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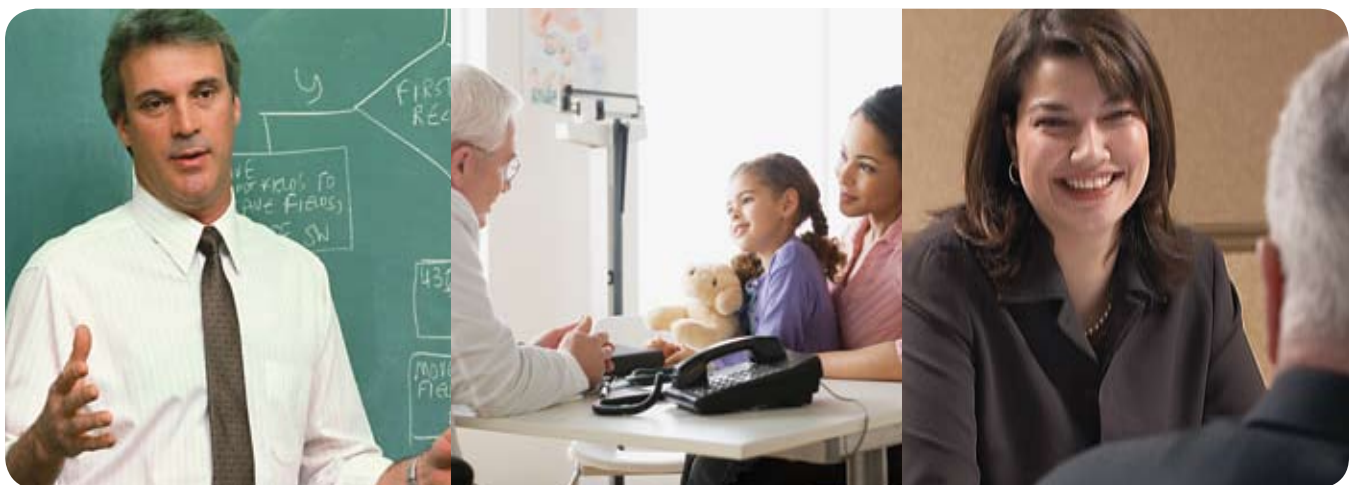
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Strategic Risk Communications

Framework and Handbook

FOR HEALTH CANADA AND THE PUBLIC HEALTH AGENCY OF CANADA

Canada

Strategic Risk Communications

Framework and Handbook

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Foreword

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Risk Communications in the Interest of Canadians

By Dr. Daniel Krewski

In the current era of openness and transparency in public and population health decision-making, the maxim "communicate early, communicate often" reflects the reality of today's world. To that, one could add "communicate well to help people make well-informed decisions." The stakes are high for effective communication on risk topics and getting higher with the globalization of issues and information via the Internet.

Health Canada is a pioneer in the development of health risk assessment and health risk management guidelines, policies, and practices in Canada. The first Departmental framework for health risk determination was published in 1990, and revised a decade later as the Departmental Risk Management Decision-making Framework (DMF). The Department again leads within the Government of Canada with its development of the Strategic Risk Communications Framework. The Framework, and this Handbook for applying it, build on current understanding in risk perception and risk communication, and together offer a state-of-the-science, systematic approach to addressing risk issues and helping people better manage risks through communication.

Strategic Risk Communications is a critical component of effective risk management. In this Handbook, strategic risk communications is defined as "a purposeful process of skilful interaction supported by appropriate information to enable well-informed decision-making and action on risks." To enable that process, communication among experts, and between experts and the public, is particularly important. Every day, people are deluged with vast amounts of information about potential health risks. The public often needs to know — and can often demand to know — which risks are real and which are hypothetical; which risks are large and which are small; which risks are avoidable and which are not, and which risks they should worry about and which they should not.

The challenge for experts in risk assessment is to make scientific information about health risks available in a form that can be easily understood by the public and that can aid decision-making and responsible action on risks. Meeting this challenge requires careful consideration of the scientific estimates of risk; assessing uncertainties in risk estimates; determining what messages to convey and choosing the most appropriate methods of transmitting the information. The Handbook explains how to do this, providing the requisite methods and tools to guide key activities at each step in the process.

There is also valuable direction in this Handbook on how information about health risks can be portrayed; who should be responsible for communicating this information, how the information should be disseminated, and how risk communication should be integrated into the DMF.

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The Handbook is unique in Canada. It is fast becoming a valuable resource for Health Canada and Public Health Agency of Canada staff, and for many other interested parties at home and abroad.

Daniel Krewski, PhD, MHA
Professor and Director
McLaughlin Centre for Population Health Risk Assessment
University of Ottawa

Introduction

A Last Frontier in Risk Communications

By Dr. Baruch Fischhoff

In more than thirty years of research into risk communications, we have learned a great deal about many elements of the process:

- How to identify the risk information that is most critical to decisions about risk.

- How to characterize the dimensions of risk that matter most to decision makers.

- How to help people make difficult risk choices, weighing competing outcomes.

- How to communicate information about the magnitude of risks (and benefits), as well as the processes that create and control them.

- How to describe people's mental models of risks, in order to identify the critical missing pieces (between what they know and need to know).

- How to evaluate the success of communication programs.

Although it would be nice to know more about all of these things, this knowledge has limited value unless it can be translated into operational terms, usable by organizations with front-line communication responsibilities. Health Canada has assumed a unique leadership role in this last frontier of risk communications. In this Handbook, and the associated activities that accompany it, the Department has taken important necessary steps toward being a premier organization in a notoriously difficult task. These include:

- Making an institutional commitment to moving communication from practice-based to science-based.

- Providing its staff with authoritative summaries of the relevant science, tested for their success as communications.

- Creating useful prototypes and concrete procedures for implementing the new approaches, rather than assuming that basic design principles are clear enough to "speak for themselves."

- Establishing clear lines of responsibility for determining the form and content of communications.

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- Supporting innovators.

- Evaluating its performance.

The way ahead is a challenging one. Although the Handbook is designed to create a cumulative set of worked examples, ready for adaptation to new problems, it will doubtless be challenged by difficult communication problems before all the pieces are in place.

Although the program's evaluation procedures are designed for continuous improvement, perceptions of its success will often depend on factors beyond its control (e.g., whether Health Canada and/or the Public Health Agency of Canada (PHAC) is brought in after problems are already out of control). Staying the course will require leadership at all levels of Health Canada and the PHAC. If successful, they will establish themselves as world leaders in risk communication, while fulfilling a mission vital to Canadians.

Baruch Fischhoff
Pittsburgh, PA

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Introduction to the Framework and Handbook

Dissemination is not communication, and dissemination of risk is not risk communications. Effective risk communications must result in meaningful actions, both internally and externally. Getting from point A to point B requires tremendous skill, tact, resourcefulness, planning, and guidance. This is the purpose of the Strategic Risk Communications Framework and Handbook: to help Health Canada and PHAC scientists and communicators conduct strategic risk communications more systematically and more effectively. In turn, this will help us provide better information to stakeholders and the public so they can make better informed decisions related to their health and well-being.

Obviously, this is not merely a downstream operation. It must work upstream as well. As we receive information from the public and from stakeholders, we must always be equipped to effectively manage it, rationalize it, and form coherent, credible and competent communications for a public that looks to us for leadership.

This Handbook lays out a process for effective communication of risk that can be used by any Health Canada or PHAC employee. It provides proven strategies based on the sciences of risk analysis and risk communication as well as on best practices developed over time and trial at Health Canada and in other organizations.

Every circumstance in which the principles from this Handbook will be used will differ from the last, and not every answer will be found in these pages. But the Framework described in Tab 2 can provide the guidance needed to help everyone in Health Canada — and throughout the Government of Canada — develop and implement the best communications strategies in the face of any risk.

Purpose of the Handbook — What's in it for the User?

The purpose of the *Strategic Risk Communications Framework and Handbook* is to give Health Canada and PHAC employees involved in risk management and risk communications a science-based process to follow that is supported by appropriate techniques and tools. It provides the essential materials needed to enable employees to plan and conduct effective risk communications, including consultation, outreach and dialogue, with their stakeholders and ultimately the Canadian public.

The Handbook has been designed as a hands-on manual for people working at the Departmental, Agency, Branch and Program levels. Experience has shown that the Strategic Risk Communications Process and all of the worksheets and materials can be effectively scaled to address a wide range of risk related issues and opportunities. A project leader at any level of the organization will be able to follow the Handbook and lead his or her team through the process, identifying and engaging the key stakeholders, capturing what is learned and then communicating effectively to help stakeholders and, if appropriate, the Canadian public, take appropriate action.

The discipline of strategic risk communications continues to evolve and grow in complexity as a worldwide practice. This Handbook does not endeavour to capture all the methods and tools

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developed to date or still under development. It does, however, provide a fair representation of current best practices and is open and flexible enough to be a reliable approach for the risk communications practitioner.

Decision Partners, the author of this Handbook, has applied the process and tools defined here to a broad range of issues and challenges across a number of industries and government agencies throughout North America for over a decade. These have evolved, with research and experience, and will continue to do so. Employees at Health Canada and the PHAC are encouraged to share their case studies and learn from each other's experiences.

How the Handbook is Organized

This Handbook has been developed as a tool for a team working on a specific risk issue. However, the process, methods and tools can also be successfully adapted and applied by an individual responsible for a specific risk communications initiative.

The Handbook takes a team through the entire Strategic Risk Communications Process: from the definition of the opportunity; to development of specific risk communications strategies and plans, through the implementation of the plan and the evaluation of both the process and outcome of the risk communications efforts.

TAB 2 contains Health Canada's Strategic Risk Communications Framework.

TAB 3 provides an overview of the history of risk perception and Strategic Risk Communications. It looks at common stakeholder concerns and touches on factors that influence people's judgment of the acceptability of risk. It also examines various types of risk communications across the risk management spectrum.

TAB 4 is a practical guide to conducting risk communication. It describes all of the Steps in the Risk Communications Process in detail. It includes activities, tools and examples for each Step, and also refers to additional material that might prove helpful. By the end of Tab 4 the individual or team should be able to: define the nature, scope and implications of the risk issue; determine what internal and external experts and/or stakeholders should be involved or consulted; develop and pretest messages, then implement their plan. The final Step is to measure the effectiveness of the Process, the Plan and the team.

TAB 5 contains all of the worksheets (templates) used at each step in the Strategic Risk Communications Process, described in Tab 4.

TAB 6 is a reference section. It includes definitions of the terms used in risk communications and lists useful publications, Web sites and other resources related to the sciences of risk and communication.

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The Strategic Risk Communications Framework

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A Framework for Strategic Risk Communications Within the Context of Health Canada and the PHAC's Integrated Risk Management

INTRODUCTION: RISK, GOVERNMENT, AND RISK COMMUNICATIONS

Risk is related to an exceptionally wide range of issues addressed by government, including direct threats to security, social disruptions, public health and safety, and the risk of damage to government's reputation in the eyes of stakeholders and citizens.

In recent years, the nature of risk has changed considerably. Major elements that characterize risk and its management today include the rapidly increasing pace of scientific and technological development. This presents new risks, greater integration of economies and communication worldwide, and public expectations for fewer external risks, as well as more control over the risks people face.

Consequently, managing risk has become increasingly central to government in its role as a regulator and a steward of the nation, as well as in the management of its own business and provision of services to citizens.

Risks cannot be managed without communication because, as research shows, communication is the most powerful influence on people's risk decision-making and behaviour. Increasingly, communications is being recognized as essential to enabling people and organizations, including governments, to manage risks effectively.

Certainly, this is the case today in Health Canada and the Public Health Agency of Canada (PHAC). Communication — especially risk communications — is seen as essential to the Department's ability to accomplish its mission: namely, helping Canadians to maintain and improve their health.

However, decades of research and experience also show that risk communications is too often ad hoc. Resulting shortfalls in communications include creating needless controversies, raising costs unnecessarily, making the risk management process more complicated, and eroding citizens' trust. Clearly, a strategic approach to risk communications that can help avoid these and other problems would provide important benefits to decision-makers and stakeholders alike.

The purpose of this Framework is to support all Health Canada and PHAC professionals involved in risk management activities in integrating effective risk communications into their work. One way it can do this is by fostering and enabling collaboration throughout the Department and the Agency. Building on successful current practices in Health Canada and the PHAC, the Framework outlines a strategic, systematic approach to risk communications within the context of integrated risk management.

The approach is intended to be flexible enough to address internal and external risk communications for all types of risk issues — from corporate risk issues to health-specific risk issues. It is grounded in the sciences of risk analysis and risk communication, and is consistent with recent guidance from

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Health Canada, Treasury Board Secretariat, as well as related work in Canada and jurisdictions outside Canada, including the United States, Australia/New Zealand, and the United Kingdom.

As a Department, Health Canada addresses an exceptionally wide range of risk issues. Rather than endeavoring to anticipate all possible issues, the Framework is designed so that each Agency, Branch and Directorate in Health Canada, and the PHAC, can adapt it to the specific requirements of its roles and responsibilities for serving the highest interests of Canadians.

NOTE: To simplify, "Health Canada" is used throughout this document, and included the Agencies, Branches, Directorates within Health Canada, as well at the Public Health Agency of Canada.

The strategic management of risk communications, called here "strategic risk communications," is an integral part of Health Canada's risk management process. As a result, every employee of Health Canada has a role in, and responsibility for, helping ensure its effectiveness in the interest of Canadians.

The Guiding Principles of this Framework represent high standards for the practice of strategic risk communications with the goal of fostering excellence among those involved. The Guiding Principles should be applied in ways consistent with decision-makers' legal and regulatory authority. They are not intended to create any new legal obligations for risk communications.

This Framework is intended to operationalize strategic risk communications within the *Health Canada's Decision-making Framework for Identifying, Strategy to Implement an Integrated Risk Management Framework at Health Canada (DMF)*. It also complements existing published frameworks, including the *Communications Policy of the Government of Canada and the Treasury Board Secretariat Integrated Risk Management Framework*.

The Framework is also linked to the Department's *Corporate Risk Profile* (CRP) and is intended to serve communications associated with it. The CRP is a corporate tool to identify risks and associated management challenges that could hinder the achievement of the Department's *Strategic Outcomes*. The Risk Profile also helps define the degree of management attention required to handle these potential risks and identifies mitigation strategies. *Strategic Outcomes* for the Department range from enhanced access by Canadians to quality health care services to safer products and food, and to the use of information and communication technologies to support decision-making.

The Communications Directorate is the steward of this Framework. Its role is outlined in the Appendix 2: Roles and Responsibilities. The Framework will be formally reviewed and updated as required every three years.

The Framework will also be available as a resource for strategic risk communications excellence for other Government of Canada Departments. Applied well and continuously improved, it can benefit all other Government of Canada professionals and ultimately all Canadians for many years to come.

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SUMMARY

Health Canada has developed this Strategic Risk Communications Framework to support the work of professionals throughout the Department who are responsible for formulating and implementing effective risk communications.

The Framework is anchored to Health Canada's vision and mission, and recognizes the evolving challenge of addressing public health and safety opportunities and issues important to Canadians.

The Framework emphasizes a strategic, systematic approach to formulating and implementing effective risk communications. It comprises the following: five Guiding Principles, Guidelines for Implementation, and a detailed process for strategic risk communications. All of these elements reflect current understanding in the relevant disciplines, including decision science, risk management, risk perception, and risk communications.

Professional roles and responsibilities within Health Canada related to assuring the success of strategic risk communications efforts are also described. A detailed application Handbook complements this Framework.

Importantly, the Framework is intended to be a continuously improving resource of guidance and expertise for Health Canada, which may serve as a guide for other Government of Canada Departments.

HEALTH CANADA'S VISION AND MISSION

Health Canada is committed to improving the lives of all of Canada's people and to making this country's population among the healthiest in the world as measured by longevity, lifestyle, and effective use of the public health care system. The mission of Health Canada is to help the people of Canada maintain and improve their health.

HEALTH CANADA'S OBJECTIVES

By working with others in a manner that fosters the trust of Canadians, Health Canada strives to:

- Prevent and reduce risks to individual health and the overall environment;

- Promote healthier lifestyles;

- Ensure high quality health services that are efficient and accessible;

- Integrate renewal of the health care system with longer term plans in the areas of prevention, health promotion and protection;

- Reduce health inequalities in Canadian society, and;

- Provide health information to help Canadians make informed decisions.

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OBJECTIVES FOR THIS FRAMEWORK

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The broad objective of the Health Canada and PHAC's Strategic Risk Communications Framework is to build internal capacity for the professional practice of risk communications within the Department and Agency in order to:

- Provide support for informed decision-making and communication within Health Canada and the PHAC;

- Help stakeholders and, ultimately, all Canadians make well-informed decisions on health, environment, and safety-related topics;

- Foster Canadians' confidence in Heath Canada and the PHAC by serving as a foundation for integrated risk management within the Department and the Agency.

STRATEGIC RISK COMMUNICATIONS DEFINED

In 2000, Health Canada published its *Decision-making Framework for Identifying, Assessing and Managing Health Risks* (DMF) to help guide the Department's risk management efforts. In this document, "risk management" is defined as the broad collection of activities involved in addressing health and safety risks. "Risk communications" is defined as "any exchange of information concerning the existence, nature, form, severity or acceptability of health or environmental risks."

The Framework for Strategic Risk Communications incorporates that definition while advancing it in important ways.

Strategic risk communications can be defined as "a purposeful process of skillful interaction with stakeholders supported by appropriate information." It is an essential component of integrated risk management. Strategic risk communications helps decision-makers and stakeholders make well-informed decisions leading to effective risk management.

Stakeholders can be defined as any individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a potential risk. Decision makers are stakeholders in the process, as are individuals and groups throughout the Department. External stakeholders can include, for example, health partners, special interest groups, and the people who bear the risk.

Strategic risk communications includes all communication content and interactions that can influence risk decisions and behaviour. Such content may be included in announcements, warnings, and guidance documents. Content may appear in verbal statements, pictures, advertisements, publications, legal briefs, labels, warning signs, or other declarations. Risk communications' content may describe risks or characterize their importance. It may also advocate actions regarding risks, hazards, and technologies, including ways to mitigate them. Interactions include everything from engaging individuals and/or groups in one-on-one or small group settings to broader and often more formal citizen engagement and consultation processes. The range of these interactions is covered in Tab 4 of the Handbook.

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Effective risk communications must reflect the best available knowledge. Such knowledge should be selected for its relevance to decisions facing stakeholders and framed in terms that address their beliefs and feelings.

GUIDING PRINCIPLES OF STRATEGIC RISK COMMUNICATIONS

1. Strategic risk communications is integral to integrated risk management.

- Health Canada's process for managing risk is described in Health Canada's *Decision-making Framework* (DMF). The interconnected activities in the DMF stress the continuing involvement of interested and affected parties, referred to as stakeholders.

- Strategic risk communications is integrated into each step of the DMF, in which it serves to enhance other risk management activities.

- Integrated Risk Management (IRM) is also important within Health Canada.[1] Strategic risk communications is aligned with IRM. "Integrated risk management" means incorporating risk information into the strategic priority-setting of the organization and making decisions that consider acceptable risk tolerance levels.

Integrated risk management is an organization-wide approach to managing risk at the strategic, operational, and project level. It is continuous, proactive, and systematic. It is about applying sound risk management practices and fostering a working culture that values learning, collaboration, innovation, responsible risk-taking, and continuous improvement. It represents an organized and systematic approach to determining the best course of action under uncertainty.

2. Stakeholders are the focal point.

- Those who face the greatest risk deserve the most attention, as do those most concerned with managing particular risks. Both represent stakeholders for Health Canada.

- As stated in the DMF, stakeholders — both internal and external — can provide valuable information, knowledge, expertise, and insights throughout the process. The views of technical experts must be focused on stakeholders' risk-related interests, priorities, and values. As a result, effective decision-making must consider stakeholders' perceptions of risks, benefits, tradeoffs, and control options. Consulting stakeholders early in the risk management process is essential to focusing it effectively.

3. Decisions are evidence-based, tapping both social and natural sciences.

- Sound scientific and technical information, combined with expert knowledge and experience are the foundation for risk management. Decisions should draw on current understanding across the full set of relevant disciplines, including the social and natural sciences, as well as business, economic, legal, and human resource management. Importantly, Health Canada decisions must also incorporate stakeholder understanding of a situation, recognizing that stakeholders'

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[1] To simplify, "Health Canada" is used throughout this document, and included the Agencies, Branches, Directorates within Health Canada, as well at the Public Health Agency of Canada.

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understanding on risk issues includes both how they feel about risks (experiential perspective) and what they think about them (analytical perspective).

- The usefulness of scientific evidence depends on the decision-making context of, and the outcomes that matter most to, stakeholders. The Strategic Risk Communications Process is the primary means of identifying these contexts and demonstrating that the risk management process has addressed them. (See page 2-10)

4. *Risk management and risk communications processes are transparent.*

- The Strategic Risk Communications Process is designed to facilitate transparency in Health Canada's risk management and risk communications process, as well as in its decision-making on risk issues.

- Strategic Risk Communications is the primary means for ensuring that Health Canada openly communicates about the risks, benefits, and risk mitigation options. It ensures that assumptions, values, methods, and plans will be clear and accessible. When facts are uncertain or unknown, Health Canada will be clear about what gaps remain and what efforts are being taken to fill them. Health Canada will also be clear about mistakes that have been made and what is being done to rectify them. When information must be kept secret, reasons for keeping it so will be clearly explained.

5. *The Strategic Risk Communications Process requires continuous improvement through evaluation.*

- The Strategic Risk Communications Process calls for clear, measurable objectives. Formal evaluation of the Strategic Risk Communications Process and its outcomes enables continuous improvement of risk management, promoting excellence over time as well as efficient and cost-effective procedures. Regular evaluation of both will ensure that Strategic Risk Communications remains state-of-the-science in Health Canada.

GUIDELINES FOR PREPARING AND IMPLEMENTING STRATEGIC RISK COMMUNICATIONS

A large and growing body of experience and scientific literature on risk perception, risk communications, and social interaction provides considerable knowledge into sound approaches for designing strategies and communications. (See References for a listing of critical references. More detailed references are available in Tab 6 of the Handbook.) This knowledge has been used to identify a formal process for preparing and implementing strategic risk communications with five critical activities. (The Strategic Risk Communications Process is illustrated on page 2-10. What to do at each Step in the Process is described in detail in Tab 4 of the Handbook.)

The Guidelines, with key activities summarized, are described in the following order:

- *Focus current understanding.*
  Review and consolidate scientific knowledge and technical information about factors determining the nature and magnitude of risks of concern. Summarize this understanding explicitly from the perspective of what can be done about the risk — so as to ensure that

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it is decision-relevant knowledge. Recognize that knowledge is widely distributed among stakeholders, officials, and scientists.

- *Develop communications strategies sensitive to stakeholders' current thinking, goals, and choices.*
  Begin the strategy development process by understanding stakeholder thinking in-depth, using appropriate, proven research methods. Develop strategies, plans, and messages based on that research, focusing on what stakeholders need to know in order to make well-informed decisions about the risk.

  Develop comprehensive communication plans, including focused messages, materials, and media required to reach and address stakeholders. Ensure a well-focused and coordinated effort.

  Prepare communications content and presentations (in the form of various materials used in various media) that are relevant, comprehensible, credible, and readily accessible. For the drafting process, clearly divide responsibility among people with three forms of expertise: (a) risk-specific subject matter, (b) communication processes, and (c) organizational issues, including legal constraints and political sensitivities. Ensure consistency with *Government of Canada Communications Policy* guiding principles, notably those stressing respect for diversity, accessibility, timeliness, respect for individual rights and sensitive to the needs and concerns of the public.

- *Pre-test strategies, plans, and messages.*
  Evaluate strategies, plans, and messages empirically to ensure that they perform as intended. Refine as required. (Methods and tools for pretesting are detailed in Tab 4 of the Handbook).

- *Implement according to plan.*
  Implement the plan, in order to facilitate appropriately sequenced internal and external interactions. This approach ensures consistency of message and enables evaluation of the risk communication process and outcomes.

Iterate as required throughout the implementation process, recognizing that messages and materials may need to be revised and released in various forms over more than one round of activity to achieve specific risk communications goals. Quickly address questions and issues that arise in the course of communicating in order to foster appropriate stakeholder understanding and action on the risk issue.

- *Evaluate the risk communication process and outcomes.*
  Measure both the effectiveness of the Strategic Risk Communications Process — including the effectiveness of the team — as well as the outcomes in order identify how Health Canada professionals and teams could better address future challenges and continuously improve the process.

  Share evaluation results with team sponsors and others to demonstrate both progress and results and to encourage discussion on the direction and substance of risk communications efforts. Share measurement results with stakeholders, when appropriate, in order to help identify risk management and risk communications opportunities, as well as ways to improve risk communications strategies.

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Use robust evaluation methods, with both internally and with stakeholders, to formal qualitative and quantitative research. Behavioural change measures are also possible, although it is important to recognize that peoples' failures to do what health officials recommend on a specific risk issue may reflect lack of desire or ability and not simply lack of information.

THE STRATEGIC RISK COMMUNICATIONS PROCESS

Decades of empirical research in risk perception and risk communications, in addition to extensive experience, suggest that the following activities encompassed in seven key steps can represent a robust process for guiding the design and implementation of effective risk communications. (Please see the Key References cited in Appendix VI.)

The process also represents a synthesis of state-of-the science approaches created by risk communication experts in several jurisdictions, including Canada, the United States and Australia/ New Zealand. It has been designed to integrate with Health Canada's Decision-making Framework (DMF).

2000 Health Canada "Decision-making Framework"
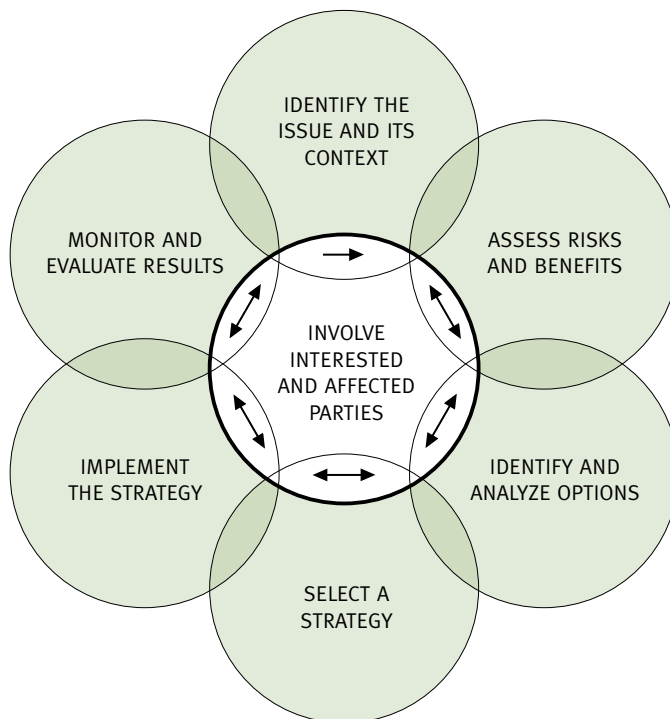
The Strategic Risk Communications Process provides step-by-step detail of the risk communications activities (depicted by the arrows) being taken to support every step in the risk management process depicted in the DMF.

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The process and some key or typical activities are summarized on pages 2-10 to 2-14. Specific detail on what to do at each step, plus a full description on methods and tools that can be used, are described in Tab 4 of the Handbook. Process steps are summarized in the Guidelines for the Practice of Strategic Risk Communications noted previously.

The Process Steps Are:

1. Define the Opportunity

2. Characterize the Situation

3. Assess Stakeholder Perceptions of the Risks, Benefits and Tradeoffs

4. Assess How Stakeholders Perceive the Options

5. Develop and Pre-test Strategies, Risk Communications Plans and Messages

6. Implement Risk Communications Plans

7. Evaluate Risk Communications Effectiveness

Dialogue-based
Strategic Risk Communications Process

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                    DEFINE THE OPPORTUNITY
                 END ←──◆── GO BACK
                     TAKE ACTION

                  CHARACTERIZE THE SITUATION
                 END ←──◆── GO BACK
                     TAKE ACTION

     ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS AND TRADEOFFS
                 END ←──◆── GO BACK
                     TAKE ACTION

            ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS
                 END ←──◆── GO BACK
                     TAKE ACTION

    DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS AND MESSAGES
                 END ←──◆── GO BACK
                     TAKE ACTION

                IMPLEMENT RISK COMMUNICATIONS PLANS
                 END ←──◆── GO BACK
                     TAKE ACTION

           EVALUATE RISK COMMUNICATIONS EFFECTIVENESS
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STEP 1: DEFINE THE OPPORTUNITY

The risk communication process and goals — or outcomes — are identified. A multi-functional project team comprising technical people and risk communicators, and possibly others, typically accomplishes this by working from an Opportunity Statement. The Opportunity Statement is developed to describe (or frame) the project scope and desired outcomes. The team can be important since effective risk communications typically require input from more than one, or a narrow set of, professional disciplines or functions.

The Strategic Risk Communications Process facilitates, or encourages, development of appropriately constituted teams within Health Canada. Disciplines represented on such teams typically include the social and natural sciences, as well as business, economic, legal, and human resource management. Team members should include professionals who can offer, as well as help integrate, vital knowledge about risk issues at hand. When warranted, team resources can include professionals from outside the Department.

One purpose of the team approach is to help ensure that the risk communications process and outcomes reflect the best blend of relevant knowledge, with members simultaneously recognizing the need to manage in a larger context of corporate risk. Better decisions can arise from this approach, thus better serving the interests of Canadians on specific issues as well as management of the Department overall.

One goal for drafting an Opportunity Statement is to build shared understanding among team members — and with team sponsors — about the scope of the opportunity, primary challenges, and possible strategies for addressing them. Process deliverables and communications outcomes are defined explicitly. Identifying how the process and outcomes will be measured or evaluated is also an important activity.

In this Step, team member roles and responsibilities are assigned or clarified. Potential stakeholders are identified. Documentation requirements and the documentation process are also defined. This task helps ensure transparency for risk communications and enables continuous learning and improvement.

STEP 2: CHARACTERIZE THE SITUATION

Three critical activities are typically involved in this Step: a) Integrating Available Knowledge, b) Developing a Stakeholder Hypothesis and c) Preparing the Initial Framing.

If risk communications are to be authoritative, they must reflect the best available understanding of the situation. Technical experts (e.g. scientists, engineers) will have much of that knowledge, but so may dedicated practitioners and lay stakeholders. Note that stakeholders are the experts in what matters to them.

One method for integrating knowledge is through an *expert model*, a form of *integrated assessment*. These models provide a formal representation of how situations are understood, capturing the range of legitimate opinion and uncertainty. The objective here is to capture a range of views on a topic,

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not to force consensus. Expert models are essential management and communication development tools. Done well, they capture and integrate the broad range of critical knowledge across the system involved in risk management and risk communications on the topic. A common form of depicting the model is an *influence diagram*, which represents understanding in terms of variables and the relationships among them, as they relate to the outcomes of interest to stakeholders. (Please see Appendix III, page 2-19, for a definition of expert models.)

Such models provide a transparent representation, allowing stakeholders to review and contribute to the evidence, thereby ensuring balance, authoritativeness, and candor (regarding the limits to knowledge), and credibility. The knowledge summary can be detailed in a resource document, such as a "white paper." Both can be used to facilitate appropriate internal and, where advisable, external reviews with stakeholders, advisory panels, etc.

Stakeholders often include key individuals and groups who will likely be involved in, or have an important interest in, opportunities and issues associated with risk management and risk communications on the topic at hand. Specific methods and tools are used to identify who the potential stakeholders are for the topic.

Secondary research is typically conducted at this point in the process to help identify stakeholders in some detail. Such research can include media analysis reports, external trend reports, and analysis of stakeholder Web sites, position papers, etc. Experience can also guide stakeholder identification. With research results in hand, the team can prepare a hypothesis of stakeholder interests and priorities. Primary research to test this hypothesis is conducted during the next Step.

Within Health Canada, it is often important to prepare the initial framing of the risk issue. Framing is the use of language to manage the meaning of messages. Framing is what helps people make sense of a subject and judge its relevance to them. Like a photographer, a communicator puts forth messages in a "frame" that represent one interpretation of a subject over other possible interpretations. How a risk issue is framed from the outset is critical because the initial framing sets up all subsequent interpretations of it.

Based on the work done to integrate expert knowledge and conduct a preliminary assessment, the risk communicators, working with the support of the team, will determine initial framing of the risk issue. This framing is typically used to brief key internal stakeholders. But it can also serve as the foundation for "holding lines" in case media or public questions about the issue come into the Department.

This initial framing is revised and updated as new information becomes available from the team and as the stakeholder research in Steps 3 and 4 is completed.

STEP 3: ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS, AND TRADEOFFS
Using formal and informal research methods appropriate to the task, stakeholder needs, issues, interests, and priorities are determined. Formal research can include individual focused interviews, such as that typical in mental models research. Informal research can include semi-structured

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conversations with a few key stakeholders. (Please see the Appendix III, page 2-19, for a definition of mental models.)

In all research, the emphasis is on revealing and characterizing in-depth stakeholder thinking. Stakeholder interests and priorities regarding the risk issue being managed are typical focal points for research. Understanding stakeholder beliefs and the underlying rationale for beliefs, along with their values and concepts of risk, benefit, and tradeoffs are critical components of any research conducted during this Step.

To identify appropriate risk communications strategies, plans, and messages, the thinking of particular stakeholder groups can be compared to that summarized in the aggregate model developed in Step 2. This comparison will reveal critical gaps in stakeholder thinking that can be addressed through communications.

STEP 4: ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS

In this Step, research results are used to help understand how stakeholders perceive the various risk management options being considered by the team, including the benefits and risks each entails. Understanding how stakeholders weigh the risks, benefits, and tradeoffs inherent various risk management options becomes important to the team in designing risk mitigation strategies and the communications that will enable them. It is during this Step that the alignment of the technical risk assessment and the social assessment, completed in Step 3, typically come together at a critical team meeting.

Even if the team does not change its risk mitigation strategies once it learns about stakeholder acceptability of these, it is still very advantageous to know — and plan in advance — if some stakeholders are likely to take exception to the planned risk mitigation option.

Reflecting what is learned through research in Step 3, the multi-functional team refines the measurable risk communication outcomes developed in Step 1 when the opportunity was framed. Outcomes are typically defined in behavioural terms; that is, what stakeholders should think, feel, and do as a result of communication.

Outcomes for broader stakeholder consultation are also defined at this point. (Some stakeholder consultation, at least at the expert level, has likely taken place to varying degrees in Steps 2 and 3.) An overarching objective is to ensure Health Canada's interests and activities can align with those of key stakeholders. It is important to describe the value that achieving key goals represents for Health Canada and stakeholders.

STEP 5: DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS, AND MESSAGES

Risk communications strategies, plans, and messages are developed based on insights gained from formal and informal research into stakeholder thinking generated in Step 3. Messages are tailored to the critical decisions being addressed by stakeholders, emphasizing the information

stakeholders need but do not already have, in order to make well-informed risk decisions and take appropriate action.

Written communication plans that detail messages, materials, and the appropriate media to reach and address stakeholders are prepared. One purpose of a written plan is to ensure that all essential elements have been engineered into a well-focused and coordinated effort. Another purpose is to facilitate internal review and discussion of risk management efforts. A third purpose is to demonstrate that resources are being used wisely.

In order to ensure that strategies, plans, and messages will perform as intended, all are empirically tested before deployment. Pre-testing methods include particular task-suited consultation activities, as well as formal testing research. Consultation and pre-testing can also help identify stakeholder acceptability of proposed options, plans, and actions. It can also bring to light outstanding opportunities or issues and provide insight into how to address them.

STEP 6: IMPLEMENT RISK COMMUNICATIONS PLANS

The risk communications plans are implemented in this Step, often by members of the team.

Risk communications materials are refined based on pre-test results in Step 5 and produced. One use of these materials is to support team members (and others) as they engage individuals and groups in dialogue as part of the broader stakeholder consultation activities. In this Step, it may be advisable to select and train additional people to conduct dialogue on the risk issue and the risk mitigation plans or options.

Strategies and communications are adapted and modified as necessary as the consultation process evolves. Materials and messages may need to be revised, upgraded, supplemented and/or released in other forms over several rounds of activity in order to achieve the team's risk communication goals. The implementation phase may also prompt new discussions or unanticipated questions. The ability to respond quickly to both can be key to furthering stakeholder understanding and action.

STEP 7: EVALUATE RISK COMMUNICATIONS EFFECTIVENESS

Evaluation is consistent with the best practices in risk communications and continuous improvement.

After at least one cycle of risk communication effort is completed, the team evaluates the effectiveness of the process and the quality of outcomes for risk communications.

Formal and informal evaluations are made based on the objectives set in Step 1. A variety of measures can be made. Measurement results are used to make recommendations about improving the strategic risk communications process and specific activities within it. They may also be used to modify communications strategies and messages.

Appendices

Appendix I

HOW THE STRATEGIC RISK COMMUNICATIONS FRAMEWORK WAS DEVELOPED

Development of Health Canada's Strategic Risk Communications Framework followed a process similar to that described in the Framework. In August 2004, a Steering Team of representatives from almost all Branches within Health Canada, chaired by the Communications Directorate, was formed to help guide the work of a small Steering Team comprising external expert and internal communication professional resources.

An "expert" model-building session with more than 20 professionals representing a broad cross section of functions and levels within the Department was held at the end of August 2004. The model summarizing beliefs about influences on risk management within Health Canada was prepared in September, using the input from that session.

In September and October, mental models research was conducted with senior people within the Branches of Health Canada, including ADM level senior managers, Directors General, and senior risk managers. Research results were mapped into the expert model and reported to the Steering Team in early November. Several subsequent presentations of the research results were shared with various internal groups in the months following.

The research identified important elements in the thinking and behaviour of professionals with respect to current risk management practices within the Department and the relationship of risk communications to them. The research also helped shape the content of the Framework, especially the Definitions, Guiding Principles, and Roles and Responsibilities. Further, it underscored the need for a detailed Handbook for the practice of strategic risk communications and appropriate training in its use. This was important to stakeholders for assuring rapid application of the Framework at a practical level and for building internal capacity.

Products of the process include a) the Framework, b) an Expert Model Narrative describing the influences on risk management and risk communications within Health Canada, c) a formal mental models research report, and d) a detailed Handbook for guiding the professional practice of strategic risk communications within the Department.

The Framework was drafted over the course of several months, from November 2004 through April 2005, with considerable input from Steering Team members. A near-final draft was reviewed with senior Department managers in April and approved in December, 2005. The Handbook was published in 2006.

Evaluation of the process and its products began in mid-2005. Orientation and training of Communications Directorate staff and others in applying the Framework began mid-summer 2005 and is ongoing.

Appendix II

A. ROLES AND RESPONSIBILITIES RELATED TO RISK COMMUNICATIONS

As an integral part of Integrated Risk Management (see Guiding Principles), risk communications activities are managed by a multi-disciplinary team, which includes Communications professionals and Program and Branch Managers. In consultation with the Communications, Marketing and Consultation Directorate (CMCD), Program and Branch managers are responsible for making risk management decisions, and therefore, risk communications decisions.

CMCD staff provide strategic advice, planning and implementation of appropriate risk communications, in support of the Program/Branch risk management. Consistent with the delegated authorities and responsibilities set out in the Government of Canada's Communications Policy (add link in Intranet version), CMCD is the main point of contact for risk communications within the Department and with Regional Staff.

To enable this, the head of CMCD will ensure that communications staff are familiar with the Strategic Risk Communications Framework and that staff at all levels in the Directorate have the requisite knowledge, skills, and tools for practicing risk communications in order to support clients throughout Health Canada in its practice. Senior managers in the Communications Directorate are responsible for ensuring that staff professionals who are co-located with their clients are familiar with the Strategic Risk Communications Framework and have a well-grounded ability to apply it. They are also dedicated to setting high professional standards for the practice of strategic risk communications throughout Health Canada and to its continuous improvement. All Communications staff will be oriented so they can provide appropriate advice on risk communications.

Program staff must be familiar with risk communications as a component of risk management. Although program staff will rely on Communications professionals for advice and support in planning and implementing risk communications, a cross-functional team of scientific and program staff will be trained in risk communications to ensure a more robust understanding of the risk communications practice and process to ensure a fully integrated and seamless approach.

> As per the Government of Canada's Communications Policy, risk communications strategies, products, and messages are a shared responsibility, with the Minister and Deputy Minister ultimately responsible for what is communicated internally and externally, with stakeholders and with the public. Exceptions to this approach are regulatory decisions where the authority rests with the designated Assistant Deputy Minister.

B. GENERAL ROLES AND RESPONSIBILITIES RELATED TO IMPLEMENTATION OF RISK COMMUNICATIONS

The Deputy Heads Will:

- Champion risk communications as an integral part of integrated risk management;

- Review risk management and risk communications plans through existing and appropriate mechanisms (eg. DEC RMs);

- Review annual reports of integrated risk management plans, which include risk communications strategies and results.

Direct Reports to the Deputy Heads Will:

- Endorse and adapt this Framework within his or her organization;

- Incorporate strategic risk communications as a support for all risk management decision-making activities;

- Ensure the appropriate leadership, infrastructure, resources, and accountabilities are in place to achieve successful risk communications;

- Create a supportive environment that encourages strategic risk communications and continuous learning;

- Report annually to the DM or Associate DM on the implementation and evaluation of strategic risk communications.

