

What are HIV and AIDS?

The human immunodeficiency virus (HIV) is the agent that infects people and causes acquired immune deficiency syndrome (AIDS). When an individual has HIV in his blood, the individual is said to be "HIV positive." HIV is transmitted through contact with an infected individual's semen, blood or vaginal fluids; through an infected mother to her unborn baby; or through breast milk passing from an infected mother to her newborn.

Compared with other viruses, HIV is difficult to transmit. In addition, many HIV-positive individuals will remain healthy and show no symptoms of AIDS for periods ranging from several months to an average of 10 years following infection. If otherwise healthy, HIVinfected individuals (known as "chronic carriers") will not know they have the disease and may unwittingly transmit it to other people.

There are no defining signs or symptoms of HIV infection. To determine whether an individual has been infected with the virus, he must be tested. An individual who is infected with HIV may or may not have symptoms such as those associated with many common illnesses. These symptoms include swollen glands in the neck, armpits or groin; fever; diarrhea; weight loss; and fatigue. It is believed that about nine out of 10 individuals who are HIV positive eventually develop AIDS. The Centers for Disease Control and Prevention have defined AIDS as including those individuals who are infected with HIV and have either a T4 cell count of less than 200 or have any of 26 secondary conditions, which include pulmonary tuberculosis, recurrent bacterial pneumonia and cancer of the cervix. AIDS may be fatal, but current treatments are available to prolong the life and protect the health of an HIV-infected individual, particularly if diagnosis occurs early in the infection.

Is there a link between HIV/AIDS and alcohol and other drug abuse?

Substance abuse and HIV/AIDS have been described as linked epidemics. Behavior associated with drug abuse is the largest factor in the spread of HIV in the United States. Injection drug use and unsafe sexual practices with multiple partners or with known injectiondrug users resulting from alcohol and other drug use are leading causes of HIV infection. Evidence also suggests that alcohol and other drug use may suppress the immune system, making people who use these substances more prone to HIV infection.

Alcohol Alert: AIDS and Alcohol. 1992. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism.

Swan, N. 1997. CDC report highlights link between drug abuse and spread of HIV. NIDA Notes, March/April. Rockville, Md.: National Institute on Drug Abuse.

How common is HIV in South Carolina?

AIDS is a major public health threat in South Carolina. Currently, 16,593 South Carolinians are HIV positive, and many of these individuals have already acquired AIDS. Each year, 1,200 new cases of HIV are diagnosed, while three new cases of HIV infection occur in South Carolina every day.

Many of South Carolina's HIV cases are related to alcohol and other drug use. Approximately 25 percent of HIV-positive South Carolinians attribute injection drug use as a possible cause of infection; and 15 percent say they acquired the disease from heterosexual sex, usually from having unprotected sex with multiple partners or with an injection-drug user.

South Carolina's STD/HIV/AIDS Data Quarterly Surveillance Program. December 31, 2000. Columbia, S.C.: STD/HIV Division, South Carolina Department of Health and Environmental Control.

What is the connection between injection-drug use and HIV?

Approximately half of all new HIV cases in the United States are linked to intravenous drug use. Because dirty needles and other drug paraphernalia provide a direct route for HIV into the user's bloodstream, infection rates in this population are high. In fact, in

Alcohol Alert: AIDS and Alcohol. 1992. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism.

HIV/AIDS and South Carolina Law, Second Edition. 1993. Columbia, S.C.: Young Lawyers Division, South Carolina Bar.

HIV and Women. 1996. Washington, D.C.: The American National Red Cross.

South Carolina Department of Health and Environmental Control, STD/HIV Program. 1999. Columbia, S.C.



cities where injection drug use is highest, 27 percent of all intravenous drug users are HIV positive. One study found that the rate of HIV infection is six times lower among heroin users who enter treatment programs than among those who continue to inject drugs.

Not only are injection-drug users at risk of contracting HIV, but anyone who has sex with an injection-drug user or past injection-drug user who has not been tested for HIV is at risk of contracting the virus. Furthermore, injectable drugs, such as heroin, may weaken a person's immune system, making HIV infection more likely.

Swan, N. 1995. Basic clinical research on AIDS: From the molecule to the patient. NIDA Notes, May/June. Rockville, Md.: National Institute on Drug Abuse.

Swan, N. 1997. CDC report highlights link between drug abuse and spread of HIV. NIDA Notes, March/April. Rockville, Md.: National Institute on Drug Abuse.

What is the connection between alcohol use and HIV?

There are two ways that alcohol can contribute to the spread of HIV:

(1) Alcohol is linked to dangerous sexual behaviors, such as having unprotected sex with multiple partners and injection-drug users. Because an HIV-positive individual may appear healthy, it is unsafe to have unprotected sex with anyone who has an unknown background. The best methods of protection are abstaining from sex or properly using condoms during sexual encounters, whether they are oral, vaginal or anal. People whose unsafe sexual activities coincide with alcohol or other drug abuse should reduce use of these substances in order to reduce high-risk behavior.

(2) Alcohol may adversely affect the immune system. A study found that just one drinking event depresses the human immune response. Cells isolated after the drinking episode were more vulnerable to HIV infection than cells taken from nondrinkers. This means that an intoxicated individual is more likely than a sober person to contract HIV during sex. Even occasional alcohol abuse may increase the likelihood of HIV infection. Furthermore, evidence suggests that an HIV-infected individual who drinks is more likely than a nondrinker to acquire infections and diseases associated with AIDS.

What is the connection between smoking and HIV?

Smoking cigarettes is dangerous for HIV-positive individuals because it increases the risk of oral candidiasis (a fungal infection of the mouth) and bacterial pneumonia, as well as magnifying complications of upper respiratory disorders.

