

## Daily Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to December 28, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **December 28, 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 175,908 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 2,553 confirmed cases (percent change of +31.7%)
  - An increase of 41 deaths (percent change of +10.8%)
  - An increase of 2,233 resolved cases (percent change of +3.8%)

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 27	Change in cases December 28	Percentage change December 28 compared to December 27	Cumulative case count as of December 28
Total number of cases	1,939	2,553	+31.7%	175,908
Number of deaths	37	41	+10.8%	4,455
Number resolved	2,151	2,233	+3.8%	151,562

**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 27	Change in cases December 28	Cumulative case count as of December 28
Gender: Male	917	1,242	86,163
Gender: Female	1,008	1,308	88,643
Ages: 19 and under	281	341	22,711
Ages: 20-39	691	855	64,094
Ages: 40-59	571	778	50,569
Ages: 60-79	271	423	25,360
Ages: 80 and over	131	154	13,134

**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 28, 2020: Ontario**

	Change in cases December 27	Change in cases December 28	Cumulative case count from August 30 to December 28
Ages: 4 to 8	45	48	3,645
Ages: 9 to 13	62	89	5,084
Ages: 14 to 17	75	98	4,980

**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**

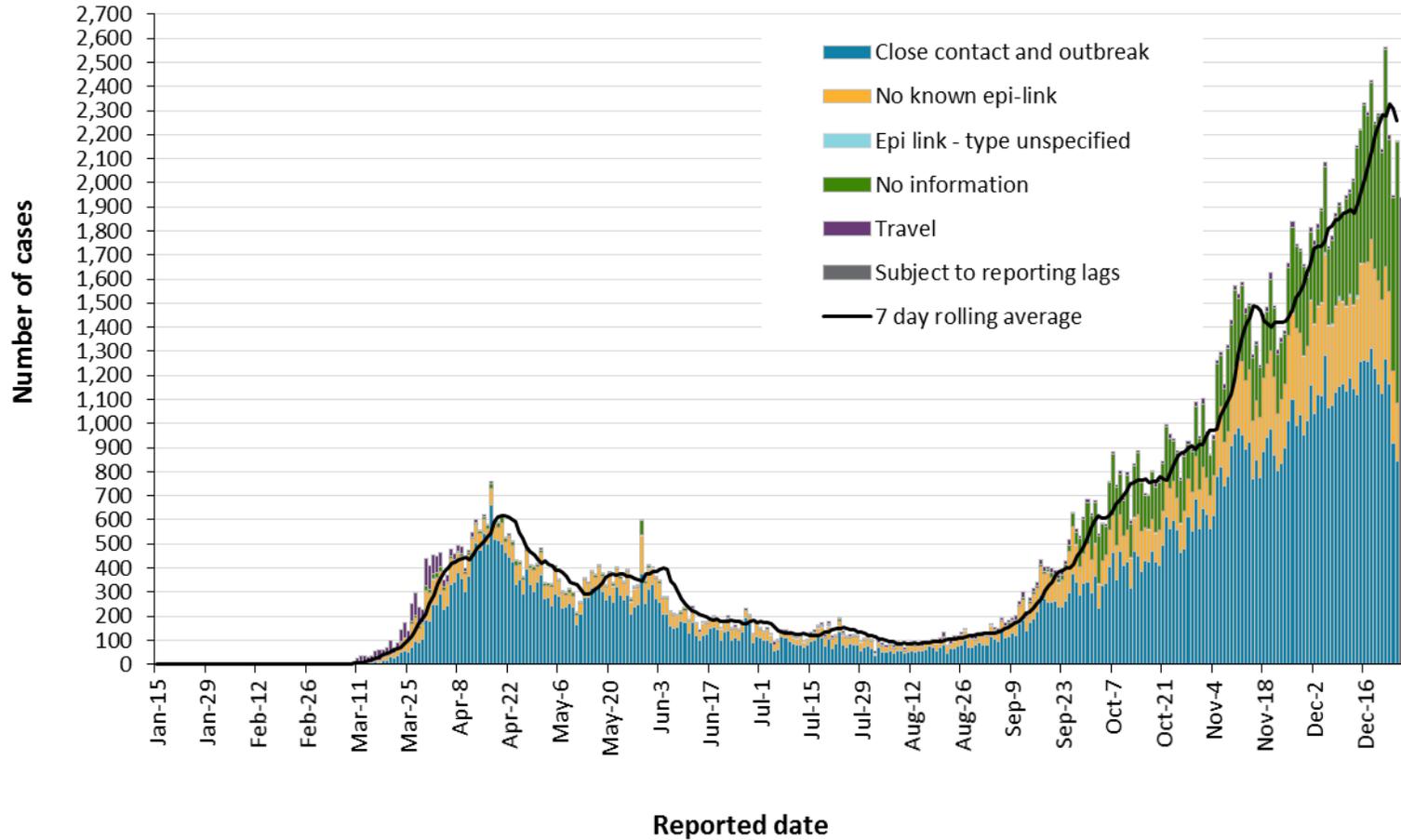
Long-term care home cases	Change in cases December 27	Change in cases December 28	Cumulative case count as of December 28
Residents	70	78	10,725
Health care workers	35	33	4,228
Deaths among residents	12	18	2,726
Deaths among health care workers	0	0	8