Functional Heads Will:

- Ensure that this Strategic Risk Communications Framework is applied consistently;

- Establish the appropriate leadership, collaborations, infrastructure, resources, and accountabilities are in place to achieve successful risk communications;

- Define risk communications objectives for each decision situation in consultation with Communications Directorate staff;

- Support the development and implementation of strategic risk communications that supports risk management decision-making;

- Monitor and report on risk communications activities and results to the Direct Reports of the Deputy Ministers on a timely basis.

Communications Directorate Staff:

In support of the line and functional management, the Communications Directorate Staff will:

Provide Stewardship of the Framework

- Develop strategies to communicate the Strategic Risk Communications Framework.

- Ensure ongoing application of the Framework throughout the Department.

- Monitor the effectiveness of this Framework in achieving the Department's risk communications and, ultimately, risk management objectives.

- Conduct a formal review and update the Framework as appropriate every three years.

Oversee Implementation of Strategic Risk Communications

- Provide professional advice and support in the application of Strategic Risk Communications.
- Define risk communications objectives for each decision situation in consultation with Functional Heads.
- Identify and access appropriate internal and external channels and resources for risk communications.
- Provide research and evaluation advice and oversee the procurement of appropriate services.
- Coordinate risk communications reporting of outcomes.
- Ensure linkages with Departmental activities on Integrated Risk Management.
- Keep abreast of risk communications developments and support ongoing maintenance of the Department's risk communications capabilities (e.g., develop and sustain learning opportunities).
- Provide a focal point for exchanging information and successful risk communications practices.
- Identify and develop innovations in risk communications processes, methods, and tools.

All Employees Will:

- Become familiar with this Strategic Risk Communications Framework.
- Employ systematic risk management decision-making in their duties, along with the required strategic risk communications activities.
- Identify risks that could inhibit carrying out their duties and alert management.
- As appropriate, aid in developing and implementing risk management and strategic risk communications strategies, messages, plans, and evaluations.

Appendix III

KEY DEFINITIONS

The definitions here reflect reasonably common interpretations of terms used in the broad fields of risk management and risk communications. In some cases, definitions that are specific to documents or to the use of terms within the Government of Canada or Health Canada are included. A more comprehensive set of definitions can be found in the Handbook.

Communication: The act of communicating; transmission. The exchange of thoughts, messages, or information as in speech, signals, writing, or behaviour. Interpersonal rapport. Also, the art and technique of using words effectively to impart information or ideas. The field of study concerned with the transmission of information by various means, such as print or broadcasting. Something communicated; a message.

Corporate Risk Profile (CRP): A tool for identifying management challenges in each Strategic Risk Area. The CRP assesses the levels of management attention required for each risk and proposed strategies.

Expert model: An expert model is a summary of relevant knowledge about a topic, typically illustrated in the form of an influence diagram. As a formal integration of knowledge, the expert model summarizes the knowledge needed to make judgments about the topic and issues related to it. It is prepared in a way that will facilitate risk analysis, risk management, and risk communications. Note that expertise is often distributed throughout the stakeholder community.

Framing: Framing is the use of language to manage the meaning of messages. Framing is what helps people make sense of a subject and judge its relevance to them. Like a photographer, a communicator puts forth messages in a "frame" that represent one interpretation of a subject over other possible interpretations. How a risk issue is framed from the outset is critical because the initial framing sets up all subsequent interpretations of it.

Integrated Risk Management: A continuous, proactive, and systematic process to understand, manage, and communicate risk from an organization-wide perspective. It is about making strategic decisions that contribute to the achievement of an organization's overall corporate objectives. IRM incorporates risk management in the organization's structure, culture, and key processes, including business planning, decision-making, and performance reporting.

Mental models: Decades of research have shown that tacit webs of beliefs — beliefs that are sometimes below the surface of consciousness — guide people's decision-making. These are called mental models. People draw on their mental models to make inferences about issues or opportunities that come to their attention through various forms of communication. Mental models guide people's learning, judgments, and interpretations of information on topics brought to their attention through communication.

Natural sciences and engineering: Disciplines concerned with understanding, exploring, developing, or utilizing the natural world. Included are life sciences, mathematics, physical sciences, and engineering.

Risk: The measure of the degree of hazard, defined as a combination of the probability and severity of adverse effects on organizational performance, health, property, the environment, or other things of value.

Risk analysis: The systematic estimation of risk.

Risk perception: People's understanding of the risks and benefits associated with an event or alternative courses of action. This may include their assessment of the limits of their understanding of the risks and benefits.

Risk judgments: Risk judgments are made when people combine their risk perceptions and their own set of values or objectives when evaluating the acceptability of an event or deciding between courses of action.

Risk tolerance: The level of risks that the organization or its stakeholders will accept. The process of determining risk tolerances identifies areas where minimal levels of risk are permissible, as well as those where higher risk levels are tolerable. Risk tolerance varies by situation and stakeholders.

Social sciences and humanities: All disciplines involved in studying human actions and conditions and the social, economic, and institutional mechanisms affecting humans. Included are disciplines such as economics, law, library sciences, philosophy, political sciences, psychology, social work, history, geography, sociology, urban and regional studies, languages, anthropology, and demography.

Stakeholder: Any individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a potential risk. Decision makers are also stakeholders.

Strategic Risk Communications: As an integral part of an integrated risk management process, Strategic Risk Communications is a purposeful process of skilful interaction supported by appropriate information to enable well-informed decision-making and action on risks.

Appendix IV

ALIGNMENT OF STRATEGIC RISK COMMUNICATIONS WITH OTHER TYPES OF COMMUNICATION

As recognized in the Communications Policy of the Government of Canada, communication functions within the Government of Canada can be characterized by, or include, different practices or disciplines. They typically include the practices of media relations, public affairs, social marketing, and public consultation. Since 2002, the Policy also requires the practices of crisis communications and risk communications. The Policy also establishes the Government of Canada's obligation to communicate with Canadians in a timely manner using a variety of information vehicles and in various languages.

As research and experience have shown, people can confuse risk communications with other disciplines. They may think that the processes, methods and tools that characterize one communication discipline, such as public affairs, can readily be used in other disciplines, such as risk communications. Since the goal of risk communications is to help people make a well-informed decision and take appropriate action — a behavioural outcome — using public affairs or media relations techniques alone will not achieve this goal. These and other practices, which tend to focus on creating awareness or generating interest can have an influence on people's motivation to change, but on their own, they rarely result in behaviour change. And more often than not, these practices are used to advocate a position or advance a solution or recommended action that may not be aligned with the interests and priorities of the stakeholders. So it is useful to clearly distinguish between risk communications, and the practices of public affairs, crisis communications and media relations.

Risk communications is a science-based, professional practice that is often an integral part of integrated risk management. Risk communications supports the identification and effective management of a wide range of risks that can exist for an organization, as well as for individuals and groups. Unlike public affairs or public relations, its primary focus is on stakeholders, those who are impacted by or who have a stake in the decisions professionals within Health Canada can make about risks and how they are managed. Although it may involve one-way information out about risks, strategic risk communications is generally characterized by an exchange of appropriate information that leads to informed decision-making.

Public affairs and public relations can be thought of as the art of establishing and enhancing positive relationships with individuals and groups (in government communication terms this usually means the general public). The practices have many similarities, draw on similar skills and provide essential services to organizations. Techniques or methods used in the practice of public affairs and public relations, such as media relations, can play important roles in disseminating information about risks that citizens and other types of stakeholders need to address risks effectively. Public affairs and public relations are legitimate practices but they are not strategic risk communications and cannot provide the requisite processes, methods and tools for formulating and implementing strategic risk communications. The latter includes formal collaborative processes of different kinds to identify stakeholder perceptions of risks and focus message content on the concerns of the stakeholders rather than on the concerns of the organization.

When it comes to strategic risk communications, journalists working in the news media, including the Internet and other forms of mass media, represent important channels, or a kind of partner for Health Canada, for disseminating risk information needed by Canadians. Health Canada's goal is to be a trusted and reliable source of health risk information in the country. The Department can advance that goal by working closely with responsible media professionals. At the same time, the Department's communications professionals must be vigilant regarding the activities of irresponsible or unreliable news media, helping to improve their communications and counteracting any harm done by inadequate or misinformation.

Crisis communications typically involves communicating on an matter or urgent concern in a sharply limited timeframe and with the broad goal of quickly resolving risk challenges. Often, communications are intended to prompt or guide immediate action. Crisis communications is not strategic risk communications, although it may involve the communication of risk information. Crises may not allow for a full, systematic implementation of the Strategic Risk Communications Process. But even an abbreviated or scaled form of the process can help, notably a quick formal analysis of stakeholder judgments and perceptions, and the pre-testing draft messages.

Appendix V

OVERVIEW OF THE HANDBOOK THAT SUPPORTS THE FRAMEWORK

The purpose of the *Strategic Risk Communications Framework and Handbook* is to give Health Canada and PHAC employees involved in risk management and risk communications a science-based process to follow that is supported by techniques and tools. It provides the essential materials needed to enable representatives to plan and conduct effective risk communication, including consultation, outreach, and dialogue with their stakeholders and ultimately the Canadian public.

The Handbook has been designed as a hands-on manual for people working at the Departmental, Agency, Branch, and Program levels. Experience has shown that the Strategic Risk Communications Process and all of the worksheets and materials can be effectively scaled to address a wide range of risk related issues and opportunities. A project leader at any level of the organization will be able to follow the Handbook and lead his or her team through the process: identifying and engaging the key stakeholders; capturing what is learned; and then communicating effectively in order to help stakeholders and, if appropriate, the Canadian public take appropriate action.

The discipline of strategic risk communications continues to evolve and grow in complexity as a worldwide practice. The Handbook does not endeavour to capture all the methods and tools developed to date or still under development. It does, however, provide a fair representation of current best practices and is open and flexible enough to be a reliable approach for the risk communications practitioner.

OVERVIEW OF THE CONTENTS OF THE HANDBOOK

This Handbook has been developed as a tool for a team working on a specific risk issue. However, the process, methods, and tools can also be successfully adapted and applied by an individual responsible for a specific risk communications initiative.

The Handbook takes a team through the entire Strategic Risk Communications Process: from the definition of the opportunity to development of specific risk communications strategies and plans, through the implementation of the plan and evaluation of both the process and outcome of the risk communications efforts.

TAB 1 provides an introduction to the Handbook. The Forward and Introduction, by Dr. Dan Krewski and Dr. Baruch Fischhoff respectively, underscore the importance of strategic risk communications to the achievement of the Department's mandate.

TAB 2 contains Health Canada's Strategic Risk Communications Framework.

TAB 3 explores the history of risk communications, provides background on the approach outlined in the Framework, and discusses the range of its applications across Health Canada.

TAB 4 provides an overview of the Strategic Risk Communications Process, followed by a detailed description of what is involved at each Step. Worksheets are included in each Step to guide the activities of the team. Tips and examples have been included for consideration by team members.

TAB 5 contains all of the worksheets (templates) used at each step in the Strategic Risk Communications Process, described in Tab 4.

TAB 6, the Resources section, provides the team with a glossary of terms and references. It also provides a list of resources that may be of interest to risk communicators.

Appendix VI

KEY REFERENCES

The following are some of the key references used in the development of the Framework. A more comprehensive list of references can be found in the Handbook.

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Strategic Risk Communications
— Background on the Approach

3

CHAPTER CONTENTS

3

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Risk Communications — an Integral Part of the Risk Management Process

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INTRODUCTION

In this Tab, the basic elements of risk and risk perception are presented and linked to risk communications strategies and messages. Much more could be said about risk perception and risk communications than can be explored here. Readers are encouraged to refer to the extensive literature in both disciplines, beginning with the publications cited in Tab 6.

NOTE: To simplify, "Health Canada" is used throughout the Handbook, and includes the Agencies, Branches, Directorates within Health Canada, as well at the Public Health Agency of Canada.

THE NATURE OF RISK

"Risk" might seem simple. It is a common enough word and concept that one would expect it to be readily understood to mean the same thing to people everywhere. In fact, as research and experience show, people can think about risk in varying and often unpredictable ways. "Risk" can mean very different things to different people. So, it is important when formulating risk communications to ensure the team is working with same definition of "risk" and is thinking about risk perception and risk communications in the same way.

A good simple definition of risk is: "Risk is the chance of loss or injury." For a full definition, please see Tab 6.

It is important to note that all choices entail both benefits and risks. So when considering options for managing or mitigating risks, one should think through both the benefits and risks of each option to the various stakeholders. A more detailed discussion influences on the acceptability of the risks, benefits and tradeoffs inherent in any risk issue can be found on page 3-7. Exposure involves facts and considerations about whom or what may bear a risk, including the distribution of risk across the exposed population. Are people, property and pets exposed to a risk, for instance? How many people are exposed? Are they young or old? Where are they located? Do some people bear most of the risk while others might enjoy most of the benefits inherent in a risk situation?

Chance is the notion of probability. What is the probability or likelihood of those exposed to the risk experiencing a loss or injury? Or, alternately, enjoying a benefit or a gain?

When it comes to *loss or injury*, people often think of losses in financial terms, such as a loss of income, or loss of property value. They often think of an injury in a physical sense, such as an injury to the body, or a serious illness.

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But people's perceptions of loss and injury can go well beyond financial or physical concerns. For example, experience in industrial settings shows that many people are concerned that their rights as homeowners may be "lost" when developers propose building a new facility near their property. Or they may be concerned about a loss of personal status, for example, that developers may not respect their interests and concerns associated with the new facility.

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Risk has Stakeholders

In addition to exposure, chance and loss or injury, a defining feature of risk is that it has "stakeholders." Stakeholders are people who are, or believe themselves to be, affected by the decisions of others. They may be exposed to a risk themselves, such as the risk associated with consuming tainted food. Or, they may feel responsible for protecting others, such as their families, from potential risks.

Stakeholders can be very engaged in issues. They can have set views regarding the nature of risks and how they believe risk issues should be managed. They may feel strongly about how they see the risks, benefits and tradeoffs involved in any risk decision being managed. They may also feel strongly about what they think is an acceptable risk management solution. A critical concern is to minimize the chance that they might become a "victim" of a loss to some degree, especially a loss where there is no apparent offset or compensation.

> **RISK HAS STAKEHOLDERS**
> - *Stakeholders are people who are, or believe themselves to be, affected by the decisions of others.*
> - *By virtue of believing they have a "stake" in the situation, they often insist on a right to have a "say" in decision-making.*
> - *For stakeholders, the root issue is often the fear of becoming a victim to (uncompensated) loss or injury.*
> - *Core concerns tend to be related to trust, control, process, information and timing.*
> - *"Audiences" are less concerned. They see themselves as having no sacrifice to make.*

Audiences, on the other hand, are not likely to be very engaged in how a risk is managed. People comprising audiences may not see themselves as running a risk in any significant way. They don't have to make any sacrifices, or tradeoffs, as part of the management of the risk. Think of a movie audience. People sit in a room and wait to be impressed by the pictures and sound. They leave the movie having made no more sacrifice than giving their time and paying the price of admission.

When it comes to communicating about risk, stakeholders and audiences are entirely different. By virtue of their exposure to a risk or their interest in how a risk is or will be managed, stakeholders typically want to have a "say" in how risks are being addressed. That is, they want to significantly influence the risk management decision-making of others, including governments. Compared with lay audiences (for example, "the general public"), stakeholders may be much better informed about risks, even to the point of having more or better quality information about risks than experts involved in managing them.

People comprising audiences may consider themselves to be much less involved. It may be very hard to get their attention through communications. They may have an interest in stakeholder views on a risk issue and how stakeholders fare in the process of managing a risk, but without a strong sense of their own "stake" in the risk, audiences can be hard to motivate to take action on a risk issue.

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INFLUENCES ON PEOPLE'S PERCEPTION OF RISKS

Risk, risk management and risk communications are also defined in certain ways by how people may think about risks and judge their acceptability.

Modern theories in cognitive psychology and neuroscience suggest that there are two fundamental ways in which people think about or comprehend risk. One is the "analytic system," which uses various kinds of structures, rules, formal logic, and risk assessment activities. It's relatively slow, takes a great deal of effort, and requires quite focused thinking, often over long periods of time.

The other way that people think about risk is something that might be called the "experiential system." This system is unconscious and operates in the background of virtually everybody on the planet. In fact, we are all "hard-wired" to use the experiential system — we do it many times, every day. It is intuitive. That is, it seems like common sense to us. It is fast, mostly automatic, and it requires essentially no effort to undertake and complete. When you think about it, we typically make many risk decisions in a day without being aware of doing so.

TWO MODES OF THINKING (FIGURE 3.1)

Experiential system	Analytic system
• Holistic.	• Analytic.
• Affective: pleasure-pain oriented.	• Logical: reason oriented.
• Strong associations.	• Logical connections.
• Behaviour mediated by "vibes" from past experiences.	• Behaviour mediated by conscious appraisal of events.
• Encodes reality in concrete images, metaphors and narratives.	• Encodes reality in abstract symbols, words, and numbers.
• More rapid processing: oriented toward immediate action.	• Slower processing: oriented toward delayed action.
• Self-evidently valid: "experiencing is believing".	• Requires justification via logic and evidence.
Source: P. Slovic, et al. 2004.	

The analytic system is only about 150 years old and continues to evolve. And as the risk analysts would tell us, risk analysis is far from an exact science.

The experiential system, on the other hand, is as old as the human race, so something on the order of 10,000 years, at least, and perhaps much more. The experiential system enabled people to survive during the long period of evolution — which, of course, continues — and it remains the most natural and common way to think about and respond to risk. As a system it relies on images — internal images or internal pictures — and associations with thoughts, events and experiences, all of which are linked by experience to emotion and how one responds to that. In other words, the feeling that something is good or bad. So the experiential system represents risks as feelings. These feelings tell us whether it is safe to walk down a dark street, or drink strange smelling water.

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While scientists and technical experts tend to emphasize the analytical system, it is important to recognize that both systems operate in parallel. So understanding how people perceive a risk issue — what they think about it and how they feel about it — is critical to successful risk management. Why? Because the outcome of a risk management process entails having people take some action. The human aspect of risk management is, consequently, enhanced by efforts to understand how people perceive the risk issue. That is the integral role of risk communications within the risk management process. Both systems have their advantages, biases and limitations.

Now that we are beginning to understand the complex interplay between emotion and reason that is essential to rational behaviour, the challenge is to think creatively about what it means for managing risk and what it means for formulating and implementing effective risk communications. The opportunity is to understand that there are two systems at play that must be factored in to effective risk management and risk communications.

INFLUENCES ON PEOPLE'S JUDGMENT OF THE ACCEPTABILITY OF RISK

Empirical research dating back to the late 70s by risk perception researchers including Dr. Baruch Fischhoff and Dr. Paul Slovic have shown consistently that there are a large number of factors that can affect or influence people's judgments of the acceptability of risks.

Figure 3.2 shows eleven of these factors in descending order of impact. This table shows, for example, that the degree to which decision-makers and managers of the risk are highly trusted versus not trusted, or if that trust is under pressure about them and their decision-making, can have the highest influence on whether a person accepts a risk and the way it is being managed. And it is important to note that trust is orders of magnitude greater than the other influences.

INFLUENCES ON THE ACCEPTABILITY OF RISKS (FIGURE 3.2)

Less acceptable	More acceptable
Low trust	High trust
Benefits not clear	Benefits understood
Not controllable	Individual has control
Involuntary exposure	Voluntary exposure
No alternatives	Alternatives available
Unfair distribution	Fair distribution
Dreaded consequence	Common consequence
Affects children	Affects everyone
Human origin	Natural origin
High media concern	Low media concern
High symbolism	Low symbolism
Source: Slovic, Fischhoff et al.	

Benefits that are clear and well understood by stakeholders tend to lead to a judgment of the risk as being more acceptable than in situations where the benefits are unclear. When risks are perceived to

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be in the control of the individual, they tend to be judged as being more acceptable than risks that are perceived to be out of the control, or not very controllable, by the individuals: decision-makers and stakeholders included. Risks where exposure is voluntary tend to be judged as more acceptable than risks where exposure is involuntary. For example, many people object to second-hand smoke; that is, being in a situation where they may be involuntarily exposed to smoke and feeling that their health may have been negatively impacted as a result.

In situations involving risk where alternatives are available, risks are often deemed to be more acceptable than when there are no other options available for managing or mitigating the risks. Where distribution of benefits and risks, or gains and losses, is deemed to be fair and balanced, risks can be judged to be more acceptable. If benefits and risks are deemed to be unfair in their distribution, so that one group is seen to experience or enjoy most of the benefits while most of the risks are transferred to or experienced by other group — the situation is deemed to be unfair and often leads to very controversial situations.

An example of this, well known in the electrical industry, involves the placement of electrical facilities, most recently involving the location of power poles. Often residents who live near to where new power poles are going to be put up find the poles objectionable for one reason or another. They often argue that their neighbourhood has to bear the risks, while the "rich people" in the next neighbourhood over enjoy the benefits. The first group endures the downside of having the poles and lines in their neighbourhood, in their view, while the others enjoy the benefits with no experience of the downsides.

Dreaded consequences are much less acceptable than risks associated with more common consequences. The most dreaded health consequence in North America is cancer. The second most dreaded health consequence is contracting HIV/AIDS as a result of some voluntary or involuntary exposure.

Risks that affect children are of great concern to people in virtually all cultures in the world. If children are not affected, or if the risk essentially affects everyone of every age, such risks are deemed to be more acceptable than those affecting children alone.

Risks that are of natural origin, that is, they are caused by "Mother Nature," so to speak, are typically judged to be more acceptable than risks of human origin. An oft-cited example of such a risk is the cancer-related risks associated with exposure to radon gas. Radon is a radioactive gas that occurs naturally and is widespread in its occurrence across North America. It emerges from soils and rocks and finds its way as a gas into homes, settling in the basement. Many efforts over time by governments and others have failed to really mobilize people to test for radon and remove it from the house, which is relatively easy to do through simple and comparatively inexpensive ventilating procedures.

When it comes to risks of various kinds in the news, the media don't tell people what to think as much as they tell people what to think about. That is, the media tends to set an agenda of issues or an agenda of risks for public discussion. If risks are given a great deal of media coverage, often with an intense focus on the nature of hazards rather than the actual level of risks involved, it can affect

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people's judgments of risks, with many people deeming such risks to be less acceptable than if they are not the focus of media attention.

Finally, risks that are highly symbolic, or involve symbols that evoke strong feelings in people, tend to be much less acceptable than risks that are not associated with symbolism of any kind. Examples of precious symbols of Canadian identity for many Canadians include certain wild animals, such as polar bears and beluga whales, and pristine wilderness areas with large expanses of unspoiled lands and free roaming wildlife populations. Risks that threaten such areas can be deemed to be serious indeed because, for many, they may be attached to strong feelings about the possibility that something precious may be harmed in ways that no amount of offsetting benefit may fully compensate.

MORE INFLUENCES ON THE ACCEPTABILITY OF RISK — FACTS VERSUS VALUES

Figure 3.2, Influences on the Acceptability of Risks, is noteworthy for many reasons. Considering the influences on the acceptability of risks to lay people, the absence of facts and data is key. The following table clearly illustrates a typical risk communications challenge.

FACTS VERSUS VALUES (FIGURE 3.3)

Experts often stress	Non-experts often stress
Measurements: accuracy and agreement on the data.	*Risk acceptance:* The acceptability of options (sets of risks and benefits).
Compliance: performance against permitted levels or compliance with regulation.	*Due process:* The ability of stakeholders to participate in judging the risks and their acceptability.
Expert positions: judgments about risks and their acceptability are the responsibility of experts outside the industry, including regulators.	*Equity:* Inequitable distributions of benefits and risks.
	Management credibility: Perceptions of the trustworthiness and competence of industry managers.
	Open communication: Dialogue on the technology and relevant science.

The "experts" — managers, scientists, technical people — tend to focus their communications on "the facts." They typically emphasize measurements and data, compliance, and expert positions regarding risk assessments and risk mitigation options. The challenge is that their analytical approach is often diametrically opposed to what is most important to lay people or non-experts. In risk situations, lay people tend to emphasize the values.

Non-experts are often much more interested in values-based factors than the data. They typically want to work through for themselves the risks, benefits and tradeoffs involved a risk and the options for managing it. And as Figure 3.3 shows, those risks, benefits and tradeoffs include a whole range of factors beyond the data.

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The ability for stakeholders to participate in the risk management process in a *meaningful* way often has a strong influence on non-experts' judgment of the acceptability of a risk. And, as noted in the discussion on influences on the acceptability of risks above, the degree to which the benefits and risks associated with a risk and options for its management are seen to be equitable, can have a significant influence on their judgment as can their perceptions of the credibility of management — the people responsible for making the risk management decision. Finally, the degree to which people feel that the communications process has been open, and that they have had an opportunity to have dialogue on the technology and relevant science, has an influence on their judgment of the acceptability of a risk and options for its management.

Both the expert and non-expert approaches are "correct" in the sense that they both seem very real and important to the people using them. At the same time, they can produce problems. For example, experts can go wrong with laypeople when they discount their informal risk assessments and emphasize only the formal types of risk assessment or risk calculations. Laypeople can often miss or discount useful information about risks that experts can provide as a result of performing formal assessments.

So the facts are important — they are fundamental to effective risk communications. But one cannot just rely on the facts. The comment often heard — "When they have all the information we have, they will come to the same conclusion" — can be a trap. There are many other factors that influence people's perceptions of the acceptability of a risk and its management. These need to be addresses explicitly in strategic risk communications plans and messages.

THE COMMUNICATIONS ENVIRONMENT: PRESSURES ON TRUST AND CONCERNS ABOUT CONSEQUENCES

A key element that influences people's feelings about a risk is trust.

The communication environment surrounding a risk and how it is being managed is often characterized by low trust and high concern. The trustworthiness of the decision-makers is often questioned. Stakeholders may be concerned about who is making decisions, how informed they might be about stakeholder interests and priorities, how empathetic they might be to those interests and priorities, and what processes decision-makers are following to guide their efforts to address risk. These issues typically underlie two primary concerns: first, whether or not stakeholders have had an opportunity to participate in the decision-making process in a meaningful way; and secondly, if the ultimate decision will adequately reflect the interests of the stakeholders involved in the issue.

The communication environment can also be characterized by high concern on the part of stakeholders for how risks are being managed, and what the effects on them will be, as well as the conduct of decision-makers.

In a communication environment characterized by pressures on trust and concerns about consequences, the "rules" of communication can be entirely different than in situations

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where pressures on trust and consequences are low or neutral. Intuition or guesswork-driven communications strategies and messages that seemed to work in the low/neutral environment may backfire in the risk communications environment. Familiar approaches, bolstered by conventional wisdom or the experience of decision-makers, may not only prove ineffective, they may create issues where none existed or even make matters worse!

FORMULATING EFFECTIVE RISK COMMUNICATIONS STRATEGIES AND PLANS

Effective risk communications may require identifying and applying new "rules" for communication in order to address stakeholders' interests and priorities for risk management and risk communications. It may also call for new skills and tools for developing and implementing focused, strategic risk communications. The Strategic Risk Communications Process, plus the tools required at each Step, is described in detail in Tab 4.

Research and experience show that conventional strategies for influencing people's thinking — that is, strategies focusing on educating, informing, or persuading people through various kinds of public relations, public participation, or public education advertising campaigns — can often be inadequate. Their inadequacy can be traced to problems associated with the nature of the risk and its management.

> ### CONVENTIONAL STRATEGIES CAN BE INADEQUATE …
> Conventional strategies for influencing people's thinking, such as educating, informing, persuading, motivating through public relations, public participation, or public education campaigns, can be inadequate. Such strategies may under-perform or fail because of problems that include the following:
>
> - The issues and opportunities are complicated.
> - The issues are technical in nature.
> - The science and facts are not available or are controversial.
> - The "experts" disagree.
> - Risk assessments are controversial.
> - Multiple individuals and groups with diverse interests and priorities are involved.
> - The pros and cons of proposals or solutions may be uncertain or unknowable.
> - The communication environment is sensitive and complex.
> - The political environment may add additional challenges.
> - The credibility of leaders may be under intense pressure.

The issues involved in the risk are often very technical or scientific in nature and not easy to communicate to laypeople. The science and the facts are often not available, or are controversial. Information may be incomplete or unavailable. Often the experts disagree. For example, in some cases, there may be dueling scientists. In such situations laypeople can often become more concerned about the risks because it appears that the experts who should understand them cannot agree

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among themselves. This tends to raise laypeople's concerns that risk is poorly understood, or perhaps not controllable.

Formal risk assessments are themselves controversial. People can take exception to over-reliance, or the emphasis placed on formal risk assessments. The criticism is often that formal risk assessments do not adequately consider people's feelings about risks.

Situations involving risks are often characterized by multiple individuals and groups involved with very diverse interests and priorities, so the communication environment tends to be complicated and often highly charged. Often the pros and cons of particular proposals for solutions are uncertain, or perhaps even unknowable, which can influence people's perceptions of the risks and certainly their judgments about how to address the risks.

As a result, the communication environment can be sensitive, complex and not readily influenced by practices that are common approaches to public relations and mass communications. As well, the political environment can add additional challenges, sometimes ending up with counter-intuitive or counter-indicated approaches to risk management and risk communications. In addition, the credibility of leaders may be under intense pressure, which tends to make it difficult for proposals from those leaders to be readily accepted and put into action by individuals.

To address these issues, new strategies must be created, but the reliability of the results must also be assured.

SO WHY TAKE THE RISK OF COMMUNICATING?

Given the challenges outlined above, some may wonder why they would take the risk of communicating. It may appear that the risks of communicating possibly outweigh the benefits of doing so, especially on complicated risk issues.

Well, the first rule of communications is that ***you can't not communicate***. Everything you do or don't do — or say or don't say — is a form of communicating. Remember the old adage: Actions speak louder than words.

The second rule is that **nature abhors a vacuum**. In absence of communications, especially in challenging risk situations, people will fill the gap with whatever information is available — whether it is accurate or not, or whether it is from a reliable source or not. They may actively seek information that reinforces their fears and concerns, particularly in situations of low trust and high concern. So risk decision-makers have a responsibility to communicate clearly and effectively about risks. And they must to do so in a way that is timely, open and transparent, and addresses the interests and priorities of the people most affected by the risk and its management.

The key is to learn to manage your risk communications effectively. There are two primary ways to achieve this. First: by following a clearly defined process — the Strategic Risk Communications

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Process — you can engineer out much of the risk of communicating. How? By using methods and tools to systematically define your stakeholders, identify their interests and priorities and design and implement strategies and communications that address these explicitly. Second: by building effective risk communications skills, you can learn to communicate with confidence about difficult risk issues.

This Handbook provides the process, methods and tools you need to be successful. The training that supports it will help foster the skills you need to be an effective risk communicator.

3.2

Strategic Risk Communications — True to the Sciences of Risk and Communication

When it comes to helping manage risks through effective risk communications, the fundamental challenge — given the best understanding of the facts, values and influences that you are dealing with — is to decide:

- What best to do.

- What best to say.

- How best to do it.

- How best to say it.

While these statements are straightforward, answers for them seldom are. Strategic risk communications offers an approach for systematically addressing these four questions in a way that is true to the sciences of risk and communication[1] and which will also have the intended influence on people's risk decision-making and risk management behaviour.

As an approach, it enables communicators and others to develop strategies and communications that go beyond typical goals for awareness and understanding that are common in public relations or public education efforts, to focus decision-making on risks and appropriate risk management behaviour. In part, it accomplishes this by:

- Creating a synergistic collaboration among science, technical, management and communications professionals.

- Building on essential knowledge about, and research-based insight into, where stakeholders and others are at today in their thinking.

- Tailoring strategies, messages and the implementation of both to the critical decisions people must make.

- Enabling measurement, systematic learning and continuous improvement of the risk communication process as well as its outcomes.

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[1]   The *Strategic Risk Communications Framework* taps current understanding in the relevant disciplines — risk management, risk perception, risk communications, behavioural decision research, psychology and engineering.

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> ***STRATEGIC RISK COMMUNICATIONS DEFINED***
> ***Strategic Risk Communications is an integral part of an integrated, purposeful risk management process.*** **Strategic Risk Communications = skilful interaction supported by appropriate information.**
>
> - *Key goal: To enable decision-makers and stakeholders to make well-informed decisions that lead to responsible and ethical risk management.*
> - *Key element: Stakeholders are part of the process of resolving risk issues and significant contributors to it.*

ABOUT PUBLIC JUDGMENT

One goal of the *Strategic Risk Communications Framework* is to help enable informed public judgment of — not public opinion about — the organization, its people and its activities and their value with respect to the health interests and priorities of Canadians.

Experts have studied public opinion on one topic or another for decades. And experts and lay people alike continue to be impressed with how difficult it is to understand public opinion in all of its shadings and complexities.

As some experts have said, if public opinion was as simple and one dimensional as it is usually represented in news media reports ("51 percent of Canadians support....") then one would think that after more than four decades of surveying, public opinion would be reasonably predictable and free of surprises. Yet, what continues to emerge is a Canadian public that can demonstrate depth in thinking, thoughtfulness, richness and subtlety and great "common sense".

One possible problem is that many methods for assessing the thinking of Canadians, especially public opinion polls, can be misleading when they fail to distinguish between people's top of mind, offhand, "no-sacrifice-for-me" views and their thoughtful, considered judgments that emerge from a careful weighing of options and the pros and cons which characterize them.

So, such careful and considered thinking can be thought of as being more like public judgment, than opinion, and as such a genuine form of knowledge about certain aspects of opportunities and issues.

Decades of research and experience in understanding people's thinking in depth suggest that public judgment has certain characteristics, which should be considered when you are formulating strategies and communications.

Compared to the historically changeable and volatile nature of public opinion, public judgment appears to be stable and mature. People can have an "on balance" positive or negative judgment about a matter and still take specific exceptions to it. For example, recent research in the United States showed that many Americans believe the benefits provided by chemicals and the chemical

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industry outweigh risks associated with use of chemicals, but can still take exception to the use of certain products and the acts of chemical companies, or their industry association.

Public judgment tends to emphasize coherence and consolidation of views. Information that is relevant to the decisions at hand and useful for decision-making can help people better understand issues and resolve ambivalence or confusion about them. People's thinking on issues often takes in a full spectrum of facts and values that may resist the narrow positions offered by advocates of one view or another.

Importantly, public judgment represents a weighing of pros and cons inherent in options and a reconciliation of them. People clearly are in touch with the consequences of various decisions and how options may play out with respect to their interests and priorities and those of the larger community. In this sense, people's judgment is informed and "responsible" even though the subject matter experts on the topics involved may see it another way — or prefer it to be — another way.

Communications that can enable and focus public judgment are the key to the success of many undertakings in Health Canada. The methods and tools available for formulating them are relatively new. New methods and tools are emerging, as is the opportunity to develop more and better ones. At the same time, risk practitioners must these tools in ways that clearly recognize, and adjust for, their limitations.

KEY DIFFERENCES BETWEEN PUBLIC JUDGMENT AND MASS OPINION (FIGURE 3.4)

Public judgment	Mass opinion
• Is mature and stable.	• Is volatile.
• Emphasizes coherence.	• Emphasizes diversity.
• Relies on relevant and useful information.	• Relies on incomplete information.
• Looks like a fair weighing.	• Looks like a knee-jerk response.
• Involves a higher level of engagement in the issue or opportunity.	• Involves little or no engagement in the issue or opportunity.
• Thinking is based on the full context.	• Compartmentalizes thinking.
• Reconciles risks and benefits.	• Emphasizes risks.
• Understands and accepts consequences.	• Considers and addresses consequences.
• Emphasizes values and ethics; includes but goes beyond knowledge.	• Emphasizes knowledge, information, laws and rights.
Sources: D. Yankelovich, et al.	

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Two Perspectives on Risk Communications and its History

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This section presents two perspectives by well-known professionals in the field of risk communications research and applied risk communications research. The first perspective, by Dr. Rebecca Parkin, discusses risk management in a medical or public health context. The second, summarizing three decades of research by Dr. Baruch Fischhoff, takes a wider view. Both are useful in helping communications professionals understand the tacit "mental models" of risk communication that — for better or worse — they may encounter when it comes to formulating strategies and communications.

THE SPECTRUM OF RISK COMMUNICATIONS: BY DR. REBECCA PARKIN[2]

Risk communications methods and activities serve various purposes at different points in risk management paradigms and in diverse situations[3] (CSA 1997;PCCRAM 1997). Communications are an important part of the process of defining a risk issue, gathering the data and information to assess the technical and societal implications of an issue, selecting the risk management option/s, and evaluating the impacts of the options that were implemented.

For example, cleaning up hazardous waste sites typically requires the involvement of many stakeholders over a long period of time. Initially, citizens or community leaders may report their concerns about a suspected risk, or government agencies may announce their identification of risks associated with a specific site. Depending on the applicable laws and regulations, as well as the level of community concern and expectations for fair processes, a wide range of stakeholders may become engaged in clarifying what "the risk" really is and how to manage it. Frequently, there are many aspects to the risk that may emerge or develop over time — such as health and economic concerns, political agendas, esthetic and environmental values, etc. — that must be incorporated in the risk management process. Only when you know the range of issues and facts associated with the original risk, can risk management options be adequately developed and implemented. Additional stakeholders and agencies are often identified as new aspects of the risk issue arise, new data and information are needed, and/or management options are recognized. To be effective, a risk communications strategy must be integral to the entire risk management process and adaptable to evolving conditions.

Purposes

Helping to define the problem. In the earliest stages of the risk management process, communications initiatives focus on gathering enough preliminary information to define the risk issue and the context. These communications may be largely internal (e.g., among the responsible parties within one or more organizations). Additionally, informal communications with community

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[2]   Dr. Rebecca Parkin, MPH, PhD, is Associate Dean for Research and Public Health Practice, and Professor of Environmental and Occupational Health, at The George Washington University School of Public Health and Health Services.

[3]   CSA (Canadian Standards Association). 1997. *Q850 Risk Management: Guidelines for Decision Makers.* Toronto: Canadian Standards Association.

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leaders may provide information about public views of risk-related issues. These initial activities, however, do not provide the type and depth of knowledge that is essential for strategic risk communications. Defining a risk problem based exclusively on this initial information is likely to result in fundamental and consequential errors.

Stakeholders have many views of what "the" risk problem is, while experts and community leaders have other views. It is difficult to characterize these views adequately without using systematic, science-based methods. Understanding stakeholders' views and incorporating them early is essential for long-term success in managing risks. Experts often assume that they know what stakeholders' views are without understanding that (1) their assumptions may be dangerous, and (2) sound knowledge about why stakeholders hold such views and make decisions as they do is crucial for developing strategic risk communications.

Gathering data and information. During the detailed data-gathering phase, deeper knowledge of stakeholders' views — along with greater technical information about the risk and related parameters — should be developed. Methods for obtaining in-depth knowledge of stakeholders' views must be matched to the type of knowledge that is needed. For example, individual research methods might be most appropriate to determine individual-level risk perception and decision-making; group methods may be preferred to determine peer-influenced views and decision processes, and organizational analysis used to gather information about operational processes, etc.

Risk management options. Various options for addressing the risk (and related issues of interest to stakeholders) are identified later in the risk management paradigm, and decisions are then made about which option/s to implement. A wide range of communication methods, ranging from formal to informal, should be considered in the context of the specific risk situation. In some cases, legislation requires a mandatory public engagement process. Even in cases where legally mandated processes must be used, frequently they can be enhanced using a range of deliberative methods (e.g., NRC 1996). Less formal but often highly effective community-based dialogues can be used to explore, develop, and build support for specific risk management options (e.g., Chapter 2 in Parkin et al. 2004).

Evaluation. After taking action to manage risk, it is important to monitor and evaluate the results. A variety of methods may be used to assess stakeholders' views of the options implemented. Unfortunately, projects often have run out of resources by this phase and evaluations are frequently not conducted. Without structured evaluations, many lessons that could be learned are lost.

MODES OF RISK COMMUNICATION ACROSS THE RISK MANAGEMENT PARADIGM: BY DR. REBECCA PARKIN

Strategic risk communications options rely on a variety of formal and informal methods, ranging from one-to-one through many-to-many interactions. Methods extend to doctor-patient interactions and small group discussions, to Internet sites and legally mandated public engagement processes. (See Table 3.1) The type of communication selected should meet the needs of the stakeholders, and fit the context (e.g., societal, cultural, legal, etc.) and time frame (e.g., emergency or chronic dimensions) of the risk situation.

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MODES OF RISK COMMUNICATION ACROSS THE RISK MANAGEMENT PARADIGM (TABLE 3.1)

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Phase of the risk management situation	Type of risk communication interaction	Examples
Risk identification	One-to-one	• Patient — clinician. • Clinician — Department, Branch or Agency director or staff member. • Physician — large Health Authority staff member (e.g., via phone, e-mail, or in person). • Environment Canada staff member — Public Health Agency staff (interagency).
	One-to-some	• Physician — staff of several agencies or several staff in one Branch. • Risk manager — advisory group.
	One-to-many	• Branch or Department — public (via mass media).
	Some (<20 people)-to-one OR Some-to-some	• Community or advocacy group/s — elected official/s. • Community or advocacy group/s — director/s of Branch or Department.
	Many-to-one OR Many-to-some	• Public — elected official/s (e.g., Minister and/or MPs). • Public to Branch director/s and/or staff (e.g., hotlines, e-mails).
	Many-to-many	Advocacy groups to the public (e.g., Internet or Web sites).
Preliminary analysis	One-to-some	• Branch representative — key community leaders. • Branch representative — employees in other Branches and/or Departments.
	Some-to-one	• Advisory committee — Branch or Directorate. • Branch staff — risk manager.
	Some-to-some	• Advisory committee — Branch heads. • Community representatives — citizens (e.g., community liaisons on advisory panels).

