

## Daily Epidemiologic Summary

# COVID-19 in Ontario: January 15, 2020 to February 28, 2021

This report includes the most current information available from CCM as of **February 28, 2021**.

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 301,839 confirmed cases of COVID-19 in Ontario reported to date.
- Compared to the previous day, this represents:
  - An increase of 1,023 confirmed cases (percent change of -3.7%)
  - An increase of 6 deaths (percent change of -70.0%)
  - An increase of 939 resolved cases (percent change of -8.7%)

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 February 27, 2021	Change in cases February 28, 2021	Percentage change February 28, 2021 compared to February 27, 2021	Cumulative case count as of February 28, 2021
Total number of cases	1,062	1,023	-3.7%	301,839
Number of deaths	20	6	-70.0%	6,986
Number resolved	1,029	939	-8.7%	284,283

**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

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

	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count as of February 28, 2021
Gender: Male	560	511	148,468
Gender: Female	499	503	151,820
Ages: 19 and under	242	225	40,421
Ages: 20-39	395	396	110,555
Ages: 40-59	275	268	87,178
Ages: 60-79	130	118	43,397
Ages: 80 and over	20	13	20,222

**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

**Table 2. Summary of recent confirmed cases of COVID-19 in school aged children by age group, August 30, 2020 to February 28, 2021: Ontario**

	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count from August 30, 2020 to February 28, 2021
Ages: 4 to 8	58	57	6,772
Ages: 9 to 13	62	47	9,091
Ages: 14 to 17	46	59	9,548

**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

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

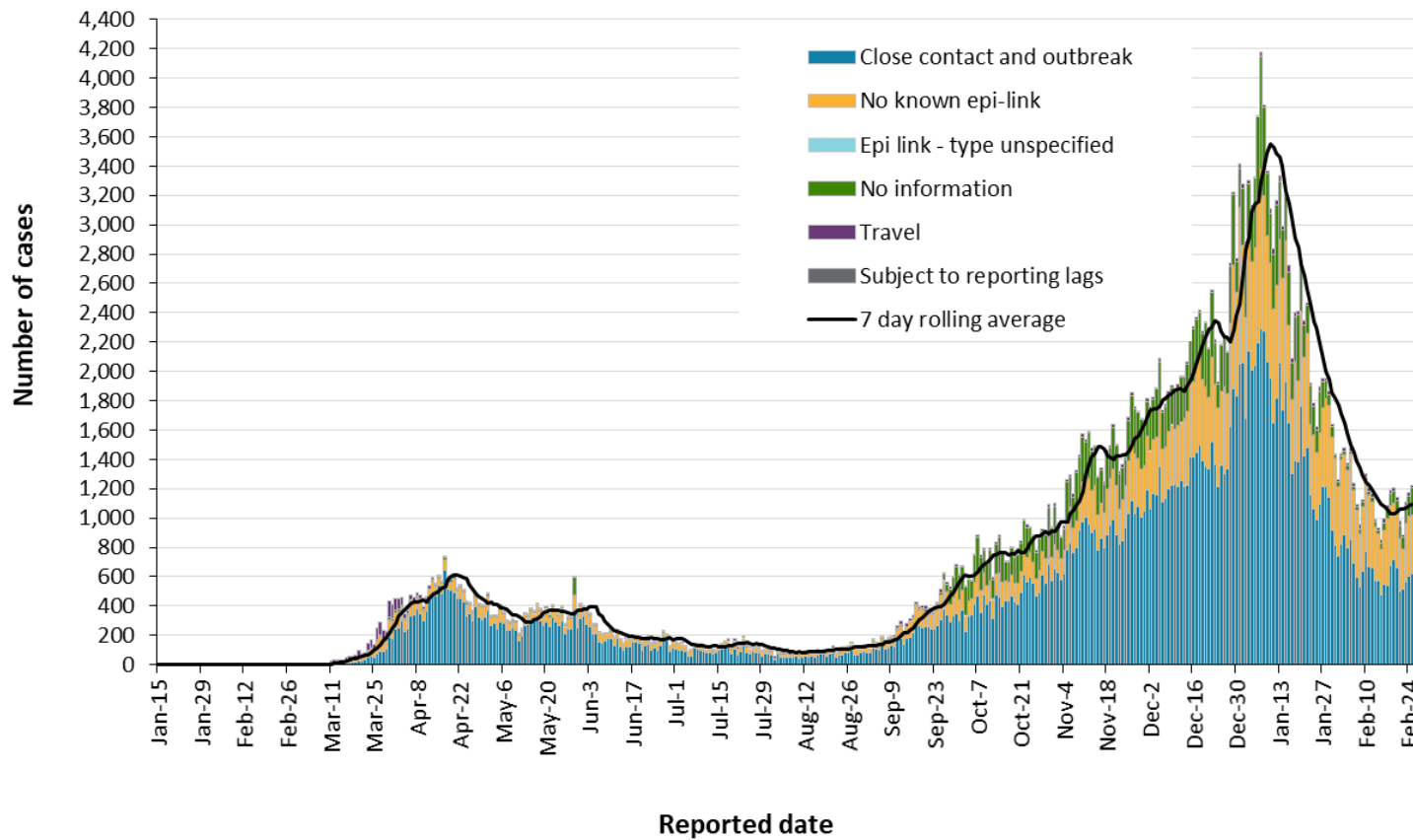
Long-term care home cases	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count as of February 28, 2021
Residents	0	0	14,958
Health care workers	3	4	6,622
Deaths among residents	-1	1	3,865
Deaths among health care workers	0	0	10

