Bloodborne Pathogens

There are three bloodborne pathogens that may pose a risk to you. Hepatitis B and hepatitis C are viruses that affect the liver, which HIV targets the immune system and can lead to AIDS.

HBV

The hepatitis B virus, or HBV, can cause inflammation of the liver.

- About half the people infected with it show no symptoms
- The others may experience jaundice, fatigue, abdominal pain, loss of appetite and occasional nausea or vomiting
- Approximately 10 percent of people with HBV develop chronic infections, which can lead to chronic liver disease, cancer or death

Hepatitis B is the most easily transmitted bloodborne pathogen, and the only way to confirm and HBV infection is by blood test. Fortunately, there is an effective vaccine.

HCV

The hepatitis C virus, or HCV, causes liver infection and manifests symptoms similar to hepatitis B. There are some important differences between HBV and HCV, however:

- Three-quarters of those infected with HCV show no symptoms
- Eighty-five percent are chronically infected
- It is the leading reason for liver transplants

There is currently no vaccine for hepatitis C, although recently approved antiviral drugs have been effective in treating some who have contracted the disease.

HIV

Human Immunodeficiency Virus, or HIV, attacks the body’s immune system, eventually destroying its ability to fight infection.

- Many people who are infected lead normal lives and appear to be healthy for years
- Although HIV can lead to AIDS, the number of cases is declining due to improved treatments
- There is no preventive vaccine for HIV or cure for AIDS
Transmission: Workplace Safety

HBV, HCV and HIV are transmitted the same way – on the job – through exposure to contaminated blood and other body fluids containing blood. You can be exposed if:

- Contaminated blood or other body fluids containing visible blood contact or any break in your skin, such as cuts, nicks abrasions, dermatitis or acne sores
- These contaminated fluids come in contact with the mucous membranes of your nose, eyes or mouth
- You’re are cut with a sharp object that’s contaminated with these fluids
- You touch a contaminated surface and then touch your mucous membranes or broken skin. HBV can survive at room temperature for a week or more

Work Practice Controls

Reducing the risk of exposure is often a matter of good judgment and personal hygiene. The single most effective technique for preventing the spread of bloodborne pathogens is washing your hands. It reduces the possibility of infecting yourself, or transferring the virus to environmental surfaces where others could be exposed. To properly wash your hands:

- Scrub them up past your wrists with a non-abrasive soap and water
- Rinse completely
- Dry with a clean, disposable towel
  - If mucous membranes are involved, flush the area with water. If you are injured:
Minimize blood spatters and droplets

- Stop bleeding by applying pressure with a sterile gauze pad or compress
- Keep the injury well bandaged
- Clean up after yourself and report the incident

If someone else is injured and blood is present:

- Always put on gloves to avoid contact with blood
- After providing assistance, remove gloves and discard in appropriate container
- Wash your hands immediately

If you get blood or other potentially infectious materials on your skin, or if you’re cleaning a surface that may be infected, there are certain things to avoid until you’ve thoroughly cleaned up:

- Never eat, drink or smoke
- Don’t apply cosmetics or lip balms
- Don’t handle contact lens

Personal Protective Equipment

As a custodian, your job may sometimes require you to handle substances potentially contaminated with bloodborne pathogens, blood or body fluids containing visible blood. Or you may have to handle substances that may be contaminated with other pathogens, such as urine, feces, vomit, mucus from the nose or sputum. Standard precautions require you to wear personal protective equipment, or PPE, to avoid contact with any of these potentially infectious substances. Always wear PPE that is appropriate for the task:

- Gloves
- Aprons
- Face shields, protective eyewear, masks
- Resuscitation bags and other ventilation devices
General Rules for PPE

PPE can only protect you if it is used correctly. After selecting the appropriate protective gear:

- Make sure it fits correctly
- Always check for damage before using
- If it is damaged during use, remove it immediately and dispose of it according to your school’s Exposure Control Plan

Gloves

You must wear gloves if there’s any chance you might come in contact with blood or other potentially infectious material. They should fit snugly over your fingers, and be pulled up over your wrists as far as possible. Before you put them on, however, be sure to cover any cuts or abrasions.

There are two types of gloves:

- Heavy-duty utility gloves for housekeeping duties
- Single-use, disposal gloves for other tasks

Glove Removal

To avoid risk of infection, remove single-use gloves carefully as follows:

- Grasp the first glove, and peel it off from wrist to fingertips
- Hold it in your gloved hand, and repeat the process
- Pull the second glove down around the first
- Don’t let the outside of the used gloves touch your bare skin
- Discard both gloves promptly; never reuse disposable gloves
- Immediately wash your hands with soap and running water

Resuscitation Devices
Mechanical resuscitation devices and pocket masks are used in cases of medical emergency. Using these devices:

- Protects you by providing a physical barrier between you and the victim’s body fluids
- Requires proper training

**Housekeeping**

It’s a good idea to review your regular housekeeping practices. Specific procedures and schedules are outlined in your Exposure Control Plan, but here are some general guidelines:

- Clean and treat any equipment or working surfaces with an appropriate disinfectant as soon as possible after potential contamination
- Never use your hands to pick up broken glass; always use a broom and dustpan
- Don’t use your hands or feet to push down the trash into the bag or can. Sharp materials, such as contaminated glass or cans, might puncture your skin through your shoes or gloves
- Seal potentially infectious waste in approved, clearly labeled “biohazard” containers
- Assume school laundry could be contaminated. Handle it as little as possible, and always wear gloves. Transport wet laundry in leak-proof containers
- Regularly inspect and disinfect reusable receptacles that may become contaminated
Bloodborne Pathogens Quiz

1. True False The bloodborne pathogens putting you at greatest risk on the job are HBV, HCV and HIV
2. True False HIV manifests itself as an inflammation of the liver
3. True False The hepatitis B and C viruses can only be confirmed by blood test
4. True False Many people with bloodborne viruses seem healthy and show no symptoms
5. True False The hepatitis B virus can survive on work surfaces for a week or more at room temperature
6. True False HBV, HCV and HIV are transmitted in the same way on the job
7. True False Contact with urine, feces and vomitus can expose you to bloodborne pathogens
8. True False You can be exposed to a bloodborne pathogen if contaminated blood contacts an open cut or abrasion
9. True False You cannot infect yourself by applying cosmetics or lip balm after exposure to contaminated materials
10. True False Jobs that carry risks of exposure are identified in your school’s Exposure Control Plan
11. True False Work practice controls are based on good judgment and personal hygiene
12. True False It is not necessary to wash your hands if you have worn gloves to handle infectious materials
13. True False Any blood, or body fluid containing visible blood, could be infected with bloodborne pathogens
14. True False Personal Protective Equipment, such as a resuscitation device, provides a physical barrier between you and a victim’s potentially-infected body fluids
15. True False Heavy-duty utility gloves are best for housekeeping
16. True False Disposable gloves may be re-used after decontamination if they are not torn or punctured
17. True False You must be careful not to let the outside of used disposable gloves touch your bare skin
18. True False It is not dangerous to tamp trash into a receptacle as long as you wear gloves
19. True False You should regularly inspect and disinfect re-usable containers, such as trash cans, bins and pails, that might become contaminated
20. True False You can minimize your risk of infection by bloodborne pathogens if you know the facts and use your good judgment

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