



HIV (Human Immunodeficiency Virus)

What is HIV?

HIV (Human Immunodeficiency Virus) is a virus that attacks the immune system – the part of the body that fights disease. HIV infection can eventually lead to AIDS (Acquired Immunodeficiency Syndrome). As of January 1, 2017, 5,920 Boston residents were known to be living with HIV.

How is HIV spread?

HIV is spread through body fluids such as vaginal fluids, semen, and blood. Anyone who is exposed to the virus through sexual or blood contact can get infected. HIV can be transmitted through sex (vaginal, oral, or anal), injection drug use, and from mother to child during pregnancy, birth, or breastfeeding. In very rare cases, HIV can also be transmitted through blood transfusions (process of getting blood products) or organ transplants. However, all blood and donated organs are screened for HIV, so the chance of being infected this way is very small. Individuals can still spread HIV even if they don't have symptoms. Men who have sex with men (MSM) have a higher rate of HIV infection than other groups. As of January 1, 2017, 50% of Boston residents living with HIV were MSM.

Risk factors for HIV include:

- Anal or vaginal sex without using a condom (latex or polyurethane)
- Having multiple sex partners
- Having another Sexually Transmitted Infection (STI) like Chlamydia, Gonorrhea, or Syphilis
- Sharing needles or “works” if injecting drugs
- Being born to an HIV infected woman
- There is little to no risk of getting or transmitting HIV from oral sex.

How does HIV work?

There are different stages with HIV infection: acute infection, clinical latency and AIDS.

Acute Infection:

- This phase takes place 2-4 weeks **after** being infected with the virus.
- The majority of people infected develop a flu-like illness (fever, muscle aches, rash, joint pain)
- Symptoms may be mild enough to go unnoticed, but the virus is multiplying and spreading throughout the body during this time.
- The ability to spread HIV is highest at this stage because the amount of virus in the blood is very high.

Clinical Latency (inactivity or dormancy):

- This stage can last for years
- There are limited symptoms associated with this stage of HIV infection. Many individuals can live without symptoms for many years.
- During this phase the virus is present in the body but is not attacking the immune system, however, treatment during this phase is important.
- Individuals can still spread the virus during this stage.

AIDS (Acquired Immunodeficiency Syndrome):

- This stage usually occurs years after being infected with HIV.
- A person has AIDS when their immune response is very weak and they have lost the ability to fight off infections.
- Symptoms associated with this stage can vary greatly.
- Many medicines are available to treat AIDS.

It is important to note that a person can transmit HIV to others during any of these stages.

HIV does not survive long outside the human body (such as on surfaces), and it cannot reproduce outside a human host. It **is not** spread by

- Mosquitoes, ticks, or other insects.
- Saliva, tears, or sweat that is not mixed with the blood of an HIV-positive person.
- Hugging, shaking hands, sharing toilets, sharing dishes, or closed-mouth or “social” kissing with someone who is HIV-positive.
- Other sexual activities that don’t involve the exchange of body fluids (for example, touching).

What are the symptoms of HIV?

Many people who are infected with HIV do not have any symptoms until many years after infection. The following **may be** warning signs of advanced HIV infection:

- Rapid weight loss, dry cough, recurring fever, or severe night sweats
- Profound and unexplained fatigue, swollen lymph glands in the armpits, groin, or neck
- Diarrhea that lasts for more than a week
- White spots or unusual marks on the tongue, the mouth, or the throat
- Memory loss, depression, and other neurological problems

How can I find out if I have HIV?

The only way to know if you are infected is to **Get Tested**. A healthcare provider can take a blood sample or a swab of the inside of your mouth to test for HIV. Depending on the type of test, you could find out results in 20 minutes (Rapid HIV Test) or in a few days. Talk to your healthcare provider to find out which test is best for you. There are also several free and confidential testing centers in Boston. To find a testing center near you, call the Mayor’s Health Line at **617-534-5050** or visit https://gettested.cdc.gov/search_results.

Can HIV be treated or cured?

Medicines are available to treat HIV infection, but there is currently no cure. HIV medicine reduces the amount of HIV in the body (**viral load**) to a very low level, which keeps the individual healthy and reduces the chance of infecting others through sex or sharing injection drug equipment such as needles. People with HIV who take HIV medicine as prescribed and get and keep an undetectable viral load have effectively no risk of transmitting HIV to their HIV-negative sexual partners. Researchers are currently working on HIV vaccines, new medicines, and new ways to prevent HIV.

What if I may have been exposed to HIV?

If you think you were exposed to HIV, contact your healthcare provider immediately. Medicines soon after exposure can prevent infection; this is called Post-Exposure Prophylaxis (PEP). If you think you might be exposed to HIV in the future, ask your healthcare provider about PrEP (Pre-Exposure Prophylaxis). If you do not have a healthcare provider, contact the Mayor’s Health Line at **617-534-5050** for help in finding care in Boston.

How can I protect myself from getting HIV?

- Always use a latex, nitrile, or polyurethane condom or barrier (dental dam) when having sex (vaginal, oral, or anal).
- Condoms made from “natural” materials may protect against pregnancy but **not** HIV or other STIs.
- Limit your number of sex partners.
- Talk with your partner about their status and getting tested.
- Talk with your health care provider about safer sex and getting tested.
- Understand that having sex while under the influence of drugs and/or alcohol can increase the likelihood of unprotected sex.
- Do not share needles or “works” if you are injecting drugs.

