

Building the Public Health Workforce for the 21st Century

A Pan-Canadian
Framework for Public
Health Human
Resources Planning

The Joint Task Group
on Public Health
Human Resources

Advisory Committee on
Health Delivery and
Human Resources

Advisory Committee on
Population Health and
Health Security



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Édifier une main-d'œuvre en santé publique pour le 21^{ème} siècle
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A Pan-Canadian Framework for
Public Health Human Resources Planning

Prepared by the Joint Task Group on Public Health Human Resources

Advisory Committee on
Health Delivery & Human Resources

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Health & Health Security

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Executive Summary

“No attempt to improve public health will succeed that does not recognize the fundamental importance of providing and maintaining in every local health agency across Canada an adequate staff of highly skilled and motivated public health professionals. Our national aim should be to produce a cadre of outstanding public health professionals who are adequately qualified and compensated, and who have clear roles, responsibilities and career paths.”

Learning from SARS: Renewal of Public Health in Canada

Over the next ten years, jurisdictions across Canada expect to see rising rates of chronic preventable diseases, such as obesity, diabetes, heart disease, stroke, tobacco-related illnesses, and environmental illnesses. They are also likely to face one or more major health emergencies, such as an influenza pandemic. These 21st century health threats will require a strong public health response. These added pressures are occurring at a time when all jurisdictions are facing critical shortages in the public health workforce and struggling to maintain essential public health services. The problem is particularly acute in rural and remote areas, and in First Nations and Inuit communities.

In the 2003 First Minister’s Accord on Health Care Renewal and the 2004 Ten-Year Plan to Strengthen Health Care, the provincial, territorial and federal governments made a commitment to work together to improve health human resources (HHR) planning and management. Collaborative planning is essential in public health because, to be effective, public health services must operate in a highly interdependent way. All jurisdictions – local/regional, provincial, federal, and international — must coordinate their efforts to develop and maintain a highly skilled workforce that can provide essential public health services within their own boundaries and be mobilized to respond to any threat in any part of the country or the world.

Collaborative public health human resource (PHHR) planning will:

- ▶ enhance the public health sector’s ability to conduct its day-to-day business;
- ▶ allow jurisdictions to share specialized human resources, such as expertise in environmental toxicology, and to assist when one jurisdiction requires surge capacity;
- ▶ help public health education programs prepare enough students with the skills required for public health practice;
- ▶ improve the quality/standard of public health across the country;
- ▶ reduce duplication and make more effective use of financial resources to develop planning data and tools (e.g., forecasting models); and
- ▶ encourage the public health sector to be innovative in the way it develops and deploys its workforce.

While there are significant benefits to collaborative PHHR planning, there are limits to the types of decisions that can be made at an interjurisdictional or pan-Canadian level. The challenge is identifying which activities should be pursued collaboratively and which are better managed jurisdiction by jurisdiction.

This document sets out a framework for PHHR planning that focuses on activities that will benefit from collaboration (e.g., developing databases and forecasting models, defining public health competencies, developing career paths, and identifying best practices in education, deployment, recruitment and retention). It describes assumptions and principles underlying public health human resource planning, and sets out the following vision and goals for collaborative PHHR planning.

Vision

Through collaborative planning, all jurisdictions in Canada will have a flexible, knowledgeable public health workforce working in safe supportive environments to meet the population's public health needs, and reduce health and social disparities.

Goals

1. To increase all jurisdictions' capacity to plan for the optimal number, mix and distribution of public health skills and workers.
2. To develop an interprofessional public health workforce with the skills and competencies to fulfill public health functions and meet population health needs at the local, provincial, national and international levels.
3. To enhance all jurisdictions' capacity to achieve the appropriate mix of public health workers and deploy them in interprofessional, population and client-centred service models that make full use of their skills and competencies.
4. To enhance all jurisdictions' capacity to recruit and retain public health providers and maintain a stable, affordable public health workforce in healthy, safe work environments.

A Building Block, Needs-Based, Competency-Based Approach

The framework proposes a building block approach to strengthening the public health workforce for the 21st century (see diagram next page). Using the building block approach, the public health sector will assemble all the pieces required to support the right mix of public health providers with the right skills deployed in ways that makes the best use of their expertise. The sector will also be able to create the kind of workplaces and career opportunities that will attract highly skilled and motivated people to public health.

The proposed framework also takes a systems-based and needs-based approach to human resources, in which planning for PHHR is driven by assessing the population's public health needs (rather than past utilization trends), as well as the needs or requirements of the different service models that jurisdictions use to deliver public health programs.

Because public health practice is highly interprofessional and many public health providers have overlapping competencies, the framework advocates a skills or competency-based – rather than a discipline or profession-based – approach to PHHR planning. Planners will focus less on which professionals have traditionally performed certain public health functions, and more on the skills and competencies required to perform each function.

** Core competencies refer to those competencies required by all public health workers.*

*** Function-specific competencies include those required to perform certain public health functions, including those specific to the scopes of practice of certain regulated health professions or disciplines.*

The Players

Effective implementation of the proposed planning framework will require close collaboration among the provincial/territorial agencies responsible for public health (e.g., Ministries of Health and Education, regional and local health authorities, training institutions, regulatory bodies), federal agencies (i.e., the Public Health Agency of Canada, Health Canada, Human Resources Development Canada, and research agencies such as the Canadian Institutes of Health Research and the Canadian Institute for Health Information), municipal governments that fund or deliver public health services, and non-governmental organizations that hire public health providers to implement prevention and population health promotion programs in some communities.

The newly formed Public Health Network and Public Health Council will play a critical role in coordinating, integrated and providing leadership on many aspects of collaborative PHHR planning.

Summary

Canada's public health workers are passionate about prevention and health promotion. They have extensive expertise in the practice of public health; and they are committed to keeping people healthy and improving the health of communities. Starting with this strong base and working collaboratively, all jurisdictions in Canada have the opportunity to develop a public health workforce with the knowledge and skills to meet 21st century health needs. They will also be able to deploy that workforce innovatively to safeguard the health of Canadians and provide leadership in public health at home and internationally.

Preamble

“No attempt to improve public health will succeed that does not recognize the fundamental importance of providing and maintaining in every local health agency across Canada an adequate staff of highly skilled and motivated public health professionals. Our national aim should be to produce a cadre of outstanding public health professionals who are adequately qualified and compensated, and who have clear roles, responsibilities and career paths.”

Learning from SARS: Renewal of Public Health in Canada

The tainted blood scandal. Contaminated drinking water in Walkerton and North Battleford. The threat of bioterrorism post 9/11. SARS. West Nile virus. Avian flu. A potential flu pandemic. The dramatic increase in chronic preventable conditions such as obesity, diabetes and heart disease. This recent series of health problems has highlighted both the critical importance of public health, and the weaknesses of Canada’s public health system.

