



COVID-19 Epidemiology Weekly Supplement

OTTAWA PUBLIC HEALTH. Report compiled on July 22, 2020, 11:00 am

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Purpose

This Weekly Supplement provides an epidemiologic summary of COVID-19 activity in Ottawa to date. The report includes the most current information available from the COVID-19 Ottawa Database (COD) and the integrated Public Health Information System (iPHIS) as of 2:00 p.m. July 21, 2020.

Please visit the [Ottawa COVID-19 Dashboard](#) for additional information on cases and deaths, outbreaks and core indicators for COVID-19 monitoring.

Summary

- As of 2:00 p.m. on July 21, 2020, OPH is investigating **2,320** lab-confirmed cases among Ottawa residents.
- Over the past 10 days, there has been a surge in the number and rate of confirmed COVID-19 infections, primarily among younger adults and youth.
- No source was identified for 26% of the 171 non-institutionalized cases with episode dates during July 5 – July 19; these cases are considered community-acquired.
- Females have a higher rate (256 per 100,000) of confirmed COVID-19 infections than males (183 per 100,000).
- A total of 250 (11%) Ottawa residents with confirmed COVID-19 have been hospitalized, including 62 (3%) who were admitted to the ICU.
- There have been **263 deaths** in total.
- There are 6 ongoing outbreaks in institutions.



Cases

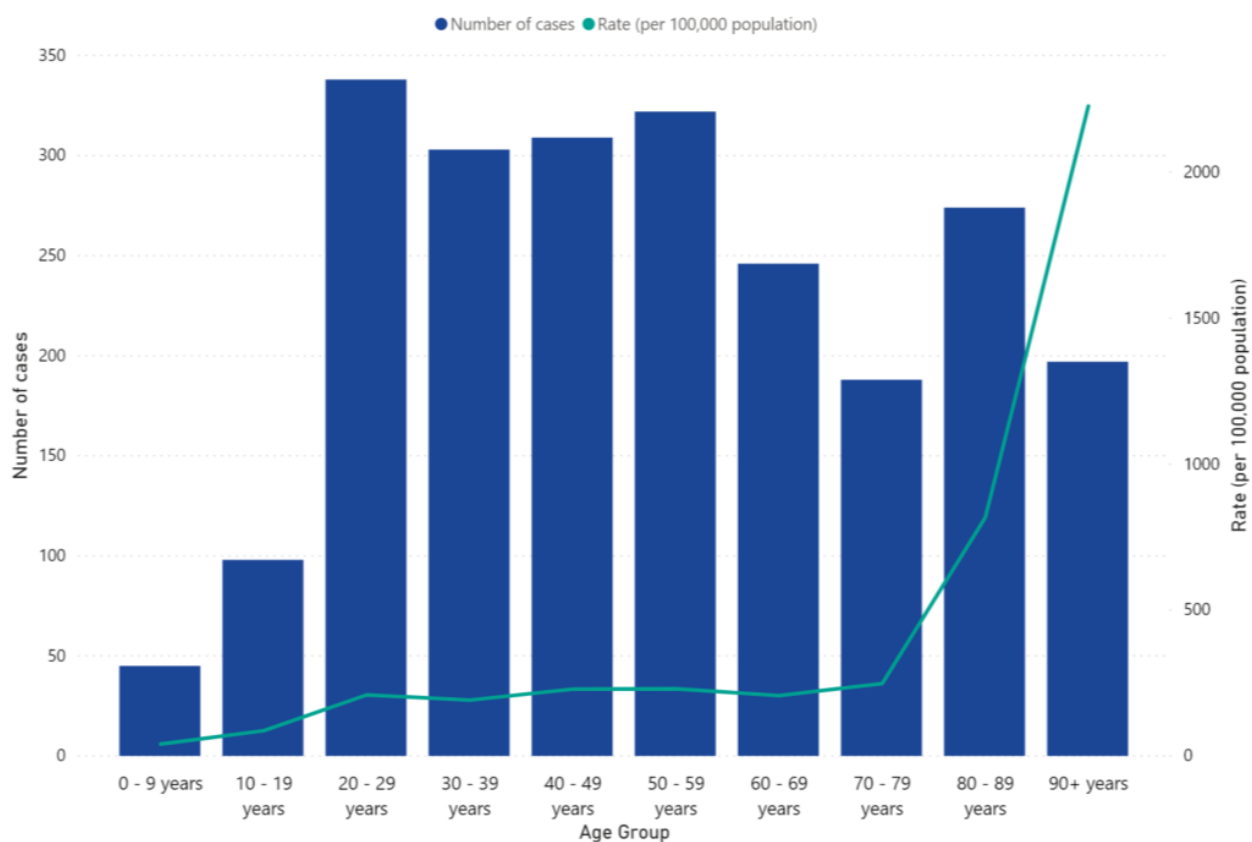
Table 1. Ottawa residents with confirmed COVID-19 (n=2,320), by gender

