Public Health Sudbury & Districts Coronavirus Disease 2019 (COVID-19) Epidemiology Update

All information in this report is based on data available from Public Health Sudbury & Districts as of 4:00 PM January 17, 2022, unless otherwise specified.

Highlights

Active COVID-19 Cases and Outbreaks

As of January 17, 2022, Public Health Sudbury & Districts was reporting:

- 948 active case of COVID-19, of which
 - 98 active cases (10.3%) were 19 years old or younger
 - 287 active cases (30.3%) were 60 years old or older
 - 181 active cases (19.1%) were linked to an outbreak
 - 40 active cases (4.2%) had no known epidemiological link (unknown exposure)
- 20 new hospitalizations due to COVID-19 in the past 7 days, with 42 local cases in hospital during that time.
- 13 active outbreaks declared in local hospitals, long-term care homes and retirement homes
- **0** active outbreaks declared in local schools and licensed daycares
- 11 active outbreaks declared in other community settings

Total COVID-19 Cases and Outbreaks

Since the beginning of the pandemic, Public Health Sudbury & Districts has reported:

- **7,983** cases of COVID-19, of which:
 - **1,849** cases (**23.2%**) were 19 years old or younger
 - **1,312** cases (**16.4%**) were 60 years old or older
 - **1273** cases (**15.9%**) are linked to an outbreak
 - 1039 cases (13.0%) have no known epidemiological link (unknown exposure)
- 291 hospitalizations due to COVID-19
- 59 deaths due to COVID-19. The local case fatality rate is 0.7% (i.e., Total Deaths / Total Cases x 100%)
- 53 outbreaks declared in local hospitals, long-term care homes and retirement homes
- 66 outbreaks declared in local schools and licensed daycares
- **89** outbreaks declared in other community settings

Public Health Sudbury & Districts COVID-19 Epidemiology Update

Epidemiology – Sudbury and Districts

Current Status

Public Health Sudbury & Districts has reported **7,983** cases of COVID-19 since the start of the pandemic. Of these, **948** cases are currently active, and **59 (0.7%)** cases have died from COVID-19.

The current 7-day average rate of new COVID-19 cases is **78.9** cases per day.

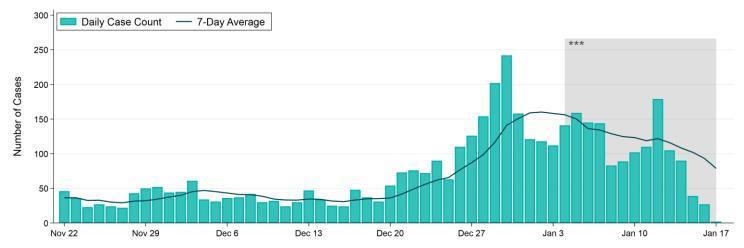


FIGURE 1. Daily confirmed COVID-19 cases and rolling 7-day average, past 8 weeks, Sudbury and districts

Dates are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM

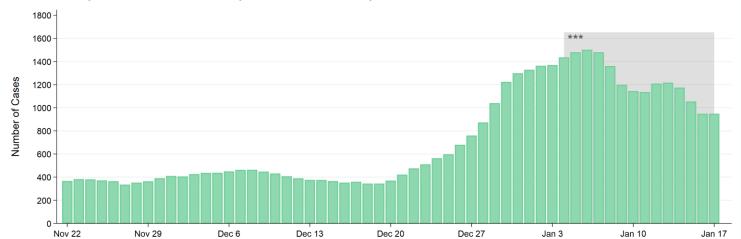


FIGURE 2. Daily active COVID-19 cases, past 8 weeks, Sudbury and districts

Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. CCM

Case Counts by Week

The following graphs show weekly COVID-19 case counts in Sudbury and districts since the first case was reported locally (Figure 3), and the cumulative weekly case count (Figure 4).