**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

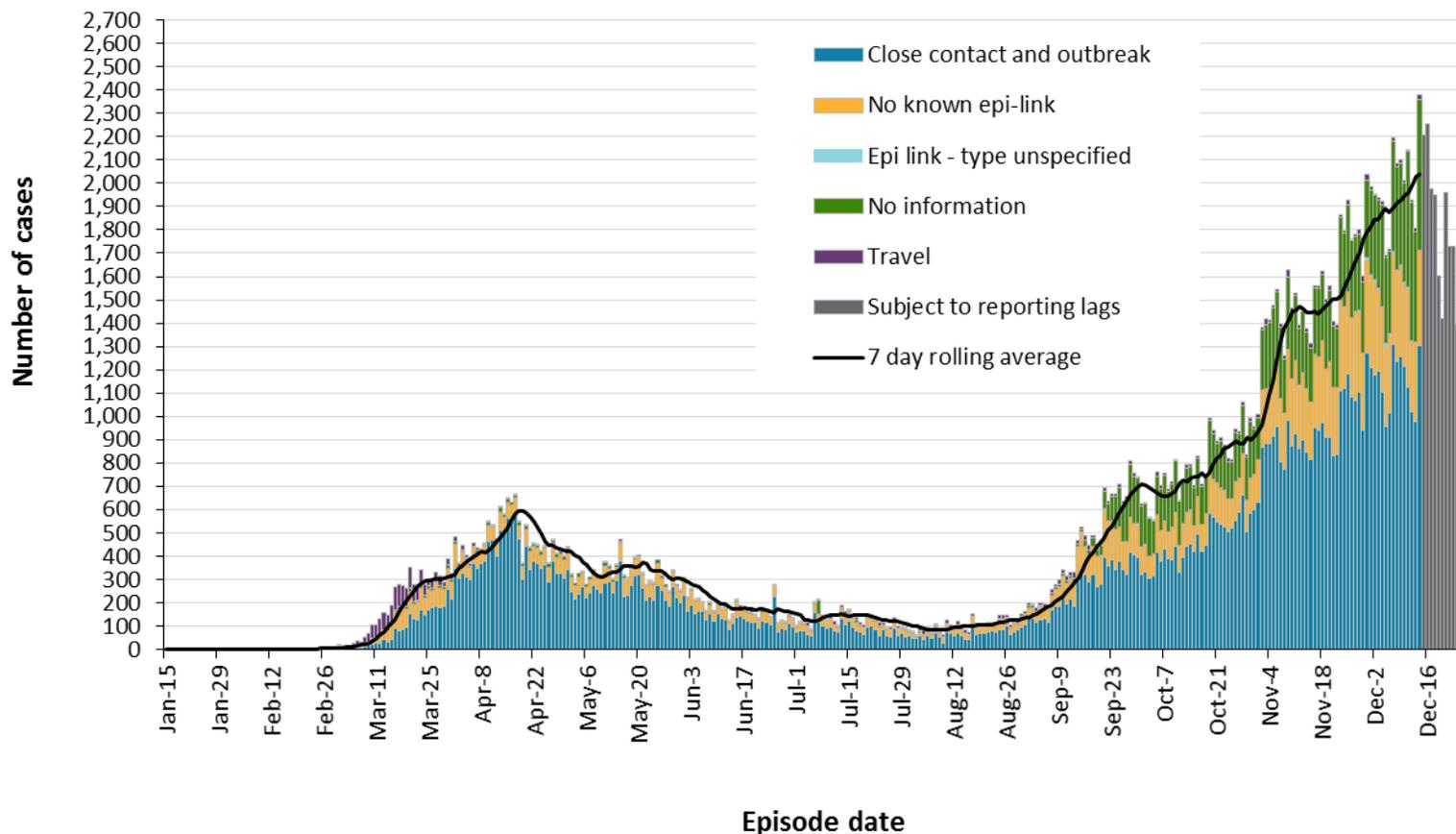
Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to December 28, 2020



