

### **Slide 1: Bloodborne Pathogen Training for School Staff**

December 1991- **Occupational Safety & Health Administration (OSHA)** in the U.S. Department of Labor issued regulations regarding bloodborne pathogen (BBP) occupational exposure to reduce risk for workers. In Ohio, public employees are subject to Public Employee Risk Reduction Program (PERRP). PERRP regulations are consistent with OSHA regulations.

**BBP training** must be provided to identified staff:

1. At no cost.
2. During working hours.
3. Annually.

Additional training must be offered if there is a modification or addition of tasks that affect the occupational exposure of the staff member.

Training materials must be appropriate to the educational and literacy level, as well as the language, of the employees.

**Training records** must:

1. Include dates of training sessions.
2. Include the contents of training sessions.
3. Include the names of qualified persons conducting training.
4. Include the names and job titles of all attending training sessions.
5. Be maintained for three years from date of training.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)



## Note

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.

BBP-2

### Slide 2: Note

Dear School Nurse,

The purpose of this resource is to assist you as you inform your school district staff about bloodborne pathogens.

You will find notes on each slide with additional information for you to review before making your presentation. The notes are provided as background information for you; you do not need to read all of the notes during a presentation.

This presentation has been created on Microsoft PowerPoint. Nurses are encouraged to customize the content at their discretion. For example, you may wish to insert slides with specific information about your school district policy. You will need to save the presentation to your hard drive in order to make any changes.

It is best to include demonstrations (such as proper glove removal) in the presentation in order to enhance the learning of the audience members.

We hope that you find this resource helpful!

Ohio Department of Health, School and Adolescent Health

August 2006



## 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.

BBP-3

### Slide 3: Training Objectives

OSHA regulations describe the content to be covered in BBP training.

The material covered in this PowerPoint presentation satisfies the majority of the requirements.

For compliance, you should supplement this presentation with information specific to your district, as found below in requirements numbers 1, 4 and 10.

#### **BBP training must include:**

1. Accessible copy and explanation of the regulatory text.
2. Explanation of the epidemiology and symptoms of bloodborne disease.
3. Explanation of modes of transmission of BBP.
4. Explanation of employer's exposure control plan, including employee access to written copy.
5. Explanation of methods to identify tasks involving exposure to blood or other potentially infectious material (OPIM).
6. Explanation of use and limitations of engineering controls, work practices and personal protective equipment (PPE).
7. Information on types, proper use, location, removal, handling, decontamination and disposal of PPE.
8. Information on hepatitis B vaccination.
9. Information on actions when exposed to blood or OPIM.
10. Explanation of procedure if exposure incident occurs.
11. Information on post-exposure evaluation.
12. Explanation of biohazard sign and color coding.
13. Opportunity to ask questions.
14. A trainer knowledgeable in the subject matter covered.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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!**

BBP-4

### **Slide 4: Why do I need this training?**

**Important:** Because all exposure plans are site specific, please refer to your district plan frequently during this presentation.

The school district administration is required to identify staff whose job duties put them at risk of exposure to blood or OPIM. Administration may ask for the assistance of the nurse concerning this determination. Each district must assess risks to each employee in making this determination, as each situation is unique.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# 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!

BBP-5

### **Slide 5: Regulatory Authority**

BBP standards prescribe safeguards to protect workers against the health hazards from exposure to blood and OPIM, and to reduce their risk from this exposure. Implementing this standard can significantly reduce the risk of workers contracting HIV, hepatitis C, hepatitis B or other bloodborne diseases.

Reference: <http://perrp.com.state.oh.us/w3/webpo2.nsf?Opendatabase>

## 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)

BBP-6

### Slide 6: What are Bloodborne Pathogens?

BBP include:

1. Hepatitis B Virus (HBV).
2. Hepatitis C Virus (HCV).
3. Hepatitis D Virus (HDV).
4. Hepatitis G Virus (HGV).
5. Human Immunodeficiency Virus (HIV).
6. Cytomegalovirus (CMV).
7. Parvovirus B19, Erythema Infectiosum (EI).

BBP most commonly encountered in the school environment are HBV, HCV and HIV.

