



# The Universities AT SHADY GROVE

9636 Gudelsky Drive, Rockville, MD 20850 | shadygrove.umd.edu

## Laboratory Safety Orientation Guidance

Laboratory instructors are responsible for ensuring that all personnel who will work in their lab have the knowledge and training to work safely. USG EHS is providing the guidance below on new laboratory member/student safety orientations to establish initial orientation efforts to achieve this goal specific to the resources available in USG labs. This guidance is directed at introducing new lab members to facilities, equipment, resources, and lab-specific safety procedures. After completing orientations, lab personnel should be able to:

- Know the specific safety rules and procedures of the laboratory.
- Recognize the hazards that are present in the laboratory.
- Know how to use the various controls specific to the hazards they will be working with.
- Know where to find safety information.
- Know how to respond to emergencies and incidents.
- Know the hazardous waste streams generated in the laboratory and how they are handled.
- Understand the training requirements for working in the laboratory.

### Identification of Hazards

1. Discuss the types of hazards present in the lab and where they are found:

- |   |  |
|---|--|
| <input type="checkbox"/> Chemical                       | <input type="checkbox"/> Ultraviolet light       |
| <input type="checkbox"/> Acutely toxic material(s)      | <input type="checkbox"/> Electrical/high voltage |
| <input type="checkbox"/> Carcinogenic material(s)       | <input type="checkbox"/> Vacuum/pressure         |
| <input type="checkbox"/> Reproductive toxin material(s) | <input type="checkbox"/> High temperature        |
| <input type="checkbox"/> Biological – BSL1 and BSL2     | <input type="checkbox"/> Other _____             |
| <input type="checkbox"/> Lasers                         | <input type="checkbox"/> Other _____             |
| <input type="checkbox"/> Compressed gases               | <input type="checkbox"/> Other _____             |

### Control of Hazards

1. Identify and review the location of engineering controls and demonstrate proper use:

- |  |                                      |
|--|--------------------------------------|
| <input type="checkbox"/> Chemical fume hood        | <input type="checkbox"/> Snorkel     |
| <input type="checkbox"/> Biological safety cabinet | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Storage cabinets          | <input type="checkbox"/> Other _____ |
| <input type="checkbox"/> Shielding                 | <input type="checkbox"/> Other _____ |

2. Identify and review the required personal protective equipment, when it is required and where it is located:

**Protective Clothing**

- \_\_\_ Appropriate lab attire
- \_\_\_ Lab coat

**Eye and Face Protection**

- \_\_\_ Safety glasses/splash goggles
- \_\_\_ Face shield

**Gloves**

- \_\_\_ Disposable (nitrile, latex)
- \_\_\_ Specific (chemical resistant, autoclave, cryogen, cut resistant)

**Other**

- \_\_\_ Other \_\_\_\_\_
- \_\_\_ Other \_\_\_\_\_
- \_\_\_ Other \_\_\_\_\_

**Signage, Plans, Procedures, and Safety Materials**

1. Identify the location of:

- |                                     |   |
|-------------------------------------|---|
| ___ Hazard/restriction door signage | ___ Equipment manuals                         |
| ___ Chemical Hygiene Plan           | ___ MSDS/SDS (paper copies, online resources) |
| ___ Biosafety Manual – BSL2 labs    | ___ Other _____                               |
| ___ Standard operating procedures   | ___ Other _____                               |

2. Review laboratory safety documents, rules and procedures:

- \_\_\_ Requirements for prior approval for hazardous materials or experimental procedures
- \_\_\_ How to report safety concerns
- \_\_\_ Other \_\_\_\_\_
- \_\_\_ Other \_\_\_\_\_

**Emergency Procedures and Incident Reporting**

1. \_\_\_ Review the location of the Emergency Procedures Poster and how to report an emergency.
2. \_\_\_ Review how to report an incident (Instructor, and [Report a Concern Button](#))
3. Walk through the lab and identify the location and discuss the usage of:

- |                                  |  |
|----------------------------------|--|
| ___ Emergency shower and eyewash | ___ First aid kit                          |
| ___ Fire alarm pull station      | ___ Primary and secondary routes of egress |
| ___ Fire extinguisher            | ___ Other _____                            |
| ___ Chemical spill kit           | ___ Other _____                            |
| ___ Biological spill kit         | ___ Other _____                            |

4. Review how to respond to emergencies:

- |                                  |   |
|----------------------------------|---|
| ___ Injury/illness/exposure      | ___ Unexpected utility loss or building closure |
| ___ Fire (in lab, in building)   | ___ Campus shutdown, shelter in place           |
| ___ Spill (chemical, biological) | ___ Other _____                                 |

**Hazardous Waste**

1. Identify the types of waste generated in the lab, where and how waste is stored, procedures for adding/disposing of waste.

- |                                       |                         |
|---------------------------------------|-------------------------|
| ___ Chemical waste (liquid and solid) | ___ Sharps/broken glass |
| ___ Biological solid waste            | ___ Other _____         |
| ___ Biological liquid waste           | ___ Other _____         |

## Training

1. Identify and review training requirements and how to register for training, if applicable. Institutional training is only required of instructors and teaching assistants (TAs).

### Partner Institution's EHS Training

\_\_\_\_ List \_\_\_\_\_

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### Lab-Specific Training

Experimental Procedure/Equipment Specific Training

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