



COVID-19 Epidemiology Weekly Supplement

OTTAWA PUBLIC HEALTH. Report compiled on September 16, 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. September 15, 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 September 15, 2020, **3,447** lab-confirmed cases have been reported among Ottawa residents.
- Last week the number of reported cases (253 from September 7 to September 13) was 86% higher than the previous week (136 from August 31 to September 6).
- In the past week, there was a notable increase in the rates of cases reported for all age groups under 80 years compared to the previous 5 weeks; rates were highest among younger age groups (0-19 years and 20-39 years). Rates in adults 80 years and older also remained high.
- Among school-age children, rates of cases reported were highest among 13-19 years olds (high-school).
- No source was identified for 19% of the 308 non-institutionalized cases with episode dates during August 30 – September 12, 2020. This has remained steady over the past few weeks; these cases are considered community acquired.
- Females have a higher rate (364 per 100,000) of confirmed COVID-19 infections than males (287 per 100,000).
- Hospitalizations have remained steady. Six new cases were hospitalized in the past week. A total of 297 (9%) Ottawa residents with confirmed COVID-19 have been hospitalized, including 70 (2%) who were admitted to the ICU.
- The number of deaths increased this past week. Six deaths were reported in the past week, all from one Long-Term Care outbreak. There have been **273 deaths** in total.
- Seven new outbreaks in healthcare settings were reported over the past week – four more than the week before. There are 16 ongoing outbreaks in healthcare institutions.
- There were three new outbreaks in childcare establishments and camps in the past week. There are 3 ongoing outbreaks in childcare establishments and camps.
- There have been no outbreaks in Ottawa schools.