Data Source: CCM plus

COVID-19 in Ontario: January 15, 2020 to December 28, 2020

**Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to December 28, 2020**

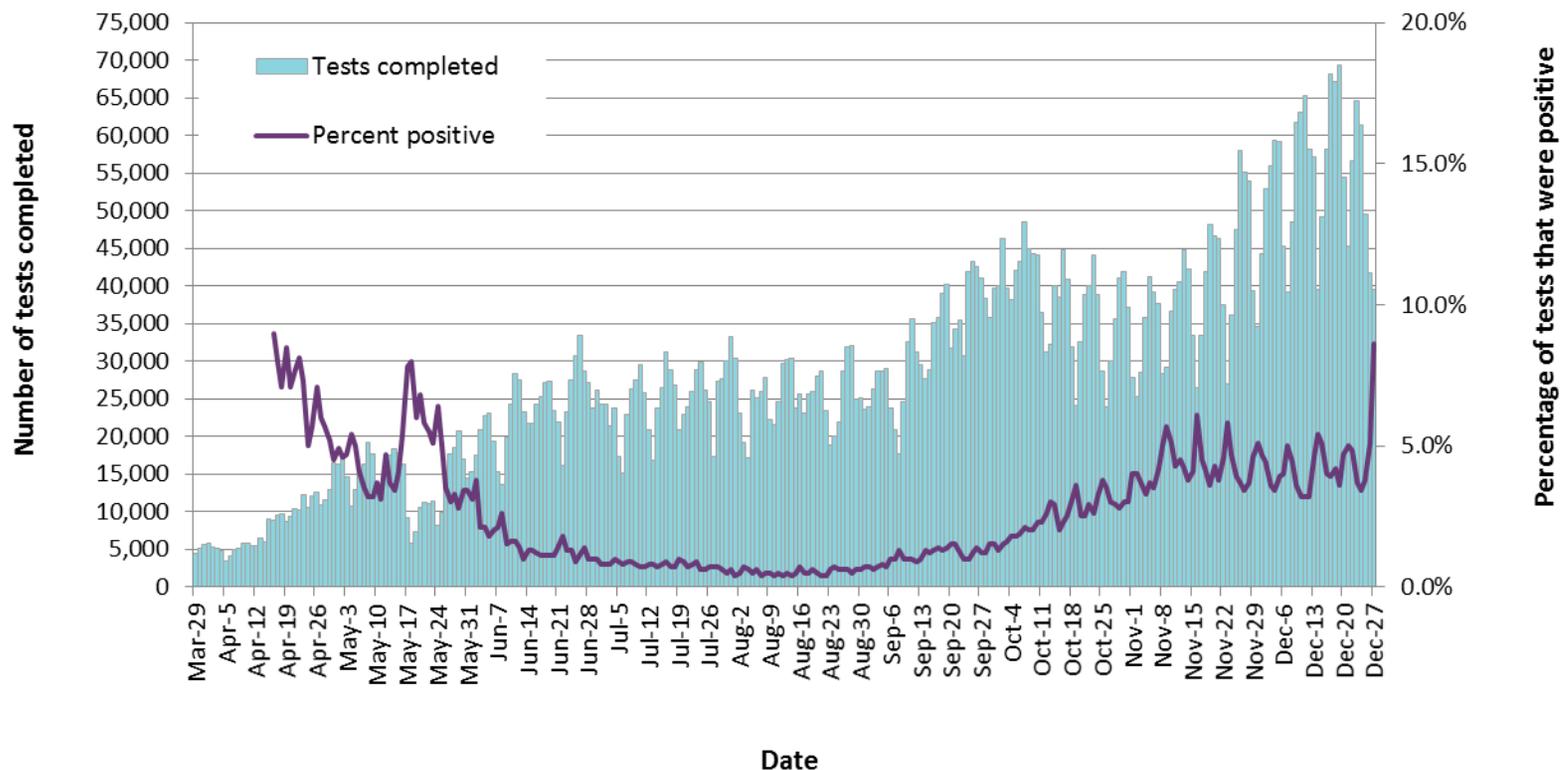


**Note:** Not all cases may have an episode date and those without one are not included in the figure. Episode date is defined and available in the technical notes.

