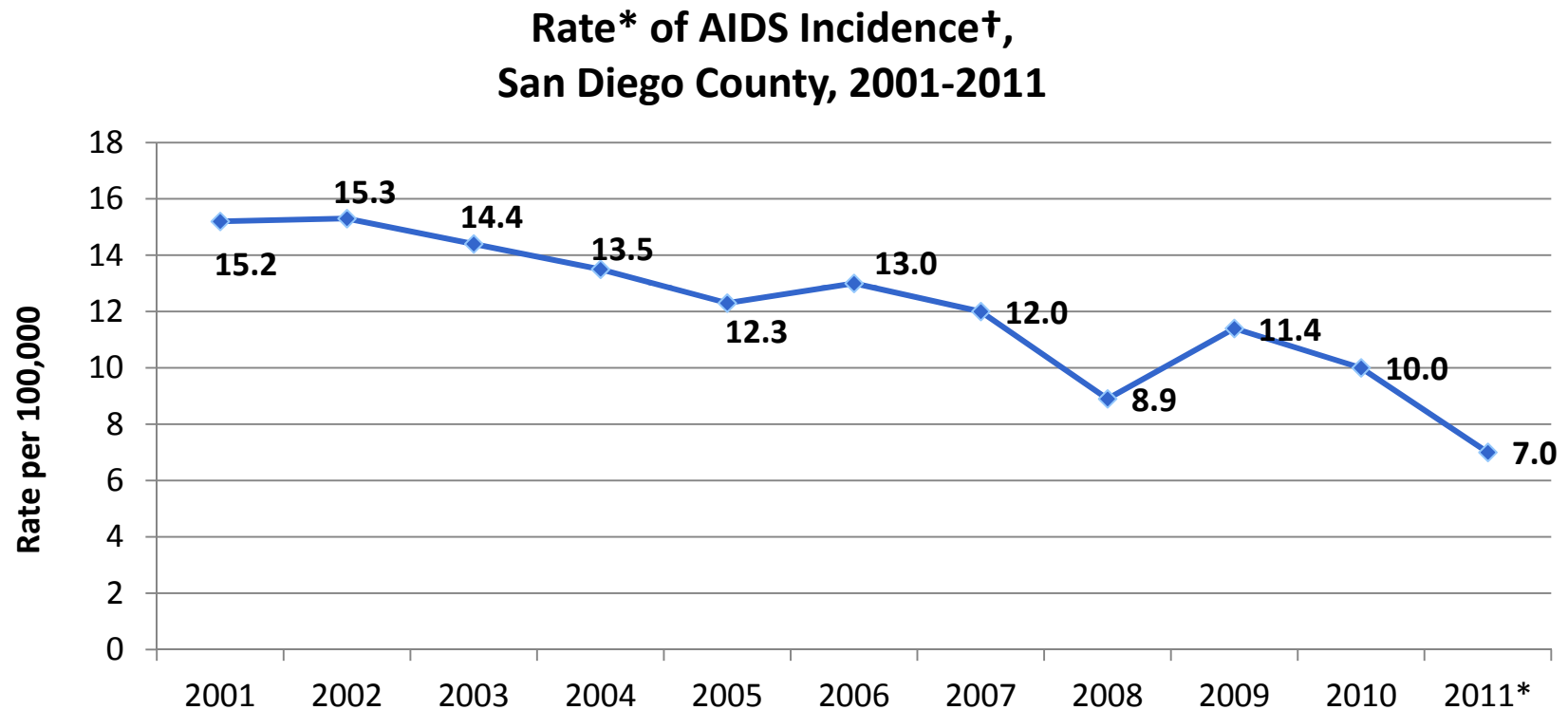
**HIV Infection Rates* by Year of Diagnosis,
San Diego County, 2001-2011**



*Rates per 100,000 population.

Source: County of San Diego, Health and Human Services Agency, Public Health Services, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 10/2012.