Public health is the science and art of promoting health, preventing disease, and prolonging life through the organized efforts of society.

*JM Last, cited in Future of Public Health in Canada:
Developing a System for the 21st Century*

In the wake of these threats to public health, a number of federal, provincial, and federal/provincial/territorial commissions and committees recommended that the public health infrastructure in Canada be renewed. In all these reports, the key messages are clear and unequivocal:

- ▶ It is just as critical to have a well functioning public health system as it is to have a strengthened health care system. (Future of Public Health in Canada)
- ▶ Public health is in the same business as the rest of the health system – saving lives.
- ▶ Public health efforts on health promotion, disease and injury prevention are critical to achieve better health outcomes for Canadians and contribute to the long-term sustainability of medicare by reducing pressure on the health care system (Communiqué, 2004 First Ministers’ Meeting on the Future of Health Care).
- ▶ Investments in public health services that engage people in improving their health have the potential to reduce the rapid increase in health care costs and help jurisdictions manage health care spending over the long term.
- ▶ Our most valuable public health resources are human resources (Ontario Expert Panel on SARS and Infectious Disease Control).
- ▶ A strong public health system depends on an adequate supply of public health professionals with the right knowledge, skills and supports to do their jobs (National Advisory Committee on SARS and Public Health).

Faced with critical shortages in the public health workforce, jurisdictions across Canada are struggling to maintain the capacity to respond to public health needs. The desire to renew public health creates an opportunity for jurisdictions to collaborate to maintain and enhance a highly skilled, motivated public health workforce for the 21st century.¹

A Framework for Collaborative Health Human Resources Planning

In the 2003 First Minister's Accord on Health Care Renewal, the provinces, territories and federal governments made a commitment to work together to improve health human resources (HHR) planning and management. In the 2004 Ten-Year Plan to Strengthen Health Care, First Ministers reaffirmed their commitment to both collaborative HHR planning and strengthening public health. They agreed to develop strategic health human resource action plans by December 2005, and strengthen Canada's public health system.

To fulfill these commitments, the Conference of Deputy Ministers (CDM) of Health asked the Advisory Committee on Health Delivery and Human Resources (ACHDHR) to develop a framework for collaborative pan-Canadian HHR planning.

The proposed approach is driven by both population health needs and how services should be delivered to meet those needs, rather than by past utilization trends. This gives jurisdictions an opportunity to identify innovative ways to deliver services and make more effective use of a wide range of provider skills – including public health skills — rather than continuing to plan based on how and by whom services are delivered now. The goal is to build a stronger health workforce that will support health care renewal.

The proposed approach highlights the factors that shape the health workforce including: education programs, the supply and mix of health providers (including recruitment and retention strategies), financial resources, the way care is delivered (e.g., delivery models), and how health care providers are deployed.

The ACHDHR framework sets out the areas where jurisdictions will benefit most from collaborative HHR planning, such as access to data, tools, training, models, approaches and influence that they cannot achieve on their own.

¹ The Province of Quebec subscribes to the general goals of the report with regard to the importance of public health human resources planning. The Province of Quebec intends to have the sole responsibility for developing and implementing education programs, recruitment and retention strategies for caregivers, allocation of financial resources, and ways for providing and deploying health care. The Province of Quebec does not intend to participate in a future pan-Canadian strategy; however, it intends to pursue the exchange of information and expertise with other Canadian jurisdictions.

About this Document

Because of the urgent HHR needs in the public health sector, the ACHDHR and the Advisory Committee on Population Health and Health Security (ACPHHS), through the F/P/T Strengthening Public Health System Infrastructure Task Group (SPHSITG) established a Joint Task Group on Public Health Human Resources (JTG PHHR) to focus on long-term planning, forecasting, research, education and training related to public health human resources.

This document, developed by the JTG PHHR, sets out a framework for collaborative pan-Canadian public health human resources planning, which is consistent with the broader ACHDHR planning framework. Those involved in public health human resource planning should use both the broad framework and the public health framework to develop comprehensive approaches.

Within the proposed framework for public health human resources planning, all jurisdictions will continue to develop and implement their own PHHR policies and service models; however, they will do so within the context of a larger system that shares information and works together to develop the optimum number, mix and distribution of public health providers to meet health needs.

I. The Case for Collaborative Public Health Human Resources Planning

Public Health Human Resources Planning Now

The public health sector is facing the same human resources planning challenges as the rest of the health system: shortages in key professions, an aging workforce, geographic maldistribution of the available people, the need for ongoing learning and “retooling” to keep pace with new knowledge and changes in practice, and a lack of information on the workforce to inform planning.

In addition, public health faces a number of unique HHR planning challenges. For example:

- ▶ Public health programs serve populations and communities as well as individuals, but most HHR planning is based on individual clinical data: planners have limited capacity to assess the health needs of a population/community and use this information to determine the number and mix of public health services to meet those needs.
- ▶ Public health employs a broader range of regulated and non-regulated providers than most other parts of the health care system – many of whom are not considered in traditional HHR planning.
- ▶ Public health practice is highly interprofessional (e.g., different professionals work together, sharing their skills and knowledge, to provide more effective services) yet both education programs and HHR planning have traditionally been profession or discipline specific.
- ▶ A number of public health functions can be performed by a variety of practitioners.

Public Health Workforce

Regulated Providers

- › Public health/community medicine physicians (medical officers of health)
- › Public health nurses
- › Medical microbiologists
- › Some laboratory personnel/technicians
- › Infectious disease specialists
- › Speech-language pathologists
- › Audiologists
- › Dental hygienists
- › Dietitians
- › Veterinarians
- › Public health engineers
- › Public health lawyers

Non-Regulated Providers

- › Public health inspectors (certified but not regulated)
- › Epidemiologists
- › Biostatisticians
- › Sociologists
- › Geographers
- › Anthropologists
- › Infection control practitioners
- › Dental assistants
- › Nutritionists
- › Health educators
- › Health promotion specialists
- › Community development workers
- › Community health representatives in Aboriginal communities
- › Communication officers

- ▶ A significant number of people trained in public health disciplines (e.g., community medicine, epidemiology, health education) do not work in the public health sector – so planners cannot make assumptions about the system's capacity to provide public health services based on the number of trained professionals.
- ▶ Unlike other health services, which are delivered locally or regionally, public health programs are delivered locally, provincially, federally and, in some cases, internationally. PHHR planning must take into account the mix of people and skills needed at all levels.
- ▶ There are few dedicated public health education and continuing education programs. The graduate programs that do exist tend to focus on epidemiology and research skills, so many graduates go into research rather than public health practice. Those who do practice public health feel their training has not prepared them adequately.
- ▶ Training capacity is not evenly distributed across the country. Several jurisdictions depend on training programs in other provinces to prepare their public health workers, and have more difficulty recruiting than jurisdictions with training programs. Even when jurisdictions have training programs, recruitment can be difficult because the public health workforce is highly mobile.
- ▶ The sector's ability to attract new providers is limited by the lack of clinical field placements/practicums in public health. Students who are not exposed to the practice are less likely to choose a public health career.
- ▶ The sector's ability to retain providers is limited by lack of career development options.
- ▶ Public health programs are often asked to respond to new or emerging health needs/policies (e.g., a new immunization program, a new tobacco strategy) with little assessment of the human resources required or the potential impact on other essential public health programs.

