

HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to AIDS (acquired immunodeficiency syndrome). Learning the basics about HIV can keep you healthy and prevent HIV transmission.

What is HIV?

- HIV (human immunodeficiency virus) is a virus that attacks the body's immune system. If HIV is not treated, it can lead to <u>AIDS</u> (acquired immunodeficiency syndrome).
- There is currently no effective cure. Once people get HIV, they 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.

How do I know if I have HIV?

The only way to know for sure whether you have HIV is to get tested. Knowing your HIV status helps you make healthy decisions to prevent getting or transmitting HIV.

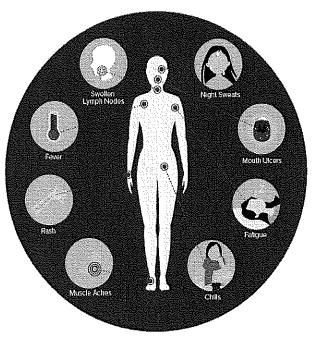


Are there symptoms?

Some people have flu-like symptoms within 2 to 4 weeks after infection (called *acute HIV infection*). These symptoms may last for a few days or several weeks. Possible symptoms include

- Fever,
- · Chills,
- · Rash,
- · Night sweats,
- · Muscle aches,
- Sore throat,
- Fatigue,
- Swollen lymph nodes, and
- Mouth ulcers.

But some people may not feel sick during acute HIV infection. These symptoms don't mean you have HIV. Other illnesses can cause these same symptoms.



See a health care provider if you have these symptoms and think you may have been exposed to HIV. Getting tested for HIV is the only way to know for sure.

What are the stages of HIV?

When people with HIV don't get treatment, they typically progress through three stages. But <u>HIV medicine</u> can slow or prevent progression of the disease. With the advancements in treatment, progression to Stage 3 is less common today than in the early days of HIV.

Stage 1: Acute HIV Infection

- People have a large amount of HIV in their blood. They are very contagious.
- Some people have flu-like symptoms. This is the body's natural response to infection.
- But some people may not feel sick right away or at all.
- If you have flu-like symptoms and think you may have been exposed to HIV, seek medical care and ask for a test to diagnose acute infection.
- Only antigen/antibody tests or nucleic acid tests (NATs) can diagnose acute infection.

Stage 1: Acute HIV Infection

Stage 2: Chronic HIV Infection

- This stage is also called asymptomatic HIV infection or clinical latency.
- HIV is still active but reproduces at very low levels.
- People may not have any symptoms or get sick during this phase.
- Without taking HIV medicine, this period may last a decade or longer, but some may progress faster.
- People can transmit HIV in this phase.
- At the end of this phase, the amount of HIV in the blood (called *viral load*) goes up and the CD4 cell count goes down. The person may have symptoms as the virus levels increase in the body, and the person moves into Stage 3.
- People who take HIV medicine as prescribed may never move into Stage 3.



Stage 3: Acquired Immunodeficiency Syndrome (AIDS)

- The most severe phase of HIV infection.
- People with AIDS have such badly damaged immune systems that they get an increasing number of severe illnesses, called <u>opportunistic infections</u>.
- People receive an AIDS diagnosis when their CD4 cell count drops below 200 cells/mm, or if they develop certain opportunistic infections.
- People with AIDS can have a high viral load and be very infectious.
- Without treatment, people with AIDS typically survive about three years.

Stage 3:
Acquired
Immunodeficiency
Syndrome
(AIDS)

TYPES OF HIV TESTS

What kinds of tests are available, and how do they work?

There are three types of tests available: nucleic acid tests (NAT), antigen/antibody tests, and antibody tests. HIV tests are typically performed on blood or oral fluid. They may also be performed on urine.

