BLOODBORNE PATHOGEN REVIEW

INTRODUCTION

Exposure to Bloodborne Pathogens

All school employees-teachers, administrative staff, custodians, maintenance, food service, bus drivers and bus aide, and more- are at risk from exposure to bloodborne pathogens.

School staff members are exposed to germs, viruses, and potentially infectious agents on a daily basis. After all, that's part of working in any environment with a high concentration of people. In particular, **bodily fluids** - including blood and vomit-carry the risk of disease.

Be Prepared

As a result, school employees, must be familiar with the policies and procedures necessary to prevent infections from bloodborne pathogens.

Even if you're not exposed to bodily fluids as a routine part of your job, you need to be prepared. Chances are that you will come into contact with blood, vomit and other bodily fluids in a school environment at some point.

Goal

The goal of this course is to familiarize school employees with the **dangers of bloodborne pathogens** as well as the steps they must take to **protect themselves and others** from BBP exposures.

We'll review: BBP Facts, Smart Safety Policies and Procedures

BBP FACTS

Disease and BBP's

BBp's are disease that are carried-and potentially transmitted-through a bodily fluid. They include infectious bacteria, viruses, and other microorganisms.

BBP's are carried by millions of people, many of whom are not even aware that they are carriers.

Transmission

Bloodborne pathogens may be present in **blood from a wound**. They may also be present in other **bodily fluids which may contain traces of blood**, such as vomit, saliva, mucus, semen, vaginal fluids, and more. BBPs may be transmitted through any of these fluids.

A BBP can enter a person's body through cuts or abrasions. They may also enter a body though the mouth, eyes, nose, or a body cavity.

The Risk Is Real

Approximately 300,000 cases of blood-based infections are reported each year according to the Centers For Disease Control and Prevention (CDC). Additionally the CDC estimates that there may be as many as 3 million people infected with the BBP called Hepatitis C, and most of them are not even aware.

OSHA Guidelines and Standards

OHSA has established recommended guidelines for preventing the spread of BBPs.

Nearly all states have adopted OSHA BBP guidelines or have created similar regulations. It's likely that our school district has policies as well. They are contained in your school's **Exposure Control Plan.**

BBP Training

OSHA has established **training requirements** to minimize your occupational risks from BBPs. Some states have additional requirements as well. A review of BBP exposure and control procedures is **required annually**, even if you have received training in previous years. You must stay up to date.

Types of BBPs

It is important to know about some of the most common types of BBPs:

Hepatitis B-known as HBV

Hepatitis C-known as HCV

Human Immunodeficiency Virus or-HIV

Bacterial & Viral

BBPs can be:

Bacterial such as staph and strep or Viral, including hepatitis B, hepatitis C or HIV

There are **vaccines available for certain viruses**, including hepatitis B. Currently; there are no vaccines for hepatitis C or HIV.

BBP Facts You Need to Know

The viruses with which you are most likely to come into contact at school are hepatitis B (HBV)

and cytomegalovirus (CMV).

Hepatitis B (HBV) is the main focus of OSHA BBP regulations. HBV can be transferred from person to person via blood, saliva, semen, or vaginal fluids-even if the fluids have dried.

Cytomegalovirus (CMV) is a herpes-type virus contracted in childhood. It comes from the same viral family as chickenpox and mononucleosis. Many adults have already contracted CNV.

Hepatitis C (HCV) is the most recently identified type of hepatitis. It's a viral disease that leads to inflammation of the liver. HCV's risk at school is very small.

Hepatitis A (HAV) is not a BBP. It's the most common form of hepatitis, and is the type most often identified with contaminated food in a restaurant or cafeteria.

HIV is not easily transmitted in a school setting and cannot be transmitted through casual contact, such as shaking hands or working with an infected person.

Vaccinations: Hepatitis B Vaccine

A vaccine is available for **hepatitis B** (HBV) and may be offered to you by your school. Specifically, OSHA requires that the HBV vaccine be offered at no cost to employees in positions of potentially high risk for BBP's.

Risk to School Personnel

One of the most dangerous characteristics of a BBP is that it **symptoms don't always manifest immediately.** Persons infected with these viruses may not know that they have contracted these diseases for up to nine months. In the meantime they are interacting with others and unknowingly exposing them to infection.

To protect yourself ALWAYS treat bodily fluids as if they are infected.

Potential Exposure in School

You could become infected with a bloodborne pathogen through unprotected contact with:

A bleeding student, staff member or visitor,

Vomit material (because the vomit may contain traces of blood).

A person who has soiled his/hers pants.

POLICIES AND PROCEDURES

Universal Precautions

School staff members must follow a set of smart safety practices known as **Universal Precautions** whenever **a BBP** exposure is possible. According to the CDC, **Universal Precautions**

Are "a set of precautions designed to prevent transmission of BBP's when providing first aid or health care." They help protect staff members when cleaning up potentially infectious fluids.

