Bloodborne Pathogens

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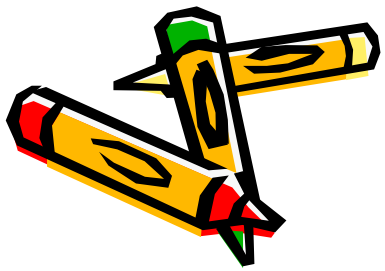
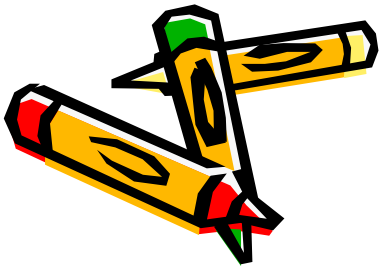
Welcome

- Annual training is required for all employees who can reasonably anticipate contact with blood or potentially infectious body fluids while at work.



Diseases of Bloodborne Pathogens

- Blood borne pathogens (BBP) are microorganisms such as viruses or bacteria that are carried in blood and other body fluids and can cause disease in people. These pathogens include, but are not limited to, Hepatitis B Virus (HBV), Hepatitis C Virus (HCV) and Human Immunodeficiency Virus (HIV).

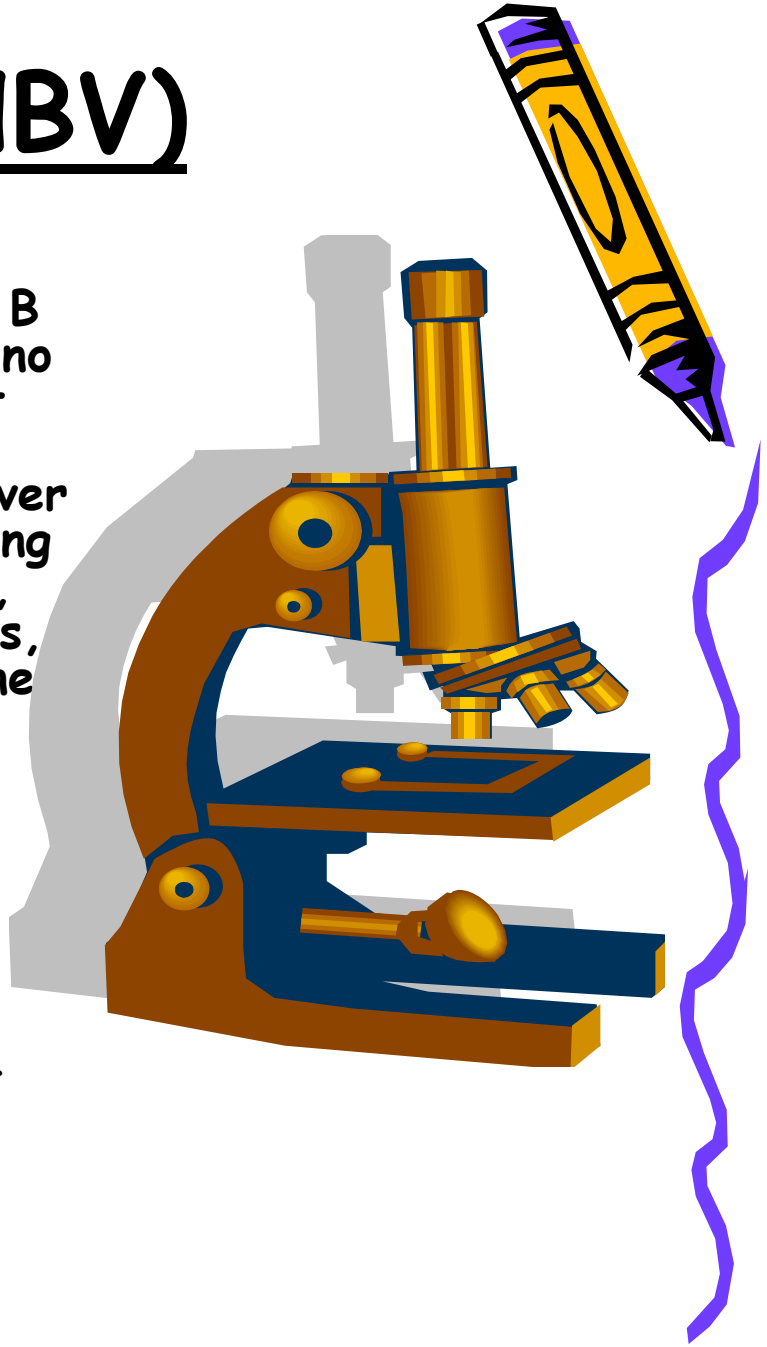


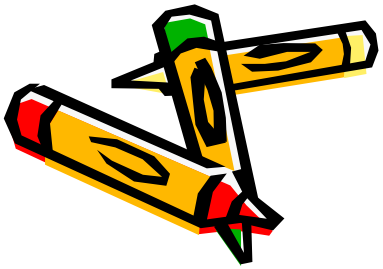
Hepatitis B (HBV)

- *"Hepatitis"* means "*inflammation of the liver,"* and, as its name implies, Hepatitis B is a virus that infects the liver. There is no "cure" or specific treatment for HBV, but many people who contract the disease will develop antibodies, which help them get over the infection and protect them from getting it again. It is important to note, however, that there are different kinds of hepatitis, so infection with HBV will not stop someone from getting another type.

- Vaccination against HBV is available in 2 or 3 dose series.

- Some employees are designated to have HBV vaccine specific to job classification.





Hepatitis B (HBV)

The Hepatitis B virus is very durable, **it can survive in dried blood for up to *seven days*.** For this reason, this virus may be the primary concern for employees such as housekeepers, custodians, laundry personnel and other employees who may come in contact with blood or other potentially infectious materials in a non-emergency or medical care situation.

Hepatitis B (HBV)

