

# Profiles of Public Health Systems in Canada: Ontario

Report | 2021



Centre de collaboration nationale  
sur les politiques publiques et la santé  
National Collaborating Centre  
for Healthy Public Policy





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## About this research project: context, team and partners

The *Profiles of Public Health Systems in Canada* are part of a research project titled *Platform to Monitor the Performance of Public Health Systems*, led by Principal Investigators Dr. Sara Allin, Dr. Andrew Pinto and Dr. Laura Rosella from the University of Toronto. The project involves the participation of knowledge users, collaborators and an inter-disciplinary team of scholars from across Canada, and aims to develop a platform to compare public health system performance across Canada. To achieve this aim, the project comprises three phases:

1. Produce detailed descriptions of the public health financing, governance, organization, and workforce in each of the 13 provinces and territories using a literature review with results validated by decision makers.
2. Conduct a set of comparative in-depth case studies examining implementation and outcomes of reforms, and their impacts on responses to the COVID-19 pandemic.
3. Define indicators of public health system performance with structure, process, and outcome measures.

The National Collaborating Centre for Healthy Public Policy (NCCHPP) joined the research project working group in the early months of the COVID-19 pandemic, and is now proud to publish their work as a series of 13 Canadian Public Health System Profiles, with supplementary methodological materials. The series of public health system profiles are available on the NCCHPP website at: <https://www.ncchpp.ca/profiles-of-public-health-systems-in-canadian-provinces-and-territories/>.

## About the National Collaborating Centre for Healthy Public Policy (NCCHPP)

The NCCHPP seeks to increase the expertise of public health actors across Canada in healthy public policy through the development, sharing and use of knowledge. The NCCHPP is one of six centres financed by the Public Health Agency of Canada. The six centres form a network across Canada, each hosted by a different institution and each focusing on a specific topic linked to public health. The NCCHPP is hosted by the Institut national de santé publique du Québec (INSPQ), a leading centre in public health in Canada.



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## List of acronyms

aIPHa	Association of Local Public Health Agencies
APHEO	Association of Public Health Epidemiologists in Ontario
BOHs	Boards of Health
CRC	Capacity Review Committee
EPHOs	Essential public health operations
HPPA	Health Protection and Promotion Act
CAO	Chief Administrative Officer
CIHI	Canadian Institute for Health Information
CMOH	Chief Medical Officer of Health
FAO	Financial Accountability Office of Ontario
FTEs	Full-time equivalents
INSPQ	Institut national de santé publique du Québec
MoCCSS	Ministry of Children, Community and Social Services
NCCHPP	National Collaborating Centre for Healthy Public Policy
OPHS	Ontario Public Health Standards
PPHP	Population and Public Health Program
PHO	Public Health Ontario
PHU	Public health unit
CEO	Chief Executive Officer
LHIN	Local Health Integration Networks
MOH	Medical Officer of Health
SLFNHA	Sioux Lookout First Nations Health Authority



# Introduction

## Objectives

As Canada deals with the COVID-19 pandemic, one of the biggest public health challenges of our time, the need to strengthen public health systems has never been greater. Strong public health (PH) systems are vital to ensuring health system sustainability, improving population health and health equity, and preparing for and responding to current and future crises. There are considerable variations across provinces and territories in how public health is organized, governed and financed, as well as in how public health systems have been reformed and restructured in recent years. This report builds upon prior reports and describes Ontario's current public health system, including its organization, governance, financing, and workforce. It is part of a series of 13 public health system profiles<sup>1</sup> that provide foundational knowledge on the similarities and differences in the structures of public health systems across provinces and territories. In addition to summarizing what is known, these profiles also draw attention to variations and gaps to inform future priorities. This series will serve as a reference for public health professionals, researchers, students, and decision makers seeking to strengthen public health infrastructure in Canada.

## Approach

Details on the jurisdictional review methodology are presented in the document *Profiles of Public Health Systems in Canada: Jurisdictional Review Methodology*.<sup>1</sup> The research team sought out information from peer-reviewed journal articles and publicly available grey literature (e.g., governmental and non-governmental organization reports, documents, webpages, legislation), and data sources (e.g., provincial/territorial budget estimates). The World Health Organization's essential public health operations (EPHOs) were used to define programs and services that constitute public health activities, and enabler EPHOs were used to define public health governance, organizational structure, financing, and workforce (Rechel, Maresso, et al., 2018; World Health Organization, 2015). The search terms were also informed by the research questions presented in a standardized data abstraction form adapted from the European Observatory for Health Systems and Policies (Rechel, Jakubowski, et al., 2018). A narrative synthesis was used to develop detailed profiles that were reviewed internally by the research team and externally by experts from each jurisdiction (e.g., public health policy makers and practitioners) for accuracy, completeness, and reliability. The reports were reviewed by public health key informants in each jurisdiction to assess the validity of our findings. We incorporated their comments and formally acknowledge their contributions at the start of each report.

## Limitations

Despite this comprehensive iterative review process and our attempt to highlight information gaps, it should be noted that the process used to compile information was not a formal systematic search, and thus information sources may have been missed. Further, a detailed review of the role of the federal government and of First Nations, Inuit and Métis approaches to public health was beyond this project's scope and should be made a priority for future work. Moreover, by relying in large part on the published documents and websites of the key government actors and agencies in public health, we may not have fully captured how the system functions in practice, and whether and how actual roles and relationships may deviate from what is written in legislation and policy documents. Finally, these profiles describe the public health system prior to the COVID-19 pandemic; we do not review the governance structures, advisory groups and partnerships that were established in response to the COVID-19 pandemic.

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<sup>1</sup> The series of 13 public health system profiles and the jurisdictional review methodology document are available at: <https://www.nccchpp.ca/profiles-of-public-health-systems-in-canadian-provinces-and-territories/>.

