

## Daily Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to December 22, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **December 22, 2020**.

Please visit the interactive [Ontario COVID-19 Data Tool](#) to explore recent COVID-19 data by public health unit, age group, sex, and trends over time.

A weekly summary report is available with additional information to complement the daily report.

This **daily** report provides an epidemiologic summary of recent COVID-19 activity in Ontario. The change in cases is determined by taking the cumulative difference between the current day and the previous day.

## Highlights

- There are a total of 162,663 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 2,408 confirmed cases (percent change of +9.4%)
  - An increase of 41 deaths (percent change of +95.2%)
  - An increase of 2,243 resolved cases (percent change of +18.1%)

In this document, the term 'change in cases' refers to cases publicly reported by the province for a given day. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals for updated case counts (i.e., age group, gender) differing from the overall updated case counts.

The term public health unit reported date in this document refers to the date local public health units were first notified of the case.

## Case Characteristics

**Table 1a. Summary of recent confirmed cases of COVID-19: Ontario**

	Change in cases December 21	Change in cases December 22	Percentage change December 22 compared to December 21	Cumulative case count as of December 22
Total number of cases	2,202	2,408	+9.4%	162,663
Number of deaths	21	41	+95.2%	4,229
Number resolved	1,900	2,243	+18.1%	139,010

**Note:** The number of cases publicly reported by the province each day may not align with case counts reported to public health on a given day; public health unit reported date refers to the date local public health was first notified of the case. Data corrections or updates can result in case records being removed and or updated from past reports.

**Data Source:** CCM plus

**Table 1b. Summary of recent confirmed cases of COVID-19 by age group and gender: Ontario**

	Change in cases December 21	Change in cases December 22	Cumulative case count as of December 22
Gender: Male	1,082	1,180	79,810
Gender: Female	1,115	1,226	81,862
Ages: 19 and under	320	368	20,949
Ages: 20-39	833	887	59,476
Ages: 40-59	633	676	46,606
Ages: 60-79	303	339	23,315
Ages: 80 and over	113	135	12,280

**Note:** Not all cases have a reported age or gender reported. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals (i.e., age group, gender) differing from past publicly reported case counts.

**Data Source:** CCM plus

**Table 2. Summary of recent confirmed cases of COVID-19 in school aged children by age group, August 30 to December 22, 2020: Ontario**

	Change in cases December 21	Change in cases December 22	Cumulative case count from August 30 to December 22
Ages: 4 to 8	62	67	3,355
Ages: 9 to 13	78	89	4,639
Ages: 14 to 17	88	96	4,518

**Note:** Includes all confirmed cases of COVID-19 for specified ages, regardless of school attendance. Data corrections or updates can result in case records being removed and or updated from past reports and may result in subset totals (i.e., age group) differing from past publicly reported case counts.