Gender	Number of cases (%)	Rate (per 100,000 population)
Female	1,373 (59%)	256
Male	945 (41%)	183
Unknown	2 (0.1%)	-

Notes:

1. Data on cases are from the COD as of 2:00 p.m. on July 21, 2020.
2. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
3. Rates per 100,000 were calculated using Ottawa population projection data for 2020 from Ontario Ministry of Health, IntelliHEALTH Ontario, extracted on November 26, 2019.

Figure 1: Ottawa residents with confirmed COVID-19 (n=2,320), by age group



Notes:

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3. Rates per 100,000 were calculated using Ottawa population projection data for 2020 from Ontario Ministry of Health, IntelliHEALTH Ontario, extracted on November 26, 2019.



Figure 2a: Cumulative rates of confirmed COVID-19 cases among Ottawa residents (n=2,320) by age group, all ages

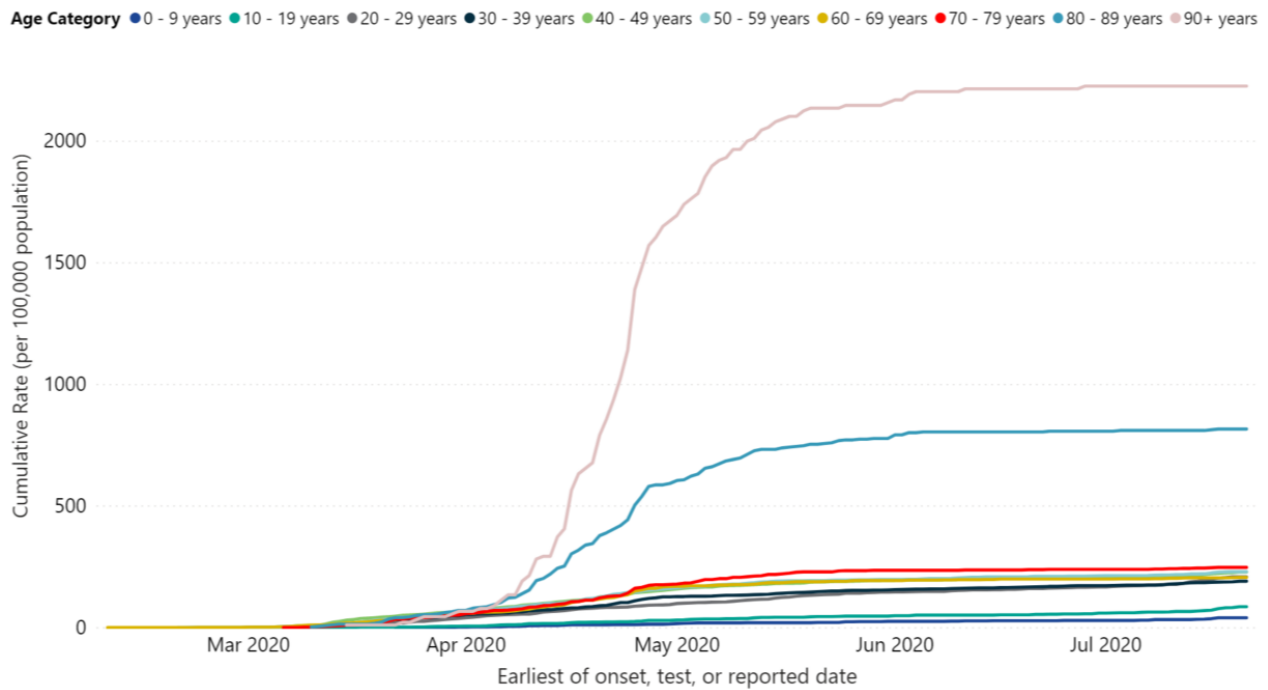
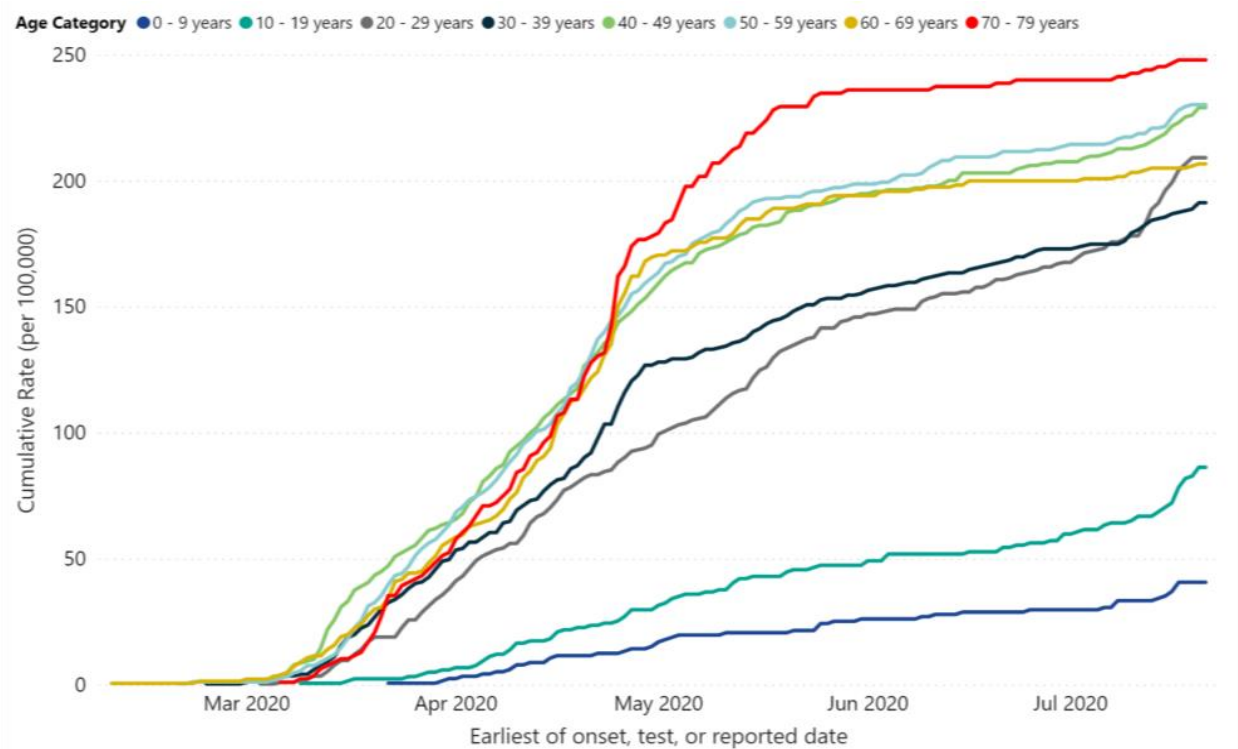


Figure 2b: Cumulative rates of confirmed COVID-19 cases among Ottawa residents age 0-79 years (n=1,849), by age group



Notes:

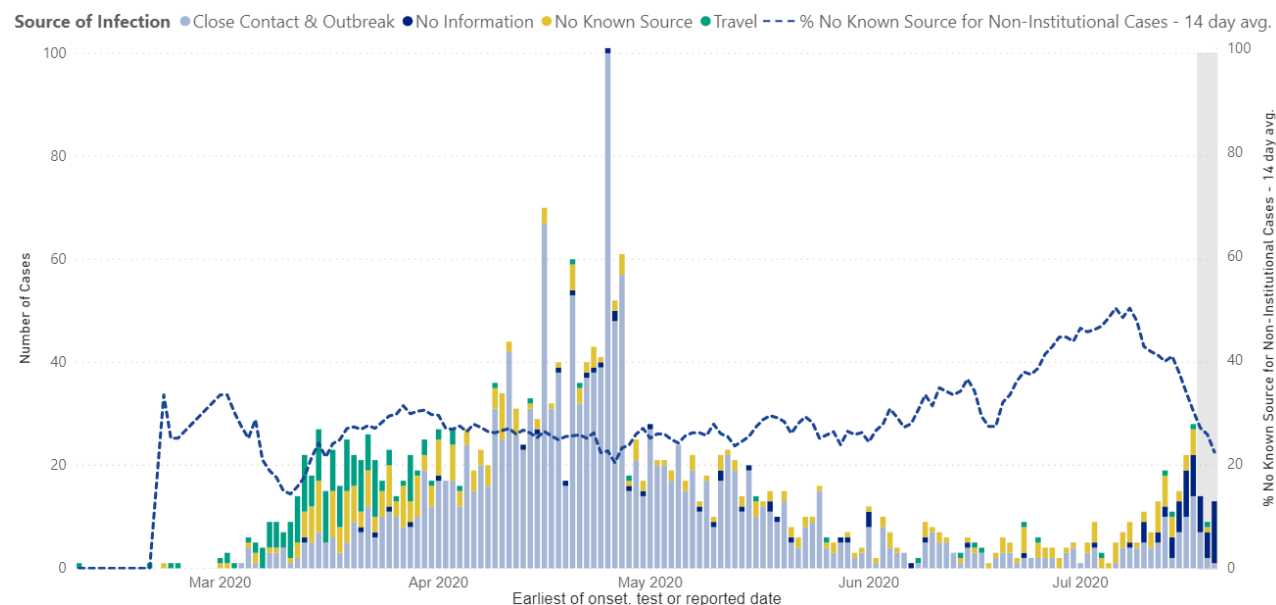
1. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
2. Rates per 100,000 were calculated using Ottawa population projection data for 2020 from Ontario Ministry of Health, IntelliHEALTH Ontario, extracted on November 26, 2019.



Source of infection

No source was identified for 26% of the 171 non-institutionalized cases with episode dates during July 5 – July 19.

Figure 3: Epidemiological curve of Ottawa residents with confirmed COVID-19, by the earliest of onset, test and reported date, by source of infection (n=2,320)

