



# UNC BIOBEHAVIORAL LAB

at the School of Nursing



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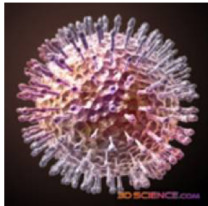
*Environmental Health and Safety Training*

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# Environmental Health and Safety

## Risks of working with microorganisms

- Exposure & infection of researchers and staff
- Contamination of the environment
- Invalidation of experiments/contamination of lab stocks



## EHS policies and procedures aim to

- Ensure the well-being of residents and visitors
- Respect the local environment
- Comply with all environmental health and safety requirements

# Researcher Biosafety

## Routes of Exposure

- Injection/splash to non-intact skin
- Mucous membranes (eyes, nose, mouth)
- Inhalation
- Ingestion



## Biosafety based on containment

- Use of well-characterized organisms
- Not known to cause disease in healthy adult humans
- Minimal potential hazard to people and the environment

**BL1**

# Researcher Biosafety (con't)

## Personal Protective Equipment

- Closed-toe shoes
- Full-length pants
- Safety glasses
- Lab coat
- Nitrile gloves



## Standard BL1 Procedures

### DO:

- Wear PPE
- Use mechanical pipetting devices
- Confine long hair, jewelry and loose clothing
- **Wash your hands before leaving the lab!**

### DON'T

- Eat, drink or apply cosmetics in the lab
- Talk on your cell phone in the lab
- Smoke in the lab or w/in 25 ft of the bldg.

# Biosafety Incidents

## Avoiding Cross Contamination

- Do not touch door handles or public surfaces (e.g. phones) while wearing gloves
- Do not reuse gloves
- Do not wear lab coats out of the lab
- Again: Wash your hands
  - After handling materials
  - After removing gloves
  - Before leaving the lab

## Incident Reporting

All injuries and major spills that occur must be documented in an Incident Report, so please tell your instructor

If necessary, a confidential medical evaluation and follow-up will immediately be made available

# Environmental Safety

## Types of Biohazardous Waste

- Liquid (e.g. media, cultures)
  - Leave on your bench to be decontaminated with bleach by your instructor at end of day
- Solids (e.g. gloves, tips, agar plates)
  - Discard temporarily into plastic lined containers on your bench
  - End of day, transfer to biomed waste at end of day
- Sharps (e.g. broken glass)
  - Tell PI
  - Use biosharps bin

## Lab Sink Disposal

- Allowed
  - Bleached liquid biological waste
  - Water and soap from hand washing
- Prohibited
  - Chemicals
  - Kit solutions that cannot be discharged into the wastewater system must be collected as chemical waste.

# What to do in an Emergency

## Hazardous Material Spill

Do not attempt to clean-up hazardous material spills

Spills into your eyes:

- Flush eyes in the eyewash for 15 minutes

Spills onto you

- Remove any contaminated clothing
- Rinse off in the safety shower for least 15 minutes

## Fire and Medical

For Medical Emergencies

- Report to your instructor
- **Dial 911** to report the emergency
- DO NOT move the victim

For Fire Emergencies

- Activate the nearest fire alarm
- **Dial 911** to report the emergency