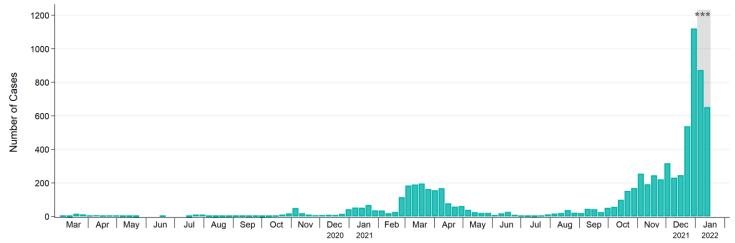


FIGURE 3. Confirmed COVID-19 cases, by week, Sudbury and districts

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM

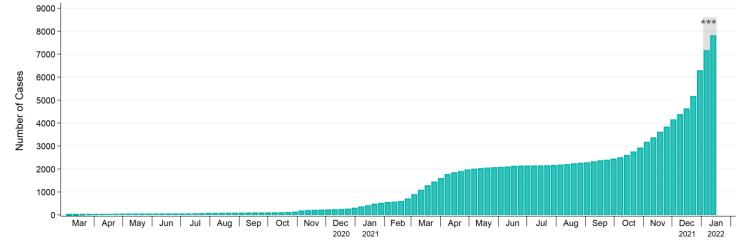


FIGURE 4. Cumulative confirmed COVID-19 cases, by week, Sudbury and districts

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. CCM

Case Characteristics

Table 1, below, summarizes the number and percentage of total and active COVID-19 cases in Sudbury and districts by various characteristics, including age, sex, location and whether they have screened positive for a variant of concern (VOC).

| Characteristic | Total Cases | Percentage (%) | Active Cases | Percentage (%) |
|-------------------------------|-------------|----------------|--------------|----------------|
| Numbers of Cases | 7,983 | 100% | 948 | 100% |
| Change from 7 days ago | 472 | 6.3%* | -195 | -17.0%* |
| Sex: Male | 2,897 | 36.3% | 341 | 36.0% |
| Sex: Female | 3,207 | 40.2% | 498 | 52.5% |
| Sex: Not specified** | 1,849 | 23.2% | 98 | 10.3% |
| Ages: 19 and under | 1,849 | 23.2% | 98 | 10.3% |
| Ages: 20-39 | 2,871 | 36.0% | 326 | 34.4% |
| Ages: 40-59 | 1,951 | 24.4% | 237 | 25.0% |
| Ages: 60-79 | 943 | 11.8% | 163 | 17.2% |
| Ages: 80 and over | 369 | 4.6% | 124 | 13.1% |
| Ages: Not specified** | 0 | 0.0% | 0 | 0.0% |
| Area: Greater Sudbury | 6,926 | 86.8% | 835 | 88.1% |
| Area: Manitoulin District | 489 | 6.1% | 48 | 5.1% |
| Area: Sudbury District, North | 72 | 0.9% | 5 | 0.5% |
| Area: Sudbury District, West | 340 | 4.3% | 43 | 4.5% |
| Area: Sudbury District, East | 156 | 2.0% | 17 | 1.8% |

TABLE 1. Number and Percentage of Cases, by Various Characteristics

Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *Percent change represents the degree of change over time, calculated: (New-Original)/Original. **Data on sex and age groups are listed as unspecified until there are sufficient numbers to allow them to be assigned to the appropriate categories. This ensures that individual cases cannot be identified. Sex is not specified for cases aged 19 years and under. Data source: CCM

Variants of Concern (VOCs)

COVID-19 variants of concern (VOC) are genetic mutations to the virus that may result in the infection being more easily transmissible, cause more severe illness, or both. In total, cases have screened positive for a VOC in Sudbury and districts. The Alpha variant was dominant locally in the spring of 2021, while the Delta variant was dominant in the fall. The highly transmissible Omicron variant is now dominant in the winter of 2022.

Note: As routine screening for VOCs was discontinued by the province as of December 30, 2021, the results of VOC screening cases will no longer be provided in this report.

Probable Exposure

Table 2, below, summarizes how local COVID-19 cases are thought to have acquired their COVID-19 infection. Both total and active cases are presented. Exposure categories are assigned using the hierarchy shown in the table for prioritization. This means that if a case might have acquired their infection in multiple different ways, the exposure classification shown higher in the table below will be assigned.

