



COVID-19 Epidemiology Update

OTTAWA PUBLIC HEALTH. Report compiled on May 13, 2020, 11:00 am

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Ottawa Public Health (OPH) has transitioned to a new case management and reporting system. This transition will position OPH to better manage COVID-19 case volumes, facilitate remote work options for the case management team, and continue to uphold provincial reporting obligations. To support the transition, OPH is currently conducting quality assurance to validate the data in the new system.

Purpose

This daily report 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 pm May 12, 2020 and the integrated Public Health Information System (iPHIS) as of 4:00 p.m. May 12, 2020.

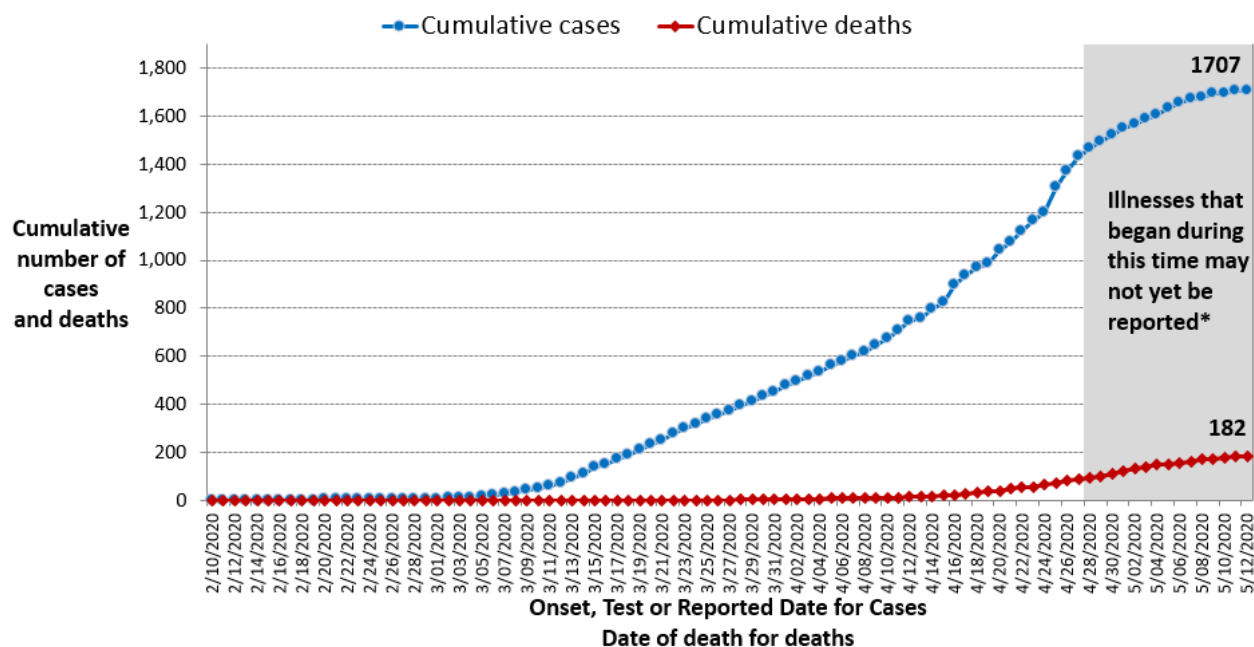
Summary

- 1,707 laboratory-confirmed cases, including 182 deaths, have been reported in Ottawa.
- This includes 15 new cases and 4 new deaths since the previous report.
- 52 Ottawa residents with COVID-19 are currently hospitalized.
- There are 21 ongoing outbreaks in [institutions](#).