The symptoms of HBV are very much like mild "flu". As the disease continues to develop, jaundice (yellow skin) and darkened urine will often occur.

After exposure it can take 1-9 months before symptoms become noticeable.

Hepatitis B Complications

- Hospitalization
- Cirrhosis
- Hepatocellular carcinoma (cancer)
- Death

BV Vaccination is the best protection

Hepatitis A (HAV)

- Transmission - Fecal-oral . Rarely by transfusion
- Children typically do **not** display symptoms
- Schools are not common sites for HAV transmission
- Vaccine available in 2 doses 6-18 months apart

Hepatitis C (HCV)

Hepatitis C virus (HCV) infection is the ***most common chronic blood borne infection*** in the United States. Most people with this virus are chronically infected and might not be aware of their infection because they are not clinically ill. People chronically infected with HCV may have no symptoms for 20 years.

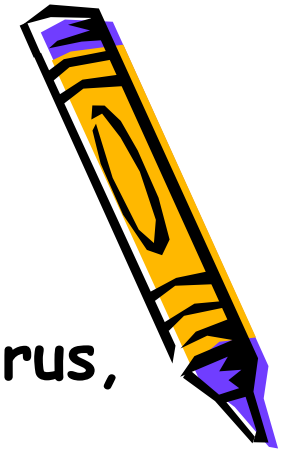
HCV is transmitted primarily through exposures to blood. Risk factors include blood transfusion, injecting drug use, exposure from sexual contact or household member who has had a history of hepatitis.

mptoms:

Many patients have no symptoms prior to development of liver cirrhosis (damage). The presenting symptoms are usually mild fatigue, poor appetite, joint and body aches, nausea, and mild abdominal discomfort.

No available Vaccine

Human Immunodeficiency Virus (HIV)



- A virus called the **human immunodeficiency virus, or HIV causes AIDS (acquired immune deficiency syndrome)**. Once a person has been infected with HIV, it may be many years before AIDS actually develops.
- HIV attacks the body's immune system, weakening it so that it cannot fight other deadly diseases.
- AIDS is a fatal disease, and while treatment for it is improving and prolonging life, there is no known cure.

