COVID-19 Epidemiology Weekly Supplement

OTTAWA PUBLIC HEALTH. Report compiled on August 26, 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) as of 2:00 p.m. August 25, 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 August 25, 2020, **2,871** lab-confirmed cases have been reported among Ottawa residents.
- Last week the number of reported cases (114 from Aug 17 to August 23) was higher than the previous week (75 from Aug 10 to August 16).
- The rate of cases reported in the week of August 17 was higher than the previous week for all age groups; the largest increase in the rate of weekly reported cases was for the 20-39 age group.
- Recently, the percent of cases for whom no source of infection was identified decreased and was 15% of the 157 non-institutionalized cases with episode dates during August 9 – August 22; these cases are considered community-acquired. At the same time, there was an increase in the percent of cases whose source of infection was a known close contact.
- Females have a higher rate (310 per 100,000) of confirmed COVID-19 infections than males (233 per 100,000).
- Nine new cases were hospitalized in the past week. A total of 280 (10%) Ottawa residents with confirmed COVID-19 have been hospitalized, including 67 (2%) who were admitted to the ICU.
- One new death was reported in the past week. There have been **266 deaths** in total.
- Three new outbreaks in healthcare settings were declared over the past week. There are 6 ongoing outbreaks in institutions.

Cases

Change in number of new cases from the previous week: ▲52%

Figure 1a. Weekly cases and rates of confirmed COVID-19 among Ottawa residents

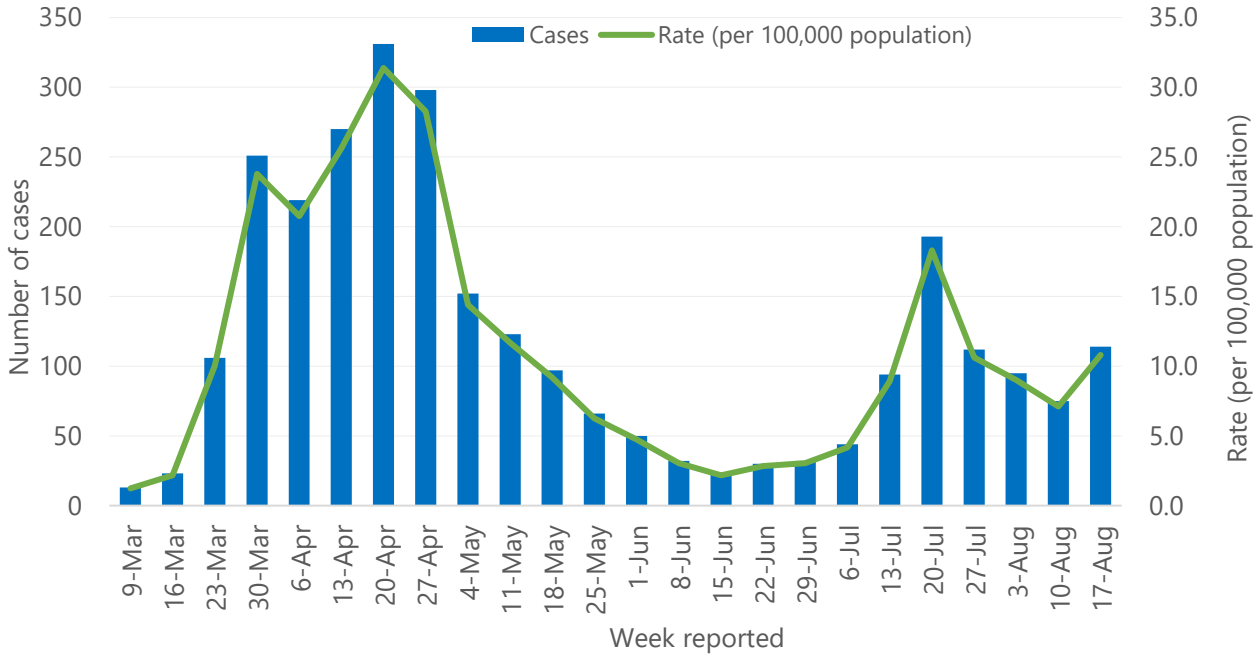
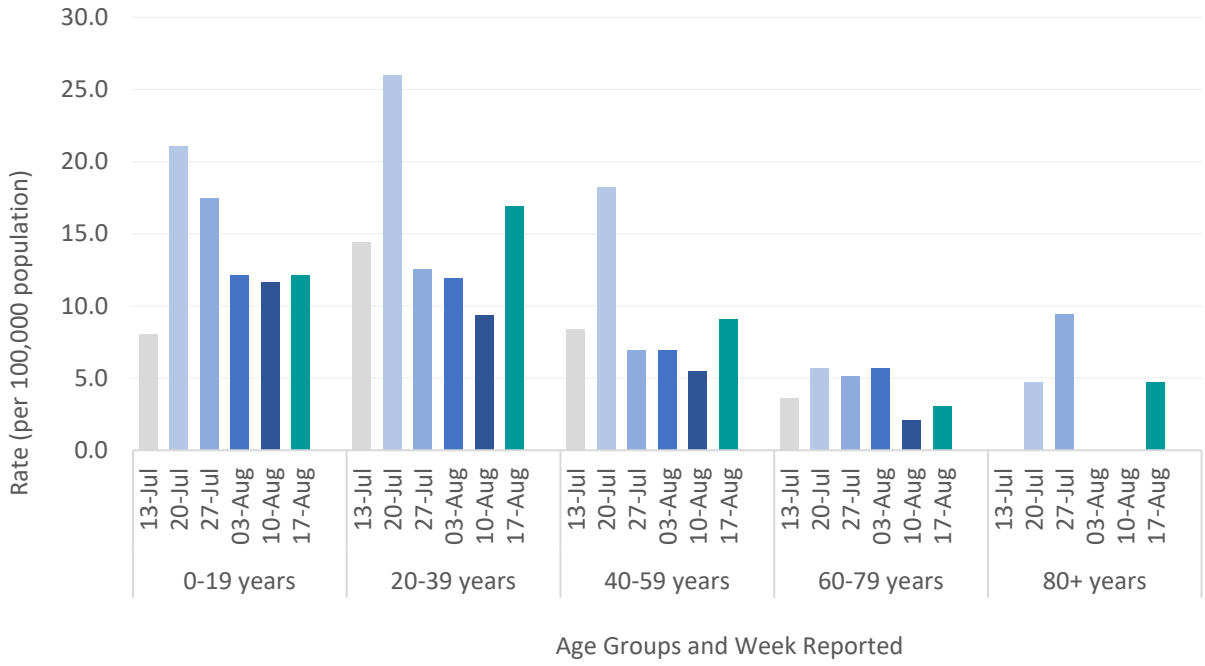


