

QUICK EPIDEMIOLOGICAL SUMMARY

(ARCHIVED) Hospitalizations and Deaths among COVID-19 Cases in Ontario: Waves 1, 2, 3 and 4

Published: April 2022

Archived: March 2023

ARCHIVED DOCUMENT

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Purpose

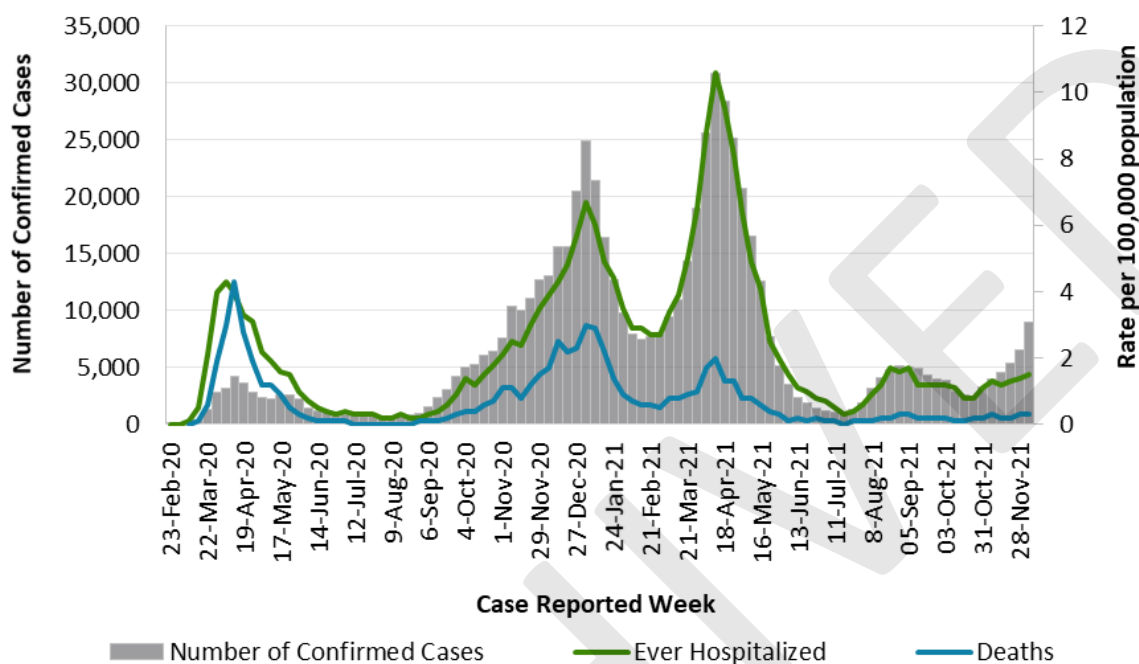
This brief report presents information on COVID-19 cases with a focus on severe outcomes. It examines differences over time and between waves. For the purposes of this analysis severe outcomes are defined as COVID-19 cases who were ever hospitalized or died.

Summary

- The rate of deaths in COVID-19 cases per 100,000 people was highest in wave 1 and decreased with each subsequent wave. The reverse was true for the rate per 100,000 people of cases ever hospitalized with the exception of wave 4 which had the lowest hospitalization rate of all four waves.
- The proportion of COVID-19 cases that were ever hospitalized was noticeably highest in wave 1 for all age groups except the 80+ age group. Among those 80 years and over the proportion increased slightly from wave 1 (25.1%) to wave 2 (26.1%) before increasing more substantially in wave 3 (40.9%) and then decreasing in wave 4 (32.8%).
- The proportion of deaths in COVID-19 cases by wave and age group was highest for cases reported in wave 1 overall (6.9%). The proportion of deaths declined noticeably from wave 1 compared to wave 2 in the 60-79 age (10.4% to 3.6%) and the 80+ age groups (32.6% to 20.1%). The proportion of COVID-19 cases that died was the highest in the 80+ age group in all four waves.

Results

Figure 1. Incidence of COVID-19 cases and number of cases with severe outcomes over time by case reported week



Note: December 12 to 14 data are not presented because they form a partial week.

Figure 2. Proportion of COVID-19 cases that were ever hospitalized by age group and COVID-19 wave

