



<b>Biosafety Policy</b>	
<b>Category:</b> Academic-Administrative	<b>Approval Date:</b> March 31, 2022
<b>Policy Owner:</b> President	<b>Effective Date:</b> March 31, 2022
<b>Policy Administrator:</b> Chief Human Resources Officer	<b>Review Period:</b> 5 Years
<b>Recommended by:</b> Service Council	
<b>Associated Documents</b> Plan for Administrative Oversight for Pathogens and Toxins Biosafety Code of Practice Biosafety Plan & Permit Application Biosafety Containment Level 2 Standard Operating Procedures Health and Safety Policy Hazardous Material Disposal Procedure	

## PURPOSE

The purpose of this policy is to address provisions for the safe use of biohazardous materials and notifiable biological substances. This policy provides guidelines for working with pathogens and toxins safely and includes the terms of reference for the Biosafety Advisory Committee.

## SCOPE

This policy applies to all staff, students and contractors, and any person who visits, rents or leases Red Deer Polytechnic facilities. In addition, the policy applies to any facility rented or leased by the Polytechnic.

## POLICY

### *Generally*

1. Red Deer Polytechnic is committed to providing a safe working environment for all staff, students, contractors, and visitors, to incorporating health and safety practices into all aspects of research and teaching, and to protecting the environment.
2. All individuals working with or manipulating biohazardous materials or notifiable biological substances (see definitions on page 2 and 3) that are in Risk Group 2 (RG2) or higher must adhere to the administrative procedures and rules for the acquisition, use, storage,

transportation, and disposal of the above materials, as set forth in this Policy as well as in the related Plan for Administrative Oversight of Pathogens and Toxins, the Biosafety Code of Practice, the Biosafety Plan & Permit Application and Biosafety Containment Level 2 Standard Operating Procedures. The Biosafety Officer (BSO) and Occupational Health and Safety Officer (OHSO) have the authority to enforce the Policy and Regulatory Standards.

3. Consistent with the objectives of the Red Deer Polytechnic's Health and Safety Policy, the Biosafety Advisory Committee (BAC) is established as a sub-committee of the Health and Safety Committee (HSC). The BAC is authorized by Health and Safety Committee to approve and advise on the safe use of biohazardous materials and notifiable biological substances, to make recommendations on policies, procedures, and guidelines related to biosafety, to issue Biosafety Permits and to ensure compliance with regulatory requirements.
4. All Permit Holders, Supervisors, Principal Investigators, and Lab Instructors have the moral and legal responsibility to ensure the health and safety of employees and students working under their jurisdiction, in addition to protecting the environment. It is the duty of all Supervisors and Lab Instructors to comply with federal, provincial, and municipal regulations and standards. It is the duty of all authorized workers and authorized service personnel to conduct themselves in a safe and responsible manner by incorporating safety measures as an integral part of daily work and training.
5. The policy is revised as codes and regulations are altered in the field of biotechnology, biosafety, and biosecurity.

#### ***Role of the Occupational Health and Safety Officer (OHSO)***

1. The OHSO is committed to helping the RDP community conduct its activities in a safe manner.
2. The OHSO acts as a resource for faculty, staff, and students to meet their responsibilities pertaining to federal, provincial, and municipal legislation and safety standards.
3. The OHSO strives to reduce risks by ensuring all workplace hazards and potential hazards are identified and controlled, appropriate training sessions are provided at regular intervals and by conducting biannual workplace inspections, inventory audits, and consultations with the Polytechnic community.
4. The OHSO has the authority to take any action deemed necessary and appropriate to meet all health, safety, and environmental regulatory requirements.

#### ***Plan for Administrative Oversight for Pathogens and Toxins***

1. The Polytechnic maintains a current Plan for Administrative Oversight for Pathogens and Toxins as required in the HPTR.
2. The BSO is responsible for providing guidance on the Plan elements and for initiating annual reviews to update the Plan.
3. The Executive Director, People and Culture is responsible for approving the Plan and revisions to the Plan as this position is administratively responsible for all aspects of health and safety at the Polytechnic.

### ***Biological Safety Officer's Responsibilities***

1. The BSO is responsible for administering the Biosafety Program and acts as a resource to the Polytechnic community in assisting Permit Holders to meet regulatory compliance and Biosafety Policies.
2. The BSO also acts as the liaison between the Biosafety Advisory Committee, the OHSO and Permit Holders.
3. As prescribed in the HPTR, the BSO is responsible for
  - a. verifying the accuracy and completeness of HPTR licence and biosafety permit applications;
  - b. serving as the point of contact between the Polytechnic and the Public Health Agency of Canada (PHAC);
  - c. promoting and monitoring compliance with the HPTA, the HPTR, conditions of the Pathogen and Toxins licence and applicable biosafety and biosecurity standards at the Polytechnic;
  - d. developing and maintaining the Biosafety Code of Practice, the Biosafety Plan & Permit Application and Biosafety Containment Level 2 Standard Operating Procedures; and
  - e. assisting with internal investigations of reportable incidents - all incidents, injuries or "near misses" regardless of their nature.
4. The BSO has the authority to access any records that are required to carry out these functions.

