

## HIV/AIDS: The Basics

### What is HIV/AIDS?

**HIV** stands for **human immunodeficiency virus**. HIV attacks and destroys the infection-fighting **CD4** cells of the immune system. Loss of CD4 cells makes it difficult for the immune system to fight infections.

**AIDS** stands for **acquired immunodeficiency syndrome**. AIDS is the most advanced stage of HIV infection.

### How is HIV transmitted?

HIV is transmitted (spread) from one person to another through specific body fluids—blood, semen, genital fluids, and breast milk. Having **unprotected sex** or sharing drug needles with a person infected by HIV are the most common ways HIV is transmitted.

You can't get HIV by shaking hands, hugging, or closed-mouth kissing with a person who has HIV. And HIV isn't spread through objects such as toilet seats, doorknobs, dishes, or drinking glasses used by a person with HIV.

Although it takes many years for symptoms of HIV to develop, a person infected with HIV can spread the disease at any stage of HIV infection. Detecting HIV during the earliest stages of infection and starting treatment well before symptoms of HIV develop can help people with HIV stay healthy. Treatment can also reduce the risk of **HIV transmission**.

### What is the treatment for HIV?

**Antiretroviral therapy (ART)** is the recommended treatment for HIV infection. ART involves taking a combination (**regimen**) of three or more anti-HIV medications daily. ART prevents HIV from multiplying and destroying infection-fighting CD4 cells. This helps the body fight off life-threatening infections and cancer.

Although anti-HIV medications can't cure HIV, people with HIV are enjoying healthy lives and living longer thanks to ART.

### Can treatment prevent HIV from advancing to AIDS?

Yes! Treatment with anti-HIV medications prevents HIV from multiplying and destroying the immune system. This helps the body fight off life-threatening infections and cancers and prevents HIV from advancing to AIDS.

Although it takes many years, without treatment HIV can advance to AIDS. To be diagnosed with AIDS, a person infected with HIV must either:

- Have a **CD4 count** less than 200 cells/mm<sup>3</sup>. (The CD4 count of a healthy person ranges from 500 to 1,200 cells/mm<sup>3</sup>. People infected with HIV with CD4 counts less than 500 cells/mm<sup>3</sup> should begin ART.)

OR

- Have an **AIDS-defining condition**. (AIDS-defining conditions are serious and life-threatening illnesses. Having an AIDS-defining condition indicates that a person's HIV infection has advanced to AIDS.)

### What illnesses are considered AIDS-defining conditions?

The Centers for Disease Control and Prevention (CDC) considers several illnesses AIDS-defining conditions.

#### Terms Used in This Fact Sheet:

**AIDS:** Acquired immunodeficiency syndrome. AIDS is the most advanced stage of HIV infection. AIDS is diagnosed when a person infected with HIV has a CD4 count less than 200 cells/mm<sup>3</sup> or has an AIDS-defining condition.

**AIDS-defining condition:** Any one of several illnesses that can lead to a diagnosis of AIDS in a person infected with HIV. AIDS is the most advanced stage of HIV infection.

**Antiretroviral therapy (ART):** The recommended treatment for HIV. ART involves taking a combination of three or more anti-HIV medications from at least two different drug classes every day to control the virus.

**CD4 cells:** Also called T cells or CD4+ T cells. Infection-fighting white blood cells of the immune system. HIV destroys CD4 cells, making it harder for the body to fight infections.

**CD4 count:** The number of CD4 cells in a sample of blood. A CD4 count measures how well the immune system is working.

**HIV:** Human immunodeficiency virus. HIV is a virus that attacks the immune system, putting people infected with HIV at risk for life-threatening infections and cancer. AIDS is the most advanced stage of HIV infection.

**Regimen:** A combination of three or more anti-HIV medications from at least two different drug classes.

**Unprotected sex:** Sex without using a condom.

*Pneumocystis jiroveci* pneumonia, tuberculosis, and toxoplasmosis are examples of AIDS-defining conditions.

448-0440 or visit <http://aidsinfo.nih.gov>. See your health care provider for medical advice.

**For more information:**

Contact an *AIDSinfo* health information specialist at 1-800-