Reference: <http://www.cdc.gov/ncidod/diseases/hepatitis/b/>

# 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.



BBP-7

## Slide 7: Hepatitis B Virus (HBV)

HBV may lead to acute hepatitis, chronic active hepatitis, cirrhosis, liver cancer, liver failure and death. Symptoms appear two to six months after exposure (so immunization immediately after exposure may prevent infection).

The most common transmission route in the U.S. is sexual contact.

Transmission does **not** appear to occur by tears, sweat, urine, stool or droplet.

CDC recommends vaccination against HBV for:

1. All babies.
2. Sexually active adolescents or those who inject drugs.
3. People exposed to blood at work.
4. People engaging in tattooing or body piercing.

Reference: <http://www.cdc.gov/ncidod/diseases/hepatitis/b/>

# 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!*

BBP-8

## Slide 8: HBV Symptoms

Thirty percent of people with HBV have no signs or symptoms. Children are less likely to exhibit

signs and symptoms than adults. There is no specific treatment for HBV.

Other symptoms of HBV:

1. Fatigue.
2. Joint pain.
3. Appetite loss.
4. Nausea and vomiting.
5. Itching all over the body.

The highest rate of HBV occurs in 20 to 49-year-olds because of lifestyle choices.

Reference: <http://www.cdc.gov/ncidod/diseases/hepatitis/b/>

# 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.

BBP-9

## Slide 9: Hepatitis B Vaccine

The vaccine is only effective for HBV (does not include hep. A or hep. C). A nurse needs a prescription from a health care provider to administer vaccine.

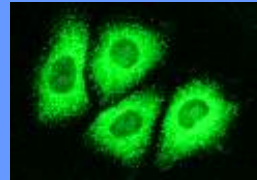
School districts are required to offer the vaccine, but staff are not required to accept the vaccination.

1. Vaccine must be made available within 10 working days of assignment to job at risk of exposure.
2. Any employee who declines the vaccine must sign a declination statement.
3. An employee who chooses not to have the vaccination at the initial offering may request the vaccination at a later date.
4. Employees are not required to participate in antibody prescreening program to receive vaccination series.
5. If routine boosters are later recommended by the US Public Health Service, the employer shall provide it to employees.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# Hepatitis C Virus (HCV)

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.



BBP-10

## Slide 10: Hepatitis C Virus (HCV)

Long term effects of HCV:

1. Chronic infection in 55-85 percent.
2. Chronic liver disease in 70 percent.
3. Cirrhosis.
4. Liver cancer.
5. One to five percent infected may die of liver disease.
6. Leading cause of liver transplant.

Most HCV infections are due to illegal drug use.

Reference: <http://www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm>

# HCV Symptoms

Hepatitis C symptoms are very similar to Hepatitis B symptoms:

1. Pain on the right side of abdomen.
2. Jaundice.
3. Fatigue.
4. Appetite loss.
5. Nausea.
6. Dark-colored urine.
7. Stools become pale in color.



BBP-11

## Slide 11: HCV Symptoms

Eighty percent of those infected with HCV have no signs or symptoms.

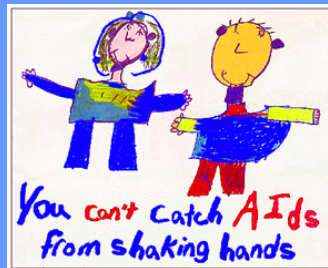
The incubation period for HCV is two to six months.

Highest incidence of HCV is in 20-29 age group.

Reference: <http://www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm>

# 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.



BBP-12

## Slide 12: Human Immunodeficiency Virus (HIV)

Casual, person-to-person contact does **not** transmit HIV. It is **not** transmitted through insects, air or water. Contact with saliva, sweat, urine, feces or tears has **never** been found to transmit HIV. Transmission through blood transfusions is **rare**.

HIV is fragile and does not survive well in the environment.

HIV typically enters the blood stream through lining in vagina, vulva, penis, rectum or mouth during intimate sexual contact.

HIV may be transmitted through sharing needles; droplets of contaminated blood remain in syringe or needle and are injected into bloodstream.

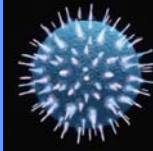
Babies of HIV-infected mothers may be infected during pregnancy, delivery or breastfeeding.