Cases

Change in number of new cases reported from the previous week: ▲86%

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

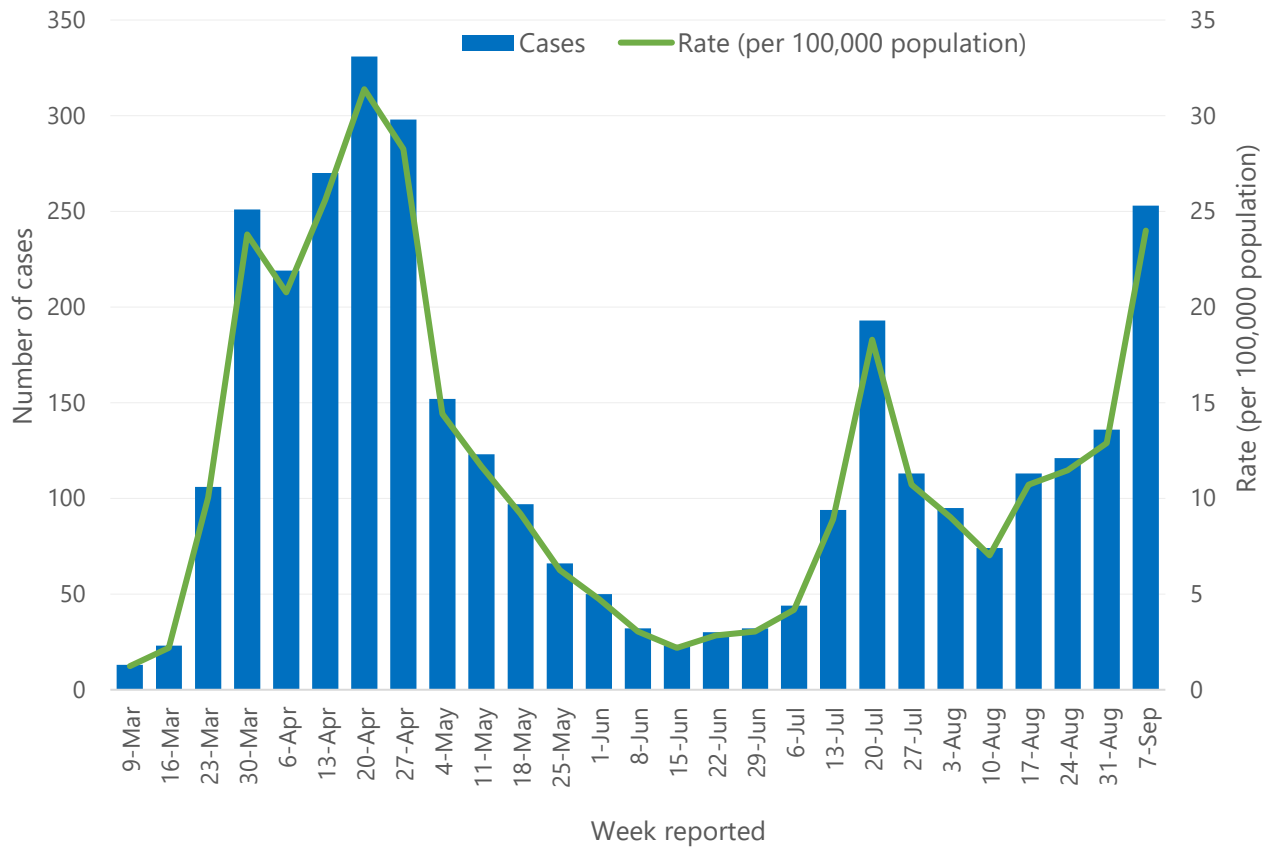


