

Brandon University Biosafety Policy

1.0 PURPOSE

The Brandon University Biosafety Policy is in place to ensure the safety of students, faculty, staff, the community, and the environment when using biological pathogens and toxins at or under the auspices of Brandon University, and to facilitate research, teaching, and testing in compliance with the applicable regulations and legislation. The handling or storing of infectious pathogens or toxins necessitates an awareness and application of biosafety and biosecurity practices among laboratory personnel and those who work with pathogens, toxins, or infected animals in containment zones. The release of human and animal pathogens and toxins from laboratories or other containment zones may pose a risk to public health, animal health, or both. Personnel can reduce the risks associated with infectious material or toxins through the application of appropriate biosafety and biocontainment principles and practices.

2.0 DEFINITIONS

- Biological Material Pathogenic and non-pathogenic microorganisms, proteins, and nucleic acids, as well as any biological matter that may contain microorganisms, proteins, nucleic acids, or parts thereof. Examples include, but are not limited to, bacteria, viruses, fungi, prions, toxins, genetically modified organisms, nucleic acids, tissue samples, diagnostic specimens, live vaccines, and isolates of a pathogen (e.g., pure culture, suspension, purified spores).
- Biosafety Containment principles, technologies and practices that are implemented to prevent unintentional exposure to infectious material and toxins, or their accidental release.
- **Biological Safety Officer (BSO)** Individual designated by the Provost & Vice-President (Academic) to oversee the institution's biological safety program.
- **Biosecurity** Security measures designed to prevent the loss, theft, misuse, diversion, or intentional release of infectious material and toxins.
- **Containment Level (CL)** Minimum physical containment and operational practice requirements for handling infectious material or toxins safely in laboratory and animal work environments. There are four containment levels ranging from a basic laboratory (CL1) to the highest level of containment (CL4).
- Containment Zone A physical area that meets the requirements for a specified containment level. A containment zone can be a single room (e.g., CL2 laboratory), a

series of co-located rooms (e.g., several non-adjoining but lockable CL2 laboratory work areas), or it can be comprised of several adjoining rooms (e.g., CL3 suite comprised of dedicated laboratory areas and separate animal rooms/cubicles). Dedicated support areas, including anterooms, showers and dirty change rooms, may be part of the containment zone.

- Infectious Material Any isolate of a pathogen or any biological material that contains human or animal pathogens and, therefore, poses a risk to human or animal health.
- **Pathogen** A microorganism, nucleic acid, or protein capable of causing disease in humans or animals.
- **Toxin (microbial)** Poisonous substance that is produced or derived from a microorganism and can lead to adverse health effects in humans or animals.

3.0 POLICY

Brandon University is committed to complying with all regulations and legislation pertaining to Biosafety with respect to the procurement, use, storage, transfer, and disposal of biological materials. The Public Health Agency of Canada (PHAC) and the Canadian Food Inspection Agency (CFIA) developed the Canadian Biosafety Standard (CBS), a national harmonized standard for the handling and storing of human and terrestrial animal pathogens and toxins in Canada. The CBS is intended to facilitate compliance with the regulatory framework by incorporating risk-based, evidence-based and where possible, performance-based Biosafety and biosecurity requirements. The CBS also streamlines the requirements for handling or storing human or terrestrial animal pathogens and toxins into a single national reference document.

All research, teaching, and testing involving biological materials undertaken by any person (faculty, staff, students, visiting professors, adjunct professors, visiting professional associates, research associates, postdoctoral fellows) at or under the auspices of Brandon University must be reviewed and approved by the Brandon University Biosafety Committee (BUBC). Furthermore, any laboratory intending on housing biological materials must be certified by the Brandon University's Biological Safety Officer prior to ordering and housing such materials. All work involving biological materials must be conducted in a safe manner in order to protect the University community and the community at-large.

