Bloodborne Pathogens Training
for University of Rochester Off-site Locations
Bloodborne Pathogens Training
Requirements

Bloodborne Pathogens training must be

- Conducted at least annually
  - Or whenever changes in equipment or practices occur

- Presented by a qualified trainer
  - Healthcare professional such as IC practioner, nurse practioner, RN, P.A., EMT or in dental or physicians’ offices, the individual employer may conduct the training provided he or she is familiar with the subject matter

- Include an opportunity for interactive questions & answers
BBP training requires coverage of 11 topics:

2. Epidemiology & symptoms of bloodborne diseases
3. Transmission of bloodborne pathogens
4. Recognizing potential exposure risks
5. Methods to reduce or prevent exposure
6. Site-specific personal protective equipment
7. Employer’s Exposure Control Plan
8. Hepatitis B vaccine
9. Emergencies involving blood or body fluids
10. Post Exposure Evaluation & Follow up
11. Recordkeeping
1. The Bloodborne Pathogens Standard

• Promulgated by OSHA in 1991
  – Purpose: to protect all workers who may come into contact with human blood or body fluids as a routine part of their job

• Revised in 2001
  – New requirements for employers to maintain a Sharps Injury Log and provide employees with safety needles

• 29 CFR 1910.1030
  – Full text & additional information can be found on the OSHA website at: www.osha.gov
2. Epidemiology & symptoms of bloodborne diseases: general explanation

- Bloodborne pathogens are viruses or infectious agents carried by human blood and body fluids.
  - They can enter our bodies and cause disease and immune deficiencies, which can sometimes lead to death.

- HIV, HBV, HCV
3. Transmission of Bloodborne Pathogens

- **Blood & Body Fluids**
  - from accidents, illnesses, medical procedures, research samples and handling medical waste
- **Disease Transmission**
  - through cuts, punctures, contact with broken skin, contact with mucous membranes

**BBP Prevalence:**

<table>
<thead>
<tr>
<th>Bloodborne Pathogen</th>
<th>Prevalence</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B</td>
<td>1 in 20 people</td>
<td>Vaccine available, but no cure</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>1 in 50 people</td>
<td>No Vaccine, No Cure</td>
</tr>
<tr>
<td>HIV</td>
<td>1 in 1,000 people</td>
<td>No Vaccine, No Cure</td>
</tr>
</tbody>
</table>

Source: Centers for Disease Control and Prevention and Monroe County Health Dept.
3. Transmission of Bloodborne Pathogens

Direct Transmission

• Cut/Puncture (needlestick, broken glass)
• Splash onto open sore (broken skin) or mucous membrane (eyes, nose, mouth)
3. Transmission of Bloodborne Pathogens

Indirect Transmission

- Touching a contaminated surface and transferring the infectious material to your eyes, mouth or an open sore
- Documented for HBV

It is possible for the Hepatitis B virus to survive in dried blood on a contaminated surface for over a week.
4. Recognizing Potential Exposure Risks

Discuss site-specific exposure risks

Examples may include:

• Patient care / Patient contact
• Cleaning or working with contaminated equipment or instruments
• Cleaning contaminated surfaces
5. Methods to Reduce or Prevent Exposure: Work Practice Controls

• Wash hands frequently, and never eat, drink or handle contact lenses where exposures could occur
  – Why?
  To avoid indirect exposure!
5. Methods to Reduce or Prevent Exposure: Work Practice Controls

Practice

Universal Precautions

Treat the blood & body fluids of all people as though they are potentially infectious
5. Methods to Reduce or Prevent Exposure: Work Practice Controls

**DO NOT** recap or manipulate (bend, break, shear) used needles

If re-capping is **absolutely** required, use one-handed scoop technique:

1. Place needle cap on table
2. Holding the syringe only, guide needle into cap
3. Lift up syringe so cap is sitting on needle hub
4. Secure needle cap into place
5. Methods to Reduce or Prevent Exposure: Engineering Controls:

Safety Sharps

• OSHA Requires:
  – Use of safety devices
  – Employee involvement in the selection of safety sharps
  – SMH employees evaluate & select safety sharps through the Blood Exposure Reduction Committee (BERC)
    • The list of safety sharps approved by BERC & in use at SMH is located in Appendix VIII of the SMH Exposure Control plan at: http://www.safety.rochester.edu/ih/bbpplan-6.html#appendix8
  – Additional information on needlestick prevention
    • OSHA’s website at: http://www.osha.gov/SLTC/bloodbornepathogens/solutions.html
5. Methods to Reduce or Prevent Exposure: Engineering Controls:

Safety Sharps

What are safety sharps?

– sharps with engineered sharps injury protections, a built-in safety feature or mechanism that effectively reduces the risk of an exposure incident, and

– needless systems for the collection of bodily fluids after initial venous or arterial access is established.