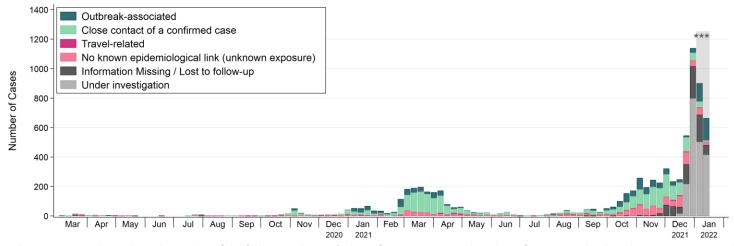
| Exposure | Total Cases | Percentage (%) | Active Cases | Percentage (%) |
|--|----------------|----------------|-----------------|----------------|
| Outbreak-associated | 1,273 | 15.9% | 181 | 19.1% |
| Close contact of a confirmed case | 2,742 | 34.3% | 21 | 2.2% |
| Travel-related | 126 | 1.6% | 0 | 0.0% |
| No known epidemiological link (unknown exposure) | 1,039 | 13.0% | 40 | 4.2% |
| Information missing / Lost to follow-up | 825 | 10.3% | 75 | 7.9% |
| Under investigation | 1,978 | 24.8% | 631 | 66.6% |

TABLE 2. Cases, by probable exposure, Sudbury and districts

Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. Data Source: CCM

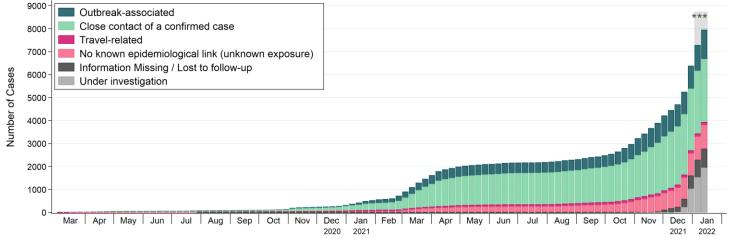
Figures 5 and 6, below, summarize the weekly and cumulative weekly COVID-19 case counts by the cases' probable exposure, respectively. The bars in the graph are stacked to illustrate the proportion of total cases each week that each exposure category represents.

FIGURE 5. COVID-19 cases, by week and probable exposure, Sudbury and districts



Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Cases for which the probable exposure is currently under investigation have been excluded. Data source: CCM

FIGURE 6. Cumulative COVID-19 cases, by week and probable exposure, Sudbury and districts



Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Cases for which the probable exposure is currently under investigation have been excluded. Data source: CCM

Hospitalizations

In total there have been **291** hospitalizations due to COVID-19 among cases in Sudbury and districts. Figure 7, below, shows the number of new hospitalizations each week, along with the total number of patients in hospital due to COVID-19 at any point during that week.

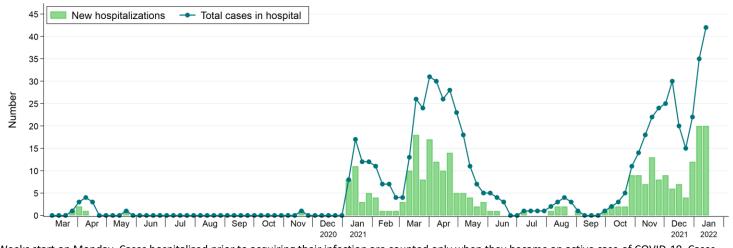


FIGURE 7. New and total COVID-19 cases in hospital, by week, Sudbury and districts

Weeks start on Monday. Cases hospitalized prior to acquiring their infection are counted only when they became an active case of COVID-19. Cases remaining in hospital following resolution of their infection are not counted once released from public health follow-up. These data exclude residents of other geographic regions receivng treatment at local hospitals unless their case is being managed by Public Health Sudbury & District. Data source: CCM

Figure 8 presents the cumulative count of new hospitalizations for COVID-19, by week.