Human Immunodeficiency Virus (HIV)

The HIV virus is very fragile and will not survive very long outside of the human body. It is primarily of concern to employees providing *first aid in situations involving fresh blood or other potentially infectious materials.*

All precautions must be taken to avoid exposure.

HIV status is protected and you don't know who is infected. Therefore, must assume risk is always present

Symptoms:

- Symptoms of HIV infection can vary, but often include weakness, fever, sore throat, nausea, headaches, diarrhea, a white coating on the tongue, weight loss, and swollen lymph glands.

Modes Of Transmission

Bloodborne pathogens such as HBV, HCV and HIV can be transmitted through contact with infected human blood and other potentially infectious body fluids such as: semen, vaginal secretions, saliva (in dental procedures), and any body fluid that is visibly contaminated with blood.

It is important to know how exposure and transmission are most likely to occur in your job duties.

Modes Of Transmission

HBV and HIV are most commonly transmitted through:

- Sexual Contact
- Sharing of hypodermic needles
- From mothers to their babies
- at/before birth, breast feeding

Accidental puncture from contaminated needles, broken glass, or other sharps

- Contact between broken or damaged skin and infected body fluids
- Contact between mucous membranes and infected body fluids

Modes Of Transmission

- Anytime there is blood-to-blood contact with infected blood or body fluids, there is a slight potential for transmission. Unbroken skin forms the best barrier against blood borne pathogens. However, infected blood can enter your system through: open sores, cuts, abrasions, acne or any damaged or broken skin such as sunburn or blisters.
- Bloodborne pathogens may also be transmitted through the mucous membranes of the eyes, nose, or mouth. For example, a splash of contaminated blood to your eye, nose, or mouth could result in transmission.

Reducing Your Risks

- Reducing your risk of exposure to bloodborne pathogens means you need to do more than wear gloves.

- To protect yourself effectively use:
  - Engineering control
  - Work Practice control
  - Personal protective equipment
  - Housekeeping
  - Hepatitis B vaccine

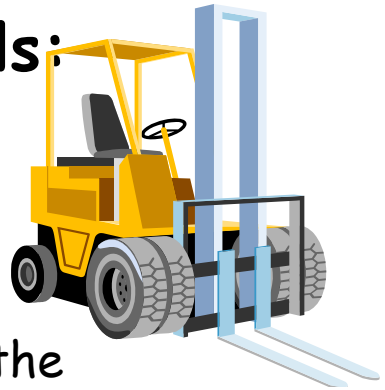
Engineering Controls

Engineering controls are mechanical systems that are in place in the school to minimize hazards at the source.

Their effectiveness usually depends on you and using them appropriately.

Examples of engineering controls:

- sharps containers
- double bag trash
- red biohazard bags
- isolyzer: EPA registered product for the treatment of liquid medical waste



Engineering Controls

Sharp Containers are puncture resistant, leak proof containers used for disposal of contaminated broken glass, needles or lancets. Sharps containers are located in the health office.

