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# **PREVENTING EXPOSURE TO BLOODBORNE PATHOGENS**

**Leader's Guide, Fact Sheet  
& Quiz**

**Item Number: 3161**

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***This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation.***

## **PREPARING FOR THE MEETING**

Here are a few suggestions for using this program:

- a) Review the contents of the Fact Sheet that immediately follows this page to familiarize yourself with the program topic and the training points discussed in the program. The Fact Sheet also includes a list of Program Objectives that details the information that participants should learn from watching the program.
- b) If required by your organization, make an attendance record to be signed by each participant to document the training to be conducted.
- c) Prepare the area and equipment to be used for the training. Make sure the watching environment is comfortable and free from outside distractions. Also, ensure that participants can see and hear the TV screen or computer monitor without obstructions.
- d) Make copies of the Review Quiz included at the end of this Leader's Guide to be completed by participants at the conclusion of the presentation. Be aware that the page containing the answers to the quiz comes before the quiz itself, which is on the final page.

## **CONDUCTING THE PRESENTATION**

- a) Begin the meeting by welcoming the participants. Introduce yourself and give each person an opportunity to become acquainted if there are new people joining the training session.
- b) Introduce the program by its title and explain to participants what they are expected to learn as stated in the Program Objectives of the Fact Sheet.
- c) Play the program without interruption. Upon completion, lead discussions about your organization's specific policies regarding the subject matter. Make sure to note any unique hazards associated with the program's topic that participants may encounter while performing their job duties at your facility.
- d) Hand out copies of the review quiz to all of the participants and make sure each one completes it before concluding the training session.

## **3161 PREVENTING EXPOSURE TO BLOODBORNE PATHOGENS FACT SHEET**

**LENGTH: 15 MINUTES**

### **PROGRAM SYNOPSIS:**

The focus of this program is preventing exposure to bloodborne pathogens. While most of us have jobs where we will never come into contact with blood or other body fluids, there are various situations where we may encounter potentially infectious materials. Employees must know what actions to take in these situations to protect themselves from exposure to bloodborne pathogens.

Topics of the video include diseases caused by bloodborne pathogens, the Exposure Control Plan, how bloodborne pathogens are transmitted, jobs with occupational exposure, methods of protecting against exposures, handling potentially contaminated items and responding to exposure situations.

### **PROGRAM OBJECTIVES:**

After watching the program, the participant will be able to explain the following:

- The purpose and contents of the company's Exposure Control Plan;
- How bloodborne pathogens can be transmitted;
- Specific safety precautions that should be taken to prevent contact with contaminated items;
- How to respond to possible exposure situations.

### **INSTRUCTIONAL CONTENT:**

#### **INTRODUCTION**

- As employees, we are all familiar with the obvious hazards that can be found in our workplace: slippery floors, moving parts, electricity or hazardous chemicals.
- We must consider other hazards we often don't think about in our normal working environment, including exposure to blood or bodily fluids.
- We may think this issue only applies to doctors, paramedics, or other healthcare providers, but we must understand that each of us may come into contact with these bodily fluids and we need to know how to protect ourselves.
- Most of us are familiar with the types of serious diseases that can be transmitted by contact with blood. In addition to blood, contact with other body fluids may also lead to infection. These fluids include semen, vaginal secretions, spinal fluid, amniotic fluid or any body fluid or tissue containing blood.

#### **DISEASES CAUSED BY BLOODBORNE PATHOGENS**

- Hepatitis B, Hepatitis C and Hepatitis D can be transmitted by contact with infected blood or body fluids. HIV, the virus that causes AIDS, can also be contracted in this manner.
- HIV attacks the body's immune system, leaving it vulnerable to other infections. The prolonged deterioration of the immune system can lead to AIDS. No known cure for HIV or AIDS exists.
- The symptoms of HIV include weakness, fever, sore throat, diarrhea and nausea.
- Hepatitis is a disease that attacks the liver and can be fatal. Various types of Hepatitis include types B, C and D.
- The symptoms of Hepatitis include fatigue, stomach pain, jaundice, darkening of the urine and loss of appetite. Victims of Hepatitis C may show no symptoms until later stages of the disease.
- Hepatitis D only occurs in those people who have previously been exposed to Hepatitis B. Contracting Hepatitis D increases the severity of the Hepatitis B infection, creating what is known as a "super-infection."
- While there is no known cure for Hepatitis B, C or D, there is a vaccination available to prevent Hepatitis B.

#### **THE EXPOSURE CONTROL PLAN**

- The microorganisms that spread diseases such as HIV and Hepatitis are called bloodborne pathogens and protecting ourselves from them is critical in avoiding infection by these life-threatening diseases.