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		• Branch or Department staff — (e.g., interagency) — Advisory panels. • Branch or Department representatives — regional health representatives.
Risk assessment	Some-to-some	• Expert advisors — Branch or Department personnel. • Branch or Department employees working in small groups (interagency). • Branch or Department personnel working with health community representatives (e.g., task forces, advisory panels, etc.). • Stakeholders — Branches.
	Some-to-many	• Branch or Department representatives — series of health group meetings (e.g., regional health organizations, health partner organizations such as Red Cross, Canadian Cancer Society, etc.). • Representatives from several Branches or Departments — public (e.g., public meetings). • Branch or Department — public (e.g., mass media, Internet, Web site, formal reports). • Advocacy groups — public (e.g., mass media, Internet, Web site, public forums). • Concerned citizens — public (e.g., Internet).
	Many-to-some	• Public — Branch or Department representatives (e.g., public hearings).
Risk management	One-to-many	• Branch or Department — public (e.g., mass media, Web site, formal reports and/or public meetings).
	Some-to-some	• Advisory panels — Branch or Department staff.

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3.3

		• Expert advisors — Branch or Department personnel. • Stakeholders — Branch or Department staff. • Branch or Department employees working in small groups. • Branch or Department personnel working with health community representatives (e.g., task forces, advisory panels, etc.).
	Some-to-many	• Branch or Department representatives — series of health community group meetings. • Representatives from several Branches or Departments — the public (e.g., public meetings). • Branch or Department — the public (e.g., mass media, Internet, Web site). • Advocacy groups — the public (e.g., mass media, Internet, Web site, public forums). • Concerned citizens — the public (e.g., Internet).
	Many-to-many	• Advocacy groups — public (e.g., mass media, Internet, Web sites, public forums).
Monitoring/evaluation	Some-to-one	• Expert evaluators — Branch or Department senior managers.
	Some-to-some	• Branch or Department representatives — other Branch or Department representatives or provincial counterparts. • Health community representatives — Branch or Department staff.

3.3

RISK COMMUNICATIONS — AN EVOLVING PRACTICE: BY DR. BARUCH FISCHHOFF[4]

Early efforts at risk communications followed a one-way path. Information, when it flowed at all, was sent to the stakeholder by the decision maker. This form of one-directional communication was sometimes called "Decide-Announce-Defend." It is what still happens when risk management is done without the broad participation of interested parties.

The practice of risk communications has come a long way over the past 30 years. It now draws on the sciences of risk analysis and communications, and taps into such areas as cognitive, health and social psychology; survey research; psycholinguistics; psychophysics and behavioural decision theory.

The modern risk management process is becoming a more open one. As part of that change, risk communication is now a multi-directional process, with stakeholders engaged in ways that are designed to be transparent and procedurally fair.

This hasn't happened by accident. It is the result of continuously and evolving risk communications research that really got started with a series of ground-breaking studies begun in the 1970s, when psychologists began measuring laypersons' concerns about different types of risks — rather than just relying on anecdotal observation. An overview of this work is described in the research paper *Risk Perception and Communication Unplugged: Twenty Years of Progress*, referenced in Tab 6.

These studies showed that laypeople were generally aware of the relative rates of observable fatalities from different sources. However, when judging "risk," they also factored in other concerns, such as how well a hazard is understood and how much of a feeling of dread it evoked. Those hazards for which the person had little knowledge and which were also highly dreaded were perceived as being the most risky. For some technologies, such as nuclear power and activities such as storing radioactive waste, there is a wide disparity in views between ordinary people and the experts' thoughts of the "risk," even if they generally agreed about fatalities under normal circumstances.

The discovery that laypeople see the world differently from the scientific community also raised questions as to the nature of the decision-making process for dealing with risks. This led to research further characterizing these two sets of judgments.

A common complaint by experts about lay decision-making is that "they" do not realize how small (or large) the risks are. If that were the case, then the mission of risk communications would theoretically be simple — transmit credible estimates of the magnitude of risks and people will relax. But probability estimates alone don't address people's concerns. They also want to know what benefits are associated with the risks. Even small risks may be unacceptable, if they bring no benefit to those who bear them — or only bring benefits to those who impose them on others. Lay reactions depend, further, on their relationship with those responsible for the risks. Can they be trusted? Do they behave respectfully?

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[4]   Dr. Baruch Fischhoff, is Chief Scientist, Decision Partners; University Professor, Department of Social and Decision Science & Department of Engineering and Public Policy, Carnegie Mellon University.

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Subsequent research on risk perception has increased risk researchers' understanding of the choices people make under uncertainty and has broadened the nature of the risk assessment process.

This understanding is the result of a kind of evolutionary process in risk communications research, with identifiable developmental stages. At each stage, progress was made toward acquiring some new skills, only to discover that there were additional, more complicated problems to solve. This required practitioners to layer on more tools and techniques, building on what they had learned in the stage before. Often the relationships between risk managers and the public follow a similar evolution, as the managers gradually discover "what people want from them."

The developmental stages of risk communications with the public have been summarized as:

- All we have to do is get the numbers right.

- All we have to do is tell them the numbers.

- All we have to do is explain what we mean by the numbers.

- All we have to do is show them that they've accepted similar risks in the past.

- All we have to do is show them that it's a good deal for them.

- All we have to do is treat them nice.

- All we have to do is make them partners.

- All of the above.

Research has found that much of the "conventional wisdom" about people and risk withers when it is subjected to empirical examination. Indeed, an important lesson is that what the public wants is, typically, not zero risk, but an acceptable balance of risks and benefits, embedded in a mutually respectful social contract. Of course, they would take zero risk if they could get it, or demand it if they see no benefit.

People often speak and act in ways that require systematic research or dialogue to determine what is really on their minds. Successful risk communications, as described in this guide, involves taking a disciplined approach to analyzing what information people need, leading to tailoring messages with appropriate content for the audience. Even then, no matter how careful the preparation, pretesting is still needed to ensure that these messages are being communicated as intended before actually delivering them to the public.

Effective risk communications can help people to reduce risks or to get greater benefits in return for those risks that they do take. Ineffective communications not only fails to do this, but can even prompt wrong decisions by omitting key information or failing to contradict misconceptions. Misdirected communications can confuse people and can even provoke conflict by eroding a recipients' faith in the communicator. In the extreme, by causing undue alarm or complacency, poor communications can have greater public impact than the risks they attempt to describe.

3.3

Recent research on risk perception has resulted in a broadening of the risk assessment process. This has focused on determining how to ensure that risks and the benefits are seen in ways that allow meaningful comparisons and that people associate with alternative courses of action. As well, people need to understand the limits to their own knowledge and the limits to the advice that is offered by various experts.

It is clear that risk communication will continue to evolve to reflect challenges including information technology, increased globalization, changes in the level of people's trust in government and the expectations of people about the role of government.

THE IMPORTANCE OF BRIDGING SOCIAL AND TECHNICAL OR SCIENTIFIC PERSPECTIVES: CONSIDERATIONS ON TECHNICAL DIALOGUE

Technical experts, such as scientists, frequently take the lead in developing risk management strategies and communications. However, the success of these initiatives is often dependant on whether laypeople understand and accept them. Laypeople can include non-technical employees, stakeholders, special interest groups, consumers and others.

Research and experience show that experts frequently base their strategies on guesswork about the factors influencing a layperson's decision-making and how a layperson will interpret communications. Experts sometimes overlook the factors that laypeople consider important, or they judge them to be irrational. The team's strategies and communications may miss their mark if mechanisms are not in place to help experts reliably anticipate the views and actions of laypeople.

The differences between the thinking of experts and that of laypeople can be significant enough to result in poor strategy and communication performance, even causing a backlash and loss of confidence by laypeople in the experts and their analyses. Both sides can be surprised by outcomes and disappointed in the process used to create them, without ever understanding why things turned out so poorly. Sadly, the stage is then set for a future repetition of the same experience.

Fortunately, a much different outcome is possible. More than a decade of decision research and practical experience has shown that strategies and communications can produce outstanding results when both are formulated using a process that explicitly combines technical knowledge with social insight and perspectives.

Such a process is easy to recommend, but difficult to achieve. It is important that experts be willing to explicitly factor in lay perspectives when formulating strategy and communications. Additionally, the risk management process used must itself be grounded in a deep understanding of — not guesswork about — salient layperson beliefs and their underlying rationale. The use of appropriate management tools also makes a big difference in improving the quality of results.

Stakeholders can provide valuable information, knowledge, expertise and insights throughout the process. The views of technical experts must be focused on stakeholders' risk-related interests, priorities and values. As a result, effective decision-making must consider stakeholders' perceptions

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of risks, benefits, tradeoffs, and control options. Consulting them early in the risk management process is essential to focusing it effectively. It may also be beneficial to consult both internal and external stakeholders at different parts of the process to ensure it remains on track.

3.3

Sound scientific information and expert knowledge are the foundation for risk management. Both should tap current understanding across a full set of relevant disciplines. Importantly, decisions must also incorporate stakeholder knowledge, knowledge that can comprise analytical and experiential perspectives.

3.4

The Range of Risk Communications Applications Across Health Canada

When work began to develop *The Strategic Risk Communications Framework*, research showed that people within the Department had a wide range of definitions and interpretations for the concepts of risk, risk management and risk communications.

For example, some people thought of risk communications as being information items about risk, such as a warning notice or advisory alerting people to a potentially risky situation or product. Others perceived risk communications as being more strategic in nature and an essential part of programs intended to change risk behaviours, such as smoking cessation programs.

In fact, everyone interviewed was correct in their thinking in that the practice of risk communications can comprise a broad range of modes of expressions, methods and tools. Here, an overview of such a range is depicted in Figure 3.5 showing the span of risk communications tools and activities. Readers may readily identify possible additions. The purpose of the illustration is to help Health Canada and PHAC professionals recognize that the practice of strategic risk communications is a rich one and includes many options and many means for helping accomplish important goals for risk management within the Department and Agency.

As the illustration shows, risk communications methods range in intensity from one way communications about risk issues, such as putting warning labels on packages and sending advisory letters to physicians (indicated on the left of the spectrum), to more complex consultation initiatives typically involving multiple stakeholders, as illustrated on the far right. Each of these methods is appropriate for specific risk communications tasks. As the multifunctional project team works through the Strategic Risk Communications Process, it can determine which is the best approach for dealing with a given risk issue. More guidance on defining appropriate strategies and plans can be found in Tab 4, Section 4.6.

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SPECTRUM OF RISK COMMUNICATIONS TACTICS (FIGURE 3.5)

Spectrum of Risk Communications Tactics
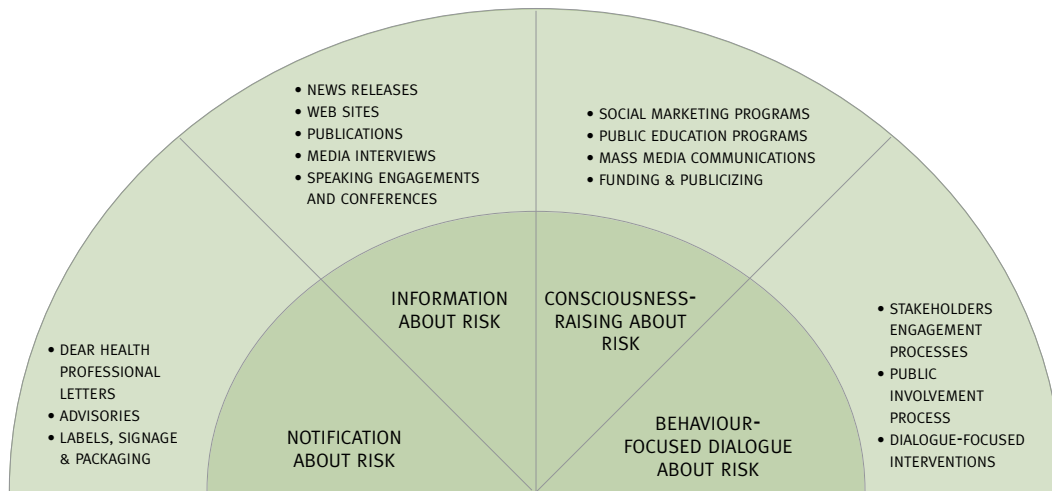
SUMMARY

Risk is defined as "the chance of loss or injury." Stakeholders are people or groups who are, or believe themselves to be, affected by the decisions of others with respect to risk issues. By virtue of believing they have a stake in the situation, they often insist on a right to have a say in decision-making.

Situations involving risks are often characterized by multiple individuals and groups involved with very diverse interests and priorities. As a result, the communications environment tends to be complicated and often highly charged. Many factors influence people's willingness to accept risk, particularly the degree to which decision-makers and managers of the risk are trusted.

Effective risk communications strategies and plans can pre-empt or mitigate stakeholder concerns. Communications are an important part of the process of defining a risk issue; gathering the data to assess the technical and societal implications of an issue; selecting the risk management options, and evaluating the impacts of the options that were implemented.

Strategic Risk Communications options rely on a variety of formal and informal methods. The type of communication selected should meet the needs of the stakeholders, and fit the context and time frame of the risk situation.

As the body of research into risk perception and communications grows, this process is becoming increasingly refined. At the same time, modern practitioners should keep in mind the limitations of current risk management tools and techniques when dealing with a risk issue.

The Strategic Risk Communications Process

4

CHAPTER CONTENTS

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Introduction

Communication is about much more than words. Actions send powerful messages, which often speak louder than anything that is actually said. People watch more than they listen and they tend to draw more meaning from behaviour than from what is spoken. This applies to institutions as well as to individuals.

Research shows that communication is the most powerful influence on people's risk decision-making and behaviour. Risks cannot be effectively managed without the support of appropriate communication. The strategic management of risk communications, called Strategic Risk Communications here, is integral to the wider context of Health Canada and the PHAC's Integrated Risk Management approach. Communication is essential to enabling people and organizations, including government, to manage risks effectively.

By following the science-based, structured Strategic Risk Communications Process, risk communicators can support the team established to analyze the risk, define options for its management and ultimately implement the risk management strategy by systematically assessing the risk from a social perspective, then developing and implementing appropriate and focused plans for engaging stakeholders and others through effective communication about it. This Process begins by supporting the team through a series of steps to Define the Opportunity and then, following a defined sequence of Steps, developing and implementing an appropriate Risk Communications Plan. The Process ends with a formal evaluation by the team of the both the Process and the Outcome.

Tab 4 describes all of the Steps in the Process in detail. It includes risk communications activities, tools and examples for each Step, and also refers to additional material that might prove helpful. Templates to support the work in each Step are included in the text of Tab 4, often with examples. A full set of templates used in the Handbook is located in Tab 5.

By the end of Tab 4 the individual or team should be able to:

- Define the nature, scope and implications of the risk issue the team has been asked to work on.

- Conduct a stakeholder hypothesis.

- Determine what internal and external experts and/or stakeholders should be involved or consulted at which Steps in the process.

- Define a comprehensive risk communications strategy and plan.

- Develop appropriate messages for each of the key stakeholders identified.

- Choose an effective method for pretesting messages to ensure they have the intended effect.

- Pretest messages and refine them as necessary.

4.0

- Implement the risk communications plan.

- Measure the effectiveness of the team process and the outcome of the risk communications strategy and plan.

NOTE: To simplify, "Health Canada" is used throughout the Handbook, and includes the Agencies, Branches, Directorates within Health Canada, as well at the Public Health Agency of Canada.

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State-of-the-science[1] Strategic Risk Communications Process

OVERVIEW OF THE STRATEGIC RISK COMMUNICATIONS PROCESS

Health Canada's Risk Communications Process is a state-of-the-science system that is aligned with the Department's Decision-Making Framework. The process provides risk communicators with specific steps, supported by techniques and tools, for the team (and/or the risk communicator) to use when working through risk communications issues in a way that ensures alignment of the strategic risk communications process with the technical risk management process. The key Steps are listed and explained below.

THE KEY STEPS:

1. Define the opportunity

2. Characterize the situation

3. Assess stakeholder perceptions of risks, benefits and tradeoffs

4. Assess how stakeholders perceive options

5. Develop and pre-test strategies, risk communications plans and messages

6. Implement risk communications plans

7. Evaluate risk communications effectiveness

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[1]   For more information, refer to the document cited in Tab 6., CSA (Canadian Standards Association). 1997. *Q850 Risk Management: Guideline For Decision-Makers*. Toronto: Canadian Standards Association.

4.1

Dialogue-based
Strategic Risk Communications Process

```
                    ┌─────────────────────────────────────┐
                    │         DEFINE THE OPPORTUNITY        │
                    └─────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
                    ┌─────────────────────────────────────┐
                    │       CHARACTERIZE THE SITUATION      │
                    └─────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
        ┌─────────────────────────────────────────────────────────┐
        │  ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS AND TRADEOFFS  │
        └─────────────────────────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
                ┌─────────────────────────────────────────────┐
                │    ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS    │
                └─────────────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
        ┌─────────────────────────────────────────────────────────┐
        │  DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS AND MESSAGES  │
        └─────────────────────────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
                ┌─────────────────────────────────────────────┐
                │        IMPLEMENT RISK COMMUNICATIONS PLANS         │
                └─────────────────────────────────────────────┘
                                     ↓
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION ──
                                     ↓
                ┌─────────────────────────────────────────────┐
                │     EVALUATE RISK COMMUNICATIONS EFFECTIVENESS     │
                └─────────────────────────────────────────────┘
```

NOTE: For an overview of how the Strategic Risk Communications Process is aligned with Health Canada's Decision-making Framework, please see Tab 2.

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Step 1: Define the Opportunity

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Strategic Risk Communications Process
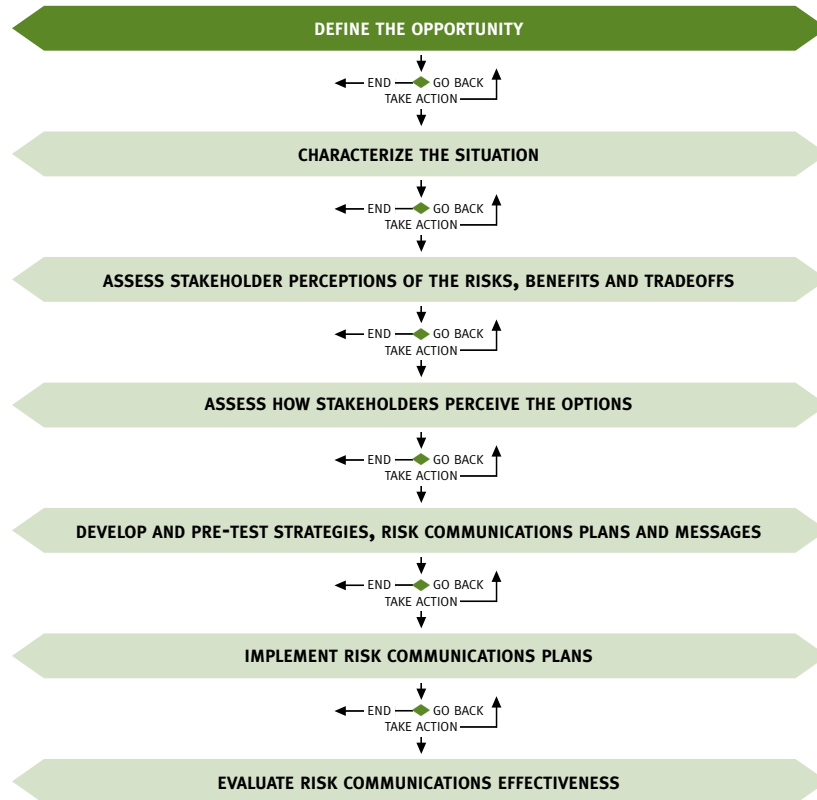
In this Step, risk communicators work together with the science and program people, preferably on a project team, to identify and characterize the risk communications opportunity in detail. An Opportunity Statement is developed to broadly define the challenge, problem, issue or opportunity the group has been charged with resolving. As part of this Step, the team also describes the Department and/or branch's interests and priorities associated with the opportunity. The process and project goals are then identified. Roles and responsibilities of team members are assigned. Resource requirements are defined and potential stakeholders are identified. The documentation process begins.

INTRODUCTION

At this stage — the beginning — it is important to take the time to determine the full scope of the opportunity and to draft an Opportunity Statement. That statement spells out the scope of the opportunity, what the desired outcome is and how success will be measured.

The term "opportunity" is used to a) focus the team on the full context of the issue or challenge at hand, and b) to ensure that the team considers both the benefits and risks involved in the issue

4.2

and its resolution. As research conducted by Decision Partners in 1990 for the chemical industry on how people perceive the risks and benefits of the industry, and subsequent research conducted by Decision Partners and others shows, if one only communicates about the risks, people will think about the benefits. The reverse is also true. So it is important that the challenge be framed from the outset as an "opportunity," which takes into consideration both the risk and benefits.

Another critical activity is determining who in the organization will be responsible for managing the planning and implementation of essential consultation and communication activities. A multi-functional team comprising science and program people, risk communicators and possibly others is usually the best way to carry out the number and range of tasks required. Effectively achieving the objectives set out in the Opportunity Statement often calls for the collaboration of many people, with various backgrounds, to produce a resolution that is acceptable and likely of benefit to all the key internal players. Most of the risk issues that Health Canada and the PHAC deals with are complex and many-faceted, so a team approach is usually recommended. This Tab focuses on the role of the team in completing the seven steps in the risk communications process. An individual would follow a similar process.

The Opportunity Statement is developed to describe (or frame) the project scope and desired outcomes. The team can be important since effective risk communication typically requires input from more than one, or a narrow set of, professional disciplines or functions.

Primary Activities for Defining the Opportunity

THE PRIMARY ACTIVITIES IN THIS STEP INCLUDE THE FOLLOWING:

A. FORM THE TEAM:
- Determine if a team is required. If it is:
- Define the team mandate.
- Define who should be on the team.
- Determine team roles and responsibilities.

B. DEFINE THE SCOPE OF THE OPPORTUNITY:
- Use key questions to define the scope of the opportunity.
- Draft the Opportunity Statement.
- Ensure the opportunity is achievable and measurable.
- Identify measurements.

WHAT STARTS THE PROCESS?

Anyone in Health Canada or PHAC can initiate the Strategic Risk Communications Process. It can be triggered by an event, a pending regulatory change, a media call, an inquiry from a concerned citizen, findings from a risk analysis, or simply by the leader of a risk management team. Once the need to initiate the process is clear, typically the first challenge is who should be on the team.

A. FORMING THE TEAM

4.2

Undoubtedly, there will be a team established to manage a risk issue. It is important to include risk communicators on the team from the outset, to ensure that the Strategic Risk Communications Process is integrated at every Step. Here are some guidelines to keep in mind when a risk management team is being formed:

When do You Need a Team?

The decision to establish a formal risk management team will depend on the issue to be addressed. The benefits of teamwork can sometimes be accomplished without having a formal team by effectively networking with technical, scientific, program and communications experts inside and outside government. However, forming a team is likely the best approach to take if:

- The risk issue is important, complex and requires expertise from different individuals over the course of the process.

- Synergistic or creative thinking is required that can be achieved only through close teamwork.

- Working on the Strategic Risk Communications Process will have a broad impact and likely affect several individuals or functions that have a stake in the outcome.

- The support and buy-in of different functional leaders is needed to implement solutions.

- It is necessary to build internal capability for implementing the Process.

- The work to be done is beyond the ability and resources of one person.

- Critical information about the project, the stakeholders, relevant history and other issues are beyond the experience or expertise of one person.

The Team Mandate

Determining how the team will be structured and how it will operate (such as its terms of reference) will be important considerations for the team sponsor and leader. Provide focus for the team by addressing these questions:

- Who is the team sponsor?

- How will the team be structured in such things as membership, reporting lines and requirements?

- What will the team's boundaries be? For example:

  - How will it relate to other functional groups?

  - How will it relate to other initiatives in the organization?

  - What issues or opportunities is the team <u>not</u> expected to work on?

  - What resources can the team draw on for support?

  - What internal sources of information relevant to the opportunity will the team draw on?

  - What results of the team's efforts will be measured?

  - How will the team assess its own performance?

4.2

- Where will the team meet, and how often?
- By what date must the team have completed its task?

Who Should be on the Team?

It is important that those invited to be on the team understand their respective roles and responsibilities, and be committed to both. They must understand the risk issue as defined by the group and see clearly how they can contribute.

Typically, team members include:

- A team leader, who may also serve as the team facilitator, although this role is often given to a specialist trained in the practice.
- Subject matter experts representing different functional areas, such as communications, policy, technical, scientific and legal experts.
- People who will be involved in carrying out the team's decisions.
- Both men and women.
- A mix of professional backgrounds, positions in government, and ages.

Team Member Roles and Responsibilities

If the decision is made to establish a team, the first step is to clarify the roles of the various members. The following outlines some of the key responsibilities of each of the players on the team.

Team Sponsor: Defines the project and takes responsibility for ensuring the team's success.

- Works with the team leader to establish the project goal and to support the team's objectives and mandate.
- Helps to select team members.
- Supports the team leader throughout the process.
- Identifies constraints and removes barriers to the team's progress.
- Ensures the team remains focused on the opportunity.
- Monitors the team's progress.
- Ensures adequate resources are in place.
- Helps the team celebrate the achievement of the goal.

The team sponsors are typically senior managers responsible for ensuring the effective management of the risk issue, including the effective implementation of the Strategic Risk Management Process.

Team Leader: Is responsible for managing the overall team process.

- Facilitates* meetings if no one is directly assigned this responsibility.

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- Schedules meetings, prepares agendas and ensures a complete record of proceedings and team progress is kept.*

- Ensures team members have the training they need.

- Systematically tracks team efforts and follows up with members to ensure action plans are carried out.

- Monitors issues that arise.

- Ensures that the team or Department has a plan in place to address these issues effectively.

- Meets with the sponsor to provide regular progress reports.

- Seeks assistance from the sponsor, as required.

*The team leader may assign some of these tasks to other team members.

The Team leader may be the person responsible for the overall risk management process or the person on the team responsible for ensuring that the risk communications process is managed effectively.

Team Members: For many projects, a team of six to 10 people should suffice. The team should be small enough to work effectively. Others can be brought in as subject experts as required. Team members are responsible for working together, under the guidance of the team leader, to achieve the project opportunity as defined. They must:

- Attend meetings and provide expertise from their respective functions.

- Provide timely feedback to the team leader about the results of their efforts and report any arising issues related to the risk issue.

NOTE: Including People Outside the Department on the Team

Team members can include external resources, whether from within or outside government. External members can bring additional expertise to the team's proceedings on an as-needed basis, such as providing legal counsel or perspectives from various stakeholders.

When partnerships or joint decision-making processes are in place, and depending on the issue, it may be appropriate to include people on the team who come from outside the branch or Department, or sometimes, from outside of government. These external people may be individuals; consumers; representatives of environmental, health or consumer organizations; specific demographic groups; communities; other government agencies; industry associations or individual industries; scientific or professional associations; educational institutions, Aboriginal people and various minority groups.

These external people will certainly be considered as stakeholders and their interests and priorities regarding the risk issue will be identified in subsequent Steps in the Strategic Risk Communications Process. However, in some situations, it may be beneficial to include a few of these individuals on the team from the outset. For example, in some cases, they may have critical knowledge about a risk or a primary stakeholder group that will be critical to enabling the team to move forward. Of course there are both pros and cons to including external representatives on the team that need to be assessed

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by the team leader and the sponsor before a decision to include such individuals is taken. If it is best to limit the team to people within the Department, others can be brought into the Process later on to provide insight and specific advice as required.

Team Facilitator: In many cases, the team leader will assume responsibility for facilitating team meetings. However, it is often best to use a facilitator when issues are complex and multiple points of view are anticipated. Using a facilitator is also a good idea when it's important to achieve team consensus on both the meeting process and the content, especially when time is a factor. An effective facilitator can:

- Steward the team process.

- Enable the team to stay on its agenda and make progress.

- Maintain objectivity and not contribute to, or evaluate, ideas and comments, given that the facilitator is not the team leader but a neutral third-party.

- Encourage group interaction.

- Defuse tension and intervene in conflicts to resolve issues and enable progress.

- Provide continuity (in team tasks and process design).

The facilitator:

- Works with the team leader to set agendas and prepare for meetings.

- Keeps the meeting on the agenda topic and focused on issues.

- Encourages balanced discussion.

- Ensures agenda items are discussed in the allotted time.

- Reviews, for accuracy, records of meeting proceedings.

- Keeps meeting notes and an Action Register from each meeting.

The facilitator can be a team member, or he or she may be a trained facilitator from within the Department who is asked to serve this role. Alternately, the facilitator may be an external contractor hired for this purpose.

Team Recorder: This may not be a separate role from that of the facilitator, or the function may be performed by a team member assigned by the facilitator.

- Accurately documents team discussions and decisions.

- Prepares and distributes a record of meeting notes, including the Action Register.

The Importance of Documentation

Documentation is a critical component of an effective risk management process, so documentation of the risk communications efforts by the team is very important. As suggested above, assigning someone on the team to keep the meeting notes and documents up to date is probably the most efficient way to manage all of the documents related to the Strategic Risk Communications Process.

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The templates that follow (and are repeated as a full set in Tab 5) will help the recorder in this role. The templates can serve as the working documents of the team. As such, they will likely need to be updated as more information about the topic, the stakeholders and their interests and priorities, become available. For that reason, it is important to label and date each draft of the templates. At the end of the project, these templates can be reviewed by the team when the group evaluates the process, the outcomes and makes recommendations for improvement that can be passed on to future teams. Good documentation is the key to continuous improvement!

NOTE: THE IMPORTANCE OF DOCUMENTATION CANNOT BE OVER-EMPHASIZED BECAUSE IT REINFORCES THE GOALS OF CONTINUOUS IMPROVEMENT OF PERFORMANCE AND OF BUILDING INTERNAL CAPACITY.

Team Meeting Tools

When planning the first team meeting, it may be helpful to create a multi-purpose project plan document to formalize the team set-up and establish meeting schedules and action plans. To begin, the plan would reflect the following information:

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SAMPLE AGENDA ✎⊃

STRATEGIC RISK COMMUNICATIONS TEAM
Meeting Date: / Meeting Number: 1
Time: 8:00 a.m. to 11:30 a.m. / Place: Conference Room, Building 1A

Attendees:

- Sponsor…
- Team leader…
-

Meeting purpose: (Revised each time to reflect the overall intent of the meeting. It does not state the project goal.) For the first meeting the purpose might be to:

Kick-off project team meeting to orient members to … the risk issue…

Desired outcomes: (List specific end results desired from each agenda item.)

- All members understand the project goal, team mandate and their role on the team.
- Review of the Strategic Risk Communications Process.
- Define the opportunity.
- Agree on next steps, such as work to "characterize the situation" at the next meeting.

Pre-meeting assignments: (Lists tasks for members in preparation for the upcoming meeting.)

- Review the backgrounder accompanying this agenda

Time	Topic	Process	Who
8:00–8:15	Welcome and introductions	Around the table	Sponsor/all
8:15–9:30	- Define the opportunity. - Team mandate/ terms of reference. - Team member roles and responsibilities. - Team meeting schedule.	Present/discuss/agree	Sponsor Team leader
Break: 9:30–9:45	Break		
9:45–10:30	Overview: Strategic Risk Communications Process	Present/discuss	Team leader/all
10:30–11:00	Overview of 'Characterizing the Situation'	Present and discuss steps for next meeting	Team leader/all
11:00–11:30	- Review meeting purpose and desired outcomes. - Create Action. - Register Adjourn.		Team leader

EXAMPLE: TEAM AGENDA EXAMPLE

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<div align="center">

PRELIMINARY AGENDA

Health Canada Risk Communications Framework

Steering Team Meeting

November 16, 2004

Location: Brooke Claxton Bldg., Room 1234B

</div>

Sponsor:

Sheila Watkins, Director General, Public Affairs Division, Communications, Marketing and Consultation Division

Project Leader:

Élaine Chatigny, Director, Public Affairs Division, Communications, Marketing and Consultation Division

Participants:

Health Canada Steering Team

Facilitators:

Gordon Butte — Decision Partners

Sarah Thorne — Decision Partners

Meeting time: 9:00 a.m.–4:30 p.m.

Project purpose:

Health Canada leaders consider effective risk communication to be essential to the Department's ability to achieve its mission.

The purpose of the Risk Communications Framework is to:

    a) Improve support for informed decision-making and communications,

    b) Help Canadians make well-informed decisions on health-related topics and,

    c) Build internal capacity for the practice of professional risk communication.

The Framework will comprise state-of-the-science processes, methods and tools for Strategic Risk Communications.

Meeting purpose:

To workshop the results of the mental models research and work with the steering team on recommendations and next steps regarding the Risk Communications Framework.

Meeting objectives:

1. To workshop the results of the mental models research with the Steering Team, the Communications Team and other key project stakeholders.

2. To work with the Steering Team on recommendations arising from the research report and assign next steps.

3. To work with the SteeringTeam on key elements of the Risk Communications Framework and assign next steps.

EXAMPLE: TEAM AGENDA EXAMPLE

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AGENDA: November 16, 2004

Time	Topic	Who's responsible
9:00	Welcome and introductions • Welcome. • Review agenda and desired outcomes. • Review project purpose and progress to date.	• Élaine Chatigny.
9:45	Workshop the mental models research results • Lead the group through the detailed research results. • Discuss considerations and implications for: the Department, the branches, the Communications Directorate and others.	• Decision Partners. • NOTE: we will take a break part way through the report, likely around 10:45.
12:15	**Lunch**	
1:00 Steering Team meeting continues	Develop recommendations • Develop key recommendations based on the research report. • Define and assign next steps.	• Decision Partners facilitate.
2:15	**Break**	
2:30	Discuss critical elements of the Risk Communications Framework • Work with the Steering Team to review progress and get input required to focus the key elements of the Risk Communications Framework, including: • Definitions. • Objectives. • Guiding Principles. • Process. • Roles and responsibilities. • Review and get input on the draft table of contents for the Framework handbook. • Define and assign next steps.	• Decision Partners facilitate.
4:15	Wrap-up • Review what we have accomplished. • Discuss next steps, next meeting — conference call December 8. • Feedback from participants.	• Decision Partners/ Élaine Chatigny.
4:30	**Session ends**	

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TEAM ACTION REGISTER 🪛

Each meeting concludes by comparing the progress made against the purpose statement and desired outcomes. Before adjourning, create an Action Register highlighting commitments made by team members to perform specific tasks, often to be accomplished before the next meeting. The Action Register is carried forward as a regularly updated document listing tasks and their completion status. For example:

Item #	Person	Action	Timing	Comments/Status
1	Name of member…	Activity e.g. issue minutes	By….	
2	Name of member…	Distribute agenda for next meeting	By….	
3				
4				
5				

EXAMPLE: *ACTION REGISTER EXAMPLE*

November 23, 2004

To: Health Canada Risk Communications Framework Steering Team

From: Gordon Butte and Sarah Thorne

Re: Action Register from November 16 team meeting

The following is a segment of the Action Register from the November 16 Steering Team meeting.

Who	What	By when
Decision Partners	• Develop a one page summary of the process and results so far — in memo form.	Dec. 3
Decision Partners Élaine Chatigny	• Update the research highlights with changes recommended by the team. • Create a second highlights presentation without the expert model. • Distribute both versions to the team.	Completed — November 17
Decision Partners	• Revise Draft Guiding Principles and Objectives for discussion at January Meeting. • Review draft Roles and Responsibilities at next meeting.	January 18

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B. DEFINE THE SCOPE OF THE OPPORTUNITY

Effective risk communication begins with everyone on the team having a shared understanding of the risk issue. One of the team's first tasks is to define the nature and scope of the project it has been asked to work on. This is often best done by having the entire team working together in a facilitated session. In this way, team members can listen to, and build on, the views of others. A typical objective is to have team members come to a shared understanding of the opportunity and possible scenarios associated with it.

FOCUSING ON THE "OPPORTUNITY" RATHER THAN THE "ISSUE OR PROBLEM" FORCES THE TEAM TO CONSIDER THE BENEFITS ALONG WITH THE RISKS ASSOCIATED WITH THE TOPIC AT HAND.

Typically, the team leader or facilitator leads the group through a series of questions to determine what is known about the topic — the facts; and what is not known — the uncertainties. In an integrated risk management approach, it is critical that any risk communications efforts start with an understanding of the risk from a scientific perspective. The key questions noted on page 4-23 provide an overview of the questions the team needs to know in order to get started. These can be customized to suit the particular project.

During the team meeting it is likely that important details will materialize that may later become critical to the project's success. These need to be added to existing documents to ensure that they are kept up to date and as complete as possible.

If there are significant gaps, team members may be assigned specific tasks to gather additional information about some aspects of the situation.

Drafting the Opportunity Statement

The team should begin the Strategic Risk Communications Process by drafting an Opportunity Statement, typically with input from the team sponsor. The sponsor is the individual (usually a senior official) who defines the project goal and takes responsibility for ensuring the team's success. Having clear goals helps to clarify the scope of the opportunity. As a senior manager, the sponsor's perspective is very important in determining where the resources will come from if the decision is made to form a team.

Defining the Opportunity Statement also keeps team and individual efforts focused and on track, providing an end-point against which you, your sponsor, the team and other members of the organization can measure progress and the ultimate success of the project.

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TEMPLATE 4.1: *ISSUE-FOCUSED QUESTIONS TO CONSIDER WHEN ASSESSING THE OPPORTUNITY* 🖙

Here are typical questions for the team to ask that will help identify and characterize the nature and scope of the risk issue. The team leader will need to adapt them to the topic at hand.

Questions	Comments/Observations
What? What is the current situation?	
• What is the risk issue? • If we have a problem or issue, how can we express it as an opportunity?	

• What do we know about this issue?
• What are the facts?
  • What don't we know?
  • What is still uncertain?	

• What are the primary drivers of this issue? For example:
  • A Department priority.
  • A new policy.
  • Emerging legislation, policy changes or litigation.
  • External interest in the issue — stakeholder, media, interest groups, public, etc.	

• What is the critical decision to be made? • Why now? • Whose decision is it? • Will this decision be seen to be significant by people inside and outside of the organization?	
So what?	

• Thinking in terms of the key stakeholders and your organization, what are the impacts of this decision in the context of:
  • Social impacts?
  • Technical impacts?
  • Economic impacts?
  • Political impacts?
  • Environmental impacts?
  • Financial impacts?
  • Legal and regulatory impacts?	

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• Who are the key players internally?	
• Who are the key players externally?	
• Is the risk issue likely to be contentious? • Who stands to win? • Who stands to lose?	
• Has there been any media attention given to topics associated with the issue?	
• How much time is available to address the issue?	
• What decisions might be made that could affect implementation of your issue in a positive way?	
• What decisions might be made that could affect the implementation of your issue in a negative way?	
• How well prepared are your leaders to follow through to achieve the positive results?	
• How effectively will your leaders respond to the negative consequences?	
• What could be done to prevent or minimize the likelihood of any negative consequences of implementing your risk management or risk mitigation solution(s)? • On the organization? • On your stakeholders?	
• What could be done to ensure the likelihood of a positive outcome?	
NOTE: The team will continue to build on this template in subsequent work as it continuously revises and updates its understanding of the risk issue.	

Write the Opportunity Statement so that it focuses on an outcome and clearly identifies what is to be accomplished. The Opportunity should speak to the higher purpose; for example, the Opportunity is not to develop and implement a communications plan, it is to enable key stakeholders to take appropriate action to protect themselves from a specific health risk, by communicating effectively about the risk issue and what they can do to protect themselves.

It is important to use simple language and avoid technical terms. Check your Opportunity Statement against the following criteria: It should require specific actions and be achievable, measurable and driven by time lines.

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How you will achieve the opportunity becomes your broad objective as a team. (See the example that follows).

TEMPLATE 4.2: *WRITE THE OPPORTUNITY STATEMENT*

State the opportunity as a sentence: The opportunity of the «name» Team now is to «do what? — higher purpose» «for what purpose?» We will do this «how?» «by when?»

The opportunity of the _____ Team now is to _____

_____

because _____ .

We will do this _____

by _____ .

Criteria for Success

The team must review the Opportunity Statement to ensure that it is:

- Appropriately focused.

- Avoids using negative language.

- Is clear.

- Is measurable.

- Is achievable.

- Has a clear timeline.

EXAMPLE: *EXAMPLE OF AN OPPORTUNITY STATEMENT (PANDEMIC INFLUENZA)*

The following is the Opportunity Statement developed by the PIC Communications Sub-Committee to guide its work for approximately nine months.

PIC Sub-committee Opportunity Statement

The opportunity of the Pandemic Influenza Committee (PIC) Communications Sub-Committee is to ensure that Canadians are prepared to take appropriate action if we experience a pandemic, in a way that builds Canadians' confidence in our organizations.

We will establish appropriate mechanisms to do this by:

- Creating a strong communications network;

- Defining clear roles and responsibilities for communication at each phase of the pandemic;

- Defining a variety of communications options, strategies, methods and tools at each stage; and

- Developing consistent key messages in this pre-pandemic phase.

We will accomplish this by June, 2005.

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Completing Step 1 When Time is Tight

As a minimum, the team, or an individual risk communicator, should take the time to fill in the Opportunity Statement Template and check it with the sponsor, or his or her supervisor, before getting too far into the work. The potential for misunderstanding and possible failure is high if the key players do not, from the outset, have a shared understanding of — and commitment to — the purpose, scope and deliverables of the work to be undertaken. An effective team (and an effective risk communicator) would not take this risk!