Universal Precautions are a key element of the **Standard Precautions** for health care identified by the CDC and OSHA.

Universal Precautions: Personal Protective Equipment

Universal Precautions involve the use of **Personal Protective Equipment** (PPE) whenever a school staff member comes into contact with another person's bodily fluids.

PPE includes items such as: disposable gloves, eye goggles, face shields, aprons, other necessary materials to place a barrier between you and potentially infected fluids.

Universal Precautions: Hand Washing

A simple but important universal precaution is **hand washing!** Wash your hands thoroughly after a possible BBP exposure. Wash your hands with soap under warm running water for at least 15 seconds.

Use the Victim's Help Whenever Possible

Keep in mind that it **may not be necessary to touch a victim who is bleeding**. For victims who are conscious, calm and old enough to follow instructions, provide them with sterile gauze, a towel or other covering and instruct him or her to apply direct pressure to the wound.

Remain Calm so that you can help effectively.

Keep students and staff away from blood and other bodily fluids.

Request assistance, via telephone, intercom, or student messenger.

Personal Emergency Kit-A Smart Idea!

Many teachers and staff members carry a small emergency kit during school hours.

Items in the kit my include: Disposable Gloves, Tissues or towels, bandages, Antiseptic wipes and or ointment.

These items should be kept in a plastic bag or box which serves as both a carrying container and also a way to dispose of any exposed materials after the emergency is over.

Clean-Up

Always remember that **if bodily fluids are present**, **a BBP danger exists**. As a result you should always **call a custodian** for cleanup. Never attempt to clean up the fluids yourself unless you have been trained, properly equipped and designated by your school for this task.

Cleanup Process

When cleaning up bodily fluids, a custodian should **wear disposable gloves, use paper towels and use a districtapproved disinfectant**. All materials, including the gloves and towels, should be disposed of in a puncture proof, sealable trash bag. This bag should later be placed into a specially designated **biohazard waste receptacle**. Any equipment that is used in the cleanup-such as tongs and brooms-should be cleaned and disinfected using a district approved disinfectant.

Glove Removal Technique

Remove one glove with the other gloved hand. Peel the first glove off towards your fingers and hold the first glove in the hand that is still gloved, being careful not to touch your skin with the contaminated outside surface of either glove.

With your exposed hand, peel the second glove from the inside, tucking the first glove inside the second.

Dispose of the contaminated gloves in an approved biohazard waste container.

After your gloves are removed, wash hands thoroughly with soap and warm, running water for at least 15 seconds.

Sharps Removal Technique

If "sharps" – such as broken glass, metal wire or other materials that might cause a puncture-are present, you must make certain that no one touches them! The custodian should use tweezers, tongs, or mechanical devices to collect broken glass or other sharps.

Here is the proper way to clean up glass sharps:

Always wear Personal Protective Equipment-including puncture proof disposable gloves=when dealing with sharps. Pick up the bigger pieces of broken glass with tweezers.

Clean up the rest with a broom and dustpan. Afterwards, the broom and dustpan must be disinfected with a district approved disinfectant, or disposed of in an approved container.

Place all broken glass in a biohazard disposal container designated for sharps.

Always Assume Infection is Possible!

Immediately wash any exposed body areas thoroughly with soap under warm running water for at least 15 seconds.

If your **eyes or mouth** are exposed to BBP's, flush them repeatedly with large amounts of water. After flushing, cleaning and changing your clothes(if necessary), **report the incident** to your school nurse or other designated school official.

BBP Exposure Follow-Up After a cleanup involving BBP's is complete:

Review your district's Exposure Control Plan for specific instructions on how to report the incident.

Policy # 8453.01 If you have not had a **hepatitis B vaccine**, you should consider talking to your school nurse or doctor about getting one. If you have any **questions or concerns** about BBP exposure and or cleanup procedures ask your school nurse or district nurse coordinator. Always take BBP exposure seriously!

If a potential BBP exposure occurs, **carefully follow the policies and procedures described in your school's Exposure Control Plan. Know what's in your Exposure Control Plan before a** BBP incident occurs. Always **observe Universal Precautions** including the use of Personal; Protective Equipment.

If you believe that you may have been exposed to a BBP, consult with your school nurse, district health official and/or a personal physician.

Check Point

After taking this course, you should be able to: Identify where BBPs may be found in schools.

Define Universal Precautions

List basic types of Personal Protective Equipment

Describe safe and effective clean-up procedures.

Quiz: Answer True or False

- 1) It may not be necessary to touch a Bleeding Student.
- 2) A Vaccine is available for Hepatitis B.
- 3) Hepatitis B (HBV) is the main focus of OSHA Bloodborne Pathogens regulations.
- 4) Most people who become infected with a BBP shows symptoms immediately.
- 5) You should always treat blood and other body fluids such as vomit as if contaminated.
- 6) Wearing disposable gloves while cleaning up blood is one example of a Universal Precaution.