
Bloodborne Pathogens For School Employees

Dallas Co R-1 Public Schools
Bloodborne Pathogens Training
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Introduction

- In an educational setting, the school system is required to identify the personnel whose job duties expose them to blood and potentially infectious body fluids. Not every school staff is occupationally exposed to bloodborne pathogens while performing his or her job. **However**, it is important for everyone in an educational setting to understand the dangers of infection and the safety procedures to minimize risk.



The Facts on Bloodborne Diseases

- Bloodborne Pathogens are microorganisms carried by human blood and other body fluids.
- The 3 deadliest bloodborne diseases are:
 - HBV – Hepatitis B Virus
 - HCV – Hepatitis C Virus
 - HIV – Human Immunodeficiency Virus

Hepatitis B (HBV)

- Hepatitis B is a contagious liver disease that ranges in severity from a mild illness lasting a few weeks to a serious, lifelong illness. It results from infection with the Hepatitis B virus. Hepatitis B can be either “acute” or “chronic.”
- There is no cure for HBV.
- HBV poses a greater risk than HCV & HIV because it is more easily transmitted.
- Symptoms include fever, jaundice, fatigue, loss of appetite, abdominal pain, nausea and vomiting.
- People infected with HBV may not know they are infected or may not have symptoms; however they can still infect others.

Hepatitis B Vaccine

- HBV **can be prevented** by receiving the Hepatitis B vaccine and taking appropriate safety precautions.
- The vaccine can also be started within 24 hours of exposure.

Hepatitis C (HCV)

- Hepatitis C is a virus that attacks the liver and presents with symptoms similar to Hepatitis B.
- Many people infected with Hepatitis C may not know or do not have any symptoms.
- Hepatitis C is the leading cause of liver transplants.
- There is **not** a vaccine available to prevent Hepatitis C.

Human Immunodeficiency Virus (HIV)

- HIV attacks the person's immune system and causes it to break down.
- The infected person becomes seriously ill when the immune system loses its ability to fight infection.
- Some infected persons may go on to develop AIDS.
- There is **not** a preventative vaccine for HIV.



Transmission of Bloodborne Diseases

- Spreads most easily through contact with blood, semen, vaginal secretions and other body fluids and tissue with visible blood.

- Bloodborne viruses are **most commonly** transmitted by:

- Sharing needles to inject drugs.
- Having unprotected sex with an infected person.
- Transmitting the virus from mother to unborn child during pregnancy.

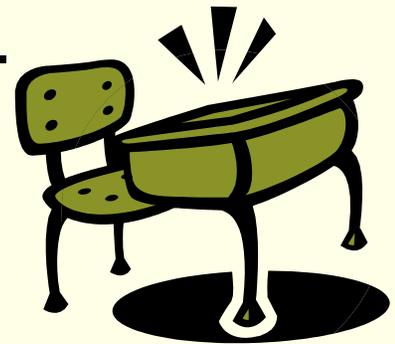


Transmission at School

- Bloodborne viruses at **school** are transmitted mostly by:
 - Contaminated blood or body fluid entering your body through broken skin (i.e. cuts, nicks, abrasions, dermatitis, and acne) or the mucous membranes of the eyes, nose, or mouth.
 - A contaminated sharp punctures the skin

Transmission - Indirectly

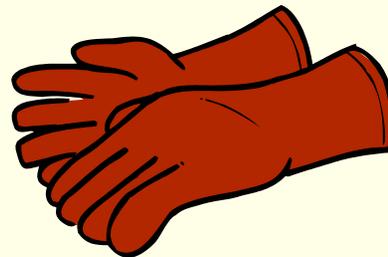
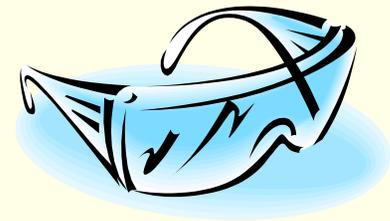
- Indirect transmission occurs when you touch a contaminated object or surface and then transfer the infection to your mouth, eyes, nose or non-intact skin.
- **Contaminated surfaces** are a major cause of the spread of hepatitis. HBV can survive on environmental surfaces, dried and at room temperature, for at least one week.



Personal Protective Equipment (PPE)

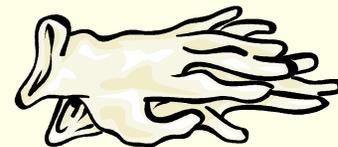
- Equipment that protects you from contact with blood or other potentially infected material (PIM) include:

- **Gloves**
- Gowns, Aprons, Lab Coats
- Face Shields, Protective Eye Wear
- Masks, Mouthpieces, Resuscitation Bags



Personal Protective Equipment (PPE) continued

- The PPE must fit properly, especially gloves.
- All PPE must be **free of physical flaws** that could compromise safety.
- You must use appropriate PPE each time you perform a task involving PIMs.
- Additional gloves and other PPE can be requested from the school nurse.