- A NAT looks for the actual virus in the blood and involves drawing blood from a
 vein. The test can either tell if a person has HIV or tell how much virus is present
 in the blood (known as an HIV viral load test). While a NAT can detect HIV sooner
 than other types of tests, this test is very expensive and not routinely used for
 screening individuals unless they recently had a high-risk exposure or a possible
 exposure and have early symptoms of HIV infection.
- An antigen/antibody test looks for both HIV antibodies and antigens. Antibodies are produced by your immune system when you're exposed to viruses like HIV. Antigens are foreign substances that cause your immune system to activate. If you have HIV, an antigen called p24 is produced even before antibodies develop. Antigen/antibody tests are recommended for testing done in labs and are now common in the United States. This lab test involves drawing blood from a vein. There is also a rapid antigen/antibody test available that is done with a finger prick.
- HIV antibody tests only look for antibodies to HIV in your blood or oral fluid. In general, antibody tests that use blood from a vein can detect HIV sooner after infection than tests done with blood from a finger prick or with oral fluid. Most rapid tests and the only currently approved HIV self-test are antibody tests.

Talk to your health care provider about what type of HIV test is right for you.

What is HIV treatment?

HIV treatment involves taking medicine that reduces the amount of HIV in your body.

- HIV medicine is called antiretroviral therapy (ART).
- There is no effective cure for HIV. But with proper medical care, you can control HIV.
- Most people can get the virus under control within six months.
- Taking HIV medicine does not prevent transmission of other sexually transmitted diseases.

When should I start treatment?

Start Treatment As Soon As Possible After Diagnosis

- HIV medicine is recommended for all people with HIV, regardless of how long they've had the virus or how healthy they are.
- Talk to your health care provider about any medical conditions you may have or any other medicines you are taking.
- Let your health care provider know if you or your partner is pregnant or thinking about getting pregnant. They will determine the right type of HIV medicine that can help prevent transmitting HIV to your baby.

What if I delay treatment?

- HIV will continue to harm your immune system.
- This will put you at higher risk for developing AIDS. Learn more about AIDS and opportunistic infections.
- This will put you at higher risk for transmitting HIV to your sexual and injection partners.



What are the benefits of taking my HIV medicine every day as prescribed?

Treatment Reduces the Amount of HIV in the Blood

- The amount of HIV in the blood is called viral load.
- Taking your HIV medicine as prescribed will help keep your viral load low and your CD4 cell count high.
- HIV medicine can make the viral load very low (called *viral suppression*). Viral suppression is defined as having less than 200 copies of HIV per milliliter of blood.
- HIV medicine can make the viral load so low that a test can't detect it (called an *undetectable viral load*).
- If your viral load goes down after starting HIV treatment, that means treatment is working. Continue to take your medicine as prescribed.
- If you skip your medications, even now and then, you are giving HIV the chance to multiply rapidly. This could weaken your immune system, and you could become sick.
- Getting and keeping an undetectable viral load (or staying virally suppressed) is the best way to stay healthy and protect others.

Treatment Helps Prevent Transmission to Others

- If you have an undetectable viral load, you have effectively no risk of transmitting HIV to an HIV-negative partner through sex.
- Having an undetectable viral load may also help prevent transmission from injection drug use. We don't have data about whether having an undetectable viral load prevents transmission through sharing needles, syringes, or other injection equipment (for example, cookers). It very likely reduces the risk, but we don't know by how much.
- Having an undetectable viral load also helps prevent transmission from mother to baby.
 If a mother with HIV takes HIV medicine as prescribed throughout pregnancy, labor, and
 delivery and gives HIV medicine to her baby for 4 to 6 weeks after birth, the risk of
 transmitting HIV to her baby can be 1% or less.
- Having an undetectable viral load reduces the risk of transmitting HIV to the baby through breastfeeding, but doesn't eliminate the risk. The current recommendation in the United States is that mothers with HIV should not breastfeed their babies.

Taking Treatment as Prescribed Helps Prevent Drug Resistance

- Taking HIV medication consistently, as prescribed, helps prevent drug resistance.
- Drug resistance develops when people with HIV are inconsistent with taking their HIV
 medication as prescribed. The virus can change (mutate) and will no longer respond to
 certain HIV medication.
- If you develop drug resistance, it will limit your options for successful HIV treatment.
- Drug-resistant strains of HIV can be transmitted to others.

For more information visit https://www.cdc.gov/hiv/basics