
1. BI Biohazardous Work Policy

- a. Biohazardous work within the BI must follow McMaster University biosafety guidelines and applicable RMMs, and be approved by the McMaster Biosafety Office and the McMaster Presidential Biosafety Advisory Committee (PHAC), through the completion of Biological Utilization Protocols (BUP):
https://biosafety.mcmaster.ca/biosafety_bup.htm
- b. An **approved** BUP is required if planning to work with or import infectious biological material or toxins in a laboratory.
- c. The BI BUP is approved for BSL-1 work in all laboratories, BSL-2 work in two culture labs. BSL-2 agents require the use of a biological safety cabinet (BSC). Work with laboratory animals is prohibited within BI facilities.
- d. A copy of the BI BUP, inventory and audit inspections will be stored in the BI office area. Refer to the [BI Documentation Policy](#).
- e. BUPs and affiliated laboratory locations and inventory are subject to routine audits by the McMaster Biosafety Office. Refer to the [BI Inspection Policy](#).
- f. Biohazardous workers must comply with the [BI Biosecurity Policy](#) to ensure biohazard agent(s) are not lost, stolen, misused, or released from BI laboratories.
- g. Select BSL-2 agents may require enrollment in the McMaster Medical Monitoring Program. Refer to the [BI Medical Monitoring Policy](#).
- h. Contact the BI Biological Research Technician for assistance as needed.

1.1. Biohazardous Work – McMaster Requirements

- a. An **approved** BUP that captures biohazardous work, workers and inventory is required if planning to work with or import infectious biological material or toxins in BI laboratories.
- b. The BUP(s) must be **amended** to include relevant BI facilities and equipment. Contact BI Biological Research Technician for assistance.
- c. The BI must be notified of any relevant BUP changes or amendment to biohazard work, workers or inventory to ensure BI biosafety compliance.

1.2. Biohazardous Work – BI Requirements

- a. **ALL** biohazardous agent(s) brought into BI laboratories must be **pre-approved** by the BI Biological Research Technician and BI Director, through the disclosure of relevant BUP(s). Consultation with the Biosafety Office may be required.
- b. Each biohazardous agent will be captured in an internal risk assessment via the completion of a [BI Biohazard Risk Assessment Form](#) to determine: relevant assets, potential threats and vulnerabilities; appropriate countermeasures or mitigation strategies; control measures to reduce biohazard agent/material exposure risk; and adequate biosecurity measurements.
- c. BI users are required to review the BI Biohazard Risk Assessment and

supporting documentation **prior** to working with the biohazardous agent, as needed, and at minimum annually.

- d. Risk assessments will be compiled and reviewed annually by the BI Biological Research Technician. Users should disclose updated biosafety information to the BI as it is available.
- e. Each user's supervisor must sign a BI Biohazardous Work Responsibility Form.
- f. BI users working with biohazardous agents must submit a project proposal to disclose how biohazardous agent(s) are being manipulated in BI facilities.

1.2.1. BI Biohazard Risk Assessments

- a. The BI Biological Agent Risk Assessment Form will include:
 - agent information (e.g. name, strain, source) and biosafety level;
 - possible transmission modes (e.g. direct contact, inhalation, ingestion);
 - health hazard information and recommended precautions (e.g. PPE, BSC);
 - disinfection procedures;
 - exposure risks and consequences (e.g. Lab Acquired Infections) and appropriate treatments if exposed;
 - whether medical monitoring is necessary;
 - agent recombinant DNA and genetic manipulation information (e.g. donor proteins or transfection vectors), if applicable; and
 - typical agent growth conditions.
- b. Available supporting biohazardous agent information (e.g. vendor, product sheets, SDS/PSDS) used to complete risk assessments forms will be attached.
- c. BI users may be required to provide supporting biohazardous agent information.
- d. If an accurate risk assessment cannot be completed or approved due to poorly characterized information, or uncharacterized secondary sources, the biohazardous agent will be assumed to pose an elevated infectious risk. In such instances, strict control measures will be implemented, under the guidance of the McMaster Biosafety Office, or biological work within the BI will be denied.
- e. Disinfection and decontamination chemicals that are not regularly available in the BI must be provided by the user's supervisor. Culture laboratories house 70% ethanol and bleach.
- f. Biohazard agent(s) and/or material(s) risk assessments will be kept within the BI. Refer to the BI Documentation Policy.

1.3. Biohazardous Agent SOP

- a. Procedural SOPs pertaining to BI user's specific biohazardous work are the responsibility of the BI user's supervisor and not kept on file in the BI.

1.4. BI Biohazardous Work Forms

- a. BI Biohazard Work Responsibility Form.
- b. BI Biohazardous Agent Risk Assessment Form.