



Public Safety and Emergency
Preparedness Canada

Sécurité publique et
Protection civile Canada

The Chemical, Biological, Radiological and Nuclear Strategy of the Government of Canada



Most of the photos used in this publication are courtesy of Defence Research and Development Canada (CBRN Research and Technology Initiative) and the Royal Canadian Mounted Police (Northwest Region CBRN Team).

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An electronic version of this brochure is available via www.psepc.gc.ca on the Internet.

Cette publication est aussi offerte en français.

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Catalogue No. PS4-19/2005
ISBN 0-662-68927-5



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INTRODUCTION

Background

The events of September 11, 2001 and the subsequent anthrax incidents of Fall 2001 brought growing attention to terrorist threats. Continuing terrorist attacks around the world demonstrate that no country is immune from the threat of terrorism and there is ongoing concern over the threat of chemical, biological, radiological and nuclear (CBRN) terrorism.

Canada and its allies are potential targets of CBRN terrorism. While there has been no specific CBRN threat to Canada, the Government of Canada has acted decisively to address the CBRN issue. There is a need for a CBRN strategy that takes into account the Government of Canada's efforts to date and provides an over-arching framework to enhance the country's readiness to manage CBRN incidents.

Definition of CBRN

The Chemical, Biological, Radiological and Nuclear Strategy of the Government of Canada defines CBRN as weaponized or non-weaponized chemical, biological, radiological and nuclear materials that can cause significant harm. Non-weaponized materials have been traditionally referred to as Dangerous Goods (DG) or Hazardous Materials (HAZMAT) and can also include contaminated food, livestock and crops. The term "CBRN" includes DG or HAZMAT. The CBRN Strategy recognizes that these materials pose significant threats in the hands of terrorists. While the CBRN Strategy does not specifically highlight explosive threats such as conventional terrorist bombs (e.g. pipe bomb), improvised explosive materials (e.g. fuel oil-fertilizer mixture) and new threats like enhanced blast weapons (e.g. dirty bomb), the CBRN Strategy does recognize that explosives can be used to deliver CBRN materials causing significant harm (e.g. radiation dispersion device).

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Definition of a CBRN Incident

The CBRN Strategy focuses on terrorist-related CBRN incidents. Except for certain criminal acts such as the deliberate dumping or release of hazardous materials to avoid regulatory requirements, or the malicious, but non-politically motivated poisoning of one or more individuals, an intentional CBRN incident will, for the purposes of this CBRN Strategy, be considered a terrorist act (as defined in the *Criminal Code of Canada* and the *Security Offences Act*). This includes acts involving serious violence to persons or property where the offence potentially has a political, religious or ideological objective either in Canada or a foreign state, or is a matter of national interest. Whether related to terrorists or not, an **intentional** CBRN incident in Canadian jurisdiction is a criminal act.



An **accidental** CBRN incident refers to an event caused by human error or natural or technological reasons. This could include spills, accidental releases or leakages. These are generally referred to as DG or HAZMAT accidents. The overall approach to dealing with the consequences of a terrorist CBRN incident may be similar to an accidental CBRN incident. However, CBRN terrorism incidents differ because there are unique implications relating to federal/provincial/territorial responsibilities, public safety, public confidence, national security and international relations. The CBRN Strategy is developed based on a CBRN terrorist incident, but could also be relevant and applied to accidental CBRN incidents.

STRATEGIC AIM

The aim of the CBRN Strategy of the Government of Canada is to protect Canada and Canadians by taking all possible measures to prevent, mitigate and respond effectively to a potential CBRN incident.

Key Elements

The CBRN Strategy supports the Government's National Security Policy.

The CBRN Strategy supports the Government of Canada's Anti-Terrorism Action Plan announced after September 11, 2001, which aims to:

- prevent terrorists from entering Canada
- protect Canadians from terrorist acts
- bring forward tools to identify, prosecute, convict and punish terrorists
- keep the Canada-U.S. border secure and open to legitimate trade
- work with the international community to bring terrorists to justice.

