

Registered Biological Safety Officers – Registration Committee

Issue Date:	May 30, 2016
Revision Date:	June 1, 2017
Review Date:	May 30, 2018 October 14, 2021 July 12, 2024 October 3, 2024
Revision #:	5

Introduction

The following describes the criteria and procedures used to register biological safety officers in Canada. This is a designation that falls under CABS-ACSB and is not linked to the Human Pathogens and Toxins Act/Regulations.

Background

In Canada, work with biological material and microorganisms is regulated primarily by two agencies: the Public Health Agency of Canada (PHAC) and the Canadian Food Inspection Agency (CFIA). Practitioners of biosafety come from many different disciplines, and there is a need for someone to oversee each institution's biohazards operations and ensure compliance with legislation. These responsibilities are performed by biosafety officers (BSO) [or biosafety professionals (BSP)]. In recent years, the field of biosafety has become better defined, and many institutions have recognized the need for BSOs overseeing biohazard activities to be educated and competent in many fields of work and research.

A Registered Biosafety Officer (RBSO) in Canada is an individual with documented university or accepted education or specialized training in relevant biological safety and security disciplines. A RBSO has an understanding of microbiology appropriate to the scope of work expected for a Biological Safety Officer attained through a combination of education, training and experience. Experience includes the application of methods to safely and securely control infectious materials in academia, research, clinical, production, testing, educational, developmental, public health, veterinary and animal health and other work environments. RBSOs understand the need for and application of biological safety principles and practices. They have knowledge of applicable federal, provincial or municipal regulatory legislation, standards and guidelines (e.g. Human Pathogens and Toxins Act, Human Pathogens and Toxins Regulations, Canadian Biosafety Standard, Canadian Biosafety Handbook) impacting work with infectious agents and materials. A RBSO understands safe methods for manipulating, studying, producing, and containing infectious agents and biological hazards. The RBSO maintains a level of professional

knowledge current with new developments in biological safety and security. RBSOs understand basic cell biology, pathogenic microbiology, molecular genetics, immune responses of hosts, and concepts of infectious transmission to enable them to apply safeguards to work with biohazardous materials, including recombinant DNA manipulation.

A RBSO has a minimum of three years of experience in biological safety and security program implementation and management and in the drafting, auditing, presentation, training and enforcement of biological safety practices. RBSOs are dedicated to the prevention of occupational exposure to infectious diseases and recommend good faith compliance of their employers with all pertinent published laws and standards impacting biological safety in the workplace. Registered biological safety professionals always encourage and promote safe work practices that protect humans, animals and the environment from the potential danger of infection.

Registration Committee

A Registration Committee (RC) has been formed to review all RBSO applications submitted to CABS-ACSB. Members of the RC committee must be CABS-ACSB members in good standing and possess an advanced level of experience in the practice of biological safety. The RC is provided with one paid administrative support person responsible for the intake of applications and fees, communications and to schedule meetings of the committee to review applications. The RC meets as needed and considers applications virtually.

Application Materials and Process

The CABS-ACSB Executive Committee is responsible for the development of application materials used by the RC and posting them on the CABS-ACSB web site. Application materials will be reviewed as needed and updated according to current needs and on the advice of the RC.

Upon review by the RC, applicants will be advised of their application status within 5-7 business days. If applicants are not currently CABS-ACSB members, they must become a member to receive the formal RBSO designation.

Eligibility Criteria for Registration

Applicants must possess the qualifications stated below.

- Graduation from a college or university with a Baccalaureate degree in a physical or biological science discipline or accepted education as approved by the Registration Committee, plus
- Three years with a minimum of 25% dedicated to biosafety program management or more of professional biological safety experience acceptable to the RC. Applicants do not

need to be currently employed, but must demonstrate previous experience in biosafety program management in the last 5 years.

Biosafety program management does not need to be the applicant's only responsibility (including radiation safety, chemical safety, etc.). Applicants must demonstrate they dedicate at least 25% of work time managing and implementing a comprehensive biosafety and biosecurity program

In order to qualify as acceptable biosafety experience, the applicant should be responsible for oversight of biosafety and biosecurity practices and management of the biosafety program including:

- Policy development
- Implementing the program
- Monitoring compliance
- Conducting risk assessments and internal inspections/audits
- Overseeing and documenting biosafety-related training
- Assisting in investigations of incidents
- Compiling and providing any reports/documentation, as required by the regulatory agencies
- Maintaining liaison with containment zone personnel, support staff, housekeeping personnel, and contractors on biosafety-related matters
- Biorisk assessment and management (including hazard identification and risk assessment, management and communication)
- Creating and conducting biosafety related training
- Establishing written biosafety programs policies and procedures
- Developing and maintaining site biosafety manuals and exposure control plans
- Establishing and leading biosafety committees
- Reviewing project proposals and providing advice on biosafety issues
- Providing technical support to medical surveillance program managers
- Developing and supporting implementation of infectious waste management programs
- Developing and recommending biosafety practices and plans for biological emergencies
- Providing technical advice on shipping, importing and exporting biological materials and agents
- Auditing biosafety and/or biosecurity programs
- Establishing and managing programs for regulated agents and materials (e.g. SSBA's)
- Developing site biosecurity programs and plans and conducting biosecurity risk assessments
- Continual improvement of the program

In addition, professional biological safety experience may be supplemented with laboratory

experience gained through working with biohazardous agents in a laboratory setting at a rate of 10% of the total time spent in the laboratory. For example, if an individual has worked for 5 years in a microbiology laboratory using biohazardous materials safely, 6 months of that time may be counted towards professional biological safety experience. Note: Only experience gained through using or working with biological agents and materials may be counted. Work in a laboratory writing biosafety standard operating procedures (SOPs) does not qualify as experience. The applicant is responsible to provide supporting documentation to the RC.

Substitutions or Modifications of the General Criteria

- An earned Doctoral degree in a relevant discipline from a college or university may be recognized in lieu of up to three years of the applicant's required professional biological safety experience.
- A Master's degree in a relevant discipline from a college or university may be recognized in lieu of two years of the applicant's required professional biological safety experience.
- Professional certification, licensing, or registration that required qualifications commensurate with those in the General Criteria, may be recognized in lieu of two years of the applicant's required professional biological safety experience.

An applicant not meeting the academic requirements may, at the discretion of the RC, be permitted to substitute approved biological safety experience.

Substitution of biological safety experience for degree requirement:

A combination of professional development training in biological safety and direct biological safety experience may be substituted for the basic academic requisite according to the discretion of the RC. The applicant is responsible for demonstrating to the committee that their training and experience are equivalent to the requirements above.

RBSO Fees and Registration Period

All RBSO applicants will submit a \$50.00 CAD RBSO administrative fee upon submitting their application.

If accepted by the RC, the RBSO will receive a certificate to be an RBSO in good standing for that calendar year.

The following year, RBSOs will be asked to provide a fee of \$100.00 CAD, which will maintain their RBSO status for 3 years. At the end of the three year period, RBSO applicants will be asked to renew for an additional 3 years for \$100.00 CAD and be asked to demonstrate their continuing education efforts by providing tools, training and online sessions attended.

RBSO status will only remain valid as long as the RBSO is a member in good standing of CABS-ACSB, which requires annual renewal. If they do not maintain their membership, their RBSO designation will no longer be valid.