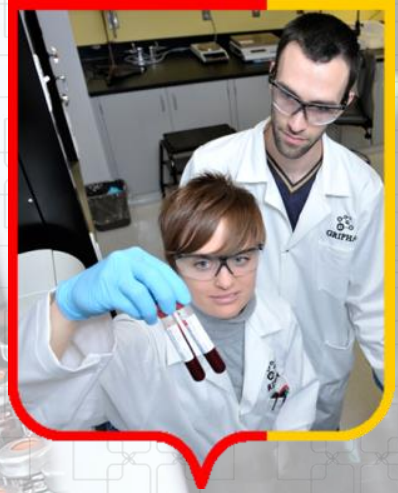


Safety rules and guidelines for research and teaching laboratories



Health and Safety Committee
Animal Science Department
Updated June 2015



Faculté des sciences de l'agriculture
et de l'alimentation
Département des sciences animales

INTRODUCTION

The rules and regulations presented herein apply to all laboratories of the Animal Science Department (SAN) in the Comtois building, as well as to laboratories of the “des Services” building and of the Centre de recherche en sciences animales de Deschambault (CRSAD).

The federal hazardous products act, as well as the provincial occupational health and safety act, frames the basic principles for the safe handling of hazardous materials.

Laval University fulfils its responsibility in this matter through the following standing committees:

- *le Comité de protection des animaux (animal protection committee);*
<http://www.vrr.ulaval.ca/deontologie/cpa/for.html>
- *le Comité de radioprotection de l'Université Laval (Laval University Radioprotection Committee);* <http://www.ssp.ulaval.ca/prevention/>
- *le Comité de gestion des produits chimiques de l'Université Laval (Laval University's Committee for the Management of Hazardous Chemicals);*
- *le Comité de gestion des risques biologiques de l'Université Laval (Laval University's Committee for the Management of Biological Hazards);*
- *le Comité en santé et sécurité au travail (SST) du Département des sciences animales (The Occupational Health and Safety Committee of the Animal Science Department).*

In accordance with the laws cited above and their accompanying regulations, the general mandate of these Committees includes the obligation to inform users of the risks they face when working with controlled substances. Especially, the Committee for the Management of Hazardous Chemicals manages the workplace hazardous materials information system (WHMIS), which main objectives are:

- *appropriate labeling of controlled products;*
- *the material safety data sheet describing them;*
- *user training.*

The Committee also sees to the rational and safe use of chemical products and controls the disposal of chemical waste.

In the SAN department, a certain number of measures are taken to offer each user the proper conditions to protect his/her health and maintain his/her safety. For example:

- *the WHMIS training is mandatory for all laboratory users;*
- *designated individual receive basic first aid training;*
- *inspection protocols are in place to regularly evaluate the conditions of general and laboratory spaces;*
- *clean work spaces;*
- *measures to control access are put into place.*

In order to complete and support these efforts, this document presents the main rules and guidelines for a safe work environment in the SAN Department, in the Comtois, des Services and CRSAD buildings, where hazardous materials are being handled. In this text, guidelines for the application of rules can be found. These guidelines complete or explain, when appropriate, the rules presented in a summarized form.

This document was discussed by the Occupational Health and Safety Committee of the SAN department and represents the unanimous position of Committee members. This Committee, composed of representatives of administrative personnel, research personnel and professors, therefore recommends its implementation as of December 2010.

IT IS MANDATORY TO:

