Bloodborne Pathogen Training for School Staff
The information contained in this presentation represents a compilation of best practice standards and policies that are consistent with the Ohio Revised Code and OSHA regulations. It is important to note that each local board of education has the authority to develop school policies and procedures specific to its school district. Prior to teaching this course to school staff, it is highly recommended that each nurse review and become familiar with his/her school district’s Bloodborne Pathogen Exposure Control Plan. The information in this resource is not meant to supersede local school board policies. Further, the inclusion of information, addresses or Web sites for particular items does not reflect their significance, nor is it intended to endorse any views expressed or products or services offered.
Training Objectives

Provide a basic understanding of:

1. Bloodborne pathogens (BBP).
2. Common modes of transmission of BBP.
3. Methods to prevent transmission of BBP.
4. Information to help school staff maintain compliance with the BBP standard.
Why do I need this training

Schools are responsible for identifying and educating staff who could be “reasonably anticipated,” as a result of performing their job duties, to be in contact with bloodborne pathogens.

It is extremely important that you understand and can access our school’s Exposure Control Plan!
Occupational Risk--Annual In-service

Building Administrators
Bus Drivers
Coaches
Cooks
Custodians
Paraprofessionals
School Nurses
Secretaries
Teachers
Regulatory Authority

**OSHA**
*Occupational Safety & Health Administration*

- Federal agency.
- Covers private sector employees including private schools.

**Ohio PERRP**
*Public Employee Risk Reduction Program*

- Ohio Bureau of Worker’s Compensation.
- Covers public sector employees including public schools in state, county & local districts.

These prescribe safeguards to protect workers against the health hazards from exposure to blood & other potentially infectious materials. Standards in schools apply only to staff, not students!
OSHA Standards

- Ohio legislated these regulations in 1993
- Initial in-service is required for all new employees.
- ANNUAL in-service is required for employees who have been identified by Ironton City Schools as having an occupational risk for exposure
What are Bloodborne Pathogens?

Viruses, bacteria and other microorganisms that are carried in the bloodstream and can cause disease.

The most common bloodborne pathogens are:
- Human Immunodeficiency Virus (HIV)
- Hepatitis B Virus (HBV)
- Hepatitis C Virus (HCV)
Hepatitis B Virus (HBV)

1. Hepatitis means “inflammation of the liver.”
2. Most infectious bloodborne hazard.
3. Can survive outside the body for up to a week.
4. Vaccination for HBV is available and very effective.
HBV Symptoms

If you become infected with HBV you may have:

1. Flu-like symptoms.
2. Pain on the right side of the abdomen.
3. A condition in which the skin and the whites of the eyes turn yellow in color (jaundice).
4. Dark urine (like cola or tea).
5. Pale stools.

Some people have no symptoms at all!
Hepatitis B Vaccine

Hepatitis B vaccine series must be offered at no cost to all staff who are at risk of an occupational exposure to blood or Other Potentially Infectious Materials (OPIM).

1. Staff considered at risk should be notified by the district.

2. Vaccination is a series of three injections over seven months, with relatively few side effects.
1. Long-term effects include chronic liver disease and death.
2. No treatment or vaccine is available for HCV.
3. Virus does not survive well out of the body.
HCV Symptoms

Hepatitis C symptoms are very similar to Hepatitis B symptoms:

1. Pain on the right side of abdomen.
2. Jaundice.
3. Fatigue.
5. Nausea.
6. Dark-colored urine.
7. Stools become pale in color.
Human Immunodeficiency Virus (HIV)

1. HIV attacks immune system & can cause the disease known as AIDS.
2. AIDS is the second-leading cause of death for age group 25-44 years.
3. Mostly commonly spread by unprotected sex or sharing needles.
Symptoms of HIV

1. Flu-like symptoms.
2. Night sweats or fever.
3. Weight loss.
4. Fatigue.
5. Swollen glands.
6. May also develop AIDS-related illnesses including neurological problems and cancer.

A person with HIV may carry the virus without developing symptoms for 10 years or more.
Transmission: How BBP Enter Your Body

*Bloodborne pathogens can be transmitted when there is **direct contact** with blood or OPIM of an infected person.*

1. Blood entering open cuts, wounds or skin abrasions.
2. Blood splashing into your eyes, nose or mouth area (mucous membranes).

