

## Fast Facts

- Substance use and abuse are important factors in the spread of HIV.
- Alcohol and other drugs can lower a person's inhibitions and create risk factors for HIV transmission.
- Vulnerable populations (people living in poverty, those who are mentally ill, and those with a history of abuse) are more likely to have high rates of alcohol and substance use.

Substance use, abuse, and dependence have been closely associated with HIV infection since the beginning of the epidemic. Although injection drug use (IDU) is a direct route of transmission, drinking, smoking, ingesting, or inhaling drugs such as alcohol, crack cocaine, methamphetamine ("meth"), and amyl nitrite ("poppers") are also associated with increased risk for HIV infection. These substances may increase HIV risk by reducing users' inhibitions to engage in risky sexual behavior.

Substance use and addiction are public health concerns for many reasons. In addition to increasing the risk of HIV transmission, substance use can affect people's overall health and make them more susceptible to HIV infection and, in those already infected with HIV, substance use can hasten disease progression and negatively affect adherence to treatment.

## Vulnerable Populations

- **People who live in poverty.** People who live in disadvantaged neighborhoods are more likely to have high rates of alcohol and illicit drug use.
- **Gay and bisexual men.** Alcohol and drug use among gay and bisexual men can be a reaction to homophobia, discrimination, or violence they experienced because of their sexual orientation and can contribute to other mental health problems. Compared with the general population, gay and bisexual men
  - Are more likely to use alcohol and drugs.
  - Are more likely to continue heavy drinking later in life.
  - Have higher rates of substance abuse.
- **People with a mental illness.** The coexistence of substance use and mental health disorders is common and is linked to poor impulse control and greater risk-taking and sensation-seeking behaviors.
- **People with a history of abuse.** People who have experienced sexual, physical, or emotional abuse are more likely to overuse drugs and alcohol and practice risky sexual behaviors.

## Prevention Strategies

A number of factors contribute to the spread of HIV infection among substance users:

- **Sexual risk factors.** Substance use can decrease inhibitions and increase sexual risk factors for HIV transmission, including not using a condom.
- **Stigma and discrimination associated with substance use.** Often, drug use is viewed as a criminal activity rather than a medical issue that requires counseling and rehabilitation. Stigma may prevent users from seeking HIV testing, care, and treatment.
- **Differences among people who abuse drugs and alcohol.** Racial, ethnic, and gender differences, as well as differences in geographic location (urban vs. rural, region of the country), access to drug and alcohol treatment and HIV testing and counseling, and socioeconomic and cultural issues should be considered when developing and implementing prevention programs.
- **Complex health and social needs.** People who use drugs often have other complex health and social needs, including a need for treatment for substance abuse and mental disorders. Comprehensive prevention strategies, including case management, are needed.
- **Effects on HIV treatment adherence.** Nonadherence can lead to medication-resistant viral strains. Because they fear dangerous side effects or dislike following a regimen that interrupts their drug-using activities, many HIV-infected substance users are less willing to start antiviral therapy than non-substance users, according to research.

## Commonly Used Substances

**Alcohol:** Excessive alcohol consumption,<sup>a</sup> notably binge drinking, is associated with multiple adverse health and social consequences and is sometimes linked to other drug use. Alcohol use can be an important risk factor for HIV infection because it is linked to less frequent use of condoms and to multiple sexual partners.

**Crack Cocaine:** Crack cocaine's short-lived high and addictiveness can create a compulsive cycle in which users quickly exhaust their resources and turn to other ways to get the drug, including trading sex for drugs or money, which increases HIV infection risk. African Americans account for the majority of people who use crack cocaine.

Compared to nonusers, crack cocaine users reported

- A greater number of recent and lifetime sexual partners.
- Infrequent condom use.
- Heightened sexual pleasure.
- Using more than one substance.
- Being less responsive to HIV prevention programs, according to recent studies.

**Methamphetamine:** "Meth" use is associated with increased HIV risk and has become a public health threat in recent years because, like alcohol and other substances, it is linked to high-risk sexual activity with nonsteady partners under the influence. In addition,

- It is highly addictive and can be injected.
- It tends to dry out the skin on the penis and mucosal tissues in the anus and the vagina, which may lead to small tears and cuts during sex where the HIV can enter the body.
- Some gay and bisexual men combine meth with erectile dysfunction drugs that are also associated with unprotected anal sex.

The largest numbers of meth users are white males. According to one study, gay and bisexual men report using meth and other stimulants at rates approximately 9 times as high as the general population.

**Inhalants:** Like meth, use of amyl nitrite ("poppers") has also been associated with increased HIV risk. Nitrite inhalants have long been linked to risky sexual behaviors, illegal drug use, and sexually transmitted infections among gay and bisexual men and have recently been linked to increased use among adolescents because inhalants:

- Enhance sexual pleasure.
- Aid anal sex by increasing sensitivity and relaxing the sphincter, which may lead to more unprotected sex.
- Are commonly found, even in household products.

## What CDC Is Doing

CDC and its partners are pursuing a high-impact prevention approach to advance the goals of the **National HIV/AIDS Strategy** for the United States and maximize the effectiveness of current HIV prevention methods. This approach centers on using combinations of scientifically proven, cost-effective, and scalable interventions targeted to populations at greatest risk for HIV infection, including substance abusers; this approach promises to increase the impact of HIV prevention efforts. Behavior risk reductions and other public health strategies (syringe services programs, community outreach, and substance abuse treatment programs) anchor evidence-based prevention strategies for reducing HIV transmission between substance users and their sex partners.

In 2006, CDC released **Revised Recommendations of HIV Testing of Adults, Adolescents, and Pregnant Women in Health Care Settings**. These revised recommendations advise routine HIV screening of adults, adolescents, and pregnant women in health care settings in the United States and repeat testing for people with risk behaviors since their last test, including exchange of sex for drugs.

CDC supports the national dissemination of effective HIV behavioral interventions for substance abusers that are delivered by health departments and community-based organizations around the country. These interventions include

- **Community PROMISE** (for any drug users).
- **Modelo de Intervención Psicomédica** (MIP, for Latino injection drug users).
- **Safety Counts** (for crack cocaine smokers and injection drug users).
- **SHIELD** (for any drug user social networks).

The **2010 National Drug Control Strategy** acknowledges that it is important to prevent, reduce, and treat drug abuse, and that behavioral, social, environmental, and structural factors contribute to illicit use of drugs.

### Additional Resources

#### CDC-INFO

1-800-CDC-INFO (232-4636)  
cdcinfo@cdc.gov  
*Get answers to questions and find HIV testing sites.*

#### CDC HIV Website

[www.cdc.gov/hiv](http://www.cdc.gov/hiv)

#### National HIV and STD Testing Resources

<http://hivtest.cdc.gov>

#### CDC National Prevention Information Network (NPIN)

1-800-458-5231  
[www.cdcnpin.org](http://www.cdcnpin.org)  
*Technical assistance and resources.*

#### Act Against AIDS

<http://www.cdc.gov/actagainstaids>

#### AIDSinfo

1-800-448-0440  
[www.aidsinfo.nih.gov](http://www.aidsinfo.nih.gov)  
*Treatment and clinical trials.*

#### AIDS.gov

[www.aids.gov](http://www.aids.gov)  
*Comprehensive government HIV resources.*

<sup>a</sup> Excessive alcohol consumption is defined as follows: binge drinking (>4 drinks per occasion for a woman and >5 drinks per occasion for a man); heavy drinking (>1 drink per day on average for a woman and >2 drinks per day on average for a man); any alcohol consumption by youth aged <21 years; and any alcohol consumption by pregnant women.