

THIS IS PUBLIC HEALTH: A CANADIAN HISTORY

Executive Summary

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explores the evolution of public health from its early foundation before Canada was a country until 1986, when the Ottawa Charter for Health Promotion launched what many considered to be a new era in public health. During this time span, numerous public health milestones were achieved through organized community efforts to promote health and to prevent disease and injury, which have always been at the core of public health.

This history has been compiled by the Canadian Public Health Association (CPHA), to mark its 2010 centenary. Like the field of public health, CPHA has much to celebrate in addressing ongoing challenges over 100 years as the national voice for a very diverse field. This narrative is dedicated to those public health advocates and activists who have “fought the good fight,” struggling to advance community health long before Canadian health systems were in place.

This history underlines the importance of federal leadership in the implementation of successful public health initiatives in

Canada, despite the tensions of jurisdictional boundaries. The struggle to eliminate disparities—between geographic regions, urban and isolated communities, Aboriginal and non-Aboriginal people—was a longstanding concern that continues to this day.

Since its beginnings, public health has faced changes and challenges and has too frequently been undervalued. However, a number of remarkable advances in Canada over the past 100-plus years can be attributed to public health.



Public Health Journal, November 1917



McCORD Museum, M993X.5.1529.1

THE GOVERNMENT INSPECTOR'S OFFICE

The government inspector's office, 1850

THE BEGINNINGS

Indigenous peoples have inhabited the North American continent for thousands of years and their health, social, economic and physical conditions were adversely affected by increased European immigration, which began in the 1600s. As the fur trade drove French and British expansion across North America, smallpox, measles, tuberculosis and alcohol destroyed many Indigenous lives. The idea that smallpox could be prevented through arm-to-arm inoculation was widely known in Britain in the 1720s, although the practice had been known in Asia centuries earlier. In 1796, British physician Edward Jenner used fluids collected from cowpox lesions on livestock to protect humans from smallpox infection, creating the first effective vaccine.

As European immigration increased, there were more concerted government efforts to limit the spread of infectious diseases with quarantine laws, but these were of limited effectiveness. In the 1800s, stronger quarantine legislation was passed, but local governments tended to act only during or immediately after the spread of disease epidemics. Epidemic cholera, typhus, tuberculosis, measles and scarlet fever spreading across Europe and Britain prompted a series of sanitary reforms and the creation of boards of health. The colonial governments of what would later become Canada also began establishing local boards of health in the first decades of the 19th century and in 1832 a quarantine station was built on Grosse Isle, a small island about 50 kilometres east of Quebec City, as thousands of British and Irish immigrants sailed to Canada from cholera-infested ports. Epidemic cholera continued to strike the colonies, despite bolstered quarantine defences and local clean-up efforts.

Public health legislation was consolidated during the 1850s and more permanent local boards of health were created. In Britain, the sanitary reform movement was being established through the work of physicians who scientifically demonstrated that cholera was spread through contaminated water and who linked high rates of infectious diseases and child mortality to unsanitary conditions and polluted drinking water. John Snow, a physician and epidemiologist, proved that the London Broad Street pump was responsible for hundreds being sick and many deaths. Compulsory smallpox vaccination was introduced in Canada by the colonial governments of the time, while to the west, the Hudson's Bay Company served as a *de facto* public health agency from the late 18th to the early 19th century.

CONFEDERATION AND THE SANITARY MOVEMENT

Canadian public health begins to gain momentum after Confederation. Between 1867 and 1909, the fundamental elements were being developed to varying degrees, such as the gathering of vital mortality and morbidity statistics, popular education to mobilize public and professional opinion, and municipal infrastructures capable of implementing and enforcing legislated reforms. The *British North America Act of 1867* created the Dominion of Canada through the confederation of the provinces of Nova Scotia, New Brunswick, Quebec and Ontario. There was little mention of health in Canada's original constitution, other than establishing federal jurisdiction over quarantine and marine hospitals and provincial jurisdiction over other hospitals and asylums.

Local and provincial efforts to control infectious diseases and build effective water and sewage systems were aided by discoveries of the bacteriological revolution in the 1880s. As knowledge and infrastructures developed, a growing number of voluntary organizations and individual sanitary reformers preached the gospel of hygiene. Popular acceptance of the germ theory was not widespread until the early 20th century and before the 1880s, many common infectious diseases were thought to be due to bad air or heredity. Typhoid, for example, was widely thought to have a spontaneous origin until clear evidence pointed to contaminated drinking water or milk. The discovery and successful testing of both diphtheria antitoxin and rabies vaccine in the 1890s were major achievements and provided the first reliable and scientific biological tools for the control of these deadly diseases.