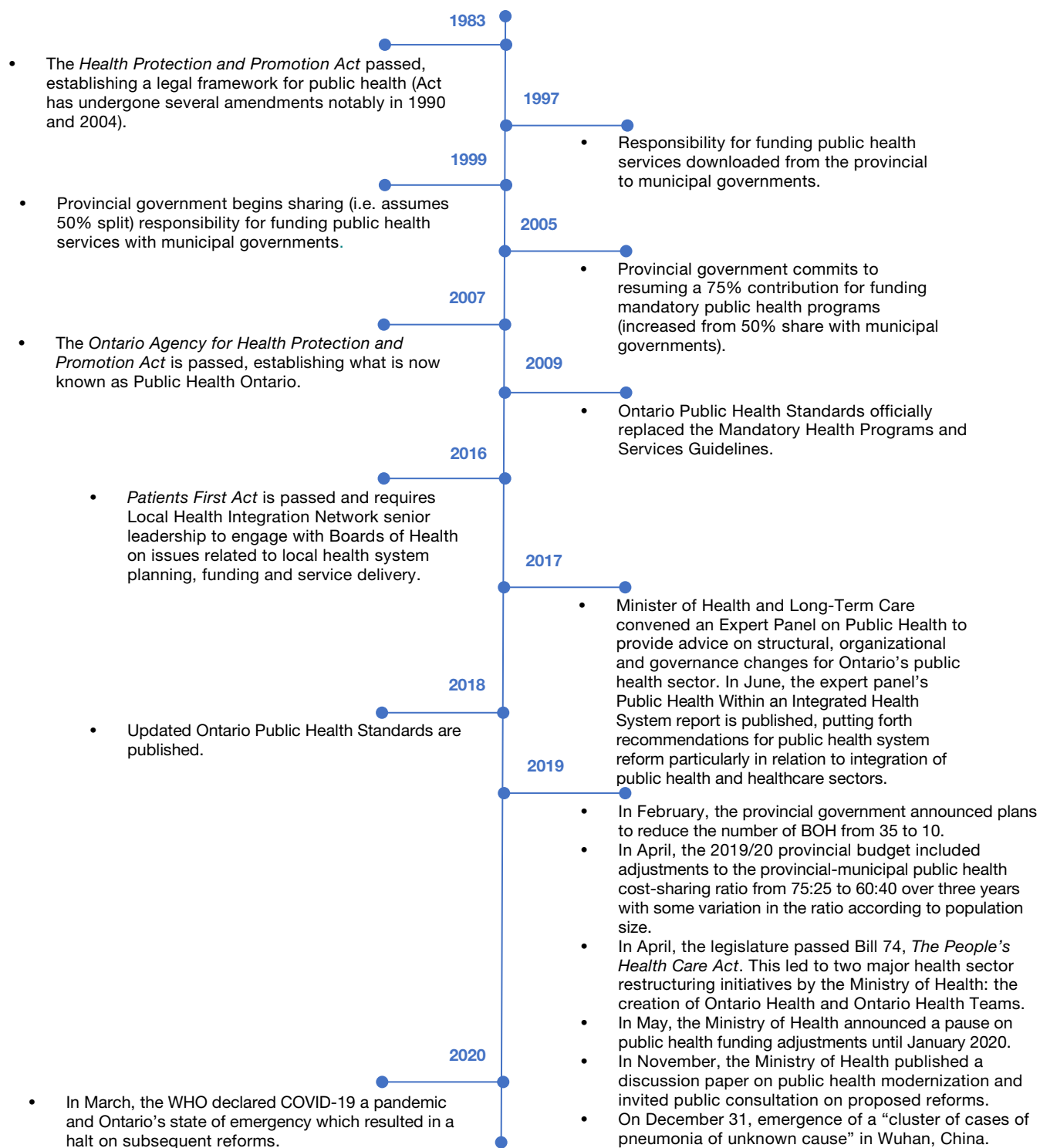




# 1 Historical and Contextual Background

In Ontario, the planning and delivery of public health programs and services has primarily been the responsibility of local Boards of Health (BOHs) and their respective public health units since the 19<sup>th</sup> century (Association of Local Public Health Agencies, n.d.-b). Recent reforms to Ontario's public health system have come in the wake of the Walkerton *E.coli* outbreak (2000), the Severe Acute Respiratory Syndrome (SARS) pandemic and subsequent reports from the Campbell Inquiry and the National Advisory Committee on SARS and Public Health (2003), and the Capacity Review Committee (2006) (Campbell, 2004; Canadian Public Health Association, 2019; Capacity Review Commission, 2006; Health Canada, 2003). The following timeline presents a summary of proposed and enacted reforms impacting Ontario's public health system in chronological order.

**Figure 1** Timeline of proposed and enacted reforms impacting Ontario's public health system



(Association of Local Public Health Agencies, n.d.; Association of Municipalities of Ontario, 2019; Canadian Public Health Association, 2019; Deber et al., 2006; Financial Accountability Office of Ontario, 2019; Government of Ontario, 2020, 2021; Health Protection and Promotion Act, 1990; Lyons, 2016; Ontario Ministry of Health and Long-Term Care, 2017, 2018b, 2019; World Health Organization, 2020a, 2020b)

## 2 Organizational Structure

This section describes the organizational structure of Ontario's public health system as of June 2021. We present the roles, responsibilities, and supervisory relationships of governmental and arms-length governmental institutions with a legislated role in public health, including health authorities, public health units, and key figures within each that lead the planning and delivery of public health services. Our focus is on those with public health as their primary role, therefore we do not provide a detailed description of organizations and service providers in other sectors (e.g., primary care, mental health and addictions, social services, and non-governmental organizations) that may perform essential public health functions as part of their work (e.g., immunization, health promotion).

### 2.1 Provincial

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#### 2.1.1 MINISTRY OF HEALTH

The Ministry of Health (here forward referred to as “the Ministry”), under the direction of the Minister of Health, sets the strategic direction and priorities for Ontario's health system (Public Health Ontario, 2020). The Ministry develops and enforces legislation, regulations, standards, policies and directives for government actors, provincial public health agencies, and local public health units (Health Protection and Promotion Act, 1990; Public Health Ontario, 2020). Additionally, the Ministry monitors and reports on population health in Ontario (Public Health Ontario, 2020). The Ministry sets targets and ensures the delivery of public health programs and services in accordance with the Ontario Public Health Standards (OPHS; described further in Governance section) (Ontario Ministry of Health and Long-Term Care, 2020b). As of July 2020, there were at least five divisions within the Ministry that manage public health-related portfolios, including the Office of the Chief Medical Officer of Health; Public Health Ontario; Emergency Health Services and Public Health Modernization; Population Health Initiatives; Health Services Information and Information Technology Cluster (Ontario Ministry of Health and Long-Term Care, 2020a).

#### 2.1.2 OFFICE OF THE CHIEF MEDICAL OFFICER OF HEALTH, PUBLIC HEALTH

The Office of the Chief Medical Officer of Health (CMOH), Public Health is led by the CMOH and is responsible for developing provincial public health strategies, advising the government on the potential health impacts of provincial policy and initiatives, monitoring public programs delivered by public health units, and preparing themed annual reports on public health in Ontario (Health Protection and Promotion Act, 1990; Public Health Ontario, 2020; Williams, 2018, 2019). The Office of the CMOH is also responsible for ensuring “appropriate actions” are taken in response to urgent and emergency situations (Public Health Ontario, 2020).

The statutory roles and powers of the CMOH are defined within the *Health Protection and Promotion Act (HPPA)* (Health Protection and Promotion Act, 1990). The CMOH's role aligns with what Fafard and colleagues (2018) describe as, “Everyone's Expert” (Fafard et al., 2018). The CMOH has the authority to communicate publicly, and has a senior advisory role but not the extensive managerial responsibilities of a senior civil service employee (Fafard et al., 2018). The CMOH reports directly to the Deputy Minister of Health (Public Health Ontario, 2020). In response to a public health risk or emergency, the CMOH has the authority to direct local public health units to implement specific public health measures (Public Health Ontario, 2020). The CMOH has the legislative authority to report on, independently of the Minister, any public health issue as they see fit (Fafard et al., 2018).

