

HIV/AIDS UPDATE 2009

AGENDA

- I. Basic Information about the virus**
- II. Statistics by culture/gender**
- III. Prevention and Education**
- IV. Testing**
- V. Treatment and Care**

OBJECTIVES

- 1. Explain how HIV affects the body's immune system**
- 2. Discuss the cultural groups most Affected by HIV/AIDS epidemic**
- 3. Identify modes of transmission**
- 4. Describe methods for limiting and prevention**
- 5. Compare treatment modalities**

BASIC HIV/AIDS INFORMATION

HIV interrupts the body's ability to fight off viruses, bacteria, and fungi that cause disease effectively. HIV damages and destroys the cells of your immune system which causes the chronic and life-threatening disease known as AIDS.

HIV can not be passed through casual contact like shaking hands, hugging, sharing a drink, giving blood, nor by a mosquito bite. You can't even get it by a person with HIV/AIDS coughing or sneezing on you.

HIV is spread through some of the body's fluids such as blood, semen, vaginal fluids, breast milk, and fluids that surround the brain, spinal cord, bone joints and embryonic fluid. HIV is passed from person to person by the following ways: Vaginal, anal or oral sex, sharing drug needles/syringes, during pregnancy, birth to breast-feeding by or with an infected person.

STATISTICS

Based on data from a 2005 study in 33 states

Asian/Pacific Islanders represent 1.1% of the cases diagnosed in 2005. Of those, Asian/Pacific Islanders 78% were men, 21% were women and 1% were under the age of 13 years old. Due to under reporting or misclassification of Asian/Pacific Islanders' this number may be higher.

Hispanics/Latinos represented 18% of the new cases diagnosed in 2005. Testing was higher within this race more so than any other except Blacks. Both Hispanic women and men's most common exposure was through high-risk heterosexual contact and injection drug use. Men also were exposed by contact with other men. Since the beginning of the epidemic, approximately 952,629 AIDS cases have been diagnosed. Hispanics/Latinos accounted for 16% of those cases.

Blacks/African Americans accounted for 49% of the people who get HIV/AIDS. Children under the age of 13 diagnoses with HIV/AIDS was 63%. Blacks/African Americans living with HIV/AIDS, 41% are men and 64% are women. The most common ways of contracting the virus for both men and women were having unprotected sex with men and sharing injection drug needles/syringes. Men also commonly contracted the disease from unprotected sex with infected women.

American Indian/Alaska Natives represent 0.5% of the cases diagnosed in 2005 and 29% of them were women.

Men who have sex with men accounted for 71% of HIV case in 2005.

Women accounted for 26% of HIV cases diagnosed in 2005. Heterosexual, high-risk contact contributed to 80% of these cases.

Female adults or adolescents' cases decreased by 0.8% from 2001 to 2005.

Young people, aged 13-24 years of age, diagnosed with HIV made up 13% of the cases in 2004. HIV progresses more slowly to AIDS in young people. Persons aged 15-24 years, 81% had not progressed to AIDS within 12 months and 70% aged 13-14 years had also not progressed with 12 months of diagnosis. HIV/AIDS diagnosis given to persons aged 13-24 years, from 2001-2004, 62% were male and 38% were female.

Women

The latest data provided in 2004 showed:

- Black women aged 25-34 years; HIV was the leading cause of death.
- Black women aged 35-44 years; HIV was the 3rd leading cause of death.
- Black women aged 45-54 years; HIV was the 4th leading cause of death.
- Hispanic women aged 35-44 years; HIV was the 4th leading cause of death.
- All women aged 35-44 years; HIV was the 5th leading cause of death.
- All women aged 25-34 years; HIV was the 6th leading cause of death.

