National Framework for Health Emergency Management
Guideline for Program Development

Prepared for the
Conference of F/P/T Ministers of Health

by the F/P/T Network on Emergency Preparedness and Response

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National Framework for Health Emergency Management

1 Executive Summary

1.1 Introduction and Background

This National Framework for Health Emergency Management: A Guideline for Program Development (the Framework) is about the health and safety of the people of Canada. Its goal is to set principles and elements of a comprehensive integrated framework that will provide a context for leadership and coordination through Federal/Provincial/Territorial emergency management systems in the health and social services sectors.

The management of health and emergency social services at the Federal level is the mandate of the Minister of Health. In 2001, the Federal, Provincial and Territorial Ministers of Health recognized the necessity for a comprehensive, integrated, coordinated strategic plan for emergency management in the health and social services sectors across the country. The Deputy Ministers of Health, through the Advisory Committee on Population Health and Health Security (ACPHHS) and the Federal/Provincial/Territorial Network for Emergency Preparedness and Response, tasked the Council of Health Emergency Management Directors (CHEMD) to develop a pan-Canadian framework for health emergency management. It was understood this process include input from the Council of Emergency Social Services Directors (CESSD), the Council of Chief Medical Officers of Health (CCMOH), and other government and community stakeholders. As a result of these discussions this Framework was developed.

All partners have a mandate and key role in providing for the health and well being of individuals and communities. For partners to be delivering coordinated mitigation, preparation, response and recovery activities, they must effectively and efficiently use all resources available based on a similar set of principles. Roles, responsibilities and resources, (human, physical and financial) must be managed across the health and emergency social services sectors. To achieve this the health and emergency social services system must be capable of providing a coordinated response during disasters and deliver effective mitigation and preparedness programs before an extreme event. The health and emergency social services sectors have a vested interest and a key role in this process since safer communities are healthier and the health of the population is an important contributing factor to individual and community safety.

It is important to remember that this emergency management system is for preparing the health and emergency social services sectors for the consequences of emergencies. It is not intended to replace the regular management of health or social service delivery. Furthermore, this Framework seeks to be integrated into the overall community management of emergencies, which is generally a municipal responsibility.

1.2 Understanding Emergency Management

This Framework is based on an understanding that it is the relationship between extreme events and the resources of a community that determines what is manageable using normal coping systems, what requires special responses and what situations stand to overwhelm a community in times of disaster. Managing this interaction, to keep incidents below the disaster threshold, is the objective of a comprehensive emergency management program. This involves managing the physical processes, socioeconomic factors and organizational issues that drive vulnerability and coping-capacity. This is the process of hazard and risk management.

1.3 Primary Outcome of an Emergency Management Program

The F/P/T Network for Emergency Preparedness and Response has adopted the following primary outcome anticipated from the successful development and implementation of the Framework:

Canadians live in safer communities where emergencies and disasters are comprehensively managed so there are fewer deaths, physical injuries, illness and psychosocial trauma.
1.4 Comprehensive Emergency Management

The Framework is based on the concept that there are four “complementary and expandable” facets of the health and emergency social services sectors:

- Physical Health (individual perspective)
- Public Health (population perspective)
- Emergency Social Services (societal perspective)
- Maintenance of Activities (organizational)

Each facet is involved in every phase of comprehensive emergency management:

- mitigation / prevention
- preparedness
- response
- recovery

It is important that there be an integrated all-hazards approach that considers the inclusion of all facets in each of these phases. While circumstances may place the emphasis on one facet in one phase (e.g. public health response following the SARS outbreak) it is important a balance between the facets and the phases is maintained. Communications is a critical component that links and supports all facets across all emergency management phases.

1.5 Emergency Management Principles and Elements

The Framework is based on the following principles:

- Comprehensive Emergency Management
- Strategic Programs Approach
- All Hazards / Common Consequences
- Sustainability
- Resiliency
- Pan-Canadian, trans-jurisdictional

It also builds on a set of common elements that will help guide policy decisions and program development:

- Risk Management
- Continuity of Health Service
- Evaluation and Quality Improvement
- Cooperation and Coordination
- Professionalism and Expertise
- Communications
- Management Systems
- Volunteer Participation
- Resource Management

Each of the principles and elements is deemed to have significant value. There is no priority to be inferred from their order. Furthermore, these principles and elements apply to all facets of health and in all phases of comprehensive emergency management. Together they ensure a consistency in philosophy that will underlie the long-term implementation of the Framework.
1.6 Components

The Framework itself consists of nine main components that occur before, during and after emergencies.

Before an Emergency
- Strategic Approach
- Hazard, Risk and Vulnerability Assessment
- Mitigation
- Preparedness

During and After an Emergency
- Initial Response
- Incident Management Systems
- Consequence Management
- Recovery

Throughout the Process
- Quality Improvement

Canada’s health and emergency social services sectors need a consistent and sustained organizational structure to properly mitigate hazards, prepare for emergencies, respond quickly and help communities recover. This Framework sets out the broad steps of a process, guided by the principles and elements, which will ensure the health and emergency social services sectors have the structure and capacity needed to meet future emergency management challenges.

This Framework will require a prolonged commitment from all facets of the health and emergency social services sectors in all jurisdictions. Many of the solutions that will be generated will take time to fully develop and, despite the constant and uncertain threat of disasters, the health and emergency social services sectors must invest this time and other necessary resources to see these solutions implemented.
Acknowledgements

The Council of Health Emergency Management Directors (CHEMD) developed the pan-Canadian Framework for Health Emergency Management: A Guideline for Program Development as part of their commitment to the F/P/T Network on Emergency Preparedness and Response.

The founding provincial and territorial representative members of the CHEMD during this time included:

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<td>British Columbia</td>
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CHEMD gives special thanks to Larry Gwiazda for his strategic leadership during this period and his efforts to bring together the development project. CHEMD thanks Manitoba Health for its support and the input of the Disaster Management Services staff, in particular John Lindsay and John Lavery for their research and analysis. CHEMD also thanks Health Canada’s Center for Emergency Preparedness and Response for the financial and logistical support that allowed for Michael Olczyk to assist with the development of this project.

Finally, we would like to acknowledge the valued input and assistance from the Council of Emergency Social Services Directors, the Council of Chief Medical Officers of Health, and the many other partner organizations and colleagues from across Canada’s health and emergency social services sectors.

4 Introduction

The management of health and emergency social services at the Federal level is the mandate of the Minister of Health. In 2001, the Federal, Provincial and Territorial Ministers of Health recognized the necessity for a comprehensive, integrated, coordinated strategic plan for emergency management in the health and social services sectors across the country. The Deputy Ministers of Health, through the Advisory Council on Population Health and Health Security (ACPHHS) and the Federal/Provincial/Territorial Network for Emergency Preparedness and Response, tasked the Council of Health Emergency Management Directors (CHEMD) to develop a pan-Canadian framework for health emergency management. It was understood this process include input from the Council of Emergency Social Services Directors (CESSD), the Council of Chief Medical Officers of Health (CCMOH), and other government and community stakeholders. As a result of these discussions this National Framework for Health Emergency Management: A Guideline for Program Development (the Framework) was developed.
All partners have a mandate and key role in providing for the health and well being of individuals and communities. For all partners to be delivering coordinated mitigation, preparation, response and recovery activities, they must effectively and efficiently use all resources available based on a similar set of principles. Roles, responsibilities and trained resources, (human, physical and financial) must be managed across the health and emergency social services sectors. To achieve this health and emergency social services must be capable of providing a coordinated response during disasters and deliver effective mitigation and preparedness programs before an impact. The health and emergency social services sectors have a vested interest and a key role in this process since safer communities are healthier and the health of the population is an important contributing factor to individual and community safety.

It is important to remember that this emergency management system is for preparing the health and emergency social services sectors for the consequences of emergencies. It is not intended to replace the regular management of health or social service delivery. Furthermore, this Framework seeks to be integrated into the overall community management of emergencies, which is generally a municipal responsibility.

The F/P/T Network for Emergency Preparedness and Response adopted six emergency management expected outcomes that describe the long-term desired state of emergency management in the health and emergency social services sectors. These outcomes will be achieved by implementing a comprehensive, integrated program based on the principles of emergency management. A successful emergency management program will incorporate the four main phases of mitigation, preparedness, response and recovery. These will be achieved as part of an overall strategic plan for emergency management and will be included in an ongoing quality improvement cycle.

This guideline provides information about the emergency management principles and the elements that are the basis of the emergency management model for the health and emergency social services sectors. It provides an overview of the elements that will be useful when developing a strategic plan for an emergency management program in the health and emergency social services sectors. Each element begins with proposed objectives, focused internally and externally, that may be adopted to help guide the program.

This guideline is directed at all facets of the health and emergency social services sectors. Even when recent events have focused attention on the response phase of a public health emergency, it is important to recognize that there are mitigation, preparedness, response, and recovery issues relating to the physical, population, social and organizational perspectives.

This Framework is also pan-Canadian and trans-jurisdictional in scope. Only the scale of the activities needs to change for the principles, outcomes and elements to be applied effectively to different jurisdictional levels. In this way the ideas are useful to an individual facility, a community-based program, a private sector component such as a pharmacy, a local jurisdiction such as a municipality or a regional health organization, a Province or Territory, a Federal department or the country as a whole. A coordinated program that includes all of these components will be necessary to create safer communities.

4.1 Recent Recommendations Supporting a Framework

In October 2001, the F/P/T Deputy Ministers of Health established the Special Task Force on Emergency Preparedness and Response in response to the terrorist attacks of September 11th, 2001. Subsequently, the Task Force looked at many issues relating to terrorism, including bio-terrorism after the Anthrax attacks and related white-powder scares, and at emergency management in general. The Task Force recommended the creation of the F/P/T Network for Emergency Preparedness and Response and also presented 31 other recommendations. This Framework and the implementation of the comprehensive emergency management program it proposes will address many of these recommendations directly and indirectly. The Task Force’s first recommendations were:

1 Leadership and Coordination

1.1 Comprehensive frameworks be put in place to provide for consistent and inter-operational approaches at a pan-Canadian level while respecting each jurisdiction's differences and priorities; and that those frameworks be designed to ensure a rapid, effective and efficient capacity based on best practices and the best available information and expertise.
1.2 Standardised frameworks, protocols and guidelines be adopted, and adapted as necessary, for each region and government.

1.3 Existing processes be supported and enhanced, to ensure ongoing networking, knowledge and awareness, as well as appropriate resourcing and accountability.

These three recommendations, under the theme of leadership and coordination, provide the primary mandate for the development of this Framework and program. The recommendations in Chapter 5 of the Learning from SARS report (the 2003 Naylor report) reflect and support the direction set by the Taskforce.

5 Four Facets

The Framework is based on the concept that there are four “complementary and expandable” facets of the health and emergency social services sectors:

- Physical Health (individual perspective)
- Public Health (population perspective)
- Emergency Social Services (societal perspective)
- Maintenance of Activities (organizational)

Physical Health represents the individual perspective on health, focusing on clinical care and other services aimed at the physical wellbeing of each citizen. It includes primary, secondary and tertiary care.

Public Health has a population perspective looking at the issues that affect the health of the community on a collective scale. This includes the identification and control of disease outbreaks and health promotion to the population.

Emergency Social Services takes a societal perspective and is directed at both the mental and social wellbeing of the community members. Emergency social services addresses basic human needs distinct from medical or psychological issues. These include emergency food, clothing, lodging, registration and inquiry services to reunite evacuated families, reception center services and personal services.

The Maintenance of Activities is concerned with the provision of all these before, during and after an impact, including the continuity of care to existing clients and to meet the emergency related needs of the community. Communications is included in all of these and forms a critical connection between them.

While the consequences of any particular impact may be more severe for one part of the health and emergency social services sectors than for the others, there is always constant interaction between them and any disruption to one will have repercussions for the others. The SARS outbreak in the spring of 2003 in Toronto, for example, shows how one incident can cross all parts of the sectors. SARS was primarily a Public Health impact that had significant consequences for the physical health of the individuals who were hospitalized and curtailed or altered the provision of many other health services. There was also a widespread affect on the mental and social health of the community including the involvement of emergency social services to support isolated families.

Health and emergency social services are only two aspects of a community that are affected in emergencies. Other social, physical and economic consequences fall under the jurisdiction of other sectors. Therefore, emergency management programs must be integrated in the wider community context. Furthermore, just as the health and emergency social services sectors as a whole are sometimes isolated from municipal or other emergency planning, there can also be internal gaps that need to be addressed. The Framework will help to resolve any inappropriate separation between the four parts within the sectors and between health, emergency social services and the other sectors in the community.
5.1 Scope

Geographically the health and emergency social services sectors exist in all areas and at all scales. The Framework is intended to be adjustable in scope to suit the needs of all jurisdictions and at all levels.

The health and emergency social services sectors are present at a local level, in the direct provision of community and facility based services. The Framework can serve as a guide for developing emergency measures for the smallest of these units. For example, a facility that wishes to improve its level of preparedness can set a simple strategic plan in place to assess the local hazards, vulnerabilities and risks prior to developing its own emergency plan and training program. Some risks may be preventable, perhaps through the normal maintenance or capital improvement program, while others may require contingency plans that are very specific to the local conditions. When an emergency occurs the facility may be involved in the initial response and, depending on its size, may decide to adopt a basic Incident Management System (IMS) to organize its staff and resources to address the consequences. Following the emergency the facility can play a key role in the long-term physical and psychosocial recovery of its clients.

These local services are coordinated at a municipal or regional level within the Provinces and Territories. At this jurisdictional level the importance of consistent and sustained organizational systems is increased. Regions within a Province or Territory, such as a Regional Health Authority or a municipality, must take a lead in developing and implementing their own comprehensive emergency management program that are based on local risks and resources. These municipal or regional plans link the facility and program based activities and connects them to the larger Provincial or Territorial system.

Each Province and Territory has its own wider health and emergency social services sector involvement that can include crossing its borders to form sub-regions within the overall national health and emergency social services sectors. Some issues can be best resolved at this jurisdictional level and, just as regions maximize the value of connected facility and program plans, Provinces and Territories make planning more effective by promoting cooperation and best practices.

