

A HISTORY OF PUBLIC HEALTH IN ALBERTA, 1919-2019

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ISBN 978-1-77385-546-2

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Albertans' Health over Time: What We Know (and Why We Don't Know What We Don't Know)

Lindsay McLaren and Rogelio Velez Mendoza

Introduction

Our intention with this chapter is to present an overview of the health status of the Alberta population from 1919 to 2019. However, this is not a straightforward task, nor one without controversy.

First, what constitutes "the population" is not always clear, consistent, or inclusive. As seen in Chapter 1 and elsewhere in this volume, there are many examples throughout Alberta's public health history where "the public" or "the population" excluded certain groups, often based on problematic assumptions about Indigeneity, ethnicity, gender, socio-economic circumstances, or other social dimensions. Second, what constitutes "health" can be debated, and how health is understood and experienced, versus measured, is not always concordant. In their 1946 constitution, the World Health Organization famously defined health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." In contrast to this broad definition, much of what we know about the "health" of Albertans is based more narrowly on sickness and death. We encourage the reader to keep in mind that what we know about population health and illness over time reflects social processes and power dynamics pertaining to what aspects of health are counted, among whom, to what end, and who gets to decide.

This chapter presents one version of Albertans' health over time, which draws on quantitative data — namely, leading causes of death as recorded in Alberta's

vital statistics, which were published in provincial annual reports across our one hundred-year period of interest,² supplemented by other quantitative information that is likewise available over a long period of time, such as historical statistics on notifiable diseases, diseases which, by law, must be reported to government authorities.³ Notwithstanding the challenges noted above, we believe that compiling information that is available over a long time period provides an important, albeit partial, opportunity to better understand our history as it pertains to health and illness including societal efforts to address health problems.

The chapter proceeds as follows. First, continuing with the question of how we know what we know, we briefly introduce some of the key sources consulted. Then, using those sources, we present trends over time, beginning with a broad overview of the period of interest, approximately 1919 to 2019, followed by a more detailed analysis of discrete time periods. We contextualize the statistics with contemporary events and discourse gleaned from debates in the Alberta legislature, changes in the administrative structure of the provincial Department of Public Health, and news media. We take the liberty of going into some depth for topics that do not appear elsewhere in this volume, such as motor vehicle accidents and seat belts.

How Do We Know What We Know? Disease and Death Statistics, 1919–2019

Vital statistics, or "systematically tabulated information concerning births, marriages, divorces, separations, and deaths based on registrations of these vital events," constitute the earliest and longest-standing source of formally recorded, quantitative information about the health of the Alberta population and indeed across Canada.⁴ Following the passing of census and vital statistics legislation for Upper and Lower Canada in 1847 and then the Dominion of Canada in 1879,⁵ provincial legislation was passed throughout the late nineteenth and early twentieth centuries, with Alberta passing its first Vital Statistics Act (An Act respecting the Registration of Births, Marriages and Deaths) in 1907.⁶ To improve upon processes under the former Northwest Territories Ordinances, Alberta's 1907 act provided for the appointment of postmasters throughout the province to serve as registrars, which reportedly permitted "much fuller and more accurate returns of births, marriages and deaths."

Speaking to long-standing administrative connections between vital statistics and public health, a new provincial Vital Statistics Act, passed in 1916, created the positions of Registrar General of Vital Statistics, which was held by the minister of agriculture (the government department responsible for public health at the time), and Deputy Registrar General of Vital Statistics, which fell to

the provincial medical officer of health.⁸ The act remained with the Department of Agriculture until 1919, when it was transferred to the newly established Department of Public Health.⁹ Vital Statistics remained under the Department of Public Health (or the Department of Health as it was sometimes called) until 1994, when the act was transferred to the Department of Municipal Affairs and then later, around 1998, to the Department of Government Services (called Service Alberta at the time of writing).¹⁰

Another important and long-standing source of health (illness) statistics in Alberta is notifiable diseases, defined as "a disease that, by statutory requirements, must be reported to the public health authority in the pertinent jurisdiction when the diagnosis is made [because it is] deemed of sufficient importance to the public health to require that its occurrence be reported to health authorities." Notifiable disease reporting is part of a broader set of activities in public health surveillance (i.e., the ongoing, systematic collection, analysis, and interpretation of data and its timely dissemination to decision makers to inform action). Retaining content from prior territorial ordinances, Alberta's inaugural Public Health Act retained legislated responsibilities for notifiable disease reporting, authorizing regulation by the Provincial Board of Health. At the time of writing, the list of notifiable diseases is found in the Communicable Diseases Regulation of the provincial Public Health Act.

Historical news media sheds some light on social perceptions around designating a disease as notifiable. For example, designating venereal diseases as notifiable permitted public reporting of important trends over time, such as a decline in syphilis in Alberta between the 1940s and 1960s (see also below). ¹⁶ The practice, moreover, permitted clarification of the number of cases of food poisoning (salmonella; 65) versus measles (1,968) in Edmonton in 1967, when public concern seemed disproportionately focused on the rarer problem. ¹⁷ Designating a condition as notifiable can be controversial. This was the case with HIV: when the Alberta Hospital Association passed a resolution in 1988 recommending that HIV be reported under the notifiable diseases regulations of the Public Health Act, Dr. John Gill, chair of the Provincial Advisory Committee on AIDS argued that the resolution shows "a disappointing lack of understanding" in that such an action would discourage people from getting tested. ¹⁸ HIV became a notifiable disease in Alberta in 1998. ¹⁹

A final example of an important and long-standing source of health (illness) statistics in Alberta —for non-communicable disease — is the provincial cancer registry, which began in the early 1940s amid recognition of cancer as a growing problem in Alberta and across the country; the registry continues today.²⁰

The Health of the Alberta Population, 1919–2019

Some important caveats apply to the statistics presented below. First, what one might call reporting infrastructure has changed over time, such that accuracy and completeness of records may be imperfect in any given year, and the degree of inaccuracy and incompleteness changes over time. As one illustration, the 1921 *Report of the Provincial Board of Health*, prepared by Dr. W.C. Laidlaw, stated that "in most of the infectious diseases there has been an increase over the year 1920, and this increase can be explained by the fact that infectious diseases are being more fully reported. It is not considered that the incidence of disease was any higher this year than in previous years, as judging by the death-rate the incidence must have been practically the same." We accordingly encourage readers to focus more on trends over time than on specific numbers.

Second, the ways in which diseases and causes of death are classified has changed over time. This presents a particular challenge to the trends presented in Table 3.1 and Figure 3.1, which we attempt to mitigate by extracting more or less exactly what was presented in the provincial annual reports for the purpose of year-to-year comparison, with details provided in Appendix B on page 430. For the rest of the chapter, readers are directed to the endnotes in which we provide additional details about the statistics presented.

The Health of the Alberta Population Since 1915: Broad Overview

Table 3.1 shows the three most common causes of death from 1920 to 2010 at ten-year intervals.²²

TABLE 3.1: Leading causes of death (number of deaths), all ages, Alberta, 1920 to 2010, 10-year intervals. Ranking based on absolute number of deaths for Selected Causes, all ages.²³

Year	Rank 1 (# of deaths)	Rank 2 (# of deaths)	Rank 3 (# of deaths)
1920	Influenza (603)	Pneumonia (all forms) (398)	Violent causes (excl. suicide) (365)
1930	Diseases of the heart (564)	Malignant tumors (482)	Pneumonia (all forms) (468)
1940	Diseases of the heart (1,086)	Malignant tumors (759)	Diseases of the arteries (517)
1950	Diseases of the heart (2,046)	Malignant tumors (997)	Cerebral haemorrhage (693)
1960	Diseases of the heart (2,800)	Malignant tumors (1,439)	Cerebral haemorrhage (934)
1970	Diseases of the heart (3,171)	Malignant tumors (1,827)	Violent causes (excl. suicide) (981)
1980	Diseases of the heart	Malignant tumors (2,627)	Cerebrovascular diseases (1,057)
1990	Diseases of the heart (3,777)	Malignant tumors (3,607)	Violent causes (excl. suicide) (1,066)
2000	Malignant tumors (4,775)	Diseases of the heart (4,548)	Cerebrovascular diseases (1,271)
2010	Malignant tumors (5,649)	Diseases of the heart (4,785)	Violent causes (excl. suicide) (1,390)

For those causes of death listed in Table 3.1, the rates of death, from 1915 to 2015, are shown in Figure 3.1. For this and subsequent figures, rates refer to the number of deaths per 100,000 population during a one-year period in Alberta.²⁴

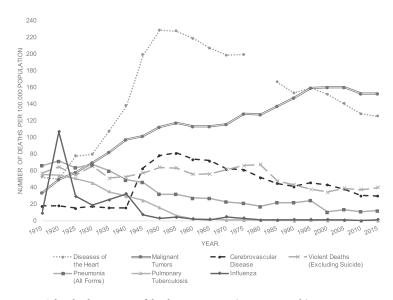


Fig. 3.1: Select leading causes of death, 1915 to 2015 (5-year intervals). Rate per 100,000 population. 25

Overall, Table 3.1 and Figure 3.1 show that communicable diseases, and specifically influenza, were the most important causes of death around 1920 but were soon overtaken by non-communicable diseases — first heart disease, which dominated from the 1930s to the 1980s, and then cancer, which surpassed heart disease in the 1990s. These latter groups of diseases dwarfed influenza and other communicable diseases in terms of their absolute (number) and relative (rate) impacts on mortality across the Alberta population.

We structure the remainder of the chapter by presenting statistics on somewhat more specific causes of death within discrete time periods (1910–1922, 1923–1940, 1941–1959, 1960–1977, 1985–2015), defined based on the classification system, generally the International Classification of Diseases system, used to classify and tabulate the vital statistics in Alberta's annual reports. Figures 3.2a to 3.2i include the top five causes of death in the first year of the time period in question; in some cases we included additional causes of death that otherwise seemed important or interesting due to, for example, a major increase or decrease. For each time period, we also consider elements of the public health context and activities aligning with one or more of the prominent causes of morbidity or mortality in more detail.

1910-1922: Communicable Diseases

Figure 3.2a presents leading causes of death for Albertans from 1910 to 1922. During this early period in Alberta's history, the leading causes of death were communicable in nature. Diarrhea and enteritis, specific to Albertans under two years of age, and typhoid fever figured prominently in 1910 but decreased fairly rapidly thereafter in terms of both incidence and mortality, in part reflecting early public health efforts relating to waterworks, sewerage, and immunization.

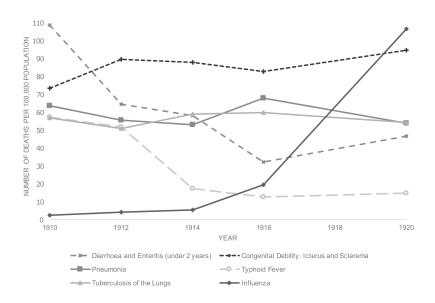


Fig. 3.2a: Leading causes of death (individual codes), 1910 to 1920. Rate per 100,000 population.²⁷

Although reported deaths from influenza were relatively uncommon in Alberta early in this period, they increased significantly late in the decade reflecting the 1918/19 influenza pandemic, which was described in the inaugural provincial Department of Public Health's annual report in 1919.

