

**What is HIV / AIDS**

Human Immunodeficiency Virus (HIV) is the virus that leads to AIDS. HIV falls into a subset of retroviruses called lentiviruses, which means that there is an interval , sometimes years, between the initial infection and the onset of symptoms. HIV infects the CD4+T cells and replicates rapidly. Many scientists believe that HIV uses the body’s aggressive immune response to the virus to attack the immune system and replicate. HIV causes gradual deterioration of the immune function eventually leading to the destruction of the organs that protect the body from outside diseases, which triggers the immune suppression that leads to AIDS.

The final stage of HIV is AIDS (Acquired Immunodeficiency Syndrome). The CDC defines AIDS as an HIV-infected person with fewer than 200 CD4+T cells and/or person with HIV who develops certain opportunistic infections: pneumocystis carinii pneumonia, toxoplasmosis, cryptosporidiosis, candidiasis, and cryptococcal meningitis, among others.

**HIV / AIDS Awareness**

**HIV Transmission**

The most common transmission of HIV occurs through sexual contact, however it is important to note that transmission occurs with the exchanging of certain bodily fluids (semen, vaginal secretions, and breast milk) during sex, not the act itself. HIV can also be transmitted through blood-to-blood contact (such as sharing needles or blood transfusions involving unscreened blood). Another form of transmission is from an infected mother to her child through pregnancy, birth or breastfeeding

There are certain behaviors that expose a person to a higher risk of contracting HIV:

* Sharing needles for drugs, tattoos, body piercing, vitamins or steroids with an HIV infected person
* Engaging in unprotected sex (of any kind) with an HIV infected person.

**HIV Prevention**

Understanding how HIV is transmitted is the first step in preventing HIV. Once the processes of transmission are understood, people can take the necessary action to avoid contracting HIV. Avoiding the high-risk behaviors mentioned previously is the best way to prevent HIV transmission.

**Getting Tested**

Getting tested regularly and communicating with sexual partners can be another way to prevent HIV transmission. There are numerous testing sites around the United States. To find testing sites around Arkansas just visit [www.aids.org](http://www.aids.org) or call the CDC National AIDS Hotline at (800)342-2437. At home testing kits can also be purchased at a pharmacy. The Home Access brand test kit is the only FDA approved kit at this time.

**Signs and Symptoms of HIV**

The only way to confirm HIV infection is by getting tested, since symptoms and latent periods vary from person to person. During the first two to four weeks of infection a person may experience flu-like symptoms and enlarged lymph nodes. During this stage people are highly infectious and HIV is present in large quantities in genital secretions. According to the CDC, the following are symptoms that may be warning signs of HIV infections:

* Rapid weight loss
* Dry cough
* Recurring fever or profuse night sweats
* Profound and unexplained fatigue
* Swollen lymph glands
* Diarrhea lasting more than a week
* White spots on the tongue, in the mouth or throat
* Pneumonia
* Red, brown, pink or purplish blotches on or under the skin
* Memory loss, depression and other neurological disorders

**HIV Treatment**

Treatment for HIV/AIDS carries a great cost. The estimated monthly medical cost from beginning care to death is estimated to be $21,000 per month with an estimated lifetime cost of $681,900. Early diagnosis and treatment of HIV can cut treatment costs down to one-fifth of the cost. Early treatment of HIV also reduces infectiousness by 60% and the death rate by up to 66%.

The number of drug treatments for HIV continues to grow. A thorough list of HIV drugs and complete information for each drug can be found at <http://www.thewellproject.org/.>

**HIV Prevalence in the United States**

In 2007 the CDC reported the percentages of HIV and AIDS cases by region, the south had the highest percentage for both HIV and AIDS cases. Minorities were most affected by HIV/AIDS in the state of Arkansas. African American and Hispanic men comprise 47% of new HIV infections, but comprise only 17% of the general population. The mortality rate attributed to HIV/AIDS for African Americans in Arkansas was 13.6 per 100,00 compared to 1.4 in the Caucasian population. The CDC estimates that there are approximately 1.1 million people living with HIV in the United States , one in five of these people does not know they are infected. This number is expected to increase over time, meaning prevention efforts by individuals are needed.

**Getting Support**

For someone who has just been diagnosed as HIV+, life can be confusing and hard. Support networks have been set-up to help these people to cope with the diagnoses. Support networks for those just diagnosed or living with HIV/AIDS can be found at <http://www.herpes-coldsores.com/support/aids.htm>

**Healthcare Personnel Transmission Prevention**

With the growing number of HIV/ AIDS cases growing daily in the United States, healthcare personnel are at a great risk for contracting HIV. New measures have been implemented in healthcare settings throughout the United States to protect workers, including:

* Routine barriers, such as gloves and/or goggles, when anticipating contact with blood or body fluids.
* Washing hands and other skin surfaces immediately after contact with blood or body fluids
* Careful handling and disposing of sharp instruments during and after use.

**Resources**

* <http://www.hiv.com/>
* <http://www.cdc.gov/hiv/resources/factsheets/#Treatment>
* <http://www.thewellproject.org/>
* <http://www.herpes-coldsores.com/support/aids.htm>

**Upcoming Events:**

**December 1, 2010** – Dept of Social Work will host its third World AIDS Day in the Mockingbird Room beginning at 9 am with featured keynote speaker Dr. Carl Abraham.

Pre-registration is not required. For more information on the day’s activities, contact [pwalls@astate.edu](mailto:pwalls@astate.edu)

\*\*If you have any suggestions for newsletter topics, please contact Dean Susan Hanrahan at [hanrahan@astate.edu](mailto:hanrahan@astate.edu).

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

The Arkansas State University Employee Wellness Newsletter is published monthly during the academic year by the College of Nursing and Health Professions. Health questions can be addressed to Dean Susan Hanrahan, Ph.D., ext. 3112 or hanrahan@astate.edu. Produced by Helen Grimes, graduate student in the College of Nursing and Health Professions, Physical Therapy Program.