



Health  
Canada Santé  
Canada

# Health Protection *for the* **21st** Century

Renewing  
the Federal  
Health Protection  
Program

A Discussion Paper  
Health Canada  
July 1998

Canada

**Our mission is to help the people of Canada  
maintain and improve their health.**

*Health Canada*

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## Message from the Minister

As Canadians, we value our good health and our health care system. At the same time, we recognize that many of the rapid changes taking place in our communities present new challenges to our health. We know we must modernize our health care system so it will be there to serve the needs of our children and grandchildren. We also know that dealing with existing and emerging risks to our health will help to make Canadians healthier and reduces the pressure on our health care system.

Health Canada plays a leadership role in protecting and improving the health of Canadians. One important part of this role is managing the risks posed by diseases and products. These health protection activities are carried out today by Health Canada's Health Protection Branch (HPB) and its partners across Canada.

Health Canada's health protection activities are constantly changing to respond to public health needs. In addition, over the next two to three years, the HPB will go through a process of review, consultation and renewal of our health protection activities in order to find new and better ways to protect the health of Canadians into the next century. This process is called *HPB Transition*.

We have established an independent expert-based *Science Advisory Board* to provide scientific, technical and policy advice. Chaired by Dr. Roberta Bondar, the Board is made up of independent scientists, health professionals, consumer advocates and others with expertise in public health. This arms-length organization will provide advice on all Health Canada's health protection activities.

The Krever Inquiry taught us some tragic lessons in the difficulty and importance of health protection decisions. It also taught us the importance of active participation by all Canadians who are affected by health protection decisions.

Whether you are a parent concerned about the health of your children, a volunteer for a health charity, a health professional, a scientist, a teacher, a health journalist, a manufacturer in a health-related industry or a member of a health care union, I encourage you to take part in *HPB Transition*.

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# 1 – Health Protection in a Changing World

Canada's health system is made up of health care, health promotion and health protection.

**Health care** consists of the medical and hospital services that provide care and treatment for people who are ill or injured.

**Health promotion** is the process of enabling people to increase control over, and to improve, their health. Health promotion is not just the responsibility of the health sector, but goes beyond healthy lifestyles to well-being.

**Health protection** helps Canadians to avoid illness or injury. Our lives are affected every day by the work of the men and women involved in health protection across the country.

- They help to make our food safe to eat, our water fit to drink and our air clean to breathe.
- They make sure that the products we use are safe and that the prescription drugs we take are effective.
- They monitor diseases and tell us about the best ways to prevent or control illness or injury.
- They prevent and respond to public health emergencies.
- They help manufacturers to make safer products, health care professionals to improve public health, and families and communities to live safer, healthier lives.
- And they share their knowledge and expertise with other health protection organizations across the country and around the world.

Health Canada does not do the job alone. It shares health protection responsibilities with other federal departments and agencies, provincial/territorial governments and international organizations. Health Canada also works with industry and with members of the health community.

The health protection activities of Health Canada and its partners have helped to make this country one of the healthiest and safest places in the world to live.

## The Need for Change

The rapid changes sweeping our society also have had an impact on public health and the work of health protection. We now need to modernize Canada's health protection system to deal with these changes.

### *New health risks are emerging.*

Hospitals struggle to control new drug-resistant infections. Air travel means that contagious diseases can spread around the globe in a matter of hours. Old illnesses like tuberculosis re-emerge in deadly forms. Urban pollution increases as more of us live in cities.

### *New discoveries are changing our lives.*

New types of organ transplants, reproductive technologies and drug-device combinations raise difficult medical and ethical issues. New drugs can save lives but may have dangerous side effects. New research expands our knowledge about old problems, like the dangers of second-hand tobacco smoke.

### *New technologies are changing the way we work.*

Scientific and technological improvements have changed the kind of expertise we need to assess and manage health risks. With instant communications around the world, we also have new ways of collecting, analyzing and sharing information, and managing risks.

### *Government is developing new partnerships.*

To avoid duplication of services and to be cost-effective, governments at all levels are developing partnerships. Canada-wide health protection systems, non-governmental organizations and university research communities are capable of doing work that is now being done within Health Canada. If industry takes on more responsibility for product safety and standards, Canadians want assurance that public health interests will continue to be the first priority.

