

# **BLOODBORNE PATHOGENS**

Ana Hernandez RN, BSN, PHN

### **BLOODBORNE PATHOGEN IN-SERVICE TRAINING**



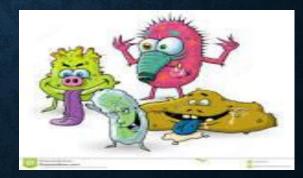
## BBP TRAINING IN-SERVICE

- Learning Objectives
- Understand the potential for exposure to Bloodborne Pathogens (BBPs) in the school setting
- BBPs exposure prevention procedures
- List universal precautions to protect against infection
- Know the types and use of Personal Protective Equipment (PPE)
- Safe Clean-up Procedures following a possible BBP exposure
- Safe disposal of potentially infectious materials



## WHAT ARE BLOODBORNE PATHOGENS?

- Bloodborne Pathogen (BBPs) are infectious bacteria, viruses or other potential infectious materials in human blood, which can cause disease in humans
- Bacterial infections can be treated with antibiotics
- Viral Infections
  - Hepatitis B HBV Vaccine
  - Hepatitis C & HIV have no vaccine



# HOW AM I EXPOSED TO BLOODBORNE PATHOGENS?

- Body fluids:
  - Blood
  - Saliva
  - Vomit
  - Mucous
  - Urine
  - Semen
  - Vaginal Secretions





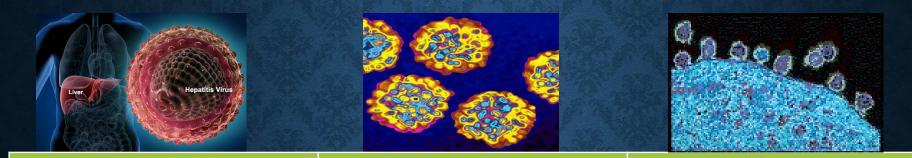
- BBPs enter the body through a normal body cavity:
  - Eyes
  - Nose
  - Mouth
- A break in the skin:
  - Skin cut
  - Skin abrasion
  - Skin puncture
- Sexual Contact

#### WHY AM I AT RISK WORKING AT SCHOOL?

- School Exposure
  - Bleeding student or staff member
  - Student who has vomited (vomit may contain blood)
  - Student who has wet or soiled his clothes (body fluids may contain traces of blood)



## HOW DO BLOODBORNE PATHOGENS MAKE ME ILL?



#### **Hepatitis B**

- Contact with blood or body fluids of the infected person
- Inflammation of the liver caused by the virus

Contact with blood or body fluids through unprotected sex, sharing of needles to inject drugs

**Hepatitis** C

 Inflammation of the liver caused by the virus HIV

- Contact with blood. Spread by unprotected sex and sharing of needles to inject drugs
- Weakens a person's immune system by destroying important cells that fight disease and infection
- AIDS occurs when person can no longer fight off serious infections

A Dangerous Characteristic of BBPs – Symptoms do not always appear immediately!

#### HOW CAN I AVOID EXPOSURE? (UNIVERSAL PRECAUTIONS) MEASURES DESIGNED TO PREVENT TRANSMISSION OF DISEASES

#### ALWAYS ASSUME THAT BLOOD, OTHER BODY FLUIDS, AND ANY FORM OF REGULATED WASTE MIGHT BE INFECTED USE UNIVERSAL PRECAUTIONS – BEST DEFENSE AGAINS INFECTION

#### • HAND WASHING

- Wash hands with soap and running water for at least 15 to 20 seconds after a potential exposure
- USE PERSONAL PROTECTIVE EQUIPMENT (PPE)
- Disposable gloves
- Protective goggles
- Face Shield
- Other necessary materials to place a barrier between you and the potentially infected fluids



## HOW CAN I AVOID EXPOSURE? (UNIVERSAL PRECAUTIONS)

#### PROPER REMOVAL OF CONTAMINATED GLOVES

 Avoid touching contaminated glove with unprotected hands – follow hand washing procedure after glove removal



#### HOW CAN I AVOID EXPOSURE? (UNIVERSAL PRECAUTIONS)

- It is <u>NOT</u> always necessary to touch person bleeding
  - Provide a sterile gauze, paper towel, or other protective covering and instruct to apply direct pressure over the wound
  - Keep calm and keep everyone else away from person and site
  - Request assistance calling the office or sending a student







#### HOW CAN I AVOID EXPOSURE? (UNIVERSAL PRECAUTIONS)

- Recognize situations of potential exposure to BBP
- Never pick up broken glass with your unprotected hands
- Never use bare hands to compress trash in garbage cans
- Be familiar with school district guidelines on the prevention of BBP transmission



