

– A Justice Centre Report –



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Post-Covid Canada: The Rise in Unexpected deaths

Covid policies killed, but government
has yet to take responsibility



Justice Centre
for Constitutional Freedoms

We Defend
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in Canada

Abstract

This report conducts a detailed analysis of the most recent Government of Canada cause-of-death statistics and contributes to the growing body of literature that has challenged the government's official narrative about the danger of Covid and the effectiveness of lockdowns and vaccine mandates. This report points to three findings that should concern policymakers and the general public. First, Covid death numbers were significantly exaggerated, largely due to an overbroad definition of Covid deaths. Second, government-imposed lockdowns caused substantial harm, leading to excess deaths from drug overdoses, alcohol-related illnesses, and delayed healthcare, among others. Third, there is a disturbing correlation between the rushed Covid vaccine and the ongoing trend of unexpected deaths, including deaths from heart issues, digestive disorders, and neurological diseases. Alarming, many deaths remain unclassified," with up to 25 percent of deaths among Canadians under 45 attributed to unknown causes. Despite all this, Canadian public officials have failed to address these concerns or acknowledge any potential policy mistakes. The findings in this report call for an immediate and thorough analysis of the government's policy response to Covid, to ensure accountability and protect Canadians' well-being and fundamental rights and freedoms in future years.

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Updates to this report

This is Version 1.2 of this report, which may be updated periodically.

About the authors

This report was produced by Justice Centre staff and researchers.

Contents

Executive Summary	4
Introduction	7
What are excess <i>deaths</i>? Why do they matter?	8
The ongoing trend of excess deaths	11
How deadly was Covid really?	14
<i>Definitions matter: Dying “with Covid” or “from Covid”</i>	14
<i>Was the Covid death count exaggerated?</i>	17
<i>The underreporting of other deaths</i>	18
Respiratory-related deaths	18
Influenza and pneumonia deaths	19
Deaths from dementia, Parkinson’s, and Alzheimer’s	20
Did lockdowns cause excess deaths?	22
<i>Excess deaths among non-Covid causes</i>	24
Young Canadians especially affected	24
Drug overdoses	25
Liver disease	27
Diabetes and hypertension	28
Excess deaths from long hospital wait times	30
The pandemic after the “pandemic”	31
<i>Why did the highest death rates appear after Covid?</i>	31
Children: death rates reach a new record	32
Young and middle-aged: death rate, 20-year record	33
Seniors: death rate, 10-year record	34
Did the covid vaccine cause excess deaths?	35
Nervous system diseases among children	35
“Mysterious” deaths among all age groups	36
Falls among the elderly	37
Digestive system and ischaemic heart diseases	38
<i>The rise of deaths from “unknown” causes</i>	39
<i>Why are Covid vaccine deaths not recognized?</i>	41
Conclusion	43
Appendices A, B (“unknown causes”), and C (vaccination rates)	45
A – Comparison of Excess Death Estimates	45



Executive Summary

In recent years, it has become quite clear that the prevailing narrative around Covid and the effectiveness of government policies was largely misleading. Covid proved far less dangerous than claimed by politicians, health officials, and the established media. Government policies were not only largely ineffective at saving lives but also contributed to the rise in unexpected deaths. Many doctors, statisticians, and other experts have raised concerns about troubling patterns they have observed among death statistics.

Until now, few Canadian studies have conducted detailed examinations of excess deaths by specific causes, in part because the release of such data has been slow. The Justice Centre's August 2023 report, *The rise of excess and unexplained deaths in Canada*,¹ while showing the troubling concern around excess deaths, it also did not analyse them by cause of death.

In February 2025, Statistics Canada released its latest annual death statistics, including death statistics by age and causes of death. This report's detailed analysis of that data by age and cause of death largely confirms existing doubts surrounding the Covid narrative and reveals what actually happened behind the overall death statistics during and after Covid – it reveals three key concerns.

First, while there was a rise in deaths during Covid, the number of deaths attributed to Covid itself was significantly exaggerated, largely as a result of government health authorities using an overbroad definition of Covid deaths, resulting in many deaths being misattributed to Covid. According to Statistics Canada,² for example, approximately 27,000 deaths were due to Covid during 2020-2021, for Canadians aged 65 and over. However, this age group only saw about 17,000 excess (statistically unexpected) deaths: the number of deaths above what is expected in a given year, based on historical trends. This suggests that at least 10,000 deaths were over-attributed to Covid.

Analyzing deaths by cause helps explain this discrepancy. There were substantial “deficits” (fewer than expected) in several common death categories during the Covid years. For example, during 2020-2021, there were about 7,600 fewer deaths attributed to dementia, Parkinson's, Alzheimer's and related diseases, and about 4,000 fewer deaths from influenza, pneumonia, and other respiratory illnesses, than would have been expected under normal circumstances. This suggests very strongly that these deaths were misclassified as Covid deaths.

¹ Justice Centre for Constitutional Freedoms, Reports, <https://www.jccf.ca/reports/>

² Recent Statistics Canada death data is provisional and subject to revision when new data is released, typically for up to three years after the initial release.

Second, government-imposed lockdowns contributed significantly to the rise in excess deaths during and after Covid. The stress and isolation from lockdowns and the fearmongering by government and media exacerbated mental health problems, increased drug overdoses, worsened chronic health conditions, and significantly delayed medical diagnoses and treatments. As a result, several of these lockdown-related causes of death saw significant excess deaths.

Young Canadians, who were nearly unscathed by Covid itself, were particularly hard-hit by lockdowns. For Canadians under 45, weekly deaths rose by 30 percent from a pre-lockdown (2015-2019) average of 257 to an average of 334 deaths per week for the 2020-2024 period. There were an estimated 2,500 unexpected deaths from drug overdoses alone for 2020-2021, likely driven by isolation and despair caused by lockdowns. Similarly, deaths from alcohol-related diseases spiked, increasing by 19 percent from 2019 (n=2,790) to 2020 (n=3,310) for Canadians aged under 45, with a further 10 percent increase in 2021 (n=3,630). This was the largest year-over-year increase in over 20 years. Excess deaths from liver diseases had an estimated 1,200 excess deaths for those two years in this age group.

Further, the significant backlog in Canadian healthcare systems, exacerbated by the hundreds of thousands of cancelled surgeries and diagnostic procedures, plays an important role in the healthcare system's inability to provide adequate care to Canadians. The overall medical wait times increased by 43 percent compared to pre-lockdown averages. The significant delays in cancer treatments, for example, can certainly contribute to increased numbers of deaths, as revealed by studies in the UK.

Third, despite the government's silence on the issue, there is a disturbing correlation between the Covid vaccine and high excess deaths in 2022 and thereafter. By the end of 2021, most Canadians (80+ percent) were considered “fully vaccinated.”³ Yet, rather than seeing declines in deaths, excess deaths peaked in 2022 at approximately 31,370 excess deaths – more than double the 14,950 excess deaths recorded in 2020 during the peak of Covid and lockdowns.

Disturbingly, there were approximately 4,000 and 700 excess deaths from ischaemic heart disease and digestive disorders (both confirmed vaccine-related side effects by peer-reviewed studies), respectively, among Canadians 65 and above in 2022, with similar numbers in 2023. Additionally, there were unusual rises in deaths among neurological diseases, “mysterious deaths,” and falls among the elderly.

Compounding the issue is the troubling rise of deaths with “unknown” cause in recent years. For instance, for Canadians aged under 45, 15.8 percent of 2019 deaths were

³ Government of Canada, “Cumulative number and percent of people who have received a COVID-19 vaccine in Canada by number of doses, age group, sex, and jurisdiction - Vaccination Coverage by Age and Sex,” <https://open.canada.ca/data/en/dataset/be0e92bd-b332-4a11-9d8f-19013e956f5b/resource/d03600e1-ec60-48cb-ae01-90c2a7f1e0a4>



classified as “cause unknown” upon release of the death statistics. However, this number goes up to 20.5 percent in 2020, 16 percent in 2021, 25.2 percent in 2022, and to 20.6 percent in 2023. These numbers are updated with the new death statistics each year, but a great proportion still remain as “cause unknown.” For instance, 14.9 percent of the 2022 deaths remain with cause unknown in 2025, for this age group. This means thousands of additional deaths among young Canadians remain unexplained, yet public health officials remain slow to address the issue, or perhaps reluctant because they know what those cases will reveal.

Despite all this, the emergence of studies linking Covid vaccines with serious harms and sometimes death, Canadian public health officials refused to acknowledge Covid deaths. While doctors have reported 488 deaths as “adverse events following immunization,” public health officials have recognized only very few as Covid vaccine deaths.

In summary, the Canadian government’s own data shows that Covid was not nearly as dangerous as claimed and that their response to Covid, including lockdowns and rushed vaccine mandates, significantly contributed to the rise and ongoing trend of excess deaths in Canada. Rather than addressing these findings, governments and public health officials avoid acknowledging potential policy errors. This is a strong disservice to Canadians, who deserve an immediate, transparent, and full investigation into their governments’ response to Covid and its impact. Canadians deserve accountability to ensure they can protect their health, and very importantly, their rights and freedoms in future years.

Introduction

In recent years, it has become increasingly clear that the prevailing Covid narrative around the danger of Covid and the effectiveness of government policies was largely misleading. Many doctors, statisticians, and other experts have challenged the narrative driven by public officials and the media. Emerging evidence, both statistical and anecdotal, has shown that Covid was not as dangerous as claimed, while government policies (masks, lockdowns, vaccine mandates) were not only largely ineffective, but also substantially contributed to the rise in unexpected deaths.

However, few studies (if any) have comprehensively analyzed Canada-wide official government death statistics by cause of death, particularly for the years following Covid, which continue to show high numbers of unexpected deaths. Detailed analyses of cause-of-death statistics enable us to identify more precisely whether, how, and to what extent Covid death numbers were exaggerated, and to determine what causes and numbers of deaths were primarily driven by lockdowns and Covid vaccine mandates.

In August 2023, the Justice Centre addressed the overall rise in unexpected deaths in its report *“The rise of excess and unexplained deaths in Canada,”*⁴ exposing the federal and provincial Covid policy failures in Canada. However, not having detailed enough data, it did not yet analyze these deaths by cause of death either.

In February 2025, Statistics Canada released its official annual death statistics for 2023, including the numbers of deaths by age and specific causes. This report analyzes this data and confirms more conclusively existing doubts surrounding the official Covid narrative and the effectiveness of government interventions.⁵

In this report, we begin by explaining what “excess deaths” are, and show how the numbers of “excess deaths” and Covid deaths were inflated and exaggerated the perceived danger of Covid. We analyze excess deaths by age and causes of death,⁶ and expose how Covid death counts were exaggerated in specific causes. Similarly, we show how lockdowns contributed significantly to the rise in excess deaths, detailing the numbers of deaths by specific causes. This report also confirms that excess deaths remained high well into 2024 and identifies which causes of death linked to the Covid vaccine contributed to the high numbers of excess deaths in the post-Covid years.

⁴ Justice Centre for Constitutional Freedoms, Reports, <https://www.jccf.ca/reports/>

⁵ We use Statistics Canada data, as these are the official (and most reliable) death statistics for Canada. Most other platforms and organizations that show death statistics (like Statistica, Macrotrends, OECD, OWID, etc.) largely base their numbers on Statistics Canada data available to date.

⁶ We primarily use the same age groups as those in Statistics Canada’s weekly mortality data: age 85 and above, 65 to 84, 45 to 64, and under 45 years of age.



The findings in this report are inescapable: intentional or not, Canadian politicians and public health authorities exaggerated the danger of Covid while neglecting the harm their freedom-violating policies inflicted upon Canadians during and after the years of lockdowns and vaccine passports.

Whenever Canada's federal or provincial governments place restrictions on the *Charter* rights and freedoms of Canadians, governments are required by the *Charter* to demonstrably justify, with cogent and persuasive evidence, that their law or policy is reasonable, rational, truly necessary, and produces more good than harm. This requires governments to conduct thorough cost-benefit analyses of their policies.

During the Covid years, however, Canada's federal and provincial governments accepted, and repeatedly doubled down on, the prevailing narrative about the danger of Covid and the efficacy of lockdowns, masks, and vaccines. While their policies substantially restricted Canadians' rights and freedoms, governments failed to conduct the kind of thorough cost-benefit analyses necessary to justify such restrictions. This failure resulted in the perpetuation of failed policies based on fear rather than empirical data, leading to unjustified restrictions on Canadians' rights and freedoms and unnecessary harm.

This report analyses the Canadian government's own death statistics and challenges the narrative around Covid, lockdowns, and vaccines, demanding an immediate and thorough investigation of government policies and their true effects on Canadians. Such an analysis – and an acknowledgement of potential policy mistakes during Covid – would ensure government accountability, help protect the well-being and the rights and freedoms of Canadians in future “crises,” and have the potential of rebuilding some of the trust in their government that many Canadians lost during Covid.

What are excess deaths? Why do they matter?

Statisticians began to pay attention to “unexpected” or “excess” deaths when Covid first arrived in 2020⁷, using mathematical models to *estimate* how many Canadians are expected to die under “*normal*” circumstances in any given year⁸. Deaths above this

⁷ Statistics Canada first began publishing excess deaths in May 2020.
<https://www150.statcan.gc.ca/n1/daily-quotidien/200513/dq200513d-eng.htm>

⁸ Statistics Canada calculated deaths expected for each week using different models over time. See Appendix A.

expected number are called “excess deaths,”^{9,10,11} meaning, they are unexpected, and likely in need of investigation or inquiry.

There are different methods to estimate excess deaths, including using historical averages or trendlines of deaths over a chosen period that can be projected into future years. The actual number and rate of deaths naturally fluctuate slightly above or below the projected numbers from year to year. Nonetheless, these models can identify significant deviations from the typical range of death counts during unusual events, such as epidemics, natural disasters, storms, and heat waves.

The method in this report uses Statistics Canada data to calculate total annual death rates (the number of deaths per population), calculates the linear trend of these death rates over the five years before the beginning of Covid (2015 to 2019), and then projects the trend into 2020 to 2023 to produce the estimated number of expected deaths for each of these years.^{12,13} These calculations are first done separately for each of the major age groups used by Statistics Canada in its weekly data (under 45 years, 45 to 64 years, 65 to 84 years, and over 85 years of age), and then added together to calculate the total (all ages) number of excess deaths for each year.

⁹ Statistics Canada, *Provisional deaths and excess mortality in Canada Dashboard*.
<https://www150.statcan.gc.ca/n1/pub/71-607-x/71-607-x2021028-eng.htm>

¹⁰ Statistics Canada, “Estimation of Excess Mortality,” August 28, 2020.

Expected mortality refers to the non-crisis mortality rate in the population of interest. Statistics Canada estimates the non-crisis mortality rate using a model that considers recent trends. *Excess mortality or deaths* refers to the “mortality above what would be expected based on the non-crisis mortality rate in the population of interest. Excess mortality also encompasses collateral impacts of Covid, such as deaths occurring because of overwhelmed healthcare systems, or deaths avoided due to decreased air pollution or traffic.”

¹¹ As with any analysis modelling complex phenomena, estimates of expected deaths are not definite and can vary depending on the type of model used, the age groupings, the time period considered and the measure of mortality.

¹² The projection is calculated by multiplying the expected death rate by the population estimate for the year.

¹³ Using death rates, as opposed to simple death counts, for example, accounts for changes in the population. A disadvantage of incorporating population is that they are estimates. Death statistics are subject to revisions, but are actual number counts so using them alone reduces the imprecision of population estimates. A trend line is preferred to a simple average since it considers existing rising or falling trends in death. The breakdown by age was chosen to capture and analyze the death rates and trends among age groups.



Statistics Canada, the Organization for Economic Co-operation and Development (OECD), and Our World in Data (OWID) are three organizations that began producing excess death estimates during the Covid-era to show the impact of Covid on deaths across many countries. Their models generate different levels of excess deaths in Canada from 2020 to 2023.