### **2.1.3 PUBLIC HEALTH ONTARIO (FORMERLY THE ONTARIO AGENCY FOR HEALTH PROTECTION AND PROMOTION)**

Governed under the *Ontario Agency for Health Protection and Promotion Act* and *Agencies and Appointments Directive*, Public Health Ontario (PHO) is designated as a board-governed provincial agency (Public Health Ontario, 2017). PHO was established in 2008 following the SARS pandemic (Ontario Agency for Health Protection and Promotion Act, 2007, S.O. 2007, c. 10, Sched. K, 2007). PHO's mandate is to "provide scientific and technical advice and support to clients working in government, public health, health care, and related sectors" (Public Health Ontario, 2019). Clients include the Ministry and other non-health ministries, public health units, and healthcare organizations spanning primary, secondary, and long-term care (Public Health Ontario, 2017). PHO supports the Ministry in managing infectious disease outbreaks, health promotion, chronic disease prevention, emergency preparedness, environmental and occupational health, injury prevention, infectious disease, and microbiology (Public Health Ontario, 2020). As part of their role in microbiology, PHO completes over six million laboratory tests per year for public health units, hospitals and physicians (Public Health Ontario, 2020). PHO delivers services in the following six general areas: laboratory services; environmental and occupational health; health promotion, chronic disease and injury prevention; communicable disease, emergency preparedness and response; infection prevention and control; and knowledge services (Public Health Ontario, 2017).

### **2.1.4 ONTARIO HEALTH**

Established in 2019, Ontario Health is a provincial agency that collaborates with the Ministry to implement health system strategies (Financial Accountability Office of Ontario, 2019). Ontario Health is responsible for planning, integrating and funding health service providers (Financial Accountability Office of Ontario, 2019). Beyond overseeing community organizations that deliver public health-related services (e.g., community health centres, mental health and addiction agencies), at the present time, Ontario Health's role in the public health sector is minimal.

## **2.2 Regional**

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Over the 1990s and early 2000s, all provinces and territories in Canada except Ontario reorganized their health systems, including public health, under regional health authorities (Lewis & Kouri, 2004). The Ontario health system retained a decentralized organizational structure for public health: accountability for planning and delivery remained with local (i.e., sub-regional) versus regional or provincial agencies (Chessie, 2009).

## **2.3 Local**

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### **2.3.1 BOARD OF HEALTH AND PUBLIC HEALTH UNITS**

Boards of Health (BOHs) are the legal entities responsible for overseeing and administer public health programs and services delivered within 34 municipal and regional jurisdictions (commonly referred to as public health units [PHUs]) (Figure 2) (Health Protection and Promotion Act, 1990). PHUs are governed by a board of directors (i.e., the BOH, here forward referred to as such) and PHU operations are led by a Medical Officer of Health (MOH) and/or Chief Executive Officer (CEO), Chief Administrative Officer (CAO), or Commissioner, depending on how the PHU is defined within legislation (Table 1) (Association of Local Public Health Agencies, 2018). In approximately two-thirds of PHUs, the MOH additionally fulfills the role of CEO or Commissioner and employs at least one Associate MOH (Association of Local Public Health Agencies, 2018). Twenty-four PHUs are established under the *HPPA* as autonomous corporations, six are established under the *Municipal*

Act (2001) as part of a regional administration of municipalities, and four are established under city or town-specific acts (e.g., *City of Ottawa Act*, 1999; *Town of Haldimand Act*, 1999) as part of single-tier municipal administrations (Association of Local Public Health Agencies, 2018; *City of Ottawa Act*, 1999; *Town of Haldimand Act*, 1999; *Municipal Act*, 2001). Autonomous, regional, and municipal PHUs vary in the degree to which their organizational structures are integrated within regional and municipal administrations (Table 1).

### 2.3.2 GOVERNING BODIES

BOHs are accountable to the Minister of Health, and are responsible for ensuring the MOH and/or CEO fulfill statutory responsibilities. The *HPPA* regulates the size and composition of autonomous BOHs, whereas municipal/regional by-laws articulate these requirements for regional and municipal BOHs (Association of Local Public Health Agencies, 2018). Municipalities can appoint between three and 13 elected municipal councillors and unelected citizens as autonomous BOH members (Association of Local Public Health Agencies, 2018; *Health Protection and Promotion Act*, 1990). While councillors tend to form the majority of members, citizen members can also be appointed to the BOH (Association of Local Public Health Agencies, 2018; *Health Protection and Promotion Act*, 1990). First Nations band members can be appointed by their Band Council to BOHs who work within First Nations communities (e.g., Peterborough Public Health) (*Health Protection and Promotion Act*, 1990). Elected representatives of Regional Councils represent regional BOHs, however in some cases Regional Council sub-committees perform the governance responsibilities (Association of Local Public Health Agencies, 2018; *Health Protection and Promotion Act*, 1990). The Municipal Council acts as the governing body for single-tier municipal BOHs and semi-autonomous municipal BOHs vary in their governing body composition but are largely comprised of elected officials from Municipal Council (Association of Local Public Health Agencies, 2018; *City of Ottawa Act*, 1999).

### 2.3.3 MEDICAL OFFICERS OF HEALTH

Each BOH has a Medical Officer of Health (MOH) who is responsible for managing the public health program and services of their respective PHU (*Health Protection and Promotion Act*, 1990). In most cases, the MOH reports directly to the BOH with the exception of regional PHUs with a Commissioner through which the MOH reports to the BOH (*Health Protection and Promotion Act*, 1990). MOHs may also be supported in their role by a CEO or CAO (solely overseeing PHU operations), or a Commissioner or General Manager (who also oversee operations in departments beyond public health such as social services and emergency medical services), and an Associate MOH (Table 1). MOHs are members of the PHU senior leadership team with responsibility for PHU operations and have authority to issue and enforce public health orders and directives from the CMOH (*Health Protection and Promotion Act*, 1990; Ontario Ministry of Health and Long-Term Care, 2018a). MOHs act as designated health information custodians required to maintain information systems on their jurisdiction's public health system, and implement policies and procedures pertaining to privacy and security, data collection, and records management (*Health Protection and Promotion Act*, 1990). MOHs require healthcare professionals to alert the PHU to notifiable illness and diseases in their jurisdiction and are able to delegate inspection and enforcement responsibilities in order to prevent, reduce or eliminate the health hazards in a timely manner (*Health Protection and Promotion Act*, 1990). As defined in the *HPPA*, MOHs have additional powers that can be used in emergencies to prevent or control transmission of a communicable disease (*Health Protection and Promotion Act*, 1990).

