

# BIOHAZARD

# DECONTAMINATION

PHHS Pathology



# Objectives

At the completion of this module, the participant should be able to correctly:

- Explain proper procedure in the decontamination of laboratory surfaces/equipment, including centrifuges and the pneumatic tube system
- Follow the 8 steps for disinfecting a blood/fluid spill
- Discuss which activities require shipping certification

# Decontamination



- Decontamination is the removal or neutralization of toxic agents or the use of physical or chemical means to remove, inactivate, or destroy living organisms.
- Decontamination is the **responsibility of all laboratory workers.**
- Failure to decontaminate can result in exposure to infectious agents which can cause great illness.
- Most decontamination can be done by chemicals - disinfection.

# Decontamination of Surfaces/Equipment

- Decontaminate all laboratory work areas with an appropriate disinfectant after a spill of blood or body fluids and when work activities are completed.
- Lab countertops should be disinfected once per shift and always after a spill.
- The Hospital Infection Control Committee selects and approves all disinfectants used anywhere in PHHS.



# Decontamination of Centrifuge

If spill occurs, report to your supervisor and use appropriate decontamination and cleanup procedures



For general purposes, when tube breakage occurs:

- Remove broken glass with tongs or forceps
- Absorb spilled sample with gauze
- Clean equipment with hospital disinfectant and allow to air dry before reuse

# Decontamination of Pneumatic Tube System

When specimen leakage occurs:

- Absorb spilled specimen with gauze
- Clean inside and outside carrier with 10% bleach
  - Allow to air-dry before reuse
- If broken glass is present, remove with tongs or forceps

If spill was sufficient to contaminate the tube system, call Engineering at 22000



**NOTICE**

**CLEAN UP SPILLS  
IMMEDIATELY**

# Blood/Body Fluid Spills

Follow these steps to clean up and disinfect contaminated surfaces after a spill:

1. **Don PPE** – gloves, gown, safety glasses, etc.
2. Do not remove any glass or other sharp objects with your hands. Rigid cardboard or dustpans may be used to handle such objects.
3. **Absorb** spills with disposable, absorbent materials such as paper towels or gauze pads.
4. **Clean** all visibly spilled material using a detergent or disinfectant. **10% bleach** is used in the laboratories to disinfect non-metallic surfaces.

# Blood/Body Fluid Spills



5. Flood the spill site or wipe down the spill site with disposable towels soaked in **disinfectant**.

6. **Wipe** off the spill site with a clean dry paper towel or gauze pad and **allow to air dry**. Follow manufacturer's recommendations.

7. Place contaminated gloves and paper towels in a plastic biohazard bag and **dispose** according to laboratory protocol.

8. **Remove gloves and wash hands** when cleanup is completed.

**Remember to report the incident to your supervisor.**



# Biohazardous Waste Disposal

- Body fluids and contaminated items shall be discarded into red biohazard bags if they:



Puddle or Pool	Items soaked or dripping with blood/body fluids or containing liquids that are likely to collect in a puddle or pool in the bottom of a bag.
Cake or Flake	Items that appear as thick pieces or large layers of dried blood or body fluids.
Ooze Under Pressure	Items that are likely to pool or puddle with the weight of many bags or boxes on top during transport

# Shipping Biohazardous Materials

Shipping lab samples by ground or air transport requires additional training and certification.

- What activities require shipping certification?
  - Mailing newborn screening cards to TDH
  - Preparing samples to be collected by reference lab courier
  - Packaging lab samples for shipment by FedEx or Airborne Express
  - Shipment of packages containing dry ice



# Shipping Biohazardous Materials

- Certified Shipper training is:
  - Specific to the assigned task
  - Valid for 2 years
  - Assigned by your supervisor if your job requires you to ship regulated materials
- Certified shippers will know how to:
  - Classify
  - Identify
  - Package
  - Label and Mark
  - Document



# Laboratory Safety Manual

- A comprehensive Laboratory Safety Manual is available in each lab division. This manual contains current information on all aspects of lab safety.
- All Pathology employees are required to read and sign the Laboratory Safety Manual annually. Contact your lab's Safety Officer or Manager for more information.

