



"I Love
Bloodborne
Pathogens and
Hazardous
Communications
Refresher
Classes", says
NO ONE
EVER!



BLOODBORNE PATHOGENS

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Bloodborne Pathogens

Training Objectives

- The MIOSHA Standard - background, employer responsibilities and requirements
- Definitions
- The diseases these pathogens can cause
- Risky situations - at work and in the community
- How to protect yourself
- Question & Answer

Exposure Control Plan

- **Exposure Determination (who's at risk)**
- **Control methods (universal precautions, handwashing facilities, PPE, needle and waste disposal)**
- **Hepatitis B Vaccine Policy (options for employers and employees)**
- **Post-exposure Evaluation (reporting requirements, immediate treatment, ongoing follow-up)**
- **Training (initial and annual refresher)**
- **Recordkeeping (medical, training, Sharps Log)**

Part 554.
Bloodborne Infectious Diseases

- An employer shall evaluate routine and reasonably anticipated tasks and procedures to determine whether there is actual or reasonably anticipated employee exposure to blood or other potentially infectious material.

What Are Bloodborne Pathogens?

- *Pathogen*: a germ, a virus, or bacteria - something that *can* make you sick
- *Bloodborne*: Carry or transmit in human blood
- *So, a bloodborne pathogen* (BBP) is something that can make you sick, that can be carried in human blood (and a few other body fluids) - *but transmission of illness can only occur if you come into contact with it in certain ways*

Three Most Common Bloodborne Diseases

- **HIV: Human Immunodeficiency Virus - causes AIDS**
- **HBV: Hepatitis B Virus**
- **HCV: Hepatitis C Virus**

Other Potentially Infectious Materials (OPIM)

- **BESIDES BLOOD, THESE BODY FLUIDS CAN TRANSMIT BBP:**
- **Semen & Vaginal Secretions**
- **Body fluids surrounding the brain, spine, heart, lungs, abdomen, joints**
- **Any fluid contaminated with blood**
- **All body fluids in situations where it is difficult or impossible to differentiate between body fluids**

Other Potentially Infectious Materials (OPIM)

- BODY FLUIDS THAT *DO NOT* TRANSMIT BBP, UNLESS VISIBLY CONTAMINATED WITH BLOOD:
- Saliva (unless dental procedures involved)
- Urine or feces
- Vomit
- Sweat or tears

3 Examples of “Certain Ways” Bloodborne Pathogens Can Enter Your Body

- Contact with non-intact skin;
example: A first aid provider helps an injured worker, but wears no protective equipment, and the provider has a cut, scratch, or sore on their hands
- Through mucous membranes: eyes, nose and mouth;
example: a blood splash, or accidental secondary contact between contaminated gloved hands and face
- Through a wound from a contaminated sharp object;
example: a dirty needle or broken glass

Risky Situations on the Job

- Appendix to MIOSHA Standard: 32 job titles
- Health Care Personnel (Doctors & Nurses, Paramedics, Dentists)
- First Aid / CPR Responders
- Barbers & beauticians, correctional & police officers, day care center & foster home workers, housekeepers & janitors, laundry workers, maintenance staff, plumbers, & tattooists

Risky Situations in the Community

- Unprotected sexual contact with an infected partner
- Sharing drug, tattoo, or piercing needles
- Sharing personal items like razors or toothbrushes (might have blood on them)
- Transmission can occur from an infected mother to her baby during birth
- Individuals receiving donated blood prior to July 1992 (Hepatitis C)

SIGNS & SYMPTOMS

HIV:

Can include depression, diarrhea, nausea / vomiting, unexplained weight loss, fatigue, night sweats, sinus infections, and tingling / burning of the hands and feet.

HEPATITIS B:

About 30% of persons have none.

Signs and symptoms are less common in children than adults. They can include: jaundice, fatigue, abdominal pain, loss of appetite, nausea, vomiting, joint pain.

HEPATITIS C:

80% of persons have none.

Signs and symptoms can include: jaundice, fatigue, dark urine, abdominal pain, loss of appetite, nausea.

Hepatitis B Vaccine

- New infections have declined dramatically - primarily due to routine vaccination (95% effective)
- 3-shots, administered over 6 months
- CDC recommends vaccination for everyone under 18 years old, and any adult who is at risk
- Long-term studies of healthy adults and children indicate that hepatitis B vaccine protects against chronic HBV infection for at least 23 years, even though antibody levels might decline



Hepatitis B Vaccine

- MIOSHA requirement:
- Within 10 working days of the time of initial assignment ... an employer shall make the hepatitis B vaccination available to each employee at risk of exposure
- First Aid Responder option
- If an employee initially declines vaccination, but later decides to accept the HBV vaccine, the employer shall provide the vaccine at that time



Universal Precautions

- PRECAUTIONS: Be careful
- UNIVERSAL: All the time
- Assume that all human blood and body fluids are infected
- Whether conducting a cleanup, or treating an injury, use Universal Precautions to protect yourself **before** you get involved
- Do what it takes to make sure potentially infectious material doesn't get **in** you or **on** you



Personal Protective Equipment (PPE)

- Single-use gloves
Latex, nitrile, or vinyl
- CPR masks



- Eye protection
- Masks
- Gowns /
protective clothing



Glove Removal

1



2



Glove Removal

3



4



Removing PPE

- Properly dispose of single-use gloves
- Turn the items inside out, and place them in designated containers
- Wash contaminated clothing
- Wash your hands and any other exposed skin with soap and water; waterless disinfectants and alcohol wipes can be effective as well



Cleanup Procedures

- **Wear Personal Protective Equipment.**
- **Use a 1:10 bleach/water solution or an EPA-registered disinfectant to clean:**
 - **Anything that has been contaminated with potentially infectious materials**
- **Use tongs, or a brush and dust pan to pick up broken glass - not your hands**

Regulated Waste Disposal

- *Regulated waste* includes liquid or semiliquid blood and other potentially infectious material along with other *contaminated* items
- Dispose of regulated waste by placing it in a closeable biohazard or red-colored container



THANK YOU



***Questions
Or
Comments?***

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