



CANADIAN
PUBLIC HEALTH
ASSOCIATION

The Voice of Public Health

PUBLIC HEALTH

**IN THE CONTEXT OF
HEALTH SYSTEM
RENEWAL IN CANADA**

BACKGROUND DOCUMENT | MAY 2019

THE VOICE OF PUBLIC HEALTH

The Canadian Public Health Association is the independent national voice and trusted advocate for public health, speaking up for people and populations to all levels of government.

We champion health equity, social justice and evidence-informed decision-making. We leverage knowledge, identify and address emerging public health issues, and connect diverse communities of practice. We promote the public health perspective and evidence to government leaders and policy-makers. We are a catalyst for change that improves health and well-being for all.

We support the passion, knowledge and perspectives of our diverse membership through collaboration, wide-ranging discussions and information sharing.

We inspire organizations and governments to implement a range of public health policies and programs that improve health outcomes for populations in need.

OUR VISION

A healthy and just world

OUR MISSION

To enhance the health of people in Canada and to contribute to a healthier and more equitable world.

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The Canadian Public Health Association (CPHA) has a history of contributing to the discussions concerning the development and renewal of public health systems* in Canada. CPHA's latest contribution comes at a time when public health systems in some provinces and territories are being reorganized and in some cases reduced in size. The resulting changes have raised concern that these systems will no longer be able to meet the current mandate nor address future demands at the provincial, territorial and municipal levels. The Association's commentary regarding these changes is provided in two parts. The first part is this background document that summarizes the factors that have contributed to the current status of Canadian public health systems. This paper was prepared with the support of an advisory panel of established Canadian public health professionals and CPHA's Public Policy Committee and Board of Directors. The second is CPHA's [position statement](#) in response to these changes. It is recommended that the background document be read first, followed by the [position statement](#).

* For the purpose of this paper, the term public health systems refers to the complex adaptive network of federal, provincial, territorial and municipal/regional departments, agencies, units, organizations, teams and programs that deliver public health services to Canadians. It does not refer to Canada's publicly-funded health care systems.

GLOSSARY

Acute Care: “... all promotive, preventive, curative, rehabilitative or palliative actions, whether oriented towards individuals or populations, whose primary purpose is to improve health and whose effectiveness largely depends on time-sensitive and, frequently, rapid intervention.” (Hirshon, J.M., Risko, N., Calvello, E.J.B., Stewart de Ramire, S., Narayan, M., Theodosis, C. and O’Neill, J. 2013. [Health systems and services: the role of acute care](#). *Bulletin of the World Health Organization*. 2013; 91:386-388.)

Health: is a state of physical, mental and social well-being and not merely the absence of disease or infirmity. (WHO)

Health Equity: means that all people can reach their full health potential and should not be disadvantaged from attaining it because of their race, ethnicity, religion, gender, age, social class, socioeconomic status or other socially determined circumstances. (Whitehead, M, and Dahlgren, G. 2006. [Concepts and principles for tackling social inequities in health: Levelling up Part 1](#). Geneva: World Health Organization. As described in: NCCDH 2013. [Let’s Talk Health Equity](#). Antigonish, NS: National Coordinating Centre for the Determinants of Health, St. Francis Xavier University.)

Health-in-all-Policies: is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies, and avoids harmful health impacts, in order to improve population health and health equity. (WHO)

Health Promotion: is the process of enabling people to increase control over, and to improve, their health. It moves beyond a focus on individual behaviour towards a wide range of social and environmental interventions. (WHO)

Home and Community Care: are services that help people receive care at home, rather than in a hospital or long-term care facility, and to live as independently as possible in the community. Home and community care is delivered by regulated health care professionals (e.g., nurses), non-regulated workers, volunteers, friends and family caregivers. ([Health Canada](#). 2016.)

Primary Health Care: refers to an approach to health and a spectrum of services beyond the traditional health care system. It includes all services that play a part in health, such as income, housing, education, and environment. *Primary care* is the element within primary health care that focusses on health care services, including health promotion and illness and injury prevention, as well as the diagnosis and treatment of illness and injury. ([PHAC](#), 2012.)

Public Health: The organized efforts of society to keep people healthy and prevent injury, illness and premature death. It is a combination of programs, services and policies that protect and promote the health of all Canadians. (PHAC, 2008)

Public Health Practice: An approach to maintaining and improving the health of populations that is based on the principles of social justice, attention to human rights and equity, evidence-informed policy and practice, and addressing the underlying determinants of health. ([CPHA Conceptual Framework](#))

Public Health Services: Those services that address health promotion, health protection, population health surveillance, and the prevention of death, disease, injury and disability. ([CPHA Conceptual Framework](#))

Population Health: An approach to health that aims to improve the health of the entire population and to reduce health inequities among population groups. (PHAC)

Population Health Interventions: Population-level health interventions are policies or programs that shift the distribution of health risk by addressing the underlying social, economic, and environmental conditions. (Hawe, P. and Potvin, L. 2009. [What is population health intervention research?](#) *Can J Public Health* 100(1):I8-I14.)

Population Health Outcomes: Metrics that reflect a population’s dynamic state of physical, mental and social well-being. Positive health outcomes include being alive; functioning well mentally, physically and socially; and having a sense of well-being. Negative outcomes include death, loss of function, and lack of well-being. (Parrish, R.G., 2010. [Measuring population health outcomes](#). *Prev Chronic Dis* 7(4): A71.)

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PREFACE

In May 2000, CPHA released a paper entitled *An Ounce of Prevention: Strengthening the Balance in Health Care Reform*¹ that highlighted the issues and challenges within the Canadian health system and identified the critical importance of a public health strategy within health system reform. The paper identified a series of “building blocks” required for the Canadian health system in the 21st century, including:

- federal leadership and intergovernmental cooperation;
- a continuum of services; and
- measures to strengthen the delivery of public health services within the broader health services continuum.

A subsequent paper² provided the results of regional roundtable discussions that identified some of the system’s strengths and limitations, outlined challenges that needed to be addressed in order to maintain a strong public health service component, and provided a vision for public health in a sustainable health care system. It described ten guiding principles, including: public health as a public good; addressing all determinants of health; equity, diversity and social justice; partnership; public participation; interdisciplinary approaches; science-based; efficient and cost effective; continual improvement; and sustainability. The ten principles provided the foundation of CPHA’s brief to the Commission on the Future of Health Care in Canada.³ CPHA’s remarks included a scenario for greater public investment and reorganized service delivery that included public health.⁴

Concerns have been expressed recently regarding the future of public health following reductions in and reorganizations of provincial and/or local/regional public health organizations.⁵⁻⁷ Some of these changes have been targeted to public health organizations, while others have been targeted at

the health care system in general, but the effect of the change has resulted in alterations to the roles, responsibilities and structure of public health organizations at the provincial, territorial and municipal levels. The provincial governments that undertook these changes have explained them as a means of better aligning public health services with those of health care delivery, and better managing health system costs. Those opposed to the changes viewed them as a loss of integrity for the public health system and programs through reductions in autonomy, elimination of capacity and loss of authority for public health. Arguments can also be made regarding the actual cost savings resulting from these changes and the reductions' effects on existing programs. Apprehension has been expressed that long-standing, successful programs that address upstream* public health issues have been lost due to these reorganizations and reductions. The problem, however, is that scant evidence or analysis exists in Canada to either refute or substantiate the claimed effects of recent structural changes and funding reallocations.

Such reorganizations are challenging as they often do not respect the diverse range of disciplines that use a set of public and population health competencies to address a shared agenda of health promotion, disease prevention and health protection, and that are working with distinct groups and populations. In the interest of improving integration and the establishment of local primary care networks, public health staff and programs may be dissociated, placed within alternative organizations and may be directed by managers who lack knowledge of public health principles and practices. As such, these reorganizations may cause the loss of the original public health direction with a movement

* From a health perspective, *upstream* refers to the idea of taking action on those issues that have the greatest influence on our health (e.g., income, employment, education, early childhood education and development, housing, nutrition and the wider environment) as a means of reducing the likelihood of developing a health issue.

to a more individual orientation. Without evidence to the contrary, it is anticipated that governments will continue to undertake reorganizations as they believe appropriate. The issue then is to design and implement health systems and public health organizations in such a way that the principles, objectives, roles, responsibilities and resource allocations are maintained within evolving governmental structures to meet present and future needs.

PURPOSE

To review the organization of public health services in Canada from a governance and function perspective.

INTRODUCTION

The World Health Organization (WHO) definition of health⁸ describes an approach that recognizes that health is a resource rather than a state of being.⁹ It corresponds to the notion of being able to pursue one's goals, acquire skills and education, and grow rather than to simply be physically well. As such, prevention, protection, preparedness and promotion – functions of public health – are part of several interrelated components, ranging from primary and acute care delivery to responding to the social and ecological determinants of health that are necessary for positive health outcomes. With this view comes a complex series of interrelationships and functions that are based on the principles of health equity, social justice, attention to human rights and equity, and evidence-informed policy and practice.¹⁰

In Canada, the roles and responsibilities associated with this complex adaptive system[†] are framed by

† Complex adaptive systems are systems composed of many interacting parts that evolve and adapt over time. Organized behaviour emerges from the simultaneous interaction of the parts without a global plan. This approach had been applied to many complex issues, including economic, scientific and organizational design thinking.

the constitutional and legislative directions that exist among the various federal, provincial and territorial public health acts and regulations. These directions are informed by supporting documents that further describe and situate the roles, responsibilities and services of public health organizations at all levels of government. Then there are those responsibilities that support health (e.g., social and ecological determinants of health) but require actions by government departments that do not have a health mandate. Furthermore, the importance of developing relationships with Indigenous Peoples is demonstrated by the complex interweaving of legislation, regulations and agreements that govern health care and public health service delivery for them. (Refer to [CPHA's Position Statement regarding Jordan's Principle](#) for an example of the effects of these complex relationships.)* To function within this complex adaptive system, the component organizations have an ongoing responsibility to address processes and mechanisms needed to manage the distributed control of the system; provide leadership; address the influence of nested systems (e.g., primary health care and public health) on program delivery; and recognize the influence of the multiple levers to initiating activities that exist within these systems.

