211 Warren Square 610-758-4251 LUFacilities

Lehigh University Environmental Health and Safety Laboratory Newsletter

by Randy Shebby Nov - Dec 2021 Volume 85



Lab Accident Review

An accident occurred at the University of Idaho where a student was pouring liquid nitrogen into a glass that shattered. What they found during the investigation was that lab users provided/obtained glass that was not pressure rated or pressure ratings were unknown. Some forms of lab glass can be pressure rated where others cannot. A similar accident occurred at Texas A&M. Check your glass labware to ensure it is pressure rated glass prior to using it with cryogenic fluid. Glassware can also age and become prone to failure. Equipment used for cryogenic material must be laboratory grade. Borosilicate glass is often used as it will withstand extreme temperature.



If you have a first aid kit in your lab check it to ensure the first aid materials are up to date and ready for use. Also check for latex or rubber gloves.



Hazardous Gas Alarms

As research at Lehigh University continues to grow, the use of hazardous gases has increased in laboratories. Gas alarm systems monitor these gases and a lighted display (shown above) indicates the condition of the gas line and air quality in the lab. When everything is working well the green light is illuminated. A yellow light indicates a problem with the system requiring a maintenance review. Red indicates a gas release and a need to evacuate the lab or in some cases the building. Hazardous gases in gas cabinets must be under ventilation and monitoring 24/7 regardless of whether the gas is in use.

Tech Tip - Keeping your lab clean and organized will guarantee a positive response from a safety review. Keep areas clear around eyewashes, emergency showers and fire extinguishers.

Protecting Yourself

PPE is required when working *near* chemicals or powders on a lab bench. Lab coats and safety glasses are required in the lab when working with chemicals or powders. Gloves are required if the materials are hazardous to your skin.



Be certain to review the Safety Data Sheet (SDS) before working with chemicals. This will advise you on what precautions to take when using the chemical, powder or gas. To learn more take the **Right to Know** training found on the online training portion of the EH&S website.

Remember: As a supervisor or PI you are responsible for ensuring your personnel receive the proper safety training for the work being conducted in the lab. Get your people trained. Safety training modules are available for Compressed Gases, Laboratory Fire Safety, Right to Know, Hazardous Waste, Biosafety, Nanotechnology and several more areas. For more information visit: https://facilities.lehigh.edu/ environmental-health-safety/onlinetraining-videos-quizzes