# Bloodborne Pathogens for School Employees

Noble Public Schools

Professional Development

Created on July 27, 2006

# Introduction

- As sure as the sun comes up every day, children end up with scraped knees, cuts, and bruises. Students of all ages hurt themselves on the playground, in the classroom, and on the playing field. As a professional in our educational system, you need to be aware of **the potential danger of bloodborne pathogens.**

# 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 educator 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

- The 3 deadliest bloodborne diseases are:
  - HBV – Hepatitis B Virus
  - HCV – Hepatitis C Virus
  - HIV – Human Immunodeficiency Virus
- These 3 viruses pose the greatest risk **to you on the job.**
- HBV and HIV are the 2 most common diseases carried by blood.

# The Facts on Bloodborne Diseases

- Research shows that proper **safety precautions** greatly reduces the risk of coming in contact with one of the three viruses.
- To reduce your risk:
  - **Handle all** blood and body fluids as if they are infected.
  - Dispose of sharps (needles) safely.
  - Use sharp safety devices.
    - i.e., plastic needle caps

# The Facts on Bloodborne Diseases

- HBV is a serious liver disease.
  - Most people infected with HBV recover, but 10% become chronically infected.
- There is no cure for HBV.
- HBV poses a greater risk than HCV & HIV because it is more easily transmitted.
- HBV **can be prevented** by taking the HBV vaccine and taking appropriate safety precautions.

# The Facts on Bloodborne Diseases

- People infected with HBV and HCV may not exhibit symptoms of the disease; however, the infection slowly damages the liver.
- ½ of the people infected with HBV and ¾ of the people infected with HCV exhibit no symptoms.

# The Facts on Bloodborne Diseases

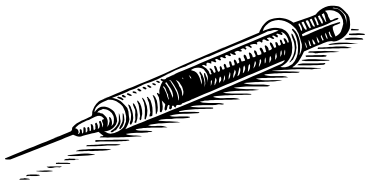
- HIV attacks the human immune system and causes it to break down.
- There is **no known** preventative vaccine for HIV.

# Transmission

- HBV, HCV, and HIV are most **easily transmitted** by a person coming in contact with blood.
- They can also be contacted through other Potentially Infected Material (PIM).
- PIMs include:
  - Semen
  - Vaginal Secretions
  - Other body fluids with visible blood.

# Transmission

- Bloodborne viruses are most commonly transmitted by:
  - Sharing needles to inject drugs.



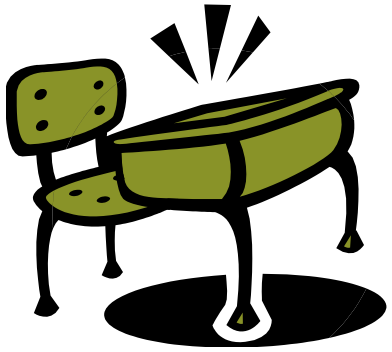
  - Having unprotected sex with an infected person.
  - Transmitting the virus from mother to unborn child during pregnancy.

# Transmission

- Bloodborne viruses at **work** are transmitted mostly by:
  - A contaminated sharp punctures the skin
  - Contaminated blood splashes onto broken skin or the mucous membranes of the eyes, nose, or mouth.

# Transmission

- **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.



# Transmission

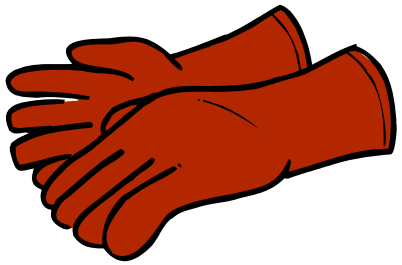
- The keys to preventing infection are:
  - **Understanding** the dangers you face
  - Knowing **how** to protect yourself
- Universal Precautions
  - You need to consider that **every person, all blood, and most body fluids** are potential carriers of infectious disease.

# Safety Guidelines

- Your school's **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.**

# Personal Protective Equipment (PPE)

- The type of protective equipment appropriate for your job varies with the task and the degree of exposure you anticipate.



# Personal Protective Equipment (PPE)

- Equipment that protects you from contact with blood or other PIMs include:
  - **Gloves – Man's Second Best Friend!!!!**
  - Gowns, Aprons, Lab Coats
  - Face Shields, Protective Eye Wear
  - Masks, Mouthpieces, Resuscitation Bags

# Personal Protective Equipment (PPE)

- 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.

# Personal Protective Equipment (PPE)

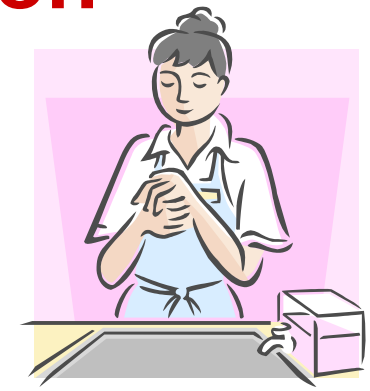
- Gloves should be removed **when they become contaminated or damaged or immediately after finishing the task**. You must follow a safe procedure for glove removal, being careful that no pathogens from the soiled gloves contact your hands.

# Personal Protective Equipment (PPE)

- 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 running water as soon as you possibly can.

# Standard Precautions

- **Treat all** blood and body fluids, excretions and secretions (except sweat), non-intact skin, and mucous membranes as though they are infected with bloodborne viruses or other pathogens.
- **Hand washing** is the **#1 protection** against infection.



# Standard Precautions

- 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 PIMs.

# Hand Washing

- Wash hands after coming in contact with blood, body fluids, excretions, and secretions **even if wearing gloves**.

# Hand Washing

- Hand Washing Steps
  - Use soap and running water for 10-15 seconds.
  - Rub vigorously over all surfaces, including above your wrists.
  - Rinse thoroughly and dry with a clean paper towel and discard.
  - Use a clean paper towel to turn off the facet and discard.

# 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 PIMs 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

- Housekeeping is everyone's responsibility.
- Effective housekeeping strategies include:
  - Clean and decontaminate all material with the appropriate disinfectant.
  - Use a broom and dust pan to pick up broken glass instead of your hands.
  - Dispose of sharps and other PIMs in appropriately marked containers.
  - Handle contaminated laundry as little as possible.

# 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 PIM comes in contact with your eyes, immediately flush them with large amounts of clean, running water.

# What to do if Exposed?

- Do not use caustic agents, such as bleach to clean contacted skin areas.  They can damage the skin.
- Report the exposure incident to the designated person immediately.
  - This will usually be your site administrator.

# Stay Safe!

- Your best tool to prevent infection is to follow the work practices discussed in this presentation.
- If you feel you would like more information regarding bloodborne pathogens, please contact your site administrator about watching a short 15 minute video.

# Stay Safe!

- Protecting yourself from bloodborne diseases on the job requires **knowing the facts and taking sensible precautions**. As a professional educator, backed by OSHA's Bloodborne Pathogens Standards and your school's Exposure Control Plan, you can confidently protect yourself from bloodborne infection and safely give our children their most valuable asset, an education.

# Coastal Video Communication Corp.

- 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.

# Documentation

- Please print this ***slide (page*** 32). Sign, date, and turn in to your Site Principal by the end of September.
- I have gone through the tutorial presentation on Bloodborne Pathogens and have a full understanding of the safe practices that can assist me when dealing with situations that might have the potential danger of bloodborne pathogens. I have also been afforded the opportunity to learn more about the dangers and safety precautions of bloodborne pathogens.

_____ _____

Signature of Employee Date

_____ _____

Signature of Principal Date