

Colorado State University-Pueblo
Student Health Services
2200 Bonforte Blvd
Pueblo, CO 81001
(719) 549-2830
HIV Patient Teaching Sheet

Definition: HIV is an acronym for Human Immunodeficiency Virus which is the virus that causes AIDS (Acquired Immunodeficiency Syndrome). HIV is a retrovirus, which means that it has the ability to destroy a type of cell that defends the body against many illnesses. This cell is called a CD4 helper lymphocyte. The lymphocyte is in the white blood cell family and it fights against infections. People who have HIV and it develops into AIDS can die of a simple infection that the normal immune system would fight off. Can you imagine dying from a simple cold?

Statistics: Twenty years ago, the first cases of HIV/AIDS were identified in San Francisco and New York in the gay communities. Today, there are an estimated 42 million people who have HIV or AIDS worldwide and include heterosexual, bisexual, and homosexual communities. More than 3 million people die every year from AIDS related illnesses worldwide. It is important to remember that anybody can get HIV/AIDS by having unprotected sex or sharing needles. HIV is non-discriminatory and can affect anyone; male, female, moms, dads, gay, straight, adults, children, teens. Now, thousands of young people are infected or will be infected by HIV due to unsafe sexual practices.

How HIV is transmitted: HIV can be transmitted from one infected person to another through blood, semen, vaginal fluids, and breast milk. HIV can also be transmitted by sharing needles to inject drugs like heroin, or anabolic steroids. Tattooing needles that are reused can be contaminated with the HIV virus. (Make sure the tattoo artist you go to uses disposable needles only!). At one time, people who had bleeding disorders and required frequent blood transfusion contracted HIV from contaminated blood. It is now very rare for patients to get HIV from blood transfusion. The blood is tested for infectious diseases. People who have other sexually transmitted diseases are at a higher risk for contracting HIV. Individuals who are infected with an STD are 2-5 times more likely than uninfected people to acquire HIV. If a person is infected with an STD and HIV, they are more likely to transmit HIV through sexual contact.

HIV Myths: You cannot get HIV from holding hands, hugging, or any other casual contact. HIV is not spread through sneezing, coughing, or by sitting next to someone who is HIV positive. Mosquitoes and other bugs do not carry the virus and it is very rare for someone to get HIV from a blood transfusion. In the United States, blood that is donated is checked very carefully for communicable diseases.

Why do STD's increase the Risk of acquiring HIV?

- a. STD's likely increase susceptibility to HIV infection a couple of ways. 1) STD's that cause ulcers like herpes, syphilis, or chancre cause openings in the skin of the genital areas and are a point of entry for HIV. 2) STD's that do not cause ulcers but cause increased secretions and inflammation can be a target for the HIV virus. **Remember, anytime you have an infection of any kind, your body will produce white blood cells (mainly CD4 leukocytes) to try to fight it and HIV will zone in on those cells and try to kill them.**
- b. People who already have HIV and an STD have a large amount of genital secretions that have 10 times the concentration of HIV in their semen than a patient who is just infected with HIV. (Especially in men who have gonorrhea)

Pregnancy and HIV

- a. All pregnant women should be tested for HIV. If a pregnant woman is HIV positive, her baby can become infected in the womb, through the birthing process, or through breast feeding. If a primary care provider knows that a woman is infected with HIV, he or she can prevent the spread of the virus to the baby with medication.

Signs and Symptoms: Patients with HIV may not have symptoms until the virus has affected the immune system enough to prevent the body from fighting off infections. Warning signs that a patient has HIV are:

- a. Extreme weakness
- b. Rapid weight loss
- c. Frequent fevers that last for several weeks with no explanation
- d. Heavy sweating at night
- e. Swollen lymph glands
- f. Minor infections that cause skin rashes and mouth, genital, and anal sores
- g. White spots in the mouth or throat
- h. Chronic diarrhea
- i. A cough that will not go away
- j. Trouble remembering things
- k. Females may experience severe yeast infections that will not respond to medication or develop Pelvic Inflammatory Disease

Patients whose immune systems have been attacked by HIV and are now in full blown AIDS can develop:

- a. Lung infection-the pneumonia *Pneumocystis carinii* or tuberculosis
- b. Brain infection-meningitis or encephalitis
- c. Intestine Issues-blockages in the colon

Diagnosis

HIV/AIDS is diagnosed with a blood test or a swab on the inside of your cheek.

Treatment

There is not a cure for HIV/AIDS. There are medications out there called antivirals and usually a special doctor will initiate a combination of the antiviral drugs that will help a patient who has HIV boost his immune system and resist full blown AIDS. Right now there is not a vaccine to prevent HIV and AIDS.

Prevention

HIV/AIDS can be prevented by doing the following:

- a. Abstain from sexual intercourse (including oral, vaginal, or anal sex)
- b. If abstinence is not an option then always using a latex condom for all types of intercourse (including oral, vaginal, or anal sex) If a person is in a lesbian relationship it is important to use a dental dam (a type of barrier to be used when practicing oral sex)
- c. All health care professionals should practice universal precautions. (wear latex gloves when working with a patient, wash hands thoroughly, and if exposed to contaminants; report it and get immediate testing)
- d. Never share needles
- e. Discuss your sexual history with your partner and know that you can always be checked for HIV and other STD's at the student health center before initiating a sexual relationship

