Daily Epidemiologic Summary

COVID-19 in Ontario: January 15, 2020 to November 23, 2020

This report includes the most current information available from CCM and other case management systems (CCM plus) as of **November 23, 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 106,510 confirmed cases of COVID-19 in Ontario reported to date.

- Compared to the previous day,* this represents:

    - An increase of 1,009 confirmed cases (percent change of -36.5%)

    - An increase of 14 deaths (percent change of -26.3%)

    - An increase of 1,082 resolved cases (percent change of -27.1%)

* Due to technical issues, instead of cases up until 12:00 p.m. on November 22, yesterday's report contained cases reported in CCM up until 8:30 p.m. on November 22, resulting in an overestimate of the daily counts yesterday, and an underestimate of the daily counts today.

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 November 22*	Change in cases November 23*	Percentage change November 23 compared to November 22	Cumulative case count as of November 23
Total number of cases	1,589	1,009	-36.5%	106,510
Number of deaths	19	14	-26.3%	3,519
Number resolved	1,484	1,082	-27.1%	90,074

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 Source: CCM plus

* Due to technical issues, instead of cases up until 12:00 p.m. on November 22, yesterday's report contained cases reported in CCM up until 8:30 p.m. on November 22, resulting in an overestimate of the daily counts yesterday, and an underestimate of the daily counts today.

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

	Change in cases November 22	Change in cases November 23	Cumulative case count as of November 23
Gender: Male	786	485	51,598
Gender: Female	781	515	54,313
Ages: 19 and under	214	163	12,544
Ages: 20-39	625	354	38,690
Ages: 40-59	447	307	30,363
Ages: 60-79	218	130	15,585
Ages: 80 and over	81	56	9,314

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 November 23, 2020: Ontario

	Change in cases November 22	Change in cases November 23	Cumulative case count from August 30 to November 23
Ages: 4 to 8	39	36	1,760
Ages: 9 to 13	59	42	2,382
Ages: 14 to 17	42	41	2,412