**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

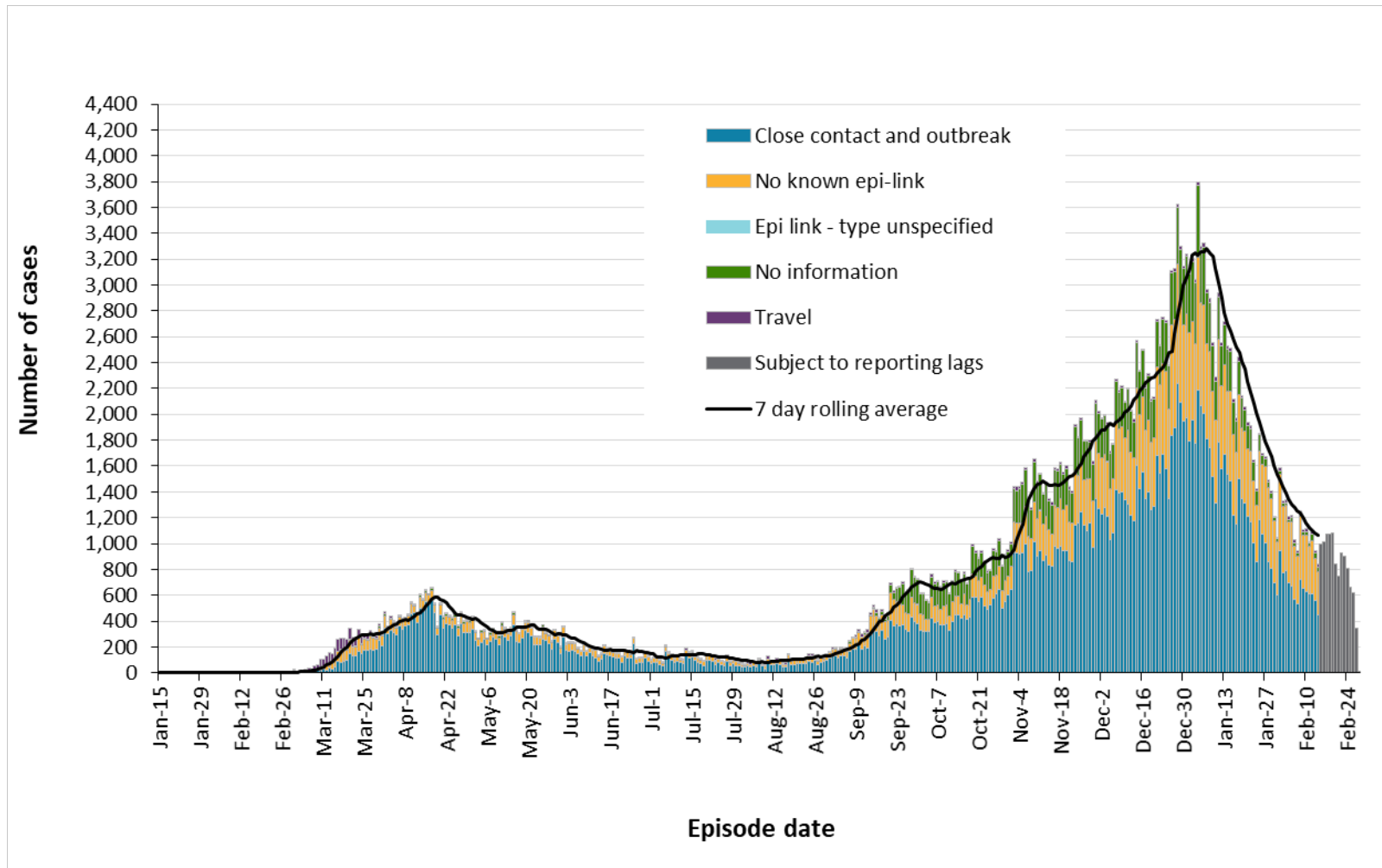
Figure 1. Confirmed cases of COVID-19 by likely acquisition and public health unit reported date: Ontario, January 15, 2020 to February 28, 2021



Data Source: CCM

COVID-19 in Ontario: January 15, 2020 to February 28, 2021

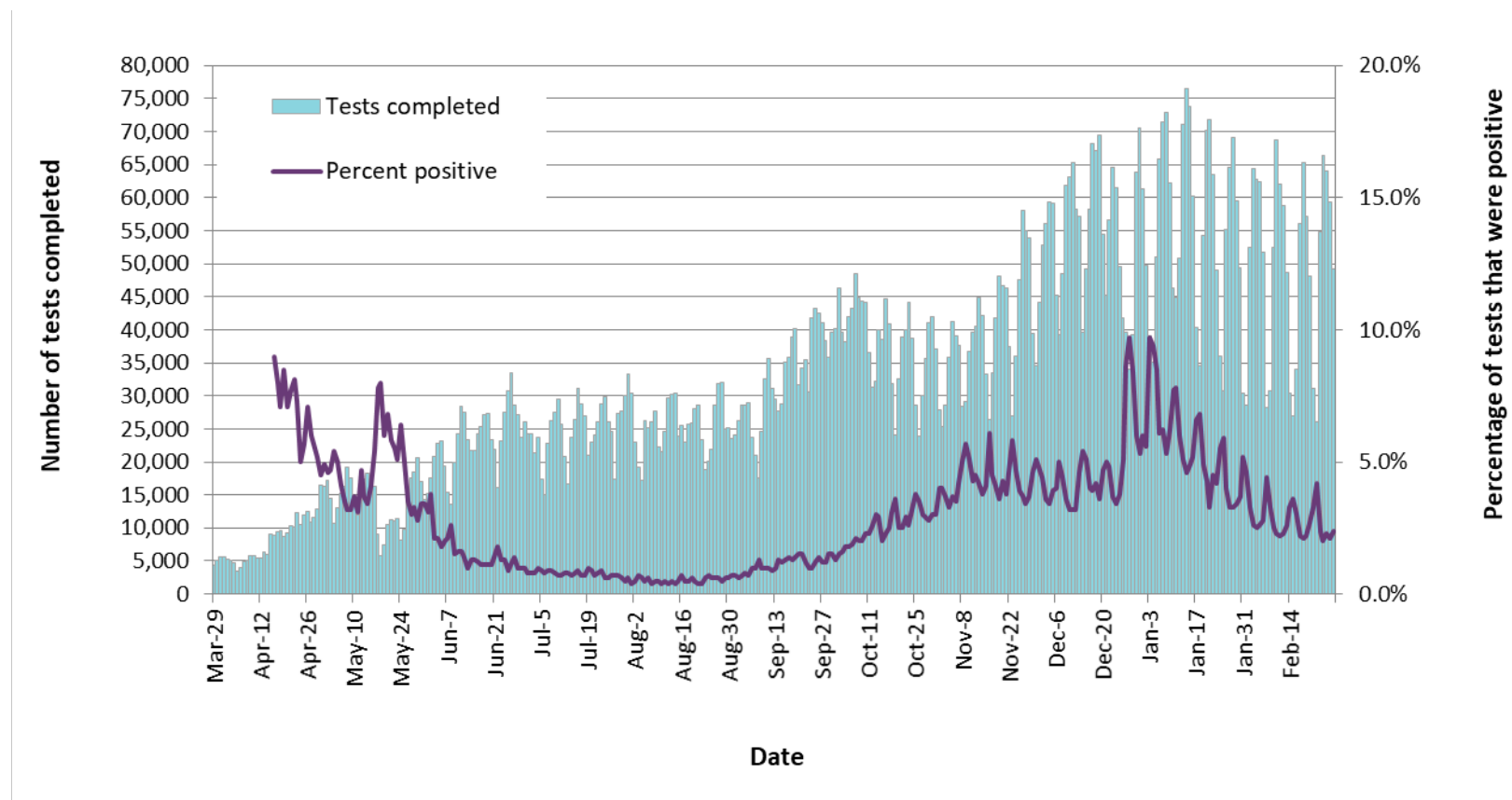
**Figure 2. Confirmed cases of COVID-19 by likely acquisition and approximation of symptom onset date: Ontario, January 15, 2020 to February 28, 2021**