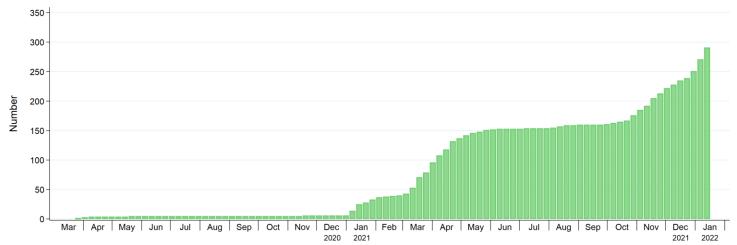


FIGURE 8. Cumulative hospitalizations among COVID-19 cases, by week, Sudbury and districts

Weeks start on Monday. Cases hospitalized prior to acquiring their infection are counted only when they became an active case of COVID-19. These data exclude residents of other geographic regions receivng treatment at local hospitals unless their case is being managed by Public Health Sudbury & District. Data source: CCM

Testing

As of January 16, 2022, there have been 368,881 tests for COVID-19 among residents of Sudbury and districts. This includes preliminary counts of tests completed in the previous 6 days. Note that an individual can be tested on multiple occasions, and that samples collected on each such occasion may undergo multiple laboratory tests, which are counted separately.

Figure 9 shows the number of tests completed each week, as well as the number of individual people tested.

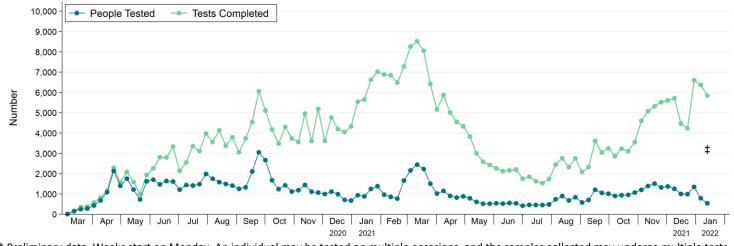
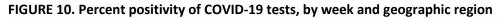
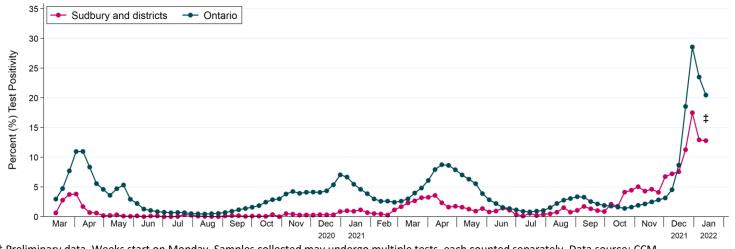


FIGURE 9. Number of tests and people tested, by week, Sudbury and districts

+ Preliminary data. Weeks start on Monday. An individual may be tested on multiple occasions, and the samples collected may undergo multiple tests, each counted separately. Data source: CCM

Figure 10, below, shows the percent test positivity in both Sudbury and districts and in Ontario overall. This is the percentage of all laboratory tests completed that are positive for COVID-19. A high rate of test positivity (for example, 5% or above) can mean rates of transmission are high, rates of testing are too low, or both. Either way, it indicates that there are likely more people in the community who are positive for COVID-19 but haven't been tested yet.





[‡] Preliminary data. Weeks start on Monday. Samples collected may undergo multiple tests, each counted separately. Data source: CCM

Outbreaks in Hospitals, Long-term Care and Retirement Homes

An outbreak in a hospital will be declared if there are two or more cases of COVID-19 in a 14-day period that have some link with each other, and with evidence that infection occurred at the hospital. In long-term care or retirement homes, an outbreak may be declared with a single case among staff or residents. Public Health assesses each unique situation in determining if an outbreak should be declared, including, for example, occupation, exposures in the home, symptoms of the case, specific risk factors, and local epidemiology.

- In total there have been **53** COVID-19 outbreaks in local hospitals, long-term care homes and retirement homes.
- Of the declared outbreaks, **13** are currently active, and **40** have been declared over.

