

# HIV Infection and AIDS

## What are HIV and AIDS?

HIV (human immunodeficiency virus) is the virus that causes AIDS (acquired immunodeficiency syndrome). HIV attacks the body's immune system. The immune system is the body's defense against infections. Over time, HIV weakens your body's ability to fight off serious infections and some cancers. When this happens, HIV infection becomes AIDS. AIDS can be life threatening, but it is also a preventable disease.

The full effects of the infection may not show up until 5 to 10 years after you are infected with the virus. New treatments allow people to live longer with the disease.

## What is the cause?

The infection-fighting cells of the immune system are a type of white blood cell called CD4 cells or T-helper cells. Months to years after infection with HIV, the virus begins to destroy these cells. HIV infection becomes AIDS when so many of the CD4 cells are destroyed that you lose your ability to fight off serious infections or tumors. Various infections called opportunistic infections develop. They are called opportunistic because they take advantage of your weakened immune system. These infections would not normally cause severe or fatal health problems. However, when you have AIDS, the infections and tumors are more serious and are harder to treat successfully.

HIV spreads from person to person when infected blood or sexual secretions, such as semen, enter the body. Men, women, and children of all ages can get HIV. You can get infected with HIV through:

- Unsafe sex
- Dirty needles
- Transfusion of blood or blood products in countries where donated blood is not carefully tested

Babies can get infected before they are born or from the breast milk of an infected mother.

HIV is **not** spread through the air, in food, or by casual social contact such as shaking hands or hugging.

## What are the symptoms?

It is important to remember that HIV usually does not cause any symptoms for many months or even years. When you do start having symptoms, they are usually the symptoms of the other diseases that are able to attack the body because of the HIV infection:

- Fever
- Loss of appetite or weight

- Nausea and vomiting
- Tiredness
- Swollen glands
- Sore throat
- Sores on the skin or mouth
- Repeated, severe infections in the mouth or vagina despite treatment for the infections
- Muscle and joint pain
- Diarrhea
- Headache
- Blurry vision or other problems with vision

## **How is it diagnosed?**

Tests for HIV are done in 2 steps.

1. The first step is a screening test of your blood or saliva. If this test is negative, it usually means that you don't have HIV. However, it is possible to have a negative test if you have just recently been infected with the virus. If you have a negative test result but you are at high risk for infection, you may need to have this test again in 3 to 6 months.
2. If the screening test is positive, it means that you are probably infected with HIV. A second, more specific blood test is then done to confirm the results.

Having an HIV test at your healthcare provider's office or a clinic takes just a few minutes.

You can get a kit that lets you test your saliva for HIV at home. You use a swab to get a sample of saliva from your mouth and then you use the kit to test the swab. You can get the result in just a few minutes and it's 92% reliable in finding HIV infection. It is possible to get an incorrect result. You should confirm the test result by getting a second test at your healthcare provider's office or a clinic.

Once you have confirmed positive HIV test results, you will have a thorough medical exam. The exam includes discussing your history of sexual practices and infections. Your healthcare provider will also ask about any history of drug abuse.

You will also be tested for other infections that can get worse when you have HIV or AIDS.

## **How is it treated?**

Medicines can slow down the disease, but they are not a cure. Many new drug treatments and combinations are being prescribed. Your treatment may include medicines that slow down the growth of the virus. Treatment with these medicines will depend on how low your CD4 cell count is and how much virus is in your body. You may need to have lab tests every few weeks or months to see how the virus is affecting your body and how well your treatment is working. Your treatment for HIV/AIDS may include treatment or prevention of other types of infections and tumors.

Getting care in an office or clinic that offers case management can be an important part of your treatment. This means a team of providers will be giving you care and your care will be coordinated by a case manager. The case manager will help you communicate with all who are caring for you. Other advantages include:

- Up-to-date medical care
- Treatment for both the medical and social aspects of your illness
- Help in finding medical, social, and financial resources

## **How can I take care of myself?**

If you have HIV or AIDS, there are things you can do to take care of yourself and help prevent problems.

- Discuss your treatment with your healthcare provider.
- Take your medicines exactly as prescribed. Know what to do if you miss a dose.
- See your provider on a regular schedule to keep up to date on new treatments.
- Contact a local AIDS support network. Your provider should be able to help you find one.
- Ask your healthcare provider:
  - How and when you will hear your test results
  - What activities you should avoid and when you can return to normal activities
  - How to take care of yourself at home
  - What symptoms or problems you should watch for and what to do if you have them
- Make sure you know when you should come back for a checkup.

## **How can I help prevent HIV infection?**

If you do not have HIV or AIDS, the best way to prevent infection with HIV is to practice safe sex and not use illegal drugs.

- Avoid exposure to infected body fluids by using latex or polyurethane condoms every time you have oral, vaginal, or anal sex.
- Have sex with only 1 person who is not having sex with anyone else.
- Don't use a spermicide containing nonoxynol 9 and don't use condoms coated with this spermicide. This chemical can irritate the lining of the vagina and rectum and make it easier for the virus to enter the body.
- If you use a lubricant, use one that is water based. Don't use oil-based lubricants made with petroleum jelly, mineral oil, vegetable oil, or cold cream. They can damage condoms.
- **Do not** share needles for drug use, tattooing, or body piercing.

In addition:

- Ask any new sexual partner about his or her sexual history, drug use, and tattoos or body piercings.
- If you have not been tested for HIV, get tested and ask sexual partners to be tested for HIV.

If you have been exposed to HIV, there are medicines that may be used to prevent infection. The treatment must be started as soon as possible and no more than 72 hours after the exposure. This preventive treatment is not recommended for people who are often at risk of exposure to HIV, such as people who have sex with HIV-positive partners. There is a daily medicine that can help prevent HIV infection if you have a very high risk of getting infected—for example, you are HIV negative but you have a partner who is HIV positive. However, the medicine may cause serious side effects and may be costly. It must be used with the usual safe sex recommendations.

If you do have HIV or AIDS, you can prevent spreading HIV to others if you:

- Practice safe sex.
- Don't donate blood, plasma, or semen.
- Don't donate organs from your body.
- Tell all of your healthcare providers that you are HIV positive. Discuss any concerns you may have about confidentiality with your healthcare provider.

Women who are HIV positive should talk to their healthcare provider before getting pregnant.

You can get more information from:

- AIDSinfo  
<http://aidsinfo.nih.gov>  
1-800-HIV-0440 (1-800-448-0440)
- CDC-INFO  
1-800-232-4636
- CDC National Prevention Information Network  
<http://www.cdcnpin.org>  
1-800-458-5231

Developed by RelayHealth.

*This content is reviewed periodically and is subject to change as new health information becomes available. The information is intended to inform and educate and is not a replacement for medical evaluation, advice, diagnosis or treatment by a healthcare professional.*