Recent events have highlighted that all Canadian jurisdictions are closely linked by the speed at which people and information, and with them disease and concern, can travel from coast to coast. This Framework needs to be implemented at the most local level to be truly effective but it also needs consistency and economies of scale to be most efficient. Applying the principles, elements and components of the Framework across Canada, both within the Health Canada’s activities and through other national agencies and programs, will provide the support the local levels need to see the greatest success.

All four facets of the health and emergency social services sectors have issues from each of the four phases that can be considered at a local, regional, provincial, and national scale. In this way the Framework is designed to be pan-Canadian and trans-jurisdictional. In order to simplify the wording within the following sections the term “jurisdictions” is used to mean all these levels: local, regional, Provincial/Territorial and national.

6 Understanding Disasters, Hazards and Emergency Management

The public is gaining a more common understanding of the causes and consequences of disasters through the media, documentaries and, sadly, firsthand experience. This general perception of hazards and disasters is affected by the dramatic way these events are often portrayed.

Some occupations, such as police and fire services or the health and emergency social services sectors, deal with ‘life and death’ crises everyday and are familiar with the concepts of hazard and risk. In some settings terms such as mitigation take on technical meanings that may not be the same between fields.

At the same time hazard and disaster researchers are continuing to examine these same concepts in more specific terms. To better understand the physical, economic and social aspects of hazards and disasters researchers attempt to define their terminology, though the literature is far from consistent.

All three of these perspectives, the public, the practitioner and the researcher, provide a valid view of hazards and disasters. The important issue is to recognize which perspective is in use and to avoid confusion between conflicting definitions or ideas. This section outlines how these core concepts are used within the Framework.
6.1 Disasters

There is a range of impacts a community can experience that increase in severity along a continuous scale. At the small end of this continuum are the “everyday” accidents that effect one or two people. As the seriousness increases these mishaps become emergencies that involve more people, as victims and as responders. When an extreme event, like a tornado, occurs it can cause severe damage within the community, including property destruction and personal injuries. This type of wide-scale impact is toward the disaster end of the continuum. Finding the threshold between emergencies and disasters depends on the ability of the community to deal with the event more than the cause of the event itself.

Every community has some coping resources to deal with accidents and emergencies. Coping resources are the individual and community skills, materials, equipment or services that can be used to meet the demands created by an incident. The health and emergency social services sectors form an important part of this. Support can extend from the self-administered treatments available at a pharmacy, walk-in clinic, or telephone help-line, through the Emergency Medical Services, hospital emergency departments, or evacuee reception centers, to the special care provided at burn wards or the provision of emergency housing.

Other coping resources can include municipal departments, emergency services, private companies, volunteers and other formal or informal sources. However, these resources may be very limited and not capable of meeting all the demands created by a larger scale hazard impact. Disasters occur when an impact exceeds the community’s normal coping resources (See Figure 1). Disasters require communities to take extraordinary measures to apply resources effectively and to gain access to additional resources to prevent or limit further damage.

This way of understanding disasters can also mean that the same event, for instance the same depth of snowfall, may be a disaster for one community but not for another, better prepared community. It also helps explain how multiple events can combine to create a larger disaster and how factors that affect coping resources, such as holiday periods, can cause a more routine emergency to become a disaster.

![Figure 1 Understanding Disaster](image)

6.2 Hazards

It is important to understand hazards before developing strategies to deal with them. When a disaster is seen as the actual occurrence where the negative impacts of an extreme event exceed a community’s ability to cope it becomes easier to understand hazards as the potential for this interaction. This understanding must go beyond thinking of hazards just in terms of the extreme event or agent. Hazards must be considered in terms of the threat and the threatened community. For instance, a tornado, by itself, is simply an extreme weather phenomenon whereas a prairie town that is built in an area that experiences tornadoes has a tornado hazard.
This leads to thinking about hazards as a type of “interaction”. To identify what a hazard is from this perspective, first consider all the extreme events in the environment that could impact on the community. Then consider how vulnerable the population is to the effects of these various impacts. Finally, consider what resources the community can apply to cope with these impacts. This recognizes that hazards are the potential for a negative interaction between extreme events (of a natural or technological origin) and the vulnerable parts of the population. Add to this the community’s coping resources and the hazards are the remaining potential interactions.

Different hazards have different characteristics that help explain how the interaction with the community is likely to happen. Understanding these differences can improve planning and better target mitigation activities. It can lead to more efficient planning as well when solutions to one problem can be applied to multiple hazards. For example, a rapid notification system to alert staff can be used for all sudden impact events such as a transportation accident, hazardous materials incident, or a tornado.

![Diagram: Understanding Hazards]

It is also helpful to use hazard characteristics to identify which hazards, like flooding, will probably yield long duration impacts, as this will affect many logistical issues, or which ones might have a seasonal occurrence pattern that can assist in mitigation planning.

### 6.3 Vulnerability

Equally important in understanding the characteristics of hazards is identifying the characteristics of the vulnerable population. Vulnerability describes the relationship between common social and economic characteristics of the population, individually and collectively, and their ability to cope with hazards they face. The factors that increase an individual’s vulnerability to harm in a disaster are the same as the factors that determine the general health of an individual. Each of these can contribute to how a disaster affects an individual and therefore lessening the impacts of a disaster is dependent on improving these factors (just as improving these factors will improve an individual’s health).

“Health” has been defined, in part, as the ability to cope with life’s challenges. Clearly a disaster creates rare and extreme challenges but an individual’s ability to cope is still the basic factor in determining how the disaster will affect them and the “determinants of health” are the basic indicators of that coping ability.

The determinants of health also relate to the primary concerns of emergency social services. Income and social status, social support networks, social environments, and personal health practices and coping-skills have particular relevance. The other determinants will also contribute to the social, economic and physical wellbeing of the population.
Since deaths, injuries and economic losses are the primary negative impacts of a disaster it is obvious that the health and emergency social services sectors have a direct role in emergency management. Unfortunately emergency management has tended to emphasize the immediate response needs and has neglected the pre-event mitigation and post-event recovery needs of communities. The health and emergency social services sectors have traditionally shared this limited view of emergency management and have directed their energy towards reactive measures, such as mass casualty triage plans and evacuee reception centers.

The population health approach currently being promoted by Health Canada and Manitoba Health looks at the following factors as determinants of health:

- Income and Social Status
- Social Support Networks
- Social Environments
- Physical Environments
- Healthy Child Development
- Education Employment and Working Conditions
- Personal Health Practices and Coping Skills
- Biology and Genetic Endowment
- Health Services
- Culture
- Gender

While such response actions are very important, and deserve appropriate consideration, emergency management is now broadening its view of how to best deal with disasters. This is strongly signaled by the field’s growing interest in the concepts of sustainable mitigation and proactive prevention. The emergency management profession is recognizing that the only way to make a significant change to a community’s catastrophic risk profile is to influence the social, economic and physical factors that determine the community’s exposure to those risks and its ability to cope with actual impacts.

In parallel to this shift in emergency management, the health and emergency social services sectors are recognizing that improving the social, economic and physical wellbeing of a community cannot be achieved through the provision of reactive services alone. The sectors are looking to models of population health and health promotion to address the determinants of health just as emergency management has evolved from treating the harmful agent to strengthening the community’s resilience to harm.

Communities can become safer and healthier. The health and emergency social services sectors must become active partners in the emergency management of communities while emergency management becomes an integral part of a broader program to protect, preserve and promote the wellbeing of the whole community.

6.4 Emergency Management

The term “emergency management” is now becoming widely recognized as most commonly associated with the field of dealing with extreme harmful events. Some health organizations refer to this as “disaster management” in order to differentiate this work from responsibilities for urgent or emergent health care that is often referred to as “emergency medicine”. Other internationally recognized terms include “emergency preparedness”, “emergency measures” and, in some jurisdictions, “civil defense”.

Manitoba Health 1997
Health Canada 2000
Emergency management aims to shift the threshold at which an impact becomes a disaster. This is achieved through two main methods: decreasing the amount of damage an impact can cause and; increasing the capability of the community’s coping resources to deal with any damage that does occur. Emergency management ensures a coordinated response to make the best use of the community’s coping resources. The long-term recovery of the community is also a basic part of emergency management.

Decreasing, or mitigating, the impact of an event on a community involves actions directed at the threat and actions directed at the community’s vulnerability. Considering the common flood hazard as an example, dikes that prevent floodwaters from spreading are directed at the threat while land-use plans that preclude building on the floodplain are directed at the vulnerable population. These examples also highlight the difference between physical or structural mitigation activities (such as dikes) and social or non-structural activities (such as land-use plans).

Mitigation activities are able to shift the disaster threshold permanently so that a particular scale of event no longer presents the risk of causing a disaster. Storm sewer systems, retention ponds, and riverbank parks are all further examples of flood mitigation activities that prevent heavy rainfalls from flooding homes. These measures are designed to compensate for an amount of rain that is determined to be large enough to cause flooding and common enough to justify the cost of the mitigation. This is the essence of risk management.

The disaster threshold is also influenced by the community’s ability to cope. Communities develop resources that are appropriate to their size. Emergency response services, such as fire departments, will vary from small towns to major cities. Volunteer groups with limited equipment will be sufficient in lower risk communities whereas fires in high-rise buildings require advanced equipment, full-time professional staff and specialty units to deal with such situations. The health and emergency social services sectors have a similar range of services based on the community’s needs. Recognizing how this level of coping ability relates to a community’s disaster threshold is important when making decisions regarding resource allocation.
A comprehensive preparedness program increases the community’s capacity to cope with the larger hazard impacts. Again the flood example can demonstrate this concept: sandbagging before the water rises and evacuating vulnerable populations (e.g. the elderly) allows the remaining community to cope better with the flood.

The flooding may still generate emergency response actions, perhaps fixing a ruptured dike or rescuing stranded livestock, and will certainly require clean up and recovery. The important point is that the damage could be much worse if mitigation and preparedness actions are not taken. The whole idea of emergency management makes more sense when it is viewed as the management of the community’s vulnerability, resources and environment as a means of making the community safer.

### 7 Emergency Management Outcomes

The Federal/Provincial/Territorial Network for Emergency Preparedness and Response (the F/P/T Network) has defined a set of outcomes that a successful emergency management program will aim to achieve. They describe what the F/P/T Network expects to see several years in the future, once the Framework and its component programs have been implemented across the country. These specific outcomes contribute to the health and emergency social services sectors’ overall mission of helping the people of Canada maintain and improve their health and to protect the well being of Canadians during times of emergency.

**Canadians live in safer communities where emergencies and disasters are comprehensively managed so there are fewer deaths, physical injuries, illness, economic losses and psychosocial trauma.**

- This is the overall aim of an emergency management program. While large, disaster-scale impacts will continue to kill and injure people it is important to see that these effects can be reduced and that communities can be ready to respond and recover quickly and effectively.

**Communities’ and individuals’ risks and disaster vulnerability are minimized.**

- This outcome relates to the first phase of comprehensive emergency management: mitigation. The factors that place people at risk and limit their ability to cope can be changed to make the population less vulnerable to disasters, even preventing them or reducing their likelihood.

**Communities and individuals are more resistant to the impacts of disaster.**

- Preparing and improving coping resources, at both individual and community levels, ensures that the harmful effects of a disaster-scale impact are limited.
Communities and individuals receive appropriate health care and emergency social services in times of disaster.

- A disaster impact will drastically change the needs of a community and the ability of the health and emergency social services sectors to meet those needs. It is important that the health care services are able to respond to the community’s needs during and immediately after a disaster.

Communities and individuals receive health care and emergency social services that address their changing needs resulting from a disaster.

- Disasters can change the future of individuals and whole communities. The direct effects of injuries sustained in a disaster can require long-term rehabilitation while the indirect impacts on the social, economic and physical environment can affect the population’s health overall. The health and emergency social services sectors must recognize and adapt to these changing needs.

The health and emergency social services systems are capable of responding to disasters in other Canadian jurisdictions.

- Disasters, by definition, are events that exceed the ability of the local community to cope with the harmful effects and require extraordinary measures. During national emergencies these measures may include health care or emergency social services being delivered across normal boundaries. Even local emergencies can create consequences in the health and emergency social services sectors that impact other jurisdictions across the country. This outcome reflects the commitment of the F/P/T Network for Emergency Preparedness and Response to a pan-Canadian, trans-jurisdictional approach to emergency management.

These outcomes are phrased at an individual and community scale with the understanding that this encompasses all the facets of health as applied to individuals or to communities of any size or composition.

8 Emergency Management Principles

To achieve these outcomes, the F/P/T Network for Emergency Preparedness and Response is committed to comprehensive emergency management, enabling the health and emergency social services sectors to mitigate, prepare for, respond to, and recover from mass emergencies and disasters. The F/P/T Network is proposing all Provinces and Territories and all components of the health and emergency social services sectors adopt an all-hazards, all agencies program that promotes hazard reduction, emergency readiness, response co-ordination and community recovery.
The F/P/T Network adopted the following principles to guide efforts in emergency management:

1. **Comprehensive Emergency Management**: Address hazards and disasters through a constant balancing of the mitigation, preparedness, response, and recovery components.

2. **Strategic Programs**: Provide an objective and logical process to achieving an ongoing comprehensive emergency management system that is part of the organization’s integral and normal business practices.

3. **All Hazards / Common Consequences**: Examine the full range of threats and the implications of their common consequences to Canadians and to the health and emergency social services sectors.

4. **Sustainability**: Implement programs, policies and plans that can be maintained without transferring risk to other communities nor simply postponing risk to future generations.

5. **Resiliency**: Develop resiliency within the health and emergency social services sectors and the population to allow communities to resist the harm of an impact and return quickly to normal.

6. **Pan-Canadian, Trans-jurisdictional systems**: Ensure that programs, policies and plans link easily between local, regional, provincial and federal levels within the health and emergency social services sectors and with other sectors and partners.

The practice of emergency management is built on these fundamental principles. They are interrelated to each other and best achieved when integrated into an organization’s normal systems or business. They underlie the development of programs, policies and decisions and provide a common frame of reference. Therefore these principles can serve as ‘tests’ when considering broad policy decisions at all levels. Ensuring every decision supports the realization of these principles will result in a cohesive and commonly directed set of programs and policies.