The table below provides a summary of outbreaks that have been active within the past 7 days.

| TABLE 3. Summary of recent outbreaks in hospitals, le | ong-term care and retin | rement homes | s, Sudbury and districts |
|---|-------------------------|--------------|--------------------------|
| | | | |

| Name of Facility | Facility Type | Status | Date Active | Date Declared Over |
|---|--------------------|--------|----------------|-----------------------|
| St Joseph's Villa | Long-term Care | Active | December 23 | - |
| Pioneer Manor | Long-term Care | Active | December 27 | - |
| Health Sciences North, 4th Floor South | Hospital | Active | January 3 | - |
| The Westmount Retirement Home | Retirement Home | Active | January 3 | - |
| Extendicare York | Long-term Care | Active | January 4 | - |
| The Elizabeth Centre | Long-term Care | Active | January 4 | - |
| Extendicare Falconbridge | Long-term Care | Active | January 10 | - |
| Finlandia Hoivakoti Nursing Home | Long-term Care | Active | January 6 | - |
| St. Joseph's Continuing Care Centre | Hospital | Active | January 7 | - |
| Health Sciences North, 6 Floor North | Hospital | Active | January 8 | - |
| Maison McCulloch Hospice | Hospice | Over | January 10 | January 18 |
| St. Joseph's Continuing Care Centre, Clarion Site, 3rd floor | Hospital | Active | January 14 | - |
| Golden Years Retirement Home | Retirement Home | Active | January 12 | - |
| Health Sciences North, 5th Floor South | Hospital | Active | January 14 | - |

Data Source: CCM

Outbreaks in Schools and Licensed Daycares

An outbreak in a school or daycare will be declared if there are two or more cases of COVID-19 in a 14-day period that have some link with each other, and with evidence that infection occurred at the school.

- In total there have been **66** COVID-19 outbreaks in area schools and licensed daycares.
- All outbreaks have now been declared over.

The table below provides a summary of outbreaks that have been active within the past 7 days.

TABLE 4. Summary of recent outbreaks in schools and licensed daycares, Sudbury and districts

There have been no active outbreaks in the past 7 days.

Data Source: CCM

Outbreaks in Other Community Settings

An outbreak in a community setting may be declared if there are two or more cases of COVID-19 in a 14-day period that have some link with each other, and with evidence that infection occurred in that setting.

- In total there have been 89 COVID-19 outbreaks in community settings.
- Of the declared outbreaks, **11** are currently active, and **78** have been declared over.

The table below provides a summary of outbreaks that have been active within the past 7 days.

| Location | Type of Setting | Status | Date Active | Date Declared Over |
|--|--------------------------|--------|----------------|-----------------------|
| Sudbury Development Services, Ester House | Congregate Living | Active | January 5 | - |
| Sudbury Developmental Services, Cedar House | Congregate Living | Active | January 7 | - |
| Sudbury Jail, 5 Bravo Unit | Correctional Facility | Active | January 15 | - |
| L'Arche Sudbury, Bethany House | Congregate Living | Active | January 6 | - |
| Monarch Recovery Services, Men's Recovery Home | Congregate Living | Active | January 7 | - |
| Trillium Residential Services, Coniston | Congregate Living | Active | January 7 | - |
| Sudbury Developmental Services, Oak House | Congregate Living | Active | January 10 | - |
| Sudbury Developmental Services, Westmount Group Home | Congregate Living | Active | January 11 | - |
| Christian Horizons, House 5 | Congregate Living | Active | January 11 | - |
| Independence Centre and Network (ICAN) Reintegration Unit | Transitional House | Active | January 13 | - |
| Cecil Facer Youth Center | Correctional Facility | Active | January 14 | - |

TABLE 5. Summary of recent outbreaks in community settings, Sudbury and districts

Data Source: CCM

Regional Context

Case Counts by Week

Figure 11, below, shows the number of new COVID-19 cases by week in both Sudbury and districts and Northeastern Ontario. Figure 12 shows the weekly count in Ontario overall. Note that the vertical axis in the Ontario graph is very different, since provincial case counts are much higher than local counts.

