

Provisional death counts and excess mortality, January to September 2020

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COVID-19 has had and continues to have a clear impact on communities and families across the country and many have lost family members and friends. To understand both the direct and indirect consequences of the pandemic, it is important to measure excess mortality, which occurs when there are more deaths during a period of time than what would be expected for that period. It should be noted that, even without a pandemic, there is always some variation in the number of people who die in a given week from year to year. This means that the number of deaths that would be expected falls within a certain range of values.

There were more than 7,500 excess deaths across Canada from March to the start of June 2020, which aligns closely with the 8,345 deaths caused by COVID-19 over that same period. By July, the weekly number of deaths was within the range of what would be expected had there been no pandemic. At the national level, no excess mortality was observed through to the end of September. British Columbia was the only province to record consecutive weeks of excess deaths in August and September, which may reflect increases in the number of deaths due to accidental overdoses.

Today, as part of Statistics Canada's commitment to provide timely and relevant information on COVID-19 and its impact on Canadians, an updated provisional dataset from the Canadian Vital Statistics – Death Database covering the period from January to the end of September is now available.

Updates were also made to the provisional death estimates, which have been adjusted, where possible, to account for the incomplete nature of the counts. The provisional estimates will continue to be revised in future releases as more information is reported by provincial and territorial vital statistics agencies.

During the first wave of COVID-19, individuals age 85 and older account for over half of excess deaths

From the end of March to the start of June, there were an estimated 7,576 more deaths than what would have been expected if there was no pandemic. Of these excess deaths, 52% were individuals age 85 and older, 36% were aged 65-84 and 12% were younger than 65.

This reflects the fact that deaths caused directly by COVID-19 disproportionately affected the elderly. Over the same period of time, 8,345 people died due to COVID-19 and 4,615 (55%) of those individuals were aged 85 and older.

Excess deaths over this period have affected females (53%) more than males (47%). This is, again, in line with patterns for deaths due to COVID-19 itself. From March until June, 4,515 (54%) females died due to COVID-19 compared with 3,830 (46%) males. The difference between the two sexes comes from deaths among people over the age of 85, where more women than men have died of the disease. In the younger age groups, more men than women have died of COVID-19.

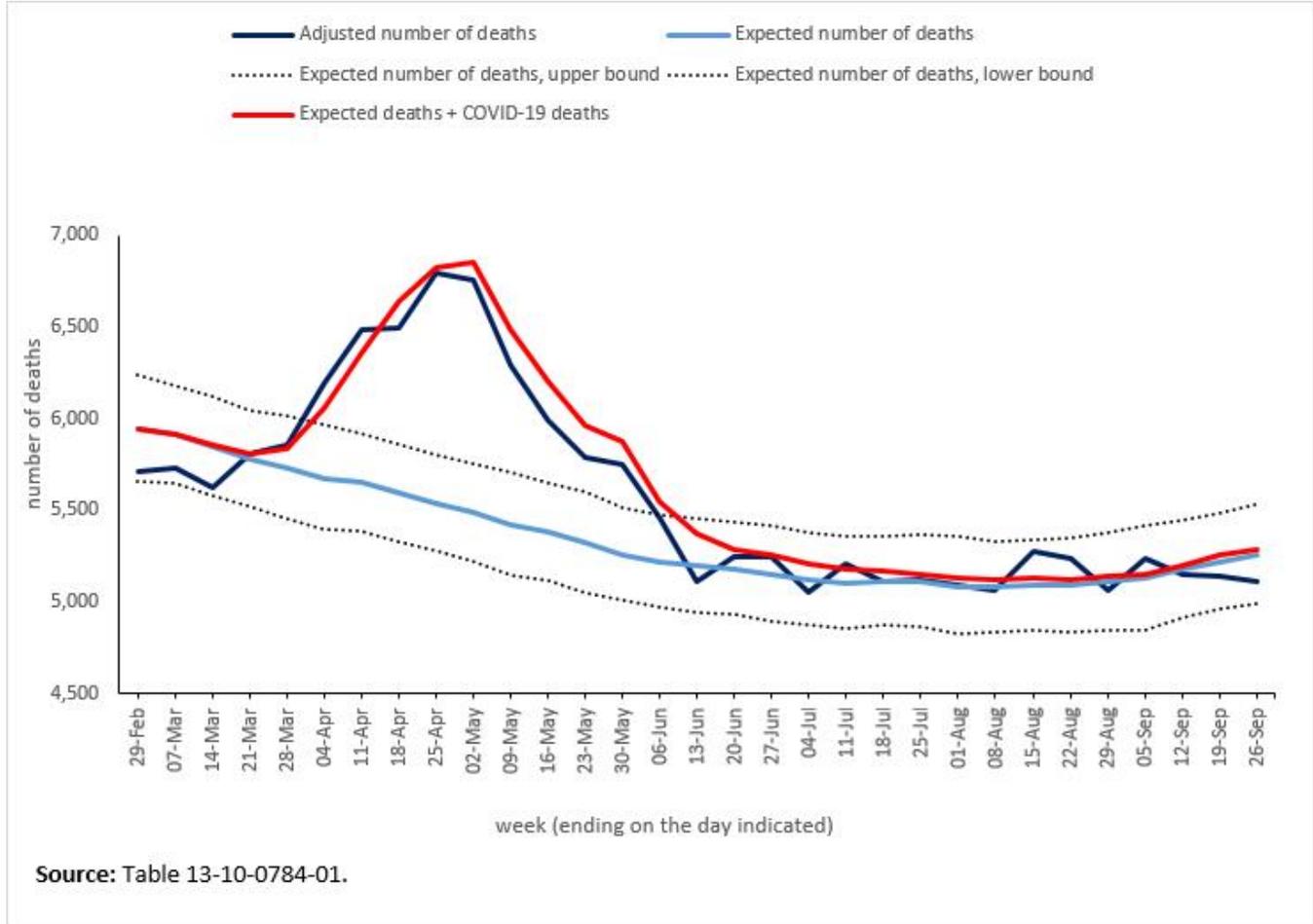
British Columbia experiences excess deaths in August and September