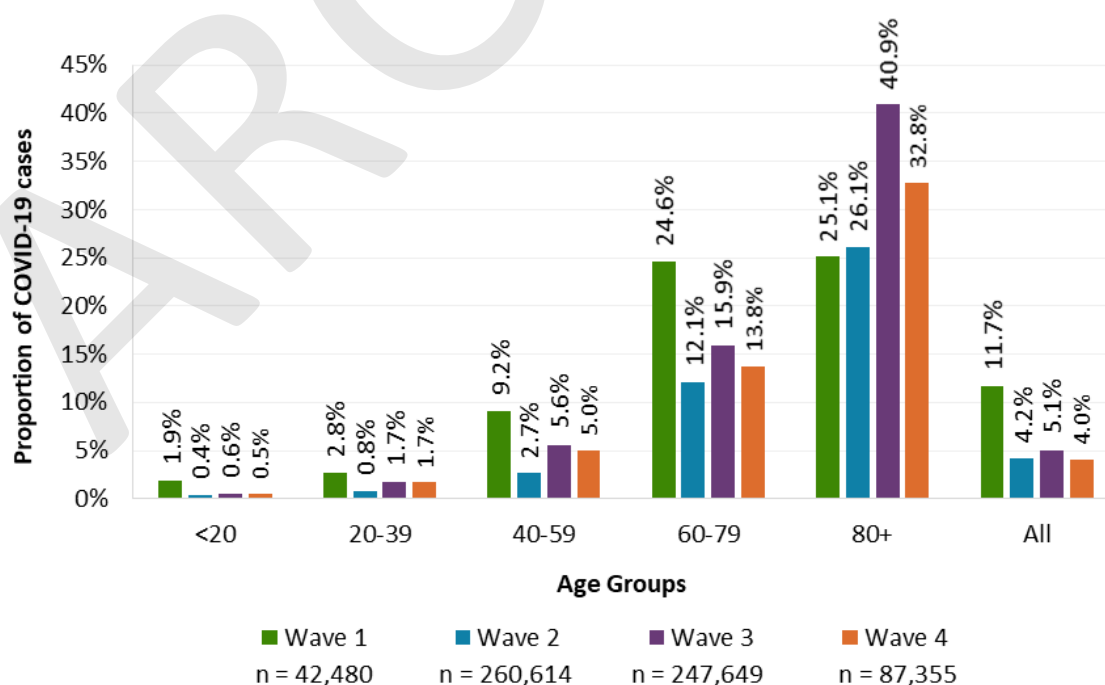
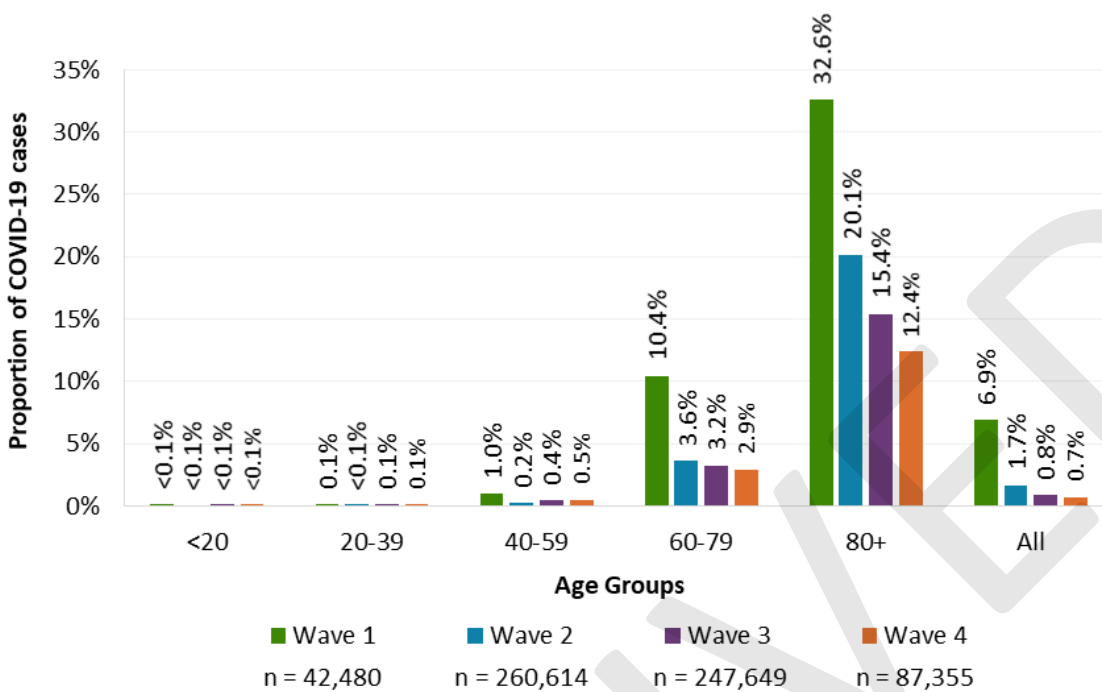


Figure 3. Proportion of COVID-19 cases that died by age group and COVID-19 wave



Data source and Caveats

- The data for this report were based on information successfully extracted from the Public Health Case and Contact Management Solution (CCM) for all PHUs by PHO as of **March 27, 2022 at 1 p.m.** for cases reported from May 1, 2021 onwards and as of **March 24, 2022 at 9 a.m.** for cases reported up to April 30, 2021.
- For information on COVID-19 data, refer to the [Ontario COVID-19 Data Tool](#).
- COVID-19 waves refer to COVID-19 cases reported week using the following dates:
 - Wave 1: February 26, 2020 to August 31, 2020 (length of wave 188 days)
 - The week starting February 23, 2020 presented in Figure 1 contains data from February 26 on.
 - Wave 2: September 1, 2020 to February 28, 2021 (length of wave 181 days)
 - Wave 3: March 1, 2021 to July 31, 2021 (length of wave 153 days)
 - Wave 4: August 1, 2021 to December 14, 2021 (length of wave 136 days)

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Hospitalizations and deaths among COVID-19 cases in Ontario by wave: waves 1, 2, 3 and 4. Toronto, ON: Queen's Printer for Ontario; 2022.

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