

## DAILY EPIDEMIOLOGICAL SUMMARY

# COVID-19 in Ontario: January 15, 2020 to March 21, 2022

Due to changes in the Ministry of Health's [updated guidance on testing and case, contact and outbreak management](#), case counts in this report are an underestimate of the true number of individuals with COVID-19 in Ontario. In addition, data for hospitalizations, intensive care unit (ICU) admission and deaths in the most recent reporting period should be interpreted with caution due to data entry and reporting lags.

In alignment with the Ministry of Health's updates to COVID-19 death reporting, COVID-19 deaths in this report will include deaths for which COVID-19 is the underlying cause of death, COVID-19 contributed to but was not the underlying cause of death, and those with a type of death unknown or missing.

## Introduction

This report includes the most current information available from CCM as of **March 21, 2022**.

A [weekly summary report](#) is available with additional information to complement the daily report.

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. For more information about whole genome sequencing, please see the [SARS CoV-2 Whole Genome Sequencing in Ontario 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.

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, sex) 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.

## Highlights

- There are a total of 1,140,865 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 1,447 confirmed cases (percent change of +18.9%)
  - An increase of 7\* deaths (percent change of +133.3%)
  - An increase of 1,562 resolved cases (percent change of +18.6%)

\*This number only includes deaths that have occurred in the last month.

## Case Characteristics

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

	Change in cases March 20, 2022	Change in cases March 21, 2022	Percentage change March 21, 2022 compared to March 20, 2022	Cumulative case count as of March 21, 2022
Total number of cases	1,217	1,447	+18.9%	1,140,865
Number of deaths	3	7	+133.3%	12,343
Number resolved	1,317	1,562	+18.6%	1,112,239

**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. The number of deaths presented in the change in cases column for each day only includes deaths that occurred in the last 30 days.

**Data Source:** CCM

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

	Change in cases March 20, 2022	Change in cases March 21, 2022	Cumulative case count as of March 21, 2022
Sex: Male	453	587	540,731
Sex: Female	721	877	593,217
Ages: 0-4	43	32	34,028
Ages: 5-11	68	84	68,602
Ages: 12-19	82	109	98,151
Ages: 20-39	483	582	436,298
Ages: 40-59	344	390	316,949
Ages: 60-79	146	166	137,156
Ages: 80 and over	46	81	49,285

**Note:** Not all cases have an age or sex 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, sex) differing from past publicly reported case counts.