**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

**Figure 3. Number of COVID-19 tests completed and percent positivity: Ontario, March 29, 2020 to February 27, 2021**

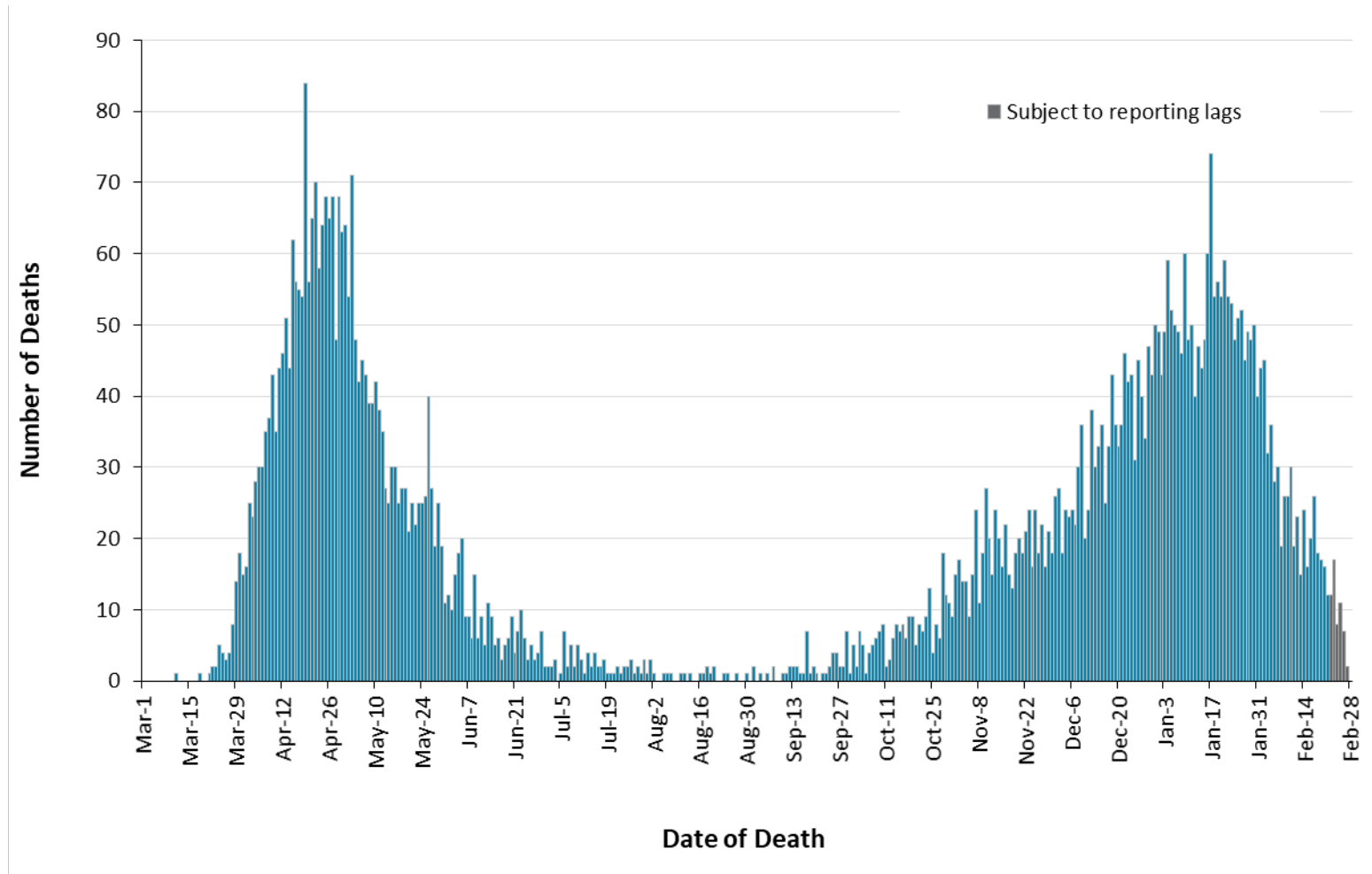


**Note:** The number of tests performed does not reflect the number of specimens or persons tested. More than one test may be performed per specimen or per person. As such, the percentage of tests that were positive does not necessarily translate to the number of specimens or persons testing positive.

