

LAKEHEAD UNIVERSITY

DEPARTMENT OF BIOLOGY

SAFETY POLICY

(Revised January, 2006)

Safety Officer & Representative:

Mr. Michael Moore, CB 3011A, 343-8909, mnmoore@lakeheadu.ca

Preamble:

The Department of Biology is committed to a safe learning and working environment for students, faculty, staff, employees, and volunteers. Recognizing that safety is a collective activity, the Department adopts the following policies and principles:

1. The Department of Biology will designate one or more staff to be responsible for overseeing the Departmental safety policy.
2. The Department of Biology will designate a representative to serve on Faculty and University Safety Committees.
3. The safety representative will report any suggested changes or updates on safety policy, or safety concerns, to a regularly scheduled Biology Faculty meeting at least once each year.
4. Approval of, and changes to, safety guidelines and procedures must be endorsed by a majority vote of the Biology Faculty.
5. The Department will post copies of the safety policy as well as safety guidelines and procedures in all teaching and research laboratories, and on the Department's webpage.
6. The Department will ensure that all Biology students, faculty, staff, and volunteers are aware of their responsibility to be familiar with, and abide by, the Department's safety policy and safety guidelines and procedures.
7. The Department will cooperate with Lakehead University to provide opportunities for faculty, staff, and volunteers to receive and maintain accredited first-aid training.
8. The Department safety policy will be an official regulation of the Department and will be posted on the Department's webpage.

LAKEHEAD UNIVERSITY

DEPARTMENT OF BIOLOGY

SAFETY GUIDELINES AND PROCEDURES

(Revised January 28, 2005)

All students, faculty, staff, employees, and volunteers share a collective responsibility for mutual safety, and are expected to be familiar with, and abide by, the Department's safety policy and the Department's safety guidelines and procedures. Any student, faculty or staff member, employee, or volunteer has the right to refuse work that s/he believes is unsafe. Any student, faculty or staff member, employee, or volunteer refusing work must immediately tell her/his supervisor that the work is being refused and explain why.

GENERAL SAFETY:

It is the policy of the Department of Biology that all students, faculty, staff, employees, and volunteers follow the Lakehead University Emergency Procedures. A copy of these procedures is available in flip-chart form on the wall by the exit door in every Biology laboratory.

All students, faculty, staff, employees, and volunteers are expected to know the location of:

- the Lakehead University Emergency Procedures flip chart
- the nearest fire exit
- the nearest fire pull station
- the nearest emergency phone
- the nearest eye-wash station
- the nearest first-aid kit.

LABORATORY SAFETY:

It is the intent of the Department of Biology to minimize exposure to potential hazards in labs whenever possible. Students, faculty, staff, employees, and volunteers are expected to know the risks involved in labs and are expected to receive WHIMIS certification as required, and follow appropriate safety precautions.

- Oral or written briefings should precede each student laboratory activity to ensure that individuals are aware of the activities planned and the appropriate precautions.

Eye Safety

- The Department safety representative, or delegate, will inspect all eye-wash stations on a regular basis to ensure that each is functioning properly, and that the stations are open and

accessible. The inspection should also ensure that all eye-wash bottles are full, and that bottles are replaced before the expiration date.

- Safety glasses must be worn in labs while engaging in activities with potential for eye damage (e.g., when working with chemicals, sharps, etc.).
- All chemical bottles and containers must be properly stored, clearly labeled, and all tops should be secured.
- Eye-wash bottles must be available in areas with chemical hazards.

General hazards that could be found in a lab include, but are not limited to:

Chemicals

- All students, faculty, staff, employees, and volunteers using a facility should know the location of current MSDS sheets for chemicals used or stored in the facility. In the case of an emergency, MSDS sheets should be sent with casualties to health-care professionals.
- All students, faculty, staff, employees, and volunteers follow proper procedures when handling and storing chemicals.
- All students, faculty, staff, employees, and volunteers must wear gloves when handling preserved specimens whose method of preservation poses a potential health risk to humans.

Sharps

- Never place sharps such as razor blades, scalpel blades, needles or broken glass in the regular garbage. Each lab has a yellow sharps container by the sink for proper disposal.