RULES

- Guidelines
- 1. BE AWARE OF SAFETY RULES.**
 - Having read, understood and signed the commitment to adhere to the laboratory safety rules and guidelines for the Department of Animal Science.
 - Locate phones, showers and first aid kits during the first visit of a laboratory.
 - 2. CHECK IN WITH LABORATORY SUPERVISORS (TECHNICIANS).**
 - Introduce yourself to the laboratory supervisors (see Appendix 5 of this guide).
 - Obtain an access card through secretariat staff.
 - 3. WEAR A LAB COAT, SAFETY GLASSES AND CLOSED SHOES.**
 - Lab coats must be kept closed by snap fasteners.
 - Safety glasses must comply with Z94.3 standards in place at Laval University.
 - Disposable gloves must be worn when handling chemical products, animal and plant matter, as well as infectious agents that could lead to contamination.
 - Shoes must cover the top of the foot as well as the heel. It is also mandatory to remove any jewelry and wear long pants.
 - 4. RESPECT ACCESS**
 - Access to laboratories of the animal science department is reserved to its personnel. Your access is limited to certain areas that you must respect. Immediately report the loss of your access card at the secretariat or by calling extension 5555. It is forbidden to enter a room if you do not possess the required authorization, you must be accompanied by an authorized person.
 - 5. COMPLETE THE WHMIS TRAINING.**
 - It is mandatory to complete the WHMIS training. Material safety data sheets of chemical products are available in binders. For those missing, please visit the internet (see Appendix I).
 - 6. DISPOSE OF WASTE IN THEIR SPECIFIC CONTAINERS (GLASS, BIOHAZARD, CHEMICALS).**
 - Non-recoverable glass must be disposed of in “glass waste” boxes.
 - Small sharp objects (needles, blades, etc.) must be disposed of in small yellow « biomedical waste » bins.
 - Chemicals must be disposed of in appropriate containers (halogenated and non-halogenated solvents, acids, bases, solids).
 - Microbiological waste must be disposed of in “biorisk” plastic bags. Bags must be decontaminated in the autoclave.
 - Material contaminated by radioactive substances must be disposed of in containers identified according to requirements.

RULES

- Guidelines
- 7. FIRMLY SECURE GAS CYLINDERS.**
- Secure cylinders on a stand intended for this purpose using chains.
 - Transport cylinders with their cap on and tied to an appropriate trolley.
- 8. FILL OUT RESERVATION SHEETS AND LOGBOOKS.**
- Cancel your unused reservations as soon as possible.
- 9. REPORT ANY ACCIDENT, SPILL OR EQUIPMENT MALFUNCTION.**
- All accidents, even minor, must be immediately reported to the closest supervisor (research professional, technician, professor, first aid respondent).
 - In case of leak, spill or any other incident involving hazardous material, apply emergency interventions. See Appendix 2.
 - Any breaks or defect must be reported to lab managers.
 - Be aware of the list of first aid respondents displayed near laboratory doors or at: www.rh.ulaval.ca/sgc/accueil/sst/sst_securitetravail/sst_st_secouristes/site/rh. See Appendix 3 « what to do in case of accident in the workplace? »
 - In case of emergency or accident, immediately take the appropriate measures and dial 911 or 5555. See first aid measures in Appendix 2 of this document or at: ulaval.ca/urgences/procedures.html.
- 10. USE SAFETY EQUIPMENT (HOODS, MASKS, GLOVES) EVERY TIME THERE IS A RISK.**
- Ask a supervisor before using a mask to make sure it is appropriate for the intended use.
 - Remove all material from the hoods after use. The use of an unattended experimental montage is a highly discouraged practice and must only be considered as a last resort, when no other alternative is possible. Training for respiratory protection is required when a mask is worn.
- 11. IDENTIFY YOUR MATERIAL.**
- All products being used, including transferred materials must be clearly identified. Identification must include: -name of product – name of user – date received or stored – expiration date – indications if the product is hazardous (flammable, corrosive, acid, base, toxic).
- 12. RECEIVE TRAINING FOR THE EQUIPMENT BEFORE ITS USE.**
- Contact the person responsible for the laboratory.
 - Read and understand the protocols provided with the equipment.
 - Be aware of cleaning procedures for the equipment.
- 13. GET APPROVAL FOR ALL MODIFICATIONS TO EQUIPMENT OR MONTAGE BY LABORATORY SUPERVISORS.**
- One must not modify in any way electrical equipment, electronic circuits or electrical apparatus.
- 14. FOLLOW THE INSTRUCTIONS IN CASE OF EVACUATION OF AN AREA, A BUILDING OR THE CAMPUS.**