Cases Over Time

Figure 1. Cumulative epidemiological curve of Ottawa residents with confirmed COVID-19, by the EARLIEST of onset date, test and reported date or date of death

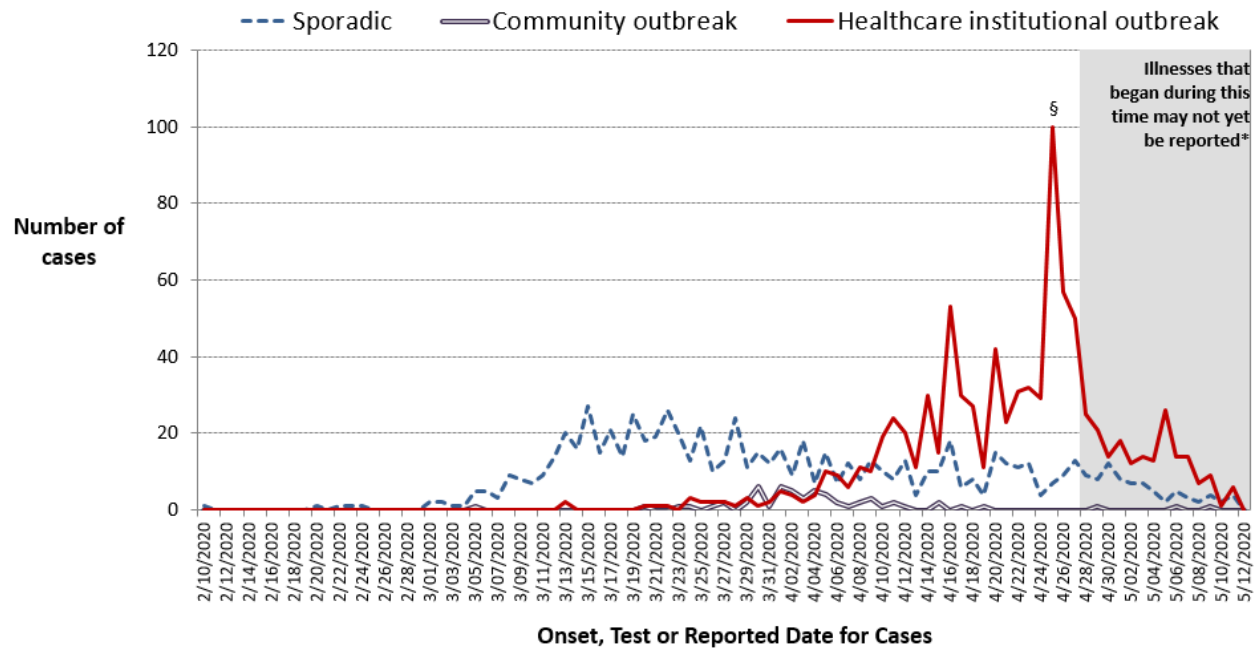


Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 2020.
2. The onset date is the earliest of symptom onset, laboratory testing, and reporting dates. This means that in the graphs, cases are shown based on when the person's symptoms started, or if that is not known, the date that they were tested. If the test date is not known, the date that the case was reported to public health is used. 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. March 25, 2020 version 6.0.
4. A patient's exposure may have occurred up to 14 days prior to onset of symptoms.
5. *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.
6. ERRATA: In reports before May 11, 2020, the death data were graphed to the earliest of onset date, test and reported date. As of May 11, 2020, the death data are graphed to the date of death. Since data represent a snapshot in time and case investigations are in progress, there may be some instances where a date of death is not yet entered in the COD database. In these instances, the date of death is captured as the reported date.