The influenza epidemic which late in the year 1918 swept the province with such disastrous results had by the beginning of 1919 materially declined, and while there were one or two waves, they had not the virulence of the first wave, and declined more rapidly. 7,185 cases were reported during the year [1919], the last cases being reported in the month of May. 31,051 cases were reported in 1918, thus making a total of 38,236 for the epidemic.²⁸

Table 3.2 shows cases and deaths due to influenza in Alberta during those pandemic years and, by contrast, years on either side. During the pandemic, there were 38,236 cases and over 4,300 deaths²⁹ in a population of just over 500,000.³⁰

TABLE 3.2: Reported annual number of cases of, and deaths from, influenza in Alberta, 1916–1923.³¹

Year	Reported cases (#)	Reported deaths (#)
1916	(not reported)	97
1917	(not reported)	75
1918	31,051	3,315
1919	7,185	1,049
1920	2,753	603
1921	3	75
1923	(not reported)	272

The illnesses noted in Figure 3.2a were the biggest contributors to mortality at the time. There were others that — while not necessarily causing large numbers of deaths — raised concern because of rising incidence, rapid spread, and impact on health and well-being. One example was venereal diseases which, in the context of World War I, were prevalent among Canadian soldiers³² and extended to the civilian population. Venereal disease was described in the Alberta legislature in 1917 as "the scourge [that] was increasing at a tremendous rate, through the ignorance of the people" by Dr. George D. Stanley, MLA for High River; his comment provides insight into views on the causes of those diseases.³³ In 1920 a venereal disease division was established within the provincial Department of Public Health, which was responsible for treatment (i.e., every person with a venereal disease must place himself under treatment by a qualified practitioner); education (i.e., all persons attending treatment are informed about precautions to prevent spread of infection; as well, two films on the subject were shown across the province, and booklets were distributed); and reporting of cases.³⁴ Gonorrhea and syphilis became notifiable diseases in Alberta in 1919 and 1921, respectively.³⁵

1923–1940: Communicable Diseases Persist, and an Epidemiological Transition Begins, in a Context of Economic Depression

Figures 3.2b and 3.2c present, respectively, leading causes of death in Alberta from 1923 to 1929 and from 1931 to 1939. Communicable diseases, including pneumonia, tuberculosis, and influenza persisted as important causes of death during the 1920s and 1930s in Alberta. The persistence of communicable disease deaths underpinned the 1924 creation of an infectious disease branch within the provincial Department of Public Health. Deaths from influenza continued to show periodic spikes. In 1937, for example influenza caused 472 deaths in Alberta, compared to 340 the year before. Based on news media coverage, there

was concern, which did not materialize, that the 1937 outbreak might rival the 1918/19 pandemic.³⁶

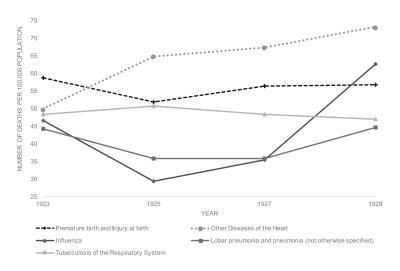


Fig. 3.2b: Leading causes of death (individual codes), 1923 to 1929. Rate per 100,000 population.³⁷

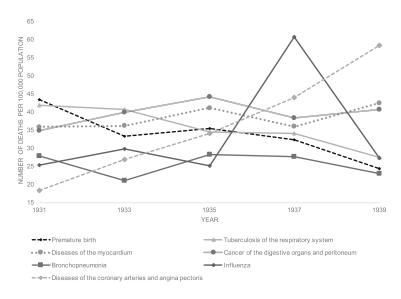


Fig. 3.2c: Leading causes of death (individual codes), 1931 to 1939. Rate per 100,000 population.³⁸

Epidemics of polio struck the province in 1927 — with 353 cases, including fifty-three deaths — and in 1930, when there were 150 cases and thirty-two deaths. However, as we shall soon see, Alberta's most significant polio outbreak was yet to come.³⁹ The 1927 outbreak occurred mostly in and around Edmonton, while the 1930 outbreak largely affected areas south of Red Deer, including Calgary, suggesting that those in the Edmonton area had developed some immunity that protected them later.⁴⁰ Although 1937 was a significant polio year for Canada, Alberta was less affected than provinces such as Ontario. 41 Approximately half of Alberta's 169 reported cases that year occurred in and around Medicine Hat; the incidence of polio in Medicine Hat at the time was the highest ever experienced by any Alberta municipality. As described by historian Christopher Rutty and colleagues, polio sparked frustration and fear throughout the first half of the twentieth century due to a lack of understanding of its cause, the unpredictability of outbreaks, and the fact that it primarily affected middle-class children and families, 42 who have relatively high political voice (see Chapter 1). In this context, the Alberta government passed the Poliomyelitis Sufferers Act in 1938, which provided free treatment for polio patients.⁴³

Alongside the persistence of communicable diseases, non-communicable diseases began to appear among the leading causes of death during the 1920s and 1930s. Deaths from diseases of the circulatory system (e.g., heart, myocardium, coronary arteries), for example, increased during the 1920s and 1930s. In the 1930s, cancer appeared for the first time in the top five causes of death, causing considerable public and professional concern,⁴⁴ including a discussion in 1931 by the Edmonton Board of Health to make cancer a notifiable disease (this did not materialize).⁴⁵ This transition from communicable to non-communicable diseases as primary causes of death led Deputy Minister of Health, Dr. Malcolm Bow to lament in 1937 that "we have done relatively little for those over forty years of age [who are more likely to suffer from] [c]ancer, diabetes, diseases of the heart and arteries, accidents."⁴⁶

Insight into other health concerns of this period may be gleaned from the content and structure of the provincial Department of Public Health, including dental health in the 1920s. In 1930, a division of mental health was created within the provincial department. However, contrary to its name, the mental health division focused entirely on provincial institutions for patients with mental illnesses, including those considered "refractory or disturbed" and "idiots, imbeciles . . . and defectives." It also focused on mental hygiene clinics, which dealt with "problem cases referred by schools, courts, police, physicians, health departments, hospitals, charities, homes, parents and the Department of Neglected Children;"

perhaps not surprisingly, the director of mental health, Dr. C. A. Baragar, worked closely with the provincial Eugenics Board (see also Chapter 1).⁴⁷

1941–1959: Cancer, Nutrition, and a Resurgence of Polio

Leading causes of death in Alberta during the 1940s and 1950s are shown in Figure 3.2d (1941–1949) and Figure 3.2e (1951–1959). The context for these statistics is the period during and after World War II, which included wartime restrictions such as food rationing, followed by post-war economic growth and development of the welfare state. The 1940s represented the last period that any communicable disease, in particular tuberculosis (Figure 3.2d), appeared among the top five causes of death for Albertans according to the statistics presented here.

With funding from provincial and federal governments, the Central Alberta Sanatorium (later renamed the Baker Sanatorium) in the Calgary area opened in 1920 to serve civilians and World War I veterans.⁴⁸ The provincial Tuberculosis Act, passed in 1936, authorized free tuberculosis treatment, and allowed for significant increases in institutional beds and diagnostic services.⁴⁹ The so-called rest cure provided in sanatoriums was the most common treatment for tuberculosis until the 1940s, when the antibiotic streptomycin was discovered, widespread use of which has been credited with contributing importantly to the continued decline in deaths from tuberculosis.⁵⁰ As discussed in Chapter 1, the framing and deployment of tuberculosis control efforts in Alberta effectively excluded, on racist grounds, Indigenous patients. These dynamics moreover cast doubt on the reliability of the estimates of the number of Indigenous tuberculosis patients in Alberta.

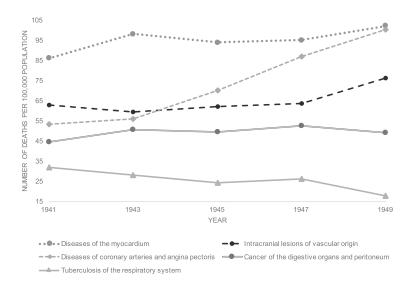


Fig. 3.2d: Leading causes of death (individual codes), 1941 to 1949. Rate per 100,000 population.⁵¹

By the 1950s, despite an emerging sense of having largely combated communicable disease, illnesses persisted.⁵² A notable spike in gonorrhea incidence in the province occurred during the 1940s (see Figure 3.4 on page 80),⁵³ once again influenced by wartime circumstances and high rates of infection among returning WWII soldiers. Although penicillin had been discovered in the late 1920s, it was in the 1940s that research efforts intensified to permit producing the antibiotic on a larger scale.⁵⁴ In 1945 in Alberta, penicillin was added to the list of drugs to be distributed for free by the provincial Department of Public Health for the treatment of gonorrhea.⁵⁵

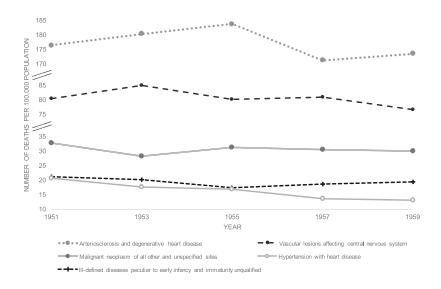


Fig. 3.2e: Leading causes of death (individual codes), 1951 to 1959. Rate per 100,000 population.⁵⁶

In the 1950s, attention shifted again to polio. Alberta's largest polio outbreak occurred in 1952/1953, with a total of 2,232 cases and 192 deaths.⁵⁷ During August and September of 1953, polio appeared in the local news almost daily, including frequent advertisements for polio insurance (Figure 3.3). The Salk vaccine was the focus of a large-scale field trial in 1954 led by the U.S. National Foundation for Infantile Paralysis with materials provided by the Toronto-based Connaught Laboratories.⁵⁸ Alberta — having been badly affected by the 1953 outbreak — was one of a few Canadian jurisdictions to participate in the trial, and over 16,000 Alberta children were enrolled. The trial established that the Salk vaccine was 60 to 90 percent effective depending on the type of poliovirus, and Alberta and other provinces began widespread funding and distribution of the vaccine to school-aged children.⁵⁹ Immunization has eliminated polio in Alberta and across Canada. In Alberta, there have been only three cases of symptomatic polio since 1968, with the last one reported in 1979.⁶⁰

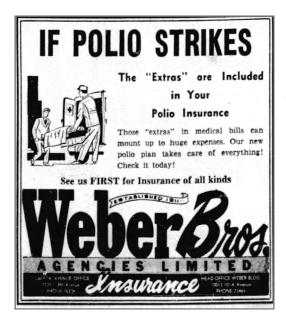


Fig. 3.3: Advertisement for polio insurance. Originally published in *the Edmonton Journal*, a Division of Postmedia Network Inc. *Edmonton Journal*, 8 August 1953, 34 (one of many examples).