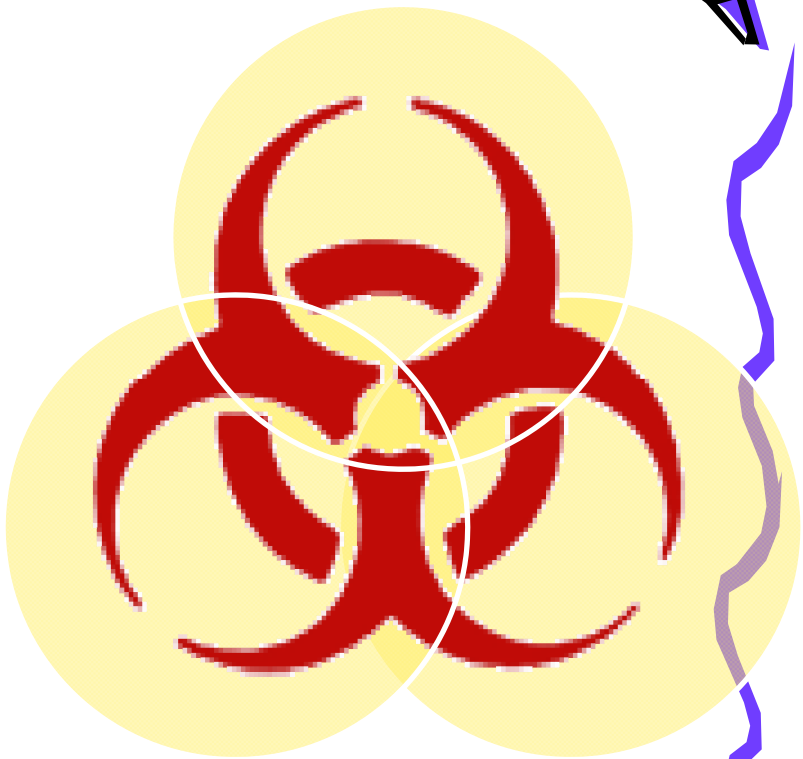
Red biohazard bags are used for disposal of bloody waste material such as ***soaked dressings***. Bloody materials need to be placed in a biohazard bag if the blood is dripping, pouring, squeezable or flaking from the contaminated material.

If it does not meet one of these requirements, it can be disposed in the standard wastebasket with a plastic liner bag.

Isolyzer is a powder that converts liquid contaminated waste into treated solid waste. The waste then can be scooped and placed in a double bagged trash container or biohazard container.

Biohazard Sign

- The label to the right is the universal symbol for biohazardous materials. Watch for this florescent orange-red label.
- This symbol warns you that the container holds blood or other potentially infectious material.



Work Practice Controls

Work practice controls are specific procedures you must follow on the job to reduce your exposure to blood or other potentially infectious materials.

These practices would include the use of standard precautions, personal hygiene and hand washing.

STANDARD PRECAUTIONS

Most approaches to infection control are based on the concept of "Standard Precautions", ***treating all blood and body fluids as if they were potentially infectious.***

Remember: there are many people who carry infectious diseases that having no visible symptoms and no knowledge of their condition.

Using Standard Precautions resolves this uncertainty by ***requiring <u>you</u>*** to treat all human blood and body fluid as if they were known to be infected with HIV, HBV or other blood borne pathogens.

PERSONAL HYGIENE

ere are some controls based on personal hygiene you must follow to decrease your risk of exposure:

Do not eat, drink, smoke, apply cosmetics, lip balm or handle contact lenses where there is a reasonable likeliness of occupational exposure.

nimize splashing, spraying, spattering and generation of droplets when attending to an injured student or co-worker.

not keep food and drink in refrigerators, freezers, shelves, cabinets or on countertops where blood or other potentially infectious materials are present.

HANDWASHING

e most important work place practice control is hand washing.
od hand washing keeps you from transferring contamination from
r hands to other parts of your body or other surfaces you may
tact later.
u should wash your hands with non-abrasive soap and running water
ry time you remove your gloves and other personal protective
ipment.
your skin or mucous membranes come in direct contact with blood or
er body fluids, wash or flush the area with water ASAP.
here hand washing facilities are not available, such as the
yground, you should use antiseptic towelettes or hand sanitizer. Use
se as a temporary measure only. You must still wash your
hands with soap and running water as soon as you can.

Proper Method for Hand Washing

- **Step 1** Wet hands with water and then add soap.
- **Step 2** Use ***friction*** to work up lather and wash hands for at least 10-20 seconds.
- **Step 3** Rinse well under a stream of water.
- **Step 4** Dry hands thoroughly, with a single use paper towel.
- **Step 5** Turn off faucet with a paper towel, if possible.