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



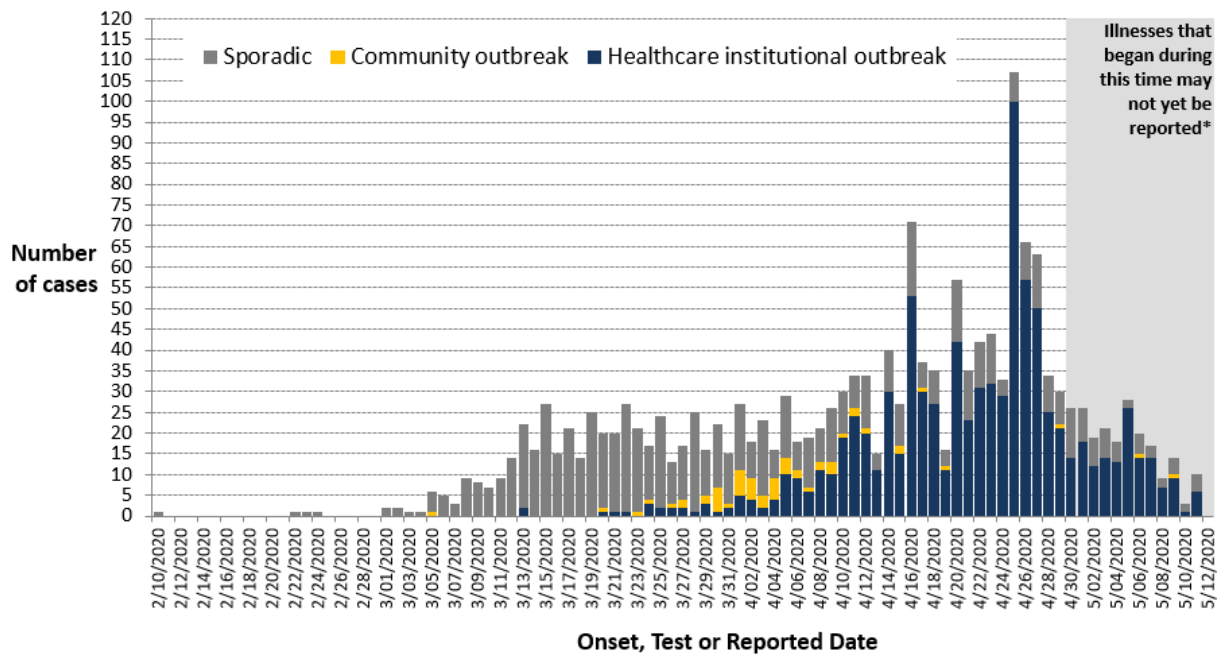
Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 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. March 25, 2020 version 6.0.
3. †Cases are associated with a specific, isolated community outbreak; a healthcare institutional outbreak; or no known outbreak (i.e., sporadic).
4. A patient’s exposure may have occurred up to 14 days prior to onset of symptoms.
5. *Symptomatic sporadic 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.
6. Healthcare institutions include long term care facilities, retirement homes, and hospitals.
7. §Surveillance testing for COVID-19 began in long term care facilities on April 25, 2020.
8. The province has had to limit testing to priority groups. Since only a small fraction of all the persons who were infected with the COVID-19 virus were tested, 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



Figure 3. Epidemiological curve of Ottawa residents with confirmed COVID-19, by the EARLIEST of onset, test and reported date, by outbreak association† (n=1,707)



Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 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. March 25, 2020 version 6.0.
3. †Cases are associated with a specific, isolated community outbreak; a healthcare institutional outbreak; or no known outbreak (i.e., sporadic).
4. A patient's exposure may have occurred up to 14 days prior to onset of symptoms.
5. *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.
6. Healthcare institutions include long term care facilities, retirement homes, and hospitals.
7. The province has had to limit testing to priority groups. Since only a small fraction of all the persons who were infected with the COVID-19 virus were tested, 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.²

² 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



Case Characteristics

Table 1. Age, gender and occupation (health care worker or first responder) of Ottawa residents with confirmed COVID-19

Measure	Number	Percentage
Case count	1,707	-
Change from previous report	15	1% increase
Age, median (range)	57 years (4m-105y)	-
Age		
0-9 years	16	1%
10-19 years	40	2%
20 to 29 years	164	10%
30 to 39 years	208	12%
40 to 49 years	235	14%
50 to 59 years	252	15%
60 to 69 years	217	13%
70 to 79 years	156	9%
80 to 89 years	228	13%
90+ years	191	11%
Unknown	0	0%
Gender		
Female	1,010	59%
Male	697	41%
Unknown	0	0%
Health care workers and first responders	441	26%

Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 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. March 25, 2020 version 6.0.