**Table 1**      **Typologies of Public Health Unit organizational structure**

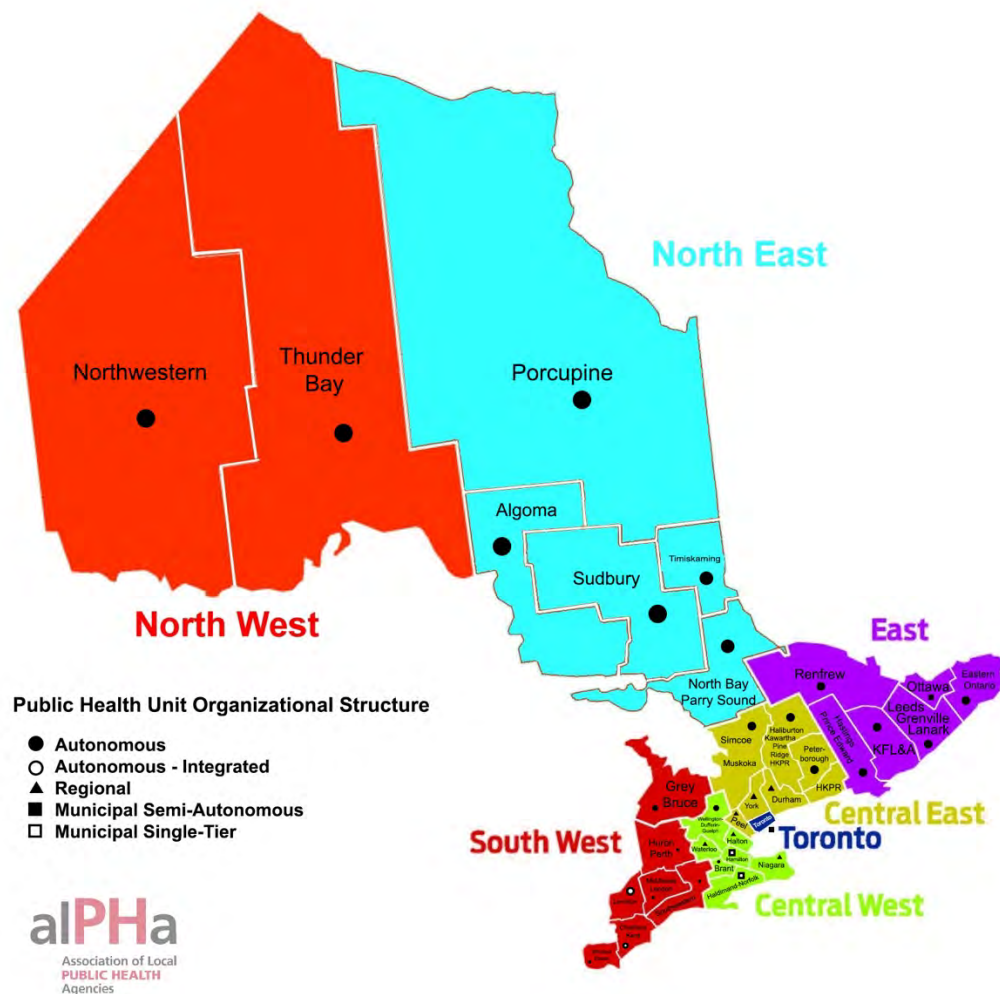
	<b>Autonomous</b>	<b>Autonomous-Integrated</b>	<b>Regional</b>	<b>Municipal Single-Tier</b>	<b>Municipal Semi-Autonomous</b>
<b>BOH - Governing Body</b>	Municipal Council, Order-In-Council, and citizen appointees	Municipal Council, Order-In-Council, and citizen appointees	Regional Council	Municipal Council	Municipal Council and citizen appointees
<b>PHU Organizational structure</b>	Independent from municipal administrations	Integrated within one municipal administration	Integrated within regional administration	Integrated within one municipal administration	Formally independent from municipal administration but Municipal Council retains authority over budget and staffing approvals
<b>Head of Operations</b>	MOH and CEO or CAO	MOH and General Manager	MOH and/or Commissioner	MOH and General Manager	MOH

**Source:** (Association of Local Public Health Agencies, 2018)

**Note:** PHU – Public Health Unit; Unless established as an Autonomous PHU, the organizational structure of PHUs evolve with the structure of municipal and regional administrations. However, the legal designation of a PHU may not immediately change accordingly. For example, Lambton Health Unit is designated as an Autonomous-Integrated PHU but now functions as a Regional PHU.



**Figure 2 Public Health Units across health regions in Ontario as of January 2020**



**Note:** Figure adapted with permission from alPHA (Association of Local Public Health Agencies, 2020); PHUs by region, North West: Northwestern, Thunder Bay; North East: Porcupine, Algoma, Sudbury, Timiskaming, North Bay Parry Sound; East: Renfrew, Ottawa, Eastern Ontario, Leeds Grenville Lanark, Kingston Frontenac Lennox and Addington (KFL&A), Hastings-Prince Edward; Central East: Haliburton-Kawartha-Pine Ridge (HKPR), Peterborough, Durham, Simcoe Muskoka, York, Peel; Toronto; Central West: Niagara, Halton, Hamilton, Brant County, Wellington-Dufferin-Guelph, Waterloo, Haldimand-Norfolk; South West: Grey Bruce, Huron Perth, Southwestern, Middlesex-London, Lambton, Windsor-Essex, Chatham-Kent.

### 2.3.4 PUBLIC HEALTH UNITS – LOCAL OFFICES

A public health unit (PHU) can have several service points staffed by public health professionals located within one or multiple municipalities. Among some of their activities, PHU service providers (e.g., nurses, dietitians, public health inspectors, health promoters) and program support staff (e.g., epidemiologists, policy advisors, program managers) are responsible for public education on healthy lifestyles, communicable and non-communicable disease prevention and control (e.g., immunization and screening), food premises inspection, healthy childhood development programs, and health education in schools (Ontario Ministry of Health and Long-Term Care, 2018). The OPHS illustrate the broad scope of services and programs delivered by local PHUs. Due to variation in the internal organizational structure of PHUs, we were unable to provide a detailed summary of roles, responsibilities, and reporting relationships of senior (e.g., Chief Nursing Officers), director-level and program-manager-level leaders supporting PHU operations. This remains a key data gap and reflects significant heterogeneity within the Ontario public health system.

## 2.4 Integration, Intersectoral Coordination and Inter-jurisdictional Partnership

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Integrated health services involve seamless and easy navigation of the health system for users, and coordination of delivery (e.g., programs, services, information), governance (e.g., policies, stewardship), and financial arrangements (e.g., funding models and agreements) between providers and formal and informal partners (World Health Organization, 2008, 2018). Our search identified several programs and services that may constitute integration and intersectoral coordination within and beyond health sectors, as well as inter-jurisdictional partnerships aimed at supporting public health systems within First Nations communities.