To meet these expectations, public health organizations have integrated services that support a unique position for public health within the larger health system. Public health system roles may be disrupted through direct reorganization of public health organizations or be the indirect result of broader health system reorganizations or generic budget reductions that do not consider the value of the program nor the critical mass needed for success. In addition, only a minimal portion of funding for

* CPHA recognizes the nation-to-nation relationship with Indigenous Peoples intrinsic to the Government of Canada's response to the Recommendations of the Truth and Reconciliation Commission, 2015. For the purpose of this paper, however, these relationships will be addressed in a subsequent section.

the overall health system is directed to public health services. With the increasing alignment of public health and the health care delivery systems, there may be a challenge to maintain both the population-level roles and the critical mass necessary to provide the public health services Canadians expect. This concern may be especially evident in smaller jurisdictions with their correspondingly limited resources.

A BRIEF HISTORY OF PUBLIC HEALTH IN CANADA

The provision of public health services in Canada finds its roots with the establishment of the Boards of Health in Lower Canada in 1832, and Upper Canada in 1833. Since these beginnings, the roles and responsibilities of public health organizations have changed and expanded when a population health approach was viewed as beneficial for preventing health-related harms. These developments, ranging from improvements in water quality and sanitation in the mid-1800s, to maternal-child health and immunization against common childhood diseases (in the mid-1900s), health promotion in the 1980s, and recent efforts to address the social determinants of health, focused on specific issues that affect the quality of life for Canadians and are described elsewhere.¹¹ One topic that requires additional discussion, however, is the development of health promotion as a component of public health.

The notion of developing programs that promote health for Canadians finds its roots in the Lalonde report, *A New Perspective on the Health of Canadians*¹² (1974),[†] which proposed that changes in lifestyles or social and physical environments would likely

[†] It could be argued that the advent of Medicare, first implemented in Saskatchewan and later in all of Canada, represented a population health intervention. This program, described in part by the Canada Health Act and the current FPT Health Accords, provides federal funding for primary care delivery by the provinces; as such, it should not be viewed as public health. Currently there is no targeted funding for public health within the Health Accords.

lead to more improvements in health than would be achieved by spending more money on existing acute and primary care delivery systems. This report provided the groundwork for programs that raised awareness of the health risks associated with personal behaviours and lifestyles such as smoking, excessive alcohol consumption, inadequate nutrition, and poor physical fitness.¹³ The benefits of health promotion activities were further described in a 1986 report that addressed the social, economic and environmental factors affecting (public) health,¹⁴ as well as the *Ottawa Charter for Health Promotion*.¹⁵ The Ottawa Charter also identified five priority action areas, including: building healthy public policy; creating supportive environments for health; strengthening community action for health; developing personal skills; and reorienting health services. Federal, Provincial and Territorial (FPT) Ministers of Health endorsed a population health approach in 1994,¹⁶ while the strategies underpinning this approach were further described in a subsequent discussion paper.¹⁷ In 2010, Ministers of Health issued a declaration that addressed the need to make prevention a priority.¹⁸ This commitment to health promotion continues.¹⁹

Two successive events, however, reinforced the need to maintain strong public health capacity for infectious disease prevention and emergency preparedness. The September 11, 2001 World Trade Center attack followed by the Fall 2001 anthrax attack in the United States (US) highlighted the need for strong emergency response capabilities, including international, inter-governmental and inter-departmental cooperation. These events directly resulted in organizational and programmatic changes to enhance response preparedness. The second incident, the Severe Acute Respiratory Syndrome (SARS) outbreak in 2003 further underscored these needs, while the resulting report *Learning from SARS: Renewal of Public Health in Canada – Report of the National Advisory Committee on SARS and Public Health* (the Naylor Report), led to the formation of

the Public Health Agency of Canada (PHAC) and provided recommendations concerning the core functions of public health:²⁰

- Health protection;
- Health surveillance;
- Disease and injury prevention;
- Population health assessment;
- Health promotion; and
- Emergency preparedness.

These findings were reinforced by the *Kirby Report*.²¹ These reports also led to a study on the public health workforce and the development of masters of public health programs in Canada.

In 2008, PHAC identified core competencies necessary for success in public health practice and grouped them under the following seven categories:²²

- Public health sciences;
- Assessment and analysis;
- Policy and program planning, implementation and evaluation;
- Partnerships, collaboration and advocacy;
- Diversity and inclusion;
- Communication; and
- Leadership.

These core competencies have neither been fully implemented nor evaluated within government systems in Canada.

Since the 2003 SARS outbreak, each successive response to an infectious disease event has resulted in recommendations to improve the response system, and the implementation of changes to emergency preparedness and related functions at federal and provincial/territorial levels of government that also resonate at the local level of government. It has been argued that this emphasis on responding to emergencies has impeded health promotion efforts, and that discussions on health system reorganization should be used as an opportunity to re-examine public

health infrastructure and renew health promotion activities.²³ However, ongoing concerns regarding the increasing levels of chronic illness associated with, for example, obesity, tobacco consumption, and inadequate diet and nutrition have led governments to continue or enhance programmatic funding and implementation to address health promotion activities. These influences on public health practice will continue to present themselves and be augmented by the ongoing challenges of integrating a health equity perspective to address these demands, and those that result from the changing demographics of the Canadian population. The challenge is to determine whether the existing programs and activities are achieving their anticipated outcomes.

MEASURING PUBLIC HEALTH

Often, public health interventions require longer time frames (beyond conventional government funding cycles) to demonstrate their effectiveness, while there are continuing pressures to demonstrate their success and cost-effectiveness over the short term. This challenge is especially difficult for those programs that take upstream approaches to addressing public health issues or those that have been implemented through administrative processes that support legislative requirements. Also, health promotion and health equity activities often involve interventions in partnership with other sectors and community-based organizations; as a result, it is often difficult to demonstrate causation between the planned intervention and the outcome, and then correctly attribute that success. Similarly, the role of public health is sometimes restricted to addressing the results of an issue, when public health officials may not have access to the policy levers to deal with the root cause, such as our interventions concerning the effects of climate change. A similar challenge is the development of appropriate outcome measures by which to express success, and that resonate with

decision-makers and the public. Often program benefits are expressed in terms of reduced morbidity and mortality or improved quality of life, which may not resonate with the interests of decision-makers (e.g., programmatic costs or economic sustainability). The benefits of public health interventions, while real, are generally long term in nature, and do not lead to immediate reductions in health system costs.

The American Public Health Association,²⁴ the Canadian Coalition for Public Health in the 21st Century (CCPH21)²⁵ and a recent systematic review²⁶ have developed return on investment (ROI) analyses for several public health interventions that have all demonstrated positive ROI. A question remains, however, regarding where those returns have gone. A 2009 study that examined the cost effectiveness of clinical preventive care in the US found that only childhood immunization and counseling of adults on low dose acetylsalicylic acid (ASA, aspirin) use resulted in cost savings, two others could likely produce cost savings (alcohol and tobacco interventions) and thirteen other preventive services were cost effective (reduced the cost of managing illness).²⁷ In these cases, the cost savings and improved quality of life resulting from the intervention were balanced against the cost of care resulting from lengthened life for individuals. While this study may not be directly applicable to public health in Canada at the population level, it should provide pause for consideration of the effectiveness of current interventions.

Public health service delivery has a unique and changing role within the health care system. The focus on the health of populations and how to prevent disease and promote health is different from the attention to disease management and care of individuals provided through primary care. In addition, the role of public health has expanded over time and will likely continue to expand as governments struggle to address the social and ecological determinants of health and health equity. Within existing and future roles, effort must be

made to align the evolving array of expectations on the public health workforce with its core competencies, and to ensure that the expectations are properly expressed within the framework of existing and future public health legislation, regulations and associated supporting documents. As a result, an understanding of the current systems of governance is necessary to manage the relationships needed to succeed.

A QUESTION OF GOVERNANCE

Governance of the public health system is provided by a complex series of Acts, regulations and supporting documents at all levels of government. This complexity arises in part from the fact that Canada is a federation of fourteen governments and that the provinces and territories are responsible for delivery of health services, while the federal government maintains a leadership and organizational role. Through legislation, regulation and other supporting documents, the federal, provincial and territorial partners describe their approach to health service delivery, including the delivery of public health services at the local level, with municipal governments being under provincial jurisdiction. The challenge is to understand these roles, responsibilities and relationships, and the risks governments may face when they reorganize them from time to time.

Federal responsibilities

The federal government has constitutional authority over some areas of health (e.g., quarantine at our national borders) and, with the agreement of provinces and territories, assumed certain responsibilities for health that are defined in various Acts of Parliament. For public health, these roles are found in the:

- *Department of Health Act*;
- *Public Health Agency of Canada Act*;
- *Human Pathogens and Toxins Act*; and
- *The Quarantine Act*.

Through this legislative framework, the Public Health Agency of Canada (PHAC) has developed a mandate to:²⁸

- Promote health;
- Prevent and control chronic diseases and injuries;
- Prevent and control infectious disease;
- Prepare for and respond to public health emergencies;
- Serve as a central point for sharing Canada's expertise with the rest of the world;
- Apply international research and development to Canada's public health program; and
- Strengthen intergovernmental collaboration on public health and facilitate national approaches to public health policy and planning.

The latter objective is achieved through the Public Health Network Council, the Council of Chief Medical Officers of Health and the Conference of Federal, Provincial and Territorial Deputy Ministers of Health, which bring together federal, provincial and territorial representatives, and the newly-formed Chief Public Health Officer's Health Professionals Forum that includes non-governmental organizations (NGO).

Within its mandate, PHAC also has a responsibility to collect data regarding several reportable diseases, as well as other pertinent public health data, in collaboration with the provinces and territories.