OPIM=Other Potentially Infected Material
Exposure Control Plan

Written plan to protect staff from BBP:

1. Identifies staff at risk.
2. Identifies jobs and tasks at risk.
3. Vaccination program.
5. Use of personal protective equipment.
6. Post exposure incident procedure.

The plan must be accessible!
Ironton City Schools Exposure Control Plan
Staff At Risk

Building Administrators
Bus Drivers
Coaches
Cooks
Custodians
Paraprofessionals
School Nurses
Secretaries
Teachers
Potential Risk of Exposure

Jobs:

1. Building Administrators
   Bus Drivers
   Coaches
   Cooks
   Custodians
   Paraprofessionals
   School Nurses
   Secretaries
   Teachers

2. Custodians

Tasks:

1. Illness/injury care; Performing first aid

2. Cleaning up bloody waste and/or other body fluids.
Work Practice Controls

Are methods that reduce the chance of an exposure to BBP including:

1. Universal precautions.
2. Hand washing.
3. Engineering control (such as sharps containers).

When occupational exposure risk remains, personal protective equipment (PPE) must be used.
Universal Precautions

The practice of treating ALL human blood as if it is infectious.

1. Provide the first line of defense against the risks of exposure to bloodborne pathogens.
2. Assist in the prevention of contact with blood and other body fluids.

ENGINEERING CONTROLS include the use of sharps containers, the availability of running water within easy reach and proper antiseptic cleaner where water is not available.

WORK PRACTICE CONTROLS include proper hand washing, proper handling and disposal of sharps, cleanup which minimizes splashing, spraying and spattering, proper decontamination of soiled equipment, biohazard labels and use of Personal Protective Equipment.

Prevent employee contact with blood borne pathogens by the use of ENGINEERING CONTROLS and WORK PRACTICE CONTROLS.
Universal Precautions

Apply when there is a possibility of coming in contact with:
1. Blood.
2. OPIM.

Do not apply to the following unless blood is visible:
1. Feces.
2. Urine.
3. Sweat.
5. Vomit.
Hand Washing

Wash hands before:
- Eating.

Wash hands after:
- Any contact with blood, body fluids or soiled objects.
- Using the toilet.
- Assisting with personal hygiene.

This is the single most important technique for preventing the spread of infectious diseases.
1. Use soap & water to wash hands when available.
2. Always use soap & water if hands are visibly soiled.

http://www.co.lacrosse.wi.us/Health/Environmental/docs/HandWsh.htm
Alcohol-based Hand Sanitizers

Procedure:
1. Apply to palm of one hand.
2. Rub hands together.
3. Rub the product over all surfaces of hands and fingers until hands are dry.

Remember: if hands are visibly soiled, wash with soap & water!
Personal Protective Equipment (PPE)

Specialized clothing or equipment that provides protection against infectious material.

- Gloves
- Gowns
- Eye protection
- Resuscitation devices
Personal Protective Equipment (PPE) in the School

1. PPE is provided at no cost to staff.
2. Must be accessible.
3. Type of PPE used is determined by task you are performing.
**PPE Guidelines: Gloves**

- Wear gloves when contact with potentially infectious materials is anticipated.
- Check gloves before use (no small holes, tears, cracks).
- Remove contaminated gloves before leaving the work area.
- Wash hands after removing gloves.
- Never reuse disposable gloves.
- Types of gloves that can be used include vinyl, latex, neoprene or utility gloves.
Glove Removal Demonstration

Step 1

Step 2

Step 3

Step 4

Step 5
Disposing of Sharps

1. All contaminated sharps are discarded as soon as feasible in a designated sharps container.
2. Containers will be found where sharps are used.
3. Disposal is regulated by the Ohio EPA.
Signs and Labels

1. Check for the Biohazard Sign which warns that the container holds blood or other infectious material.

2. Staff responsible for biohazard waste disposal will be informed of the district policy.

3. Waste such as bloody tissues can be disposed of in plastic-lined trash cans and do not need a biohazard label.
Cleaning Blood Spills

1. All surfaces and equipment that come in contact with blood must be decontaminated with appropriate cleaning solution.
2. Take your time and be careful.
3. Avoid splashing contaminated fluids.
4. Wear appropriate PPE.
Cleaning Up and Decontamination

Some commercially available solutions will effectively disinfect surfaces and equipment.