### 2.4.1 GOVERNMENTAL MECHANISMS

There is limited published information regarding governmental mechanisms enabling the coordination of and collaboration on public health activities across regions, other public sectors (e.g., with Ministry of Children, Community and Social Services who oversee and fund the Healthy Babies Healthy Children programs), and private sectors. Knowledge exchange and inter-region coordination of public health activities can occur through professional associations (e.g., Ontario Public Health Association, Association of Public Health Business Administrators, Ontario Association of Public Health Nursing Leaders) and respective committees (e.g., Council of Ontario Medical Officers of Health, alPHa) (Association of Local Public Health Agencies, n.d.-c, n.d.-a).

The *Patients First Act* (2016) created the foundation for Local Health Integration Networks (LHINs) (now Home and Community Care Support Services) to facilitate greater coordination in the planning and delivery of public health and healthcare services (Patients First Act, 2016). The Act required LHINs to engage with PHUs on issues of health system planning, funding, and service delivery (Patients First Act, 2016). This manifested as collaborative planning of local programs and the collection and sharing of data on community health and social needs (Public Health Ontario, 2018). Health promotion and disease prevention areas that have been the focus of collaborative activities include the following: tobacco cessation; falls prevention; flu vaccination; Indigenous health; communicable disease outbreak response; opioid crisis response; and workplace mental health (Public Health Ontario, 2018).

In the 2017 *Public Health Within an Integrated Health System* report, the Minister's Expert Panel on Public Health found that PHUs lack mechanisms for collaboration across regions and that "a lack

of alignment [between PHUs and] LHINs also make[s] it challenging to collaborate, share resources, and maximize impact within the public health sector and within the broader health system” (Ontario Ministry of Health and Long-Term Care, 2017). In an audit conducted close to the same time, the Office of the Auditor General also found that there was little coordination or collaboration across PHUs in the planning and delivery of chronic disease prevention programs and services (Office of the Auditor General of Ontario, 2017). This was believed to contribute to potentially avoidable duplication of research, health promotion material development, program design and management (Office of the Auditor General of Ontario, 2017).

#### **2.4.2 FIRST NATIONS PUBLIC HEALTH SYSTEMS**

Twenty-one PHUs in Ontario intersect with the boundaries of 133 First Nations communities (Talking Together to Improve Health Project Team, 2017b). Various communities, organizations, and levels of government are involved in funding, coordinating, and delivering public health services within First Nations, Inuit and Métis communities (Mattison et al., 2016; Public Health Physicians of Canada, 2019). Under section 50 of the *HPPA*, First Nations can establish formal agreements with PHUs for the provision of public health services (Public Health Physicians of Canada, 2019). In 2017, a survey of PHUs found that seven of the 14 responding PHUs that intersect with First Nations community boundaries had written agreements in place for the delivery of specific programs and services (Talking Together to Improve Health Project Team, 2017a). Self-governed public health systems led by, with, and for First Nations communities were also identified. While not formally recognized in provincial legislation as a PHU, Sioux Lookout First Nations Health Authority (SLFNHA) is a First Nations-led organization supporting the funding, co-design, and administration of Approaches to Community Wellbeing (i.e., what our profile refers to as a public health system) with 31 remote and northern First Nation communities in northwestern Ontario (Public Health Physicians of Canada, 2019; Sioux Lookout First Nations Health Authority, 2010, 2020). Approaches to Community Wellbeing is led by a program director and public health and preventive medicine specialist who also serves as Associate MOH with the Thunder Bay District Health Unit (Sioux Lookout First Nations Health Authority et al., 2021).

The Trilateral First Nations Health Senior Officials Committee is another example of a mechanism established to improve the coordination of efforts to identify gaps in public health service delivery and policy development. This committee originally included the Ontario Chiefs Committee on Health, the Ministry of Health, the Ministry of Aboriginal Affairs (now Indigenous Affairs), the Cabinet Office, and Health Canada (Chiefs of Ontario, 2019).

#### **2.4.3 LOCAL AND INTERSECTORAL COLLABORATION**

Further research is required to assess the full scope of intersectoral collaboration operationalized by PHO and local PHUs. An example of local intersectoral collaboration includes the Grey Bruce Healthy Communities Partnership (Diallo, 2020). This intersectoral partnership, launched in 2010, involves about 30 actors from public health, education (e.g., school board directors), municipal government, and community organizations (e.g., YMCA, M’Wikwedong) and focusses on developing public policy solutions to shared priorities (e.g., affordable housing) and increasing awareness of community health, health equity, and environmental sustainability (Diallo, 2020). Other examples include PHO partnerships with the Ministry of Health and Canadian universities around immunization educational initiatives (Public Health Ontario, 2017). Also, in collaboration with provincial ministries and community organizations, PHO provides evaluation support for programs such as Healthy Smiles Ontario which provides dental care and dental health promotion programs for children and, formerly, the Healthy Kids Community Challenge which aimed to promote healthy lifestyles among children in 45 Ontario communities (2015-2018) (Public Health Ontario, 2017).



## 3 Governance

Public health system governance comprises the legal, regulatory and policy frameworks (e.g., public health legislation, regulations, standards, guiding policies) which define the roles and responsibilities of key actors and the strategic vision, mission and goals directing the public health system (World Health Organization, 2015). Performance measurement and evaluation of public health activities are fundamental to assessing whether systems produce the intended outcomes and facilitate the continuous improvement of programs and services (World Health Organization, 2015).

### 3.1 Legal and Policy Framework for Public Health

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#### 3.1.1 HEALTH PROTECTION AND PROMOTION ACT

The *Health Protection and Promotion Act (HPPA)* was enacted in 1983 (with notable amendments in 1990 and 2004) and is the primary law governing public health in Ontario (Health Protection and Promotion Act, 1990; Health Protection and Promotion Amendment Act, 2004). This Act is divided into nine parts which address the responsibilities of key actors (e.g., Minister of Health, CMOH, MOHs) in the planning, delivery and evaluation of mandatory and optional public health programs and services (Health Protection and Promotion Act, 1990).

For example, section 49 defines BOHs as the main entity responsible for governing and administering public health services locally in Ontario (Ontario Ministry of Health and Long-Term Care, 2018b). While the act does not define public health explicitly, section 5 of the *HPPA* specifies that BOHs “...must superintend, provide or ensure the provision of public health programs and services in the following areas:

- Community sanitation and the prevention or elimination of health hazards;
- Provision of safe drinking water by small drinking water systems;
- Control of infectious diseases and diseases of public health significance, including providing immunization services to children and adults;
- Health promotion, health protection, and disease and injury prevention;
- Family health;
- Collection and analysis of epidemiological data and;
- Such additional health programs and services as prescribed by regulations” (Health Protection and Promotion Act, 1990).