Heart disease was the leading cause of death during the 1940s and 1950s,⁶¹ but cancer was a growing concern. Under the 1940 Cancer Treatment and Prevention Act, the provincial government assumed responsibility for funding procedures related to cancer diagnosis, treatment, and prevention.⁶² The Alberta Cancer Registry evolved from a need for a system to support the administration of that new payment model under the 1940 act.⁶³ Starting out as a file-card data collection system, the registry expanded and evolved over time; in 1953, registration of patients with government-administered cancer clinics — at that time in Edmonton, Calgary, and Lethbridge — became a prerequisite for physicians to be paid for treating cancer patients. In 1968, it became mandatory for medical laboratories in Alberta to send pathology reports concerning cancer to the registry, and in 1974, physicians became legally required to register cancer patients.

In line with the shift toward non-communicable diseases as major causes of death, the 1940s saw growing interest in nutrition on the part of the provincial Department of Public Health.⁶⁴ In 1947, a nutrition division was created within the provincial department, with Public Health Nutritionist, Elva M. Perdue BSc, appointed as director. From the outset, the division's efforts focused on nutrition education, thus illustrating an assumption that lack of knowledge, rather than lack of money and its intersection with other social identities such as ethnicity, was at the root of poor nutrition.⁶⁵ The division also participated in dietary surveys to assess nutrition among the Alberta population.⁶⁶

1960-1977: A Focus on Motor Vehicle Accidents

Diseases of the circulatory system and cancer continued to be leading causes of death during the 1960s (Figure 3.2f) and 1970s (Figure 3.2g). A new entry among the leading causes of death starting in the 1960s was motor vehicle accidents. This was a period of considerable provincial and national discussion around traffic safety, including the role of seat belts.⁶⁷

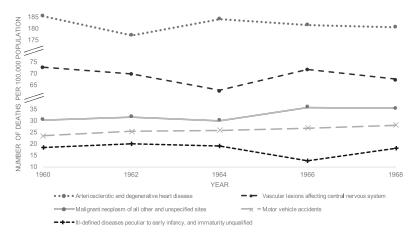


Fig. 3.2f: Leading causes of death (individual codes), 1960 to 1968. Rate per 100,000 population.⁶⁸

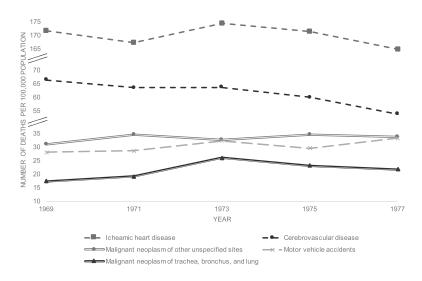


Fig. 3.2g: Leading causes of death (individual codes), 1969 to 1977. Rate per 100,000 population.⁶⁹

There had been a few references to seat belts in Alberta news media as early as the 1950s. In 1954, the Farm Women's Union of Alberta passed a resolution recommending that all manufacturers of motor cars provide safety belts as standard equipment in cars,⁷⁰ one of several examples of involvement by women's groups in advocating for seat belts.⁷¹ In 1955 and 1956, members of the Alberta Safety Council,⁷² including safety director Paul Lawrence, attended meetings of the National Safety Council in Chicago, where seat belts were major topics of discussion.⁷³ Awareness of the safety benefits of seat belts⁷⁴ manifested in their mandatory use in stock car racing, including in Edmonton,⁷⁵ and their adoption in other limited circumstances.⁷⁶ In 1955, the Chrysler Corporation announced from Detroit that seat belts would be made available as "dealer-installed optional equipment" in its 1955 cars; the initiative would come to Canada soon after.⁷⁷

Discussion about seat belts grew in frequency and intensity during the 1960s. Alongside a growing chorus of pro-seat belt voices by medical professionals and others,78 automobile industry standards slowly advanced, beginning with seat belt attachments to permit their installation in vehicles.⁷⁹ Uptake of seat belt certification in Alberta was hastened in 1963 when the cabinet of the governing SC party passed an order-in-council stipulating that seat belts sold in the province must meet specific safety standards. 80 However, it was still up to consumers to decide whether or not to purchase and install seat belts in their vehicles. Although other jurisdictions passed legislation requiring all new cars sold to be equipped with seatbelts, Alberta preferred to wait.81 In 1962, Premier Ernest Manning stated that the provincial government had "no intention of requiring car owners to have them installed."82 He then predicted that seat belts would become standard equipment in all cars, in time.83 In fact, he was largely correct: by early 1964 three major car manufacturers — American Motors (Canada), Chrysler Canada, and General Motors — had announced that all new cars, including those purchased in Alberta, would have seat belts pre-installed, to the delight of long-standing Highways Minister Gordon Taylor.84

With seat belts physically in place, for the most part, the discussion in the late 1960s shifted to use which, at the time, was low.⁸⁵ In Alberta, there was a very strong sentiment, which endured well into the 1970s and 1980s, that seat belt use should not be legislated and that education was the best approach.⁸⁶ The Alberta Safety Council, with Mr. Paul Lawrence as safety director and later general manager, continued to be a vocal proponent for seat belts and was frequently in the news,⁸⁷ publicizing the benefits of seat belt use and answering common questions, such as whether seat belts are necessary for short trips in town at a slower speed limit (yes; a large proportion of traffic deaths occur within 25 miles [around 40 kilometres] of home, and at speeds of less than 40 miles per hour

[around 65 kilometres per hour]), and whether the potential risk of being belted in if a vehicle is burning or submerged outweighs the benefit (no; even in such circumstances, chances of remaining conscious to free oneself are increased when wearing a seat belt). 88 A 1969 survey by the council estimated that, even though approximately three-quarters of cars had seat belts installed, fewer than one in four individuals surveyed said that they used them on a regular basis. 89

During the 1970s, in the face of persistently low seat belt use, attention began to shift to the idea of making it compulsory to wear seat belts, building on precedents elsewhere, including Australia. In Canada, Minister of National Health and Welfare, Marc Lalonde, in the 1974 context of his newly released *A New Perspective on the Health of Canadians Report*, urged provincial governments to consider compulsory seat belt legislation. Although some Canadian provinces advanced such legislation, Alberta resisted, despite efforts, including by Mr. George Ho Lem, Social Credit MLA for Calgary McCall. In the mid-1970s Mr. Ho Lem made two attempts to introduce legislation in the form of private members bills to amend the provincial Highway Traffic Act to mandate seatbelt use. There was very little discussion and no apparent support for the proposed amendment in the legislature, and the bill did not progress.

In 1975, Mr. Ho Lem was back with Bill 213, to amend the Highway Traffic Act such that seat belt use would be required but only on public highways where the prescribed speed limit was 50 mph (around 80 km/h) or more. 94 This time, the bill underwent second reading, with Mr. Ho Lem delivering an impassioned description and rationale, including the benefits of seat belts for reducing suffering, deaths, and hospital costs; the success of compulsory seat belt legislation elsewhere; analogies with other legislation such as for helmet use on motorcycles; and his perspective about public perceptions shifting to be more supportive of seat belt legislation. Considerable discussion followed, nearly all of which was opposed, and the bill timed out.95 In these and subsequent debates, the points of opposition raised in the legislature were similar and may be summarized into several themes, which are listed along with illustrative examples in Table 3.3. Overall, these wide-reaching points of opposition led to strong reluctance to embrace compulsory seat belt legislation in Alberta, even when other Canadian jurisdictions were beginning to move in that direction. 96 We continue the seat belt story below.

TABLE 3.3: Points of opposition to compulsory seatbelt legislation (thematic groupings), along with illustrative examples, from the Alberta legislature, 1970s.⁹⁷

Point of opposition	Illustrative examples (quotations)
Uncertainty about the benefits of seat belts / it's not just about seat belts.	"it has not been proven that wearing seat belts is a complete safety factor [] I would hope, before we pass legislation [] that we make every effort to study, research, and bring back the report to the Legislature whether the research proves that wearing seat belts is an effective way of saving people from being injured or killed."—Rudolph Zander (PC), MLA for Drayton Valley, Alberta Hansard, 13 February 1975.
	"I should point out, though, that the statistics on morbidity and mortality relative to automobile accidents have been coming down across the country without regard to whether that particular jurisdiction has mandatory seat belt legislation." —Hugh Horner (PC), MLA for Barrhead, Alberta Hansard, 25 March 1977.
Harms of seat belts ("I know someone ")	"Out of dozens of examples in my own constituency [] There was one incident where a man and a lady were travelling and at an intersection they piled in with a gravel truck [] The man, a person [of] 180 pounds, was in a seat belt. He couldn't loosen the seat belt [] By that time, the car exploded and the person burned."—John Batiuk (PC), MLA for Lamont, <i>Alberta Hansard</i> , 13 February 1975.
Seat belt use can't be enforced	"One is the problem of enforcement. How does a policeman see somebody who's only wearing a lap belt and not a shoulder belt? How does he obtain a conviction if an apprehended person says he has just snapped loose his seat belt at the moment his vehicle is stopped?" —Roy Farran (PC), MLA for Calgary-North Hill, <i>Alberta Hansard</i> , 20 November 1975.
I believe in seat belts, just not in being forced to wear them.	"No one will deny the wearing of seat belts is of some help in reducing the extent of injury in highway accidents [] However, we must be aware that encouraging people to use seat belts and making sure the car has seat belts are very different from enforcing people to use seat belts. It is to this latter element of coercion [] that I take exception [] By requiring that seatbelts be used, the freedom of choice is lost."—Clifford Doan (PC), MLA for Innisfail, <i>Alberta Hansard</i> , 13 February 1975.

1985-2015: Some Key Successes, and New Challenges

Continuing among the top causes of death in the 1980s, 1990s, and early 2000s was cancer (Figure 3.2h and 3.2i). Priorities for cancer prevention were reducing the prevalence of cigarette smoking (see also Chapter 9), research into the influence of diet, and the development of programs for early diagnosis, especially for colorectal, breast, and cervical cancer. Also in the mid-1980s, and against the backdrop of an international wave of enthusiasm around community-based health promotion and disease prevention activities, was the Steve Fonyo Cancer Prevention Program, a community-based education demonstration project focused on cancer risk reduction and early detection.