**Data Source:** CCM plus

COVID-19 in Ontario: January 15, 2020 to December 28, 2020

**Figure 3. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to December 27, 2020**

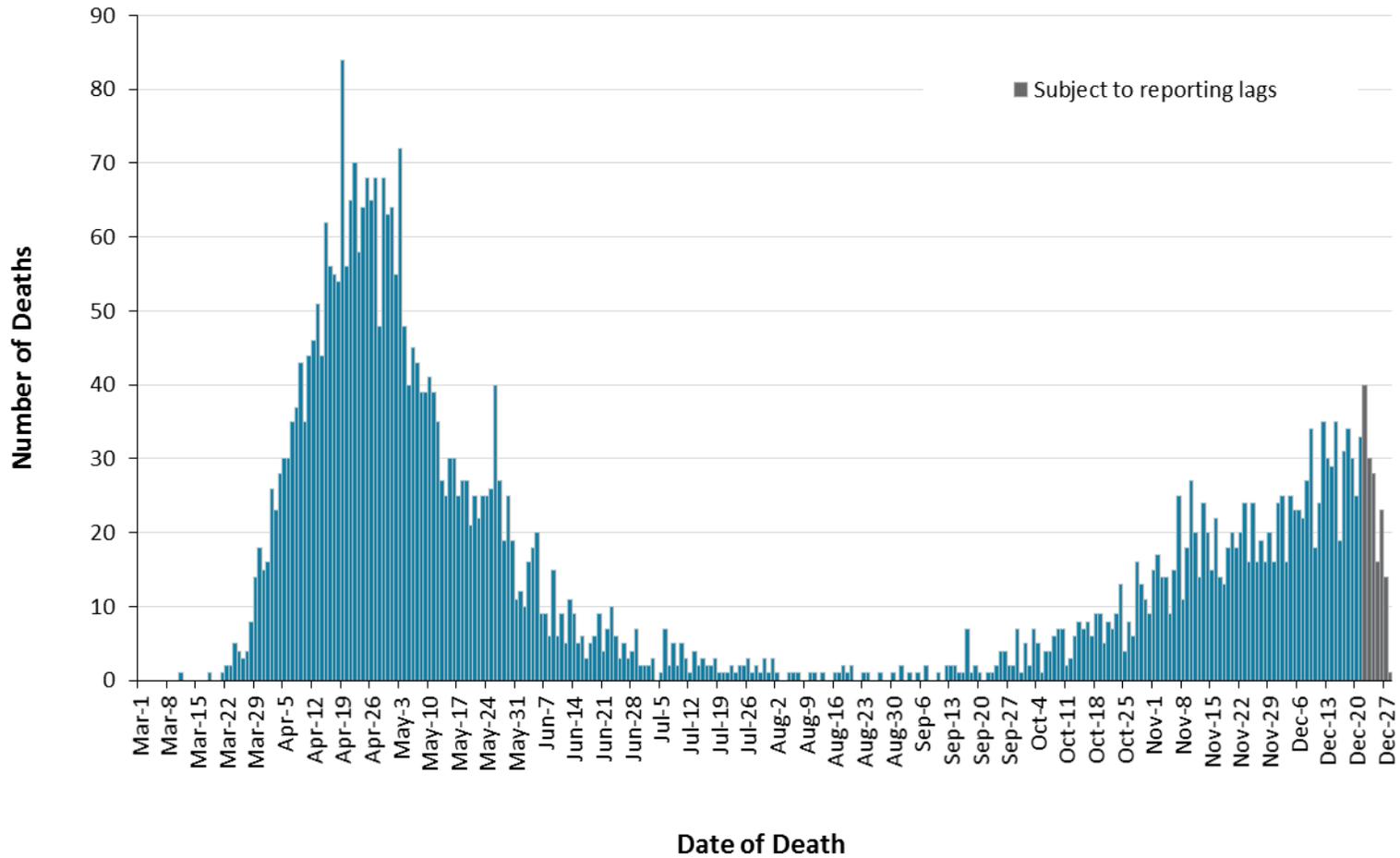


**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

**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 28, 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 28	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	4,455	2.5%
Deaths reported in ages: 19 and under	1	< 0.1%
Deaths reported in ages: 20-39	19	< 0.1%
Deaths reported in ages: 40-59	175	0.3%
Deaths reported in ages: 60-79	1,182	4.7%
Deaths reported in ages: 80 and over	3,077	23.4%
Ever in ICU	N/A	N/A
Ever hospitalized	N/A	N/A

**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

Data for hospitalizations and ICU are unavailable at this time due to a reporting error.

## 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 27	Change in cases December 28	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	3	1	162	184.8
Thunder Bay District Health Unit	3	9	574	382.8
<b>TOTAL NORTH WEST</b>	6	10	736	309.7
Algoma Public Health	0	0	65	56.8
North Bay Parry Sound District Health Unit	-4	0	120	92.5
Porcupine Health Unit	0	1	128	153.4
Public Health Sudbury & Districts	-2	1	264	132.6
Timiskaming Health Unit	3	1	65	198.8
<b>TOTAL NORTH EAST</b>	-3	3	642	114.8
Ottawa Public Health	41	65	9,805	929.7
Eastern Ontario Health Unit	13	16	1,320	632.5
Hastings Prince Edward Public Health	6	-1	266	157.9
Kingston, Frontenac and Lennox & Addington Public Health	9	3	517	243.0
Leeds, Grenville & Lanark District Health Unit	1	5	655	378.2
Renfrew County and District Health Unit	0	0	228	209.9
<b>TOTAL EASTERN</b>	70	88	12,791	664.0

