LABORATORY SAFETY RULES

Section:	Laboratory Safety Manual	Date of Issue:	2006.01.01
		Issued By:	Environment, Health &Safety
Part:	Rules and Procedures	Revision #:	2
		Revision Date:	2011.06.17
Pages:	3	Revised By:	FD, PH, LC, RL, SS, SL, SD

The University of Calgary considers health and safety to be a priority and is committed to providing a safe and healthy work and study environment for the entire University community. This will be possible by meeting or exceeding all regulatory requirements

All faculty members, employees, students, volunteers, contractors and visitors are required to comply with all University health and safety policies, procedures and rules, as well as all applicable legislation. It is the responsibility of supervisors, department heads, directors and Deans to enforce these rules.

Laboratories are work places that contain hazards requiring adherence to special rules and procedures. These basic Laboratory Safety Rules are to safeguard your health and the health of the University community, and are a minimum requirement for persons working in laboratories at the University of Calgary.

Specific Laboratory Safety Rules are outlined in other documents that govern the research and usage of specific hazards such as radioactive or biohazardous materials.

A Laboratory Rules Poster is to be posted in every laboratory and can be obtained from EH&S or printed from the EH&S website. An explanation of the rules is provided below. These rules must be covered by all laboratory staff prior to commencing work.

LABORATORY SAFETY RULES EXPLAINED

1. Be aware of the location of the first aid kit, spill kit, fire extinguisher, nearest alarm pull stations, fire exit, and other emergency response equipment.

The time to prepare for an emergency is before something happens. Each Laboratory is required to have available;

- a first aid kit - http://www.ucalgary.ca/safety/firstaid
- a spill kit - http://www.ucalgary.ca/safety/files/safety/SpillResponseProcedures.pdf
- emergency response plans completed and signed of by the laboratory supervisor;
  http://www.ucalgary.ca/safety/files/safety/ERPFire.pdf
  http://www.ucalgary.ca/safety/files/safety/ERPInjury.pdf
  http://www.ucalgary.ca/safety/files/safety/ERPChemicalHazard.pdf

2. Don’t eat or drink in the lab. Do not bring or store food, drinks, and related eating utensils in a laboratory.

The separation of food and drink from locations containing hazardous materials and potentially contaminated items minimizes the risk of accidental ingestion. The use of laboratory microwave ovens for the heating of food is also prohibited. The water in laboratories is not considered safe for drinking. This includes deionized water.

3. Wear appropriate personal clothing for the laboratory to protect exposed skin. Wear shoes that provide full coverage of the feet.

Shorts, skirts, and dresses do not provide adequate protection and are not to be worn in the laboratory unless any exposed skin can be protected by a long apron or gown. Proper footwear comprises closed toes and heels and is preferably semi permeable. Flip flops, open weave shoes, sandals, and Crocs ™, etc. are not appropriate footwear.

4. Wear appropriate eye protection in the laboratory. Unless prohibited by your supervisor you may wear contact lenses in the laboratory. If you wear contacts in the laboratory, you are prohibited from removing, adjusting or inserting them.

Wear appropriate eye protection, such as safety glasses, goggles, face shields, UV blocking, wave length specific (for laser), based on the hazards. Each laboratory must determine a contact wear policy based on the hazards. Refer to pertinent regulations, medical and/or industrial hygiene recommendations for guidance. Suitable eye protection must be provided for all workers exposed to eye injuries regardless of contact lens wear.

5. You must wear a laboratory coat and personal protective equipment as appropriate when in the laboratory.

Splashing hazardous materials onto exposed skin is a commonly encountered occurrence. The risk of exposure may also arise from spilled or splashed materials that co-workers handle. A buttoned up laboratory coat, provides the minimal protection required for handling hazardous materials. Gloves, appropriate to the hazard, must be available and worn when working with hazardous materials. Refer to the laboratory's hazard assessment and/or standard operating procedures to see what has been determined as the appropriate personal protective equipment for the task.

6. Perform procedures that involve the liberation of volatile, flammable, strong smelling or toxic materials in a fume hood.

Do not expose yourself or your colleagues to hazardous materials - use the provided fume hoods to control the hazard. Engineering controls which put a barrier between you and the hazard are the preferred control and provide the best protection.

7. Only allow authorized individuals in your laboratory.

Authorized means having business in the laboratory with the permission of the principal investigator. It also means that such authorized persons must be provided the same kind of protection from hazards as persons working in the laboratory, and be made aware of the hazards in the laboratory. Authorized persons also have to adhere to established rules and requirements. Anyone under the age of eighteen has to be under immediate and direct supervision of a competent authorized person at all times.

8. Wash hands after removing gloves, and before leaving the laboratory.

Before leaving the laboratory, make sure to wash your hands to minimize the risk of carrying radioactive, biological, or other hazards out of your work area into areas that should be clean and uncontaminated. The wearing of gloves will not guarantee that your hands are not contaminated. Make certain that soap and towels are available in your work area. A sink should be designated in each laboratory for washing hands and other “clean” activities.

9. Remove gloves and laboratory coats before leaving the laboratory.

Laboratory coats and gloves are personal protective equipment and intended to serve as a barrier between a hazard and your body. It is possible that laboratory coats may be contaminated with radioactive material, biohazardous agents, or chemicals. For this reason laboratory coats and gloves shall NOT be worn outside of the lab. Whether this potential contamination comes from hazardous products in a laboratory or from the blood of a patient or animal in the operating room, or from the contact with a sick patient in an examination room – the personal protective equipment is not to be worn in public areas even if presumed uncontaminated. When transporting hazardous materials outside the laboratory in hallways, stairwells, elevators, etc. the hazard must be safely contained (i.e. a sealed sturdy container) and the outside of the container decontaminated to prevent contaminating surfaces.

10. Lock your laboratory when unoccupied.

Always lock your laboratory when it is unoccupied, not only when you leave for the night, but also when you leave the laboratory to get something or to take a coffee break or lunch.

11. Identify all containers, chemical storage areas, and waste appropriately.

All chemicals must be labelled with either a WHMIS supplier or workplace label as appropriate. Chemical storage areas must be labelled to identify the WHMIS or TDG hazard class of the materials stored within. This includes storage for biohazardous materials. Radioactive storage areas must be identified with the radiation symbol and isotope(s). Waste bottles must be identified with the contents.

12. Dispose of waste in accordance with the Hazardous Materials Services waste instructions, and dispose of it frequently.

Hazardous materials present the same hazards and risk as their constituents. Frequent disposal will minimize accumulation of hazardous waste materials in work areas reducing potential risk to laboratory occupants and facilities.

- http://www.ucalgary.ca/hazmat/waste_disposal