In 2005, data collected from 33 states, HIV reporting showed the following on woman:

- Approximately 126,964 women are living with HIV/AIDS
- 64% of that number are African American
- 19% of that number are White
- 15% of that number are Hispanic
- 1% of that number are Asian/Pacific Islanders
- <1% of that number are American Indian/Alaska Native

Blacks/African American

HIV/AIDS has hit African Americans harder than any other racial or ethnic group in the US. This not directly related to race or ethnicity but rather barriers faced by African Americans. Barriers like higher poverty levels, access to health care, health care seeking behaviors, and high rates of incarceration. African American with AIDS doesn't live as long as some of the other ethnic groups. HIV/AIDS is the leading cause of death among Blacks.

A CDC report in 1986 documented that AIDS among Blacks and Hispanics was over three times the rate for Whites. AIDS mortality rates remain nearly ten times higher among African Americans than Whites even though deaths declined across the board from 1995 and 1998.

The CDC has initiated numerous national, regional, and community-based programs geared exclusively toward the African American population in order to educate and decrease infection among this group.

Hispanics/Latinos

The 4th leading cause of death among Hispanic/Latino men and women aged 35 to 44 years in 2004 was HIV/AIDS. Risk factors for HIV differ

by the country of birth according to research. Hispanic/Latinos born in Puerto Rico are more likely to contract the virus through injection drug use and risky heterosexual contact. Hispanic/Latino men born in Central and South America, Cuba, Mexico, and the US's primary cause of infection in by sexual contact with other men. Cultural differences may also play a role in the spread of HIV in this group. Partners may be silent/silenced from talking openly about sexual issues and preferences. This may not apply to all of Hispanic/Latino origin due to diversity in people and culture within the US.

American Indians/Alaska Natives

Population size is taken into account when ranking American Indian/Alaska Natives 3rd in HIV/AIDS diagnosis in 2005. Among this group, this is a growing problem. The rate of AIDS diagnosis for this group has been higher than that for Whites since 1995.

American Indian/Alaska Natives living with AIDS is estimated to be 1,581 persons in 2005 3,238 sine the beginning of the epidemic. The 32 children of that total number were younger than 13 years. This group has the shortest life expectancy than nay other race/ethnic group in the US. Higher rates also exist for many other diseases such as diabetes, tuberculosis, and alcoholism. Their access to health care is poor. Some of the data for American Indian/Alaska Native may be incomplete due to some states not conducting HIV surveillance, misclassification, or under reporting.

Asian/Pacific Islanders

Asian/Pacific Islanders had the lowest rate of AIDS diagnosis in 2005. Since the start of the epidemic to 2005, 7659 Asian/Pacific Islanders were diagnosed with AIDS. Though rates are low among this group, there is growing concern of rising levels of risky sexual behavior of Asian/Pacific Islander men having sex with men in San Francisco. Another study of 503 Asian/Pacific Islander MSM aged 18-29 years showed overall HIV prevalence nearly 3% and varied by ethnicity

ranging from 0% for Vietnamese MSM to 13.6% for Thai MSM. Unprotected anal intercourse in the past 6 months was reported by 48% of those surveyed. Methamphetamines and other drugs have also shown to be a high factor for unprotected sex among this group. Data on this group may be incomplete due to language barriers, cultural differences, under reporting and lack of access to health care.

Prevention and Education

There are several ways to avoid becoming infected with or transmitting HIV. They are by being abstinent (refraining from any type of sexual contact), monogamous and long-term relationships with an uninfected partner, and not sharing needles/syringes for non prescription drugs.

Before initiating a sexual relationship, you and your partner should be tested for HIV and other sexually transmitted diseases. STDs increase your chances of becoming infected or an infected person will transmit HIV. Condoms also decrease transmission risks.

The most effective approach for limiting HIV and hepatitis transmission among injection drug users, their partners and their children is to use clean, new, sterile needles or syringes.

If a woman is pregnant, she should voluntarily be tested for HIV. Early detection can increase the infant's chances of being born HIV infection free by receiving antiretroviral therapies or preventive drugs.

CDC's HIV Prevention goal is to reduce new HIV infection numbers in the US by half each year, increase care and treatment services to those infected, increase nationwide capacity to monitor, track, develop intervention and prevention programs.