The CBRN Strategy incorporates both domestic and international elements.

The CBRN Strategy incorporates crisis and consequence management.

The CBRN Strategy is part of Canada's National Emergency Management System and is inclusive of federal departments and authorities, and is coordinated with provincial and territorial governments.

Enhancing communication between departments, other levels of government, international partners, the media, the private sector and general public are key components of the CBRN Strategy and its objectives.

Assumptions

The Government of Canada has primary responsibility to prevent unauthorized use of CBRN materials and for the policy and operational response to the criminal aspects of a terrorist incident, while recognizing that local and provincial/territorial authorities will likely be the first to respond.

The federal government is also responsible for providing a consequence management response for terrorist incidents on, or affecting, federal property as well as Canada's territorial oceans and inland waters and any other areas of federal jurisdiction. It will work with provinces and territories to provide this response.

The province or territory where a CBRN terrorist event occurs has the main responsibility to manage its consequences. They are also responsible for working with municipalities. If needed, a province or territory can request additional assistance from the federal government. Federal support to the municipalities is provided through the appropriate provincial/territorial authorities.



The response to an accidental CBRN incident will be managed according to current response systems and plans. These include well-established roles for federal departments and proven protocols for managing these types of emergencies.

The Government of Canada has primary responsibility for coordinating the international aspects of a CBRN incident affecting Canada. It will work with provinces and territories to ensure their interests and issues are appropriately represented when dealing with the international community.

STRATEGIC CONCEPT

General Outline

The CBRN Strategy provides strategic guidance for all activities related to CBRN matters including policies, funding and follow-up on operational plans to meet the CBRN Strategy's aim.

The CBRN Strategy supports the Government of Canada's National Security Policy. The CBRN Strategy includes objectives to prevent or reduce the impact of a potential CBRN incident. Should a CBRN terrorist incident affect Canada, the response will be carried out within the National Emergency Response System, including crisis and consequence management. If the incident occurs within Canadian jurisdiction, the Minister for Public Safety and Emergency Preparedness is the pre-designated lead. Outside of Canadian jurisdiction, the Minister of Foreign Affairs is the lead.

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Implementing the CBRN Strategy is complex and requires an inclusive approach that involves all levels of government. The CBRN Strategy is based on a command and control structure, with flexibility to support rapid and effective decision-making.

STRATEGIC OBJECTIVES



The CBRN Strategy consists of strategic objectives to enhance Canada's ability to mitigate and prevent CBRN incidents from occurring. The objectives will also allow Canada to prepare for, respond to, and recover from, CBRN incidents.

Four strategic objectives are necessary to achieve the CBRN Strategy's aim:

- prevention and mitigation
- preparedness
- response and
- recovery.

Prevention and Mitigation

The CBRN Strategy recognizes that taking preventative/mitigative actions in advance to address CBRN threats will help to prevent and reduce the effects of a CBRN terrorist attack. The Government of Canada is committed to the following actions.

- Continue to support the global effort to combat terrorism through coherent and consistent international action based on agreed upon standards and practices.
- Provide CBRN training, funding, technical and legal assistance, and information to prevent and respond to a CBRN terrorist attack.
- Continue to be a world leader in the support of non-proliferation, arms control and disarmament. Canada's position remains clear: the elimination of nuclear weapons and all weapons of mass destruction will reduce the likelihood of terrorists acquiring CBRN weapons.
- Work with the provinces, territories and the private sector to keep CBRN-related materials out of the hands of terrorists. This will be done, in part, by reviewing and revising, as necessary, the legislation and regulations governing the acquisition, importation, sale, safe storage and transportation of CBRN-related materials.
- Support, in collaboration with our allies, international efforts to deter and prevent states with CBRN weapons and CBRN weapons-capable materials from using them and/or transferring them to others.
- Work with the international community to improve the security for the storage and movement of CBRN weapons-capable materials as well as the safe destruction of CBRN weapons.
- Support the principle that all states adopt and enforce appropriate, effective laws to prohibit the unauthorized manufacture, acquisition, possession, development, transportation, transfer or use of nuclear, chemical or biological weapons.
- Continue to strengthen our national program to identify and intercept CBRN-capable materials, weapons, and persons who may want to use them with malicious intent. This objective will be met by enhancing our partnerships and cooperation at Canada's borders and ports. This will help to ensure a secure border, open to legitimate trade and travel.
- Maintain a system of shared intelligence. Provincial and territorial levels of governments and other stakeholders (e.g. industry associations), where applicable, will be provided with CBRN-related intelligence, including threat assessments and warnings, from the national intelligence system.
- Continuously review legislation to provide law enforcement and intelligence agencies with the tools they need to fight terrorism.
- Ensure that the mitigation aspects of CBRN threats are incorporated as part of ongoing federal, provincial and territorial efforts to review and renew Canada's Emergency Management System.