4.0 REGULATORY AUTHORITIES

Facilities, such as research and teaching laboratories, where human pathogens or toxins are handled or stored are regulated under the Human Pathogens and Toxins Act (HPTA) and the Human Pathogens and Toxins Regulations (HPTR). Brandon University is committed to these and any other applicable Canadian Federal and Provincial regulations and legislations, Brandon University policies and procedures, and City of Brandon by-laws, including but not limited to the following:

Canadian Biosafety Standard, Second Edition

- Canadian Biosafety Handbook, Second Edition
- Dangerous Good Handling and Transportation Act (Manitoba)
- Health of Animals Act
- Health of Animals Regulations
- Human Pathogens and Toxins Act
- Human Pathogens and Toxins Regulations
- Transportation of Dangerous Goods Act, 1992 (Canada)
- Workplace Health and Safety Act (Manitoba)

5.0 INTERNAL OVERSIGHT

The Provost & Vice-President (Academic)

The Provost & Vice-President (Academic) shall have administrative oversight of the Biosafety Policy and Program at Brandon University. The Provost & Vice-President (Academic) is responsible for maintaining the Brandon University Biosafety Committee and ensuring sufficient personnel and resources for the administration and enforcement of the Biosafety Policy and Program.

Biological Safety Officer (BSO)

A Biological Safety Officer shall be appointed by the Provost & Vice-President (Academic) and be designated for the oversight of biosafety and biosecurity practices. The BSO will:

- monitor biological material that enters, is held within, or leaves the containment zone;
- facilitate compliance with all relevant federal regulatory requirements;
- develop and maintain the Biosafety Manual and Standard Operating Procedures;
- maintain the institution's biosafety licence with the Public Health Agency of Canada;
- inspect, licence, and monitor research facilities that have containment level 2 certification
- coordinate and provide employee training;
- facilitate compliance with the Biosafety Manual and Standard Operating Procedures; and
- determine personnel authorized to work in the containment zone.

Brandon University Biosafety Committee (BUBC) Membership

Brandon University shall maintain the Brandon University Biosafety Committee, composed of members of the University community which will include the BSO and individuals knowledgeable in biological materials, the safe use of biological materials, and workplace health and safety. With the exception of the BSO, the BUBC composition shall be determined by BUBC for approval by the Senate Research Committee. All BUBC members are appointed by the Senate Research Committee.

Brandon University Biosafety Committee Responsibilities

The Brandon University Biosafety Committee is responsible for the certification of research, teaching, and testing involving biological materials conducted at or under the auspices of Brandon University. BUBC is responsible for providing advice and direction on all aspects pertaining to the use of biological materials at Brandon University. Specifically, BUBC will:

- a. maintain, develop, and revise internal policies and procedures, as appropriate;
- b. for containment level 2 laboratories, review applications that have the necessary laboratory certification from the BU BSO;
- c. determine the nature of biological work in-progress or proposed;
- d. either approve a Biosafety application, approve a Biosafety application subject to modifications, or reject a Biosafety application;
- e. review all proposed amendments to approved applications prior to implementation;
- f. monitor on-going research, teaching, and testing involving biological materials;
- g. terminate projects and certifications that do not conform to BUBC standards;
- h. assist in the design of appropriate training and serve as an educational resource to members of the University community; and
- i. communicate the provisions of Biosafety to all appropriate workplace parties.

6.0 COMPLIANCE

Brandon University requires that all faculty members, staff, and students adhere to this policy and the Brandon University Biosafety Committee policies and procedures derived from it. The University considers non-compliance and the inappropriate use of biological materials to be a serious offence, subject to penalties, including, but not limited to, formal written notification and documentation, withdrawal of privileges to conduct research involving biological materials, and/or disciplinary action.

7.0 ACCOUNTABILITY

Any fines imposed on Brandon University, as a result of an individual's failure to obtain Biosafety certification or comply with Brandon University Biosafety Committee policies and procedures, and regulations and legislation, shall be the responsibility of that individual.

Approved by Senate Research Committee: October 21, 2021

Approved by Senate: January 18, 2022