### *Health Canada has changed.*

There have been organizational changes affecting Health Canada in recent years, such as the creation of the Canadian Food Inspection Agency and changes in mandate and responsibilities. These changes created new functions and new issues to be managed for the benefit of Canadians. It has become even more urgent to modernize the overall health protection system.

## The Transition Process

For the next two to three years, the Health Protection Branch (HPB) of Health Canada will be going through a process of transition in order to respond to the emerging challenges to public health. Each of the core areas of health protection — science, surveillance, risk management, legislation, and program development — will carry out in-depth consultations. Individuals, governments and organizations affected by the transition will be invited to participate.

This process, called *HPB Transition*, will help Health Canada to develop programs to protect the health of Canadians into the next century. *HPB Transition* has the following objectives:

- to strengthen the science that underlies decision making in order to meet current and emerging public health risks;
- to improve and modernize the Canada-wide health surveillance capacity;
- to improve the management of health risks, while recognizing the roles and responsibilities of all partners and participants;
- to update and integrate the federal health protection legislation: and
- to review and improve the delivery of health protection programs.

Several important principles will guide the complex process of modernizing the health protection system:

- Health Canada's health protection activities will continue to protect the health of Canadians during the transition.
- The transition is not a cutback or a "downsizing."
- Canadians will be consulted. Individuals, other levels of government, communities, health organizations, unions, employees, health professionals, industry representatives, international organizations and others will be given opportunities to participate. The process of transition will be open and accountable to Canadians, including the goals, activities and results.
- The outcome of the transition is not pre-determined. Recommendations for action will be developed only after full consultations with Canadians.

Over the course of the transition, we want to talk to people like you about health protection issues.

- A Web site will bring you up to date on current information and events related to transition.
- A series of documents will be available to interested groups and organizations. These documents will form the basis for detailed discussions of health protection issues.

- There will be formal consultations with groups and individuals affected by health protection decisions.
- Public workshops, focus groups and meetings across the country will provide opportunities for more public involvement.

While the transition process is under way, we will prepare reports on the consultations and on the recommendations for change. These reports will be available to interested Canadians.



## **2 – Where We Begin: Health Protection Today**

An effective health protection system depends on five basic tools — science, surveillance, risk management, legislation, and program development. These tools make it possible to take action on the basis of sound scientific information and social, economic, ethnocultural and gender concerns in order to respond to changing health protection needs.

### **Science: The Foundation of Health Protection**

Across the country, work by scientists from Health Canada protects Canadians against food and water hazards, unsafe products, infectious and non-infectious diseases, dangerous drugs and hazards in our workplace or our environment. Some Health Canada scientists work in government laboratories while others analyze and interpret research, surveys and studies. Together with partners from outside Health Canada, they provide independent and unbiased information in the areas of toxicology, microbiology, epidemiology, biostatistics, social sciences, chemistry, nutrition science, biotechnology, and physical and mechanical testing.

### **Surveillance: Forecasting Public Health**

The process of monitoring and forecasting public health trends is called surveillance. In order to assess and manage health risks, we need high-quality and timely information on the health status of groups of people or populations. We need to know when, where and how many people become ill or injured, and whether those patterns are changing over time. We need to know about their lives as well as their potential causes of poor health — their age, gender, socioeconomic status, their occupations, their lifestyle and their ethnocultural backgrounds. We need to know if they have been exposed to substances or bacteria that could have caused their illness or injury. And we need to know the outcome of any action taken to prevent or treat their disease.

Collecting information is only the first step. It must be evaluated and compared with other information, then shared among the many organizations involved in public health. This information has many important uses, including:

- identifying an outbreak of a communicable disease, so fast action can be taken to control it;
- detecting, at an early stage, new diseases or the reappearance of old diseases and new causes of injury, so plans for prevention or control can be made and implemented;

- monitoring the pattern of diseases and injury over time, so public health officials can set priorities and use resources effectively; and
- identifying hazardous products and emerging safety issues with respect to products.

