Bloodborne Pathogens, Asbestos, Chemical and Lab Safety

Department of Environmental Health and Safety

412-624-9505
www.ehs.pitt.edu
What are Bloodborne Pathogens?

- **Microorganisms present in blood or body fluids that can cause disease in humans**
- **Examples:**
  - HIV
  - Hepatitis B
  - Hepatitis C
Body Entry Routes

How can you be exposed...

Through the skin

- Puncture wounds (needle sticks, sharps injuries)
- Damaged skin (cuts or dermatitis)

Mucous membranes

- Splashes into eyes, nose, and mouth
Prevention of BBP Diseases

Exposure Control Plan and many other resources
Universal Precautions

...also known as “Standard Precautions”...

Treat all human blood, body substances, and other potentially infectious material as if they were infectious for HIV, hepatitis or other bloodborne pathogens.
Hepatitis B Vaccination

- NO COST to the employee
- No live virus injected – safe vaccine
- Now recommended for newborns and children
- Employee MUST sign Declination Form
- No current recommendation for booster
Three shot HBV Series

• Three shot series; 2nd shot one month after the first; 3rd shot 6 months later
• If pregnant now or within 6 months ask your doctor about getting HBV vaccination
• HBV immunity effective for 97% receiving three shot series
• If you have not received all 3 shots, contact Employee Health at 412-647-3695 for instructions
Hepatitis B Vaccination

- If you wish to receive the vaccination series, go to:
  
  **Employee Health**

  3708 Fifth Avenue

  Medical Arts Building, Suite 500.59

  Normal Work Hours 7:30 AM – 4:00 PM Monday – Friday

- Appointment not necessary, proper ID required
Engineering Controls — Eliminate or reduce exposure through the use of engineered machinery or equipment
Puncture-resistant sharps containers
Eye and hand wash stations

Hand washing is a valuable tool in preventing infection
Personal Protective Equipment (PPE)

- Provided by employer at no cost to employees
- Must be specifically selected for tasks performed:
  - Appropriate gloves
  - Eye protection / face shields
  - Surgical masks
  - Protective coveralls / lab coats
Rules of PPE Usage

- Remove PPE:
  - If integrity compromised
  - If contaminated
  - When task complete
  - Before leaving laboratory space
  - Before entering public areas

- Properly dispose of used PPE

- Wash hands after removing PPE
Spill Clean-up

- Spill clean-up kits are available, notify your supervisor when you need one.
- Isolate the area
- Wear personal protective equipment (PPE)
  - Latex or nitrile gloves
  - Face protection (safety glasses and surgical mask)
- Cover the spill with paper towels
Spill Clean-up

- Pour disinfectant over covered spill
- Allow adequate contact time (15-20 min)
Spill Clean-up

- Remove absorbent and dispose as bio-waste
  - If broken glass or sharp objects are present, use shovel or tongs to dispose

- Remove gloves and dispose of as biological waste

- Wash hands thoroughly

- Dispose of red bag through supervisor
Accident Treatment and Reporting

Report for Treatment
For Bloodborne Pathogen Injuries:

- **Employee Health Clinic (5th Floor, Medical Arts Building)**
  - Normal work hours 7:30AM-4:00PM M – F
  - Phone – (412) 647-3695

- **Presbyterian University Hospital Emergency Room**
  - After work hours or on weekends for medical emergencies
  - Phone – (412) 647-3333
ASBESTOS AWARENESS

★ Health Risks
★ Presumed Asbestos Containing Materials (PACM)- Insulation or surfacing material containing >1% asbestos (found in buildings constructed before 1980)
★ Friable vs. Non-Friable
★ Asbestos locations
★ Operations And Maintenance Program
★ If you find damaged material that you suspect may be asbestos, notify your supervisor.
Special Cleaning Practices

Do not dust, dry sweep or use compressed air on suspected ACM.
Do not buff floors at high speeds (>300rpm)
Do not use ordinary vacuum to clean up asbestos debris. Special HEPA filter vacuums must be used
Stripping of finishes shall be conducted using low abrasion pads at speeds lower that 300 rpm and wet methods.
Burnishing or dry buffing may be performed only on asbestos-containing flooring which has sufficient finish so that the pad does not contact the tile
Cleaning Labs
What kinds of labs are at Pitt?

- **Biomedical labs:**
  - School of Medicine (BST3, Biotech, McGowan, Bridgeside Point, BST E/W/S, Scaife, Victoria)
  - Life Sciences (Crawford-Langley-Clapp)
  - Graduate School of Public Health (Parran, Crabtree)

- **Chemistry labs:** Chevron

- **Mixed labs:** Benedum, OEH, Allen, Thaw

- **Others:** 3343, PSB, Trees, Posvar, NPL, SRCC, Eberly
  - (chemicals, lasers, animals, human subjects)
Biosafety Hazard Classification System

Biosafety Level:

- **BSL-1**: Won’t hurt most people.
- **BSL-2**: Bloodborne pathogens, could hurt you, but moderate disease, some treatments
- **BSL-2+**: BSL-2 lab with enhanced practices.
- **BSL-3**: Spread through air, will hurt you, moderate/serious disease, some treatments
- **BSL-4**: Not at Pitt.
Lab workers are supposed to clean up all spills immediately. If you find or create a spill in a lab – call the Pitt Police.
Glass and Sharps Disposal
Glass Disposal

- Non-infectious glass is disposed in broken glass boxes
- Infectious glass must be disinfected before disposal.
- Some workers dispose of infected glass in Sharps disposal containers
- Workers are told not to dispose of Sharps like needles and scalpels in glass boxes
- All sharps into sharps containers, boxed, moved to biowaste by lab personnel.
Improper disposal of glass / sharps

- **What do you do?**
  - Do not touch it; leave it where it is
  - Notify your supervisor
  - Leave a note for the lab workers identifying the problem
  - If possible, take a picture and send it to us.

QUESTIONS ????