To diagnose, blood is tested for high levels of HIV antibodies which may not be present in traceable quantities until up to six months after diagnosis.

Recent improvements in treatment have improved the quality of life and longevity of those with HIV. There remains no cure or vaccine for HIV.

Reference: <http://www.niaid.nih.gov/factsheets/hivinf.htm>

# 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.*

BBP-13

## Slide 13: Symptoms of HIV

Twenty-five percent of those in the U.S. with HIV are unaware of their infection status.

Flu-like symptoms may occur **within one to two months** after exposure. Additional symptoms include: fever, headache, tiredness, enlarged lymph nodes. People are very infectious at this time.

Other symptoms that may be noted **later**: lack of energy, weight loss, frequent fevers and sweats, persistent yeast infections, skin rashes or flaky skin, short-term memory loss and pelvic inflammatory disease that does not respond to treatment. Some people develop severe herpes infections or shingles. Infected children may grow slowly or experience frequent illnesses.

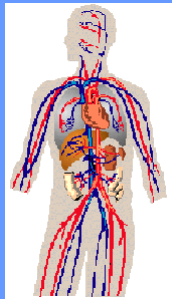
AIDS is the most advanced stage of HIV infection.

Those exposed to HIV should be tested in six weeks to 12 months so that treatment can start. Testing can be done anonymously.

Reference: <http://www.niaid.nih.gov/factsheets/hivinf.htm>

## 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

BBP-14

### Slide 14: Transmission: How BBP Enter Your Body

Example of #1: If a staff member punctures their skin with a sharp item (glass, knife) that is contaminated with blood, this could provide a possible opportunity for a BBP to enter the body.

Exposure incident (definition): specific eye, mouth, other mucous membrane, non-intact skin, or parenteral contact with blood or OPIM that results from the performance of an employee's duties.

Parenteral-piercing mucous membranes or the skin barrier through such events as needlesticks, human bites, cuts and abrasions.

It is important that the staff understand an exposure incident must include

1) blood and/or OPIM **AND** 2) an entrance into the body.

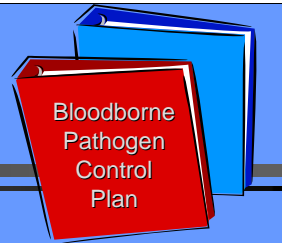
Other Potentially Infectious Material (OPIM) includes:

1. Human bodily fluids such as: semen, vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, saliva, pleural fluid, pericardial fluid, peritoneal fluid, amniotic fluid, any body fluid visibly contaminated by blood and fluids where it is difficult to differentiate between fluids.
2. Any unfixed human organ or tissue, whether the source is living or dead.
3. Cultures or cells containing HIV or HBV, or specimens from experimental animals infected with HIV or HBV.

BBP can also enter via non-sterile technique when tattooing or body piercing, sharing needles, sexual intercourse and rarely by direct blood transfusion.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# 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.
4. Work practice controls.
5. Use of personal protective equipment.
6. Post exposure incident procedure.

*The plan must be accessible!*

BBP-15

### Slide 15: Exposure Control Plan

**Site specific:** Copy and hand out district's/school's **Exposure Control Plan**. Go over the site-specific plan with the trainees, including the above suggested material.

An Exposure Control Plan must be written and contain:

1. Exposure determination.
2. Procedure for evaluation of an exposure incident.
3. Plan to ensure a copy is accessible to all employees.
4. Plan to review and update annually, which shall reflect:
  - a. Changes in technology.
  - b. Consideration of more effective and safer methods and products.
  - c. That non-managerial employees were solicited to be on the review committee.

Go over general criteria in plan including:

1. Engineering controls.
2. Work-practice controls.
3. Housekeeping.
4. Personal protective equipment (PPE).
5. Infectious waste.
6. Vaccinations.
7. What to do/where to go in case of an exposure incident.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# Potential Risk of Exposure



## **Jobs:**

1. School nurses.
2. Coaches & athletic trainers.
3. Custodians.
4. Secretaries.

## **Tasks:**

1. Illness/injury care.
2. Caring for sports injuries.
3. Cleaning up bloody waste.
4. Performing first aid.

BBP-16

### **Slide 16: Exposure at Work**

These are some examples of specific jobs and tasks in the schools that may expose staff members to BBP. This list is not exhaustive. For example, if your building has health occupation teachers, they might be included in this list.