Public Health Unit Name	Change in cases December 27	Change in cases December 28	Cumulative case count	Cumulative rate per 100,000 population
Durham Region Health Department	59	108	6,983	980.2
Haliburton, Kawartha, Pine Ridge District Health Unit	5	1	499	264.1
Peel Public Health	475	496	38,432	2,393.1
Peterborough Public Health	9	0	320	216.2
Simcoe Muskoka District Health Unit	56	34	3,440	573.7
York Region Public Health	158	142	16,508	1,346.7
<b>TOTAL CENTRAL EAST</b>	762	781	66,182	1,477.1
Toronto Public Health	412	895	56,788	1,819.9
<b>TOTAL TORONTO</b>	412	895	56,788	1,819.9
Chatham-Kent Public Health	9	19	652	613.3
Grey Bruce Health Unit	1	3	443	260.8
Huron Perth Public Health	6	8	645	461.5
Lambton Public Health	35	16	684	522.3
Middlesex-London Health Unit	108	86	3,045	600.0
Southwestern Public Health	32	25	1,183	559.3
Windsor-Essex County Health Unit	178	147	7,151	1,683.3
<b>TOTAL SOUTH WEST</b>	369	304	13,803	816.4
Brant County Health Unit	16	11	927	597.3
City of Hamilton Public Health Services	100	144	5,793	978.3

Public Health Unit Name	Change in cases December 27	Change in cases December 28	Cumulative case count	Cumulative rate per 100,000 population
Haldimand-Norfolk Health Unit	7	10	858	752.1
Halton Region Public Health	67	78	5,457	881.5
Niagara Region Public Health	53	115	3,745	792.6
Region of Waterloo Public Health and Emergency Services	45	57	5,671	970.5
Wellington-Dufferin-Guelph Public Health	35	57	2,515	806.3
<b>TOTAL CENTRAL WEST</b>	<b>323</b>	<b>472</b>	<b>24,966</b>	<b>876.2</b>
<b>TOTAL ONTARIO</b>	<b>1,939</b>	<b>2,553</b>	<b>175,908</b>	<b>1,183.4</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 27	Change in outbreaks December 28	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	11	5	199	903
Retirement homes	9	5	106	471
Hospitals	1	0	52	234

**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 28, 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 28, 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 28, 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 13, 2020 to December 25, 2020**

Public Health Unit Name	Dec 13 to Dec 19	Dec 14 to Dec 20	Dec 15 to Dec 21	Dec 16 to Dec 22	Dec 17 to Dec 23	Dec 18 to Dec 24	Dec 19 to Dec 25	% change from Dec 13-19 to Dec 19-25
<b>NORTH WEST</b>								
Northwestern Health Unit	5.7	5.7	10.3	11.4	11.4	19.4	19.4	+240.4%
Thunder Bay District Health Unit	44.7	44.0	48.7	58.0	58.0	50.7	46.7	+4.5%
<b>NORTH EAST</b>								
Algoma Public Health	0.0	0.0	0.0	0.9	1.7	1.7	1.7	N/A
North Bay Parry Sound District Health Unit	12.3	12.3	12.3	13.1	10.8	12.3	9.2	-25.2%
Porcupine Health Unit	4.8	3.6	8.4	10.8	10.8	9.6	9.6	+100.0%
Public Health Sudbury & Districts	4.0	4.0	5.0	5.5	6.0	5.5	6.5	+62.5%
Timiskaming Health Unit	33.7	36.7	45.9	55.1	61.2	70.4	79.5	+135.9%
<b>EASTERN</b>								
Ottawa Public Health	27.0	26.6	27.2	30.2	29.6	31.6	36.7	+35.9%

Public Health Unit Name	Dec 13 to Dec 19	Dec 14 to Dec 20	Dec 15 to Dec 21	Dec 16 to Dec 22	Dec 17 to Dec 23	Dec 18 to Dec 24	Dec 19 to Dec 25	% change from Dec 13-19 to Dec 19-25
Eastern Ontario Health Unit	45.5	41.7	41.7	46.5	49.4	53.2	50.8	+11.6%
Hastings Prince Edward Public Health	14.8	16.6	14.8	15.4	16.6	14.8	11.3	-23.6%
Kingston, Frontenac and Lennox & Addington Public Health	35.7	35.7	32.4	28.7	27.3	27.3	22.1	-38.1%
Leeds, Grenville & Lanark District Health Unit	21.4	20.8	19.6	17.9	13.9	12.1	9.8	-54.2%
Renfrew County and District Health Unit	15.6	13.8	16.6	16.6	13.8	10.1	12.9	-17.3%
<b>CENTRAL EAST</b>								
Durham Region Health Department	88.9	93.2	96.9	96.7	96.4	92.1	89.1	+0.2%
Haliburton, Kawartha, Pine Ridge District Health Unit	24.3	23.8	24.9	23.8	25.4	26.5	25.4	+4.5%
Peel Public Health	201.3	208.6	195.1	190.9	194.2	190.4	182.0	-9.6%