The Justice Centre's excess death estimates are conservative compared to the estimates of these other organizations, and are significantly lower than those of Statistics Canada and the OECD.¹⁴ We believe that, whether intentional or not, the high estimates of excess deaths produced by Statistics Canada and the OECD had the effect of exaggerating the perceived danger of Covid.

The Justice Centre considers its approach to be reasonable and so far the most accurate, having no other incentive but to show the most accurate estimates of expected and unexpected deaths. Our intent is to provide Canadians with a good understanding of what the death numbers really showed in Canada during and after Covid. (Details of the differences in the estimates and methods of each group are in Appendix A.)

Excess death numbers by themselves do not reveal the *cause* of the excess deaths. They merely show how many more Canadians died during a given year than would reasonably have been expected under normal circumstances. This paper analyzes cause of death data by estimating which causes were above or below a normal trend.

Canadian politicians and public health authorities most often referred to Covid cases, hospitalizations, and deaths to justify lockdowns and mandatory vaccination policies, while the statisticians at government institutions corroborated the narrative that Covid was exceptionally deadly. Using cause of death data, historical trends in death rates, and our own excess death estimates by specific age groups, this paper will show that Covid was not as severe as portrayed and was not the only thing that contributed – and continues to contribute – to excess deaths in Canada.

¹⁴ The only exception to being lower than the other estimates was in 2020, when the Justice Centre estimates were slightly higher than OWID's estimates.

Total excess death estimates for Canada from the Justice Centre, OWID, and OECD for the four years from 2020 to 2023 are: 73,800, 71,570, and 177,320, respectively. Statistics Canada stopped reporting excess deaths after 2022, but the three-year total for 2020 to 2022 was 79,240, higher than the four-year totals for the Justice Centre and OWID.

Appendix A discusses the differences among the models and addresses the reasons for the unrealistic and exaggerated levels of excess deaths.

The ongoing trend of excess deaths

With a growing and aging population, the annual number of deaths in Canada has steadily increased in recent years. However, above normal increases began in 2020 with Covid. At 308,820, total deaths in 2020 were 8.1 percent higher than in 2019 (n= 285,610) and 5.1 percent higher than expected (n=293,860) based on the previous five-year trend. Excess deaths in 2021 (n=13,510) were a little lower than 2020 (n=14,950) but the total deaths were still 4.5 percent more than expected.

The highest number of excess deaths, however, came in 2022, after more than 80 percent of Canadians were fully vaccinated by end of 2021, and Covid cases were down with most lockdowns lifted by mid-2022. As Figure 1 shows, the total deaths did not level off or fall in 2022, as one would expect, but increased to the highest level since Covid began. Total deaths rose to a record 337,000 and excess deaths climbed

to 31,370, 10.1 percent higher than the expected number of deaths for this year. While the total deaths were lower in 2023, they were still above trend by 13,960 deaths, 4.5 percent higher than the expected number for that year.

Combined, 2022 and 2023 had 45,320 excess deaths, which was significantly higher than the combined excess deaths for the first two years of Covid (2020 and 2021), when excess deaths totalled 28,480. How could excess deaths be higher in the two years *after* Covid than the two years *during* Covid? Canadian politicians and public health officials have yet to explain – or even address the issue – of why we are seeing the tens of thousands of unexpected (excess) deaths in the years after Covid, lockdowns, and vaccine mandates.

Figure 1

Source: Statistics Canada

Tables: 13100710 13100792

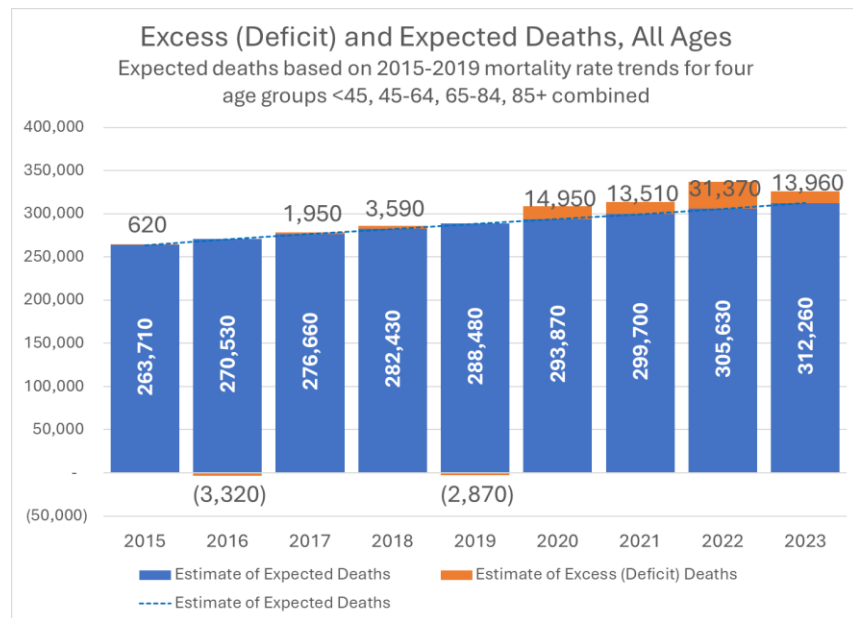
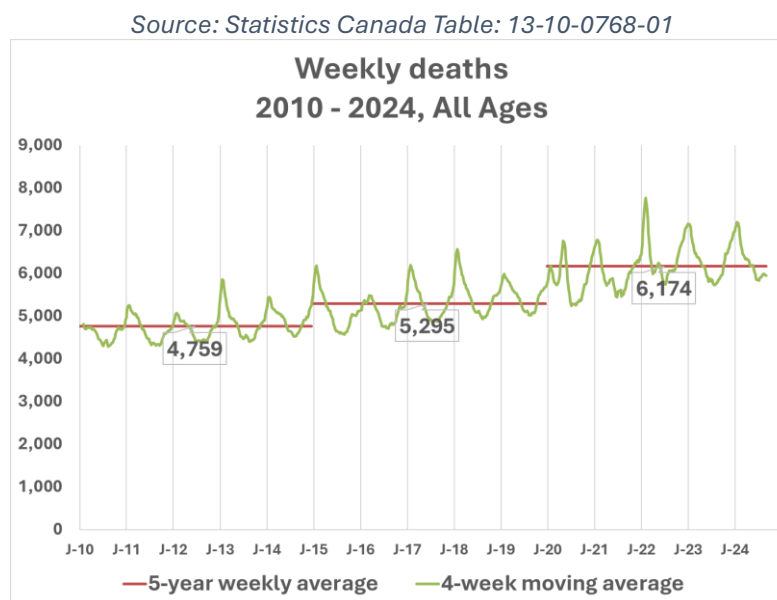


Table 1
Deaths by the Numbers
Source: Statistics Canada
Table: 13-10-0394-01

	Deaths	Expected	Excess	Excess as % of Expected
All ages				
2020	308,820	293,860	14,950	5.1%
2021	313,220	299,700	13,510	4.5%
2022	337,000	305,630	31,370	10.3%
2023	326,220	312,270	13,960	4.5%

Expected death estimates are calculated using a five-year (2015-2019) linear trend of death rates for four age groups (under 45, 45-64, 65-84, over 85) applied to population estimates.

Weekly data published by Statistics Canada shows that high numbers of deaths continued into 2024. The five-year weekly average number of deaths from 2015 to 2019 increased by 11.2 percent over the average for the previous 5 years (2010-2014). However, the average for the next five years (2020-2024) increased much more, by 16.9 percent over the 2015-2019 period. This created a new baseline with much higher numbers of weekly deaths, as shown in the weekly deaths figure here.



The ongoing trend of high death rates and excess deaths in the post-Covid years is not just observed in Canada. According to Our World in Data (OWID) weekly death data, Canada, Australia, Ireland, the UK and the US all have a high number of excess deaths in 2022 and 2023. All had 47 or more weeks with excess deaths in both 2022 and 2023, except for the UK, which had 37 weeks with excess deaths for those years. In other words, all but a handful of weeks in these countries show excess deaths for these two years. For 2022, the

average percentage of deaths above the expected number ranged from 10.0 percent (US) to 13.9 percent (Australia). The average rate for Canada was 10.8 percent in 2022.¹⁵

In short, while Canadian governments implemented strict lockdowns and vaccine mandates to save lives, high numbers of excess deaths continued long after Covid. But it was not just excess deaths; Covid deaths themselves climbed significantly after the imposed vaccine mandates.

By mid-2021, a majority of Canadians were considered “fully vaccinated,” and by the end of 2021, more than 80 percent of Canadians aged 12 and above were “fully vaccinated.”¹⁶ Further, by mid-2022, Covid cases were significantly down with most lockdowns lifted, and by year's end, Covid had largely disappeared.¹⁷ Why, then, did 2022 have the highest number of unexpected (excess) deaths? Why did they remain high in 2023 and the years after when Covid was long gone?

Breaking the data up into two main age groups, those under 65 and those 65 and older (who were the most affected by Covid), allows us to make a few specific observations.

Figure 2

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01

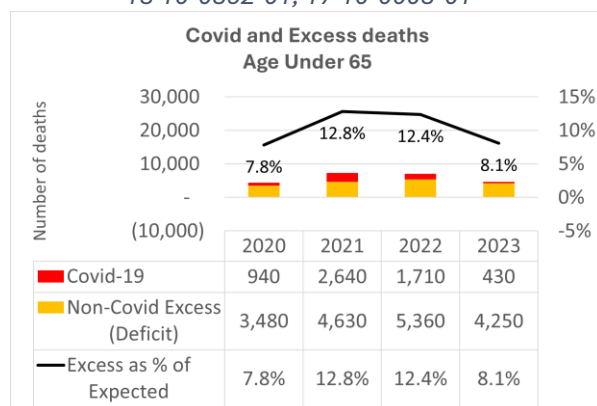
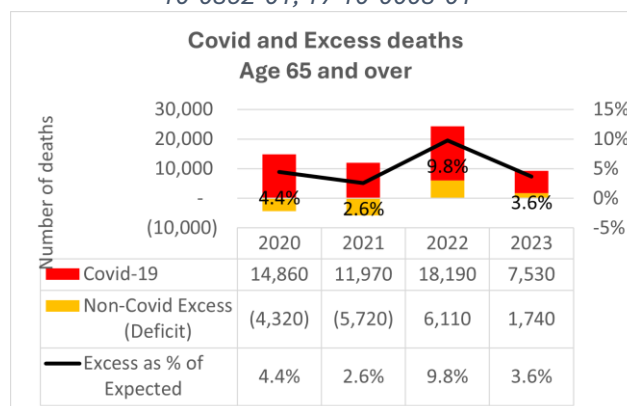


Figure 3

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01



These charts show the deaths from Covid and estimates of excesses and deficits each year (red and orange bars) and the percent deviation (black lines) from what is expected. Expected deaths are based on the 2015 to 2019 death rate trends of four age groups (under 45, 45-64, 65-84, 85+).

¹⁵ For a visual representation of the trends for these and other countries see “Excess mortality: Deaths from all causes compared to projection based on previous years, Jan 5, 2020 to Dec 31, 2023.”

OWID, “[Excess mortality: Deaths from all causes compared to projection based on previous years, Jan 5, 2020 to Dec 31, 2023.](https://ourworldindata.org/excess-mortality)”

¹⁶ Government of Canada, “<https://open.canada.ca/data/en/dataset/be0e92bd-b332-4a11-9d8f-19013e956f5b/resource/d03600e1-ec60-48cb-ae01-90c2a7f1e0a4>. See also Appendix D.

¹⁷ OWID, “[Canada: Coronavirus Pandemic Country Profile,](https://ourworldindata.org/coronavirus/country/canada)”



1. A trend of over-attributing deaths to Covid. Among Canadians aged 65 and older, about 10,000 (shown as non-Covid deficits of deaths in Figure 3) of the 27,000 deaths attributed to Covid by government health officials in 2020 and 2021 were not excess deaths but would have been expected under normal circumstances. This suggests a significant number of deaths were misclassified as Covid deaths, resulting in inflated Covid death numbers. It also suggests that Covid was not as deadly as claimed, even for those aged 65 and above. This will become even more evident when examining specific causes of death below.

2. High non-Covid excess deaths, especially among younger Canadians. For those under 65, excess deaths were consistently high from 2020 through 2023. However, despite the observed tendency to over-attribute deaths to Covid, the vast majority (79 percent) of excess deaths were attributed to non-Covid causes. This means that something other than Covid drove large numbers of excess deaths among this group of young and middle-aged Canadians.

3. Non-Covid excess deaths remain high long after Covid. In 2022 and 2023, after most Canadians were considered “fully vaccinated” and lockdowns had been lifted, excess deaths remained high, with large numbers due to non-Covid causes. Indeed, despite the Covid deaths being exaggerated, non-Covid excess deaths accounted for almost 40 percent (n=38.5 percent) of excess deaths for all ages. This suggests that whatever drove these deaths was not only independent of Covid, but potentially as harmful – if not more – as Covid itself.

These observations raise important questions: How deadly was Covid truly? What caused the high numbers of non-Covid excess deaths among Canadians? Why were so many Canadians dying long after Covid?

To answer these questions, we first explore the statistics around Covid deaths and then look at deaths from other causes.

How deadly was Covid really?

Definitions matter: Dying “with Covid” or “from Covid”

The government of Canada – and most governments globally – largely adopt death classification guidelines offered by the World Health Organization (WHO). In April 2020, the WHO released its guidelines for classifying Covid as cause of death.¹⁸ The definition they created of a Covid death, however, was extremely broad: “COVID-19 should be recorded on

¹⁸ World Health Organization (WHO), “Emergency use ICD codes for COVID-19 disease outbreak,” <https://www.who.int/standards/classifications/classification-of-diseases/emergency-use-icd-codes-for-covid-19-disease-outbreak>

the medical certificate of cause of death for ALL decedents where the disease caused, or is assumed to have caused, or contributed to death.”¹⁹ In other words, Covid should be listed as cause of death even when it only contributed – or rather, is merely *assumed* to have contributed – to death, even when the primary cause was, for example, terminal cancer.

In the subsequent government of Canada guidelines, Covid deaths were defined as a “probable or confirmed COVID-19 case [where] death resulted from a clinically compatible illness, unless there is a clear alternative cause of death identified (e.g., trauma, poisoning, drug overdose)” and “a death due to COVID-19 may be attributed when COVID-19 is the cause of death or is a contributing factor.”²⁰

Prior to the April 2020 guidelines for classifying Covid as death, if a terminally ill cancer patient caught a bad flu that led to their immediate death, cancer would likely have been listed as the leading cause (or at least, a cause) of death. With the Covid death classification guidelines, however, the cause of death of a terminally ill cancer patient would be listed as Covid if they had contracted the disease before their death or Covid was suspected. Indeed, the broad criteria leave it completely open – if not recommended – to assign Covid as cause of death if such a terminally ill patient merely tested positive on a PCR (polymerase chain reaction) test without even being sick from, or showing any symptoms of, Covid.²¹

Whatever the purpose, defining Covid deaths so broadly led to inflated numbers of Covid deaths, and thereby exaggerated the perceived danger of the virus. How could such a distortion of statistics result in good public policy?

Statistics are vulnerable to intentional and unintentional distortion and misuse. When data is collected improperly, misrepresented, or stripped of context, the resulting statistics can be dangerously misleading. Statistics are also subject to systemic bias and can be used to

¹⁹ World Health Organization (WHO) International guidelines for certification and classification (coding) of Covid-19 as cause of death, April 20, 2020. https://cdn.who.int/media/docs/default-source/classification/icd/covid-19/guidelines-cause-of-death-covid-19-20200420-en.pdf?sfvrsn=35fdd864_2&download=true. Accessed March 24, 2025.

