

UF&ShandsJacksonville

Let's talk about HIV and AIDS



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HIV is a frightening disease that requires advanced research to treat and prevent. For those living with the virus, it takes commitment and determination to cope with this disease. There have been major advances in HIV treatment in recent years, and now patients with HIV can expect to live long and fulfilling lives. While early testing and treatment are important, accurate and up-to-date knowledge are essential. HIV is now considered a chronic illness similar to diabetes, heart disease and high blood pressure.

HIV stands for human immunodeficiency virus. It is primarily found in the blood, semen and vaginal secretions of an infected person. The virus attacks T cells, which are part of the body's immune system, making the immune system unable to fight off infections. There are two major types of HIV: HIV-1 and HIV-2. HIV-1 is the predominant type worldwide. HIV-2 is primarily found in West Africa.

## Evaluation and diagnosis

The early symptoms of HIV infection are often overlooked because they tend to be mild. These include unexplained fever, cough, or flu-like symptoms and enlargement of lymph nodes. The initial stage of the infection may show no signs or symptoms at all. The only way to know if one is infected is by getting an HIV test.

Even when the HIV virus is attacking and destroying T cells, a person may remain healthy and unaware that they are infected for many years. However, as the virus continues to grow, it destroys helper T cells (white blood cells that allow the immune system to function properly). Later on, signs and symptoms develop, and include swollen lymph nodes, cough and shortness of breath, fever, weight loss and diarrhea.

Only after the HIV virus has destroyed so many T cells that the immune system can no longer function properly will the person start to get sick. At this point the person has developed AIDS.

## Frequently Asked Questions

### **How did humans contract HIV?**

Scientists have linked HIV in humans to one type of chimpanzee in West Africa. It is thought that when humans hunted these chimpanzees for food, they came into contact with infected blood. Over the next 20 years the virus quickly spread across Africa and then the rest of the world.

### **How do you become infected with the HIV virus?**

It is not always easy or even possible to know exactly how a person gets infected with HIV. However, the most common ways of becoming infected are:

- Sexual contact (oral, vaginal, or anal) with someone infected with HIV
- Sharing needles or syringes
- Blood transfusions prior to 1985
- Infection from mothers to their babies during childbirth or breastfeeding

You cannot get HIV by touching, casual kissing, hugging, shaking hands, sharing food or utensils, or from water fountains, clothing, pets or mosquito bites.

Scientists have found that the HIV virus does not survive well outside of the body, so there is little chance of contracting the infection from the environment. There is no need to fear being around people with HIV.

### **What is AIDS?**

AIDS stands for acquired immunodeficiency syndrome. When a person has AIDS, he or she often develops what are called opportunistic infections. These infections either don't affect people with healthy immune systems or are much more severe in people with AIDS. Some examples of opportunistic infections are candidiasis, toxoplasmosis and tuberculosis.

### **How long does it take for HIV to progress to AIDS?**

HIV progresses more quickly in some people than others, but in general, an untreated HIV-infected person will progress to AIDS 10 to 15 years after contracting the infection. Some factors promote more rapid progression of HIV, include:

- Virulence - Some strains are more virulent than others, and these tend to progress more rapidly and to be resistant to the anti-viral medications.
- Infection with multiple strains - If one HIV-positive person engages in unprotected sex with another HIV-positive person; he may then have two or

more strains of HIV in his body. The combination of strains may complicate the treatment or make the disease progress more rapidly.

- Age - As people get older, their immune systems get weaker. HIV progresses more rapidly in people who already have weaker immune systems.
- Lifestyle-Alcohol consumption, drug abuse, and/or being overweight can weaken the immune system and make HIV progress more rapidly.

### **How is AIDS treated?**

In the past five years, significant progress has been made in the treatment of HIV and prevention of some of the opportunistic infections and cancers that affect HIV patients. It has been proven that treatments are more successful when they are started earlier in the course of the disease. Close monitoring is important so that your doctor can determine when to start treatment. The major aspects of treatment are:

- Highly active antiretroviral therapy, or HAART, are the medications that target the HIV virus itself.
- Antibiotics are administered to prevent some of the opportunistic infections. Once again, it is important to see a physician regularly and get your T cell count checked so you can be prescribed the appropriate antibiotics.
- Careful monitoring for certain cancers that affect HIV patients so that they can be treated early before they spread.
- Maintaining a healthy lifestyle to keep the immune system as strong as possible.

### **Do I have to take HIV medicines even if I feel healthy?**

A person infected with HIV may feel healthy, but the virus may be actively destroying T cells at the same time. Your physician may do regular blood tests in order to determine when to start HIV medications. These medications can prevent the virus from destroying more T cells and keep the immune system strong. When HIV medicines are prescribed, they should not be stopped unless advised by the doctor. If these medicines are not taken as directed, or if you frequently miss doses, they may stop working.