Table 2. Age, gender and occupation (health care worker or first responder) of Ottawa residents with confirmed COVID-19 who have died

Measure	Number	Percentage
Cumulative cases	1,707	
Cumulative deaths	182	11%
Change from previous report	4	2% increase
Age, median (range)	87 years (39-105)	
Age		Percent of deaths by age group
0-9 years	0	0%
10 to 19 years	0	0%
20 to 29 years	0	0%
30 to 39 years	1	<1%
40 to 49 years	0	0%
50 to 59 years	6	2%
60 to 69 years	10	5%
70 to 79 years	25	16%
80 to 89 years	71	31%
90+ years	69	36%
Unknown	0	0%
Gender		
Female	97	10%
Male	85	12%
Unknown	0	0%
Healthcare workers and first responders	1	<1%

Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 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. March 25, 2020 version 6.0.

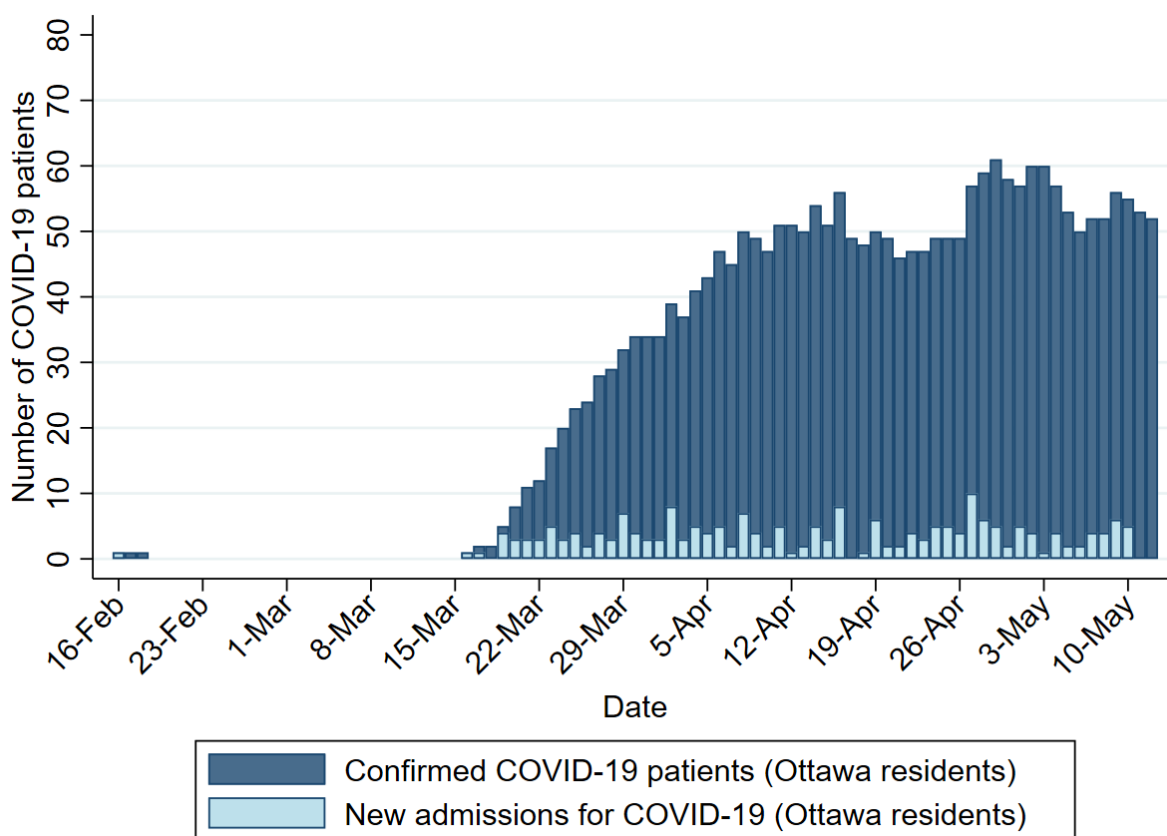


Severity of Cases: Hospitalizations among Ottawa residents with COVID-19

The data presented in Figure 4 and Tables 3-4 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.