IT IS FORBIDDEN TO:

RULES

- Guidelines

1. WORK IN LABORATORIES WITHOUT PROPER AUTHORIZATION.

- A person who works in the laboratory outside of normal University working hours (Monday through Friday from 8h30 to 17h) must have written authorization by his/her superior and laboratory supervisor(s).
- One must check in with a laboratory respondent in close proximity and who can rapidly intervene in case of accident.
- Contact information (name and telephone #) of the respondent must be displayed on the document granting access to laboratories.
- In case of emergency or accident, immediately take appropriate measures and dial 911 or 5555 (see first aid measures in Appendix 2 of this document).

2. GRANTING ACCESS TO THE LABORATORY TO UNAUTHORIZED INDIVIDUALS.

- Tolerating unauthorized individuals in the laboratories is strictly forbidden as their presence can involve risks of a biological, chemical, mechanical, radioactive, etc. nature.

3. EAT, DRINK OR STORE FOOD IN THE LABORATORIES.

- The use of laboratory fridges, cold rooms or oven to store or prepare meals is strictly forbidden.

4. MOUTH PIPETTING.

- Use manual or automatic pipettes.

5. BRING BOOTS, BAGS OR COATS IN THE LABORATORIES.

- Working surfaces and aisles must be clean and unobstructed.
- Rent a locker if needed.

6. UNATTENDED MONTAGE.

- Leaving an open flame unattended.

7. WEAR EARPHONES.

- Wearing earphones or earbuds is forbidden.

Any person not following the rules and guidelines can see their access to the laboratories revoked.

- 1st warning: verbal; consigned in personal file;
- 2nd warning: verbal and written; consigned in personal file and forwarded to the individual and his/her research director ;
- 3rd warning: written; consigned in personal file and forwarded to the individual and his/her research director. Withdrawal of laboratory access. The department head will decide on a course of actions.
- In case of major breach, a person can see his/her access to the laboratories revoked without prior notification. The department head will decide on a course of actions.

Professors-researchers and members of the personnel are authorized to warn individuals in breach of rules and guidelines.

A follow-up sheet for breach of rules and guidelines will be filled and submitted to the Occupational and Laboratory Health and Safety Committee of the Animal Science Department.

APPENDIX I Where to find material safety data sheets (MSDS)

MSDS are the main source of information on hazardous materials. These sheets contain the majority of the useful information, such as toxicity, chemical and physical properties and measures to be taken in case of emergency.

You can get the MSDS through your product supplier by downloading them from their website.

You will find below the websites for databases and suppliers. These links will help you find MSDS and information on the products you use.

Laval University MSDS database

<https://intranet.ssp.ulaval.ca/cgpc/fsss/recherche.php>

Anachemia

<http://www.anachemia.com/frenew/frame/ressource1.html>

Avantor

<http://www.avantormaterials.com/search.aspx?searchtype=msds>

Boc Gases

<http://www.bocsds.com/uk/sds/index.asp>

CCHST infoweb

<http://ccinfoweb.cchst.ca/>

ChemBioFinder.com

<http://chembiofinder.cambridgesoft.com/>

Fisher Scientific

<http://iris.fishersci.ca/MSDS2.nsf/frmSearch?OpenForm&Culture=fr-ca>

Sigma-Aldrich

<http://www.sigmaaldrich.com/canada-english.html>

MSDS Search

<http://www.msdssearch.com/DBLinksN.htm>

Praxair

<http://www.praxair.com/resource-library/sds>

ScienceLab.com

<http://www.sciencelab.com/page/S/CTGY/10403>

SIRI Vermont

<http://hazard.com/msds/>

VWR

<https://ca.vwr.com/store/search/searchMSDS.jsp?tabId=msdsSearch>

Where to find MSDS on the Internet

<http://www.ilpi.com/msds/index.html>

If you cannot find the MSDS of a product, write to:

Risques_Chimiques@ssp.ulaval.ca.

Reference: www.ssp.ulaval.ca/

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APPENDIX 2 What to do in case of leak, spill of any other incident involving hazardous materials?