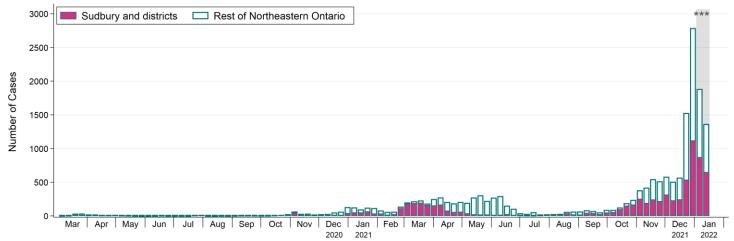


FIGURE 11. Confirmed COVID-19 cases, by week, Sudbury and districts and Northeastern Ontario

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM

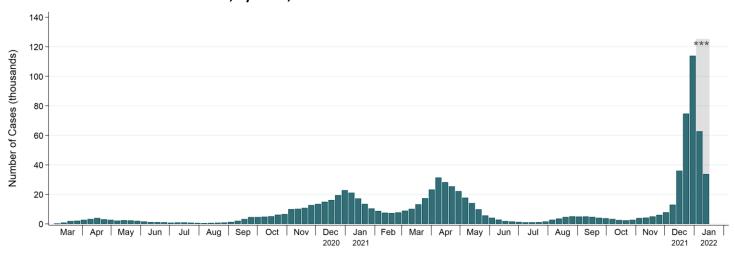
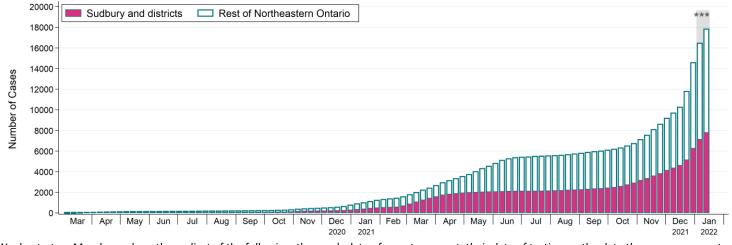


FIGURE 12. Confirmed COVID-19 cases, by week, Ontario

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. ue to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM Figures 13 and 14 present a comparison of cumulative weekly case counts by region. Again, note the difference in the vertical axis for the Ontario graph.

FIGURE 13. Cumulative confirmed COVID-19 cases, by week, Sudbury and districts and Northeastern Ontario



Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM

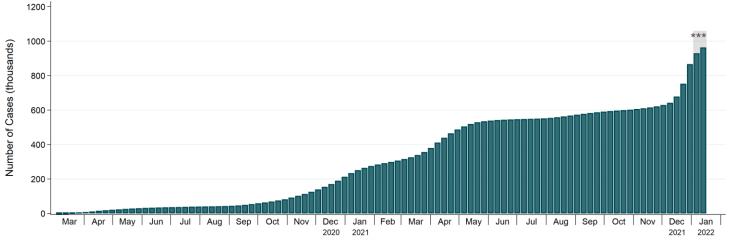


FIGURE 14. Cumulative confirmed COVID-19 cases, by week, Ontario

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM

Incidence Rates by Week

Figure 15, below, presents weekly COVID-19 incidence rates by geographic region. These rates are the number of new cases of COVID-19 each week per 100,000 people in the population.

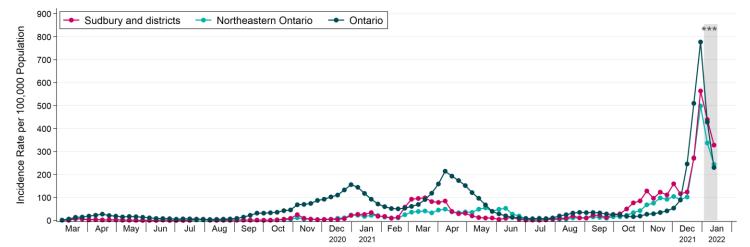


FIGURE 15. Incidence rate of COVID-19 per 100,000 population, by week and geographic region

Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: CCM and Population Projections 2020, Ontario Ministry of Health, IntelliHEALTH Ontario, Access Date: April 21, 2021

Regional Case and Testing Summary

Tables 6 and 7 (next page) present an overall summary of COVID-19 cases and testing by geographic region including Canada, Ontario, Northern Ontario, Northeastern Ontario and Sudbury and districts.

| TABLE 6. F | Regional | COVID-19 | case | summary |
|------------|----------|----------|------|---------|
|------------|----------|----------|------|---------|

| Geographic Area | Cases | Cumulative incidence per 100,000* | Active Cases | Prevalence per 100,000** | Resolved Cases | Resolved Rate | Deceased | Case Fatality Rate | Data Availability† |
|-----------------------------------|-----------|---|-----------------|--------------------------------|-------------------|------------------|----------|--------------------------|-----------------------|
| Canada | 2,801,451 | 7,452.8 | 331,376 | 881.6 | 2,470,075 | 88.2% | 31,679 | 1.1% | January 17 |
| Ontario | 963,693 | 6,573.5 | 91,473 | 624.0 | 872,220 | 90.5% | 10,666 | 1.1% | January 17 |
| Northern Ontario | 25,851 | 3,243.9 | 3,475 | 436.1 | 22,376 | 86.6% | 209 | 0.8% | January 14 |
| Northeastern Ontario | 17,708 | 3,165.5 | 2,808 | 502.0 | 14,900 | 84.1% | 124 | 0.7% | January 14 |
| Public Health Sudbury & Districts | 7,983 | 4,014.5 | 948 | 476.7 | 7,035 | 88.1% | 59 | 0.7% | January 17 |

Due to changes in provincial testing policy effective December 31, 2021, confirmed cases are an underestimate of the true number of people with COVID-19. * Cumulative incidence is the rate at which new cases have occurred since the beginning of the pandemic. ** Prevalence is the current rate of active (unresolved) cases in the population

[†] This report is based on the most currently available information at date and time of production.

Data source: Statistics Canada, Government of Canada COVID-19 Update, Ontario MOH COVID-19 Update, integrated Public Health Information System (iPHIS) database, Northwestern Health Unit, Thunder Bay District Health Unit, Algoma Public Health, North Bay Parry Sound District Health Unit, Public Health Sudbury & Districts, Porcupine Health Unit, Timiskaming Health Unit.

TABLE 7. Regional COVID-19 testing summary

| Geographic Area | Tests Completed | Tests per 100,000 | % Tests that were Positive* | People Tested | People Tested per 100,000 | % People Tested who were Positive** | Data Availability† |
|-----------------------------------|--------------------|----------------------|--------------------------------|---------------|------------------------------|---|-----------------------|
| Canada | 55,234,662 | 146,942 | Not Available | Not Available | Not Available | Not Available | January 15 |
| Ontario | 19,803,202 | 135,081 | 4.9% | 7,054,053 | 48,117 | 13.7% | January 16 |
| Northern Ontario | 1,302,065 | 163,389 | 2.0% | 399,438 | 50,123 | 6.5% | January 16 |
| Northeastern Ontario | 914,923 | 163,552 | 2.0% | 277,059 | 49,527 | 6.4% | January 16 |
| Public Health Sudbury & Districts | 368,881 | 185,505 | 2.3% | 110,707 | 55,673 | 7.2% | January 16 |

* This is calculated using the following formula: Total Positive Tests / Total Tests x 100%. Note: an individual person may be tested on multiple different occasions. Samples collected on each such occasion may undergo multiple tests, and thus may yield multiple positive tests. The number of positive tests will therefore exceed the number of confirmed cases within an area.

** This is calculated using the following formula: Total Confirmed Cases / Total People Tested x 100%

⁺ This report is based on the most currently available information at date and time of production.

Data source: Statistics Canada, Government of Canada COVID-19 Update; COVID-19 Testing Report (SAS Visual Analytics), Ontario Ministry of Health, January 18, 2022