

Designation of Registered Biological Safety Officers in Canada

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Introduction

The following describes the criteria and procedures used to register biological safety officers in Canada.

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 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 has understanding of 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 "hands on" 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 work place. 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) will be formed to review all RBSO applications submitted to CABS. A four member RC will be appointed by the CABS Executive Committee for a term of not less than 2 years. RC appointees must be CABS members in good standing for at least 2 years and possess an advanced level of experience in the practice of biological safety. The RC will be 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 will meet four times annually to consider the applicants and determine their eligibility for registration.

Application Materials and Process

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

Eligibility Criteria for Registration

All registration applicants must be CABS members in good standing for the year in which they are applying for registration. Applicants must also possess the qualifications stated below.

- Graduation from an accredited 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 (full-time) or equivalent years part-time (with a minimum of 25% dedicated to biosafety program management) or more of professional biological safety experience acceptable to the RC.

In order to qualify as acceptable biosafety experience, part of the applicant's responsibility must be to manage and/or direct a comprehensive biosafety and biosecurity program. Although biosafety program management does not need to be the applicant's only responsibility (including radiation safety, chemical safety, etc.), the applicant must demonstrate they dedicate at least 25% of work time managing and implementing a comprehensive biosafety and biosecurity program. Typical biosafety program management responsibilities may include, but are not limited to, 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. SSBAAs) and developing site biosecurity programs and plans and conducting biosecurity risk assessments.

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 an accredited 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 an accredited 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.

Only one of the professional experience equivalents will be credited. If more than one professional experience equivalent is acceptable, the RC will apply the one that provides the most credit.

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 (xxx credit hours) and direct biological safety experience (6 years at 100%) 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.