### 9 Key Program Elements

In addition to the emergency management principles, the F/P/T Network for Emergency Preparedness and Response has also identified a number of key elements that support the implementation of the Framework and its associated programs. They apply to all the components of the Framework.

- **Risk Management**: A systematic risk management approach provides a framework for determining the appropriate risk treatment options. Risk management is integral to hazard assessment and leads to mitigation and preparedness activities. Risk management also influences response and recovery priorities. It contributes to public awareness and allows for public involvement in decision-making.

- **Continuity of Services**: Service continuity planning ensures that appropriate levels of services remain available to current and emergent clients in times of internal system disruptions and external community impacts. The health and emergency social services sectors’ critical infrastructure and their interdependencies with other sectors, such as utilities, communications or transportation, needs to be assessed and protected as part of service continuity planning.

- **Evaluation and Quality Improvement**: Ongoing monitoring, evaluation and improvement processes are necessary because communities, the threats they face, and the systems they develop are dynamic. Continuous Quality Improvement forms a component of its own within the Framework by linking the Exercises and Response Evaluation components back to the Hazard, Risk and Vulnerability Assessment component. The need for ongoing evaluation also applies to all components of the Framework as a key element. This means that each of the components needs to incorporate evaluation.

- **Cooperation and Coordination**: Cooperation and coordination with municipal governments, provincial and federal departments and other relevant agencies will ensure the health and emergency social services sectors can contribute to the community’s overall emergency management activities. Promoting cooperation and coordination during the pre-event activities will foster better response and recovery relationships.

- **Professionalism and Expertise**: An appropriate range of professional expertise must be combined with evidence-based information and best practices to form the basis for emergency management systems, decisions and actions. This will involve drawing on disaster studies research and practices from the field. The recognition and adoption of best practices, the application of research findings, and a commitment to professional development will guarantee the growth of emergency management programs within the health and emergency social services sectors.

- **Communications**: Communicating effectively is a critical function of all emergency management components. This
includes two-way communications within health, between health and other sectors and partners, and with the public. Communications involves both the physical capacities to share information, as well as the processes needed to collect, develop, and distribute the information. For example, when this is applied to the mitigation component it may involve the researching, writing, publication and distribution of design guidelines.

Management Systems: All components need to have the appropriate management systems and supports. In the pre-event components this may take the form of an organization structure of committees and working groups to coordinate and carryout the activities. Response and recovery actions should be based on a standardized Incident Management Systems approach that incorporates command, operations, planning, logistics and administration/finance functions. Since both pre-event and response and recovery activities are likely to draw on the same people it is important that the two management systems are related while recognizing their separate needs.

Volunteer Participation: Volunteers, through non-governmental organizations and partners, serve an important function in emergency management. Before, during and after a disaster it is critical to understand how volunteer contributions can be best utilized. This takes on special meaning when addressing the issue of volunteer convergence during a response. In some situations the quantity and quality of volunteerism can overwhelm the system’s ability to properly match resources with needs and can create additional problems.

Resource Management: Emergency management programs require the ongoing commitment of human, financial and physical resources. Emergency management activities can draw from both capital and operational budgets. Furthermore, the key to accessing resources in a response is identifying and managing those resources, through memoranda of understanding, usage policy, equipment database or similar methods. This also applies equally well to accessing the appropriate skills, information and equipment needed by the pre-event components.

As with the principles, these elements can be used to guide decision-making, program development and policy setting. The elements are presented as a set and each carries the same weight. They are not intended to serve as a list of priorities, in the sense that business continuity should not come at the expense of cooperation. All these elements should be combined and supported in an emergency management program.

These principles and elements pertain to each of the components of the Framework that are described in the following sections. The application of these principles and elements in the development and implementation of an emergency management program is fundamental to achieving the desired outcomes.

10 Emergency Management Components

This Framework involves applying the principles and elements in practice through a process that is diagramed in Appendix 1. This process is a means of organizing related activities to ensure their effective implementation.

The three main pre-event components are:

1. Hazard, Risk and Vulnerability Assessment (identifying the threats and vulnerabilities and determining the implications and treatment options);
2. Mitigation (eliminating or reducing the threats as possible and appropriate) and;
3. Preparedness (developing and readying response and recovery actions).

The Disaster Response Management components include:

1. Initial Response
2. Consequence Management
3. Recovery

These are implemented as part of a strategic approach and each link to an evaluation and quality improvement process that monitors and evaluates changes to the systems, the community and the environment. It is important to apply all components, as they are interdependent. While each has its boundaries and will involve its own set of processes, information and resources, they provide each other with critical support. Each of these components can be further broken down into layers of sub-components.
The Framework also encourages a natural systems approach to be adopted. This approach means that roles and responsibilities in a disaster reflect those undertaken in normal times. It prevents the development of an independent ‘disaster-only’ system that may be in conflict with the normal system, especially in incidents where the nature or scale of the problem does not appear sufficient or consistent enough to trigger a ‘disaster’ response.

This natural system approach recognizes that ownership of emergency management planning must be linked to the day-to-day planning. In this way the responsibility for emergency management permeates an organization. The value of integrating the emergency management Framework is that it provides a coherent structure for how this responsibility is fulfilled within an organization.

Integrated emergency management also provides for a better balance between flexibility and preparedness. Disasters are unique events that involve a high degree of uncertainty. This requires a system that can respond fluidly to the specific demands. This adaptability must be based on pre-existing or pre-arranged activities in order to be effective. Using the integrated Framework with its preference for natural systems allows for rapid change without needing a drastic realignment of roles or responsibilities.

The Framework is essentially a cyclical process that begins with the strategic plan that identifies the functions and assigns responsibilities for the components. The first task is hazard, risk and vulnerability assessment, which provides the information necessary to make decisions on the mitigation and preparedness actions needed to address the risks. All of these actions and their outcomes are evaluated through the quality improvement process that leads back to refining and maintaining the strategic overview and each component.

In practice there will be activities from all pre-event components occurring simultaneously. The entire model must be integrated into the management of the organization, whether the model is being applied by a facility, across a regional service provider, or to the health and emergency social services sectors as a whole. Different people and programs will contribute as information is generated, enhanced and shared at each step.

A coordinated response is needed when an extreme event impacts on the community. This response will proceed through a number of identifiable stages and require the implementation of a wide variety of actions from the emergency services, local, regional, provincial and federal government agencies, non-government or volunteer organizations, the private sector and the public.

Seven stages identified in an emergency response include:

- **Warning**: early technical indications
- **Threat**: first obvious signs of trouble
- **Impact**: damage period
- **Inventory**: damage assessment
- **Rescue**: actions limiting further losses
- **Remedy**: short-term solutions
- **Recovery**: long term repair & restoration

*After Powell, 1954*

The longer-term recovery of the community is equally important and while public health and mental health may be most involved there will be issues for all parts of the health and emergency social services sectors. The systematic restoration of services and the demobilization of resources to a pre-event level are two main aspects of the recovery process. Recovery activities will blend into the pre-event components, as a reassessment of the hazards, risks and vulnerable populations will be required. There will also be lessons from the post-response and recovery evaluations that must be integrated into future mitigation and preparedness decisions.

The Framework for Health Emergency Management is discussed in detail in the following sections of this guide. The pre-event activities are covered first, then the disaster response management activities are explained to highlight the importance of having an established emergency management program in place before a disaster occurs.
11 Strategic Approach

Implement a strategy to achieve comprehensive, integrated emergency management.

Coordinate its emergency management strategy with related emergency management strategies of other components of the health and emergency social services sectors and other sectors, organizations, and agencies.

The first component of a successful program is that the health and emergency social services sectors adopt a strategic approach to emergency management. That is to say that each component of the health and emergency social services sectors will have an overall plan of how it will develop, resource, and implement its emergency management program in conjunction with the relevant emergency management strategies of other components, sectors and agencies. These plans will be scaled appropriately.

A strategic approach ensures resources are being committed to comprehensive emergency management in a balanced and effective manner. An integrated emergency management framework is a means of organizing related activities to best apply them to achieving the desired outcomes. The health and emergency social services sectors must also contribute to and support the activities of local authorities and others that have emergency management roles and responsibilities.

A strategic approach to emergency management applies the concept of comprehensive emergency management through an integrated framework. It will involve cooperating with other agencies and jurisdictions to ensure the resulting activities and plans are coordinated. A strategic approach uses existing resources and programs to achieve emergency management goals while recognizing when unique or specialized skills and technologies are required.

11.1 Comprehensive Emergency Management

“Comprehensive Emergency Management” is a key concept in modern emergency management practice. Its focus on emergencies, rather than disasters, reflects the idea that successful management of vulnerabilities, resources and the environment will reduce the likelihood of an impact exceeding the disaster threshold. A program based on comprehensive emergency management ensures resources are being committed to emergency management in a balanced and effective manner. Comprehensive emergency management developed from the idea that a community progresses through four phases after a disaster impact: response; recovery; mitigation and; preparedness.

The response phase focuses on the immediate efforts to limit further harm and meet the community’s basic needs. Recovery is the process of returning the community to “normal” that extends for many years and involves the physical, social and economic components of the community. Mitigation refers to the steps taken to eliminate or lessen the risk of future impacts while preparedness pertains to increasing the community’s ability to respond to future impacts.

Examples of agencies and organizations to consult during planning:

Local:

- Municipal governments
- Emergency services (police & fire)
- Schools
- Churches and community groups
- Business

Provincial Departments:

- Health
- Highways & Government Services
National Framework for Health Emergency Management

- EMO
- Family Services and Housing
- Conservation (Fire Program, Water Resources, Environment)
- Aboriginal and Northern Affairs
- Office of the Fire Commissioner

Federal Departments:

- Public Safety Emergency Preparedness Canada
- Health Canada
- Indian and Northern Affairs Canada
- RCMP
- Environment Canada

Other agencies:

- Manitoba Association of Native Fire Fighters (MANNF)
- Salvation Army
- Canadian Red Cross
- Amateur Radio Emergency Service
- Canadian Emergency Preparedness Association (CEPA)

Utility service providers (e.g. gas, power, telecommunications, water)

Each of the phases is dependent on the others. In reality, at any given time a community will be addressing all of these phases simultaneously, although the emphasis may shift between the phases, especially following an impact. The health and emergency social services sectors need to be involved in all phases.

11.2 Cooperation and Coordination

The success of an emergency management program depends on a wide range of agencies and organizations coordinating their activities before, during and after an emergency. There are often specific jurisdictional issues or responsibilities that need to be respected. Mitigation activities involve both physical and social components that need the cooperation of different groups to implement. An emergency response needs strong coordination to ensure all resources are being put to the best use. Post-disaster recovery is a long-term process and will involve every part of the community.

While provincial legislation varies, the general intent is to empower local authorities to plan their response to emergencies and to take action based on those plans when needed. While this responsibility to prepare and implement community emergency preparedness plans and programs lies clearly with the local authority, the health and emergency social services sectors must contribute to and support these emergency management activities. This should extend to participating on community planning committees that the local authorities may establish. Provincial legislation also gives local authorities special powers to prevent or limit loss of life and damage to property or the environment during a state of local emergency. This must clearly be planned for and executed in conjunction with the health and emergency social services sectors and other related agencies.

Other agencies and groups in the community may have emergency management plans that overlap with the health and emergency social services sectors’ activities. The private sector, especially companies involved in natural resources (e.g. forestry or mining) or those that deal with hazardous substances, will have emergency response protocols. Non-government organizations such as the Canadian Red Cross or the Salvation Army have significant international experience while community groups may have access to local resources and knowledge that would otherwise remain untapped. Neighboring components of the health and emergency social services sectors should be consulted regarding cross boundary issues and mutual aid arrangements. A strategic approach to emergency management will ensure there are no gaps or conflicts between these external plans and the programs implemented by the various parts of the health and emergency social services sectors.
11.3 Technical Information and Expertise

The formal study of disasters and their effects on communities dates back to the 1920’s. The modern emergency management profession grew out of the civil defense programs of the 1950’s and 60’s. Since then it has established its own best practices, professional organizations and qualifications. There are a growing number of emergency management practitioners graduating from university programs and gaining other qualifications.

Emergency management now encompasses research and applications from a diverse range of fields including business management, psychology, geography, sociology, planning, health, political science and engineering. Furthermore, it draws on an understanding of the earth sciences, such as meteorology and geology, as well as other specialties that look at extreme events. There are also technical topics, such as communications, that may require specialized knowledge and equipment.

The modern emergency management practitioner has the ability to access and interpret information from these various sources and can provide distinct technical expertise. Other aspects of the emergency management program will require general management skills in planning, budgeting, training, leadership and evaluation. These requirements can be met efficiently by integrating emergency management within an organization and using the existing talents of the staff.

11.4 Organizational Consistency and Sustainability

Canada’s health and emergency social services sectors need a consistent and sustained organizational structure to properly prepare for emergencies. There is a sense of urgency generated because emergencies and disasters can happen at any time. This urgency is compounded by the high degree of uncertainty that is inherent in the management of hazards and disasters. This combination can lead to a reliance on ad hoc structures that are issue specific or event driven.

The result is a disconnected series of committees, working groups and programs that individually address portions of the larger emergency management issue. Many of these committees are set up only to review a recent incident or to plan for an identified threat and their planning or lessons are not as well integrated as they could be. Creating an organizational structure that is based on an all-hazards, comprehensive emergency management approach is an important step in successfully implementing this Framework.

This organizational structure should allow for each of the Framework’s components to be dealt with at a local, regional, provincial and national level. These structures need to be established in a manner that is adaptable to the varying scale of the issues and resources at each level. Using a consistent set of structures will ensure the lessons, plans and issues of one level can easily be shared with the other levels.

Maintaining these structures over time will build momentum in the program. Emergencies can create periods of heightened interest and support for emergency management programs. The stretches between incidents can, however, see programs slow down even though it is during these “quiet times” that the majority of an emergency management program’s development is achieved. Having a sustained and consistent organizational structure will help level off these peaks and valleys so emergency management programs are able to quickly and efficiently take advantage of increased resources or attention following an incident. It will also mean that new threats can be addressed faster through the assessment and preparedness processes without waiting for new organizational structures to be created.

Each component of the Framework should be related to some organizational entity. While jurisdictions at each level will assemble their own unique organization, that may involve committees, staff positions or other solutions, it is important that each is associated with functions of the Framework so that trans-jurisdictional cooperation and coordination are facilitated.