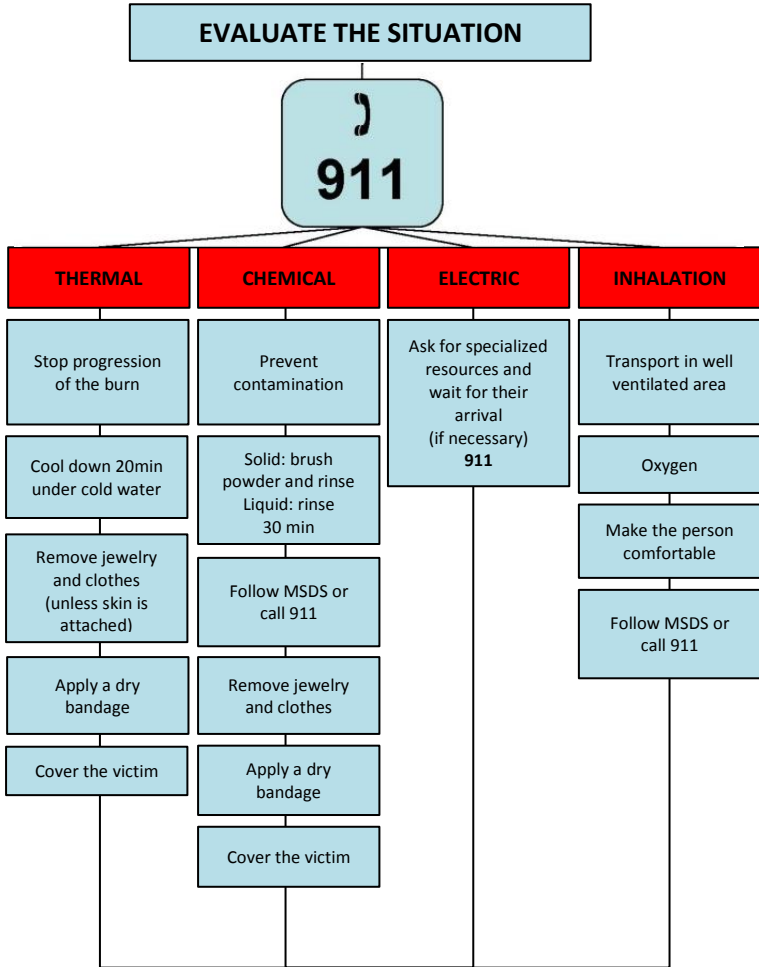
1. **Notify** other occupants.
2. If necessary, have the area immediately **evacuated**; isolate the area by closing the door.
3. Call **911*** or **5555**, or pick up a red phone and mention:
 1. your name
 2. location of the incident
 3. nature of the problem
 4. state of the product (gas, liquid, solid)
 5. amount
 6. name of the product (if possible)
 7. your knowledge of the product
 8. potential danger (wounded, poisoning, contamination)
4. **Follow the instructions** of the Security and Prevention representative.
5. Apply **first aid** measures if necessary (wash under the shower for example).
6. **Do not touch** chemical products without the appropriate protective equipment.
7. **Be aware** of the situation and act accordingly for the safety of all. For example, close the main gas valve of the lab in case of a leak.
8. **Limit access** to the affected area to minimize contamination risks.
9. Provide the **MSDS** to respondents.

In case of an accident involving an individual from Laval University, you must also report the event to the Occupational Health and Safety sector:

- [Accident report](#)

* When you dial 911 from an internal phone line, your call is directly forwarded to the Safety and Prevention Service of Laval University.

What to do in case of burns?



- Report event, Appendix 3

APPENDIX 3 What to do in case of accident in the workplace?