In the shorter term, the mandate letter to the current (2019) Federal Minister of Health²⁹ further identified lead public health responsibilities for: increasing vaccination rates; regulating food and beverage marketing to children; regulating trans fats and salts in food; and improving food labelling for sugars and dyes. The Minister also assumed responsibilities for managing the opioid crisis and supported the development of cannabis legislation and regulation. Legislative actions related to the social determinants of health (i.e., housing and poverty reduction)

Table 1. Summary of the core public health programs and standards in four provinces of Canada

<p>BRITISH COLUMBIA³¹</p> <ol style="list-style-type: none"> 1. Healthy living (healthy eating, physical activity, tobacco cessation, etc.) and healthy communities (food security, mental health promotion and prevention of mental disorders, chronic disease prevention) 2. Maternal, child (healthy development) and family health 3. Positive mental health and prevention of substance harms 4. Communicable disease prevention 5. Injury prevention (unintentional injuries, violence, neglect) 6. Environmental health (air quality, water quality, food safety, healthy community environments, health care facilities) 7. Public health emergency management (preparation, response, recovery, mitigation) 	<p>ONTARIO^{32*}</p> <ol style="list-style-type: none"> 1. Chronic disease prevention and well-being 2. Food safety 3. Healthy environments 4. Healthy growth and development 5. Immunization 6. Infectious disease and communicable disease prevention and control 7. Safe water 8. School health 9. Substance use and injury prevention 10. Foundational standard that includes emergency management, surveillance and health equity
<p>QUÉBEC³³</p> <ol style="list-style-type: none"> 1. Continuous surveillance of population health and its determinants 2. Global development of children and youth 3. Healthy and safe lifestyles and environments 4. Communicable disease prevention 5. Management of risk and health threats, and emergency preparedness 	<p>NOVA SCOTIA³⁴</p> <ol style="list-style-type: none"> 1. Foundational standard that includes understanding, health equity and social justice, public health workforce development, public health emergency management, and public health system infrastructure development 2. Healthy development of infants, children, youth and families 3. Healthy communities that include a range of settings (workplace, schools, homes, etc.) and environments (social, economic, and physical) 4. Prevention and control of communicable diseases 5. Environmental health

* On February 26, 2019 the Government of Ontario announced a restructuring of their health service, including a reduction in the number of public health units, with the goal of accruing cost savings. These changes may affect the public health programs and services currently offered by the province.

and climate change are the responsibility of other Ministries, although the Minister of Health may play a supporting role.

Provincial and territorial responsibilities

Provincial and territorial public health legislation defines the core functions of public health for each jurisdiction, and several Acts describe the roles and responsibilities of an executive level function responsible for overseeing the public health sector (a Chief Public Health Officer, Chief Medical Officer of Health, Provincial Health Officer or National Public Health Director, depending on the jurisdiction). Each statute describes different responsibilities to be performed; a summary of these legislative requirements is provided in Appendix 1. These

legislative requirements may be augmented at the request of the provincial or territorial minister of health. A review of this legislation shows the different approaches used by each province and territory to define the baseline activities for its public health programs. In general, those provinces and territories with newer Acts address the range of core public health functions, while those with older legislation are more limited with respect to their functions.

Public health functions are often expanded beyond these minimum requirements through administrative mechanisms that support the legislation. These requirements vary among jurisdictions and are applied at the municipal/regional level in each province or territory for program delivery. The core programs required by four provinces are presented in Table 1, above, while a list of the available supporting

Table 2. Functions of the senior executive responsible for public health as described in public health statutes

Province/Territory	Functions of the Chief Medical Officer of Health* as outlined in F/P/T Acts					Other Functions
	PHA	HS	HProm	DIP	HProt	
Canada <i>(Public Health Agency of Canada Act, SC 2006, c. 5) (Chief Public Health Officer)</i>						<ul style="list-style-type: none"> Advise the Minister and President of the Public Health Agency of Canada on public health matters Collaborate with governments, public health authorities, and organizations within Canada or internationally on health matters
Alberta <i>(Public Health Act, RSA 2000, c. P-37)</i>						<ul style="list-style-type: none"> Act as a government liaison Monitor and provide directives to Regional Health Authorities, medical officers of health, and executive officers
British Columbia <i>(Public Health Act, SBC 2008, c. 28)</i>						<ul style="list-style-type: none"> Advise the Minister of Health and public officials Establish standards of practice for and provide directives to medical health officers
Manitoba <i>(The Public Health Act, C.C.S.M. c. P210)</i>						<ul style="list-style-type: none"> Advise the Minister of public health issues on the officer's own initiative or at the request of the Minister Consult with the Minister on any other reports the Chief Public Health Officer considers appropriate to prepare and distribute Provide directions to health officials
New Brunswick <i>(Public Health Act, SNB 1998, c. P-22.4)</i>						<ul style="list-style-type: none"> The responsibilities of the Chief Medical Officer of Health are not explicitly indicated under the Public Health Act
Newfoundland and Labrador <i>(Health and Community Services Act, SNL 1995, c. P-37.1)</i>						<ul style="list-style-type: none"> The responsibilities of the Chief Medical Officer of Health are not explicitly indicated under the Health and Community Services Act These responsibilities will be expanded when the Public Health Protection and Promotion Act comes into force July 1, 2019
Northwest Territories <i>(Public Health Act, S.N.W.T. 2007, c. 17 SI-007-2009)</i>						<ul style="list-style-type: none"> Monitor and provide directions to the Deputy Chief Public Health Officers and public health officers Provide recommendations to the Minister in public health emergency situations
Nova Scotia <i>(Health Protection Act, SNS 2004, c. 4)</i>						<ul style="list-style-type: none"> Monitor and provide directions to the Deputy Chief Medical Officer and medical officers about the exercise of any power or duties under the Health Protection Act
Nunavut <i>(Public Health Act, S.Nu. 2016, c. 13)</i>						<ul style="list-style-type: none"> Provide recommendations to the Minister in public health emergency situations Appoint a Chief Public Health Officer and provide directions to public officers appointed under the Public Health Act Advise the Government of Nunavut and health officials on public health issues
Ontario <i>(Health Protection and Promotion Act, R.S.O. 1990, c. H.7)</i>						<ul style="list-style-type: none"> Provide directions to local boards of health or medical officers in matters which concern infectious diseases, health hazards, public health emergency preparedness or any other matter outlined in regulations made by the Minister
Prince Edward Island <i>(Public Health Act, RSPEI 1988, c. P-30.1)</i>						<ul style="list-style-type: none"> Advise the Lieutenant Governor in Council and the Minister in public health emergency situations
Québec <i>(Public Health Act, RLRQ 2001, c. S-2.2)</i>						<ul style="list-style-type: none"> Support the Minister in all matters related to public health, including public health emergencies; may provide orders during emergency situations Coordinate, with regional Public Health Directors, the Québec Public Health Program
Saskatchewan <i>(The Public Health Act, SS 1994, c. P-37.1)</i>						<ul style="list-style-type: none"> Consult with and provide approvals to medical officers of health in the issuing of orders to decrease or eliminate a public health risk in the interest of population health and well-being
Yukon <i>(Public Health and Safety Act, RSY 2002, c. 176)</i>						<ul style="list-style-type: none"> Complete other duties and functions as assigned by an enactment or by the Minister

* The designation of Chief Medical Officer of Health (CMOH) varies among provinces and territories within Canada. CMOH is the term most commonly used (Alberta, Saskatchewan, Ontario, New Brunswick, Nova Scotia, and Newfoundland and Labrador) and is used here to depict the roles of these leaders as opposed to the alternative titles of Chief Public Health Officer (Manitoba, Prince Edward Island, and Canada), Provincial Health Officer (British Columbia), and National Public Health Director (Québec).

PHA = Population health assessment; HS = Health surveillance; HProm = Health promotion; DIP = Disease and injury prevention; HProt = Health protection

documents that describe the functions of the various provincial and territorial public health organizations is provided in Appendix 2. The organizations that support these functions at the PT level have been curated into a website supported by the National Collaborating Centre for Healthy Public Policy.³⁰ It should be noted that the legislation and supporting documents describe required services, while the organizational structures for delivering them are addressed through the machinery of government.*

In addition, Table 2, above, provides a summary of the responsibilities of each federal, provincial and territorial lead public health official, as described in their respective legislation, compared to the functions described in the Naylor Report. The variation in responsibilities of these officials serves as a proxy to illustrate that public health systems across Canada can differ substantially. These requirements were further described in a recent publication.³⁵ The required functions vary according to jurisdiction, while the provincial acts for New Brunswick and Newfoundland and Labrador† do not explicitly describe this executive's roles. These inconsistencies among the various authorities and responsibilities may be a point of weakness. As such, the public health functions that underlie these authorities are also susceptible to reorganization to reflect their legislative mandates, as opposed to the mandates that they have assumed through non-legislative means. These concerns have also been expressed about the roles and responsibilities of the local/regional public health organizations and the roles and responsibilities of the local medical officers of health; however, limited information is available concerning their changing roles. A systematic survey of these changing roles and

responsibilities could act as a proxy for the changing functions of public health and would provide a basis for reconsidering the future direction and organization of public health delivery mechanisms. In general, efforts should be made to modernize existing public health legislation and directional documents to reflect current activities while providing flexibility to address future challenges at the FPT and municipal/regional levels.

From time to time, governments will adjust departmental funding or organizational structures for a variety of reasons that might include:

- Advancing short-term partisan goals and promises;
- Adding new programs;
- Strengthening existing programs;
- Adjusting mature programs;
- Increasing efficiency, or reducing duplication and overlap; or
- Eliminating programs that are deemed unsuccessful or have reached the end of their life cycle.

Programs may also be adjusted from time to time within the bureaucracy because they have matured and no longer require the existing level of resourcing; they have reached or are not reaching their anticipated outcomes; the interests of the government no longer align with the program goals; or programmatic adjustments are needed to meet immediate needs (e.g., a response to an infectious disease outbreak).

As noted previously, concern has been expressed regarding the reorganization of public health services taking place within some provinces and territories, and the potential effect of these changes (often viewed as reductions) on the authority of the Chief Medical Officer or equivalent.⁵⁻⁷ These concerns are also reflected at the local/regional level and in the roles of local medical officers of health. Concern

* Machinery of government refers to the interconnected structures and processes of government, such as the functions and accountability of departments in the executive branch of government.

† Effective July 1, 2019 the *Newfoundland and Labrador Public Health Protection and Promotion Act* will be enacted. It provides revised responsibilities for public health, including a health-in-all-policies approach, and expands the roles and responsibilities for the Chief Medical Officer of Health.

has also been expressed that budget reductions in some jurisdictions will weaken the capacity to meet performance expectations, while the realignment of services from a local perspective to a regional one could affect service delivery within the community. While the focus of this section is on public health system reorganizations, it is recognized that broader health system renewal efforts may have direct and indirect influences on public health program development and delivery, as well as public health budgets, both at the provincial level and for local public health program delivery.

