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# Safeguarding Science

Promoting Awareness of Chemical, Biological, Radiological, and Nuclear Security Risks, and the Potential Proliferation of Dual-use Technology

Participant Guide

# Background

As part of its effort to raise awareness across academia of chemical, biological, radiological, and nuclear security risks, as well as the potential for dual-use proliferation, Government of Canada partners (Public Safety, Public Health Agency of Canada, and the Canadian Nuclear Safety Commission) have developed an outreach workshop aimed at improving the cooperation between federal security partners and Canadian institutions hosting sensitive laboratories, and research facilities.

Safeguarding Science was born out a series of successful exploratory meetings between the scientific community and federal agencies, as part of a multi-year pilot project. Based on feedback received, an outreach program was developed and is now offered to Canadian research institutions.

## What is 'dual-use'?

Dual-use refers to products, knowledge or technologies based on research, which, although conducted for legitimate purposes, have the potential to be illicitly acquired and/or exploited by others to purposely cause harm, or to threaten public health or national security.

# Safeguarding Science

Canada is a society of openness and freedom. These values are especially inherent in Canadian research institutions where the sharing of information and open dialogue constitute important components of the democratic nature of our country.

The Public Health Agency of Canada's, Centre for Biosecurity, Public Safety Canada, and the Canadian Nuclear Safety Commission recognize the tremendous value of research in science, technology, and engineering. Yet, at the same time we are mindful that research and knowledge involving, for example, radiological substances or pathogens also hold the potential to be misused by individuals or foreign entities and directed for alternate purposes, up to and including weaponization. In order to protect valuable Canadian contributions to science, we are working together to advance an awareness of chemical, biological, radiological, and nuclear security in scientific research and development.



## Workshop Objectives

The objectives of this workshop are to improve cooperation between federal security partners and Canadian institutions hosting sensitive laboratories. This is accomplished through:

- Raising awareness of dual-use risks associated with chemical, biological, radiological, and nuclear research, knowledge, technology, information, and materials;
- Understanding the Government of Canada's broader counter-proliferation considerations in relation to Canadian scientific and research communities; and
- Providing resources and information to participants, in order to facilitate mitigation against these risks.

## Workshop Overview

This interactive workshop is led by a multi-disciplinary team, and will include the following components:

- Overview of case studies involving security incidents at sensitive laboratory and research sites;
- A practical overview of key terminology;
- Methods of responsible communication of information;
- A description of insider and outsider threats to sensitive laboratory sites;
- Common challenges and approaches to securing research and related facilities;

- An overview of federal security partners' mandates, roles, and activities;
- A description of Canada's counter-proliferation regime;
- A facilitator-led group exercise incorporating realistic running scenarios, aimed at challenging participants to react to evolving security threats;
- A concluding, "lessons learned" dialogue and;
- Distribution of an electronic resource package which includes reference documents, training, guidelines, apps, and important contacts.

## What's The Benefit?

Safeguarding Science will:

- Improve your ability to protect the reputation of your researchers and organization;
- Help you protect your intellectual property or potentially patentable property;
- Help you protect research integrity which supports your ability to attract and maintain partnerships and collaboration;
- Facilitate networking between departments involved in laboratory and information security, research, human resources, and information technology

## Who Should Attend?

This program encourages a diverse mix of interested participants, including biosafety and radiological safety officers, information technology and information management staff, security personnel, researchers, human resources personnel, and senior management.

## For More Information

For more information about this event or to inquire about scheduling your institution for a future outreach session, please contact:

Safeguarding Science  
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