Preparedness

Assuring that Canada and Canadians are adequately prepared to deal with effects of CBRN incidents is a continuing priority of all levels of government. The Government of Canada will undertake the following.

- Work collaboratively with provinces and territories and the private sector, including industry and the academic community, to implement the CBRN Strategy in a comprehensive and cost-effective manner.
- Work with provinces, territories and private industry to develop and implement appropriate and effective national protective measures against CBRN incidents. This includes, for example, enhanced national immunization and antibiotic stockpiles, CBRN incident surveillance and monitoring, and advice on protective measures in the event of a CBRN incident.
- Conduct and assist in the coordination of CBRN research and development, in partnership where possible, to build capabilities in critical or lacking areas.
- Work with our partners and allies to develop combined response plans, training protocols, equipment and interoperability standards, mutual aid agreements. Conduct exercises, share intelligence and threat information, engage in joint research and development, coordinate technical assistance to other states, and cooperate in other ways to address CBRN threats.
- Provide federal leadership and coordination to prepare for, and respond to, public health risks caused by CBRN threats.
- Sustain and deliver a coordinated CBRN training program, in conjunction with provinces and territories, that includes standards for response personnel.
- Work with provincial and territorial governments, standards organizations and industry to develop coordinated equipment capability standards and guidelines.
- Enhance our national exercise framework in order to coordinate efforts to validate and ensure that all aspects of the response system are tested. The program will aim to:
 - evaluate the national response structure
 - act as a catalyst for the development of a “lessons learned” system, the amendment of policies, procedures and protocols, and to enhance exercises and results-based research
 - confirm plans, policies, training standards, equipment and linkages between federal government departments and authorities, other levels of government, the private and public sector and the international community.

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Response

To strengthen capabilities to respond to CBRN incidents, the Government of Canada will:

- integrate crisis and consequence management of a CBRN incident and support provinces and territories in their management efforts
- enhance national operational response capabilities for CBRN incidents within the National Emergency Response System
- share intelligence and provide first responders with the equipment, technology and training to respond to a CBRN incident and
- ensure that the Government Operations Centre is connected with regional centres to coordinate the management of CBRN incidents or other critical events.



Recovery

Recovering from a CBRN incident poses significant challenges. The Government of Canada and its partners will continue to develop national recovery mechanisms for major emergencies, including those with CBRN elements.

ROLES AND RESPONSIBILITIES

Federal departments and agencies with key roles and responsibilities to achieve the aim of the CBRN Strategy are listed below.