A summary of recent provincial and territorial health system reorganizations is presented in Appendix 3. While each reorganization was specific to the province or territory in which it occurred, each resulted in a realignment of public health services either within the provincial or territorial organizational structure, or municipal/regional organizations. Some were accompanied by budget reductions, while others were not. Common reasons cited for these reorganizations included realignment of responsibilities with a view to developing efficiencies, improved services at the regional and local level, and cost savings. It is recognized that every provincial or territorial government has the authority to organize and support programs as it determines to be appropriate. A question remains as to whether these reorganizations have or have not achieved their anticipated outcomes, or whether these changes have compromised the core functions of public health. Many are recent and, as a result, limited evidence is available to evaluate their effects.

An approach to evaluating the reorganization of public health services by some provinces and territories might be to examine the effect the change could have in relation to the overall system deficiencies that were identified in the Naylor Commission report. Public health systems with the capacity to meet those deficiencies are needed, and

introducing budgetary cuts will make it difficult to make necessary improvements. An initial assessment of the provincial and territorial reorganizations against these criteria is provided in Appendix 4; however, a formal evaluation would provide more comprehensive information.

Staffing and budget reductions appear to have the greatest potential effect on system performance. However, these reorganizations may contribute to improved efficiencies, enhanced communication, and support of a health-in-all-policies approach. Complicating this assessment is the effect that structural reorganization, staff reduction, and budget reductions have on staff morale, program effectiveness, and availability of a critical mass of staff and financial resources to perform the necessary functions.^{36,37} These effects may be mitigated, however, by the development of a proactive climate conducive to change prior to its implementation,³⁸ or by the reduction of program activities to reflect staff and financial resource levels. Further evaluation is required before conclusions can be drawn regarding the effect of recent reorganizations on the public health system's performance and the health of the public.

LOOKING TO THE FUTURE

While it is important to maintain continuing vigilance to address existing public health issues, it is also necessary to examine changes in science and society that may affect public health practice. In 2014, the Chief Public Health Officer (CPHO) of Canada identified health risks due to climate change, technological innovation, and an aging population as the main issues within the emerging public health context.³⁹ This report also noted that a focus was needed on the maintenance of principles of public health along with strengthening of our role as a collaborator and coordinator as inter-sectoral

action is undertaken. Planning for success would involve continuing to support our traditional policy promotion activities across all levels of government while investing in strong research and surveillance programs. These factors will affect how public health services will be organized and perform their functions. The purpose of this section is to highlight select topics and issues that are affecting or may affect the future activities of public health systems.

A changing environment

The ecological determinants of health have been described in a recent CPHA discussion paper.⁴⁰ A clear link exists between a healthy, sustainable environment and human mental and physical health. This relationship is underscored when climate change, perhaps the most pressing challenge, is examined through a public health lens. It has been described as the “biggest global health threat of the 21st century,”⁴¹ and “(t)he effects of climate change are being felt today and future projections represent an unacceptably high and potentially catastrophic risk to human health.”⁴² For example, the effects of extreme weather events resulting from climate change include extreme heat with its direct effect on seniors, young children, the insecurely housed, and other vulnerable populations; increased occurrence of extreme weather events that affect emergency preparedness and response; and shifts in historical infectious disease patterns (e.g., West Nile disease, Lyme disease, malaria, Zika) with the resulting effect on surveillance and health protection. Similarly, changing weather patterns may affect food production and, by extension, food security. The enormity of the problem and need for immediate action has been described in a recent report.⁴³ These effects will also influence psychological well-being and mental health as people become overwhelmed with the complexity of the problem resulting in an increase of psychoterratic*

* Psychoterratic disease arises from a negative relationship to our home environment, be it at local, regional or global scales. The negative relationship involves a loss of identity, loss of an endemic

syndromes.⁴⁴ Public health services must prepare for and respond to the results of these changes, but have limited policy influence to address the root causes of climate change. Such levers align with those organizations responsible for environmental policy, economic growth and tax policy. Similar issues can be expected as responses are developed to other threats to our environment and the health of the population.

A changing economy

Western economies are transforming from an industrial base to one based on information management and other advanced technologies that will affect the nature of work. For example, the integration of automation into manufacturing facilities has led to changes in the skills and competencies necessary to operate such facilities, while reducing the number of traditional middle-class jobs. It has also resulted in unstable access to work for segments of Canadian society, which may affect quality of life, mental wellness, and access to adequate income, housing and food. Overall, the nature of work is changing and some Canadians will be negatively affected.

Access to adequate income, housing, and food has a direct influence on people’s health and well-being, whereby those at the upper end of the social gradient (with access to adequate income, housing and food) are generally in better health than those at the lower end. Income⁴⁵ and housing security⁴⁶ have been the subjects of position papers by Canadian Coalition for Public Health in the 21st Century, while food security⁴⁷ has been addressed by the Dietitians of Canada. The policy levers for addressing these issues fall within the ambit of government departments other than Health. At the federal level, these are Finance, Infrastructure, and Agriculture and Agri-Food, respectively. The successes of programs that address housing, food and income security, however, have a direct influence on

sense of place and a decline in well-being. Further description is available [online](#).

the health of the citizens accessing them. As such, a role for the public health sector should be two-fold; first, to provide leadership by advocating for innovative approaches to address these issues, and second, to provide information regarding changes in the burden of illness resulting from these and other innovations.

Changing technology

As the development and introduction of advanced materials, new technologies, and expanded information management systems are altering our economy, so will they also affect health care and public health services. For example, advances in genomics and the introduction of Clustered Regularly Interspaced Short Palindromic Repeats (CRISPR) technology have facilitated greater understanding of the genetic basis of illness and the potential to develop patient-specific treatment modalities. This personalized medicine approach could reduce mortality and the burden of illness while improving length and quality of life, with its consequent demand for public health services. These technologies could also provide clues to understanding the root causes of traditional public health challenges, such as heart disease and obesity, although the implications for public health have yet to be delineated. These technological advances, however, are unlikely to close health gaps as members of society will not have equal access to them. It further signals the changing relationship between health care delivery and public health, and the development of approaches that may lead to clinical public health methodologies.

Advanced technologies may also influence the practice of public health. The application of artificial intelligence and big data manipulation are influencing surveillance and epidemiological methodology, as our capacity to mine social media and other information feeds may allow rapid identification of illness outbreaks and permit targeted responses. The

challenge to public health systems will be to identify those technologies that work or show promise of working, implement and integrate them into practice, and evaluate their effectiveness.

A changing public

For the first time in the history of our country, the number of Canadians aged 65 years and older has surpassed the number of youth (18 years of age and younger), thereby affecting the mix of programs necessary to meet the needs of seniors while still meeting the needs of children and youth.

Accompanying this demographic shift is the increasing incidence of mental illness in Canada.⁴⁸ Similarly, children and youth are demonstrating less resilience than previous generations. While responsibility for responding to these challenges rests largely with mental health professionals, a growing body of evidence⁴⁹ supports the introduction of upstream, population mental wellness approaches. These approaches would establish the psychological and emotional basis that could produce reductions in the incidence and prevalence of mental illness from societal influences, and improve personal resilience among youth, thereby permitting them to succeed as adults to the greatest extent possible.

Of particular concern is the development of approaches to respond to the needs of Indigenous Peoples, where the experiences of racism, colonization, genocide and structural violence include the dislocation of First Nations, Inuit and Métis from their land, culture, spirituality, languages, traditional economies and governance systems, and have resulted in the erosion of family and social structures. The effects of these actions are described, in part, in the report of the Truth and Reconciliation Commission⁵⁰ and the associated Calls to Action.⁵¹ The challenge for public health practitioners will be to build the

relationships necessary to become trusted partners in their journey to reconciliation.

A further challenge is the increasing diversity of the Canadian population and the influence of socio-economic status on health. It is known that those at the lower end of the social gradient are more likely to have poorer health outcomes than those at the higher end, while persons of colour and Indigenous Peoples are over-represented at the lower end of the social gradient. One study has shown that 76% of low-income children under the age of five in Toronto were visible minorities.⁵² Steps, such as the establishment of programs to address food, housing and income insecurity, are required to address this disparity.

Complicating these demographic shifts is the amount of information available, the scientific literacy of the population, and the way in which Canadians access and interpret it. The increasing use of the Internet to seek health-related information prior to consulting a health care provider raises questions with respect to the quality of information available and its influence on decision-making. Similarly, the misrepresentation of information or the dissemination of incorrect information results in poorer health decision-making. These challenges are further complicated by the influence of social media where concerns expressed by influential commentators may result in decisions that limit healthful activities (e.g., the anti-vaccination movement).⁵³ The challenge then is to understand the influences of social media on personal decision-making, and to develop health promotion strategies that counteract them.

An underlying challenge posed by these influencers of future public health practice is that they continue the movement from a practice that focused on responding to specific public health challenges with policy levers within the health mandate (e.g., sanitation, vaccination, improved lifestyle choices) to one where public health systems must respond to issues where

the policy levers for addressing the issue are found outside health's ambit (e.g., finance, justice and social services). The result is that public health practitioners will have to further develop their role as a convenor and collaborator while maintaining leadership within its ambit. These roles come with the need to enhance our capacity to work within and manage complex adaptive systems that demand the integration of people with the responsibility, skills, competencies, level of decision-making authority and interest necessary to achieve success.

AN APPROACH TO CHANGE

From its beginnings, the public health system has based its interventions on evidence-informed practice, which has allowed the organizations employing public health professionals to affirm their role in meeting the needs of Canadians. It has also resulted in robust organizations that evolved to address new responsibilities. This capability to evolve must continue as public health systems adjust to current and future issues. The challenge is to determine whether these existing structures are appropriately designed and funded to meet both the continuing and future expectations of Canadians and the core public health functions. The *National Advisory Committee on SARS and Public Health* provided a list of six core functions required of public health organizations to meet the needs of the government for which they work, provide necessary services to protect and promote health, and maintain and improve the quality of life of Canadians. These functions were reinforced in the 2008 report of the Chief Public Health Officer of Canada.⁵⁴ These programs and policies must be supported by a public health research capacity to identify public health challenges, support development of policies and programs, and evaluate the results of any responses. However, the infrastructure and approaches used to apply these principles must evolve as governmental needs change.