Figure 1b. Weekly rates of confirmed COVID-19 cases among Ottawa residents, by age



Notes:

1. Data on cases are from the COD as of 2:00 p.m. on August 25, 2020,
2. Case counts are presented by reported date. Counts from the latest week should be interpreted with caution due to potential lags in reporting.

Figure 2a. Cumulative rates of confirmed COVID-19 cases among Ottawa residents (n=2,871) by age group, all ages

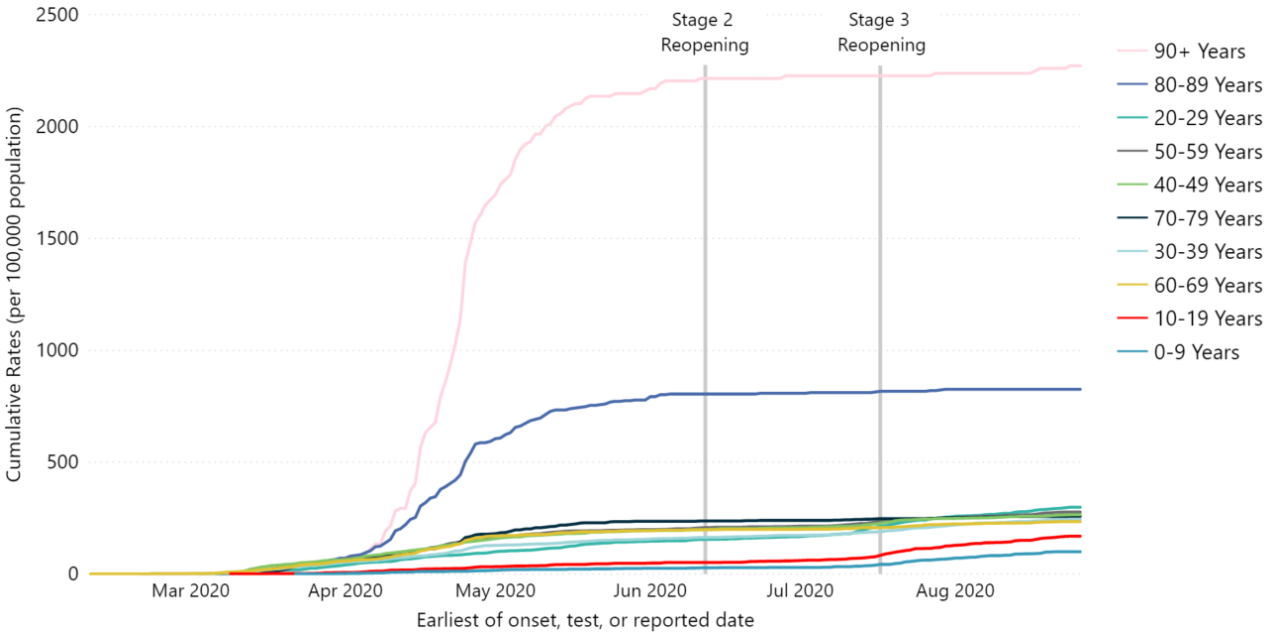
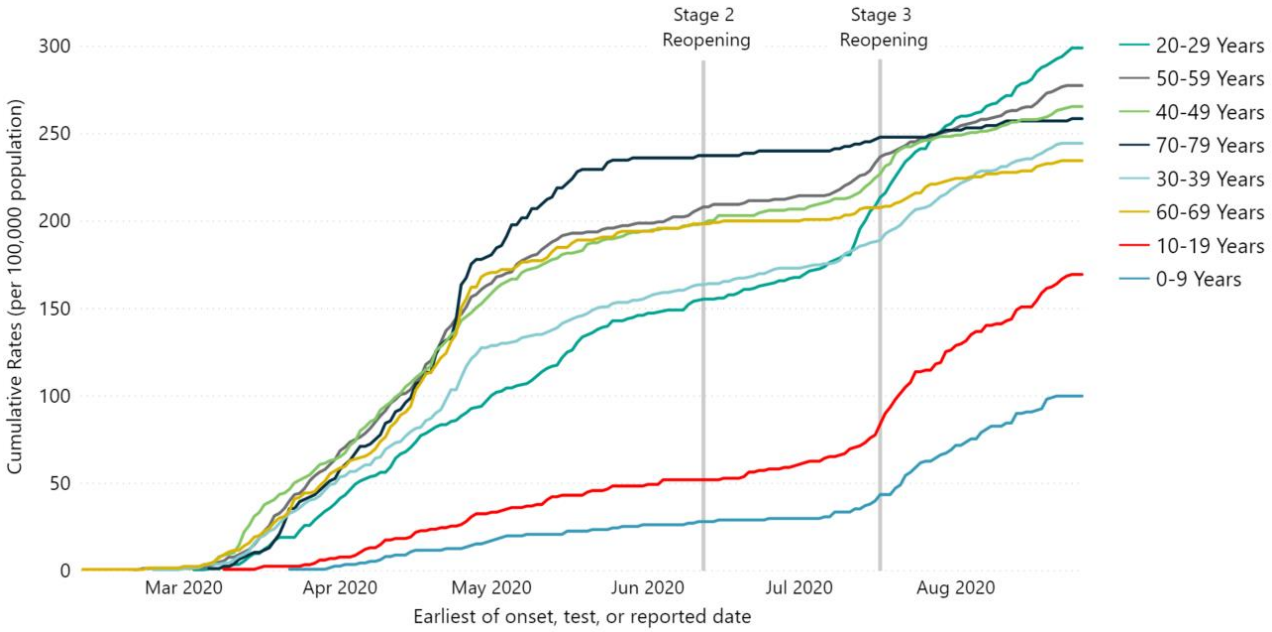