Sample safety sharp in use at SMH: BD Insyte Autoguard IV Catheter
5. Methods to Reduce or Prevent Exposure: Engineering Controls:

Safety Sharps

More Examples of Safety Sharps in use at Strong:

Safety Butterfly
BD Safety Glide Needle
Safety Lancet
5. Methods to Reduce or Prevent Exposure: Engineering Controls: Sharps Safety

Safe Handling of Sharps:

- Minimize distraction, always maintain focus on task
- Keep fingers/hands away from point
- Always engage the safety immediately after use!
5. Methods to Reduce or Prevent Exposure: Engineering Controls: Sharps Containers

Protect the people who handle your trash. Always dispose of contaminated sharps in Sharps Containers.
5. Methods to Reduce or Prevent Exposure: Signs, Labels & Color-coding

- Discuss site-specific signs, labels & color-coding
  - Biohazards
  - Medical waste
5. Methods to Reduce or Prevent Exposure: Personal Protective Equipment

- Personal Protective Equipment
  - Gloves, shoe covers, face protection
- Change compromised PPE immediately
  - Gloves with tears or holes will not protect you
- Wear double gloves for maximum protection
6. Site-specific Personal Protective Equipment

Discuss the following site-specific practices & procedures

- Selection of appropriate PPE
  - Discuss job tasks performed at your location – what types of PPE are necessary?
    - Gloves
    - Face shields, masks, safety goggles for splash protection*
- Types of PPE available at your location
  - Including latex-free alternatives
- Location(s) of PPE
- Handling & Removal of PPE
- Decontamination of PPE
- Disposal of PPE

*ALL blood exposures caused by splashes are preventable if you consistently wear appropriate PPE
7. Employer’s Exposure Control Plan

- Bloodborne Pathogens Exposure Control Plan Guidelines for UR Off-Site Locations can be found at:

  http://www.safety.rochester.edu/ih/bbpoffsiteindex.html

- Utilize template to create site-specific Exposure Control Plan
8. Hepatitis B Vaccine

- The Hepatitis B Vaccine must be offered to all employees covered by the site’s Exposure Control Plan.
  - At no cost to the employee
  - If an employee declines vaccination, document using the *Hepatitis B Declination form* provided in Appendix IV of the BLOODBORNE PATHOGENS EXPOSURE CONTROL PLAN GUIDELINES FOR OFF-SITE LOCATIONS located at http://www.safety.rochester.edu/ih/bbpoffsiteindex.html

- The vaccine is effective, safe & highly recommended for all employees who come into contact with blood or body fluids.
9. Emergencies Involving Blood or Body Fluids

• Discuss on-site policy concerning the appropriate actions to take and persons to contact in an emergency involving blood or other potentially infectious materials.
  – Emergency Contact List
  – Location of Personal Protective Equipment
  – Procedure for Spill Clean Up
    • Location of spill clean up supplies
9. Blood Spill Clean Up

- Wear PPE!
- Cover with paper towels to prevent splashing
- Pour 10% bleach solution over all
- Never use your hands to remove sharps
- Dispose of clean up materials in Medical Waste

- **Intact skin:**
  - wash with soap & water

- **Needlestick, cut or non-intact skin:**
  - wash with chlorhexadine soap & water
  - or wash with soap & water, then pour 3% Hydrogen Peroxide over exposed area.

- **Mouth:**
  - Spit. Rinse mouth with 3% hydrogen peroxide.

- **Eyes:**
  - Remove contact lenses. Rinse eyes with tap water or saline.

- **All blood exposures must be reported**
  -- Discuss site specific method for reporting
10. Post Exposure Evaluation & Follow Up

The Bloodborne Pathogens Standard requires the employer to make immediately available a confidential medical evaluation & follow-up to an employee reporting an exposure.

The current CDC recommendations for HBV, HIV and HCV are found in the Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV and HIV and Recommendations for Postexposure Prophylaxis.

Access the CDC recommendations and other valuable information at: http://www.cdc.gov/niosh/topics/bbp/#treatment
10. Post Exposure Evaluation & Follow Up

Strong Health Affiliates
(Article 28 locations, UR Medical Faculty Groups, Primary Care Practices)

– Access to exposure evaluation & follow up through Strong varies according to type of affiliation, advice is always available.

– Contact the Blood Exposure Hotline at University Health Services for more information.

Blood Exposure Hotline:
275-1164
Recordkeeping

• All percutaneous injuries from contaminated sharps must be recorded on:
  – OSHA 300 Log
  – Sharps Injury Log
    • Type & brand of device involved in incident
    • Department or work area where exposure incident occurred
    • Explanation of how the incident occurred
  – If you file form SMH115 (employee incident form) for sharsps injuries, your records are maintained through Strong.

Employee confidentiality must be protected at all times
Questions?

Environmental Health & Safety: 275-3241
UHS: 275-1164
Infection Control: 275-7716
www.osha.gov
www.cdc.gov