MAY 2025 HEALTH, SAFETY AND ENVIRONMENT OFFICE

SAFETY ALERT

RECENT INCIDENTS HIGHLIGHT RISKS OF SKIPPING SAFETY GLASSES

Three recent incidents involving eye injuries in our research laboratories have highlighted the dangers of not wearing safety glasses. In one case, while a student was working in front of an opened fume hood and conversing with someone, he accidentally shook a vial causing phenol-chloroform to splash into his eye. In another incident, a researcher used a hand siphon pump to transfer isopropyl alcohol (IPA) from a 20L drum to a 2.5L solvent bottle. As she removed away the siphon pump from the drum, the solvent splashed into her eyes. In addition, a third incident involved a researcher who was injured by flying fragments of the mug's cap after an explosion with dry ice stored in a vacuum-insulated stainless steel mug. In all instances, the researchers were not wearing safety glasses.

A tube containing Phenol-Chloroform

Hand siphon pump for transferring solvent

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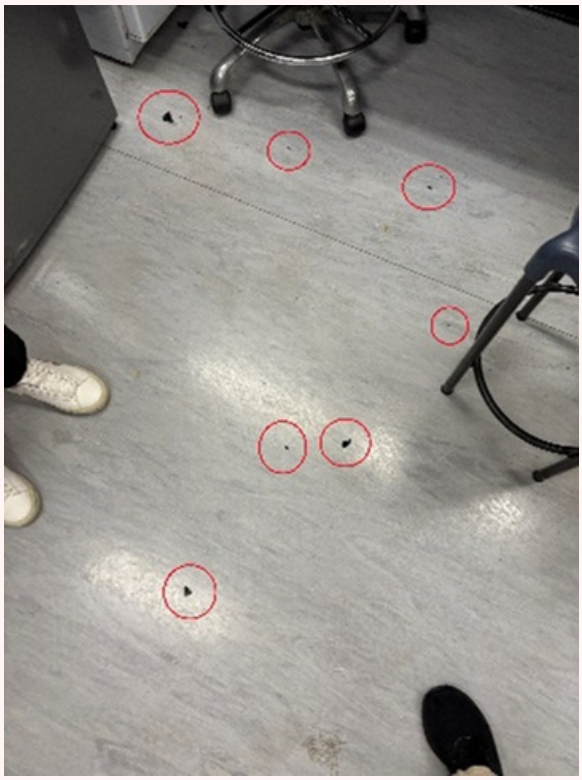
A vacuum-insulated stainless mug and a broken cap



Fragments of the mug's cap

These incidents highlight the critical importance of adhering to safety protocols outlined in Section F, Chapter 7: General Laboratory Safety and Chapter 13: Personal Protective Equipment of the University's Safety and Environment Protection Manual.

KEY POINTS TO REMEMBER:

- **Always Wear PPE:** Personal protective equipment is essential for minimizing risks when working with hazardous materials. This includes wearing a lab coat, safety glasses, gloves, long pants and closed-toed footwear. No matter the type and quantities of hazardous materials being handled, PPE must be worn at all times.

- **Lower the Sash of the Fume Hood:** Handle chemicals in a fume hood and always ensure that the sash of the fume hood is lowered to the recommended height when in use. This provides an additional barrier against chemical splashes and helps maintain proper airflow.

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- **Safe Storage for Dry Ice:** Always store dry ice in a properly designed container. Do not store dry ice in a tightly sealed container such as a plastic or glass bottle, or any container with a screw-top lid that will not allow produced gas to escape.

- **Incident Reporting:** Any accidents or near misses should be reported immediately to your supervisor and the departmental safety officer. This not only helps in managing the situation but also in preventing future occurrences.

To enhance your understanding of laboratory safety, we recommend reviewing the following two safety videos:

Fundamental of Laboratory Safety: Introduction to Laboratory Safety - This video provides a comprehensive overview of essential safety protocols and practices that should be followed in the laboratory environment. (**link**)

Splash Tests Suggest Which Eyewear is the Safest for Chemists - This video demonstrates various splash tests that highlight the effectiveness of different types of eyewear, helping you choose the safest options for chemical handling. (**link**)

These resources are valuable for reinforcing the importance of wearing appropriate personal protective equipment (PPE), including safety glasses, lab coats, long pants and close-toed shoes, especially when working with hazardous materials.

We urge everyone to commit to safety practices and ensure that all necessary PPE is worn at all times while in the laboratory. Your safety is our priority and adherence to these guidelines is essential for a safe working environment.