TREATMENT AND CARE

HIV is now considered a chronic, long-term disease. There is no cure or vaccine for HIV/AIDS. However, people with this disease can benefit from a variety of antiretroviral therapies and other services which have been shown effective.

Drug regimens, vaccines, and prevention strategies to help people from becoming infected are being investigated through federal efforts.

HIV/AIDS medicines fall into three categories:

1. Reverse transcriptase (RT) inhibitors
To keep the virus from reproducing, this interferes with a critical HIV life cycle
2. Protease inhibitors
A protein used by the HIV virus to produce infectious viral particles is what this medicine interferes with.
3. Fusion inhibitors
This medicine blocks the virus from entering the body's cells.

TESTING

Testing is one of the main keys in controlling the spread of HIV. It is believed that 25% of the more than 1 million Americans believed to be living with HIV don't even know they are infected.

Whether you test positive or negative for the HIV virus, the testing process is a chance to get informed and take action in the fight against HIV/AIDS.

The most common HIV test is by having blood drawn. This test searches for the antibodies your body make to fight HIV. Result time varies from a few days to two weeks. A urine sample can also be used to search for the antibodies and have the same result time frame. An oral exam can also be administered by placing a pad between the cheek and gum for 2-5 minutes. Again, the test is searching the antibodies in the blood vessels in your cheek and gum. This is then sent to a lab and results with in 5-7 days. Home testing kits are now available online or can be purchased at the local drugstore. You simply place drops of blood from your finger onto a card and mail the card to the lab. The FDA has approved only one home test kit called Home Access Express HIV-1 Test System. You can get your results by calling the number it provides in 3-7 days. You can also go to HIVtest.org to locate a testing site in your area.

.....**RESOURCES**

Internet websites:

<http://www.aids.gov/basic101/index.html>

<http://www.aids.gov/basic/factsheets/index/html#fact>

<http://www.cdcnpin.org/scripts/hiv/prevent.asp>

<http://www.aids.gov/treatment/index/html>

<http://www.nlm.nih.gov/medlineplus/aidsmedicines.html>

<http://www.aids.gov/testing/index/html>

<http://www.aids.gov/testing/types/index/html>

<http://www.aids.gov/testing/where/index.html>

<http://www.cdc.gov/hiv/topics/women/resources/factsheets/women.htm>

<http://www.cdc.gov/hiv/topics/aa/index.html>

<http://www.cdc.gov/hiv/resources/factsheets/hispanic.htm>

<http://cdc.gov/hiv/resources/factsheets/aian.htm>

<http://www.cdc.gov/hiv/resources/factsheets/api.htm>

<http://www.census.gov/ipc/prod/wp98/ib98-4.pdf>

<http://www.fda.gov/oashi/aids/virals.html>

http://cdc.gov/dhdsp/cdcynergy_training/content/activeinformation/resources/african_American_report.pdf

HIV/AIDS 09 UPDATE QUIZ

Name _____ Date _____

1. True or False. HIV damages and destroys the cells of you immune system.

2. True or False. If you have HIV, you have AIDS.

3. Name three ways HIV can not be spread from person to person.

4. Name three body fluids which could carry the HIV virus.

5. Data from the 2005 study of 33 states, what is the % represented by the following groups Asian/Pacific Islanders _____

American Indian/Alaska Natives _____

Hispanic/Latino _____

Black/African American _____

6. Men who had sex with men accounted for _____ of HIV cases in 2005.

7. Name two ways to avoid becoming infected with or transmitting HIV. _____

8. True or False. A pregnant woman should put off HIV testing until the baby is born .

9. Name the three categories of HIV/AIDS medicines

10. From the Antiretroviral Formulations chart give the class and generic name of the two Protease Inhibitors that come in both capsules and tablets.

11. From the FDA sheet on drugs used in the treatment of HIV Infection give the brand name and manufacturer name of the most recently approved drug.

12. What is the most common HIV testing method?

13. True or False. The FDA has approved three different HIV home test kits.

14. His was the leading cause of death in 2004 among black women in what age group? _____

15. According to the chart, what is the life expectancy of a person with AIDS in Zimbabwe? _____