Please consider the hospitalization data in this section to be preliminary. OPH is collaborating with local hospitals to receive daily electronic updates on hospitalizations for COVID-19 and we are conducting quality assurance work while incorporating this new data source. It is anticipated to provide more complete and accurate hospitalization data once it is fully incorporated.

Figure 4. 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 May 12, 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. March 25, 2020 version 6.0.
2. The dark blue bars represent the number of COVID-19 patients hospitalized. The light blue bars represent the number of newly hospitalized COVID-19 patients.
3. Data for this figure will soon be available at [OpenDataOttawa](#) [instead of the end of the report]



Table 3. Severity of disease for Ottawa residents with confirmed COVID-19

Measure	Number	Percentage
All cases	1,707	
Cumulative hospitalized	210	12%
Currently in hospital	52	3%
Cumulative intensive care	52	3%
Deaths	182	11%
Resolved ⁵	1,245	73%

Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 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. March 25, 2020 version 6.0.
3. Intensive care patients are a subset of hospitalized patients.
4. As per provincial practice, cases that are 14 days past symptom onset (if available) or 14 days past the episode date are classified as resolved for non-fatal cases that are not currently listed as hospitalized. Cases are also classified as resolved if the case is reported as “recovered” in the COD. This represents a change from reports prior to May 1, 2020 that relied solely on the classification in the COD/iPHIS and increases the number classified as Resolved.

Table 4. Age of Ottawa residents with confirmed COVID-19 that have been hospitalized (cumulative) and in intensive care (cumulative) (n=1,707)

Measure	Cumulative Hospitalized		Cumulative Intensive Care	
	Number	Percentage	Number	Percentage
Case count	210	12%	52	3%
Age, median (range)	69 years (25 to 102)		65 years (33 to 91)	
Age		Percent of cases hospitalized by age group		Percent of cases in intensive care by group
0 to 9 years	0	0%	0	0%
10 to 19 years	0	0%	0	0%
20 to 29 years	2	1%	0	0%
30 to 39 years	8	4%	3	1%
40 to 49 years	16	6%	6	3%
50 to 59 years	34	13%	11	4%
60 to 69 years	47	22%	15	7%
70 to 79 years	42	27%	11	7%
80 to 89 years	39	17%	4	2%
90+ years	22	12%	2	1%

Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 2020.
2. Intensive care patients are a subset of hospitalized patients.
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. March 25, 2020 version 6.0.



Exposure Settings of Confirmed COVID-19 Cases

Table 5. Exposures of Ottawa residents with confirmed COVID-19

Exposure	Number	Percentage
Travel only	110	6%
Travel and contact with a case	43	3%
Contact with a case only	294	17%
Institutional	877	51%
Institutional and travel	3	<1%
No known exposure	325	19%
Undetermined	55	3%
TOTAL	1,707	

