



# DRUG USE AND HIV

## HOW DOES DRUG USE RELATE TO HIV?

Injection drug and alcohol use are major factors in the spread of HIV infection. Outside of Africa, injection drug use now accounts for 1 in 3 new HIV infections. Shared equipment for using drugs can carry HIV and hepatitis viruses, and drug and alcohol use is linked with unsafe sexual activity.

Drug and alcohol use can also be dangerous for people who are taking antiretroviral medications (ARVs). Drug users are less likely to be adherent to their medications, and street drugs may have dangerous interactions with ARVs. Fact sheet 494 has more information on individual drugs and HIV. Drug and alcohol treatment to stop drug use can lower your risk of HIV infection.

## INJECTION AND INFECTION

HIV infection spreads easily when people share equipment to inject drugs. Sharing equipment also spreads hepatitis B, hepatitis C, and other serious diseases.

Infected blood can be drawn up into a syringe and then get injected along with the drug by the next user of the syringe. This is the easiest way to transmit HIV during drug use because infected blood goes directly into someone's bloodstream.

To reduce the risk of HIV and hepatitis infection, **never share any equipment** used with drugs, and **keep washing your hands**. Carefully clean your cookers and the site you will use for injection. See fact sheet 155 for more information on ways to reduce the harm of drug use.

A recent study showed that **HIV can survive in a used syringe for at least 4 weeks**. If you have to re-use equipment, you can reduce the risk of infection by cleaning it between users. If possible, re-use your own syringe. It still should be cleaned because bacteria can grow in it.

The most effective way to clean a syringe is to use water first, then bleach and a final water rinse. Try to get all blood out of the syringe by shaking vigorously for 30 seconds. Use cold water because hot water can make the blood form clots. To kill most HIV and hepatitis C virus, leave bleach in the syringe for two full minutes. Cleaning does not always kill HIV or hepatitis. **Always use a new syringe if possible.**

## ACCESS TO CLEAN NEEDLES

Access to clean needles and syringes reduces the spread of HIV and viral hepatitis. In some states, adults can purchase new syringes in pharmacies without a prescription. Some communities have started needle exchange programs to give free, clean syringes to people so they won't need to share.

Programs that provide easier access to new syringes are controversial because some people think they promote drug use. However, research on needle exchange shows that this is not true. Rates of HIV infection go down where there are needle exchange programs, and more drug users sign up for treatment programs.

The North American Syringe Exchange Network has a web page listing several needle exchange programs at <http://www.nasen.org/>

## DRUG USE AND UNSAFE SEX

For a lot of people, drugs and sex go together. Drug users might trade sex for drugs or for money to buy drugs. Some people connect having unsafe sex with their drug use. Research shows that sexual behavior is the main HIV risk factor for injection drug users.

Drug use, including methamphetamine or alcohol, increases the chance that people will not protect themselves during sexual activity. Someone who is trading sex for drugs might find it difficult to set limits on what they are willing to do. Drug and alcohol use may reduce condom use and safer sex practices.

Often, substance users have multiple sexual partners. This increases their risk of becoming infected with HIV or another sexually transmitted disease. Also, substance users may have an increased risk of carrying sexually transmitted diseases. This can increase their risk of becoming infected with HIV, or of transmitting HIV infection.

## MEDICATIONS AND DRUGS

It is very important to take every dose of ARVs. People who are not adherent (miss doses) are more likely to have higher levels of HIV in their blood, and to develop resistance to ARV medications. Drug use is linked with poor adherence, which can lead to treatment failure and disease worsening.

Some street drugs interact with ARVs. The liver breaks down some medications used to fight HIV, especially the protease inhibitors and the non-nucleoside reverse transcriptase inhibitors. It also breaks down some recreational drugs, including alcohol. When drugs and medications are both "in line" to use the liver, they might both be processed much more slowly. This can lead to a serious overdose of the medication or of the recreational drug.

An overdose of a medication can cause serious side effects. An overdose of a recreational drug can be deadly. At least one death of a person with HIV has been blamed on mixing a protease inhibitor with the recreational drug Ecstasy.

Some ARVs can change the amount of methadone in the bloodstream. It may be necessary to adjust the dosage of methadone in some cases. See the fact sheets for each of the medications you are taking, and discuss your HIV medications with your methadone counselor and your HIV health care provider.

## THE BOTTOM LINE

Drug use is a major cause of new HIV infections. Shared equipment can spread HIV, hepatitis, and other diseases. Alcohol and drug use, even when just used recreationally, contribute to unsafe sexual activities and an increase in sexually transmitted infections.

To protect yourself from infection, never re-use any equipment for using drugs. Even if you re-use your own syringes, clean them thoroughly between times. Cleaning is only partly effective.

In some communities, new syringes can be bought without a prescription. Also, needle exchange programs in some areas provide free, new syringes. These programs reduce the rate of new HIV infections.

Drug use can lead to missed doses of ARVs. This increases the chances of treatment failure and resistance to medications.

Mixing recreational drugs and ARVs can be dangerous. Drug interactions can cause serious side effects or dangerous overdoses.

*Reviewed September 30, 2014*