**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 February 28, 2021



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

**Data Source:** CCM

COVID-19 in Ontario: January 15, 2020 to February 28, 2021



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

	Cumulative case count as of February 28, 2021	Percentage of all cases
Cumulative deaths reported (please note there may be a reporting delay for deaths)	6,986	2.3%
Deaths reported in ages: 19 and under	2	< 0.1%
Deaths reported in ages: 20-39	30	< 0.1%
Deaths reported in ages: 40-59	282	0.3%
Deaths reported in ages: 60-79	1,917	4.4%
Deaths reported in ages: 80 and over	4,754	23.5%
Ever in ICU	2,745	0.9%
Ever hospitalized	15,231	5.0%

**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

## 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 February 27, 2021	Change in cases February 28, 2021	Cumulative case count	Cumulative rate per 100,000 population
Northwestern Health Unit	14	12	471	537.2
Thunder Bay District Health Unit	22	55	1,640	1,093.6
<b>TOTAL NORTH WEST</b>	36	67	2,111	888.3
Algoma Public Health	-1	3	200	174.8
North Bay Parry Sound District Health Unit	0	1	261	201.2
Porcupine Health Unit	-1	1	339	406.3
Public Health Sudbury & Districts	16	11	636	319.6
Timiskaming Health Unit	1	0	93	284.5
<b>TOTAL NORTH EAST</b>	15	16	1,529	273.4
Ottawa Public Health	31	72	14,727	1,396.4
Eastern Ontario Health Unit	4	9	2,687	1,287.4
Hastings Prince Edward Public Health	4	4	411	243.9
Kingston, Frontenac and Lennox & Addington Public Health	1	0	708	332.8
Leeds, Grenville & Lanark District Health Unit	4	2	857	494.9
Renfrew County and District Health Unit	2	7	347	319.4

Public Health Unit Name	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count	Cumulative rate per 100,000 population
<b>TOTAL EASTERN</b>	46	94	19,737	1,024.6
Durham Region Health Department	23	34	11,842	1,662.3
Haliburton, Kawartha, Pine Ridge District Health Unit	3	1	1,031	545.7
Peel Public Health	201	182	61,088	3,803.8
Peterborough Public Health	7	12	643	434.5
Simcoe Muskoka District Health Unit	20	39	6,533	1,089.6
York Region Public Health	86	47	28,750	2,345.4
<b>TOTAL CENTRAL EAST</b>	340	315	109,887	2,452.5
Toronto Public Health	259	280	94,397	3,025.2
<b>TOTAL TORONTO</b>	259	280	94,397	3,025.2
Chatham-Kent Public Health	5	0	1,352	1,271.7
Grey Bruce Health Unit	2	1	695	409.1
Huron Perth Public Health	3	1	1,348	964.5
Lambton Public Health	26	14	2,102	1,605.0
Middlesex-London Health Unit	13	18	6,184	1,218.5
Southwestern Public Health	43	1	2,539	1,200.5
Windsor-Essex County Health Unit	25	22	12,974	3,053.9
<b>TOTAL SOUTH WEST</b>	117	57	27,194	1,608.4
Brant County Health Unit	31	16	1,806	1,163.6

Public Health Unit Name	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count	Cumulative rate per 100,000 population
City of Hamilton Public Health Services	45	53	10,502	1,773.5
Haldimand-Norfolk Health Unit	6	5	1,386	1,214.9
Halton Region Public Health	47	39	9,189	1,484.3
Niagara Region Public Health	18	30	8,602	1,820.6
Region of Waterloo Public Health and Emergency Services	60	39	10,721	1,834.7
Wellington-Dufferin-Guelph Public Health	42	12	4,778	1,531.9
<b>TOTAL CENTRAL WEST</b>	249	194	46,984	1,649.0
<b>TOTAL ONTARIO</b>	<b>1,062</b>	<b>1,023</b>	<b>301,839</b>	<b>2,030.6</b>

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

**Data Source:** CCM

## 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 February 27, 2021	Change in outbreaks February 28, 2021	Number of ongoing outbreaks	Cumulative number of outbreaks reported
Long-term care homes	6	1	91	1,275
Retirement homes	4	0	57	753
Hospitals	1	1	31	416

**Note:** Ongoing outbreaks include all outbreaks that are 'Open' in CCM 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 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

## Variant COVID-19 Cases

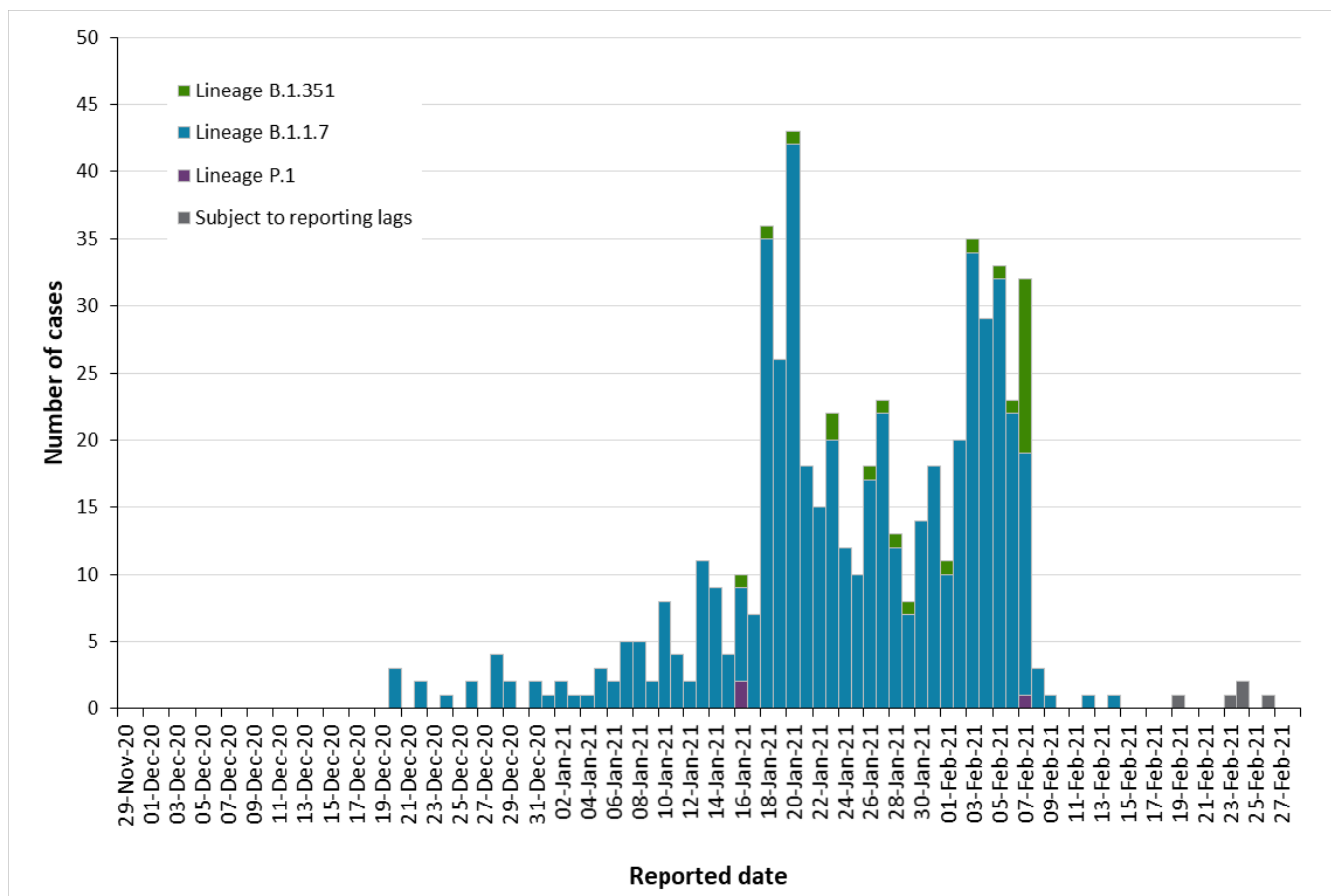
**Table 7. Summary of confirmed variant of concern (VOC) cases: Ontario**

