What is AIDS?

WHAT DOES AIDS MEAN?

AIDS stands for Acquired Immune Deficiency Syndrome:

- This condition is acquired, meaning that a person becomes infected.
- This condition affects a person's immune system, the part of the body that fights off germs such as bacteria and viruses.
- The immune system becomes deficient and does not work properly.
- A person with AIDS may experience other diseases and infections because of a weakened immune system.

AIDS is caused by a virus called Human Immunodeficiency Virus (HIV). If you get infected with HIV, your body will try to fight the infection. It will make antibodies, which are special immune molecules the body makes to fight germs. Tests for HIV look for these antibodies. If you have them in your blood or mouth lining, it means that you have HIV infection. People who have HIV antibodies are called HIV-positive.

AIDS is the most advanced stage of infection caused by HIV. The names HIV and AIDS can be confusing because both terms describe the same disease. However, most people with HIV do not have AIDS. And most people with HIV will not develop AIDS if they start antiretroviral therapy (ART) with medicines called antiretroviral medications (ARVs) soon after becoming diagnosed with HIV.

People with AIDS have badly damaged immune systems. Viruses, parasites, fungi, and bacteria that usually don't cause any problems can make people very sick if their immune systems are damaged. These are called opportunistic infections (OIs).

It is important to remember that most people with HIV will not develop AIDS if they start ART soon after becoming infected.

HOW DO PEOPLE GET AIDS?

You don't actually get AIDS. You might get infected with HIV and later you might develop AIDS. HIV can be transmitted from anyone who has HIV, even if they don't look sick and even if they haven't tested positive yet. The blood, vaginal fluid, semen, and breastmilk of people with HIV have enough of the virus in it to transmit HIV to other people.

Most people who get HIV get it through anal or vaginal sex, or sharing needles, syringes, or other drug injection equipment (for example, cookers). In addition, HIV can be transmitted from a birthing person to their baby during pregnancy, birth, or breastfeeding. However, it is less common because of advances in HIV prevention and treatment. This is called perinatal transmission. Getting a transfusion of HIV-positive blood

used to be a way people got HIV, but now the blood supply is screened very carefully and the risk is extremely low. There are no documented cases of HIV being transmitted by tears or saliva.

The Centers for Disease Control and Prevention (CDC) estimates that about 1.2 million people in the U.S. had HIV at the end of 2018, the most recent year for which this information is available. Of those people, about 14%, or 1 in 7, did not know they had HIV. About 76% of the approximately 38,000 new HIV diagnoses each year are in people assigned male at birth (AMAB) and about 24% in people assigned female at birth (AFAB). In 2018, Black/African American and Hispanic/Latinx people accounted for 69% of new HIV diagnoses but comprised only 31% of the U.S. population. In the mid-1990s, AIDS was a leading cause of death. However, newer treatments have cut the AIDS death rate significantly.

WHAT DOES HIV POSITIVE MEAN?

If you receive an HIV diagnosis, it means that you have HIV. Unlike some other viruses, the human body can't get rid of HIV completely. Once you have HIV, you have it for life. But with proper medical care, HIV can be controlled. People with HIV who get effective HIV treatment can live long, healthy lives and protect their partners.

In the first few weeks after acquiring HIV, some people get fever, headache, sore muscles and joints, stomachache, swollen lymph glands, or a skin rash. Most people think it's the flu. Some people have no symptoms. The virus then multiplies in the body for a few weeks or even months before the immune system responds. During this time, people won't test positive for HIV but can transmit the virus to other people.

When the immune system responds, it starts to make antibodies. When this happens, HIV tests will become positive, a process known as seroconversion. After the first flu-like symptoms, some people with HIV may stay healthy for many years. But during this time, HIV is damaging the immune system.

One way to measure the damage to the immune system is with blood tests to count CD4 cells. These cells, also called T-helper cells, are an important part of the immune system. Healthy people have between 500-1,500 CD4 cells in a milliliter of blood.

Without treatment, the CD4 cell count of people with HIV will most likely go down. They might start having signs of HIV disease like fevers, night sweats, diarrhea, or swollen lymph nodes.

With treatment, CD4 cell counts can recover or remain normal. Life expectancy for people who know their status and take ART is nearly normal for people who adhere to their medications.

HOW DO PEOPLE KNOW IF THEY HAVE AIDS?

People receive an AIDS diagnosis when:

- they develop certain opportunistic infections (OIs), or
- their CD4 cell count drops below 200 cells per milliliter of blood

There is an official list of OIs put out by the CDC. The most common ones are:

- Pneumocystis pneumonia (PCP), a lung infection
- Kaposi sarcoma (KS), a skin cancer

- Cytomegalovirus (CMV), an infection that usually affects the eyes
- Candidiasis, a fungal infection that can cause thrush (a white film in the mouth) or infections in the throat or vagina

AIDS-related symptoms also include serious weight loss, brain tumors, and other health problems.

IS THERE A CURE FOR AIDS?

There is currently no cure for AIDS. ART can prevent or reverse damage to the immune system and prevent transmission to others. Most people stay healthy as long as they continue ART. There is no way to clear HIV from the body.

Several medications can prevent or treat OIs. In most cases, these drugs work very well. Newer, stronger ARVs have helped reduce the rates of most OIs.

MORE INFORMATION

NIH: AIDS and Opportunistic Infections

CDC: HIV in the United States and Dependent Areas

MedlinePlus: HIV/AIDS

HIV.org: What Are HIV and AIDS?

World Health Organization: HIV/AIDS Key Facts

Reviewed June 2024