²⁰ Government of Canada, “National case definition: Coronavirus disease (COVID-19),” <https://www.canada.ca/en/public-health/services/diseases/2019-novel-coronavirus-infection/health-professionals/national-case-definition.html#dec>

²¹ The use of PCR tests was a significant problem that led to inflated numbers of Covid deaths. For one, positive PCR test results depend largely on the number of “amplification cycles” used to identify the virus. However, as Kary Mullis, the inventor of the PCR test explained, if you amplify the test enough times, there is almost no virus that it won’t detect. During Covid, governments used an arbitrary number of amplification cycles, which often generate false positives. Further, PCR tests cannot determine whether someone is sick with the virus. They merely show whether the test found remnants of the virus being tested for. During Covid, many Canadians tested positive for Covid, while never showing any symptoms at all. As such, with the broad definition of a Covid death, someone who tested positive with a PCR test but showed no symptom at all, could have easily been classified as a Covid death.

Kary Mullis, *Corporate Greed and AIDS Part 2*, Question Everything, YouTube video, March 20, 2017, <https://www.youtube.com/watch?v=Xpcdq9jh5Eo>.



create false perceptions. When statistical presentations are wrong, they can result in bad policy decisions that can have huge negative consequences for millions of people.

The excessively broad definition of Covid deaths used by public health authorities was a key method by which statistics were distorted during Covid, leading to grossly inflated numbers of Covid cases and deaths. This statistical distortion, along with how death statistics and trends were presented (by delaying the release of important data, for example²²), reinforced ineffective and harmful policies which unjustifiably restricted the *Charter* rights and freedoms of Canadians.

Determining the cause of death can be challenging, especially for the elderly who often suffer from several illnesses. The government's data suggest that in many cases, deaths were attributed to Covid when people died of other illnesses while perhaps also testing positive for Covid. That is, many deaths attributed to Covid were cases where people died "with" Covid rather than "from" Covid.

The 2009 swine flu (H1N1) provides a perfect example of a "pandemic" whose deadliness was exaggerated by public health authorities. While authorities claimed many people died of the swine flu, in the end, there was no evidence of excess deaths in Canada.²³

²² For example, the announced date for the release of 2020 annual death data was November 2021 but it was released in January 2022 (13 months after year-end). The 2021 data were released 20 months after year-end in August 2023. When the 2022 annual death numbers were first released in December 2024 the total was 334,000 deaths. In an update two months later (February 2025) the total was 337,000 deaths. Also in the February 19, 2025, release, Statistics Canada reports in a footnote that "as a result of delays with death registrations, fewer deaths have been captured for Nova Scotia in 2023." See Statistics Canada table 13-10-0707-01 "Deaths, by place of residence and place of occurrence."

²³ Despite public skepticism about the true deadliness of the H1N1 virus, officials claimed, *"If you talk to any frontline worker, they've never seen anything like this. And we keep getting told this is nothing."* Unlike Covid, the swine flu was said to be particularly harmful to those under 65, who accounted for 73 percent of deaths. But ultimately, Canada reported only 277 swine flu deaths in 2009, a far cry from what was projected.

In justifying these low numbers, health officials argued that actual flu-related deaths were hidden within other causes, like heart disease, so the official death count was not capturing the true deadliness of the virus.

Overall death statistics, however, showed no increase. This meant that this "deadly pandemic" was not deadly at all – it produced no excess (or statistically unexpected) deaths. There simply was no "pandemic" in the sense of there being a serious or unusually deadly disease; it was a "pandemic" only in the sense that it was worldwide. (continued on next page)

Was the Covid death count exaggerated?

Covid affected elderly Canadians most of all. According to Statistics Canada data, fifty-five percent of all Covid deaths in 2020 occurred among Canadians aged 85 and over, with 94 percent of all Covid deaths among Canadians aged 65 and over. Statistics Canada ranked Covid among the five leading causes of death for Canadians aged 65 and over, in 2020 and 2021.

However, as noted above, the number of deaths attributed to Covid among the elderly was significantly higher than the number of excess (unexpected) deaths during those years. Over the course of 2020 and 2021, excess deaths for those 65 and over were an estimated 17,000, while Statistics Canada recorded 27,000 Covid deaths – 10,000 more than the estimated number of excess (unexpected) deaths. In other words, these 10,000 deaths

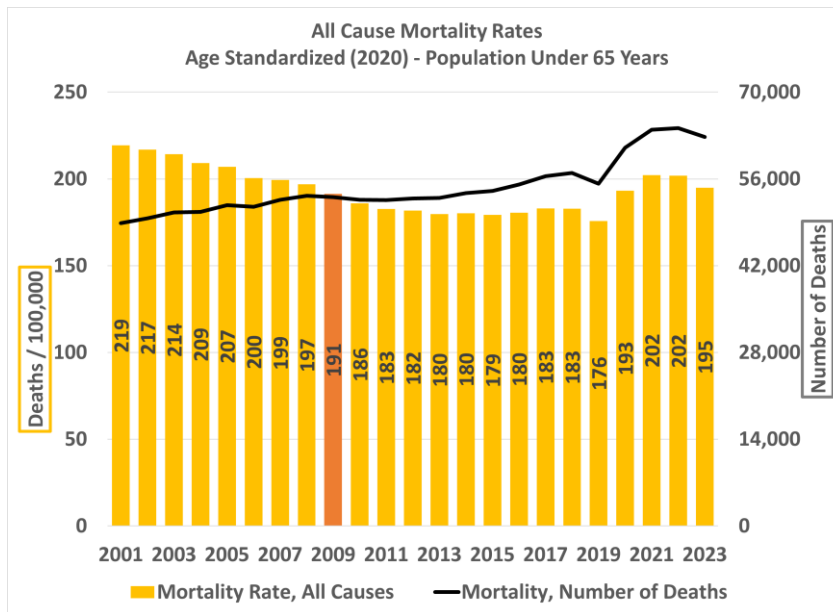


Figure 4
Source: Statistics Canada
Tables: 13-10-0709-01,
17-10-0005-01

Nevertheless, public health officials were praised for their pandemic response and for saving lives, largely crediting their vaccination program. One thing public health officials appear to have learned from this experience is that using broad definitions of virus-related deaths helps prevent the public from doubting the extent of the threat – a tactic superbly executed during Covid.

Sources: CBC News “H1N1’s true toll not shown by death tally: Full picture of virus’s perils may take months to become clear” November 16, 2009, <https://www.cbc.ca/news/science/h1n1-s-true-toll-not-shown-by-death-tally-1.807863>. Accessed March 13, 2025.

Public Health Agency of Canada, “Lessons Learned Review: Public Health Agency of Canada and Health Canada Response to the 2009 H1N1 Pandemic”, November 2010, p.10. https://www.phac-aspc.gc.ca/about_apropos/evaluation/reports-rapports/2010-2011/h1n1/pdf/h1n1-eng.pdf. Accessed March 13, 2025.

CBC News “H1N1’s true toll not shown by death tally: Full picture of virus’s perils may take months to become clear” November 16, 2009, <https://www.cbc.ca/news/science/h1n1-s-true-toll-not-shown-by-death-tally-1.807863>. Accessed March 13, 2025.



were essentially “expected” in 2020 and 2021 and were not directly a result of Covid despite being attributed to Covid.

If all Covid deaths were properly attributed to Covid, how could there have been so many more Covid deaths than excess deaths? If Covid was as deadly as claimed and all deaths were properly attributed, the number of Covid deaths should have closely matched the number of excess deaths, unless other factors contributed to the excesses. But the data shows Covid deaths were much higher than the estimates of excess deaths.

Whether intentional or not, Covid death counts were inflated, which boosted the alleged danger of the new virus.

The underreporting of other deaths

If Covid deaths were over-reported, one would expect to see *under-reporting* of deaths from other causes by at least that many, creating statistical “deficits” in those categories. That is precisely what Canadian death statistics reveal. There were notable declines – or deficits – in several non-Covid categories of death during 2020 and 2021, such as respiratory illnesses, lung diseases, influenza, dementia, Alzheimer's.

One could perhaps argue that the deficits were not because of misattributions to Covid, but because Covid claimed the lives of these individuals before these other illnesses could, effectively accelerating their deaths. In some cases, that might indeed be the case.

However, considering that the number of deaths attributed to Covid was so much higher than the number of excess deaths among the elderly and keeping in mind the very broad definition for a Covid classification, these supposed “Covid deaths” would have had to be taken from “expected deaths” in other causes. Again, at the very least, many deaths among the “deficits” in these other causes were attributed to Covid, despite dying from other illnesses, while perhaps testing positive for Covid. So, while these deficits do not prove an over-attribution to Covid, they strongly suggest it.

Respiratory-related deaths

According to Statistics Canada data, deaths from respiratory diseases and infections (excluding pneumonia and influenza) dropped significantly in 2020 and 2021. Deficits of deaths in the two years were 690 for respiratory and pulmonary diseases and 3,270 for respiratory infections and lung diseases (Figures 5 and 6). Since many respiratory-related deaths would have fallen under the excessively broad criteria of Covid deaths – which included deaths from “clinically compatible illness, unless there is a clear alternative cause of death identified” – many deaths in this category seem to have been misattributed to Covid.

Figure 5

Source: Statistics Canada Table 13-10-0782-01
ICD-10 Codes: [J80], [J81], [J82], [J84], [J85-J86],
[J90-J94], [J95-J98]
2015-2019 Linear trend

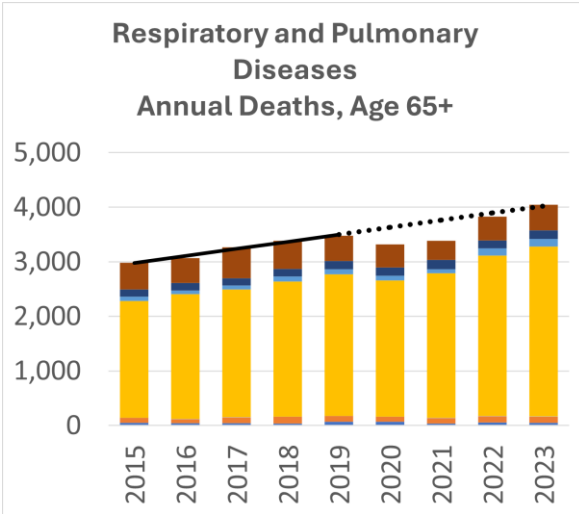
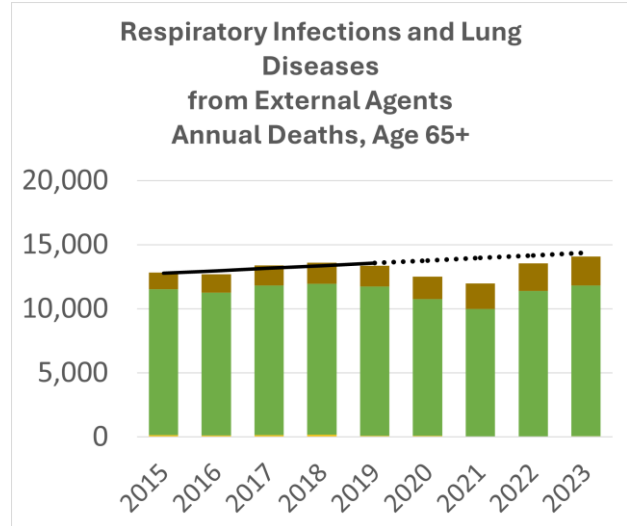


Figure 6

Source: Statistics Canada Table 13-10-0782-01
ICD-10 Codes: [J00-J06], [J20-J22], [J40-J47], [J60-J70]
2015-2019 Linear trend



Interestingly, by 2022, when public concern around Covid had mostly faded, the number of deaths from these other respiratory illnesses returned to normal levels. This obvious coincidence further supports the insight that many of these deaths were misclassified as Covid deaths during the height of concern around Covid.

To reiterate, some of these “deficits” could be due to Covid claiming the lives of these individuals before these other illnesses could. Nevertheless, due to the number of deaths that were overattributed as Covid deaths, as discussed above, many (if not most) of the deaths from the deficits in these categories appear to simply be misattributed to Covid.

Influenza and pneumonia deaths

Influenza is another illness “compatible” with Covid. It has similar symptoms and can lead to post-infection pneumonia. While there were 680 influenza deaths in 2020 among Canadians aged 65 and over (a number within the range of previous years), influenza deaths almost disappeared in 2021, with Statistics Canada recording only 19 deaths from influenza for this age group (see the grey bars in Figure 7). This is strange, as there are many influenza deaths every year, ranging from 400 to 2,000 in the years from 2015 to 2019.

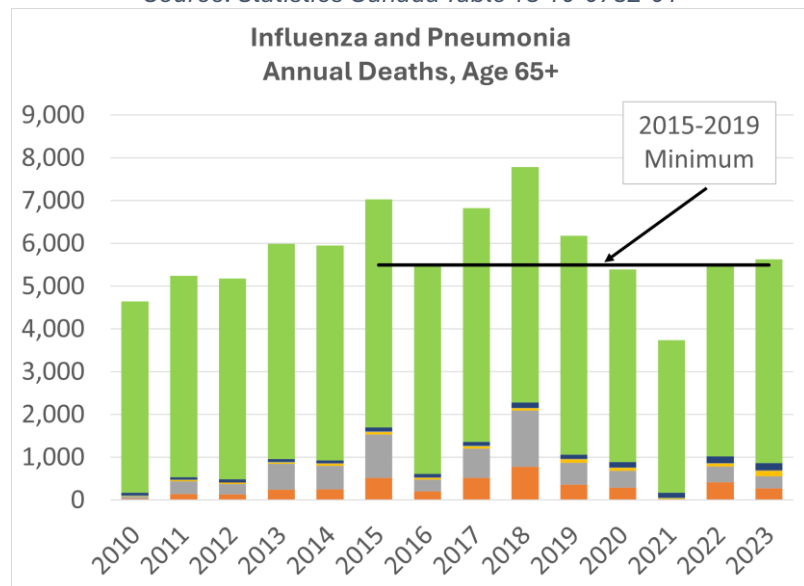


Government and public health officials offered several explanations for the disappearance of influenza deaths in 2021: (1) Covid claimed the lives of those that might otherwise have died of influenza, (2) the lockdown measures, masking, and restricted travel limited the spread of influenza, and (3) the high rates of flu shots taken by Canadians reduced the effects of influenza.

However, governments have not presented any compelling evidence to

support these theses. A simpler explanation for the statistical disappearance of influenza deaths in 2021 would be that doctors followed the new WHO guidelines for classifying Covid deaths and decided that influenza was a “compatible illness” without a “clear alternative cause of death identified (e.g., trauma, poisoning, drug overdose).” In other words: influenza deaths were recorded as Covid deaths.

Figure 7
Source: Statistics Canada Table 13-10-0782-01



ICD-10 Codes: [J09], [J10], [J11], [J12], [J13], [J14], [J15], [J18]
Influenza and pneumonia deaths fluctuate from year to year, making it hard to establish a trend line of expected deaths. Using a five-year minimum is a conservative approach to estimating excesses or deficits.

Deaths from dementia, Parkinson's, and Alzheimer's

Deaths from dementia,²⁴ Parkinson's, Alzheimer's, and other nervous system diseases were also below expected levels in 2020 and 2021²⁵.

²⁴ Dementia describes a set of symptoms, is considered an “organic mental disorder,” and is in the category of “Mental and behavioural disorders [F01-F99].” From 2015 to 2019, dementia deaths comprised over 90 percent of deaths in the category. “Mental and behavioural disorders due to psychoactive substance use [F10-F19]” accounted for 5 percent. The death of a person who exhibits dementia but has also been diagnosed with Alzheimer's or Parkinson's disease, would be included in “Diseases of the nervous system [G00-G98]” that includes subcategories for these specific neurodegenerative diseases.

²⁵ Figures 8 and 9 show the estimates for deficits of deaths each year (orange bars as negative values) and the percent deviation (blue lines) from what would be expected for these causes based on the 2015 to 2019 linear trend of deaths in the category.

Historically, annual death numbers in these categories are not impacted, one way or another, by “bad” flu seasons. If respiratory illnesses – like the flu, influenza, or pneumonia – hastened the death of people with dementia, Parkinson’s, Alzheimer’s, and other nervous system diseases, we would expect to see more deaths from these causes in particularly severe flu seasons. But this is not the case. Such a relationship does not appear in the historical data.

