

HIV Facts

This handout answers common questions about Human Immunodeficiency Virus (HIV). Read through the handout and decide what you want to discuss with your child. For parents of children and teens ages 12 to 18, you may want to offer this handout to your child after you read it and be ready to talk over the information.

What is HIV?

HIV stands for Human Immunodeficiency Virus:

- Viruses are germs that only survive by living in cells.
- Coughing or sneezing can spread the viruses that cause a cold or the flu. The HIV virus is much harder to catch because it lives in the blood.
- Most viruses, like a cold or the flu, are destroyed by the body's immune system. But HIV attacks the immune system and weakens it so that the immune system cannot fight back.
- The immune system is the body's disease-fighting system, like a shield that protects against infection. If you don't have HIV, your body can fight off infection, much like a superhero can fight off the enemy. If you get sick, your body can fight germs and make you well again. But when you have HIV, your body's immune system is unable to fight the germs as well.

What is the difference between HIV and AIDS?

- HIV is a virus that can damage the immune system. Many people with HIV feel fine and have no symptoms at all. But as their immune system weakens, they may develop illnesses.



- These illnesses are called opportunistic infections because they take the opportunity to cause problems when the immune system is too damaged to fight them off. Some of the names of these opportunistic infections are: pneumocystis carinii pneumonia (PCP), thrush, esophageal candidiasis and mycobacterium avium intracellulare (MAI).
- AIDS (Acquired Immune Deficiency Syndrome) is the word used when a person with HIV develops specific illnesses or other conditions that can occur when the immune system is weakened. Not all people with HIV infection have AIDS. People with AIDS usually need to take additional medicines to stay healthy. These medicines help to keep them from getting opportunistic infections. AIDS occurs when HIV has weakened the immune system. A person is diagnosed with AIDS after they have had one of the infections or problems listed as an AIDS-defining condition.

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How is HIV spread or transmitted?

There are five ways that HIV can spread from one person to another. A simple way to think about it is that HIV can be spread through body fluids (such as blood, breast milk or sexual fluids).

1. HIV can be passed from an infected mother to her baby during pregnancy or childbirth.
2. HIV can be passed when a baby drinks breast milk from a mother infected with HIV.
3. HIV can be spread through contact with blood. People should not touch other people's blood or allow others to touch their blood. In the past, HIV was spread through transfusions of blood or blood products. Now that all blood is tested for HIV, this is extremely rare.
4. HIV can be spread when needles are shared. A needle that has not been sterilized correctly can pass HIV to others. This includes needles used in tattooing, to give steroids and for illegal drugs.
5. HIV can be spread through unprotected sexual intercourse. An infected person can transmit HIV to another person through vaginal and anal intercourse when a condom is not used. The virus in high-risk fluids (such as semen, vaginal fluids and blood) can get into the bloodstream through openings in the lining of the vagina and rectum. During oral sex, HIV can enter through a break in the skin, the gums or in or around the mouth. With any type of unprotected sex (vaginal, anal or oral) it is easier for HIV to enter the bloodstream if someone already has a sexually transmitted disease. This is because these diseases often create openings in the skin that can allow HIV into the bloodstream.

HIV is *not* spread by:

- Living in the same place with a person who has HIV
- Coughing or sneezing
- Toilet seats
- Sharing cups or plates
- Hugging or touching
- Drinking fountains
- Bug bites

HIV is fragile and dies quickly when it is outside of the body. Even so, toothbrushes and razors should not be shared.

What is CD4?

- CD4 cells, also called T-helper cells, are a key part of the immune system. They help the other cells of the immune system fight off infections. These are the main cells that HIV attacks.
- Once HIV is inside of the CD4 cell, it can start to make copies of itself. The HIV kills the CD4 cells and makes their number go down.
- A CD4 test is done to measure the number of CD4, or T-helper, cells in the blood. The lower the CD4 count, the weaker the immune system.

What is viral load?

Viral load is a test done to measure the amount of HIV in the blood. The higher the level of virus in the blood, the faster the CD4 cells are being destroyed by the HIV. The lower the viral load, the less harm the HIV is doing to the immune system.

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Can HIV be treated?

Yes. At this time, there is not a cure for HIV, but there are many medicines to control HIV. The medicines, called antiretrovirals, keep the virus from making copies of itself and killing the CD4 cells. The medicines have to be taken every day as prescribed. Many of the medicines have side effects, but if taken right, they can keep people living with HIV infection healthy for a long time.

FOR MORE INFORMATION

- Your child's health care provider
- Visit these Web sites:
 - www.kidshealth.org
 - www.pedaids.org
 - www.seattlechildrens.org
- Read our handouts on:
 - *HIV: Children 0 to 2 years old*
 - *HIV: Children 3 to 4 years old*
 - *HIV: Children 5 to 7 years old*
 - *HIV: Children 8 to 10 years old*
 - *HIV: Children 11 to 13 years old*
 - *HIV: Teens*
 - *HIV: Making Medicines Easy*
 - *HIV: Infection Control*
 - *HIV: Talking to Your Child*
 - *HIV: Helping Children Understand the End of Life*
 - *HIV: Talking to Your Child About Sex*
 - *HIV: Teens and Sex*

Some of the material in this handout was adapted from the following Web sites:

www.4woman.gov/HIV/children.cfm

www.aids.org

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Disclaimer: The inclusion of any Web site link (or resource accessed through a link) does not imply endorsement by Children's Hospital and Regional Medical Center. Seek the advice of your child's health care provider before you act or rely upon any information from these resources.

Children's will make this information available in alternate formats upon request. Please call Marketing Communications at (206) 987-5205.

This handout has been reviewed by clinical staff at Children's Hospital. However, your child's needs are unique. Before you act or rely upon this information, please talk with your child's health care provider.