



FRATERNITY HOUSE, INC. INFORMATION ABOUT: HIV, AIDS & TB

What is HIV and AIDS?

The human immunodeficiency virus (HIV) is the virus that causes acquired immunodeficiency syndrome (AIDS). HIV causes AIDS; a person can be infected with HIV for many years before AIDS develops. Various factors, including your genetic makeup, can influence the time between HIV infection and the development of AIDS. The first cases of AIDS were identified in the United States in 1981, but the virus probably existed here and in other parts of the world for many years before that. In 1984, scientists proved that HIV causes AIDS.

The San Diego County Department of Health and Human Services' 2008 HIV/AIDS Epidemiology Report indicated that as of December 31, 2007, San Diego County had reported a total of 13,436 cases of AIDS and there are a total of 3,133 HIV cases.

What is the difference between HIV and AIDS?

When HIV enters your body, it infects specific cells in your immune system. These cells are called CD4 cells or helper T cells. They are important parts of the immune system and help your body fight infection and disease. When your CD4 cells are not working well, you are more likely to get sick. Usually, CD4 cell counts in someone with a healthy immune system range from 500 to 1,800 per cubic millimeter of blood. AIDS is diagnosed when your CD4 cell count goes below 200. Even if your CD4 cell count is over 200, AIDS can be diagnosed if you have HIV and certain diseases such as tuberculosis or *Pneumocystis carinii* pneumonia (PCP).

Ways you can get HIV:

- Having unprotected sex (sex without a condom) with someone who has HIV
- Sharing a needle to inject drugs or sharing drug works with someone who has HIV
- Having a mother who was infected with HIV when you were born
- From a blood transfusion (However, it is unlikely you got infected that way because all blood in the United States has been tested for HIV since 1985.)

Ways you cannot get HIV:

- Just working with or being around some one who has HIV
- Being stung or bitten by an insect
- Sitting on toilet seats
- Doing everyday things like sharing a meal
- Kissing (Closed-mouth or "social" kissing cannot spread HIV, however, there is a possibility of contracting blood through open-mouth or "French" kissing).
- Biting is not a common way to contract HIV
- Saliva, Tears, and Sweat
- Using latex or polyurethane (a type of plastic) condoms

How long does it take to go from HIV infection to a diagnosis of AIDS?

There is no one answer to this question because everyone is different. Before antiretroviral therapy became available in 1996, scientists estimated that AIDS would develop within 10 years in about half the people with HIV. Since 1996, new medical treatments have been developed that can prevent or cure some of the illnesses associated with AIDS, though they cannot cure AIDS itself.

What is the treatment for HIV or AIDS?

- **Antiretroviral medicines.** Because HIV is a certain type of virus called a retrovirus, the drugs used to treat it are called antiretroviral medicines. These powerful medicines control the virus and slow progression of HIV infection, but they do not cure it.
- **HAART.** The current recommended treatment for HIV is a combination of three or more medicines. This regimen of medicines is called highly active antiretroviral therapy (HAART).

Opportunistic Infections

Because HIV damages your immune system, you may have a higher chance of getting certain diseases, called opportunistic infections. They are so named because an HIV-infected person's weakened immune system gives these diseases the opportunity to develop.

Examples of common opportunistic infections

- Tuberculosis (TB)
- Hepatitis C (Hep C)
- Human papilloma virus (HPV)

The importance of getting tested for Tuberculosis (TB)

TB is a disease caused by a germ called *Mycobacterium* (my-ko-bak-TEER-I-um) *tuberculosis*. TB most often affects the lungs, but TB germs can infect any part of the body. TB may be latent or active. Latent means that the germs are in the person's body but are not causing illness. If you have *latent* TB you will not have symptoms and cannot spread TB. However, if HIV has made your immune system too weak to stop the TB germs from growing, they can multiply and cause *active* TB (also called TB disease). In people with HIV, TB in the lungs or anywhere else in the body is called an AIDS-defining condition. In other words, a person with both HIV and active TB has AIDS.

How is TB spread?

An infected person can spread TB through the air via:

- Lung or throat coughs
- Sneezes
- Singing

You cannot spread TB:

- Shaking hands
- Sitting on a toilet seat
- Sharing dishes/utensils

Can I give TB to other people?

Yes. If you have TB disease of the lungs or throat, you can probably spread TB to other people, thus the importance of getting tested.