Section 9 of the *HPPA* grants BOHs the authority to deliver additional programs and services in response to local community needs (Health Protection and Promotion Act, 1990). The *HPPA* also defines the following: the roles and responsibilities of MOHs and public health officers responsible for enforcing compliance with the Act and its regulations; the powers of the provincial government to respond to public health hazards and emergencies; and the responsibilities of public health actors for reporting, monitoring, and preventing communicable disease (Health Protection and Promotion Act, 1990). The 2004 *Health Protection and Promotion Amendment Act* updated *HPPA* sections addressing CMOH appointments, the Minister’s authority to direct the CMOH, CMOH reporting responsibilities to the government, and their authority to address the public (Health Protection and Promotion Amendment Act, 2004).

### **3.1.2 ONTARIO PUBLIC HEALTH STANDARDS**

Originally developed in 2008 and updated in 2018, the Ontario Public Health Standards (OPHS) represent the guiding framework for public health practice and policy (Ontario Ministry of Health and Long-Term Care, 2018b). The OPHS replaced the Mandatory Health Programs and Services Guidelines (1997) which specified minimum requirements for PHU service delivery (Ontario Ministry of Health and Long-Term Care, 2018b; Pinto et al., 2012).

According to the OPHS, the overall goal of public health programs and services is “to improve and protect the health and wellbeing of the population of Ontario and reduce health inequities” (Ontario Ministry of Health and Long-Term Care, 2018b). The OPHS articulate expectations and the following objectives for programs and services delivered by PHUs:

- To increase the use of public health knowledge and expertise in the planning and delivery of programs and services within an integrated health system;
- To reduce health inequities with equity focused public health practice;
- To increase the use of current and emerging evidence to support effective public health practice;
- To improve behaviours, communities and policies that promote health and wellbeing;
- To improve growth and development for infants, children and adolescents;
- To reduce disease and death related to infectious, communicable and chronic diseases of public health significance;
- To reduce disease and death related to vaccine-preventable diseases;
- To reduce disease and death related to food, water and other environmental hazards;
- To reduce the impact of emergencies on health (Ontario Ministry of Health and Long-Term Care, 2018b).

The OPHS include four Foundational Standards (population health assessment, effective public health practice, emergency management, and health equity) and nine Program Standards (infectious and communicable diseases prevention and control, food safety, healthy environments, safe water, healthy growth and development, school health, chronic disease prevention and wellbeing, immunization, substance use and injury prevention). The Foundational Standards articulate the core public health programs and services and the conceptual model of their role and function. They underlie the Program Standards, which are linked to protocols specifying the activities that PHUs are mandated to implement and guidelines that provide locally adaptable direction on how to implement the standards (Ontario Ministry of Health and Long-Term Care, 2020b; Region of Waterloo Public Health and Emergency Services, 2018).

## **3.2 Performance Management and Evaluation**

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The OPHS define program and service outcome indicators and give local PHUs flexibility to define performance indicators for five Program Standards (chronic disease prevention and wellbeing, healthy environments, healthy growth and development, school health, substance use and injury prevention) according to their local context and approaches (Ontario Ministry of Health and Long-Term Care, 2018b). Additional performance indicators listed in the OPHS include those measuring: general health, lifestyle, and quality of life; morbidity and mortality; and health inequities among priority population groups (Ontario Ministry of Health and Long-Term Care, 2018b). Priority and equity-seeking populations identified among the OPHS include school-aged children, infants, women



in their child-bearing years, and First Nations, Inuit, and Métis communities (Ontario Ministry of Health and Long-Term Care, 2018b).

PHUs are required to conduct program evaluations and to assess and report on population health. Their reports must describe the existence and impact of health inequities, and identify mitigation strategies (Ontario Ministry of Health and Long-Term Care, 2018b). Limited methodological guidance beyond the Health Equity Guideline and the Population Health Assessment and Surveillance Protocol, are provided to PHUs for these purposes (Office of the Auditor General of Ontario, 2017).

The Auditor General's 2017 audit found little evidence of the Ministry of Health mechanisms used to monitor and support program evaluation within PHUs (Office of the Auditor General of Ontario, 2017). The type, quantity, and quality of program evaluations conducted by PHUs varied across the province and this was believed to depend in part on the time and human resources available to conduct rigorous evaluations (Office of the Auditor General of Ontario, 2017). The Auditor General's report found that approximately 60% of 36 PHUs needed support for population health assessment and epidemiological analysis (Office of the Auditor General of Ontario, 2017). While cost-prohibitive for many PHUs, some reported outsourcing population health surveillance and assessment activities to York University and the Risk Factor Surveillance Service of alPHA (Association of Local Public Health Agencies, 2020a; Office of the Auditor General of Ontario, 2017). This is a telephone survey of adults within specific BOH jurisdictions which collects data on several factors such as self-rated health and wellbeing, health behaviours, sociodemographic and environmental factors, and immunization history (Association of Local Public Health Agencies, 2020b). Limited human resources for monitoring and evaluation as well as challenges accessing high-quality local epidemiological data were highlighted in the Auditor General's report and echoed in recent responses to the MOH discussion paper on public health modernization (Association of Public Health Epidemiologists in Ontario, 2020; Office of the Auditor General of Ontario, 2017).

### **3.2.1 ACCOUNTABILITY MECHANISMS**

The OPHS's public health accountability framework was developed in part to help address variation in performance measurement across PHUs (Ontario Ministry of Health and Long-Term Care, 2018b). Other accountability mechanisms promoting performance measurement and reporting in relation to the OPHS include: Ministry-BOH Accountability Agreements; BOH Strategic Plans; BOH Annual Service Plans and Budget Submissions; performance reports; and an annual report (Ontario Ministry of Health and Long-Term Care, 2018b).



## 4 Financing

Among the EPHOs, financing refers to the “mobilization, accumulation and allocation of resources to cover population health needs, individually and collectively” (World Health Organization, 2015). Our search sought publicly available data from provincial budget reports and where public health expenditures were not specified, audited financial statements of key public health actors receiving provincial health funding (e.g., provincial and regional health authorities).