**Data Source:** CCM

**Table 2. Summary of recent confirmed cases of COVID-19 in long-term care homes: Ontario**

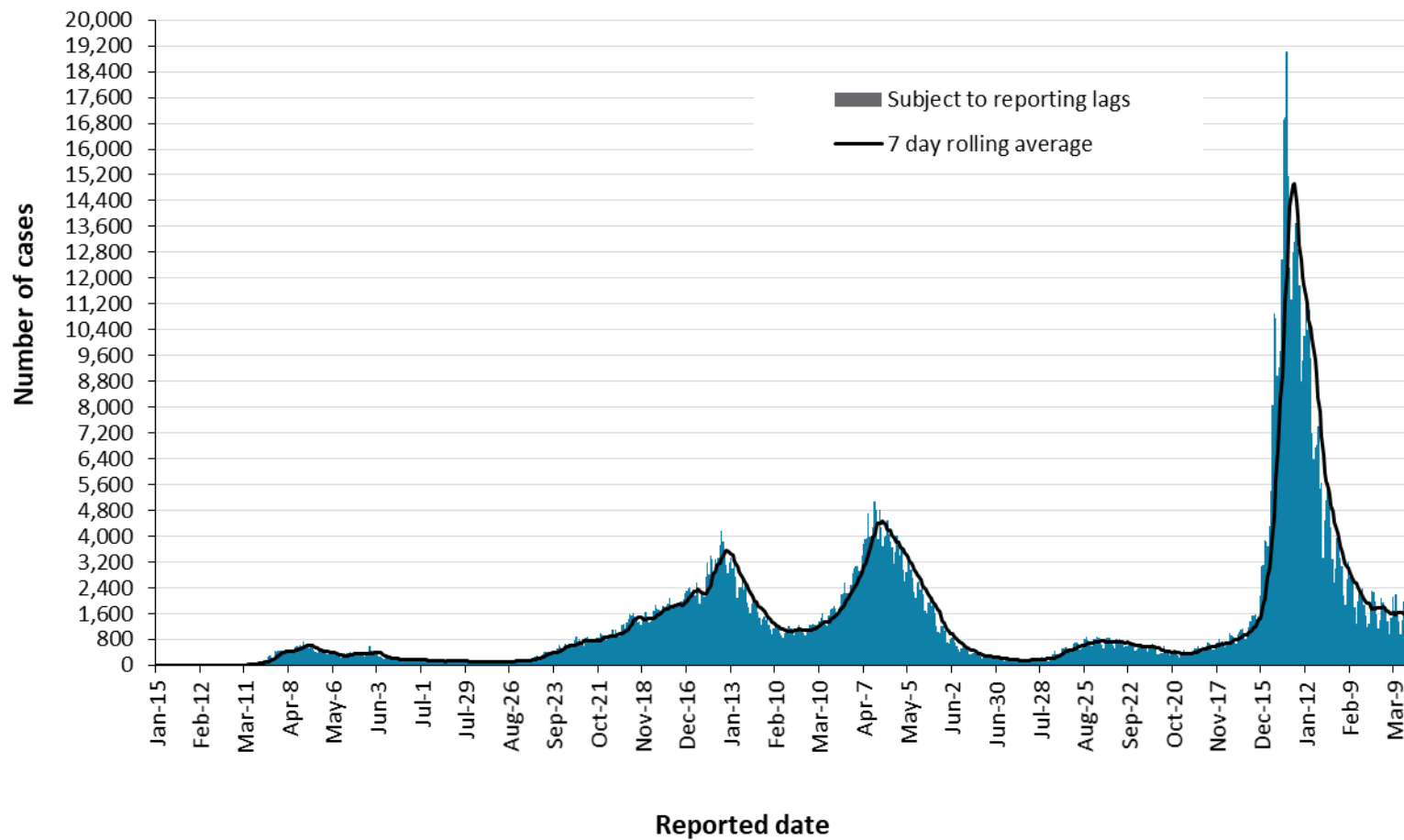
Long-term care home cases	Change in cases March 20, 2022	Change in cases March 21, 2022	Cumulative case count as of March 21, 2022
Residents	11	23	25,443
Health care workers	7	3	11,719
Deaths among residents	2	-1	4,399
Deaths among health care workers	0	0	10