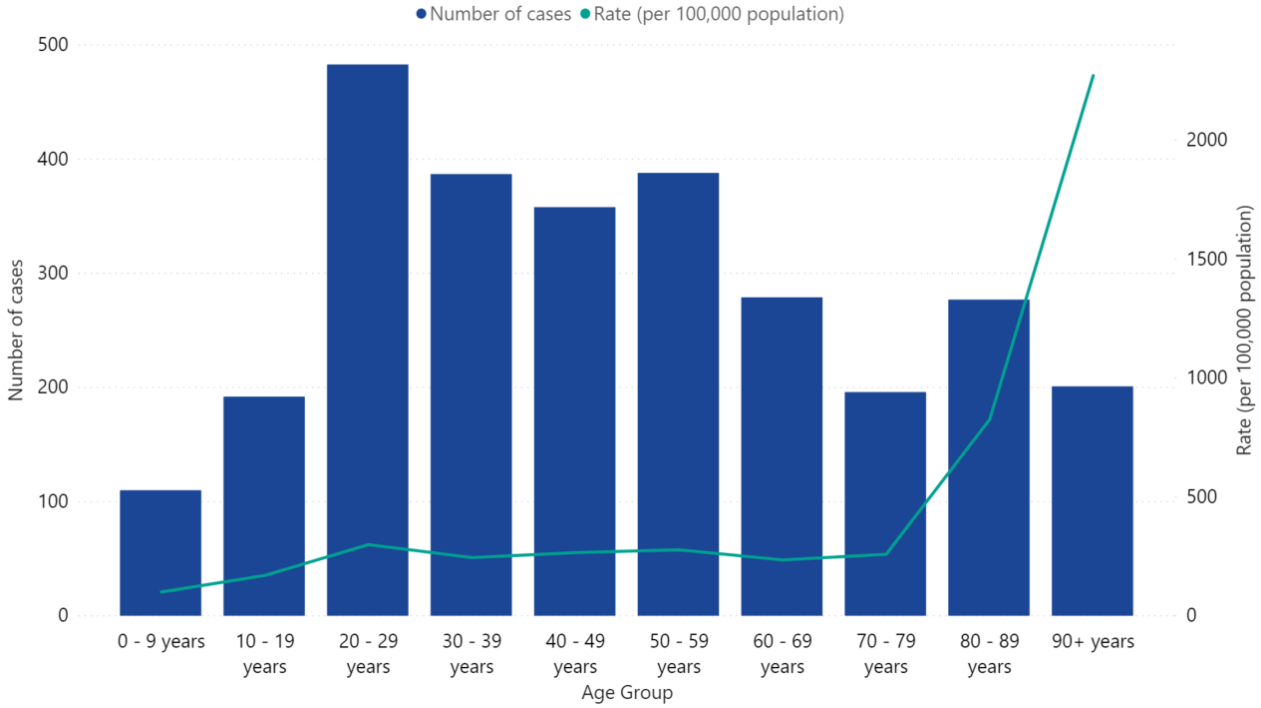
Figure 2b. Cumulative rates of confirmed COVID-19 cases among Ottawa residents age 0-79 years (n=2,393), by age group



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.

Figure 3. Ottawa residents with confirmed COVID-19 (n=2,871), by age group



Notes:

1. Data on cases are from the COD as of 2:00 p.m. on August 25, 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.

Table 1. Ottawa residents with confirmed COVID-19 (n=2,871), by gender

Gender	Number of cases (%)	Rate (per 100,000 population)
Female	1,663 (58%)	310
Male	1,208 (42%)	233

