



## BIOSAFETY AND BIOSECURITY

---

<b>POLICY NUMBER</b>	<b>ADM 25-0</b>
<b>AUTHORITY</b>	<b>PRESIDENT'S COUNCIL</b>
<b>PRIMARY CONTACT</b>	<b>ASSOCIATE DIRECTOR, SAFETY &amp; EMERGENCY MANAGEMENT</b>

### **POLICY**

The University is committed to providing a safe working and learning environment for staff, students and visitors and establish a framework by which the University can manage its biohazardous materials in a responsible manner while maintaining its service, teaching and research missions. To this end, the University will ensure that individuals using biohazardous materials are suitably trained and adequately supervised.

The University shall establish and maintain a Biosafety Program which supports the teaching, research, and service functions of the University. This Program will comply with all federal, provincial and municipal legislation concerning work with human and animal pathogens and toxins, occupational health and safety and the environment and which is in conformity with recognized codes and standards of practice. This Policy is one component of the University's Plan for Administrative Oversight for Pathogens and Toxins in a Research Setting, as required under the Human Pathogens and Toxins Act and Regulations.

### **REGULATIONS**

Biohazardous Materials can be defined as any organism, and/or toxin, that can cause disease in humans, plants or animals, or cause significant environmental or agricultural impact.

Biohazardous/infectious materials include microorganisms such as viruses, fungi, parasites, and bacterial and their toxic metabolites. Blood and body fluids, human or primate tissues, cells or cell culture, and certain types of nucleic acids such as DNA derived from pathogenic organisms, human oncogenes, and DNA from transformed cell lines are considered biohazards as well.

This policy applies to all persons involved in research and teaching activities on and off campus (including University employees, students, researchers, service providers, contract employees or any other persons) involved with the acquisition, handling, storage, removal or disposal of biohazardous materials on University premises.

#### General

1. The University will maintain a Biosafety Manual for individuals who handle or work in proximity to potentially infectious materials or toxins at the University.
2. The University shall establish the Thompson Rivers University Institutional Biosafety Committee (IBSC) comprised of academic and technical experts to advise Administration.
3. Where biohazardous materials are used, they shall be identified, evaluated and controlled to minimize risk.

4. Biohazardous materials shall only be used in facilities appropriately and adequately equipped to control personnel exposure. Personal protective equipment shall be worn wherever it is required. The University can only support Containment level 1 (CL1) and level 2 (CL2) as defined in the Health Canada Laboratory Biosafety Guidelines (2013).
5. Individuals using biohazardous materials shall be suitably trained and supervised.
6. Biohazardous materials shall be stored and secured in an approved manner. Access to these materials will be restricted to authorized individuals according to a biosecurity plan.
7. An inventory of biohazardous materials shall be kept both in the department where such materials are used, generated or stored and with the Office of Safety & Emergency Management (OSEM).
8. Specialized written procedures and guidance documents relating to biohazardous materials management shall be produced by OSEM. These procedures shall be modified to reflect changes in legislation, university operations and recognized standards or codes of practice.
9. Waste shall be disposed of in a manner which conforms to legislation and responsible standards of practice.

#### The Biosafety Program

10. The Biosafety Program shall be coordinated by the OSEM, and shall include procedures for the acquisition, handling, responsible use, storage, transportation and disposal of biohazardous materials and make provision for the following:
  - designation of responsibility
  - project registration and approval
  - acquisition
  - biosafety orientation and training
  - storage
  - engineering controls
  - safety devices and personal protective equipment
  - record keeping
  - transportation and movement of biohazardous materials
  - medical surveillance
  - reporting to external compliance agencies
  - accident and incident investigation
  - major spill response
  - biohazardous waste management

While the program is meant to be collaborative in nature with advice being sought and utilized from the IBSC, the Biosafety Officer, and senior management, when there is an imminent health and safety risk, the Biosafety Officer has the authority to stop work as appropriate under WorkSafe BC Legislation. The Biosafety Officer would report these types of major non-conformance issues to the Chair of the IBSC and the

Associate Director OSEM for immediate reporting up the senior management line. The Biosafety Officer would also then report to the Public Health Agency of Canada and other agencies as required.

### Operational Responsibilities

#### Office of Safety and Emergency Management

11. The OSEM shall develop, coordinate and oversee the Biosafety Program and all its components; support the IBSC and the University community in carrying out the duties herein. To that end the OSEM shall:

- Provide information, technical assistance and advice to individuals and departments on the management of biohazardous materials;
- Maintain records of accidents and incidents and carry out investigations as required and report findings to the IBSC, Joint Occupational Health and Safety Committee (JOHSC) and the AVP-Research and Graduate Studies as appropriate;
- Provide biosafety and biosecurity orientations and training;
- Initiate and participate in inspections, with particular attention to storage, handling and disposal of biohazardous materials and make recommendations for corrective actions;
- Report to external compliance agencies as required and represent the University to external compliance agencies; and
- Keep abreast of legislation concerning biohazardous materials and the environment, and to advise the University administration and the IBSC about potential impact on University activities.