For example, at a provincial level a Hazard and Risk Management Committee may be established to provide the hazard and vulnerability assessment, risk analysis and mitigation options. This committee may feed information back and forth to regional staff involved in community needs assessment that have also been tasked to look at vulnerability. The provincial committee may also provide input to a F/P/T hazard assessment workgroup.

Regardless of the final arrangements, the value in having a Framework is that the separate tasks and processes can be clearly defined and assigned. This will allow for better use of technical expertise from across the country, improve the exchange of information and ensure a consistent and sustainable emergency management program.
12 Hazard, Risk and Vulnerability Assessment

Conduct ongoing hazard, risk and vulnerability assessment.

Contribute information on the determinants of health and hazards to other sectors, organizations, and agencies.

Implement a risk management process to support emergency management decision-making. This process will include risk estimation, risk evaluation, and risk control.

Contribute to the risk management activities of other sectors, organizations and agencies.

12.1 Hazard Assessment

Hazards are the result of an interaction between human activities and the natural and technological processes that can generate extreme events. It is important that the hazard, the community's exposure to the hazard, and the likely effects of the hazard on the community are all understood. This is accomplished through an all-hazards approach to hazard assessment.

An all-hazards approach ensures disaster planning achieves its aims efficiently. There is a danger that a community or a sector will focus too much attention on any single hazard to the extent that it becomes prepared for one type of disaster and not for others. The all-hazard approach to assessment balances this by collecting information on the full range of threats so subsequent risk management decisions can be made appropriately. This allows planning to be more effective in all situations.

Different hazards can produce the same effects or consequences within the community. Power in a community, for instance, may be interrupted by a number of different causes such as major supply lines downed by wind or ice, technical equipment failures, or local lines damaged by accidents or fires. The common consequence of all of these events is a loss of electrical power and the effect this will have on individuals and facilities within the community.

The second advantage of an all-hazards approach is the efficiency of planning for the common effects of the various hazards, such as a loss of power, water, communications or access. All-hazard based assessment also identifies hazard specific problems. This allows one solution to be applied to a range of threats while acknowledging that some hazards present unique dangers. This simplifies the implementation of the solutions, whether that involves a structural mitigation measure, training of response actions, or some other activity.

Some hazards that have and may again impact Canadian communities include:

- Severe Storm / Hurricane (lightning, hail, heavy rain, strong winds)
- Tornado
- Extreme Cold or Heat
- Blizzard (heavy snowfall, strong winds)
- Ice Storm (freezing rain)
- River Flooding (spring floods, flash floods, ice jam floods)
- Storm Surge / tidal flooding / tsunami
- Earthquake
- Landslide
- Volcanic eruption and ash
- Dangerous Goods Incident (spill, fire, explosion)
- Transportation Incident (road, rail, air.)
- Epidemic (Pandemic)
- Water Contamination
- Wildfires (Urban interface, Smoke)
- Fire (Own Facility or Neighboring Facility)
National Framework for Health Emergency Management

- Critical Infrastructure/Lifeline Utility Disruption (Power, Gas, Water, Sewer, Communications, transportation)
- Terrorism/Civil Unrest (riots, etc.)
- Labour Disruption
- Mass Casualty Incident
- Space debris (meteorites, satellites)

Collecting specific information about hazards is critical to the overall emergency management program. Risk management needs information for evidence-based decision-making. Mitigation and preparedness both need the information to determine what actions are necessary and most appropriate. Monitoring and evaluation will use this information as a yardstick. All emergency management activities will be more effective with detailed, current and accurate hazard information.

Strategic planning of the hazard assessment program involves determining what information is needed, accessing the information that is available and collecting additional information as required. It also involves managing the information to ensure its accuracy and timeliness. This includes assessing the quality of the information.

The hazard assessment process collects information about the three factors that combine to create a hazard: the events that can impact on a community; the vulnerability of the population to such impacts; and the resources the community can apply to cope with the impacts. Most emergency management decisions will rely on understanding the balance between these three factors.

Determining what information is required is the first step in the process. An initial round of information collection is useful to develop an overview of what is available and how it may be used. The range of hazard information will be as unique as the region it is being collected for.

Not every type of hazard will be of a concern to a particular community or to the health and emergency social services sectors, but it is important to only rule out a hazard after considering the historical evidence. Some events occur very infrequently but may still present a risk that needs to be identified and managed.

12.2 Vulnerability Assessment

The factors that increase vulnerability to these extreme events are the same as the determinants of health (as explained above in Section 6.3). Past disasters in a community and lessons learned from other places may help identify groups of people at greater risk. Sometimes specific groups of people, such as minority language groups, the elderly or persons with disabilities, are referred to as special populations and receive focused attention.

The health and emergency social services sectors, particularly in public health, already has processes for collecting and assessing this information that could be closely linked with the hazard assessment program. It will also be necessary to gather information on the vulnerability of the community’s infrastructure and economy. This will include looking at the health and emergency social services sectors’ own staff, facilities and programs for vulnerabilities.

12.3 Resource Capabilities and Capacity

The final component of the hazard assessment process is to identify the resources that already exist in the community. The best way for the community to cope is to be ready to use resources that are familiar and easily available. Sometimes, however, an emergency can require the use of unusual resources or putting common tools to uncommon tasks.

Information regarding the resources in the community may include:

- Health facilities (public and private)
- Health services (public and private)
- Emergency social services
- Trained voluntary sector
It is important to consider both the capabilities of the resources and their capacity. A resource’s capability refers to its competency or ability to perform in a specific role or function. The capacity refers to the volume or amount of that function that can be handled in a specific period of time. An example of a human resource’s capability would be the skills of a paramedic, including what specific medical procedures they are trained to perform, versus their capacity as measured by the number of patients they would be able to manage in an hour.

12.4 Accuracy of Information

Most hazard information will be obtained from agencies or services that collect and analyze the raw data about different natural processes, about the population and about the resources in the community. It is important to use reliable sources whose information can be verified if necessary. It is also useful to establish sources that can provide ongoing information. Some information may need to be collected directly, especially when it is about a specific facility.

All the information will eventually need updating. Some information may not change very often whereas some information may change rapidly, even during the course of a day. Meteorological information is a good example: long term climate information may not change significantly over the course of several years, precipitation estimates may be issued several times a year (in relation to flood or fire forecasting) and storm warnings may be issued and cancelled in a matter of hours.

There should be regular reviews of the information as a whole to ensure that it is all still valid. An ongoing system of maintaining some current information may also be needed. It is necessary to determine when information requires reviewing or updating as part of the strategic planning for the hazard assessment process. The goal is to have information that is as accurate and current as it needs to be for the purposes of risk management, mitigation and preparedness.

The level of detail is similar to how current the information needs to be. It is important to collect accurate information that is at the right scale for its purpose. For instance, national statistics on the number of people with mobility impairments may be useful for general vulnerability identification but will not be detailed enough to aid in planning specific response actions. This latter task may require lists of names and addresses collected from home care patient lists.

The information will also need to be collected at different levels, from the health or emergency social services sector-wide overview down to individual facilities. It can also include targeting parts of the community for special attention, groups such as women, aboriginal people, the elderly, children or others with special needs.

The strategic goal of hazard assessment is to provide information for use in the health and emergency social services sectors' other emergency management activities. The information needs to be accurate and current enough to support quality decision making and effective action. The health and emergency social services sectors is also in a position to contribute to a better understanding of the hazards by local authorities and the public. The health and emergency social services sectors will benefit significantly from sharing hazard information, by improving the flow of information in both directions and by helping others with their emergency management activities.
12.5 Risk Management

The information collected through the assessment process must be analyzed and acted upon through a risk management process. Risk management can be defined as “the systematic application of management policies, procedures, and practices to the tasks of analyzing, evaluating, controlling and communicating about risk issues”. Risk management is the process of understanding what the risks are and deciding how to control the risks appropriately, by addressing their consequences and/or their likelihood.

Risk is an expression of the chance of a disaster or loss of a certain size. Risk is not, however, synonymous with probability or chance nor is it the same as vulnerability. Risk is, in fact, the product of these two components, the likelihood of an event happening and consequences if the event does happen.

The concept of risk allows hazardous events to be compared more fairly. It helps limit the influence that recent experience or other subjective factors may have in decision making. It does not totally eliminate such factors, as they are valid considerations, but it prevents them from misguiding decisions.

*Risk management is a critical component of an integrated approach as it provides the transition between problem identification (the all-hazards assessment step) and the appropriate treatment steps (mitigation and/or preparedness). Internal and external factors must be considered in the risk management process.*

Risk management is commonly practiced in relation to management activities such as budgeting, contracting, capital planning, project management, and other organizational tasks. All of these applications of risk management are valid and will continue. The emergency management framework simply incorporates the information these practices generate and seeks to expand the range of risks considered to include disaster scale events.

Insurance is used as an important risk control method and subsequently insurance companies play a significant role in risk management. Qualifying for insurance coverage and setting premiums will require risk management to be undertaken. Insurance providers may have specific risk assessment processes that form part of the policy request or renewal process. For instance, an insurance company may require information regarding a facility’s exposure to flood damage before issuing coverage. This information should be captured in the hazard assessment element and, through the risk management process, decisions regarding mitigation and preparedness activities can be reached.

Within this general management context risk management may be more confined to “the process of making and carrying out decisions that will minimize the adverse effects of accidental or unforeseen losses upon the goals and objectives of the organization”. These definitions lead to an understanding of risk management as a systematic process for making decisions about how to address risk. This understanding also needs to include the concept of “risk” as “the chance of injury or loss as defined as a measure of the probability and severity of an adverse effect to health, property, the environment, or other things of value”. If the term “hazards” is used in place of the latter half of this definition (an adverse effect to health, property, the environment, or other things of value) it is easier to see risk management as a systematic process for quantifying and making decisions about hazards. The challenge is expanding the scope of risk management, as it is currently applied to other issues within the sectors, to include hazards or, in other terms, catastrophic risks.

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Consequence
Risk management decisions are also made in the community. Some of these decisions are the result of a conscious process, perhaps when a homebuyer decides river front aesthetics outweigh the risk of flooding, but unfortunately many such decisions are made without complete information about the risks. At a larger scale local authorities make decisions on land use and development, often balancing economic and political factors with environmental and health concerns. The downstream results of poor risk management decisions will inevitably involve the health and emergency social services sectors when the negative health consequences become apparent and place added demands on the system. Therefore, it is in the health and emergency social services sectors’ interest to become involved earlier by contributing to community-based risk management.

Within the Framework, risk management ensures decisions about how to deal with hazards, through mitigation and/or preparedness activities, are evidence based rather than subjective. It is the process that transforms qualitative information collected about the extreme events, the vulnerability of the community and its resources into quantitative risks that can be measured and compared.

13 Mitigation

Reduce risk to programs, staff, and clients by implementing structural and non-structural mitigation measures, based on the results of its risk management decision-making process.

Promote mitigation (risk reduction) throughout the community.

Mitigation refers to actions intended to eliminate or reduce the risk from hazards to the vulnerable community. These actions are prompted by the potential risk of a hazard, rather than an imminent threat. Once a particular event is begins, even if it is still in its early pre-impact stages, the actions taken to limit the harmful effects are more associated with preparedness and response than with mitigation.

Mitigation is primarily concerned with preventing a harmful interaction between extreme events and a vulnerable community - it is about getting out of harm’s way. Mitigation may be directed at reducing the risk by managing the likely impact, the vulnerable community, or both. It may also involve transferring the risk in some circumstances.

**Mitigation actions eliminate or reduce the risk from hazards to the vulnerable community. The responsibility for mitigation lies individually and collectively with the community. The health and emergency social services sectors have two significant functions in this process: directly reducing the risks to their facilities and programs; and advocating for risk reduction measures within the community.**

The decision to mitigate a hazard is reached through the risk management process. Therefore these decisions will be influenced by costs, political perspectives, past experiences and other issues that will contribute to risk management. Risk management deliberation leads to four general options for dealing with a risk: elimination; reduction; transfer; or acceptance.

Elimination aims to remove the risk by preventing interaction between the extreme event and the community. Risk reduction focuses on decreasing the likelihood that any interaction will result in damage. Transferring or shifting the responsibility for dealing with the negative effects is often accomplished through insurance. The final option of accepting the risk requires a conscious acknowledgment that the consequences must be dealt with if the event occurs. This is an acceptable solution if it is arrived at as the result of a risk management process and is not the same as simply ignoring a risk. Ignorance inevitably results in either an inability to cope with the impact or the unplanned transference of the responsibility to cope to another party.

The first three of these options are commonly grouped under the heading of mitigation. Mitigation, especially the prospect of eliminating hazards, can seem impossible. Identifying and implementing mitigation strategies depends upon understanding hazards as an interaction between an extreme event and a vulnerable community.

Mitigation activities are implemented because there is a risk but they are neither reactive nor preparatory in nature. They focus on avoiding or limiting the possibility that an extreme event will occur at all or, if it does, that the community will not be as vulnerable to its effects. Mitigation activities tend to be permanent and do not require a triggering event to be implemented. Activities that are undertaken when an actual event occurs, or imminently threatens to, more commonly are considered response or preparedness activities.
The responsibility for mitigation lies individually and collectively with the community. That is to say that everyone and every organization within the community has a role to play in mitigation and the community, as a whole, has to encourage and support mitigation activities. Furthermore, mitigation measures must be sustainable, in keeping with the emergency management principles adopted by the F/P/T Network for Emergency Preparedness and Response and the principles of sustainable mitigation.

Six principles have recently been suggested to help make mitigation more effective and more sustainable:

- Maintain and, if possible, enhance environmental quality.
- Maintain and, if possible, enhance people’s quality of life.
- Foster local resiliency and responsibility for disasters.
- Recognize that sustainable, vital local economies are essential.
- Identify and ensure intra- and intergenerational equity.
- Adopt a consensus-building approach, starting at the local level.