Risks Associated with the Status Quo

Because of the current approach to public health HR planning and the overall lack of investment in public health systems over the past 20 to 30 years, the public health sector is experiencing:

- ▶ a high proportion of vacant public health positions;
- ▶ a significant proportion of practitioners working in public health who do not have specialized training in public health (e.g., many physicians working as medical officers of health do not have training in community medicine);
- ▶ inequitable distribution of public health resources within and between jurisdictions;
- ▶ a distinct shortage of public health providers in First Nations communities;
- ▶ lack of surge capacity to respond to new and emerging health threats; and
- ▶ non-competitive remuneration.

Given the current lack of depth in the public health workforce, a sustained crisis would seriously compromise the public health system's ability to provide routine public health programs and services (Survey of Public Health Capacity in Canada). If no changes are made in the way jurisdictions plan and manage their public health workforce, they will be less able to:

- ▶ maintain existing public health services (e.g., safe water);
- ▶ promote population health and slow the rising rates of chronic diseases (e.g., obesity, smoking related illnesses, diabetes, illnesses related to poor nutrition) that threaten the sustainability of our publicly funded health systems;
- ▶ respond quickly to public health threats (e.g., disease outbreaks, environmental contamination);
- ▶ implement new public health policies (e.g., immunization programs).

The risks of the status quo extend beyond provincial and territorial health systems to national and international systems. Communicable diseases do not recognize political boundaries. If one jurisdiction is unable to manage a health threat, all jurisdictions are at risk. If jurisdictions across Canada continue to struggle to maintain their public health workforces, they will be less able to contribute to national efforts to manage threats to public health, such as SARS or a flu pandemic; and Canada will be less able to contribute to international efforts to control communicable diseases and achieve global health goals.

The status quo represents a risk to governments. Many jurisdictions are required by legislation to meet standards for certain public health services but some do not have or are not providing an adequate workforce to fulfill those obligations. This makes them vulnerable to legal challenges and liability costs (e.g., Walkerton contaminated water).

The Benefits of a Collaborative Approach to Public Health Human Resources Planning

Collaborative federal, provincial and territorial HHR planning will benefit all sectors (see ACHDHR, A Framework for collaborative Pan-Canadian Health Human Resources Planning), but it is critical to public health. This is because public health services are highly interdependent. The public health sector in Canada is only as strong as its weakest link. Lack of capacity in one jurisdiction threatens public health in other jurisdictions. To respond to public health needs and threats, all jurisdictions must work together to develop an effective highly skilled workforce. Public health organizations across Canada currently work together to respond to public health threats. This type of collaboration should extend to developing the public health workforce for the 21st century.

Building the Public Health Workforce for the 21st Century

Collaborative PHHR planning will:

- ▶ enhance the ability of the public health sector to conduct its day-to-day business;
- ▶ allow jurisdictions to share specialized human resources, such as expertise in environmental toxicology, and to assist when one jurisdiction requires surge capacity;
- ▶ help ensure that public health education programs prepare enough students with the skills required for public health practice and improve the quality/standard of public health across the country;
- ▶ reduce duplication and make more effective use of financial resources to develop planning data and tools (e.g., forecasting models).

Collaboration can take a number of different forms. It may involve: working together under an umbrella agency such as the Public Health Agency of Canada, establishing issue specific F/P/T task groups, or collaboration among provinces and territories within a geographical area (e.g., the Western and Northern Regions HHR Planning Forum, the Atlantic Health Human Resources Forum).

The public health sector has already seen the benefit of collaboration in HHR education. For example, the Canadian Field Epidemiology Program (CFEP), which began in 1975, provides specialized epidemiological training in outbreak investigation and management: training that individual jurisdictions would not be able to offer on their own. The program, which was originally offered to physicians, is now open to a range of public health providers. The federal government funds the positions and organizes the curriculum and course work; individual jurisdictions provide the placements. Many jurisdictions use the placements as a recruitment tool. The goal is to increase public health capacity across the country. The program consults with the provinces and territories about their needs. That information is used to shape the curriculum and select participants. Graduates of the program are now working in all jurisdictions.

The Skills Enhancement online program is another example of effective collaboration. The continuing education program, developed and managed by the Public Health Agency of Canada, offers a series of online modules on health surveillance for front-line public health providers. All jurisdictions were involved in identifying the need for the program and determining its content, and they continue to provide advice on how the program can best meet their training needs. Over 1000 practitioners have taken one or more modules, and some jurisdictions now require staff to complete the program to be eligible for certain public health positions.

In Atlantic Canada, the provincial public health authorities and the First Nations and Inuit Health Branch (FNIHB) of Health Canada, collaborate on training and pandemic flu planning. For example, First Nations nurses were included in immunization training provided by district health authorities in Nova Scotia. FNIHB covered the space costs for a joint training session held in Prince Edward Island, and for some provincial nurses to attend an immunization conference. In return, the provincial nurses will be expected to help the local First Nations nurses with Band immunizations. This kind of collaboration reinforces that all public health nurses – regardless of whether they are working for provincial or Band authorities – receive the same preparation and are working to the same standard, which makes it easier for the nurses to work together on public health issues.

The Scope of Collaborative PHHR Planning

While there are significant benefits to collaborative PHHR planning, there are limits to the types of decisions that can be made at an interjurisdictional or pan-Canadian level. The challenge is identifying which activities should be pursued collaboratively and which are better managed jurisdiction by jurisdiction. This framework focuses on those activities where collaboration offers the greatest added value for jurisdictions and their public health systems (e.g., the development of planning tools, standards and guidelines).

