


Bloodborne Pathogens

30th Annual Safety Forum
January 2017

Presented by
Ken Berryhill, Cedar Point



- OSHA's Bloodborne Pathogens standard prescribes safeguards to protect workers against the health hazards from exposure to blood and other potentially infectious materials, and to reduce their risk from this exposure

Introduction

- All employees who could be "reasonably anticipated" as the result of performing their job duties to face contact with blood and other potentially infectious materials
- "Good Samaritan" acts such as assisting a co-worker with a nosebleed would not be considered occupational exposure

Who is covered by the standard?

- EMT's, Paramedics, Registered Nurses, Firefighters
- Police/Security Officers
- Lifeguards
- Trained Responders
- Maintenance?
- Ride Operations?
- Restroom Attendants?

Some Workers Who Are at Risk

- Microorganisms that can be carried in human blood and body fluids that cause serious diseases.
- Can be transmitted with any exposure to blood or other potentially infectious material (OPIM).
- OPIM – bodily secretions such as feces, sputum, and possibly vomitus

What Are Bloodborne Pathogens?

- Most common: needlesticks
- Cuts from other contaminated sharps (scalpels, broken glass, etc.)
- Contact of mucous membranes (eyes, nose, mouth) or broken (cut or abraded) skin with contaminated blood

How does exposure occur?



- HIV – Human Immunodeficiency Virus
 - Less chance of infection, 0.3% from needlestick, does not survive outside of human body
- HBV – Hepatitis B Virus
 - Easily transmitted, survives outside of the body for up to 7 days, Vaccine available
- HCV – Hepatitis C Virus
 - No vaccine, survives outside of the body for up to 3 weeks at room temperature, diseases may show up 20-30 years after initial infection

Common Types of BBP

- Identifies jobs and tasks where occupational exposure to blood or other potentially infectious material occurs
- Describes how the employer will:
 - Use engineering and work practice controls
 - Ensure use of personal protective equipment
 - Provide training
 - Provide medical surveillance
 - Provide hepatitis B vaccinations
 - Use signs and labels

Exposure Control Plan

- Written plan required
- Plan must be reviewed at least annually to reflect changes in:
 - Tasks, procedures, or assignments which effect exposure
 - Technology that will eliminate or reduce exposure
- Annual review must document employer's consideration and implementation of safer medical devices
- Must solicit input from potentially exposed employees in the identification, evaluation and selection of engineering and work practice controls
- Plan must be accessible to employees

Exposure Control Plan

- Treat all human blood and certain body fluids as if they are infectious
- Must be observed in all situations where there is a potential for contact with blood or other potentially infectious materials

Universal Precautions

- These are the primary methods used to control the transmission of HBV and HIV
- When occupational exposure remains after engineering and work practice controls are put in place, personal protective equipment (PPE) must be used

Engineering and Work Practice Controls

- Sharps disposal containers
- Self-sheathing needles
- Safer medical devices
 - Needleless systems
 - Sharps with engineered sharps injury protections
- These controls reduce employee exposure by either removing the hazard or isolating the worker



Engineering Controls

- These controls reduce the likelihood of exposure by altering how a task is performed.
- Examples:
 - Wash hands after removing gloves and as soon as possible after exposure
 - Do not bend or break sharps
 - No food or smoking in work areas



Work Practice Controls

- Specialized clothing or equipment worn by an employee for protection against infectious materials
- Must be properly cleaned, laundered, repaired and disposed of at no cost to employees
- Must be removed when leaving area or upon contamination

Personal Protective Equipment

- Gloves (synthetic, leather)
- Gowns
- Face shields
- Eye protection
- Mouthpieces and resuscitation devices



Examples of PPE

- Must develop a written schedule for cleaning and decontamination at the work site based on the:
 - Location within the facility
 - Type of surface to be cleaned
 - Type of soil present
 - Tasks or procedures being performed

Housekeeping

- Work surfaces must be decontaminated with an appropriate disinfectant:
 - After completion of procedures
 - When surfaces are contaminated
 - At the end of the work shift
- Commercial disinfectant, or use a 1:10 bleach/water solution

Housekeeping (cont'd)

- Must be placed in closeable, leak-proof containers built to contain all contents during handling, storing, transporting or shipping and be appropriately labeled or color-coded



Regulated Waste

- Handle contaminated laundry as little as possible and use PPE
- Must be bagged or containerized at location where used
- No sorting or rinsing at location where used
- Must be placed and transported in labeled and color-coded containers



Laundry

- Must make available, free of charge at a reasonable time and place, to all employees at risk of exposure within 10 working days of initial assignment unless:
 - Employee has had the vaccine (national emphasis began in 1991)
 - Antibody testing reveals immunity
- The vaccination must be performed by a licensed healthcare professional



Hepatitis B Vaccination Requirements

- Must be provided even if employee initially declines but later decides to accept the vaccination
- Employees who decline the vaccination must sign a declaration form
- Employees are not required to participate in antibody screening program to receive vaccination series
- Vaccination booster doses must be provided if recommended by the U.S. Public Health Service

Hepatitis B Vaccination Requirements (cont'd)

- Wash exposed area with soap and water
- Flush splashes to nose, mouth, or skin with water
- Irrigate eyes with water or saline
- Report the exposure
- Direct the worker to a healthcare professional

What to do if an exposure occurs?

- Document routes of exposure and how exposure occurred
- Record injuries from contaminated sharps in a sharps injury log, if required
- Obtain consent from the source individual and the exposed employee and test blood as soon as possible after the exposure incident
- Provide risk counseling and offer post-exposure protective treatment for disease when medically indicated in accordance with current U.S. Public Health Service guidelines
- Provide written opinion of findings to employer and copy to employee within 15 days of the evaluation.

Post-Exposure Follow-Up

- Warning labels required on:
 - Containers of regulated waste
 - Refrigerators and freezers containing blood and other potentially infectious materials
 - Other containers used to store, transport, or ship blood or other potentially infectious materials
- Red bags or containers may be substituted for labels

Biohazard Warning Labels



- Provide at no cost to employees during working hours
- Provide at time of initial assignment to a job with occupational exposure and at least annually thereafter
- Additional training needed when existing tasks are modified or new tasks are required which affect the worker's occupational exposure
- Maintain training records for 3 years

Training Requirements

- Copy of the standard
- Modes of transmission
- Site-specific exposure control plan
- Hazard recognition
- Use of engineering controls, work practices and PPE
- Live question and answer sessions

Training Elements

- Employee's name and social security number
- Employee's Hepatitis B vaccination status
- Results of examinations, medical testing, and post-exposure evaluation and follow-up procedures
- Health care professional's written opinion
- Information provided to the health care professional
- Employee medical records must be kept confidential and not disclosed or reported without the employee's written consent (unless required by law)
- Medical records must be maintained for duration of employment plus 30 years according to OSHA's rule governing access to employee exposure and medical records

Medical Recordkeeping Requirements

- Employers must maintain a sharps injury log for the recording of injuries from contaminated sharps
- The log must be maintained in a way that ensures employee privacy and must contain, at a minimum:
 - Type and brand of device involved in the incident
 - Location of the incident
 - Description of the incident

Sharps Injury Log

- OSHA's Bloodborne Pathogens standard prescribes safeguards to protect workers against the health hazards from exposure to blood and other potentially infectious materials, and to reduce their risk from this exposure
- Implementation of this standard not only will prevent Hepatitis B cases, but also will significantly reduce the risk of workers contracting AIDS, Hepatitis C, or other bloodborne diseases

Summary