1. Look for “tuberculocidal agent that kills hepatitis B virus.”
2. Store cleaners according to label instructions.

Household chlorine bleach:

1. Solution must be made fresh every 24 hours.
2. Use a 10% bleach solution.
# Housekeeping Practices

<table>
<thead>
<tr>
<th>Use of personal protective equipment</th>
<th>Double-bag all solid infectious wastes</th>
<th>Use appropriate containers for sharps</th>
<th>Absorbent material on infectious waste</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clean spills with detergent</td>
<td>Disinfect with EPA approved chemical (LYSOL-DC7)</td>
<td>Decontamination of reusable items ASAP after incident</td>
<td>Proper disposal of contaminated objects</td>
</tr>
<tr>
<td>Replacing contaminated protective coverings</td>
<td>Cleaning visibly contaminated equipment or containers</td>
<td>Using mechanical means to pick up contaminated sharps</td>
<td>Storing sharps in a container which does not require hand processing</td>
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</table>
Regulated Waste

- Contaminated sharps
- Blood (liquid or semi-liquid or other infectious liquid.
- Any item which would release blood if compressed
- Any item caked with dried blood which could be released.

- Sharps should be placed in designated container and other infectious waste should be double bagged.
Contaminated Laundry

- All laundry will be considered potentially contaminated.
- Should not be sorted.
- Should be handled with protective equipment.
- Should be transported in bags or containers labeled as biohazard.
Cleaning Up a Blood Spill

Cleaning process:

1. Apply gloves.
2. Absorb spill.
3. Apply 10% bleach solution or approved disinfectant.
4. Let solution sit for appropriate time:
   Bleach solution = 15 minutes.
   Follow label on other products.
What Is An Exposure

- A specific contact with blood or infectious material that results from the performance of an employee’s duties.
- The contact must be with the eye, mouth, or other mucous membrane or skin that is not intact.
- The contact may also include a parenteral (or puncture) exposure.
What is an Exposure Incident?

A specific incident, while providing job duties, that results in blood or OPIM “getting in” through:

1. Non-intact skin.
2. Mucous membranes (eyes, nose, mouth).

OPIM=other potentially infectious materials
What to do if an Exposure Occurs

1. Immediately:
   - Wash the exposed area with soap & water.
   - Flush splashes to nose, mouth or skin with water.
   - Irrigate eyes with water or saline.

2. Report exposure immediately to your school nurse. If not available, report incident to your immediate supervisor.
Exposure Follow-Up

- Should occur within 24 hours.
- Will include: Treatment of injuries, physician interview and counseling and a baseline blood test.
- All records will be maintained “off-site” at the Center for Occupational Medicine

- Vaccine will be offered
- If the “source” is known, this person will be asked to consent to testing.
- If the “source” refuses, the professionals will use the protocol for someone who has tested positive
Written Opinion

- Shall be provided to the school system after an employee seeks treatment for an exposure.
- The ECO shall obtain a copy and provide it to the employee within 15 working days.
- Shall indicate if the Hepatitis B vaccine was warranted and if the employee received it.
- If the employee has a post exposure evaluation, it will indicate that the employee has been informed of the results.
- It will affirm that the employee has been told about any medical conditions resulting from exposure to blood or other infectious materials.
- No other information will be given to the employer.
Source Information

- PLEASE NOTE THAT THE PERSON WHO IS EXPOSED IS THE ONLY PERSON WHO WILL BE ABLE TO OBTAIN THE “SOURCE” INFORMATION. You can do this by making arrangements at the medical records department where “the source” was tested to personally pick up the information. Identification will be required.
About the Vaccine

- Everyone should complete the consent declination form either requesting or declining the vaccine.
- Any Ironton City Schools employee who wishes to receive the vaccine may do so.
- For **High Risk** employees only, the vaccine will be provided on work time.
- The vaccine is given in a series of three injections.
- Any woman who is pregnant or breast-feeding should have a risk/benefit consultation with her physician before receiving the vaccine.
- The vaccine is synthetic; blood and blood products are not used in its manufacture.
BBP Training

Must be completed:
1. Annually.
2. Any time your job duties change and put you at higher risk of exposure.
Questions

If you have any questions or concerns, contact your nurse.
References

- OSHA BBP Safety & Health Topics

- OSHA BBP Training Regulations
  http://www.osha-slc.gov/OshStd_data/1910_1030.html

- Ohio Public Employment Risk Reduction Program
  http://www.colostate.edu/Orgs/safefood/NEWSLTR/v8n3s06.html

- US Centers for Disease Control and Prevention
  http://www.cdc.gov

Resources

- School District Exposure Plan


Acknowledgements

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