While, at the national level, the number of deaths observed in August and September was in the range of what was expected, an excess of 807 deaths was observed in British Columbia. Males accounted for over two-thirds (69%) of this excess, with men under the age of 65 accounting for about one-third (34%). Over that same period, there were fewer than 40 COVID-19 deaths. However, beyond COVID-19 itself, increases and decreases in mortality could also be due to indirect consequences related to measures put in place to address the pandemic, such as missed or delayed medical interventions, fewer traffic-related incidents and other possible changes in behaviour such as increased substance use. For example, in British Columbia, the Chief Coroner's Office has reported increases in deaths due to overdoses since the start of the pandemic.



Statistics Canada will continue to provide timely information on a regular basis on excess deaths as it becomes available throughout the pandemic.

Infographic 1 – Provisional adjusted weekly number of deaths, expected number of deaths and COVID-19 deaths, Canada



Note to readers

The data released today are provisional as they are not based on all deaths that occurred during the reference period due to reporting delays, and do not include Yukon. Provisional death counts are based on what is reported to Statistics Canada by the provincial and territorial vital statistics registries. Provisional death estimates have been adjusted to account for incomplete data, where possible. The numbers of excess deaths discussed in this analysis refer to provisional estimates. Information on the methods used can be found in the Definitions, data sources and methods for Survey 3233— [Vital Statistics - Death Database](#).

The provisional death counts and estimates released today for the first 40 weeks of 2020 may not match figures from other sources, such as media reports, or counts and estimates from provincial or territorial health authorities and other agencies.

References to the first wave and to the period from the end of March to the start of June refer to the period from the week ending March 28 to the week ending June 6. References to the period from August to September refer to the period from the week ending July 25 to the week ending September 26.

The number of deaths in Canada caused by COVID-19 comes from the Canadian Vital Statistics – Death Database (CVSD). The CVSD is the authoritative source for death information in Canada as it includes all registered deaths and the causes of death have been certified by a medical professional, coroner or medical examiner. For more information on COVID-19 as a cause of death, please refer to the study "[COVID-19 death comorbidities in Canada](#)."

Information on surveillance data related to COVID-19 reported by provincial and territorial health authorities can be found here: [Provincial and territorial resources for COVID-19](#).

More information on excess mortality during the COVID-19 pandemic in Canada is available in the article "[Excess mortality in Canada during the COVID-19 pandemic](#)."

Available tables: [13-10-0768-01](#) and [13-10-0783-01](#) to [13-10-0785-01](#) .

Definitions, data sources and methods: survey number [3233](#).

To facilitate the identification of trends in excess deaths by province and territory, the interactive visual tool "[Weekly adjusted number of deaths, expected number of deaths and estimates of excess mortality: Interactive Tool](#)" has been updated.

To facilitate the identification of trends in the number of weekly deaths by age group and sex, and by province and territory, the interactive visual tool "[Weekly death counts: Interactive tool](#)" has been updated.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; STATCAN.infostats-infostats.STATCAN@canada.ca) or Media Relations (613-951-4636; STATCAN.mediahotline-ligneinfomedias.STATCAN@canada.ca).