- Due to the risks associated with bloodborne pathogens, OSHA developed a regulation aimed at reducing exposure to them. As part of this regulation, the company maintains an Exposure Control Plan that outlines training and procedures to control exposure to bloodborne pathogens.
- The Exposure Control Plan includes descriptions of engineering and work practice controls, employee training, medical and vaccination information and a listing of signs and labels used to identify biological hazards.
- The Exposure Control Plan is reviewed annually and changes in technology that may eliminate or reduce the risk of exposure to bloodborne pathogens may be added.
- Just like other workplace hazards, protection from bloodborne pathogens can be controlled through training and following safe work practices.

### **TRANSMISSION OF BLOODBORNE PATHOGENS**

- To protect ourselves from exposures to bloodborne pathogens, we need to know the various methods by which transmission may occur. The three main routes of entry for infectious material to enter the body are ingestion, inhalation and absorption.
- To prevent this, always wash hands thoroughly immediately after working with potentially infectious materials. Also, never eat, drink or apply cosmetics in areas where body fluids are handled or stored.
- Inhalation can occur when small particles of blood or other body fluids become airborne in the form of a powder or dust. Once airborne they can be inhaled into the lungs. When working in areas where this is a possibility, wear the appropriate respiratory protection.
- The most likely route of entry into the body for bloodborne pathogens is through absorption. Absorption occurs when infectious material is absorbed into the body through contact with cuts in the skin or contact with mucus membranes.
- Besides sexual contact, the most likely means of absorption is when contaminated blood or body fluids come in contact with cuts, open wounds or mucus membranes.
- Bloodborne pathogens may also enter the body through needle sticks or cuts received from contact with contaminated sharp objects.

### **EMPLOYEES AT RISK OF EXPOSURE**

- Employees who perform tasks where they may reasonably be expected to contact or handle potentially infectious materials are considered to have “occupational exposure” to bloodborne pathogens.
- The company has determined which job tasks present an occupational exposure and maintains a list of these jobs in the Exposure Control Plan.
- Some examples of jobs with occupational exposure include custodial staff who may be exposed to broken glass or other contaminated items, authorized first responders who offer first aid to injured co-workers and occupational health nurses or other health providers who are exposed to bodily fluids or used needles. Laundry personnel who may contact contaminated uniforms, linens and other materials or any other worker who may reasonably be expected to handle or contact blood or body fluids are other examples.
- Workers who have been designated as having occupational exposure will receive specific instructions and training to avoid contact with bloodborne pathogens. They are also eligible to receive the Hepatitis B vaccine at no cost.
- Of course, many jobs do not have occupational exposure to bloodborne pathogens. In fact, most employees will never come into contact with blood or other body fluids while performing their normal job functions.
- Employees who are not normally at risk from bloodborne pathogens may come into contact with blood or other bodily fluids. A co-worker may be injured and bleed in your work area or used bandages, syringes or other potentially contaminated items may be encountered unexpectedly.
- Because all employees may encounter these types of situations, you must know the proper actions that must be taken.

### **METHODS OF PROTECTION**

- The only way to protect yourself from exposure is to treat all blood and bodily fluids, as well as any item contaminated with blood or body fluids, as if they are infected with bloodborne pathogens. This concept, known as universal precautions, simply means treating all suspected contaminants as if infected with bloodborne pathogens.
- This means always maintaining a barrier between you and any contaminated items or body fluids. Never allow these materials to contact exposed skin or mucus membranes such as eyes, nose or mouth.
- Various types of protective equipment is available. Gloves made of impervious material will protect hands from exposure.

- Latex gloves are a common choice because they provide comfort and dexterity. Before using this type of glove, any cuts or wounds on your hand should be properly bandaged.
- Wearing this type of glove is adequate for most simple situations such as treating a minor cut or handling small contaminated objects that will not cut or puncture the glove. Some manufacturers recommend double gloving for added protection.
- Situations which involve a greater risk of exposure will require more protection. In situations where fluids may splash into the face area, a face shield and goggles should be worn.
- In addition, rubber gloves should be used in situations where latex may be torn. No matter what kind of glove you select, it must be inspected for cracks and tears before use.

#### **HANDLING POTENTIALLY CONTAMINATED ITEMS**

- Following universal precautions also means avoiding direct contact altogether when possible. This is especially true when handling sharp objects that may be contaminated.
- Never pick up broken glass, needles or other objects with your hands. Use tongs or a broom and dustpan to avoid the possibility of exposure.
- When disposing of contaminated sharp objects such as glass or needles, place them in approved biohazard sharps containers. Sharps containers should be closeable as well as leak and spill proof.
- Place all other types of potentially infectious material in approved biohazard containers. This includes disposable gloves, dressings, bandages or other disposable items that are potentially contaminated.
- Biohazard containers are labeled with the biohazard and range in color from orange-red to solid red.