*Mileti 1999*

The health and emergency social services sectors have two significant functions in this process: directly reducing the risks to their facilities and programs; and advocating for risk reduction measures within the community. The health and emergency social services sectors have a clear responsibility to protect their facilities, staff and clients through mitigation measures. Facilities must protect the clients already in their care while preserving the ability to offer services to the remainder of the population. Mitigation measures are particularly important for facilities providing emergency health care and emergency social services that will be in high demand following an impact. Mitigating risks in non-facility based programs, such as community mental health or public health programs may be more difficult to conceptualize but is still important.

The health and emergency social services sectors also share a responsibility with the community to support measures eliminating or reducing the risks to the population at large. Home care patients, for example, may be more vulnerable to specific hazard impacts. The health and emergency social services sectors need to play a role in addressing this vulnerability in conjunction with their clients and the community.

The health and emergency social services sectors also have a vested interest in the community’s ability to limit the harmful effects on its population, as this is primarily felt in terms of health (e.g. injuries). The negative effects of a disaster also extend to the economic and physical environments within the community and this, indirectly, can have detrimental effects on the population’s health. While many of the most effective mitigation strategies, such as land-use planning, are the responsibility of local authorities, the health and emergency social services sectors can advocate in favor of mitigation in order to improve the overall health of the population in the long term. Communities that can eliminate or reduce their exposure to hazards will be healthier due to a direct reduction in disaster-related injuries and illness, as well as indirectly through an improvement in the determinants of health.

This will involve the health and emergency social services sectors in the risk management decision-making of the community, local and provincial governments, and the private sector. There are often very different, even polarized, opinions regarding the risks in a community. The “not-in-my-back-yard” (NIMBY) phenomena generated by new property developments, industrial facilities, or manufacturing practices can divide a community. This can lead to a conflict between the economic and environmental goals of a community resulting in the disintegration of social networks and the loss of employment opportunities. The spirit of partnership and cooperation that is built around emergency management can help the health and emergency social services sectors and the local authorities balance these conflicting priorities. The health and emergency social services sectors may be able to offer neutral information regarding the health risks posed by changes in the community.
Mitigation can be achieved through structural and non-structural activities. Structural techniques depend on physical measures to eliminate or reduce the risk. Non-structural or social methods are aimed at reducing the activities that make a community vulnerable or contribute to the risk. These mitigation measures are not uncommon nor are they only applicable to risks at the macro scale. Both structural and non-structural techniques can be put in place at a facility level. Many hazard mitigation activities may have additional justification from an occupational or workplace health and safety perspective. Combining mitigation measures with response actions may improve their effectiveness. This may be especially true when considering a highly variable risk or when an entire mitigation solution is not technically or fiscally possible.

Wildfire offers an excellent example of a hazard that is open to a variety of mitigation activities:

- reforestation with less flammable species;
- forest management plans to limit fuel loads;
- fire breaks to prevent fires from spreading;
- building codes specifying fire resistant materials;
- land-use plans for high risk areas;
- fire permit systems;
- spark suppression regulations for forest users;
- limiting forest access during high danger periods.

Mitigation measures must be in place before an impact. One way to achieve this effectively is to consider mitigation as part of normal budgeting and planning processes. It will be easier to incorporate structural mitigation measures into new developments or during planned expansions or renovations. This may even be a requirement of building codes and other regulations that only permit a pre-existing building to remain below the current standard until such time as it is significantly altered.

Retrofitting a facility or taking other structural measures solely for risk reduction purposes may be expensive though there will be situations when this is appropriate. It is far better, however, to consider mitigation as part of initial capital planning. The proceeding steps of ongoing hazard assessment and risk management will provide the information necessary to determine when mitigation is needed and help to determine what measures will be most effective.

Mitigation requires an investment up front but it is important to remember what that investment is buying. Properly planned mitigation measures will protect people, saving lives and reducing long-term health care and social services costs. Mitigation will also preserve property and services; thus limiting (or even eliminating) the direct cost of their repair or restoration as well as reducing the potential for lost revenues due to business interruptions. Together these will restrict any exposure to liability that may result in third party costs and the associated expenses.

The techniques discussed so far are equally applicable to either risk elimination or reduction strategies. Risk transfer is the other option coming out of risk management that is usually linked more with mitigation than with preparedness. The most common risk transfer practice is engaging some form of insurance. Unfortunately insurance is only able to address the quantifiable financial costs of an impact. Insurance cannot mend the intangible losses to an individual, organization or community. The loss of lives, the loss of a sense of safety, or the loss of opportunity that a community suffers in a disaster cannot be covered by insurance.

Insurance premiums can, however, be a powerful motivator for other mitigation strategies. The process of applying for insurance should involve hazard assessment and making decisions about which risks should be insured against. This process can contribute to the overall emergency management program within the health and emergency social services sectors. Furthermore, insurance companies are reluctant (that is to say the premiums are expensive) to underwrite hazards that could be avoided.

Mitigation needs to be an established component of a strategic emergency management program. It will not be totally effective if it is only considered as an afterthought to normal management and planning. By integrating mitigation activities into other developments or projects it is possible to control costs and reduce hazards.
14 Preparedness

Implement a disaster preparedness approach, based on its risk management decision making process, that will include planning, training, resource management and exercising.

Participate in the disaster preparedness activities of other sectors, organizations and agencies.

Emergency preparedness consists of the activities that take place before an incident that increase an organization’s or a community’s readiness to respond. The degree of readiness reflects the acknowledgement that something can happen, the assignment of a responsibility to respond and a commitment to put the plans, resources and infrastructure in place to ensure the response capability. Preparedness will focus on two aspects of emergency response. The most common, the Emergency Response Plan, deals with meeting the special demands created by an impact on the community. Business continuity planning aims to ensure services are maintained when the organization is impacted, even if the effects are limited to internal disruptions. Preparedness also extends to pre-planning activities aimed at post-event recovery.

Preparedness is an unlimited attribute: everyone can become more prepared without lessening the preparedness of others. This is important because resources are limited during an emergency response to the point of not meeting all the demands. This is the basic concept of disasters being events that have a greater impact than the community can cope with. By preparing for an impact an individual, organization or community raises their ability to cope and frees limited resources to be applied as needed. Therefore, an effective preparedness program must include the whole community.

Preparedness increases the community’s ability to respond effectively to hazard impacts and to recover quickly from the long-term effects. It involves planning, training and education, resource management, and exercising. It builds better coordination and cooperation between agencies within the community.

As with mitigation, each component of the health and emergency social services sectors has a role in local community preparedness. The health and emergency social services sectors’ resources will be amongst the most important and most demanded during a response. By helping the community become better prepared the health and emergency social services sectors will increase its effectiveness. Furthermore, many of the health and emergency social services sectors’ existing clients, such as home care patients or residents in long term care facilities, will be more vulnerable to the effects of a disaster. The health and emergency social services sectors have a responsibility to prepare to meet these needs. A comprehensive preparedness program can fulfill this responsibility.

Business continuity planning and emergency response planning are linked. Emergency response planning deals with how an organization will help its clients cope with the extraordinary demands a disaster creates. In contrast, business continuity planning deals with how an organization copes with the impact of the disaster on its own systems and resources.

Business continuity planning aims to prepare an organization to adapt quickly and appropriately to sudden changes in its human resources and/or its physical environment. It includes issues such as: succession and delegation processes; alternative work locations, practices or technologies; intentional redirection of resources to address specific needs, possibly resulting in a loss or degradation of other services and; infrastructure or systems maintenance. The related field of “disaster recovery” considers how to return an organization to normal, especially after a significant physical impact on a facility. In modern businesses these two fields are strongly associated with information technology and management systems.

Both emergency response planning and business continuity planning involve the same basic process. There are four parts in a preparedness program: planning; training and education; resource management and; exercising. The first of these, planning, is the most fundamental as the others are intended to support the implementation of the plan. Unfortunately planning is often misdirected toward producing a document, the “Emergency Plan”, without giving appropriate consideration to the process.
14.1 Planning

Effective planning identifies and develops the organizational structure that will direct and manage an emergency response. The planning process also identifies who has the authority and responsibility relating to different aspects of the response. The planning process will develop the procedures and guidelines that will ensure effective and coordinated action. A written plan is created as a means of documenting the decisions that are made during this process. The most important results of the planning process are the coordination and shared understanding that is generated.

Good planning is dependent on good risk management, which in turn is dependent on quality hazard information. The hazard and resource analysis will have identified, in detail, the dynamics and impact potential of the threats. The risk management process will have determined which risks can be mitigated and which need to be addressed through preparedness. This also identifies the response actions and resources required, providing the answer to what plans are needed and which resources must be arranged. Resource plans can then be developed to utilize “on hand” resources and to obtain resources to meet any shortfall.

Plans are only as good as the knowledge and capability of the people who are required to implement them and the clients they serve. The development of staff training and education programs to provide the knowledge and skills necessary to implement the plans is crucial. Public education on responsibilities, possible mitigation actions and what the public can expect from responding agencies is also essential.

14.2 Education and Training

Training and education is a key to minimizing the impact of disasters and to ensure a robust and resilient response system and population. It does not stop with the individual, it includes the need to train groups who will work together during disasters, both within the organization and external systems. Plans must be examined to identify these needs. Every emergency response involves a balance between improvisation and preparedness. Training and education helps responders know when a situation can be dealt with using established methods or when an innovative solution is needed.

Emergencies are often characterized as unexpected and unusual. Education and training provide a frame of reference for responders so that familiar patterns and activities can be recognized, even through the uniqueness of a particular event. In this way training and education also help limit any uncertainty about roles, procedures, and expectations that can add to the stress on a responder. Training can reduce this stress and prevent confusion over role conflicts, special tools (e.g. radios), or other aspects of the response that may be unfamiliar.

Emergency management education can vary in content and delivery. It is now possible to obtain a Bachelor’s degree in Canada in Applied Emergency and Disaster Studies. Non-degree programs are available through on-line and in person programs as well. This type of program provides the broader conceptual and background knowledge of the field.

Specific emergency management training is equally important. A facility’s or organization’s emergency plan is only a tool to be used to help coordinate response activities. Like every tool, it needs people who have the knowledge of when to use it and the skills to use it properly. Successful training imparts the knowledge and skill to use the plan. Training is focused on making staff familiar with the practical aspects of the field as it relates to an individual facility, a particular role, or with a specific jurisdiction. Unique contingency plans or other special measures that are designed specially for a certain situation or location need to be supported by staff training. Personal protective equipment is another example of a measure that requires an ongoing training program to be safe and effective.

The range of education and training topics must be further developed as well as determining how different levels within an organization require varying degrees of knowledge or skill. For example, it may be necessary for a senior manager to understand the importance of hazard assessment in order to support the process and provide the needed funding, but this does not have to entail a detailed knowledge of the assessment steps.
Training options may include:

- In-house - specific to an organization's plans, equipment and responsibilities.
- Interagency - joint training with other organizations, often coordinated and conducted by provincial or federal departments (e.g. PSEPC).
- Academic - from general to detailed information, theory and practices.

The choice of options depends on budgets, staff availability the nature of the training and the role the person will fulfill.

14.3 Resource Management

The efficient and effective management of resources is essential in times of disasters. By their definition, disasters are situations when resources are overwhelmed. The availability and conditions of physical resources is as essential to the response as the plan and staff. The threat and resource analysis provides for the essential information needed to identify resource requirements, resource availability and shortfalls. Resource management ensures that existing resources are operational. The plan includes the need to maintain the components, systematically purchase and upgrade equipment as needed. Furthermore, the resource management plan needs to address the obtaining of additional resources needed to respond during an emergency event.

14.4 Exercises

Exercising is the fourth and culminating component of response preparedness. Exercising brings the skills, knowledge, functions and systems together and applies them against event scenarios. This provides the closest thing to an event to evaluate the state of response preparedness. The type and conduct of the exercises is dictated by the purpose of the exercise and participant needs.

Training can include exercises to help deliver practical skills, build confidence, and strengthen the network between individuals and agencies. Evaluation exercises can test specific aspects of a plan, identify deficiencies, and ensure operational functionality (e.g. of communications). In this situation the design of the exercise becomes more difficult and more critical. Exercises can also raise interest in emergency preparedness within organizations and the public.

Exercises can be a powerful training tool that allows participants to apply and practice their skills and roles in a realistic scenario. Exercises can also help evaluate a response plan’s completeness. There are three general types of exercises, though different organizations and researchers name and divide exercises into several different groups. Identifying which type of exercise is needed and whether its purpose is for training or evaluation are very important decisions in the exercise design process.

Basic exercises, often called paper or tabletop exercises, are conducted on paper with participants gathering around one table. No real resources or communications are employed. The focus is on increasing the participants’ familiarity with the plan and each other, as well as providing an opportunity for problem solving. Tabletop exercises may involve maps or even models to simulate the event.

Intermediate exercises are designed to test specific plan components or agencies in response to a scenario that is only described, not simulated. Communications systems may used to pass exercise information (or inputs). Participants may be in different locations, using their actual procedures and staff complements.

Major exercises involve the real-time deployment of actual resources to mock emergency scenes. Practical or field exercises have the impacts physically simulated. Responses are carried out using the resources that would be employed during a “real” emergency or disaster. These larger events may focus on a single facility (e.g. a hospital or airport) but normally involve all responding agencies. This scale of exercise usually involves umpires and evaluators to assist and assess activities. Some accreditation programs require this style of exercise. While they can present participants with the most realistic representation of a real event they are still simulations and it is difficult to reproduce the degree of disruption that can be expected in a real emergency.
Exercises do have limitations. They are not particularly good at predicting actual performance because real emergencies create situations that make some tasks more difficult, even too difficult to effectively simulate. Real emergencies can also create a context that makes some tasks easier which is also very hard to simulate. For example, it would be possible to close a hospital to incoming patients in a real evacuation, but an exercise must be designed around the need to maintain normal services.

It is difficult to effectively test how an organization’s response procedures are initiated through an exercise. Planned or pre-announced exercises allow too much forewarning to be realistic. Staff members are expecting the call and are more likely to make themselves available quickly. Surprise exercises on the other hand will probably test the participants’ patience more than their knowledge or skill. It is difficult to justify or expect the same level of commitment to an exercise that would be offered naturally in a real crisis.