**Data Source:** CCM plus

**Table 3. Summary of recent confirmed cases of COVID-19 in long-term care homes: Ontario**

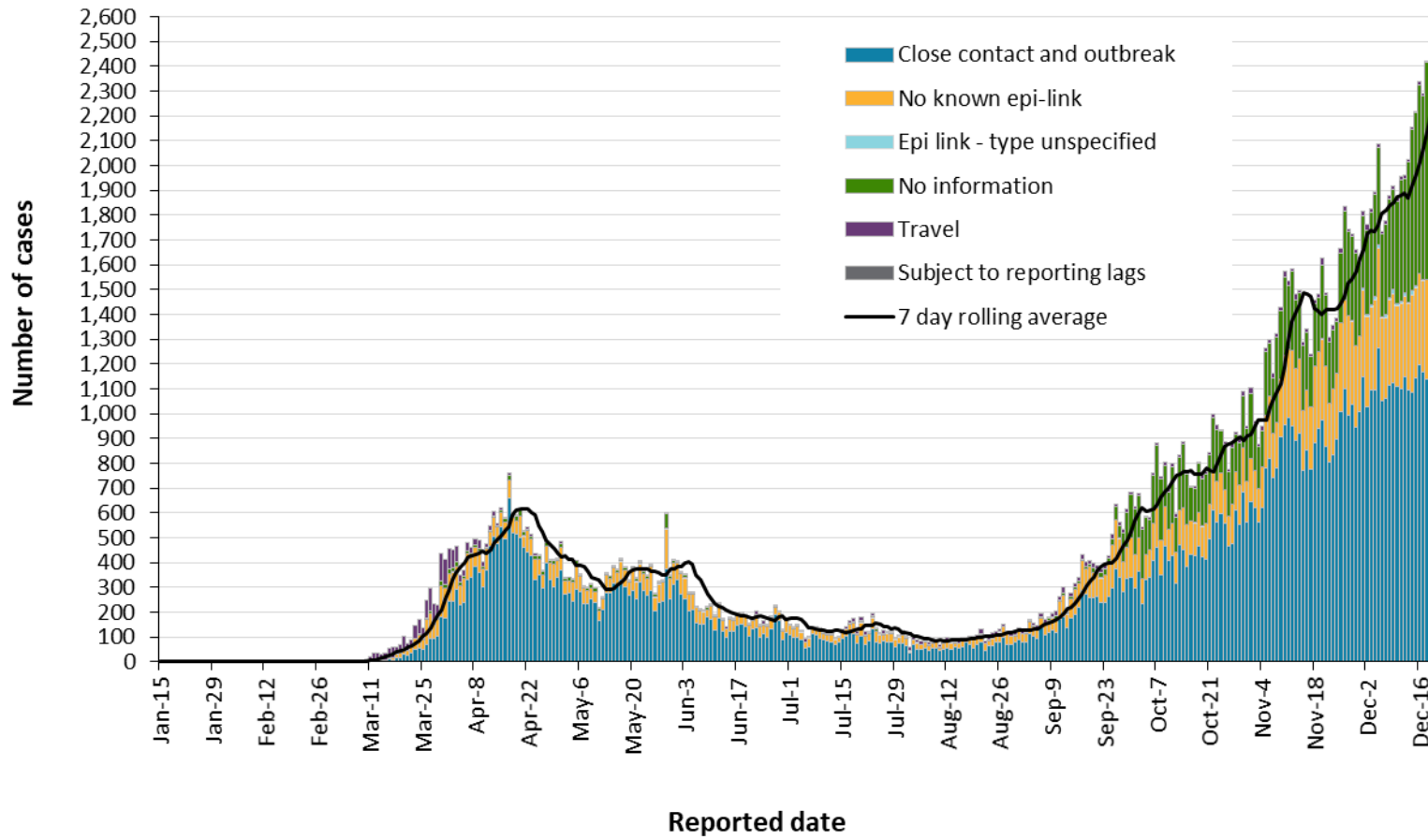
Long-term care home cases	Change in cases December 21	Change in cases December 22	Cumulative case count as of December 22
Residents	118	150	10,206
Health care workers	35	44	3,996
Deaths among residents	11	16	2,608
Deaths among health care workers	0	0	8

**Note:** Information on how long-term care home residents and health care workers are identified is available in the technical notes. Also, the change in cases in these categories may represent existing case records that have been updated.

