

 DALHOUSIE UNIVERSITY Biosecurity Plan	<i>Sponsor:</i> Vice President of Finance and Administration <i>Sign</i> _____	<i>Approval Date:</i> Feb 8, 2016
	<i>Responsible Unit:</i> Director EHS <i>Sign</i> _____	<i>Revisions:</i> 1

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A. **Background & Purpose:** This Biosecurity Plan outlines the measures to be taken to prevent the potential theft, misuse, and intentional release of biohazardous material and toxins. Section 4.1.11 of the Public Health Agency of Canada's (PHAC) *Canadian Biosafety Standard (CBS)* requires Dalhousie University to have a Biosecurity Plan in place.

B. **Application:** Applies to all Dalhousie University.

C. **Definitions:**

Biological agent: substances such as bacteria, viruses, fungi, proteins, genetic material, and/or toxins; or materials that may contain these substances, such as: cells, tissues, biomaterials or bodily fluids.

Biohazardous material: biological agents that constitute a real, potential or perceived hazard to the health and safety of humans, animals, or the environment.

Biohazardous waste: waste material for disposal that has come into contact with biohazardous material.

Biosafety: practices, procedures, and uses of equipment to ensure safe conditions when working with potentially biohazardous materials.

Biosecurity: measures taken to prevent unauthorized access, theft and misuse of biohazardous material.

EHS: Environmental Health and Safety.

Security clearance: a federal Canadian security clearance issued under section 34 of the *Human Pathogens and Toxins Act*.

Toxins: poisonous substances produced by living organisms, which are capable of causing disease in humans or animals.

D. **Statement:** As required by the Public Health Agency of Canada, Dalhousie University requires a documented Biosecurity Plan for facilities where biohazardous material or toxins are handled or stored.

E. **Administrative Structure:** The Vice President of Finance and Administration is the sponsor of this plan, with responsibility for implementation being provided through the EHS Office managed by the Biological Safety Officer.

This plan was written in conjunction with the Dalhousie University Biosafety Committee.

F. **Procedures:**

1. **Physical Security:**

Security Services patrols the campuses of Dalhousie University at regular intervals and investigates any suspicious activity. Buildings at Dalhousie University are locked after hours to prevent access by unauthorized persons. Regular inspections of laboratory/storage areas are performed by Principal Investigators and their designated staff assigned to biological laboratory safety, as well as the Biological Safety Officer.

Biological Agents in use:

Constant surveillance and control must be maintained over biological agents in use. An individual who has received training in the safe use of biological agents (as approved by the Dalhousie University Biosafety Committee) must be present in the laboratory during use.

Biological Agents in storage:

All biological agents in storage must be secured from unauthorized removal or access. The door to the laboratory must be equipped with a lock. When a room containing biological agents is unoccupied for periods such as lunch, meetings, after hours, etc. the room and/or storage enclosure must be locked. Storage of biological agents in hallways is not permitted. Any exceptions to this policy must be approved by the Dalhousie University Biosafety Committee.

Biological agents must be stored or monitored in such a manner that an individual with authorized access to the area, but who is not authorized to use or possess the agents, cannot gain control of the agents.

When not in use, biological agents as identified in the Australia Group list (<http://www.australiagroup.net/en/controllists.html>) as well as the Center's For Disease Control (CDC) Select Agent list (<http://www.cdc.gov/od/sap/docs/salist.pdf>) must be secured in a lockable storage unit within the laboratory. Security Sensitive Biological Agents, as defined by the *Human Pathogens and Toxins Act*, are only permitted to be used/stored in locations approved by the Biological Safety Officer.

Biohazardous waste:

Biohazardous waste must be secured from unauthorized removal. This may be accomplished by storing waste in locked laboratories until it is sterilized for disposal.

2. Personnel Security:

Principal Investigators must maintain a list of workers permitted to enter the laboratory and access biological material. This list must be on record with the Biological Safety Officer and kept current.

Every new worker must receive biosafety training as approved by the Dalhousie University Biosafety Committee and be informed of this Biosecurity Plan. Biosafety training is provided by the Biological Safety Officer.

Visitors to the laboratory as defined in the Dalhousie University Biosafety Manual will need to log in/out and must be under the supervision of an approved worker. Visitor logs must be maintained for a minimum of five years.