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
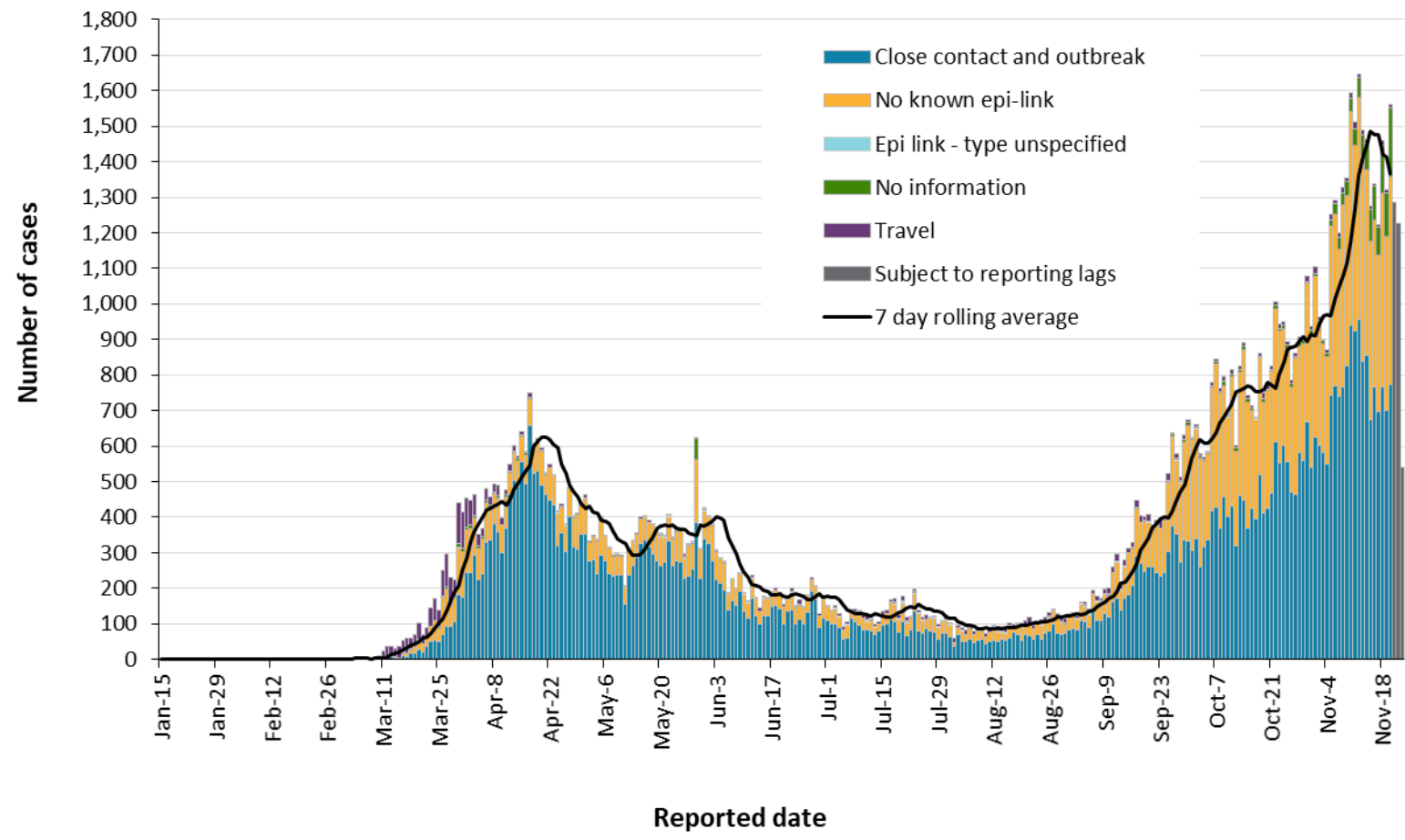
Long-term care home cases	Change in cases November 22	Change in cases November 23	Cumulative case count as of November 23
Residents	58	40	8,118
Health care workers	14	7	3,218
Deaths among residents	11	10	2,234
Deaths among health care workers	0	0	8

