

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

Highlights

Active COVID-19 Cases and Outbreaks

Public Health Sudbury & Districts is currently reporting:

- **29** active cases of COVID-19, of which **14 (48.3%)** have screened positive for a COVID-19 variant of concern (VOC)
 - **16** active cases (**55.2%**) are 19 years old or younger
 - **1** active case (**3.4%**) is 60 years old or older
 - **1** active case (**3.6%**) is linked to an outbreak
 - **3** active cases (**10.7%**) have no known epidemiological link (unknown exposure)
- **0** new hospitalizations due to COVID-19 in the past 7 days, with **2** cases in hospital at some point during that time.
- **0** active outbreaks declared in local hospitals, long-term care homes and retirement homes
- **0** active outbreaks declared in local schools and licensed daycares
- **1** active outbreak declared in other community settings

Total COVID-19 Cases and Outbreaks

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

- **2,142** cases of COVID-19, of which **955 (44.6%)** have screened positive for a COVID-19 variant of concern (VOC)
 - **506** cases (**23.6%**) were 19 years old or younger
 - **394** cases (**18.4%**) were 60 years old or older
 - **503** cases (**23.5%**) are linked to an outbreak
 - **316** cases (**14.7%**) have no known epidemiological link (unknown exposure)
- **151** hospitalizations due to COVID-19
- **30** deaths due to COVID-19. The local *case fatality rate* is **1.4%** (i.e., *Total Deaths / Total Cases x 100%*)
- **32** outbreaks declared in local hospitals, long-term care homes and retirement homes
- **25** outbreaks declared in local schools and licensed daycares
- **39** outbreaks declared in other community settings

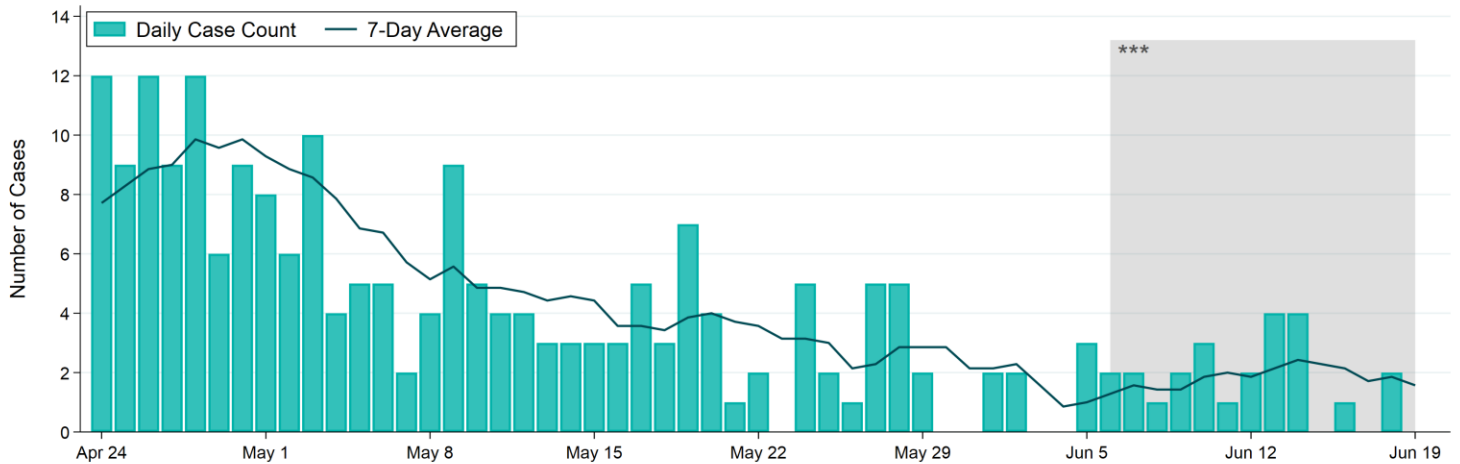
Epidemiology – Sudbury and Districts

Current Status

Public Health Sudbury & Districts has reported **2,142** cases of COVID-19 since the start of the pandemic. Of these, **29** cases (**1.4%**) are currently active, and **30** (**1.4%**) cases have died from COVID-19.