Using elements from the HHR planning model endorsed by ACHDHR, the JTG PHHR identified activities that would benefit from collaborative planning and those that would continue to be managed by individual jurisdictions. For example:

Factor Influencing PHHR Planning	Collaborative Activities (would benefit from collaboration and shared resources)	Individual Responsibilities (local, regional, provincial/territorial or federal)
Population Health Needs	Identify common tools to assess the population's public health needs. Determine how data will be collected and analyzed.	Identify, quantify and project population health needs.
Management, Organization and Delivery of Public Health Services	Confirm public health competencies. Identify core public health services that should be available in all jurisdictions. Negotiate agreements to share public health resources/expertise, or to assist when a jurisdiction needs surge capacity. Develop emergency response plans.	Make decisions about how public health services will be organized and delivered, and how public health will relate to other health services.
Financial Resources ²	Develop funding formulas for planning public health programs.	Establish funding levels for public health services.

² Note: At the current time, public health systems are funded by federal and provincial/territorial governments and, in Ontario, co-funded by the provincial and municipal governments. First Nations and Inuit Health Branch (FNIHB) of Health Canada funds and delivers public health services to on-reserve First Nations communities. Each jurisdiction will make its own decisions about the financial resources available for public health human resources and how those resources will be used.

Building the Public Health Workforce for the 21st Century

Factor Influencing PHHR Planning	Collaborative Activities (would benefit from collaboration and shared resources)	Individual Responsibilities (local, regional, provincial/ territorial or federal)
Education	<p>Identify the competencies required to provide public health services.</p> <p>Develop strategies to align education programs with the public health sector's needs.</p> <p>Identify strategies to increase access to practicums/field placements.</p> <p>Develop standards for new public health education programs.</p> <p>Develop continuing education/skills enhancement programs.</p>	<p>Negotiate with education programs.</p> <p>Fund education programs.</p> <p>Establish standards, expectations and incentives for continuing education in public health.</p>
Supply (including recruitment and retention)	<p>Develop a consistent approach to collecting data on the public health workforce (i.e., how many, types of providers, where they work, their skills, the services they provide, workloads).</p> <p>Identify strategies/best practices in recruitment, retention, legislation, healthy work environments.</p>	<p>Use data to assess capacity, identify gaps between needs and public health services.</p> <p>Implement recruitment and retention programs.</p>
Utilization and Deployment	<p>Assess different models of interprofessional practice.</p> <p>Research ways to use technology and other strategies to use/deploy public health providers.</p>	<p>Make decisions about how to deploy public health providers to meet the population's public health needs.</p>

A Pan-Canadian Framework for Public Health Human Resources Planning

Factor Influencing PHHR Planning	Collaborative Activities (would benefit from collaboration and shared resources)	Individual Responsibilities (local, regional, provincial/territorial or federal)
Outcomes	<p>Develop indicators that all jurisdictions can use to assess the impact of public health services on consumers, providers and the system. For example:</p> <ul style="list-style-type: none"> • Is the public's health improving? • Is the public health sector able to attract and keep skilled public health providers? • Are public health professionals more satisfied with their work, working environment and career paths? • Are public health services helping to implement health system reforms? • Are public health services having an impact on the demand for other health services? 	<p>Assess the impact of PHHR policies.</p> <p>Prepare annual reports on the performance of the public health sector.</p>

II. A Proposed Framework for Public Health Human Resources Planning

Assumptions

The proposed framework for PHHR planning is based on the following assumptions:

About the health system:

- ▶ In the future, the health service delivery system will change. More services will be delivered in community settings, and fewer will be delivered in hospitals. There will be more demand for public health, primary care and community care to promote/protect health and prevent or delay the need for institutional services.
- ▶ Each jurisdiction will pursue its own public health reform strategy, which will influence and be influenced by other changes in the health care system (e.g., primary care reform) so public health functions may vary from province to province.
- ▶ One of the greatest pressures on the health system over the next ten years will come from the increase in chronic preventable diseases, such as obesity, diabetes, heart disease, stroke, tobacco-related illnesses, and environmental illnesses (e.g., asthma).
- ▶ Within the next 10 years, Canada will be faced with one or more major health threats (e.g., avian flu, an influenza pandemic).

About the public health sector:

- ▶ The public health sector consists of services planned and delivered locally, provincially, federally and internationally that are connected and interdependent. A jurisdiction's ability to deliver effective local public health services depends on having stable and competent services at all levels that are appropriately planned and resourced.
- ▶ The public health sector is part of a larger system of health services, and will link – particularly at the local level – with other health, education and social services to promote health and well-being, and protect public health.
- ▶ The public health sector must have the capacity to respond in a coordinated, integrated and timely way to public health needs and emergencies.

About the availability of public health human resources:

- ▶ Over the next 10 years, the public health sector will continue to face shortages of key professionals, and will have to be innovative in the way it uses skills and human resources.

About public health planning:

- ▶ Jurisdictions across Canada will continue to plan and manage their own public health workforce, and decide how to fund, organize and deliver their public health services.
- ▶ Canada has an obligation to contribute to international public health programs and efforts, to provide resources during international emergencies, and to help develop the global public health workforce.
- ▶ Public health human resource planning decisions made in one jurisdiction or country will have implications for other jurisdictions and countries.
- ▶ Collaboration among jurisdictions, with respect for autonomy, will result in stronger public health human resource plans than working in isolation.

About resources:

- ▶ Public health will receive its fair share of new federal contributions to health services.
- ▶ The investment in public health in Canada will double over the next 10 years.

Vision

The JTG PHHR proposes the following vision to guide future public health human resource planning efforts in Canada:

Through collaborative planning, all jurisdictions in Canada will have a flexible, knowledgeable public health workforce working in safe supportive environments to meet the population's public health needs, and reduce health and social disparities.

Principles Guiding Collaborative Public Health Human Resources Planning

1. Public health is a distinct sector that links and overlaps with other sectors including but not limited to other health care sectors, education, social services, and local government.
2. Public health human resource planning must be an integral part of all health and public health planning.
3. Effective public health human resource planning is needs-based and evidence-driven.
4. Public health human resources planning recognizes that public health actions are one means by which health disparities are reduced, and takes into account the needs of the most vulnerable populations, particularly Aboriginal communities, new immigrant communities, and official language minorities.
5. Effective public health human resource education and deployment is interprofessional.

6. Effective public health human resource planning and decision-making involves the public who can articulate health needs, and front line workers who have the wisdom and experience to help develop strategies that work.
7. Public health human resource planning decisions must be ethical and comply with the *Commonwealth Code of Practice for the International Recruitment of Health Workers*, which highlights the potential impact of recruitment on services in a source country, discourages targeted recruitment of health workers from countries experiencing shortages, and safeguards the rights of recruits.
8. Effective public health planning recognizes Canada's international obligations, which are unique to public health.
9. Effective collaboration requires clearly defined roles, responsibilities and accountability.