Local Statistics



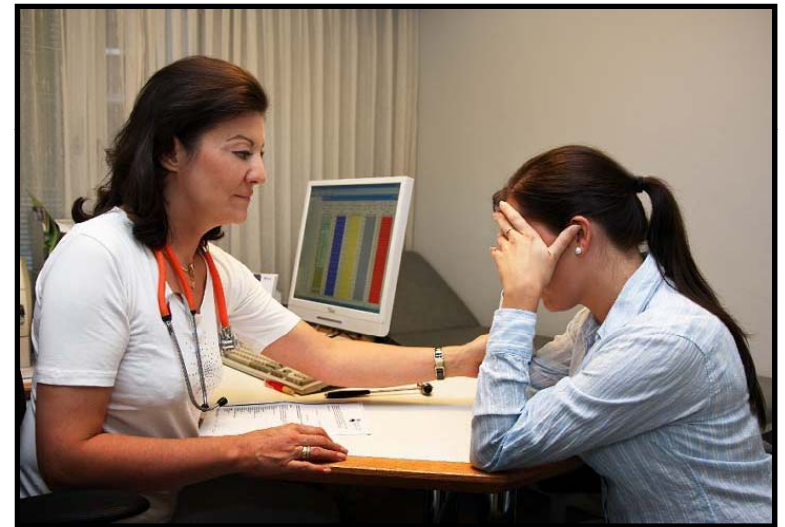
*Rates per 100,000 population. 2011 data is expected to have additional cases reported.

†AIDS Incidence refers to new cases reported to County Public Health Services.

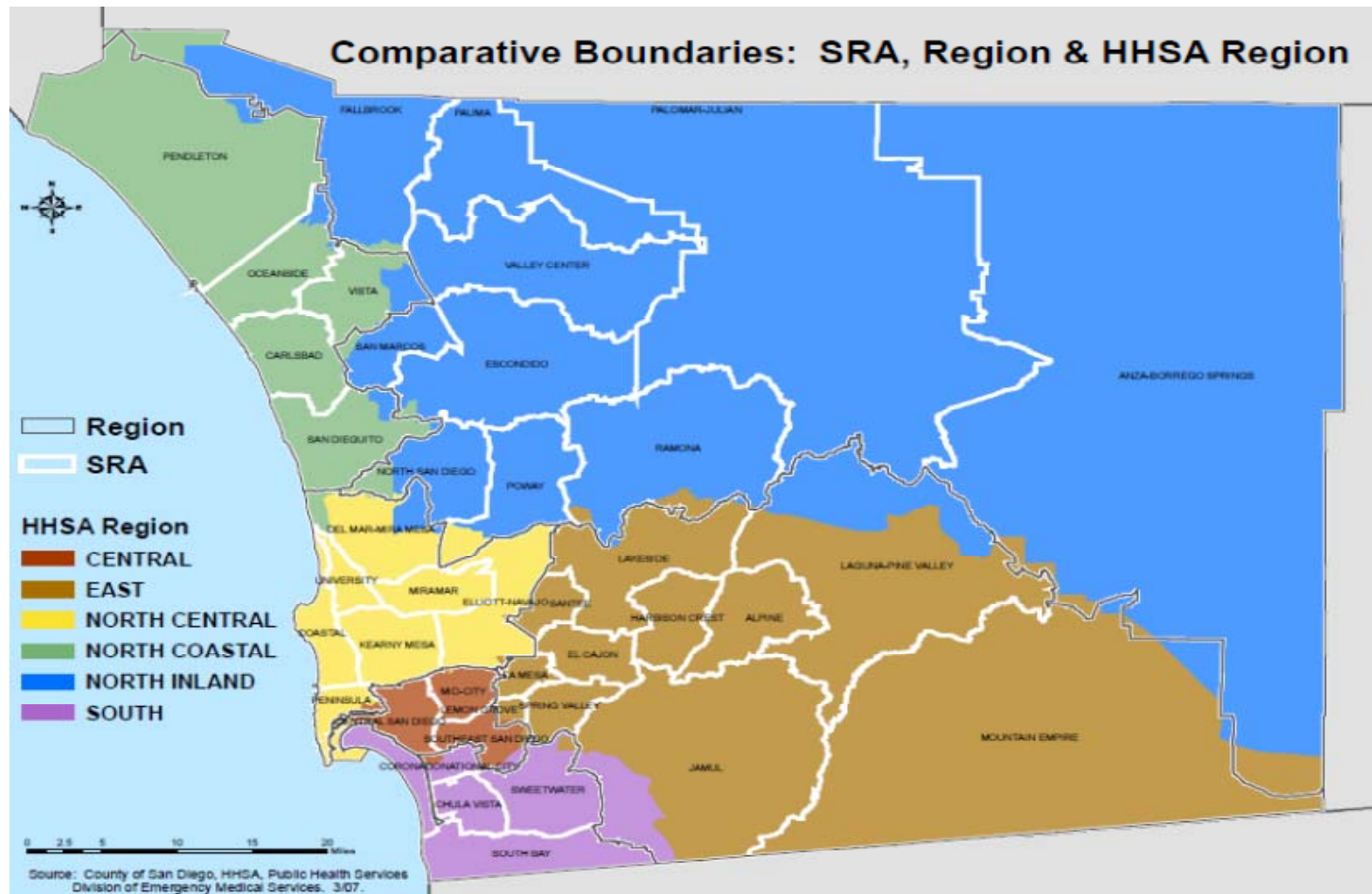
Source: County of San Diego, Health and Human Services Agency, Public Health Services, HIV/AIDS Epidemiology Unit, HIV/AIDS Reporting System; SANDAG, Current Population Estimates, 10/2012.