Figure 8

Source: Statistics Canada Table 13-10-0143-01
ICD-10 Codes: [F01], [F03]

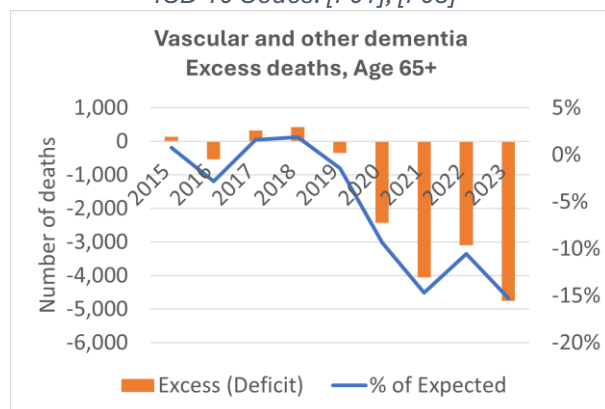
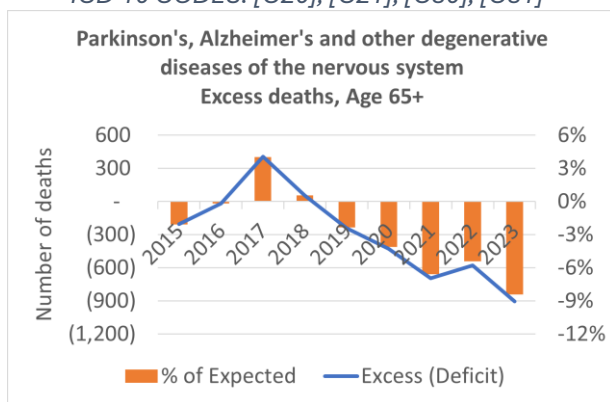


Figure 9

Source: Statistics Canada Table 13-10-0145-01
ICD-10 CODES: [G20], [G21], [G30], [G31]



During Covid, however, there were significant deficits in the number of deaths in these categories. For instance, as shown in Figure 8, there were approximately 2,100, 4,000, 3,000, and 4,800 deficits of deaths among vascular and other dementia diseases in the years from 2020 to 2023, respectively. Similarly, though not quite as high, Figure 8 shows that there were approximately 400, 600, 500, and 800 “deficits” in Parkinson’s, Alzheimer’s, and other degenerative diseases of the nervous system for those years. This suggests that these deaths were likely classified as “Covid deaths” when their deaths were expected anyway from these other causes.

In short, while Canadian governments and public health officials claim that the actual number of Covid cases and death counts was likely higher than reported, the data shows that the reverse is true. 10,000 of the 27,000 deaths attributed to Covid in 2020 and 2021 for those aged 65 and above appear to be misattributed to Covid, as they were within the expected range of deaths, and they appear to be largely explained by the historically low numbers of deaths from influenza and pneumonia, Alzheimer's, and chronic lower respiratory diseases. Combined, they had 13,500 deaths below the 2015-2019 trend:

- Respiratory infections and diseases - 4,000
- Influenza and pneumonia - 1,900 deaths (vs. the 2015-2019 minimum)
- Dementia, Parkinson's, Alzheimer's and related diseases - 7,600

It therefore appears that the government health officials' over-attribution of deaths to Covid inflated Covid death counts by *at least one-third* of all excess deaths for those 65 and older.

Table 2
Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01

Number of Deaths, Age 65 and over	2020	2021
Excess lower than Covid-19 deaths		
Reported - All cause	247,800	249,300
Expected* - All cause	237,200	243,000
Excess - All cause	10,500	6,300
Covid-19	14,900	12,000
Difference	(4,400)	(5,700)
Deficits of deaths - selected causes		
Respiratory infections & lung diseases	(1,300)	(2,000)
Respiratory & pulmonary diseases	(300)	(400)
Influenza & pneumonia	(100)	(1,800)
Vascular & other dementia	(2,400)	(4,100)
Parkinson's, Alzheimers & other	(400)	(700)
Total of deficits	(4,500)	(9,000)

**Expected death estimates are calculated using a five-year (2015-2019) linear trend of death rates for four age groups (under 45, 45-64, 65-84, over 85) applied to population size.*

The high Covid death counts were also masking the large numbers of deaths caused by non-Covid causes. If Covid caused a low number of deaths among young Canadians and at most two-thirds of the excess deaths among Canadians aged 65 and above, what drove the other excess deaths? For that, we look at two other "unusual" events during Covid: lockdowns and Covid vaccines.

Did lockdowns cause excess deaths?

In early 2020, Dr. Neil Ferguson and other academics predicted²⁶ that Covid would kill millions around the World. In response, Canadian politicians heeded the recommendations of provincial, federal, and international unelected public health

²⁶ Ferguson, Dr. Neil, et al., "Report 12: The Global Impact of COVID-19 and Strategies for Mitigation and Suppression," Imperial College of London, March 26, 2020, <https://www.imperial.ac.uk/media/imperial-college/medicine/mrc-gida/2020-03-26-COVID19-Report-12.pdf>

officials.²⁷ In a grand experiment, they imposed never-before-seen lockdowns. They closed businesses which they deemed “nonessential,” shut down schools, restricted social interactions, and told Canadians to stay home to “protect their neighbours.” These stringent measures, along with the constant and misleading reporting on Covid death counts and hospitalizations, created an environment of uncertainty, panic, fear, stress, despair, isolation, economic hardship, as well as limited access to care, support and medical attention. The data suggest that these factors played a significant role in driving high numbers of excess deaths during and after Covid.

As discussed in the Justice Centre’s May 2025 report on lockdown harms, “[Five years on: Tracing the costs of lockdowns](#),” these conditions naturally affected the physical and mental health of Canadians, especially the most vulnerable. An early study showed that, already by mid-May 2020, psychosocial and perceived stress levels were moderately high worldwide compared to pre-Covid levels.²⁸ In the same time frame, the percentage of Canadians reporting fair or poor mental health had tripled, from roughly 8 percent pre-Covid to 24 percent in May 2020.²⁹ Other longitudinal studies revealed that even in countries like Japan, which had less stringent lockdowns compared to Canada, psychosocial stress was a significant issue for the entirety of Covid restrictions from 2020 until the end of the study in 2022.³⁰

As one would expect, we see increases in deaths in several categories that were likely affected by lockdowns. The stress of social isolation, interrupted routines, economic instability, and restricted access to medical and other supports, among other factors, were likely aggravating factors for hypertension, diabetes, alcohol-related diseases and drug overdoses, leading to excess deaths from these causes.

²⁷ Dr Sabine L. van Elsland, Ryan O’Hare, COVID-19: Imperial researchers model likely impact of public health measures, 17 March 2020, <https://www.imperial.ac.uk/news/196234/covid19-imperial-researchers-model-likely-impact/>

²⁸ NCBI, *International Prevalence and Correlates of Psychological Stress during the Global COVID-19 Pandemic*, National Library of Medicine, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7763004/>. Released Dec 10, 2020.

²⁹ NCBI, *Anxiety, depression and stress during the COVID-19 pandemic: Results from a cross-sectional survey*, National Library of Medicine. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8548032/>. Published Feb 28, 2024.

³⁰ Nagisa Sugaya, Tetsuya Yamamoto & Chigusa Uchiumi, *A 2-year longitudinal study examining the change in psychosocial factors under the COVID-19 pandemic in Japan*, Nature briefing, <https://www.nature.com/articles/s41597-024-03125-2>. Published May 28, 2024.



Excess deaths among non-Covid causes

Young Canadians especially affected

The government's death statistics show that while Covid had little to no effect on younger people, young Canadians aged under 45 died in significantly greater numbers after lockdowns were imposed in March 2020. This increased death rate was not caused by Covid itself, but other factors likely caused by lockdowns. Disturbingly, this high death rate among young Canadians continues long after Covid.

In the decade prior to lockdowns (2010-2019), deaths amongst

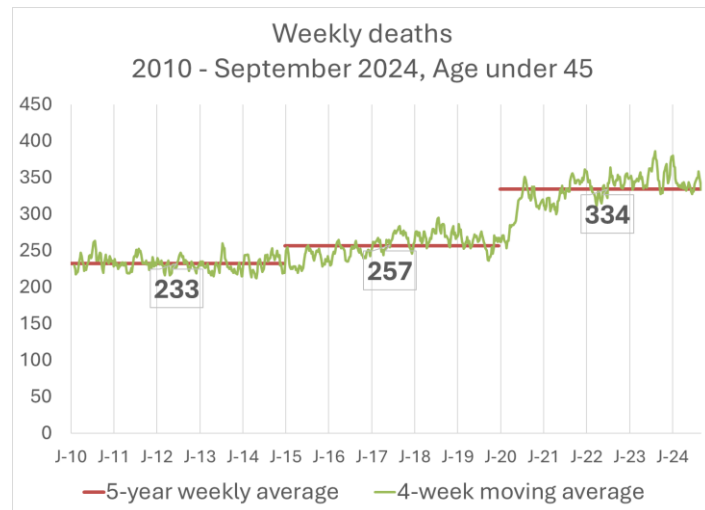
Canadians 45 and younger rose slightly from 233 per week in the years 2010-2014 to 257 weekly deaths in the years 2015-2019. However, during lockdowns from April to August 2020, average weekly deaths jumped by 30 percent to 334, setting a new baseline average for the 2020 to 2024 period.

Similarly, the death rate of those under 45 rose from an average of 66 per 100,000 during 2015-2019 to 80.3 during 2020-2023 (76.7, 83.2, 80.8, and 80.4, respectively, for 2020-2023). What caused these 10,210 additional deaths among young Canadians? Not Covid.

Canadians aged 45 to 64 also saw significant increases in deaths, though they were also slightly more affected by Covid than those under 45. Weekly deaths for this middle-aged group went from 783 to 807 (3 percent increase), to 867 (7.5 percent increase), over the same three five-year periods. While percentage increases were lower for this group, the absolute increase in the number of people dying each week was higher than for the younger group.

The estimated number of excess deaths for Canadians aged under 65 was 11,690 for 2020 and 2021. (See Figure 2.) Only 3,580 of these are attributed to Covid, although the actual number is probably lower than that for reasons discussed above. Even if we accept the government health officials' inflated number, there were 8,110 unexpected deaths in 2020 and 2021 from other causes, likely related to lockdowns, and not Covid. However, given the observed tendency to over-attribute deaths to Covid, and the known fact that young people were at low risk of death from Covid, the true number of Covid deaths is likely lower than reported, while non-Covid excess deaths were likely higher.

Figure 10
Source: Statistics Canada Table 13-10-0768-01



Drug overdoses

During lockdowns, the number of drug overdoses among Canadians aged under 65 increased substantially. They rose from a previous high of 4,600 in 2017 to 6,360 in 2020, with further increase to a high of 7,280 in 2021, and similar levels in the years thereafter. The problems of drug addiction, homelessness, and despair among many young Canadians are well-known. That lockdowns made these problems worse should not surprise anyone.

In some ways, all overdose deaths are premature and therefore excessive. But if we accept that a certain number of deaths are expected, then excess (unexpected) “accidental poisonings” or drug overdoses in those years are estimated at 2,500, based on the 2015-2019 trendline. This is almost twenty-four deaths per week, significantly above what the previous five-year trend would project, despite its already existing upward trend since 2010. However, the drop in deaths in 2019 compared to the two earlier years is not really reflected in the trend. Predictions of drug-related deaths are not simply a statistical calculation. Maybe deaths would have continued to fall after 2019 if not for Covid and lockdowns. Simply taking the 2016-2019, or 2017-2019 “trend,” would indicate that excess deaths are underestimated for 2020 to 2023.

Figure 11

Source: Statistics Canada Table 13-10-0156-01
ICD-10 [X40-X49]

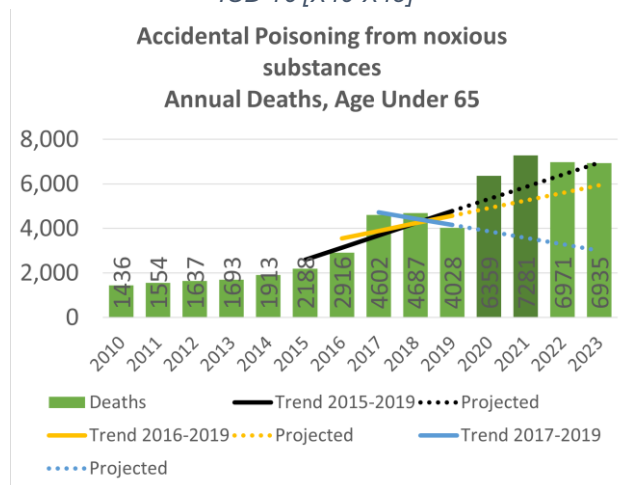
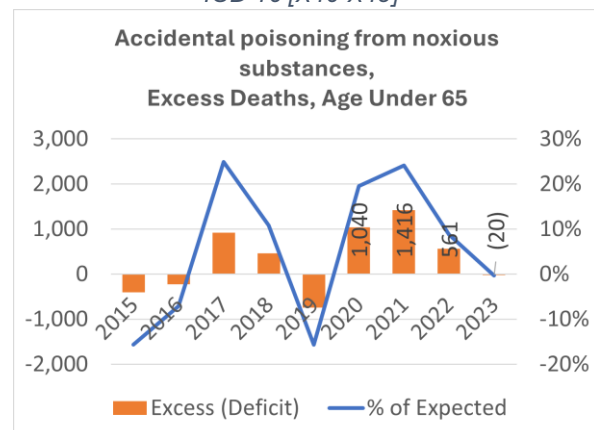


Figure 12

Source: Statistics Canada Table 13-10-0156-01
ICD-10 [X40-X49]



One response to Covid by provincial authorities in British Columbia,³¹ Quebec,³² and Ontario³³ was to offer “prescribed or regulated substances”, also known as “safer supply,” because “illicit substances may become significantly more difficult to procure” during the Covid-era policies, including lockdowns.³⁴ In British Columbia, this was presented as a way to “limit exposure to Covid”. From 2020 to 2022, the federal government supported “18 safer supply projects that are offering services across 30 sites in British Columbia, Ontario, Quebec, New Brunswick and Nova Scotia through the *Substance Use and Addictions Program* for a total investment of \$59.9 million.”³⁵

Unfortunately, the “investments” and protocols introduced to address the “dual public health emergencies” – drug overdoses and Covid – did not prevent a sharp rise in deaths for younger Canadians in 2020. Indeed, it appears to have significantly exacerbated the situation.

A 2025 study on “safer supply” in BC found that “neither the safer opioid supply policy nor the decriminalization of drug possession seemed to alleviate the opioid crisis. On the contrary, both policies were associated with an increase in opioid overdose hospitalizations.”³⁶

In addition to providing a “safer supply,” governments also gave away \$2,000 every four weeks through the Canada Emergency Response Benefit (CERB)³⁷ to those eligible. For those already struggling with a drug addiction, these handouts would have granted greater access to drugs, which may have contributed to the rise in overdose deaths.

³¹ Risk mitigation in the context of dual public health emergencies, March 2020. https://hsa-bc.ca/Library/COVID_19/Clinical-Guidance-Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies_HSABC.pdf. Accessed March 25, 2025.

³² Substance Replacement Therapy in the Context of the COVID-19 Pandemic in Québec: Clinical Guidance for Prescribers, 2020. https://dependanceitinerance.ca/app/uploads/2020/10/Guide-Pharmaco-COVID_ANG-VF.19.10.20.pdf. Accessed March 25, 2025.

³³ Strategies to Mitigate Risk of Substance Use Related Harms during Periods of Disruption, September 2020. <https://www.publichealthontario.ca/-/media/documents/ncov/he/2020/09/mitigation-strategies-substance-use.pdf>. Accessed March 25, 2025.

³⁴ PAN BC, “Risk Mitigation: In the Context of Dual Public Health Emergencies,” March 2020, <https://paninbc.ca/wp-content/uploads/2020/03/BCCSU-Clinical-Guidance-Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies.pdf>

³⁵ Health Canada, “Government of Canada highlights support for safer drug supply project in Ottawa.” October 15, 2020. “Government of Canada supports safer supply pilot project in B.C.” July 15, 2020. “Government of Canada supports expansion of innovative safer supply project to operate in four cities across Canada.” March 2, 2021. “Helping people who use substances during the COVID-19 pandemic.” October 21, 2022.