Other job tasks and actions that may present more risk of exposure to BBP:

1. Breaking up fights.
2. Assisting with nose bleeds.
3. Working with combative students including those who bite and break the skin.
4. Rendering first aid and other instances involving blood.
5. Swallowing therapy.

## 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.

BBP-17

### Slide 17: Work Practice Controls

Work-practice controls: controls that reduce the likelihood of exposure to BBP by altering the manner in which a task is performed. This may include use of PPE, handwashing, use of disinfectants and proper waste disposal.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# Universal Precautions

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

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



BBP-18

## Slide 18: Universal Precautions

The use of either standard precautions or universal precautions terminology are acceptable.

### Universal/Standard Precautions

1. Reduce the risk of transmission of microorganisms from both recognized and unrecognized sources of infection.
2. *Universal Precautions* describes an approach to infection control that assumes all human blood and OPIM are treated as if known to be infectious for BBP.

### **Remember:**

*Everyone has something you don't want... you universally treat everyone the same.*

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# 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.
4. Nasal secretions.
5. Vomit.

BBP-19

## Slide 19: Universal Precautions

Although exposure to body fluids other than blood is unlikely in the school, the following body fluids are also to be treated as being infectious: semen and vaginal secretions, amniotic fluid and cerebrospinal fluid.

Good infection control practices encourage wearing gloves when involved in some activities such as diapering or cleaning restrooms. Gloves should be worn, not because of potential exposure to BBP, but because of potential exposure to other disease-causing organisms.

Health occupation teachers/vocational health programs may require additional work practice controls due to increased risks.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# 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.**

BBP-20

### Slide 20: Hand Washing

Employers should provide hand washing facilities that are appropriately stocked and readily accessible to employees.

Hands should always be washed after the removal of gloves and after exposure to blood and OPIM.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# Hand Washing Technique

**START** →

1. Wet hands

2. Soap (20 seconds)

3. Scrub backs of hands, wrists, between fingers, under fingernails.

4. Rinse

5. Towel dry

6. Turn off taps with towel

**HAND WASHING STEPS**

<http://www.co.la-crosse.wi.us/Health/Environmental/docs/HandWsh.htm>

BBP-21

1. Use soap & water to wash hands when available.
2. **Always** use soap & water if hands are visibly soiled.

## Slide 21: Hand Washing Technique

If hand washing facilities are not available, employers must provide employees with antiseptic hand cleaner such as alcohol-based hand sanitizers. When hand sanitizers are used, hands should then be washed with soap and running water as soon as possible.

References:

[http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

<http://www.co.la-crosse.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!

BBP-22

### Slide 22: Alcohol-based Hand Sanitizers

Waterless, alcohol-based hand sanitizers are recommended for use for hand hygiene when soap and water are not available.

The alcohol content must be 60-95 percent to be effective.

Hands that are visibly soiled or contaminated should be washed with soap and water.

Alcohol-based hand sanitizers strip the outer layer of oil on the skin which destroys microorganisms on the skin surface. Regrowth of bacteria occurs slowly after use.

Alcohol based hand sanitizers should be applied according to manufacturer's directions.

### References:

[http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

<http://www.cdc.gov/od/oc/media/pressrel/fs021025.htm>

<http://www.cdc.gov/cleanhands/>

<http://www.cdc.gov/ncidod/EID/vol12no03/05-0955.htm>

# Personal Protective Equipment (PPE)

Specialized clothing or equipment that provides protection against infectious material.

**Gloves**  
**Gowns**  
**Eye protection**  
**Resuscitation devices**



BBP-23

## Slide 23: Personal Protective Equipment (PPE)

General work clothing is not intended to function as protection against a hazard and is not considered PPE. PPE should keep blood and OPIM from reaching the employee's work clothing, skin or mucous membranes under normal conditions.

All contaminated PPE must be removed and properly disposed of when leaving the area of exposure.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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.



BBP-24

### **Slide 24: Personal Protective Equipment (PPE) in the School**

The employer must ensure that all employees use appropriate PPE.