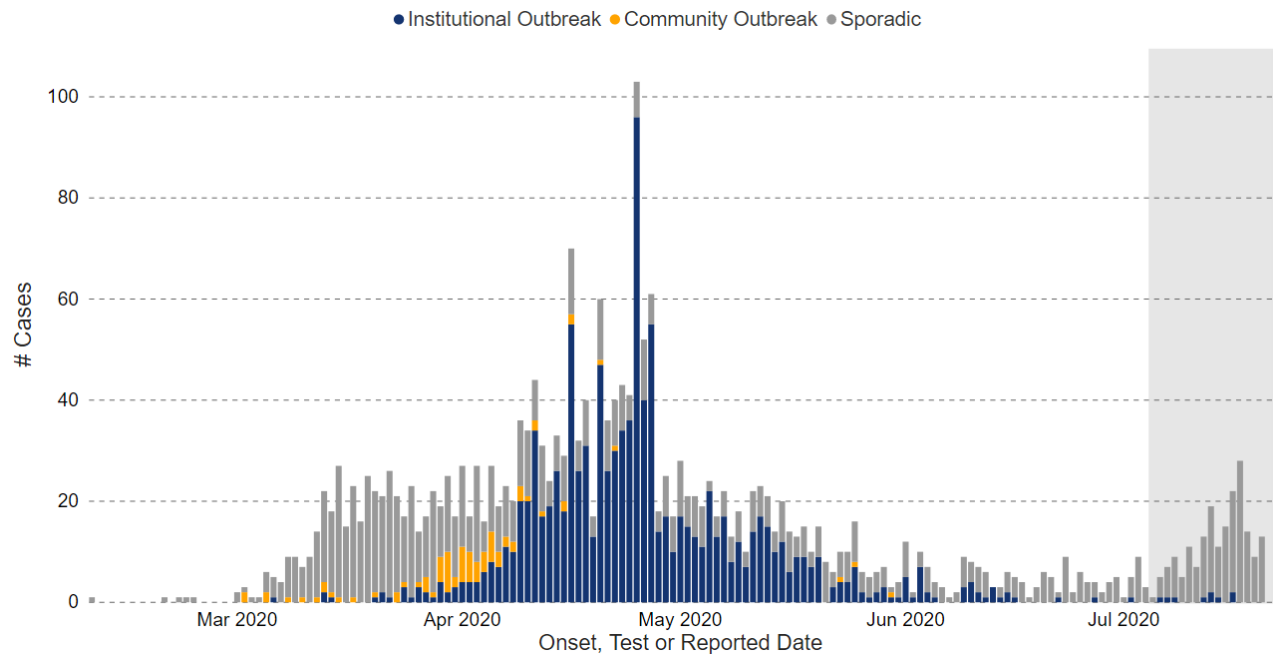


Notes:

1. Data are from the COD as of 2:00 pm on July 21, 2020.
2. Source of infection is allocated using a hierarchy: Related to travel prior to April 1, 2020 > Close contact of a known case or part of a community or institutional outbreak > Related to travel since April 1, 2020 > No known source of infection > Missing.
3. The percent of cases with unknown source, during the current day and previous 13 days, is calculated as the number of cases with no known source among cases whose source of infection is not an institutional outbreak. It is a rolling average of the 14 days ending on a given day.
4. The percent of cases with no known source is unstable during time periods with few cases.
5. As cases are investigated and more information is available, the distribution of cases by date and source of infection is updated.
6. The distribution of the source of infection among confirmed cases is impacted by the provincial guidance on testing.
7. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
8. Surveillance testing for COVID-19 began in long term care facilities on April 25, 2020.
9. The number of reported cases underestimates the actual number of infections. Information on overall infection rates in Canada will not be available until large studies on COVID-19 antibody presence in blood serum are conducted. Based on available information, the actual number of infections may lie from 5 to 30 times or more than the reported number of cases.



Figure 4. Epidemiological curve of Ottawa residents with confirmed COVID-19, by the EARLIEST of onset, test and reported date, by outbreak association† (n=2,320)



Notes:

1. Data are from the COD as of 2:00 p.m. on July 21, 2020.
2. As the case is investigated and more information is available, the dates in the graph are updated.
3. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
4. †Cases are associated with a specific, isolated community outbreak; a healthcare institutional outbreak; or no known outbreak (i.e., sporadic).
5. A patient's exposure may have occurred up to 14 days prior to onset of symptoms.
6. *Symptomatic cases occurring in approximately the last 14 days are likely under-reported due to the time for individuals to seek medical assessment, availability of testing, and receipt of test results.
7. Healthcare institutions include long term care facilities, retirement homes, and hospitals.
8. § Surveillance testing for COVID-19 began in long term care facilities on April 25, 2020.
9. The number of reported confirmed community cases underestimates the actual number of infections. Information on overall infection rates in Canada will not be available until large studies on COVID-19 antibody presence in blood serum are conducted. Based on available information, the actual number of infections may lie from 5 to 30 times or more than the reported number of cases.¹

¹ Richterich P. Severe underestimation of COVID-19 case numbers: Effect of epidemic growth rate and test restrictions. *medRxiv*. April 2020: 2020.04.13. doi.org/10.1101/2020.04.13.20064220



