Bloodborne pathogens

By Arne Larson

Before you begin
Survey your facility to identify work activities that could expose employees to blood or body fluids. These activities may include medical treatment, first aid, housekeeping and restroom-facility maintenance. To determine if your company has a bloodborne pathogen policy and training program, review your safety procedures.

Obtain disposable rubber or vinyl gloves and one shaving-cream can for the training exercise.

Introduction

Bloodborne pathogens are disease-causing microorganisms found in the blood and/or body fluids of infected people. If healthy people come into contact with these pathogens, they also may become infected. However, you can easily prevent diseases spread by contact with bloodborne pathogens. This training module will describe the methods used to avoid getting or spreading disease caused by bloodborne pathogens.

Review the hazards

Bloodborne pathogens may transmit serious diseases like Hepatitis B and C, as well as the human immunodeficiency virus (HIV). These microorganisms must find a direct route into the body to cause infection. Casual contact, coughing or sneezing typically do not transmit these microorganisms. Some of the ways bloodborne pathogens can enter the body are:

- Contact through a wound or other skin opening;
- Sprayed or splashed into your eyes or mouth;
- During cardiopulmonary resuscitation, rescue breathing without a barrier device;
- Direct injection by a contaminated needle;
- Touching contaminated hands to the eyes or mouth;
- Having unprotected sex with an infected person.

Take precautions

To reduce or eliminate infection risk, discuss these universal precautions. Ask attendees to identify jobs and locations in the facility where they might find risk examples. Talk to employees about which precautions may be best for your facility.

- Universal precautions are safe practices you should follow any time there is risk of contact with another person's blood or body fluids. These safe practices include the use of appropriate personal protective equipment (PPE).
- Wear disposable rubber gloves when there is risk of exposure to people or materials that may be contaminated with blood or body fluids.
- To prevent transferring the contamination to your hands, use care removing contaminated gloves. Thoroughly wash your hands after removing your gloves.
- If there is a possibility for a spray or splash of blood or body fluids to your face and eyes, put on goggles or a face shield. Cover any other exposed areas of your body where you may have cuts or breaks in the skin.
- Wear a rubber or vinyl apron to keep blood and body fluids off your clothing.
- Do not pick up needles or broken glass with your bare hands. Wear gloves and use a scoop or dust pan. Deposit the objects into a puncture-resistant, leak-proof container.

- Wash your hands or use waterless sanitizer after touching anything that another person's blood or body fluids may have contaminated.

Responding to injuries

- Use universal precautions when attending to any bleeding wound on another person. Assume that bloodborne pathogens could be present.
- Have the worker apply bandages to control bleeding for minor injuries. If needed, provide assistance.
- Wear disposable rubber gloves and try to avoid contact with any blood or body fluids on the person or their clothing.
- If disposable gloves are not readily available in an emergency, use your work gloves, a clean towel or newspaper to prevent contact with blood or body fluids.
- When finished with treatment and clean up, carefully remove your gloves to avoid touching the glove's contaminated exterior.
- Thoroughly wash your hands immediately after removing your gloves.
- If you do get blood or body fluids on your skin, immediately wash the contaminated areas with soap and water. Use emergency eyewash to thoroughly flush any contamination from your eyes or mouth. Report any exposure incidents to your supervisor or medical department.

Cleaning up contaminated areas and materials

Review the safety precautions listed below about safe clean up and disposal of contaminated materials. If needed, then ask employees where they can find the appropriate PPE, cleaning solution and equipment.

- Clean up and disinfect blood and body fluids as soon as possible. If needed, barricade the contaminated area to keep others from inadvertently touching or walking through it.
- HIV virus dies within hours of exposure to air, but the hepatitis B virus can survive on exposed surfaces in a dried state for at least seven days.
- Wear rubber gloves to clean up contaminated surfaces, tools, equipment, etc.
- Use a special germicidal cleaning product or a solution of one-quarter cup bleach in one gallon of water.
- Be careful not to splash or sling contamination during wiping/cleaning. If necessary, wear safety glasses, goggles or a face shield.
- Consider cleaning wipes, gloves and other disposable items contaminated waste.
- Place contaminated wastes into approved biohazard bags (red with the biohazard label) and follow the proper disposal procedures. Do not throw contaminated wastes into the regular trash.
- Thoroughly wash your hands after removing your gloves.

Group actions

Step 1: Obtain disposable gloves for everyone and one can of shaving cream.
Step 2: Have each member put on a pair of disposable gloves.
Step 3: Spray some shaving cream on the palm and fingers of each gloved hand.
Step 4: Ask each member to remove their gloves without getting any shaving cream on their hands, arms or clothing.

After the exercise, demonstrate the correct way to remove gloves by rolling the first glove off the hand inside out and then use the inside of it to remove the other glove.

Quiz (Circle "T" for true or "F" for false.)

1. Gloves cannot protect you from bloodborne pathogens. T or F
2. Coughing can spread bloodborne pathogens. T or F
3. You must not place contaminated wastes into regular trash containers. T or F
4. Only medical providers need to use universal precautions. T or F

Answers: 1.F; 2.F; 3.T; 4.F.

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