

Bloodborne Pathogens

Bloodborne Pathogens are microorganisms that may be present in human blood and other body fluids and can cause diseases such as hepatitis B & C and HIV. It pays to know as much as you can about Bloodborne Pathogens and what steps you can take to avoid exposure. It is estimated that 1 out of 250 people in the United States are infected with the human immunodeficiency virus, or HIV. Even more alarming, about 1 out of 20 are infected with HBV, the hepatitis B virus. The CDC reports an estimated 2.7 million people are chronically infected with hepatitis C. HIV, or human immunodeficiency virus is a bloodborne pathogen that invades the immune system blood cells in humans rendering the cells less effective in preventing disease. The HIV virus causes AIDS, or Acquired Immune Deficiency Syndrome. Both Hepatitis and HIV are the result of exposure to blood and other potentially infectious materials. Doctors believe a new strain of HIV has recently surfaced (2005) that quickly turns into AIDS and is not treatable with the current drugs used on many HIV patients.

Bloodborne pathogens may enter your body and infect you as a result of:

- Accidental injuries with a sharp object that is contaminated with infectious materials
- Contact of pathogens with open cuts, nicks, skin abrasions, or mucous membranes of your mouth, eyes or nose
- Indirect transmission which can occur by touching a contaminated object or surface and transferring the infectious material to your mouth, eyes, nose or broken skin
- Sexual contact

The hepatitis B virus can survive on environmental surfaces such as a table or countertop dried and at room temperature for at least one week. That is why it is of vital importance to make sure that, after an accident involving blood and other potentially infectious materials, the area is thoroughly cleaned and disinfected. Voluntary pre-exposure vaccinations for Hepatitis B may be offered at the time of assignment to employees whose job duties are described in their district's Exposure Control Plan. If an exposure incident arises out of and in the course of performing job duties, post-exposure vaccinations will be offered to the employee involved.

More information about vaccinations can be received from your supervisor.

Let's take a look at how you can avoid exposure:

- Wash your hands frequently with soap and water
- All work surfaces should be cleaned regularly with an appropriate disinfectant
- Never eat or drink in an area that has the possibility of contamination, such as the first aid or nurse's office
- Always use the personal protective equipment that is provided.

If you administer first aid to an injured person in the workplace and there is a potential for contacting any body fluids, you should adhere to the following "universal precaution" guidelines:



• Wear impervious gloves when there is a chance of exposure to blood or body fluids.

• Wear a face shield to protect your entire face, and safety goggles to provide the most complete eye protection.

• Use resuscitation devices when performing cardiopulmonary resuscitation (CPR).

• Report all BBP exposures or potential exposures to your supervisor immediately.

• Immediately wash your hands and affected areas with soap and warm water.

• Flush your eyes, nose or other mucous membrane areas with water, if exposed.

• Wash down areas which body fluids may have been contacted with the use of a mild solution of household water and bleach (10:1).

Personal protective equipment may include disposable liquid-proof gloves, CPR masks, aprons and protective eyewear. Always wear disposable liquid-proof gloves when you anticipate hand contact with blood, infectious materials, mucous membranes or non-intact skin. Since gloves can be torn or punctured, bandage any cuts on your hands before putting on your gloves, and never reuse disposable gloves. To safely remove potentially contaminated gloves, peel one glove off from top to bottom and hold it in your gloved hand. Then, with your exposed hand, peel the second glove from the inside, tucking the first glove inside the second. Dispose of the gloves promptly and wash your hands thoroughly. Remove any personal protective equipment before leaving the work area and never reach into a container that may contain broken glass or sharp objects.

Vaccines

HBV – A series of three shots prevents hepatitis B in about 95% of all people. You can be tested to make certain you are protected
HCV – Currently there is no vaccine and no cure available. Retro anti-viral drugs have shown some promise of slowing down the progression of the disease.
HIV – Currently there is no vaccine and no cure available. Retro anti-viral drugs have been very effective for some people at keeping the virus in check for a number of years. Eventually, HIV will lead to AIDS for which there is no effective medical treatment.

A bloodborne pathogen exposure incident is defined as “a specific eye, mouth, mucous membrane, non-intact skin or parenteral contact with blood or other potentially infectious materials that result from the performance of an employee’s duties”. **Any exposure or suspected exposure must be reported immediately to your supervisor.** A follow-up investigation will be conducted. All records and reports of bloodborne pathogen exposure are kept confidential. Following safety and health guidelines greatly reduce the chances that you will be infected.