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# What Are HIV & AIDS?

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Para leer este hoja informativa en español, presione aquí [2].

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#### What Is HIV?

HIV stands for Human Immunodeficiency Virus. HIV is the virus that causes AIDS.

Your <u>immune system</u> [3] is your body's defense system. While many viruses can be controlled by the immune system, HIV targets and infects the same immune system cells that are supposed to protect us from germs and illnesses. These cells are a type of white blood cell called CD4 cells (sometimes called T-cells).

Without medication to control the virus, in most cases, HIV takes over <u>CD4 cells</u> [4] and turns them into factories that produce thousands of copies of the virus. As the virus makes copies, it damages or kills the CD4 cells, weakening the immune system. This is how HIV causes AIDS.

There are many different strains of HIV that are grouped into two main types:

- HIV-1: most common type worldwide
- HIV-2: found mostly in West Africa, Asia, and Europe

It is possible for one person living with HIV to carry several different strains of HIV in their body at one time.

Click above to view or download this fact sheet as a PDF slide presentation [5]

#### What Is AIDS?

AIDS stands for Acquired Immune Deficiency Syndrome. AIDS is the most advanced stage of HIV infection.

HIV causes AIDS by attacking CD4 cells, which the immune system uses to protect the body from disease. When the immune system loses too many CD4 cells, you are less able to fight off infection and can develop serious, often deadly, infections. These are called <u>opportunistic</u> infections [6] (OIs).

When someone dies of AIDS, it is usually OIs or other long-term effects of HIV that cause death. AIDS refers to the weakened state of the body?s immune system that can no longer stop opportunistic infections.

### What Is the Difference Between HIV and AIDS?

You do not have AIDS as soon as you are infected with HIV. You can live with HIV (be HIV+) for many years with no signs of disease, or only mild-to-moderate symptoms. People living with HIV and taking HIV drugs as prescribed have a very low risk of progressing to AIDS. But without treatment, HIV will eventually wear down the immune system in most people to the point that they have low numbers of CD4 cells and develop opportunistic infections. Without treatment, this usually happens in five to ten years.

The definition of AIDS was established before there was effective treatment for HIV. It

indicated that a person was at higher risk for illness or death. In countries where HIV treatment is readily available, AIDS is no longer as relevant as it once was. This is because having access to effective treatment means people can stay healthier even with low CD4 counts. Also, someone could have received the AIDS diagnosis years ago even though they no longer have a low CD4 count.

The US Centers for Disease Control and Prevention (CDC) identifies someone as having AIDS if she or he is living with HIV and has one or both of these conditions:

- At least one AIDS-defining condition (see our list of AIDS Defining Conditions [7])
- A CD4 cell count [4] of 200 cells or less (a normal CD4 count is about 500 to 1,500)

People with AIDS can rebuild their immune system with the help of HIV drugs and live a long healthy life. Even if your CD4 cell count goes back above 200 or an OI is successfully treated, you will still have a diagnosis of AIDS. This does not necessarily mean you are sick or will get sick in the future. It is just the way the public health system counts the number of people who have had advanced HIV disease.

#### How Do I Know If I Have HIV?

Most people cannot tell that they have been exposed or infected. Initial, or acute symptoms of HIV infection may show up within two to four weeks of exposure to HIV, and can include:

- Fever
- Swollen glands
- Sore throat
- Night sweats
- Muscle aches
- Headache
- Extreme tiredness
- Rash

Some people do not notice the symptoms because they are mild, or people think they have a cold or the flu. After the 'flu-like' symptoms that often accompany initial infection, people living with HIV can go years without showing any symptoms. The only way to know for sure if you are infected is to take an HIV test [8].

If you have some of the initial or acute symptoms of HIV, it is important that you be tested for HIV antigen (not just HIV antibody). Antigens are pieces of the HIV virus or viral particles. If an HIV antigen is your blood, there are tests that can identify HIV infection as quickly as two weeks after exposure to HIV.

Antibodies are proteins that your body makes to mark HIV for destruction by your immune system. The body takes one to three months and occasionally up to six months to develop antibodies to HIV. This three to six month period between getting HIV and the production of antibodies is called the "window period." Therefore, the results of tests that detect antibodies are only reliable one to three months after your exposure to HIV.

### Do I Need to Get Tested for HIV?

The CDC estimates that about one in five people living with HIV in the US do not know they have HIV. Many of these people look and feel healthy and do not think they are at risk. But the truth is that anyone of any age, gender, race, ethnicity, sexual orientation, social group, or economic class can become infected. Humans may <u>discriminate</u> [9] on the basis of these factors, but the virus does not. For more on how HIV is spread, see our fact sheet on HIV transmission [10].

To see if you need to get tested for HIV, answer the following questions:

- Have you ever had penile-vaginal, penile-anal, or <u>oral sex</u> [11] without a condom or other latex barrier (e.g., dental dam)? Note: oral sex is a low risk activity. Vaginal and anal sex are much higher risk.
- Are you uncertain of your partner?s status or is your partner living with HIV?
- Are you pregnant [12] or considering becoming pregnant [13]?
- Have you ever had a <u>sexually transmitted infection or disease (STI or STD)</u> [14]?
- Do you have hepatitis C (HCV) [15]?
- Have you ever shared needles, syringes, or other equipment to inject drugs (including steroids or hormones)?

If you answered yes to any of these questions, you should definitely get an HIV test. In the US, it is now recommended that everyone age 13-64 be screened for HIV at least once.

### Why Should I Get Tested?

If you are worried because you think you may have been exposed to HIV, get tested. Then, if you learn you are negative (not infected), you can stop worrying. If you test HIV+ there are effective medications to help you stay well. But you cannot get the health care and treatment you need if you do not know your HIV status (whether you are living with HIV or HIV-negative). Being unaware of your status also means you could pass HIV to others without knowing it.