**Data Source:** CCM plus

# Time

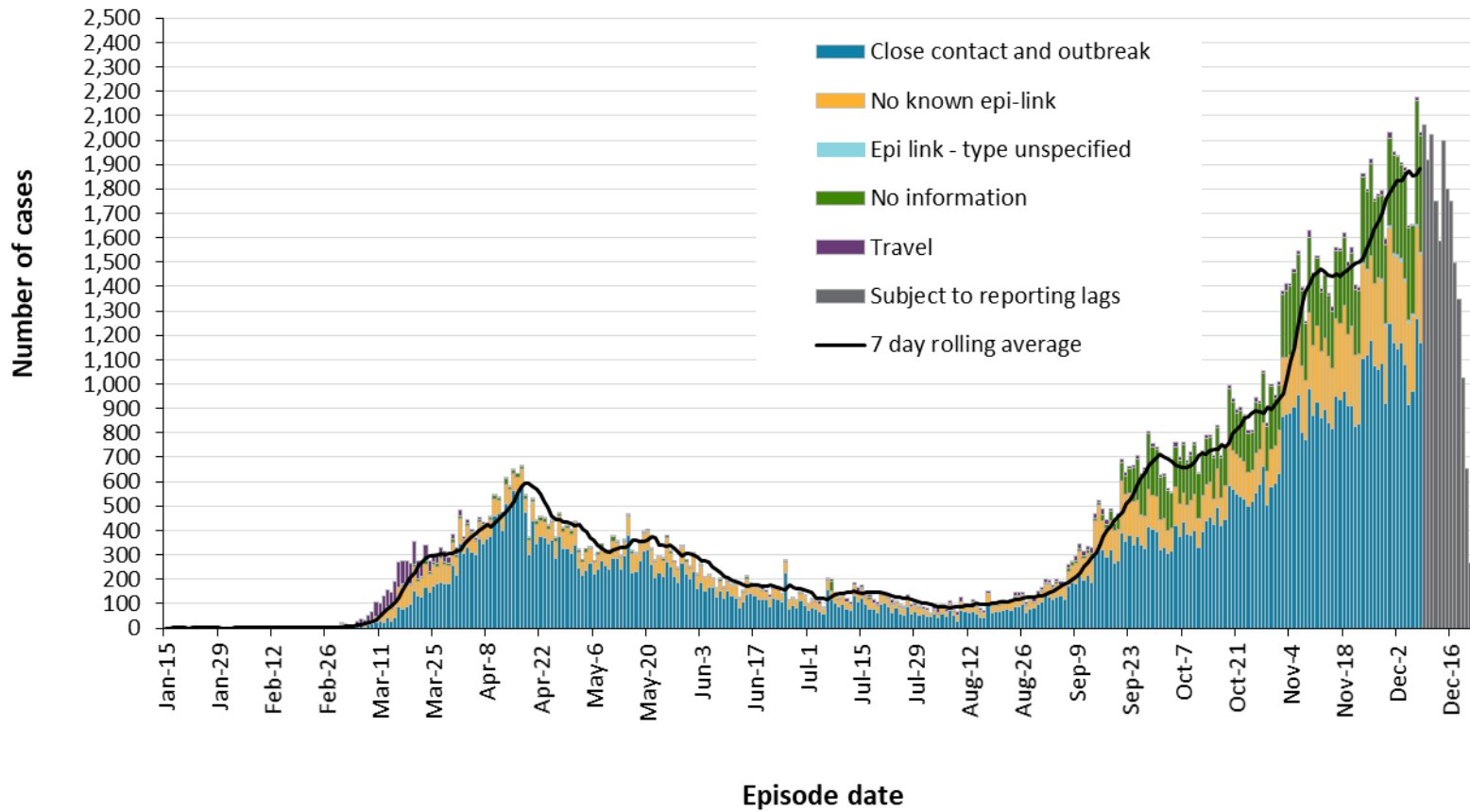
Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to December 22, 2020