### 4.1 Background

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Under section 72 of the *HPPA*, municipal governments have legislated responsibility for financing public health programs and services (Health Protection and Promotion Act, 1990). However, section 76 of the *HPPA* specifies that the Minister of Health can grant funding “on such conditions as he or she considers appropriate” (Health Protection and Promotion Act, 1990). With the exception of the late 1990s and early 2000s when municipalities supported 50% of BOH budgets, historically, municipalities have supported 25% of BOH budgets while the Ministry of Health has supported up to 75% (Association of Local Public Health Agencies, 2018; Ontario Ministry of Health and Long-Term Care, 2017). According to aLPHa and the 2017 Expert Panel on Public Health, many municipalities support more than 25% of their public health budgets (Association of Local Public Health Agencies, 2018; Ontario Ministry of Health and Long-Term Care, 2017). Programs that receive full funding from the Ministry of Health include Smoke Free Ontario, needle exchange programs, Healthy Smiles Ontario, Public Health Nurses Initiatives, and infectious diseases control programs (Ontario Ministry of Health and Long-Term Care, 2017). The 2019/20 Provincial Budget announced reductions in the provincial share of public health budgets, however, these plans were paused in May 2019 and it is unclear if they will be implemented (Association of Municipalities of Ontario, 2019; Ontario Ministry of Finance, 2019, p. 20). Detailed information on resource allocation methods are sparse. A Funding Review Working Group was commissioned in 2015 to inform the design of a population-needs based funding model for public health; however, these recommendations have not been adopted to date and resource allocation is still carried out largely on a historical basis (Moat et al., 2016; Office of the Auditor General of Ontario, 2017).

To examine the amount and proportion of provincial budgets that are allocated to public health-related activities, budget data indexed within Volume 1 of the annual provincial budget expenditure estimates reports were manually abstracted and analyzed for fiscal years (i.e., year ending March 31) 2011/12 to 2020/21 (Government of Ontario Treasury Board Secretariat, 2021). Budget estimates data for the Ministry of Health and former Ministry of Health and Long-Term Care and Ministry of Health Promotion were assessed. Presented in the following sections are total voted operating expenditure estimates that do not include capital expenditures, are not inflation adjusted, and exclude statutory appropriations (e.g., Ministers’ and parliamentary assistants’ salaries). While the focus of our analysis was on the Ministry of Health, we also report on Ministry of Children, Community and Social Services operating expenditures that support PHU programs.

### 4.2 Provincial Public Health Spending

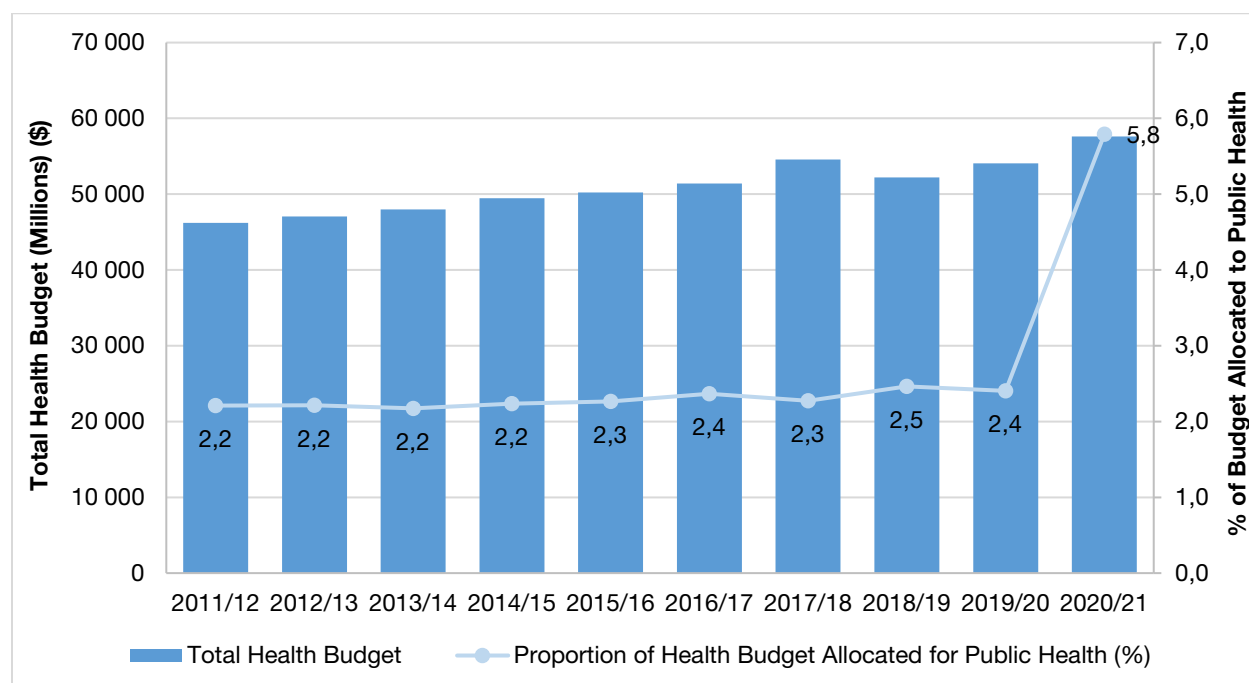
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Over the past decade, there was modest variation in the absolute amount and relative proportion of the Ministry of Health budget dedicated to the “Population and Public Health Program” (PPHP) and former “Health Promotion Program” operations expenditures (Figure 3) (Government of Ontario Treasury Board Secretariat, 2020). Since 2015/16 these budget lines for public health-related activities have been combined under the PPHP which funds programs and services administered by

the Ministry and local PHUs (Government of Ontario Treasury Board Secretariat, 2020). Here forward, for brevity, PPHP spending will be referred to as "public health" spending.

In 2011, public health accounted for approximately 2.2% (\$1.0 billion) of provincial health system expenditures (Figure 3). Over approximately a decade, this proportion grew to approximately 2.4% (\$1.3 billion in 2019/20; estimates not adjusted for inflation). For fiscal year 2020/21 there was an increase in one-time funding for COVID-19 pandemic response activities (\$1.8 billion) which increased the proportion of public health spending to approximately 5.8% (\$3.3 billion) (Government of Ontario Treasury Board Secretariat, 2020).

**Figure 3 Ministry of Health budget estimated operating expenditures, fiscal years 2011/12 to 2020/21 (CAD\$, not adjusted for inflation)**



The Financial Accountability Office of Ontario (FAO) conducted an analysis of Ministry of Health expenditure estimates for the fiscal year 2019/20 (Financial Accountability Office of Ontario, 2019). The 2019/20 budget for public health was 1.7% higher than that requested in the 2018/19 budget. The FAO indicated that this increase largely stemmed from increased funding for Official Local Health Agencies (i.e., PHUs and community-governed primary care organizations such as Community Health Centres and Aboriginal Health Access Centres), and in particular, a planned \$90 million investment in dental care for low-income older adults which would be delivered by these agencies (Financial Accountability Office of Ontario, 2019). The FAO suggests that the dental care program cost was offset by planned, but recently paused, reductions to PHU funding totaling \$200 million over three years. Since the 2019/20 budget, three sub-programs which funded public health associations, the Healthy Communities Fund, and "local capacity and coordination," have been cancelled (Financial Accountability Office of Ontario, 2019; Government of Ontario Treasury Board Secretariat, 2020).