Unrestricted/unsupervised access of emergency response personnel to laboratories is limited to emergency situations.

A valid *Human Pathogens and Toxins Act* Security Clearance is required before a worker is granted access to laboratories where Security Sensitive Biological Agents are used/stored, or to Containment Level 3 facilities. Workers requiring security clearances will also be required to wear photo identification badges.

3. Biohazardous Material and Toxin Accountability:

Labelling:

Vessels and primary containment devices must be clearly labeled to indicate the biohazardous material or toxin contained within. Samples intended for long term storage must be labelled in a permanent manner.

Inactivation and disposal:

Biohazardous waste must be sterilized or inactivated according to Dalhousie University's Biosafety Manual prior to disposal.

Inventory:

Principal Investigators must maintain inventories of biohazardous material and toxins that are handled/stored within the laboratory. As specified by the Public Health Agency of Canada in the *Canadian Biosafety Handbook (CBH)*, only those materials in storage for 30 days or longer must be recorded in an inventory.

An inventory must be maintained sufficiently such that any loss or theft of the materials will be

detected. As per the *CBH*, inventories should, at a minimum, be updated annually and whenever a sample is used, transferred, inactivated, or disposed of, and whenever new material is acquired or identified. Inventories of higher risk materials may require updating more frequently, as based on a risk assessment.

The inventory should include:

- responsible individual,
- agent identification,
- Risk Group,
- agent storage location(s),
- identification of who accesses/removes the agents,
- applicable transfer documents

Transfers:

All transfers of biohazardous materials or toxins to another individual, both within and externally to Dalhousie University, must be approved by and co-ordinated through the Biological Safety Officer. The Biological Safety Officer will ensure that transfers comply with all regulatory requirements and that the material is transferred to another licensed individual.

Records of transfers will be maintained by the Principal Investigator as well as the Biological Safety Officer.

4. Biosecurity Incident and Emergency Response:

Biosecurity incidents must be reported, documented, and investigated immediately. Biosecurity incidents include unauthorized pathogen removal, unauthorized persons within the laboratory, and loss of containment.

The Principal Investigator or his/her designate must contact the Biological Safety Officer without delay in the event of any actual or suspected loss or theft of a biological agent. The Biological Safety Officer must report the loss/theft to the Minister of Health as per the *Human Pathogens and Toxins Act*. An investigation must begin immediately and is conducted in conjunction with the Faculty, Department and Principal Investigator, with guidance being provided by the Biological Safety Officer and EHS Office.

Unauthorized entry of the laboratory must be reported to Security Services and to the Biological Safety Officer. Security Services should be notified of any suspicious activity and be contacted for removal of unauthorized persons.

Principal Investigators are required to review emergency response procedures with laboratory personnel semi-annually. This may be performed via email or through formal or informal discussions with laboratory personnel.

In the event of an emergency evacuation, biohazardous material should be secured if possible. Laboratory doors should be closed and locked upon exiting.

The Dalhousie University Crisis Management Plan provides additional information on emergency response
<http://www.dal.ca/content/dam/dalhousie/pdf/facilities/Security%20Services/University-Crisis-Management-071514.pdf>

5. Information Security

Sensitive information including biohazardous material inventories, storage locations, passwords and access codes must be protected from access by unauthorized persons.

6. Responsibilities:

Principal Investigator:

Principal Investigators must ensure that this Biosecurity Plan is implemented in the laboratory and storage spaces for which they are responsible. They must ensure that all laboratory personnel have received biosafety training and are aware of this Biosecurity Plan.

Laboratory personnel:

Laboratory personnel must follow the procedures detailed in this Biosecurity Plan. They must also complete Dalhousie University biosafety training.

Biological Safety Officer:

The Biological Safety Officer is designated the responsible officer for biosecurity purposes. The Biological Safety Officer is responsible for developing this Biosecurity Plan and works with Principal Investigators to assist with implementation.

The Biological Safety Officer must maintain records of the biohazardous material, approved workers, and storage/use locations at Dalhousie University.

Security Services:

Security Services are available 24 hours a day, 7 days a week to respond to emergencies on Dalhousie University campuses. Security Services may contact appropriate personnel for assistance when necessary.