PPE in the school setting may include gloves, gowns, lab coats, face shields, masks, eye protection and resuscitation masks.

Gowns, aprons and gloves should be used when there is risk of exposure due to splashes, sprays and splatters.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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 than can be used include vinyl, latex, neoprene or utility gloves.

BBP-25

### **Slide 25: PPE Guidelines: Gloves**

If a staff member has allergic sensitivity to latex or powder, hypoallergenic gloves must be provided by the district.

Types of situations when gloves should be worn include:

1. Diapering, toileting, changing menstrual pads or catheterization.
2. Wound care or dressing changes.
3. Oral care, including toothbrushing and cleaning oral and nasal secretions.
4. Blood glucose monitoring.
5. Clean up of emesis, ostomy bag change or suctioning.
6. Application of topical medications.
7. Cleaning blood spills.
8. Emptying trash or contaminated laundry.
9. Sweeping up or handling sharps containers or other regulated waste.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## Glove Removal Demonstration



### Slide 26: Glove Removal Demonstration

This is an important technique that should be ***demonstrated by the nurse.***

Gloves should be removed properly to avoid exposure to BBP. Contaminated gloves should be disposed of properly. Hands should be washed after gloves are removed.

#### Procedure:

Step 1--Grasp outside edge near wrist.

Step 2--Peel away from hand turning glove inside-out.

Step 3--Hold in opposite gloved hand. Slide ungloved finger under the wrist of the remaining glove; be careful not to touch the outside of the glove.

Step 4--Peel off from inside, creating a bag for both gloves.

Step 5--Discard gloves. Hands should be washed after gloves are removed.

#### References:

[http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

<http://research.dfci.harvard.edu/ehs/PPE/glove%20procedure%20document.pdf>

# 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.



BBP-27

## Slide 27: Disposing of Sharps

Sharps--Anything that can puncture your skin is considered a sharp. This might include needles, broken glass, power tools, razor blades and sharp equipment, etc.

Broken glassware should not be picked up directly with the hands.

Describe the types of containers and locations in your building.

Ohio EPA—Ohio Environmental Protection Agency.

Sharps notes:

1. Contaminated needles should not be recapped or bent.
2. Sharps containers must be:
  - a. Puncture resistant.
  - b. Closeable.
  - c. Labeled or color coded.
  - d. Leak proof.
  - f. Kept in a secure place away from student access.
3. Be careful not to overfill sharps containers to prevent injury.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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.



BBP-28

### Slide 28: Signs and Labels

Warning labels must be affixed to containers of regulated waste. Labels should be fluorescent orange or orange-red with contrasting color writing. Red bags may be substituted for labels.

Waste such as bloody tissues should be disposed of properly in a plastic-lined trash can. It is not considered hazardous material, so it can be thrown away in the school Dumpster.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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.



BBP-29

### Slide 29: Cleaning Blood Spills

Staff using cleaning solutions should receive appropriate instruction for their use.

# 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.



BBP-30

## Slide 30: Cleaning Up and Decontamination

Discuss the products your school policy prescribes for cleaning blood spills; include where solutions can be found and any precautions on the product label.

Household chlorine bleach can be used with appropriate instructions/precautions.

Contaminated surfaces should be cleaned and disinfected as soon as feasible.

All bins, cans and pails shall be inspected and decontaminated on a regularly scheduled basis or as soon as feasible after visible contamination.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# 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.



BBP-31

### Slide 31: Cleaning Up a Blood Spill

Discuss equipment your building has to absorb spill. For example, a small spill can be absorbed with a paper towel.

Spills on carpet or rugs:

1. Follow manufacturer's directions for using industrial equipment for shampooing.
2. Apply absorbent material and wait for it to dry.
3. Sweep toward center of spill and dispose of in a plastic bag.
4. Vacuum.
5. Spray with white vinegar solution (1 ounce vinegar to 1 quart cool water).
6. Blot area with paper towels.
7. Rinse, disinfect and shampoo.
8. Clean tools (such as the vacuum).