Public Health Unit Name	Dec 13 to Dec 19	Dec 14 to Dec 20	Dec 15 to Dec 21	Dec 16 to Dec 22	Dec 17 to Dec 23	Dec 18 to Dec 24	Dec 19 to Dec 25	% change from Dec 13-19 to Dec 19-25
Peterborough Public Health	16.2	16.2	19.6	20.3	20.3	22.3	31.8	+96.3%
Simcoe Muskoka District Health Unit	59.5	60.9	62.4	63.4	59.5	57.7	57.2	-3.9%
York Region Public Health	120.7	119.4	124.2	128.1	129.5	130.5	129.2	+7.0%
<b>TORONTO</b>								
Toronto Public Health	147.1	149.9	145.3	149.9	145.3	141.2	141.6	-3.7%
<b>SOUTH WEST</b>								
Chatham-Kent Public Health	32.9	32.0	35.7	41.4	38.6	36.7	46.1	+40.1%
Grey Bruce Health Unit	17.7	17.1	18.8	21.2	23.0	21.2	21.8	+23.2%
Huron Perth Public Health	51.5	54.4	58.7	52.2	50.8	61.5	63.7	+23.7%
Lambton Public Health	55.7	57.3	64.9	82.5	77.1	77.1	83.2	+49.4%
Middlesex-London Health Unit	76.3	83.7	88.9	100.3	99.1	92.8	87.9	+15.2%
Southwestern Public Health	78.0	77.1	95.0	103.5	96.5	96.5	104.0	+33.3%
Windsor-Essex County Health Unit	268.8	275.4	286.5	289.1	274.2	253.7	262.2	-2.5%

Public Health Unit Name	Dec 13 to Dec 19	Dec 14 to Dec 20	Dec 15 to Dec 21	Dec 16 to Dec 22	Dec 17 to Dec 23	Dec 18 to Dec 24	Dec 19 to Dec 25	% change from Dec 13-19 to Dec 19-25
<b>CENTRAL WEST</b>								
Brant County Health Unit	70.9	60.6	60.6	62.5	63.1	51.5	49.6	-30.0%
City of Hamilton Public Health Services	121.4	119.6	121.6	126.0	123.1	108.4	109.1	-10.1%
Haldimand-Norfolk Health Unit	59.6	59.6	62.2	61.4	70.1	75.4	72.8	+22.1%
Halton Region Public Health	84.0	85.6	86.9	84.6	83.3	87.9	83.7	-0.4%
Niagara Region Public Health	107.5	109.4	112.6	118.5	125.1	131.9	114.3	+6.3%
Region of Waterloo Public Health and Emergency Services	98.2	98.7	106.1	106.4	110.7	109.2	104.2	+6.1%
Wellington-Dufferin-Guelph Public Health	93.9	91.7	95.9	96.8	103.2	105.5	93.9	0.0%
<b>TOTAL ONTARIO</b>	<b>105.7</b>	<b>107.5</b>	<b>107.4</b>	<b>109.7</b>	<b>108.7</b>	<b>106.4</b>	<b>104.7</b>	<b>-0.9%</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

This document was developed by Public Health Ontario (PHO). PHO provides scientific and technical advice to Ontario's government, public health organizations and health care providers. PHO's work is guided by the current best available evidence at the time of publication.

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## For Further Information

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## Public Health Ontario

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