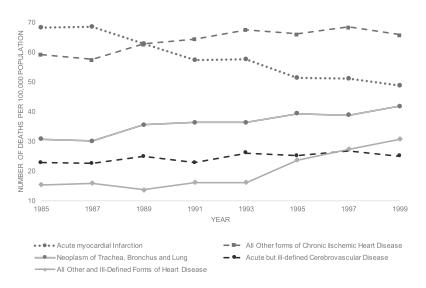


Fig. 3.2h: Leading causes of death (individual codes), 1985 to 1999. Rate per 100,000 population. 101

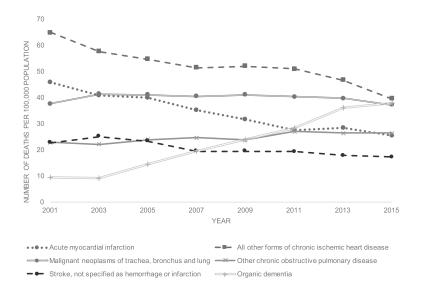


Fig. 3.2i: Leading causes of death (individual codes), 2000 to 2015. Rate per 100,000 population. 102

A notable health trend in Alberta during this most recent period (1980spresent) was a peak, followed by a steep decline, in the incidence of gonorrhea (Figure 3.4). In the 1980/81 period, Alberta had the highest incidence of gonorrhea in Canada, which was believed to reflect a variety of factors including "a buoyant economic climate" that resulted in a proportionally larger number of individuals considered high risk (e.g., young, single workers, and visitors), greater awareness of sexually transmitted disease among members of the public and health professionals, and improvements in reporting processes.¹⁰³ An increasingly comprehensive program for the control of sexually transmitted infections was developed, including the establishment of diagnostic and treatment clinics in Calgary, Edmonton, and Lethbridge;104 contact tracing; consulting and referral services to physicians; data monitoring and surveillance; free medication; counselling by professional social workers; and education, including efforts to present venereal disease as a public health problem rather than a moral one.¹⁰⁵ Starting in the early 1980s, incidence in Alberta started to show a significant decline, 106 which has been attributed in part to changes in sexual practices stemming from increased awareness of HIV-AIDS.107

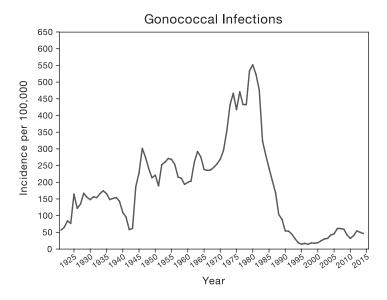


Fig. 3.4: Incidence of Gonococcal Infections (Gonorrhea), Alberta, 1919 to 2014. Figure reproduced from Alberta Health, Surveillance and Assessment Branch and Office of the chief medical officer of health, *Alberta Notifiable Disease Incidence: A Historical Record, 1919–2014* (Government of Alberta, 2015), 8.

Returning to seat belts, government deliberations continued into the 1980s, including repeated attempts to introduce mandatory legislation. In 1980, Mr. Dennis L. Anderson (PC), MLA for Calgary-Currie, introduced private member Bill 204: An Act to Amend the Highway Traffic Act, which would require "that each individual *under the age of 18* travelling in a motor vehicle wear a seat belt or be held by a child restraint device" (italics added), with a penalty for drivers who did not comply. Following discussion at second reading, including presentation of statistics from other provinces showing that seat belt use increased following the introduction of mandatory legislation, the bill was left to die on the Order Paper. Somewhat frustratingly, some members took issue with the arbitrariness of age eighteen as a cut-off. Mr. John B. Zaozirny QC (PC), MLA for Calgary Forest-Lawn, for example, argued that using eighteen years as a cut-off for mandatory seat belt use, but sixteen years as legal driving age would amount to encouraging the seventeen-year-old to break the law.

Aside from occasional questions,¹¹¹ the next time seat belts appeared prominently in the legislature was in 1983–1984, in the context of discussions around ways to reduce health care expenditures, including the possible implementation of hospital user fees.¹¹² Leader of the Official Opposition, W. Grant Notley (NDP), was vehemently opposed to user fees on the basis that they are contrary to the concept of equality in treatment.¹¹³ He, along with Dr. Walter A. Buck (Independent, MLA for Clover Bar), argued that the Lougheed government could not introduce a user fee without first considering all other alternatives — including preventive measures such as mandatory seat belt legislation, which could save lives and money.¹¹⁴

In the context of a 1983 legislative discussion, Janet Koper (PC, MLA for Calgary-Foothills) suggested that "seat belt" in previous bills be substituted with "mandatory use of *child restraint devices* in motor vehicles for *children from birth to five years of age*" (italics added). Koper's suggestion was formalized as government Bill 83: Child Transportation Safety Act, introduced by Minister of Transportation, Marvin E. Moore (PC) in October 1984. The rationale for the bill, presented at second reading, focused on the large number of deaths due to automobile accidents among children and the inability of young children to make decisions for themselves. Likely in anticipation of pushback, Moore was explicit that the proposed legislation was "not in any way associated with seat belts for all adults, and [he did not] intend to expand it in that way or to introduce legislation in that regard. Although some members expressed disappointment that the bill did not go further, Is it received broad support and passed third reading in November 1984.

With the election of Don Getty's Progressive Conservative government in 1985, the door opened to revisit the issue of mandatory seat belt legislation for everyone, with indications that the mood in the legislature was shifting. During the Speech from the Throne on 5 March 1987, the Getty administration announced that "based on extensive consultation with Albertans through their elected representatives, my government will introduce legislation requiring the use of seat belts in automobiles in a further effort to reduce the number of people injured in automobile accidents." Several members of the legislature expressed enthusiastic support, while others were resigned, maintaining that although they were personally opposed to mandatory seat belts, they were compelled to accept the views of their constituents and Albertans more generally. 122

Bill 9, which made seat belt use compulsory for all in Alberta, passed and took effect on 1 July 1987. The new legislation was accompanied by regulations outlining exceptions to the new rules. Nonetheless, and notwithstanding a hiatus in implementation and enforcement due to a legal challenge, the benefits of mandatory seat belt legislation in Alberta soon became apparent: five months after the legislation was introduced, it was reported that use averaged about 80 percent, which was the highest of any province in Canada, and the number of fatalities in 1990 had decreased by 16 percent from 1989. Perhaps emblematic of Alberta's cultural shift, Kenneth R. Kowalski (PC, MLA for Barrhead) commented a year later that "I was one of those who opposed the idea of mandatory seat belt legislation because I thought the invasion of individual rights was paramount and more important, but as I stand here on this particular day in May of 1991, I have to come clean on this matter and basically say without a moment of hesitation in my mind that seat belts do save lives."

Conclusions

This chapter presents an overview of the health of the Alberta population over a hundred-year period, using statistics that were available over the full period of interest. We are not aware of other efforts to compile and present this historical information for Alberta. The basic storyline of this chapter, which includes shifts over time in predominant health problems (e.g., communicable to non-communicable diseases and injuries); approaches (e.g., education, legislation, and health service delivery); and tensions (e.g., urban versus rural infrastructure, benefits and drawbacks of disease reporting, the balance between government intervention and individual liberties) is not unique to Alberta, yet we aimed to tell the story in a way that showcased local responses and personalities within that common story.¹²⁸

We began — and now end — the chapter with the important, yet fraught, question, "how do we know what we know?" While the answer to that question certainly includes elements of a technical nature, such as statistical data and reporting infrastructure, it also embodies elements of power and privilege that determine what information is gathered, by and from whom, to what end, what is to be done about it, and who gets to decide. We encourage anyone who is interested in the public's health to keep these considerations in mind.

NOTES

- 1 World Health Organization, "Constitution of the World Health Organization: Principles," About WHO, accessed on 4 November 2018, http://www.who.int/about/mission/en/.
- Vital statistics were published in the annual report of the Department of Agriculture from 1905 to 1917. In 1919, they were transferred to the newly established Department of Public Health.
- Alberta Health, Surveillance and Assessment Branch, and Office of the Chief Medical Officer of Health, Alberta Notifiable Disease Incidence: A Historical Record, 1919–2014 (Government of Alberta, 2015). https://open.alberta.ca/dataset/09ff0f40-1cfc-48fd-b888-4357104c3c32/resource/c5cea04-ccda-4811-9ed0-03a3cbe8c0fb/download/7019844-notifiable-disease-incidence-1919-2014.pdf. This report presents a compilation of historical data from 1919 to 2014 on select notifiable communicable diseases. The data were gathered from sources including the source files from the Government of Alberta (1919–1924), the Annual Report of Notifiable Diseases of the Dominion of Canada (1925–1978), the Cumulative Annual Notifiable Disease List from Alberta Health and Wellness (1979–1984), and Alberta's Communicable Disease Reporting System (1985–2014). For several diseases, incidence rates are available as early as 1919, corresponding to when these diseases were designated as reportable.
- 4 A Dictionary of Epidemiology, 4th ed., Ed. John M. Last (Oxford: Oxford University Press, 2001), 187 "vital statistics".
- Statistics Canada "History of Vital Statistics" (Government of Canada, modified 8 April 2020), https://www.statcan.gc.ca/eng/health/vital/2012001/hvs; Statistics Canada, "A 100 Years and More of Statistics Acts" (The Daily, Government of Canada, modified 3 December 2018), https://www150. statcan.gc.ca/n1/daily-quotidien/181203/dq181203h-eng.htm; Kelsey Lucyk, Mingshan Lu, Tolulope Sajobi, and Hude Quan, "Administrative Health Data in Canada: Lessons from History," BMC Medical Informatics and Decision Making 69, no. 15 (2015). Statistics Canada, "A 100 Years and More of Statistics Acts
- 6 Statistics Canada "History of Vital Statistics"; An Act respecting the Registration of Births, Marriages and Deaths, Statutes of the Province of Alberta (S.P.A.), 1907, c. 13.
- 7 "The Legislature on the Weed Question," Edmonton Journal, 2 March 1907, 1.
- 8 An Act respecting Vital Statistics, S.P.A. 1916, c. 22.
- 9 An Act to amend the Vital Statistics Act, S.P.A. 1919, c. 45, assented 17 April 1919.
- 10 Provincial Archives of Alberta, An Administrative History of the Government of Alberta, 1905–2005 (Edmonton: The Provincial Archives of Alberta, 2006), 286; Service Alberta, "Alberta Vital Statistics Annual Review," Open Government Publications (Edmonton, AB: Alberta Government, 2006), https://open.alberta.ca/publications/1485-3809.
- 11 Last, A Dictionary of Epidemiology, 125.
- 12 Alberta Health Services "Public Health Surveillance," (Government of Alberta, accessed 18 May 2020, https://www.albertahealthservices.ca/services/Page13513.aspx. See also Last, A Dictionary of Epidemiology, 174.
- 13 An Ordinance respecting Public Health, Ordinances of the Northwest Territories 1902, c. 4.
- 14 An Act respecting Public Health, 1907.
- 15 Communicable Diseases Regulation, 238/1985, https://open.alberta.ca/ publications/1985_238#summary
- This is notwithstanding some of the implementation challenges to notifiable disease reporting, which may lead to under-reporting. For example, in commenting on the 1967 Edmonton Board of Health annual report, city Medical Officer of Health, Dr. G.H. Ball, "said that he believes there are at least twice as many actual cases of salmonella poisoning in Edmonton as are reported." "City Will Step Up Food Poison Study," Edmonton Journal, 12 September 1967, 13; "Venereal Disease Still Major Health

Problem," Edmonton Journal, 17 September 1966, 23. In her address to the Alberta Association of Medical Record Librarians, J.D. Hanna, Division of Social Hygiene, Department of Public Health, supervisor, reported on trends in venereal diseases including syphilis, for which the number and incidence of cases in Alberta was quite a bit lower in 1965 (171 cases, 11.2 per 100,000) than in 1946 (246 cases, 30.6 per 100,000).