³⁶ Nguyen HV, Mital S, Bugden S, McGinty EE. “Safer Opioid Supply, Subsequent Drug Decriminalization, and Opioid Overdoses,” JAMA Health Forum. 2025;6(3):e250101. doi: 10.1001/jamahealthforum.2025.0101

³⁷ Government of Canada, “Canada Emergency Response Benefit (CERB) - Canada.ca,” <https://www.canada.ca/en/services/benefits/ei/cerb-application.html>

In short, while Covid had little effect on young people, the governments' lockdown response to Covid did, causing a great deal of harm and death among this young demographic.

Liver disease

While many businesses were deemed “nonessential” and forced to close during lockdowns, provincially run liquor stores (and marijuana supply outlets) remained open. Canadians, including those at risk of liver-related problems from alcohol consumption, were able to access alcohol but were generally unable to access in-person support. Many were also unable to work and found themselves at home alone. As shown by a study published by the Government of Canada, the stress, loneliness, and hopelessness during lockdowns led to a significant (12.2 percent) increase in alcohol consumption.³⁸

Figure 13

Source: Statistics Canada Table
ICD-10 [K70-K76]

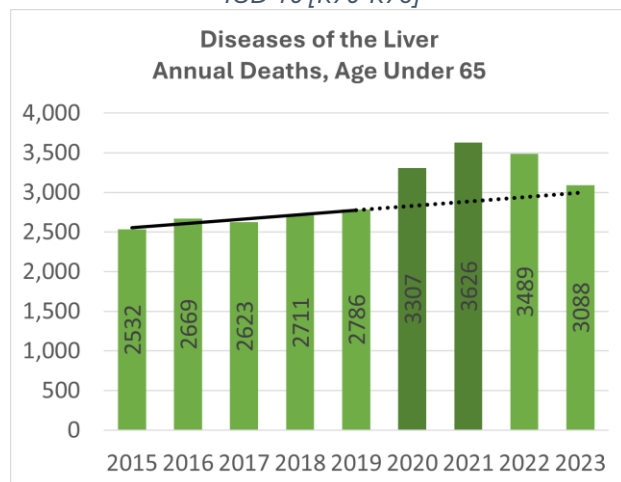
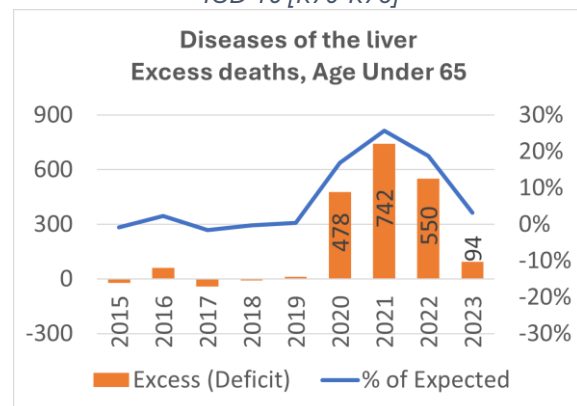


Figure 24

Source: Statistics Canada Table
ICD-10 [K70-K76]



According to Statistics Canada, with an 18 percent increase, 2019 to 2020 saw the largest year-over-year change in alcohol-induced deaths in at least the last 20 years.³⁹ Further, the effects were especially observed among those 65 years and younger. The number of

³⁸ Kara Thompson, PhD (1); Daniel J. Dutton, PhD (2); Kathleen MacNabb, MA (2); Tong Liu, MA (2); Sarah Blades, MPH (3); Mark Asbridge, PhD (2), “Changes in alcohol consumption during the COVID-19 pandemic: exploring gender differences and the role of emotional distress,” <https://doi.org/10.24095/hpcdp.41.9.02>

³⁹ Statistics Canada, “Provisional death counts and excess mortality, January 2020 to October 2022,” The Daily, <https://www150.statcan.gc.ca/n1/daily-quotidien/230112/dq230112c-eng.htm>, Accessed June 15, 2025



alcohol-induced deaths from 2019 to 2020 in this age group increased by 27 percent (from 1,955 to 2,490).⁴⁰

Alcohol is a well-known contributor to deaths from liver diseases.⁴¹ While the stress during lockdowns led to increased alcohol consumption and likely affected those already at risk of liver disease, stress itself has been linked to liver injury.⁴² Combined, stress and alcohol consumption during lockdowns appear to also have contributed to an increased number of deaths from liver diseases.

Overall, there were an estimated 1,200 excess deaths from liver disease for people 65 years and younger in 2020 and 2021 combined, including deaths from alcoholic liver diseases and fibrosis and cirrhosis of the liver.

Diabetes and hypertension

Studies show that “perceived stress is a strong risk factor for type 2 diabetes.”⁴³ and “psychosocial stress is known to contribute to the development and worsening of hypertension.”⁴⁴ Amid the continued fearmongering during Covid and government lockdowns, many Canadians understandably experienced a great deal of stress. Excess death numbers from diabetes and hypertension jumped right at the start of lockdowns and continued above the previous trend into 2023.⁴⁵

⁴⁰ Ibid.

⁴¹ NIH, “Alcohol-Associated Liver Disease Mortality,” PMC, National Library of Medicine (NIH), June 11, 2025, <https://pmc.ncbi.nlm.nih.gov/articles/PMC12159772/>

⁴² Joung JY, Cho JH, Kim YH, Choi SH, Son CG. “A literature review for the mechanisms of stress-induced liver injury.” *Brain Behav.* 2019 Mar;9(3):e01235. doi: 10.1002/brb3.1235. Epub 2019 Feb 13. PMID: 30761781; PMCID: PMC6422711.

⁴³ Harris ML, Oldmeadow C, Hure A, Luu J, Loxton D, Attia J (2017) Stress increases the risk of type 2 diabetes onset in women: A 12-year longitudinal study using causal modelling. *PLoS ONE* 12(2): e0172126. <https://doi.org/10.1371/journal.pone.0172126>. Accessed February 25, 2024.

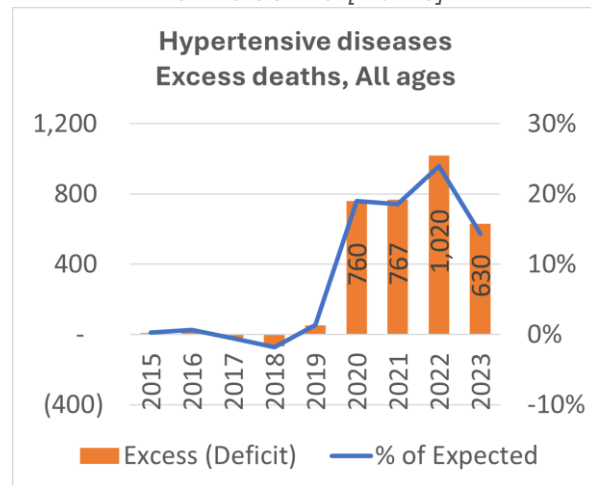
⁴⁴ Munakata, M. Clinical significance of stress-related increase in blood pressure: current evidence in office and out-of-office settings. *Hypertension Res* 41, 553–569 (2018). <https://doi.org/10.1038/s41440-018-0053-1>. Accessed February 25, 2024.

⁴⁵ Kathy O'Brien, Marylène St-Jean, Patricia Wood, Stephanie Willbond, Owen Phillips, Duncan Currie and Martin Turcotte, Statistics Canada, “COVID-19 death comorbidities in Canada.” November 16, 2020.

This Statistics Canada study from the fall of 2020 listed ten common complications associated with people who died from Covid, including diabetes and hypertension. With the broad definition.

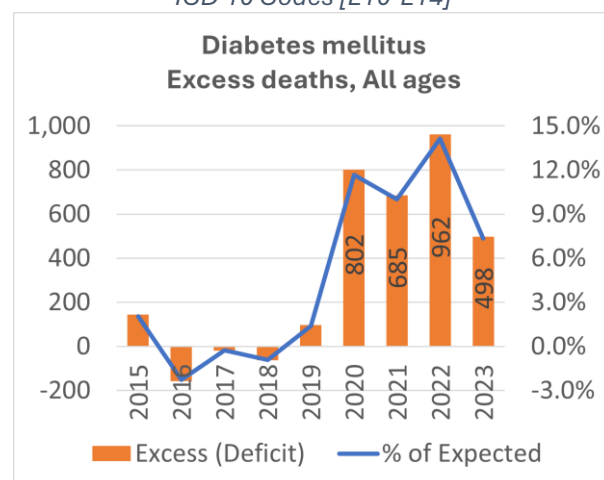
Hypertension - Deaths from hypertension have been increasing slowly over the last twenty years, but skyrocketed in 2020 to almost 20 percent more than the projected trend. Hypertension-related excess deaths then remained high through to 2023. During this four-year period from 2020 to 2023, an estimated 3,100 excess deaths occurred due to hypertension, most of them among older Canadians.

Figure 15
Source: Statistics Canada Table 13-10-0147-01
ICD-10 CODES: [I10-I15]



Diabetes – From 2010 to 2019, the number of deaths from diabetes for all ages had been stable, with an annual total close to 7,000 (plus or minus 300). In 2020, the number increased to over 7,700, almost 12 percent above the previous five-year trend. For 2020 to 2021, excess deaths from diabetes are estimated at 1,500. Another 1,400 is estimated for 2022 to 2023.

Figure 16
Source: Statistics Canada Table 13-10-0144-01
ICD-10 Codes [E10-E14]



While younger Canadians died from diabetes at a higher rate than normal in 2020, most of the diabetes-related excess deaths were among seniors older than 65 years.

Interestingly, 2022 saw the highest number of hypertension- and diabetes-related excess deaths of all Covid years, despite most lockdowns being lifted by mid-2022. This could mean that stresses related to lockdowns lingered for some time.

Together, the all-age number of excess (unexpected) deaths from liver diseases, hypertension, and diabetes amounts to 6,750 for 2020 and 2021. Excess deaths from drug overdoses and liver disease for those under 65 were 3,680. However, these are most likely not the only causes affected by lockdowns and Covid policies. These are just the categories where Statistics Canada data shows significant increases from previous years.



Excess deaths from long hospital wait times

The effects of lockdowns did not stop when lockdowns were lifted, but are still felt today, in 2025. One example is medical wait times.

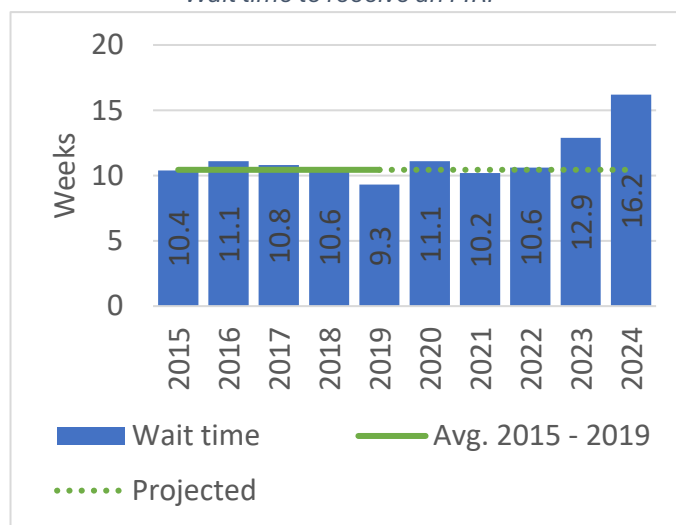
The recent Justice Centre report “*Five years on: Tracing the costs of lockdowns*,” discussed at length how Covid lockdowns resulted in delayed and missed medical diagnoses and treatment, which has resulted in many additional and unnecessary deaths in the post-Covid years. Across Canada, the chief medical officers of health cancelled literally hundreds of thousands of medically necessary surgeries,⁴⁶ in addition to cancelling hundreds of thousands of crucial diagnostic services and tests. Many Canadians now find themselves with advanced stages of cancers or other illnesses that could have been prevented with timely access to medical diagnoses and care during lockdowns. Further, the excessively long wait-times caused by the backlogs and staffing shortages as a result of the lockdowns makes timely access to medical diagnoses and treatment still prohibitive in 2025, further exacerbating an already dire public health problem.

Our report found that due to the backlog in healthcare caused by lockdowns, the wait time to receive an MRI scan went from a pre-lockdown average of 10.4 weeks, to an unprecedented 16.2 weeks in 2024. This represents a 55 percent increase in wait times. Longer wait times mean more deaths.

Further, the median overall wait time from referral to medical treatment in Canada went from a pre-lockdown high of 21 weeks to 26 weeks in 2021, and then increased further to 30 weeks by 2024. This represented a 43 percent increase in wait time from the pre-lockdown average.

Wait times to receive cancer surgeries have seen similar increases. During lockdowns, thousands of Canadians had their cancer surgeries suddenly cancelled. One study

Figure 17
Wait time to receive an MRI⁴⁷



⁴⁷ Statista, “Wait Time for MRI Canada 2024,” <https://www.statista.com/statistics/654492/weeks-waited-for-mri-in-canada/>, Accessed 29 Apr. 2025

estimated that in Canada, 27,390 cancer surgeries were cancelled during the first wave of lockdowns alone.⁴⁸ Delayed treatments result in more deaths. In the UK, delayed treatments are estimated to have led to an additional 281–344 deaths for breast cancer patients, 1,445–1,563 deaths for those with colorectal cancer, and 1,235–1,372 deaths for lung cancer patients.⁴⁹

If this is true for the UK, it is likely true for Canada as well. While looking at these kinds of effects of lockdowns helps to better understand how catastrophic government lockdowns were, the complete cost of lockdowns will likely never be known.

Canadian federal and provincial governments have yet to explain or provide evidence for how lockdowns saved lives. We know that lockdowns did not prevent Covid from spreading throughout Canada, including long-term care facilities where Covid claimed about 80 percent of its victims. Even if lockdowns prevented a small number of Covid deaths, when taking into account both their short-term and long-term effects, they appear to have caused as many – if not more – deaths in Canada than Covid did.

The pandemic after the “pandemic”

Why did the highest death rates appear after Covid?

By the end of 2021, more than 80 percent of Canadians were considered “fully vaccinated,” and by mid-2022, reports showed that Covid cases were down substantially and most lockdowns in Canada were removed. However, contrary to what one would expect, 2022 had the highest number excess deaths of all Covid years – more than in 2020 when excess deaths numbers were high enough for politicians to feel motivated to impose lockdowns. In 2022 alone, an estimated 31,370 or 10.3 percent more Canadians died than the previous five-year trend would have projected, compared to only 14,950 excess deaths in 2020. (See Figure 1).

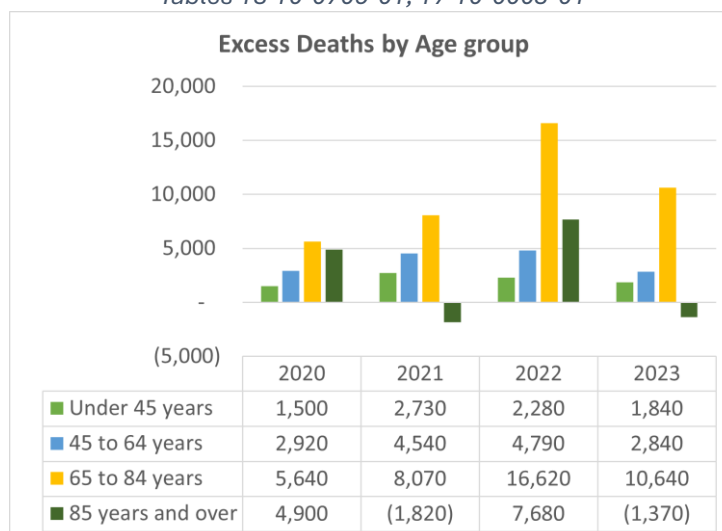
⁴⁸ Keim-Malpass, Jessica, et al. “Cancer Screening and Treatment Delays During the COVID-19 Pandemic and the Role of Health Literacy in Care Re-Engagement: Findings from an NCI-Designated Comprehensive Cancer Center Sample.” PMC PubMed Central, May 2023, <https://doi.org/10.1007/s13187-023-02312-w>.