### **Who should get tested for HIV?**

The Centers for Disease Control recommends offering HIV testing to every adult and teenager. You should prioritize HIV testing if you experienced the following:

- Have had unprotected sex (oral, vaginal, or anal) with anyone whom you are unsure of their HIV status - particularly people who have sex with multiple partners, anonymous partners or men who have sex with men

- Have exchanged sex for money or drugs
- Have ever been diagnosed with a sexually transmitted disease (gonorrhea, chlamydia, syphilis) or hepatitis B, hepatitis C or tuberculosis
- Have shared needles or syringes when injecting drugs or steroids
- Had a blood transfusion before 1985
- Are pregnant

You should ask your current or previous sex partner about their HIV status.

### **Why should I get tested?**

It is important to find out whether you have an HIV infection early so that you can get the proper treatment at the right time. There is no harm in getting checked. It is also important so that you can prevent passing the disease on to others.

### **What is the HIV test and how good is it?**

When a person is infected with HIV, the body produces an antibody to fight against it. These antibodies can be detected in the blood through tests. This is generally the first test used, called the enzyme-linked immune sorbent assay, known as the ELISA test. If the ELISA test is positive, it is confirmed with a second test called the Western Blot. Together, these two tests are 99.9 percent sensitive in detecting HIV infection.

### **Are there any faster tests?**

There is now a rapid HIV test that is available in some places. It works just as well as the conventional ELISA HIV test. It also requires a second test to confirm a positive result. The major advantage is that results can be obtained in less than 30 minutes.

### **Where can I go to get tested?**

Testing can be done at a doctor's office, hospital or public health department. Rapid testing may be not available at every site. You can locate a testing site by visiting the CDC HIV testing database or by calling CDC-INFO (formerly the CDC National AIDS Hotline) at 1-800-CDC-INFO (1-800-232-4636) 24-hours a day. You do not have to give any personal information about yourself to use these services to find a testing site.

In addition, there is the possibility of anonymous testing in a clinic or at home (for example, Home Access HIV Test), by which you are identified by a number not by a

name. The cost of testing is generally between \$30 and \$100, and some places, including many public health departments, provide testing free of charge.

### **Why should I get counseling with my HIV test?**

Pre-test and post-test counseling and education are important parts of HIV testing. Counseling gives people who test negative for HIV an opportunity to learn more about HIV and how to avoid becoming infected. For those who test positive, counseling provides a chance to get more information about HIV resources and treatment. These counseling sessions take about 15 minutes, including time for questions, and are a valuable part of the testing process, regardless of the test results.

### **How can I prevent getting infected?**

Knowledge is the best way to prevent HIV infection, and everyone must take appropriate steps to prevent the spread of HIV such as:

- Practice safe sex and always use latex condoms and/or dental dams. Lubricant is helpful because it reduces the risk that the condom will break.
- Get checked regularly, especially if you have sex with multiple partners, anonymous partners, or men who have sex with men.
- Do not use IV drugs or share needles.

### **How do I prevent transmitting HIV to others in my household?**

The first step is to be honest and open about your HIV status.

If you, your partner or someone in your family is HIV infected, the best way to prevent transmission is to tell them. Family transmission is rare if the status is known. You should use following precautions to prevent even rare household transmission:

- Cover any cuts, sores or breaks in the skin (both infected and non- infected persons).
- Avoid sharing razors, toothbrushes or hygiene products that might increase the likelihood of contact with blood.
- Wash your hands and/or other body parts if you come into contact with blood or other body fluids
- Wear gloves if you may come into contact with blood or other body fluids such as urine, feces or vomit while taking care of an HIV-infected person.

## **How do I prevent transmitting HIV to my partner?**

Again, the first step is to be honest and open about your HIV status. Casual contact, such as closed-mouth or "social" kissing is not a risk for transmission of HIV. However, because of the potential for contact with blood during "French" or open-mouth kissing, you should avoid engaging in this activity. However, the risk of acquiring HIV during open-mouth kissing is believed to be very low.

Practice safe sex and always use latex condoms. Even if your partner also has HIV, you may have different strains, and using precautions and practicing safe sex can prevent you and your partner from becoming infected with two different strains of HIV. There are many HIV positive couples with a happy and healthy relationship, and without transmission of disease to the partner.

Every HIV-infected person may differ in the time of onset of symptoms. Many times there is no illness even if the immune system has been weakened. At the same time, some may see different infections or symptoms with a somewhat good immune system. That may depend on the virus strain and your body's overall health. There are some early signs of HIV infection, which are usually missed as they are mild. These include unexplained fever, cough or flu-like symptoms or enlargement of lymph nodes. You may not see any symptoms until HIV has progressed to AIDS. The only sure way to determine your HIV status is by getting a blood test.

## **Do I have to take HIV medicines even if I feel healthy?**

An HIV-infected person may feel healthy but need medicines to keep his or her immune system strong and healthy. When HIV medicines are prescribed, they should not be stopped until the patient is advised to do so by their physician. Your physician may want to check some blood tests (labs) regularly in order to decide when to start HIV medicines. So it is very important to follow up with your physician regularly. When HIV medicines are not taken regularly or if you frequently miss doses, your body may not respond to those medicines anymore.

Armed with early detection and accurate information, it is possible to fight HIV and live a long and fulfilling life. Help yourself and others by getting tested early, being honest about your HIV status, seeing your physician regularly, taking your medications, taking steps to prevent transmission and teaching others the facts about HIV.