Department	Department Agency	Role
Public Safety and Emergency Preparedness Canada (PSEPC)		PSEPC has the lead responsibility in implementing the Government of Canada's National Security Policy. It is responsible for coordinating the Government of Canada's overall response to terrorist incidents, including CBRN incidents, occurring within Canadian jurisdiction and coordinating federal support to provinces and territories.
	Canada Border Services Agency (CBSA)	CBSA administers Canadian laws that govern international trade and travel, and manages the nation's borders. CBSA also protects Canadians and Canadian society from threats to health, safety and security, by ensuring a secure border, open to legitimate trade and travel.
	Royal Canadian Mounted Police (RCMP)	The RCMP is responsible for conducting law enforcement operations to prevent and respond to CBRN terrorist incidents.
	Canadian Security Intelligence Service (CSIS)	CSIS provides the Government of Canada with advice about emerging CBRN threats that could affect national security and public safety of Canadians.
Department of National Defence (DND)/ Canadian Forces (CF)		DND is responsible for supporting domestic operations with CBRN military expertise, intelligence and scientific support. The CF are responsible for the military defence of Canada, providing operational support to a CBRN response, supporting international counter-proliferation efforts, producing CBRN-related intelligence, and providing forces and assets to support the war on terrorism.
	Defence Research and Development Canada (DRDC)	Within the Defence portfolio, DRDC provides CBRN research and development response support, and coordinates the Government of Canada's CBRN Research and Development/Science and Technology efforts.
	Communications Security Establishment (CSE)	Within the Defence portfolio, CSE provides the Government of Canada with foreign intelligence about CBRN threats and capabilities, in support of national security and international non-proliferation efforts.

Department	Department Agency	Role
Health Canada (HC)	Public Health Agency of Canada (PHAC)	<p>HC and its PHAC are responsible for coordination with other government departments on emergency planning, preparedness and response to national public health emergencies.</p> <p>HC has a leading or coordination role in mobilizing national resources, provides a response capability and expert advice to a CBRN incident as it relates to public health and welfare. It also protects Canadians and Canadian society from threats to health under the <i>Quarantine Act</i> at the nation's borders.</p>
Environment Canada (EC)		<p>EC regulates environmental emergency planning at fixed facilities that manage toxic and other hazardous materials (non-radioactive), and provides response support (scientific and technical advice on chemical fate and effects, dispersion and trajectory modeling, clean up and recovery) for unplanned or deliberate releases of such substances.</p>
Transport Canada (TC)		<p>TC has overall responsibility for transportation security in Canada including powers under the Transportation of Dangerous Goods Act to assign duty to respond, intervene, provide liability protection, recover costs, and have access to industrial emergency response teams during transportation accidents. This is achieved through the activation of approved emergency response assistance plans. TC provides technical response information and advice by professional chemists on a 24/7 basis through CANUTEC. TC also provides on-site assistance and direction through Remedial Measures Specialists.</p>
Canadian Nuclear Safety Commission (CNSC)		<p>The CNSC regulates the production, possession and use of nuclear substances, including emergency planning at nuclear facilities. The CNSC also supports lead agencies by providing response support (scientific and technical advice) for incidents involving nuclear substances.</p>
Fisheries and Oceans Canada (DFO)/ Canadian Coast Guard		<p>DFO supports lead agencies responding to CBRN incidents affecting Canada's territorial oceans and inland waters or maritime vessels.</p>
Department of Foreign Affairs and International Trade (DFAIT) - Foreign Affairs Canada (FAC)		<p>DFAIT - FAC is the coordination lead for Canada's response to terrorist incidents, including CBRN incidents, outside of Canada involving Canadian or Canadian interests. FAC is also responsible for negotiating international agreements on controls of CBRN-related materials and technologies, and is the lead for non-proliferation, arms control and disarmament efforts. FAC coordinates international CBRN assistance to other states and serves as the clearinghouse for related requests.</p> <p>FAC is responsible for implementing Canada's contribution of up to \$1 billion over 10 years to the <i>Global Partnership Against the Spread of Weapons and Materials of Mass Destruction</i>, with the aim of preventing terrorists from acquiring weapons and materials of mass destruction.</p>
Department of Foreign Affairs and International Trade (DFAIT) - International Trade Canada (ITCan)		<p>DFAIT - ITCan is responsible for export controls of CBRN-related materials, and for providing key market intelligence concerning developments on defence industries overseas. ITCan assists Canadians in partnering internationally in areas of research and development; attracting venture capital assisting Canadian business to develop foreign markets.</p>