Local Statistics and Disparities

- Of the new HIV infections reported between 2009 and 2011, 90% of the cases were among males.
- In 2010, the rate of newly diagnosed AIDS cases among Blacks was more than 2 times the rate for San Diego County.
- In 2010, the rate of newly diagnosed AIDS cases among Hispanics was 33% higher than the rate for San Diego County.



Local Statistics and Disparities



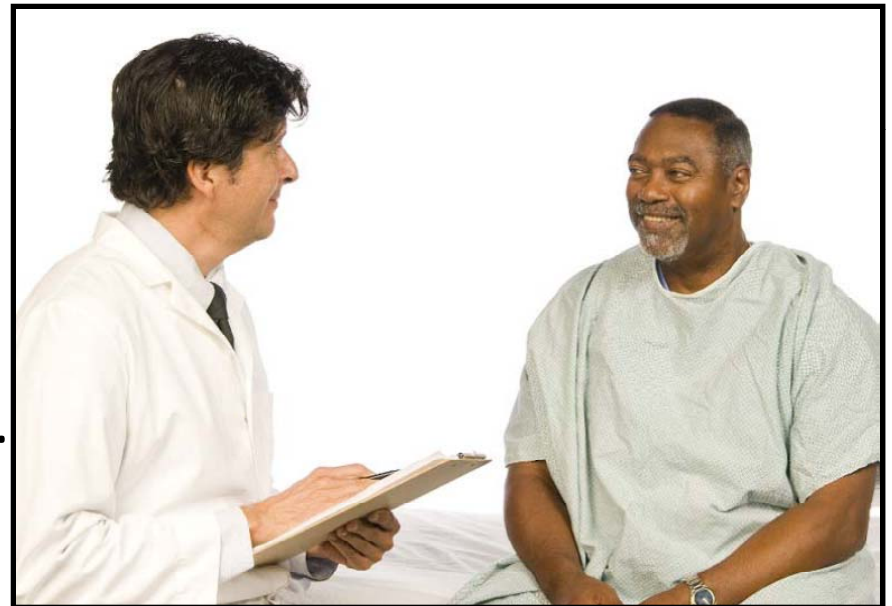
From 2007 to 2011, the Central region had the highest rates of HIV infections in all of San Diego County.