⁴⁹ Ibid.



Death rates by specific age groups show similar trends. For Canadians aged 45 and above (45 to 64, 65 to 84, and 85 and above), death rates were highest in 2022, after more than 80 percent of Canadians had been injected twice. For Canadians under 45, death rates peaked in 2021 (not 2020) and then declined only slightly in 2022 and 2023. Excess deaths followed this trend, as seen in Figure 18.

Figure 18
Source: Statistics Canada
Tables 13-10-0709-01, 17-10-0005-01

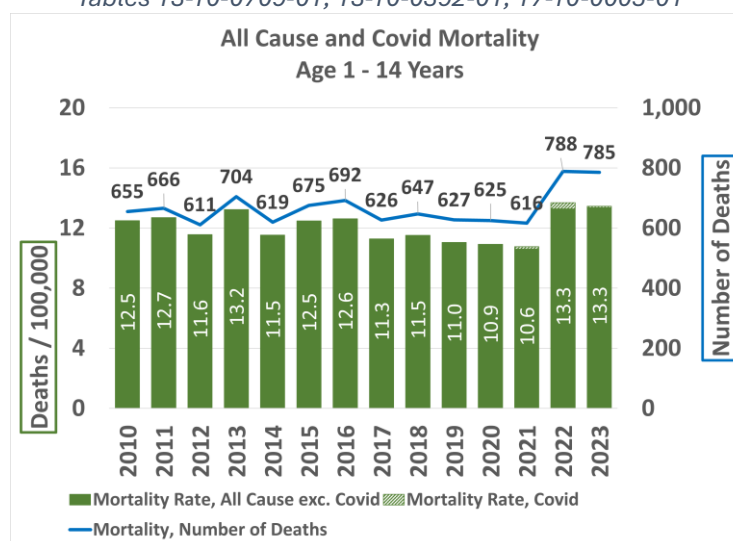


Children: death rates reach a new record

Children between one and fourteen years of age are among the healthiest demographics, consistently having the lowest death rates in any given year. Death statistics show that Covid had no effect on very young Canadians. Indeed, during the first two years of Covid, death rates actually decreased.

In 2022, however, death figures for children aged 1 to 14 jumped significantly from 643 (the previous five-year average) to 788, while the death rate went from the previous five-year average of 11.8 deaths per 100,000 children, to 13.7 in 2022 – a 16 percent increase. These numbers were observed for babies, toddlers, and adolescents alike, and remained at this new, high level in 2023. Only a small fraction (0.4 / 100,000, or 0.0004%) of these deaths were Covid-attributed deaths.

Figure 193
Source: Statistics Canada
Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01



Canada is not the only country where children are now dying at high rates. One study⁵⁰ on death rates in the UK showed that approximately 16 and 22 percent more children died than expected in 2022 and 2023, respectively.⁵¹

Young and middle-aged: death rate, 20-year record

Death rates for Canadians under 45 peaked in 2021 and then remained high in 2022 and 2023. For those aged 45 to 64, death rates peaked in 2022 and stayed high in 2023. In both cases, death rates were higher than at any time in the last twenty years.

Figure 20

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01

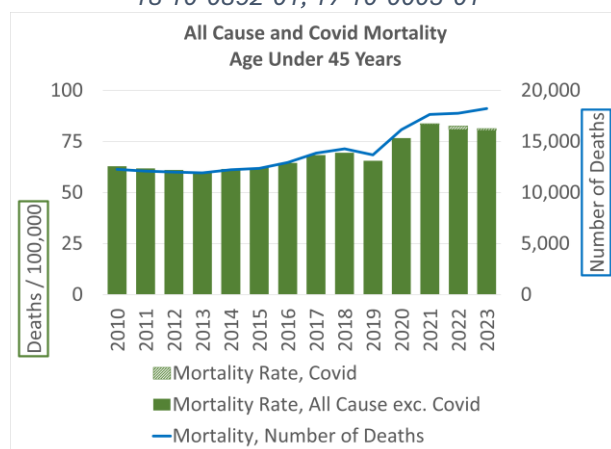
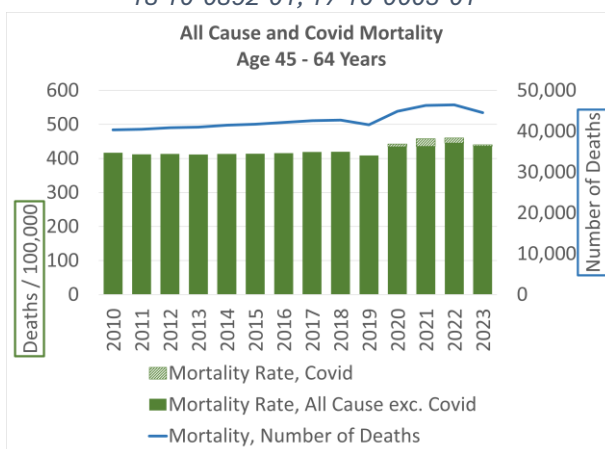


Figure 21

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01



There were over 4,230 additional and unexpected (excess) deaths for Canadians under 45 in 2022 and 2023 combined, of whom a very small minority died of Covid. For those aged 45 to 65, there were over excess 7,460 deaths in those two years, with less than half of those being attributed to Covid.

There were significant increases in several causes of deaths for these groups, but those increases did not account for all of these excesses. This is largely due to deaths that were uncategorized, or rather, categorized as “cause unknown.” For those aged under 45, more than 10,000 deaths from 2020 to 2023 still remain uncategorized, about 6,400 of which are from 2022 and 2023 alone, as discussed below.

⁵⁰ The analysis was conducted by a team from Phinance Technologies who used Office of National Statistics weekly death registrations for England and Wales to estimate excess deaths in the United Kingdom.

⁵¹ Carlos Alegria, Edward Dowd, Yuri Nunes, “Yearly Excess Death Rate Analysis - United Kingdom.” Phinance Technologies. November 2023. Accessed April 24, 2025.
<https://phinancetechnologies.com/HumanityProjects/yearly%20Excess%20Death%20Rate%20Analysis%20-%20UK.htm>



Seniors: death rate, 10-year record

By 2022, over 95 percent of seniors over 70 years had received two or more doses of the Covid vaccine. And yet, contrary to what one might expect, this was the deadliest year for Canadians 65 years and over, with approximately 24,000 excess (unexpected) deaths. This is almost two and a half times what they were in 2020.

Only 18,000 of these additional deaths were attributed to Covid. However, the true number of Covid deaths is likely much lower still, considering the observed trend of overattributing deaths to Covid, as discussed previously.

Figure 22

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01

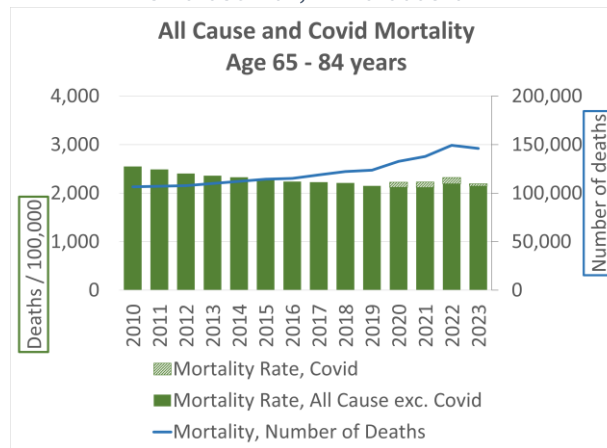
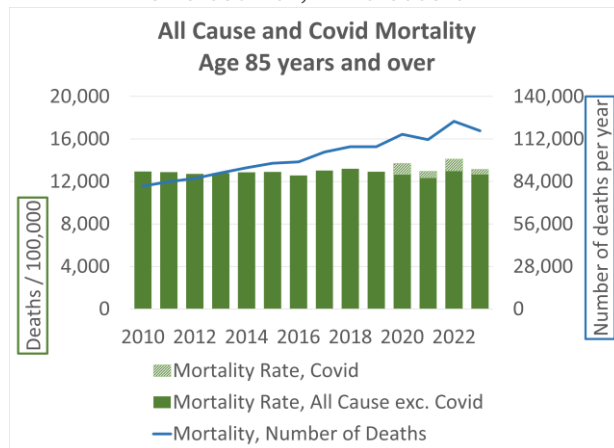


Figure 23

Source: Statistics Canada Tables 13-10-0709-01, 13-10-0392-01, 17-10-0005-01



Even if we accept the government's Covid death counts, and assume that all 18,000 deaths attributed to Covid for Canadians aged 65 and over in 2022 were properly attributed, this leaves at least 6,000 unexpected additional deaths unaccounted for. Deaths from hypertension and diabetes, which began to rise in 2020 were not the only causes. Increases in deaths from other things such as ischaemic heart disease, diseases of the digestive system, and accidents, began later, peaking in 2022. Government researchers have not properly examined and publicized reasons for these abnormally high death rates. Are there effects of lockdowns and potentially the Covid vaccine? What would cause exceptional increases in 2022 death rates in a variety of non-Covid causes?

The government's own data puts into question the efficacy of the Covid vaccine. According to Statistics Canada, about 15,800 people died of Covid in 2020, when no vaccine existed. Despite over 95 percent of seniors aged 65 and older having received two or more doses of the Covid vaccine by 2022, there were still 18,000 Covid-attributed deaths in 2022. In what way was the vaccine effective?

These high death rates after vaccination very strongly suggest that the vaccines were not effective, and that they may even have contributed to the rise in excess deaths.

If most excess deaths occurred after the “pandemic” was largely gone, after lockdowns were lifted, and after most people were vaccinated, what is causing these additional excess (unexpected) deaths?

Did the covid vaccine cause excess deaths?

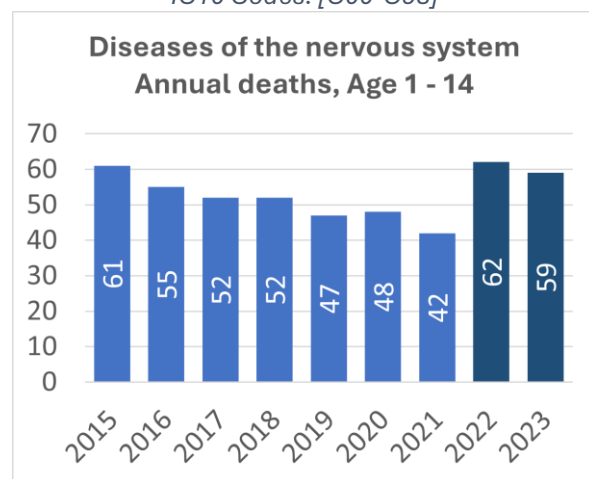
By mid-2021, Canadian governments, and governments around the world, had issued widespread rollouts of a vaccine for which no long-term safety data existed. Those who refused to get injected were soon treated as second-class citizens who found themselves unable to travel, go to the gym, play sports, watch their children play sports, and enjoy restaurants and movie theatres, etc., without proof of being “fully vaccinated.”

Many Canadians rightly questioned the safety of these new vaccines and their potential negative consequences. Could it be that vaccines could contribute to an increase in deaths, either in the short- or long-term, or both?

Nervous system diseases among children

Government data informs us that by September 2022, 87 percent of youths aged 12-17 were injected with the Covid vaccine, 55 percent of children aged 5-11, and 5 percent of children under five.⁵² Well-recognized studies show that Covid vaccines can and do cause neurological complications, whether by inflammation or other disruptions to the central nervous system (i.e., brain).⁵³ However, these studies typically say that severe negative reactions to the nervous system are extremely rare.⁵⁴

Figure 24
Statistics Canada Table 13-10-0145-01
IC10 Codes: [G00-G98]



⁵² Government of Canada, “Cumulative number and percent of people who have received a COVID-19 vaccine in Canada by number of doses, age group, sex, and jurisdiction - Vaccination Coverage by Age and Sex,” - Open Government Portal, <https://open.canada.ca/data/en/dataset/be0e92bd-b332-4a11-9d8f-19013e956f5b/resource/d03600e1-ec60-48cb-ae01-90c2a7f1e0a4>

⁵³ NIH, “Neurological Complications Following COVID-19 Vaccination,” PMC, National Library of Medicine (NIH), November 29, 2022, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9707152/>

⁵⁴ Ibid.



When looking at Canadian death statistics, deaths from nervous system diseases showed an unusual increase starting in 2022. Severe negative reactions are not all that rare, contrary to claims made by the medical establishment. When these adverse reactions occur among children and lead to death, concern and attention should be heightened.

In 2015, 61 children (ages 0-14) died from nervous system diseases. The annual number of deaths gradually fell, reaching 42 in 2021. But in 2022, the number jumped back up, to 62, and remained high in 2023 at 59. What impact did the Covid vaccine have on this increase in children's deaths? If the Covid vaccine is responsible, was the vaccine also responsible for increases in deaths among other causes?

“Mysterious” deaths among all age groups

In 2021, headlines around a “mystery neurological disease” affecting more than 40 patients in New Brunswick appeared, and a memo was sent by the chief officer of health to alert health care professionals.⁵⁵ It is very possible – perhaps even likely – that there is a causal link between the unusually high number of deaths from nervous system diseases among children and the “mysterious” cases in New Brunswick of patients with neurological symptoms that had no well-identified cause. This deserves serious investigation.

Unfortunately, the oversight committee looking into the mysterious cases concluded that there were “potential alternative diagnoses” for most of the original cases.

Four years later, neurologist Dr. Alier Marrero had identified over 500 cases with similar symptoms across seven provinces. Nevertheless, government officials have still not established what is causing the symptoms. In addressing the delays, officials contend that “it is too soon to talk about a possible source.”⁵⁶

Since 2022, a greater number of mysterious sudden deaths have occurred across all age groups and across Canada, contributing to the excess deaths observed during the post-Covid years. A careful analysis should be conducted into the possible causes of the increase in neurological complications among Canadian children and the “mysterious” neurological disease first observed in New Brunswick and then across the country.

⁵⁵ CBC News, “New Brunswick monitoring more than 40 cases of unknown neurological disease.” March 17, 2021. Marie Sutherland, CBC News, “How researchers are tracking down N.B.'s mystery neurological disease.” March 23, 2021.

⁵⁶ Bobbi-Jean MacKinnon, CBC, “Analysis of 'undiagnosed neurological illness' underway, too soon to talk possible source, says doctor.” March 27, 2025

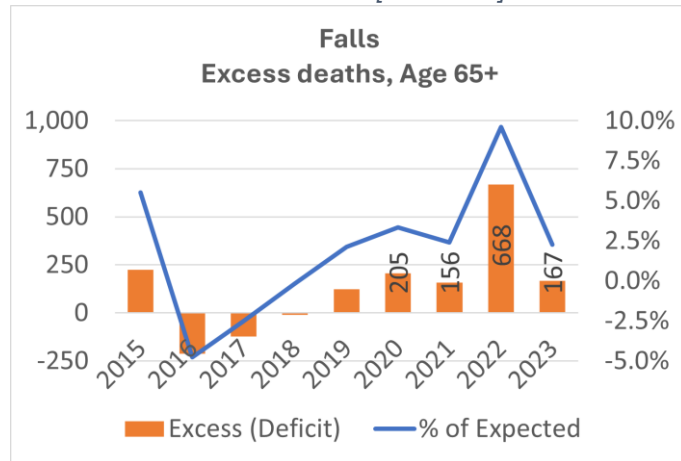
Falls among the elderly

One study found that, “side effects of mRNA vaccines are fevers, myalgias, nausea, vomiting and flu-like illnesses. These side effects appear more prevalent than those of the seasonal influenza vaccine....”⁵⁷

Further, they found that “Fall risk in the elderly population is exceptionally notable as many patients presented with shortness of breath, fatigue, dizziness, and dehydration.” In short, even if the side effects of the vaccines themselves did not kill people, other events directly related to the side effects like falls, could. And this is precisely what we see in the data.