Such development means respecting the integrity of programs that continue to have success, while altering those that require amendment and adding new functions when appropriate.

In addition to these requirements, several pieces of legislation describe the roles and responsibilities for a senior public health official. Within the public health community, many believe that this individual should have both the capacity to comment on actions taken by government to influence public health and to describe where investments should be made to address public health concerns, as well as the administrative and managerial authority necessary to manage a major government organization. Underlying this position is the notion of *independence*, which supported the inclusion of a role for a senior public health official within federal and certain PT legislation. It provides that official with the capacity to act as a physician in the position of chief public health officer within government, when necessary, and to comment on the health of the population. Such independence is unusual in government and is in contrast to the demands and limitations placed on other senior officials within government. The responsibility of all government officials (including public health officials), however, is to provide the best possible advice and then implement the decision of government.

As such, there is a unique tension within the role of a senior public health official to balance the capacity to comment on government activities while performing their responsibilities as a senior government official. The challenge for a chief public health officer, where the position exists, is to maintain independence while fostering appropriate relationships with other senior officials. This dichotomy could be addressed through various governmental mechanisms, including: separating the role as an independent advisor from that of a senior executive; developing a health-in-all-policies approach; experimenting with

public administration policies; and reconsidering public health service delivery and its integration into government structures. A similar tension exists with the role of a local medical officer of health, where a balance must be established between their responsibilities to meet the expectations of local government while maintaining their role as an independent voice concerning local public health matters.

The oversight of a diverse public health workforce should be undertaken by a public health leader (e.g., a local medical officer of health) who is responsible for enforcing the provincial or territorial public health act, has the authority to direct the activities of public health staff and has the ability to manage them in times of public health responses. Without this integrated management authority, there is a likelihood that staff may lose touch with the overarching public and population health perspective of their work, or that system-wide pressures may lead to program reductions without consideration of their possible implications.

A recurring theme in provincial efforts to redesign their health systems has been to recognize the value of locating services in communities. Supporting citizens closer to their homes is seen as a means to both enhance quality of life and avoid hospital-based care. A common result of this approach is the pairing of public health with primary/community care. Both aspects are important as primary care may counsel people to change behaviours, but there is a need for a supportive environment outside the doctor's office to enable those behaviour changes. In addition, there is a need to conduct the population-based research and program development necessary to identify and address these problems. This latter role is the domain of public health. The limitations placed on the scope of public health practice by using a combination of primary care and community care has been noted,⁵ and the experience of public health nurses in British

Columbia cited as an example of this challenge.⁵⁵ The cause of this issue was attributed to poorly-conceived arrangements for traditional public health services within the revised organizational structures.

The benefits of strengthening the relation between public health and primary care, however, have also been noted. Such collaborations have been shown to increase accessibility to health promotion and disease prevention programs and services, and decrease the cost of immunization programs through reduced wastage.⁵⁶ Similarly, examples exist whereby public health functions have been realigned to non-health related functions, for example the recent migration of environmental health officers in New Brunswick and Nova Scotia from public health organizations to non-public health organizations. The success of these realignments lies in the establishment of relationships, agreements and performance criteria to maintain the public health components of these programs. Similarly, the staff subject to these realignments must be appropriately consulted and managed throughout the transition.

Public health is a governmental responsibility and subject to the strictures placed on those organizations. It must meet the mandates provided in the various legislations, regulations and directional documents at the federal, provincial, territorial and municipal/regional levels. The mechanisms for delivering these mandates, however, are the purview of elected governments and the officials they direct. This situation is further complicated because public health offers a unique function at the population level that is often closely aligned with the provision of acute and primary health care services at the individual level. From a machinery of government perspective, the challenge lies in determining whether public health systems have the structure and flexibility to respond to our current and future needs; distinguishing public health services from acute and primary health care delivery; and determining where core public health

services should reside. Should they be preserved within a single organization or distributed among a matrix of governmental structures? Should the latter approach be chosen, what controls exist within the system to maintain program cohesiveness, efficiency and effectiveness, while addressing the need to contain the size of government and demonstrate value to Canadians? The answers to these questions hinge on defining the intent of the reorganization and thoughtful evaluation of possible outcomes, coupled with an understanding of the role of health officials working within governments to provide the best possible advice, and then implementing the decision of the government or health authority.

Evolving social, environmental and economic contexts are also influencing the issues that must be addressed and the manner in which they can be addressed. These evolving contexts have resulted in a series of “wicked”* problems demanding complex solutions that draw on the skills and competencies from various departments at all levels of government to craft and implement interventions and monitor progress. Public health has a unique role within this complex system based on its functional areas, the core competencies of its professionals and its role as a convenor and collaborator. It is well-placed to understand the social and ecological forces affecting population health through surveillance, research and its long-term population health perspective that crosses sectors. In some cases, public health services will lead, while in other situations, they will support broader-based initiatives. Efforts have been made in Europe to reconsider the organization and financing of public health services.⁵⁷ Their approach may serve as a starting point for considering the delivery of such services in Canada, although the legal, political, and

* A wicked problem is defined as a complex problem for which there is no simple solution, or a social or cultural problem that is difficult or impossible to solve due to incomplete or contradictory knowledge; the number of people or opinions involved; the large economic burden; and/or the interconnected nature of the problem with other problems.

cultural differences between Canada and Europe limit direct applicability.

To achieve this unique role in Canada, public health organizations must reconsider their methods and approaches to working within complex government systems by assuming an approach based on collaboration and, where appropriate, providing leadership within and among the various partners and stakeholders; drawing upon its core functions;³⁰ and renewing the approaches that were previously described.^{15,58} Within this past work, several actionable items remain salient and include:

- Defining the roles and responsibilities at each level of the system (municipal, regional, provincial/territorial and federal);
- Modernizing and bringing consistency to legislation across PTs;
- Developing appropriate delivery mechanisms;
- Analyzing data from appropriate information and surveillance systems to examine long-term trends and immediate issues;
- Coordinating access and providing leadership to the expertise necessary to carry out responsibilities expertly and efficiently across relevant sectors;
- Supporting adequate research, surveillance and epidemiological capacity; and
- Developing and implementing accountability mechanisms at each level of the system.

To further develop these relationships, action should be taken to:

- Clarify the interface between the primary care and public health systems;
- Develop an enhanced capacity for public health policy; and
- Strengthen the evidence base to support public health actions.

These roles, responsibilities and relationships underscore the need for a health-in-all-policies approach whereby health not only remains in the domain of FPT health ministries, but also resides in all other ministries' policies.⁵⁹ Within this framework, opportunities should be developed to support public health organizations in meeting their unique objectives:⁴⁴

- Apply holistic, capacity-building, interdisciplinary, multisectoral and upstream approaches to the work of public health organizations;
- Provide the opportunity for sectors outside the health system to undertake and/or collaborate on public health programs;
- Maintain collective action on health equity and the social and ecological determinants of health, whereby public health services are integrated within the complex governmental system responding to these challenges;
- Strengthen capacity to respond to outbreaks and issues affecting public health;
- Maintain investments in population and public health functions wherever they exist within government organizations;
- Provide adequate resources for research, and to evaluate the success of public health interventions that are undertaken both within existing public health structures, and also those undertaken by non-public health entities; and
- Support the ongoing inclusion of community consultation within public health practice.

CONCLUSION

Health starts where we learn, work, play and love, and public health services are meant to protect, promote and improve the health of Canadians through a population-based approach that complements the acute and primary care services. It is achieved by developing and implementing programs that protect and promote health, prevent illness, and respond to challenging situations. These programs are evidence-informed, have a strong research base, are supported by appropriate evaluation, and address the public health aspects of the social, economic and environmental influences affecting health.

Recently, governments have attempted to control health system costs by realigning delivery methods and, in certain instances, reducing budgets. These changes may erode public health if the functions of public health are displaced by the acute and primary care systems. Governments, however, have the authority to organize themselves as necessary to meet the mandate provided by the Constitution and their respective legislations. As a component of government, public health organizations must meet their mandates, while the professionals working within those organizations are responsible for providing the best possible advice and then implementing the decision of governments and health authorities. The challenge is to reaffirm the unique and important role of public health services in the overall health system; that is, to provide independent, evidence-informed perspectives on population health, to deliver current and future public health interventions consistent with the evolving roles and responsibilities of public health, and to maintain the capacity necessary to address public health emergency situations.

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Appendix 1 Summary of Federal, Provincial, and Territorial Public Health Acts