Prevention

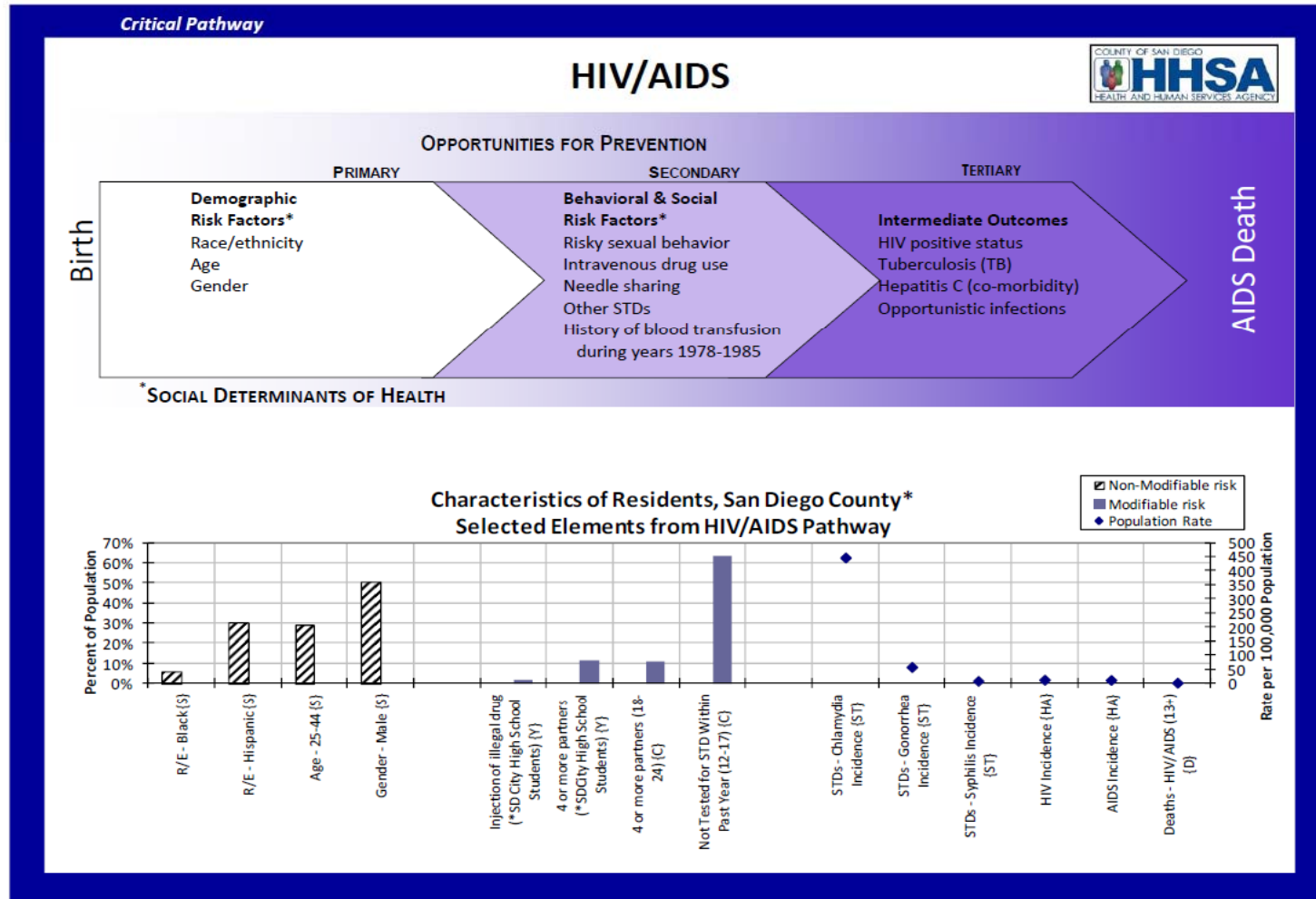
- Safer Sex Practice
 - Use condoms to reduce HIV transmission.
 - When used correctly, condoms can be 98% effective in preventing the transmission of HIV.
- Do not share needles or syringes with others.
- Seek prenatal treatment if you are pregnant.
 - There are medications available that can greatly 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.
 - 1 out of every 5 of those infected do not know they have HIV.



Critical Pathway to HIV/AIDS



Contact Us

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www.SDHealthStatistics.com