The current 7-day average rate of new COVID-19 cases is **1.6** cases per day.

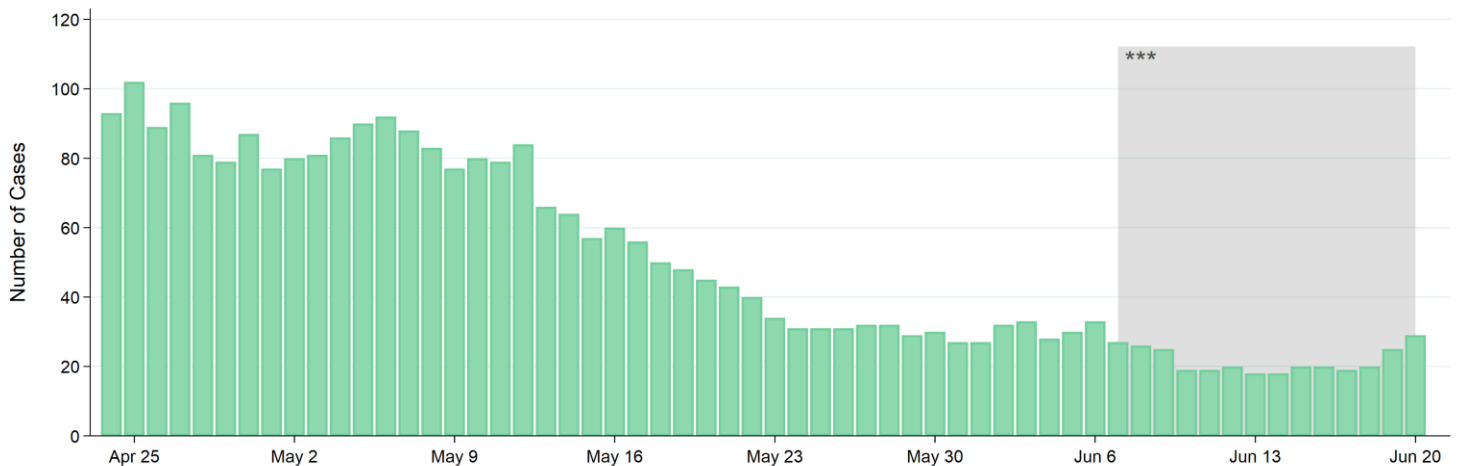
FIGURE 1. Daily confirmed COVID-19 cases and rolling 7-day average, past 8 weeks, Sudbury and districts



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.

*** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

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

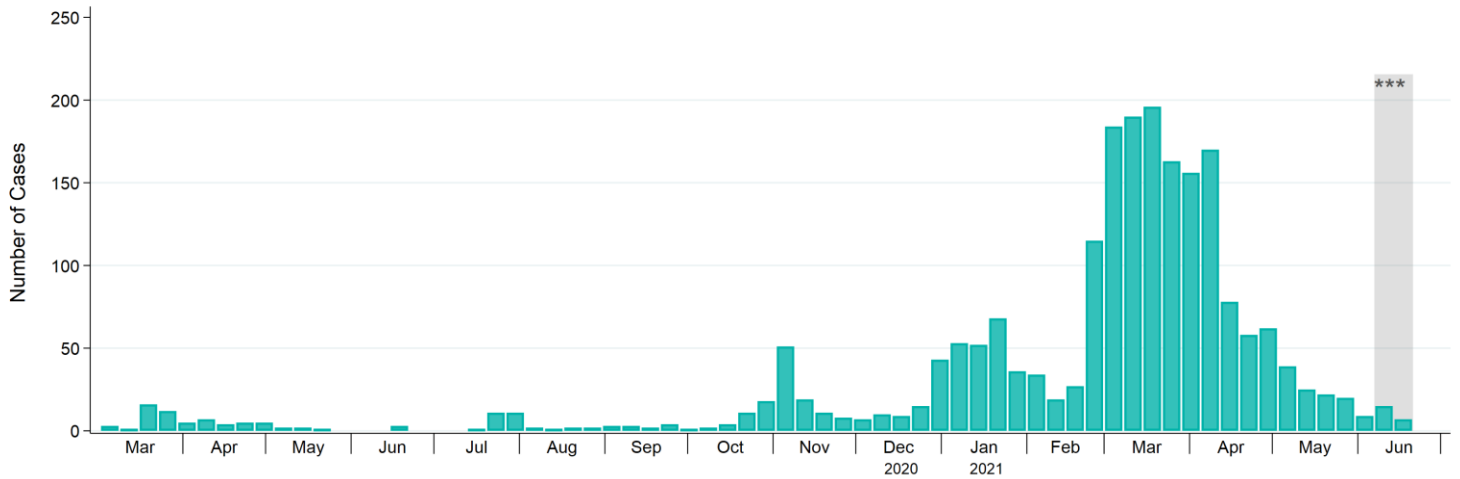


*** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

Case Counts by Week

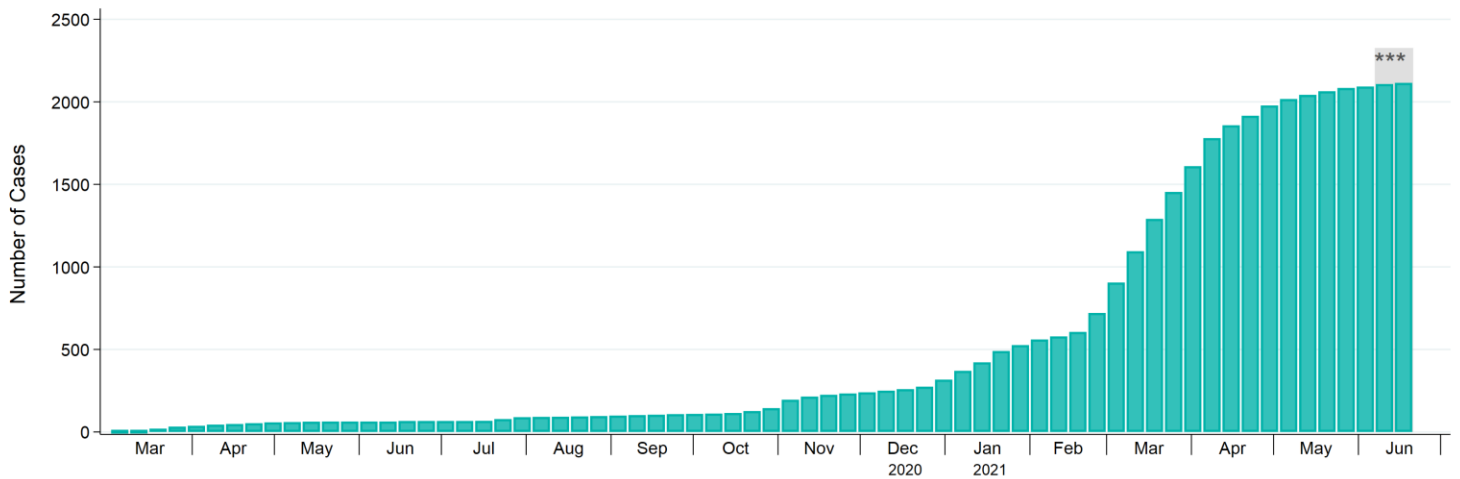
The following graphs show weekly COVID-19 case counts in Sudbury and districts since the first case was reported locally (Figure 3), and the cumulative weekly case count (Figure 4).

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. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

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



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).