- 17 "City Will Step Up Food Poison Study," Edmonton Journal, 12 September 1967, 13.
- 18 "AIDS Proposal Opposed," Edmonton Journal, 27 November 1988, 27.
- 19 Alberta Health and Wellness, Public Health Notifiable Disease Management Guidelines, Human Immunodeficiency Virus (HIV) (Government of Alberta, January 2011, superseded 2021 and 2022), https://open.alberta.ca/dataset/78566f8e-622e-448d-b579-4a838b642689/resource/dbc68c10-7fff-41c3-8063-2ec6a3872f9d/download/guidelines-human-immunodeficiency-virus-2011.pdf
- In his presidential address at the Canadian Public Health Association's 26th annual meeting in 1937, Malcolm Bow identified cancer as one of "eight major health problems facing us to-day irrespective of the particular section of Canada in which we live" due to the "tremendous toll of life levied by this disease." Malcolm R. Bow, "Public Health Yesterday, To-Day, and To-Morrow," Canadian Journal of Public Health 28, no. 7 (July 1937).
- 21 Alberta Department of Public Health, Annual Report of the Department of Public Health of the Province of Alberta 1921, 11-12 (all Alberta Department of Public Health reports are printed in Edmonton, by: J.W. Jeffery, King's Printer, for report years 1919-1923; W.D. McLean, King's Printer, for report years 1924-1933; A. Shnitka, King's Printer, for report years 1934-1949; A. Shnitka, Queen's Printer, for report years 1950-1955; and L.S. Wall, Queen's Printer, for report years 1956-1968).
- These cause of death categories represent major headings contained within the annual vital statistics reports. Although the categories are broad, they are perhaps the ones most amenable to comparisons over time. They are compiled by statistics officers for the purpose of identifying leading causes of death in the report summaries and to making comparisons over time. See for example, the summaries in the Alberta Department of Public Health, Annual Report 1924, 77–78; Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1937, 7–8; Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1947, 6–7, 119; Alberta Department of Public Health, Annual Report of the Bureau of Vital Statistics, 2–3, 63. The five- and ten-year intervals used in Table 3.1 and Figure 3.1 result in the omission of peak periods of certain causes of death, such as the 1918/19 influenza epidemic.
- 23 The number of deaths from "diseases of the heart" in 1980 is not reported because it is noted to be "understated" in the 1980 annual report (1980 Vital Statistics Report, province of Alberta). Brief contemporary definitions of each cause of death are as follows: Influenza: an acute respiratory infection caused by the influenza virus; includes seasonal and other forms of influenza; pneumonia: a form of acute respiratory infection that affects the lungs; tuberculosis: a disease caused by bacteria that most often affects the lungs; violent causes (excluding suicide): includes transport accidents, poisoning, self-harm, falls, homicides, war, drowning, etc.; diseases of the heart: includes rheumatic heart disease, coronary heart disease, congenital heart disease, and heart attacks; cancer or malignant tumors: a large group of diseases that can affect any part of the body and are characterized by the rapid creation of abnormal cells that grow beyond their usual boundaries and can invade or spread to other parts of the body; diseases of the arteries: generalized and localized diseases that affect arteries, including those that result in arterial occlusion (blockage) and those that do not; cerebral haemorrage: an escape of blood from a ruptured vessel in the brain; rupture can occur for different reasons; cerebrovascular disease: disease of blood vessels supplying the brain. Sources: "Fact Sheets", World Health Organization, https://www.who.int/news-room/fact-sheets; "Cerebral hemorrhage," Mosby's Medical Dictionary, https://medical-dictionary.thefreedictionary.com/Cerebral+hemhorrage; "Cardiovascular disease," Encyclopaedia Britannica, https://www.britannica.com/science/cardiovascular-disease/ Diseases-of-the-arteries
- 24 Sometimes the rates presented in this chapter pertain to particular age groups, and this is specified as it occurs. In general, the rates presented were drawn directly from the annual reports of the provincial department responsible for public health and vital statistics at the time.
- 25 Sources: Alberta Vital Statistics Reports, Alberta Vital Statistics Reviews, Statistics Canada, 1915 to 2015. Data were extracted from the Vital Statistics Reports summary sections and tables labelled Certain Causes of Death, Selected Causes of Death, or Leading Causes of Death for the years 1915–1995 (See Appendix A for sources). Data for "Diseases of the heart" are missing in 1980 because they are reported to be unreliable that year. Starting in 2000, data were taken from Statistics Canada. This is because the province's summary classification of Leading Causes changed in 2000 with the adoption of ICD-10. Population figures were extracted from: Population from 1905 to 1970 taken from: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 1970," in Alberta Department of

- Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121. Population from 1975 to 1995 taken from: Respective Vital Statistics Annual Reports for each corresponding year. Population from 2000 to 2015 taken from: Statistics Canada "Population estimates on July 1st, by age and sex" Frequency: Annual Table: 17-10-0005-01 (formerly CANSIM 051-0001).
- 26 The process to classify causes of death is complex and has changed significantly over time. The most common system for classification of diseases internationally is the International Classification of Diseases (ICD), which was adopted by the International Statistical Institute in 1899. In 1905, when the Department of Agriculture first reported statistics on causes of death for the province of Alberta, diseases were classified using a list of fourteen main categories with a total of 101 individual codes or causes. Starting in 1910, the province seems to have adopted the ICD system, using ICD-2, and thereafter adopted each iteration of the ICD.
- Classification system is not named but cause numbers match ICD-2 codes. Includes deaths at all ages. Sources: Alberta Department of Agriculture, Annual Report 1910 (Edmonton, 1911), 217–218; Alberta Department of Agriculture, Annual Report 1912 (Edmonton, 1913), 80–81; Alberta Department of Agriculture, Annual Report 1914 (Edmonton: Printed by J.W. Jeffrey, Government Printer, 1915), 24–25; "Deaths during the Year 1916, by ages and sexes," Alberta Department of Agriculture, Annual Report 1916 (Edmonton: Printed by J.W. Jeffrey, King's Printer, 1917), 198–201; For the year 1918, the value for "Diarrhoea and Enteritis (Under 2 years)" is not given; and "Influenza" includes the sum of the "Influenza" and "Influenza (Epidemic)" categories. "Causes of Death during the Year 1918, by Ages and Sexes (for the Whole province)," Alberta, Annual Report of the Vital Statistics Branch 1918 (Edmonton), 67–73; "Causes of Death during the Year 1920, by ages and sexes (for the whole province)," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1920 (Edmonton: Printed by J.W. Jeffery, King's Printer, 1921), 28–43. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- 28 Alberta Department of Public Health, Annual Report 1919, 9.
- 29 Alberta, Annual Report of the Vital Statistics Branch 1918 (Edmonton), 67; Alberta Department of Public Health, Annual Report 1919, 45.
- 30 The population of Alberta was 495,351 in 1916; "Census of the Prairie Provinces, 1916," Library and Archives Canada, modified 29 November 2019, https://www.bac-lac.gc.ca/eng/census/1916/Pages/about-census.aspx). Alberta's population was 588,454 in 1921 ("Census of Canada, 1921," Library and Archives Canada, modified 21 February 2019, https://www.bac-lac.gc.ca/eng/census/1921/Pages/introduction.aspx).
- 31 Sources: Alberta Department of Agriculture, Annual Report 1916, 178 and 196; Alberta Department of Agriculture, Annual Report 1917 (Edmonton: Printed by J.W. Jeffery, King's Printer, 1918), 165 and 184; Alberta, Annual Report of the Vital Statistics Branch 1918 (Edmonton), 67; Alberta Department of Public Health, Annual Report 1919, 9 and 45; Alberta Department of Public Health, Annual Report 1920, 9 and 47; Alberta Department of Public Health, Annual Report 1921 (Edmonton: Printed by J.W. Jeffery, King's Printer, 1922), 12 and 101; Alberta Department of Public Health, Annual Report 1923 (Edmonton: Printed by J.W. Jeffery, King's Printer, 1924), 7 and 92. "Not reported" (which refers to number of cases) means that influenza was not included in the Statistical Table that often accompanied the provincial medical officer's report, because it did not figure amongst the most common diseases that year. Data on the number of deaths comes from the vital statistics on causes of death.
- 32 A.F.W. Peart, "The Venereal Disease Problem in Canada," Canadian Journal of Public Health 44, no. 5 (May 1953).
- 33 "Education and Agriculture Estimates in Legislature," Edmonton Bulletin, 20 March 1917, Alberta Legislature Library, Scrapbook Hansard, https://librarysearch.assembly.ab.ca/client/en_CA/search/asset/141864/0. The Scrapbook Hansard (https://librarysearch.assembly.ab.ca/client/en_CA/scrapbookhansard) provided insight into legislative debates prior to the establishment of the Alberta Hansard in 1972.
- 34 "Report of the Director of the Division of Venereal Diseases," in Alberta Department of Public Health, Annual Report 1920, 21–2.
- 35 Alberta Health, Alberta Notifiable Disease Incidence. The idea of designating venereal diseases as notifiable diseases was discussed at least as early as 1916: at a meeting of the Alberta congress of Social Service, held 25 November 1916 in Calgary, a resolution was passed "asking government for legislation to include venereal diseases in the list of notifiable diseases, and to undertake to provide Wasserman Test and the Salverson treatment free of charge to every physician who will register a patient." "Social Service Congress Asks for Dower Law," Edmonton Journal, 25 November 1916, 9.