Goals

1. To increase all jurisdictions' capacity to plan for the optimal number, mix and distribution of public health skills and workers.
2. To develop an interprofessional public health workforce with the skills and competencies to fulfill public health functions and meet population health needs at the local, provincial, national and international levels.
3. To enhance all jurisdictions' capacity to achieve the appropriate mix of public health workers and deploy them in interprofessional, population-based and client-centred service models that make full use of their skills and competencies.
4. To enhance all jurisdictions' capacity to recruit and retain public health providers and maintain a stable, affordable public health workforce in healthy safe work environments.

Outcomes

Collaborative PHHR planning based on the proposed framework will contribute to the following outcomes:

- ▶ A better understanding of the population's public health needs and greater capacity for needs-based PHHR planning.
- ▶ A stable public health workforce with the skills and competencies to meet the population's public health needs.
- ▶ Greater consistency in public health programs and services across the country.
- ▶ Greater capacity to respond to health emergencies and still maintain essential public health services.

- ▶ A skills-based model for public health service delivery which will result in more effective use of public health human resources.
- ▶ More people choosing careers in public health.
- ▶ Lower recruitment, orientation and absenteeism costs.

A Competency-Based Approach

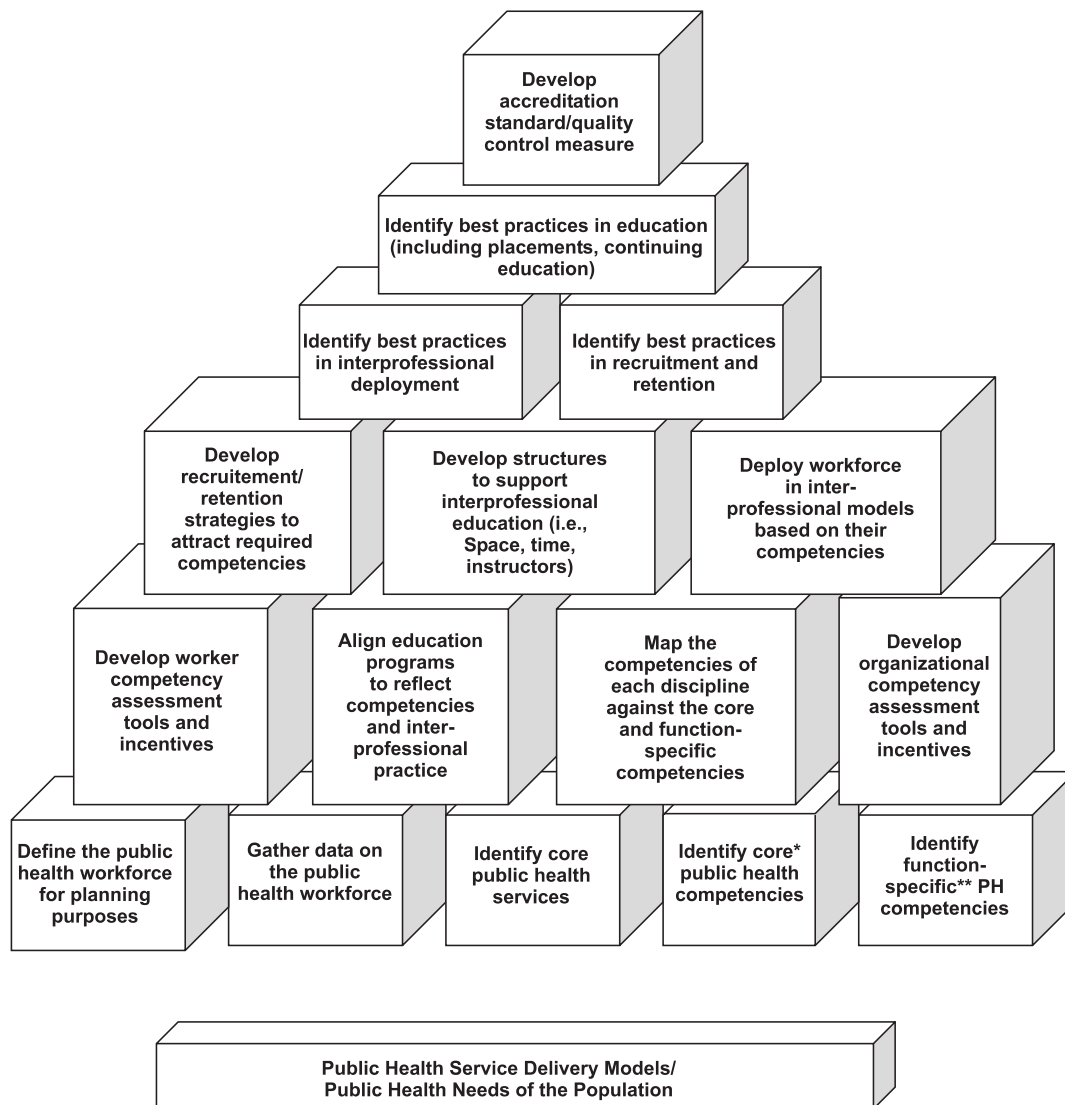
Because public health practice is highly interprofessional and many public health providers have overlapping competencies, the JTG proposes a skills or competency-based – rather than a discipline or profession-based – framework for collaborative PHHR planning. Planners will focus less on which professionals have traditionally performed certain public health functions, and more on the skills and competencies required to perform each function. They will then identify the different providers who have those skills.

The skills and competencies that public health workers require in the 21st century and the services they provide will be based on an ongoing assessment of the population's public health needs and the way public health services are delivered (i.e., service delivery models).

A Building Block Approach

The JTG proposes a building block approach to strengthening the public health workforce (see diagram on next page). For the framework to be effective, the public health sector must have each block in place. The diagram is not intended to show any hierarchy of priority: work should proceed on all the building blocks concurrently; however, the blocks at the base provide the foundation for the framework.

Building the Public Health Workforce for the 21st Century



* Core competencies refer to those competencies required by all public health workers. The JTG PHHR has developed a draft set of core competencies for public health. See Appendix 1.

** Function-specific competencies include those required to perform certain public health functions, including those specific to the scopes of practice of certain regulated health professions or disciplines.

The Players, Roles and Responsibilities

In collaborative PHHR planning, the roles and responsibilities of the planning partners should be clear. Because of recent developments in the public health sector and the commitment to build a strong public health system, there is now a structure to support more collaborative PHHR planning.

The **Chief Public Health Officer** and the **Public Health Agency of Canada (PHAC)** will provide leadership in many activities designed to establish standards and ensure consistency within the public health sector. The PHAC provides a structure that is focused on public health, and will promote collaboration with provinces and territories to renew public health in Canada and support a sustainable health care system.