Variant	Change in cases February 27, 2021	Change in cases February 28, 2021	Cumulative case count up to February 28, 2021
Lineage B.1.1.7	20	7	535
Lineage B.1.351	2	0	27
Lineage P.1	1	0	3

**Note:** Interpret the VOC trends with caution due to the varying time required to complete whole genome sequencing following the initial positive test for SARS-CoV-2. Due to the nature of the WGS process, test results may be completed in batches. 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. For a breakdown of confirmed VOC cases by PHU and interim N501Y mutation screening test volumes and percent positivity please see Appendix A and B.

**Data Source:** CCM

**Figure 5. Confirmed COVID-19 variants of concern (VOC) cases by public health unit reported date: Ontario, November 29, 2020 to February 28, 2021**



**Note:** Reported date is based on the date the case was reported, not the date that the VOC was identified. Additional testing was conducted on January 20, 2021 which led to an increase in the number of cases with variants of concern identified. Further details on screening for variants of concern can be found in the [technical notes](#). Interpret the VOC trends with caution due to the varying time required to complete whole genome sequencing following the initial positive test for SARS-CoV-2.

**Data Source:** CCM

**Table 8. Summary of confirmed variant of concern (VOC) cases by age group and gender: Ontario**

	Lineage B.1.1.7	Lineage B.1.351	Lineage P.1	Cumulative case count as of February 28, 2021
Gender: Male	237	12	1	250
Gender: Female	297	15	2	314
Ages: 19 and under	66	2	0	68
Ages: 20-39	191	12	0	203
Ages: 40-59	134	6	1	141
Ages: 60-79	87	7	2	96
Ages: 80 and over	57	0	0	57

**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



**Table 9. Summary of confirmed variant of concern (VOC) cases likely source of acquisition: Ontario**

	Lineage B.1.1.7	Percentage	Lineage B.1.351	Percentage	Lineage P.1	Percentage	Cumulative case count up to February 28, 2021	Cumulative percentage
Travel	37	6.9%	3	11.1%	1	33.3%	41	7.3%
Outbreak-associated or close contact of a confirmed case	414	77.4%	22	81.5%	1	33.3%	437	77.3%
Epidemiological link – type unspecified	0	0.0%	0	0.0%	0	0.0%	0	0.0%
No known epidemiological link	81	15.1%	2	7.4%	1	33.3%	84	14.9%
Information missing or unknown	3	0.6%	0	0.0%	0	0.0%	3	0.5%
<b>Total</b>	<b>535</b>		<b>27</b>		<b>3</b>		<b>565</b>	

**Note:** Information for how cases are grouped within each category is available in the technical notes.

**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 **February 28, 2021 at 1 p.m.**
- 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 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.
- N501Y mutation screening test and percent positivity data were based on the MOH extract of the Ontario Laboratory Information System (OLIS) by Health Analytics & Insight Branch (HAIB), MOH accessed on **February 25, 2021** on the MOH SAS server.

## Data Caveats

- 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.
- 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. This includes persons with:
  - laboratory confirmation by a validated NAAT assay
  - a validated point-of-care (POC) assay deemed acceptable to provide a final result
  - a validated laboratory-based serological assay SARS-CoV-2
- 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.
- 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-PHO (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. 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. 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 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 include all outbreaks that are 'Open' in CCM 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 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.
- PANGO lineage B.1.1.7: This lineage was first detected in England in September, 2020. Early evidence suggests that the N501Y mutation may increase SARS-CoV-2 transmissibility. The PANGO lineage B.1.1.7 is assigned to genome sequences with at least 5 of the 17 defining B.1.1.7 SNPs.

- PANGO lineage B.1.351 (also known as 501Y.V2): This lineage was first detected October, 2020 in South Africa and has several mutations of concern, including spike (S) gene: N501Y, K417N, and E484K. Early evidence suggests that these mutations may increase SARS-CoV-2 transmissibility and decrease vaccine efficacy. The PANGO lineage B.1.351 will be assigned to genome sequences at least 5 of the 9 defining B.1.351 SNPs.
- PANGO lineage P.1 (also known as 501Y.V3): This lineage was first detected January, 2021 in Brazil and has several mutations of concern, including spike (S) gene N501Y, K417T, and E484K. Early evidence suggests that these mutations may increase SARS-CoV-2 transmissibility and decrease vaccine efficacy. The PANGO lineage P.1 is assigned to genome sequences with more than 10 of the 17 defining P.1 SNPs.
- Public Health Ontario conducts variants of concern (VOC) surveillance on a subset of SARS-CoV-2 positive specimens. Additional SARS-CoV-2 specimens are referred to PHO Laboratory for screening provided they meet the criteria outlined here: <https://www.publichealthontario.ca/en/laboratory-services/test-information-index/covid-19-voc>
- Screening results for the spike (S) gene N501Y mutation presented in this report are extracted from OLIS and may differ from data in CCM, especially related to public health unit attribution.
- Screening results for the spike (S) gene N501Y mutation presented in this report do not include all provincial results because:
  - Some labs are conducting screening but are not submitting directly, or indirectly via PHO to OLIS
  - Some labs are not providing sufficient information alongside specimens transferred to PHO for testing/OLIS entry, so they are rejected from OLIS
  - Some labs may be submitting screening results to OLIS in a manner that does not conform with the VOC nomenclature, and
  - The Ministry of Health does not receive test results for specimens without an associated health card number, or that have a consent block