Scientific discoveries completely transformed popular understandings of the transmission and the prevention of infectious diseases and this knowledge brought the realization that individuals and communities could do something to stop the spread of disease and benefit from early detection. This new way of thinking was called the *sanitary idea*, and it first spread among medical elites before being gradually adopted by the educated middle classes and then later by the population at large. As longstanding beliefs about disease transmission were replaced with new understandings about personal hygiene, the challenges involved in managing human waste dominated public health in Canada. The prevailing approach to the disposal of excrement at this time was by using portable dry-earth closets in the home with a variety of absorbents and then burying the waste. People became increasingly concerned about sewers, wash basins and toilets.

Collective action was needed to manage sewage and garbage and to purify drinking water, so governments needed to play a larger role in the prevention of disease and death through public health. The early sanitary



Quebec, ca. 1915

reformers embraced the need for hygiene and sanitation with religious fervour and their commitment helped lay the foundations of Canada's public health infrastructure. Edward Playter, a Toronto physician, began publishing *The Sanitary Journal*, "devoted to public health and individual hygiene" in 1874. Information about the nature and incidence of disease among the population was needed to help develop government services and the federal *Census and Statistics Act* was passed in 1879, providing funding for the collection of vital statistics in cities with a population of more than 10,000. The Dominion government also implemented legislation regarding the adulteration of food in 1874 and revised this act in 1884, but otherwise hesitated to take further action on public health and disease prevention.

Public Health Journal (2)111, March 1911

TUBERCULOSIS MORTALITY

Chart showing the Death Rate from Tuberculosis in Ontario for 10 years.

Rate per 1,000 living.	YEARS										Rate per 1,000 living.
	1899	1900	1901	1902	1903	1904	1905	1906	1907	1908	
1.4											1.4
1.3											1.3
1.2											1.2
1.1											1.1
	Total										
Deaths	3405	3484	3284	2694	2723	2877	2667	2911	2530	2511	29086

CHART I.

Canada's largest cities and provinces began to fill the public health void. In 1882, Ontario became the first provincial government to establish a full-time Provincial Board of Health, with an annual budget of \$4,000 and William Oldright as the chairman and Peter Bryce as secretary and chief medical health officer. Ontario served as a model for the other provinces in setting up their boards of health over the next two decades. Montreal had become the industrial centre of Canada and rapid settlement resulted in working class families living in crowded, unsanitary and poorly built housing, giving the city the highest recorded mortality rates of all British North American cities. The Montreal smallpox epidemic of 1885 resulted in nearly 20,000 cases and almost 6,000 deaths across Quebec, leading to the creation a provincial public health act and board of health in 1887.

In 1886, smallpox vaccine was being produced on behalf of the Ontario Board of Health and shipped to other provinces, and then Ontario established the first public health laboratory in North America in 1890. Public bacteriological laboratories were subsequently established in Quebec, Nova Scotia, and Manitoba and these laboratories examined milk and water supplies, tested suspected diphtheria and typhoid samples, chlorinated public water supplies, and investigated rabies outbreaks. By the mid-

1890s, provincial public health laboratories also facilitated the inspection of cattle and meat.

Public education remained fundamental to reformers' public health crusades and the fight for infectious disease prevention and control prompted the creation of a number of national

organizations, such as the Canadian Association for Prevention of Tuberculosis in 1901. Other groups expanded into this sphere of interest, such as the National Council of Women, which dedicated itself to the fight against venereal disease in 1906.

Progress was slowly being made in establishing Canada's public health infrastructure. McGill University endowed a Chair in Hygiene in 1894, while the University of Toronto created a Department of Hygiene in 1896. Canada's first tuberculosis sanatorium, the Muskoka Cottage Sanatorium, opened in 1887. In 1904, the Department of the Interior and of Indian Affairs appointed a medical officer to organize and supervise the health of more than 100,000 Aboriginal people across the country.

SOCIAL TRANSFORMATION AND WORLD WAR I

This transformative decade began with the creation of the Canadian Public Health Association in 1910 and ended with the establishment of the federal Department of Health in 1919 and the end of World War I. CPHA was formed by a small group of physicians who were concerned about the state of public health. The Association was constituted through an act of Parliament and

held its first annual conference at McGill University in December 1911, attended by the Governor General, the Prime Minister of Canada and the Premier of Quebec. The early founders of CPHA were determined to bring about change, “come hell or high water.”

Saskatchewan became Canada’s public health leader in the 1910s, developing progressive public health policies under the leadership of its chief officer of health, Maurice Seymour. Throughout the country, there was a growing interest in the physical and mental health of children, which was gradually addressed through medical inspection in schools. The threat of venereal diseases became a dominant issue as the war progressed. An estimated 28.5% of Canadian troops were infected by

government of the need to create a Department of Health in 1919.