Data Source: CCM plus

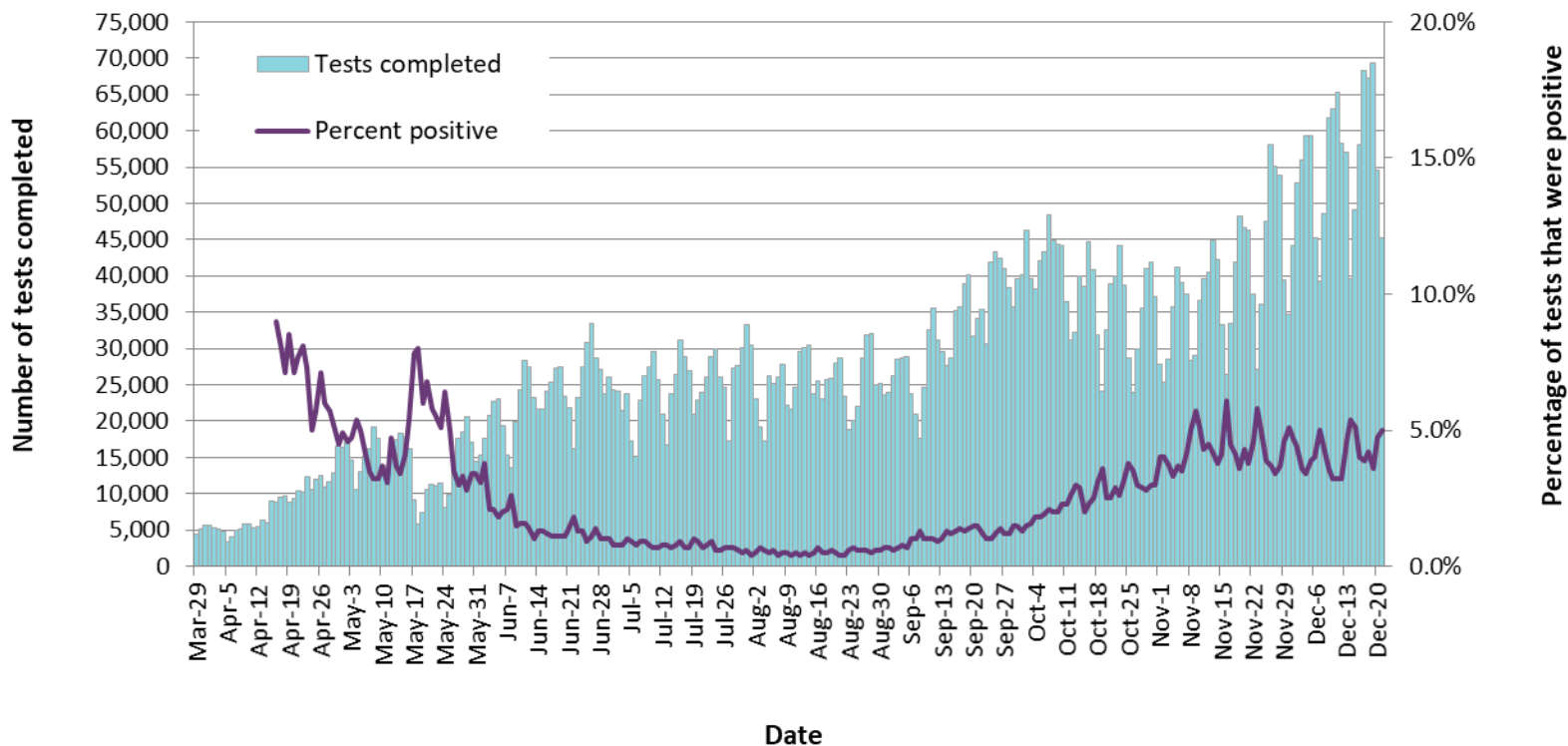
COVID-19 in Ontario: January 15, 2020 to December 22, 2020

**Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to December 22, 2020**



**Note:** Not all cases may have an episode date and those without one are not included in the figure. Episode date is defined and available in the technical notes.  
**Data Source:** CCM plus

**Figure 3. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to December 21, 2020**

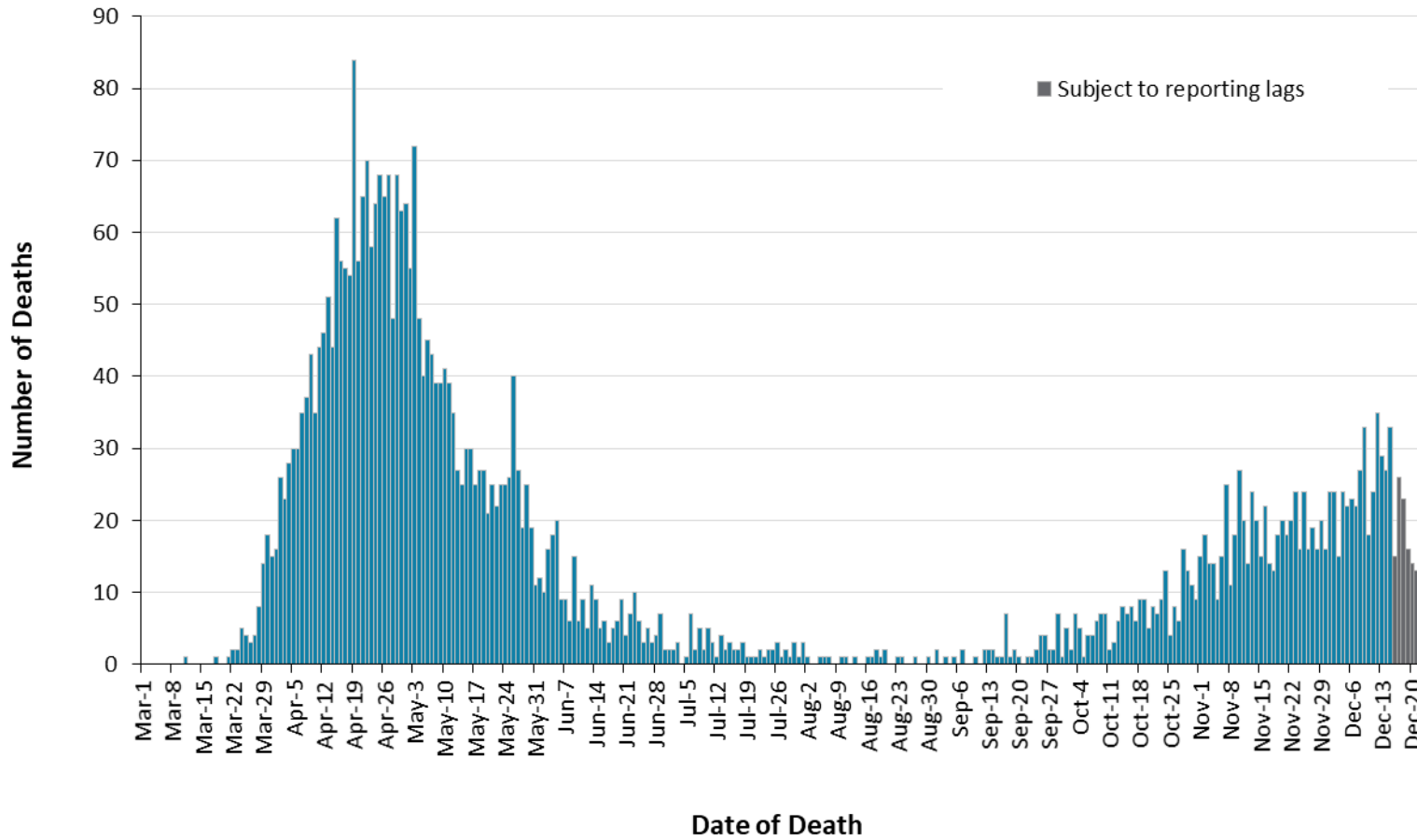


**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

**Data Source:** The Provincial COVID-19 Diagnostics Network, data reported by member microbiology laboratories.

# Severity

Figure 4. Confirmed deaths among COVID-19 cases by date of death: Ontario, March 1, 2020 to December 22, 2020



**Note:** Cases without a death date are not included in the figure.

**Data Source:** CCM plus



**Table 4. Confirmed cases of COVID-19 by severity: Ontario**

	Cumulative case count as of December 22	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	4,229	2.6%
Deaths reported in ages: 19 and under	1	<0.1%
Deaths reported in ages: 20-39	17	<0.1%
Deaths reported in ages: 40-59	170	0.4%
Deaths reported in ages: 60-79	1,118	4.8%
Deaths reported in ages: 80 and over	2,923	23.8%
Ever in ICU	1,784	1.1%
Ever hospitalized	9,006	5.5%

**Note:** Not all cases have an age reported. Data corrections or updates can result in case records being removed and/or updated and may result in totals differing from past publicly reported case counts.

**Data Source:** CCM plus

## Geography

**Table 5. Summary of recent confirmed cases of COVID-19 by public health unit and region: Ontario**

Public Health Unit Name	Change in cases December 21	Change in cases December 22	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	3	2	145	165.4
Thunder Bay District Health Unit	5	18	524	349.4
<b>TOTAL NORTH WEST</b>	8	20	669	281.5
Algoma Public Health	-1	1	63	55.1
North Bay Parry Sound District Health Unit	2	1	111	85.5
Porcupine Health Unit	0	4	125	149.8
Public Health Sudbury & Districts	0	3	254	127.6
Timiskaming Health Unit	4	1	44	134.6
<b>TOTAL NORTH EAST</b>	5	10	597	106.7
Ottawa Public Health	19	56	9,445	895.6
Eastern Ontario Health Unit	6	9	1,208	578.8
Hastings Prince Edward Public Health	3	3	256	151.9
Kingston, Frontenac and Lennox & Addington Public Health	6	6	478	224.7
Leeds, Grenville & Lanark District Health Unit	3	-1	635	366.7
Renfrew County and District Health Unit	0	3	220	202.5
<b>TOTAL EASTERN</b>	37	76	12,242	635.5

Public Health Unit Name	Change in cases December 21	Change in cases December 22	Cumulative case count	Cumulative rate per 100,000 population
Durham Region Health Department	86	136	6,493	911.4
Haliburton, Kawartha, Pine Ridge District Health Unit	6	1	463	245.1
Peel Public Health	504	448	35,899	2235.4
Peterborough Public Health	3	3	276	186.5
Simcoe Muskoka District Health Unit	46	46	3,168	528.4
York Region Public Health	218	190	15,263	1245.1
<b>TOTAL CENTRAL EAST</b>	863	824	61,562	1374.0
Toronto Public Health	636	629	53,106	1701.9
<b>TOTAL TORONTO</b>	636	629	53,106	1701.9
Chatham-Kent Public Health	1	9	593	557.8
Grey Bruce Health Unit	3	-2	411	241.9
Huron Perth Public Health	14	11	559	400.0
Lambton Public Health	15	18	554	423.0
Middlesex-London Health Unit	93	72	2,637	519.6
Southwestern Public Health	23	53	1,013	479.0
Windsor-Essex County Health Unit	172	234	6,247	1470.5
<b>TOTAL SOUTH WEST</b>	321	395	12,014	710.6
Brant County Health Unit	5	14	853	549.6
City of Hamilton Public Health Services	95	150	5,161	871.6