The timing and frequency of exercises is also an issue. All systems and procedures need to be regularly reviewed, inspected or otherwise tested. However, how this happens often depends on how time sensitive or dynamic they are. A facility that experiences a high degree of staff turnover may need more frequent training oriented exercises compared to a more stable facility. The opening of a new building may require a major simulation exercise in order to identify any physical constraints. Often training and exercise schedules can be linked to seasonal hazards or to trigger events.

### 15 Quality Improvement

**Utilize a quality improvement approach to emergency management.**

Hazards and disasters are products of the interaction between the environment, the community’s vulnerable population and the community’s coping resources. These three factors are dynamic and their fluctuations significantly alter the risks facing the community. Monitoring these factors provides a means of determining if the community needs to adjust its level of preparedness.

It is also important to monitor the components of an organization’s preparedness program, including its plans, staff skills and resources. These activities provide an indicator of the state of preparedness within the organization that can be compared with level of preparedness best suited to meet the risks.

The information that is included in the hazard assessment process and used in risk management decision making needs to be monitored. Information generated by mitigation and preparedness activities, such as staff resource lists, also needs to be watched for changes. It is important to identify who is responsible for monitoring information generated by these sources. This is especially true in a situation where information needs to be monitored by someone other than the original source.

**Emergency management is the dynamic application of solutions to an uncertain and changing set of challenges. An ongoing process of evaluating the progress of programs and monitoring the physical, social and economic environments is crucial to maintaining an emergency management system that is adapted to the current local conditions.**

Monitoring can be a means of triggering a reassessment of hazard information or a review of a risk management decision. Some sources that can provide these indicators include business plans, capital expenditure proposals, provincial and national statistics reports, and population or community health assessments, to name a few.

One way of monitoring information is to check its currency each time it is used in decision making and to create a link from the decision back to the information. This way when the information is updated it is possible to see which issues or decisions may need to be reviewed.

For example, the number of buses needed to evacuate a facility will depend on the average number of people in the facility at any given time. Once this average is determined it will be possible to contact a local transit provider and make arrangements to obtain buses during an emergency. If, however, the facility’s occupancy level increases significantly it may be necessary to review how many buses are needed and whether the existing supplier can meet this need. From a practical perspective this may mean that the evacuation plan notes the date of the occupancy information so it can be easily seen to be current and the vulnerability assessment should cross-reference the occupancy statistics to any planning decisions that are based on this information.
A community can utilize a range of mitigation and preparedness actions to decrease the risks it faces. However, it is not reasonable to wait for an emergency to escalate to discover if these measures will prove sufficient. When the constantly changing nature of the risks is also considered it becomes clear that an ongoing process of evaluating established mitigation and preparedness measures is necessary.

The most common tool for evaluating disaster preparedness activities is an exercise. While exercises are valuable as a training tool, used to practice skills and build confidence, it is important that exercises also help identify shortcomings. Mitigation measures can also be evaluated through exercises that test structural systems.

Another technique that can be used to evaluate mitigation and preparedness activities is peer reviews of programs and plans. Such reviews can take the form of comparing solutions to common problems, revisiting decision making to ensure no unintentional bias affected the results, or even simply including different presenters in the training process to inject a fresh perspective. These methods do not need to be as formal or stringent as audits or accreditation reviews that also form part of the evaluation toolbox.

Unfortunately severe incidents do occur that also test the success of mitigation efforts and the viability of preparedness actions. It is therefore necessary to evaluate the response and recovery activities following a hazard impact. Emergencies are always an opportunity to assess performance, even when the negative consequences are limited by the preventative and reactive actions. Isolated or minor events often present the only chance to test systems under actual conditions because even the most carefully planned exercise cannot duplicate the range of circumstances nor the level of uncertainty and intensity that are experienced during a real emergency.

These evaluation techniques can be extended to hazard assessment and risk management activities as well. Individual and departmental performance appraisals may be one means of documenting how well information is being collected and used.

An integrated quality improvement and monitoring system will ensure that the emergency management strategy, as a whole and through each of its components, continues to meet the needs of the health and emergency social services sectors and the community. It will also provide a means of demonstrating that the emergency management program is being implemented as set out in the strategic plan.

16 Disaster Response Management

The Framework includes both pre-event activities and disaster response management activities. These are shown on the right side of the Framework Diagram (Appendix 1). They consist of

1. Initial Response
2. Consequence Management
3. Recovery

Each of these components links into a post-event evaluation that feeds back into the pre-event activities. In this way each emergency response is part of the overall emergency management program, contributing information on hazards impacts, community vulnerability, response resources and plans to ensure continuous improvement. This is more effective than treating responses as a series of disconnected events and allows for lessons to be drawn from one type of hazard impact that can be successfully applied to prepare for other, even quite diverse, hazards.

Another important part of integrating disaster response management into the broader comprehensive emergency management program is the ability to build more robust and consistent response management systems. To this end, the F/P/T Network for Emergency Preparedness and Response is supporting the adaptation and implementation of an incident management systems approach at all levels within the health and emergency social services sectors.
16.1 Initial Response

The initial response to a large emergency or disaster is a critical stage in its successful management. This can involve first responders going to the scene of the emergency as is common with site specific incidents such as a train derailment or a forest fire. Canada’s recent experiences with the 1997 Red River flood, the 1998 Ice Storm, or 2003’s Kelowna fires and Hurricane Juan, all illustrate how well our first responders and community emergency management agencies deal with these sorts of incidents.

Alternatively emergencies can involve the victims and the problems coming to a variety of first contact points. An example of this would be a community suffering a communicable disease outbreak or exposure to a hazardous substance where victims present themselves first at clinics and emergency wards. It is this latter type of scenario that has caught the attention of the health and emergency social services sectors following the Anthrax attacks and scares in 2001 and the SARS outbreaks in 2003.

In both types of events the initial assessment of the incident, the development of short and long-term action plans, the assignment of resources to priority needs, and the provision of urgent care and support to the community must be coordinated. The health and emergency social services sectors must work closely with other public safety agencies (e.g. police, fire, and emergency management offices) as well as other community partners (e.g. utility companies, non-government agencies, and private sector companies) to achieve a coordinated response. It is necessary to have a system in place to simplify this interagency management and interaction. Incident Management Systems (IMS) provide this and it is important for the health and emergency social services sectors to prepare before an event to be able to work well within such a system.

16.2 Incident Management Systems

Incident management systems are becoming a very important organizational tool for emergency management. In the United States there is a process underway to adopt a National Incident Management System. Many Canadian provinces are implementing incident management systems as part of their response plans in both the local government and health and emergency social services sectors.

The American National Fire Protection Association defines an incident management system as “A system that defines the roles and responsibilities to be assumed by personnel and the operating procedures to be used in the management and direction of emergency incidents and other functions”. Similarly, the New Zealand Coordinated Incident Management System is defined as “a concept for coordinating responses to emergency incidents by two or more emergency services. It provides a process for agencies with different legal, geographic and functional responsibilities to work together effectively in any situation through the use of common terminology and structure.” Together these two definitions highlight the main points of a successful incident management system: the ability to have personnel and resources operating in a pre-arranged and coordinated manner and; to allow multiple agencies from different sectors to function together within a common management structure.

An incident management system approach provides several immediate benefits that will improve the health and emergency social services sectors’ ability to manage a disaster response more effectively and more efficiently. It will overcome the confusion and delay associated with developing a new or ad hoc response structure for each emergency. An incident management system provides a flexible management structure that can be quickly tailored to the unique problems posed by an emergency while retaining a common form that is easier to train staff to use. Horizontal and vertical interagency coordination is improved when each has adopted an incident management system. This can include cooperation and joint operations between:

- units within an organization (e.g. departments within a hospital);
- facilities within a region;
- regions and provincial departments, or;
- local, regional and provincial responders from different sectors (e.g. fire, police, utilities).
Various forms of incident management systems have been developed to suit different operating contexts. It is in this process of tailoring of an incident management system that the major strengths are built. The most commonly used incident management system is the Incident Command System (ICS). It was originally designed for wildfire response, under the acronym FIRESCOPE, and was primarily intended for scene management between responding fire-fighting units. It has since evolved into a more generic incident management system that forms the basis of other locally developed systems. The common components of these systems are:

- Incident Commander and Command Staff functions.
- Planning Functions.
- Operations Functions.
- Finance/Administration Functions.
- Logistics Functions.

Two incident management systems that are intended specifically for the health and emergency social services sectors are the “Hospital Emergency Incident Command System” (HEICS) and the “Medical and Health Incident Management” (MaHIM). HEICS applies the principles of the Incident Command System to the hospital setting. It creates positions under the five headings that are relevant in a hospital and helps hospitals relate to emergency services at the site and to other facilities using an IMS. The MaHIM system is under development as a result of the lessons from the 2001 Anthrax incidents in Washington D.C. when the separation of public health and facility based health services was recognized as an obstacle to a coordinated response. “MaHIM describes an overarching system for organizing and managing the many diverse medical and public health entities involved in mass casualty response.” Both of these were developed to meet the needs of the health and emergency social services sectors in the United States and reflect the separation of clinical and public health functions. Therefore, it is important to draw from both when creating an incident management system for the Canadian health and emergency social services sectors.

Most provinces and territories in Canada use an incident management system that is based on the Incident Command System (ICS). British Columbia for example, uses a multi-level ICS similar to what has been proposed above. Facilities use HEICS, regional health authorities use the Health Authority British Columbia Emergency Response Management System (HABCERMS) which is based on ICS, and the provincial health department uses the British Columbia Emergency Response Management System (BCERMS) which is also based on ICS. The Ontario and Manitoba health systems are also in the process of adopting ICS based incident management systems. The current level of support for ICS-based incident management systems should be built upon when developing a national system.

16.3 Principles for a National Health Incident Management System

The F/P/T Network for Emergency Preparedness and Response recognizes the strength of an incident management system comes from the process of the involved agencies collectively developing and agreeing on its structure. While the general parts of an incident management system are already widely established, the creation of common terminology, operating procedures and other details are equally important. Therefore, the F/P/T Network is recommending that a national incident management system for the health and emergency social services sectors be developed and that it is consistent with the following principles.
An incident management system should:

- Ensure an effective emergency response and help to ensure continuity of care.
- Be based on the Incident Command System (ICS) and adapt ICS structure, functions, terminology.
- Use consistent, common terminology.
- Be modular and adaptable to any situation regardless of size or type (including non-emergency events).
- Be adapted to meet the needs of the jurisdiction using it and the development should involve all stakeholders.
- Be integrated with other agencies (vertical and horizontal integration).
- Be suitable for use by all components of health and emergency social services sectors.
- Allow for unified command / management.
- Be defined and documented in writing (including a glossary of terms).
- Have clearly defined roles and responsibilities which are consistent with normal roles and, as much as possible, the IMS should keep people in normal roles and functions (e.g. logistics staff should take on logistics functions).
- Have clearly defined implementation, escalation, de-escalation, and termination procedures.

16.4 Incident Command System (ICS)

Part of the value of using the incident command system (ICS) is that it can be customized to meet the needs of the agency that is using it, without reducing its effectiveness. The agency will be using ICS to coordinate its internal resources as well as to integrate with other agencies. As long as the basic structure and common terminology are maintained, the agency will be able to effectively integrate its response vertically and horizontally with other agencies using ICS. The process of customizing should consider the size of the agency, its management structure, the types of emergencies it may respond to, its emergency role, and the system(s) being used by other response agencies.

In the health and emergency social services sectors the response system would see four response levels:

- Local (e.g. facility);
- Regional;
- Provincial and;
- National.

Each level should be using an ICS that meets the proposed national incident management system guidelines. Facilities may consider using a response system that is based on the Hospital Emergency Incident Command System, regions may adapt ICS to meet their needs, provincial departments and Health Canada should adopt and adapt ICS to coordinate provincial and national resources. Taken together, this approach should ensure a cohesive, coordinated health system response to emergencies and disasters that integrates effectively with the response structure being used by other agencies in the province.

16.5 Consequence Management

All emergencies can have varying degrees of impact on all facets of health and human needs. While, for example, the recent SARS outbreak in Ontario has served to highlight issues from the public health perspective there were lessons from the personal, psychosocial and business continuity aspects as well. Recognizing the interconnected nature of the components of the health and emergency social services sectors is important when managing the health consequences of any incident. It may be that the solution to one facet’s problem may lie in a different facet’s mandate. For instance, the solution to emergency wards overloaded with patients seeking reassurance following a hazardous substance release (affecting the provision of physical health and business continuity) may be in a combined public health and psychosocial response through effective public communication on symptoms.
When emergencies occur it is important to recognize all the implications for the health and emergency social services sectors. There may be immediate trauma and/or public health cases to be managed while other services such as home care may be dealing with its own issues. As well, a community may be in immediate need of clean water or emergency shelter. Emergencies, and especially those disasters that overwhelm a community, have a complex set of causes and consequences that are impossible to plan for ahead of the event in accurate detail. It is important that the health and social services sectors have a high level of preparedness and the flexibility to apply that preparedness to the unique circumstances of each event.

16.6 Recovery

Some emergencies have a very sudden onset while others provide long periods of warning or escalating damage. The immediate damaging forces may also end quickly or linger for days or weeks. These variations have a significant affect on how the response activities are carried out and it is usually the response that becomes the focus of public attention. Unfortunately, the long-term impacts of emergencies on individuals and communities is often overlooked and undervalued.

The recovery phase of a disaster can last for years and will affect all facets of a community. The physical injuries from an emergency may take months to heal and require long-term therapy. Many public health issues, such as mold or water contamination, may arise after the primary hazard impact has receded. Psychosocial trauma may become more evident with time or be exacerbated by the pain and frustrations of dealing with the losses. Damaged infrastructure, displaced staff and disruptions to external services may hamper a return to normal business for facilities and community-based programs. It is as important for the health and social services sectors to manage these consequences during the recovery period, as it is for them to prepare for the immediate responses. Health and social services will be involved with the ongoing consequences of a disaster far longer than many other community agencies and certainly long after the media’s interest has waned.

All of these issues may combine to change the community’s health needs and vulnerability. Not only will there be direct consequences to deal with it is possible that the impact on the social, economic and physical environment of a community will have detrimental affects on the determinants of health. The community’s need for the quantity and type of services may alter over time, with some services being in higher demand while others may seem surplus. The health and emergency social services sectors needs to recognize and anticipate these changes so the appropriate health and social services are available.