When Statistics Canada released its annual cause of death data in February 2025, the analysis of the data⁵⁸ was headlined: “Fall and drug overdose deaths are main contributors as accidental deaths continue to increase, 2017 to 2022.” The article correctly highlighted that “the number of accidental fall-related deaths has steadily grown from 1,570 deaths in 2000 to 7,997 in 2023.” However, they failed to observe several obvious spikes in deaths in the years following the vaccination campaign.

Figure 25
Source: Statistics Canada Table 13-10-0156-01
ICD-10 CODES: [W00-W19]



⁵⁷ Fertel BS, Milk J, Simon EL, Muir MR, Smalley CM. COVID-19 vaccine adverse reactions bring patients to emergency departments. *Am J Emerg Med*. 2022 Apr;54:302-303, Epub 2021 May 6. PMID: 33994051; PMCID: PMC8101000., <https://pmc.ncbi.nlm.nih.gov/articles/PMC8101000/>

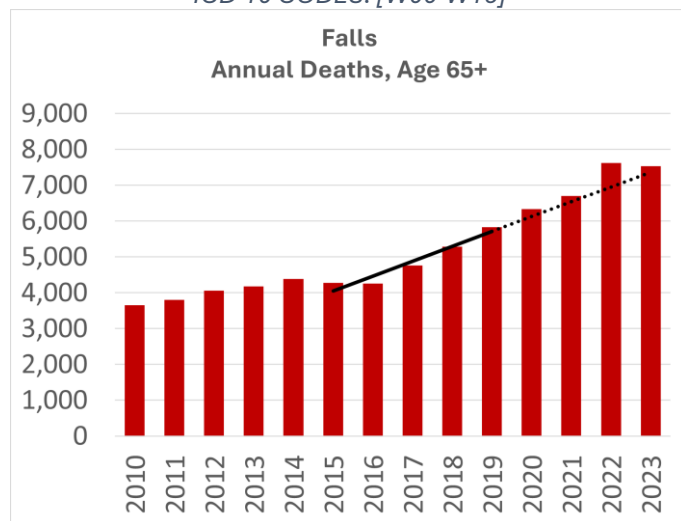
⁵⁸ Statistics Canada, “Fall and drug overdose deaths are main contributors as accidental deaths continue to increase, 2017 to 2022.” February 19, 2025



For instance, Statistics Canada failed to observe the unusual spike in deaths from falls in 2022. Deaths from falls among Canadians aged 65 and over (who accounted for 94 percent of all deaths from falls), were almost 10 percent higher in 2022 than expected based on the recent trend (2015 to 2019).⁵⁹ There were about 670 unexpected (excess) deaths from falls for this age group.

Statistics Canada suggests that the increase in deaths from falls since the early 2000s “may be related to the aging population and increasing prevalence of chronic conditions,” except that the trendline shown here reflects natural increases from the growing demographic.⁶⁰ The impact of chronic conditions should not affect one year more than others, so it does not explain the sudden and unusual increase in 2022.

Figure 26
Statistics Canada Table 13-10-0156-01
ICD-10 CODES: [W00-W19]



Digestive system and ischaemic heart diseases

In their observations about their annual death statistics, Statistics Canada also failed to mention that there were also unusually high death rates among other causes of death in 2022 and 2023. For instance, in 2022 among Canadians 65 and above, there were over 700 excess deaths among digestive diseases (excluding liver disease) and approximately 4,000 excess deaths in ischaemic heart disease – also known as coronary artery disease (CAD) – which refers to heart damage with a decrease in oxygen and blood flow to the heart muscle

⁵⁹ Another statistical measure of deviations is the “z-score” which is found by: 1) calculating the average for the selected period, 2) finding the standard deviation, which is a measure of variation above and below the average for the period, and 3) calculating how many standard deviations the data point is away from the average. The “z-score” of the number of deaths from falls in 2022 for people over 65 was 1.45, using the 2015 to 2023 period. Statistically, this means there is a 93 percent probability that the number of deaths was not a normal occurrence but was driven by some unusual factor.

⁶⁰ The population of seniors over 85 grew 1.8 and 2.0 percent in 2022 and 2023, respectively. These were the lowest growth rates for the age group from 2015 to 2023, with the exception of the first year of Covid when growth was 1.6 percent. Population growth rates in the 65 to 84 demographic have ranged from 3.3 to 4.0 percent since 2015 and was 3.8 percent in both 2022 and 2023.

due to a narrowing of the arteries⁶¹. Both of these have been associated with Covid vaccine side effects in well-established scientific studies.^{62,63}

Figure 27

Source: Statistics Canada
Table 13-10-0148-01

ICD-10 CODES: [K00-K14], [K20-K31], [K35-K38],
[K40-K46], [K50-K52], [K55-K64], [K65-K66], [K80-
K86], [K90-K92]

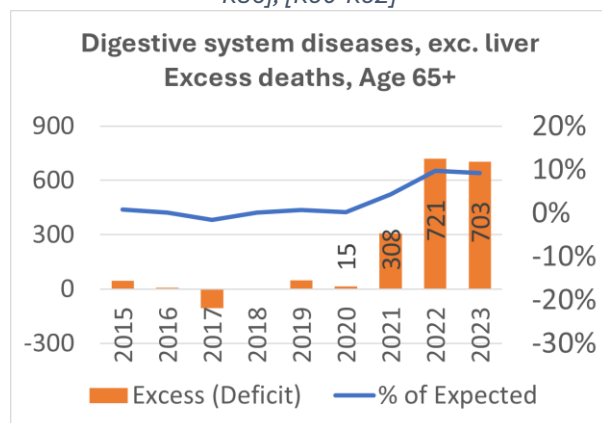
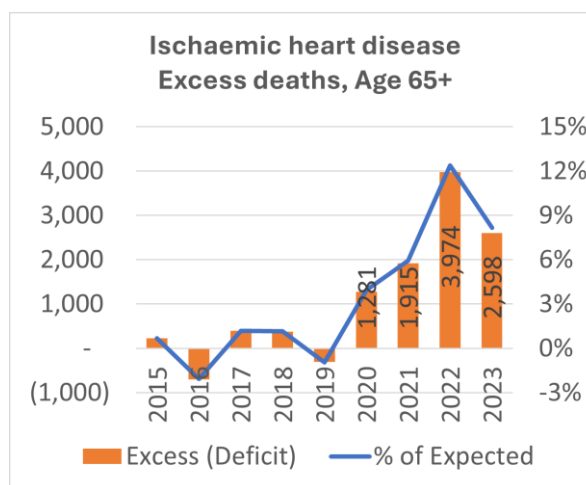


Figure 28

Source: Statistics Canada Table 13-10-0147-01
ICD-10 CODES: [I10-I15]



The rise of deaths from “unknown” causes

The rise in excess deaths in the categories mentioned above, beginning especially in 2022, strongly suggests a relationship between excess deaths and the vaccine. Other data, most notably the high rate of deaths of “unknown” causes, especially in 2022, indicates that health officials are unprepared to assign cause of death classifications to many deaths.⁶⁴

⁶¹ American Heart Association, “Ischemic Heart Disease and Silent Ischemia,” <https://www.heart.org/en/health-topics/heart-attack/about-heart-attacks/silent-ischemia-and-ischemic-heart-disease>, Accessed on June 11, 2025

⁶² NIH, “Significance of digestive symptoms after COVID-19 vaccination: A retrospective single-center study,” PMC, National Library of Medicine (NIH), May 28, 2022, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9144838/>

⁶³ NIH, Cardiac complications of COVID-19 vaccination: now we know more,” PMC, National Library of Medicine (NIH), November 12, 2022, <https://pmc.ncbi.nlm.nih.gov/articles/PMC9653149/>

⁶⁴ Since shares and numbers of deaths in this category decline with each new release, the data is taken from when it was first released for a proper comparison.

2019 - November 26, 2020; **2020** - January 24, 2022; **2021** - August 28, 2023; **2022** - November 27, 2023; **2023** - December 4, 2024 & February 19, 2025 (no change)



The proportion of deaths with an “unknown cause” is greatest among young Canadians. For Canadians under age 45, the share ranges from 15 to 25 percent from 2019 to 2023, compared to a range of 1.7 to 2.3 percent for the elderly over 85.^{65, 66} For Canadians aged under 45, 25 percent of deaths were unclassified when Statistics Canada first released its death data in November 2023. These 25 percent of deaths remained

unclassified for more than two years after 2022 year-end until February 2025, when Statistics Canada updated its cause-of-death data from previous years.

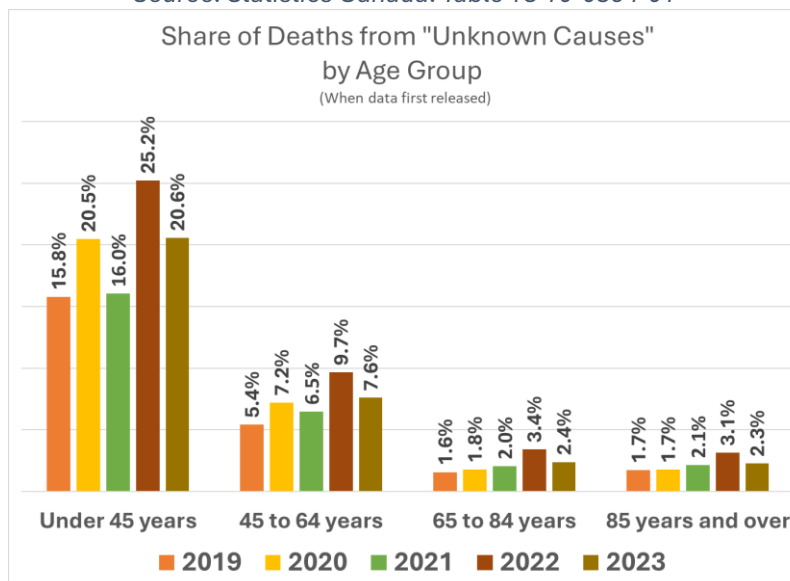
However, with the February updates, 15 percent of 2022 deaths in this age group of those under 45 still remain unclassified in 2025. In total, more than 10,000 deaths from 2020 to 2023 still remain uncategorized in this group, about 6,400 of which are from 2022 and 2023 alone.

The numbers of deaths without a specific classification in the 2022 death statistics were reported as follows: 4,380; 4,440; 5,040; and 3,840 for each age group, youngest to oldest (age under 45, 45 to 64, 65 to 84, and over 85).

Even though these numbers have and will go down as new information is available and with new releases, there are still thousands of unexplained deaths (n=13,250 for 2023) among Canadians.

Such high numbers of deaths with an unknown cause of death can significantly conceal trends in other categories, often for years. Doctors, medical examiners, coders and

Source: Statistics Canada. Table 13-10-0394-01



⁶⁵ These deaths are in the category “Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified [R00 to R99].” Statistics Canada Table 13-10-0155-01. Some deaths are assigned a broad category such as “Symptoms and signs involving the circulatory and respiratory systems [R00-R09]” but when they are hidden in this broad “not elsewhere classified” category, signals and trends in specific causes can be distorted.

⁶⁶ See appendices B for a further breakdown.

statisticians who determine the cause of death and how deaths are reported are failing to meet their obligation of providing timely information.

More than three-quarters of these deaths from unknown causes are awaiting more information or are pending investigation. What kind of information could they be waiting for after four years? Does it really take that long to collect the necessary information?

One might think that these deaths are waiting for autopsies. However, only about 6.4 to 6.6 percent of deaths typically undergo autopsies, a rate which has not changed much over the last five years.⁶⁷ Surely many – if not most – of the unexplained deaths are not waiting for autopsies.

How troubling is the double standard for reporting the cause of deaths! During Covid, federal and provincial authorities were reporting Covid deaths *in real time*. But for these unexplained deaths, the government's health authorities expect Canadians to wait more than two years for a determination as to why a loved one died! This is unacceptably slow.

Statistics are not just tools for analysts to do research; statistics should be available to help policy designers and the public know what is causing so many unexpected deaths in Canada and help prevent them. This terrible lack of urgency to understand their cause not only reflects negatively on Canadian governments at all levels but seems to indicate that they are intentionally avoiding – or even hiding – the true cause of these unexplained deaths.

Statistics Canada notes that the cause of this is provincial reporting delays – but, years on end is unacceptable.

They also note that, “Due to improvements in methodology and timeliness, the duration of data collection has been shortened compared to previous years. As a result, there may have been fewer deaths captured by the time of the release. The 2023 data is considered preliminary.” They also say, “As a result of delays with death registrations, fewer deaths have been captured for Nova Scotia in 2023.”⁶⁸ In other words, we do not even know how many deaths in Nova Scotia are not yet captured by Statistics Canada two years after.

Why are Covid vaccine deaths not recognized?

Doctors and other medical professionals who see patients and deal first-hand with adverse events after vaccination have reported 488 such adverse events “with an outcome of

⁶⁷ The number of deaths known to be subject to autopsy has been between roughly 15,000 and 20,000 in the last ten years, ranging from 5.9 to 6.6 percent of all deaths each year. Statistics Canada Table 13-10-0716-01.

⁶⁸ Statistics Canada, Table: 13-10-0155-01, released on February 19, 2025.
<https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310015501>



death,” as of January 5, 2024.⁶⁹ However, public health officials have thus far refused to recognize the vaccine as the cause of all but four deaths, based on the final Public Health Agency of Canada (PHAC) report, published in January 2024.⁷⁰ PHAC asserts that the other 484 deaths do not meet the necessary criteria, saying the information was incomplete or the evidence insufficient to conclude a vaccine injury. Statistics Canada reports only slightly more deaths caused by the Covid vaccine – 18 from 2021 to 2023.⁷¹ The government and health officials seem not to recognize the Covid vaccine as a factor in excess deaths.

Governments and health authorities practice a glaring double standard between attributing deaths to Covid and attributing deaths to the Covid vaccine. To recognize a Covid death, the WHO has a very encompassing definition, which includes words such as “compatible illness,” “probable,” “assumed,” and “contributing,” all of which easily lead to an over-counting of Covid as the cause of death. To rule out a Covid death, other causes such as trauma must be “clear” to ensure Covid could not possibly have been a factor in the death.⁷²

In stark contrast, for the Covid vaccine, promoted and administered by government agents, the guidelines for determining an *adverse event following immunization* (AEFI) (or a negative reaction from a vaccine, including death) are extremely limiting.⁷³ Deaths are only considered vaccine-related when *all* other possible explanations are ruled out. A national database must record a pattern of similar adverse events linked to the vaccine “over time” before “a signal suggesting a new potential causal association” might be identified. For a new medication, such a database could take years to establish before potential associations would be considered valid. The government’s criteria are designed to reject vaccine-related deaths.

Even when a death occurs very shortly after the Covid vaccine injection, the AEFI is classified as “indeterminate” “if there is insufficient *definitive* evidence” to link it to the

⁶⁹ Public Health Agency of Canada. Canadian COVID-19 vaccination safety report. Ottawa: Public Health Agency of Canada; January 19, 2024. <https://health-infobase.canada.ca/covid-19/vaccine-safety/>. Accessed February 22, 2024.

This report was discontinued in January 2024.

⁷⁰ Public Health Agency of Canada. Canadian COVID-19 vaccination safety report. Ottawa: Public Health Agency of Canada; January 19, 2024. <https://health-infobase.canada.ca/covid-19/vaccine-safety/>. Accessed February 22, 2024.

⁷¹ Statistics Canada. Table 13-10-0391-01 Deaths, by cause, Chapter XXII: Codes for special purposes (U00 to U99). <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039101>. Release February 19, 2025. ICD-10 code U12.

⁷² World Health Organization (WHO) International guidelines for certification and classification (coding) of Covid-19 as cause of death, April 20, 2020. <https://cdn.who.int/media/docs/default-source/classification/icd/covid-19/guidelines-cause-of-death-covid-19-20200420-en.pdf>. Accessed July 7, 2024.