Public Health Unit Name	Change in cases December 21	Change in cases December 22	Cumulative case count	Cumulative rate per 100,000 population
Haldimand-Norfolk Health Unit	8	15	801	702.1
Halton Region Public Health	48	88	4,988	805.7
Niagara Region Public Health	41	76	3,230	683.6
Region of Waterloo Public Health and Emergency Services	101	80	5,226	894.3
Wellington-Dufferin-Guelph Public Health	34	31	2,214	709.8
<b>TOTAL CENTRAL WEST</b>	332	454	22,473	788.7
<b>TOTAL ONTARIO</b>	<b>2,202</b>	<b>2,408</b>	<b>162,663</b>	<b>1,094.3</b>

**Notes:** Health units with data corrections or updates could result in records being removed from totals resulting in negative counts.

**Data Source:** CCM plus

## Outbreaks

**Table 6. Summary of recent confirmed COVID-19 outbreaks reported in long-term care homes, retirement homes and hospitals by status: Ontario**

Institution type	Change in outbreaks December 21	Change in outbreaks December 22	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	10	7	173	858
Retirement homes	4	5	101	444
Hospitals	3	3	52	223

**Note:** Ongoing outbreaks include all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded, or where the outbreak started more than five months ago, even for outbreaks where the Outbreak Status value selected in CCM/iPHIS is 'OPEN'. The start of the outbreak is determined by the onset date of first case, or if missing the outbreak reported date, or else if that is also missing, then the outbreak created date.

**Data Source:** CCM plus

# Technical Notes

## Data Sources

- The data for this report were based on:
  - Information extracted from the Ontario Ministry of Health (Ministry) integrated Public Health Information System (iPHIS) database for Toronto Public Health as of **December 22, 2020 at 1 p.m.**
  - Information successfully uploaded to the Ministry from Local Systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES as of **December 22, 2020 at 2 p.m.**
  - Information successfully extracted from the Public Health Case and Contact Management Solution (CCM) for all other PHUs by PHO as of **December 22, 2020 at 1 p.m.**
- CCM and CCM plus (which includes CCM, iPHIS, and CORES) are dynamic disease reporting systems, which allow ongoing updates to data previously entered. As a result, data extracted from CCM and the Local Systems represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population projection data for 2020 were sourced from Ministry, IntelliHEALTH Ontario. Data were extracted on November 26, 2019.
- COVID-19 test data were based on information from The Provincial COVID-19 Diagnostics Network, reported by member microbiology laboratories.

## Data Caveats

- The data only represent cases reported to public health units and recorded in CCM plus. As a result, all counts will be subject to varying degrees of underreporting due to a variety of factors, such as disease awareness and medical care seeking behaviours, which may depend on severity of illness, clinical practice, changes in laboratory testing, and reporting behaviours.
- Lags in CCM plus data entry due to weekend staffing may result in lower case counts than would otherwise be recorded.
- Only cases meeting the confirmed case classification as listed in the MOH [COVID-19 case definition](#) are included in the report counts from CCM plus. This includes persons with a positive detection of serum/plasma immunoglobulin G (IgG) antibodies to SARS-CoV-2, which was added to the confirmed case definition on August 6, 2020.
- The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.
- Reported date is the date the case was reported to the public health unit.