## 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, February 13 to February 25, 2021**

Public Health Unit Name	Feb 13 to Feb 19	Feb 14 to Feb 20	Feb 15 to Feb 21	Feb 16 to Feb 22	Feb 17 to Feb 23	Feb 18 to Feb 24	Feb 19 to Feb 25	% change from Feb 13-Feb 19 to Feb 19-Feb 25
<b>NORTH WEST</b>								
Northwestern Health Unit	104.9	108.4	96.9	90.1	74.1	74.1	53.6	-48.9%
Thunder Bay District Health Unit	97.4	112.7	123.4	140.0	160.0	176.0	198.7	+104.0%
<b>NORTH EAST</b>								
Algoma Public Health	2.6	2.6	1.7	1.7	1.7	1.7	1.7	-34.6%
North Bay Parry Sound District Health Unit	22.4	22.4	21.6	20.0	19.3	18.5	6.9	-69.2%
Porcupine Health Unit	14.4	21.6	19.2	25.2	25.2	24.0	26.4	+83.3%
Public Health Sudbury & Districts	8.0	8.0	8.5	9.0	11.1	13.1	14.6	+82.5%
Timiskaming Health Unit	0.0	0.0	0.0	0.0	3.1	3.1	3.1	N/A
<b>EASTERN</b>								
Ottawa Public Health	34.5	36.5	37.1	36.7	35.2	36.2	34.2	-0.9%
Eastern Ontario Health Unit	26.4	24.4	21.6	22.5	26.8	26.4	27.3	+3.4%
Hastings Prince Edward Public Health	6.5	5.9	5.3	5.3	8.3	10.1	10.1	+55.4%
Kingston, Frontenac and Lennox & Addington Public Health	7.1	4.7	5.6	6.1	6.1	5.2	5.2	-26.8%

Public Health Unit Name	Feb 13 to Feb 19	Feb 14 to Feb 20	Feb 15 to Feb 21	Feb 16 to Feb 22	Feb 17 to Feb 23	Feb 18 to Feb 24	Feb 19 to Feb 25	% change from Feb 13-Feb 19 to Feb 19-Feb 25
Leeds, Grenville & Lanark District Health Unit	6.9	5.2	4.6	4.0	4.6	5.8	4.6	-33.3%
Renfrew County and District Health Unit	5.5	7.4	10.1	10.1	12.9	20.3	21.2	+285.5%
<b>CENTRAL EAST</b>								
Durham Region Health Department	40.6	41.8	36.9	37.9	39.3	39.3	39.6	-2.5%
Haliburton, Kawartha, Pine Ridge District Health Unit	19.1	19.6	15.9	15.9	16.9	14.8	16.9	-11.5%
Peel Public Health	84.8	84.9	85.4	88.1	88.5	89.6	89.7	+5.8%
Peterborough Public Health	25.7	20.9	18.9	15.5	15.5	14.9	14.2	-44.7%
Simcoe Muskoka District Health Unit	40.5	46.0	47.5	48.0	48.9	48.5	47.7	+17.8%
York Region Public Health	66.7	68.6	66.0	63.1	61.3	58.4	58.6	-12.1%
<b>TORONTO</b>								
Toronto Public Health	71.7	73.1	76.5	74.3	76.7	75.0	74.5	+3.9%
<b>SOUTH WEST</b>								
Chatham-Kent Public Health	9.4	10.3	13.2	13.2	12.2	12.2	10.3	+9.6%
Grey Bruce Health Unit	6.5	5.9	4.7	5.9	5.3	7.7	6.5	0.0%
Huron Perth Public Health	10.7	14.3	14.3	14.3	14.3	19.3	21.5	+100.9%
Lambton Public Health	48.9	55.7	58.0	53.4	51.2	45.8	48.1	-1.6%
Middlesex-London Health Unit	15.4	14.0	14.4	16.4	16.6	15.4	15.0	-2.6%

Public Health Unit Name	Feb 13 to Feb 19	Feb 14 to Feb 20	Feb 15 to Feb 21	Feb 16 to Feb 22	Feb 17 to Feb 23	Feb 18 to Feb 24	Feb 19 to Feb 25	% change from Feb 13-Feb 19 to Feb 19-Feb 25
Southwestern Public Health	11.3	11.3	10.4	9.9	12.3	15.6	17.5	+54.9%
Windsor-Essex County Health Unit	47.1	40.7	39.3	46.8	46.1	49.9	51.1	+8.5%
<b>CENTRAL WEST</b>								
Brant County Health Unit	42.5	38.7	38.0	38.0	39.9	54.1	71.5	+68.2%
City of Hamilton Public Health Services	49.0	52.2	51.7	54.4	56.6	60.1	58.3	+19.0%
Haldimand-Norfolk Health Unit	14.0	19.3	21.9	23.7	26.3	28.9	24.5	+75.0%
Halton Region Public Health	36.8	36.0	35.5	33.6	35.7	34.4	32.1	-12.8%
Niagara Region Public Health	25.6	23.5	22.2	22.9	23.3	25.2	24.1	-5.9%
Region of Waterloo Public Health and Emergency Services	46.4	48.4	48.4	52.0	50.0	55.6	61.1	+31.7%
Wellington-Dufferin-Guelph Public Health	24.4	27.3	29.2	30.1	28.9	32.4	38.8	+59.0%
<b>TOTAL ONTARIO</b>	<b>48.8</b>	<b>49.8</b>	<b>50.1</b>	<b>50.4</b>	<b>51.1</b>	<b>51.7</b>	<b>51.9</b>	<b>+6.4%</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. Summary of confirmed variant of concern (VOC) cases by public health unit: Ontario as of February 28, 2021**

