February 2009 SCS Safety Newsletter

Topics in this issue:

• Fire Extinguishers
• Working Alone in the Laboratory
• Safety Equipment and Procedures
• Message from the Director of the Division of Research Safety

Fire Extinguishers:

Fire extinguishers must be available, charged, and hung in a location that is immediately accessible. If discharged, contact SCS Safety Personnel to have the extinguisher replaced. Choosing the correct type of extinguisher is critical to effectively extinguish a fire. Review the following classes to determine which type of fire extinguisher is appropriate.

Class A Fires

Class A fires involve combustible solids such as paper and wood items which leave an ash. Typical extinguishers for Class A fires include water, CO₂, halon, and dry chemical. Associated problems with these fires are destructive distillation that results in flaming vapors and toxic gases, hot ash, and residue capable of re-ignition.

Class B Fires

Class B fires involve flammable liquids. Typical extinguishers include CO₂, halon, and dry chemical. Caution: Compressed gas may spread and/or worsen fire if force from the extinguisher is excessive.

Class C Fires

Class C fires involve Class A (combustible solids) and Class B (flammable liquids) fires as well as electrical equipment. Typical extinguishers include CO₂, dry chemical (may result in equipment damage), and halon. Caution: Due to possible electrical shock, de-energize the circuit prior to fighting the fire.

Class D Fires

Class D fires are those involving reactive metals (Li, Na, K, Mg, etc.) and active hydrides (NaH, KH, LiAlH₄, etc.). Typical extinguishers and control methods include inert powder (Ansol Metal-X, sand, talc, alkali metal salts) and Metal-X extinguishers.

www.almeidacartoons.com/Safe_toons1.html
Working Alone in the Laboratory:

It is highly recommended SCS laboratory employees do NOT work alone in the laboratory. A coworker should be present in case an emergency or accident occurs. Even if working with non-hazardous materials, a coworker should be present and available to call emergency response personnel. Accidents and injuries can occur at any time in the laboratory. Individuals should **never** work alone when working with high energy materials, high pressures, quick-acting/highly toxic materials, or transfer of flammable materials, and when previous experience indicates the need for assistance.

Safety Equipment and Procedures:

Prior to working in an SCS laboratory, employees are to familiarize themselves with safety equipment and procedures in the lab. SCS employees are expected to know the location of the nearest fire alarm pull, fire extinguishers, safety showers, eyewashes, spill clean-up kits and emergency exits. Additionally, employees should be aware of any lab specific emergency alarms, availability and location of personal protective equipment, and hazards specific to the laboratory (lasers, cryogenics, etc.). Employees are encouraged to review the locations and procedures of the above items periodically.

The following is a message from Irene Cooke, D.V.M., Ph.D., Director, Division of Research Safety, University of Illinois at Urbana-Champaign:

Dear research safety contacts,

I wanted to inform you of a lab accident at UCLA where a research technician was badly burned earlier this month and later passed away. The technician was not wearing a lab coat and her synthetic sweater caught fire, causing serious burns which may have contributed to her death. Please see [http://www.drs.illinois.edu/news/index.aspx](http://www.drs.illinois.edu/news/index.aspx) for additional information about the accident. I hope this tragic situation serves as a reminder to those who work in labs (or who supervise lab staff or students) about the importance of personal protective equipment and clothing. Since we cannot predict when an accident may occur, the consistent use of protective clothing and equipment appropriate to specific lab hazards is the best way to minimize the impact of hazardous material accidents. Please feel free to forward this e-mail or the accident information to people who work in labs in your unit. For those who work in labs, look around and ask yourself this question: Are you aware of and adequately protected from the hazards of chemicals and other materials you work with? If not, and if you would like to improve the safety in your lab, please contact us at drs@illinois.edu or 333-2755.

Thank you for your attention to safety,
Irene Cooke, D.V.M., Ph.D.
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Is there a safety topic you would like covered in a future newsletter? Have any comments or suggestions? Send an email to eduvall@uiuc.edu

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