Figure 1b. Weekly rates of confirmed COVID-19 cases among Ottawa residents, by age

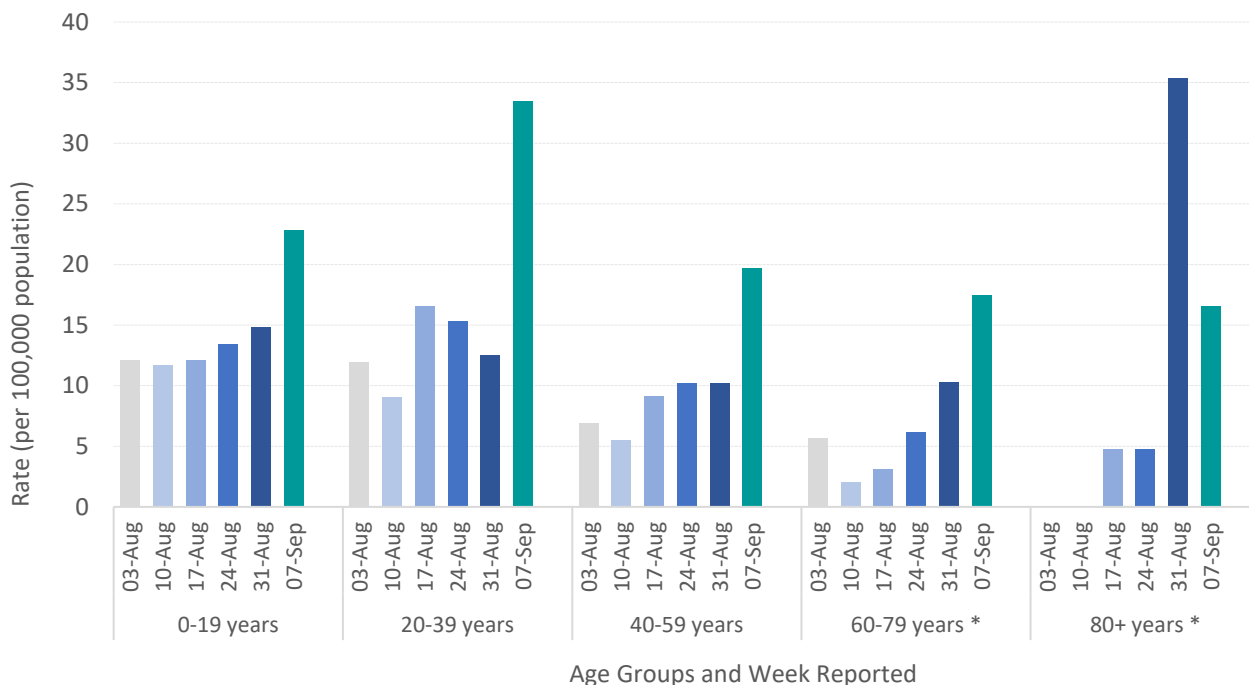
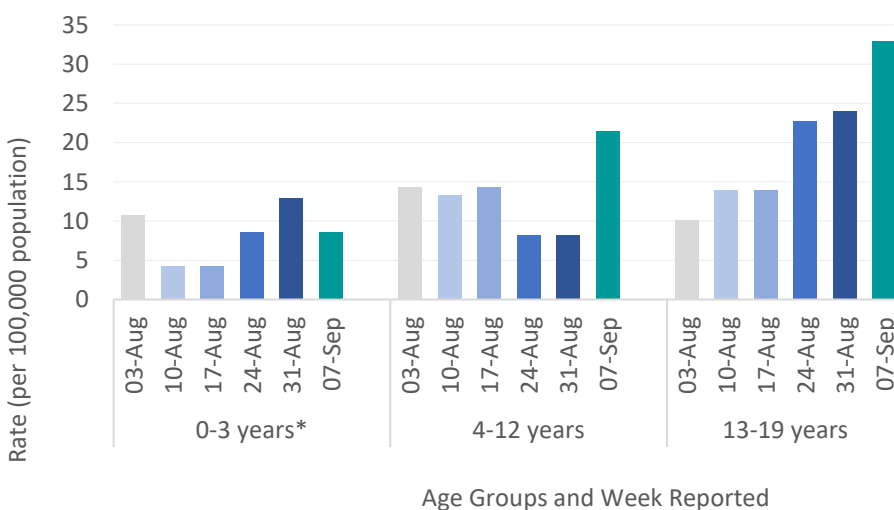


