

HIV

Definition: HIV stands for human immunodeficiency virus. It is the virus that can lead to acquired immunodeficiency syndrome, or AIDS. Unlike some other viruses, the human body cannot get rid of HIV. That means that once you have HIV, you have it for life. HIV affects specific cells of the immune system, called CD4 cells, or T cells. Over time, HIV can destroy so many of these cells that the body can't fight off infections and disease. When this happens, HIV infection leads to AIDS

Transmission: Only certain fluids—blood, semen pre-seminal fluid, rectal fluids, vaginal fluids, and breast milk—from an HIV-infected person can transmit HIV. These fluids must come in contact with a mucous membrane or damaged tissue or be directly injected into the bloodstream (from a needle or syringe) for transmission to possibly occur. Mucous membranes can be found inside the rectum, the vagina, the opening of the penis, and the mouth.

In the United States, HIV is spread mainly by

- Having unprotected sex (sex without a condom) with someone who has HIV.
- Anal sex is the highest-risk sexual behavior. Receptive anal sex (bottoming) is riskier than insertive anal sex (topping).
- Vaginal sex is the second highest-risk sexual behavior.
- Having multiple sex partners or having other sexually transmitted infections can increase the risk of infection through sex.
- Sharing needles, syringes, rinse water, or other equipment (works) used to prepare injection drugs with someone who has HIV.

Symptoms: Primary Infection

The majority of people infected by HIV develop a flu-like illness within a month or two after the virus enters the body. This illness, known as primary or acute HIV infection, may last for a few weeks. Possible symptoms include:

1. Fever
2. Muscle Soreness
3. Rash
4. Headache
5. Sore Throat
6. Mouth or Genital Sores
7. Swollen Lymph Nodes
8. Joint Pain
9. Night Sweats
10. Diarrhea

Although the symptoms of primary HIV infection may be mild enough to go unnoticed, the amount of virus in the blood stream (viral load) is particularly high at this time. As a result, HIV infection spreads more efficiently during primary infection than during the next stage of infection.

Clinical latent infection

In some people, persistent swelling of lymph nodes occurs during clinical latent HIV. Otherwise, there are no specific signs and symptoms. HIV remains in the body, however, as free virus and in infected white blood cells.

Clinical latent infection typically lasts eight to 10 years. A few people stay in this stage even longer, but others progress to more-severe disease much sooner.

Early symptomatic HIV infection

As the virus continues to multiply and destroy immune cells; you may develop mild infections or chronic symptoms such as: fever, fatigue, swollen lymph nodes, weight loss, cough, and shortness of breath.

Progression to AIDS

If you receive no treatment for your HIV infection, the disease typically progresses to AIDS in about 10 years. By the time AIDS develops, your immune system has been severely damaged, making you susceptible to opportunistic infections — diseases that wouldn't trouble a person with a healthy immune system. The signs and symptoms of some of these infections may include:

- Soaking night sweats
- Shaking chills or fever higher than 100 F (38 C) for several weeks
- Cough and shortness of breath
- Chronic diarrhea
- Persistent white spots or unusual lesions on your tongue or in your mouth
- Headaches
- Persistent, unexplained fatigue
- Blurred and distorted vision
- Weight loss
- Skin rashes or bumps

Exposure: HIV does not survive long outside the human body (such as on surfaces), and it cannot reproduce. It is a blood borne pathogen and can be spread in semen, blood, breast milk, rectal fluids and vaginal fluids. An exposure would constitute such situations as a needle stick or being exposed to a patient's blood with non intact skin. Occupational transmission of HIV to health care workers is extremely rare.

Precautions and PPE considerations: Use gloves at a minimum. If intubating or dealing with a lot of bloods consider using a gown and a mask for protection. Remember OPIM and blood can harbor the HIV virus.

Treatments: Personnel will be treated by our infection control doctor

Work Guidelines: If an exposure is confirmed then personnel will be directed to our infectious disease doctor for counseling and treatment. He will set up the return to work guidelines' for the employee.