This policy complies with Head Start Performance Standard 45 CFR Section 1304.22 .
It was approved by Policy Council on June 10, 1997. Updated May 28, 2002

Personal Protective Equipment (PPE)

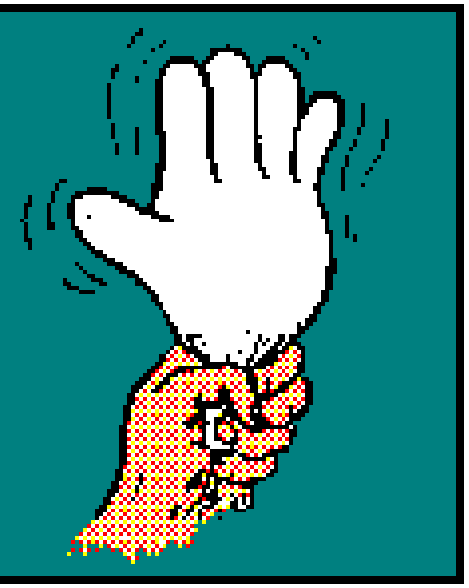
he type of personal protective equipment (PPE) appropriate or your job, varies with the task and the degree of exposure ou anticipate. Equipment that protects you from contact with lood or other potentially infectious materials may include loves, masks, gowns, face shields, goggles and/or esuscitation mouthpieces.

PE must be appropriate for the task and fit properly to rotect you from BBP.

ou must use appropriate PPE each time you perform a task ith potentially infectious material.

PE is considered appropriate if it doesn't permit blood or ther potentially infectious material to pass through or reach lothing, skin, eyes, mouth or other mucous membranes under ormal condition of use.

GLOVES: BEST BARRIER FOR PROTECTION



- Gloves are the most commonly used PPE. Gloves should be made of latex, nitrile, rubber, or other water impervious materials. If you know you have cuts or sores on your hands, you should cover these with a bandage or similar protection as an additional precaution before putting on your gloves. You should always inspect your gloves for tears or punctures before putting them on. **If a glove is damaged, don't**

Glove Removal:

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 not to contaminate your hands.

* 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 possible.

PPE

oggles and Face Shields:

nytime there is a risk of splashing or vaporization of contaminated fluids; goggles, face shields and/or other protection should be used to protect your face. Splashing could occur while cleaning up a spill, or while providing first aid or medical assistance.

prons/Cover gowns:

prons/gowns may be worn to protect your clothing and to keep blood or other contaminated fluids from soaking through to your skin.

lormal clothing that becomes contaminated with blood should be removed as soon as possible because fluids can seep through the cloth and come into contact with skin.

SHA STANDARDS STATE:
lothing Penetrated With Blood/Body Fluids/OPIM (Other tentially Infectious Materials) May Not Be Taken Home For undering

hen personal clothing is contaminated, remove the contaminated thing in such a way to avoid contact with the outer surface, (e.g. by ling up the garment as it is pulled away from the body for removal or it is pulled toward your head to prevent exposure to your face).

ce contaminated clothing in a plastic bag and close securely. Wash ll any areas that have come in contact with contaminated clothing.

ark the bag containing your contaminated clothing with your name and e the soiled clothing to the school laundry facility. Laundry must llow OSHA Standards for laundering.

Housekeeping

HANDLING BLOOD SPILLS

Clear all traffic in immediate area of spill and contact custodial staff for proper cleaning as per OSHA Standards.

HOUSE KEEPING / CLEANING

Put on latex gloves . Gown, goggles and mask may be needed if splashes are probable.

Wipe up all liquid spills with paper toweling or cloth toweling. If the towel absorbs all the blood and is not drippable, pourable, squeezable, or flakable; discard paper towels into plastic trash bag and then into bagged trash container(double bagged). Otherwise, discard paper towels into red biohazard bag.

Contaminated areas must be cleaned and decontaminated with appropriate disinfectant or a 10% bleach solution ASAP after contact with blood / potentially infectious material.

Never pick up broken glass with bare hands. Always wear gloves, and use tongs or a scooper.

Place contaminated sharps in a sharps container.