Health Canada works with more than 7000 surveillance partners across the country — provincial governments, public health officers, epidemiologists, public health and hospital laboratories, health professionals and academics — to create a national picture of disease and injury trends and health risks. Canada also is part of a worldwide surveillance network of "observation posts" which collect, analyze, compare and interpret information about the health of families, communities and countries.

## **Risk Management: Building a Modern Framework**

We all face many risks to our health every day. Some risks are the result of a personal choice, such as going mountain climbing or eating an unbalanced diet. Other risks come from products, substances or processes in the environment, such as breathing in a potentially hazardous substance like asbestos, catching the flu, eating contaminated food or using a defective product.

One of the most important jobs of Health Canada is to understand and evaluate risks to the health and safety of Canadians and to take action to reduce those risks. Health Canada looks at many different kinds of health risks, including those from prescription drugs, medical devices, consumer products, food and water contaminants, air pollution, radiation, chemical hazards, tobacco, diseases, and natural and civil disasters.

Risk management is the process of assessing and dealing with health risks. Managers, scientists and public health professionals identify and assess the risks to our health; develop, analyze and choose options for managing the risks, implement the options, then monitor and evaluate the results. Health Canada and other provincial/territorial, national and international health organizations use a formal method called a "framework" that lists the steps in the risk management process. The framework gives structured yet flexible guidelines for making decisions. Using the same or similar framework as other organizations helps to make sure that the guidelines for assessing and managing health risks are consistent across the country and around the world. A good risk management framework allows guidelines to be updated to include new information. It also encourages the participation of people and organizations directly affected by the decisions.

## Legislative Review: Renewing the Legal Base

Federal health protection legislation gives the federal government the authority it needs to act and sets out what the government can do to help reduce health risks, preserve health benefits and make the lives of Canadians healthier and safer.

The health protection activities of Health Canada are governed by more than a dozen different laws. Some of these laws were developed at the turn of the century when people traveled to Canada in tall ships and no one could imagine an artificial heart or genetically engineered food.

Some of the federal health protection laws include:

- the *Food and Drug Act* which regulates food, drugs, cosmetics and medical devices;
- the *Hazardous Products Act* which deals with the safety of consumer products and materials used in the workplace; and
- the *Radiation Emitting Devices Act* which controls radiation emitted by X-ray machines, microwave ovens, tanning lamps, ultrasound machines, lasers or cellular phones.

## Program Development: Delivering Health Protection to Canadians

Health Canada's health protection programs provide a wide range of services to Canadian consumers, health organizations, industries and other levels of government. Among other things, the programs provide information on hazardous products and substances, set standards for consumer products, food, regulate the sale and use of prescription drugs, develop policies to prevent or reduce the spread of diseases and injuries, and provide an emergency response to serious public health threats.

## 3 – Challenges for Change

Our health protection system has provided good protection for Canadians, but there are many new challenges facing public health. Here are some of them:

**New health risks.** The emergence of new health risks means that programs must be able to adapt quickly to changing situations.

**A focus on results.** As the focus in health protection continues to shift from “react and cure” to “anticipate, prevent and manage,” there is a new emphasis on health outcomes. Studying health outcomes is simply a way to evaluate the results of our programs and activities on the health of specific and general Canadian populations.

**Changing scientific and technological expertise.** As new health risks emerge, there is a need to incorporate different kinds of scientific and technical knowledge, training and experience to identify, investigate, prevent and control these risks.

**The need for timely information.** To meet the needs of many different health protection organizations and agencies, information must be gathered, evaluated, analyzed and shared quickly.

**The need for agreement on sharing information.** Many organizations need public health information that was gathered or reported by other organizations. The information must all be collected and reported using the same or similar standards so we can compare and evaluate information from different sources. We need agreements on how information will be shared, and a national agreement on our specific national priorities.

**Incompatible technologies.** Important information is gathered and reported by health protection organizations but often it is not shared because the technology used by one organization is not compatible with the other.

**Food safety responsibilities have changed.** The Canadian Food Inspection Agency has transferred some activities away from Health Canada. We must be able to meet the needs of this new organization in a timely and cost-effective way, and it must coordinate its activities with the health protection activities of Health Canada.