The **Public Health Network** is a federal/provincial/territorial body made up of representatives from each Pan-canadian Public Health Network jurisdiction. It will be the forum for collaborative PHHR activities such as:

- ▶ identifying and sharing best practices;
- ▶ leading emergency response planning;
- ▶ providing support/sharing resources when one jurisdiction faces an emergency (i.e., develop agreements between jurisdictions to provide surge capacity); and
- ▶ advising the Conference of Deputy Ministers of Health on public health matters.

The Network is expected to function in a way that:

- ▶ respects the authority and jurisdiction of each government to manage public health operations within its own domain;
- ▶ embraces the differences in the way each province and territory exercises its public health responsibilities, establishes priorities and manages its public health infrastructure;
- ▶ recognizes that there is no “one size fits all” approach to public health; and
- ▶ includes collaboration with non-governmental organizations.

Health Canada provides national leadership in developing health policy (domestic and international), enforcing health regulations and administering the *Canada Health Act*, and in working with other partners to define Canada’s international role, responsibilities and obligations. Through its First Nations and Inuit Health Branch (FNIHB), Health Canada will work collaboratively with First Nations living on reserves and Inuit living in settlements to determine their public health human resource (PHHR) needs and the existing gaps, to identify and support PHHR research, and to adapt disease prevention and healthy living programs for First Nations and Inuit communities. Health Canada will also support specific public health programs identified at the 2004 First Ministers’ and Aboriginal Leaders’ Meeting (i.e., suicide prevention, diabetes, maternal and child health, and early childhood development).

The **Canadian Institutes of Health Research (CIHR)**, Canada’s major federal funding agency for health research, supports research on health promotion and disease prevention as well as research to improve the health status of vulnerable populations.

The **Ministries of Health** of the **Provinces and Territories**, in collaboration/consultation with regional and local public health organizations, will assess needs, organize and deliver public health services, manage and deploy their public health workforce, develop and implement strategies to strengthen the public health workforce, work with their education system to enhance public health training, identify best practices in PHHR planning, and collaborate with one another, the Public Health Agency of Canada and Health Canada to develop a skilled national workforce. Some provinces and territories may also fund research to support PHHR planning.

The **education system** will work with the provincial/territorial Ministries of Health and the public health sector to prepare an interprofessional public health workforce with the knowledge, skills and flexibility to respond to changing needs.

The **regulatory system** will continue to set the standards of practice for the regulated public health professions and will play a role in determining scopes of practice and supporting interprofessional practice.

Local/municipal governments will continue to play an important role in implementing public health actions. In one province (Ontario), they fund public health services and employ public health workers.

Some arms length **provincial agencies and institutes** (e.g., BC Centre for Disease Control, Institut national de santé publique du Québec) will provide venues for advanced training of public health personnel.

Non-governmental organizations will play a stronger role in public health activities. For example, the Canadian Cancer Society hires staff to implement prevention and population health promotion programs in some communities.

The **private sector** is likely to take more responsibility in supporting and implementing public health activities in traditional occupational health and safety programs, in the evolving field of workplace health promotion, and as champions of activities that promote health, such as physical fitness and healthy eating. In the future, PHHR should consider the potential role of the private sector and the potential for partnerships.

Strategies and Activities

The JTG PHHR has identified a number of preliminary strategies and activities (short-term, medium-term and long-term) that could be pursued to create the building blocks of the planning framework. They are listed below under each of the four goals of the framework. More work is required to refine the proposed strategies and activities, have them validated by all jurisdictions through the Public Health Network, identify priorities, and determine the resources required for next steps.

Goal 1. To increase all jurisdictions' capacity to plan for the optimal number, mix and distribution of public health skills and workers.

Strategies	Activities
1.1 Identify population health needs/issues from a public health perspective	<p>Short-term:</p> <ul style="list-style-type: none"> Assess the extent to which jurisdictions use existing health assessment tools, such as the Canadian Community Health Survey, to identify their populations' public health needs, and to inform PHHR planning Identify ways to make those tools more useful for PHHR planning <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> Identify models that could be used to translate a population's public health needs/issues into PHHR required to meet those needs Develop consensus on the tools and models to be used to assess public health needs for PHHR planning <hr/> <p>Long-term:</p> <ul style="list-style-type: none"> Conduct consistent assessments of population public health needs Ensure data is used to shape the public health workforce
1.2 Develop a pan-Canadian understanding of the scope of public health programs	<p>Short-term:</p> <ul style="list-style-type: none"> Identify core public health programs and services that should be available in each P/T (at the local and provincial/territorial levels) Identify the core federal public health programs and services that should be available (including those required to meet Canada's international obligations). <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> Define pan-Canadian public health programs and services
1.3 Develop consistent information on the public health workforce	<p>Short-term:</p> <ul style="list-style-type: none"> Establish a 21st century definition of public health for the purposes of collecting data on the public health workforce (to be refined after 1.2, the basket of public health services, is developed) Develop a list of professions with definitions to be included in a public health database Define the information (i.e., minimum dataset) to be collected on the public health workforce (e.g., providers to be included, demographics, education, geographic distribution, full or part-time, workload) Define the competency information to be collected Identify strategies to collect workforce data (e.g., through professional college registration information, extracting data from payroll systems, surveying employers) <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> Develop a public health workforce database

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Strategies		Activities
1.4	Improve capacity to project the number and mix of public health professionals required to meet needs	<p>Medium-term:</p> <ul style="list-style-type: none"> • Develop competency-based modeling tools for PHHR planning • Develop scenario planning methods for the public health workforce that take into account different levels of health system reform and integration
1.5	Plan for the extraordinary needs for public health workers in emergency situations	<p>Short-term:</p> <ul style="list-style-type: none"> • Establish an expert group to develop a formula to estimate the surge capacity required at all levels (local, provincial, federal, international) to respond to emergencies • Based on that formula, develop a memorandum of understanding among all jurisdictions <p>Medium-term:</p> <ul style="list-style-type: none"> • Assess the surge capacity of public health organizations • Develop a memorandum of understanding among jurisdictions designed to provide adequate surge capacity to respond to a local, regional, or provincial/territorial emergency
1.6	Ensure PHHR planning remains a priority	<p>Short-term:</p> <ul style="list-style-type: none"> • Include an explicit section on PHHR planning in the annual individual P/T HHR plans • Identify those responsible for PHHR planning at all levels • Establish a central group responsible for those PHHR planning functions that would benefit from F/P/T collaboration • Define key indicators and targets to assess progress in PHHR workforce development <p>Medium-term:</p> <ul style="list-style-type: none"> • Establish a PHHR planning network so provinces and territories can share successes in workforce development, education, deployment, recruitment and retention among provinces and territories <p>Long-term:</p> <ul style="list-style-type: none"> • Prepare a consolidated report on the state of the public health workforce in Canada
1.7	Establish linkages with other HHR planning activities	<p>Short-term:</p> <ul style="list-style-type: none"> • Identify those leading PHHR planning in each jurisdiction • Establish close connections between leaders in PHHR and other centres of expertise on public health, such as the National Collaborating Centres, the Regional HHR Planning Forums, and provincial and territorial public health departments

Goal 2. To develop an interprofessional workforce with the public health skills and competencies to meet population health needs.