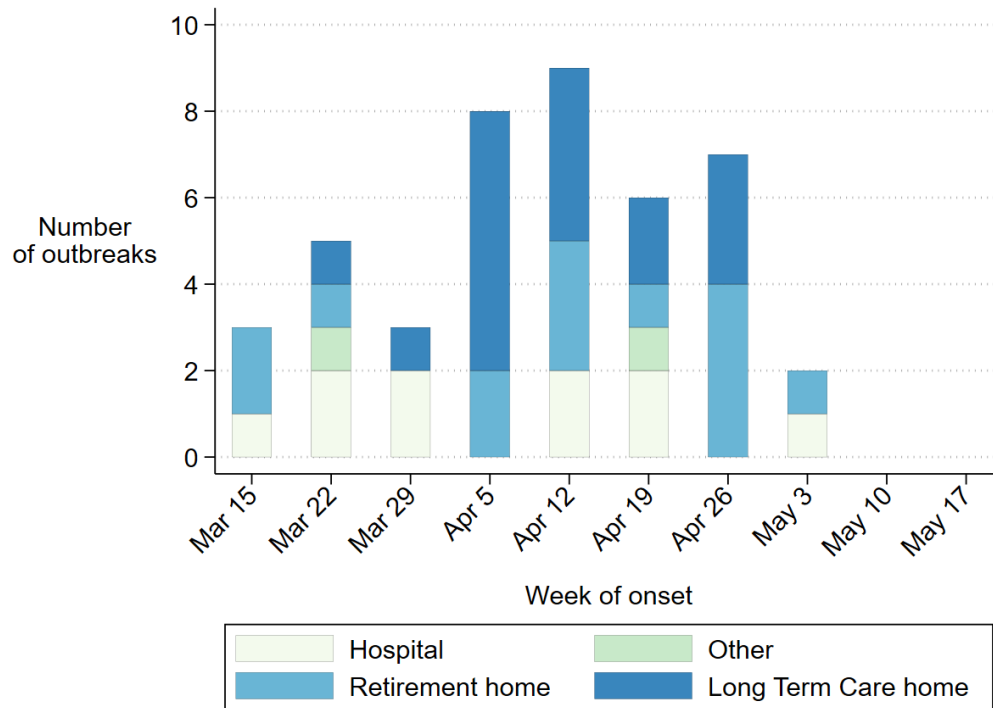
Notes:

1. Data are from the COD as of 2:00 p.m. on May 12, 2020.
2. "Institutional" exposures are assigned to residents/patients and staff associated with outbreaks in long term care facilities, retirement homes, group homes, and hospitals.
3. The number of cases with travel history has been revised downward since the last report on April 29 after additional chart review.



Outbreaks

Figure 5. Total number of COVID-19 outbreaks in Ottawa institutions³



Notes:

1. Data from iPHIS as of 4:00 pm on May 12, 2020.
2. 22 outbreaks are closed and 21 are active. Investigation and data entry are ongoing.
3. Institutions include long-term care homes, retirement homes, group homes (other) and public hospitals.



Data Notes & Sources

Data extracted represent a snapshot at the time of extraction and may differ in previous or subsequent reports. These data sources are used:

- 1) Case information
 - a. Data are from [Ontario Data Catalogue](#) of confirmed positive cases of COVID19 in Ottawa downloaded 10:30am on May 12, representing data pulled from the Ottawa Public Health COVID-19 Ottawa Database (COD) as of 2:00 p.m. on May 12, 2020.
- 2) Outbreak information
 - a. Ontario Ministry of Health, integrated Public Health Information System (iPHIS), extracted by Ottawa Public Health at 4:00 p.m. each day.

iPHIS and the COD are dynamic disease reporting systems that allow for ongoing updates to data previously entered. Data extracted from these databases represent a snapshot at the time of extraction and can be different in previous or subsequent reports.

Please use the following citation when referencing this document:

Ottawa Public Health. COVID-19 Epidemiology Update. May 13, 2020. Ottawa (ON): Ottawa Public Health; 2020.

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



Data Tables

Data Table for Figure 1

Earliest of Onset, Test or Reported Date or Date of Death	Cumulative Number of Ottawa Residents with Confirmed COVID-19	Cumulative Number of Ottawa Residents with Confirmed COVID-19 who died
2/10/2020	1	0
2/11/2020	1	0
2/12/2020	1	0
2/13/2020	1	0
2/14/2020	1	0
2/15/2020	1	0
2/16/2020	1	0
2/17/2020	1	0
2/18/2020	1	0
2/19/2020	1	0
2/20/2020	2	0
2/21/2020	2	0
2/22/2020	3	0
2/23/2020	4	0
2/24/2020	5	0
2/25/2020	5	0
2/26/2020	5	0
2/27/2020	5	0
2/28/2020	5	0
2/29/2020	5	0
3/01/2020	7	0
3/02/2020	9	0
3/03/2020	10	0
3/04/2020	11	0
3/05/2020	17	0
3/06/2020	22	0
3/07/2020	25	0
3/08/2020	34	0
3/09/2020	42	0