⁷³ World Health Organization. “Causality assessment of an adverse event following immunization (AEFI), 2019. <https://iris.who.int/bitstream/handle/10665/340802/9789241516990-eng.pdf>. Accessed July 7, 2024.

vaccine. Such an overbroad and vague definition makes classifying deaths subjective and subject to the bias of medical authorities. So, when a 20-year-old athlete without any prior health problems dies in his sleep a week after getting injected, their death could easily be deemed as having “insufficient definitive evidence” that it was caused by the Covid vaccine by medical authorities.

Further, the AEFI is deemed *coincidental* (an “inconsistent causal association to immunization”) if there is an “underlying disease condition,” including not only physical illnesses but also mental illnesses. Since many vaccines were given to high-risk elderly people suffering from underlying conditions during the respiratory virus season, many vaccine-caused deaths would be deemed “coincidental” with either Covid or some other underlying physical or mental disease, and therefore not as a Covid vaccine death. All these criteria established by government health officials make it very hard to attribute a death that happened close to receiving the vaccine as an adverse event of the vaccine.⁷⁴

All vaccines cause some AEFIs, including deaths. Though vaccine-related deaths are believed to be quite low for most vaccines, public health authorities appear to recognize that most (or all) vaccines sometimes result in death. However, when it comes to the Covid vaccine, public health authorities appear uninterested in seeking and gathering facts about the potential of vaccine-related deaths.

In short, while governments in Canada adopted extremely broad criteria to classify deaths as being caused by Covid, they set practically unattainable standards for acknowledging deaths caused by the Covid vaccine.

Conclusion

Large numbers of premature deaths of Canadians, young and old, deserve time and attention from us all. Only by having a thorough discussion around the statistics on excess deaths can we prevent more unjustified and harmful infringements on the rights and freedoms of Canadians.

The government’s data on the number and causes of additional and unexpected (excess) deaths in Canada contradicts their preferred narratives about Covid and the response of Canadian governments and bureaucrats. While excess deaths occurred in 2020 and the years that followed, a great many of these additional and unexpected deaths were not from Covid. Although government statistics show Covid to be a leading cause of excess deaths for those aged 85 and over, a significant number of these deaths would have been

⁷⁴ See [Justice Centre report](#) “The rise of excess and unexplained deaths in Canada,” for a discussion of a Quebec senior’s residence doctor who alerted health officials of many deaths coincident with patients receiving the Covid booster.



attributed to other causes if Canada had not adopted the WHO's excessively broad criteria for classifying Covid deaths.

Deaths from stress-related diseases, liver diseases and drug overdoses began to rise with lockdowns. After the introduction of vaccines, Covid deaths continued to rise. Deaths from falls, digestive diseases, ischaemic heart diseases, and nervous system diseases increased noticeably for various age groups in 2022. The vaccines were not as effective as claimed, and might even have contributed to the excess deaths, as indicated by the 2022 excess death peak among young and old Canadians.

Statistics on Covid death counts, hospitalizations, cases, and vaccinations were used by governments worldwide to justify the creation, implementation and imposition of restrictions on their citizens. These policies infringed upon the health, travel, livelihoods, families, social interactions, religious freedom, education, conscience and freedom of expression rights of all Canadians.

It is the duty of politicians, public officials, lawyers, medical professionals, and others in positions of authority to do a risk assessment of any policy they seek to implement and to be knowledgeable about and critical of the statistics they cite as justification for fundamentally changing the lives of Canadians.

More importantly, all Canadians should be encouraged to question and challenge policies, including the quality and relevance of statistics that are used to justify them. Statistics, in and of themselves, are not science as such. Rather, they are datasets and tools defined and compiled by people and organizations with viewpoints and objectives. Statistics and analyses should always be subject to scrutiny.

While most Canadians might want to forget Covid and the lockdowns, the concerning analysis highlighted above, based on publicly available statistics, demands serious attention.

We cannot afford to "move on" without scrutinizing what happened during the years of lockdowns and the intrusive vaccine mandates. We especially ask public officials to carry out their responsibility to investigate the impact of policies in an honest and open manner.

Appendices A, B (“unknown causes”), and C (vaccination rates)

A – Comparison of Excess Death Estimates

As explained in the report, Statistics Canada and other organizations, like the OECD and OWID, use models to calculate excess deaths. For Canada, international organizations source the death numbers from Statistics Canada and use either weekly or annual death counts. They can use data for all ages or data grouped by age that Statistics Canada provides.

The summary below shows how widely the estimates can vary, depending on the model used. The death rate (adjusted for population) used by the Justice Centre compares closely to the OWID estimates. Statistics Canada stopped reporting excess deaths before the end of 2023, but was estimating higher excess deaths from 2020 to 2022 than both the Justice Centre and OWID. The OECD estimates extraordinarily high excess deaths for all four years.

Excess deaths comparison					
	2020	2021	2022	2023	Total
Justice Centre	14,960	13,520	31,370	13,950	73,800
Statistics Canada	16,440	21,420	41,380	N/A	79,240 (3 years only)
Our World in Data	12,460	11,990	30,640	16,480	71,570
OECD	30,150	35,600	60,190	51,380	177,320

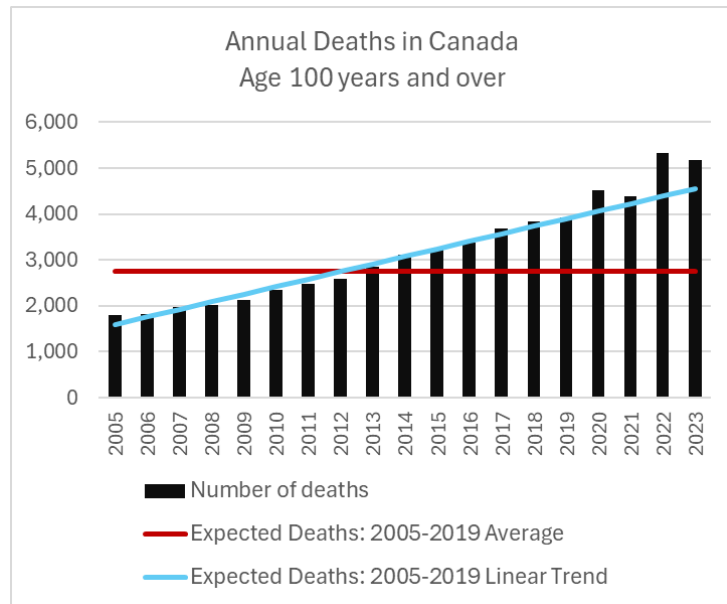
Statisticians can use a straight average over a period, a trendline, or more sophisticated models that include seasonality and population estimates. The differences in the estimated numbers of excess deaths are mostly driven by the calculation method.

A straight average of deaths (whether weekly or annual), as used by the OECD, will generate much higher excess deaths when deaths are trending up. The linear trendline approach used by OWID (weekly data) and the Justice Centre (annual data) accounts for the upward trend in the number of deaths and generates more accurate estimates. Statistics Canada uses a model designed to measure the severity of the annual winter flu season. But their model sets a low-to-moderate peak for each year, which commonly results in “excess deaths” with a bad flu season that results in more deaths than the moderate peak would show is common or expected.



This is not the exact method used by, for example, OECD, but it illustrates how using simple historical averages overestimates excess deaths (the deaths above the red line). The blue trendline is a better approach, counting only the deaths above a trendline as excess. The OECD uses averages for simplicity and transparency, but their model does not generate useful statistics.

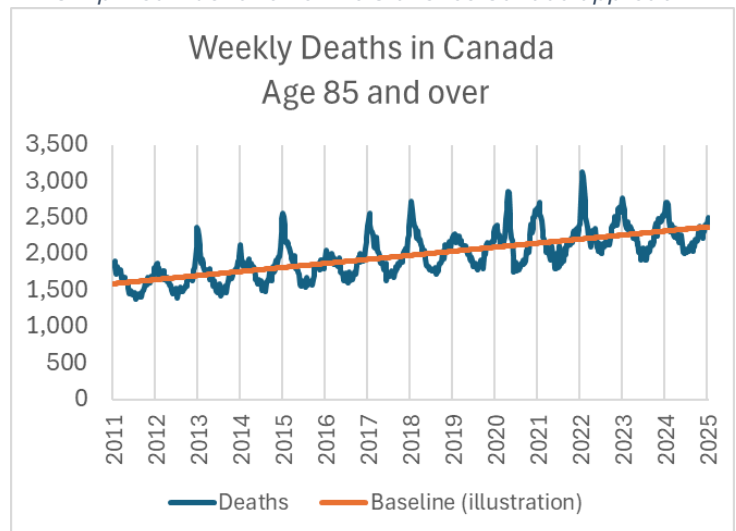
Comparison of Trend versus Average for calculating Expected Deaths



The actual Statistics Canada model would show a baseline of weekly deaths that follows the seasonal pattern with peaks in January that “aims to represent the expected pattern across weeks that *repeats* (emphasis added) from year-to-year.” In other words, some influenza deaths are anticipated and the model measures when deaths are higher than normal.

The chart above shows a straight line, whereas the Statistics Canada weekly calculations would show a curved line that follows the pattern of the typical influenza season with relatively low peaks and valleys, but the illustration is useful, nonetheless. Deaths above the baseline are considered excess. For example, 2012 and 2016 would be normal influenza years with few excess deaths and 2013 and 2015 would be years with excess deaths. The Statistics

Simplified illustration of the Statistics Canada approach



Canada approach removes the normal highs experienced in Canada during “bad” influenza seasons. These estimates were inflated and misleading.

By using this model, Statistics Canada effectively exaggerated the impact of Covid and implied that all excess deaths were unusual. This gave support to the narrative that severe government interventions, including lockdowns and vaccine mandates, were necessary.

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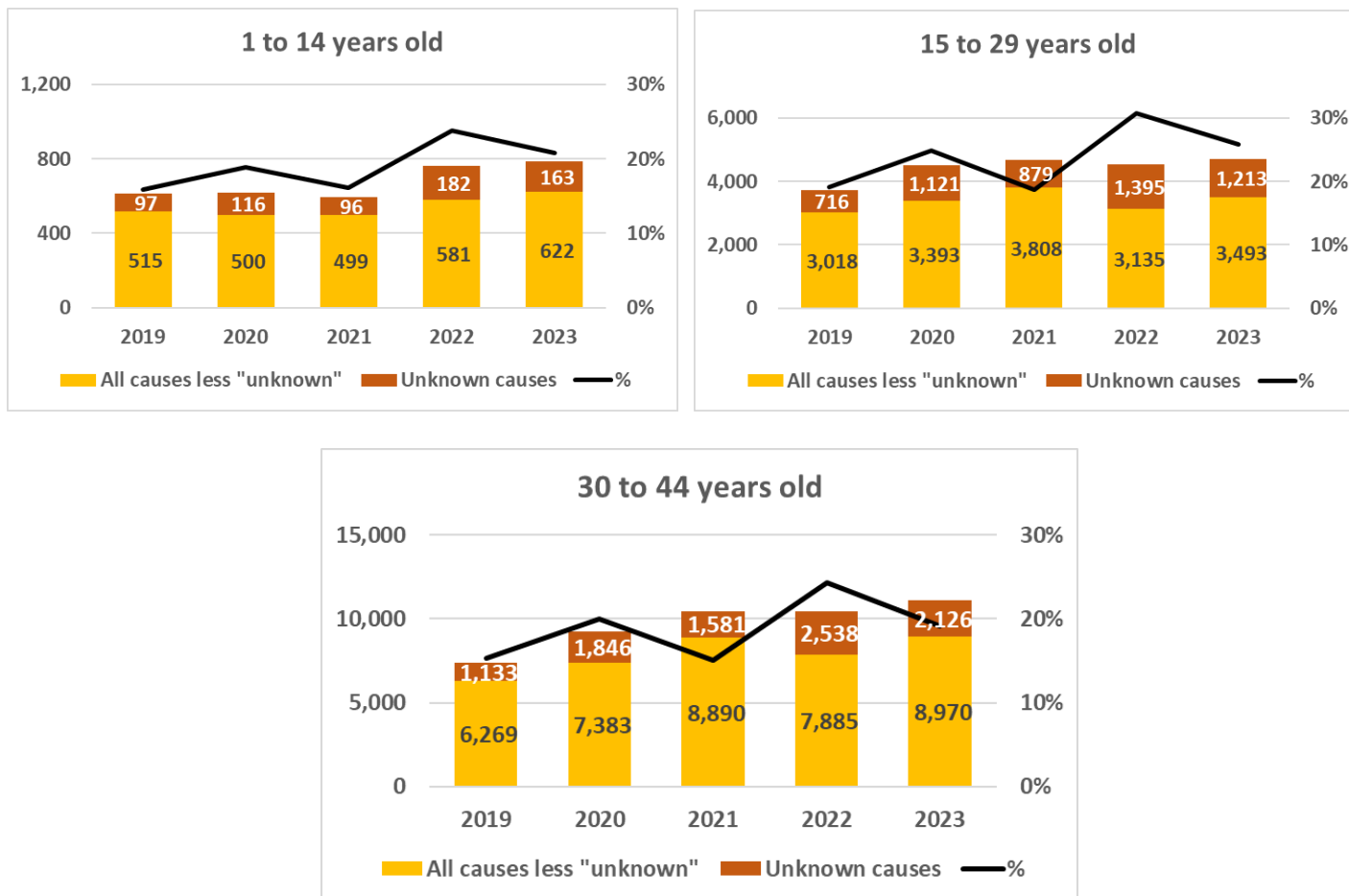
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Justice Centre: [Table 13-10-0709-01 Deaths, by age group and sex](#) Release date: 2024-09-24

Statistics Canada, [Table 17-10-0005-01 Population estimates on July 1, by age and gender](#) Release date: 2025-02-19



B – All-cause deaths & deaths from “unknown” causes
Under 45 years of age
When data first released



Source: Statistics Canada. Table 13-10-0155-01 Deaths, by cause, Chapter XVIII: Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00 to R99), <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310015501>

First year of data release.

2019 - November 26, 2020; **2020** – January 24, 2022; **2021** – August 28, 2023; **2022** – November 27, 2023; **2023** – December 4, 2024 & February 19, 2025 (no change)

Shares and numbers of deaths in category decline in new releases.

C – Covid Vaccination Rates

% of population "fully vaccinated" against Covid-19

		05–11	12–17	18–29	30–39	40–49	50–59	60–69	70–79	80+	All ages
 Canada											
2021-03-06									1.4	7.1	1.5
2021-06-26		-	4.1	14.4	18.6	24.7	32.7	46.9	63.0	71.8	27.0
2021-12-25		1.5	82.6	82.8	83.4	86.9	88.2	92.2	94.9	95.9	76.7
2022-12-04		41.3	80.4	83.2	84.8	87.9	89.7	92.7	95.5	-	80.5
2023-06-18		39.0	78.1	82.2	84.9	88.1	88.8	93.6	97.3	-	80.5

% of population "with first boosters" against Covid-19

		05–11	12–17	18–29	30–39	40–49	50–59	60–69	70–79	80+	All ages
 Canada											
2021-12-25		-	0.3	6.7	9.5	13.0	22.1	33.8	56.8	63.5	18.4
2022-12-04		6.2	18.4	37.3	45.1	54.5	64.4	77.5	86.4	90.6	50.4
2023-06-18		7.5	19.0	37.2	45.4	54.9	63.7	78.2	88.3	93.7	50.9

% of population "with second boosters" against Covid-19

		05–11	12–17	18–29	30–39	40–49	50–59	60–69	70–79	80+	All ages
 Canada											
2022-06-19		-	-	0.3	0.5	1.0	3.1	19.5	39.8	48.1	8.9
2022-12-04		-	3.4	6.5	11.7	16.0	24.9	44.1	61.2	66.9	21.9
2023-06-18		0.2	4.5	8.2	14.0	19.0	28.2	48.9	66.5	73.2	24.8

Source: Government of Canada. <https://health-infobase.canada.ca/covid-19/vaccination-coverage/>



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