**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

## Time

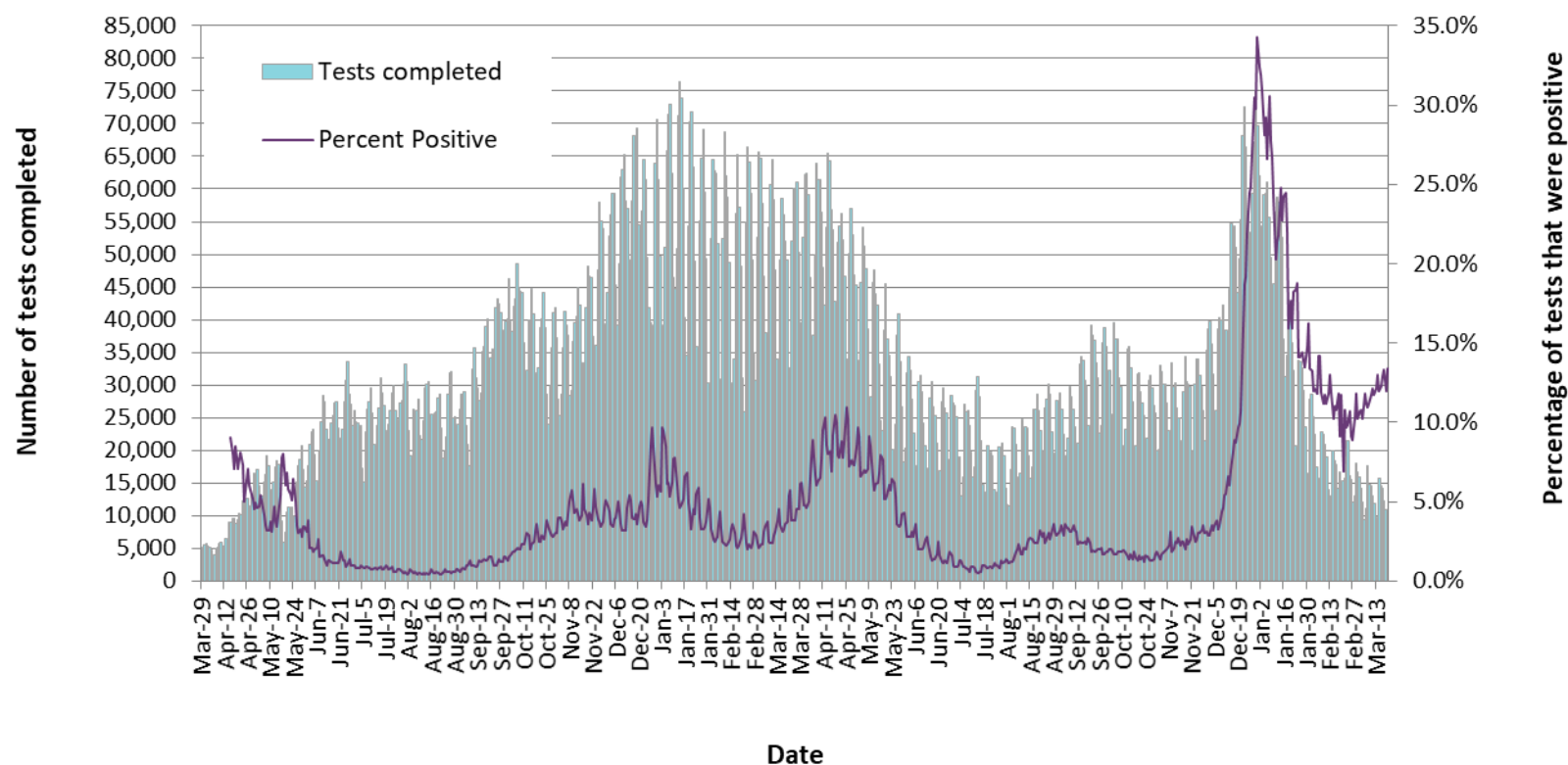
**Figure 1. Confirmed cases of COVID-19 by public health unit reported date: Ontario, January 15, 2020 to March 21, 2022**



**Note:** Changes in testing eligibility went into effect on December 31, 2021, limiting access to testing and resulting in a change in the population being tested.

