

# Laboratory Safety Program Manual

Document # 1102 – Rev. 1 (March 2023)

Office of the Chief Risk Officer

[uOttawa.ca](http://uOttawa.ca)



uOttawa

## Contents

<b>Contents</b> .....	<b>2</b>
<b>1. Document Overview</b> .....	<b>3</b>
Purpose and scope of document.....	3
Terms and definitions.....	3
Responsibilities .....	3
Reference procedures.....	3
<b>2. General Laboratory Requirements</b> .....	<b>3</b>
<b>3. Laboratory Materials and Equipment Management</b> .....	<b>4</b>
<b>4. Competence Framework and Training</b> .....	<b>5</b>
<b>5. Emergency Procedure</b> .....	<b>5</b>
<b>6. Decommissioning Procedure</b> .....	<b>6</b>

**Version Control Table**

<b>Version Number</b>	<b>Owner</b>	<b>Approver</b>	<b>Change Summary</b>	<b>Status</b>
1	OCRO	OCRO	New	N/A

## 1. Document Overview

### 1.1 Purpose and scope of document

The Laboratory Safety Manual outlines the mandatory requirements for the management of laboratory safety at the University of Ottawa.

The manual applies to work performed at uOttawa or under the supervision or control of a uOttawa worker. The manual defines the responsibilities and expectations for all uOttawa workers.

**All users of this document shall also comply with the minimum requirements and procedures outlined in the [General OHS Program Manual](#). This manual serves as a supplement for all matters specific to laboratory safety.**

### 1.2 Terms and definitions

Refer to the [OHS glossary](#) for the OHS terms and definitions that apply to documents within the management system.

### 1.3 Responsibilities

Responsibilities for several roles at uOttawa are detailed in [Administrative Procedure 14-1](#) (Internal Responsibility Procedure for Health and Safety Issues). Please refer to Procedure 14-1 for information on these detailed responsibilities.

### 1.4 Reference procedures

We have developed reference procedures to assist in implementing the requirements defined within this and other program manuals. Faculties and services shall adopt the procedures below to meet the minimum compliance requirements, or develop their own procedures that meet or exceed these requirements.

- [Laboratory Materials and Equipment Management Procedure](#)
- [Laboratory Decommissioning Procedure](#)

The entire OHS Management System can be found on the [Office of the Chief Risk Officer website](#).

## 2. General Laboratory Requirements

Work and activities performed in uOttawa laboratories shall, at a minimum, comply with the requirements outlined in the [General OHS Program Manual](#) and applicable regulatory standards, whichever are more stringent.

Individuals involved in laboratory work shall, at a minimum, meet the following requirements:

1. Complete a hazard identification and risk assessment (HIRA) prior to starting work and at regular intervals, or when there is a major change in scope of work. This assessment shall follow the [Hazard Identification and Risk Assessment Procedure](#).

2. Maintain all documentation, including any permits, registrations, or licences, relevant to the activities of the lab.
3. Provide personal protective equipment (PPE) based on the requirements defined in the [General OHS Program Manual](#).
4. Ensure the availability of appropriate emergency equipment (such as emergency showers, eye/face wash stations, fire extinguishers, etc.), train all individuals working within the laboratories on the proper use of such equipment, and ensure that this equipment is properly maintained.
5. Establish specific laboratory work procedures that include safety measures.
6. Establish emergency management procedures (refer to section 4 below), including spill response plans.
7. Refer to the [Radiation Safety Program Manual](#) and/or [Biosafety Program Manual](#) and their respective procedures when working with radioactive and/or biological materials.
8. Establish electrical safety procedures, with reference to the [Electrical Safety Management Procedure](#).
9. Ensure that individuals working alone adhere to the requirements outlined in the [Working Alone Procedure](#).
10. Report and investigate accidents and incidents based on the procedure outlined in the [Incident Management Procedure](#).
11. Receive proper training (provided by a supervisor) for work in laboratories, including refresher training conducted periodically (at least once every three years is recommended).

### **3. Laboratory Materials and Equipment Management**

Personnel performing work or activities in uOttawa laboratories that involves laboratory materials and equipment shall, at a minimum, comply with the requirements outlined in the [Laboratory Materials and Equipment Management Procedure](#) or applicable regulatory standards, whichever are more stringent.

Individuals involved in laboratory work shall meet, at a minimum (without being limited to them), the following requirements:

1. If they are supervisors of projects and workspaces, conduct a comprehensive HIRA to identify current and potential hazards and risks related to the laboratory space. The HIRA shall consider:

- Materials and equipment involved<sup>1</sup>
  - Laboratory environment
  - Safety devices
  - Housekeeping needs
2. Comply with the procurement process and requirements defined in the [General OHS Program Manual](#) for the entire lifecycle of materials and equipment.
  3. Approve, document, and review any inventory of materials and equipment, including storage locations and owners.
  4. Ensure that procurement of any materials or equipment is approved before the purchase order is created or the purchase is made.
  5. Establish glassware handling procedures, including general procedures for cleaning and disposing of broken glassware.
  6. Establish and maintain necessary laboratory signage for all materials and equipment so that the laboratory appropriately communicates hazards.
  7. Ensure that all chemical materials that are stored, used, or produced have a Safety Data Sheet (SDS).
  8. Enforce proper housekeeping within laboratories to maintain clean and clutter-free environments.
  9. Conduct laboratory inspections at least once a month, as defined by the [Laboratory Materials and Equipment Management Procedure](#).
  10. Ensure that contractors comply with the requirements established under their relationships with the University.

#### **4. Competence Framework and Training**

Project and workspace supervisors who perform activities at uOttawa shall ensure that stakeholders (including uOttawa workers) have the necessary training, knowledge, tools, and equipment to be competent and fully equipped to carry out their respective tasks. Refer to the [Laboratory Safety Training Framework](#) for specific requirements.

#### **5. Emergency Procedure**

Detailed information and steps for responding to medical emergencies, fires and spills are outlined in the [Laboratory Materials and Equipment Management Procedure](#). Refer to the procedure and/or [applicable emergency response plan\(s\)](#) for further information.

---

<sup>1</sup> Hazardous materials and designated substances shall be identified through the [Hazardous Materials and Waste Management Procedure](#).

## **6. Decommissioning Procedure**

Detailed information and steps for decommissioning laboratory spaces are outlined in the [Laboratory Decommissioning Procedure](#). Refer to the procedure for further information.