Public Health Unit Name	Cumulative count for Lineage B.1.1.7	Cumulative count for Lineage B.1.351	Cumulative count for Lineage P.1
Algoma Public Health	0	0	0
Brant County Health Unit	0	0	0
Chatham-Kent Public Health	0	0	0
City of Hamilton Public Health Services	3	0	0
Durham Region Health Department	23	1	0
Eastern Ontario Health Unit	0	0	0
Grey Bruce Health Unit	0	0	0
Haldimand-Norfolk Health Unit	1	0	0
Haliburton, Kawartha, Pine Ridge District Health Unit	0	0	0
Halton Region Public Health	13	0	0
Hastings Prince Edward Public Health	0	0	0
Huron Perth Public Health	0	0	0
Kingston, Frontenac and Lennox & Addington Public Health	1	0	0
Lambton Public Health	0	0	0
Leeds, Grenville & Lanark District Health Unit	0	0	0
Middlesex-London Health Unit	4	0	0
Niagara Region Public Health	0	0	0

Public Health Unit Name	Cumulative count for Lineage B.1.1.7	Cumulative count for Lineage B.1.351	Cumulative count for Lineage P.1
North Bay Parry Sound District Health Unit	0	14	0
Northwestern Health Unit	1	0	0
Ottawa Public Health	8	1	0
Peel Public Health	88	10	0
Peterborough Public Health	1	0	0
Porcupine Health Unit	0	0	0
Public Health Sudbury & Districts	3	0	0
Region of Waterloo Public Health and Emergency Services	10	0	0
Renfrew County and District Health Unit	0	0	0
Simcoe Muskoka District Health Unit	186	0	0
Southwestern Public Health	0	0	0
Thunder Bay District Health Unit	0	0	0
Timiskaming Health Unit	0	0	0
Toronto Public Health	113	1	3
Wellington-Dufferin-Guelph Public Health	1	0	0
Windsor-Essex County Health Unit	0	0	0
York Region Public Health	79	0	0
<b>TOTAL ONTARIO</b>	<b>535</b>	<b>27</b>	<b>3</b>

**Note:** Caution should be taken when interpreting VOC data due to the nature of the screening and confirmation process, including delays between specimen collection and whole genome sequencing (WGS). A confirmed VOC case is defined as a COVID-19 case in whom a designated VOC was detected by WGS of their SARS-CoV-2 positive specimen. 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

## Appendix B

The laboratory detection of a variant of concern is a two-step process. Samples that test positive for SARS-CoV-2 and have a cycle threshold (Ct) value  $\leq 35$  can be tested for the N501Y mutation. If positive for the N501Y mutation these samples then undergo whole genome sequencing (WGS) to confirm the presence of a designated VOC. The table below refers to step one of this process.

**Note:** The number of specimens screened for the spike (S) gene N501Y mutation is defined as the number of unique specimens with a test request code indicating a VOC screening test (TR12952-8). The number of specimens with spike (S) gene N501Y mutation detected is defined as the number of unique specimens where the Observation Value for the VOC screening test result was 'Detected'. The N501Y mutation screening results presented here do not include all screening results in the province. Further details can be found in the [technical notes](#). Testing numbers may be subject to change due to reporting lags. Data presented in Appendix B are from OLIS and may differ from that presented in CCM, especially related to public health unit attribution. These data are interim and will change as data collection and reporting methods are refined in the coming weeks.

**Table B1. Interim cumulative number of specimens screened for N501Y mutation and percent positivity: Ontario as of February 25, 2021**

	Cumulative number of specimens screened for the spike (S) gene N501Y mutation	Cumulative number of specimens with spike (S) gene N501Y mutation detected	Cumulative percent positivity
Specimens screened	19,232	2,291	11.9%

**Data Sources:** OLIS. Note that these are interim data sources to be replaced by CCM once data becomes available.

**Table B2. Interim daily number of specimens screened for N501Y mutation and percent positivity: Ontario as of February 25, 2021**

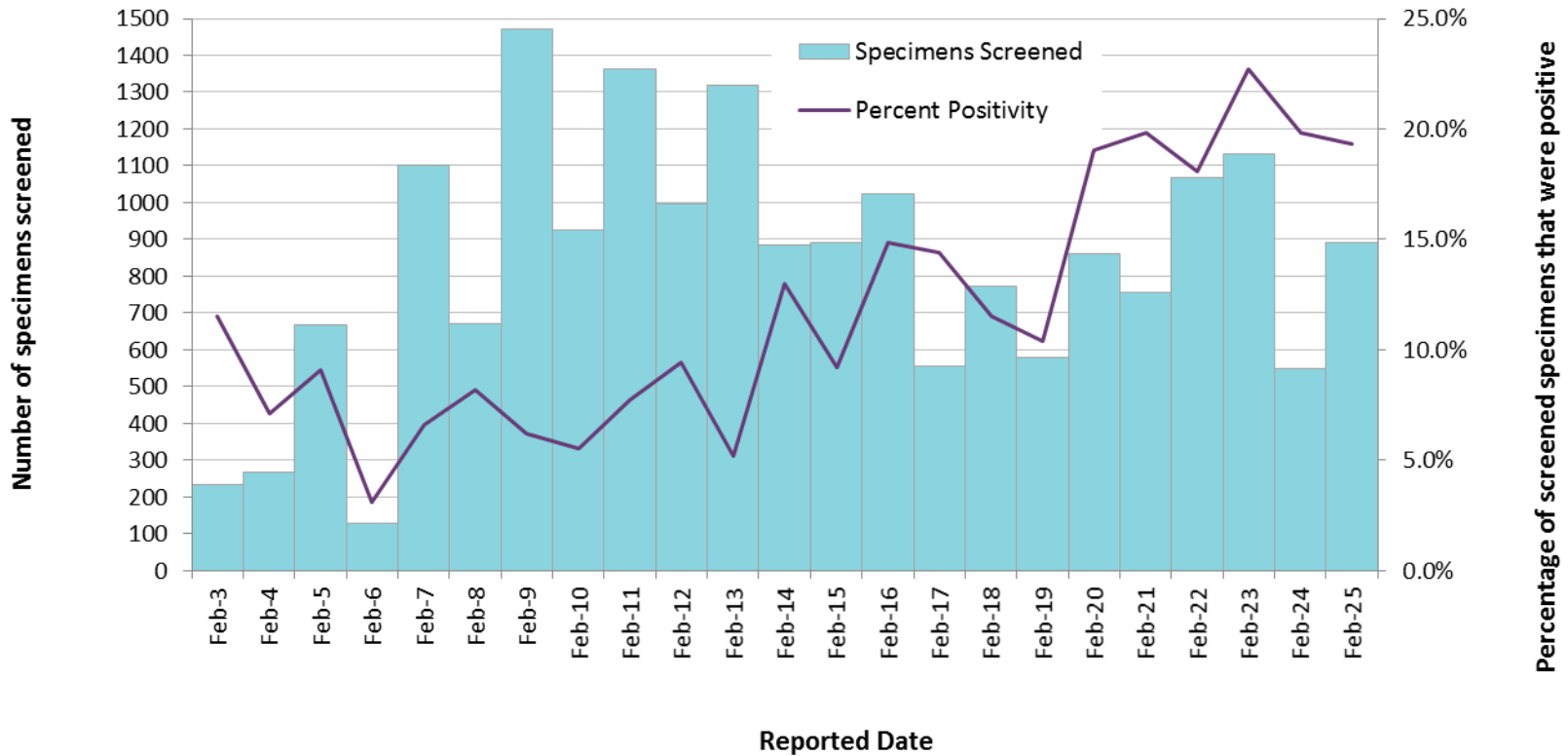
Reported Date <sup>1</sup>	# of specimens screened for the spike (S) gene N501Y mutation	# of specimens with spike (S) gene N501Y mutation detected	Daily percent positivity	Weekly percent positivity over a rolling 7-day period
February 19, 2021	580	60	10.3%	10.7%
February 20, 2021	861	164	19.0%	13.3%
February 21, 2021	757	150	19.8%	14.3%