<h2 style="margin: 0;">Accident in the workplace</h2> <h3 style="margin: 0;">What to do in case of accident in the workplace?</h3>	
Evaluate the situation	Evaluate the situation <u>Do not put your life in danger</u> What happened?
Call or have someone call emergency services	911
	Mention building, room number, number of wounded and nature of wounds
Remove victim or apply first aid	<u>Do not put your life in danger</u> If there is a danger, wait for emergency services
First aid	<ul style="list-style-type: none"> Check state of consciousness Contact emergency services Administer first aid Wait for emergency services
Collect information	Do not move or modify anything Secure the area
	What have witnesses seen? What are the products, tools or equipment involved? Take note of signs and symptoms: state of consciousness, muscle spasms, burns, wounds, etc. What is the behavior of the victim after the accident?
Wounded transport	Ambulance according to health status, or taxi accompanied by a first aid respondent or person from the sector
Event report	Before leaving the establishment or as soon as possible (within 24 hours if possible)
	<u>Minor or major events</u> Employee: Make a declaration and/or submit a claim. Go to Occupational Health and Safety sector, Parent building, room 1661, phone: 2110. Students: Make a declaration: laboratory manager or department officials. Submit a claim: Go to Lemieux building, room 2518. Graduate, post-doc or other statuses: For a declaration and/or submit a claim, go to Occupational Health and Safety sector, Parent building, room 1661, phone: 2110.

Adapted from *Secteur santé Sécurité du travail – février 2006*

List of first aid respondents in the building :

www.rh.ulaval.ca/sgc/accueil/sst/sst_securitetravail/sst_st_securistes/site/rh.

APPENDIX 4 Admissibility to the Occupational Health Service (CSST) plan

When a worker is victim of an accident in the workplace or a professional disease, it is of the utmost importance to report it to the Health and Wellness Directorate. If this report requires a claim to the CSST plan, the admissibility of the worker needs to be validated according to his/her status (employee, student, intern). Information is available at: [https://www.rh.ulaval.ca/files/content/sites/rh/files/files/documents/sst/couverture_sst/SST-Validation_admission_CSST\(11-11\)_Hyper.pdf](https://www.rh.ulaval.ca/files/content/sites/rh/files/files/documents/sst/couverture_sst/SST-Validation_admission_CSST(11-11)_Hyper.pdf)

In addition, we advise you to validate other aspects of your insurance coverage such as: health (disability insurance outside work), car, travel, civil liability.

APPENDIX 5 List of services available at the Animal Science Department

C	
Copying machine (management of)	Secretariat
D	
Dishes, cleaning	Lab technicians
E	
Emergency	Dial 911 ou 5555
F	
FAX	Secretariat
First aid	Lab technicians, research directors
H	
Health and Safety Committee	Michel Lefrançois Yvan Chouinard François Richard Nancy Bolduc Micheline Gingras Isabelle Laflamme tech. adm. du Département
I	
Information Technologies (email,software installation, network)	CRP, room 3434
Ice machine (4232-J)	Isabelle Laflamme
K	
Keys and access cards	Secretariat
L (labs)	
Nutrition lab (4232)	Nancy Bolduc, Micheline Gingras
Mass spectrometry lab (4232-E)	Nancy Bolduc, Micheline Gingras
Genomics lab Comtois (4208)	Isabelle Laflamme
Reproduction lab (4224)	Isabelle Laflamme
Radioactivity lab (4224-B)	Isabelle Laflamme
Microscopy lab (4214 B-C)	Alexandre Bastien
Genomics lab (INAF)	Isabelle Dufort
Meat microscopy lab (0312)	Linda Saucier
Physiology lab (3228)	Robert Chartrand
O	
Offices (attibution)	Secretariat
P	
Purchasing	Laboratory technicians
Petty cash	Secretariat
W	
WHMIS (SIMDUT)	Lab technicians

EMERGENCY 911 – Red phones

For all EMERGENCY situations that could cause material or bodily harm, dial 911

Extension 7000 - Repair

For all major material breakdowns requiring immediate repair, dial 7000

Extension 5555 - Assistance

For all situations requiring immediate assistance but considered NON URGENT, dial 5555

Pavillon Paul-Comtois
2425, rue de l'Agriculture
Local 4131
Québec (Québec) G1V 0A6
CANADA

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Télécopieur : 418 656-3766
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