For women who plan to become pregnant, testing is especially important. If a woman is infected with HIV, medical care and certain drugs given during pregnancy can lower the chance of passing HIV to her baby. For more information, see our fact sheet on <u>Pregnancy</u> and HIV [12].

In the US, you can go to the National HIV and STD Testing Resources website [16] or the AIDS.gov website [17] to find a testing location near you. You can also call the CDC?s information line at 800-232-4636 or call your state?s HIV/AIDS hotline (numbers listed here [18]). To find services across the world, visit AIDSmap?s e-atlas [19]. For more on getting tested for HIV - types of tests, how they work, and where to get them - see our fact sheet on HIV Testing [8].

## **How Is HIV Spread?**

HIV is spread primarily through contact with the following body fluids:

- Blood (including menstrual blood)
- Semen (?cum?) and other male sexual fluids ("pre-cum")

- Vaginal fluids
- Breast milk

The most common ways HIV is spread from person-to-person is through <u>unprotected sex</u> [20] (no condoms or other barriers), <u>sharing needles</u> [21] used for injecting drugs, and <u>mother-to-child</u> [12] (during pregnancy, birth, or breast-feeding).

HIV is **not** spread through contact with these body fluids:

- Sweat
- Tears
- Saliva (spit)
- Feces (poop)
- Urine (pee)

In other words, you CANNOT get HIV by touching or hugging someone who is living with HIV, kissing someone living with HIV, or by using a toilet also used by someone living with HIV.

### Is There a Vaccine or Cure for HIV?

There is neither a vaccine nor a cure for HIV. The best way to prevent HIV is to use consistent prevention methods, including <u>safer sex</u> [20] (choosing low- or no-risk activities, using condoms, taking <u>PrEP</u> [22]) and using sterile needles (for drugs, hormones or tattoos). For more information, see our fact sheet on HIV Vaccines [23].

### **Additional Information**

As you learn more about HIV, you may find these articles helpful:

- HIV Testing [8]
- Did You Just Test HIV+? [24]
- Considerations Before Starting HIV Treatment [25]
- HIV Transmission [10]
- Safer Sex [20]
- Pregnancy and HIV [12]
- Women and HIV [26]

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- HIV 101 [53]
- HIV testing [54]
- HIV home test [55]
- basics of HIV [56]

# **Additional Resources**

Please click on the links below for additional material related to understanding HIV and HIV testing.

What Are HIV and AIDS? (Avert) [57]

Symptoms and Stages of HIV Infection (Avert) [58]

What Is HIV/AIDS? (AIDS.gov) [59]

HIV Basics (AIDSmap) [60]

HIV/AIDS (WHO) [61]

What Is HIV/AIDS? (womenshealth.gov) [62]

HIV Basics (CDC) [63]

Symptoms of HIV (AIDS.gov) [64]

What Is HIV? (Terrence Higgins Trust) [65]

About HIV (in English, ???????, and other Eastern European languages) [66]

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- A Girl Like Me
- Partners
- Who We Are
- Terms
- Privacy
- Contact



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Source URL: http://www.thewellproject.org/hiv-information/what-are-hiv-aids?qt-activity\_tabs=2

#### Links:

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- [2] http://www.thewellproject.org/hiv-information/que-es-el-vih-y-el-sida
- [3] http://www.thewellproject.org/hiv-information/understanding-immune-system
- [4] http://www.thewellproject.org/hiv-information/understanding-cd4-cells-and-cd4-cell-tests
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- [6] http://www.thewellproject.org/hiv-information/what-are-opportunistic-infections
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- [8] http://www.thewellproject.org/hiv-information/hiv-testing
- [9] http://www.thewellproject.org/hiv-information/stigma-and-discrimination-against-women-living-hiv
- [10] http://www.thewellproject.org/hiv-information/hiv-transmission
- [11] http://www.thewellproject.org/hiv-information/oral-sex-and-hiv-whats-real-risk
- [12] http://www.thewellproject.org/hiv-information/pregnancy-and-hiv
- [13] http://www.thewellproject.org/hiv-information/getting-pregnant-and-hiv
- [14] http://www.thewellproject.org/hiv-information/sexually-transmitted-infections-or-diseases-stis-or-stds
- [15] http://www.thewellproject.org/hiv-information/hepatitis-c-hcv
- [16] http://hivtest.cdc.gov/Default.aspx
- [17] http://aids.gov/hiv-aids-basics/prevention/hiv-testing/hiv-test-locations/
- [18] http://hab.hrsa.gov/gethelp/statehotlines.html
- [19] http://www.aidsmap.com/e-atlas
- [20] http://www.thewellproject.org/hiv-information/safer-sex
- [21] http://www.thewellproject.org/hiv-information/cleaning-equipment-injecting-drugs
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- [56] http://www.thewellproject.org/tags/basics-hiv
- [57] http://www.avert.org/hiv.htm
- [58] http://www.avert.org/about-hiv-aids/symptoms-stages
- [59] http://aids.gov/hiv-aids-basics/hiv-aids-101/overview/what-is-hiv-aids/
- [60] http://www.aidsmap.com/hiv-basics
- [61] http://www.who.int/features/ga/71/en/
- [62] http://www.womenshealth.gov/hiv-aids/what-is-hiv-aids/index.html
- [63] http://www.cdc.gov/hiv/basics/index.html?s\_cid=cs\_1658
- [64] https://www.aids.gov/hiv-aids-basics/hiv-aids-101/signs-and-symptoms/
- [65] http://www.tht.org.uk/myhiv/HIV-and-you/Simple-science/What-is-hiv
- [66] http://www.about-hiv.info/