Public health confidence increased in the 1920s, with notable initiatives to protect child and maternal health, educate public health professionals, provide immunization programs and prevent diphtheria and reduce milk-related illness and death with provincial pasteurization legislation. Public health nurses were given primary responsibility for the health and welfare of women and children, and many travelled to small towns and rural areas, explaining and demonstrating scientific methods.

In 1914, Connaught Laboratories was established within the University of Toronto to provide a reliable supply of essential biological health products as a public service, and it was also a major centre of basic and applied research. The closely linked School of Hygiene, founded in 1927, provided post-graduate training for a range of public health professionals. Shared federal-provincial funding was used to implement a broad social hygiene program for venereal disease control, which was a dominant public health issue in the early 1920s. There was also growing recognition of the immense threats to Aboriginal people from tuberculosis in the face of federal inaction, paternalism and indifference.



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venereal diseases in 1915. An unprecedented national public health crisis was brought on by the “Spanish influenza” epidemic sweeping across Canada in the fall of 1918. By the time the pandemic eased, at least one-sixth of the Canadian population—predominately young adults—had been stricken and 50,000 died, accelerated by complications from infections such as pneumonia. The impact of the influenza epidemic helped convince the federal

IMMIGRATION AND THE GREAT DEPRESSION

In the 1920s, government officials worried about the impact of immigrants in sparsely settled rural areas, especially after an economic depression in 1921. Rural public health resources were limited or non-existent and both prairie and Maritime populations were growing rapidly. The Department

of Health developed policies to screen immigrants from continental Europe for diseases before they left for Canada.

The stock market crash of October 1929 and the Great Depression that followed had a devastating impact on the Canadian economy. The Gross National Expenditure declined an estimated 42% between 1929 and 1933 and a significant proportion of the population needed government relief to survive. The demands on the federal and provincial governments vastly exceeded the resources available, while voluntary organizations, which traditionally provided free health and social services, were equally hard-pressed.

As the federal government cut back on health spending, provinces and municipalities were left to fill the gaps. Quebec and Ontario fared better than the rest of the country, while the Maritime provinces saw the decline that began in the 1920s continue and the four western provinces were the hardest hit. Unemployed immigrants were deported by the thousands and entrance to Canada for new immigrants was essentially restricted to British and Americans. Public apathy towards immunization and political negligence of sanitation fuelled significant outbreaks of preventable diseases. Public health also had no tools against the crippling ravages of polio, while automobile accidents and tobacco use had a growing impact on human life and health.

Saskatchewan Photographic Services, Archives Canada/e002414872



Nurse R. McCallum uses a doll to demonstrate how to change a diaper, 1956. Yellow Grass, SK

WORLD WAR II AND POST-WAR GROWTH

The Second World War ended the economic depression and spurred the development of industry. A predominantly rural country became an urban one during the 1940s. Women were essential in keeping the economy running during the war and their rate of full-time labour force participation doubled. Technological advances put hospitals and medical specialists centre stage as industrialization continued to transform Canadian society and left-wing political forces called for greater social equity.

There was a growing recognition of the importance of nutrition and physical fitness, as well as political support for health insurance programs. The postwar years saw significant expansion in resources for federal and provincial public health services, facilitated by the introduction of a generous system of federal health grants to the provinces to

support a variety of specific disease control and treatment programs. Such grants also supported public health research projects, a key focus of which was research into developing a polio vaccine while the country experienced serious epidemics of the disease.

The professionalization of public health continued, and it was officially recognized as a designated specialty of medicine by the Royal College of Physicians and Surgeons of Canada in 1947. Canada made a significant contribution to the creation of the World Health Organization

(WHO) in 1948 and the Deputy Minister of National Health and Welfare, Dr. Brock Chisholm, is credited with defining the international organization's objective of the attainment by all people of the highest possible level of health.

The 1950s saw the continuation of significant expansion in federal and provincial funding for health services. The incidence of most infectious diseases declined, particularly from immunization programs and the wide use of new antibiotic drugs. Dental health became a public health preoccupation and water fluoridation programs expanded, while preventable injuries among children and chronic diseases such as cancer and cardio-pulmonary diseases became major causes of death among adults. Canada's polio epidemic peaked in 1953 and the introduction of the Salk and Sabin polio vaccines a few years later eventually brought this disease under control.