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Step 2: Characterize the Situation

4.3

Strategic Risk Communications Process

```
                    DEFINE THE OPPORTUNITY
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
                 CHARACTERIZE THE SITUATION
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
       ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS AND TRADEOFFS
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
            ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
    DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS AND MESSAGES
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
              IMPLEMENT RISK COMMUNICATIONS PLANS
                            ↓
                ← END —●— GO BACK ↑
                     TAKE ACTION
                            ↓
           EVALUATE RISK COMMUNICATIONS EFFECTIVENESS
```

In this Step, specific methods and tools are used to identify the individuals and groups both inside and outside Health Canada who will likely be involved in, or have an important interest in, the risk issue or opportunity. Secondary research is typically conducted to help define the key external stakeholders. Secondary research may include media analysis and a review of external stakeholders' positions in the media, on their Web sites and so on. The risk communicator, working with the project team, defines the key stakeholders and develops a hypothesis of their interests and priorities.

INTRODUCTION

By now the Opportunity has been defined and a team has been formed, with members carefully selected to ensure that all the essential expertise the team will require is represented.

At this stage it is important for the team to take the time to characterize in depth the situation that it will be working on and to determine when, and by what means, to engage key internal and external stakeholders in the process in order to achieve the objectives described in the Opportunity Statement. This Step builds on the preliminary work done in Step 1, becoming more focused and specific about the risk issue and its stakeholders.

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How to Characterize the Situation

THE PRIMARY ACTIVITIES IN THIS STEP ARE:

A. INTEGRATE EXPERT KNOWLEDGE

- Gather and integrate "expert" knowledge and develop an expert model.

  or

- Gather and integrate the information using key questions.

B. CONDUCT A PRELIMINARY STAKEHOLDER ASSESSMENT

- Brainstorm stakeholders versus audiences.
- Define key internal and external stakeholders.
- Conduct secondary research as appropriate to begin to identify key external stakeholder interests and priorities.
- Identify primary and secondary stakeholders and interested parties.
- Prioritize stakeholders.
- Develop your hypothesis of key stakeholder interests and priorities.

C. PREPARE THE INITIAL FRAMING

- Based on the work done to integrate expert knowledge and conduct a preliminary assessment, determine initial framing of the risk issue.
- Develop message frames for the key messages.
- Determine preliminary communications strategy and objectives.

A. INTEGRATE EXPERT KNOWLEDGE

A critical step in Characterizing the Situation is gathering and integrating the knowledge and insight of the "experts." Typically, the experts are the internal people working on the project. They can include technical experts — scientists, physicians, policymakers, and so on — as well as communications experts from the program, branch or Department. They might also include people outside the Department, such as implementation partners, special interest groups and academics. In complex situations they may involve experts from other departments or jurisdictions such as the U.S. Centers for Disease Control and Prevention (CDC), the U.S. Food and Drug Administration (FDA), or the World Health Organization (WHO).

The term "knowledge integration" is widely used and, in different fields such as artificial intelligence and organization development, is used in particular ways. In this Handbook, "knowledge integration" can be thought of as ways and means to collect and focus information into knowledge that is useful for purposes of creating and formulating risk communications strategies, plans and messages.

Knowledge integration is an iterative process, which means that information, assertions and objections from different disciplines and sources are repeated and reviewed many times while the facts about the risk issue are being gathered and analyzed. In general, the best results are produced by moving from simple summaries of information into successively more detailed layers of information

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organized to focus on the primary elements of a risk and means to mitigate it. Knowledge integration, and the documentation it requires, is a critical component of successful risk management and risk communications.

Integrating Expert Knowledge

The objective of integrating expert knowledge[2] is to come up with a single description that summarizes the pooled knowledge of the community of experts, not the views of any one expert. Where there are disagreements and uncertainties, the summary must capture those as well. Note that the term "expert" refers to the individuals creating it, without implying that their beliefs are complete, perfect, or even superior to lay beliefs in all respects.

There are three primary forms of integrating expert knowledge:

1) Influence diagrams

2) Inventories of related factors

3) Cause and effect stories

Whichever method the team chooses to use, the model it creates should summarize the knowledge needed to make judgments about the subject and issues related to it.

Background on "Expert" Models

If initiatives and communications are to be well informed and authoritative, they must reflect current understanding among the experts in the relevant fields. To that end, a useful step in developing strategies and communications for a risk issue is creating a model that systematically pools everything that a community of experts knows, or believes, about the topic.

The model can serve as a framework for better understanding non-expert thinking, attitudes and behaviours. It can also serve as an analytical framework for research into people's thinking on the topic.

Experts can include managers in various functions and at different levels in organizations. They can also include subject matter experts across a wide range of fields. It is worth repeating again that although it is called an "expert model," the information that it contains typically does not reside in the mind of any one expert, especially not in such an explicit form.

DEFINITION: An expert model is a summary of relevant knowledge about a topic, typically illustrated in the form of an influence diagram. As a formal integration of knowledge, the expert model summarizes the knowledge needed to make judgments about the topic and issues related to it. It is prepared in a way that will facilitate risk analysis, risk management, and risk communications. Note that expertise is often distributed throughout the stakeholder community.

2   Morgan, M.G., Fischhoff, B., Bostrom, A., & Altman, C. (2001). Risk communication: The mental models approach, cited in Tab. 6.

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Three Methods for Integrating Knowledge

Three generic methods for integrating knowledge are explained below. In each case, the final models can be extremely detailed. They all start with simple versions, initiated by the team when it begins work on Step 2. More detail on all three of these methods can be found in *Risk communication: The mental models approach*, by Morgan, M.G., Fischhoff, B., Bostrom, A., & Altman, C. (2001) cited in Tab 6.

1. *Influence Diagrams*

Decision analysts developed influence diagrams as a convenient way to summarize information about decisions in a way that encourages effective communication among experts, decision-makers and communicators.

Creating an expert model in the form of an influence diagram forces topic experts to reflect systematically on the structure and content of their expertise.

An influence diagram has been described as a "directed graph" made up of arrows that illustrate influences by connecting related circles, or "nodes." An arrow between two nodes means that the node at the arrow's tail exerts some influence on the node at the arrow's head. In more formal terms, knowing the value of the variable at the end of the tail helps predict the value of the variable at the head.

For instance, an influence diagram of a weather system might include an arrow from an oval representing sunshine projecting to an oval representing air temperature, showing that sunshine is an important variable, or influence, on air temperature. One could also calculate the degree to which a change in sunlight intensity might affect air temperature through the warming of the earth and the air closest to the ground.

Developing an influence diagram often starts with preparing a detailed questionnaire, or discussion protocol, to use to engage experts on specific aspects of a risk, such as sources influencing the existence of the risk. Then, by expanding these protocols and through more discussion as the key topics are explored, new and important information may be brought to light that enlarges or further explains the list of influences.

Properly done, expert models using influence diagrams:

- Allow effective communication among experts and between experts and non-experts.
- Ensure that no critical knowledge is missed or overlooked.
- Provide a mutually respectful way for communicators and technical experts to ensure they understand one another.
- Ensure that only decision-relevant information is included.
- Can be applied to virtually any situation.
- Are compatible with experts' conventional way of thinking.

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- Make communication with non-experts more tractable to skeptical experts by breaking down the task into manageable pieces.

- Fit with a decision-making perspective.

- Provide a strong, flexible framework for obtaining systematic assistance from experts as well as documenting the assumptions underlying information.

- Can be readily subjected to peer review.

2. Inventories of Related Factors

Factors influencing the understanding and management of risks can be "inventoried" in different ways. One method is to conduct a brainstorming exercise with the team, an expert group or a series of individuals that asks participants to list the risk factors in general categories, such as exposure and magnitude of outcome.

Participants could also write each factor on paper stick-on notes. These are then placed on a blackboard or paper where lines can be drawn to connect related factors and discussed.

The factors that are identified in this brainstorming session can be sorted into relevant groups (reflecting the important influences and their relationship), eliminating duplication and clarifying each one as it is cited. The product of this work can then be illustrated in a simple diagram or plainly documented as lists under key headings.

3. Cause and Effect Stories

Many risks can be described as stories, or scenarios, that link a series of causes to related outcomes or results. This is what is sometimes called a "causal chain" in the scientific literature on risk.

Such stories typically follow a simple line, beginning with an early or first event (such as bacteria entering drinking water) that is tied to an important second event (some people drink the water that has the bacteria in it) and so on until the key events, or variables, and their relationships are mapped. The probability of one event being tied to another as a cause can be explored at length. The story might be told backwards and forward in order to confirm important relationships and elicit new information from experts.

The final version of stories or scenarios can also be used to test new information, or other forms of risk analyses, by tracing the item through the story line.

Expert Model Example: Health Canada Simple Expert Model

In the summer of 2004, a group of professionals representing all branches of Health Canada participated in a facilitated, day long expert model development session. From their work and subsequent discussion with other HC staff, the draft Expert Model of Health Canada Risk Management — Basic Model was developed.

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After repeating this process several times, the basic model evolved into a series of models that built up to become the Expert Model of Health Canada Risk Management — Detailed Model.

The basic model that follows illustrates the key influences, and their relationships affecting Health Canada's ability to conduct effective risk management and risk communications.

Expert Model of Health Canada Risk Management and Strategic Risk Communications — Basic Model

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(Starting in the upper left corner.)

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Key Drivers — Health Canada's mission and mandate. These influence the *clarity of direction* provided for effective risk management and risk communication. *Clarity of direction* is determined by many factors including Health Canada's departmental objectives; objectives for risk communication and risk communication guiding principles. These may be formal or informal, explicit or implicit.

Clarity of direction in turn influences: a) the *quality of processes*, encompassing both decision-making and risk communications processes within the department, and b) *workforce quality*, which includes both technical and communications staff.

The *quality of processes* and *workforce quality* both influence all of the elements of a risk management/risk communications process. This includes: *efficacy of risk and issue identification; quality of risk assessment and evaluation; quality of risk control strategy; and quality of Health Canada's implementation.* Each of these elements includes both risk communication and technical risk management.

Quality of processes directly influences quality of stakeholder involvement, which, as Health Canada experts noted, can significantly influence every element in the Risk Management Process. *Quality of stakeholder involvement*, in turn, influences every element in the Risk Management Process. It also has a direct influence on Health Canada's *desired outcomes*.

Desired outcomes include such elements as public awareness of the risk; improved public health; positive judgment on Health Canada's management of risk issues and the overall credibility of Health Canada.

The detailed expert model builds on the basic model by identifying more specific nodes and their relationship. It is available from Health Canada, Communications Dictorate.

Key Questions to Ask the Experts
It is often helpful to prepare a list of questions to ask experts at this point, as the team works to characterize the situation. These may be about the nature and extent of the risk; the history of the risk issue; any remedial or mitigating factors; if there is any particular information that Canadians should know about the situation that they don't know now, and if there are any new measures that should be taken.

There are three fundamental questions that need to be asked of experts. The answers are ultimately translated into lay language, using effective risk communications methods, for use in communications with lay stakeholders. These questions are:

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WHAT? — What is the issue? What do you know now? What is the data?

SO WHAT? — So what does this mean? What are the implications for human health and the environment?

NOW WHAT? — Now what are you (Health Canada) going to do about this? What should I do to protect my health and the health of my family?

Risk communicators may find it most effective to interview experts on the team one-on-one before the team meeting. Template 4.3 can be used as a base to develop the interview protocol or script. (NOTE: some of these questions may have been answered, or partially answered in Template 4.1: Issue-focused questions to consider when assessing the opportunity. The following Template can be used to augment that work and gain additional insight from subject matter experts.)

TEMPLATE 4.3: QUESTIONS FOR EXPERTS

Questions related to characterizing the situation: What is the current situation? What is the critical risk management decision to be made?

1. What is the nature of the risk? Why is it a risk issue?

2. What health risk(s) are we addressing? What is occurring now compared to what should be occurring?

3. What environmental risk(s) are we addressing? What is occurring now compared to what should be occurring?

4. How and when did concerns about this issue arise?

5. Are there certain people or groups inside or outside Health Canada driving this issue? If so, who are they and what might their objectives be?

6. What studies on this issue have been done and by whom? How credible are these studies?

7. With respect to risks identified for the topic in question:

   a) What risks are we certain about and how certain are we? Why are we certain — what's our evidence?

   b) What is less certain? Are we acting in recognition or acknowledgement of these uncertainties? If so, how do we justify such action?

   c) What is still uncertain? What efforts are required and/or are underway to address these uncertainties? When will we have more information?

8. Have risk assessments been conducted? If so, have they been peer-reviewed?

   • What supporting views did peer-reviewers have?

   • What non-supporting or contrary views did reviewers have about the data involved in the risk assessment and the conclusions reached by risk assessors using the data?

9. Who is at most risk and why? Is there any action required now to reduce their risk?

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10. Is action urgently required in order to protect public health and/or the environment? If so, why? If not, why not?

11. What benefits are associated with the product (drug, chemical, device etc.) and who enjoys them?

12. What "bottom line" conclusions do we want Canadians to reach when Health Canada's risk assessment and decision is made public?

    • Should Canadians take protective action or measures to minimize the risks involved?

    • If so, how will these conclusions help them to make the well-informed decisions needed to do so?

13. What other factors have been/will be addressed as part of the risk assessment? For example, the social, technological, political and economic impacts of Health Canada's decisions.

    • How are/will these factors being considered in Health Canada's decision-making about appropriate risk management and risk communications on this risk issue?

The team can use the insight gained here as it conducts its preliminary stakeholder assessment.

B. CONDUCT A PRELIMINARY STAKEHOLDER ASSESSMENT

The next task for the team is to begin to identify a list of stakeholders that might be affected by the opportunity or have an interest in it. Brainstorming can be a useful way to do this.

STAKEHOLDERS CAN BE DEFINED AS ANY INDIVIDUAL, GROUP, OR ORGANIZATION THAT MAY AFFECT, BE AFFECTED BY, OR PERCEIVE ITSELF TO BE AFFECTED BY A POTENTIAL RISK. DECISION-MAKERS ARE STAKEHOLDERS IN THE PROCESS, AS ARE INDIVIDUALS AND GROUPS THROUGHOUT THE DEPARTMENT.

External stakeholders can include, for example, health partners, special interest groups, and the people who bear the risk.

For example, stakeholders might be groups associated with the issue of the safety of farmed salmon. Stakeholders could be the aquaculture industry, the fishing industry, sports fishers, environmental interest groups, health advocates, and politicians interested in their constituents' views on the topic.

Although these groups are very different in some respects, they share an interest in that particular topic and in seeing it addressed in a certain way. Thus, they represent a "community," that is, people who share a common interest. They may feel strongly that decisions made about the topic will in some way influence their lives. Consequently, they may see themselves as having a "stake" in decision-making about the topic and expect to have a "say" in how it is addressed.

The Preliminary Stakeholder Analysis Template 4.4 that follows is a useful tool to use when identifying potential stakeholders.

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TEMPLATE 4.4: *PRELIMINARY STAKEHOLDER ANALYSIS* ✍

Identifying stakeholders and audiences

List stakeholders related to the topic and the risk communications objective and goals.

Stakeholders are those who might be affected by, or have a significant interest in, the process of decision-making about the topic and implications of decisions reached.

The rule of thumb in risk communication: Those bearing the most risk deserve the most attention.

Think "outward" from the topic or risks, identifying people or groups who could be most directly affected by, or exposed to the risks, in the first level out, then those who could be somewhat less affected, and so on to audiences (people least likely to be directly affected).

- Who might be directly affected?

    - In what ways might they be affected? (Benefits and risks: Who might gain? What may they gain? Who might lose or be at risk? What might they lose?)

- What individuals and groups might have an interest in the topic and/or risks (impacts) associated with it, including (STEPHE):

    - **S**ocial impacts?

    - **T**echnological impacts?

    - **E**conomic impacts?

    - **P**olitical impacts?

    - **H**ealth Impacts?

    - **E**nvironmental impacts?

Record the specific individuals or groups that represent key stakeholders beside the applicable row heading. Note <u>why</u> you think they might be affected or interested, that is, what they stand to benefit from, or lose.

The information gathered in response to these questions can be charted as a stakeholder map, using Template 4.5 on page 4.37.

Category/Type	Individuals and groups: Why affected or interested?
Decision-makers (regulators)	
Transactors — Most affected and interested	Example: Consumers because _____
Active interests	Example: Groups advocating interest of consumers because _____
Audiences	

TEMPLATE 4.5: STAKEHOLDER MAP ⌂—

4.3

AUDIENCES

ACTIVE INTERESTS

TRANSACTORS

DECISION-MAKER(S)
REGULATORY

RISK
ISSUE

Definitions:

Decision-makers: Decision-makers can include departments, branches and/or other jurisdictions that have a primary or shared role in regulating the risk.

Transactors: Transactors are the stakeholders who are most affected by the risk issue and its management and have some sort of transaction related to the risk issue. For example, these are the people who will stop taking a drug or eating a food product due to a health warning.

Active interests: Active interests are individuals or groups who have a stake in the issue, but are not directly involved. These can include, for example, academics and media who specialize in health-related topics.

Audiences: Audiences can include general media, other government departments, and interested agencies and associations who are not actively engaged in the issue or its management.

NOTE: Your stakeholder map will likely change as the team learns more about its stakeholders through informal and formal research as the risk issue or opportunity evolves.

For a specific example, see **Consumer Perceptions of Safety of Farmed Salmon** (Tab 4. page 4.38)

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This map shows the rings of stakeholders illustrating the example of consumers' perception of the safety of farmed salmon. It is a draft only, and offered here as an example. In the middle of the map is the risk issue — the perceived safety of farmed salmon.

Stakeholder Map: Consumer Perceptions of Safety of Farmed Salmon
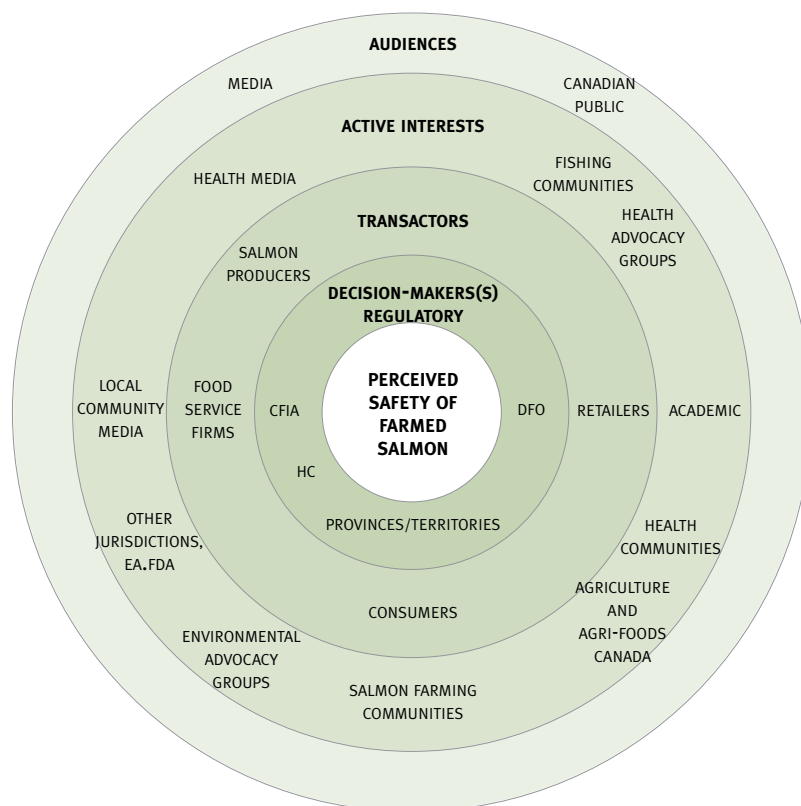
If this were a geographic map, then the next ring out would typically identify people located closest to the site — such as the aquaculture employees, their families and the local Aboriginal groups. However, this map identifies stakeholders, not just groups that share a common geography. Stakeholders are individuals or groups who have a shared focus on a topic of mutual interest.

In the first ring out, *decision-makers* would include those departments with a primary role in ensuring the safety of farmed salmon for consumers. These departments would include Health Canada, Fisheries and Oceans and the Canadian Food Inspection Agency.

So, on the topic of consumer perceptions of the safety of farmed salmon, then the second ring out — *transactors* — includes those who are most affected and interested and have some sort of transaction related to the risk issue, such as not using a product due to a health warning. They include consumers

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(because they make decisions to buy and consume salmon based on a number of factors including their perception of risks and benefits); salmon producers; companies involved in the food value chain such as wholesalers, processors, retailers and food service firms; capture fishing interests; and feed companies.

The third ring — *active interests* — could include groups advocating the interests of consumers; environmental advocates; health advocacy groups (such as the Heart and Stroke Foundation, Canadian Diabetes Association, Alzheimer's Society); the health services industry — nutritionists as well as health care providers, and academics (research funding). Provincial government agencies, which have an interest in health of the industry, and other federal government departments such as Agriculture and Agri-Foods Canada would also be included here.

These groups have a stake in the plans, but likely do not have a direct transaction with the company, or involvement in decision-making.

Primary Stakeholders

Primary stakeholders are the individuals or groups that the team focuses most of its efforts on throughout the Strategic Risk Communications Process. Some of them likely need to be engaged early in the process. Their interests and priorities are of significant importance and typically will help shape the team's decision-making.

To identify primary stakeholders, it is useful to ask questions such as the following:

- Who would be most affected — positively or negatively — by the risk management decision?

  - In the case of the farmed salmon example, key external stakeholders would include consumers, coastal communities, salmon farmers, fish processors as well as partner Departments, such as Health Canada and Agriculture and Agri-Foods Canada and agencies such as the Canadian Food Inspection Agency. Key internal stakeholders would include various senior managers — technical, communications and policy — from within DFO.

- Who could help you achieve your goal if you reached out to them early in the process?

  - In the farmed salmon example, this could include key consumer interest groups, regional Aboriginal leaders, aquaculture scientists and regional economic development leaders.

- Who do you absolutely not want to blindside?

  - Here the list would likely include all of the individuals and groups mentioned above, plus possibly others such as the head of the regional fishers union.

- Who has been involved in this type of issue or opportunity in the past?

  - Secondary research, including Web and media scans, would identify groups and individuals such as traditional fishers, coastal community leaders, environmental groups, and specific health and consumer groups.

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- Who will share in the ultimate decision?
  - Various federal government departments would share responsibility for ensuring consumer safety regarding farmed salmon, primarily Health Canada, DFO and CFIA.

Secondary Stakeholders

Secondary stakeholders are usually groups to consider once the process is underway. It is likely that their interests and priorities will support the team's decision-making process, but their involvement may come later when you are looking for input on options or proposed solutions.

Active Interests

Active interests are those people who will be interested in the issue or opportunity, but may only want and need information. Typically these are groups who may be following the issue or opportunity for personal or professional reasons.

The News Media as a Stakeholder

Where does the news media fit into this mix? The relationship with journalists, television news directors, columnists, editors and others employed in the news and information industry should be kept to a professional level with respect to risk communications.

Since it is the news professional's job to report on activities and events of all types, they typically serve as a conduit and interpreter of information to individuals and groups throughout a larger community. They may also emphasize certain views or advocate particular approaches or goals through editorial columns or in other ways. As well, the media tend to highlight hazards, concerns and differences in people's views, leaving it to the readers or viewers to reach their own conclusions about the accuracy and fairness of the statements and positions they receive.

The media can serve an important role in disseminating critical risk information to consumers, such as a contaminated food advisory. On specific health issues, specialist health and medical media would fit into the "active interests" category and likely follow that issue closely.

In rare cases, the media itself may have a stake in a risk issue, such as in situations involving openness, transparency and access to information. In these specific situations, the media would be involved as stakeholders.

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TEMPLATE 4.6: *PRIORITIZE STAKEHOLDERS* ✐

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Decision-makers	Transactors	Active interests
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.

4.3

When do you Engage Stakeholders?

Engaging with key stakeholders is an important and integral part of the Strategic Risk Communications Process, right from the start. However, whom you consult with — and what you consult with them about — changes as you progress through the Process.

In Step 1, the decision-maker is considered to be a stakeholder. The dialogue begins by discussing with the sponsor about who should be on the team. Then dialogue takes place with the potential team member, and likely the person's manager, to get approval for their time. Ongoing conversations with key internal stakeholders also go on throughout the process in the form of project updates and progress reports from the team leader and team sponsors.

In Step 2, stakeholders should include those internal people who can help, or will add value to, the task of identifying stakeholders and developing a hypothesis of their interests and priorities. These usually include communications people and others who have worked directly with some of the stakeholders and/or have been following the issues for some time. Step 2 also draws on "experts" to help characterize the situation. If risk communications are to be authoritative, they must reflect the best available understanding of the situation. Technical experts will have much of that knowledge, but so may dedicated communications practitioners and lay stakeholders. And it is important to note that stakeholders are the experts in what matters to them. So "experts" include a range of scientists, technical people, policy people and risk communicators who can speak to the science and social challenges behind the issue. Inclusion of and/or consultation with experts in other departments and outside of the government, such as academics; experts from other jurisdictions, and individuals from industry and non-government organizations may take place at this stage.

In Step 3, a small number of the targeted stakeholder groups, or group, are engaged through the research process. Typically the people who bear the most risk are a focal group for the research. Other key stakeholder groups include those who work with the people at most risk and/or those who may have the most influence on their decision-making. For example, in the case of seniors who rely on arthritis drugs, these would include primary care physicians and pharmacists, as well as some health organizations such as the Arthritis Society.

In Step 4, the team comes together to assess the risk management options and their acceptability to both internal and external stakeholders. Determining acceptability is typically done through dialogue — from one-on-one conversations, to group presentations, dialogue sessions, technical briefings and external stakeholder workshops. Follow-up formal research may also be conducted to assess the acceptability of the various options to external stakeholders.

In Step 5, dialogue with some of the key stakeholders continues as plans and messages are pre-tested with representatives of the target groups and refined.

In Step 6, the implementation of the broader stakeholder engagement plan begins. An example would be cross-Canada dialogue workshops with stakeholder groups about the risk issue and to elicit recommendations for its resolution or mitigation. This Step is supported by appropriate media, public affairs and information strategies.

In Step 7, key stakeholders, both internal and external, are asked to provide feedback on the Process and the outcome. Various formal and informal engagement and evaluation methods are used to accomplish this.

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Formulate the Team's Hypothesis of Stakeholder Interests and Priorities

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Purpose of the Hypothesis

The next task is to develop a hypothesis. This is the team's "best guess," including both knowledge and assumptions, about the interests and priorities of the key internal and external stakeholders. This is important because:

- It makes explicit the thinking of all of the team members.

- It allows for systematic collecting and documentation of the team's assumptions and its rationale for those assumptions.

- It provides a thoughtful base from which the team can draft its Risk Communications Plan.

Taking time to define your assumptions as a team, and then testing these with your stakeholders, is critical to successoful risk communications. The alternative is to base your plan and your messages on guesswork concerning what is important to your stakeholders; what is most relevant, and what they really want to know. Guesswork is a risky approach and often leads to mistakes and negative consequences.

TEMPLATE 4.7: STAKEHOLDER HYPOTHESIS 🖙

For each of the priority stakeholders identified by the team, based on the team's current understanding of their interests and priorities, fill in the following table using the guiding questions to the left.

NOTE: This table, which adapts mental models research methods, can be modified and also used to define hypotheses for Decision-makers, Transactors, Active Interests and Audiences.

Guiding questions	Priority stakeholder #1 (name)	Priority stakeholder #2 (name)	Priority stakeholder #3 (name)
What do they know now about the topic/ risk that is correct? How do we know?			
What don't they know that is consequential? How do we know?			
What might they misunderstand? How do we know?			
What might they want to know? How do we know?			
Who do they trust, and why? How do we know?			
What communication methods do they prefer? How do we know?			

4.3

EXAMPLE: FORMULATING THE TEAM'S HYPOTHESIS OF STAKEHOLDER INTERESTS AND PRIORITIES RELATED TO FARMED SALMON

The following is a draft stakeholder hypothesis illustrating the team's hypothesis of one of the top priority stakeholders and one active interest stakeholder using the guiding questions to the left.

Guiding questions	Most affected and interested example: *consumers*	Active interest *ENGO's*
What do they know now about the topic/risk that is correct? How do we know? What don't they know that is consequential? How do we know?	E.g. Consumers know generally that *salmon is good for you*. We believe this about consumers because *Health Canada told them so* (key influentials).	They know the topic well enough — we have seen them highlight the weaknesses/ challenges in their materials.
How does Canada keep food safe for consumers?	Benefits to health — *what health benefits?*	Think they know most of the important facts.
What might they misunderstand? How do we know?	• Who is regulating, inspecting, monitoring? • The difference between wild and framed salmon. • Only farmed salmon have contaminants like PCBs.	Not much, very sophisticated.
What might they want to know? How do we know?	Everything — want assurances that farmed salmon is safe to consume.	What new angle they can use against the aquaculture industry?
Who do they trust, and why? How do we know?	CFIA, Health Canada, Independent/academic, 3rd party validators.	Media — to deliver message unfettered or unchallenged.
What communication methods do they prefer? How do we know?	• Consumers — point of sale environment — Internet, media. • We are not sure what sources they prefer.	Media protest, boycott threats.

C. PREPARE THE INITIAL FRAMING

Within Health Canada, it is often important to prepare the initial framing of the risk issue at this point. This framing is typically used to brief key internal stakeholders. But it can also serve as the foundation for "holding lines" in case media or public questions about the issue come into the Department.

Based on the work done to integrate expert knowledge and conduct a preliminary assessment, the risk communicators, working with the support of the team, will determine initial framing of the risk issue. From there, they will develop message frameworks for the key messages using Template 4.8: Develop the Message Framework and preliminary communications strategy and objectives using Template 4.11: Define Risk Communications Strategy and Objectives. The risk communicators will refine these templates as new information becomes available from the team and as the stakeholder research in Steps 3 and 4 is completed.

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What is Framing?

Framing is the use of language to manage the meaning of messages. Framing is what helps people make sense of a subject and judge its relevance to them. Like a photographer, a communicator puts forth messages in a "frame" that represent one interpretation of a subject over other possible interpretations. How a risk issue is framed from the outset is critical because the initial framing sets up all subsequent interpretations of it.

In effective framing, message structure and language are important elements:

- Structure helps organize people's thinking on what is important to think about.

- Language builds understanding.

Why Framing is Important

Framing is important for the following reasons. Framing:

- Is a primary way to manage meaning for people through the skilled use of message content and wording.

- Establishes a perspective on, and interpretation of, facts and values.

- Helps create shared understanding as the basis of action.

- Increases the likelihood of gaining people's support and implementing plans successfully.

- Offers stable interpretations that can prevail over less stable views.

- Is inevitable. Issues will be framed, by design or default.

Guidelines for Framing

1. Identify and prioritize stakeholders and audiences.

2. Take the stakeholder and/or audience's point of view — put yourself in their mental chair.

3. Develop clear key messages that frame the issue in a way that is easy to understand. Key messages are used to help "position" the issue in people's thinking — to put it in familiar terms.

4. For each key message, create two supporting messages that address or "prove" the key message — evidence.

5. Use language appropriate to the target group.

6. If jargon or technical terms must be used, explain them in lay language.

7. Examples, using analogies, metaphors and stories can help people more easily interpret the meaning of the messages.

8. Draft the language of the messages so they sound like they come from real people — conversational style.

4.3

4.3

Tips for Acknowledging Uncertainty

The following tips for acknowledging uncertainty have proven effective in a number of situations where the science about the risk issue is uncertain or incomplete and/or when the risk mitigation or risk management options have yet to be developed. These tips might be useful to the team at this point in the process, as it works on its initial framing of the risk issue.

Strategy

- Acknowledge uncertainty before someone else does it for you. Nature abhors a vacuum.

How

- Share what you know, positively.

- Explain what is uncertain and how uncertain it is.

- Explain what is being done to reduce uncertainty and when you'll have more information.

- If you can't reduce uncertainty further, explain why.

- Explain your cautiousness — but don't say your approach is "conservative" — as people find that description confusing.

TEMPLATE 4.8: DEVELOP THE MESSAGE FRAME

Objective	
Theme	
Key Message	
Evidence #1	
Evidence #2	
Challenges/uncertainties	
Personal Action	

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Why Not Just Start With Messages?

Communicators often ask, why take the trouble to develop Message Frames? Why not just start with messages?

If messages are to have their intended effect on people's decision-making and behaviour, and if they are to be authoritative, they must reflect:

a) an understanding of people's information needs for decision-making and

b) expert understanding of the decision-relevant topics.

Messages prepared without using a framework that addresses both of these objectives may accomplish neither. Additionally, without the helpful structure of a framework, the evidence underlying claims or conclusions embedded in messages may be unclear to those charged with using the messages. This can lead to misinterpretation of some messages by the recipient, or a misunderstanding of the strategies to which they are tied. It can also lead to miscommunication because communicators may be designing and disseminating messages built on misinterpretation, misunderstanding and/or inadequate or incomplete information.

Perhaps the biggest challenge at this stage in the Process, is that communicators simply may not have the information necessary to construct useful, accurate and complete messages because they have not had the time, or they have not had sufficient access to expert sources.

Pandemic Influenza Message Frame

The objective of the Pandemic Influenza Message Frame outlined on page 4-49 is to inform and enable citizens to take personal action if the pandemic escalates from the Pandemic Alert Phase to an actual Pandemic.

Because Message Frames are developed early in the Strategic Risk Communications Process, their primary purpose is strategic. In the case of Pandemic Influenza Planning, the Message Frames are used to achieve the following:

- Ensure that the key messages from any of the key players will support the goal of making sure that Canadians are prepared to take appropriate action if this country experiences a pandemic, doing so in a way that builds Canadians' confidence in our organizations.

    - The Message Frames are focused on actions Canadians can take to prepare, supported by the information they need to make well-informed decisions about taking appropriate actions in a timely way.

- Ensure that all of the key players (the Pandemic Influenza Communications Sub-Committee, PIC itself, and key communicators at the federal, provincial, territorial, global and Canadian stakeholder levels) are all aligned in terms of:

    - The objectives for each Phase and for each target group.

    - The key message points for each Message Frame are consistent and complementary across all of the key players.

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- Being prepared to have clear, consistent, focused messages across Canada, regardless of the location or organization of the communicator. This is a critical component to achieving the goal of building Canadian confidence.

- Provide a sound base for communicators from all of the key organizations across Canada to use to develop specific messages that are suitable for people in their jurisdictions. These must:

    - Be appropriately adapted to specific regional or local needs.

    - Address the interest and priorities of the people in that region.

    - Be able to be conveyed through various media at a level people can understand.

These message frames are developed early in the process, with the information available at the time. As more information becomes available about the topic and the stakeholders' interests and priorities, the message frames are updated. In Step 5, they are used as the base to develop and pretest messages.

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EXAMPLE: *INITIAL PANDEMIC INFLUENZA MESSAGE FRAME*

Phase	Pandemic alert period — Phase 3
Objective	Citizen: inform citizens that organizations are mobilizing and that there is an elevated/increasing risk, implementation of self-protective measures (if in Canada) so that they can prepare their personal/family plan.
Theme	We have a Plan.
Federal key message	The world is monitoring the threat of a deadly new flu virus, which if it spreads, it could put everyone at risk of becoming infected. Canada has a developed national Pandemic Influenza Plan to manage such a risk. It is being coordinated by the Public Health Agency. • We are carefully watching what is happening in Asia. • We are working with the provinces and territories. • We're working with the provinces and territories to minimize the impact to Canadians. • Our work is and will be ongoing. • The goal of pandemic preparedness is to minimize death and social disruption. • The plan will evolve and be adapted as the situation evolves and we have more information about the specifics of the pandemic.
Evidence #1	There are X number of cases of human-to-human transmission in the world. The WHO has said.... • All levels of government are working on their emergency preparedness plans. • Organizations in Canada and around the world are mobilizing now.

Evidence #2	Health organizations in countries around the world are monitoring for evidence of this new virus.
	
	• High level of surveillance around the world for avian flu, seasonal flu and the emergence of a new strain of flu.
	
	• Canada is working with the WHO and our international partners.
	
	• We are using tools like the Global Public Health Intelligence Network to monitor international influenza activity daily.
	
	• We're managing a real-time alert system for serious respiratory illnesses (SRIs) to:
	
	  • Ensure timely dissemination of information to the provinces and territories,
	
	  • Support and maintain quarantine services at international airports, and
	
	  • Monitor annual influenza activity through the FluWatch program.

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Challenges	The goal of the Plan is to minimize the impact of an influenza pandemic, but it will not stop it from happening.
	
	• An influenza pandemic will stress our country like nothing we have experienced before.
	• We don't know how the virus will affect individuals:
	  • Some won't be infected.
	  • Some will be infected but not have symptoms. The concern is that they may spread it/be infectious.
	  • Some will get very ill and die.
	  • We cannot say that everyone is going to be okay.
	• We have a Plan, but it will have to be adapted to the specific circumstances of the pandemic.
	• It will be difficult for key players at the international, national, provincial and territorial levels to keep on top of surveillance.
	• There are limits to what can be done to manage the spread of a pandemic.

Personal action	Here is what you can do: • Check the PHAC Web site for information about an influenza pandemic (fact sheets, FAQs). • Start thinking about your own family plan. Do you have basic first aid supplies at home? Back up plans for childcare? Plans to get your annual flu shot? • Check travel advisories — Public Health Agency and Foreign Affairs — before you travel. • If you're going to be traveling internationally, check the Public Health Agency's Web site or consult a travel medicine specialist to determine if there is avian or unusual influenza activity in the area.

Completing Step 2 When Time is Tight

It is critical for the team to understand the technical and scientific aspects of the issue, and gain an understanding of the stakeholders, in order for it to do its work, even when the time is tight. If the team members are prepared to bring what they know to the table when an issue breaks, this information can be quickly and systematically assembled using the Template 4.3: Questions for Experts. If the team can't meet in person, a conference call can substitute. The team recorder needs to keep track of all of the information collected and share it back with the team as quickly as possible — point form is fine!

If some information is missing, it can be assigned to the appropriate team members and the document updated by the recorder as the material becomes available. If information is not available, or if the science is uncertain, this should be documented as well.

It is also important to prepare the initial framing of the risk issue. As a minimum, it will be shared by the team with the sponsor and other key internal stakeholders. But it might also be called on to respond to inquiries about the topic from the media or members of the public. How the risk issue is

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framed from the outset is critical, so it is worth taking the time to do a preliminary draft of the key messages using Template 4.8: Develop the Message Frame.

As was noted in Step 1, ongoing documentation is very important. Keeping a written history of what the team knows about the issue, what it doesn't know, and what it continues to learn is critical to successful risk communications.

4.3

4.4

Step 3: Assess Stakeholder Perceptions of the Risks, Benefits and Tradeoffs

Strategic Risk Communications Process
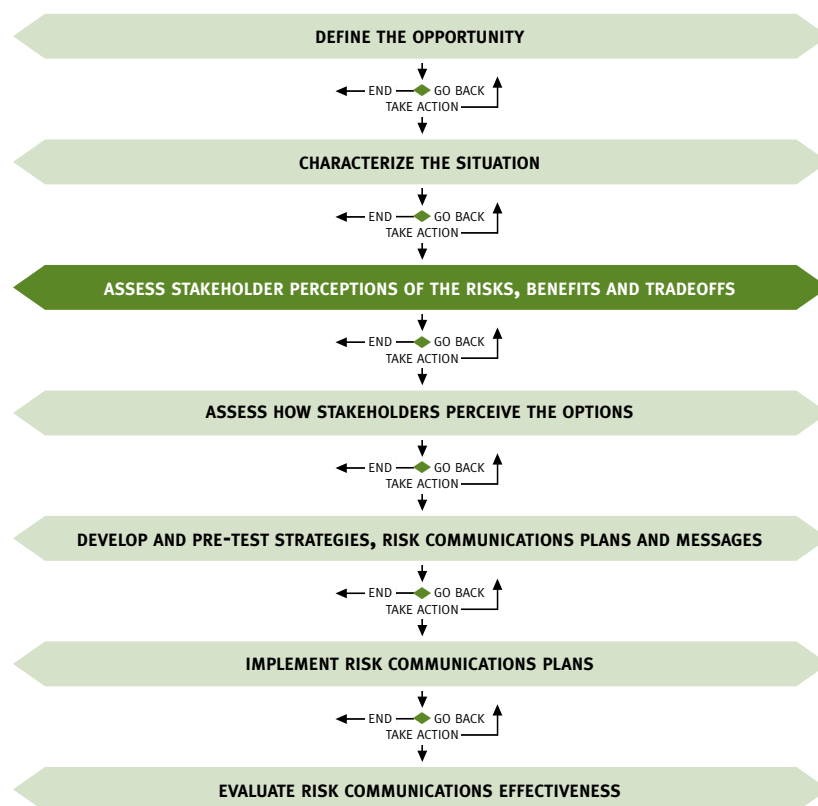
INTRODUCTION

Developing a hypothesis and then testing it through informal or formal research helps the team confirm or disprove its assumptions. Formal research typically includes individual focused interviews that reveal stakeholders' thinking about the topic, including their perceptions of benefits, risks and tradeoffs. Informal research can include semi-structured conversations with a few key stakeholders. With this next Step, team members will be able to determine where their interests and priorities are aligned with those of their stakeholders and where there are gaps. Reinforcing the alignments and closing the gaps becomes a critical part of the Risk Communications Strategy in Step 5.

This section presents a variety of ways to test the team's hypothesis and gain in-depth insight into people's thinking. Such insight plays an important role in developing a Risk Communications Plan and the messages needed to help people make well-informed judgments about a risk issue.

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Various informal and formal research methods can be used to test a team's hypothesis and confirm the interests and priorities of key stakeholders. This section briefly touches on the informal methods. More emphasis is put on examining formal research. The section explores the three formal research methods that are most widely used for understanding people's thinking: opinion polling, focus groups (a frequently used traditional method) and focused mental models interviews, a relatively new method and thus less common.

