LAB SAFETY AWARENESS WEEK

Personal Protective Equipment and General Lab Attire

Personal protective equipment (PPE) helps to minimize exposure to hazards that cause serious workplace injuries and illnesses.

These injuries and illnesses may result from contact with chemical, radiological, physical, electrical, mechanical, or other workplace hazards.

- Basic protection for most laboratories includes safety glasses, shoes and proper shirts/pants.
- Closed-toed shoes are essential in a laboratory to protect yourself from chemical splashes or broken glass.
- Chemical splash goggles or face shields should be worn when there is a risk of splashing hazardous materials or flying particles.
- If respirators are to be used for protection against airborne contaminants, equipment listed and approved by the Mine Safety and Health Administration and NIOSH may be used if properly selected and fit-tested as part of a complete respiratory protection program.
- Any laboratory operation that exposes laboratory personnel to a significant noise source of 85 decibels or greater for an 8-hour average duration should utilize hearing protection in the form of plugs or muffs.

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LAB SAFETY AWARENESS WEEK

Lab Housekeeping

Good lab housekeeping reduces the number of accidents, minimize risks & consequences of slips, trips, falls, unplanned reactions and fire.

Space is always at a premium. Don't be a hoarder!

- Reducing clutter provides more space for critical research materials, making it safer to move around the lab without tripping or potential chemical/biological exposure.
- Limiting or reducing flammable materials like paper or cardboard reduces the risk of fire.
- Never block emergency exits, fire extinguishers, safety showers, eyewashes, or electrical panels.
- Consider scheduling frequent lab clean-out days (at least quarterly). Inspections help keep the lab space clean and pristine. Establishing an internal inspections program improves the lab safety culture.
- Periodically thaw freezers.
- Make arrangements to service, maintain or remove broken equipment.

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Safety Equipment in the Lab

Lab safety starts with a safe attitude.

Identifying, getting familiar via training, keeping and maintaining safety equipment is critical in protecting and saving lives and health in emergency situations.

- Emergency showers, eye showers, fire extinguishers, proper PPE when conducting experiments and addressing spills, spill kits and other safety equipment keep the community safe and ready for emergency response.
- Check if appropriate safety equipment and supplies are present and in good condition periodically. Replenish immediately if used.
- Having a regular training and maintenance program for safety equipment is imperative. Do not use broken or damaged equipment – notify and schedule its service immediately.
- Access to the eyewash, safety shower, fire extinguishers, and spill kits must be unobstructed.
- Know the location of the nearest emergency eyewash and safety shower before starting any work in the laboratory.

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Hazard Identification & Risk Assessment

Risk assessments are crucial for conducting research projects safely.

The process of identifying hazards, determining the severity of potential risks and establishing suitable/proper control measures in place are key components to keep the academic community safe.

- Risk assessments of planned research should be undertaken **before** proceeding with research activities.
- Reviewing Safety Data Sheets (SDS), scheduling consultation with the EH&S staff and discussing the work projects are important in determining the risks, how to address and control them.
- Risk assessments should be revised periodically. Especially with any changes of the research experiment, like introducing new chemicals or adding steps to the process, new equipment, change in concentration of already assessed chemical etc.
- To minimize risks, the hierarchy of controls is used, done by elimination, substitution, engineering controls, administrative controls and PPE. EH&S helps establishing the hierarchy of controls. Contact the EH&S office a 662-325-0026. to schedule a consultation.

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LAB SAFETY AWARENESS WEEK

We're All in this Together!

Safety is everyone's responsibility.

When each person in the lab does their part, the lab is a safer place to work.

- Avoid working alone in the lab. Notify others if solitary work cannot be avoided and have someone periodically check in.
- Review standard operating procedures and follow them carefully.
- Review chemical Safety Data Sheets (SDS) and be knowledgeable about the hazards of the chemical being handled and waste disposal.
- Frequently check hazardous waste accumulation storage areas and arrange for disposal as needed. Avoid accumulating large amounts of hazardous waste.
- A clean lab is a safe lab! Keep areas tidy and organized.
- Include safety topics in your lab, school, and departmental meetings.
- EHS is here to support academic community in safely achieving their research goals.

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