- Case episode date is based on an estimate of the best date of disease onset. This date is calculated based on either the date of symptom onset, specimen collection/test date, or the date reported to the public health unit.
- Resolved cases are determined only for COVID-19 cases that have not died. Cases that have died are considered fatal and not resolved. The following cases are classified as resolved:
  - Cases that are reported as 'recovered' in CCM
  - Cases that are not hospitalized and are 14 days past their episode date
  - Cases that are currently hospitalized (no hospital end date entered) and have a status of 'closed' in CCM (indicating public health unit follow-up is complete) and are 14 days past their symptom onset date or specimen collection date
- Hospitalization includes all cases for which a hospital admission date was reported at the time of data extraction. It includes cases that have been discharged from hospital as well as cases that are currently hospitalized. Emergency room visits are not included in the number of reported hospitalizations.
- ICU admission includes all cases for which an ICU admission date was reported at the time of data extraction. It is a subset of the count of hospitalized cases. It includes cases that have been treated or that are currently being treated in an ICU.
- Orientation of case counts by geography is based on the diagnosing health unit (DHU). DHU refers to the case's public health unit of residence at the time of illness onset and not necessarily the location of exposure. Cases for which the DHU was reported as MOH (to signify a case that is not a resident of Ontario) have been excluded from the analyses.
- Likely source of acquisition is determined by examining the epidemiologic link and epidemiologic link status fields in CCM and local systems. If no epidemiologic link is identified in those fields the risk factor fields are examined to determine whether a case travelled, was associated with a confirmed outbreak, was a contact of a case, had no known epidemiological link (sporadic community transmission) or was reported to have an unknown source/no information was reported. Some cases may have no information reported if the case is untraceable, was lost to follow-up or referred to FNIHB. Cases with multiple risk factors were assigned to a single likely acquisition source group which was determined hierarchically in the following order:
  - For cases with an episode date *on or after* April 1, 2020: Outbreak-associated > close contact of a confirmed case > travel > no known epidemiological link > information missing or unknown
  - For cases with an episode date *before* April 1, 2020: Travel > outbreak-associated > close contact of a confirmed case > no known epidemiological link > information missing or unknown
- Deaths are determined by using the outcome field in CCM plus. Any case marked 'Fatal' is included in the deaths data. The CCM field Type of Death is not used to further categorize the data.

- The date of death is determined using the outcome date field for cases marked as 'Fatal' in the outcome field.
- COVID-19 cases from CCM plus for which the Classification and/or Disposition was reported as ENTERED IN ERROR, DOES NOT MEET DEFINITION, IGNORE, DUPLICATE, or any variation on these values have been excluded. The provincial case count for COVID-19 includes cases that are counted once across all systems from which the case data are obtained. Duplicate records may exist if these records were not identified and resolved prior to data upload to the Ministry.
- Ongoing outbreaks include all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded, or where the outbreak started more than five months ago, even for outbreaks where the Outbreak Status value selected in CCM/iPHIS is 'OPEN'. The start of the outbreak is determined by the onset date of first case, or if missing the outbreak reported date, or else if that is also missing, then the outbreak created date.
- 'Long-term care home residents' includes cases that reported 'Yes' to the risk factor 'Resident of a long-term care home'; or 'Yes' to the risk factor 'Resident of nursing home or other chronic care facility' and reported to be part of an outbreak assigned as a long-term care home (via the Outbreak number or case comments field); or were reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field) with an age over 70 years and did not report 'No' to the risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility'. 'Long-term care home residents' excludes cases that reported 'Yes' to any of the health care worker occupational risk factors.
- The 'health care workers' variable includes cases that reported 'Yes' to any of the occupation of health care worker, doctor, nurse, dentist, dental hygienist, midwife, other medical technicians, personal support worker, respiratory therapist, first responder.
- 'Health care workers associated with long-term care outbreaks' includes 'health care workers' reported to be part of an outbreak assigned as a long-term care home (via the outbreak number or case comments field). Excludes cases that reported 'Yes' to risk factors 'Resident of long-term care home' or 'Resident of nursing home or other chronic care facility' and 'Yes' to the calculated 'health care workers' variable.
- Percent change is calculated by taking the difference between the current period (i.e., daily count or sum of the daily count over a 7-day period) and previous period (i.e., daily count or sum of the daily count over a 7-day period), divided by the previous period.



## Appendix A

**Table A1. Weekly rates of confirmed COVID-19 cases per 100,000 population over recent rolling 7-day periods, by reported date and public health unit: Ontario, December 7, 2020 to December 19, 2020**

Public Health Unit Name	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	Dec 12 to Dec 18	Dec 13 to Dec 19	% change from Dec 7-13 to Dec 13-19
<b>NORTH WEST</b>								
Northwestern Health Unit	5.7	5.7	3.4	3.4	3.4	5.7	5.7	0.0%
Thunder Bay District Health Unit	40.7	43.3	36.7	32.0	37.3	40.0	43.3	+6.4%
<b>NORTH EAST</b>								
Algoma Public Health	0.9	0.9	0.9	0.9	0.0	0.0	0.0	-100.0%
North Bay Parry Sound District Health Unit	4.6	4.6	4.6	9.2	10.8	12.3	12.3	+167.4%
Porcupine Health Unit	2.4	2.4	2.4	2.4	3.6	3.6	4.8	+100.0%
Public Health Sudbury & Districts	3.5	3.5	3.5	3.5	4.5	4.0	4.0	+14.3%
Timiskaming Health Unit	21.4	18.4	12.2	15.3	15.3	27.5	33.7	+57.5%
<b>EASTERN</b>								
Ottawa Public Health	30.2	30.9	29.3	30.2	31.2	28.3	27.6	-8.6%