Primary Activities for Defining Stakeholder Interests and Priorities

IN THIS STEP THE TEAM TESTS ITS HYPOTHESIS IN ORDER TO DEFINE STAKEHOLDERS' INTERESTS AND PRIORITIES:

- Conduct stakeholder research.
- Analyze the research results.
- Conduct a gap analysis to define gaps and alignments.
- Summarize interests and priorities of each stakeholder group.

DEFINING STAKEHOLDER INTERESTS AND PRIORITIES REGARDING BENEFITS, RISKS, TRADEOFFS AND THEIR ACCEPTABILITY

Research results gathered in this Step are used to help estimate the acceptability of various options — and the benefits and risks each entails — to the stakeholders. Understanding how stakeholders weigh the risks, benefits and tradeoffs inherent in the risk issue at hand is important when it comes to the team designing risk mitigation strategies and the communications that will enable them. Here, the technical risk assessment and the social assessments are brought together and reviewed in detail at a team meeting typically held at the beginning of Step 4.

GENERATING INSIGHT BY TESTING HYPOTHESES

Before the team can develop plans, messages and materials to address the interests and priorities of key stakeholders, it first must confirm or correct its hypothesis. Previously, the team developed a comprehensive hypothesis for key stakeholders.

Now the team must conduct research, either informal or formal, to test its assumptions. Working from insight, not from intuition, is a key to success.

WORKING FROM INSIGHT, NOT INTUITION, IS A KEY TO SUCCESS.

FORMAL RESEARCH OPTIONS

Depending on the time and resources available, as well as the complexity of the issues and the skill and interest of the team members, the team may decide to conduct formal research.

4.4

IMPORTANT NOTE: Health Canada, as a Department of the Government of Canada, is bound by Appendix Q of the Treasury Board contracting policy, which defines public opinion research as follows:

The planned gathering, by or for a government institution, of opinions, attitudes, perceptions, judgments, feelings, ideas, reactions, or views that are intended to be used for any government purpose, whether that information is collected from persons (including employees of government institutions), businesses, institutions or other entities, through quantitative or qualitative methods, irrespective of size or cost.

[3]All public opinion research conducted by or for the Department, including assessing public judgment, is considered public opinion research. As such, it must approved through the Public Opinion Research and Evaluation Division and be contracted through the Department of Public Works and Government Services.

Here are some examples of risk issues that might prompt you to use public opinion research:

- You may want to assess Canadians' awareness, knowledge, opinions and behaviours related to a particular health issue (i.e. HIV, tobacco, health care system etc) so that you can use the information in shaping your program or policy;
- You may want to test awareness of and satisfaction with your initiative among a certain group of stakeholders;
- You may want to find out what Health Canada employees think of various corporate issues; or
- You may want to evaluate the effectiveness of a program or service.

The Public Opinion Research and Evaluation (PORE) Division, within Health Canada's Communications, Marketing and Consultation Directorate (CMCD) is the central authority for public opinion research within Health Canada, and will assist the team in planning and implementing opinion research.

CHOOSING RESEARCH SUITED FOR THE TASK

If a decision is made to conduct research, it is often done by research firms that specialize in one of the methods described below. Testing methods must suit the task. There are three major interview-based research methods: focused interviewing — typically mental models; focus groups and opinion polling.

Mental models is a dialogue-based method that focuses on a behavioural result. Its goal is typically to understand the primary influences on stakeholders' perceptions of a risk issue and their readiness to act. Opinion polls and focus groups are typically used to gauge people's awareness of a topic and/or satisfaction with its management.

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3   PUBLIC OPINION RESEARCH, A Source of Strategic Intelligence, www.hcintranet.gc.ca/POR, Communications, Marketing and Consultation Directorate.

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4.4

The mental models research approach described here is a form of behavioural research. Behavioral research techniques may also be applied in public opinion research or market research. Each focuses on gaining insight into people's thinking. The name given usually depends upon the purpose for the information being sought. Public opinion research typically refers to research into people's opinions in a more descriptive context — understanding what they think against a specific set of parameters. Market research typically refers to research into people's perceptions in the context of a purchase decision. Behavioural research as we use it here, refers to research to *discover* influences on people's decision making.

The success of any form of research depends on the quality and appropriateness of the research methodology used and how well it is implemented.

PORE has created a useful pamphlet to help guide users in the selection of appropriate research methods. A Source of Strategic Intelligence can be found at www.hcintranet.gc.ca/POR.

Another useful reference is Research Techniques: Guideposts to Value. It can be found at www.communication.gc.ca/services/por_rop/rtr_toc.html.

Communications Canada has published a useful guide for understanding the various research approaches that may be applied. The following is a brief excerpt of their description of qualitative and quantitative research approaches.

CONTRASTING THE TWO APPROACHES TO RESEARCH — QUALITATIVE VS. QUANTITATIVE

Qualitative	Quantitative
• Directional only, cannot be projected to broad population.	• Conclusive, can be projected to broader population.
• Purpose is to investigate and explore.	• Purpose is to measure and evaluate.
• Open questions with no predetermined response categories.	• Mostly closed questions with predetermined response categories.
• Relatively unstructured discussion.	• Structured questionnaire.
• Small number of people, large amount of in-depth information.	• Large number of people, limited number of questions.
• Illustrative.	• Numerical data can be easily aggregated.
• Interpretative — how and why.	• Statistical — what and how many.
Reference: *Communication Canada. 2003. Public Opinion Research: Research Techniques: Guideposts to Value.* *Cat. PF4-17/2003; ISBN: 0-662-67200-3.*	

The mental models approach is a form of qualitative research entailing, in-depth, one-on-one interviews. The mental models approach is a well-documented, peer-reviewed, non-proprietary methodology. It is particularly well suited to much of the communications research performed at Health Canada because of its rigorous process that generates reliable results that are essential in complex, high-stakes situations.

4.4

From the Communications Canada Guide, in-depth interviews, such as those employed in the mental models approach are appropriate when:

- The topic is too personal or sensitive to be discussed in a group.

- A person's opinion can easily be influenced by others in the group.

- It is as important to learn what people don't know about a subject as what they do know. In a group setting, knowledgeable participants may inhibit less knowledgeable ones, making it difficult to explore areas of ignorance or misperception.

- The participant must accomplish a task, such as navigating a Web site or operating a voice-activated telephone system.

- Logistic problems make groups impractical. Participants are geographically dispersed and travel time and costs are prohibitive.

- Confidentiality of the participant is required.

- The interview subjects are executives from competing firms who would be reluctant to open up in a group situation.

- It is important to interview the participant in a particular environment.

Additionally, a mental models approach may be appropriate when:

- The stakes or consequences are high, requiring a more rigorous approach that produces reliable results.

Three Formal Research Methods Summarized

Focused interviews (mental models) lead an individual through an agenda of topics, allowing free expression and encouraging elaboration on topics, in order to reveal individual perspectives in depth. Because a full set of beliefs is elicited from each respondent, structured analyses are possible. These involve the coding of interview transcripts and a statistical summary of beliefs. When done well, analysts are able to identify what people believe and why they believe it.

Focus groups lead a small set of individuals together through an agenda of topics, formulated in a general way to allow free expression, within the constraints of group dynamics. Opinions are often interpreted and summarized impressionistically. One challenge this method presents is the need to sort out group influences and lines of thought that could not be pursued fully by the individuals.

Opinion polling poses a fixed set of structured questions on an individual basis to a large number of people. Answers are directly subjected to statistical analyses, with no intervening interpretation. The results of these analyses must then be interpreted in terms of how respondents understood the questions and might have responded to alternative interpretations. Opinion polling typically reflects what people believe, not why they believe it.

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MENTAL MODELS (FOCUSED INTERVIEWS OR DIALOGUE METHOD)[4]

4.4

Decades of research have shown that tacit webs of beliefs — beliefs that are sometimes below the surface of consciousness — guide people's decision-making. These are called mental models. People draw on their mental models to make inferences about issues or opportunities that come to their attention through various forms of communication.

For almost two decades, researchers have used the mental models method to address complex challenges. Mental models allow researchers to determine where people are at in their thinking on an issue or topic, and to build strategies and plans accordingly. This work, and other research, has shown that in order to address people's attitudes, beliefs, and behaviours, one must understand their mental models and address them through communication.

Research has demonstrated that the complexity of people's thinking makes it impossible to accurately predict people's beliefs and their underlying rationale — what they think and why — as well as the effects of communication on both, without empirical testing.

Analysis typically addresses the following topics:

- What people know that is correct.

- What people don't know that is consequential.

- What people might misunderstand (about the issue or topic).

- What they want to know.

- Whom they trust (as an information source).

- What communication methods they prefer.

Properly done, the mental models method can produce rich results more efficiently than can the equivalent time and effort invested in opinion polls or focus groups. It can be used effectively in combination with opinion surveys and focus groups. In such cases, mental models research is done first in order to design properly constituted focus groups and opinion research instruments.

Challenges presented by this method could include:

- Inadequate pre-testing of protocols to assure questions are interpreted as intended.

- Protocols that cannot be readily analyzed against the views of experts and existing information on the topics at hand.

- Poor wording of questions, resulting in confusion in responses or inadequate inquiry.

- Poor use of prompts, resulting in failure to engage people's thinking in-depth.

- "Cueing" or "coaching" of interviewees by inexperienced interviewers.

- Suppression or distortion of beliefs by inept interviewers.

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[4]   Morgan, M.G., Fischhoff, B., Bostrom, A., & Altman, C. (2001). Risk communication: The mental models approach, cited in Tab. 6.

4.4

GROUP DISCUSSION/FOCUS GROUPS

A focus group moderator leads a small group of individuals through an agenda of topics, formulated in a general way to allow free expression, within the constraints of group dynamics. Opinions are often interpreted and summarized impressionistically.

The focus group as a research instrument was created by the U.S. military during the Second World War to understand how groups (squads of soldiers) tended to think and work together. The focus group method is most useful when studying beliefs that are normally shaped and expressed in groups that have the same composition. That is, the members of the focus group should be people who work or otherwise interact together outside of the research.

By allowing free expression of beliefs, focus groups can get closer than opinion polling to understanding what a group believes and why it holds those beliefs. The approach is inherently limited by the effects that specific group interactions have on what participants do and do not say, as well as which lines of thought can and cannot be fully pursued by individual members. In focus groups, the opinions that participants express depend on the skills and the agenda of the moderator. They are typically interpreted and summarized impressionistically by the moderator.

Sometimes, individuals from diverse backgrounds are brought together in a group setting called a "focus" group. Such groups, or gatherings, can be useful when the research task is simply to gather ideas from people or learn how people can react to certain situations or products.

Challenges presented by this method include:

- Difficulty duplicating the qualities of any particular group, partly because it is difficult to get people from a target population to attend group meetings.

- Group settings may repress the full participation of members. Some people may suppress saying in front of the group what they fully believe and their rationale for thinking that way.

- Difficulty sorting out group influences and lines of thought that could not be pursued fully by the individuals.

- Inadequate sample size. Because of suppression effects (such as a relatively small number of people dominating the conversation), the actual sample size may be considerably smaller than the group.

- Ensuring that a full agenda is covered in adequate depth.

- Pressures due to individual personalities.

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OPINION POLLING

4.4

Polling methods are well suited to identifying opinions in a large sample of people and measuring their distribution across the sample. Polling typically offers a fixed set of questions to a selected group. Answers to these questions are subjected to statistical analyses, which must then be interpreted in terms of how respondents are *believed* to have interpreted the questions, and might have responded to alternative interpretations.

Opinion polling typically tries to capture *what* respondents believe, not why they believe it. Such an approach is useful when only discrete answers to particular questions are needed. It is also useful when precise estimates of the frequency of specific beliefs in a population are required.

Challenges presented by this method could include:

- No opportunity to discover issues that are not included in the questionnaire.

- Little opportunity for systematic follow-up questions or for the expression of complex views.

- High refusal rate from cold calls.

- Large gaps between respondent and researcher interpretation of questions.

- Failure to accommodate richness of people's experiences and views.

- Tendency of people to give an opinion when they do not have a real point of view on the subject.

- Tendency of people to modify their answers to questions when the context shifts or question wording changes.

- Lack of truthful responses.

- Inability to characterize underlying rationale for opinions.

APPLYING THE MENTAL MODELS METHOD

The mental models research method typically involves individual, one-on-one, confidential interviews done in person or by telephone. The one-on-one situation is similar to the environment in which most people make decisions about an organization or industry. It enables researchers to discover people's thinking and their underlying rationale about a topic.

During the interview, the participant is led through an agenda of topics. He or she is encouraged to elaborate on issues or topics that come to mind in the course of the conversation. The method allows for free expression and encourages elaboration on topics in order to reveal individual perspectives at considerable depth. Interviewees can readily raise topics that most interest them, but which may be outside of specific questions.

Structured analyses are possible because a full set of beliefs is elicited from each interviewee. When done well, analysts can identify what people believe and, more significantly, <u>why</u> they believe it. They are also able to compare analyses over time and provide insights into why beliefs may have changed.

4.4

EXAMPLE: *MENTAL MODELS RESEARCH ON CARBON MONOXIDE IN THE HOME*

The Technical Standards and Safety Authority of Ontario (TSSA) wanted to save lives by raising homeowner awareness of the risk of carbon monoxide (CO) in the home and the need to take appropriate action, including conducting annual maintenance of fuel-burning equipment to reduce the risk. It asked Decision Partners to conduct appropriate qualitative research to discover Ontario homeowners' perceptions of the risk of CO in the home and the decisions that they make as a consequence of their perceptions.

Methodology

An expert model was developed in consultation with TSSA and a group representing a range of expertise on the issue of CO poisoning. The expert model was used to develop a conversational protocol for the mental models research with two key stakeholders groups.

Mental models research interviews were then conducted with a group of 60 homeowners to get their thoughts about CO concentrations in their homes. The sample comprised two cohorts of 20 each who were seniors living in their original homes. Seniors were chosen as TSSA's data indicated that they were the most at risk population. The third cohort comprised new homeowners — people who had been in their first home for ten years or less.

Using the expert model as the analytical framework, an assessment was done to determine gaps and alignments between expert and homeowner perspectives on all aspects of CO causes, effects and interventions available. Based on this gap analysis, risk communications targeted strategies were designed to improve homeowners' ability to minimize risks associated with CO exposure and enable well informed risk decision-making on their part.

Protocol Outline

A conversational protocol consisting of open-ended questions was developed based on a variety of topics. These included what homeowners know, don't know and/or misunderstand about the following:

CO Characteristics and Behaviour
- CO in general.
- The behaviour of CO in the home.
- How CO is detected.

Sources of CO in the Home
- Sources of CO concentration in the home.
- Influences on CO concentration in the home.

Equipment Performance and Maintenance
- Timeframe for maintain of the fuel-burning equipment in the home.
- Influences on equipment performance.
- Issues related to maintenance, including service people.

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Health Impacts
- Health impact of CO.

- Symptoms of CO poisoning.

- Who could be effected.

Homeowner Response
- What the homeowner will do if CO is detected, and why?

- Influences on their response.

Communication
- Where homeowners learn about CO risks.

- Who they trust for information concerning CO.

- The best way to communicate to them.

Demographic Information
- Age.

- Gender.

- Ethnic Background.

- Years owned home.

- Type of equipment owned — Generator, Gas Water Heater, Gas Stove, Furnace, Space Heater, Fireplace/Wood Burning Stove, Gas Powered Tools (used indoors), BBQ.

The protocol offered participants the opportunity to speak freely and candidly. They could also spontaneously raise additional topics and elaborate on those to reveal their individual perspectives in depth.

4.4

TEMPLATE 4.9: *FROM RESEARCH, SUMMARIZE STAKEHOLDER INTERESTS AND PRIORITIES* 🖎

Once you have completed your research, either informal or formal, analyze your results and complete this table for each one of your key stakeholders.

Questions	Key stakeholder: (name)	Team's hypothesis	Gaps	Alignments
What do people want to know more about? What questions do they want answered?				
What do people <u>not</u> know about the topic that they should know in order to make well-informed decisions?				
What misperceptions do they have that need to be addressed?				
What did we learn about the information sources they would trust?				
How do our stakeholders want to be kept informed?				

WORKING WITH SMALL SAMPLES

The design of research projects often involves finding an appropriate trade-off between data quality and quantity. People generally comment that they would prefer a large sample, in order to be as precise as possible about the thinking of others. However, that precision is illusory when individual observations cannot be reliably interpreted.

Mental models can be used to discover what people think. With fixed resources, one can collect and analyze fewer mental models interviews than structured surveys. The prevalence of particular beliefs can be estimated, but with less precision. However, many practical decisions do not require great precision. Rather, one needs to know about any beliefs that are held with great frequency in the target population.

For example, one might not act differently if the frequency rate were 30% or 50%; either rate would require the team to address those concerns. In general, sample size should depend on the precision

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that is needed. With mental models studies, a common rule of thumb is to sample about 30 people. That provides a good chance of eliciting any belief held by as few as five per cent of the population and a reasonable margin of error around frequency estimates.

4.4

If the team discovers its key stakeholders have a particular way of thinking about an issue and the team wants to know how that thinking would apply to a larger constituency, such as consumers of farmed salmon, an appropriate polling survey could then be sent to many people.

THE USE OF THE EXPERT MODEL FOR ANALYZING RESEARCH RESULTS

Once the thinking of the experts about a risk issue has been summarized in an expert model, the model can serve as the analytical framework for the mental models research. The protocol for the mental models interviews is developed based on the primary nodes depicted in the simple version of the expert model.

When the interviews are conducted, experienced research analysts code the transcripts from the interviews against the nodes and links in the expert model. In that way the thinking of the stakeholders can be compared to — or mapped against — that of the experts.

This comparison will reveal where the experts and stakeholders are aligned in their thinking, which can be re-enforced through communications. It will also reveal gaps in their beliefs and knowledge that may be important to address through communications.

By this point, the team will likely have a pretty good idea of what the content of the communication should be. In effect, the message should reinforce pertinent correct beliefs and discourage important incorrect ones. The expert model provides a structure for presenting this message: for example, how risks are created, how one gets exposed to them, what they do to one's body, how one can prevent them from happening or mitigate their effects.

FOLLOWING THROUGH WITH FOCUS GROUPS OR OPINION POLLS, IF REQUIRED

Mental models research helps the team discover the primary influences on stakeholder decision-making about the topic at hand. Sometimes it is also important to know how frequently different beliefs are held across a population.

These results can be used to develop an appropriate survey tool that will enable the team to focus communications on the most widely held misconceptions, as well as evaluating their impact. One way to do this is to develop a questionnaire that explores issues that have been identified as potentially important through the mental model interviews. Such a questionnaire can be efficiently administered to larger samples of people in order to achieve statistically reliable prevalence estimates.

It should address important beliefs, as defined by the expert model, as well as significant misconceptions that have been identified in the mental models research and any critical terms that are used in describing a risk.

4.4

EXAMPLE: *OPINION RESEARCH ON PESTICIDES*

Knowing how frequently different beliefs are held allows communications to be focused on the most widely held misconceptions, as well as evaluating their impact. Here is an example of research about public views on pesticides that was done for Health Canada by Ipsos Reid.[5]

Purpose of the survey

The purpose of the study was to measure Canadian's awareness of pesticides as well as their views on pesticides.

Methodology

Ipsos-Reid conducted a telephone survey of 1,000 Canadians 18 years of age and older using the Ipsos-Reid Canadian Omnibus Express. Respondents were selected using random digit dialing (RDD). The survey was conducted from July 30 to August 2, 2004. The margin of error for a sample this size is plus or minus 3.1, 19 times out of 20. The margin of error will be smaller for subsets of population.

Survey outline

1. Thinking about product safety, how do you as a consumer determine whether or not a product that you are thinking of buying is safe?

2. If you were to use a new home or garden chemical pesticide for the first time, please tell me if you would be very likely, somewhat likely, not very likely or not at all likely to do the following? Participants are read a list of possible actions and asked to rate them.

3. Participants are read specific comments about pesticides and asked to define which is closer to their opinion.

4. Participants are read a list of variables related to labels and product information and asked for each of the following, if they would make you very l likely, somewhat likely, not very likely or not at all likely to feel more comfortable about pesticide use.

5. What types of information about pesticides do you want from the Government of Canada?

6. If you were looking for information about home and garden pesticides today, what resources would you use?

7. Are you very familiar, somewhat familiar, not very familiar or not at all familiar with Health Canada's Pest Management Regulatory Agency?

8. Do you strongly agree, somewhat agree, somewhat disagree, or strongly disagree that Health Canada's Pest Management Regulatory Agency is doing a good job to ensure pesticides are safe?

9. I am going to read you a list of experts who may speak about home and garden pesticides. As I read each one out to you please tell me whether you think the expert is very credible, somewhat credible, not very credible or not at all credible.

10. And which one would you believe most?

The survey results can be found in the Health Canada publication: Public Views on Pesticides, Ipsos-Reid Corporation.

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[5]   Health Canada/Public Views on Pesticides Ipsos-Reid Corporation.

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EXAMPLE: *SAMPLE FOCUS GROUP PROTOCOL*

<div style="text-align: right">4.4</div>

In 2003, in the wake of an outbreak of Severe Acute Respiratory Syndrome (SARS) and as part of an effort to encourage Canadians to get an influenza vaccination (flu shot) each year, Health Canada commissioned Ipsos-Reid Corporation to conduct focus groups to gauge the effectiveness of print material intended to inform and educate average Canadians about infectious respiratory diseases and to prompt them to take appropriate actions to protect their own health and that of others.[6] The material featured specific advice for travellers and directed readers to sources of additional information including a flu specific Health Canada Web site.

A primary message in the material was that emerging diseases such as SARS get a lot of attention but other infectious diseases, such as influenza, are far more common and can also cause serious health effects. Other messages were about the importance of flu shots for health care workers and people at high risk of serious health effects; the importance of regular hand washing; staying home from school and work if you have the flu, and so on.

The print materials were tested through focus groups and executive interviews. Canadians were also surveyed through an omnibus vehicle to statistically determine their level of awareness and additional information needs.

Research objectives

There were two specific objectives to the research. The first was to gauge target audience members' reaction to the print material designed around the flu and SARS, and to obtain insights into how to improve the potential impact of these materials, if necessary. The second objective was to obtain quantitative insight into Canadians' views on the differences between flu and SARS-like symptoms; awareness of availability of the flu shots; any intention to get the flu shot and additional information needed.

Methodology

Focus Groups

Eight focus groups were held in Halifax, Montreal, Toronto and Vancouver between November 13th and 17th, 2003, involving the general public, and also with travellers (those who had travelled internationally within the previous year).

The group sessions were one and a half hours in duration. A draft brochure "What are infectious diseases?" and a draft poster "Need advice on infectious diseases" were tested.

Focus Group Protocol Overview:

Introduction (5 minutes)

- Explain to participants:

- Introduction to Ipsos-Reid.

- The length of session (1.5 hours).

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[6]   Final Check of Flu and SARS, Materials for Public Release Survey, Final Report, POR-03-67 H1011-03-0101.

4.4

- Taping of the discussion.

- Some colleagues viewing but they will not be taking part in the discussions.

- Results are confidential and reported in aggregate. Individuals are not identified. Participation is voluntary.

- This group is being sponsored by Health Canada.

- The role of moderator is to ask questions, timekeeper, objective/no vested interest.

- Role of participants: no need to reach consensus, speak openly and frankly about opinions, no right/wrong answers.

Warm-up — 15 minutes

- What comes to mind when you think about infectious diseases?

- Do you think Canadians are getting prepared for the flu season this year?

- What have you heard lately about the flu? PROBE: Where have you heard this?

- Do you think that Canadians are currently more or less concerned about SARS?

- What have you heard lately about SARS? Where have you heard this?

- If you were looking for information about FLU/SARS, what type of information would you be interested in?

- What sources of information would you look to first?

The survey results can be found in the document *Final Check of Flu and SARS, Materials for Public Release Survey, Final Report*, referred to in the footnote on the previous page and in Tab 6.

INFORMAL RESEARCH OPTIONS

Informal research is research that can be easily conducted by members of the project team and can include semi-structured conversations with a few key stakeholders. It is usually limited to risk issues, which are relatively straightforward and not controversial in nature. Informal research might also be done when time is short and/or there are not sufficient resources available to conduct formal studies such as opinion polling or mental models research. Here are some examples of informal research techniques:

ONE-ON-ONE DIALOGUE

You can test your hypothesis with one member of a target stakeholder group through one-on-one dialogue, following a dialogue script and documenting your conversation. Members of the team can then share the notes from their dialogue sessions and analyze the results.

This method can be a simple and effective way to test a hypothesis and build or reinforce relationships with important individuals.

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BREAKFAST ROUNDTABLES, ADVISORY TASK GROUPS, ADVISORY PANELS

A breakfast roundtable, advisory task group, or an existing stakeholder advisory panel can provide an excellent way to get input from members of target stakeholder groups in a fairly short period of time. Comments can be solicited in the context of a meeting, giving the team immediate insight or "data" to work with.

These methods can be effective if done well. For an advisory task group or advisory panel, it may be preferable to have a third party facilitator. The major drawback of using these approaches is that it may be difficult to hear the thoughts of each of the participants, or their comments may be influenced by the thinking of the larger group or dominant members of the meeting.

"5X5" DIALOGUES

The "5 x 5" dialogue technique is an ideal method for the team to use to gather insight from a relatively large number of people in a short period of time. As a research technique, each team member must have a script and commit to talk to five (or whatever number is appropriate) members of the priority stakeholders by a certain date. It is critical that each of these conversations is documented at the time by the team member. The team then gets back together and shares its data.

In a short period of time, the team has thus informally gathered data from 25 people. This is a good research sample for gaining insight and testing hypotheses.

COMPLETING STEP 3 WHEN TIME IS TIGHT

Any of the informal methods noted above can be quickly implemented when time is tight. A simple protocol of six to ten questions, with prompts to enable the team to understand not just what people are thinking, but more importantly, why they are thinking it, can be designed and implemented in a matter of hours.

If the topic is confidential, conduct the interviews with a dozen non-technical people within your work area. If insight from potential stakeholders, such as seniors using or contemplating using specific arthritis drugs for example, would be beneficial, interview a dozen parents of colleagues. The key is to get some insight in the time you have available, rather than relying on guesswork. While the sample may not be statistically valid, the results will give the team a way to test its assumptions and gain some, albeit incomplete, insight into people's thinking about the topic.

4.5

Step 4: Assess How Stakeholders Perceive the Options

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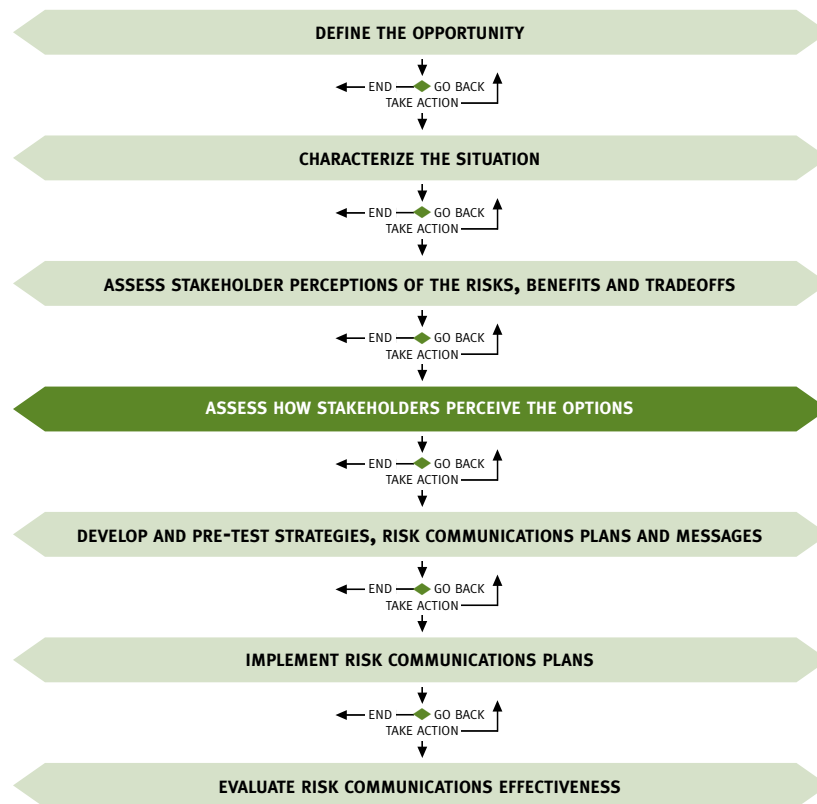
Here, research results are used to help understand how stakeholders perceive the various risk management options being considered by the team, including the benefits and risks each entails. Understanding how stakeholders weigh the risks, benefits and tradeoffs inherent in various risk management options is important when it comes to the team finalizing risk mitigation strategies and the communications that will enable them.

Even if the team does not change its risk mitigation strategies once it learns about stakeholder acceptability of these, it is still very advantageous to know — and plan in advance — if some stakeholders are likely to take exception to the planned risk mitigation option. For example, a risk management option such as making seat belts mandatory, likely was not popular with all stakeholders when it was first introduced, for a variety of reasons. A prudent risk communicator would want to understand in advance of announcing such a measure, how various stakeholders would likely respond, and plan accordingly.

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INTRODUCTION

In the previous Step, new knowledge about stakeholder perceptions of risks, benefits, tradeoffs and judgments of their acceptability is generated through formal or informal research. Communications professionals or others bring this information to the team while risk assessment professionals complete their technical risk assessment work.

It is in this Step that the alignment of technical risk assessment and the social assessment, completed in Step 3, typically occurs in a facilitated team meeting or series of meetings.

The team uses all of this information to help identify and characterize risk mitigation and/or risk management options in depth. The information at this stage is also useful as it provides the team with insight into the acceptability of various options to stakeholders.

Once options are developed, even in a preliminary form, it can be important to understand how stakeholders will likely weigh the risks, benefits and tradeoffs inherent in each. This insight is critical for formulating, perhaps refining and ultimately selecting from among various risk management strategies available to the team.

NOTE: This understanding will help assure the success of the proposed risk management strategy by ensuring that people will take the appropriate action — that is, achieve the behavioural objectives set by the team.

If the risk management strategy has been determined, understanding how stakeholders will likely respond to it — positive or negative — can provide valuable insight to the team. For example, the team may need to develop specific strategies to offset or at least address a negative response to the risk management solution. Knowing how people will perceive the solution in advance just makes good sense!

The work in this Step provides the basis for developing the strategies and risk communications plans necessary to enable a successful risk management solution and effective communications for the issue at hand.

4.5

4.5

Primary Activities in Assessing How Stakeholders Perceive Options

THE PRIMARY ACTIVITIES IN THIS STEP ARE TO:

- Assure that the formulation of risk mitigation/management options have factored in stakeholder perceptions, interests and priorities.
- Assess stakeholder acceptance of the benefits and risks associated with a proposed risk mitigation/management option, most often through formal research using an appropriate research instrument.
- If the risk mitigation/management option the team ultimately selects is not going to be widely accepted by most stakeholders, prepare risk communications, issues management and/or media relations strategies to clearly explain the process, the risk management decision, and most importantly, **why** that decision is the most appropriate one.

In this Step, the research results are used to assess how stakeholders perceive the benefits, risks and tradeoffs associated with various risk mitigation options being considered by the team. Through the risk management process, the team has identified one or more potential risk mitigation options. Determining the degree to which the option or options will be with the key stakeholders typically requires additional formal or informal research through dialogue, using appropriate techniques such as those outlined in Step 3. Often all that is required is a follow-up call or meeting with a couple of groups or half a dozen key individuals to review possible actions and get feedback. Making the effort to do this is often seen by stakeholders as a strong indication of your commitment and respect for them. Even if their input does not change the team's recommended risk management solution, this Step assures that stakeholder input has been sought, listened to and considered by the team.

RISK EVALUATION: ADDRESSING ACCEPTABILITY OF OPTIONS

In all the options being considered by the team for managing or mitigating the risk issue, stakeholders will weigh the risks, benefits and tradeoffs entailed in each. How they judge these options is likely to have a strong influence on their willingness to accept the balance of risks and benefits inherent in them. Knowing this in advance of any announcements on the risk management decision is very important from both a risk management and risk communications perspective. A prudent team will take the opportunity to minimize risks to the achievement of its risk management efforts and, with insight, plan accordingly!

For example, stakeholders may be satisfied with the available information needed to understand and manage a risk. They may see that adequate controls can be put in place and that the timing of those controls is appropriate. The risk managers may be deemed by stakeholders to be quite credible. And the distribution of benefits and risks may be seen to be equitable. These among other factors could

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be the basis for stakeholders judging certain risk management options to be more acceptable than others.

On the other hand, those who believe they have insufficient information or, more seriously, that important information is being deliberately withheld; who may not regard risk managers as being particularly credible and have concerns about controls and the distribution of risks and benefits, may deem risk management options to be unacceptable, perhaps even objectionable.

In the latter situation, it can be important to make it clear that all available information is being shared about the risk and risk management options. That is: what is known, what can be known at this time, what is unknown or cannot be known at this point and when more information is likely to be available. The team must also confirm the process for assessing, communicating and managing the risk in a timely manner. All these elements can influence judgments of the acceptability of options and the communications supporting them.

To evaluate options in stakeholder terms, it can be useful to conduct formal and/or informal research, scaled to resource constraints, to provide insight into how stakeholders conceptualize the options and the process of communicating about them.

For more information about the influences on people's judgment of the acceptability of risk, please see Tab 3 Figure 3.2, page 3-7.

4.5

Once you have completed your research on acceptability of options to your various stakeholders, either informal or formal, analyze your results and complete this table for each one of your key stakeholders. If you have more than one option, create a duplicate template for each of them.

Questions re: acceptability of the option(s)	Key stakeholder: (name)	Key stakeholder: (name)	Key stakeholder: (name)	Key stakeholder: (name)
What do people want to know more about? What questions do they want answered?				
What do people <u>not</u> know about the option(s) that they should know in order to make well-informed decisions?				
What misperceptions do they have that need to be addressed?				
What did we learn about the information sources they would trust?				
How do our stakeholders want to be kept informed?				
To what degree do think they support the option(s) if the issues above are addressed — high support, medium support, no support?				

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COMPLETING STEP 4 WHEN TIME IS TIGHT

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As with the previous Step, it is highly beneficial to get some input from stakeholders or people who are closer to the thinking of stakeholders than are the project team members. Any of the informal methods noted in Step 3 can be quickly implemented when time is tight. Making informal calls to six to a dozen stakeholders, using a simple protocol of six to ten questions, can be done in a matter of hours by one or more members of the team. Taking the time to do this can generate useful insight needed for developing strategies and plans. And it can go a long way from preventing a significant misstep!

COMPLETING STEP 4 WHEN TIME IS TIGHT

4.6

Step 5: Develop and Pre-test Strategies, Risk Communications Plans and Messages

Strategic Risk Communications Process

```
                    DEFINE THE OPPORTUNITY

                  ←— END —◆ GO BACK
                         TAKE ACTION—

                    CHARACTERIZE THE SITUATION

                  ←— END —◆ GO BACK
                         TAKE ACTION—

      ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS AND TRADEOFFS

                  ←— END —◆ GO BACK
                         TAKE ACTION—

                ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS

                  ←— END —◆ GO BACK
                         TAKE ACTION—

     DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS AND MESSAGES

                  ←— END —◆ GO BACK
                         TAKE ACTION—

                  IMPLEMENT RISK COMMUNICATIONS PLANS

                  ←— END —◆ GO BACK
                         TAKE ACTION—

                  EVALUATE RISK COMMUNICATIONS EFFECTIVENESS
```

By this stage, the team has acquired some insights into the risk issue. Working with these insights, the team now develops detailed strategies, plans and initial communications for use with stakeholders. Communications are tailored toward the critical decisions being addressed by Health Canada, through dialogue with stakeholders, supported by relevant information.

Strategies and messages are pre-tested, using a suitable method. Through dialogue with stakeholders, including pre-testing, the team assesses stakeholder acceptance of risk communications strategies and messages and any outstanding issues and concerns they might have.

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INTRODUCTION

The key to an effective plan is to choose dialogue techniques and develop messages and materials that:

- Address the interests and priorities of stakeholders.

- Are respectful.

- Can be readily understood.

This section describes how to define the scope of a plan and develop messages for it. The importance of framing messages effectively is discussed. Suggestions are made for different ways to pre-test messages to ensure they have the intended effect.

> ### Primary Activities in Developing the Plan
>
> **THE PRIMARY ACTIVITIES IN THIS STEP INCLUDE THE FOLLOWING:**
> - Define the risk communications strategy (or strategies).
> - Define clear, focused measurable objectives for the risk communications plan that support the achievement of the Opportunity Statement.
> - Complete development of a comprehensive plan.
> - Develop targeted messages that are appropriate for: a) stakeholders, b) active interests and c) audiences.
> - Pre-test messages.

A. DEVELOPING STRATEGIES AND PLANS

By now the team's research has led to an in-depth understanding of stakeholder thinking. The team can use this insight to develop appropriate strategies, plans and messages that focus on what stakeholders need to know in order to make well-informed decisions about the risk issue.

It is important that everyone on the team is clear about the purpose of the communication. Is it primarily to inform stakeholders about the nature of a particular risk, or is it to motivate people to change their behaviour? The message must be tailored accordingly.

Messages also speak to the critical decisions being addressed by stakeholders, emphasizing information stakeholders need, but do not already have, in order to make well-informed decisions about a risk issue and take appropriate action.

Communication Planning and its Benefits

Effective communication never happens by accident. It is the result of well-planned and well-implemented programs that are carefully evaluated. Unplanned or careless communication may create new issues where none existed. This is perhaps the greatest fear of people charged with communicating about complicated risk issues. So, careful planning can increase confidence in what to communicate and how to do it most effectively to achieve your risk communications objectives.

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The time and effort required to plan communication can be viewed as an investment in its effectiveness. An important return on this investment is a greatly reduced risk of creating conflict between the decision-makers and the stakeholders and others with an interest in the risk and its resolution.

Communication plans should be clear, specific and measurable. They need to be anchored in the Opportunity Statement the team developed in Step 1. And they need to be based on a firm understanding of stakeholder interests and priorities. They should not be based on guesswork about what is important to people and what they know and don't know about a situation.

At this point, the Team has done its homework, and formally and/or informally assessed stakeholder perceptions of the risks, benefits and tradeoffs in Step 3 and followed through with additional work in Step 4 to assess the options and their acceptability to stakeholders. The groundwork has been systematically laid for the development of an effective strategy and plan to achieve the project team's risk communications objectives.

The investment in communication planning pays off handsomely because the team's risk communications plan is focused and targeted on the interests and priorities of the people who bear the most risk. This approach reduces overall costs, minimizes wasted time and materials, and can foster greater confidence among those communicating. The following table outlines the action elements required for an effective communications plan.

NOTE: At this point in the process, the team has completed many of the elements of the Plan in Steps 1–4, using Templates 4.1 — 4.10. They will need to draw on that work to complete the Plan in Step 5 and implement it in Step 6.

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Overview of the Elements of a
Strategic Risk Communications Plan

ANCHOR: HEALTH CANADA MISSION

Health Canada is responsible for helping Canadians maintain and improve their health.

STEP 1: DEFINE THE OPPORTUNITY

A. FORM THE TEAM:
- Determine if a team is required. If it is:
  - Define the team mandate.
  - Define who should be on the team.
  - Determine team roles and responsibilities.

B. DEFINE THE SCOPE OF THE OPPORTUNITY:
- Use key questions to define the scope of the opportunity.
- Draft the Opportunity Statement.
- Ensure the opportunity is achievable and measurable.
- Identify measurements.
  - *TEMPLATE 4.1:* ISSUE-FOCUSED QUESTIONS TO CONSIDER WHEN ASSESSING THE OPPORTUNITY page 4-23.
- Clear description of the Opportunity, including measurable objectives.
  - *TEMPLATE 4.2:* WRITE THE OPPORTUNITY STATEMENT page 4-25.

STEP 2: CHARACTERIZE THE SITUATION

A. INTEGRATE EXPERT KNOWLEDGE
- Gather and integrate "expert" knowledge and develop an expert model.
  or
- Gather and integrate the information using key questions.
  - *TEMPLATE 4.3*: QUESTIONS FOR EXPERTS page 4-34.

B. CONDUCT A PRELIMINARY STAKEHOLDER ASSESSMENT
- Brainstorm stakeholders versus audiences.
- Define key internal and external stakeholders.
- Conduct secondary research as appropriate to begin to identify key external stakeholder interests and priorities.
- Identify primary and secondary stakeholders and interested parties.
- Prioritize stakeholders.
- Develop your hypothesis of key stakeholder interests and priorities.
  - *TEMPLATE 4.4:* PRELIMINARY STAKEHOLDER ANALYSIS page 4-36.
  - *TEMPLATE 4.5:* STAKEHOLDER MAP page 4-37.
  - *TEMPLATE 4.6:* PRIORITIZE STAKEHOLDERS page 4-41.
  - *TEMPLATE 4.7:* STAKEHOLDER HYPOTHESIS page 4-43.

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c. prepare Initial Framing

- Based on the work done to integrate expert knowledge and conduct a preliminary assessment, determine initial framing of the risk issue.
- Develop message frames for the key messages.
  - *TEMPLATE 4.8:* DEVELOP THE MESSAGE FRAME page 4-46. ✍
- Determine preliminary communications strategy and objectives.