Smoking marijuana is particularly dangerous for HIVpositive individuals because it weakens the body's natural immune-system defenses, making it harder to fight disease. Smoking marijuana or crack cocaine also increases an HIV-infected individual's risk of contracting bacterial pneumonia.

HIV and cigarettes. 1996. AIDS Clinical Care. 8(11): 94.

Lugliani, G. June 1997. Gotta light? POZ. 74.

Swan, N. 1995. Basic clinical research on AIDS: From the molecule to the patient. NIDA Notes, May/June. Rockville, Md.: National Institute on Drug Abuse.

Is marijuana useful in treating the symptoms of AIDS?

Although there have been suggestions that marijuana has medical use as an anti-nausea drug in treating certain patients, including those with AIDS, the drug's usefulness is limited by the harmful effects of smoking. In addition, medicines today are expected to be of known composition and quality, and marijuana's crude plant mixture does not meet this modern expectation. As a result, the U.S. Drug Enforcement Administration has classified marijuana as a Schedule I drug, the most strictly controlled category. This means that marijuana has a high potential for abuse; has no currently accepted medical use in the United States; and has no safe level of use under medical supervision.

It should be noted that THC, the most active ingredient in marijuana, is *already* a Schedule III drug currently available in a pill form. Marinol[®], as the pill is known, can be effective at relieving nausea and/or restoring appetite to some chemotherapy and AIDS patients. As a Schedule III drug, Marinol[®] is legal *only* with a prescription and is considered to have less of a potential for abuse than the drugs or other substances in Schedules I and II. However, its use still may lead to moderate or low physical dependence or high psychological dependence. For these reasons, it should never be used without a physician's supervision.

Hun, T. Marijuana: medicine or menace? The Big Issue. 25(2):7-10. Columbia, S.C.: South Carolina Department of Alcohol and Other Drug Abuse Services. Inciardi, J.A. 1992. The War on Drugs II. Mountain View, Calif.: Mayfield Publishing Co.

Alcohol Alert: AIDS and Alcohol. 1992. Rockville, Md.: National Institute on Alcohol Abuse and Alcoholism.

Use Patterns Predict High-Risk Sexual Behavior Among Drug Users. 1998. New York: Reuters Health Information Service.



Marijuana and Medicine: Assessing the Science Base. 1999. Washington, D.C.: National Academy of Sciences Institute of Medicine.

Marijuana: Facts Parents Need to Know. 1995. Rockville, Md.: National Institute on Drug Abuse.

Swan, N. 1995. Basic clinical research on AIDS: From the molecule to the patient. NIDA Notes, May/June. Rockville, Md.: National Institute on Drug Abuse.

Is it dangerous for an HIV-positive woman to use drugs while pregnant or breast feeding?

Using alcohol, tobacco and other drugs during pregnancy — regardless of HIV status — is dangerous to the unborn child and can cause birth defects. Overall, the infection rate for babies born to HIV-positive mothers has steadily declined. This is due in part to new treatment interventions and technologies. However, the unborn baby of an HIV-positive woman who uses cocaine or heroin is still almost three times as likely to become infected with HIV before birth than the child of an HIV-positive woman who does not use these drugs. Even if a baby is born without HIV infection, the disease can still be acquired through the breast milk of an HIVpositive mother.

HIV and Women. 1996. Washington, D.C.: The American National Red Cross.

Maternal drug use and mother-to-infant HIV transmission. 1996. Director's Report to the National Advisory Council on Drug Abuse. Rockville, Md.: National Institute on Drug Abuse.

South Carolina Department of Health and Environmental Control, STD/HIV Program. 1999. Columbia, S.C.

Women and drug abuse. February 1994. NIDA Capsule. Rockville, Md.: National Institute on Drug Abuse.

What should I do if I think I have been exposed to HIV?

The South Carolina Department of Health and Environmental Control offers free and confidential HIV testing to anyone who requests it. Pre- and post-test counseling is available to everyone who takes the test, regardless of HIV status. If the test is negative, post-test counseling can help individuals learn how to prevent future infection. If the test is positive, post-test counseling can help them deal with the medical and psychological issues associated with knowledge of HIV infection.

Regardless of whether the test is positive or negative, it is important to engage in safe sexual practices and abstain from drug use to avoid future infection and to protect others from infection. In South Carolina, it is a crime for an individual who knows that he is HIV positive to engage in sex or share needles with another person without first informing that person of his HIV status.

HIV/AIDS and South Carolina Law, Second Edition. 1993. Columbia: Young Lawyers Division, South Carolina Bar.

HIV and Women. 1996. Washington, D.C.: The American National Red Cross

Where can I get more information?

In South Carolina, the Department of Alcohol and Other Drug Abuse Services (DAODAS) operates a statewide, toll-free telephone line that provides information and assistance on a variety of topics related to alcohol and other drug abuse. The number is **1-800-942-DIAL (3425)**. DAODAS also offers an online clearinghouse of alcohol and other drug information on the Internet at www.scprevents.org.

The county alcohol and drug abuse authorities and other public and private service providers offer local information and assistance as well.

The South Carolina Department of Health and Environmental Control operates an HIV/AIDS hotline. That number is **1-800-322-AIDS**.

There is also a national AIDS hotline and a national AIDS information clearinghouse. Those numbers are **1-800-342-AIDS** and **1-800-458-5231**, respectively.



South Carolina Department of Alcohol and Other Drug Abuse Services 101 Business Park Boulevard • Columbia, SC 29203-9498 toll-free: 1-800-942-DIAL (3425) www.daodas.state.sc.us

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