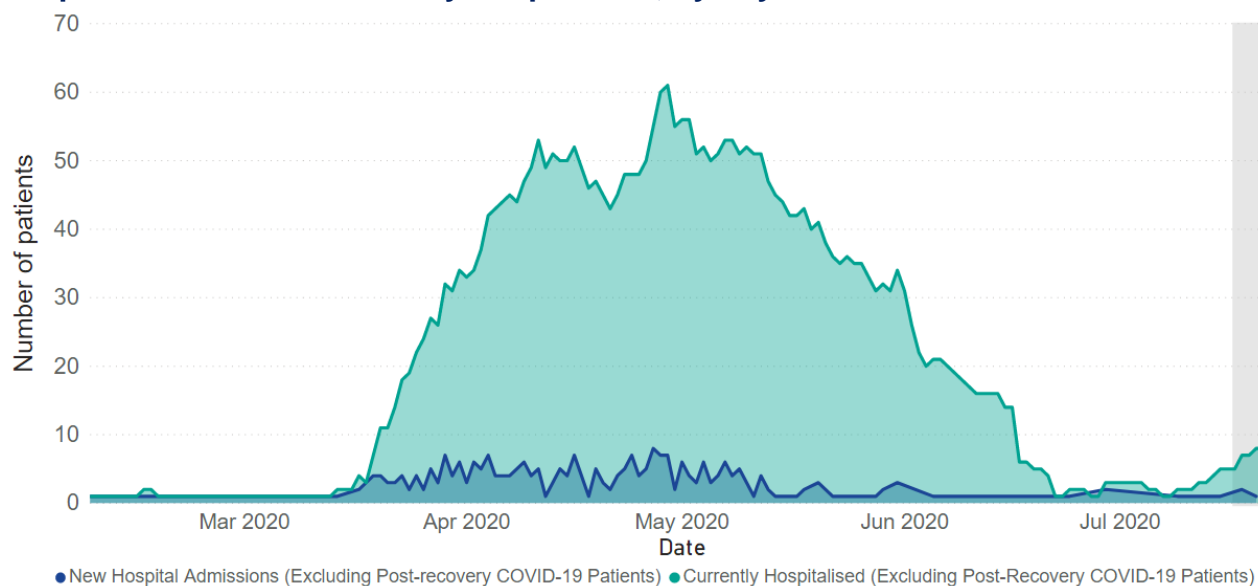
Severity of Cases

The data in Figure 4 present information about Ottawa residents with COVID-19 who have been admitted to hospitals in Ottawa. These indicators help us monitor the level and severity of infection within the City.

The number of hospital admissions recorded in the past 3-5 days should be considered preliminary as hospital data are still being received and entered for this time period.

This measure is intended to be an indicator of hospitalizations from new COVID-19 infections. Therefore, the data do not include hospitalizations for Ottawa residents with confirmed COVID-19 whose COVID-19 infection was deemed resolved and are subsequently hospitalized, due to sequelae (lingering effects) of COVID-19 or reasons other than COVID-19.

Figure 5. Number of Ottawa residents with confirmed COVID-19 newly admitted to hospital and number currently hospitalized, by day



Notes:

1. Data are from the COD as of 2:00 p.m. on July 21, 2020. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
2. The light green curve represents the number of COVID-19 patients hospitalized. The dark blue curve represents the number of newly hospitalized COVID-19 patients.
3. This measure is intended to be an indicator of hospitalizations from new COVID-19 infections. Therefore, the data do not include hospitalizations for Ottawa residents with confirmed COVID-19 whose COVID-19 infection was deemed resolved and are subsequently hospitalized, due to sequelae (lingering effects) of COVID-19 or reasons other than COVID-19.
4. New admissions, discharges, deaths, and data entry lags contribute to daily fluctuations in the number of patients currently in hospital making comparisons to the previous day difficult. New hospital admissions and counts of currently in hospital may lag and are subject to change as the hospitalization information is tied to case investigation. Comparisons should not be made between the number of patients currently in hospital and new hospital admissions since hospitalization information is only updated once a patient's COVID-19 infection is confirmed. Admission information would then be updated retrospectively. For example, there can be a delay between when a patient is admitted to hospital, tested for COVID-19, and receive test results. If positive results are received, a case investigation begins and their hospitalization information is updated, resulting in a lag in the newly admitted and currently hospitalized information.