Earliest of Onset, Test or Reported Date or Date of Death	Cumulative Number of Ottawa Residents with Confirmed COVID-19	Cumulative Number of Ottawa Residents with Confirmed COVID-19 who died
3/10/2020	49	0
3/11/2020	58	0
3/12/2020	72	0
3/13/2020	94	0
3/14/2020	110	0
3/15/2020	137	0
3/16/2020	152	0
3/17/2020	173	0
3/18/2020	187	0
3/19/2020	212	0
3/20/2020	232	0
3/21/2020	252	0
3/22/2020	279	0
3/23/2020	300	0
3/24/2020	317	1
3/25/2020	341	1
3/26/2020	354	1
3/27/2020	371	1
3/28/2020	396	2
3/29/2020	412	2
3/30/2020	434	3
3/31/2020	449	3
4/01/2020	476	3
4/02/2020	494	5
4/03/2020	517	5
4/04/2020	533	6
4/05/2020	562	8
4/06/2020	580	9
4/07/2020	599	9
4/08/2020	620	11
4/09/2020	646	11



Earliest of Onset, Test or Reported Date or Date of Death	Cumulative Number of Ottawa Residents with Confirmed COVID-19	Cumulative Number of Ottawa Residents with Confirmed COVID-19 who died
4/10/2020	676	11
4/11/2020	710	11
4/12/2020	744	13
4/13/2020	759	16
4/14/2020	799	18
4/15/2020	826	23
4/16/2020	897	23
4/17/2020	934	26
4/18/2020	969	31
4/19/2020	985	36
4/20/2020	1042	40
4/21/2020	1077	47
4/22/2020	1119	54
4/23/2020	1163	57
4/24/2020	1196	65
4/25/2020	1303	73
4/26/2020	1369	82
4/27/2020	1432	88
4/28/2020	1466	94
4/29/2020	1496	102
4/30/2020	1522	109
5/01/2020	1548	120
5/02/2020	1567	132
5/03/2020	1588	138
5/04/2020	1606	150
5/05/2020	1634	152
5/06/2020	1654	155
5/07/2020	1671	161
5/08/2020	1680	169



Earliest of Onset, Test or Reported Date or Date of Death	Cumulative Number of Ottawa Residents with Confirmed COVID-19	Cumulative Number of Ottawa Residents with Confirmed COVID-19 who died
5/09/2020	1694	173
5/10/2020	1697	180
5/11/2020	1707	181
5/12/2020	1707	182

Data table for Figure 2 and Figure 3

Earliest of Onset, Test or Reported Date	Daily Total of Sporadic COVID-19 Cases	Daily Total of COVID-19 Cases Linked to Community Outbreaks	Daily Total of COVID-19 Cases Linked to Outbreaks in Health Care Institutions	Daily Total of Ottawa Residents with Confirmed COVID-19
2/10/2020	1	0	0	1
2/11/2020	0	0	0	0
2/12/2020	0	0	0	0
2/13/2020	0	0	0	0
2/14/2020	0	0	0	0
2/15/2020	0	0	0	0
2/16/2020	0	0	0	0
2/17/2020	0	0	0	0
2/18/2020	0	0	0	0
2/19/2020	0	0	0	0
2/20/2020	1	0	0	1
2/21/2020	0	0	0	0
2/22/2020	1	0	0	1
2/23/2020	1	0	0	1
2/24/2020	1	0	0	1
2/25/2020	0	0	0	0
2/26/2020	0	0	0	0
2/27/2020	0	0	0	0
2/28/2020	0	0	0	0



