

Risk Management Policy

for

The Department of Chemistry

The University of Western Ontario

1) **Health and Safety Policy**

a) The University Health and Safety policy is posted in a conspicuous area

The UHS policy is posted outside Room 120 (Main Office/Chairs Office) and under the “Safety” Menu on the Departmental webpage.

b) All staff are aware of the location of the policy and are aware of its contents

2) **Health and Safety Responsibilities**

a) All personnel in charge of other personnel should be:

Performing workplace inspections

Conducting information sessions

Conducting incident investigations

Conducting employee on the job training

Correcting substandard acts or conditions

Commending employee health and safety performance

Performing employee safety observation

The supervisor or designate fulfill these tasks, specifically:

- Supervisors will inspect workplace – often this happens informally whenever the supervisor enters the lab. Documentation will be made in a Laboratory Safety Binder on a monthly-to-six-weekly basis.
- Supervisors (or designate) conduct information sessions and initial new employee orientation. See the New Employee Orientation Checklist and Safety Requirements for Laboratory Work forms (laboratory documentation file)
- Supervisors will investigate incidents, with assistance from the Safety committee, when necessary.
- Correction of sub-standard acts or conditions should be remedied immediately. Commonly a follow-up is made in group meetings, documentation of which may follow in the form of email and entered into the Laboratory Safety Documentation Binder. For convenience, especially in larger groups, a “Safety Officer” may be assigned to document such conditions.

b) All workers work in accordance with Health and Safety rules and are held accountable if they do not.

Our policy is to promote and encourage the adoption of a safe work culture through education and by example. However, in the case that a Worker or Supervisor refuses to abide by safety recommendations and policies the steps outlined in the Policy for Resolution of Unsafe Working Conditions will be followed.

c) A visitor policy is in place to ensure they are aware of University Health and Safety Policies before entering any labs.

All laboratory visitors must:

- Dress appropriately, as required by the laboratory.
- Wear the personal protective equipment required to be worn in the laboratory.
- Be accompanied by a Western representative who is responsible for them in the case of an emergency. The Western rep is either the person being visited or as assigned by the lab supervisor
- Follow the rules and procedures of the laboratory.

Anyone unable to comply with the above will not be allowed entry into the lab.

3. Posted Health and Safety Materials

a) All personnel have access to all up-to-date Material Safety Data Sheets (MSDSs)

A minimum acceptable standard is that MSDS information can be accessed by the internet from a direct link (icon) on the desktop of laboratory computers.

The best practice is to keep hardcopies for the most hazardous, commonly used chemicals in the laboratory in the Laboratory Safety Documentation Binder used. Hardcopies of MSDS that are “hard to find” because the compounds are rare, specialty or otherwise unusual should be kept within the laboratory and accessible to lab workers.

*b) Emergency Instructions including:
Phone contact list*

An up-to-date telephone contact list of all laboratory workers posted in a conspicuous place and known by all should be maintained. This information should be duplicated in the Laboratory Safety Documentation Binder.

*c) Primary and Secondary Building evacuation route
Location of emergency equipment (Shower, pull station, fire extinguisher)*

Laboratories in Chemistry have been posted with emergency evacuation and safety equipment maps.

d) Hazard signs at Lab entrances as required by UWO handbook

4. Health and Safety Standards & Procedures

*a) If applicable, ensure that each lab has information readily available on:
Chemical Spills
Radiation Spills
Biohazard Spills*

b) Each lab has a Fire/Safety Emergency Plan

c) Any specialized lab procedures have written Standard Operating Procedures (SOPs) that are up-to-date and readily available

Laboratory Supervisors will determine for which procedures/apparatus an SOP is necessary and prepare one for the lab. In some cases, the workers (as a designated of the Supervisor) may prepare SOPs.

When available, published literature may substitute for SOPs. For example, in synthetic chemistry, some very good resources for setting up standard reaction apparatus:

Vogel's Textbook of Practical Organic Chemistry

Advanced Practical Organic Chemistry by Leonard, Lygo and Procter

Experimental Organic Chemistry, Standard and Microscale by Harwood, Moody and Percy

Similar practical texts exist that specialize in inorganic chemistry and other disciplines. It is the responsibility of individual Laboratory Supervisors to judge if these are appropriate for their specific needs.

d) Staff are aware of the procedure to report Hazards

Workers are to report dangerous situations directly to their supervisor, as outlined in the Laboratory Safety Requirements, Department of Chemistry, document that is produced by the Department of Chemistry.

It is also standing policy that "questionable" odours or situations are immediately investigated by a member of the Safety Committee. These situations are evaluated on the basis of immediacy and danger, *i.e.* should a general evacuation take place.