Figure 1c. Weekly rates of confirmed COVID-19 cases among Ottawa residents aged 0-19 years (n=194), by age group



Notes:

1. Data on cases are from the COD as of 2:00 p.m. on September 15, 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.
3. * Some rates are from counts less than 5; these rates may be unstable and should be interpreted with caution.
4. 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 for Figure 1b, and extracted Jun 6 2018 for Figure 1c.



Figure 2a. Cumulative rates of confirmed COVID-19 cases among Ottawa residents (n=3,447) by age group, all ages

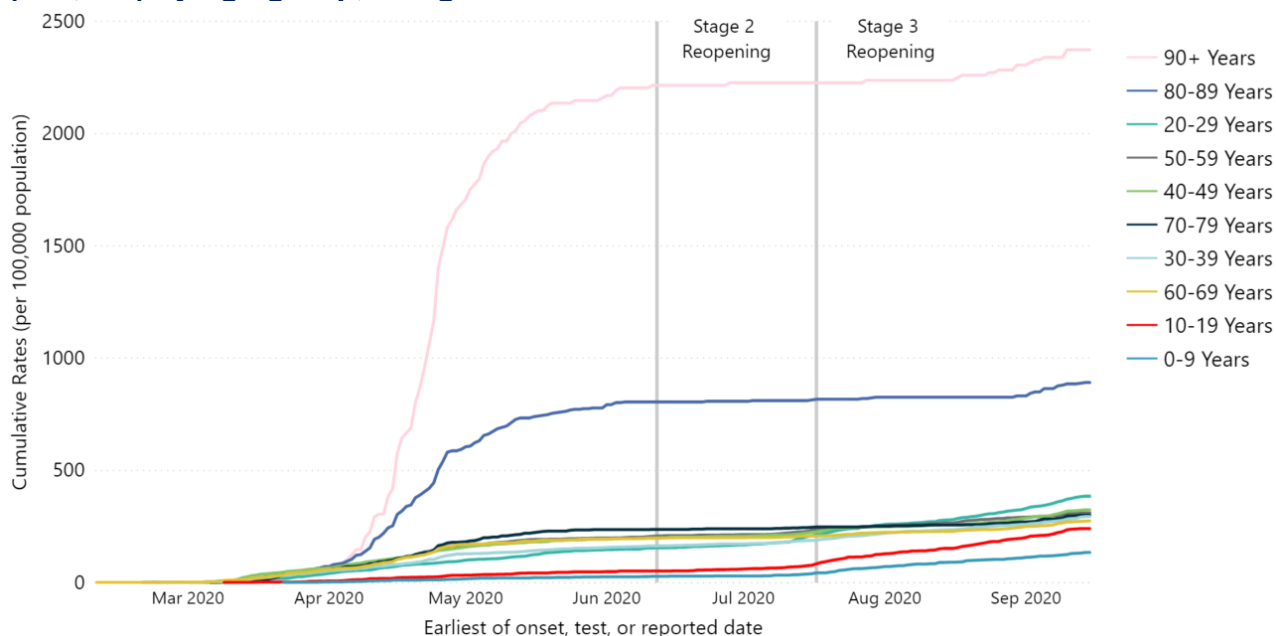
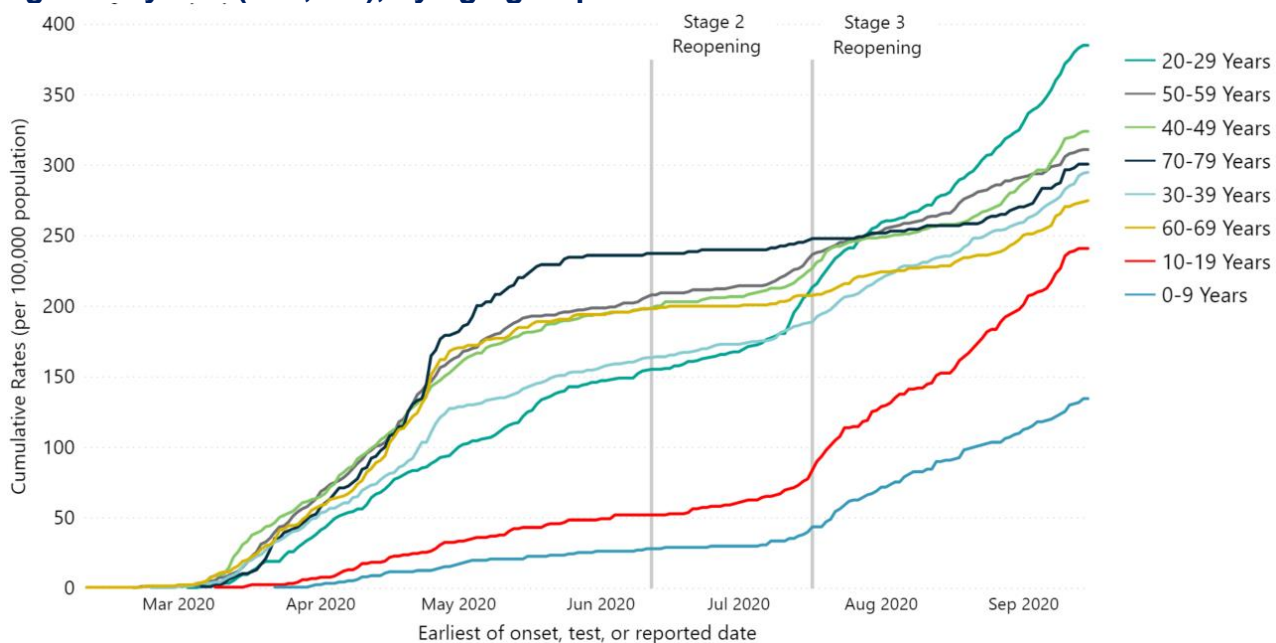


