



Human Immunodeficiency Virus (HIV)

What is HIV?

The Human Immunodeficiency Virus or HIV is a virus that attacks the human immune system, specifically the CD4+ T cells, which are crucial to helping the body fight diseases. HIV is the virus that can cause AIDS or Acquired Immune Deficiency Syndrome. In Boston, there were over 5,000 people living with HIV in 2010.

How can a person get HIV?

HIV is spread when someone has vaginal, anal or oral sex with someone who is infected. HIV can also be passed from mother to child during birth. The virus is passed through body fluids such as vaginal fluids, semen and blood.

Risk factors known to increase your risk of contracting HIV:

- Men having unprotected sex with men or unprotected anal sex
- Sharing needles or “works” for injection
- Having sex without using a latex or polyurethane condom
- Having multiple sex partners
- Having a different Sexually Transmitted Infection (STI)

Who can get HIV?

Anyone who is exposed to the virus through sexual or blood contact (including injection drugs) can get infected. Individuals can still spread HIV even if they don't have symptoms. In Boston, men who have sex with men make up the largest portion of HIV cases compared to other risk categories (48% of the total cases).

How does HIV work?

There are three stages to HIV infection: an acute HIV syndrome, clinical latency, and AIDS.

- Acute HIV Syndrome:
 - This stage takes place a month or two after being infected with the virus.
 - The majority of people infected develop a flu-like illness such as a fever, muscle aches, rash, joint pain, etc.
 - Symptoms may be mild enough to go unnoticed but the virus is multiplying and spreading throughout the body during this time.
- Symptom Free Stage (Clinical latency):
 - 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.
 - Individuals can still spread the virus during this stage.
- AIDS:
 - This stage usually occurs years after being infected with HIV.
 - An individual is said to have AIDS when their immune response is significantly impaired, losing the ability to fight off infections.
 - Symptoms associated with this stage can vary greatly.

How long can an infected person spread HIV?

Once an individual is infected with HIV, they can always spread the virus to an uninfected individual with certain types of contact. If you or your partner is infected it is important to know your status and always use protection when engaging in sexual activities and to never share needles or “works” for injection. For women, HIV can be passed from an infected mother to child.

How can I find out if I have HIV?

The only way to know if you are infected is to **get tested** for HIV infection. A healthcare provider may ask for a blood sample or may take an oral swab from 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 one to two weeks. Talk to your healthcare provider to find out which test is best for you.

What are the symptoms of HIV?

Not everyone who is infected with HIV has symptoms. Many people who are infected with HIV do not have any symptoms at all for years.

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

Where can I get tested?

Most health care providers offer testing for HIV and other sexually transmitted infections (STI). To find a health care center in a neighborhood near you, call the Mayor's Health Line at **617-534-5050** or

Toll-Free: 1-800-847-0710 or visit

<http://www.bphc.org/programs/infectiousdisease/infectiousdiseasesatoz/sti/Pages/Home.aspx> and enter your zip code.

Can HIV be treated?

Yes, there are medications available that can help many HIV infected people live with the disease for many years. It is important that individuals get tested for HIV and know that they are infected early in order for medical care and treatment to have the greatest effect. Taking the HIV medication can reduce the amount of virus in an individual and reduce their risk of spreading the virus to someone else.

Is there a cure for HIV?

No, but medications are available to help keep the virus in check. Researchers continue to work to find a vaccine that will prevent HIV infection and treatments to prevent the transmission of HIV to an uninfected person.

Methods currently in development are:

- **Pre-Exposure Prophylaxis (PrEP):** medication taken before sexual exposure to an HIV infected individual to prevent the transmission of the virus.
- **Microbicides:** topical gel used to prevent the transmission of HIV during sexual contact. These are still being tested.

While PrEP and microbicides are still being studied, prevention methods such as always using clean needles and “works” and always using condoms during sexual activities have been shown to prevent the spread of HIV.

How can you protect yourself from getting HIV?

The most effective way to prevent HIV is to not have sex and to not share needles or “works”.

If you do have sex, you can limit your risk by taking the following steps:

- Always use a latex or polyurethane condom or barrier (dental dam) when having anal, vaginal and/or oral sex
 - Condoms made from “natural” materials may protect against pregnancy but NOT HIV or other STIs
- Reduce your number of partners if you choose to have sex
- 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