Strategies	Activities
<p>2.1 Develop a skills/competencies-based (instead of a discipline/profession) approach to PHHR</p>	<p>Short-term:</p> <ul style="list-style-type: none"> • Confirm/validate the core public health competencies • Continue to work with the Public Health Research and Education Group (PHRED) and other stakeholders to identify the function-specific public health competencies • Map the competencies of each discipline against the core and function-specific competencies, and identify any gaps • Ensure the Skills Enhancement for Health Surveillance program (of the PHAC) aligns with the public health competencies <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Work with education programs to modify/adapt curricula to fill skill gaps • Develop common tools that employers can use to assess skills and competencies • Promote a workplace culture that ensures providers have opportunities to develop needed skills and competencies • Encourage employers to use a competency-based approach to develop new service delivery models • Ensure the core public health competencies are used to inform all public health education programs
<p>2.2 Develop a better understanding of the public health education system and how it can support PHHR planning</p>	<p>Short-term:</p> <ul style="list-style-type: none"> • Ensure the minimum dataset for education capacity (CIHI) includes public health programs and provides regular reports on the production capacity of public health education programs and the public health educator workforce • Establish formal mechanisms for public health and post-secondary education planners to discuss public health workforce needs • Establish a link among PHAC, the Health Council of Canada, and other relevant national organizations regarding public health issues <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Work with the education system and the regulatory systems to develop a range of appropriate training options for public health professionals based on the public health competencies (e.g., short courses, Diploma, BSc, MPH/MSc, PhD; distance, part-time, full-time; continuing education; interprofessional; education including management, leadership and emerging issues)

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Strategies		Activities
2.3	Identify best practices in public health education and professional development	<p>Short-term:</p> <ul style="list-style-type: none"> • Develop capacity to review best practices in education and professional development • Examine the programs that prepare public health providers • Identify innovative ways to educate public health professionals that reflect current and anticipated demands (e.g., regional schools of public health, interprofessional education) • Assess the potential to use simulation to educate the workforce in public health skills and competencies • Develop common standards and expectations for continuing education • Work with partners to develop and submit a proposal for a project on interprofessional public health education for community/population centred practice to the F/P/T Interprofessional Education for Collaborative Patient-Centred Practice Initiative <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Identify the education and technologies required to respond to emerging needs (e.g., informatics, genomics, management, communication). Evaluate education initiatives <hr/> <p>Long-term:</p> <ul style="list-style-type: none"> • Develop an incentive or reward system that recognizes innovation in education
2.4	Increase capacity to train public health workers with the appropriate competencies	<p>Short-term:</p> <ul style="list-style-type: none"> • Assess the need for highly specialized training programs (e.g., community medicine, population-focused epidemiology) to develop people with the required competencies • Develop scholarship and incentive programs to attract people to high priority areas (e.g., public health informatics, public health management) • Work with the Public Health Task Group of the Association of Faculties of Medicine of Canada and the Canadian Association of Schools of Nursing to increase exposure to public health in entry level education <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Plan and implement regional training programs to provide the small volume, highly specialized providers required to meet health needs • Assess the potential for virtual schools of public health

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Strategies		Activities
2.5	Enhance the capacity of the public health sector to provide practice placements	<p>Short-term:</p> <ul style="list-style-type: none"> • Raise awareness of barriers to successful practice placements • Pilot different approaches to increase practice placements (e.g., backfilling positions, creating dedicated teaching positions in health units, creating teaching health units, providing subsidies for student travel) • Assess the capacity of the Field Epidemiologist Program to meet local, provincial, and national needs, and expand it if required • Identify best practices in practice placements (e.g., how long should placements be, how should they be delivered)
2.6	Enhance the capacity for public health research and education	<p>Short-term:</p> <ul style="list-style-type: none"> • Reinforce public health as a distinct practice and identify the research and education required to support the field • Assess the potential to use the skills enhancement model to enhance other public health skills and competencies • Develop more teaching health units that combine practice and academic learning • Establish formal university-affiliated positions in public health departments responsible for teaching and continuing education • Encourage two CIHR institutes – the Institute of Population and Public Health and the Institute of Health Services and Policy Research – to give priority to research that would contribute to understanding PHHR issues <p>Medium-term:</p> <ul style="list-style-type: none"> • Increase opportunities for public health teaching and applied research (e.g., chairs, clinician scientists, practitioner exchanges, consortia of academic institutions) • Develop practitioner-scientist responsible for practice relevant research and education

Goal 3. To enhance all jurisdictions' capacity to achieve the appropriate mix of public health workers and deploy them in interprofessional, population-based and client-centred service models that make full use of their skills and competencies.

Strategies	Activities
3.1 Promote innovative approaches to deploy the public health workforce	<p>Short-term:</p> <ul style="list-style-type: none"> • Identify best practices in public health workforce deployment, focusing on interprofessional practice, teamwork, and geographic coverage • Identify career paths for public health providers <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Collaborate/share information with regional and provincial HHR planning groups (e.g., the Western & Northern Regions' Health Human Resources Planning Forum and the Atlantic Advisory Committee on Health Human Resources) • Assess and disseminate best deployment practices <hr/> <p>Long-term:</p> <ul style="list-style-type: none"> • Develop a pan-Canadian analysis of PHHR distribution issues, and strategies to address them
3.2 Explore the potential to integrate public health and primary health care services	<p>Short-term:</p> <ul style="list-style-type: none"> • Ensure public health representation on the Planning Committee for the Primary Health Care Best Practices Network • Include public health in primary care reform discussions at the P/T level
3.3 Enhance the capacity of the public health workforce to meet the needs of Aboriginal people	<p>Short-term:</p> <ul style="list-style-type: none"> • Link PHHR planning to Aboriginal health human resource planning • Include/address Aboriginal health issues in PHHR planning <hr/> <p>Medium-term:</p> <ul style="list-style-type: none"> • Develop a better understanding of the PHHR needs of Aboriginal communities

Goal 4. To enhance all jurisdictions' capacity to recruit and retain public health providers and maintain a stable, affordable public health workforce in healthy safe work environments.