STEP 3: ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS, BENEFITS AND TRADEOFFS

- Conduct stakeholder research (formal or informal).
- Analyze the research results.
- Conduct a gap analysis to define gaps and alignments.
- Summarize interests and priorities of each stakeholder group.
- Describe stakeholder information needs.
- Describe stakeholder preferences regarding communications methods and tools.
  - *TEMPLATE 4.9:* FROM RESEARCH, SUMMARIZE STAKEHOLDER INTERESTS AND PRIORITIES page 4-62. ✍

STEP 4: ASSESS HOW STAKEHOLDERS PERCEIVE OPTIONS

- Assure that the formulation of risk mitigation/management options have factored in stakeholder perceptions, interests and priorities.
- Assess stakeholder acceptance of the benefits and risks associated with a proposed risk mitigation/management option, most often through formal research using an appropriate research instrument.
  - *TEMPLATE 4.10:* FROM RESEARCH, SUMMARIZE STAKEHOLDER INTERESTS AND PRIORITIES RE: OPTIONS page 4-72. ✍
- If the risk mitigation/management option the team ultimately selects is not going to be widely accepted by most stakeholders, prepare risk communications, issues management and/or media relations strategies to clearly explain the process, the risk management decision, and most importantly, **why** that decision is the most appropriate one.

STEP 5: DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS PLANS AND MESSAGES

- Define the risk communications strategy and clear, focused measurable objectives for the risk communications plan that support the achievement of the Opportunity Statement.
  - *TEMPLATE 4.11:* DEFINE RISK COMMUNICATIONS STRATEGY AND OBJECTIVES page 4-81. ✍

Complete development of a comprehensive plan:
- Define an appropriate strategy or strategies.
- Determine if it is best to implement the plan through partners, such as provinces, territories, other regulators or NGOs.

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- Identify message pre-test options and plans.
- Identify appropriate communication (dialogue and information) methods and vehicles.
- Identify other strategic considerations and work with others to develop appropriate and aligned plans and messages.
- Specify the sequence and timing of all communication activities.
- Define training requirements of the communicator(s).
- Identify possible alternative actions to those proposed.
- Define who is responsible for implementation of the plan and ensure the have the skills, tools and resources to successfully implement the plan.
- Define an appropriate evaluation plan for communications.
- Establish the budget.
  - *TEMPLATE 4.12:* POSSIBLE RISK COMMUNICATIONS TACTICS TO APPLY TO THIS RISK OPPORTUNITY page 4-85.
  - *TEMPLATE 4.13:* DEVELOP A COMPREHENSIVE RISK COMMUNICATIONS PLAN page 4-88.

Develop targeted messages that are appropriate for: a) stakeholders, b) active interests and c) audiences.

- Draft messages that are relevant to target stakeholders using the Message Frames developed in Step 2 and refined in Steps 3 and 4.
  - *TEMPLATE 4.8:* DEVELOP THE MESSAGE FRAME page 4-46.
  - Draft messages appropriate for active interests and audiences, including media.
- Identify third parties who are credible to stakeholders, who could provide independent references.
- Anticipate and prepare for tough questions.

STEP 6: IMPLEMENT RISK COMMUNICATIONS STRATEGIES AND PLANS

- Finalize materials to support the risk communications plan.
- Train individuals and/or engaging the PORE division to conduct dialogue using risk communications techniques.
- Implement the plan.

STEP 7: MEASURE RISK COMMUNICATION EFFECTIVENESS

- Ensure dialogue and continuous improvement.
- Measure Process effectiveness.
  - *TEMPLATE 4.14:* CHECKLIST FOR DESIGNING APPROPRIATE PERFORMANCE MEASURES FOR EACH STEP OF THE STRATEGIC RISK COMMUNICATIONS PROCESS page 4-129.
- Design feedback forms.
- Measure Process outcomes.
  - *TEMPLATE 4.15:* MEASURING PROCESS OUTCOMES page 4-137.
- Sunset the Team.

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Defining Clear Risk Communications Strategy and Objectives

In Step 2 the team developed its stakeholder hypothesis, then confirmed stakeholder interests and priorities in Step 3. Key decision-makers and internal stakeholders, along with key external stakeholders, active interests and audiences were identified. Based on that work, and subsequent work in Step 4 which gave the team insight into how stakeholders (and possibly others) view the risk management options being considered, it is now time for the team to develop a clear, specific and targeted risk communications strategy and objectives as it prepares to communicate more broadly about the risk issue and how it will be managed.

The key is to define the risk communications objectives in behavioural terms. Remember, the goal of strategic risk communications is to help people make well-informed decisions and take appropriate actions. So thinking about the actions — or behaviours — the team wants its communications to result in, consider the questions outlined in Template 4.10.

TEMPLATE 4.11: *DEFINE RISK COMMUNICATIONS STRATEGY AND OBJECTIVES* ✑

1. Describe the overall risk communications strategy in behavioural terms:

   - What is our single overall purpose for communicating?

   - What do we want people to be able to think, do and feel as a result of communications?

        - Use simple language. Avoid the use of technical terms.

     Example: Better informed self-protective behaviour by users of a medical device.

     Overall Risk Communications Strategy: "To enable device users to better assess and manage personal health risks with respect to use of medical device "x" based on new information we have to share about self-protective behaviour and the experiences of other device users."

     Overall Risk Communications Strategy: To «do what?» «with whom» «why» and «how».

2. Describe key risk communications objectives for decision-makers (internal to Health Canada and other key government agencies).

   Describe the objectives in <u>behavioural</u> terms:

     Decision-makers «name» : As a result of risk communications on this topic, decision-makers should be better able to _____ , because _____ .

     Example: Health Canada HPFB Decision-makers

     As a result of risk communications on this topic, HPFB decision-makers will be able to communicate new information with current and potential device users more effectively because the new information, presented using best risk communications principles, will be designed to help users make more informed decisions about the device.

3. Describe key risk communications objectives for transactors (identified on Template 4.4). Note, depending on the range of transactors, it might be beneficial to develop specific objectives for each one. For example, the team's objectives regarding the actions of the people who use the medical devices noted in the example above, will be quite different from those for the specialist physicians who prescribe the device.

   Again, describe the objectives in <u>behavioural</u> terms:

     Transactor 1 «name» : As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

     Example: Plastic Surgeons who specialize in reconstructive surgery

     As a result of risk communications on this topic, reconstructive surgeons will be better able to determine if this device is appropriate for their patients and they will be better prepared to have a fully informed discussion with their patients about the benefits and risks of the device, given their particular situations.

Transactor 2 «name» : As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

Transactor 3 «name» : As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

4. Describe key risk communications objectives for active interests (identified on Template 4.4). Again, depending on the range of active interests, it might be beneficial to develop specific objectives for each one.

Again, describe the objectives in <u>behavioural</u> terms:

Active Interests 1 «name» : As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

Active Interests 2 «name» : As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

Active Interests 3 «name» : As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

5. Describe the risk information objectives for audiences.

For example: As a result of our media lines and media interviews, the media will be able to write clear, balanced stories that provide basic information to device users.

Audience 1 «name» : As a result of our information on this topic, audiences should be better able to_____, because_____.

Audience 2 «name» : As a result of our information on this topic, audiences should be better able to _____ , because _____ .

Sample of Risk Communications Tactics in Health Canada

4.6

The table that follows provides a broad overview of the spectrum of risk communications tactics practiced across Health Canada. It builds on the Spectrum Diagram in Tab 3 page 3-27. It has been developed at a very broad and generic level only to give the team a sense of the range of tactics available when it starts to develop its risk communications strategy and plan. It is important to note that often the team will employ a variety of these tactics, often in a clearly defined sequence. People working in the Programs in the various Branches of the Department will likely want to customize it and make it specific to the work in their area before using this as a planning tool.

Sample of Risk Communications Tactics

Risk communications tactics	Sample activities	Possible objectives for use	Implementation challenges
Notification about risk	• Dear Health Professional Letters. • Advisories. • Labels, signage and packaging.	• Direct the action of "regulatees." • Stimulate essential short-term protective actions. • Formalize risk management guidance.	• Notifications may not be received or read/used in a timely manner. • Advisories may not stimulate appropriate action fast enough to do much good. • Forms of instruction about risks may not be capable of being readily interpreted or useable as intended, especially without empirical testing.
Information about risk	• News releases. • Web site. • Publications. • Media interviews. • Speaking engagements and conferences.	• Establish the public record. • Share useful information or news about risks and their management. • Stimulate public/ stakeholder discourse. • Frame risks and their management. • Provide a resource of useful information for stakeholders. • Shape stakeholder opinion.	• Content may not reflect stakeholder/public understanding of risks and so may be deemed irrelevant. • Content may not be readily understandable or easily converted into actions. • Circulation may be limited. Poorly targeted information may be wasted.

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Consciousness-raising about risk	• Social Marketing programs. • Public education programs. • Mass media communications. • Funding and publicizing creation of new knowledge (research).	• Suggest appropriate risk reduction behaviors. • Shift stakeholder attention to specific risks. • Generate awareness about risks and their management. • Create a readiness to act on risks among target populations. • Stimulate stakeholder consideration.	• Can be extremely expensive. • Typically little ability to directly measure return on investment unless measurable objectives guide content selection/emphasis. • Cannot control media and they may not convey messages as intended. • Challenges of conveying the context and findings of research.
Behaviour focused dialogue about risk	• Stakeholder Engagement processes.* • Public Involvement processes.* • Behaviour-focus research such as polling and mental models research to focus dialogue.	• Gain essential knowledge for risk management purposes. • Demonstrate/ help assure democracy on risk management. • Stimulate stakeholder/public judgment on risk management.	• Can be time consuming and expensive to mount. • Difficult to ensure that everyone who wants to be heard/ participate can be heard/participate. • Research must often be practical in order to enable communication in aid of risk management versus not readily applicable results.
Additional branch specific tactics (list and complete table)			
NOTE: The Department's Office of Consumer and Public Involvement can provide assistance in planning and conducting these processes.			

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TEMPLATE 4.12: *POSSIBLE RISK COMMUNICATIONS TACTICS TO APPLY TO THIS RISK OPPORTUNITY* ✎

*NOTE: Teams may wish to complete a separate Template 11 for Transactors, Active Interests and Audiences, particularly if the issue being addressed is complex. If not, indicate which activities, objectives and challenges fit with each of these groups by using **T** for Transactors, **AI** for Active Interests and **A** for audiences.*

Risk communications tactics	Possible activities by stakeholder group: T, AI, A	Possible objectives for use by stakeholder group: T, AI, A	Implementation challenges by stakeholder group: T, AI, A
Notification about risk	•	•	•
Information about risk	•	•	•
Consciousness-raising about risk	•	•	•
Behaviour focused dialogue about risk	•	•	•
Additional Branch specific tactics (list and complete table)	•	•	•

Defining the Scope of the Strategy and Plan

It is important to develop communications strategies and plans that are within the scope, time, budget and ability of the team to achieve. The most important thing is to ensure that whatever the strategy and plan, it must achieve the objectives defined in the Opportunity Statement. It must enable stakeholders, and often the public, to take appropriate action to ensure their health and safety related to the risk issues.

For larger-scale undertakings, for projects where relationships have not been established, and for those where stakeholders may have concerns about the trustworthiness and competence of the Department, planning and developing appropriate materials could take months and require significant resources.

It will be important for the team to determine the scope of the plan it will need to achieve the project goal. The following table contrasts the elements of a small-scale plan with those of a large-scale initiative. Most plans will fit somewhere in between these extremes. Please see the table on the following page.

4.6

DEFINING THE SCOPE OF THE PLAN (TABLE 4.1)

Parameter	Small scale	Large scale
Quality of relationships with stakeholders	• Few stakeholders. • Their priorities are well known to the team. • Solid, long-term relationships.	• Many stakeholders. • Many different priorities, may or may not be known to the team. • No or poor relationships with team members and possibly others in the Department.
Trust	• High trust of the Department, branch or program.	• Low trust of the Department, branch or program.
Risk issue dimensions	• Risk issue is fairly simple, straightforward or similar to a previous issues worked on with these stakeholders. • Issue is not controversial.	• Issue is large and complex. • Issue, or elements of it, could be controversial.
Time/urgency	• Time for communications and consultation is short.	• More time available for planning, communications and consultation.
Resources	• The resources available to the team — people and/or money — are tight. • Resources are available but not needed because the issue is small and manageable.	• More resources are available for the team to draw on. • Issue may be larger than available resources and/or beyond the scope of the team to implement the strategy and risk communications plan. • Other branches or departments, or partner organizations such as regional health authorities, may need to be involved in implementation.

New Technology to Consider — Electronic Consultation[7]

Within the Spectrum of Risk Communications Tactics, Behaviour-Focused Dialogue can be enabled through a number of different stakeholder engagement mechanisms. There are a variety of engagement mechanisms that enable decision makers to involve relevant individuals and groups in the decision process to varying degrees. Each consultation mechanism is applicable in specific situations based various factors including the complexity of the issues, the stakeholders and risk coupled with cost, timing and desired outcomes. The choice of which mechanism is appropriate and how that mechanism is applied is critical to creating productive involvement and dialogue towards an effective risk communication strategy.

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[7]   This segment was provided by Carlo Aiello, President of the Intersol Group, Ottawa. Intersol specializes in state-of-the-science stakeholder engagement and consultation.

4.6

With the evolution of the internet and electronic tools, a number of online mechanisms have evolved that effectively and efficiently extend the reach of traditional dialogue approaches and produce more robust outcomes. These tools have enabled the advent of Electronic Consultation that now hold a valuable place on the stakeholder engagement spectrum. Online approaches can include one-to-one type tools and or tools that involve participant interaction. Participant input can be captured through deliberative workbooks, surveys, form submissions and document uploads to highlight a few examples. Interactive tools can include Q&A sessions, focus groups, conferences, communities of practice, issue and expert forums, live chat events and more.

Citizens, stakeholders, and even employees want to be consulted, especially on issues that affect them. Consulting online allows risk communicators to reach and involve new and larger audiences, broadening the scope of consultation. The key benefit is being able to connect with different voices such as our youth, the have-nots and the marginalized and not simply the "usual suspects" who always attend in-person sessions. Another major benefit of consulting online is the convenience factor. Participants can contribute when they like and from where they want, removing the logistical requirements associated with in-person consultations.

While online tools enable broader and more effective consultation through Electronic Consultation, they do not replace traditional consultation approaches. Nor do they take away the challenges, planning and skills required to produce positive outcomes. As with other traditional mechanisms online mechanisms are suitable for specific engagements. Selection of the tool requires the same approach applied to the traditional tools with more factors to consider. Challenges, planning and skills related to online consultations are often more complex than traditional approaches due to the speed and reach that the online tools produce.

It is also important to note that stakeholder engagement is one step in the spectrum of risk communications tactics. It is critical, as with all engagement mechanisms, to support the on line engagement with notification, information and consciousness raising about the issues. This can be done through on line or off line approaches.

When determining the overall consultation strategy, the approach can be exclusively online or a combination of both online and in-person (an intermodal approach). A powerful example of an intermodal approach is the use of online tools as a complement to in-person consultations. Online tools can be used pre-event, to introduce the participants to the issue(s), and post-event to wrap up the process. Introducing the issues(s) before an event provides for deliberation and informed participation. At the conclusion of the event, providing participants with a summary of the event provides tangible results of their participation.

There is no one-size-fits-all that will meet the needs of every consultation and dialogue. The key is to determine your objectives and choose the approach that is most appropriate. In order to ensure the effective delivery of an online consultation, you must first decide which approach and tool(s) will best suit stakeholders and meet the team's objectives for consultation. In practical terms, this means using the best approaches both online and in traditional (or in-person) consultation and dialogue.

4.6

The key is maximizing the synergies between on and off-line techniques through the selection of consultation processes, modules and tools. Participant recruitment is a key success factor. Creating an elaborate consultation Web site with an extensive mix of online tools will only produce the intended results if the target stakeholders provide input. The key to remember is that with good project and risk management, potential issues and challenges will be identified, assessed and mitigated on an on-going basis.

It is important to remember that online consultations are less about the technology and more about the purpose, people and processes. Experienced and seasoned engagement professionals are required to ensure key principles of effective consultations are reflected and implemented effectively in the online approach.

Strategic Risk Communications Strategy and Plan

Building on the work done in Steps 1–4 to Define the Opportunity; Characterize the Situation; Assess Stakeholder Perceptions of the Risks Benefits and Tradeoffs, and finally to Assess How Stakeholders Perceive Options, now is the time for the team to develop a comprehensive plan using the following template as a guide.

TEMPLATE 4.13: *DEVELOP A COMPREHENSIVE RISK COMMUNICATIONS PLAN* ✐

COMPREHENSIVE RISK COMMUNICATIONS PLAN TEMPLATE

Project title: / Date:

Project team: / Project timeframe:

Project Opportunity Statement:

(From Template 4.2. Note, the team may have refined the opportunity as it worked through the process).

Overall risk communications strategy:

(From Template 4.11)

Key objectives by stakeholder:

(From Template 4.11)

Key plans:

NOTE: key plans and activities are typically driven by results of the research conducted in Steps 3 and 4. The work done on Templates 4.10 and 4.11 is useful in defining plans.

Key plans to achieve our risk communications strategy include:

1.
2.
3.
4.
5.
6.

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Describe each plan and the key activities that support it.

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1. Plan 1
Plan:
Key activities:

2. Plan 2
Plan:
Key activities:

3. Plan 3
Plan:
Key activities:

4. Plan 4
Plan:
Key activities:

5. Plan 5
Plan:
Key activities:

6. Plan 6
Plan:
Key activities:

Information materials required — short term:

Critical materials required between «month» and «month» include the following:

-
-
-
-
-
-

Information materials required — longer term:

Additional materials required between «month» and «month» include the following:

-
-
-
-
-
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Target results of this plan:

Define the anticipated results, in business terms, of this plan. That is, the risk communications plan should link back to the opportunity and the overall goals for the project. The results should be aligned with the overall goals of the Program, Branch and, ultimately, the Department. Results should be measurable.

Target results of this plan include:

Primary measurements:

By the «timeframe» we will:

•

•

•

Principles that guide plans:

This Plan is driven by the Strategic Risk Communications Guiding Principles. It is aligned with «name other principles if appropriate».

Requirements for success:

In order to achieve our goal, the following are required:

Management:

•

•

•

•

Resources:

•

•

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•

Programming:

•

•

•

•

Use of best know-how:

- Science-based process, methods and tools.
- Strategies and communications based on insight not guesswork.

Other requirements:

Draft plan — «timeframe»

Month	Activities-Internal	By when	Who
Key Deliverables: • • • •			
Strategy and plan			
Team organization/ support			
Team meetings			
Critical materials development			
Internal engagement activities			
Partner engagement activities			
Stakeholder engagement activities			
Media relations activities			
Conferences/speaking engagements			

Defining Measurable Outcomes

Using specific performance measures to evaluate outcomes ensures that the plans being implemented are effective and that the team is on track. Evaluation adds credibility and is consistent with the best practices in risk communications and continuous improvement. Risk communications should be designed so that that it is possible to measure outcomes.

Formal and informal evaluations can be made against the objectives set out in Step 1. A variety of methods can be used, such as using an evaluation form to track the progress of each component and document feedback. The team should evaluate the effectiveness of the process, as well as the quality of outcomes for risk communications, after at least one cycle of a risk communication effort has been completed.

The team might also go back and interview key stakeholders who participated in the initial research to determine if there have been any shifts in behaviour or risk assessment as a result of the initiative.

Measurement results are used to make recommendations about improving the strategic risk communications process and specific activities within it. They may also be used to modify communications strategies and messages.

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Outcome evaluations are sometimes conducted by an independent and credible third party. Depending on what the initial goal was, these test whether the Risk Communication Process has led to a positive change in behaviour, or an increased public awareness of the risk issue.

A STRATEGY FOR THE CONTENT OF RISK COMMUNICATIONS FOLLOWING A TRAGEDY (IN THIS CASE THE WASHINGTON D.C. SNIPER ATTACKS)

by Baruch Fischhoff** October 16, 2002

SUMMARY

- Acknowledge the gravity of the events and tragedy of those who have suffered.
- Recognize the public's concerns, emotions, and efforts to manage the risk.
- Assure the audience that the relevant officials are doing all that they can.
- Express a coherent, consistent communication philosophy (for all risks).
  - We will do all we can to help you to make responsible decisions for yourself and your loved ones.
  - To that end, we will provide you the best, relevant information that we can, along with an idea of how good that information is.
  - We will not engage in speculation.
  - We may need to withhold information that may aid or comfort the enemy. Recognizing our duty to inform, we are following a socially acceptable procedure, for deciding what to withhold.
- Provide quantitative risk estimates, including the attendant uncertainties.
- Provide summary analyses of possible protective actions, considering all the expected effects.
- Lead by example, showing possible models for responsible bravery.
- Commit to earning and keeping the public trust.

B. DEVELOPING MESSAGES

Developing risk communications messages is a strategic process, typically starting with the development of preliminary message frames in Step 2, Characterize the Situation. As more information becomes available about the risk issue through the technical risk assessment process, and as more information becomes available about stakeholders' interests and priorities through the strategic risk communications process, these preliminary message frames are updated. In this Step, they are used as the base from which to build and pretest messages targeted specifically to what people need and want to know in order to make a well-informed decision.

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The following provides some background on the development and pretesting of messages.

What Are Messages?

A message is a communication transmitted by spoken or written words, or by other means, from one person or group to another. Messages are typically thought of as words, but it is important to remember that actions are also powerful messages. People take meaning from what people do as well as from what they say.

ACTS COMMUNICATE. COMMUNICATIONS ARE ACTS

Strategic risk communications includes all communication content and interactions that can influence risk decisions and behaviour. Messages may be included in announcements, warnings and guidance documents. Messages may appear in verbal statements, pictures, advertisements, publications, legal briefs, labels, warning signs or other declarations. They may describe risks or characterize their importance. Messages may also advocate actions regarding risks, hazards, and technologies, including ways to mitigate them.

Communications Content — Messages

For strategic risk communication purposes, communications content in the form of messages should be tailored to critical stakeholder decisions concerning the risks at hand and what appropriate action to take. As much as possible, messages should reflect the interests and priorities of the stakeholders (and, more broadly, the audiences) for whom they are intended. For instance, physicians may have specific communications needs and interests about the safety of a drug that are different from their patients. The team has gained this understanding from the formal and informal research conducted in prior Steps, and messages should reflect this insight.

If such research has not been done, or if information about stakeholder thinking is deemed inadequate, it may be appropriate to conduct such research now. At a minimum, there should be an opportunity to test messages, using appropriate instruments to do so. As experience shows, some insight into stakeholder thinking is better than no insight. Knowledge of stakeholder perceptions is always a better guide for developing strategies and messages than guesswork or intuition.

COMMUNICATIONS CONTENT — MESSAGES — SHOULD REFLECT THE INTERESTS AND PRIORITIES OF STAKEHOLDERS, NOT THEORIES ABOUT WHAT THE TEAM THINKS THEY SHOULD KNOW.

Theories about what stakeholders need to know through messages can be an inadequate, even counterproductive, guide for message formulation. As decades of research show, no one can accurately predict people's information needs or how they will process communications without the requisite research. So, developing messages should be driven less by what one internal group believes stakeholders should know, or thinks it needs to know, and more by objective knowledge of stakeholder information interests and needs.

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Using Message Frameworks

Using simple frameworks can help the team develop messages in a way that reliably addresses stakeholder decision-making and behaviour. Message frameworks focus on the "engineering" of a message. That is, they show the overall message structure and key message components, the order of the components, and important qualities such as tone. Frameworks help organize the important work of message development and improve efficiency and effectiveness in message preparation.

Message frameworks can also aid the internal communications essential to message development because they help make message design transparent and understandable to people unfamiliar with communications, especially risk communications.

Framework Examples

For strategic risk communications, message frameworks should generally focus on providing information that stakeholders should know for risk management purposes, but do not know yet.

Simple Risk Communications Message Framework

One simple framework for risk communications content that readily applies insights from mental models and other research into stakeholder thinking is the following:

Goal: Address stakeholder decision-making and behaviour by building on where they are at today in their thinking, tailoring messages to critical decisions at hand.

Elements: Content should:

- Reinforce what people know now that is correct and that it may be important to be reminded about.

- Correct any significant misunderstandings, especially about false or unlikely cause and effect relationships.

- Address what people want to know.

- Be responsive to how people want to get this information and from whom.

- Offer additional sources of credible information if available.

- Strike an appropriate tone.

The following framework example was developed directly from extensive, national mental models research in the United States that addressed citizen thinking about risks and benefits of chemical products, practices and the industry overall.

This framework provides more detailed than the preceding example in order to help illustrate the degree to which it can be used to quickly focus the work of message development. It also addresses elements of message delivery and production that were discovered to be important to stakeholders through mental models research.

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Risk communicators can use this message framework to develop focused, targeted messages that help stakeholders and others make well-informed decisions about the risk issue and take appropriate action. Developing draft messages from the Message Frames drafted in Step 2 and updated in Steps 3 and 4, the risk communicator can then use the basic framework below, to assess the draft messages. Once satisfied that the draft messages meet the criteria below, the risk communicator is ready to pretest the messages with stakeholders. For more information about Message Frames, please see pages 4-46 to 4-48.

Basic Message Framework*

Message criteria	Delivery method criteria	Production features criteria
• Personal impact. • Tangible evidence. • Appropriate tone. • Credible source.	• Accessible information and sources. • Opportunity for clarification and feedback. • Opportunity for dialogue.	• Clear text. • Appropriate visuals and sounds. • Easily understandable illustrations.
*Source: Final report to the Chemical Manufacturers Association (now the American Chemistry Council), March 1997 of the Benefits Message Research conducted by Decision Partners.		

Detailed Message Framework*

Message criteria	Content elements
Personal impact	Relates to: • The individual's experience. • His or her family's experience or situation.
Tangible evidence	Relates to: • Familiar products, effects or results, especially in the context of home life. • Products, effects or results that represent clear improvements in the individual's circumstances or his or her family's circumstances. • Easily understandable innovations that benefit the lives of others. • The organization's actions that have bettered the individual's situation.
Appropriate tone	Relates to: • Respect for individuals. • Acknowledgement of people's issues and concerns — empathy. • Positive future orientation. • Optimism. • Sensitivity to circumstances and issues. • Responsiveness to interest.

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Credible sources	Relates to:
	• Orientation to relationships and dialogue, i.e. building shared understanding.
	• Accessibility of and openness with information.
	• Responsiveness to requests.
	• Expertise.
	• Moral action — doing what's right.

Explanation of Message Criteria:

Personal Impact

Research shows that the most effective messages are those that are deemed to be relevant at a personal level to the stakeholders or audiences involved. So clearly, messages must relate to what people want to know that's meaningful to them, not what government sources may want to tell them. The team's job is to find a way to connect messages with stakeholder interests and priorities in a personal way. It is important to try to relate messages to people's experiences as individuals or as part of a larger group.

Tangible Evidence

Tangible evidence refers to real examples that can demonstrate results or serve as "proof" of claims. For example, if a project involves a change in regulations that affect the public, such as the decision to ban baby walkers, it is important to show why this was necessary. Providing vivid examples that people can relate to, such as clear examples of why baby walkers are risky, perhaps accompanied by simple illustrations that show injury statistics or other evidence of the magnitude of the situation or risk, are examples of tangible evidence.

Appropriate Tone

One way to think of message tone is as its human quality. For example, in strategic risk communications it can be important to acknowledge people's concerns and, through tone, convey a caring or empathetic orientation to them. So, does a message sound like it comes from a thoughtful or caring individual? Or does it sound like it comes from unfeeling officials. People can interpret tone as much as they interpret information comprising the message. They can also make judgments about the credibility of the communications source, that is, the degree to which the source could be considered to be trustworthy and competent.

Credible Sources

Extensive research and experience demonstrate that in order for messages to be deemed to be credible, they must also be perceived to have come from a credible source. However, the criteria people use for judging source credibility can vary in unpredictable ways. In the chemical industry case, mental models research revealed specific criteria citizens used to judge the credibility of sources from chemical industry companies.

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Criteria included:

- The degree to which a source was oriented to a positive relationship, through dialogue, with an individual or group versus a "teacher/student" relationship or "tell assertive" orientation;

- The degree to which the source also provided access or direction to other sources of useful information on the topic at hand. This way, if people wanted to, they could gather more information at their own pace;

- The degree to which the source would commit to being responsive and then was actually found to be responsive when asked for information;

- The degree to which the source was competent or expert on the topic and therefore well qualified to communicate; and

- The degree to which the source was committed to, or could be seen to be behaving in a way that was consistent with, important values such as serving the interests of citizens, not just corporate shareholders.

Sample Application: Electro-magnetic Fields

The following example illustrates how the message framework has been applied to a risk communications task, in this case, communicating about health risks associated with exposure to electro-magnetic fields (EMFs). EMF risks have been controversial for many years and much research remains to be done that would help address people's concerns.

Personal impact	Relates to:	Sample language:
	- The individual's experience. - The family's experience or situation. - The community's interests.	Everywhere there is electricty in our homes and businessess there are electric and magnetic fields that are created by electric charges. Taken together, the fields are called "electro-magnetic fields." Most people respect the power of electricty to shock or injure people and pets and therefore, handle electricity powered equipment or appliances very carefully. Over the past ten years or so, some homeowners, scientists and regulators have asked if being exposed to electric and magnetic fields involves risks to health or the environment. A lot of good scientific research has been done. Yet, answers to simple questions about risks are not always straightforward, mostly because the effects of these fields on people and animals is not fully understood. So it can be difficult to provide people with the information they might like to have about electroc-magentic fields.

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| Tangible evidence | Relates to:

• Familiar products, effects or results, especially in the context of home life.

• Products, effects or results that represent clear improvements in my circumstances or my family's circumstances.

• Easily understandable innovations that benefit the lives of others.

• Source actions that have improved the situation.

• Actions of others that have improved the situation. | It's easy to understand how people might wonder about risks from exposure to electro-magnetic fields when so many things in our everyday lives — ovens, toasters, TV's, computers and cell phones — are powered by electricity.

One way to understand exposure is to measure the strength of electro-magnetic fields. Electric fields from power lines are commonly measured with a field meter like the one shown here (simple illustration).

Magnetic fields are usually measured with a simple coil and meter like the the one shown below (simple illustration). Recently, miniaturized meters have been developed. These are small enough to be carried in a pocket or even worn like a watch.

Company X practices when it comes to managing possible risks associated with exposure to electromagnetic fields have been consistent with guidelines developed by Health Canada since 1979. These were later adopted as the standard for Industry Canada for wireless communications and broadcast systems.

Company X is also following, and where appropriate, applying the work of other important organizations studying EMF. For example, fundamental research and development to create new methods of measuring EMF exposures continues to be undertaken by the Electromagnetics Division, CCRPB. This particular equipment has been is used by Health Canada in the National Capital Region and extensively by the government of British Columbia to characterize people's exposures to EMF from the two types of wireless phone base stations.

Health Canada is also involved in biological research, i.e. the reaction to EMFs at cellular (DNA) and molecular levels. |

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Appropriate tone	**Relates to:** • Respect for individuals. • Acknowledgement of people's issues and concerns — empathy. • Positive future orientation. • Optimism. • Sensitivity to circumstances and issues. • Responsiveness to interest.	Can electro-magnetic fields pose health risks? The honest answer is that no one knows. Scientists have found that exposure to fields can produce a variety of effects in animals and people. Whether any of these effects can lead to health risks is less clear. Still, people may be concerned about health risks for themselves and their families. Cancer can be of particular concern to people. If you or your friends or family are concerned about lowering the risk that you will contract cancer, it can be important to remember that there are a number of steps you can take, that, according to medical doctors, will almost certainly help reduce your cancer risks more than anything you can do about lowering your exposure to electro-magnetic fields.
Credible source	**Relates to:** • Orientation to relationships and dialogue, i.e. building shared understanding. • Accessibility of and openness with information. • Expertise. • Responsiveness to requests. • Moral action — doing what's right.	We believe it is important to keep sharing information about fields, especially any new information that can help everyone better understand their risks. Health Canada is working closely with international organizations such as the World Health Organization, on an International EMF Project established by the WHO in the mid 1990's. This project is to set up a clearing library for research on EMFs that has been done or is in progress and to identify gaps in the research and develop definitive steps that might be taken. HC has a representative on WHO's scientific advisory committee. Through this and other mechanisms, we track the latest research on electro-magnetic fields in Canada and around the world. Our team talks to health experts and experts in other fields, such as electrical engineering, who are working on topics related to the effects of electro-magnetic fields. When new information becomes available, it is posted on our Web site. Good health interests all of us. Virtually everyone takes care around the home and at work not to be injured or to to exposed to serious health risks. So, you can expect all of us continue to work to ensure that Canadians can enjoy the benefits of electricity safely.

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CHECKLIST BASED ON MESSAGE DEVELOPMENT FRAMEWORK

Element	Rating: To what degree — high, medium, low (H, M, L)	Evidence?	Potential improvements
Message criteria	• Has personal impact? • Provides tangible evidence? • Has appropriate tone? • Cites or comes from a credible source?		
Delivery method	• Provides accessible information or sources. • Provides an opportunity for clarification or feedback? • Provides an opportunity for dialogue?		
Production features	• Provides clear text? • Provides appropriate visuals and/or sound? • Provides easily understandable features?		

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DR. PETER SANDMAN ON THE SEESAW OF RISK COMMUNICATION[8]

Whenever people are ambivalent, seeing merit on both sides of some issue, they tend to focus on the side others are ignoring. When addressing an ambivalent audience, therefore, it is often useful to stress the side that does you harm, leaving the other side — your preferred side — for your audience to stress instead. Thus:

- **Responsibility/blame.** If you emphasize the sense in which a problem is not your fault, we will emphasize the sense in which it is. But if you blame yourself more, we will blame you less.
- **Catastrophic potential.** If you emphasize that a catastrophic possibility is low-probability, we will emphasize that it is high-magnitude. But if you keep saying how bad it would be, we will point out how unlikely it is.
- **Tradeoffs against cost or benefit.** If you emphasize that a risk is "worth it" compared to the alternatives, we will emphasize that it is horrific considered on its own. But if you insist on ignoring the tradeoffs, we will insist that they are crucial to a sound decision.

A longer-term strategy is to move to the fulcrum of the seesaw, forcing your publics to come to terms with their ambivalence, to recognize that there are good arguments on both sides.

The worst strategy — and the most common one — is to pre-empt the position you wish your audience were adopting, as if the game were follow-the-leader instead of seesaw.

Remember, the seesaw applies only when people are ambivalent. If they are firmly on one side and you express that side, they won't move to the other side; they'll just tell you it's about time you saw the light.

The Communications Environment Influences the Trust and Credibility of the Department and its People

Communications typically happen in one of two environments. These have come to be described in terms of two factors: trust and concern. The first communications environment is known as "higher trust/lower concern." The second is "lower trust/higher concern."

In Higher Trust Environments:

- Organizations that are sources of communications, and the messages received from them, tend to be perceived as trustworthy.

- Message recipients tend to believe that these organizations are competent in their field(s) of expertise.

- Recipients may be relatively unconcerned about how decisions are being made by (trusted) people within the organizations and how those decisions may affect their personal interests.

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[8] ©Copyright 1998 by Peter M. Sandman.

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- No sacrifices or tradeoffs have to be made by recipients as a result of the decisions and actions of these organizations.

- Messages are relatively straightforward and easy to understand.

In this environment, the social "rules" that guide communications, and how messages are interpreted by the recipients, are well established. They are intuitive or "second nature" to all involved. For this reason, strategies and messages that worked well in the past may also work well on new risk challenges.

In Lower Trust Environments:

- The recipients may perceive organizations that are sources of communications, and messages from them, as untrustworthy.

- Recipients may challenge or question an organization's trustworthiness, character and motivation.

- Recipients may question the competency of an organization and/or its employees. They may think their employees are not expert in their fields, or believe they claim expertise that they in fact do not have.

- Recipients may be very concerned about how people in poorly-trusted organizations make decisions and how those decisions may affect the recipients' personal interests. In fact, they may take great exception to the decision-making process and insist on seeing their interests directly addressed within any process.

- As stakeholders, recipients may believe they are being asked to make serious sacrifices or tradeoffs. This can intensify their interest in seeing a decision-making process unfold fairly.

- Messages may sometimes be complicated or incomplete. They may also be technically involved and hard to understand.

There are well-established social "rules" that guide communications in lower trust environments. How messages are interpreted under these conditions are also well known in the field of risk communications. However, the people formulating communications plans may not be aware of this information. In a low trust environment, the familiar and intuitive approaches that are well known to organizations, and typically learned through experience in a higher trust environment, may not work. Even worse, they may produce the opposite of their intended results. This can result in an organization communicating about risk issues in ways that actually create issues and negatively influence people's judgments of their trustworthiness and competence.

Risk communications typically take place in lower trust/higher concern environments with people who have, or believe they have, a stake in decisions that affect them.

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DR. VINCE COVELLO'S SEVEN CARDINAL RULES OF RISK COMMUNICATION[9]

"SPEAK CLEARLY AND WITH COMPASSION"

SEVEN CARDINAL RULES OF RISK COMMUNICATION
1. Accept and involve the public as a partner.
2. Plan carefully and evaluate your efforts.
3. Listen to the public's specific concerns.
4. Be honest, frank, and open.
5. Work with other credible sources.
6. Meet the needs of the media.
7. Speak clearly and with compassion.

Technical language and jargon are useful as professional shorthand. But they are barriers to successful communication with the public.

USEFUL GUIDELINES:
- Use simple, non-technical language.
- Be sensitive to local norms, such as speech and dress.
- Use vivid, concrete images that communicate on a personal level. Use examples and anecdotes that make technical risk data come alive.
- Avoid distant, abstract, unfeeling language about deaths, injuries and illnesses.
- Acknowledge and respond (both in words and with actions) to emotions that people express — anxiety, fear, anger, outrage, helplessness.
- Acknowledge and respond to the distinctions that the public views as important in evaluating risks, such as voluntariness, controllability, familiarity, dread, origin (natural or man-made), benefits, fairness, and catastrophic potential.
- Use risk comparisons to help put risks in perspective, but avoid comparisons that ignore distinctions that people consider important.
- Always try to include a discussion of actions that are under way or can be taken.
- Tell people what you cannot do, and be sure to do what you promise.

Credible Sources

It is important that team members chosen to work with stakeholders include subject matter experts who are good communicators. All team members should also have strong working knowledge of the Health Canada's policies and initiatives.

The key for risk communicators, is that one cannot guess who is credible to which stakeholders. Before selecting the people who will conduct dialogue with stakeholders, it is important to do research to determine who would be most credible. The research undertaken in Step 3, whether

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[9]   Covello V, Allen F. 1992. Seven Cardinal Rules of Risk Communication. US Environmental Protection Agency, OPPE, EPA Publication No.: EPA 230K92001. Washington, DC.

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formal or informal, should provide insight into which sources stakeholders do or would got to if they were seeking information on a risk topic, and of those, which are seen to be most credible.

Once the people who are going to conduct the stakeholder dialogue or more formal consultation are chosen, they should be fully briefed on the risk issue and the stakeholder analysis. They should also be coached or trained in effective risk communications skills. Training and coaching in risk communications is available through the Communications Directorate.

Health Information Credibility

Levels of trust and credibility in entities who communicate risk information are dependent upon the particular situations and entities involved as well as certain underlying social and psychological factors that influence the level of trust. Significant research has been performed to identify these factors. Peters (1997) hypothesized three factors: perceptions of knowledge and expertise; perceptions of openness and honesty; and perceptions of concern and care. Frewer et al. (1996) examined perceptions of trust in the area of food risks and identified factors such as: information sources being associated with truthfulness, having a good track record, accuracy and factual reporting of risk information, feeling a responsibility for public welfare, and being knowledgeable about the risks.

Other studies have been more descriptive, characterizing the level of trust in particular sources of information. In a study performed for Health Canada (2002), Canadians were asked to rate the credibility of several potential sources of information about air pollution.

	Very credible	Somewhat credible	Not very credible	Not at all credible	DK/NA
Environment Canada	69	26	3	*	2
Health Canada	65	28	4	1	2
The mainstream media (radio, TV, newspapers, magazines)	42	48	7	2	1
Partnerships among governments, health groups and non-governmental organizations	41	46	8	2	3
An environmental group (e.g., Greenpeace, Friends of the Earth, etc.)	35	45	12	7	1
Your provincial government	33	50	11	5	2
The Internet	28	42	12	6	12
Your municipal government	26	49	15	7	3
*Less than one percent					

In a study of risk communication regarding possible health effects from a local industry, Trauth (1994) found that, "when asked which source of information they trusted "a lot" when it comes to finding out about the risks of chemicals in their community, respondents ranked family physicians first, followed by environmental groups, the ACHD [local health department], local media and friends or relatives,

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local emergency planning committees, national media, federal government officials, state government officials, and industry officials."

In many more recent studies the emergence of health information published on the Internet has been examined. This medium presents new challenges for understanding the factors that influence credibility. A study by Stanford et al. (2002) compared individuals' judgment of credibility of online health Web sites to the judgments of health experts and found that while many expected factors, such as reputation of the source, come into play, many other factors such as the design quality of the Web site also affect the perceived credibility of health information. This study points out the need to educate consumers about how to judge the credibility of health information that they find on the Internet. This is an objective that is repeated elsewhere and have generated various guidelines to evaluate online health information (NCI, 2003; Mitretek, 1999).

How to Evaluate Health Information on the Internet (NCI, 2003)

1. Who runs the Web site?

2. Who pays for the Web site?

3. What is the purpose of the Web site?

4. What is the original source of the information on the Web site?

5. How is the information on the Web site documented?

6. How is information reviewed before it is posted on the Web site?

7. How current is the information on the Web site?

8. How does the Web site choose links to other sites?

9. What information about users does the Web site collect, and why?

10. How does the Web site manage interactions with users?

Criteria for Evaluating Internet Health Information (Mitretek, 1999)

- Credibility: includes the source, currency, relevance/utility, and editorial review process for the information.