Personal Protective Equipment (PPE) - Gloves

- Gloves should be removed **when they become contaminated or damaged or immediately after finishing the task.** You must follow a safe procedure for glove removal, being careful that no pathogens from the soiled gloves contact your hands. Wash hands as soon as you can after removing gloves.



Personal Protective Equipment (PPE) – Glove Removal

■ Glove Removal

- With both hands gloved, peel one glove off from top to bottom and hold it in the gloved hand.
- With the exposed hand, peel the second glove from the inside, tucking the first glove inside the second.
- Dispose of the entire bundle promptly.
- Never touch the outside of the glove with bare skin.
- Every time you remove your gloves, wash your hands with soap and warm running water as soon as you possibly can.



Hand Washing

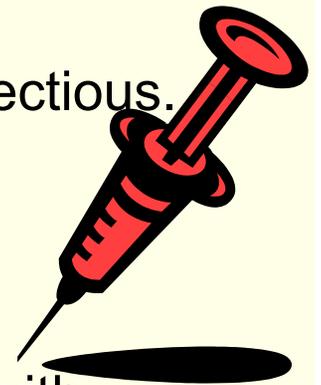


- **Hand washing** is the **#1 protection** against infection.
- Wash hands after coming in contact with blood, body fluids, excretions, and secretions **even if you were wearing gloves**.
- Hand Washing Steps
 - Use soap and warm running water for 20 seconds.
 - Rub vigorously over all surfaces, including above your wrists and under fingernails.
 - Rinse thoroughly and dry with a clean paper towel and discard.
 - Use a clean paper towel to turn off the faucet and discard.



Standard Precautions

- Research shows that proper **safety precautions** greatly reduce the risk of coming in contact with bloodborne pathogens.
- To reduce your risk:
 - **Handle all** blood and body fluids as if they are infectious.
 - Dispose of sharps (needles) safely.
 - Wear personal protective equipment (PPE) when exposed to blood and body fluids.
 - Clean and disinfect areas possibly contaminated with infectious materials with the proper cleaning agent or with a mixture of bleach and water (one part household bleach to 10 parts water).
 - Get the Hepatitis B vaccine.



Standard Precautions – Signs and Labels

- Watch for fluorescent orange-red labels, red bags, and containers with a biohazard symbol. This symbol will **warn** you when the contents of containers are used for waste, storage, or shipping contain blood or other potential infectious material.



Safety Guidelines

- The **Exposure Control Plan** outlines the safety methods that can help **prevent** you from becoming infected with bloodborne viruses.
- OSHA highly recommends receiving the immunization for HBV.
- Remember, there are **no vaccines** for HCV and HIV, so it is important to **follow all safety precautions.**

Safe Practices to Follow

- Do not eat, drink, or smoke when you are likely to be exposed to blood or body fluids.
- Do not handle contact lenses or apply cosmetics/lip balm when exposure is possible.
- Never keep food and drink in places where blood and other possible infectious materials are present.

Safe Practices to Follow

- Clean all blood and bodily fluid spills promptly according to the Exposure Control Plan.
- Keep work surfaces and protective coverings clean.
- Trash may contain contaminated sharps and shards, so never push down with your hands and feet.



Housekeeping

- Effective housekeeping strategies include:
 - Clean and decontaminate all material with the appropriate disinfectant / cleaner.
 - Use a broom and dust pan to pick up broken glass instead of your hands.
 - Dispose of sharps and other potential infectious material in appropriately marked containers.



What to do if Exposed?



- Do not panic if you are exposed to blood or other body fluids.
- **Immediately wash the skin area with soap and water.**
- If blood or other potentially infectious material comes in contact with your eyes, immediately flush them with large amounts of clean, running water.
- Do not use caustic agents, such as bleach to clean contacted skin areas. They can damage the skin.
- Report the exposure incident to your school nurse so post-exposure evaluation can begin.

Stay Safe!

- Healthy, intact skin is your first line of defense from exposure to blood and body fluids.
- Treat all blood or body fluids, fresh or dried as if it is contaminated.
- If a student is bleeding, instruct the student to cover and apply pressure as needed – get to the school nurse.
- If you **MUST** assist – you need gloves.

Resources

- The information presented in this presentation was taken from Bloodborne Pathogens: Handbook and from the video, Bloodborne Pathogens for School Employees. Both items are produced by Coastal Video Communications Corp.
- Additional information within this PowerPoint presentation was used with permission from Noble Public Schools.