

QUICK EPIDEMIOLOGICAL SUMMARY

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

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 has the lowest hospitalization rate of all four waves to date.
- 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 (25.2%) to wave 2 (26.0%) before increasing more substantially in wave 3 (40.9%) and then decreasing in wave 4 (32.6%).
- The proportion of deaths in COVID-19 cases by wave and age group was highest for cases reported in wave 1 overall (7.0%). The proportion of deaths declined noticeably from wave 1 compared to wave 2 in the 60-79 age (10.5% to 3.1%) and the 80+ age groups (33.1% to 20.7%). 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

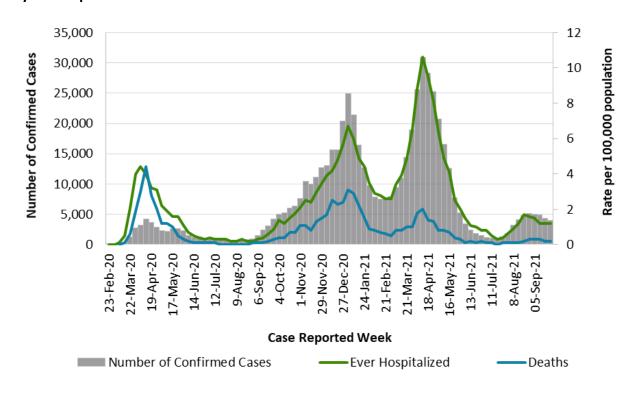
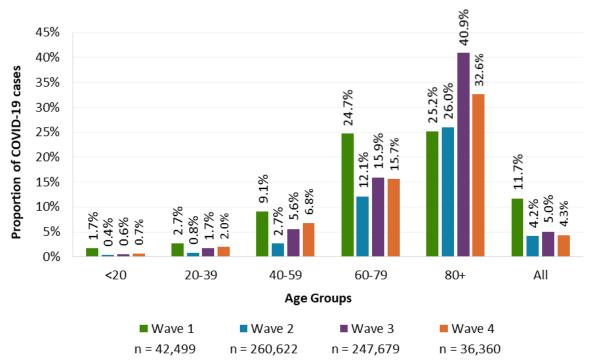
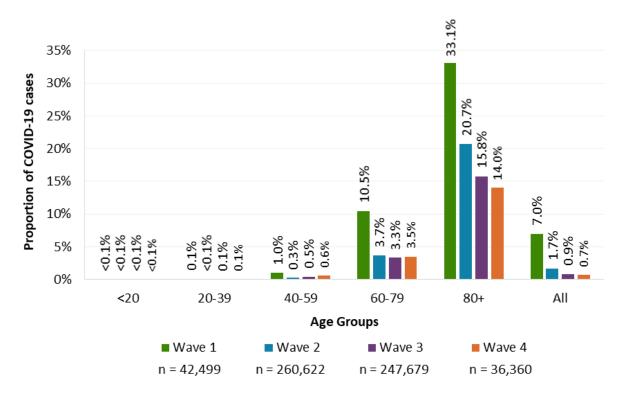


Figure 2. Proportion of COVID-19 cases that were ever hospitalized by age group and COVID-19 wave







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 October 26, 2021 at 1
 p.m. for cases reported from February 1, 2021 onwards and as of October 26, 2021 at 9 a.m. for
 cases reported up to January 31, 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 onwards (data presented up to September 30, 2021)

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Hospitalizations and deaths among COVID-19 cases in Ontario by wave. Toronto, ON: Queen's Printer for Ontario; 2021.

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