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.
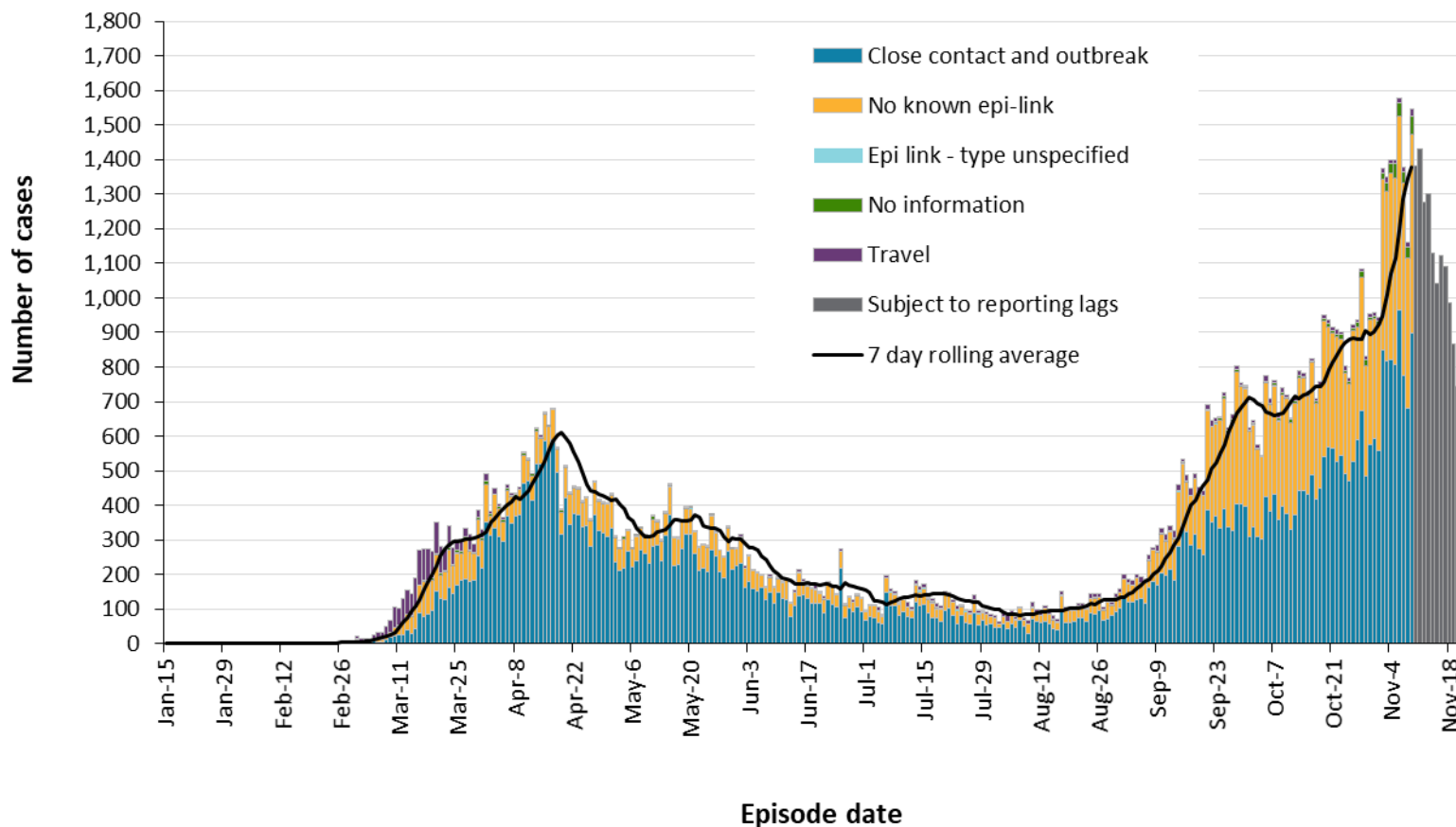
Data Source: CCM plus

