

COVID-19 Epidemiology Weekly Supplement

OTTAWA PUBLIC HEALTH. Report compiled on September 2, 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 1, 2020.

Please visit the <u>Ottawa COVID-19 Dashboard</u> for additional information on cases and deaths, outbreaks and core indicators for COVID-19 monitoring.

Summary

- As of 2:00 p.m. on September 1, 2020, **2,987** lab-confirmed cases have been reported among Ottawa residents.
- Last week the number of reported cases (127 from Aug 24 to August 30) was higher than the previous week (114 from Aug 17 to August 23).
- Rates of cases reported in the week of August 24th continued to be highest among 20-39 year-olds followed by 0-19 year-olds and 40-59 year-olds. Rates of cases among 80+ years remained very low.
- No source of infection was identified for 21% of the 195 non-institutionalized cases with episode dates during August 16 – August 29. This has increased slightly since last week; these cases are considered community acquired.
- Females have a higher rate (321 per 100,000) of confirmed COVID-19 infections than males (244 per 100,000).
- Five new cases were hospitalized in the past week. A total of 285 (10%) Ottawa residents with confirmed COVID-19 have been hospitalized, including 68 (2%) who were admitted to the ICU.
- One new death was reported in the past week. There have been **267 deaths** in total.
- Nine new outbreaks in healthcare settings were declared over the past week three times as many as the week before. There are 13 ongoing outbreaks in healthcare institutions.
- There were 3 new outbreaks in childcare establishments and camps in the past week. There are 4 ongoing outbreaks in childcare establishments and camps.

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Cases

Change in number of new cases from the previous week: ▲11%







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

Age Groups and Week Reported

Notes:

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



Figure 2a. Cumulative rates of confirmed COVID-19 cases among Ottawa residents (n=2,987) by age group, all ages

Figure 2b. Cumulative rates of confirmed COVID-19 cases among Ottawa residents age 0-79 years (n=2,507), 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=2,987), by age group

Number of Cases — Rate (per 100,000 population)

Notes:

- 1. Data on cases are from the COD as of 2:00 p.m. on September 1, 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=2,987), by gender

Gender	Number of cases (%)	Rate (per 100,000 population)
Female	1,722 (58%)	321
Male	1,265 (42%)	244

Notes:

1. Data on cases are from the COD as of 2:00 p.m. on September 1, 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 21% of the 195 non-institutionalized cases with episode dates during August 16 – August 29, 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=2,987)



Notes:

- 1. Data are from the COD as of 2:00 pm on September 1, 2020.
- 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=2,987)



Institutional Outbreak
 Community Outbreak
 Sporadic

Notes:

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



New Hospital Admissions (Excluding Post-recovery COVID-19 Patients)
 Currently Hospitalised (Excluding Post-Recovery COVID-19 Patients)

Notes:

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



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	20 (5%)	6 (2%)	1 (<1%)
50 to 59 years	49 (12%)	20 (5%)	7 (2%)
60 to 69 years	62 (22%)	17 (6%)	20 (7%)
70 to 79 years	52 (26%)	13 (6%)	39 (19%)
80 to 89 years	50 (18%)	6 (2%)	106 (38%)
90+ years	29 (14%)	1 (<1%)	93 (46%)
Unknown	0	0	0
Median age	68 years	63 years	87 years
Total	285 (10%)	68 (2%)	267 (9%)

Table 2. Age of Ottawa residents with confirmed COVID-19 that have been hospitalized (cumulative) and in intensive care (cumulative) (n=2,987)

Notes:

1. Data are from the COD as of 2:00 p.m. on September 1, 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*	0	1
Currently in intensive care	1	1

Notes:

1. Data are from the COD as of 2:00 p.m. on September 1, 2020.

 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 1, 2020.
- 2. 71 outbreaks are closed and 13 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 8 ongoing and 18 closed outbreaks in other settings in Ottawa.

Setting	Ongoing Outbreaks	Closed Outbreaks	Cases	Deaths
Childcare and Summer Camps	4	8	29	0
Workplace	3	9	96	1
Spiritual/Religious Organization	1	0	6	0
Residential	0	1	14	0
Total	8	18	145	1

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

Notes:

1. Data are from the COD as of 2:00 p.m. on September 1, 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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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	74	7.0
17-Aug	114	10.8
24-Aug	127	12.0
Total	2,969	281.5

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
20-Ju	l 21.1	26.0	18.2	5.6	4.7	18.3
27-Ju	l 17.5	12.5	6.9	5.1	9.4	10.6
3-Aug	g 12.1	11.9	6.9	5.6	0.0	9.0
10-Au	g 11.6	9.1	5.5	2.1	0.0	7.0
17-Au	g 12.1	16.9	9.1	3.1	4.7	10.8
24-Au	g 14.3	16.3	9.8	6.7	7.1	12.0



Age	Number of Cases	Population	Rate (per 100,000)
0-9 years	120	109,973	109
10-19 years	210	113,243	185
20 to 29 years	517	161,498	320
30 to 39 years	400	158,259	253
40 to 49 years	371	134,815	275
50 to 59 years	402	139,786	288
60 to 69 years	286	118,913	241
70 to 79 years	201	75,781	265
80 to 89 years	278	33,540	829
90+ years	202	8,848	2,283
Total	2,987	1,054,656	283

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

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).