

# **Biosafety Awareness (Non-User)**



# Definition of Biosafety

- The development and implementation of administrative policies, work practices, facility design, and safety equipment to prevent transmission of biologic agents to workers, other persons, and the environment.

# Biosafety Principle

- The primary principle of biological safety (i.e., biosafety) is containment. The term containment refers to a series of safe methods for managing infectious agents in the laboratory. The purpose of containment is to reduce or eliminate human and environmental exposure to potentially harmful agents.

# Why biosafety practices?

## ➤ To protect:

- Faculty
- Staff (Researchers, Custodial, Maintenance, etc.)
- Students
- Visitors
- Environment

# Who needs biosafety training?

- Texas State faculty, staff, students or other individuals who work with or have access to biohazardous materials -

Materials of biological origin that have the capacity to produce deleterious effects on humans or animals.

# Signage and Postings

- The universal biohazard symbol



# Warning Signs



# Waste Containers



- Bags



- Boxes



- Sharps Containers

# Biosafety Levels

- The CDC-NIH has established four biosafety levels.
- The least restrictive level (BSL-1) to the most restrictive level (BSL-4)

# Biosafety Levels (BSL)

- BSL-1
  - Not known to cause disease in healthy adults
- BSL-2
  - Associated with mild to moderate disease in humans
- BSL-3
  - Associated with serious or potentially lethal disease to humans
- BSL-4
  - Associated with high risk of life-threatening disease in humans

(BSL-I and BSL-II are currently being used at Texas State)

# Universal Precautions

- Laboratories sometimes handle specimens that may contain infectious agents. To minimize exposure, observe **universal precautions** when handling any biological specimen. This means that you consider all specimens and fluids to be infectious and protect yourself by wearing the appropriate personal protective equipment, i.e., gloves, eye protection, lab coat, etc.

# Where can I find out more about biosafety?

- All information available on biosafety is available through the Risk Management & Safety Office at 245-3616.
- If you plan to work with biohazardous materials, you must receive training in advance on safety precautions and potential hazards from your supervisor.