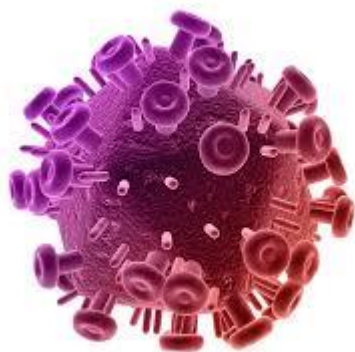


HIV & AIDS



HIV stands for human immunodeficiency virus. It is the virus that can lead to acquired immunodeficiency syndrome, or AIDS. Unlike some other viruses, the human body cannot get rid of HIV. That means that once you have HIV, you have it for life.

HIV is a lot like other viruses, including those that cause the flu or the common cold. But there is an important difference – over time, your immune system can clear most viruses out of your body. That isn't the case with HIV – the human immune system can't seem to get rid of it. That means that once you have HIV, you have it for life.

We know that HIV can hide for long periods of time in the cells of your body and that it attacks a key part of your immune system – your T-cells or CD4 cells . Your body has to have these cells to fight infections and disease, but HIV invades them, uses them to make more copies of itself, and then destroys them.

Over time, HIV can destroy so many of your CD4 cells that your body can't fight infections and diseases anymore. When that happens, HIV infection can lead to AIDS, the final stage of HIV infection.

However, not everyone who has HIV progresses to AIDS. With proper treatment, called “antiretroviral therapy” (ART), you can keep the level of HIV virus in your body low. ART is the use of HIV medicines to fight HIV infection. It involves taking a combination of HIV medicines every day. These HIV medicines can control the virus so that you can live a longer, healthier life and reduce the risk of transmitting HIV to others. Before the introduction of ART in the mid-1990s, people with HIV could progress to AIDS in just a few years. Today, a person who is diagnosed with HIV and treated before the disease is far advanced can have a nearly normal life expectancy.

No safe and effective cure for HIV currently exists, but scientists are working hard to find one, and remain hopeful.

AIDS stands for Acquired Immunodeficiency Syndrome. To understand what that means, let's break it down:

- A – Acquired – AIDS is not something you inherit from your parents. You acquire AIDS after birth.
- I – Immuno – Your body's immune system includes all the organs and cells that work to fight off infection or disease.
- D – Deficiency – You get AIDS when your immune system is "deficient," or isn't working the way it should.
- S – Syndrome – A syndrome is a collection of symptoms and signs of disease. AIDS is a syndrome, rather than a single disease, because it is a complex illness with a wide range of complications and symptoms.

As noted above, AIDS is the final stage of HIV infection, and not everyone who has HIV advances to this stage. People at this stage of HIV disease have badly damaged immune systems, which put them at risk for opportunistic infections (OIs).

You are considered to have progressed to AIDS if you have one or more specific OIs, certain cancers, or a very low number of CD4 cells. If you have AIDS, you will need medical intervention and treatment to prevent death.

Causes

A person gets HIV when an infected person's body fluids (blood, semen, fluids from the vagina or breast milk) enter his or her bloodstream. The virus can enter the blood through linings in the mouth, anus, or sex organs (the penis and vagina), or through broken skin.

Both men and women can spread HIV. A person with HIV can feel OK and still give the virus to others. Pregnant women with HIV also can give the virus to their babies.

Common ways people get HIV:

- Sharing a needle to take drugs
- Having unprotected sex with an infected person

You cannot get HIV from:

- Touching or hugging someone who has HIV/AIDS
- Public bathrooms or swimming pools
- Sharing cups, utensils, or telephones with someone who has HIV/AIDS
- Bug bites

Who Can Get HIV?

Anyone can get HIV if they engage in certain activities. You may have a higher risk of getting HIV if you:

- Have unprotected sex. This means vaginal or anal intercourse without a condom or oral sex without a latex barrier with a person infected with HIV.
- Share needles to inject drugs or steroids with an infected person. The disease can also be transmitted by dirty needles used to make a tattoo or in body piercing.
- Receive a blood transfusion from an infected person. This is very unlikely in the U.S. and Western Europe, where all blood is tested for HIV infection.
- Are born to a mother with HIV infection. A baby can also get HIV from the breast milk of an infected woman.

Symptoms

Signs that HIV is turning into AIDS include:

- A fever that won't go away
- Sweating while you sleep
- Feeling tired all the time (not from stress or lack of sleep)
- Feeling sick all the time
- Losing weight
- Swollen glands (neck, groin, or underarms)
- Oral thrush

Diagnosis

HIV is most commonly diagnosed by testing your blood or saliva for antibodies to the virus. Unfortunately, it takes time for your body to develop these antibodies — usually up to 12 weeks. In rare cases, it can take up to six months for an HIV antibody test to become positive.

A newer type of test that checks for HIV antigen, a protein produced by the virus immediately after infection, can confirm a diagnosis within days of infection. An earlier diagnosis may prompt people to take extra precautions to prevent transmission of the virus to others. There is also increasing evidence that early treatment may be of benefit.

Treatment

HIV Treatment

When people discover they have HIV, they may not begin taking medications immediately. The decision to start treatment for HIV is individual and considers a person's past medical history, the length of time they've been infected with HIV, current CD4 T cell count, and current health.

Vaccines

Two main types of HIV vaccines are currently being tested -- preventive and therapeutic.

Alternative medicines

Antiretroviral therapies have brought renewed hope for many people living with HIV. However, they do not offer a cure, and they can cause many side effects.

Coping with side effects

Here are some common side effects of HIV treatment and tips for coping with them.

Finding a doctor

The HIV/AIDS doctor you choose should be knowledgeable about HIV and have experience treating patients with HIV and AIDS. You'll also want to find a person with whom you feel at ease and can talk comfortably.

Drugs

Today, HIV-positive people have many options for AIDS and HIV medication.

In children

If HIV is diagnosed before it becomes AIDS, medicines can slow or stop the damage to the immune system. Early treatment can help your child live a long and active life.

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