

Bloodborne Pathogens

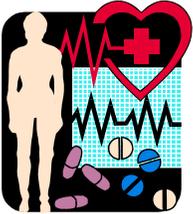
Norfolk Public Schools

Hepatitis B (HBV)

In the United States, approximately 300,000 people are infected with HBV annually. Of these cases, a small percentage are fatal.

"Hepatitis" means "inflammation of the liver," and, as its name implies, Hepatitis B is a virus that infects the liver. While there are several different types of hepatitis, HBV is transmitted primarily through "blood to blood" contact. HBV initially causes inflammation of the liver, but it can lead to more serious conditions such as cirrhosis and liver cancer.

There is no "cure" or specific treatment for HBV, but many people who contract the disease will develop antibodies which help them get over the infection and protect them from getting it again. It is important to note **that infection with HBV will not stop someone from getting another type of hepatitis.**



The hepatitis B virus is very durable, and can survive in dried blood for up to seven days. For this reason, this virus is the primary concern for custodians.

Knowledge of bloodborne pathogens is an important factor for the safety of Norfolk Public School employees and its students.

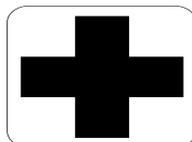
Symptoms of HBV

The symptoms of HBV are very much like a mild "flu." Initially there is a sense of fatigue, possible stomach pain, loss of appetite, and even nausea. As the disease continues to develop, jaundice (a distinct yellowing of the skin and eyes) and a darkened urine will occur. However, people who are infected with HBV will often show no symptoms for some time. **After exposure, it can take one to nine months before symptoms become noticeable.** Loss of appetite and stomach pain, for example, commonly appear within 1-3 months, but can occur as soon as two weeks or as long as 6-9 months after infection

Human Immunodeficiency Virus (HIV)

AIDS, or Acquired Immune Deficiency Syndrome, is caused by a virus called the Human Immunodeficiency Virus or HIV. Once a person has been infected with HIV, it may be many years before AIDS actually develops. HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases. AIDS is a fatal disease and while treatment for it is improving, there is no known cure.

Norfolk Public Schools custodians and employees who clean restrooms or assist with toileting procedures must be aware of HBV and HIV modes of transmission.



HIV is very fragile and will not survive very long outside of the human body. It is primarily of concern to employees providing first aid or medical care in situations involving fresh blood or other potentially infectious materials. It is estimated that the chances of contracting HIV in a workplace environment are only 0.4%. However, because it is such a devastating disease, all precautions must be taken to avoid exposure.

HIV infection essentially occurs in three broad stages. The **first stage** happens when a person is actually infected with HIV. After the initial infection, a person may show few or no signs of illness for many years. Eventually, in the **second stage**, an individual may begin to suffer swollen lymph glands or other lesser diseases which begin to take advantage of the body's weakened immune system. The second stage is believed to eventually lead to AIDS, the **third and final stage**. In this stage, the body becomes completely unable to fight off life threatening diseases and infections.

Symptoms of HIV infection can vary, but often include **weakness, fever, sore throat, nausea, headaches, diarrhea, a white coating on the tongue, weight loss, and swollen lymph glands.**

Universal Precautions

"Universal precautions" is the name used to describe a prevention strategy in which all blood and potentially infectious materials are treated as if they are infectious, regardless of the perceived status of the source individual. In other words, you treat all blood and body fluids as if they are infected.

Most Common Modes of Transmission

HBV and HIV are most commonly transmitted through:

- Sexual contact
- Sharing of hypodermic needles
- From mothers to their babies at or before birth
- Accidental puncture from contaminated needles, broken glass, or other sharps
- Contact between broken or damaged skin and infected body fluids
- Contact between mucous membranes and infected body fluids

To protect yourself, it is essential to have an impervious barrier between you and the potentially infectious material. **Wearing gloves is a simple precaution that should always be used.** If glove material is thin, double gloving can provide an additional layer of protection. Also, if you know you have cuts or sores on your hands, you should cover these with a bandaid before donning your gloves. You should always inspect the gloves for tears or punctures before putting them on. **If a glove is damaged, don't use it!** When taking contaminated gloves off, do so carefully. Make sure you don't touch the outside of the gloves with any bare skin, and be sure to dispose of them in a proper container so that somebody else won't come in contact with them either. **If you are contaminated by blood or an infectious material, immediately notify your building principal.**

Normal clothing that becomes contaminated with blood or potentially infectious materials should be removed as soon as possible. Contaminated laundry should be handled as little as possible and placed in a bag or container until it is decontaminated, disposed of, or laundered.

Handwashing is one of the most important practices used to prevent transmission of bloodborne pathogens. Exposed skin and hands should be thoroughly washed as soon as possible following an exposure incident. Use an antibacterial soap, avoiding harsh, abrasive soaps which may open fragile scabs or other sores. Flush eyes with copious amounts of clean water following exposure.

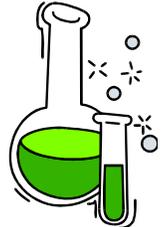
If you are working in an area where there is reasonable likelihood of exposure, you should never eat, drink, smoke, apply cosmetics or lip balm, or handle contact lenses in your work area.

When contamination of work surfaces occurs, decontaminate the surface by using a bleach and water solution (1 cup of bleach per one gallon of water) or an EPA-registered tuberculocidal disinfectant. If you are cleaning up blood, cover the spill with paper towels or rags, then gently pour the bleach solution or disinfectant over the towels and leave it for **at least 10 minutes**. Any materials you use to clean up a spill must be decontaminated as well.

Modes of Transmission

Bloodborne pathogens such as HBV and HIV can be transmitted through contact with infected human blood and other potentially infectious body fluid such as:

- Semen
- Vaginal secretions
- Saliva (in dental procedures)
- Any body fluid that is visibly contaminated with blood



Infected blood can enter your system through open sores, cuts, abrasions, acne, and any sort of damages or broken skin such as sunburn or blisters. Bloodborne pathogens may also be transmitted through the mucous membranes of the eyes, nose, and mouth.