The National Health Program provided grants for health surveys, hospital construction, child and maternal health services, medical rehabilitation, and laboratory and radiological services. In 1957, legislation was enacted allowing the federal government to enter into an agreement with the provinces to establish a comprehensive, universal plan covering acute hospital care and laboratory and radiology diagnostic services. By the end of the decade, all provinces had agreed to participate in the national hospital services insurance plan and a growing demand for health services exceeded the supply of professionals, most notably nurses. Industrial production, processing and distribution of food products drew greater federal attention in the late 1950s, after a strengthened, more pro-active *Food and Drugs Act* was implemented in 1954. There was growing attention paid to water pollution and the need to invest in sewage and water treatment facilities.

MODERN SOCIAL AND ENVIRONMENTAL CHALLENGES



Ontario March of Dimes Archives

In the 1960s, amidst great social change and longer life expectancy, new public health challenges continued to emerge. Chronic diseases and injuries and “lifestyle” risks to health related to tobacco, alcohol and drug use and a re-emergence of sexually transmitted infections would become the next major prevention issues. The federal government made contraception legal, as Justice Minister Pierre Trudeau announced that there was no place for the state in the bedrooms of the nation. The public health field tried to redefine itself while primary care consumed the bulk of government health spending on a national system of hospital-based health care. The 1960s also saw a tremendous increase in the numbers and influence of women within the public health profession. There was a greater public concern about synthetic chemicals and some prescription drugs, as illustrated by the impact of DDT on wildlife and the tragic consequences of thalidomide use among pregnant women.

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There was also growing public apathy towards public health messages about vaccines, tobacco use and water fluoridation programs. At the same time, the death toll from automobile crashes continued to increase.

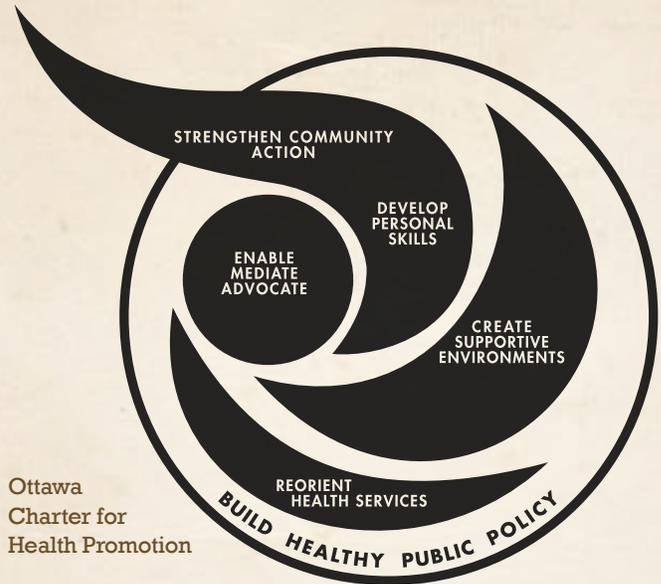
NEW FRAMEWORKS FOR PUBLIC HEALTH

After 22 years of expansion in health services, the 1970s marked the beginning of a period of consolidation, rationalization and reduced federal funding for health care. The release of the Lalonde report in 1974—*A New Perspective on the Health of Canadians*—resulted in a broader approach to public health. Community health protection promoted healthy living and CPHA expanded its activities to include a number of international initiatives. The global eradication of smallpox in 1980 was the result of a concerted international public health effort, while in Canada, public health campaigns targeted individual actions to improve fitness, stop smoking and detect breast cancer early.

CPHA had a significant leadership role in a national HIV/AIDS educational campaign aimed at both the public and health professionals beginning in 1986. This new disease reshaped public health approaches, following the first reported case in Canada in 1982. Broader health promotion goals and an understanding of the social and economic determinants of health led to a recognition of the need for a new public health movement to address the links between poverty and ill-health, as demonstrated for example by the enduring disparities experienced by Canada's Indigenous people.

This new public health movement was defined with extensive Canadian involvement in what has become known as the Ottawa Charter for

OTTAWA CHARTER FOR HEALTH PROMOTION



Ottawa
Charter for
Health Promotion

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Health Promotion.

This Charter for action was developed and adopted by an international conference, jointly organized by the World Health Organization, Health and Welfare Canada and the Canadian Public Health Association. Two hundred and twelve participants from 38 countries met in Ottawa from November 17 to 21, 1986 to exchange experiences and share knowledge of health promotion. The Charter presented fundamental strategies and approaches that the participants considered vital for major progress in health promotion. The move towards a new public health became a worldwide goal.

It is on that hopeful and inspiring note that *This is Public Health, A Canadian History* formally ends. It is too early to review our more recent history, but several public health stories from the past still resonate today. Today's public health reformers continue to work to build a better, healthier future for all.

This is Public Health, A Canadian History is an on-line, interactive resource suitable for a broad audience and available as a free download at cpa100.ca