- 36 "'1918 Type' 'Flu Epidemic Feared," Edmonton Journal, 7 January 1937, 9.
- 37 Classification system is not named but cause numbers match ICD-3 codes. For the years 1923 and 1925, the causes of deaths for Indigenous ("Indian") and non-Indigenous people were published in two separate tables. We added the numbers from the two tables to present a total sum for the province. This was to be consistent with other years, where a single table presents causes of death for Indigenous and non-Indigenous peoples. Note that statistics for Indigenous peoples are incomplete at best. Includes deaths at all ages. Sources: "Deaths during the Year 1923—by Ages and Sexes for the Whole Province (Indians Excepted)" and "Death during the Year 1923, by ages and sexes, of Indians Living on Reserves," Alberta Department of Public Health, Annual Report 1923 (Edmonton: Printed by W.D. McLean, King's Printer, 1924), 96-107 and 164-165; "Deaths during the Year 1925—by Ages and Sexes for the Whole Province (Indians Excepted)," and "Death during the Year 1925, by ages and sexes, of Indians Living on Reserves," Alberta Department of Public Health, Annual Report 1925 (Edmonton: Printed by W.D. McLean, King's Printer, 1926), 96-109 and 142-144; "Table 9: Causes of Death by Sex and Ages—for the Whole Province," Alberta Department of Public Health, Annual Report 1927 (Edmonton: Printed by W.D. McLean, King's Printer, 1928), 70-83; "Table 13: Causes of Death by Sex and Ages, 1929, for the Whole Province," Alberta Department of Public Health, Annual Report 1929 (Edmonton: Printed by W.D. McLean, King's Printer, 1931), 106-119. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- Classification system is not named but cause numbers match ICD-4 codes. Includes deaths at all 38 ages. Sources: "Table 17: Causes of Death by Sex and Age, for the Whole Province, 1931," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1931 (Edmonton: Printed by W.D. McLean, King's Printer, 1932), 47-63; "Table 17: Causes of Death by Sex and Age, for the Whole Province, 1933," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1933 (Edmonton: Printed by W.D. McLean, King's Printer, 1934), 48-65; "Table 17. Causes of Death by Sex and Age for the Whole Province, 1935," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1935 (Edmonton: Printed by A. Shnitka King's Printer, 1936), 48-65; "Table 17. Causes of Death by Sex and Age for the Whole Province, 1937," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1937 (Edmonton: Printed by A. Shnitka, King's Printer, 1938), 48-65; "Table 17. Causes of Death by Sex and Age for the Whole Province, 1939," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1939 (Edmonton: Printed by A. Shnitka, King's Printer, 1940), 48-65. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- 39 Alberta Department of Public Health, Annual Report 1927; Alberta Department of Public Health, Annual Report 1930.
- 40 R. B. Jenkins, "Some Findings in the Epidemic of Poliomyelitis in Alberta, 1927," Canadian Public Health Journal 20, no. 5 (May 1929); A. C. McGugan, "Anterior Poliomyelitis in Alberta in 1930," Canadian Public Health Journal 22, no. 12 (December 1931).
- 41 According to Rutty et al., the 1937 outbreak included almost 4,000 reported cases of polio across the country, of which over 2,500 were in Ontario. Christopher J. Rutty, Luis Barreto, Rob Van Exan, Shawn Gilchrist, "Conquering the Crippler: Canada and the Eradication of Polio," Canadian Journal of Public Health 96, no. 2 (Mar-Apr 2005): 17.
- 42 Rutty et al., "Conquering the Crippler," I4. See also Geraldine Huynh, "University of Alberta Hospital Acute and Convalescent Polio Care and the Reintegration of Polio Patients into Albertan Communities, 1953–-80," Canadian Bulletin of Medical History 36, no. 1 (Spring 2019).
- 43 Alberta Department of Public Health, Annual Report 1938, 13.
- 44 "City May Start Active Campaign to Check Cancer," Edmonton Journal, 28 March 1930, 17.
- 45 "Health Inspectors Asking Higher Pay; May Be Granted," Edmonton Journal, 15 October 1931, 13.
- 46 Malcolm R. Bow and F. Thomas Cook, "History of the Department of Public Health of Alberta," Canadian Public Health Journal 28, no. 1 (1937).
- 47 C. A. Baragar, M.D., Commissioner of Mental Institutions and Director of Mental Health, "Mental Health Division," in Alberta Department of Public Health, *Annual Report 1930*, 58.
- 48 Alberta Department of Public Health, Annual Report 1920. The WWI veterans had reportedly been transferred from the military hospital in Frank, Alberta, of which Dr. A.H. Baker was in charge. Baker served as medical superintendent for the new Central Alberta Sanatorium and was the inaugural director of the provincial Division of Tuberculosis Control upon its establishment in 1936. The Central Alberta Sanatorium also reportedly treated Japanese evacuees during WWII. "Baker Memorial

- Sanatorium," Asylum Projects, https://www.asylumprojects.org/index.php/Baker_Memorial_ Sanatorium.
- 49 Alberta Department of Public Health, Annual Report 1936, 7–8. Hospitalization or treatment was provided at no charge to "persons who have been residents of the Province for twelve successive months out of the twenty-four months immediately preceding admission." An Act Respecting the Prevention and Treatment of Tuberculosis, S.P.A. 1936, c. 50. See also George Jasper Wherrett, The Miracle of the Empty Beds: A History of Tuberculosis in Canada (Toronto: University of Toronto Press, 1977), 182.
- 50 Canadian Public Health Association "History of Tuberculosis." During the early 2000s, an important new concern has emerged: multidrug-resistant Mycobacterium tuberculosis. Public Health Agency of Canada, The Chief Public Health Officer's Report on the State of Public Health in Canada 2013 – Tuberculosis – past and present.
- 51 Classification system is labelled "Int. List No.," which corresponds to ICD-5 codes. Includes deaths at all ages. Sources: "Table 17. Causes of Death by Sex and Age for the Whole Province, 1941," Alberta Department of Public Health, Annual Report 1941 (Edmonton: Printed by A. Shnitka, King's Printer, 1942), 48-67; "Table 17. Causes of Death by Sex and Age for the Whole Province, 1943," Alberta Department of Public Health, Annual Report 1943 (Edmonton: Printed by A. Shnitka, King's Printer, 1945), 48-67; "Table 16. Causes of Death by Sex, Age and Residence for the Whole Province, 1945," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1945 (Edmonton: Printed by A. Shnitka King's Printer, 1947), 33-53; "Table 17. Causes of Death by Sex and Age in Alberta, by Place of Residence, 1947," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1947 (Edmonton: Printed by A. Shnitka King's Printer, 1948), 35-57; "Table 17. Causes of Death by Sex and Age in Alberta, by Place of Residence, 1949," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1949 (Edmonton: Printed by A. Shnitka King's Printer, 1951), 35-57. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- 52 "Alberta Has Lowest Death Rate," Calgary Herald, 9 March 1960, Alberta Legislature Library, Scrapbook Hansard, https://librarysearch.assembly.ab.ca/client/en_CA/search/asset/165143/0.
- 53 See Alberta Department of Public Health annual reports for the following years on indicated pages: 1941: 763 cases (21), 1942: 577 cases (20), 1943: 602 cases (21), 1944: 902 cases (22), 1945: 1,039 cases (26), 1946: 1,479 cases (22), 1947: 1,476 cases (22), 1948: 1,903 cases (23), 1949: 1,113 cases (24), 1950: 951 cases (24).
- 54 Christopher Rutty and Sue C. Sullivan, This is Public Health: A Canadian History (Ottawa: Canadian Public Health Association, 2010).
- 55 Alberta Department of Public Health, Annual Report 1945, 94; Alberta Department of Public Health, Annual Report 1947, 22.
- 56 Classification system is the "Intermediate List" of ICD-6 (also known as List A). Includes deaths at all ages. Please note broken y-axis. Sources: "Table 17. Causes of Death (Intermediate List) by Sex and Age in Alberta, by Place of Residence, 1951," Alberta Department of Public Health, *Annual Report* of the Vital Statistics Branch 1951 (Edmonton: Printed by A. Shnitka Queen's Printer for Alberta, 1953), 30-38; "Table 8. Deaths by Cause and Sex, by Age, in Alberta, 1953," Alberta Department of Public Health, Annual Report of the Vital Statistics Branch 1953 (Edmonton: Printed by A. Shnitka Queen's Printer, 1955), 30-37; "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1955," Alberta Department of Public Health, Annual Report of the Bureau of Vital Statistics 1955 (Edmonton: Printed by A. Shnitka, Queen's Printer, 1956), Part III, 22-29; "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1957," Alberta Department of Public Health, Annual Report 1957 (Edmonton: Printed by A. L.S. Wall, Queen's Printer, 1959), Part III, 21-28; "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1959," Alberta Department of Public Health, Annual Report 1959 (Edmonton: Printed by A. L.S. Wall, Queen's Printer, 1961), Part III, 32-40. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- 57 Alberta Department of Public Health, *Annual Report 1952*, 17 (774 cases, 81 deaths); Alberta Department of Public Health, *Annual Report 1953*, 20 (1458 cases, 111 deaths).
- 58 This sentence belies a much longer and more complex history, for which the reader is directed to work by Rutty et al., "Conquering the Crippler."
- 59 Rutty et al., "Conquering the Crippler;" Albert Department of Public Health, Annual Report 1955.
- 60 Alberta Health, Alberta Notifiable Disease Incidence, 14.
- 61 "Alberta Has Lowest Death Rate," Scrapbook Hansard.

- 62 An Act relating to the Treatment and Prevention of Cancer, S.A. 1940, 49. ("The Cancer Treatment and Prevention Act").
- 63 Alberta Health Services, Alberta Cancer Registry, https://www.albertahealthservices.ca/cancer/ Page17367.aspx
- 64 Alberta Department of Public Health, Annual Report 1947, 21 and 54-56; Alberta Department of Public Health, Annual Report 1948, 22 and 47-48; Alberta Department of Public Health, Annual Report 1949, 22 and 55-56; Alberta Department of Public Health, Annual Report 1950, 22 and 56-61.
- 65 Alberta Department of Public Health, Annual Report 1947, 54–6; Alberta Department of Public Health, Annual Report 1948, 47–8; Alberta Department of Public Health, Annual Report 1949, 55–6; Alberta Department of Public Health, Annual Report 1950, 56–61.
- For example, during 1947 and 1948, a family dietary survey was carried out in the Foothills Health Unit (specifically, in the areas of High River, Milo and Queenstown, Royalties, and Okotoks). This survey was a collaborative effort involving the Nutrition Services division of the provincial Department of Public Health, the Foothills Health Unit nursing staff, the nutrition specialist of the provincial Department of Agriculture, and the Nutrition Division of the federal Department of National Health and Welfare. Beginning in 1947, 236 families were invited by Foothills Health Unit staff to participate in the survey, of which 122 families (450 people) agreed. August 1947 and January 1948 dietary records were completed, and for 239 of the individuals, a medical examination, including physical and dental examinations and blood tests, was done in May 1948. Survey participants received a report on recommended dietary changes, a pamphlet summarizing the findings was distributed more broadly throughout the health unit, and "vitamin capsules and other medications were made available to those requiring them." From the point of view of the provincial Department of Public Health, this was a positive experience the 1948 annual report comments on the "splendid co-operation" by the people residing in the foothills district and the staff at the health unit. Alberta Department of Public Health, Annual Report 1948, 47-48.
- 67 An article about life expectancy in Canada in the *Calgary Herald* in 1972 identified traffic deaths as "the biggest killer" but "also the simplest to tackle," including via seat belt use. "Canadians May Get the Life Expectancy They Deserve," *Calgary Herald*, 11 September 1972, 18.
- Classification system is the "Intermediate List" of ICD-7 (also known as List A). Includes deaths at all ages. Please note broken y-axis. Sources: "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1960," Alberta Department of Public Health, Annual Report of the Division of Vital Statistics 1960 (Edmonton: Printed by A. L.S. Wall, Queen's Printer, 1962), 27-35; "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1962," Alberta Department of Public Health, Annual Report 1962 (Edmonton: Printed by A. L.S. Wall, Printer to the Queen's Most Excellent Majesty, 1964), Part II, 29-37; "Table 8: Deaths, by Cause and Sex, by Age, Alberta 1964," Alberta Department of Public Health, Annual Report 1964 (Edmonton: Printed by A. L.S. Wall, Printer to the Queen's Most Excellent Majesty, 1966), Part II, 29-37; "Table 6: Deaths, by Cause and Sex, by Age, Alberta, 1966," Alberta Department of Public Health, Annual Report 1966 (Edmonton: Printed by A. L.S. Wall, Printer to the Queen's Most Excellent Majesty, 1968), Part II, 32-49; "Table 6: Deaths by Cause and Sex, by Age, Alberta, 1968," Alberta Department of Health, Annual Report 1968 (Edmonton: Printed by A. L.S. Wall, Printer to the Queen's Most Excellent Majesty, 1970), Part II, 41-45. Population source: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most Excellent Majesty, 1972), 121.
- Classification system is the "Intermediate List A" of ICD-8 (also known as List A). Data from 1971 and 69 1973 was extracted from the list of causes of death for each province contained in the Vital Statistics Annual publication, Volume II, Deaths by Statistics Canada (Alberta Vital Statistics reports for those years are not available). Includes deaths at all ages for residents and non-residents. Please note broken y-axis. Sources: "Table 6: Deaths by Cause and Sex, by Age, Alberta, 1969," Alberta Department of Health, Annual Report 1969 (Edmonton: Printed by A. L.S. Wall, Printer to the Queen's Most Excellent Majesty, 1971), Part II, 45-54; "Table 21. Deaths and Rates by Cause and Sex, Canada and Provinces, 1971," Statistics Canada, Vital Statistics: Volume III - Deaths 1971 (Ottawa: The Minister of Industry, Trade and Commerce, 1974), 132-151; "Table 21. Deaths and Rates (per 100,000 population) by Cause and Sex, Canada and Provinces, 1973," Statistics Canada, Vital Statistics: Volume III - Deaths 1973 (Ottawa: The Minister of Industry, Trade and Commerce, 1975), 132-151; "Table 11b: Deaths Occurring in Alberta, Cause by Sex, 1975," Alberta Social Services and Community Heath, Vital Statistics Annual Review 1975 and 1976 (Edmonton: 1978), 37-47; "Table 11b: Deaths Occurring in Alberta, Cause by Sex, 1977," Alberta Social Services and Community Heath, Vital Statistics Annual Review 1977 (Edmonton: 1978), 36-46. Population sources: "Table 32: Population, Birth, Marriages, Death and Rates for the years 1905 - 1970," in Alberta Department of Health, Annual Report of the Division of Vital Statistics 1970 (Edmonton: Printed by L.S. Wall, Printer to the Queen Most