Handle contaminated laundry as little as possible. Place soiled laundry in labeled container to indicate laundry is contaminated before sending to be laundered.

Hepatitis B Vaccinations

Employees who have routine exposure to blood borne pathogens (i.e., nurse, first aid responders, custodians, those who perform medical procedures and laundry personnel) shall be offered the Hepatitis B vaccine series through the Health Dept.

The series consists of 2 or 3 vaccinations.

If you are exposed to blood or body fluids and the vaccine is administered immediately after exposure it is extremely effective at preventing the disease.

There is no danger of contracting the disease from getting the vaccine, and once vaccinated, a person does not need to receive the series again.

Although recommended, the vaccine is up to the employee, who may change their mind at any time

Exposure Control Plan (ECP)

OSHA requires that every school system have a written Exposure Control Plan (ECP) and make it available to every school employee.

ECP manuals are located in the school's administrative office.

The ECP will:

- Identify the personnel at greatest risk of exposure.
- Analyze the potential hazards of each job.
- Determine what measures will be taken to reduce the risk of exposure to BBP on the job.
- State measures to take if an exposure to BBP has occurred.

Post Exposure Follow Up

In the event of exposure to bloodborne pathogens while at work, follow these steps:

- Wash/flush area exposed to BBP with soap and water.
- Seek first aid (ASAP) after the incident occurs
- Inform your supervisor or school nurse immediately of exposure.
- Fill out an Incident/Accident form ***and*** a Exposure Incident form available from the business office or school nurse.
- Seek medical attention from your health provider or local emergency room.

Bloodborne Pathogens

Contact the school nurse with any questions you may have about this in-service.

QUIZ

1) True False Annual training is required for all employees who can reasonably anticipate contact with blood or other potentially infectious body fluids while at work.

2) True False The Exposure Control Plan is located in the school's administrative office and is available to every employee for viewing.

3) True False The Hepatitis B virus can survive in dried blood for up to seven days.

4) True False Good hand washing is the number one defense against transmission of disease.

5) True False Transmission of bloodborne pathogens can occur through: broken skin (open sores, cuts), and by entering mucous membranes of the eyes, nose and mouth.

6) True False There is no need to wash your hands after removing your disposable gloves.

7) True False If you have an exposure to blood borne pathogen while at work you need to contact your supervisor or school nurse immediately.

8) True False Human Immunodeficiency Virus (HIV) is the only infectious disease carried by the blood that you should be concerned with.

9) True False Hepatitis B Vaccine will protect you from all types of viral hepatitis.

10) True False Standard Precautions are to be used only when there is a chance of contacting the blood of a human at high risk for a bloodborne disease.

Answers

True Annual training is required for all employees who can reasonably anticpate contact with blood or other potentially infectious body fluids while at work.

True The Exposure Control Plan is located in the administrative office and available to every employee for viewing.

True The Hepatitis B virus can survive in dried blood for up to seven days.

True Good hand washing is the number one defense against transmission of disease.

True Transmission of blood borne pathogens can occur through: broken skin (open sores, cuts) and by entering mucous membranes of the eyes, nose and mouth.

Answers

False Hands need to be washed as soon as possible after removing gloves and other PPE.

True If you have an exposure to blood borne pathogens while at work your supervisor or school nurse should be notified immediately.

False Human Immunodeficiency Virus (HIV), HBV, HCV are infectious diseases carried by the blood that you should be concerned with.

False Hepatitis B vaccine protects you from HBV only.

) **False** Treat all human blood and body fluids as if they were known to be infected with BBP. Wear Personal Protective equipment: gloves, goggles, gowns.

After completion of the self test print ONLY this page. Fill in requested information and submit to Human Resources to be kept in your employee file as documentation of training. Please see the school nurse for any questions or need for clarification of the information provided in this self study.

I have completed the self-study program on the OSHA standards for BBP.

Name (print)_____

Title/Position_____

Date_____

Signature_____

Keep a copy of this certificate for your records.