Liquid Nitrogen Dispensing Room:

The policy for accessing the liquid nitrogen dispensing room (35 RAL) has changed. The room will be key accessed using the Noyes Lab outside door (31-1 OS) key. Only trained users should access the room. In the very near future, Group Safety Representatives will receive training from a staff member in SCS Receiving and the SCS Safety Coordinator. Training will take only a few minutes. Group Safety Representatives will then instruct the other individuals in their groups on liquid nitrogen dispensing procedures. Group Safety Representatives will be notified in the near future regarding training information.

Any liquid nitrogen dispensing area is a potential asphyxiation hazard. To avoid such a hazard, a motion detector that automatically turns on the lights and the exhaust fan has recently been installed. In addition, an oxygen deficiency monitor with alarm has been installed. General procedures for utilizing the room are as follows: Upon entering the room, the exhaust fan and lights should turn on automatically. If the fan and light do not come on, you should not proceed with a liquid nitrogen fill. If the oxygen deficiency monitor alarms, liquid nitrogen fills should be stopped immediately. Further information will be provided at the upcoming training sessions.

Working with Mercury:

Mercury and mercury containing devices should be replaced with alternatives whenever possible. Mercury vapor is highly toxic. Due to mercury’s low vapor pressure, the evolution of mercury
vapors is especially of concern when the mercury is heated. Furthermore, mercury spills are very difficult to clean up because mercury splashes into microscopic spheres, which roll into cracks and crevices where they cannot be easily seen or removed. To reduce the chance of mercury spills, use a catch pan of appropriate size and depth under all mercury-containing equipment. Use non-mercury thermometers whenever possible. Never use a mercury thermometer in a heated oven.

**Mercury Spills:**

Mercury spill clean up methods are determined by the quantity of mercury spilled. Small spills can be managed by using a mercury sponge or by aspirating mercury droplets into a suction flask. If aspirating the mercury, the mercury can be transferred to another container for disposal. For large quantity spills or where the spill has contaminated a large area, quarantine the area to prevent further contamination (shoes, equipment, etc.). Contact SCS Safety Personnel to coordinate the mercury clean up with the Facilities and Services mercury cleanup crew. DO NOT use sulfur to coat the mercury or use nitric acid to dissolve the mercury, since either method will greatly complicate disposal. Contaminated materials used to clean up the mercury spill should be collected and sealed in a bag. To dispose of the clean up materials or a container of mercury, follow the instructions for chemical waste disposal described in the UIUC Chemical Waste Management Guide.

SCS Safety Office
University of Illinois
306 Noyes Lab
217-244-7268
eduvall@uiuc.edu

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