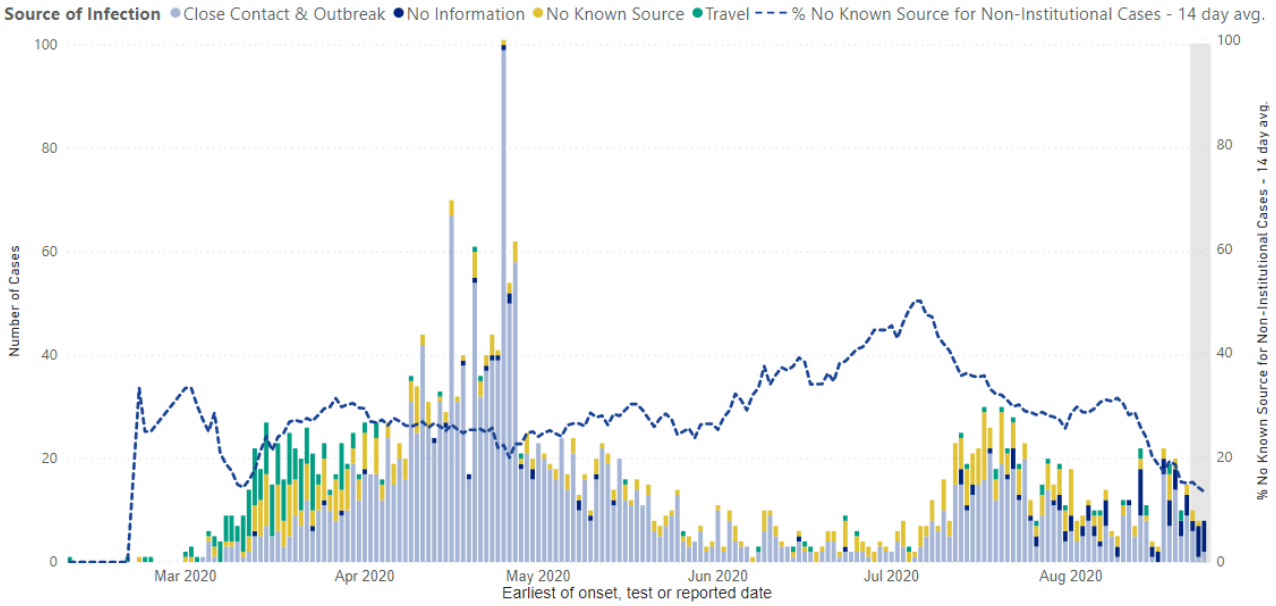
Notes:

1. Data on cases are from the COD as of 2:00 p.m. on August 25, 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.

Source of infection

No source was identified for 15% of the 157 non-institutionalized cases with episode dates during August 9 – August 22, 2020.

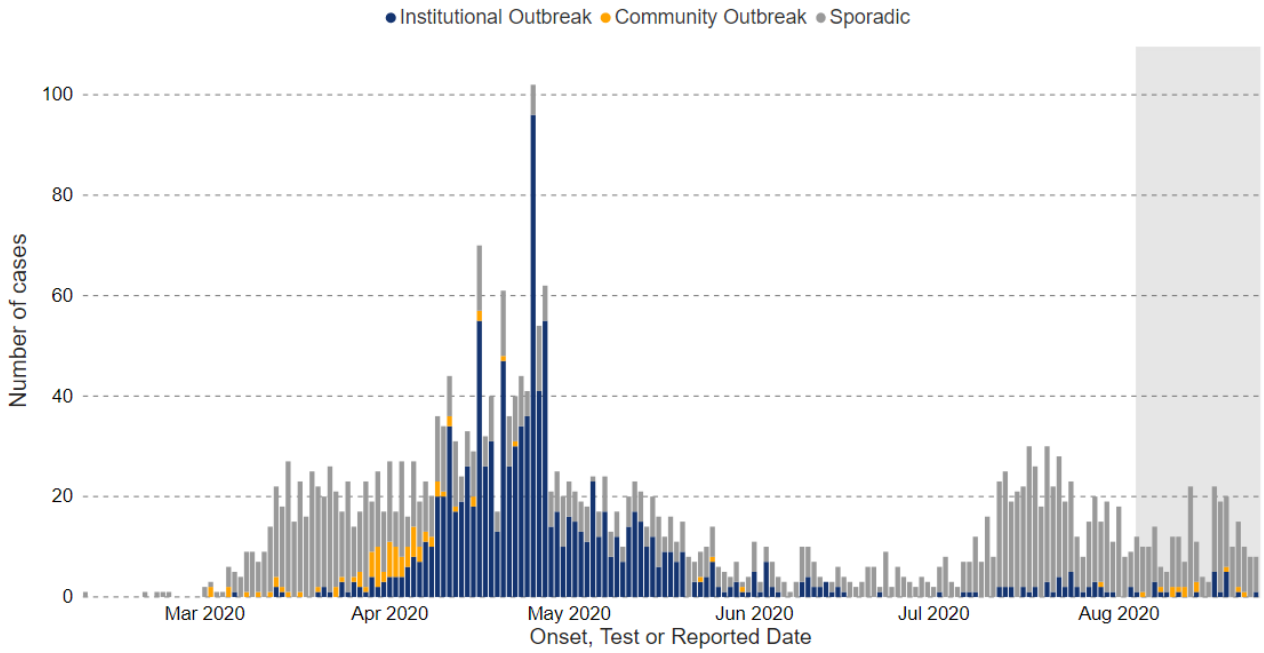
Figure 4. Epidemiological curve of Ottawa residents with confirmed COVID-19, by the earliest of onset, test and reported date, by source of infection (n=2,871)