- Excellent Majesty, 1972), 121; Alberta, Social Services and Community Health, *Annual Report 1971–72* (Edmonton, 1972), 33; Alberta, Social Services and Community Health, *Annual Report 1973–74* (Edmonton, 1974), 16; and Alberta, Social Services and Community Health, *Annual Report 1975–76* (Edmonton, 1977), 37.
- "District Personals, Morinville" Edmonton Journal, 4 December 1954, 37. The Farm Women's Union of Alberta began in 1915–16 as the United Farm Women of Alberta, which was the first provincial organization of farm women in Alberta. They became the Farm Women's Union of Alberta in 1949 (Nanci Langford, "United Farm Women of Alberta," in The Canadian Encyclopedia. Historica Canada, last edited 16 December 2013, https://www.thecanadianencyclopedia.ca/en/article/united-farm-women-of-alberta). Farm women in Alberta continued to be supportive of seat belts; for example, at the sixth annual Western Canada Farm Safety Conference, it was reported that "The women have... been active in selling seat belts for cars." "Women Contribute to Farm Safety," Edmonton Journal, 13 February 1963, 17).
- For example, at a 1962 meeting, the National Council of Women announced that they would work with the Canadian Highway Safety Conference to sponsor a campaign focused on the installation and use of seat belts in vehicles ("Bilingualism, immigration on Council agenda," Edmonton Journal, 7 February 1962, 21; "Women Promote Seat Belt Use," Edmonton Journal, 3 May 1962, 19); also that year, District Two of the Alberta Women's Institute announced their upcoming conference which would feature a talk on seat belts by William J. Perkins of the Alberta Safety Council ("WI District Two to Confer Here," Edmonton Journal, 10 March 1962, 20). The intersection of women and seat belts revealed strong gender stereotypes of the time; for example, an Edmonton Journal article from 10 January 1962 featured Nell Siemens, "a bit of a traffic stopper herself," who had launched a country-wide campaign to make Canadian women more conscious of traffic safety "through the women, she hopes to make more careful drivers out of Canada's men ... [and to] get their husbands and children to take safety precautions, such as wearing safety belts . . . but 'they shouldn't nag.'" ("Rules for Safety in Traffic World," Edmonton Journal, 10 January 1962, 26). Furthermore, the co-ordinator of women's activities with the Alberta Safety Council, Mrs. L.R. Betts of Edmonton, asserted that "the woman's hand in traffic safety" is to teach safety to her children ("Women Steer Safety Drive," Edmonton Journal, 9 May 1962, 17).
- 72 The Alberta Safety Council is a non-government, not-for-profit organization that was established in approximately the early 1950s and remains active at the time of writing (https://www.safetycouncil. ab.ca/). In its early years the organization was primarily focused on farm and rural safety, but grew to encompass transportation and children's safety by the 1960s, and workplace health and safety in the 1970s.
- 73 "Use of Seat Belts in Autos Topic at Safety Convention," *Edmonton Journal*, 27 October 1955, 13; "Plan Inventory Traffic Mishaps," *Edmonton Journal*, 1 November 1956, 6.
- 74 For example, in 1954, the Ontario Medical Association recommended that safety belts be made compulsory equipment in automobiles. "Doctors Recommend Car Safety Belts," Edmonton Journal, 27 August 1954, 26.
- 75 For example, "20 Cars Enter Stock Car Races," Edmonton Journal, 14 May 1953, 19.
- 76 "Belt for 'Suicide Seat," Edmonton Journal, 9 February 1954, 4.
- 77 "Plan Safety Belts for Automobiles," Edmonton Journal, 26 April 1955, 23.
- For example, in 1960 the Canadian Medical Association recommended installation and use of seat belts by all car occupants ("Doctors Caution Ambulance Drivers," Edmonton Journal, 15 June 1960, 74); and throughout the 1960s Alberta physicians spoke up in favour of seatbelts, often based on their experiences with accident victims in hospital ("Automobile Safety Campaign Gains City Police Approval," Edmonton Journal, 11 September 1964, 1 [Dr. F.M. Christie, Lethbridge]; "No Seat Belt No Sympathy," Edmonton Journal, 11 June 1965, 60 [Dr. M.T. Carpendale, Edmonton]; and "Quiet Ones Concern Doctors Most When Injured are Brought to Emergency Ward," Edmonton Journal, 22 August 1968, 29.
- "CSA Preparing Basis for Car Safety Belts," Edmonton Journal, 25 May 1962, 26; "Standards Set," Edmonton Journal, 9 October 1962, 9. "Auto Seat Belts Standards Met," Edmonton Journal, 14 December 1962, 23.
- 80 The safety standards could be those of the Canadian Standards Association or the U.S. Society of Automotive Engineers. "Cabinet Would Set New Speed Limits," Edmonton Journal, 20 March 1963, 3; "Seat Belts Will Need Approval," Edmonton Journal, 26 June 1963, 38.
- 81 "New York Cars Must Have Seat Belts," Edmonton Journal, 28 April 1962, 55; "BC Enacts Seat Belts for '64," Edmonton Journal, 7 March 1963, 2; "Safety Belts Made a Must," (New Zealand), Edmonton Journal, 14 September 1964, 20. In 1965, New York became the first U.S. State to require safety belts in

- the rear as well as in the front seats of passenger vehicles ("World Notes," *Edmonton Journal*, 21 July 1965, 6).
- 82 "Seat Belts Predicted in All Cars," *Edmonton Journal*, 8 February 1962, 21; see also "No Seat Belts in this Car," *Edmonton Journal*, 15 January 1964, 1.
- 83 "Seat Belts Predicted in All Cars," Edmonton Journal.
- 84 "3 Firms to Include Seat Belts," Edmonton Journal, 28 January 1964, 23.
- 85 "Motorists Ignoring Shoulder Harnesses," Edmonton Journal, 25 June 1968, 3.
- 86 "No Law for Seat Belt Use," Edmonton Journal, 1 March 1966, 22; "Seat Belt Use May Be Enforced," Edmonton Journal, 30 March 1968, 1. Alongside seatbelt discussions was growing attention to drinking and driving, as illustrated by the creation of a Division of Alcoholism in the provincial Department of Public Health in 1965 with the major aim "to prevent alcoholism by means of treatment, education and research" ("Division of Alcoholism," in Alberta Department of Public Health, Annual Report 1965, 122–126) and a new 1966 law stipulating that the license of a driver who refused to take a breath test would be subject to suspension. ("Canada Looks at Auto Safety," Edmonton Journal, 17 June 1966, 14).
- 87 The Alberta Motor Association was also involved in efforts to promote seat belt use and road safety; one example was their "Bring 'em back alive" (BEBA) campaign, which involve broad publicizing of the BEBA campaign (e.g., car decals, highway overpass signs, schools, roadside restaurants) during holiday long weekends ("Province-wide Safety Drive will 'Bring 'em Back Alive," Edmonton Journal, 8 May 1968, 60; "Drivers Get Message Bring 'em Back Alive", Calgary Herald, 1 May 1969, 32).
- 88 "Seat Belts can Cut Deaths in Alberta by Third if Used," Edmonton Journal, 6 May 1963, 47.
- 89 For example, "Plan Inventory Traffic Mishaps," Edmonton Journal, 1 November 1956, 6; "126 Die on Roads; Death Toll up 24%," Edmonton Journal, 27 July 1960, 3; "Safety Official Urges Use of Seat Belts," Edmonton Journal, 1 February 1962, 22; "Road Death Figures are Growing Worry," Edmonton Journal, 23 June 1964, 8; "No Law for Seat Belt Use," Edmonton Journal, 1 March 1966, 22; "Photograph Urged on Driving License," Calgary Herald, 9 June 1969, 30.
- 90 For example, at the 1972 Ontario Traffic Conference, representatives from the auto industry, police, and teaching, legal and medical professions reportedly agreed that the wearing of seat belts in autos should be made compulsory. "Mandatory Seat Belt Use Proposed at OTC," Calgary Herald, 16 May 1972, 6. "Buckle up or Else," Calgary Herald, 15 July 1971, 6; "In the Driver's Seat," Calgary Herald, 24 September 1971, 71. "Mandatory Use of Seat Belts Cuts Australia Deaths," Calgary Herald, 30 May 1972, 6. "Australia Requires Use of Seat Belts," Calgary Herald, 28 February 1972, 20.
- Provincial Minister of Health and Social Development, Neil Crawford (PC), attended the provincial health ministers' meeting in February of 1974, where federal minister Marc Lalonde urged provincial governments to consider compulsory seatbelt legislation. When questioned about this in the Alberta Legislature, Mr. Crawford responded, "as desirable as that proposal was . . . my feeling was that it would be an extremely difficult matter to enforce" Alberta. Legislative Assembly of Alberta, 18 March 1974 (Neil Crawford, PC) (Alberta Hansard transcripts are available at https://www.assembly.ab.ca/assembly-business/transcripts/transcripts-by-type). See also: The Honourable Marc Lalonde, "Beyond a New Perspective," Fourth annual Matthew B. Rosenhaus Lecture, 104th Annual Meeting of the American Public Health Association, 18 October 1976, Miami Beach, Florida, in American Journal of Public Health 67, no. 4 (April 1977).
- 92 Ontario and Quebec passed compulsory seat belt legislation in 1976, followed by Saskatchewan and British Columbia in 1977.
- 93 Alberta. Legislative Assembly of Alberta, 2 May 1974 (George Ho Lem, SC).
- 94 Alberta. Legislative Assembly of Alberta, 29 January 1975 (George Ho Lem, SC).
- 95 Alberta. Legislative Assembly of Alberta, 13 February 1975 (George Ho Lem, SC).
- 96 For example, provinces of Ontario, Saskatchewan, and British Columbia implemented mandatory seat belt legislation in 1976, 1977, and 1977 respectively, with Newfoundland and Labrador (1982), New Brunswick (1983), Nova Scotia (1984), and Manitoba (1984) following in the early 1980s. Canadian Council of Motor Transport Administrators (CCMTA), CCMTA Road Safety Report Series: National Occupant Restraint Program 2010 - Annual Monitoring Report 2009, prepared for the Canadian Council of Motor Transport Administrators Standing Committee on Road Safety Research and Policies (Ottawa: CCMTA, 2010), http://ccmta.ca/images/publications/pdf/norp_report09.pdf
- 97 It is interesting and important, from the point of view of public health more broadly, to note the similarities between the points of opposition to compulsory seat belt legislation, and the points of opposition to other public health interventions, such as community water fluoridation (see Chapter 9: Mobilizing Preventive Policy).
- 98 Alberta Cancer Board, Taking Stock.