#### The Biosafety Officer

12. The Biosafety Officer is the individual assigned to manage biological safety issues and is the liaison between the University and the Public Health Agency of Canada on regulatory issues. The Biosafety Officer is responsible for the day-to-day operations of the biosafety program including but not limited to:

- Developing effective procedures for implementation of standards and guidelines;
- Ensuring compliance with regulation for the use of, or exposure to, biohazardous materials;
- Providing general training sessions on biosafety;
- Ensuring appropriate training is provided to persons using biological hazards;
- Notifying the Public Health Agency of Canada of any lab acquired infections, inadvertent possession of human toxins, pathogens or SSBA's not received as expected;
- Conducting regular internal inspections and biosafety audits and reporting findings to the Associate Director of OSEM and the license holder (AVP RGS) via the IBSC;
- Informing the license holder of any non-compliance by a person conducting activities under the license;

- Establishing procedures for dealing with spills;
- Keeping abreast of legislation concerning biohazardous materials and advise the ISBC and administration about potential impact on the University;
- Participating in investigations of incidents; and
- Authorizing purchase requests for biohazardous materials.

The Biosafety Officer is a member of IBSC (co-chair), the Joint Occupational Health & Safety Committee, the University Animal Care Committee and is a staff member of the OSEM.

#### Institutional Biosafety Committee

13. The IBSC is mandated to fulfill the requirements of the Human Pathogens and Toxins Act and Regulations to control/manage biosafety and biosecurity risks. As such the IBSC will:

- Review University projects conducted by faculty, staff, students and/or visiting scientists which involve biosafety activities that are containment level 2 – under the Public Health Agency of Canada’s Laboratory Biosafety Standard to ensure that all work with biohazardous agents is conducted in accordance with applicable legislation, guidelines and recognized codes and standards of practice in ways that best facilitate relevant research, teaching or service activities of the University.
- Review risk assessments and permit applications as well as any other submissions.
- Assist the OSEM, and in particular the Biosafety Officer, with the development of manuals, training programs and procedures.
- Distribute new and relevant biosafety information to laboratories.
- Report non-compliance to the respective department head and to the respective supervising Dean or Director with recommendations for appropriate action.
- Review reported incidents/accidents and exposures and make recommendations for corrections.

#### 14. Membership

The ISBC is comprised of members representing departments that conduct activities using biohazardous agents requiring containment level 2 (CL2). These departments include but are not limited to Physical Sciences, Biological Sciences, Natural Resource Sciences, Animal Health Technology program, and the Biological Sciences Laboratory Technician program. Non-academic members will include the Director of Risk Management Services, Associate Director of Safety and Emergency Management and a designate from the Office of the AVP of Research and Graduate Studies. The Biosafety Officer sits on this committee as well as the Joint Occupational Health & Safety Committee and Animal Care Committee in order to provide continuity and consistent oversight for biosafety.

The IBSC Terms of Reference will include these membership requirements as well as defining roles, meeting frequencies, quorum, appointment terms and reporting responsibilities. The Terms of Reference will be approved by the AVP

Graduate and Research Studies, who will also have the authority to amend the Terms of Reference from time to time.

### Deans

15. Deans shall be responsible for the overall conduct of scientific research and teaching activities carried out in their respective Faculties.

### Department and Research Chairs

16. Department and Research Chairs are responsible for the following:

- Oversee the application of the Biosafety Program within their departments ensuring that all protocols are followed and issues addressed.
- Ensure workplace inspections are performed on a regular basis by department staff and any identified deficiencies are resolved either within the department if possible or forwarded to the Biosafety Officer for further action.
- Ensure that new research grant proposals and programs involving biohazardous materials are reviewed by the Biosafety Officer and IBSC.
- Encourage and support the activities of the IBSC within their own areas.

### Principal Investigators (PI's) and Researchers

17. PI's must understand and follow the procedures outlined in the Biosafety Manual and must ensure that all staff and students working within their laboratories are aware of and follow these procedures. PI's are also responsible for:

- Obtaining the Biosafety Certificate (approved and signed) and informing the OSEM of any changes to the conditions of the certificate.
- Ensuring that the conditions of the certificate are followed.
- Ensuring that the containment level assigned to the work is respected.
- Ensuring that standard operating procedures are available, up to date and communicated to lab personnel and students.
- Ensuring that all persons working under their supervision receive the proper training and work safely with all potentially hazardous materials.
- Providing all the necessary personal protective equipment and standard operating procedures.
- Conducting workplace inspections as frequently as necessary to identify problems and correct unsafe practices and conditions.
- Reporting any incidents, accidents, injuries, hazards or exposures to the OSEM.

### Employees

18. It is the responsibility of individual employees:

- To be familiar with all University and departmental safety instructions, whether written or oral, and to comply with such instructions when performing assigned duties.
- To report all accidents and incidents involving hazardous materials to the immediate

supervisor who will report to the OSEM as per the Health and Safety Policy ADM 5-0.

### Students

19. It is the responsibility of individual students:

- To follow all instructions provided and to wear the required protective equipment.
- To report, without delay, all accidents and incidents to their immediate supervisor.

20. Students who have not received appropriate training and specific hazard information, or who cannot be adequately supervised, shall not use or handle biohazardous materials.

### Visitors

21. Visitors are not permitted entry to areas where biohazardous materials are used or stored unless they have received University specific training, orientation, and information and appropriate supervision is provided.