Notes:

1. Data are from the COD as of 2:00 pm on August 25, 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 > No information available.
3. As cases are investigated and more information is available, the distribution of cases by date and source of infection is updated.
4. The percent of cases with no known source is unstable during time periods with few cases.
5. The percent of cases with no known 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.
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 5. Epidemiological curve of Ottawa residents with confirmed COVID-19, by the EARLIEST of onset, test and reported date, by outbreak association† (n=2,871)



Notes:

1. Data are from the COD as of 2:00 p.m. on August 25, 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; an institutional outbreak (healthcare or childcare); or no known outbreak (i.e., sporadic). Healthcare institutions include long term care facilities, retirement homes, hospitals, shelters, and group homes.
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. § Surveillance testing for COVID-19 began in long term care facilities on April 25, 2020.
8. 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

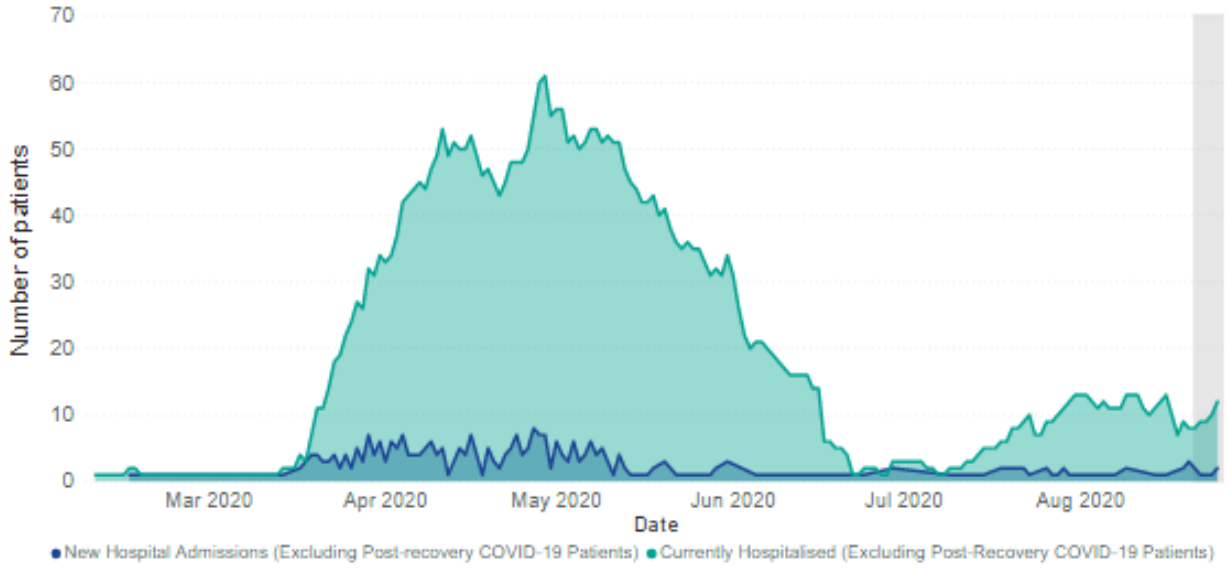
Severity of Cases

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 6. 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 August 25, 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=2,871)