Figure 2b. Cumulative rates of confirmed COVID-19 cases among Ottawa residents age 0-79 years (n=2,937), by age group

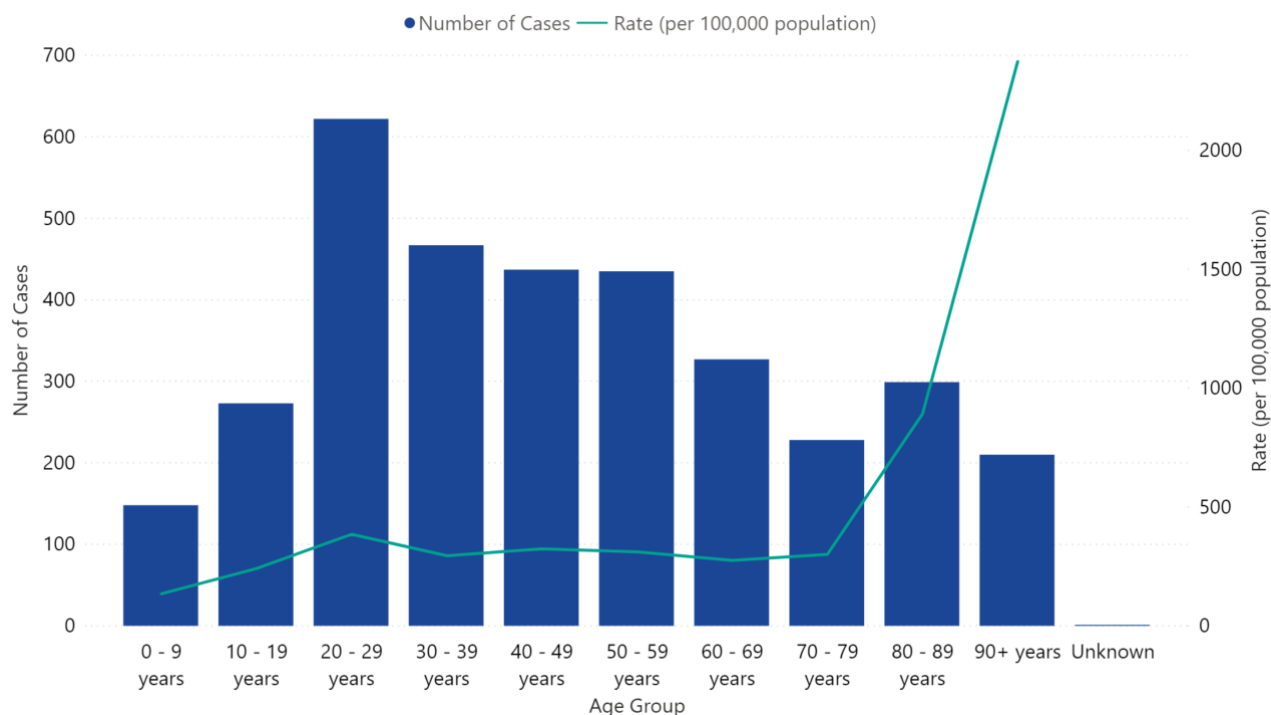


Notes:

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=3,447), by age group



Notes:

1. Data on cases are from the COD as of 2:00 p.m. on September 15, 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=3,447), by gender

Gender	Number of cases (%)	Rate (per 100,000 population)
Female	1,956 (57%)	364
Male	1,486 (43%)	287
Unknown	5	-

Notes:

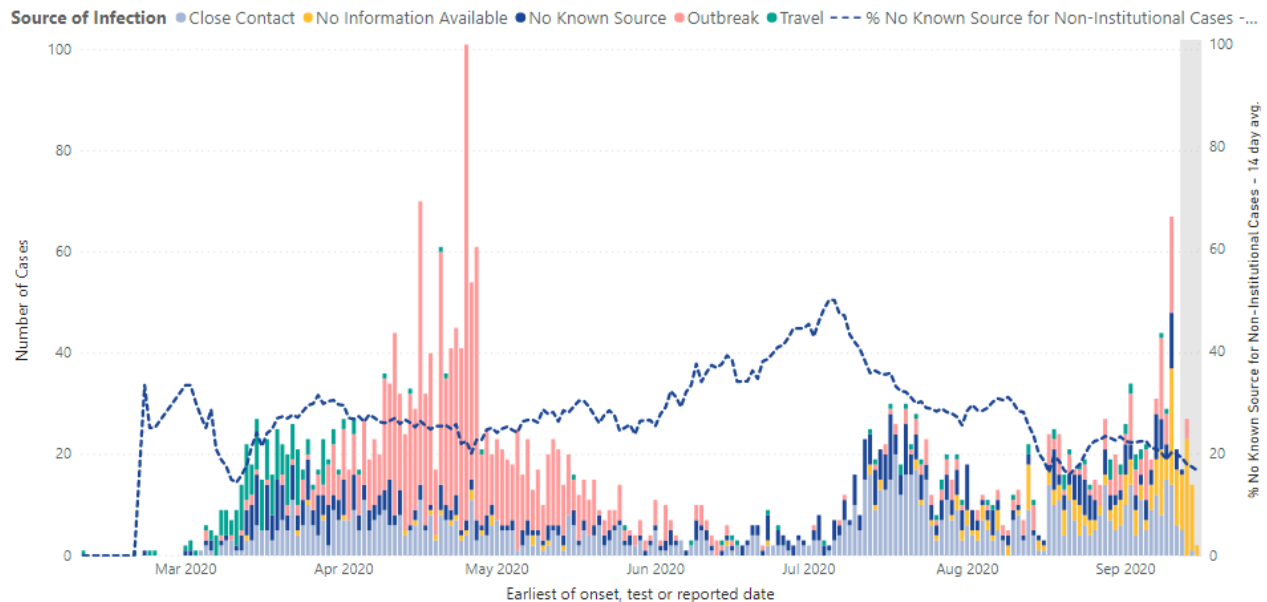
1. Data on cases are from the COD as of 2:00 p.m. on September 15, 2020.
2. Confirmed cases are those with a confirmed COVID-19 laboratory result as per the Ministry of Health Public health management of cases and contacts of COVID-19 in Ontario. June 23, 2020 version 8.0.
3. Rates per 100,000 were calculated 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 19% of the 308 non-institutionalized cases with episode dates during August 30 – September 12, 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=3,447)