## **HEPATITIS B VACCINATION**

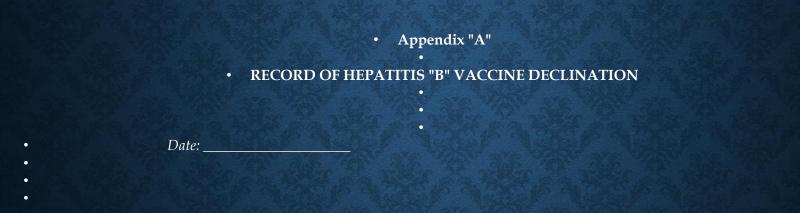
Employees identified as High Risk and needing Hepatitis B Vaccination are:

• Athletic Coach, Athletic Equipment/Utility Worker, Custodians, Campus Discipline and Security Liaison, District Athletic Trainers, Special Education Health Care Aides, SASIs and Physical Education Teachers and Special Education Teachers (SDC/SH).

• The hepatitis B vaccination and vaccination series shall be made available at no cost to all employees who have occupational exposure.

• Employees requiring Hepatitis B Vaccination shall provide their immunization records.

#### EMPLOYEES WHO DECLINE TO ACCEPT THE VACCINATION SHALL SIGN THE HEPATITIS B DECLINATION STATEMENT. (8 CCR 5193(F))



I understand that due to my occupational exposure to blood or Other Potentially Infectious Materials (OPIM) I may be at risk of ٠ acquiring Hepatitis B virus (HBV) infection. I have been given the opportunity to be vaccinated with Hepatitis B vaccine, at no charge to me. However, I decline Hepatitis B vaccination at this time. I understand that by declining this vaccine I continue to be at risk of acquiring Hepatitis B, a serious disease. If in the future I continue to have occupational exposure to blood or OPIM and I want to be vaccinated with Hepatitis B vaccine, I can receive the vaccination series at no charge to me.

Employee Name:

- Employee Signature: \_\_\_\_\_
- Social Security No.: \_\_\_\_\_
- Employee Representative: \_\_\_\_\_

#### HOW DO I CLEAN UP POSSIBLE HAZARDOUS MATERIALS AT SCHOOL?

- Trained employees should cleanup contaminated areas
- Wear PPE as needed
- Use appropriate school district approved cleaning materials



 Any non-disposable items will also need appropriate disinfection



Dispose following district hazardous waste disposal policy

## WHAT DO I DO IF I AM EXPOSED TO BBP AT SCHOOL?

<u>Exposure Incident</u>: when a specific eye, mouth, or other mucous membrane, non-intact skin, or skin puncture contacts blood during the course of an employee's activities at work



- If you have an exposure incident
  - Immediately wash hands and any other exposed body part
  - Flush eyes if necessary
  - Change clothes if necessary
  - Report incident to supervisor or the school nurse
  - If not already vaccinated, consult supervisor or primary care provider for HBV vaccine

#### SUMMARY

 Always use Universal Precautions and Personal Protective Equipment

- If you believe you have been exposed to BBP report incident to your supervisor or school nurse
  - School Districts are required to maintain record of exposure incidents

#### References

Centers for Disease Control and Prevention [CDC] (2014) The National Institute for Occupational Safety and Health (NIOSH) Bloodborne Pathogens: Self Inspection Checklist. Retrieved from: http://www.cdc.gov/niosh/docs/2004-101/chklists/n77blo~1.htm

Centers for Disease Control and Prevention [CDC] (2016a) *The ABCs of Hepatitis* Retrieved from: http://www.cdc.gov/hepatitis/Resources/Professionals/PDFs/ABCTable.pdf

Centers for Disease Control and Prevention [CDC] (2016b) *About HIV/AIDS* Retrieved from : http://www.cdc.gov/hiv/basics/whatIshiv.html

Centers for Disease Control and Prevention [CDC] (2016c) *Surveillance for Viral Hepatitis – United States, 2014* Retrieved from : https://www.cdc.gov/hepatitis/statistics/2014surveillance/commentary.htm#bkgrndC

Occupational Safety and Health Administration (2011) OSHA Fact Sheet: OSHA's Bloodborne Pathogens Standard. Retrieved from: https://www.osha.gov/OshDoc/data\_BloodborneFacts/bbfact01.pdf

Occupational Safety and Health Administration [OSHA] (n.d.a) OSHA Bloodborne Pathogens and Needlestick Prevention Retrieved from: https://www.osha.gov/SLTC/bloodbornepathogens/index.html

Occupational Safety and Health Administration (n.d.b). OSHA Quick Reference Guide to the Bloodborne Pathogens Standard. Retrieved from: https://www.osha.gov/SLTC/bloodbornepathogens/bloodborne\_quickref.html

Occupational Safety and Health Administration (2012). OSHA Bloodborne Pathogen Training, Bloodborne Pathogen Video Retrieved from: https://www.youtube.com/watch?v=gLeTNOVfh8o

Selekman, J. (2013). School nursing: A comprehensive text. (2nd ed.). Philadelphia, PA: F.A. Davis Co.