**Data Source:** CCM

**Figure 2. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to March 20, 2022**

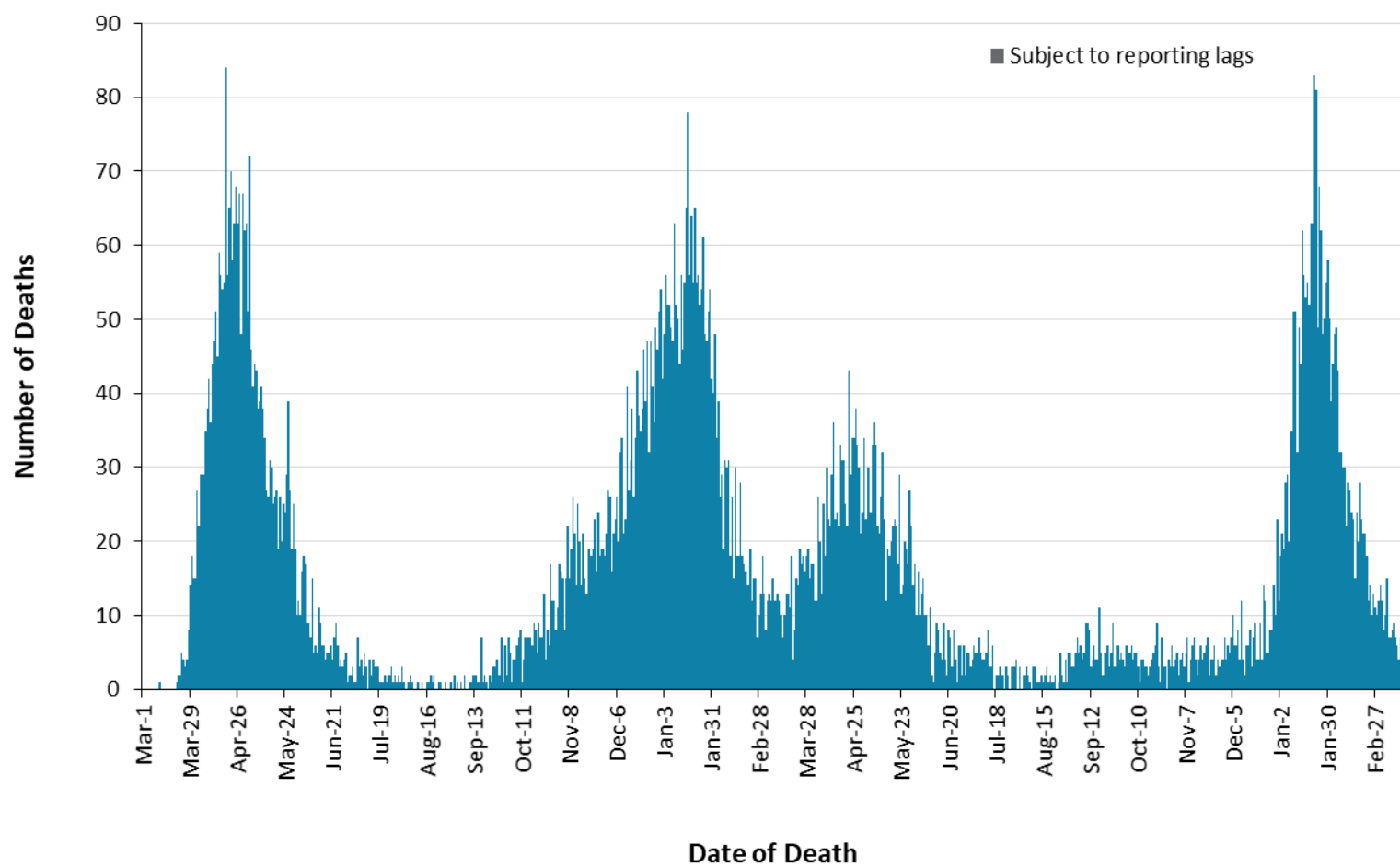


**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive. Changes in testing eligibility went into effect on December 31, 2021, limiting access to testing and resulting in a change in the population being tested.

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

## Severity

**Figure 3. Confirmed deaths among COVID-19 cases by date of death: Ontario, March 1, 2020 to March 21, 2022**



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

**Data Source:** CCM

**Table 3. Confirmed cases of COVID-19 by severity: Ontario**

	Cumulative case count as of March 21, 2022	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	12,343	1.1%
Deaths reported in ages: 19 and under	13	<0.1%
Deaths reported in ages: 20-39	129	<0.1%
Deaths reported in ages: 40-59	880	0.3%
Deaths reported in ages: 60-79	4,143	3.0%
Deaths reported in ages: 80 and over	7,177	14.6%
Ever in ICU	7,926	0.7%
Ever hospitalized	43,185	3.8%

**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. Percentage of deaths reported for each age group is calculated using all cases in the age group as the denominator.

**Data Source:** CCM

## Geography

**Table 4. Summary of recent confirmed cases of COVID-19 by public health unit and region: Ontario**

Public Health Unit Name	Change in cases March 20, 2022	Change in cases March 21, 2022	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	3	8	6,071	7,478.0
Thunder Bay District Health Unit	21	31	9,552	6,056.8
<b>TOTAL NORTH WEST</b>	24	39	15,623	6,539.8
Algoma Public Health	28	54	6,147	5,216.4
North Bay Parry Sound District Health Unit	9	18	4,306	3,330.0
Porcupine Health Unit	2	31	6,076	7,148.2
Public Health Sudbury & Districts	23	32	12,192	5,939.9
Timiskaming Health Unit	1	9	1,277	3,768.6
<b>TOTAL NORTH EAST</b>	63	144	29,998	5,250.9
Ottawa Public Health	48	38	64,925	6,224.1
Eastern Ontario Health Unit	21	10	14,005	6,488.0
Hastings Prince Edward Public Health	29	18	7,536	4,360.4
Kingston, Frontenac and Lennox & Addington Public Health	48	77	11,791	5,635.4
Leeds, Grenville & Lanark District Health Unit	13	10	7,137	3,966.2
Renfrew County and District Health Unit	5	8	3,623	3,340.0
<b>TOTAL EASTERN</b>	164	161	109,017	5,650.1