Department	Department Agency	Role
Agriculture and Agri-Food Canada (AAFC)		AAFC provides scientific expertise and advice regarding detection, measurement, evaluation or projection of CBRN-related material effects on crops, soils and livestock. AAFC also ensures appropriate measures are in place to contain or eliminate long term risks from those effects. AAFC works with provinces, territories and industry to develop systems to prevent or mitigate the impacts of CBRN incidents.
Canadian Food Inspection Agency (CFIA)		Under the <i>Emergency Preparedness Act</i> , the CFIA is mandated to prepare for, and respond to, emergencies involving food safety, animal health, plant health or any other situation related to the Agency's programs. The CFIA's emergency preparedness program focuses on activities that help the Agency and its partners reach a state of readiness to ensure an effective and rapid response to a food safety, animal disease or plant pest emergency. This is accomplished through the development of effective policies, procedures and plans for managing emergencies, as well as through emergency exercises and training. CFIA's import requirements and inspection programs are also designed to prevent a CBRN incident.
Natural Resources Canada (NRCan)		<p>NRCan provides response capabilities for real-time aerial mapping of radioactivity dispersed accidentally or intentionally. This information is used by others to guide evacuation, sheltering, quarantine and decontamination.</p> <p>Under the <i>Comprehensive Test Ban Treaty (CTBT) Implementation Act</i>, and related policies, NRCan is responsible for the Canadian seismic, hydro-acoustic and infrasound components of the International Monitoring System for nuclear explosion detection.</p>
Public Works and Government Services Canada (PWGSC)		PWGSC is responsible, under the authority of the <i>Defence Production Act</i> , for ensuring that CBRN related controlled goods and technologies are restricted to persons/companies registered with the Controlled Goods Program. This is done through the development of effective policies, procedures, compliance activities, and plans for managing emergencies and security breaches. PWGSC's inspection programs are also designed to prevent unauthorized access to CBRN related materials/technologies that are controlled goods. PWGSC also provides tools to prioritize federal buildings based on risk and vulnerability.
Privy Council Office (PCO)		PCO has overall responsibility for the coordination of emergency public communications during a CBRN incident.



Entity	Role
Provinces, Territories and Municipalities	Developing and maintaining appropriate CBRN preparedness and response programs as part of their primary, overall responsibility for managing the consequences of CBRN incidents. When requested or when the situation legally requires, the federal government will provide the appropriate response. Provinces, territories and municipalities will work with other levels of government to implement the objectives of the CBRN Strategy of the Government of Canada.
First Responder Services	Serve as the front-line in the crisis and consequence management to CBRN incidents, develop and implement appropriate preparedness and response programs, and capabilities to manage CBRN threats.
Private Industry, Academia and Non-Governmental Organizations	Contribute to the fulfillment of the CBRN Strategy of the Government of Canada objectives through the development of innovative products, technology, research and development, analysis and other supportive activities.

STRATEGIC COORDINATION BODIES

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The primary governing bodies to guide the implementation of the CBRN Strategy of the Government of Canada, and its objectives, begins with the Assistant Deputy Minister (ADM) Public Safety Committee, which reports through Deputy Ministers to the Cabinet Committee on Security, Public Health and Emergencies. A report assessing the status of initiatives to fulfill the CBRN Strategy's objectives will be provided to the relative governing bodies by Public Safety and Emergency Preparedness Canada (PSEPC) annually.

The Federal/Provincial/Territorial CBRN Working Group and Committee of Senior Officials Responsible for Emergency Management (SOREM) will act as the main coordinating bodies to link federal and provincial-territorial governments as they develop and carry out programs and initiatives in support of the CBRN Strategy.

PSEPC will continue to coordinate the implementation of the CBRN Strategy, providing updates as necessary on initiatives that fulfill the CBRN Strategy's objectives, and reporting to government as required.

CONCLUSION

Achieving the objectives of the CBRN Strategy of the Government of Canada requires the combined and coordinated efforts of many organizations. The Government of Canada will lead and work with other levels of government, the private sector and international partners to achieve the objectives of the CBRN Strategy.