Biohazards

- Some organisms may be potential allergens. It is the responsibility of individuals at risk to take appropriate precautions.
- Microbiology is to be restricted to a separate lab not used for any other purpose to minimize exposure to those students, faculty, staff, employees, and volunteers who have received proper training.
- The safety protocol for the microbiology lab must follow that mandated by Health Canada.

FIELD SAFETY:

Biological Hazards

Many biological organisms are either hazardous themselves, or harbour hazards to human health and well being. Hazards include, but are not restricted to, aggressive animals, parasitic and pathogenic organisms, infectious diseases, and allergenic and poisonous plants and animals. Before venturing into the field, all students, faculty, staff, employees, and volunteers should:

- Be familiar with the local biota, and particularly so, with potentially dangerous organisms.
- Be familiar with appropriate precautions to avoid such organisms.
- Be familiar with appropriate responses should such organisms be encountered.
- Be familiar with the appropriate handling of organisms, or specimens, to minimize contact with biological hazards.
- Possess, and practice, a plan of action should dangerous or otherwise hazardous organisms be encountered.
- Maintain, when possible, proper immunization against infectious and zoonotic diseases.

Environmental Hazards

Environmental hazards include, but are not restricted to, overhead dangers such as falling rocks and dead trees, water- or ice-covered surfaces, severe weather, and rugged terrain. Before venturing into the field, all students, faculty, staff, employees, and volunteers should:

- Possess a degree of fitness and stamina that is appropriate for the field activities being undertaken.
- Be familiar with potential environmental hazards.
- Be familiar with appropriate responses should such hazards be encountered.
- Possess, and practice, a plan of action should injury occur or evacuation be required.

Pre-departure Planning

Pre-departure planning may prevent unforeseen emergency situations. Planning should include:

- A clear explanation of field activity given to students, faculty, staff, employees, and volunteers well in advance of departure for the field so that appropriate preparations can be implemented. The explanation should include, as much as is feasible, the location and schedule of activities.
- Notification to appropriate persons of contact information, should an emergency arise.
- An evacuation plan to cover possible emergencies in the field.
- Acquisition of health liability waivers.
- Acknowledgment of medical conditions that could potentially compromise the ability of the field workers, or their associates, to complete the field activities safely.

Equipment

Field equipment may include power or manually-operated tools, electrical devices, instruments, motor vehicles, and watercraft. Before venturing into the field, all students, faculty, staff, employees, and volunteers should:

- Acquire appropriate licenses and instruction for the safe operation of field equipment.
- Adhere to the regulations of the appropriate legislative bodies (e.g., Ministry of Transport) regarding appropriate operations, maintenance, and safety procedures while using watercraft and motorized vehicles.

Firearms

- Field workers operating firearms in Canada should possess a valid firearms license and comply with associated federal and provincial regulations. Persons with firearms should make all co-workers aware of their possession.

First-Aid

- All field crews should include at least one member certified in first-aid procedures with access to, and responsibility for, a properly stocked first-aid kit.

Other

- Appropriate instruction should be given to those working in the field with regard to handling, collecting, and possessing organisms and specimens.
- Proper procedures should be followed when storing and handling potentially hazardous materials, such as preservatives, drugs, and solvents.
- Copies of these policies, procedures and guidelines should be readily available and distributed to all faculty, staff, students, employees and volunteers.
- Faculty, staff, students, employees and volunteers who are concerned about any activity that appears to contravene the safety guidelines and procedures should immediately express their concern to the individual responsible for the activity.

IN THE EVENT OF AN INJURY:

- The injured person should immediately seek first aid. The injured person, and the first-aid provider, should notify the individual responsible for the lab/field trip.
- Lab supervisors should use the nearest emergency telephone to call Lakehead University First Response (8911), then secure and evacuate the lab.
- The individual responsible for the lab/field trip should, after administering first aid, immediately notify the Human Resources Officer/Health and Safety at 807-343-8671 or 807-343-8022 (UC 0003), as well as the Department's Safety Officer to ensure that all

appropriate post-injury procedures are followed. Field employees seeking medical treatment must fill-in form 7 with the WSIB.