Table 2. Age of Ottawa residents with confirmed COVID-19 that have been hospitalized (cumulative) and in intensive care (cumulative) (n=2,320)

Measure	Hospitalizations (% of cases within age group)	ICU Admissions (% of cases within age group)	Deaths (% of cases within age group)
Age Group			
0 to 9 years	0	0	0
10 to 19 years	0	0	0
20 to 29 years	4 (1%)	0	0
30 to 39 years	13 (4%)	4 (1%)	1 (<1%)
40 to 49 years	16 (5%)	6 (2%)	0
50 to 59 years	42 (13%)	18 (6%)	7 (2%)
60 to 69 years	52 (21%)	15 (6%)	19 (8%)
70 to 79 years	49 (26%)	12 (6%)	38 (20%)
80 to 89 years	49 (18%)	6 (2%)	106 (39%)
90+ years	25 (13%)	1 (<1%)	92 (47%)
Unknown	0	0	0
Median age	70 years	63 years	87 years
Age range	24 – 102 years	32 – 90 years	39 – 105 years
Total	250 (11%)	62 (3%)	263 (11%)

Notes:

1. Data are from the COD as of 2:00 p.m. on July 21, 2020.
2. This measure is intended to be an indicator of hospitalizations from new COVID-19 infections. Therefore, the data do not include hospitalizations for Ottawa residents with confirmed COVID-19 whose COVID-19 infection was deemed resolved and are subsequently hospitalized, due to sequelae (lingering effects) of COVID-19 or reasons other than COVID-19.
3. The percent of hospitalizations, ICU admissions, and deaths by age group uses the number of cases for each age group as the denominator.

Table 3. COVID-19 volume of Ottawa residents in Ottawa hospitals

Measure	July 21, 2020	7-day median	30-day median
Currently hospitalized	8	7	3
Newly hospitalized*	0	0	0
Currently in intensive care	3	1	1

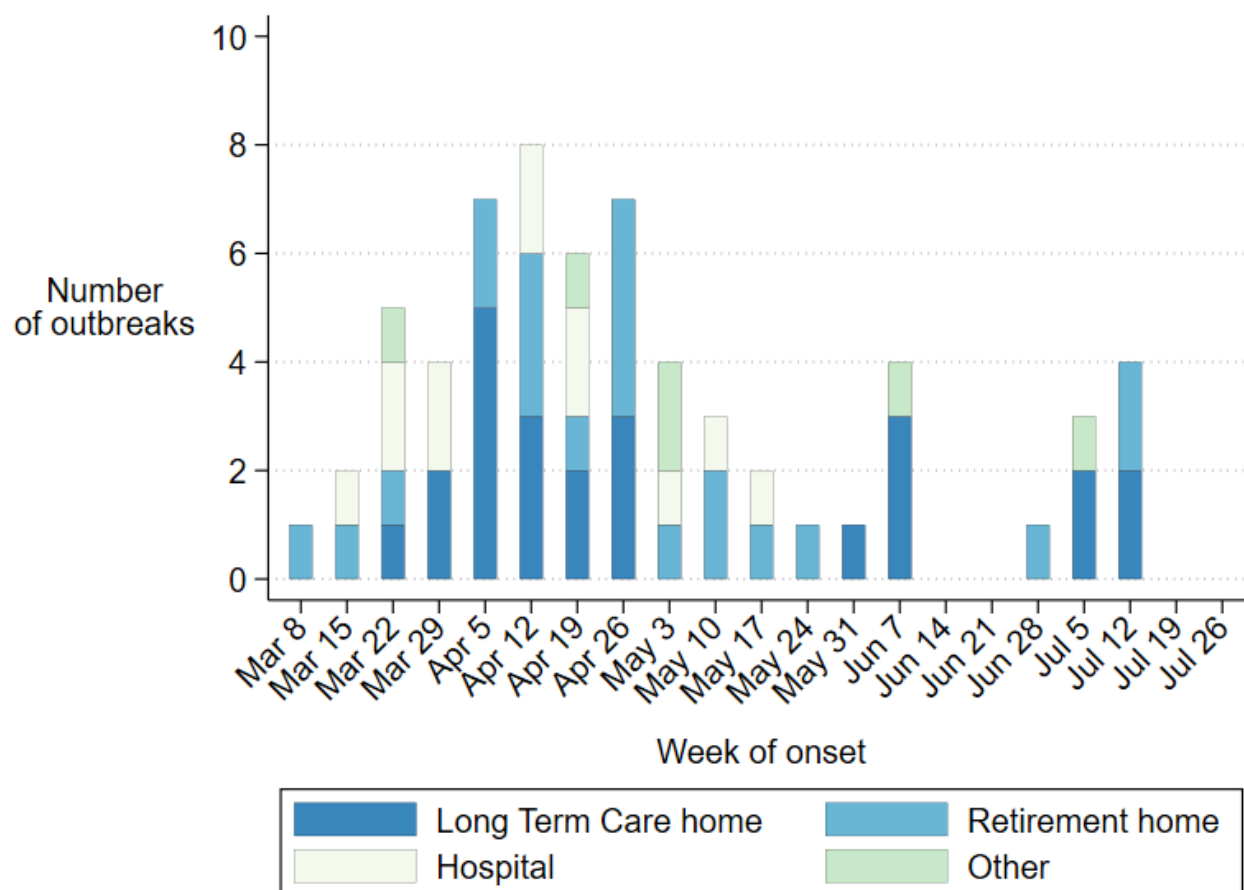
Notes:

1. Data are from the COD as of 2:00 p.m. on July 21, 2020.
2. Ottawa hospitals reporting inpatient data include The Children’s Hospital of Eastern Ontario, The Ottawa Hospital, Queensway Carleton Hospital, The Montfort Hospital, The University of Ottawa Heart Institute, The Royal Ottawa, and Bruyère Continuing Care.
3. Ottawa hospitals reporting intensive care data include The Children’s Hospital of Eastern Ontario, The Ottawa Hospital, Queensway Carleton Hospital, The Montfort Hospital and The University of Ottawa Heart Institute.
4. *Newly hospitalized refers to most current day for which data are available.



Outbreaks

Figure 6: Total number of COVID-19 outbreaks in Ottawa institutions⁴



Notes:

1. Data are from iPHIS as of 2:00 pm on July 21, 2020.
2. 57 outbreaks are closed and 6 are active. Investigation and data entry are ongoing.
3. These outbreaks reflect the definitions at the time they were declared open.
4. Institutions include long-term care homes, retirement homes, public hospitals, and other institutions (e.g. group homes, shelters, assisted living).

There have been 8 community outbreaks in Ottawa. There are currently no ongoing community outbreaks.

Table 4. Confirmed community outbreaks of COVID-19 in Ottawa

Setting	Ongoing Outbreaks	Closed Outbreaks	Cases	Deaths
Workplace	0	7	72	1
Residential	0	1	14	0
Total	0	8	86	1

Notes:

1. Data are from the COD as of 2:00 p.m. on July 21, 2020.
2. In workplace settings, the occurrence of two or more cases of laboratory-confirmed COVID-19 with an epidemiological link (i.e., there is reasonable probability of acquisition in the workplace) is considered an outbreak.



Please use the following citation when referencing this document:

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Ottawa (ON): Ottawa Public Health; 2020.

For further information about COVID-19 in Ottawa, visit ottawapublichealth.ca.



Data Tables

Data table for Figure 1 (Age of Ottawa residents with confirmed COVID-19)

Age	Number of Cases	Population	Rate (per 100,000)
0-9 years	45	109,973	41
10-19 years	98	113,243	87
20 to 29 years	338	161,498	209
30 to 39 years	303	158,259	191
40 to 49 years	309	134,815	229
50 to 59 years	322	139,786	230
60 to 69 years	246	118,913	207
70 to 79 years	188	75,781	248
80 to 89 years	274	33,540	817
90+ years	197	8,848	2,226
Total	2,320	1,054,656	220

Data table for Figures 2a and 2b are available on [Open Ottawa](#) (Excel file).

Data table for Figure 3 are available on [Open Ottawa](#) (csv file).

Data table for Figure 4 are available on [Open Ottawa](#) (csv file).

Data table for Figure 5 are available on [Open Ottawa](#) (csv file).

Data table for Figure 6 are available on [Open Ottawa](#) (csv file).