Federal Legislation			
Nation State	Act	Description	
Canada	Public Health Agency of Canada Act, SC 2006, c 5 <i>Public Health Agency of Canada</i> <i>Chief Public Health Officer</i>	<p>The <i>Public Health Agency of Canada Act</i> provides a framework for public health action by the Government of Canada, including health protection and promotion, population health assessment, health surveillance, disease and injury prevention, and public health emergency preparedness and response. It facilitates collaboration within the public health sector, coordinates federal public health policies and programs, and supports cooperation of provincial and territorial governments, foreign governments, and international organizations which operate in the field of public health. The responsibilities of the Chief Public Health Officer are to:</p> <ul style="list-style-type: none"> ● Advise the Minister and President of the Public Health Agency of Canada on public health matters ● Collaborate with governments, public health authorities, and organizations within Canada or internationally on health matters ● Speak to the public, health professionals, and key stakeholders about matters impacting population health ● Produce an annual report on the state of public health in Canada to be provided to the Minister for tabling in Parliament ● Prepare and publish any report concerning public health should it be considered appropriate by the Chief Public Health Officer 	
Provincial/Territorial Legislation			
Province/Territory	Provincial/Territorial Ministry	Act	Description
Alberta	Department of Health <i>Acute Care and Population Health Division</i> <i>Primary Health Care Division</i> <i>Chief Medical Officer of Health</i>	Public Health Act, RSA 2000, c P-37	<p>The <i>Public Health Act</i> addresses issues relating to communicable diseases, epidemics, and public health emergencies. The Act outlines the responsibilities of the Chief Medical Officer of Health, deputy and medical officers of health, and regional health authorities, emphasizing health protection and surveillance. The responsibilities of the Chief Medical Officer of Health are to:</p> <ul style="list-style-type: none"> ● Monitor the health of the population of Alberta and provide recommendations to the Minister and regional health authorities concerning protection and promotion of health and prevention of disease and injury ● Liaise between the government and regional health authorities, medical officers of health, and executive officers in the execution of responsibilities outlined under the Public Health Act ● Monitor and provide directions to regional health authorities, medical officers of health and executive officers in line with the responsibilities outlined under the Public Health Act
British Columbia	Ministry of Health <i>Population and Public Health Division</i> <i>Provincial Health Officer</i>	Public Health Act, SBC 2008, c 28	<p>The <i>Public Health Act</i> outlines the duties of the Minister, public health officials, regional health authorities, local governments, and others in order to increase effectiveness and efficiency of public health services. The roles and responsibilities of the Minister and health officials are:</p> <ul style="list-style-type: none"> ● Public health planning, monitoring, and surveillance ● Communicable disease prevention and control ● Environmental health hazard response ● Chronic disease and injury prevention ● Public health emergency response <p>The <i>Framework for Core Functions in Public Health</i> produced by the Ministry of Health Services outlines four key public health strategies, including health promotion; health protection; preventive interventions; and health assessment and disease surveillance. It is through these strategies that the core public health programs are implemented. These programs may target areas of health improvement; disease, injury, and disability prevention; environmental health; and health emergency management. The responsibilities of the Provincial Health Officer are to:</p> <ul style="list-style-type: none"> ● Monitor the health of the population of British Columbia ● Independently advise the Minister and public officials on public health issues, matters of health promotion and protection, and the need for legislation, policies, and practices addressing these areas ● Produce public reports addressing the aforementioned public health matters if considered appropriate by the Provincial Health Officer ● Produce a report for the Minister at least once a year on the health of the population of British Columbia, the extent to which health targets have or have not been achieved, and any recommendations related to health promotion and protection ● Act as a medical health officer and provide directives to health authorities in this instance if the Provincial Health Officer considers it in the public interest to do so ● Establish standards of practice for medical health officers in alignment with their duties under the Act, monitor and conduct performance reviews relating to compliance with these standards

<p>Manitoba</p>	<p>Manitoba Health, Healthy Living and Seniors <i>Manitoba Public Health and Primary Health Care</i> <i>Chief Public Health Officer</i></p>	<p>The Public Health Act, C.C.S.M. c. P210</p>	<p>"The purpose of this Act is to enable the delivery of public health services to protect and promote the health and well-being of the people of Manitoba" (<i>The Public Health Act</i>, C.C.S.M. c. P210, Section 2). The Act outlines a framework to aid the province in anticipating and responding to public health emergencies and in providing public health services, including:</p> <ul style="list-style-type: none"> ● Health surveillance ● Population health assessment ● Health promotion ● Health protection ● Disease prevention and control ● Injury prevention <p>The responsibilities of the Chief Public Health Officer are to:</p> <ul style="list-style-type: none"> ● Advise the Minister of public health issues on the officer's own initiative or at the request of the Minister ● Carry out any powers of a medical officer as considered appropriate ● Provide directions to health officials about the exercise of any power or duties under The Public Health Act ● Revoke or amend, by order, an order made under The Public Health Act by a health official ● Produce a report for the Minister at least once every five years on the health status of Manitobans ● Consult with the Minister on any other reports the Chief Public Health Officer considers appropriate to prepare and distribute
<p>New Brunswick</p>	<p>Department of Health <i>Chief Medical Officer of Health</i></p>	<p>Public Health Act, SNB 1998, c P-22.4</p>	<p>The <i>Public Health Act</i> is concerned with public health protection and communicable diseases. Changes to the legislation in 2009 aimed to increase the capacity of health officials to prevent and respond to public health risks. The responsibilities of the Chief Medical Officer of Health are not explicitly indicated under the <i>Public Health Act</i>.</p>
<p>Newfoundland and Labrador</p>	<p>Department of Health and Community Services <i>Population Health Branch</i> <i>Chief Medical Officer of Health</i></p>	<p>Health and Community Services Act, SNL 1995, c P-37.1</p>	<p>The <i>Community Health Act</i> and <i>Health and Community Services Act</i> outline the public health responsibilities of health officials which focus on health surveillance, protection and prevention. Those Public Health responsibilities specific to regional authorities are specified in the Regional Integrated Health Authorities Order and include health promotion, prevention, and protection. The responsibilities of the Chief Medical Officer of Health are not explicitly indicated under the Health and Community Services Act.</p> <p>On July 1, 2019 the <i>Community Health Act</i> and parts of the <i>Health and Community Services Act</i> will be replaced by the <i>Public Health Protection and Promotion Act</i> that will implement a health-in-all-policies approach to public health, expand the core functions of public health, and define and expand the duties of a Chief Public Health Officer. Available at: https://assembly.nl.ca/HouseBusiness/Bills/ga48session3/bill1837.htm.</p>
<p>Northwest Territories</p>	<p>Department of Health and Social Services <i>Chief Public Health Officer</i></p>	<p>Public Health Act, S.N.W.T. 2007, c.17 SI-007-2009</p>	<p>The <i>Public Health Act</i> is focused on health protection and outlines public health functions in terms of how, by whom, and to what extent these functions are to be carried out. The responsibilities of the Chief Public Health Officer are to:</p> <ul style="list-style-type: none"> ● Monitor and provide directives to the Deputy Chief Public Health Officers and public health officers ● Take any actions considered appropriate to protect public health, which could include: <ul style="list-style-type: none"> - Produce and disseminate public health advisories and bulletins - Issue health hazard orders - Provide recommendations to the Minister in public health emergency situations - Aid in the coordination of public health emergency responses - Aid in the coordination of public health inspections and investigations - Provide population health surveillance - Establish and maintain registries (notifiable diseases and conditions, notifiable tests, notifiable immunizations, reportable diseases, reportable tests) - Require persons to take or refrain from taking actions to protect public health from risks presented by reportable diseases

<p>Nova Scotia</p>	<p>Department of Health and Wellness <i>Chief Medical Officer of Health</i></p>	<p>Health Protection Act, SNS 2004, c. 4</p>	<p>The <i>Health Protection Act</i> outlines the responsibilities of public health officials and provides them with a framework for the protection of public health and the prevention, detection, management, and containment of public health threats. The Act addresses topics such as notifiable and communicable diseases, health hazards, public health emergencies, and food safety. It prompted the development of Nova Scotia Public Health's <i>Moving Forward: A Commitment to Public Health's Future 2010</i>, which outlines the core functions of the Public Health system as population health assessment; health surveillance; health promotion; disease and injury prevention; and health protection. The responsibilities of the Chief Medical Officer are to:</p> <ul style="list-style-type: none"> ● Monitor and provide directions to the Deputy Chief Medical Officer and medical officers about the exercise of any power or duties under the <i>Health Protection Act</i> ● Develop surveillance protocol for communicable diseases, notifiable diseases and dangerous diseases ● Develop necessary communication plans and protocols for response to health hazards, notifiable diseases and conditions, communicable diseases, and public health emergencies ● Provide medical relief to persons in need in the province as considered appropriate to ensure protection of public health ● Order any person, organization, corporation or municipality to control disease vectors as detailed under the Act
<p>Nunavut</p>	<p>Department of Health <i>Public Health Branch</i> <i>Chief Public Health Officer</i></p>	<p>Public Health Act, S.Nu. 2016, c.13</p>	<p>The <i>Public Health Act</i> serves to protect and promote the health of the population of Nunavut through public health measures such as health promotion, health protection, population health assessment, public health surveillance, disease and injury prevention, and public health emergency preparedness and response. The Act promotes policies, processes, activities, and behaviours to facilitate increased control over, and improved population health. The responsibilities of the Chief Public Health Officer are to:</p> <ul style="list-style-type: none"> ● Establish programs for surveillance, promotion, and protection of population health ● Establish and maintain public health records ● Identify, investigate, and manage health hazards (with particular emphasis on climate change), communicable diseases, and outbreaks, and convey these risks to the public when considered necessary ● Implement services and programs as outlined under the Public Health Act ● Provide recommendations to the Minister in public health emergency situations ● Prepare the public health aspects of Nunavut's emergency preparedness and response ● Produce a report for the Executive Council every two years on the health status of the people in Nunavut ● Appoint medical and environmental health officers ● Provide directions to public officers appointed under the Public Health Act ● Provide advice to the Government of Nunavut and health officials on public health issues ● Make recommendations and engage in public health planning ● Act on behalf of the Government of Nunavut with agencies such as the Public Health Agency of Canada to increase administrative or technical capacities under the Public Health Act ● Prepare a report on any public health related concern should it be considered appropriate at the discretion of the Chief Public Health Officer to be shared with the Legislative Assembly and given directly to the Speaker

<p>Ontario</p>	<p>Ministry of Health and Long-Term Care <i>The Public Health Division</i> <i>Chief Medical Officer of Health</i></p>	<p>Health Protection and Promotion Act, R.S.O. 1990, c. H.7</p> <p>Ontario Agency for Health Protection and Promotion Act S.O. 2007, Chapter 10 Schedule K</p>	<p>The <i>Health Protection and Promotion Act</i> provides a framework for the organization and delivery of public health programs and services, the prevention of disease, and the promotion and protection of population health in Ontario. Responsibilities of the Minister described in the Act include: "... publish health standards for the provision of mandatory health programs and services and every board of health shall comply with them." The Ontario Public Health Standards (OPHS) and Protocols are an example of such guidelines and include assessment and surveillance; health promotion and policy development; disease and injury prevention; and health protection. The responsibilities of the Chief Medical Officer of Health are to:</p> <ul style="list-style-type: none"> ● Investigate, prevent, and eliminate any threat to public health through means considered appropriate by the Chief Medical Officer of Health, including advising the Minister ● Provide directives to local boards of health or medical officers in matters which concern infectious diseases, health hazards, public health emergency preparedness or any other matter outlined in regulations made by the Minister ● Produce an annual report to be delivered to the Speaker of the Legislative Assembly on the status of public health in Ontario ● Prepare a report should it be considered appropriate at the discretion of the Chief Medical Officer of Health to be shared with whomever the Chief Medical Officer of Health considers appropriate <p>The <i>Ontario Agency for Health Protection and Promotion Act</i> provides for the establishment of an Agency to provide scientific and technical advice and support to those working across sectors to protect and improve the health of Ontarians and to carry out support activities such as population health assessment, public health research, surveillance, epidemiology, planning and evaluation.</p>
<p>Prince Edward Island</p>	<p>Department of Health and Wellness <i>Chief Public Health Officer</i></p>	<p>Public Health Act, RSPEI 1988, c P-30.1</p>	<p>The <i>Public Health Act</i> is health protection focused and outlines public health functions in terms of how, by whom, and to what extent these functions are to be carried out. The Act prompted the development of Prince Edward Island's <i>Promote, Prevent, Protect: PEI Chief Public Health Officer's Report</i> (produced every two years to keep the public informed and can be used by governments but is not mandated under the Act), which outlines the core functions of public health as health protection; health surveillance; disease and injury prevention; population health assessment; health promotion; and emergency preparedness and response. The responsibilities of the Chief Public Health Officer are to:</p> <ul style="list-style-type: none"> ● Issue orders to prevent, decrease or eliminate any health hazard through means considered appropriate by the Chief Medical Officer of Health ● Produce a public health notice or order regarding a health hazard when deemed necessary by the Chief Public Health Officer to reach impacted individuals ● Monitor the health of the population of Prince Edward Island ● Require persons to take or refrain from taking actions to protect public health from risks presented by communicable diseases ● Advise the Lieutenant Governor in Council and the Minister in public health emergency situations ● Provide directions to persons in emergency situations when considered necessary to protect population health

