Bloodborne Pathogens

Adapted from
Occupational Safety and Health Course for Healthcare Professionals

https://www.youtube.com/watch?v=7huPHJtsLV8
Objectives

- Define bloodborne pathogens.
- Recognize OSHA standards related to bloodborne pathogens.
- Identify employer responsibilities related to compliance with OSHA standards.
Definition

Bloodborne Pathogens

Pathogenic microorganisms that are present in human blood or other potentially infectious materials and can cause disease in humans.

Pathogens include but are not limited to:
- Hepatitis B
- HIV – human immunodeficiency virus
OSHA Standard

- 29 CFR 1910.1030, Occupational Exposure to Bloodborne Pathogens
- Published December 1991
- Effective March 1992

Scope
  - ALL occupational exposure to blood and other potentially infectious material (OPIM).
Why the concern?

OSHA estimates 5.6 million workers in health care and other facilities are at risk of exposure to bloodborne pathogens such as human immunodeficiency (HIV) and hepatitis B (HBV).
What would you do?
and what would other employees do?

- Employee falls, sustains cut to scalp – fair amount of bleeding.
…reasonably anticipated skin, eye, mucous membrane, or parenteral contact with blood or other potentially infectious materials that may result from the performance of an employee’s duties.

Duties may include:
- Direct Patient Care
- Phlebotomy/Laboratory
- Environmental Services
- Waste Management
- Other?
Exposure Control Plan: Key Components

- **Exposure Determination**
  - all job classifications in which all employees in those job classifications have occupational exposure.
  - job classifications in which some employees have occupational exposure.
  - all tasks and procedures...in which occupational exposure occurs and that are performed by the above listed employees.
Exposure Control Plan

- The schedule and method of implementation for:
  - Methods of compliance.
  - Hepatitis B vaccination and post-exposure evaluation and follow-up for any exposure.
  - Communication of hazards to employees.
  - Recordkeeping.
Exposure Control Plan

- The procedure for the evaluation of circumstances surrounding exposure incidents:
  - Immediate availability for exposed employees to confidential medical evaluation and follow-up.
  - Documentation of the route(s) of exposure, and the circumstances under which the exposure incident occurred.
Methods of Compliance

- Standard (universal) Precautions
  - ...shall be observed to prevent contact with blood or other potentially infectious materials.
  - ...all body fluids shall be considered potentially infectious materials.
Engineering & work practice controls

Purpose - to eliminate or minimize employee exposure:
- Readily accessible hand washing facilities.
- Contaminated sharps management.
- Keeping food and drink out of the work area.
- Procedures involving blood handling.
- Transport of specimens.
- Contaminated equipment.

- CFR 1910.1030 (d)(2)
Hand Hygiene

- Teaching appropriate technique, make no assumptions!
- Availability of materials.
- Reinforcing and reminding.
- Monitoring.
Hand Hygiene is a Continuing Challenge

- Provide alcohol-based hand cleansers in multiple locations.
- Monitor use by volume replacement and observation.
- When they should be used: if hands are not visibly dirty, if soap and water are not available.
- Frequent use is recommended, good amount, rubbing into all surfaces of hands until dry.
- Washing with soap and water: careful technique, 20-30 seconds, if hands are dirty, and after direct contact with potentially infectious material, after toileting, and when caring for a patient with a C. Difficile infection.
Resources Available

- Posters, fact sheets….OSHA, CDC, NIOSH
- Reminders are helpful!
- Let’s take on the Challenge!
Personal Protective Equipment

- Shall be used where exposure remains after institution of engineering and work practice controls.
- Employer shall provide appropriate PPE at no cost to employee.
- May include: gloves, gowns, laboratory coats, face shields or masks, eye protection, mouthpieces, resuscitation bags, pocket masks, or other ventilation devices.
PPE

- Use
- Accessibility
- Cleaning, laundering, and disposal
- Repair and replacement
- Garment penetration
- PPE removal prior to leaving work area
Housekeeping/Environmental Services

- Worksite maintained in clean and sanitary condition.
- Cleaning and decontamination of items.
- Safe disposal.
Regulated Waste

Contaminated sharps discarding and containment:
- Approved sharp containers
  - Easily accessible
  - Upright
  - Not allowed to overfill
- Container removal
  - Close immediately prior to removal
  - Place in secondary container if leakage is possible
- Reusable containers
  - Not opened, emptied, or cleaned manually
Regulated waste

- Other regulated waste containment:
  - Closeable, constructed to contain all contents, labeled or color-coded, closed prior to removal.
  - If outside contamination of the container occurs, it shall be placed in a second container.

- Disposal of all regulated waste shall be in accordance with applicable regulations.
Contaminated Sharps

- Public Law 106-430
- “Needlestick Safety and Prevention Act”

- Why? In 2000, it was estimated that over 300,000 percutaneous injuries would occur involving contaminated sharps.
Needlestick Safety

- Requires that organizations use safer medical devices with injury protection or needleless systems.
- Need to reflect the changes in technology that can eliminate or reduce exposure to blood borne pathogens.
- Must document annually the consideration and implementation of safer devices.
Needlestick Safety

- Must maintain a Sharps Injury Log.
- List for each incident the type and brand of device involved, department/work area, and how the incident happened.
- Must “solicit input” from non-managerial staff in the identification, evaluation, and selection of effective engineering and work practice controls and shall document this input process in the Exposure Control Plan.
Sharps Safety begins with you.

BE PREPARED. Anticipate injury risks. Prepare the patient and organize the work area with prevention in mind.

BE AWARE. Keep exposed sharps in view and under your control. Visually inspect for unprotected sharps in trays, beds and waste receptacles.

DISPOSE WITH CARE. Be responsible for the sharps you use. Activate safety features. Dispose in sharps containers.

www.cdc.gov/sharpsafety
Contaminated laundry

- Shall be handled as little as possible:
  - Bagged or containerized at the location where it was used.
  - Containers labeled or color-coded.
  - Leak proof bags or containers.
- Employer **shall ensure** that employees who have contact with contaminated laundry wear protective gloves and other appropriate PPE.
- Shipping to an off-site facility.
The employer **shall** make available the Hep B vaccine & appropriate medication…to **all** employees who have occupational exposure.

- Post-exposure evaluation & follow-up care to **all** employees who have had an exposure incident:
  - No cost to the employee
  - At a reasonable time
  - Licensed physician or healthcare professional
  - According to recommendations of the US Public Health Service
  - All lab tests are conducted by an accredited lab at no cost to employee.
Post-exposure evaluation and follow-up

- Documentation of the route(s) of exposure.
- Identification and documentation of the source individual.
- Collection and testing of blood for HBV and HIV.
- Post-exposure prophylaxis and care.
- Counseling.
- Evaluation of reported illnesses.
Communication of Hazards to Employees

Labels and Signs

Information and Education

• At the time of initial assignment
• At least annually
• When changes occur
• Content and vocabulary appropriate to educational level, literacy, and language of employees.
Information & Education

- Provided to all employees who may be at risk for exposure.
- At no cost.
- Minimum requirements
  - CFR 1910.1030 (g)(2)(vii) lists all training program requirements.
Recordkeeping

- Medical Records
  - Shall be maintained for duration of employment plus 30 years.

- Training Records
  - Shall be maintained for 3 years from the date of training.
Why do we not have 100% compliance?

- Lack of training
- Busy, hectic, rushing
- Decreased awareness of hazards
- “won’t happen to me….”
In Summary

- Definition and scope.
- OSHA standards relating to Bloodborne Pathogens.
- Employer responsibilities.

Think Safety
Not Just Compliance!