- 99 For example: Caroline Schooler, John W. Farquhar, Stephen P. Fortmann, and June A. Flora, "Synthesis of Findings and Issues from Community Prevention Trials," Annals of Epidemiology 7, no. 7 (1997); S. Leonard Syme, "Social Determinants of Health: the Community as an Empowered Partner," Preventing Chronic Disease 1, no. 1 (2004):A02 (epub); Louise Potvin and David McQueen (editors), Health Promotion Evaluation Practices in the Americas: Values and Research (New York: Springer, 2008).
- 100 The community members were invited from, for example, health care agencies, educational institutions, service clubs, voluntary agencies, media, and civic governments. Judy M. Birdsell, H. Sharon Campbell, S. Elizabeth McGregor, Gerry B. Hill, "Steve Fonyo Cancer Prevention Program: Description of an Innovative Program," Canadian Journal of Public Health 83, no. 3 (May/June 1992).
- Classification system is reported to be ICD-9 ("ICD-9 282 Selected Causes of Death"); however, the numbers do not match ICD-9 codes. Includes deaths at all ages for residents and non-residents. Sources: "Table 11: Deaths, Cause by Sex and Age, 1985," Alberta Community and Occupational Health, Vital Statistics Annual Review 1985 (Edmonton: 1986), 18–49; "Table 11: Deaths, Cause by Sex and Age, 1987," Alberta Community and Occupational Health, Vital Statistics Annual Review 1987 (Edmonton: 1988), 25–55; "Table 11: Deaths, Cause by Sex and Age, 1989," Alberta Health, Vital Statistics Annual Review 1989 (Edmonton: 1990), 28–50; "Table 11: Cause of Death by Age and Sex, 1991," Alberta Health, Vital Statistics Annual Review 1991 (Edmonton: 1992), 22–44; "Table 11: Deaths, Cause by Gender and Age, 1993," Alberta Municipal Affairs, Vital Statistics Annual Review 1993 (Edmonton: 1994), 20–46; "Table 11: Deaths, Cause by Gender and Age, 1995," Alberta Municipal Affairs, Vital Statistics Annual Review 1995 (Edmonton: 1996), 18–40; "Table 11: Deaths, Cause by Gender and Age, 1997," Alberta Municipal Affairs, Vital Statistics Annual Review 1997 (Edmonton: 1998), 18–40; "Table 11: Deaths, Cause by Gender and Age, 1997," Alberta Municipal Affairs, Vital Statistics Annual Review 1999 (Edmonton: 2000), 18–40. Population source: Respective Vital Statistics Annual Review Vital Statistics Ann
- Classification system is reported to be ICD-10: "Causes of death are bases [sic] on the International Classification of Diseases 10th Edition" and uses 358 Selected Causes of Death; however, the numbers do not match ICD-10 codes. Sources: "Table 15: Deaths, Cause by Gender and Age, 2001," Alberta Government Services, Alberta Vital Statistics Annual Review 2001 (Edmonton: 2002), 25-54; "Table 15: Deaths, Cause by Gender and Age, 2003," Alberta Government Services, Alberta Vital Statistics Annual Review 2003 (Edmonton: 2004), 25-54; "Table 18: Deaths, Cause by Gender and Age, 2005," Alberta Government Services, Alberta Vital Statistics Annual Review 2005 (Edmonton: 2006), 28-57; "Table 18: Deaths, Cause by Gender and Age, 2007," Service Alberta, Alberta Vital Statistics Annual Review 2007 (Edmonton: 2008), 28-57; "Table 20: Deaths, Cause by Gender and Age, 2009," Service Alberta, Alberta Vital Statistics Annual Review 2009 (Edmonton: 2010), 30-59; "Table 20: Deaths, Cause by Gender and Age, 2011," Service Alberta, Alberta Vital Statistics Annual Review 2011 (Edmonton: 2012), 30-59; "Table 20: Deaths, Cause by Gender and Age, 2013," Alberta Government, Service Alberta, Alberta Vital Statistics Annual Review 2013 (Edmonton: 2014), 36-61; "Top 10 Leading Causes of Death in Alberta in 2015," Service Alberta, Alberta Vital Statistics: Annual Review 2015 (Edmonton: 2017), 15. Population source: Statistics Canada "Population estimates on July 1st, by age and sex" Frequency: Annual Table: 17-10-0005-01 (formerly CANSIM 051-0001).
- 103 Alberta Department of Social Services and Community Health, Annual Report 1979–80, 28; Alberta Department of Social Services and Community Health, Annual Report 1980–81 (Edmonton: 1984), 28. For Alberta Department of Social Services and Community Health Reports (1974/75-1984/85), no printer information is listed.
- 104 In addition to the clinics in Calgary, Edmonton, and Lethbridge, a mobile clinic permitted contact tracing and treatment across the province (Alberta Department of Social Services and Community Health, Annual Report, 1977–78 (Edmonton: 1979), 14; Alberta Department of Social Services and Community Health, Annual Report 1979–80, 28), and a clinic in Fort McMurray provided the same diagnostic and treatment services under the auspices of the Fort McMurray Health Unit (Alberta Department of Social Services and Community Health, Annual Report 1980–81, 28).
- 105 See the Alberta Department of Health and Social Development and Department of Social Services and Community Health Annual reports, 1973–74 to 1985–86; "VD Increasing, Grade 8 Told," Calgary Herald, 19 March 1975, 26.
- 106 Alberta Department of Social Services and Community Health, Annual Report 1983–84 (Edmonton: 1984), 8; Alberta Department of Social Services and Community Health, Annual Report, 1985–86 (Edmonton, 1986), 10.
- 107 Alberta Health, Alberta Notifiable Disease Incidence.
- 108 Alberta. Legislative Assembly of Alberta, 26 March 1980 (Dennis Anderson, PC).

- 109 Alberta. Legislative Assembly of Alberta, 15 May 1980 (Dennis Anderson, PC). Discussion timed out, and the Bill was "left to die on the Order Paper" as described in: Alberta. Legislative Assembly of Alberta, 1 May 1984 (Janet Koper, PC), 609.
- 110 We say "frustratingly" because, as stated by Mr. Anderson who introduced the bill, seat belts are beneficial for all ages, yet the concession was made to address concerns about undue coercion of adults. Alberta: Legislative Assembly of Alberta, 15 May 1980 (Dennis Anderson, PC).
- 111 For example, questions to the minister of transportation as to why there has been no action on seat belts (Alberta. Legislative Assembly of Alberta, 27 April 1981 (John S. Batiuk, PC; Henry Kroeger, PC); Alberta. Legislative Assembly of Alberta, 19 May 1981 (R. Speaker, SC; Henry Kroeger, PC); and as one small part of broader Motion 202: that the Assembly urge the government, through the Department of Transportation, to initiate a multimedia campaign to increase public awareness regarding traffic safety, which also timed out: Alberta. Legislative Assemby of Alberta, 16 March 1982; 23 March 1982; and 1 April 1982.
- 112 For example, Bill 28 Appropriation (Interim Supply) Act of 1983. Alberta. Legislative Assembly of Alberta, 25 March 1983, first reading; 28 March 1983, second reading; 29 March 1983, Committee of the Whole; and 30 March 1983, third reading – when Mr. Notley attempted but failed to intervene.
- 113 Alberta. Legislative Assembly of Alberta, 30 March 1983.
- 114 Alberta. Legislative Assembly of Alberta, 30 March 1983.
- 115 Alberta. Legislative Assembly of Alberta, 24 November 1983 (Janet Koper, PC).
- 116 Alberta. Legislative Assembly of Alberta, 26 October 1984 (Marvin Moore, PC), Bill 83 first reading.
- 117 Alberta. Legislative Assembly of Alberta, 2 November 1984, Bill 83 second reading.
- 118 For example, Mr. Martin expressed that "I am a little disappointed that the government hasn't screwed up its political courage" and Mr. Anderson commented "Of course... I would have preferred that we would have gone to legislation for those under 18. Alberta. Legislative Assembly of Alberta, 2 November 1984.
- 119 Alberta. Legislative Assembly of Alberta, 13 November 1984, Bill 83, third reading [passed].
- 120 Alberta. Legislative Assembly of Alberta, 12 August 1986.
- 121 Alberta. Legislative Assembly of Alberta, 5 March 1987.
- 122 Alberta. Legislative Assembly of Alberta, 20 March 1987; 25 March 1987.
- 123 Bill 9 Highway Traffic Amendment Act, 1987: Alberta. Legislative Assembly of Alberta, 12 March 1987, first reading; 13 April 1987, second reading; 9 June 1987, Committee of the Whole; 10 June 1987, third reading.
- 124 For example, you don't need a seatbelt if you are driving in reverse, John Zazula "June 22, 1987:
 Albertans Prepare for Seatbelt Law," CBC Edmonton, last updated: 23 June 2016, https://www.cbc.ca/news/canada/edmonton/june-22-1987-albertans-prepare-for-seatbelt-law-1.3649730
- 125 See, for example, David L. Ryan and Guy A. Bridgeman "Judging the Roles of Legislation, Education and Offsetting Behaviour in Seat Belt Use: a Survey and New Evidence from Alberta," Canadian Public Policy 18, no. 1 (March 1992). See also Alberta. Legislative Assembly of Alberta, 3 May 1990.
- 126 Alberta. Legislative Assembly of Alberta, 9 December 1987 (Stanley Schumacher, PC).
- 127 Alberta. Legislative Assembly of Alberta, 2 May 1991 (Kenneth Kowalski, PC).
- 128 Rutty and Sullivan, This is Public Health.