Public Health Unit Name	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	Dec 12 to Dec 18	Dec 13 to Dec 19	% change from Dec 7-13 to Dec 13-19
Eastern Ontario Health Unit	51.7	53.2	54.6	58.5	55.1	50.3	44.1	-14.7%
Hastings Prince Edward Public Health	29.7	31.5	26.1	22.0	14.2	16.0	14.8	-50.2%
Kingston, Frontenac and Lennox & Addington Public Health	40.9	44.2	44.2	43.7	40.9	37.6	35.7	-12.7%
Leeds, Grenville & Lanark District Health Unit	40.4	38.1	33.5	31.8	26.6	24.3	20.8	-48.5%
Renfrew County and District Health Unit	36.8	29.5	29.5	17.5	18.4	15.6	15.6	-57.6%
<b>CENTRAL EAST</b>								
Durham Region Health Department	75.2	75.8	83.8	87.6	89.7	92.8	88.9	+18.2%
Haliburton, Kawartha, Pine Ridge District Health Unit	33.9	33.3	34.4	30.2	28.1	25.4	24.3	-28.3%
Peel Public Health	184.8	198.0	197.8	194.2	194.3	194.3	200.9	+8.7%

Public Health Unit Name	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	Dec 12 to Dec 18	Dec 13 to Dec 19	% change from Dec 7-13 to Dec 13-19
Peterborough Public Health	13.5	12.8	14.2	15.5	15.5	16.9	16.2	+20.0%
Simcoe Muskoka District Health Unit	49.7	47.7	46.9	52.4	55.5	57.0	59.9	+20.5%
York Region Public Health	103.6	102.3	103.5	101.6	104.3	115.7	120.7	+16.5%
<b>TORONTO</b>								
Toronto Public Health	124.1	130.4	135.0	142.1	145.0	147.8	146.7	+18.2%
<b>SOUTH WEST</b>								
Chatham-Kent Public Health	20.7	23.5	24.5	25.4	31.0	25.4	31.0	+49.8%
Grey Bruce Health Unit	20.6	20.0	17.1	15.9	15.9	15.9	17.7	-14.1%
Huron Perth Public Health	45.1	43.6	55.8	60.1	59.4	53.7	51.5	+14.2%
Lambton Public Health	18.3	16.0	19.9	24.4	35.9	41.2	55.7	+204.4%
Middlesex-London Health Unit	53.8	57.9	50.6	54.8	62.1	70.3	76.3	+41.8%
Southwestern Public Health	65.7	65.2	74.2	79.9	80.4	81.3	78.0	+18.7%
Windsor-Essex County Health Unit	174.0	173.5	189.3	212.1	241.7	249.3	265.8	+52.8%

Public Health Unit Name	Dec 7 to Dec 13	Dec 8 to Dec 14	Dec 9 to Dec 15	Dec 10 to Dec 16	Dec 11 to Dec 17	Dec 12 to Dec 18	Dec 13 to Dec 19	% change from Dec 7-13 to Dec 13-19
<b>CENTRAL WEST</b>								
Brant County Health Unit	65.1	70.9	72.2	70.9	77.3	74.7	69.6	+6.9%
City of Hamilton Public Health Services	110.3	106.7	111.1	116.4	127.0	128.3	123.3	+11.8%
Haldimand-Norfolk Health Unit	46.5	48.2	45.6	44.7	41.2	47.3	59.6	+28.2%
Halton Region Public Health	71.1	64.9	68.5	72.0	74.5	77.7	84.0	+18.1%
Niagara Region Public Health	63.9	68.4	74.9	76.6	79.4	101.6	107.3	+67.9%
Region of Waterloo Public Health and Emergency Services	81.3	79.9	84.7	87.1	87.1	91.9	97.4	+19.8%
Wellington-Dufferin-Guelph Public Health	88.8	88.8	88.8	95.2	94.6	101.0	93.6	+5.4%
<b>TOTAL ONTARIO</b>	<b>90.0</b>	<b>92.6</b>	<b>94.9</b>	<b>97.7</b>	<b>100.5</b>	<b>103.7</b>	<b>105.5</b>	<b>+17.2%</b>

**Note:** Rates are based on the sum of the daily case counts during the date ranges specified in each column.

**Data Source:** CCM plus

## Disclaimer

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## For Further Information

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