Public Health Unit Name	Change in cases March 20, 2022	Change in cases March 21, 2022	Cumulative case count	Cumulative rate per 100,000 population
Durham Region Health Department	46	49	54,859	7,711.1
Haliburton, Kawartha, Pine Ridge District Health Unit	15	15	7,456	3,909.2
Peel Public Health	60	101	174,355	11,150.5
Peterborough Public Health	15	17	5,948	4,015.7
Simcoe Muskoka District Health Unit	63	54	37,459	6,196.6
York Region Public Health	95	95	100,517	8,374.6
<b>TOTAL CENTRAL EAST</b>	294	331	380,594	8,613.3
Toronto Public Health	264	322	285,002	9,536.9
<b>TOTAL TORONTO</b>	264	322	285,002	9,536.9
Chatham-Kent Public Health	2	2	7,139	6,695.7
Grey Bruce Health Unit	10	19	6,799	3,859.8
Huron Perth Public Health	9	7	6,031	4,124.0
Lambton Public Health	7	11	10,090	7,588.1
Middlesex-London Health Unit	54	43	33,163	6,494.8
Southwestern Public Health	21	20	11,656	5,324.6
Windsor-Essex County Health Unit	55	58	38,629	8,963.8
<b>TOTAL SOUTH WEST</b>	158	160	113,507	6,589.9
Brant County Health Unit	19	16	10,199	6,641.8
City of Hamilton Public Health Services	44	100	49,880	8,574.5
Haldimand-Norfolk Health Unit	6	7	7,331	6,108.8

Public Health Unit Name	Change in cases March 20, 2022	Change in cases March 21, 2022	Cumulative case count	Cumulative rate per 100,000 population
Halton Region Public Health	38	29	43,534	7,130.0
Niagara Region Public Health	51	95	35,521	7,373.7
Region of Waterloo Public Health and Emergency Services	58	27	41,519	6,860.0
Wellington-Dufferin-Guelph Public Health	34	16	19,140	6,134.7
<b>TOTAL CENTRAL WEST</b>	250	290	207,124	7,229.9
<b>TOTAL ONTARIO</b>	<b>1,217</b>	<b>1,447</b>	<b>1,140,865</b>	<b>7,743.1</b>

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

**Data Source:** CCM

## Outbreaks

**Table 5. 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 March 20, 2022	Change in outbreaks March 21, 2022	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	2	4	60	2,213
Retirement homes	2	5	43	1,510
Hospitals	1	2	21	1,178

**Note:** Ongoing outbreaks are those that are reported in CCM as 'Open' and without a 'Declared Over Date' recorded. 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

# Technical Notes

## Data Sources

- The data for this report were based on information successfully extracted from the Public Health Case and Contact Management Solution (CCM) for all PHUs by PHO as of **March 21, 2022 at 1 p.m.** for cases reported from May 1, 2021 onwards and as of **March 21, 2022 at 9 a.m.** for cases reported up to April 30, 2021.
- CCM is a dynamic disease reporting system, which allows ongoing updates to data previously entered. As a result, data extracted from CCM represent a snapshot at the time of extraction and may differ from previous or subsequent reports.
- Ontario population estimate data were sourced from Statistics Canada. Population estimates 2001-2020: Table 1 annual population estimates by age and sex for July 1, 2001 to 2020, health regions, Ontario [unpublished data table]. Ottawa, ON: Government of Canada; 2021 [received April 22, 2021].
- COVID-19 test data were based on information from The Provincial COVID-19 Diagnostics Network, reported by member microbiology laboratories.

## Data Caveats

- Due to changes in the availability of testing, driven by increasing COVID-19 cases related to the Omicron variant, case counts in this report are an underestimate of the true number of individuals with COVID-19 in Ontario. As such, data should be interpreted with caution.
- The data only represent cases reported to public health units and recorded in CCM. 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.
- Data cleaning for older cases is incorporated on Mondays and Thursdays and may impact the case count published on Tuesdays and Fridays.
- Lags in CCM 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 Case Definition – Coronavirus Disease \(COVID-19\) document](#) are included in the report counts from CCM.
- Cases of confirmed reinfection, as defined in the provincial case definitions, are counted as unique investigations.
- Case classification information may be updated for individuals with a positive result issued from a point-of-care assays.
- 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.