Earliest of Onset, Test or Reported Date	Daily Total of Sporadic COVID-19 Cases	Daily Total of COVID-19 Cases Linked to Community Outbreaks	Daily Total of COVID-19 Cases Linked to Outbreaks in Health Care Institutions	Daily Total of Ottawa Residents with Confirmed COVID-19
2/29/2020	0	0	0	0
3/01/2020	2	0	0	2
3/02/2020	2	0	0	2
3/03/2020	1	0	0	1
3/04/2020	1	0	0	1
3/05/2020	5	1	0	6
3/06/2020	5	0	0	5
3/07/2020	3	0	0	3
3/08/2020	9	0	0	9
3/09/2020	8	0	0	8
3/10/2020	7	0	0	7
3/11/2020	9	0	0	9
3/12/2020	14	0	0	14
3/13/2020	20	0	2	22
3/14/2020	16	0	0	16
3/15/2020	27	0	0	27
3/16/2020	15	0	0	15
3/17/2020	21	0	0	21
3/18/2020	14	0	0	14
3/19/2020	25	0	0	25
3/20/2020	18	1	1	20
3/21/2020	19	0	1	20
3/22/2020	26	0	1	27
3/23/2020	20	1	0	21
3/24/2020	13	1	3	17
3/25/2020	22	0	2	24
3/26/2020	10	1	2	13
3/27/2020	13	2	2	17
3/28/2020	24	0	1	25
3/29/2020	11	2	3	16



Earliest of Onset, Test or Reported Date	Daily Total of Sporadic COVID-19 Cases	Daily Total of COVID-19 Cases Linked to Community Outbreaks	Daily Total of COVID-19 Cases Linked to Outbreaks in Health Care Institutions	Daily Total of Ottawa Residents with Confirmed COVID-19
3/30/2020	15	6	1	22
3/31/2020	12	1	2	15
4/01/2020	16	6	5	27
4/02/2020	9	5	4	18
4/03/2020	18	3	2	23
4/04/2020	7	5	4	16
4/05/2020	15	4	10	29
4/06/2020	7	2	9	18
4/07/2020	12	1	6	19
4/08/2020	8	2	11	21
4/09/2020	13	3	10	26
4/10/2020	10	1	19	30
4/11/2020	8	2	24	34
4/12/2020	13	1	20	34
4/13/2020	4	0	11	15
4/14/2020	10	0	30	40
4/15/2020	10	2	15	27
4/16/2020	18	0	53	71
4/17/2020	6	1	30	37
4/18/2020	8	0	27	35
4/19/2020	4	1	11	16
4/20/2020	15	0	42	57
4/21/2020	12	0	23	35
4/22/2020	11	0	31	42
4/23/2020	12	0	32	44
4/24/2020	4	0	29	33
4/25/2020	7	0	100	107
4/26/2020	9	0	57	66
4/27/2020	13	0	50	63



Earliest of Onset, Test or Reported Date	Daily Total of Sporadic COVID-19 Cases	Daily Total of COVID-19 Cases Linked to Community Outbreaks	Daily Total of COVID-19 Cases Linked to Outbreaks in Health Care Institutions	Daily Total of Ottawa Residents with Confirmed COVID-19
4/28/2020	9	0	25	34
4/29/2020	8	1	21	30
4/30/2020	12	0	14	26
5/01/2020	8	0	18	26
5/02/2020	7	0	12	19
5/03/2020	7	0	14	21
5/04/2020	5	0	13	18
5/05/2020	2	0	26	28
5/06/2020	5	1	14	20
5/07/2020	3	0	14	17
5/08/2020	2	0	7	9
5/09/2020	4	1	9	14
5/10/2020	2	0	1	3
5/11/2020	4	0	6	10
5/12/2020	0	0	0	0



Data Table for Figure 5

Week of symptom onset	Number of outbreaks in Ottawa hospitals	Number of outbreaks in other Ottawa institutions	Number of outbreaks in Ottawa retirement homes	Number of outbreaks in Ottawa long term care homes
Mar 15	1	0	2	0
Mar 22	2	1	1	1
Mar 29	2	0	0	1
Apr 05	0	0	2	6
Apr 12	2	0	3	4
Apr 19	2	1	1	2
Apr 26	0	0	4	3
May 03	1	0	1	0
May 10	0	0	0	0