Laboratory Supervisors and Workers are aware that should an incident or accident occur, that they must follow the reporting structure given on the Accident/Incident Reporting Form & Investigation Report.

e) Staff are aware of the procedure to Refuse unsafe Work

The right to refuse unsafe work policy is posted on the Department website.

f) Employees use the proper personal protective equipment at all times, when necessary

g) Any Non-routine Work that has been identified has SOPs and pre-work reviews to address the hazards

Any non-routine work will have an associated SOP or the supervisor (or designate) has trained the worker appropriately. This training includes a pre-work review to address the hazards.

h) Does all equipment have safety features in place – e.g guarding

Safety features of equipment necessary for the safe and proper operation of equipment will remain in place and not be defeated.

i) Labs are tidy and clutter free

5. Health and Safety Representative/ Committee

a) All staff know who their health and safety representatives on the Joint Health and Safety Committee are and how to contact them if they need to

This information is posted by hardcopy outside the main office and on the Departmental website.

6. Health and Safety Education/ Training

a) All employees must attend employee orientation

b) All personnel have been trained in the following:

- *WHMIS*
- *Employee Safety Orientation*
- *Laboratory and Environmental/Waste Safety, as necessary*
- *Biosafety, Radiation, X-ray and Laser Safety as applicable*
- *Location and Use of Deluge Shower*
- *Location and Use of Eyewash station*

For all training provided, records must be kept on file

Training records will be kept by the Laboratory Supervisor in the Laboratory Safety Documentation Binder.

c) All personnel are given initial job instruction and task-specific training before any new task is performed

d) All personnel are instructed on the emergency procedures before commencing any work. This will include but is not limited to:

- *The phone number to call for emergency assistance*
- *The location of the nearest fire alarm pull station*
- *The location and class of the nearest fire extinguisher*
- *The building evacuation route upon hearing fire alarm*
- *The location of chemical spill kits*
- *Fire extinguisher and agent use (specific training is required in certain labs)*
- *The location and use of secondary exits*
- *Records of training must be kept on file*

These aspects are covered by the Departmental New Employee Orientation Checklist. A signed copy will be kept within the Department:

Front office secretaries for undergraduate students

Graduate secretaries for graduate students

Departmental Administrative Assistant for Faculty, Staff, PDFs, Visiting Scholars, etc.

e) Employees must be aware of and trained on any designated substances in their work area

The link to the University maintained list of designated substances will be posted on the Departmental Safety web site, and all members of the Department will be made aware of this by an annual email.

7. First Aid Requirements

- a) *First aid kits must be in quick and easy access for all employees*
- b) *There must be a qualified first aider that works in close proximity to each kit and they must post their certificate with the kit*
- c) *This kit is to be inspected monthly to ensure contents are present*

First aid responders will be responsible for confirming the contents of First Aid Kits and reporting deficiencies to the Chair of the Safety Committee

- d) *Staff are aware of Western's transportation of an injured worker policy.*

Call 9-1-1 or a taxi (for less urgent situations) – do not use personal transportation.

8. Health and Safety Inspections

- a) *Supervisors must do regularly scheduled inspections (monthly) of their work areas and these should be recorded for future reference*

Supervisors must oversee regular inspections (suggested monthly) of their work areas and these should be recorded for future reference. The inspections may be done by a designate. Documentation of these regular inspections should be kept in a Laboratory Safety Documentation Binder.

- b) *Pre-use inspections should be conducted before any equipment is used. These should be recorded on a standard form and any problems should be followed up*

Pre-use inspections will be conducted for equipment requiring this, as judged by the Laboratory Supervisor. A log or record book may be used to document problems that will be followed up.

9. Preventive Maintenance

Maintenance should be scheduled, recorded, and performed by a qualified person for any identified equipment requiring this.

Maintenance will be performed by a qualified person for any equipment identified by the Laboratory Supervisor or Manufacturer requiring it.

10. Injury/Incident Investigations

a) Staff is aware that all accident/incidents must be reported to a supervisor so a proper report can be filled out

b) All supervisors have been trained on accident investigation including:

- *scene assessment*
- *interviewing*
- *identifying contributing factors*
- *filling out the report*
- *assigning recommendations for corrective action follow-up*

Supervisors are superficially trained in accident investigation as per the Supervisor Training Seminar offered by OHS. As such, accident investigations may require the assistance of a Safety Committee member, OHS, campus police or Fire Prevention, as applicable.

11. Early and Safe Return to Work

a) Staff should be aware of the early and safe return to work program

The program is run by Rehabilitation Services.

http://www.uwo.ca/humanresources/facultystaff/h_and_s/rehab/rehab_index.htm

b) Supervisors should be aware of the return to work process