Reported Date <sup>1</sup>	# of specimens screened for the spike (S) gene N501Y mutation	# of specimens with spike (S) gene N501Y mutation detected	Daily percent positivity	Weekly percent positivity over a rolling 7-day period
February 22, 2021	1,068	193	18.1%	15.8%
February 23, 2021	1,170	265	22.6%	17.4%
February 24, 2021	636	121	19.0%	17.8%
February 25, 2021	891	172	19.3%	18.9%

<sup>1</sup> Reporting date refers to the Observation Release Date

**Data Sources:** OLIS. Note that these are interim data sources to be replaced by CCM once data becomes available.

**Figure 6. Number of specimens screened for the spike (S) gene N501Y mutation and percent positivity: Ontario, February 3, 2021 to February 25, 2021**



**Note:** Reporting date refers to the Observation Release Date

**Data Sources:** OLIS. Note that these are interim data sources to be replaced by CCM once data becomes available.

**Table B3. Interim number of specimens screened for N501Y mutation and percent positivity: Ontario, February 19, 2021 to February 25, 2021**

Public Health Unit Name	# of specimens screened for the spike (S) gene N501Y mutation	# of specimens with spike (S) gene N501Y mutation detected	Weekly percent positivity over a rolling 7-day period	Cumulative percent positivity February 03 to February 25
Algoma Public Health	1	0	0.0%	5.9%
Brant County Health Unit	53	0	0.0%	0.6%
Chatham-Kent Public Health	25	0	0.0%	0.0%
City of Hamilton Public Health Services	245	16	6.5%	3.9%
Durham Region Health Department	302	63	20.9%	14.3%
Eastern Ontario Health Unit	28	0	0.0%	0.0%
Grey Bruce Health Unit	6	0	0.0%	0.0%
Haldimand-Norfolk Health Unit	21	0	0.0%	0.0%
Haliburton, Kawartha, Pine Ridge District Health Unit	25	6	24.0%	6.9%
Halton Region Public Health	179	15	8.4%	7.0%
Hastings Prince Edward Public Health	9	1	11.1%	5.9%
Huron Perth Public Health	17	0	0.0%	0.0%
Kingston, Frontenac and Lennox & Addington Public Health	7	0	0.0%	0.0%
Lambton Public Health	50	0	0.0%	0.0%

Public Health Unit Name	# of specimens screened for the spike (S) gene N501Y mutation	# of specimens with spike (S) gene N501Y mutation detected	Weekly percent positivity over a rolling 7-day period	Cumulative percent positivity February 03 to February 25
Leeds, Grenville & Lanark District Health Unit	7	0	0.0%	0.0%
Middlesex-London Health Unit	85	5	5.9%	2.5%
Niagara Region Public Health	41	7	17.1%	6.4%
North Bay Parry Sound District Health Unit	14	9	64.3%	56.4%
Northwestern Health Unit	17	0	0.0%	0.0%
Ottawa Public Health	71	9	12.7%	11.5%
Peel Public Health	1,050	194	18.5%	12.2%
Peterborough Public Health	16	1	6.3%	6.1%
Porcupine Health Unit	16	1	6.3%	7.8%
Public Health Sudbury & Districts	22	4	18.2%	6.7%
Region of Waterloo Public Health and Emergency Services	252	44	17.5%	10.3%
Renfrew County and District Health Unit	3	0	0.0%	0.0%
Simcoe Muskoka District Health Unit	222	82	36.9%	30.5%
Southwestern Public Health	25	0	0.0%	4.9%
Thunder Bay District Health Unit	117	4	3.4%	1.9%
Timiskaming Health Unit	0	0	N/A	N/A



Public Health Unit Name	# of specimens screened for the spike (S) gene N501Y mutation	# of specimens with spike (S) gene N501Y mutation detected	Weekly percent positivity over a rolling 7-day period	Cumulative percent positivity February 03 to February 25
Toronto Public Health	2,070	467	22.6%	12.9%
Wellington-Dufferin-Guelph Public Health	86	8	9.3%	5.7%
Windsor-Essex County Health Unit	169	6	3.6%	1.9%
York Region Public Health	667	168	25.2%	18.0%
<b>TOTAL<sup>1</sup></b>	<b>5,963</b>	<b>1,125</b>	<b>18.9%</b>	<b>11.9%</b>

<sup>1</sup>The N501Y screening results presented here do not include all screening results in the province. Further details can be found in the [technical notes](#).

**Data Sources:** OLIS. Note that these are interim data sources to be replaced by CCM once data becomes available.

## 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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