### ***Inspections***

1. Monitoring for compliance is necessary to maintain the accountability and integrity of the Biosafety Program, which also serves to demonstrate due diligence in the workplace. This is accomplished through inspections.
2. The BSO conducts inspections at least twice a year. In order to verify compliance, Regulatory Inspectors or members from the Health and Safety Committee are authorized at any reasonable time to enter and inspect a biohazardous work area(s).
3. Deficiencies are rectified within the period indicated by the inspector or a member of the HSC. The OHSO assist, where possible, to improve safety in the work area. However, when items of non-compliance are not rectified or non-compliance is ongoing, the matter is referred to the BAC and the HSC.

### **DEFINITIONS**

**Authorized Worker:** a person who is authorized to work with permitted materials under the supervision of a Permit Holder.

**Authorized Service Personnel:** any person who is authorized to work in areas where biohazardous materials or notifiable substances are used or stored. These may be maintenance workers, equipment technicians, cleaning staff, security staff, etc.

**Biohazardous materials:** is any biological material, which is potentially harmful to humans, animals, plants and/or the environment. These include but are not limited to any organism (bacteria, protozoa fungi, algae, viruses; and human blood, cells, body fluids and tissues) or their toxic metabolites believed to be potentially harmful to humans, animals or plants. Certain types of nucleic acids, such as DNA derived from pathogenic organisms or human oncogenes, are also considered to be biohazardous materials. Any cases where it is uncertain whether the material is a biohazard should be referred to the Biological Safety Officer.

**Biological Safety Cabinet (BSC):** an engineered safety control device that is used to provide an aseptic work area as well as contain biohazardous materials or notifiable biological substances in order to protect the health of the worker and the environment.

**Biological Safety Officer (BSO):** an individual appointed by the Chief Human Resources Officer in charge of Health and Safety in consultation with the Dean and Associate Dean responsible for Science. This individual must have the qualifications as set out in the federal regulations of the *Human Pathogens and Toxins Act* ([section 8 of the HPAT regulations](#)), and they will exercise the powers and shall carry out the functions set out in the regulations.

**Biosafety Permit:** a document presented to a Permit Holder by the Biosafety Advisory Committee when all regulatory requirements have been met for working with biohazardous materials or notifiable biological substances.

**Biotechnology:** the application of science and engineering in the direct or indirect use of living organisms or parts or products of living organisms in their natural or modified forms.

**Containment Level 2:** the primary exposure hazards associated with organisms requiring containment level 2 are through the ingestion, inoculation, and mucous membrane route. Agents requiring containment level 2 facilities are not generally transmitted by airborne routes, but care must be taken to avoid the generation of aerosols (aerosols can settle on bench tops and become an ingestion hazard through contamination of the hands) or splashes. Primary containment devices such as BSCs and centrifuges with sealed rotors or safety cups are to be used along with appropriate personal protective equipment. As well, environmental contamination must be minimized by the use of hand washing sinks and decontamination facilities (autoclaves).

**Human Pathogens and Toxins Act (HPTA):** the Federal Act with its purpose being to establish a safety and security regime to protect the health and safety of the public against the risks posed by human pathogens and toxins.

**Human Pathogens and Toxins Regulations (HPTR):** the regulations that set out how the HPTA is to be enacted and enforced.

**Notifiable Biological Substances:** genetically modified microorganisms or genetic combinations, which are not known to occur naturally.

**Occupational Health and Safety Officer (OHSO):** functions as a specialist advisor to Schools/Divisions in occupational health and safety legislation and industry best practices for faculty, staff, and students. The OHSO coordinates the development, delivery and creation of integrated health and safety services for RDP's current and future needs and in alignment with the strategic plan.

**Pathogen and Toxin Licence:** a licence required in order to acquire, grow, or store human pathogens and toxins under the HPTR.

**Permit Holder:** a Principal Investigator, Faculty Member, or Laboratory Manager who is authorized to work with Biological Substances and/or Biohazardous Materials by the Biosafety Advisory Committee.

**Risk Groups:** as defined in the [Canadian Biosafety Standard 2<sup>nd</sup> Edition - 2015](#) and in the HPTA.

**Supervisor:** a person who is authorized by the RDP to oversee or direct the work of employees and students. The authority to supervise employees and students is inherent in their job function. Although the RDP recognizes the ultimate responsibility of performing work in a safe manner lies with the individual employee, supervisors have additional responsibilities, which arise from their role as persons responsible for providing training, competent supervision and managing the workplace under their authority.