Time

Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to November 23, 2020
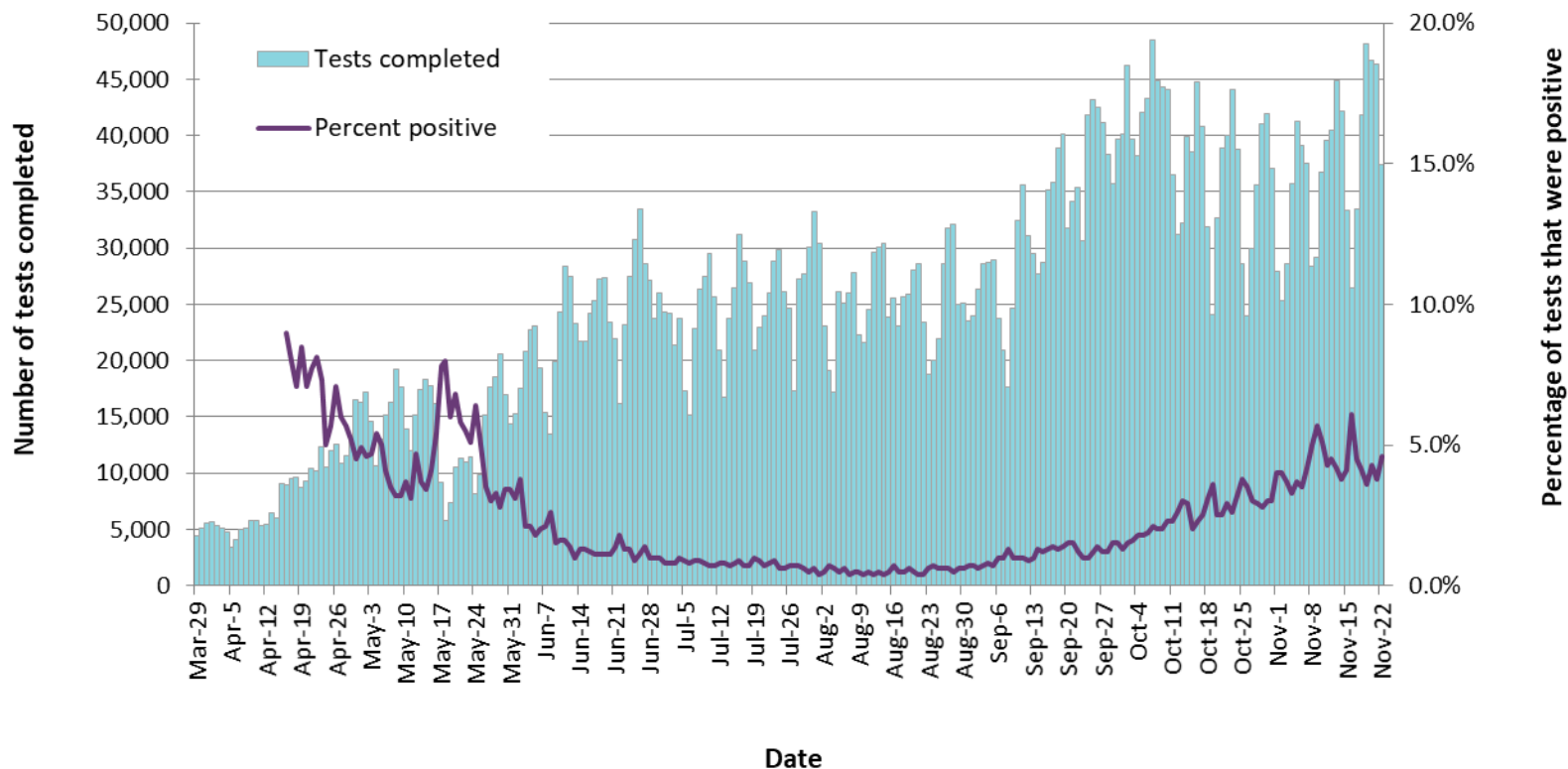

Data Source: CCM plus

Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to November 23, 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 November 22, 2020