#### **RESPONDING TO EXPOSURE SITUATIONS**

- Trying to assist an injured co-worker is the most likely scenario for most employees to come into contact with blood or other body fluids.
- When a co-worker is injured, the best course of action is to activate the company's emergency plan for reporting injuries. This enables the trained first aid responders to arrive quickly and provide assistance.
- First aid responders are trained to provide medical treatment while maintaining universal precautions for bloodborne pathogens. They have specialized equipment to protect them from exposure.
- If you must assist a co-worker who has suffered an injury, get the supplies needed to treat the wound. Encourage the victim to apply his own bandages and other first aid procedures that will eliminate you from the risk of exposure.
- If you encounter a situation that is life-threatening and you feel you cannot wait for the emergency responders, be sure to follow universal precautions while assisting the victim.
- Control large amounts of blood with towels, blankets or similar materials. Avoid direct contact by encouraging the victim to apply direct pressure to lacerations.
- If you must contact the victim, use impervious materials on hand such as a rain coat, trash bags or similar materials to maintain a barrier between you and potentially infectious materials.
- Acting as a Good Samaritan places you at risk.
- If you think you may be confronted with this type of situation, prepare a first aid kit that includes latex gloves, eye and face protection and other barrier devices. Keep this kit nearby so it will be available when you need it.
- When work areas have been exposed to bloodborne pathogens, they must be thoroughly cleaned and decontaminated before workers are allowed back in the area.
- Cleaning a work area with soap and water is not enough. It must be thoroughly decontaminated with a mixture that will kill any infectious materials that may be present. One simple mixture that may be used is one part bleach mixed with nine parts water.
- Protective equipment such as facemasks, goggles and other reusable devices must be cleaned and decontaminated thoroughly after use.
- Never attempt to reuse disposable equipment such as latex gloves or disposable clothing. These items must be disposed of in a biohazard container.

#### **CONTACTING POTENTIALLY INFECTIOUS MATERIALS**

- In the event you come into contact with blood or other body fluid, taking the proper action will reduce the risk of infection.

- If the contact occurs on the skin, immediately wash the affected area with warm water and soap. An anti-bacterial soap is preferred.
- If the material splashes into your eye or other mucus membrane, rinse the affected area thoroughly with water for 15 minutes.
- Report all exposures right away so any necessary medical testing, treatment and record keeping can take place.
- With employee consent, blood tests may be performed to determine if infection has occurred. In addition, the source material may be tested for infection.
- Keep in mind that the Hepatitis B vaccine can still be effective after an exposure.
- If the potential exposure is due to a sharp object such as a needle stick, it will be recorded into the company's sharps injury log. OSHA requires companies to maintain a sharps injury log to gather data for research on preventing needle stick injuries.

## PREVENTING EXPOSURE TO BLOODBORNE PATHOGENS

### ANSWERS TO THE REVIEW QUIZ

1. c

2. a

3. b

4. b

5. a

6. c

7. b

8. b

9. b

**PREVENTING EXPOSURE TO BLOODBORNE PATHOGENS**  
**REVIEW QUIZ**

*The following questions are provided to determine how well you understand the information presented in this program.*

Name \_\_\_\_\_ Date \_\_\_\_\_

1. Bloodborne pathogens are \_\_\_\_\_.
  - a. Containers approved to carry blood or other body fluids
  - b. Protective equipment to prevent contact with blood
  - c. Microorganisms present in infected blood or other body fluids
2. Where can you find detailed information about the company's plan to control employee exposures to bloodborne pathogens?
  - a. The company's Exposure Control Plan
  - b. Encyclopedia
  - c. The Employee Handbook
3. Which of the following is **not** a route of entry for infected materials?
  - a. Ingestion
  - b. Incubation
  - c. Inhalation
  - d. Absorption
4. Workers with an occupational exposure to bloodborne pathogens are those workers who \_\_\_\_\_.
  - a. Have a co-worker with HIV
  - b. Can reasonably be expected to come in contact with or handle blood or other body fluids
  - c. Work with hazardous chemicals
5. Workers who are not classified as having occupational exposure may still come in contact with blood or body fluid through unexpected events.
  - a. True
  - b. False
6. What colors are approved biohazard containers?
  - a. They can range from light blue to dark blue
  - b. They must be bright yellow
  - c. They can range from orange-red to solid red.
  - d. They can be any color
7. Contaminated sharps objects such as needles or broken glass should be wrapped in a paper towel and placed in a standard biohazard bag.
  - a. True
  - b. False
8. When an injured co-worker is discovered, what is the best course of action to follow?
  - a. Assist the victim right away
  - b. Activate the company's emergency plan for reporting injuries
  - c. Sound the fire alarm to get an immediate response from emergency personnel
9. After contaminated work areas have been cleaned with soap and water, it is safe for workers to reenter the area.
  - a. True
  - b. False