- For surveillance purposes, a COVID-19 death is defined as a death resulting from a clinically compatible illness unless there is a clear alternative cause of death that cannot be related to COVID-19 (e.g., trauma, medically assisted death). There should be no period of complete recovery from COVID-19 between illness and reported death.
- Deaths are determined by using the Outcome and Type of Death fields in CCM. COVID-19 deaths are counted where the Outcome value is 'Fatal' and the Type of Death value is not 'DOPHS was unrelated to cause of death'.
  - COVID-19 deaths are placed in time using the 'Date of Death' field in CCM. If the date of death is missing, the outcome date field is used as a proxy.
- Resolved cases are determined only for COVID-19 cases that are not considered COVID-19 deaths. The following cases are classified as resolved:
  - Cases that are reported as 'recovered' in CCM based on local public health unit assessment
  - Cases that are not hospitalized and are 14 days past their symptom onset date or specimen collection date (where symptom onset date is not known)
  - 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
  - Cases that died with a Type of Death = "DOPHS was unrelated to cause of death". These are considered resolved for the purpose of COVID-19 surveillance and reporting
- Hospitalization includes all cases hospitalized (or that had their hospital stay extended) because of COVID-19. It includes cases that have been discharged from hospital as well as cases that are currently hospitalized. Includes Intensive Care Unit (ICU) cases but not emergency room visits. Hospitalizations were identified by a reported hospital admission date or reported 'Yes' for hospitalization/ICU
- 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 permanent health unit. This is equivalent to the diagnosing health unit (DHU) in iPHIS. 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-PHO (to signify a case that is not a resident of Ontario) have been excluded from the analyses.
- Male/Female information presented in this report are sourced from the Sex field in CCM and are intended to represent sex assigned at birth. On October 14, 2021 changes were made in CCM to enable reporting on the Sex field where these data are supplemented by archived Male/Female information previously entered in the Gender field.
- COVID-19 cases from CCM 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 may include some duplicate records, if these records were not identified and resolved.

- Ongoing outbreaks are those that are reported in CCM as 'Open' and without a 'Declared Over Date' recorded. Closed outbreaks are 'Closed' or have a 'Declared Over Date' recorded in CCM or where the outbreak start date (determined by the onset date of first case, or if missing the reported date, or if missing the created date) is more than 5 months from the current date, even for outbreaks where the outbreak status value selected in CCM is 'OPEN'.
- '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, March 6, 2022 to March 18, 2022**

Public Health Unit Name	Mar 6 to Mar 12	Mar 7 to Mar 13	Mar 8 to Mar 14	Mar 9 to Mar 15	Mar 10 to Mar 16	Mar 11 to Mar 17	Mar 12 to Mar 18	% change from Mar 6 – Mar 12 to Mar 12 – Mar 18
<b>NORTH WEST</b>								
Northwestern Health Unit	436.0	471.8	480.4	491.5	571.5	564.1	544.4	+24.9%
Thunder Bay District Health Unit	182.0	178.2	182.0	166.8	171.2	159.8	156.0	-14.3%
<b>NORTH EAST</b>								
Algoma Public Health	278.3	283.4	286.0	276.6	292.8	275.8	285.1	+2.4%
North Bay Parry Sound District Health Unit	129.1	123.0	117.5	114.5	106.7	103.6	102.1	-20.9%
Porcupine Health Unit	251.8	251.8	240.0	236.5	223.5	200.0	195.3	-22.4%
Public Health Sudbury & Districts	165.2	173.4	170.0	162.2	160.3	149.6	141.3	-14.5%
Timiskaming Health Unit	129.9	123.9	112.1	88.5	126.9	112.1	121.0	-6.9%
<b>EASTERN</b>								
Ottawa Public Health	71.6	69.2	62.7	58.0	63.4	59.0	59.0	-17.6%
Eastern Ontario Health Unit	55.6	56.1	53.7	59.8	62.1	59.8	51.0	-8.3%
Hastings Prince Edward Public Health	108.8	115.1	120.9	136.0	140.0	153.3	141.2	+29.8%