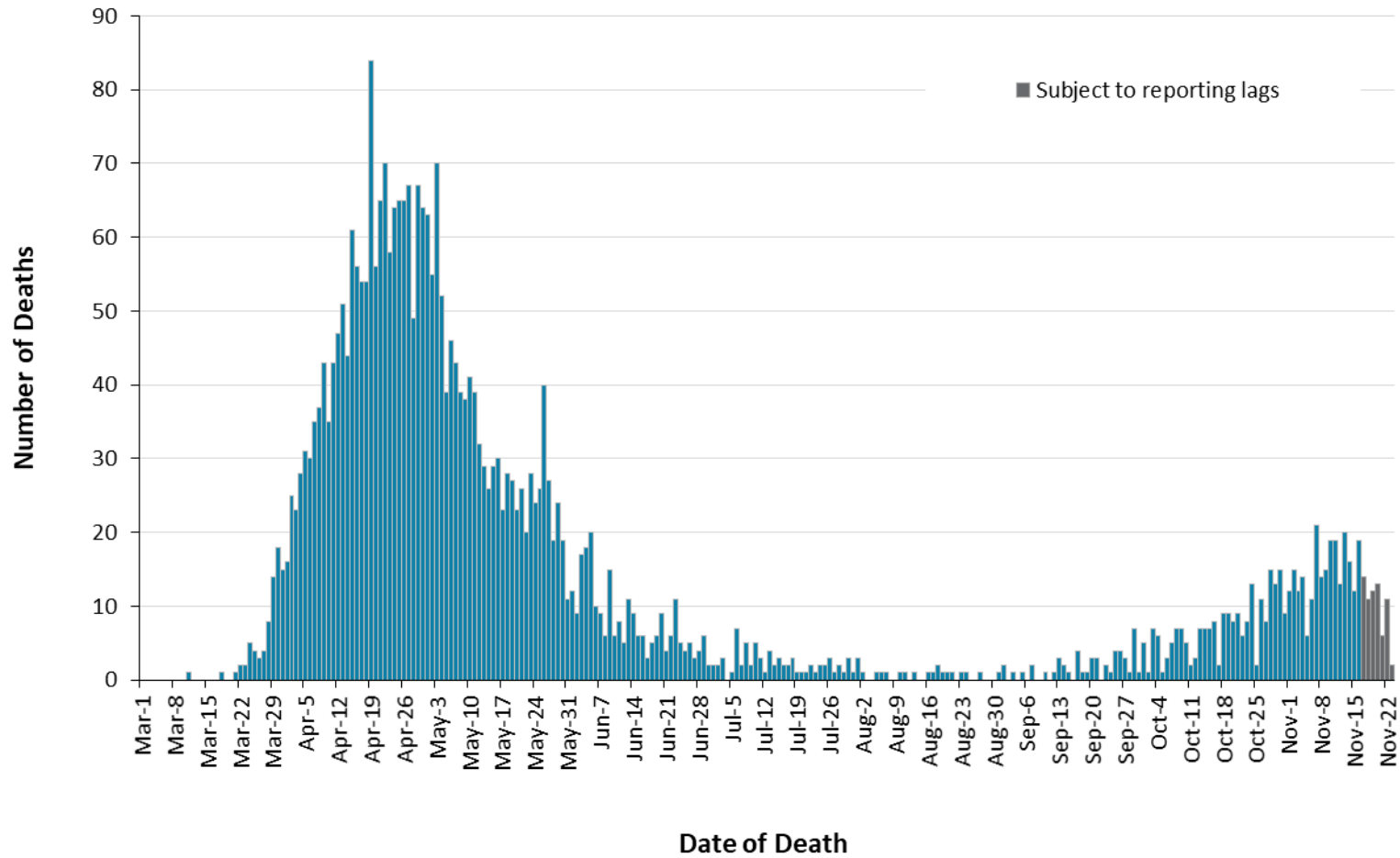**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

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 November 23, 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 November 23	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	3,519	3.3%
Deaths reported in ages: 19 and under	2	0.0%
Deaths reported in ages: 20-39	12	0.0%
Deaths reported in ages: 40-59	142	0.5%
Deaths reported in ages: 60-79	921	5.9%
Deaths reported in ages: 80 and over	2,441	26.2%
Ever in ICU	1,392	1.3%
Ever hospitalized	7,011	6.6%

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 November 22*	Change in cases November 23*	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	4	3	106	120.9
Thunder Bay District Health Unit	16	1	235	156.7
TOTAL NORTH WEST	20	4	341	143.5
Algoma Public Health	0	0	58	50.7
North Bay Parry Sound District Health Unit	1	-2	63	48.6
Porcupine Health Unit	0	0	106	127.0
Public Health Sudbury & Districts	4	2	221	111.0
Timiskaming Health Unit	0	-1	19	58.1
TOTAL NORTH EAST	5	-1	467	83.5
Ottawa Public Health	40	19	8,229	780.3
Eastern Ontario Health Unit	6	1	780	373.7
Hastings Prince Edward Public Health	2	1	109	64.7
Kingston, Frontenac and Lennox & Addington Public Health	0	0	232	109.1
Leeds, Grenville & Lanark District Health Unit	0	2	480	277.2
Renfrew County and District Health Unit	3	0	128	117.8

Public Health Unit Name	Change in cases November 22*	Change in cases November 23*	Cumulative case count	Cumulative rate per 100,000 population
TOTAL EASTERN	51	23	9,958	516.9
Durham Region Health Department	41	16	4,074	571.9
Haliburton, Kawartha, Pine Ridge District Health Unit	4	1	288	152.4
Peel Public Health	535	175	22,476	1399.5
Peterborough Public Health	1	3	195	131.8
Simcoe Muskoka District Health Unit	25	25	1,942	323.9
York Region Public Health	205	118	9,796	799.2
TOTAL CENTRAL EAST	811	338	38,771	865.3
Toronto Public Health	336	497	36,783	1178.8
TOTAL TORONTO	336	497	36,783	1178.8
Chatham-Kent Public Health	3	0	480	451.5
Grey Bruce Health Unit	7	2	274	161.3
Huron Perth Public Health	5	5	283	202.5
Lambton Public Health	0	4	404	308.5
Middlesex-London Health Unit	13	6	1,478	291.2
Southwestern Public Health	9	4	500	236.4
Windsor-Essex County Health Unit	56	31	3,352	789.0
TOTAL SOUTH WEST	93	52	6,771	400.5
Brant County Health Unit	16	6	544	350.5

