

Training Needs Assessment

Memorial University of Newfoundland
Biosafety Program

Memorial University of Newfoundland Biosafety Program: Overarching Risk Assessment (ORA)

CBS 4.2.1 A training needs assessment to be conducted, documented, kept up to date, and reviewed annually.

CBS 4.2.2 A training program, based on a training needs assessment, to be developed, documented, implemented, kept up to date, and evaluated and improved as necessary. A training program includes training on:

- SOPs and relevant elements of the biosafety manual;
- potential hazards associated with the regulated materials handled;
- signs and symptoms of diseases associated with the regulated materials handled;
- necessary precautions to prevent exposure to, or the release of, regulated materials handled;
- necessary precautions to prevent biosecurity incidents involving regulated materials or related assets (e.g., sensitive information);
- relevant physical design and operation of the containment zone and containment systems;
- correct use and operation of laboratory equipment, including primary containment devices;
- restraint and handling techniques for work involving animals; and
- emergency response procedures (including annual refresher training).

CBS 4.2.3 Visitors, maintenance and janitorial staff, contractors, and others who require temporary access to the containment zone to be trained and/or accompanied by authorized personnel, in accordance with their anticipated activities in the containment zone.

CBS 4.2.4 Personnel to demonstrate knowledge of the relevant elements of the biosafety manual and proficiency in the procedures on which they were trained before engaging in unsupervised activities with regulated materials and regulated animals.

Training needs assessment

A training needs assessment can be used when initially developing a training program to determine key components of the training program, including objectives, content, target groups, implementation strategy, and retraining cycles. It can also be used to assess an existing training program against its established objectives to determine whether any gaps or deficiencies exist in the program. As training needs can vary according to personnel responsibilities and experience, separate assessments can be performed for different target

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groups (e.g., scientists, technicians, students, maintenance and cleaning staff, personnel with an HPTA Security Clearance). Assessments also determine any need for additional training and the frequency of refresher training (e.g., training on emergency response procedures, drills). The need for refresher training can change over time, based on the annual review process, personnel competence and experience, incidents, or changes in the biosafety program or biosecurity plan (i.e., new risk mitigation measures).

1. Purpose

The purpose of this training needs assessment is to outline the training requirements for personnel who work with, or in the vicinity of biohazardous materials. This includes the identification of all work groups that handle or store biohazardous materials, or perform their work duties in the vicinity of biohazardous materials (e.g. ancillary workers and visitors).

2. Biosafety training program

The purpose of the biosafety training program is to provide customized biosafety training to applicable personnel based on the type of work that they will do with, or in the vicinity of biohazardous materials. “Core” or general biosafety training is mandatory for any personnel with access to an authorized biohazard laboratory at Memorial and will be provided primarily via online learning (e.g., Brightspace). In addition, “laboratory-specific” biosafety training is mandatory for personnel who work directly with biohazardous materials. Lab-specific training will be provided in person and is the responsibility of the Biosafety Permit holder. The intent of each type of training is as follows:

1. Brightspace Biosafety (“core”) – available via online learning and provides a general overview of biological hazards, Canadian biosafety legislation, biosafety controls and MUN-specific biosafety program elements. Intended for individuals working in authorized biohazard laboratories.
2. Lab-safety awareness for non-lab workers (“core”) – available via online learning or in person and provides a general overview of biological, radiation and chemical hazards, hazard signage recognition, laboratory access requirements and emergency response procedures. Intended for individuals who do not work in MUN labs but may require access as part of their regular work duties (i.e. ancillary workers and external contractors).
3. Laboratory-specific biosafety training – provided in person by the individuals supervisor (i.e. biosafety permit holder) and covers the hazards associated with the specific work conducted, laboratory/containment zone design and containment systems, correct use of laboratory equipment and biosafety emergency response procedures.

3. Work group identification

A variety of Memorial and external work groups may work with or in the vicinity of biohazardous materials while performing their primary work functions. The following stakeholders are included in Memorial’s biosafety training program:

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1. **Laboratory workers** (faculty, staff and students) – individuals who work in Memorial biohazard laboratories (all containment levels) with, or in close proximity to, biohazardous materials.
2. **Administrative staff** – individuals who may require access to Memorial laboratories, and as a result, may come into close contact with biohazardous materials, as a result of their administrative duties (e.g. departmental administrative staff, IT support, etc.).
3. **Facilities Management (FM) and Technical Services (TS) personnel (Memorial and Eastern Health)** – individuals from FM and TS units/shops who may require laboratory access to perform maintenance or custodial functions.
4. **Memorial Environmental Health and Safety (EHS) personnel** – individuals from EHS require access for incident response and compliance monitoring/enforcement.
5. **Memorial Campus Enforcement and Patrol (CEP) personnel** – individuals from CEP provide security for laboratories as well as access during emergency situations (e.g. plumbing leak).
6. **Mail/Delivery personnel (Memorial and Eastern Health)** – mailroom staff may require laboratory access for mail/package delivery purposes.
7. **External contractors** – may require temporary access for maintenance.

4. Biosafety training requirements

The training requirements for individuals who work with, or in the vicinity of biohazardous materials, depends on the type and duration of work, as well as the requirement for supervision while working within the laboratory. Table 1 below describes the biosafety training required prior to authorized laboratory access.

Stakeholder group	Training requirements	Training frequency
MUN Laboratory workers (faculty, staff and students) – “authorized personnel”	<ul style="list-style-type: none"> • D2L Biosafety • Lab-specific biosafety training • Biosafety emergency response training 	<ul style="list-style-type: none"> • 5 years • As required • 1 year
MUN administrative staff	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years
FM and TS personnel (Memorial and Eastern Health)	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years
MUN Environmental Health and Safety (EHS)	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years
MUN Campus Enforcement and Patrol (CEP)	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years
Mail, delivery (MUN and EH)	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years
Eastern Health and MUN hired sub-contractors (It is the responsibility of the respective group to ensure all training required is communicated and completed by subcontractor teams before requesting access)	<ul style="list-style-type: none"> • Lab safety awareness for non-lab workers OR D2L Biosafety 	<ul style="list-style-type: none"> • 3 years • Escort by authorized individual required at all times.