Québec	Ministry of Health and Social Services <i>Public Health Departmental Branch</i> <i>National Public Health Director</i>	Loi sur la santé publique, 2001, c S-2.2 Loi sur les services de santé et les services sociaux, c M-19.2 Loi sur la santé et la sécurité au travail Loi sur l'Institut national de santé publique du Québec	<p><i>Loi sur la santé publique</i> aims to protect population health by establishing and maintaining conditions to facilitate the maintenance and enhancement of the health and well-being of the population of Québec. The Act outlines the framework for Québec's public health activities and programs. These are characterized by core functions in Public Health, including:</p> <ul style="list-style-type: none"> ● Population health surveillance ● Disease and injury prevention ● Health promotion ● Health protection <p>The responsibilities of the National Public Health Director are to:</p> <ul style="list-style-type: none"> ● Fulfil the role of Assistant Deputy Minister of Public Health (<i>Loi sur les services de santé et les services sociaux</i>, 1985, s 5.1) ● Monitor population health ● Prepare the national report on the health status of the population in collaboration with the public health directors and the Institut national de santé publique du Québec for the Minister ● Support the Minister in all matters related to public health, including public health emergencies; may provide orders during emergency situations ● Coordinate, with regional Public Health Directors, the Québec Public Health Program ● Prevent disease, trauma, and social problems which impact health and positively influence population determinants of health through: <ul style="list-style-type: none"> - Organizing health information and awareness campaigns - Supporting health protection initiatives - Assessing and acting on health risks - Promoting health ● Public health institutes are legally responsible for aspects of occupational health <p><i>Loi sur l'Institut nationale de santé publique du Québec</i> provides for the establishment of an institute in support of the Minister of Health and Social Services and of the regional council respecting the health services and social services of Cree native persons in connection with their responsibilities in the field of public health.</p>
Saskatchewan	Ministry of Health <i>Population Health Branch</i> <i>Chief Medical Health Officer</i>	The Public Health Act, SS 1994, c P-37.1	<p>The <i>Public Health Act</i> is largely health protection focused and outlines public health functions in terms of how, by whom, and to what extent these functions are to be carried out. Emphasis is placed on protecting the health of the population of Saskatchewan from public health risks that might arise from water supplies and sewage disposal, food, the environment, as well as non-communicable and communicable diseases. The responsibilities of the Chief Medical Health Officer are not clearly defined in the Act, however, it alluded to the following responsibility:</p> <ul style="list-style-type: none"> ● Consult with and provide approvals to medical officers of health in the issuing of orders to decrease or eliminate a public health risk in the interest of population health and well-being <p>These responsibilities may be altered at the request of the Minister of Health under authority provided by the <i>Interpretation Act</i>.</p>
Yukon	Department of Health and Social Services <i>Chief Medical Officer of Health</i>	Public Health and Safety Act, RSY 2002, c.176	<p>The <i>Public Health and Safety Act</i> recognizes the government's responsibility to take action to prevent and protect the population from threats to public health and safety. The Act outlines public health functions in terms of how, by whom, and to what extent functions relating to sanitation, communicable diseases, public health emergencies and hazards, and inspections are to be carried out. Outside of the mandate of the <i>Public Health and Safety Act</i>, the Chief Medical Officer of Health produces the Yukon Health Status Report every three years. The responsibilities of the Chief Medical Officer of Health are to:</p> <ul style="list-style-type: none"> ● Prevent, monitor, investigate and respond to communicable disease ● Promote health ● Carry out public health surveillance ● Complete other duties and functions as assigned by an enactment or by the Minister

Appendix 2 Administrative Documents Supporting Provincial and Territorial Public Health Acts

Province or Territory	Supportive Documents
Alberta	<ul style="list-style-type: none"> ● Alberta Health Services ● A Healthier Future Together: The 2017-2020 Health Plan and Business Plan
British Columbia	<ul style="list-style-type: none"> ● Framework for Core Functions in Public Health ● <i>The Health Authorities Act</i> ● Setting Priorities for the B.C. Health System (2014) ● Promote, Protect, Prevent: Our Health Begins Here: BC's Guiding Framework for Public Health
Manitoba	<ul style="list-style-type: none"> ● The <i>Public Health Act</i> and the <i>Regional Health Authorities Act</i> ● Each regional health authority has a five-year strategic plan (2016-2021)
New Brunswick	<ul style="list-style-type: none"> ● The <i>Regional Health Authorities Act</i> ● Toward the Modernization and Transformation of the Health Care System: Strategic Plan 2017-2020 ● New Brunswick's Wellness Strategy 2014-2021: The Heart of our Future ● Rebuilding Health Care Together: The Provincial Health Plan 2013-2018
Newfoundland and Labrador	<ul style="list-style-type: none"> ● Regional Integrated Health Authorities Order (2005) ● Achieving Health and Wellness: Provincial Wellness Plan for Newfoundland and Labrador (2006) ● Department of Health and Community Services: Strategic Plan 2017-2020
Northwest Territories	<ul style="list-style-type: none"> ● Caring for Our People: Strategic Plan for the NWT Health and Social Services System 2017 to 2020
Nova Scotia	<ul style="list-style-type: none"> ● Nova Scotia Public Health Standards ● Moving Forward: A Commitment to Public Health's Future (2010)
Nunavut	<ul style="list-style-type: none"> ● Developing Healthy Communities: A Public Health Strategy for Nunavut 2008-2013
Ontario	<ul style="list-style-type: none"> ● The Ontario Public Health Standards and Protocols ● Public Health Ontario Strategic Plan 2014-2019
Prince Edward Island	<ul style="list-style-type: none"> ● Health P.E.I. Strategic Plan: 2017-2020 ● PEI Chief Public Health Office Strategic Plan 2016-2018 ● Healthy Islanders Healthy Communities 2015-2018 Strategic Plan
Québec	<ul style="list-style-type: none"> ● Programme national de santé publique 2015 - 2025
Saskatchewan	<ul style="list-style-type: none"> ● The <i>Regional Health Services Act</i> ● Healthier Places to Live, Work and Play: A Population Health Promotion Strategy for Saskatchewan (2004) ● Healthy People, a Healthy Province: The Action Plan for Saskatchewan Health Care (2001)
Yukon	<ul style="list-style-type: none"> ● Health and Social Services Strategic Plan: 2014-2019

Appendix 3 Recent Provincial and Territorial Health System Reorganizations

Province/Territory	Year	Description of Changes	Government Rationale	Potential Impacts on PH
Alberta	2015	<ul style="list-style-type: none"> Proposed return to decentralized health services (following amalgamation in 2008) Proposed creation of 8-10 health districts responsible for services 	<ul style="list-style-type: none"> Amalgamation led to organizational chaos and wasteful spending 	<ul style="list-style-type: none"> N/A – Change from Conservative to NDP leadership eliminated this plan
	2017	<ul style="list-style-type: none"> Creation of primary care network (PCN) zones to implement region-specific service plans 	<ul style="list-style-type: none"> Better coordination to meet unique health needs in each region Shared services to lower administrative costs 	<ul style="list-style-type: none"> Integrated care framework that links PCNs with Alberta Health Services resources Increased support for community-based programming and complex care between health providers
British Columbia	N/A			
Manitoba	2015	<ul style="list-style-type: none"> Amalgamation of 11 regional health authorities into 5 RHAs 	<ul style="list-style-type: none"> Streamlining administration Redirection of savings (\$10M over 3 years) to frontline care 	
	2017	<ul style="list-style-type: none"> More than 10% funding cut for programs that monitor and promote public health \$3.1M in 'prevention cuts' Cancellation of 6 capital health projects 	<ul style="list-style-type: none"> Long-term sustainability of health care system Redirection of spending to hospital maintenance Balanced budget 	<ul style="list-style-type: none"> Communities at risk without resources or investment for future health care need
Ontario*	2017	<ul style="list-style-type: none"> Amendment to <i>Health Protection and Promotion Act</i> to remove qualification requirements for Boards of Health staff Qualifications were later listed as enforceable under the Ontario Public Health Standards 2017 <i>Patients First Act</i>, 2016 	<ul style="list-style-type: none"> Greater autonomy in hiring practices 	<ul style="list-style-type: none"> Lack of regulated credentials may reduce quality of workforce Hiring of non-regulated professionals as cost-saving mechanism Protect Ontario's universal public health care system by making evidence-based decisions on value and quality
	2017	<ul style="list-style-type: none"> Recommended restructuring of 36 health unit boundaries to mirror those of 14 Local Health Integration Networks 	<ul style="list-style-type: none"> Improved capacity of public health sector to work within integrated health system 	<ul style="list-style-type: none"> Staffing and wage concerns (redundancies, layoffs, etc.) Larger public health entities could mean less local spending for smaller communities Separation of public health from regional governments may limit ability to work with related local departments (transit, social services, housing, etc.) Disproportionate direction of local taxes to programming for region
	2018	<ul style="list-style-type: none"> Implementation of Ministry of Health and Long-Term Care's <i>Standards for Public Health Programs and Services</i>, a framework to improve population health and reduce health inequities 	<ul style="list-style-type: none"> Transformation of services to align with changes in public health and healthcare sectors 	<ul style="list-style-type: none"> Greater emphasis on 'non-traditional' public health and social determinants of health Expectation of changes in programming with no change in budget may be unrealistic
Newfoundland & Labrador	2017	<ul style="list-style-type: none"> 93 jobs cut from regional health authorities 21% reduction in executive-level management at RHAs 	<ul style="list-style-type: none"> Savings of \$7.6 million per year Reduce health spending closer to national average 	<ul style="list-style-type: none"> Reduced health system sustainability
New Brunswick	2017	<ul style="list-style-type: none"> Public Health Practice and Population Health Branch moved to Dept. of Social Development Healthy Environments Branch moved to Dept. of Environment and Local Government Public Health and Agri-Food Inspectors moved to Dept. of Justice and Public Safety 	<ul style="list-style-type: none"> Pool together similar sets of expertise to enhance collaboration Structure resources similarly to other Atlantic provinces 	<ul style="list-style-type: none"> Perceived decreased capacity of CMOH to undertake prevention and promotion activities Reduced access to public health responses, especially in outbreak response Legislative challenges with information sharing and communication between departments

* The Province of Ontario announced a reorganization of that province's health care system on February 26, 2019, including a reduction in the number of public health units from 120 to 35 with an anticipated cost saving of \$200 million. Additional information concerning these changes is pending.