**New health protection partners are available.** When Health Canada laboratories started up, there were very few health laboratory and testing systems. Today, good Canada-wide systems, non-governmental organizations and university research communities are available to carry out health protection work. The capacity of industry

and academic facilities to deal with public health work has expanded dramatically over the last 30 years.

**A need to work together.** The wide range of health protection issues means that no one organization or government agency can cover adequately all the fields and trends in public health. We need collaboration across different levels of governments and organizations. As well, we need expertise from many different disciplines. If scientists are brought together into multi disciplinary teams, they can share expertise and experience, as well as respond more effectively to public health crises. We also need to build national and international networks of scientists from outside Health Canada to provide additional expertise when needed.

**A need for public participation.** Health protection decisions touch many parts of many lives. We need to consult widely with those who are or may be affected by our decisions.

**Health protection must be cost-effective.** In times of fiscal restraint, we need to use our resources wisely and set priorities that will benefit the health of Canadians.

**Current laws are outdated.** Many of the federal laws on health protection were adopted decades ago. They have not kept pace with scientific, social and technological changes. We need legislation that clearly defines the health protection role of the federal government.

## **4 – The Future of Health Protection: Starting the Dialogue**

As the Health Protection Branch begins the transition process, there are many questions to discuss with Canadians. The questions below will help to begin the dialogue. This basic list is not comprehensive, and more questions will be raised as each of the core areas of science, surveillance, risk management, legislative renewal and program development begin their consultations.

### **Science**

- What are the emerging health risks, and what kind of science expertise will we need to deal with these risks?
- Do our universities and colleges train scientists to meet those needs? What kind of training or retraining will our current scientists need? What sort of technology and facilities will we need?
- What role should science play in making decisions on health protection? Should decisions be made on the basis of science alone? What are the rights and responsibilities of scientists in public health decisions?
- Is there an advantage in transferring some scientific activities of health protection to outside laboratories and research communities? Should these activities be transferred?
- How do we ensure independence and effectiveness when we work in collaboration with private-sector scientists and facilities?
- How do we build and maintain national and international links with other health organizations and resources?

### **Surveillance**

- How do we decide what information to collect?
- What standards and guidelines do we need for gathering and reporting information? How do we make standards consistent at all levels — from the level of local health units to large international organizations?
- Who should be responsible for setting standards? How can we make sure that those affected by the decisions can participate in setting standards?

- What technologies do we need to be able to gather, analyze and share information among all our health protection partners?
- Who should have access to sensitive health information, and under what conditions, without violating individual rights to privacy and confidentiality?

## **Risk Management**

- In making health protection decisions, how should we consider factors such as scientific data, non-scientific information, economic impact, legal obligations, public perception and available resources?
- How do we balance risks, benefits and costs when making decisions?
- What is an “acceptable” level of risk? What factors should we consider when deciding? How should we consider them? Who should decide what is acceptable?
- How can everyone affected by health protection decisions, including the public, participate in the process? What help do they need to participate fully? How do we build effective communications among health protection partners and those affected by the decisions?

## **Legislative Renewal**

- How do we build in flexibility to respond to unexpected health hazards?
- Since social, cultural and economic factors and ethical questions all play a role in public health, how should they be taken into account by the legislation?
- How will we monitor and enforce the new laws? How will we settle disputes in the application of the new laws? What kind of fines or penalties should we set?
- Where do we draw the line between protecting the public against health risks and fraud, and interfering with personal tastes and individual freedom of choice?

## **Program Development**

- What are the gaps in our current health protection system? What kind of programs would best fill those gaps?
- How can we be fair and equitable in setting health protection priorities? How do we set priorities that take into account social, economic, cultural and regional differences across the country? What are the ethical issues that should be considered?
- Where do we draw the line between protecting public health and interfering with individual freedom of choice?
- How do we deal with health hazards or diseases “imported” into Canada?

- What is the right balance between the responsibilities of government and manufacturers for identifying health hazards and setting standards for potentially dangerous consumer products?

## **Getting Involved: How You Can Participate**

The health protection activities of Health Canada touch the lives of all Canadians. We want to make sure that everyone who is interested or involved in health protection has the opportunity to participate in the transition process.