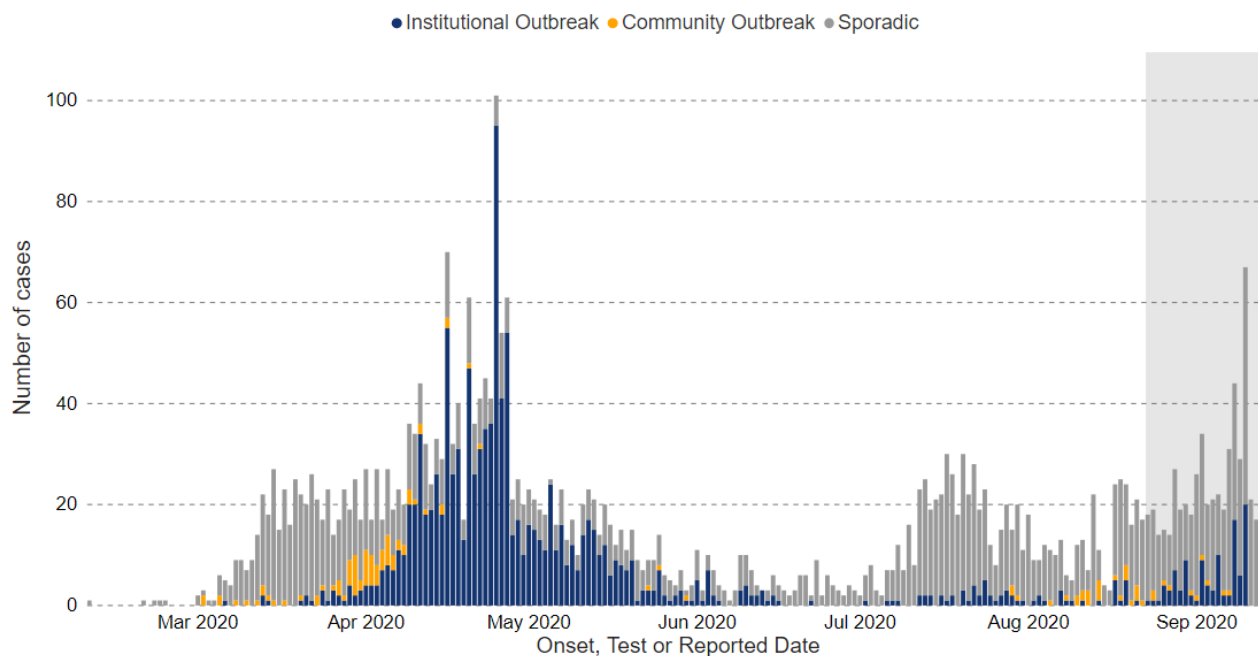


Notes:

1. Data are from the COD as of 2:00 pm on September 15, 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=3,447)



Notes:

1. Data are from the COD as of 2:00 p.m. on September 15, 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



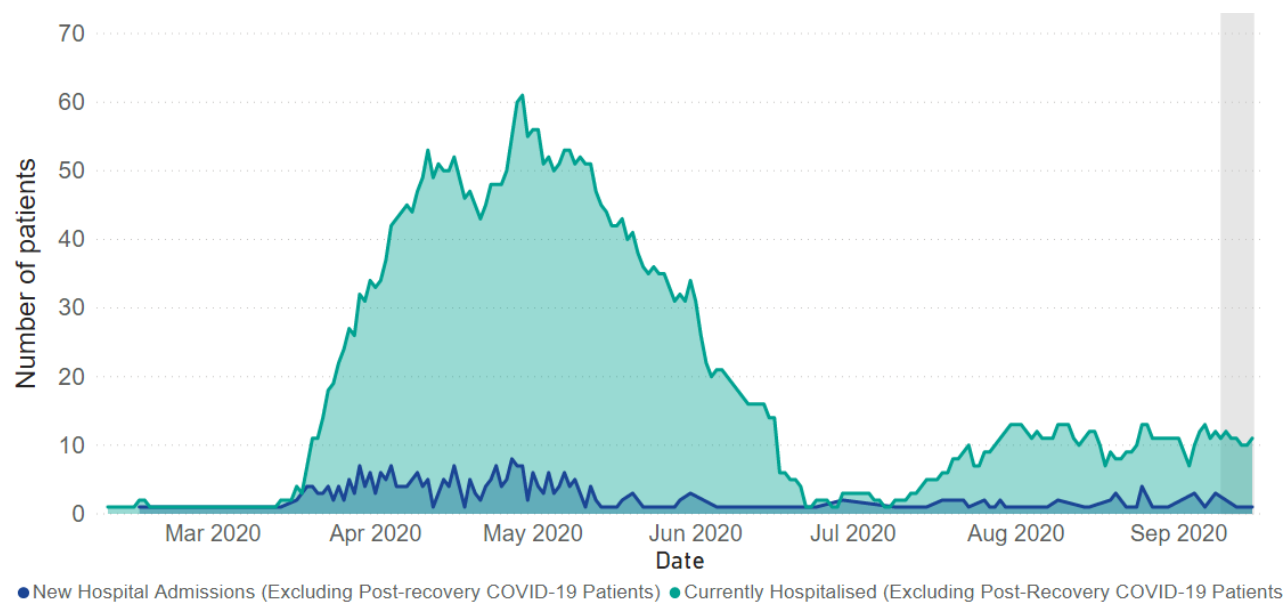
Severity of Cases

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 September 15, 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=3,447)

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	5 (1%)	0	0
30 to 39 years	17 (4%)	4 (1%)	1 (<1%)
40 to 49 years	23 (5%)	7 (2%)	1 (<1%)
50 to 59 years	51 (12%)	20 (5%)	7 (2%)
60 to 69 years	67 (20%)	18 (6%)	22 (7%)
70 to 79 years	54 (24%)	13 (6%)	40 (18%)
80 to 89 years	50 (17%)	6 (2%)	108 (36%)
90+ years	29 (14%)	1 (<1%)	94 (45%)
Unknown	0	0	0
Median age	68 years	62 years	87 years
Total	297 (9%)	70 (2%)	273 (8%)

Notes:

1. Data are from the COD as of 2:00 p.m. on September 15, 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	11	11
Newly hospitalized*	1	1
Currently in intensive care	1	1

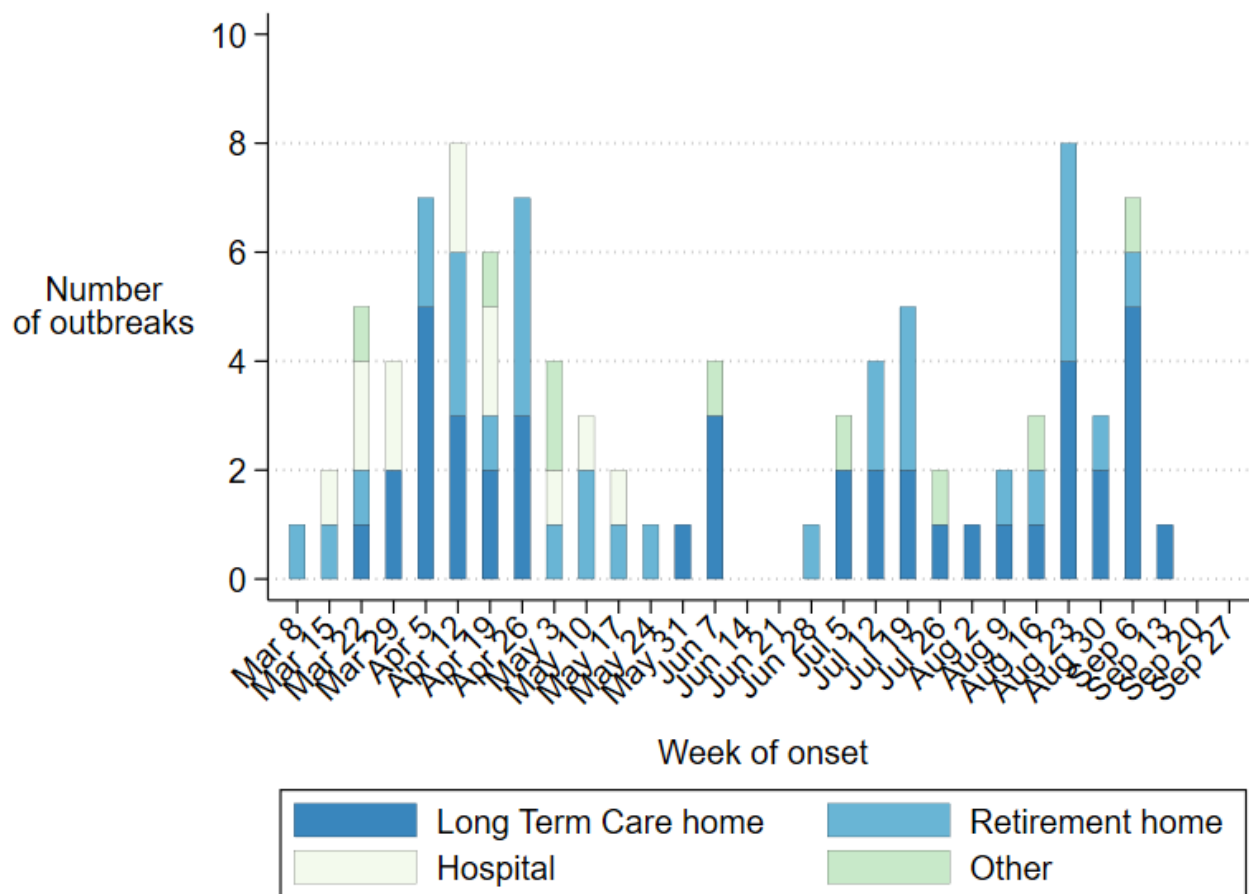
Notes:

1. Data are from the COD as of 2:00 p.m. on September 15, 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.



Outbreaks

Figure 7. Total number of COVID-19 outbreaks in Ottawa healthcare institutions⁴



Notes:

1. Data are from The COD as of 2:00 pm on September 15, 2020.
2. 79 outbreaks are closed and 16 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 6 ongoing and 22 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	3	12	33	0
Workplace	3	8	102	1
Spiritual/Religious Organization	0	1	6	0
Residential	0	1	14	0
Total	6	22	155	1

Notes:

1. Data are from the COD as of 2:00 p.m. on September 15, 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. September 16, 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	113	10.7
3-Aug	95	9.0
10-Aug	74	7.0
17-Aug	113	10.7
24-Aug	121	11.5
31-Aug	136	12.9
7-Sep	253	24.0
Total	3352	317.8

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

Week reported	Age groups (years), Cases, and Rates (per 100,000 population)									
	0-19		20-39		40-59		60-79		80+	
	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate	Cases	Rate
3-Aug	27	12.1	38	11.9	19	6.9	11	5.6	0	0.0
10-Aug	26	11.6	29	9.1	15	5.5	4	2.1	0	0.0
17-Aug	27	12.1	53	16.6	25	9.1	6	3.1	2	4.7
24-Aug	30	13.4	49	15.3	28	10.2	12	6.2	2	4.7
31-Aug	33	14.8	40	12.5	28	10.2	20	10.3	15	35.4
7-Sep	51	22.8	107	33.5	54	19.7	34	17.5	7	16.5



Data table for Figure 1c (Weekly rates of confirmed COVID-19 among Ottawa residents aged 0-9, by age group)

Week Reported	0-3 years		4-12 years		13-19 years	
	Cases	Rate	Cases	Rate	Cases	Rate
3-Aug	5	10.8	14	14.3	8	10.1
10-Aug	2	4.3	13	13.3	11	13.9
17-Aug	2	4.3	14	14.3	11	13.9
24-Aug	4	8.6	8	8.2	18	22.8
31-Aug	6	12.9	8	8.2	19	24.1
7-Sep	4	8.6	21	21.4	26	32.9

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	148	109,973	135
10-19 years	273	113,243	241
20 to 29 years	622	161,498	385
30 to 39 years	467	158,259	295
40 to 49 years	437	134,815	324
50 to 59 years	435	139,786	311
60 to 69 years	327	118,913	275
70 to 79 years	228	75,781	301
80 to 89 years	299	33,540	891
90+ years	210	8,848	2,373
Unknown	1	-	-
Total	3,447	1,054,656	327

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).