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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

BBP-32

### Slide 32: What is an Exposure Incident?

Refer to **your** school district's Exposure Control Plan to identify staff to be contacted. General procedures are:

1. Incident should be reported as soon as possible for documentation of the event.
2. An attempt should be made to identify the source individual. That person's blood should be tested as soon as feasible and with appropriate consent to determine infection. This information should be provided to the exposed staff member.
3. The exposed staff member should be directed to a health care provider for evaluation at the time of the exposure. Results should be reported to the school district.
4. The exposed staff member shall receive appropriate testing, prophylaxis and counseling.

All health information should be kept confidential. Results of employee medical evaluation and follow-up must be kept confidential.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

## 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 the incident according to your district plan.
3. The district will provide for additional medical evaluation and treatment, if needed, at no cost to the staff member.

BBP-33

### Slide 33: What to do if an Exposure Occurs

These are generally recommended instructions; it is important for the nurse to review **your** district policy again here.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# BBP Training

Must be completed:

1. Annually.
2. Any time your job duties change and put you at higher risk of exposure.

See you next year!



BBP-34

## Slide 34: BBP Training

OSHA regulations require at least **annual** BBP training for all employees at risk of exposure. Additional training may be required if job duties change.

If the employee received BBP training in the past year, the next training must contain only provisions not included previously.

Reference: [http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](http://www.osha-slc.gov/OshStd_data/1910_1030.html)

# Questions

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



BBP-35

## Slide 35: Questions

Use this slide for Q&A; also, reinforce resources for future questions.

# References

- **OSHA BBP Safety & Health Topics**  
<http://www.osha.gov/SLTC/bloodbornepathogens/index.html>
- **OSHA BBP Training Regulations**  
[http://www.osha-slc.gov/OshStd\\_data/1910\\_1030.html](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>
- Centers for Disease Control and Prevention (2006) Atkinson, W., Hamborsky, J., & Wolfe, S. (Eds.) *Epidemiology and Prevention of Vaccine-Preventable Diseases*, 9<sup>th</sup> Ed., Public Health Foundation: Washington, DC.

BBP-36

## Slide 36: References

Other references used in this presentation:

<http://www.cdc.gov/cleanhands/>

<http://www.cdc.gov/ncidod/diseases/hepatitis/b/>

<http://www.cdc.gov/ncidod/diseases/hepatitis/c/fact.htm>

<http://www.cdc.gov/ncidod/EID/vol12no03/05-0955.htm>

<http://www.cdc.gov/ncidod/hip/ppe/PPEslides6-29-04.pdf>

<http://www.cdc.gov/od/oc/media/pressrel/fs021025.htm>

<http://www.co.la-crosse.wi.us/Health/Environmental/docs/HandWsh.htm>

<http://www.health.state.mn.us/handhygiene/handrub.html>

<http://www.niaid.nih.gov/factsheets/hivinf.htm>

<http://research.dfci.harvard.edu/ehs/PPE/glove%20procedure%20document.pdf>

# Resources

- **School District Exposure Plan**
- **OSHA Bloodborne Pathogens Standard (Standard – 29 CFR 1910.1030)** <http://www.osha.gov>
- **Ohio Revised Code – Public Employee Risk Reduction Program** <http://www.perrp.gov>
- Champion, C. (2005). *Occupational Exposure to Bloodborne Pathogens: Implementing OSHA Standards in a School Setting*. National Association of School Nurses, Inc: Castle Rock, CO.
- American Academy of Pediatrics (2006) In: Pickering, LK, (Ed.) *Red Book: 2003 Report of the Committee on Infectious Diseases*, 27<sup>th</sup> Ed. American Academy of Pediatrics: Elk Grove Village, IL.

BBP-37

## Slide 37: Resources

1. For review of your specific school plan, distribute or refer staff to Web site/manual.
2. OSHA Standards – 29 CFR can be found online; standard requires that employers provide a written copy of 29 CFR 1910.1030 to employees.
3. <http://www.colostate.edu/Orgs/safefood/NEWSLTR/v8n3s06.html>

# Acknowledgements

This presentation was produced by the Ohio Department of Health (ODH), School and Adolescent Health, in collaboration with the University of Findlay.

Funding for this project was provided by the U.S. Department of Health and Human Services, Maternal and Child Health Bureau and the ODH Centers for Disease Control Emergency Preparedness Grant.



BBP-38

Slide 38: Acknowledgements