PUBLIC HEALTH IN THE CONTEXT OF HEALTH SYSTEM RENEWAL IN CANADA

Northwest Territories	2016	<ul style="list-style-type: none"> Amalgamation of 8 health authorities into NWT Health and Social Services Authority Dept. of Health and Social Services will continue ministry functions, while the Northwest Territories Health and Social Services Authority will be responsible for service delivery Regional wellness councils will provide guidance 	<ul style="list-style-type: none"> Maximize human resources and enhance quality of care Break down systemic barriers to efficiency 	
Nova Scotia	2015	<ul style="list-style-type: none"> Amalgamation of 9 regional health authorities into Dept. of Health and Wellness and Nova Scotia Health Authority Environmental Health transferred from the Department of Health and Wellness to the Department of Environment 	<ul style="list-style-type: none"> Divert more resources to frontline care Cut administrative costs Resource sharing Savings of \$41.5M/year Streamline inspection efforts; build operational surge capacity; minimize duplication of inspection visits, increase dedicated enforcement capacity 	<ul style="list-style-type: none"> Loss of agility needed to respond to diverse community needs Bureaucracy limits quality and speed of service delivery Loss of environment health function from public health Responsibilities under Health Protection Act, Tobacco Access Act, Snow Sport Helmet Act, Safe Body Art Act and Tanning Bed Act governed by Memorandum of Understanding
	2016	<ul style="list-style-type: none"> Elimination of 100 positions at Dept. of Health and Wellness, 62 of which transferred to NS Health Authority and IWK Health Centre Creation of 25 positions that focus on developing policies to improve healthcare results 	<ul style="list-style-type: none"> Shifting demands following amalgamation Focus resources on frontline care 	<ul style="list-style-type: none"> Cost to Dept. of \$1.5 million in severance and expenses Shift in resources to acute care rather than prevention
Nunavut	2013	<ul style="list-style-type: none"> Split of Dept. of Health and Social Services into Dept. of Health and Dept. of Family Services Dept. of Family Services will assume responsibility for income support, social advocacy, and homelessness 	<ul style="list-style-type: none"> Response to Auditor General Report on not meeting responsibilities of protecting well-being of children, youth, and their families 	
Prince Edward Island	2010	<ul style="list-style-type: none"> Creation of Health PEI, arm's length Crown corporation responsible for service delivery 	<ul style="list-style-type: none"> Separation of service delivery (Health PEI) and admin/policy (Dept. of Health and Wellness) 	
Québec	2014	<ul style="list-style-type: none"> Number of health institutions reduced from 182 to 34, of which 22 are territorial Integrated Health and Social Service Centres are established in order to manage and deliver all social, curative and public health services for their catchment area. Misalignment between 3/18 administrative regions in Québec and newly established Integrated Health and Social Services Centres Elimination of 2000 management positions throughout the health system 	<ul style="list-style-type: none"> Better integration of services and information Less bureaucracy \$220M in savings 	<ul style="list-style-type: none"> Loss of flexibility and innovation Loss of identity in eliminating community-specific initiatives Over-direction of funds to acute care in wake of budget pressure
	2015	<ul style="list-style-type: none"> 33% cut to regional public health services, resulting in loss of public health expertise \$24M reduction in budget 	<ul style="list-style-type: none"> Presentation of balanced budget 	<ul style="list-style-type: none"> Increased pressure on acute health care system Reduced ability to provide high quality and timely public health services that maintain public health successes
Saskatchewan	2017	<ul style="list-style-type: none"> Amalgamation of 12 regional health authorities into single provincial health authority 	<ul style="list-style-type: none"> Better coordination of health services Reduce administration and duplication Anticipated savings of \$10-20M by 2019 	<ul style="list-style-type: none"> Potential cuts to local, community-based care Uncertainty for rural communities
Yukon	N/A			

Appendix 4 Comparison of Naylor Report Recommendations and Provincial and Territorial Health System Changes

Identified System Deficiency	Corresponding Recommendation(s)	Related Provincial Change
Lack of surge capacity in the clinical and public health systems	<ul style="list-style-type: none"> Health Emergency Response Teams to mobilize personnel in epidemic Common operating procedures, compatible training and equipment, and prior agreements for mutual assistance in emergencies Sufficiency of capacity for 'business as usual', allowing effective redirection in time of need Create and support training positions and programs in various public health-related fields where there are shortfalls in workforces 	<ul style="list-style-type: none"> Newfoundland & Labrador, 2017 - Job cuts in RHA Nova Scotia 2015 - all Certified Public Health Inspectors (CPHI) employed under one provincial government department, with a departmental commitment of developing and maintaining CPHI competencies. This is bound by the bilateral MOU between Dept. of Health and Wellness and Dept. of Environment. Nova Scotia, 2016 - Job cuts in Dept. of Health and Wellness Québec, 2015 - 33% reduction to regional public health services, resulting in loss of public health expertise
Difficulties with timely access to laboratory testing and results	<ul style="list-style-type: none"> Laboratory information system (including provincial networks) capable of meeting information management needs of an outbreak Laboratory information system aligned with data-sharing agreements across jurisdictions and institutions Integrated platform of national disease surveillance systems, integrated for use by public and private laboratories Integration of hospital and community-based laboratories to clarify roles in infectious disease control 	<ul style="list-style-type: none"> Prince Edward Island, 2010 - Separate entities for service delivery and health administration/policy Québec, 2014 - Consolidate entities for service delivery and health administration/policy Ontario, 2017 - Align health units with LHINs
Lack of protocols for data or information sharing among governments	<ul style="list-style-type: none"> Clear rules on the sharing of information, the establishment of databases, and the use of biologic materials for research Each hospital protocol incorporates an understanding of interrelationships with local and provincial public health authorities Statutes and regulations require that every hospital or health region have outbreak management protocols, including mechanisms for getting information and supplies to those outside the institutional sector 	<ul style="list-style-type: none"> Manitoba, 2015 - Amalgamation New Brunswick, 2017 - Restructuring departments Northwest Territories, 2016 - Amalgamation Nova Scotia, 2015 - Amalgamation Nunavut, 2013 - Restructuring departments Ontario, 2017 - Amalgamation Saskatchewan, 2017 - Amalgamation
Uncertainties about data ownership	<ul style="list-style-type: none"> Formal protocols to outline data sharing and ownership, privacy, distribution of data, and consequences of non-compliance Agreement on data ownership that facilitates greater sharing of data 	
Inadequate capacity for epidemiological investigations of the outbreak	<ul style="list-style-type: none"> Integrated risk assessment capability for public health emergency response Clear protocols for leadership and coordination of future epidemic research responses Ensure epidemic response teams provide not only surge capacity, but also investigative infrastructure Network for Communicable Disease Control to give priority to linking research in government and academic institutions 	<ul style="list-style-type: none"> Manitoba, 2017 - Public health budget cuts Québec, 2014 - Elimination of health entities, resulting in disrupted teams and networks Québec, 2015 - 33% reduction to regional public health services, resulting in the loss of public health expertise
Lack of coordinated business processes across institutions and jurisdictions for outbreak management and emergency response	<ul style="list-style-type: none"> Training programs and tools to support local public health units in developing, implementing, and evaluating crisis and emergency risk communication strategies Process for collaborative surveillance of infectious diseases and response to outbreaks Federal funds tied to intergovernmental agreements to secure harmonized legislative framework for surveillance and management All plans include a clear hierarchy of response mechanisms with appropriate cross-linkages 	<ul style="list-style-type: none"> New Brunswick, 2017 - Restructuring departments Ontario, 2017 - Align health units with LHINs
Inadequacies in institutional outbreak management protocols, infection control and infectious disease surveillance	<ul style="list-style-type: none"> Strengthened infection control standards, surveyor guidelines and tools, and expertise required to maintain hospital infection control Process to include front-line public health and healthcare workers in advance planning 	
Weak links between public health and personal health service systems	<ul style="list-style-type: none"> Investment in provincial, territorial, and regional public health science capacity Strategy for renewal of human resources in public health - developed with a wide range of nongovernmental partners, and including funding mechanisms Each hospital protocol incorporates an understanding of interrelationships with local and provincial public health authorities 	<ul style="list-style-type: none"> Manitoba, 2017 - Public health budget cuts Newfoundland & Labrador, 2017 - Job cuts in RHA Nova Scotia, 2016 - Job cuts in Department of Health and Wellness Prince Edward Island, 2010 - Separate entities for service delivery and health administration/policy Québec, 2014 - Job cuts in Integrated Health and Social Services Centres Québec, 2014 - Consolidate entities for service delivery and health administration/policy Québec, 2015 - Public health budget cuts



**CANADIAN
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The Voice of Public Health

The Canadian Public Health Association is the independent national voice and trusted advocate for public health, speaking up for people and populations to all levels of government.

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