Public Health Unit Name	Mar 6 to Mar 12	Mar 7 to Mar 13	Mar 8 to Mar 14	Mar 9 to Mar 15	Mar 10 to Mar 16	Mar 11 to Mar 17	Mar 12 to Mar 18	% change from Mar 6 – Mar 12 to Mar 12 – Mar 18
Kingston, Frontenac and Lennox & Addington Public Health	240.9	260.5	240.9	256.2	277.7	250.0	253.3	+5.1%
Leeds, Grenville & Lanark District Health Unit	82.2	80.0	78.9	78.4	76.1	68.9	67.2	-18.2%
Renfrew County and District Health Unit	88.5	95.0	92.2	78.4	74.7	75.6	77.4	-12.5%
<b>CENTRAL EAST</b>								
Durham Region Health Department	64.7	65.6	67.5	63.8	63.8	66.2	66.1	+2.2%
Haliburton, Kawartha, Pine Ridge District Health Unit	66.6	62.9	61.3	58.2	52.4	53.0	54.5	-18.2%
Peel Public Health	32.3	32.2	31.5	31.1	31.1	31.6	30.6	-5.3%
Peterborough Public Health	72.2	79.7	79.7	85.1	79.7	78.3	74.9	+3.7%
Simcoe Muskoka District Health Unit	74.1	73.1	71.1	79.6	90.8	92.0	96.9	+30.8%
York Region Public Health	45.6	45.3	47.7	48.6	49.2	50.5	51.1	+12.1%
<b>TORONTO</b>								
Toronto Public Health	59.7	59.3	61.2	61.6	63.6	63.0	64.0	+7.2%
<b>SOUTH WEST</b>								
Chatham-Kent Public Health	81.6	76.0	65.7	71.3	79.7	81.6	77.8	-4.7%
Grey Bruce Health Unit	110.7	114.1	112.4	102.8	101.1	93.1	95.4	-13.8%

Public Health Unit Name	Mar 6 to Mar 12	Mar 7 to Mar 13	Mar 8 to Mar 14	Mar 9 to Mar 15	Mar 10 to Mar 16	Mar 11 to Mar 17	Mar 12 to Mar 18	% change from Mar 6 – Mar 12 to Mar 12 – Mar 18
Huron Perth Public Health	73.8	78.0	82.7	73.2	78.6	95.0	98.5	+33.5%
Lambton Public Health	89.5	84.2	82.7	76.7	85.0	85.0	92.5	+3.4%
Middlesex-London Health Unit	106.9	102.2	105.2	94.4	95.2	96.2	90.5	-15.3%
Southwestern Public Health	76.3	73.1	69.0	62.6	69.0	69.4	72.2	-5.4%
Windsor-Essex County Health Unit	102.3	93.3	99.1	104.4	103.5	98.6	103.3	+1.0%
<b>CENTRAL WEST</b>								
Brant County Health Unit	78.8	80.8	75.5	67.7	67.7	74.9	66.4	-15.7%
City of Hamilton Public Health Services	87.7	87.8	87.7	89.4	87.5	83.9	87.2	-0.6%
Haldimand-Norfolk Health Unit	83.3	80.8	80.0	75.0	72.5	66.7	70.8	-15.0%
Halton Region Public Health	72.4	73.0	71.4	69.1	70.1	63.1	60.9	-15.9%
Niagara Region Public Health	88.4	88.4	83.7	78.9	80.3	77.2	84.7	-4.2%
Region of Waterloo Public Health and Emergency Services	61.3	58.3	59.6	55.0	60.8	63.4	63.0	+2.8%
Wellington-Dufferin-Guelph Public Health	66.3	68.0	66.3	70.5	73.1	73.7	76.3	+15.1%
<b>TOTAL ONTARIO</b>	<b>77.1</b>	<b>76.9</b>	<b>76.5</b>	<b>75.5</b>	<b>78.1</b>	<b>76.5</b>	<b>76.7</b>	<b>-0.5%</b>

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

**Data Source:** CCM



**Table A2. Number of confirmed COVID-19 cases with a fatal outcome by date of death in the last 30 days: Ontario**

Date of Death	Number of deaths
February 20, 2022	21
February 21, 2022	21
February 22, 2022	18
February 23, 2022	12
February 24, 2022	14
February 25, 2022	10
February 26, 2022	13
February 27, 2022	11
February 28, 2022	10
March 1, 2022	12
March 2, 2022	14
March 3, 2022	12
March 4, 2022	8
March 5, 2022	10
March 6, 2022	15
March 7, 2022	7
March 8, 2022	7
March 9, 2022	8
March 10, 2022	9
March 11, 2022	7
March 12, 2022	6
March 13, 2022	4

Date of Death	Number of deaths
March 14, 2022	7
March 15, 2022	9*
March 16, 2022	8*
March 17, 2022	3*
March 18, 2022	6*
March 19, 2022	4*
March 20, 2022	6*
March 21, 2022	0*

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

\*Subject to reporting lags

**Data Source:** CCM

## Citation

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