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	1 (<1%)	1 (<1%)	0
20 to 29 years	6 (1%)	0	0
30 to 39 years	16 (4%)	4 (1%)	1 (<1%)
40 to 49 years	19 (5%)	6 (2%)	1 (<1%)
50 to 59 years	48 (12%)	19 (5%)	7 (2%)
60 to 69 years	61 (22%)	17 (6%)	20 (7%)
70 to 79 years	52 (27%)	13 (7%)	39 (20%)
80 to 89 years	50 (18%)	6 (2%)	106 (38%)
90+ years	27 (13%)	1 (<1%)	92 (46%)
Unknown	0	0	0
Median age	69 years	63 years	87 years
Total	**280 (10%)**	**67 (2%)**	**266 (9%)**

Notes:

1. Data are from the COD as of 2:00 p.m. on August 25, 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.

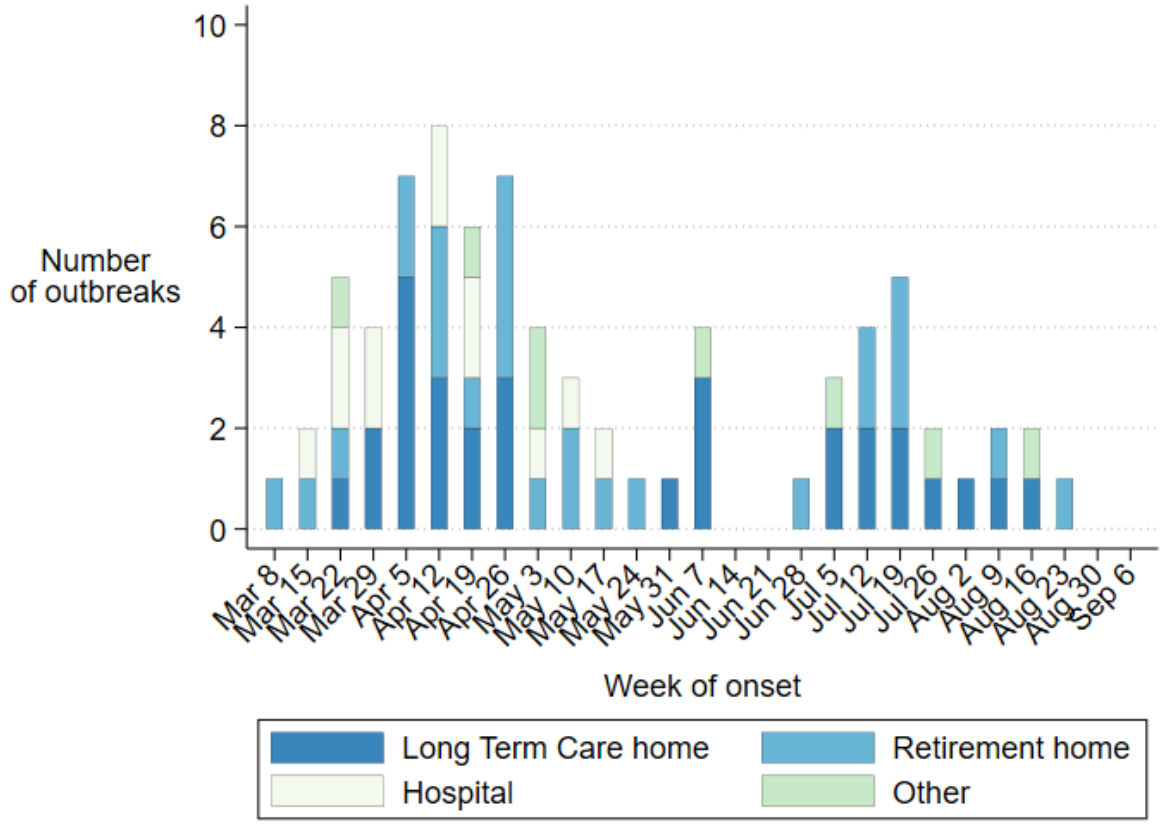
Table 3. COVID-19 volume of Ottawa residents in Ottawa hospitals