#### 4.2.1 PUBLIC HEALTH SPENDING IN HEALTHCARE AND ACROSS SECTORS

Additional Ministry of Health budget lines supporting healthcare and potentially public health-related services delivered across the health system include the Ontario Health Insurance Plan disease prevention strategy (\$2.5 million, <0.1% of total Ministry of Health expenditure, 2020/21), HIV/AIDS and Hepatitis C programs (\$0.1 billion, 0.2%, 2020/21) and capital investments such as on public health laboratory construction (\$18.5 million, <0.1%, 2020/21) (Government of Ontario Treasury Board Secretariat, 2020). The 2019/20 budget additionally included expenditures for cancer screening programs (\$95.3 million, 0.2%) (Treasury Board Secretariat, 2019). Cancer Care Ontario was a recipient of cancer screening program funding (Cancer Care Ontario, 2019). While expenditure figures are not specified, it is likely that funding for cancer screening is included within the 2020/21 Health Services and Programs budget (i.e., vote 1416) which now supports Ontario Health agencies including Cancer Care Ontario and community-governed primary care organizations such as Community Health Centres and Aboriginal Health Access Centres (Government of Ontario Treasury Board Secretariat, 2020). Finally, it should be noted that PHUs also receive funding through the Ministry of Children, Community and Social Services (MoCCSS) for specific programs such as Healthy Babies Healthy Children (\$90.3 million, 2.1% of total MoCCSS expenditures, 2020/21) (Ontario Ministry of Children, Community and Social Services, 2020).

### 4.3 Municipal Public Health Spending

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Our search did not enumerate public health expenditures from municipal actors because of variation in PHU accounting structures and thus reporting of financial information. For example, autonomous PHUs (e.g., Algoma Public Health Unit) report disaggregated audited financial statements for PHU operations while regional PHU expenditures such as those of Peel Region Public Health are aggregated within financial statements for the regional administration (i.e., Region of Peel) (Algoma Public Health, 2019; Peel Region, 2020). PHU financial statements thus vary in the degree to which they are disaggregated from related expenditures on community health, emergency medical services, and other health and social services. Future research should examine disaggregated PHU financial information to quantify and compare municipal public health expenditures more effectively.





## 5 Public Health Workforce

The core public health workforce includes “all staff engaged in public health activities that identify public health as being the primary part of their role” (Rechel, Maresso, et al., 2018). This excludes professionals such as midwives, community pharmacists or family physicians who may promote public health, but only as a part of their job. Our search sought information detailing the size and professional discipline composition of, and recruitment and retention trends and strategies for, the public health workforce in Ontario.

### 5.1 Size, Composition, Recruitment and Retention

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#### 5.1.1 CURRENT STATE

The public health workforce in Ontario includes a diverse mix of regulated professionals (e.g., nurses, physicians, social workers, dietitians, dentists, dental hygienists, and medical laboratory technologists) and unregulated professionals (e.g., environmental health officers, health promotion officers, epidemiologists, data analysts, scientists, management staff) (Mattison & Lavis, 2016). The exact size and distribution of Ontario’s public health professionals remains unclear in part because workforce data tends to be reported for the health system overall and/or by regulated professions without a breakdown by sector (Canadian Institute for Health Information, 2021; Mattison & Lavis, 2016).

Our search identified a few different sources of information detailing Public Health Professional composition of the workforce in Ontario. The 2017 Auditor General’s report estimated that PHUs employed approximately 7,500 full-time equivalents (FTEs) among which 980 FTEs were allocated to chronic disease prevention programs and services (Office of the Auditor General of Ontario, 2017). On average 12% of PHU FTEs were allocated to chronic disease prevention, although noteworthy and unexplained variation in PHU workforce allocation was identified (range 6% – 20% of PHU FTEs) (Office of the Auditor General of Ontario, 2017).

According to Scott’s Medical Database (Canadian Institute for Health Information), as of 2018, there were 131 Public Health and Preventive Medicine specialist physicians working in Ontario; many of whom assume roles as MOHs or Associate MOHs (Canadian Institute for Health Information, 2020; Public Health Physicians of Canada, 2019). Within the Canadian Institute for Health Information (CIHI) health workforce database, environmental public health professionals were the only roles specifically related to public health (Canadian Institute for Health Information, 2021). All other professions included in this database were aggregate numbers for the entire field and thus, we were unable to identify the proportion specific to public health. Over 13 years, the number of environmental public health professionals in Ontario has increased 57%, and as of 2013, 681 of these workers were employed in Ontario (46% of total for Canada) (Mattison & Lavis, 2016).

Recently, the Association of Public Health Epidemiologists in Ontario (APHEO) 2020 survey of PHUs and First Nations health authorities (specific organizations not defined) in Ontario indicated that 23 of the 35 participating organizations (66%) had insufficient epidemiology capacity to meet population health assessment and surveillance needs (Association of Public Health Epidemiologists in Ontario, 2020). This finding was echoed in the 2017 Auditor General’s report (Office of the Auditor General of Ontario, 2017). Some of the cited reasons for this insufficient capacity include a large and increasing volume of requests for epidemiological support, insufficient epidemiology staff, epidemiology staff taking on other functions outside the job description to fill in for insufficient staff in other positions

and challenges in filling epidemiology vacancies by the PHUs (Association of Public Health Epidemiologists in Ontario, 2020).

PHO's workforce is reported to comprise professionals from over 20 different disciplines (e.g., physicians, nurses, health specialists, scientists, epidemiologists, laboratory technologists and corporate and support staff); however detailed workforce estimates were not identified by our search (Public Health Ontario, 2017).

### **5.1.2 SEMINAL REPORTS — CAPACITY REVIEW COMMITTEE (2005, 2006)**

Over a decade ago, a Ministry of Health Public Health Capacity Review Committee (CRC) conducted a comprehensive review of PHUs. As of 2005, the CRC estimated that 6,358 FTE staff were working in direct program delivery in public health across Ontario's then 36 PHUs (Capacity Review Commission, 2005). The CRC interim report stated that the majority of the public health workforce was comprised of public health nurses and public health inspectors (Capacity Review Commission, 2005). They also reported that there were over 1,400 FTEs who played supportive roles directing public health program delivery in addition to the program delivery staff (e.g., administrative, information technology, librarians, evaluation and support staff) (Capacity Review Commission, 2005). The 2005 CRC interim report estimated the vacancy rate across PHUs at approximately 4.6% with a high degree of variation across regions (Capacity Review Commission, 2005). Several PHUs were found to be experiencing high rates of program delivery staff turnover, particularly among public health inspectors and public health nurses (Capacity Review Commission, 2005). Specific strategies for improving working conditions, organizational management, and recruitment and retention issues were discussed in these reports, however it remains unclear how widely they were enacted (Capacity Review Commission, 2005, 2006). Since the CRC reports, to our knowledge, no comprehensive public health workforce reviews have been conducted.

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