Public Health Unit Name	Change in cases November 22*	Change in cases November 23*	Cumulative case count	Cumulative rate per 100,000 population
City of Hamilton Public Health Services	61	10	2,757	465.6
Haldimand-Norfolk Health Unit	6	0	606	531.2
Halton Region Public Health	53	5	3,153	509.3
Niagara Region Public Health	24	19	2,014	426.3
Region of Waterloo Public Health and Emergency Services	83	40	3,112	532.5
Wellington-Dufferin-Guelph Public Health	30	16	1,233	395.3
TOTAL CENTRAL WEST	273	96	13,419	471.0
TOTAL ONTARIO	**1,589**	**1,009**	**106,510**	**716.5**

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

Data Source: CCM plus

* Due to technical issues, instead of cases up until 12:00 p.m. on November 22, yesterday's report contained cases reported in CCM up until 8:30 p.m. on November 22, resulting in an overestimate of the daily counts yesterday, and an underestimate of the daily counts today.

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 November 22	Change in outbreaks November 23	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	2	5	101	664
Retirement homes	2	2	62	332
Hospitals	1	0	29	157

Note: Ongoing outbreaks includes all outbreaks that are 'Open' in CCM plus without a 'Declared Over Date' recorded.

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 **November 23, 2020 at 3 p.m.**

    - Information successfully uploaded to the Ministry from Local Systems: Toronto Public Health (Coronavirus Rapid Entry System) CORES, The Ottawa Public Health COVID-19 Ottawa Database (The COD) and Middlesex-London COVID-19 Case and Contact Management Tool (CCMtool) as of **November 23, 2020 at 2 p.m.**

    - Information successfully uploaded to the Ministry from the Public Health Case and Contact Management Solution (CCM) for all other PHUs as of **November 23, 2020 at 12 p.m.**

- CCM and CCM plus (which includes CCM, iPHIS, CORES, The COD and COVID-19 CCMtool) 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.

- CCM/iPHIS cases 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 are those that are reported in CCM plus as 'Open' without a 'Declared Over Date' recorded.

- '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, November 8, 2020 to November 20, 2020

Public Health Unit Name	Nov 8 to Nov 14	Nov 9 to Nov 15	Nov 10 to Nov 16	Nov 11 to Nov 17	Nov 12 to Nov 18	Nov 13 to Nov 19	Nov 14 to Nov 20	% change from Nov 8-14 to Nov 14-20
NORTH WEST								
Northwestern Health Unit	9.1	9.1	10.3	13.7	9.1	9.1	11.4	+25.3%
Thunder Bay District Health Unit	18.7	23.3	29.3	37.3	39.3	43.3	42.7	+128.3%
NORTH EAST								
Algoma Public Health	7.9	2.6	1.7	0.9	0.9	0.9	0.9	-88.6%
North Bay Parry Sound District Health Unit	5.4	4.6	6.2	4.6	4.6	6.2	6.9	+27.8%
Porcupine Health Unit	4.8	3.6	3.6	2.4	3.6	3.6	4.8	0.0%
Public Health Sudbury & Districts	20.6	17.1	14.6	11.6	9.0	7.5	4.5	-78.2%
Timiskaming Health Unit	0.0	3.1	3.1	3.1	3.1	6.1	6.1	N/A
EASTERN								
Ottawa Public Health	37.7	36.1	34.3	33.2	32.0	31.5	26.9	-28.6%
Eastern Ontario Health Unit	21.6	23.0	19.6	19.6	17.7	16.8	17.7	-18.1%
Hastings Prince Edward Public Health	5.9	6.5	6.5	7.1	9.5	8.3	7.7	+30.5%
Kingston, Frontenac and Lennox & Addington Public Health	15.5	15.5	17.9	16.5	14.1	13.2	8.5	-45.2%