Measure	7-day median	30-day median
Currently hospitalized	9	11
Newly hospitalized*	1	1
Currently in intensive care	1	2

Notes:

1. Data are from the COD as of 2:00 p.m. on August 25, 2020.
2. Ottawa hospitals reporting inpatient data include The Children's Hospital of Eastern Ontario, The Ottawa Hospital, Queensway Carleton Hospital, Hôpital Montfort, 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, Hôpital Montfort and The University of Ottawa Heart Institute.
4. *Newly hospitalized refers to most current day for which data are available.

Figure 7. Total number of COVID-19 outbreaks in Ottawa healthcare institutions[4]



Notes:
1. Data are from The COD as of 2:00 pm on August 25, 2020.
2. 70 outbreaks are closed and 6 are active in Ottawa healthcare institutions. Investigation and data entry are ongoing.
3. These outbreaks reflect the definitions at the time they were declared open.
4. Healthcare institutions include long-term care homes, retirement homes, public hospitals, and other institutions (e.g. group homes, shelters, assisted living).

There are two ongoing and 16 closed outbreaks in other settings in Ottawa.

Table 4. Confirmed outbreaks of COVID-19 in other settings in Ottawa

Setting	Ongoing Outbreaks	Closed Outbreaks	Cases	Deaths
Childcare and Summer Camps	1	8	23	0
Workplace	1	7	85	1
Residential	0	1	14	0
Total	**2**	**16**	**122**	**1**

Notes:
1. Data are from the COD as of 2:00 p.m. on August 25, 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:

Ottawa Public Health. COVID-19 Epidemiology Weekly Supplement. August 26, 2020. Ottawa (ON): Ottawa Public Health; 2020.

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

Data Tables

Data table for Figure 1a (Weekly cases and rates of confirmed COVID-19 among Ottawa residents, by week)

Week reported	Cases	Rate (per 100,000 population)
9-Mar	13	1.2
16-Mar	23	2.2
23-Mar	106	10.1
30-Mar	251	23.8
6-Apr	219	20.8
13-Apr	270	25.6
20-Apr	331	31.4
27-Apr	298	28.3
4-May	152	14.4
11-May	123	11.7
18-May	97	9.2
25-May	66	6.3
1-Jun	50	4.7
8-Jun	32	3.0
15-Jun	23	2.2
22-Jun	30	2.8
29-Jun	32	3.0
6-Jul	44	4.2
13-Jul	94	8.9
20-Jul	193	18.3
27-Jul	112	10.6
3-Aug	95	9.0
10-Aug	75	7.1
17-Aug	114	10.8
Total	**2843**	**269.6**

Data table for Figure 1b (Weekly change in cases of confirmed COVID-19 among Ottawa residents, by age group)

	Age Group (years)					
Week reported	**0-19**	**20-39**	**40-59**	**60-79**	**80+**	**Total**
13-Jul	8.1	14.4	8.4	3.6	0.0	8.9
20-Jul	21.1	26.0	18.2	5.6	4.7	18.3
27-Jul	17.5	12.5	6.9	5.1	9.4	10.6
03-Aug	12.1	11.9	6.9	5.6	0.0	9.0
10-Aug	11.6	9.4	5.5	2.1	0.0	7.1
17-Aug	12.1	16.9	9.1	3.1	4.7	10.8

Data table for Figure 3 (Ottawa residents with confirmed COVID-19, by age group)

Age	Number of Cases	Population	Rate (per 100,000)
0-9 years	110	109,973	100
10-19 years	192	113,243	170
20 to 29 years	483	161,498	299
30 to 39 years	387	158,259	245
40 to 49 years	358	134,815	266
50 to 59 years	388	139,786	278
60 to 69 years	279	118,913	235
70 to 79 years	196	75,781	259
80 to 89 years	277	33,540	826
90+ years	201	8,848	2,272
Total	**2,871**	**1,054,656**	**272**

Data table for Figures 2a and 2b are available on Open Ottawa (Excel 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).
Data table for Figure 7 are available on Open Ottawa (csv file).