- Content: must be accurate and complete, and an appropriate disclaimer provided.

- Disclosure: includes informing the user of the purpose of the site, as well as any profiling or collection of information associated with using the site.

- Links: evaluated according to selection, architecture, content, and back linkages.

- Design: encompasses accessibility, logical organization (navigability), and internal search capability.

- Interactivity: includes feedback mechanisms and means for exchange of information among users.

- Caveats: clarification of whether site function is to market products and services or is a primary information content provider.

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Depending on the issue or topic, the team may call on support from external people who have specific expertise, such as academics who have been working on this issue. Subject matter or technical experts from within Health Canada and from external organizations as well may also be called in at various points throughout the process.

Considerations Regarding Message Development

For any project, the team will likely be communicating with different stakeholders, such as consumers, physicians, health associations and special interest groups. While consistency of messages is critical, the order or priority of the supporting messages typically changes depending on the stakeholder and their specific interests and priorities. The "evidence" they want, and need, will vary.

It is also necessary to tailor the complexity of the supporting messages to ensure that you are communicating with each group at a level that is appropriate to it. For example, consumers may be most interested in being assured about the safety of eating farmed salmon, while an economic development association may be most interested in hearing about the economic impacts of a potential new farmed salmon fishery in a region. An environmental group may want to know about the environmental impacts first and possibly in more detail than other groups, but they may also be interested in an overview of the health and social impacts. So the order of the messages can change and the amount of detail and complexity can vary by stakeholder group, but overall, the messages should be consistent.

As well, messages must be conveyed in language and in modes that people can readily understand and access. Clearly, proper translation into different languages (and dialects) can be an important consideration. In some cases, it may be appropriate to not only translate but "trans-create" messages so that they are in an idiom familiar to stakeholders.

Strategies and communications should also be adapted and modified as necessary as the risk communications plan is implemented. Often people's interest in the topic evolves as they learn more about it. Materials and messages may need to be revised, upgraded, supplemented and/or released in other forms over several rounds of activity in order to achieve the team's risk communications objectives.

The implementation phase may also prompt new discussions, the emergence of new stakeholders and/or unanticipated questions, issues and concerns. Being able to respond quickly and effectively can be the key to furthering stakeholder understanding and action.

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ACCEPTABLE RISK

Occasionally communications materials include the phrase "unacceptable health risk," as in: "No unacceptable health risk was identified," or something similar.

The use of this phrase indicates that someone has made a judgment call about this particular risk issue on behalf of the intended audience. In fact, the science of risk perception and risk communications says that the acceptability of a risk is in the eye (or mind) of the beholder.

Equally problematic is the phrase "no significant risk" because in many cases there are no maximum exposure limits set.

Acceptable risk problems are decision problems for people to make for themselves because they are required to choose between alternatives. For example: to accept being exposed to a possible risk or to not accept that exposure; or to tolerate a risk that may not be acceptable. That choice depends on the person's values, beliefs and other factors.

There is no single, all purpose number or judgment by others that expresses the acceptability of a risk. Similarly, there is no simple turn of phrase to express acceptability that will be suitable for all situations. At best, communicators can hope to find the most acceptable alternative to a specific problem, which will reflect the values of specific stakeholders.

The question of acceptable risk raises the need to develop better ways of expressing risks in terms of their acceptability or tolerability to a range of stakeholders. At this point, very little work has been done in the area of health risk acceptability and no tested messages are currently known.

SOME APPROACHES USED INCLUDE:

- Comparing risks to suggest acceptability. <u>This is not recommended</u>!
- Comparing exposures to background levels. For example: "much less exposure to X from this source than to X from all other existing sources."
- Saying that technical experts have found the risk "significant" and noting the expert frame of comparison. However, phrasing it this way begs the question: significant relative to what?

One approach that could be tested is to put the risk being addressed in the context of options people may have for thinking about the risk, its relevance to them, and their own judgment about its significance in their own circumstances.

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For example: "Of all the risks that people face, risks to health are generally considered among the most important. Here, the risk of X causing a serious, long-term illness is estimated by health risk experts to be very low. With that in mind, steps people can take to address this risk include: a) doing nothing, b) doing nothing on this risk but doing something to address health risks they consider to be more likely, c) taking action to reduce any personal exposure to X and thereby reduce their personal risk."

The strategic advantage here is that the information: a) creates a partnership; b) demonstrates a respectful attitude; c) shows that choice is required; and d) is presented in a way that may help — even encourage — people to make up their own minds, rather than suggesting that risk experts are making it for them.

However, any approach needs to be tested to ensure it will work as intended and that the tone is right.

The Multi-layered Approach

Risk communicators often draw on proven methods and tools to use when designing and delivering communications plans and messages. Having a variety of methods that are known to produce their intended results prevents mistakes and saves time.

The "multi-layered" approach for designing information materials is one such method. Research shows this approach is useful when communicating complex technical information, such as scientific research studies, to technical and non-technical audiences.

The multi-layered approach was developed based on mental models research that found readers tend to move up and down through various levels of documents about a single complicated topic (in this case, a study related to mechanisms of cancer causation associated with exposure to chloroform in drinking water). Readers, regardless of their expertise on the topic, typically started reading at the level most comfortable to them.

The research also showed that experts (managers, scientists and communicators alike) could not guess — or accurately predict — which type of reader (an industry CEO or senior scientist in a regulatory agency) would prefer any given level of information.

By offering all readers access to all layers and levels of information, the materials were deemed by readers to be useful and credible. As sources of information, the documents were seen to be open and transparent. As well, the materials enabled the results of the scientific work involved to be judged more appropriately by various stakeholders.

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The content of the four layers assessed in the study followed a common outline, but offered varying degrees of detail. They layers were written in the following styles and levels of complexity:

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- Layer 1 (L-1): an employee publication.

- Layer 2 (L-2): a *Popular Science* article.

- Layer 3 (L-3): an article in *Scientific American*.

- Layer 4 (L-4): a peer-reviewed article published by a recognized science or technical journal or organization.

Delivery Method

Every public health and health protection risk issue requires a unique process for informing and engaging the public. Risk communications materials are refined for each risk issue based on the pre-test results in Step 5.

In addition to developing your messages, it is also important to consider the most appropriate delivery method or methods for sharing your information. These will depend upon the kind of information you need to share, the needs of the various stakeholders, and how quickly the message needs to be delivered.

It may be useful to reflect back to the stage where you determined what information your respective stakeholders wanted and needed and what they suggested would be the best way to reach them. Remember that some stakeholders will prefer written materials; others will prefer audiovisual materials, while some may prefer to go to a Web site. The merits of various delivery methods are outlined in the Sample of Risk Communications Tactics on page 4-83, but it is important to recognize that no single one will meet all needs.

However, you can maximize the use and effectiveness of the materials you produce by:

- Posting the contents of print materials on the Department Web site.

- Advertising how people can obtain a copy of your audiovisual materials on the Web site and in your print materials. Include your 1-800 number, if applicable.

- Referencing the Web site on all print materials.

- Including a feedback form and/or information about how to provide feedback on all print materials, with your audiovisual materials and on the Web site.

See delivery message criteria, on page 4–95 for criteria to consider when determining the best delivery method(s) for your message.

Production Features

The appearance of your information materials is often as important as the messages you are trying to convey. Clear text and visuals are crucial. The text and visual elements must be appropriate for

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the intended stakeholder in terms of language level and the use of technical terms. If you must use medical or industry jargon, make sure it is defined in lay terms.

Visuals used in print documents as well as in audiovisual presentations should be readily understandable and convey a clear message at a glance. Graphs or charts should be simple. Symbols or figures used should be familiar to people. It is critical to test graphs and visuals intended for lay readers as they can be easily misunderstood or misinterpreted.

PRODUCTION VALUES AND FEATURES

Clear text	✓ Uses appropriate level of language, use of terms.
	✓ Avoids technical language, jargon, and complicated communication styles.
	✓ Uses headlines, sub-heads, sidebars, advance summaries etc. to lead people through the text.
Appropriate visuals and sound	✓ Supports the text with appropriate visuals.
	✓ Recognizes that visuals and sound are messages themselves.
	✓ Ensures that the messages from visuals and sound are interpreted as intended.
	✓ Ensures images and sounds are familiar to stakeholders and/or fit with their current images.
Easily understandable illustrations	✓ Uses graphs or charts that convey clear messages at a glance.
	✓ Ensures illustrations are interpreted as intended and do not raise unfavourable associations.
	✓ Avoids the use of statistics to convey primary messages.
	✓ Uses symbols or figures that are familiar to stakeholders.

C. PRE-TESTING MESSAGES

The key to successful print or audiovisual materials is pre-testing them to ensure the target stakeholders and audience(s) will understand them and that their messages have the intended effect.

In the Strategic Risk Communications Process, the process is as important — sometimes more important — than the outcome. Since the team already has (or is building) relationships with the people it worked with to test its assumptions, it is a good idea to go back to them and ask for their thoughts on the draft messages and materials. If one asks people for help in a respectful way, they are usually pleased to assist you and will likely offer comments in a respectful way. This approach can also earn their trust because you have asked them for help and taken them into your confidence.

The Public Opinion Research and Evaluation (PORE) Division, within Health Canada's Communications, Marketing and Consultation Directorate (CMCD) will provide advice and assistance with pre-testing.

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Why Pre-test?

Pre-testing messages and information materials helps ensure that the team's communication efforts will have the desired effect. Pre-testing can determine if the messages are understandable, relevant, attention getting, memorable, attractive, credible, sensitive and acceptable to your intended stakeholder group(s). These factors determine whether materials will be effective with the specific group.

Pre-testing should be done before all of the money allotted has been committed to the production of information materials and while there is still time to change messages, if necessary.

Because pre-testing is qualitative in nature, it does have some limitations. For example, pre-testing cannot absolutely predict or guarantee learning, behaviour change or other measures of communication effectiveness. Pre-testing is not statistically precise. Nor is it a substitute for judgment based on experience. Rather, it simply provides additional information from which you can make sound decisions.

How to Pre-test

A number of techniques can be used to test messages and materials. Choosing an appropriate technique depends on the nature of the materials, the stakeholder or audience for whom it is intended, and the amount of time and resources available. There is no formula for selecting a pre-testing technique, nor is there a perfect technique for pre-testing. The method you chose should be selected and shaped to fit the pre-testing requirement and the resources available.

Small Group Testing

Message testing can be done using small groups, especially if you are testing presentations to groups. Try asking representatives of various stakeholder groups to listen to your presentation or to review your materials at a meeting and fill in a questionnaire about them. It is best if a member of the team attends the meeting and asks for feedback from the group.

Self-administered Questionnaires

A more general technique for message testing is a self-administered questionnaire mailed to respondents to be filled out at their convenience. These are used to gather information from people who may not be accessible for personal interviews. This method allows respondents to take the time to thoroughly consider their responses. A self-administered questionnaire is relatively inexpensive because interviewer time is not required and it has the potential to reach a large number of people.

However, self-administered questionnaires do have some disadvantages. The respondent may choose not to reply. Data collection may take a long time, given that people will respond at their own convenience. You will likely get a low response rate unless you call first and ask people to participate. In addition, those who do respond may differ from those who do not respond, thereby confounding your results. Moreover, the purpose of the questionnaire and the line of questioning can be misinterpreted, because there is no one from your organization present to respond to questions

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the respondent may have. Finally, this approach cannot be used with people who have reading and writing limitations.

For the best results, self-administered questionnaires are usually distributed to people whose participation is sought in advance. Participants are asked to review the materials on their own, to complete the questionnaire and then to return it to you within a specified time.

"Read Backs"

For information materials, testing is often best done one-on-one. One effective way to test materials is to ask a few people — one at a time, in separate sessions — to do "read backs".

Ask someone who is unfamiliar with the subject matter and/or who may be a member of your target key stakeholder group to sit with you and read your information material aloud. Stop him or her every couple of paragraphs and ask what he or she understood from the section, what he or she did not understand and if there is anything else that should be included. Repeat the process with three or four more people.

This method is a quick and inexpensive way to get immediate feedback so you can make corrections to ensure that your message is understood. It is also an ideal way to identify jargon, or technical terminology, that people might not understand.

Location Intercept Interviews

Location intercept interviews involve positioning interviewers at a point that is frequented by individuals from the target audience, such as a mall or community centre. Individuals are stopped and asked if they would mind taking a few minutes to participate in a short interview. The participant is asked a few screening questions to identify him or her as a member of targeted group, and then the individual is presented with the pre-test information material and asked the desired questions.

One advantage of this method is that a high traffic area can produce a number of interviews in a reasonably short period of time. Using a central location to find hard to contact stakeholders can be a cost-effective way of gathering data.

If the team is considering the use of location intercept interviews, it is important to also be aware of the impact your message will have on the intended group. Some topics may provoke an emotional response that puts participants ill at ease. If people are in transit and preoccupied, they may answer questions abruptly and not be prepared to offer much insight into their thinking. This kind of pre-test calls for a very short and focused questionnaire, as people will likely be unwilling to take much time away from their original business.

Mental Models Pre-testing

The mental models research method can be an effective way to pre-test messages. This method helps you discover what people think, and more importantly, why they think what they think about a given topic. Please see Tab 4 Step 3 for more detail on this method.

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Pre-testing messages using a mental models approach typically involves phoning some of the stakeholder who have participated in mental models research in a previous step to get their thoughts on specific messages. The purpose of this type of pre-test is to see whether or not the message is having the intended effect.

Each message is read to the interviewee. The person is then asked a series of questions to identify what they understand about the message and what they misunderstand. Ask them to define terms to see if you need to tone down jargon or technical terms. This process is repeated for each message you want to test. It is often beneficial, at the end of the interview, to ask the interviewee which of the messages they heard best addressed the issue or topic and why, and which did not and why.

Mental models pre-testing is helpful because it allows the participant an opportunity to reveal their perceptions and understanding about a topic, in this case, the message and specific components of the message. Pre-test participants can explain why a message is effective or ineffective, and which message is preferred.

Another advantage is that mental models pre-testing can be done in a relatively short period of time. As with the previous methods, the information should be tabulated, analyzed, and documented in a report, and then presented to the team.

Web Site Performance Testing

When stakeholders, employees, health agencies and citizens want information, they increasingly are turning to the Internet to find it.

Understanding how stakeholders search for information, and how they react to what they find, can have a significant impact on your success in communicating with them. It is important to ensure that articles posted on your Web site are written in simple, clear language and are supported by effective graphics. Major risk issues and messages should be flagged on Health Canada and the PHAC's Web sites so that it is easy for stakeholders to find the information, understand it and take positive actions.

Web site content should be tested for effectiveness through feedback and by software programs that track such things as the number of hits people make and how frequently they follow links to other sites that offer additional or related information.

Components of an effective Web site include:

- **Site visibility.** If your stakeholders cannot find your Web site or do not choose to visit it, then the site is not achieving its purpose.
- **Site navigability.** Once users reach your site, they must also be able to find the information they are looking for and the information you want then to see, particularly key messages.
- **Site impact.** Monitoring the number of hits to a site and asking for user feedback provides insight into how useful the information posted on it is to stakeholders and how they use it.

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On Line Testing Methods[10]

The Internet connects a vast population of all kinds of individuals and groups around the world, and makes them more easy to reach than ever before. This is particularly true compared to other types of environments or "universes" available for social survey research.

The survey or test experience conducted via the Internet is one of the technology's greatest gifts. Unlike telephone interviewing, in which every word must be read to the respondent, Internet-based surveys are wholly visual and the respondent proceeds at his or her own speed, which reduces respondent fatigue. This tends to result in far fewer respondents quitting in mid-study. Internet-based research is also available 24/7. As well, it is possible to show respondents visuals, ranging from print concepts to fully-produced television ads.

A significant advantage is that Internet-based assessments tend to have less respondent "satisficing" than other methodologies. So-called "satisficing" occurs when respondents do not engage in careful and thoughtful thinking to generate accurate answers to questions. This occurs because of low respondent ability or motivation, or because of high task difficulty. A recent study by Chang and Krosnick (2003)[11] found less "satisficing" in Internet-based assessment than those conducted by telephone.

Other advantages of using the Internet versus the telephone include the ability to:

- Capture richer, more illustrative open ended responses.

- Allow for more messages/offers/attributes to be asked to each respondent.

- Permit more metrics per message/offer/attribute.

- Allow people to take surveys at their convenience, when they won't feel so rushed — with benefits to both sample and data quality.

- Speed up turnaround time; respondents are available 24-7.

When it comes to reaching certain sub-populations, the Internet is the preferred means. Depending on who, and what is being researched, the issue of "representativeness" and sample bias are of greater or lesser importance. For example, users of advanced communication technology may be exactly the individuals that the research is aiming to reach.

But Internet research is not without its challenges. One commonly cited concern with Internet research is sample bias, specifically, the concern that contact can only be made with those who have access to the Internet and thus will all be computer users, who tend to skewed as affluent and younger.

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[10] This segment developed based on input from Rob Green of Penn, Schoen and Berland. Penn, Schoen was the first to develop an effective methodology for conducting scientific and representative Internet survey assessment. Since its creation in 1999 the Internet Surveys Group (ISG) within PSB has conducted over 1,000,000 interviews worldwide.

[11] For more information see http://communication.stanford.edu/faculty/krosnick.html

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Overall characteristics of Internet users are coming more in line with the general population. Internet access and use are becoming increasingly mainstream. For example, more than 20 million Canadians are online, which is almost two-thirds of the population (64 per cent) and 79 per cent of Canadians aged 18 to 54. South of the border, more than 200 million Americans are online (74.9 per cent of population) including 78 per cent of Americans aged 18 to 54. In the US, African-Americans and Hispanics are now as likely to be on the Internet as whites. Women are more likely to use the Web than are men.

As the use of the technology continues to rapidly expand, methods for sample collection continue to improve. The net result is that concerns about sampling bias and other research quality issues now resemble those which are regularly managed in the course of conventional survey efforts.

Rapid Visual Testing[12]

Visual testing enables researchers to scientifically perfect the message that best connects to the target audience. Visual testing is not at all like focus groups, a well-known but unreliable technique that is often pressed into service when people want to test messages. While focus groups are useful for exploration of ideas and language, they fail to adequately measure the impact of messages on the desired behavioural outcome.

Online visual testing uses random assignment techniques to create identical control groups or "cells" among key audiences, which enables researchers to test various versions of the messaging. Unlike focus groups, this technique uses random assignment techniques, which are typically the strongest social-science design because it creates virtually identical treatment and control groups.

Random design is how pharmaceutical companies conduct clinical drug tests. In such cases, a representative sample of people is exposed to different treatments so the efficacy of a particular medication can be accurately determined. In visual testing participants are randomly (meaning without pre-condition) assigned to one of several test cells. No single participant can be in more than one cell or test group. Test media is supposed to look like real media, such as actual ads you might see on TV, but it is not real. The purpose of test or "mock" spot is to provide an effective means to deliver a message. The respondent assumes it's real media if it looks like the real thing.

How to Implement Step 5 When Time is Tight

As with previous steps, getting input from stakeholders or people who are close to the thinking of stakeholders is highly beneficial when determining the potential effectiveness of risk communications strategies, plans and messages. The feedback obtained from using even the simplest pretest tools will give the team insight into how to proceed or modify their materials. Asking six to 12 stakeholders to review risk communications plans and messages can be done in a matter of hours, especially if the team uses some of the new techniques described here. Taking the time to do this goes a long way toward ensuring you're on the right track.

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[12] This segment was developed based on background from Rob Green from Penn, Schoen and Berland. Penn, Schoen created a unique visual testing process, also known as Rapid Visual Testing (RVT), in the mid-1990s on behalf of AT&T.

4.7 Step 6: Implement Risk Communications Plans

Strategic Risk Communications Process

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          ┌─────────────────────────────────────────────────────┐
          │              DEFINE THE OPPORTUNITY                  │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │            CHARACTERIZE THE SITUATION               │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │  ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS,       │
          │           BENEFITS AND TRADEOFFS                    │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │     ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS    │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │  DEVELOP AND PRE-TEST STRATEGIES, RISK              │
          │  COMMUNICATIONS PLANS AND MESSAGES                  │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │        IMPLEMENT RISK COMMUNICATIONS PLANS          │
          └─────────────────────────────────────────────────────┘
                        ← END ──◆ GO BACK ↑
                            TAKE ACTION
          ┌─────────────────────────────────────────────────────┐
          │     EVALUATE RISK COMMUNICATIONS EFFECTIVENESS      │
          └─────────────────────────────────────────────────────┘
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INTRODUCTION

In this Step, the team members are selected and trained in effective risk communications dialogue techniques. Materials are developed based on the pre-testing in Step 5 to support the team as they engage individuals and groups in dialogue. The Department's Public Opinion Research and Evaluation (PORE) Division will assist the team with pre-testing materials. The Department's Office of Consumer and Public Involvement can assist with planning and conducting stakeholder outreach and consultation.

Strategies and communications are adapted and modified as necessary as the implementation process evolves.

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A. Primary Activities in Implementing the Plan

THE PRIMARY ACTIVITIES IN THIS STEP ARE:

- Finalize materials to support the risk communications plan.
- Train individuals and/or engage the Office of Consumer and Public Involvement to support the team in conducting dialogue using risk communications techniques.
- Implement the Plan.

Preparing and pretesting materials has been covered in Step 5. In this Step, materials are designed and published. Team members or others who will conduct dialogue with key individuals and/or consultation with stakeholder groups are identified and trained. The Office of Consumer and Public Involvement will likely be engaged at this point to provide strategic and implementation support.

NOTE: Members of this group may have been on the Team from the outset, or they may have been called in as a resource to the Team in Steps 3, 4, 5 and/or 6.

Preparing the Team for Dialogue

Effective risk communications is not simply about the words used. Actions also send powerful messages. In most situations, especially those that can be characterized as having low trust and high concern, actions speak much louder than anything that is said. People often watch more than they listen and tend to draw more meaning from behaviour than from what is spoken.

After studying dialogue for many years, Dr. William Issacs, a professor at MIT, commented: "In skillful dialogue, we pay attention to the spaces between the words, not only the words; the timing of action, not only the result; the timbre and tone of a voice, not only what is said. We listen for the meaning of the comment or question, not only its discrete elements."

So skills training is critical. Training and support in effective risk communications skills is available through the Communications Directorate. The Department's Office of Consumer and Public Involvement can provide coaching and training for conducting effective stakeholder outreach and consultation.

Practice, Practice, Practice

As with any skill, practice is the key to success. Practicing your presentations and responses to questions — particularly the difficult ones — with your team members or a coach from the Communications Directorate is important to good preparation. Hearing yourself speak out loud can invaluable. Practicing will also make you aware of the speed at which you are speaking, your tone, body language and style — all of the elements that are important to success.

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PRACTICING DIALOGUE SKILLS

- Rehearse with a colleague by role-playing.

- Videotape yourself and subject your performance to critique.

- Recognize repetitive behaviours or sayings (e.g., playing with change in your pockets, clicking a ballpoint pen, or saying *you know*) and determine how to avoid these.

- Observe and take note of people you perceive to be good, confident dialogue role models.

How and When the Strategic Risk Communications Process Draws on Public Involvement[13]
The goal of public involvement is to improve the quality of policy and decision-making at Health Canada.

There is a growing range of approaches and methodologies available to support informed and meaningful public participation. This support can be placed on a continuum, from a limited public role in decision-making to broader participation, and from traditional public consultations to open-ended models of public involvement. **Any of these approaches may be appropriate as a means of involving stakeholders and/or the public in a given issue.** The wide range of approaches means that a public involvement strategy must be designed deliberately, and in collaboration with participants, taking into account:

- The nature and scope of the issue.

- Who is interested in and most affected by possible decisions.

- The reasons for involving the public in decision-making and the expected outcomes of doing so.

A decision to draw on Public Involvement is made by the Team as it works through the Steps of the Strategic Risk Communications Process.

B. WORKING EFFECTIVELY WITH THE MEDIA ON RISK ISSUES[14]
Working with the news media on complex risk issues is not easy, particularly when tight deadlines leave you little time to provide detailed briefings. That is why it is important to be prepared in advance for interviews. First, you need to know how your issue is already being covered. Then you must decide how best to communicate useful new information, and how to correct any serious misinformation in previous stories.

Understanding the Media
The media see themselves as a forum for airing different ideas and opinions, not as vehicles to communicate one message. When it comes to uncertainty, the media tend to run both sides of the argument, and let the readers sort it out.

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[13] Public Involvement Framework and Guidelines, Office of Consumer and Public Involvement, Health Canada.

[14] This segment was developed by Michael Keating, former journalist, writer and consultant in environment and sustainable development issues.

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Reporters focus on the crisis, conflict and hazard aspects of a story. Most journalists have little or no understanding of science issues in general, let alone the way experts weigh a series of factors to make risk assessment decisions.

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Dealing with the Media

Do your research. Monitor the news so you will know how your issue is being covered. This will tell you what is being said and printed, who are the key journalists and who are their sources.

Be prepared. Organize your information so that reporters who may not grasp the big picture can get a quick overview. Equip yourself with short documents, such as press releases and backgrounders of two — 20 pages, which are long enough for all but a few reporters, particularly when they are close to deadline. Try to have pre-packaged "B-roll" video to provide images for television. Have suggestions of where people can take their own photos, and get it pre-cleared with your team. Have more detailed information available for those reporters who want it.

Make your message clear and easy for non-experts to understand. Too much jargon can give people the impression you are trying to baffle them, or to avoid giving a clear answer. Put it in everyday terms, and test it on non-experts.

Boil down your key message into one sentence that you deliver sometime during the interview no matter what the questions are. This may be the key quote or audio/video clip.

The most interesting stories are "people" stories. Can you identify an example that will put a human face on the story?

Prepare for tough questions in advance. Think of the ones you would not like to face, and then practice answering them until you have a clear, honest and consistent message.

Be proactive. If a risk issue is likely to become newsworthy, seek out key journalists and editors to give them some background. Most will appreciate having a heads-up on a difficult issue.

If a story is being covered, don't always wait for the phone to ring. You can call the journalist to offer your viewpoint.

Be aware of deadlines. Find out before, or at the start of an interview, if the reporter is on a one-hour, one-day or one-week deadline. That will give you a sense of how much information they can digest. Always respond to calls before deadline.

Interviews

Go into interviews with the attitude that you can use the media to help the public understand complex risk issues. Work to be a source that journalists want to hear from by being trustworthy, available, reliable, timely, clear and quotable.

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Make your points with the knowledge that the reporter is likely to seek other viewpoints. Consider raising key points that others would make, and giving your interpretation.

Most news stories are short. In an interview, do not try to make more than three key points, which can be backed up with some details.

Be clear about what you know and don't know. Refer the reporter to people who can answer questions you cannot deal with. Offer to be available by phone to answer follow-up questions after the interview.

Who to Deal With

Develop good working relationships with specialist reporters who cover medicine and science. They will know your issues best.

Know who else shapes the news. Reporters report, but the editors assign stories, and decide what runs. You can sell them on a story.

Work with the leaders. When you are setting priorities for whom to call first, remember that if it hits the lead media, others will pick up the story. For national stories, this means starting with Canadian Press and Broadcast News, the national TV chains and papers, and big regional media.

When They Get it Wrong

You must be prepared for stories that will not tell your message the way you would have said it. What you need to do is the best possible job of communicating clearly, and in a manner that will encourage trust.

If a story has serious errors, get a correction both to set the record straight and so the mistakes will not keep appearing in subsequent stories.

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Step 7: Evaluate Risk Communications Effectiveness

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Strategic Risk Communications Process