It is during this recovery phase that the transition back to ‘normal’ systems and services is handled. This must be managed in a way that maintains the needed level of service while assisting the community to adjust to the post-disaster realities. It may not be possible for all services to be restored or resumed exactly as they were prior to the incident. This does not mean, however, that ‘emergency’ systems should remain in operation indefinitely. There needs to be an orderly transition that supports the new needs of the community and the new issues facing the health and emergency social services sectors.

17 Learning From Disaster

Emergencies, especially those that stress a community’s coping-capacity beyond the disaster threshold, do offer rare insights into the way that the community and its systems function. Most importantly, it may only be through disasters that some system failures can be properly assessed and fixed. It is never appropriate to place people in danger to test emergency systems and yet it is only when people are threatened that the true effectiveness of those systems is determined. Furthermore, some systems, such as buildings and infrastructure, can not be realistically tested to “the breaking point” in an exercise or other simulation.

Disasters also change communities. They can alter the physical landscape, influence social, demographic and economic trends, and lead to deterioration in the determinants of health. This can result in increasing vulnerability, decreasing resiliency and a greater potential for further disaster. Recognizing change is crucial to redirecting resources, within the emergency management program specifically and the health and emergency social services sectors generally, to counter this potential. Post-event data collection, analysis and the development of better systems and practices contribute significantly to the local community, to the health and emergency management professions and to the country as a whole.
Therefore, it is critical to extract as much value and knowledge as possible from every disaster so that the losses and suffering caused can be better avoided in the future. This requires an organizational system that has experience and is prepared to act quickly, as many of the lessons can be fleeting, but is also sustained over the long-term to be able to identify issues that may only arise during the recovery period, possibly years later. This combination of experience, rapid activation and prolonged effort is not possible through the use of ad hoc or temporary systems. In this way the evaluation of the causes of disasters, their direct and indirect consequences and the health and emergency social services sectors’ immediate and long-term responses reinforces the need for a consistent and sustainable organizational structure.

Too often it takes a disaster to spur a jurisdiction into committing to comprehensive emergency management. Implementing this Framework will also create an organizational environment where learning from disasters is a positive and integral part of the Framework’s cycle and making our communities safer.

Appendix 1: Framework for Health Emergency Management

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**National Framework for Health Emergency Management**

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*Reduce Morbidity and Mortality  **Return to Pre-Event Morbidity and Mortality & Recovery of Health Systems*
Appendix 2: The F/P/T Network for Emergency Preparedness and Response

Federal, Provincial, Territorial Network on Emergency Preparedness and Response
Terms of Reference

Background:
In October 2001, F/P/T Ministers of Health established the Special Task Force on Emergency Preparedness and Response. In its final report to Ministers, the task Force recommended that:

- The F/P/T Network provide continuing oversight of the implementation of the recommendations of the Report and follow-up actions;
- An annual report be prepared and presented at the Conference of Deputy Ministers and Ministers of Health at their annual meeting; and
- Review the effectiveness of this structure after three years.

The implementation plan included in the Special Task Force’s final report was received by F/P/T Deputy Ministers and Ministers of Health.

Purpose:
The F/P/T Network, led by Health Canada’s Centre for Emergency Preparedness and Response (CEPR) will implement the recommendations of the Task Force Final report to develop a strong, coordinated and seamless emergency response capacity (pan-Canadian emergencies management approach) in the health sector and provide advice on related issues, as appropriate.

Mandate of the Network
The F/P/T network will provide oversight on the preparation of the annual report to Ministers of Health and action a common approach to carry out the recommendations included in the final report of the Special Task Force on Emergency Preparedness and Response and the implementation plan.

The F/P/T Network may also address related or emerging emergency preparedness and response (EP&R) issues of common concern, as appropriate. The F/P/T Network will hold regular tele-conferences and meetings as required (e.g., once or twice a year) to coordinate the implementation of the recommendations. It will also oversee the review of the effectiveness of the process in the fall of 2005.

F/P/T Network Structure:

Reporting: To the Conference of F/P/T Deputy Ministers of Health via the Centre for emergency preparedness and Response (CEPR). An annual report will be presented to F/P/T Deputy Ministers at their June Conference to be transmitted to the September Annual Conference of F/P/T Ministers of Health.

Membership: Provincial/territorial jurisdictions designated the current members of the Special Task Force on Emergency Preparedness and Response as the lead officials. The CEPR Executive Director is the designated federal government member. Membership could also include selected representatives from Emergency Social Services, Emergency health Services and the Council of Chief Medical Officers of Health (CCMOH).

Chair: Co-chair, Executive Director CEPR and a P/T senior official.

CEPR June 2002
Appendix 3: Council of Health Emergency Management Directors

Emergency preparedness and response has changed significantly over the past twenty years. The events of September 11th, 2001 and the subsequent fears of bio-terrorism have combined with the emergence of new diseases, such as West Nile Virus and SARS, to change expectations of the health and emergency social services sectors within all levels of government and the general public. Emergency issues in health have reached a degree of complexity requiring a more formal arrangement to address the full spectrum of existing and new concerns, risks, and threats. The depth and complexity of managing emergencies in the health and emergency social services sectors can no longer be effectively addressed through historical practices.

On November 30-December 1, 2002, the Federal/Provincial/Territorial Emergency Services Directors, endorsed a strategy and model to better serve the health emergency management environment. Health Canada participated in these deliberations and is supportive of the initiative. This entailed the creation of the Council of Health Emergency Management Directors (CHEMD). It was agreed that this was a necessary step forward to ensure that emergencies in the health and emergency social services sectors are addressed in a consistent and effective manner across all levels of government and in coordination with other emergency management organizations. CHEMD provides a unique venue for sharing knowledge and expertise across jurisdictions and sectors. This will positively affect the strategic convergence of emergency management practices strengthening and enhancing the Canadian emergency management infrastructure.

Mission:
For the health implications of emergencies, the Council of Health Emergency Management Directors (CHEMD) provides direction, advice, and guidance for the advancement of five essential elements (Risk and Threat Assessment, Mitigation, Preparedness, Response, and Recovery) of emergency management across Canadian jurisdictions.

Functions:
Foster, maintain, and enhance a strategic Pan-Canadian approach to health emergency management by:

- Initiating and sustaining joint emergency management activities;
- Providing support, advice, and guidance to all levels of governments and other emergency management agencies and functions;
- Identifying emerging issues, risks, and threats in order to:
  - Provide strategic advice; and
  - Recommend policy directions.
- Ensuring collaboration of individuals and organizations to support the sharing of ideas, expertise, and systems;
- Identifying and supporting best practices;
- Brokering federal/provincial/territorial consensus on common issues/initiatives; and
- Promoting and contributing to relevant research, information, and education programs.
Council of Health Emergency Management Directors (CHEMD) 
Terms of Reference 

Council of Health Emergency Management Directors 
Conseil des Gestionnaires des Mesures d’Urgence de la Sante 

Terms of Reference 

Endorsed May 05th 2003 Amended November 26, 2003 

Mission 

For the health implications of emergencies, the Council of Health Emergency Management Directors (CHEMD) provides direction, advice, and guidance for the advancement of five essential elements (Risk and Threat Assessment, Mitigation, Preparedness, Response, and Recovery) of emergency management across Canadian jurisdictions.

Membership 

Members are the senior manager/director who has authority and responsibility for leading emergency planning and management within the health sector, designated by each province and territory.

Health Canada is represented in an ex-officio (non-voting) capacity by the Director of the Centre for Emergency Preparedness and response and/or designate. 

Other participants may, by invitation, participate in Council activities.

Mandate 

- The Council may provide advice, support, guidance and recommendations to a variety of groups including, but not limited to:
- The Conference of Deputy Ministers of Health and other F/P/T consultative mechanisms through federal/provincial/territorial structures
- Health Canada through the Director of the Centre for Emergency Preparedness and Response or the delegate for that office
- The FPT Advisory partners. The Council of Chief Medical Officers of Health, (CCMOH) and the Council of Emergency Social Service Directors, (CESSD)
- The Office of Critical Infrastructure Protection and Emergency Preparedness, (OCIPEP).
- Committees, working groups and non-governmental organizations dealing with emergency preparedness and management issues at a national level

To fulfill the above mandate, the Council functions as:

- A knowledgeable body on emergency planning and management on issues of pan-Canadian concern. This includes providing advice, guidance and recommendations on strategies to prepare for and manage the broad range of hazards and threats that comprise potential emergencies or disasters for the health sector in Canada.
- An advocate for the mitigation and planned management of hazards, threats and risks within the health sector.
- A sponsor and catalyst for initiatives to strengthen the awareness and capabilities of the health sector to manage the consequences of the full range of natural and human induced emergencies that impact the health and well-being of individuals, families, communities, and the health sector.
- A vehicle for communication and collaboration with key groups and individuals within federal and provincial/territorial jurisdictions and with colleagues in other countries as appropriate.
Operations and Procedures

The Council:

- Will identify priorities, key activities and funding requirements, to be reflected in work plans.
- May strike working groups composed in whole or in part of members of the Council to address specific issues.
- May identify and solicit additional resources and expertise not available through existing committees.
- May initiate working agreements, memoranda of understanding and other collaborative arrangements.

The following operational procedures will apply:

- The Chair will be elected by the membership annually for a one-year term, renewable once. The past Chair will assume the role of Alternate Chair and perform the duties of Chair in the absence of the incumbent.
- The Chair is responsible for:
  - setting meeting agendas in consultation with members and circulating them in advance;
  - determining the location and date of meetings, after consultation with the membership;
  - conducting business on behalf of the Council (e.g., handling requests for participation, sending replies on behalf of the Council);
  - liaising with Health Canada as necessary; and
  - ensuring records of decisions and proceedings are produced.
- Council meetings will be held at least twice per year.
- Between meetings, the Chair may call teleconferences, at their discretion or at the request of other members.
- Proceedings will be informal, with decisions based on consensus defined as “a decision I can live with”.
- Communiqués and recommendations will be sent under the signature of the chair.

Resources

Provincial and territorial governments are responsible for the salaries of council members and for their time to participate in and support council activities.

Health Canada will support council activities in reference to an annual work plan submitted by the Council.

Health Canada support will include the following:

- all expenses for Council members related to at least two meetings per year, (i.e. travel, accommodation, meals as per federal government travel regulations) and monthly teleconferences.
- travel related expenses for members who are proactively representing the Council on committees (who do not pay expenses for their members).
- Special projects and initiatives will be considered on a case by case basis as they may contribute to, be supportive of, the overall development of a national emergency management system and the pursuit of goals of the council.
- Health Canada (CEPR) will provide secretariat support for the Council. Secretariat responsibilities include activities such as:
  * organizing meetings and teleconferences
  * managing the budget and contracts
  * processing expenditures for payment
  * liaison with other relevant committees on behalf of the Council
  * liaison with sub-committees or working groups established by the Council
  * additional activities as required and appropriate based on work plans.
Appendix 4: Council of Chief Medical Officers of Health

Council of Chief Medical Officers of Health
Conseil des médecins hygiénistes en chef

Terms of Reference

Revised March 15, 2002
Approved by CCMOH May 23-24, 2002

Mission

We support a vision of healthy people in healthy communities and are committed to the improvement, protection and promotion of the health of Canadians.

Membership

Voting members include the Chief Medical Officer of Health* from each province and territory.

Health Canada is represented in an ex-officio (non-voting) capacity by the Assistant Deputy Minister, Population and Public Health Branch or a delegate of that office, and a representative of the First Nations and Inuit Health Branch.

Other participants will be invited to participate in Council activities related to specific issues and population groups. These guests may include other Health Canada officials, federal representatives of the Canadian Food Inspection Agency, Correctional Services Canada, academics in community public health and experts in specific areas of national importance.

* A Chief Medical Officer of Health (CMOH) is the most senior medical officer of health employed by a ministry of health.

Mandate

1. To advocate and provide specific advice on measures which prevent disease and injury, and protect and promote the health of Canadians.

2. To provide a forum for assuring excellence in population and public health practice through communication, collaboration and the exchange of ideas, knowledge, experience and best practices on public health issues, activities and concerns. (See section at the end for definitions of public health and population health)

3. To facilitate discussion and collaborative action on professional and human resource issues related to strengthen community public health; for example, identifying generic functions of Medical Officers of Health, standards of practice and ethical issues.

The Council may provide advice, guidance and recommendations to a variety of groups including:

- The Conference of Deputy Ministers of Health using federal/provincial/territorial structures
- Health Canada through the Deputy Minister or the delegate for that office
- Committees, working groups and non-governmental organizations dealing with public health issues at the national level.
To fulfill the above mandate, the Council functions as:

- An expert advisor or consultant on public health and population health issues of pan-Canadian concern. This includes the provision of advice, guidance and recommendations on strategies to analyze, manage and communicate risks and threats to the health of the public.
- An advocate for the prevention and control of disease and injury, the promotion and protection of health and the improvement of conditions and factors leading to better health.
- A catalyst for strengthening community public health systems and practices across the country and for enhancing the professional competence of Medical Officers of Health in Canada.
- A communicator and liaison with key groups and individuals within federal and provincial/territorial jurisdictions and with colleagues in other countries as appropriate. This function also helps to improve coordination and collaboration among groups in the pursuit of common public health goals.

Chief Medical Officers of Health have the responsibility within their jurisdictions for the protection and promotion of the health of the public and prevention of disease and injury. By nature, public health concerns cross borders. Therefore the ability to collaborate in respect of each governments’ jurisdiction is crucial. The Council brings this function together at a Pan-Canadian level.

Operations

In order to fulfill its mandate in an efficient way, Council will:

- prepare an annual plan that identifies priorities, key activities and funding requirements for those activities
- initiate contracts as required
- establish working groups composed in whole or in part of members of the Council to address specific issues that require expertise not available through existing committees. Specific functions and timelines are required for these working groups.

The following operational procedures will apply:

- The Chair and Vice-Chair of the Council will be selected by vote from the membership at the annual meeting. (Minimum two-year term renewable if desired for a second term)
- The Chair will be responsible for:
  - setting the agenda for meetings in consultation with members and circulating them in advance
  - determining the location and date of meetings, after consultation with the membership
  - ongoing business on behalf of the Council (e.g., handling requests for participation, sending out replies on behalf of the Council)
  - ongoing liaison with the Secretariat.