Public Health Unit Name	Nov 8 to Nov 14	Nov 9 to Nov 15	Nov 10 to Nov 16	Nov 11 to Nov 17	Nov 12 to Nov 18	Nov 13 to Nov 19	Nov 14 to Nov 20	% change from Nov 8-14 to Nov 14-20
Leeds, Grenville & Lanark District Health Unit	6.9	6.9	5.2	4.6	3.5	2.3	2.3	-66.7%
Renfrew County and District Health Unit	5.5	4.6	4.6	5.5	5.5	10.1	11.0	+100.0%
CENTRAL EAST								
Durham Region Health Department	50.3	53.1	53.9	50.4	53.6	50.7	52.2	+3.8%
Haliburton, Kawartha, Pine Ridge District Health Unit	5.3	6.4	6.4	6.4	6.4	5.8	4.8	-9.4%
Peel Public Health	195.1	193.0	191.1	187.3	184.9	167.4	169.6	-13.1%
Peterborough Public Health	14.2	15.5	14.9	12.2	12.2	14.9	12.2	-14.1%
Simcoe Muskoka District Health Unit	30.5	30.5	33.0	31.4	32.5	32.5	32.4	+6.2%
York Region Public Health	83.0	85.7	88.4	82.2	83.2	85.1	85.0	+2.4%
TORONTO								
Toronto Public Health	104.3	103.0	102.5	98.9	97.3	94.3	96.6	-7.4%
SOUTH WEST								
Chatham-Kent Public Health	31.0	35.7	36.7	23.5	22.6	22.6	19.8	-36.1%
Grey Bruce Health Unit	14.7	18.8	20.0	20.6	30.0	34.7	33.6	+128.6%
Huron Perth Public Health	50.1	44.4	32.9	30.1	25.8	28.6	25.0	-50.1%
Lambton Public Health	4.6	5.3	6.9	8.4	9.2	10.7	13.7	+197.8%
Middlesex-London Health Unit	22.5	19.7	18.3	19.5	19.1	22.9	20.3	-9.8%

Public Health Unit Name	Nov 8 to Nov 14	Nov 9 to Nov 15	Nov 10 to Nov 16	Nov 11 to Nov 17	Nov 12 to Nov 18	Nov 13 to Nov 19	Nov 14 to Nov 20	% change from Nov 8-14 to Nov 14-20
Southwestern Public Health	29.3	31.2	32.6	29.8	30.3	29.3	26.5	-9.6%
Windsor-Essex County Health Unit	37.9	36.0	39.3	38.4	39.1	42.6	47.3	+24.8%
CENTRAL WEST								
Brant County Health Unit	29.6	30.3	32.9	32.2	30.9	36.1	36.1	+22.0%
City of Hamilton Public Health Services	47.6	43.4	43.4	40.0	42.2	43.6	50.0	+5.0%
Haldimand-Norfolk Health Unit	14.9	14.0	14.9	18.4	17.5	20.2	17.5	+17.4%
Halton Region Public Health	56.5	58.5	60.6	58.6	58.3	54.8	54.4	-3.7%
Niagara Region Public Health	40.0	39.6	31.7	29.4	28.4	31.3	31.7	-20.8%
Region of Waterloo Public Health and Emergency Services	59.9	62.6	63.8	60.9	59.6	55.8	53.9	-10.0%
Wellington-Dufferin-Guelph Public Health	34.0	33.7	35.9	37.2	40.4	44.2	44.6	+31.2%
TOTAL ONTARIO	**69.9**	**69.6**	**69.4**	**66.9**	**66.6**	**64.4**	**64.9**	**-7.2%**

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 more information, email cd@oahpp.ca.

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