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┌─────────────────────────────────────────────────────────┐
│                 DEFINE THE OPPORTUNITY                   │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│               CHARACTERIZE THE SITUATION                │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│  ASSESS STAKEHOLDER PERCEPTIONS OF THE RISKS,           │
│  BENEFITS AND TRADEOFFS                                  │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│        ASSESS HOW STAKEHOLDERS PERCEIVE THE OPTIONS     │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│  DEVELOP AND PRE-TEST STRATEGIES, RISK COMMUNICATIONS   │
│  PLANS AND MESSAGES                                      │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│           IMPLEMENT RISK COMMUNICATIONS PLANS           │
└─────────────────────────────────────────────────────────┘
              ← END ─● GO BACK
                 TAKE ACTION
┌─────────────────────────────────────────────────────────┐
│       EVALUATE RISK COMMUNICATIONS EFFECTIVENESS        │
└─────────────────────────────────────────────────────────┘
```

WE MEASURE TO IMPROVE. WHAT GETS MEASURED, GETS DONE.

INTRODUCTION

This section describes how best to evaluate both the team's Strategic Risk Communications Process and the outcomes of that Process. *Process effectiveness* is the *means* of the risk communications efforts, while *Process outcomes* measure the *end results*.

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Primary Activities in Evaluating Effectiveness

THE PRIMARY ACTIVITIES IN THIS STEP ARE:

- Ensure dialogue and continuous improvement.
- Measure Process effectiveness.
- Design feedback forms.
- Measure Process outcomes.
- Sunset the Team.

WHY MEASURE?

It is important to measure both outcomes of the Strategic Risk Communications Process — did it achieve the goals set by the project team? — as well as the overall Process results. Measurement results are used to improve the Process and the effectiveness of specific activities comprising it. This is consistent with best practices in continuous improvement.

As noted previously, it is important to ensure that some measure of Process effectiveness is taken at each step along the way. This enables the team to gauge its progress and make any necessary course corrections. It also enables the team to demonstrate progress to the sponsor and others. Continuous measurement is done to ensure the integrity of activities that then become the building blocks for subsequent steps.

The Public Opinion Research and Evaluation (PORE) Division can provide advice and assistance to the team in measuring Process effectiveness.

As well, it is important to measure how well the team itself accomplished its goal and how it performed as a working unit. Before the team adjourns for the last time, it is important to take members through an exercise to thoroughly evaluate the process they used, their work as a group, and to identify any continuous improvement opportunities for the future.

THE OPPORTUNITY FOR CONTINUOUS IMPROVEMENT AND INSTITUTIONAL LEARNING

Strategic Risk Communications is a process that builds shared understanding and, if done effectively, earns the trust of stakeholders. That is why it is important to be able to measure and demonstrate progress to the sponsor, others within Health Canada and the stakeholders. It is also important that the team take the time to document and pass on what it has learned to others in Health Canada, as appropriate.

This section provides guidelines for measuring performance on four levels:

- Process effectiveness: The effectiveness of the Strategic Risk Communications Process — an evaluation of what was accomplished at each Step of the process.

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- Process outcome: The achievement of the strategic risk communications goal(s) outlined in the Opportunity Statement, especially the degree to which both the team sponsor (and others in Health Canada) and the key stakeholders judge the end result of the process.

- Team member effectiveness: The effectiveness of the working relationship of the team and the performance of its individual members.

- Team meeting effectiveness: The effectiveness of the team's work at each step in the process, and the value and effectiveness of each meeting.

To reiterate, every risk communications initiative should include a mechanism for measuring the effectiveness of its message(s) and whether the Process resulted in the desired impact on behaviour.

EXAMPLE: EXCERPT ON EFFECTIVENESS OF WEST NILE VIRUS BROCHURE

As an example, in 2003, Health Canada conducted a public education campaign about the West Nile virus. The effectiveness of various communications delivery methods used in the campaign was monitored and charted.[15] The tables below show the outputs and expected outcomes, the performance indicators and the collection of data that supports (or demonstrates a gap) between the indicators and outcomes.

WNV OUTPUT:

National West Nile Virus brochure to serve as a fulfilment piece for the 1-800 phone line

---

INDICATOR(S):

- Materials developed and in place by target date.

- Distribution — reach.

- Client satisfaction: quality; timeliness.

RESULTS:

- Concepts and a final National West Nile virus brochure was initiated May 22, 2003.

- Established a service contract with 1-800 O'Canada for West Nile virus enquiries.

- Contract signed, Qs &As prepared and 1-800 staff trained

- Brochures sent to the printer June 16, 2003.

- Brochures in place and ready for distribution July 2, 2003.

- Image/photo cost:
  $1,000 (the copyright to a photo of female mosquito was purchased)
  This image was also used for the retail West Nile Brochure.

  - Printing cost:
    40,000 English; 10,000 French = 50,000 copies total @ $ 8,613.50.

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[15] West Nile Virus 2003 Public Education Campaign.

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- Intercept survey of shoppers:
  - One in five shoppers (19%) took a copy of the brochure — almost all of these (96%) were brochures placed in counter displays and (4%) asked a cashier for a copy. Findings reveal that shoppers who paid more attention to the displays were more likely to have taken a brochure (33%) more than those who had only briefly glanced at the display materials (13%). Those that did not take a brochure said they did not know one was available, or they had already enough information about WNV received from other sources (17%) or that the information was not useful (14%).

- Retail store managers' survey:
  - 92% of these participants are satisfied overall with HC partnership on WNV promotion mainly because they recognize the relevance of and benefit to their customers of a public education campaign on WNV. Materials were said to be relevant (29%), informative (15%) and of interest (7%) for a total of 48% on customer benefit; the materials were also said to be good, they fit well into stores, were visible, clear and looked good for a total of 25%; 17% accounted for negative responses such as people were not interested in reading information, it was not necessary; but 8% said it was a good government initiative anyway.
  - In the development of the display materials, Health Canada received some feedback from head offices, but not directly from store managers. However, the brochures, counter displays and posters appear to have been suitable. Almost all (95%) of the managers said they were satisfied with the materials that they received and would not have preferred to receive different types of materials. The remaining five percent did not express a preference one way or the other.

COMMENTS:

WNV OUTPUT:
1-800 enquiry lines
INDICATOR(S):
• **Established and working by target date.**   • **Number of general and media calls.**   • **Client satisfaction: quality; timeliness.**
RESULTS:
• **1-800 O'Canada:**   25K (1-800 redirect calls and distribute brochures)   This contract covered the cost from May to end of October.   • Established and working by target date.   • **General public calls:** 3505 calls with requests for information, document orders and referrals.

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- **Media calls:**
  a) <u>Media Enquiries</u>
     - From Jan. to April 2003: 75 in Ottawa, 100 Winnipeg.
     - From May to Oct. 2003: 110 Ottawa, 105 Winnipeg.
  b) <u>Interviews</u>
     - About 170, most in Winnipeg (except for technical briefing in Ottawa).
  c) <u>Topics covered</u>
     - Started with predictions, where's it going to go — ended with analysis, why did it go there.
     - Lots about testing early in the year.
     - Surveillance.
     - Mosquito control — for a while there was a focus on gadgets and myths.
     - Personal protection.
     - Vaccines.
     - The Oakville survey (study to determine prevalence in the population) — before it came out.

COMMENTS:

MEASURING COMMUNICATION OUTCOMES

It is important to measure the effects or outcomes of communications initiatives because doing so produces the information needed to continuously improve communications effectiveness over time.

Three focal points for measuring or tracking communication effects are discussed here. There are other measurement methods that could also be used, and people are encouraged to explore the subject further by reading the reference material cited in Tab 6.

MEASURING MEDIA CONTENT

As a form of research, media content analysis goes back to as early as 1910. As well, efforts were made to study the effects of propaganda in the 1930s and '40s, leading up to and including the Second World War. Methods since then have become increasingly sophisticated. The first software programs for machine readable texts were developed in the 1960s. Today, software applications exist that can help to organize and analyze large amounts of content in a broad range of media.

Traditional media research can be divided into two basic types:

a) So-called "media centric" research, which focuses on the structure of the communications industry and on media content, with minimal attention paid to the intended impact on stakeholders or audiences, and

b) Effects-centric research, which focuses on the effect on stakeholders or audiences of messages conveyed through the media.

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Some methods for content analysis concentrate on counting various elements of the content. These are "quantitative" techniques. They include, but are not limited to, counting the frequency of stories or how many times words or concepts are mentioned. They may count the connection of one concept to another (food to public health risk, for example) and "strings" or "clusters" of concepts.

Some methods are "qualitative," and focus on the degree to which content is positive or negative about a subject. It might also count the degree to which emotion is emphasized in a story treatment, such as through the use of technical editing in preparation of television news stories. Today, qualitative content analysis mainly refers to the means of interpreting the coding, or organization, of content data.

Interpreting or predicting the direct effect of media content on the decision-making and behavior of readers/viewers remains controversial. Some researchers claim to be able to measure the direct effects with high confidence. Others are skeptical about the ability to link content to decision-making and behavior, at least in the absence of the research needed to help inform such questions.

Media content analysis is an active area of practice and research. Some of the advanced methods of measuring media content — which are still being developed — include:

- **Content category analysis**
  Content category analysis is a systematic method used to turn primarily text material into content categories. This method is usually used to further inform quantitative research and it follows clear rules of coding. It enables large quantities of data to be categorized with relative ease. Content category analysis provides a reasonably rapid and broad overview of content information. As such, it can be used to support, and be corroborated by, additional and more detailed methods of text analysis.

- **Evaluative assertion analysis (EAA)**
  This approach taps into work begun in the 1950s. It attempts to map texts, and the elements referred to in the texts, by distilling them to clear summaries or "nuclear" statements. EAA was more recently advanced using Computer-Assisted Evaluative Text Analysis (CETA).

- **Frame analysis**
  Frame analysis typically looks for themes within a text that tend to emphasize or re-enforce certain attitudes and behaviours in a society. In studies of the media, frame analysis shows how aspects of the language and the structure of news items emphasize certain ways of thinking or behaviour and omits others.

- **Discourse analysis (DA)**
  Discourse Analysis (DA) examines how the social world comes together through discourse. Within DA there are various distinct traditions, including conversation analysis and socio-linguistics.

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From research and experience in risk communications, it is clear that media content does not *tell* people what to think, so much as it suggests — or directs people toward — what to think *about*. In other words, media content can frame an "agenda" of risk topics for citizen attentions for example, this week it is farmed salmon, but not necessarily provide all the substance needed to guide citizen decision-making and behaviour on managing the risks at hand — "Should I feed my children farmed salmon?".

Media content analysis that is not evaluated against goals for strategic risk communication can be useful as a means of identifying and tracking topics or emerging issues and their nature. However, without proper measurement of the effects of media content on people's thinking, it is impossible to accurately judge how media content may have influenced people's perceptions or judgments about risks and benefits on the topic at hand.

MEASURING THE EFFECTS OF MEDIA CONTENT AGAINST GOALS FOR STRATEGIC RISK COMMUNICATIONS

Media content analysis can also be useful when measuring strategic risk communications goals.

To do so, the first task for communicators is to set measurable goals for the impact of media reports or coverage. For example, communicators might set a goal to get a certain degree of prevalence or volume of distribution of messages among stakeholders or the public. For example, a goal might be to have 75 per cent of media stories in the period between month 'x' and month 'y' contain all the major themes related to frequent hand washing being an effective means of reducing the risk of spreading an infectious disease.

One measurement for this goal would be a simple count of the frequency of mention of the themes, for example, how many stories emphasized hand washing?

Again, this example measures distribution — what's "out there" in the media — and not what effects themes and stories have on people's thinking.

Another type of goal might be to link media content to changes in stakeholder behaviour, for example, hand washing to reduce the risk of contracting the flu. In this case, one would need to have a clear "before" understanding of public hand washing behaviour, and determine in advance of a media effort what measures will be used to gauge the impact ("after") of media content on hand washing practices. The measures may be the same as those used in the first instance or they may differ but still produce comparable results.

The challenge here is to be sure that the measures can demonstrate a **direct** link (cause and effect) — if possible — between media content and behaviour, rather than an association.

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Measuring the effects of media content on people's thinking involves use of appropriate research methods. Essentially, there are three methods that can be used to understand people's thinking to various degrees. As described earlier in this Tab, they are: polling, group work, and focused interviews, including mental models interviews. Each method has its advantages and disadvantages. The key is to match the method to the research task.

Given the complexity of the measurement challenge, it is likely best to work with research professionals to determine a suitable method for measuring the direct effect of media content on people's thinking.

MEASURING STRATEGIC RISK COMMUNICATIONS EFFECTIVENESS

Evaluating the effectiveness of the Strategic Risk Communications Process is a dynamic and continuing exercise that is critical at every step of the initiative. It is also done to record progress and elicit ongoing feedback from the organization and stakeholders.

Frequent and effective measurement focuses team activities on the goals to be achieved and allows for course corrections, as needed, while the process is still underway.

The team can use the following questions to guide it during process effectiveness evaluations:

- Is anything changing (regarding the perceptions and feedback from stakeholders) to suggest revisions are needed to the team's original goals and objectives?

- Are there objectives that are not being met and, if not, why not?

- Which strategies and activities have been especially effective? Why?

- Are there strategies or activities that are not succeeding. Why?

- Is there is new information that should be incorporated into the message design?

- Are there areas where additional consultation efforts are needed? If so, where? How?

- Are more resources required? What type?

- Are the results of the risk communications activities the team is sharing with the sponsor and others frequent and comprehensive enough?

PROCESS CHECKLIST

This checklist provides a basic plan for designing appropriate performance measures to assess the team's work against specific steps in the Strategic Risk Communications Process. The team can use this tool to take the 'pulse' of the risk communications initiative.

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*TEMPLATE 4.14: CHECKLIST FOR DESIGNING APPROPRIATE PERFORMANCE MEASURES
FOR EACH STEP OF THE STRATEGIC RISK COMMUNICATIONS PROCESS* ✐

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Use this checklist to work through each consecutive Step of the Strategic Risk Communications
Process. Document comments and observations, as applicable, and decide how variances might be
addressed. In each case, ensure the plans to address variances are implemented and that the desired
results are achieved.

Process step/Measure	Comments/Observations
Step 1: Define the opportunity	
☐ Is the opportunity clear, achievable and measurable?	
☐ Does it allow for stakeholders to receive information, provide feedback and participate in decisions?	
☐ Is flexibility built into the schedule?	
☐ Do you have the right people on the team?	
☐ Do you have adequate resources to achieve the opportunity?	
☐ Does the sponsor support the opportunity?	
☐ Have barriers to achieving the opportunity been identified and managed?	
☐ Do you have adequate time for the Strategic Risk Communications Process to be effective?	
Step 2: Characterize the situation	
☐ Have all key stakeholders been identified, including any that are likely to be critical of Health Canada or the risk communications process itself?	
☐ Have hypotheses about stakeholders been documented — what they know now, what they don't know that is consequential, what they need to know or want to know?	
☐ Are you prepared to add to the list of stakeholders as you learn more through the process?	
Step 3: Assess stakeholder perceptions of risks, benefits and tradeoffs	
☐ Have you effectively identified stakeholder interests and priorities?	
☐ Have you defined key gaps and alignments between the thinking of the team and those of the stakeholders?	
☐ Have you defined appropriate goals and objectives for your risk communications plan?	

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☐ Have you defined what the end result will look like?

☐ Does everyone involved or affected by the process understand its goal and the issues at stake?

☐ Will the risk communications activities allow all key stakeholders an opportunity to participate in a meaningful way?

Step 4: Assess how stakeholders perceive the options

☐ Have you classified stakeholders according to their interests and priorities?

☐ Have you prioritized stakeholders based on your informal and/or formal research?

☐ Can you anticipate what issues are likely to be raised by stakeholders? By the media?

☐ Have you tested your hypothesis about the interests and priorities of key stakeholders regarding the options?

Step 5: Develop and pre-test strategies, risk communications plans and messages

☐ Have you considered if your risk communications efforts should be linked to other existing or upcoming activities?

☐ Have you determined the most appropriate consultation techniques with which to engage stakeholders?

☐ Is there a need to accommodate special relationships within the process?

☐ Are your plans culturally sensitive and appropriate?

☐ Have you developed, pre-tested and refined communication messages?

☐ Do you need a neutral third party to help implement and evaluate your consultation efforts?

☐ Have you identified the skills and training that team members need to conduct effective consultation through dialogue?

☐ Have you identified information to support your consultation efforts?

☐ Is the information in a format and at a level that stakeholders can understand?

☐ Do you plan to collect feedback throughout the process?

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☐ How will internal communications on the process be managed?

☐ How will media relations be managed?

☐ Is there a plan to inform other interested parties about the process and its outcomes?

☐ Is your risk communications plan consistent with Health Canada's Communication Policy?

Step 6: Implement the Risk Communications Plan

☐ Have the logistics to support your plans — invitations, meeting facilities, etc. — been carefully planned?

☐ Do you have the resources you need?

☐ Do you have an approved budget?

☐ Do team members have the necessary consultation skills?

☐ Are all team participants clear on their roles and responsibilities?

Step 7: Evaluate communications effectiveness

☐ Have you been evaluating the effectiveness of the team at each Process step?

☐ Are you measuring your performance against the desired results in each step?

☐ Are all team members fulfilling their responsibilities?

☐ Are you evaluating how well the team process is working?

☐ Are you monitoring the budget?

Before the team sunsets —

☐ Did the team achieve its goals?

☐ Did the process enable meaningful participation by key stakeholders?

☐ How might the process be improved in the future?

☐ What did the team learn?

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ADDITIONAL WAYS TO MEASURE OVERALL PROCESS EFFECTIVENESS

This table provides more ways to measure the overall effectiveness of the Strategic Risk Communications Process. Items listed in the left column represent key measurement areas (what to measure), while the right column lists indicators or quantitative data that can be gathered and used to measure how effectively that topic is being addressed. The team can opt to track some or all of the performance data listed as it works through the risk issue or opportunity.

Process effectiveness measures	Performance data
• Ability to participate in a meaningful way in the decision-making process.	• Early involvement of stakeholders in the decision-making process. • Amount of stakeholder discussion/feedback on options related to the decision to be made.
• Diversity of views represented.	• Number/types of participants. • If media have been involved, number of news organizations/media covering the process. • Continuous participation.
• Opportunities for participation.	• Number, length and frequency of consultation sessions. • Size and types of groups participating. • Number of in-person, telephone and mail inquiries. • Number of communication materials distributed. • Number of feedback forms or comment cards returned. • Number of hits on the Web site.
• Information exchange.	• Availability/clarity of materials. • Agreement on what the data mean. • New or additional information provided by stakeholders.
• Identification of concerns.	• Key issues identified and discussed. • Issues/goals agreed upon and prioritized.

TOOLS FOR MEASURING CONSULTATION EFFECTIVENESS

Logistics planning is critical if the team is using a variety of risk communication techniques. It's possible these may include many kinds of group meetings such as advisory task groups, small group meetings, and town hall meetings (all medium intensity techniques) together with high intensity activities such as conducting multi-stakeholder workshops and stakeholder advisory panels.

In every case, good planning ensures that the consultation facilitates full participation and feedback. Here are some simple steps for conducting effective consultation sessions. These should be modified according to the type of meeting being held.

PREPARATION CHECKLIST

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Session planning
☐ Determine participants.
☐ Set objectives for the session.
☐ Assess needs (resources).
☐ Determine information to provide.
☐ Select activities/prepare agenda.
☐ Select team and assign tasks.

Agenda
☐ Select the venue*, date, time.
☐ Appoint chairperson.
☐ Appoint facilitator/recorder.
☐ Designate speakers.
☐ Prepare materials — presentation; A/V; handouts, displays, video, sign-in register.
☐ Obtain equipment — projector; flip charts.
☐ Prepare evaluation sheets.
☐ Prepare name tags.
☐ Invitations/posters/ads (as applicable).
☐ Prepare and distribute agenda.
☐ Check registration needs.

When booking the room, consider room size and layout (capacity), physical access, lighting, electrical outlets, security, facilities, catering options.

Logistics/Set-up
☐ Inspect and pre-test facilities/equipment.
☐ Prepare seating arrangement, head table, reception table and facilitation materials.
☐ Decide on location of refreshments.
☐ Ensure transportation is available.
☐ Obtain building superintendent contact information.
☐ Post signs.
☐ Pre-test audio and visual equipment.

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IMPLEMENTATION CHECKLIST

The event
☐ Greet participants at the door.
☐ Have people sign in.
☐ Issue name tags.
☐ Start on time.
☐ Check to see that everyone can see and hear the speakers.
☐ Provide introductions.
☐ Review meeting objectives.
☐ Conduct presentation.
☐ Conduct dialogue.
☐ Identify next steps.
☐ Obtain participant feedback.

Follow-up
☐ Hold team debriefing.
☐ Review evaluation sheets/feedback.
☐ Identify lessons learned.
☐ Assign follow-up tasks.
☐ Plan next session.

DESIGNING FEEDBACK FORMS

The forms used to solicit feedback from consultation session participants present some unique design challenges. All questions must be clearly stated. The form itself must also be simple and reasonably quick to complete. However, it is also important to give people enough space on the form to provide more extensive written feedback if they wish, so it must be designed in a way that accommodates additional comments. Participants should also be able to submit evaluations anonymously. An example of a feedback form is provided below.

Note that the facilitator could conduct a similar group evaluation while the participants are still involved in the closing plenary session and before the meeting formally adjourns. Often such an evaluation is undertaken in addition to providing people an opportunity to complete individual questionnaires.

Members of the team should make themselves available to continue the discussion after a session ends. Participants often have additional comments or questions, or would prefer to talk one-on-one rather than in front of a group.

Before participants leave the session, ensure each receives a feedback form. Explain the importance of their comments to your ongoing activities; thank them in advance for taking the time to complete the short questionnaire, and explain how the forms can be returned. A drop-box at the exit is usually the preferred method.

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GENERIC FEEDBACK FORM ⌐━━

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A feedback card similar to the one below might be provided to consultation session participants to help the risk communications team gain further insights into their thinking and preferences, and to identify ways in which future sessions might be improved.

Sample feedback card

Date:

Please take a moment to share your thoughts on this consultation session so that we can continue to learn about your interests and priorities, and to improve how future events of this kind are conducted.

1. How did you hear about the «name it» session?

2. Please tell us a little about why you decided to attend today?

3. In general, did the session meet your expectations? Why/why not?

4. Please provide us with some feedback on our presentation (if applicable) and visual display materials:

   • Was the information provided useful? Why/why not?

5. Please tell us about your experience in speaking with our consultation team:

   • Were our team members courteous?

   • How well did the information they provided address your questions?

   • Very Well ☐   Well ☐   Somewhat Well ☐   Not at all Well ☐

   Please explain your rating:

6. How might we improve future consultation sessions of this kind?

Thanks for taking the time to share your thoughts. If you have any unanswered questions; would like a team member to get in touch with you, or would like to be put on our mailing list for more information about «topic», please leave your contact details below:

• Your name:

• Organization (if applicable):

• Postal address:

• Telephone number:

• E-mail address:

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MEASURING STRATEGIC RISK COMMUNICATIONS PROCESS OUTCOMES

Measuring the outcomes, or results, of the Strategic Risk Communications Process is done to assess the effectiveness of the risk communications activities against both the project goal and the risk communications objectives. The performance measures used to evaluate outcomes ensure that the plans being implemented are effective and that the team is on track.

The stakeholders, as well as the team sponsor and others, ultimately determine the true measure of whether or not the team, and its application of the Strategic Risk Communications Process, has been successful. Feedback should be obtained from all of these before the team sunsets.

Examples of teamwork and process outcome measurements (the results of undertaking specific activities) might include those shown below. This form, for tracking progress and documenting feedback, is a good management tool for the team leader to regularly refer to, both for guiding the team in its planning and activities, and for reporting to the team sponsor.

Measuring outcomes can help the team leader determine if the appropriate plans are being implemented. Measuring process outcomes can help address such questions as whether or not the risk communications material is effective and appropriate for the stakeholders and audiences in terms of content, style and language.

Outcome evaluations are sometimes conducted by an independent and credible third party. This assumes that measurements are taken both before and after the process.

It is possible to measure change by going back and interviewing key stakeholders who participated in formal or informal research in Steps 3 and/or 4. The team can then assess:

- How do the new research results compare with previous ones?

- Have there have been any shifts in people's perception of the issue or Health Canada? Why have these occurred?

- Are there any outstanding gaps between the expectations of the key stakeholders and Health Canada's risk management decision that have not yet been addressed? What would it take to narrow these gaps?

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TEMPLATE 4.15: MEASURING PROCESS OUTCOMES

Process outcomes measures	Comments/Observations
• Is the risk communications plan proceeding on schedule?	
• Have the planned number of consultation sessions been conducted?	
• What are we hearing about the project from stakeholders? • How are we responding? • Are these methods effective? How do we know?	
• Is the risk communications plan on budget?	
Tracking inquiries: • How many have been received? • What is the frequency of inquiries? • From which groups do they originate? • What are the predominant questions? • How effectively are we responding? How do we know? • Is any additional follow-up required?	
• Monitor media coverage — quantify and profile. • How many articles about the project have appeared? • Was the tone of the articles positive, neutral or negative? • What op-ed positions have been published? • What was the tone of any editorial comment? • Did coverage accurately reflect our position and intent on the project? • Do we know if others support our position and commitment? • Were opposing perspectives represented in a balanced way?	

4.8

ADDITIONAL WAYS TO MEASURE STRATEGIC RISK COMMUNICATIONS PROCESS OUTCOMES ✏

The following table provides additional methods to use to measure the results of the Strategic Risk Communications Process. The items in the left column represent key measurement areas (what to measure), while the items in the right column list indicators or quantitative data that can be gathered and interpreted to measure how effectively the key measurement area is being addressed.

This performance data can serve as a benchmark against which the team can continue to measure the results of the risk communications Plan. Those indicators might be represented in chart form and posted in the team's conference room as a visible indicator of progress.

Process outcomes measures	Performance data
• Process/decision acceptability.	• Ratio of negative to positive comments from stakeholders.
	• Ratio of negative to positive comments in the media.
• Project efficiency.	• Percentage of decisions approved.
	• Percentage of deadlines met.
• Cost avoidance.	• Ratio of actual to anticipated costs.
	• Actual vs. anticipated process time.

HOW TO IMPLEMENT STEP 7 WHEN TIME IS TIGHT

Measuring the effectiveness of the process, as well as the outcomes, is critical to continuous learning and continuous improvement within Health Canada. So even if time is tight, this is not a Step to be skipped. A quick assessment can be conducted by the team in an hour or two at its final meeting, before the team sunsets.

One of the simplest ways to assess the effectiveness of the team's process is through use of a flip chart. The team leader draws a line down the centre of the chart and put a plus sign (+) at the top of the left hand column and a delta sign (triangle) at the top of the right hand column. He or she then asks each person what was done well and what could have been improved or could be improved on future projects. It is often beneficial to give the team members a few minutes to jot down their thoughts, before the leader goes around the table. These flip chart notes should be typed up and included in the documentation on the project.

To assess the outcomes, the team can post its objectives on flip charts — one page for each objective — and undertake a similar plus/delta exercise. In this case, however, it is helpful if team members can provide evidence. For example, if one of the objectives was to generate fair, balanced coverage of the topic by the media, team members should cite specific media coverage. It is unlikely that team members will be able to cite evidence of specific behavioural outcomes, but where they can, these should be noted. Again, this round table assessment should be included in the documentation on the project.

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To wrap up the meeting, the team leader should then ask the group to list three to five key recommendations they would offer to future teams working on similar issues. These considerations for improvement should be part of the final documentation that goes to the team sponsor (and others, as appropriate).

SUMMARY

Risks cannot be effectively managed without the support of appropriate communication. By practicing strategic risk communications effectively, risk managers can exert a powerful influence on people's risk decision-making and behaviour.

Tab 4 describes how to put a team together to address a risk issue. The team is then led through a science-based, structured Strategic Risk Communications Process to determine how best to effectively manage and communicate about the issue. The seven key Steps in the process are:

1) Define the opportunity

2) Characterize the situation

3) Assess stakeholder perceptions of risks, benefits and tradeoffs

4) Assess options and their acceptability to stakeholders

5) Develop and pre-test strategies, risk communications plans and messages

6) Implement risk communications plans

7) Evaluate risk communications effectiveness

The team implements the risk management strategy by developing and implementing appropriate and focused initiatives including a Risk Communications Plan to engage stakeholders and others through effective communication about the risk issue. Tools and examples are provided throughout this Tab to help the team work through the process.

By the end of Tab 4 the individual or team should be able to:

- Define the nature, scope and implications of the risk issue the team or individual has been asked to work on.

- Conduct a stakeholder hypothesis.

- Determine what internal and external experts and/or stakeholders should be involved or consulted at which Steps in the process.

- Define a comprehensive risk communications strategy and plan.

- Develop appropriate messages for each of the key stakeholders identified.

- Choose an effective method for pretesting messages to ensure they have the intended effect.

- Pretest messages and refine them as necessary.

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- Implement the risk communications plan.

- Measure the effectiveness of the process, the plan and the team.

It is important that, throughout the risk management process, the team use the results of its ongoing monitoring and evaluation to learn from the experience, keep a pulse on stakeholders and adjust its activities with new approaches, messages or revised strategies, as appropriate. Process effectiveness measures are used to help the team assess whether its risk management and strategic risk communications measures are working and whether the team is achieving the results it wants, based on the goals set out in the Opportunity Statement. These goals should be realistic, achievable and measurable.

The process ends with a formal evaluation by the team of the both the Strategic Risk Management Process and the outcome. It is important that the team takes the time before it is disbanded to assess the success of its efforts and to note any changes or improvements it feels should be made, so that continuous improvement opportunities can be identified and acted upon.

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Worksheets

CHAPTER CONTENTS

Worksheets for Step 1: Define the Opportunity

Worksheets for Step 2: Characterize the Situation — Stakeholder Analysis

Worksheet for Step 3: Assess Stakeholder Perceptions of the Risks, Benefits and Tradeoffs

Worksheet for Step 4: Assess How Stakeholders Perceive the Options

Worksheets for Step 5: Develop and Pre-test Strategies, Risk Communications Plans and Messages

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Worksheets for Step 7: Evaluate Risk Communications Effectiveness

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HEALTH CANADA AND PHAC RISK COMMUNICATIONS PROCESS

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Project Team Name:

Project Team Members and Roles:

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TEMPLATE 4.1: ISSUE-FOCUSED QUESTIONS TO CONSIDER WHEN ASSESSING THE OPPORTUNITY

Here are typical questions for the team to ask that will help identify and characterize the nature and scope of the risk issue. The team leader will need to adapt them to the topic at hand.

Questions	Comments/Observations
What? What is the current situation?	
• What is the risk issue? • If we have a problem or issue, how can we express it as an opportunity?	

• What do we know about this issue?
• What are the facts?
  • What don't we know?
  • What is still uncertain?	

• What are the primary drivers of this issue? For example:
  • A Department priority.
  • A new policy.
  • Emerging legislation, policy changes or litigation.
  • External interest in the issue — stakeholder, media, interest groups, public, etc.	

• What is the critical decision to be made? • Why now? • Whose decision is it? • Will this decision be seen to be significant by people inside and outside of the organization?	
So what?	

• Thinking in terms of the key stakeholders and your organization, what are the impacts of this decision in the context of:
  • Social impacts?
  • Technical impacts?
  • Economic impacts?
  • Political impacts?
  • Environmental impacts?
  • Financial impacts?
  • Legal and regulatory impacts?	

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• Who are the key players internally?	
• Who are the key players externally?	
• Is the risk issue likely to be contentious?	
• Who stands to win?	
• Who stands to lose?	
• Has there been any media attention given to topics associated with the issue?	
• How much time is available to address the issue?	
• What decisions might be made that could affect implementation of your issue in a positive way?	
• What decisions might be made that could affect the implementation of your issue in a negative way?	
• How well prepared are your leaders to follow through to achieve the positive results?	
• How effectively will your leaders respond to the negative consequences?	
• What could be done to prevent or minimize the likelihood of any negative consequences of implementing your risk management or risk mitigation solution(s)?	
• On the organization?	
• On your stakeholders?	
• What could be done to ensure the likelihood of a positive outcome?	
NOTE: The team will continue to build on this template in subsequent work as it continuously revises and updates its understanding of the risk issue.	

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TEMPLATE 4.2: ***WRITE THE OPPORTUNITY STATEMENT*** ⊂▬

Write the Opportunity Statement so that it focuses on an outcome and clearly identifies what is to be accomplished. It is important to use simple language and avoid technical terms. Check your Opportunity Statement against the following criteria: It should focus on measurable outcomes and clearly identify what is to be accomplished and by when. It should be: appropriately focused, avoid using negative language, be measurable and achievable.

How you will achieve the Opportunity becomes your broad objective as a team.

OPPORTUNITY STATEMENT

State the opportunity as a sentence: The opportunity of the «name» Team now is to «do what?
— higher purpose» «for what purpose?» We will do this «how?» «by when?»

The opportunity of the _____ Team now is to _____

_____

because _____ .

We will do this _____

by _____ .

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TEMPLATE 4.3: *QUESTIONS FOR EXPERTS* ✑

Questions related to characterizing the situation: What is the current situation? What is the critical risk management decision to be made?

1. What is the nature of the risk? Why is it a risk issue?

2. What health risk(s) are we addressing? What is occurring now compared to what should be occurring?

3. What environmental risk(s) are we addressing? What is occurring now compared to what should be occurring?

4. How and when did concerns about this issue arise?

5. Are there certain people or groups inside or outside Health Canada driving this issue? If so, who are they and what might their objectives be?

6. What studies on this issue have been done and by whom? How credible are these studies?

7. With respect to risks identified for the topic in question:

    a) What risks are we certain about and how certain are we? Why are we certain — what's our evidence?

    b) What is less certain? Are we acting in recognition or acknowledgement of these uncertainties? If so, how do we justify such action?

    c) What is still uncertain? What efforts are required and/or are underway to address these uncertainties? When will we have more information?

8. Have risk assessments been conducted? If so, have they been peer-reviewed?

    • What supporting views did peer-reviewers have?

    • What non-supporting or contrary views did reviewers have about the data involved in the risk assessment and the conclusions reached by risk assessors using the data?

9. Who is at most risk and why? Is there any action required now to reduce their risk?

10. Is action urgently required in order to protect public health and/or the environment? If so, why? If not, why not?

11. What benefits are associated with the product (drug, chemical, device etc.) and who enjoys them?

12. What "bottom line" conclusions do we want Canadians to reach when Health Canada's risk assessment and decision is made public?

    • Should Canadians take protective action or measures to minimize the risks involved?

    • If so, how will these conclusions help them to make the well-informed decisions needed to do so?

13. What other factors have been/will be addressed as part of the risk assessment? For example, the social, technological, political and economic impacts of Health Canada's decisions.

    • How are/will these factors being considered in Health Canada's decision-making about appropriate risk management and risk communications on this risk issue?

5

TEMPLATE 4.4: *PRELIMINARY STAKEHOLDER ANALYSIS*

List stakeholders related to the topic and the risk communications objective and goals.

Stakeholders are those who might be affected by, or have a significant interest in, the process of decision-making about the topic and implications of decisions reached.

The rule of thumb in risk communication: Those bearing the most risk deserve the most attention.

Think "outward" from the topic or risks, identifying people or groups who could be most directly affected by, or exposed to the risks, in the first level out, then those who could be somewhat less affected, and so on to audiences (people least likely to be directly affected).

- Who might be directly affected?

    - In what ways might they be affected? (Benefits and risks: Who might gain? What may they gain? Who might lose or be at risk? What might they lose?)

- What individuals and groups might have an interest in the topic and/or risks (impacts) associated with it, including (STEPHE):

    - **S**ocial impacts?

    - **T**echnological impacts?

    - **E**conomic impacts?

    - **P**olitical impacts?

    - **H**ealth Impacts?

    - **E**nvironmental impacts?

Record the specific individuals or groups that represent key stakeholders beside the applicable row heading. Note <u>why</u> you think they might be affected or interested, that is, what they stand to benefit from, or lose.

Category/Type	Individuals and groups: Why affected or interested?
Decision-makers (regulators)	
Transactors — Most affected and interested	Example: Consumers because _____
Active interests	Example: Groups advocating interest of consumers because _____
Audiences	

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TEMPLATE 4.5: STAKEHOLDER MAP ⬡─

Concentric circles labeled from outer to inner: **AUDIENCES**, **ACTIVE INTERESTS**, **TRANSACTORS**, **DECISION-MAKER(S) REGULATORY**, with center circle **RISK ISSUE**.

Definitions:

Decision-makers: Decision-makers can include departments, branches and/or other jurisdictions that have a primary or shared role in regulating the risk.

Transactors: Transactors are the stakeholders who are most affected by the risk issue and its management and have some sort of transaction related to the risk issue. For example, these are the people who will stop taking a drug or eating a food product due to a health warning.

Active interests: Active interests are individuals or groups who have a stake in the issue, but are not directly involved. These can include, for example, academics and media who specialize in health-related topics.

Audiences: Audiences can include general media, other government departments, and interested agencies and associations who are not actively engaged in the issue or its management.

NOTE: The map will evolve as more is learned about stakeholders through the process.

5

TEMPLATE 4.6: *PRIORITIZE STAKEHOLDERS*

Decision-makers	Transactors	Active interests
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.
5.	5.	5.
6.	6.	6.

Take the stakeholders identified in Template 4.5 and prioritize them using this table.

NOTE: You can have more than one priority one or priority two stakeholders in those boxes.

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TEMPLATE 4.7: STAKEHOLDER HYPOTHESIS

For each of the priority stakeholders identified by the team, based on the team's current understanding of their interests and priorities, fill in the following table using the guiding questions to the left.

NOTE: This table, which adapts mental models research methods, can be modified and also used to define hypotheses for Decision-makers, Transactors, Active Interests and Audiences.

Guiding questions	Priority stakeholder #1 (name)	Priority stakeholder #2 (name)	Priority stakeholder #3 (name)
What do they know now about the topic/ risk that is correct? How do we know?			
What don't they know that is consequential? How do we know?			
What might they misunderstand? How do we know?			
What might they want to know? How do we know?			
Who do they trust, and why? How do we know?			
What communication methods do they prefer? How do we know?			

5

TEMPLATE 4.8: *DEVELOP THE MESSAGE FRAME*

The risk communicators on the team likely developed a draft Message Frame or Frames in Step 2. Based on the work done in Steps 3 and 4, and the completion of the risk assessment, the team should review the Message Frames and update them.

Objective	
Theme	
Key Message	
Evidence #1	
Evidence #2	
Challenges/uncertainties	
Personal Action	

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TEMPLATE 4.9: *FROM RESEARCH, SUMMARIZE STAKEHOLDER INTERESTS*
AND PRIORITIES ✐

Questions	Key stakeholder: (name)	Team's hypothesis	Gaps	Alignments
What do people want to know more about? What questions do they want answered?				
What do people not know about the topic that they should know in order to make well-informed decisions?				
What misperceptions do they have that need to be addressed?				
What did we learn about the information sources they would trust?				
How do our stakeholders want to be kept informed?				

5

TEMPLATE 4.10: *FROM RESEARCH, SUMMARIZE STAKEHOLDER INTERESTS AND PRIORITIES RE: OPTIONS* ✎

Once you have completed your research on acceptability of options to your various stakeholders, either informal or formal, analyze your results and complete this table for each one of your key stakeholders. If you have more than one option, create a duplicate template for each of them.

Questions re: acceptability of the option(s)	Key stakeholder: (name)	Key stakeholder: (name)	Key stakeholder: (name)	Key stakeholder: (name)
What do people want to know more about? What questions do they want answered?				
What do people <u>not</u> know about the option(s) that they should know in order to make well-informed decisions?				
What misperceptions do they have that need to be addressed?				
What did we learn about the information sources they would trust?				
How do our stakeholders want to be kept informed?				
To what degree do think they support the option(s) if the issues above are addressed — high support, medium support, no support?				

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TEMPLATE 4.11: *DEFINE RISK COMMUNICATIONS STRATEGY AND OBJECTIVES* ✎

1. Describe the overall risk communications strategy in behavioural terms:

   • What is our single overall purpose for communicating?

   • What do we want people to be able to think, do and feel as a result of communications?

      • Use simple language. Avoid the use of technical terms.

   Example: Better informed self-protective behaviour by users of a medical device.

   Overall Risk Communications Strategy: "To enable device users to better assess and manage personal health risks with respect to use of medical device "x" based on new information we have to share about self-protective behaviour and the experiences of other device users."

   Overall Risk Communications Strategy: To «do what?» «with whom» «why» and «how».

2. Describe key risk communications objectives for decision-makers (internal to Health Canada and other key government agencies).

   Describe the objectives in <u>behavioural</u> terms:

   Decision-makers «name»: As a result of risk communications on this topic, decision-makers should be better able to _____ , because _____ .

   Example: Health Canada HPFB Decision-makers

   As a result of risk communications on this topic, HPFB decision-makers will be able to communicate new information with current and potential device users more effectively because the new information, presented using best risk communications principles, will be designed to help users make more informed decisions about the device.

3. Describe key risk communications objectives for transactors (identified on Template 4.4). Note, depending on the range of transactors, it might be beneficial to develop specific objectives for each one. For example, the team's objectives regarding the actions of the people who use the medical devices noted in the example above, will be quite different from those for the specialist physicians who prescribe the device.

   Again, describe the objectives in <u>behavioural</u> terms:

   Transactor 1 «name»: As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

   Example: Plastic Surgeons who specialize in reconstructive surgery

   As a result of risk communications on this topic, reconstructive surgeons will be better able to determine if this device is appropriate for their patients and they will be better prepared to have a fully informed discussion with their patients about the benefits and risks of the device, given their particular situations.

5

Transactor 2 «name»: As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

Transactor 3 «name»: As a result of risk communications on this topic, stakeholders should be better able to _____ , because _____ .

4. Describe key risk communications objectives for active interests (identified on Template 4.4). Again, depending on the range of active interests, it might be beneficial to develop specific objectives for each one.

Again, describe the objectives in <u>behavioural</u> terms:

Active Interests 1 «name»: As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

Active Interests 2 «name»: As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

Active Interests 3 «name»: As a result of risk communications on this topic, active interests should be better able to _____ , because _____ .

5. Describe the risk information objectives for audiences.

For example: As a result of our media lines and media interviews, the media will be able to write clear, balanced stories that provide basic information to device users.

Audience 1 «name»: As a result of our information on this topic, audiences should be better able to_____, because_____.

Audience 2 «name»: As a result of our information on this topic, audiences should be better able to _____ , because _____ .

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TEMPLATE 4.12: *POSSIBLE RISK COMMUNICATIONS TACTICS TO APPLY TO THIS RISK OPPORTUNITY* ✐

*NOTE: Teams may wish to complete a separate Template 11 for Transactors, Active Interests and Audiences, particularly if the issue being addressed is complex. If not, indicate which activities, objectives and challenges fit with each of these groups by using **T** for Transactors, **AI** for Active Interests and **A** for audiences.*

Risk communications tactics	Possible activities by stakeholder group: T, AI, A	Possible objectives for use by stakeholder group: T, AI, A	Implementation challenges by stakeholder group: T, AI, A
Notification about risk	•	•	•
Information about risk	•	•	•
Consciousness-raising about risk	•	•	•
Behaviour focused dialogue about risk	•	•	•
Additional Branch specific tactics (list and complete table)	•	•	•

5

COMPREHENSIVE RISK COMMUNICATIONS PLAN TEMPLATE

Project title: / Date:

Project team: / Project timeframe:

Project Opportunity Statement:

(From Template 4.2. Note, the team may have refined the opportunity as it worked through the process).

Overall risk communications strategy:

(From Template 4.11)

Key objectives by stakeholder:

(From Template 4.11)

Key plans:

(NOTE: key plans and activities are typically driven by results of the research conducted in Steps 3 and 4. The work done on Templates 4.10 and 4.11 is useful in defining plans.

Key plans to achieve our risk communications strategy include:

1.

2.

3.

4.

5.

6.

Describe each plan and the key activities that support it.

1. Plan 1

Plan:

Key activities:

2. Plan 2

Plan:

Key activities

3. Plan 3

Plan:

Key activities

4. Plan 4

Plan:

Key activities

5. Plan 5

Plan:

Key activities

5

6. Plan 6
Plan:
Key activities

Information materials required — short term:
Critical materials required between «month» and «month» include the following:

-
-
-
-
-
-

Information materials required — longer term:
Additional materials required between «month» and «month» include the following:

-
-
-
-
-
-

Target results of this plan:
Define the anticipated results, in business terms, of this plan. That is, the risk communications plan should link back to the opportunity and the overall goals for the project. The results should be aligned with the overall goals of the Program, Branch and, ultimately, the Department. Results should be measurable.

Target results of this plan include:

Primary measurements:
By the «timeframe» we will:

-
-
-

Principles that guide plans:
This Plan is driven by the Strategic Risk Communications Guiding Principles. It is aligned with «name other principles if appropriate».

5

Requirements for success:

In order to achieve our goal, the following are required:

Management:

•

•

•

•

Resources:

•

•

•

•

Programming:

•

•

•

•

Use of best know-how:

- Science-based process, methods and tools.
- Strategies and communications based on insight not guesswork.

Other requirements:

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Draft plan — «timeframe»

Month	Activities-Internal	By when	Who
Key Deliverables: • • • •			
Strategy and plan			
Team organization/ support			
Team meetings			
Critical materials development			
Internal engagement activities			
Partner engagement activities			
Stakeholder engagement activities			
Media relations activities			
Conferences/speaking engagements			

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Use this checklist to work through each consecutive Step of the Strategic Risk Communications Process. Document comments and observations, as applicable, and decide how variances might be addressed. In each case, ensure the plans to address variances are implemented and that the desired results are achieved.

Process step/Measure	Comments/Observations
Step 1: Define the opportunity ☐ Is the opportunity clear, achievable and measurable? ☐ Does it allow for stakeholders to receive information, provide feedback and participate in decisions? ☐ Is flexibility built into the schedule? ☐ Do you have the right people on the team? ☐ Do you have adequate resources to achieve the opportunity? ☐ Does the sponsor support the opportunity? ☐ Have barriers to achieving the opportunity been identified and managed? ☐ Do you have adequate time for the Strategic Risk Communications Process to be effective?	
Step 2: Characterize the situation ☐ Have all key stakeholders been identified, including any that are likely to be critical of Health Canada or the risk communications process itself? ☐ Have hypotheses about stakeholders been documented — what they know now, what they don't know that is consequential, what they need to know or want to know? ☐ Are you prepared to add to the list of stakeholders as you learn more through the process?	
Step 3: Assess stakeholder perceptions of risks, benefits and tradeoffs ☐ Have you effectively identified stakeholder interests and priorities? ☐ Have you defined key gaps and alignments between the thinking of the team and those of the stakeholders? ☐ Have you defined appropriate goals and objectives for your risk communications plan?	

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☐ Have you defined what the end result will look like?	
☐ Does everyone involved or affected by the process understand its goal and the issues at stake?	
☐ Will the risk communications activities allow all key stakeholders an opportunity to participate in a meaningful way?	
Step 4: Assess how stakeholders perceive the options	
☐ Have you classified stakeholders according to their interests and priorities?	
☐ Have you prioritized stakeholders based on your informal and/or formal research?	
☐ Can you anticipate what issues are likely to be raised by stakeholders? By the media?	
☐ Have you tested your hypothesis about the interests and priorities of key stakeholders regarding the options?	
Step 5: Develop and pre-test strategies, risk communications plans and messages	
☐ Have you considered if your risk communications efforts should be linked to other existing or upcoming activities?	
☐ Have you determined the most appropriate consultation techniques with which to engage stakeholders?	
☐ Is there a need to accommodate special relationships within the process?	
☐ Are your plans culturally sensitive and appropriate?	
☐ Have you developed, pre-tested and refined communication messages?	
☐ Do you need a neutral third party to help implement and evaluate your consultation efforts?	
☐ Have you identified the skills and training that team members need to conduct effective consultation through dialogue?	
☐ Have you identified information to support your consultation efforts?	
☐ Is the information in a format and at a level that stakeholders can understand?	
☐ Do you plan to collect feedback throughout the process?	

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☐ How will internal communications on the process be managed? ☐ How will media relations be managed? ☐ Is there a plan to inform other interested parties about the process and its outcomes? ☐ Is your risk communications plan consistent with Health Canada's Communication Policy?	
Step 6: Implement the Risk Communications Plan ☐ Have the logistics to support your plans — invitations, meeting facilities, etc. — been carefully planned? ☐ Do you have the resources you need? ☐ Do you have an approved budget? ☐ Do team members have the necessary consultation skills? ☐ Are all team participants clear on their roles and responsibilities?	
Step 7: Evaluate communications effectiveness ☐ Have you been evaluating the effectiveness of the team at each Process step? ☐ Are you measuring your performance against the desired results in each step? ☐ Are all team members fulfilling their responsibilities? ☐ Are you evaluating how well the team process is working? ☐ Are you monitoring the budget? **Before the team sunsets —** ☐ Did the team achieve its goals? ☐ Did the process enable meaningful participation by key stakeholders? ☐ How might the process be improved in the future? ☐ What did the team learn?	

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TEMPLATE 4.15: MEASURING PROCESS OUTCOMES ✐

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Process outcomes measures	Comments/Observations
• Is the risk communications plan proceeding on schedule?	
• Have the planned number of consultation sessions been conducted?	
• What are we hearing about the project from stakeholders? • How are we responding? • Are these methods effective? How do we know?	
• Is the risk communications plan on budget?	
Tracking inquiries: • How many have been received? • What is the frequency of inquiries? • From which groups do they originate? • What are the predominant questions? • How effectively are we responding? How do we know? • Is any additional follow-up required?	
• Monitor media coverage — quantify and profile. • How many articles about the project have appeared? • Was the tone of the articles positive, neutral or negative? • What op-ed positions have been published? • What was the tone of any editorial comment? • Did coverage accurately reflect our position and intent on the project? • Do we know if others support our position and commitment? • Were opposing perspectives represented in a balanced way?	

Resources   6

Key Definitions

6.0

The definitions here reflect reasonably common interpretations of terms used in the broad fields of risk management and risk communications. In some cases, definitions that are specific to documents or to the use of terms within the Government of Canada or Health Canada are included. A more comprehensive set of definitions can be found in the Framework.

Active monitoring: The activity of monitoring management practices and controls to assess their effectiveness with a view to taking early and effective action where risks, vulnerabilities or control deficiencies or failures emerge, and adjusting management practices to prevent recurrence.

Communication: The act of communicating; transmission. The exchange of thoughts, messages, or information, as in speech, signals, writing, or behaviour. Interpersonal rapport. Also, the art and technique of using words effectively to impart information or ideas. The field of study concerned with the transmission of information by various means, such as print or broadcasting. Something communicated; a message.

Consequence: An element of "risk" and the measure of the outcome of a risk event. Outcome is defined in terms of the impact on defined objectives and can be either negative or positive in nature.

Corporate Risk Profile (CRP): A tool for identifying management challenges in each Strategic Risk Area. The CRP assesses the levels of management attention required for each risk and proposed strategies.

Expert model: An expert model is a summary of relevant knowledge about a topic, typically illustrated in the form of an influence diagram. As a formal integration of knowledge, the expert model summarizes the knowledge needed to make judgments about the topic and issues related to it. It is prepared in a way that will facilitate risk analysis, risk management, and risk communications. Note that expertise is often distributed throughout the stakeholder community.

Framing: Framing is the use of language to manage the meaning of messages. Framing is what helps people make sense of a subject and judge its relevance to them. Like a photographer, a communicator puts forth messages in a "frame" that represent one interpretation of a subject over other possible interpretations. How a risk issue is framed from the outset is critical because the initial framing sets up all subsequent interpretations of it.

Hazard: A source of potential harm, or a situation with a potential for causing harm, in terms of human injury, damage to health, property, the environment, and other things of value, or some combination of these.

Integrated Risk Management: A continuous, proactive, and systematic process used to understand, manage, and communicate risk from an organization-wide perspective. It is about making strategic decisions that contribute to the achievement of an organization's overall corporate objectives. IRM incorporates risk management in the organization's structure, culture, and key processes, including business planning, decision-making, and performance reporting.

Likelihood: The probability of the potential risk event taking place, measured as a) high (very likely, or already happening), b) medium (possible) or c) low (unlikely).

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Mental models: Mental models: Decades of research have shown that tacit webs of beliefs — beliefs that are sometimes below the surface of consciousness — guide people's decision-making. These are called mental models. People draw on their mental models to make inferences about issues or opportunities that come to their attention through various forms of communication. Mental models guide people's learning, judgments, and interpretations of information on topics brought to their attention through communication.

Natural sciences and engineering: Disciplines concerned with understanding, exploring, developing, or utilizing the natural world. Included are life sciences, mathematics, physical sciences, and engineering.

Potential risk event: Refers to the impact of an event that has the potential to influence the achievement of an objective. May also be called a risk scenario. (See Risk Scenario)

Residual risk: The risk remaining after the application of risk control measure(s).

Risk: The measure of the degree of hazard, defined as a combination of the probability and severity of adverse effects on organizational performance, health, property, the environment, or other things of value.

Risk analysis: The systematic estimation of risk.

Risk assessment: The overall process of risk analysis and risk evaluation.

Risk control option: An action intended to reduce the probability of an unwanted event occurring and/or the severity (consequences) of the event if it does.

Risk control strategy: A program that can include the application of one or more risk control options.

Risk estimation: The activity of measuring (estimating) the likelihood (probability) and consequences of a risk scenario. Estimates must include a consideration of their "uncertainty" and of the assumptions implicit in the analyses.

Risk evaluation: The process by which risks are examined in terms of cost and benefits, and evaluated in terms of their acceptability, considering the needs, issues, and concerns of stakeholders.

Risk judgments: Risk judgments are made when people combine their risk perceptions and their own set of values or objectives when evaluating the acceptability of an event or deciding between courses of action.

Risk management: The systematic application of management policies, procedures and practices to the tasks of analyzing, evaluating, controlling and communicating risks.

Risk mitigation strategy: Planned actions that will be undertaken to reduce, limit or eliminate the undesirable effects of a potential risk event. May also refer to the application of one or more risk control options designed to reduce the likelihood or probability of a potential risk event happening.

Risk perception: People's understanding of the risks and benefits associated with an event or alternative courses of action. This may include their assessment of the limits of their understanding of the risks and benefits.

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Risk scenario: A defined sequence of events with an associated likelihood of occurring and a range of associated consequences. Consequences could be negative or positive in nature.

Risk tolerance: The level of risks that the organization or its stakeholders will accept. The process of determining risk tolerances identifies areas where minimal levels of risk are permissible, as well as those where higher risk levels are tolerable. Risk tolerance varies by situation and stakeholders.

Social sciences and humanities: All disciplines involved in studying human actions and conditions and the social, economic, and institutional mechanisms affecting humans. Included are disciplines such as economics, law, library sciences, philosophy, political sciences, psychology, social work, history, geography, sociology, urban and regional studies, languages, anthropology, and demography.

Stakeholder: Any individual, group, or organization that may affect, be affected by, or perceive itself to be affected by a potential risk. Decision makers are also stakeholders.

Strategic Risk Communications: As an integral part of an integrated risk management process, strategic risk communication is a purposeful process of skilful interaction supported by appropriate information to enable well-informed decision-making and action on risks.

Strategic Risk Areas: Strategic Risk Areas represent the elements of the Department's management framework within which are identified horizontal risks (e.g. financial, legal, IM/IT, etc.) that may influence the achievement of departmental objectives.

6.1   Key Risk Communications References

The works referred to here are a general collection of key readings in the broad field of risk communications. They cover some specific risk communications topics, as well as more general risk communications frameworks adopted by other agencies. Comprehensive bibliographies on risk communications can be found in various places including those referenced in the Internet resources section below.

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