- At the discretion of the Chair, the Past-Chair and Vice-Chair will assist with activities and decision-making related to the business and activities of the Council. The Vice-Chair will function in place of the chair as needed.
- Face-to-face meetings will be held twice per year, for at least 1.5 days. Between meetings, the Chair may call teleconferences to deal with pressing issues and ongoing business, at his/her discretion or at the request of other members.
- Decisions will be taken by consensus, which is defined as “a decision I can live with”. In the event that consensus is not reached, a majority agreement will be required. A majority is defined as 9 plus 1 of all Council member votes.
- Statements, advice and recommendations will be sent under the signature of the chair representing the collective voice. Individual members will not be required to sign on as individuals unless requested.
National Framework for Health Emergency Management

Resourcing

Health Canada will provide annual funding based on an agreed upon workplan and budget submitted by the Council.

Fiscal funding (April 1st - March 31st) will be provided for:

- All expenses for Council members related to two meetings (1.5 to 2 days each) per year and teleconferences (i.e. travel, accommodation, meals etc.) as per federal government travel regulations
- Travel related expenses for members who are proactively representing the Council on committees (who do not pay expenses for their members). When requests for participation on outside committees are made, the requesting body should pay for Council representation.

Health Canada (PPHB) will provide secretariat support for the Council.

Secretariat responsibilities include activities such as:

- organizing meetings and teleconferences
- drafting and finalizing record of decisions and monitoring follow-up actions
- managing the budget and contracts
- processing expenditures for payment
- liaison with other relevant committees on behalf of the Council
- liaison with sub-committees or working groups established by the Council
- additional activities as required and appropriate to the annual workplan.

Provincial and Territorial ministries of health contribute by providing the Chief Medical Officers of Health with time away to participate in the activities of the Council.

Definitions

Public health

Public health is one of the efforts organized by society to protect, promote, and restore the people’s health. It is the combination of sciences, skills, and beliefs that is directed to the maintenance and improvement of the health of all the people through collective or social actions. The programs, services, and institutions involved emphasize the prevention of disease and the health needs of the population as a whole. Public health activities change with changing technology and social values, but the goals remain the same: to reduce the amount of disease, premature death, and disease-produced discomfort and disability in the population. Public health is thus a social institution, a discipline, and a practice.1 The Acheson Report2 offered a more succinct definition: The science and art of prevention disease, prolonging life, and promoting health through organized efforts of society.


Reference:

A Population Health Approach

In January 1997, the ACPH defined population health as follows:

Population health refers to the health of a population as measured by health status indicators and as influenced by social, economic and physical environments, personal health practices, individual capacity and coping skills, human biology, early childhood development, and health services.

As an approach, population health focuses on the interrelated conditions and factors that influence the health of populations over the life course, identifies systematic variations in their patterns of occurrence, and applies the resulting knowledge to develop and implement policies and actions to improve the health and well-being of those populations.

Reference:


Appendix 5: Council of Emergency Social Services Directors

Acknowledgements:

The founding provincial representative members of the CESSD during this time included:

<table>
<thead>
<tr>
<th>Province / Territory</th>
<th>Representative(s)</th>
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<tbody>
<tr>
<td>Alberta</td>
<td>Pearl Morrison</td>
</tr>
<tr>
<td>British Columbia</td>
<td>Bill Douglas / Wayne Dauphinee</td>
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<tr>
<td>Manitoba</td>
<td>Larry Gwiazda / John Lavery</td>
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<tr>
<td>New Brunswick</td>
<td>Wayne Buffet</td>
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<tr>
<td>Newfoundland</td>
<td>Dennis Davis</td>
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<td>Nova Scotia</td>
<td>Keith Dares</td>
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<td>Nunavut</td>
<td>Bruce Trotter</td>
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<td>NWT</td>
<td>Jack MacKinnon</td>
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<tr>
<td>Ontario</td>
<td>Patricia Powell / Gary Bragagnolo</td>
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<td>Prince Edward Island</td>
<td>Susan Birt / Janet Wood</td>
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<td>Patrice Guyard</td>
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<td>Saskatchewan</td>
<td>Garnet Matchett</td>
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<td>Yukon</td>
<td>Gord Settle</td>
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CESSD gives special thanks to Ron Fortier (Province of Manitoba) for his leadership and strong commitment to the development of CESSD during this period. Ron's endless patience has been an invaluable support to the Council. CESSD thanks John Webb (Province of Nova Scotia) for his consistent support to CESSD as Vice-Chair. John's sense of humour has greatly enhanced the process. CESSD appreciates the time and effort of Dianne Scoffield (Province of Ontario) to coordinate and put in writing the Social Services components of this document.

CESSD also thanks Health Canada's Center for Emergency Preparedness and Response for the financial and logistical support that has resulted in the development of the CESSD.

Finally, no acknowledgement would be complete without special thanks to Claude Giroux and Linda Robinson (Health Canada) and Raymond Lafond (formerly of Health Canada) for their support to CESSD's fledgling growth.
Preamble
In emergencies, the volume, urgency and intensity of human needs and the degree of social disorganization are such that regular community social services may be unable to cope. Emergencies require the implementation of an emergency social services system to meet urgent physical and personal needs until longer term programs are effectively in operation.

Mission
The Council provides advice, support, guidance and formulates recommendations to ensure efficiency, effectiveness and consistency in the provision of Emergency Social Services.

Mandate
The Council provides advice, support, guidance and recommendations to a wide range of organizations including, but not limited to:

- The Federal, Provincial, and Territorial (F/P/T) Conference of Deputy Ministers of Health;
- Health Canada through the Director General of the Centre for Emergency Preparedness and Response or delegate;
- F/P/T Network on Emergency Preparedness and Response;
- As required, the Council may recommend that Deputy Ministers of Health engage and or inform their counterparts responsible for emergency social services initiatives;
- The Council of Health Emergency Management Directors (CHEMD);
- The Council of Chief Medical Officers of Health (CCMOH); and
- Committees, working groups and non-governmental organizations dealing with emergency preparedness and management issues at a national level.

Membership
Members are the senior manager directors who have authority and responsibility for leading emergency social services planning and management designated by each province and territory.

Health Canada is represented in an ex-officio (non-voting) capacity by the Director General of the Centre for Emergency Preparedness and Response and/or designate.

Other participants may, by invitation, participate in Council activities.

Scope of Interventions
The Council will provide advice, support, and guidance to emergency preparedness and response development forums and policies related to:

- emergency clothing,
- emergency food,
- emergency lodging,
- registration and inquiry,
- personal services, and
- reception centre services.
Functions
To fulfill the above mandate, the Council functions as:

- A knowledgeable body on emergency social services planning and management on issues of pan-Canadian concern. This includes providing advice, guidance and recommendations on strategies to prepare for and manage the broad range of hazards and threats that comprise potential emergencies in Canada;
- An advocate for the mitigation and planned management of hazards, threats and risks within the context of emergency social services;
- A sponsor and catalyst for initiatives to strengthen the awareness and capabilities of the emergency social services sector to manage the consequences of the full range of natural and human induced emergencies that impact the well-being of individuals, families, and communities;
- A vehicle for communication and collaboration with key groups and individuals within federal and provincial, territorial jurisdictions and with colleagues in other countries as appropriate.

Operations and Procedures
A minimum attendance of at least seven of thirteen provinces and territories shall constitute a quorum for decision-making.

The Council:
- Will identify priorities, key activities and funding requirements to be reflected in work plans;
- May strike working groups composed in whole or in part of members of the Council to address specific issues;
- May identify and solicit additional resources and expertise not available through existing committees;
- May initiate working agreements, memoranda of understanding and other collaborative arrangements.

The following operational procedures will apply:
The Chair and Vice-Chair of the Council will be elected by the membership, by June of each year, to a 2-year term (the Chair initially elected for a one-year term and the Vice-Chair for 2-year term);

The Chair and Vice-Chair are responsible for:
- Setting meeting agendas in consultation with members and circulating them in advance;
- Determining the locale and date of meetings, after consultation with the membership;
- Conducting business on behalf of the Council (e.g. handling requests for participation, sending replies on behalf of the Council);
- Liasing with Health Canada as necessary;
- Ensuring records of decisions and proceedings are produced and circulated;
- Council meetings will be held at least twice per year;
- Between meetings, the Chair or Vice-Chair may call teleconferences, at their discretion or at the request of other members;
- Proceedings will be informal, with decisions based on consensus;
- Communiqués and recommendations will be sent under the signature of the Chair or designate.

Resources
Provincial and territorial governments are responsible for the salaries of Council members and for their time to participate in, and support, Council activities.

Health Canada will support Council activities in reference to an annual work plan submitted by the Council.
Health Canada support will include the following:

- All expenses for Council members related to two meetings per year, or as required, (i.e.) travel, accommodation, meals as per federal government travel regulations) and teleconferences as required;
- Travel related expenses for members who are representing the Council on committees;
- Special projects and initiatives will be considered on a case by case basis as they relate to the overall development of a national emergency management system and the pursuit of goals of the Council.

Health Canada (CEPR) will provide administrative support for the Council. Administrative responsibilities include activities such as:

- Organizing meetings and teleconferences;
- Managing the budget and contracts;
- Processing expenditures for payment;
- Liaison with other relevant committees on behalf of the Council;
- Liaison with sub-committees or working groups established by the Council; and
- Additional activities as required.

Appendix 6 Glossary

**Accident**: “Everyday” events that impact on small portions of the population and are dealt with using the community’s normal response systems and coping resources.

**All-Hazards Approach**: Ensures disaster planning achieves its aims efficiently by collecting information on the full range of threats so subsequent risk management decisions can be made appropriately.

**Canadian Council on Health Services Accreditation (CCHSA)**: Is a national, non-profit, independent organization whose role is to help health services organizations, across Canada and internationally, examine and improve the quality of care and service they provide to their clients through the process of accreditation.

**Centre for Emergency Preparedness and Response (CEPR)**: Health Canada's central coordinating point for public health security issues.

**Comprehensive Emergency Management**: Encompasses mitigation, preparedness, response, and recovery and reflects the idea that successful management of vulnerabilities, resources, and the environment will reduce the likelihood of an impact exceeding the disaster threshold.

**Coping Resources**: The individual and community skills, materials, equipment or services that can be used to meet the demands created by an incident. Also, can include municipal departments, emergency services, private companies, volunteers and other formal or informal sources.

**Council of Chief Medical Officers of Health (CCMOH)**: A committee of the Chief Medical Officers of Health from each province and territory who are committed to the improvement, protection and promotion of the health of Canadians.

**Council of Health Emergency Management Directors (CHEMD)**: A committee of the Federal, Provincial and Territorial Directors responsible for disaster and emergency management.

**Council of Emergency Social Services Directors (CESSD)**: A committee of Provincial and Territorial Senior Manager Directors who have the authority and responsibility for leading emergency social services planning and management.

**Disaster**: An event that exceeds the ability of the local community to cope with the harmful effects and requires extraordinary measures.

**Disaster Threshold**: The point at which the consequences of an event exceed the level of a community’s coping resources and an emergency becomes a disaster.

**Emergency**: Increasingly serious mishaps that involve more people, as victims and as responders,
Emergency Management: The professional discipline and process of dealing with extreme harmful events where the management of the community’s vulnerability, resources and environment as a means of making the community safer.

Exercises: Simulation activities that bring the skills, knowledge, functions and systems together and apply them against event scenarios for both training and evaluative purposes.

Extreme Event: An occurrence that can cause severe damage within the community, including property destruction and personal injuries.

Federal/Provincial/Territorial Network (F/P/T Network): An initiative, led by the Centre for Emergency Preparedness and Response (CEPR), that will provide oversight, develop, and implement a coordinated, integrated and seamless approach to emergency preparedness and response. Membership includes representatives from provincial and territorial jurisdictions, CCMOH, and the EHS and ESS networks.

Hazard: The potential for a negative interaction between extreme events (of a natural or technological origin) and the vulnerable parts of the population. Three factors combine to create a hazard: the events that can impact on a community, the vulnerability of the population to such impacts, and the resources of the community to cope with those impacts.

Hazard, Risk, and Vulnerability Assessment: The process of identifying the threats and vulnerabilities facing a community and determining the implications and possible treatment options (a collection of information about the three factors that combine to create a hazard).

Incident Management Systems (IMS): “A system that defines the roles and responsibilities to be assumed by personnel and the operating procedures to be used in the management and direction of emergency incidents and other functions”.

Mitigation: Actions intended to eliminate or reduce the risk of future impacts from hazards to the vulnerable community.

Non-structural Mitigation: Social methods that are aimed at managing the activities that make a community vulnerable or contribute to the risk.

Planning: A process to develop the procedures and guidelines that will ensure effective and coordinated action.

Preparedness: Developing and readying response and recovery actions to increase the community’s ability to respond to future impacts.

Quality Improvement and Monitoring System: The ongoing process of evaluating the progress of programs and monitoring the physical, social, and economic environments to maintain an emergency management system that is adapted to current local conditions.

Recovery: Is the process of returning the community to “normal” that extends for many years and involves the physical, social and economic components of the community.

Resiliency: The ability of a community to resist the harm of an impact and return quickly to normal.

Risk: The product of two components, the likelihood of an event occurring and the potential consequences of the event.

Risk Management: “The systematic application of management policies, procedures, and practices to the tasks of analyzing, evaluating, controlling and communicating about risk issues.”

Structural Mitigation: Physical measures intended to eliminate or reduce risk.

Sustainability: “A process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations”.

Vulnerability: The relationship between common social and economic characteristics of the population, individually and collectively, and their ability to cope with hazards they face.


These mission statements are based on Health Canada’s mission but also reflect the general direction of local, regional and Provincial health programs.


The business continuity field has adopted the term “disaster recovery” with specific reference to the recovery of information and business systems. There are broader health and emergency social services considerations around community based disaster recovery that include mental health, rehabilitation, epidemiology, long-term shelter requirements, and other social and economic factors affecting the determinants of health.

In 2001 Brandon University’s Applied Disaster and Emergency Studies Department began offering both a Bachelor of Science or a Bachelor of Arts degree.


Agreed November 26, 2003, Ottawa