Strategies		Activities
4.1	Improve recruitment and retention practices	<p>Short-term:</p> <ul style="list-style-type: none"> • Identify best practices to recruit and retain public health workers • Identify best practices to prepare internationally trained public health workers to work in Canada • Identify Canadian public health workers to train in international venues • Identify best practices to create healthy work environments <p>Medium-term:</p> <ul style="list-style-type: none"> • Assess and disseminate best practices in recruitment and retention • Assess PHHR shortages/distribution problems in terms of geography, level (i.e., local, provincial, federal) competencies and specialties
4.2	Create career opportunities for public health practitioners	<p>Short-term:</p> <ul style="list-style-type: none"> • Assess the utility of conducting either a situational analysis or sector study for public health similar to those done for pharmacy and the Software Human Resources Council
4.3	Support mobility of public health workers across jurisdictions, and between practice and academic settings	<p>Short-term:</p> <ul style="list-style-type: none"> • Develop HR and other employment policies that support labour mobility (e.g., portable benefits and pensions, vacation time) • Explore the potential to establish a program of secondments and cost sharing of positions among jurisdictions <p>Medium-term:</p> <ul style="list-style-type: none"> • Encourage jurisdictions to adopt core competencies as a way of facilitating and supporting labour mobility

Summary

Canada's public health workers are passionate about prevention and health promotion. They have extensive expertise in the practice of public health; and they are committed to keeping people healthy and improving the health of communities. Starting with this strong base and working collaboratively, all jurisdictions in Canada have the opportunity to develop a public health workforce with the knowledge and skills to meet 21st century health needs. They will also be able to deploy that workforce innovatively to safeguard the health of Canadians and provide leadership in public health at home and internationally.

References

- Advisory Committee on Health Delivery and Human Resources. HHR Planning Subcommittee (2005). *A Framework for Collaborative Pan-Canadian Health Human Resources Planning*.
- Meeting of Commonwealth Health Ministers (2003). *Commonwealth Code of Practice for the International Recruitment of Health Workers*. www.thecommonwealth.org.
- Canadian Coalition for Public Health in the 21st Century (2005). *Closing the Naylor Gap*. Submission to the Standing Committee on Finance.
- Canadian Institutes of Health Research (2003). *The Future of Public Health in the 21st Century*.
- Canadian Institutes of Health Research (2003). *Comparison of Recommendations on Public Health System Infrastructure*.
- Canadian Nurses Association (2004). *Literature Review and Summary of Relevant Resources for the National Community Health Nursing Certification Exam*.
- Canadian Nurses Association (2004). *Strategic Plan for Developing the National Community Health Nursing Certification Examination*.
- Canadian Public Health Association (2004). *Development of a National Strategy to Define Core Public Health System Functions and Core Public Health Workforce Competencies*.
- Canadian Public Health Association (2004). Workshop on Public Health Core Competencies, Newfoundland Annual General Meeting.
- Centers for Disease Control and Prevention (2005). *The Public Health Workforce Development Initiative*.
- Centre for Surveillance Coordination, Health Canada (2002). *Environmental Scan of Health Human Resources in Public Health in Canada*.
- The Development of a Draft Set of Public Health Workforce Core Competencies. Summary Report. Federal/Provincial/Territorial Joint Task Group on Public Health Human Resources. Advisory Committee on Health Delivery and Human Resources, Advisory Committee on Population Health and Health Security.
- Health Canada (2004). Pan-Canadian Public Health Education Initiative: Summary of Three Regional Workshops.
- Institute of Medicine (2003). Who will keep the Public Healthy? Educating Public Health Professionals for the 21st Century.

- Mowat, D.L., & Moloughney, B.W. (2004). Developing the public health workforce in Canada: a summary of regional workshops on workforce education and training. *Can J Public Health*, 95(3):186-187.
- National Advisory Committee on SARS and Public Health (2003). *Learning from SARS - Renewal of Public Health in Canada*. Public Health Agency of Canada.
- Nevis Consulting Group (2004). *Public Health Workforce Development: Australia, England and the United States*. Prepared for the Joint Task Group on Public Health Human Resources.
- O'Brien-Pallas, L., Tomblin Murphy, G., Baumann, A., & Birch, S. (2001). Framework for analyzing health human resources (p.6). In *Canadian Institute for Health Information. Future development of information to support the management of nursing resources: Recommendations*. Ottawa: CIHI.
- Ontario Expert Panel on SARS and Infectious Disease Control (2003). *For The Public's Health : Initial Report of the Ontario Expert Panel on SARS and Infectious Disease Control*. Ontario Ministry of Health and Long-Term Care.
- Ontario Public Health Association (2004). *Core Competencies in Public Health Literature Review*.
- Ontario Public Health Association Core Competencies Task Group (2004). *Project Report – Core Competencies in Public Health: Summary of Work to Date and Long Term Management Plan*. Submitted to Ontario Public Health Association Board of Directors and Federal/Provincial/Territorial Advisory Committee on Population Health & Health Security.
- Ontario Public Health Association (2004). *Core Competencies: Summary of Meeting*.
- Strengthening Public Health System Infrastructure Task Group (2005). *Improving Public Health System Infrastructure in Canada*. Prepared for the Federal/Provincial/Territorial Advisory Committee on Population Health & Health Security.

Appendix 1:

Draft Core Public Health Competencies

Competencies are the knowledge, skills and abilities demonstrated by the members of an organization or system that are critical to the effective and efficient function of that organization or system.

The Joint Task Group on Public Health Human Resources (JTG PHHR) developed a *Draft Set of Public Health Workforce Core Competencies* that are based on the five core public health system functions which are: disease and injury prevention, health promotion, health protection, population health assessment, and public health surveillance. The report of the F/P/T Task Group on Strengthening Public Health Systems Infrastructure describes these functions in more detail.

Building on work conducted by the Ontario Public Health Association, the JTG PHHR identified a draft set of core competencies for public health, organized in seven domains: core public health sciences, analysis and assessment, policy development and program planning, partnership and collaboration, communication, socio-cultural competencies, and leadership and systems approaches.³

Core competencies are the set of cross-cutting skills, knowledge and abilities necessary for the broad practice of public health. They transcend the boundaries of the specific disciplines within public health and reflect the common knowledge, skills and abilities of all professionals working within the field of public health.

In its report, the JTG PHHR recommended that the Public Health Agency of Canada undertake a national process to review and modify or validate these draft core competencies. The *Draft Set of Public Health Workforce Core Competencies* and current information on public health core competencies may be obtained from the Public Health Agency of Canada.

3 The Development of a Draft Set of Public Health Workforce Core Competencies. Summary Report. Federal/Provincial/Territorial Joint Task Group on Public Health Human Resources. Advisory Committee on Health Delivery and Human Resources, Advisory Committee on Population Health and Health Security. January 2005.