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

Characteristic	Total Cases	Percentage (%)	Active Cases	Percentage (%)
Numbers of Cases	2,142	100%	29	100%
Change from 7 days ago	22	1.0%*	11	61.1%*
Cases screening positive for a variant of concern (VOC)	955	44.6%	14	48.3%
Sex: Male	795	37.1%	8	27.6%
Sex: Female	843	39.4%	6	20.7%
Sex: Not specified**	504	23.5%	15	51.7%
Ages: 19 and under	506	23.6%	16	55.2%
Ages: 20-39	698	32.6%	7	24.1%
Ages: 40-59	544	25.4%	5	17.2%
Ages: 60-79	300	14.0%	1	3.4%
Ages: 80 and over	94	4.4%	0	0.0%
Ages: Not specified**	0	0.0%	0	0.0%
Area: Greater Sudbury	1,993	93.0%	20	69.0%
Area: Manitoulin District	40	1.9%	0	0.0%
Area: Sudbury District, North	11	0.5%	3	10.3%
Area: Sudbury District, West	65	3.0%	5	17.2%
Area: Sudbury District, East	33	1.5%	1	3.4%

*Percent change represents the degree of change over time, calculated: (New-Original)/Original

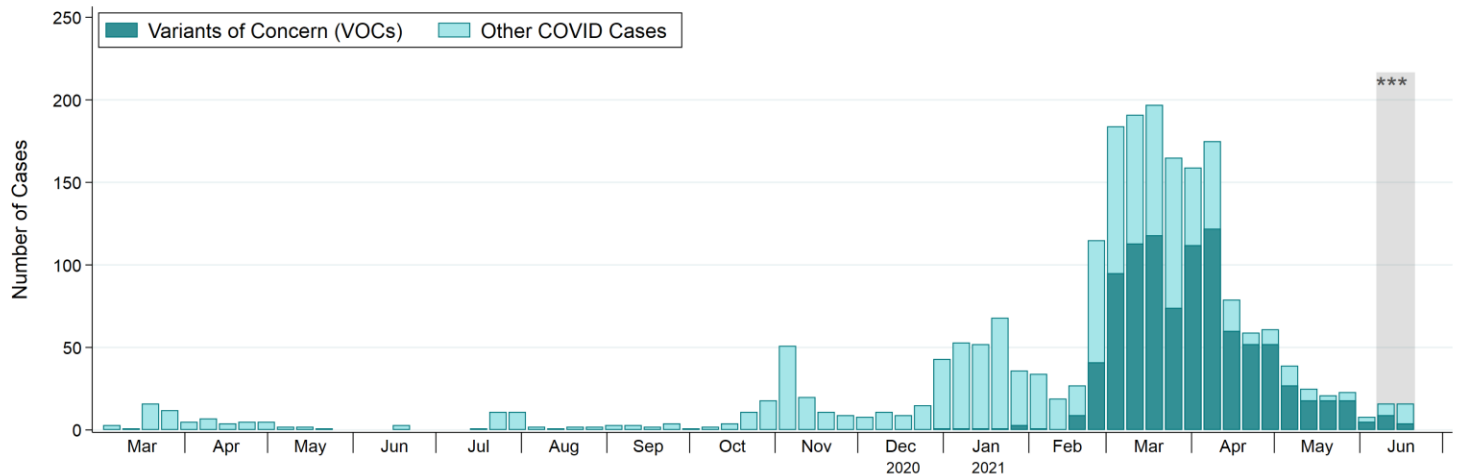
**Data on sex and age groups are listed as unspecified until there are sufficient numbers to allow them to be assigned to the appropriate categories. This ensures that individual cases cannot be identified. Sex is not specified for cases aged 19 years and under. Data source: Public Health Sudbury & Districts

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, **955** cases have screened positive for a VOC in Sudbury and districts, of which **14** are currently active.

Figure 5, below, shows weekly counts of VOCs in Sudbury and districts, in comparison to the original strain of the virus.

FIGURE 5. Variants of concern (VOCs) and other 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. *** Infections occurring during this period may not yet be detected and/or reported. Data source: Public Health Sudbury & Districts

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.

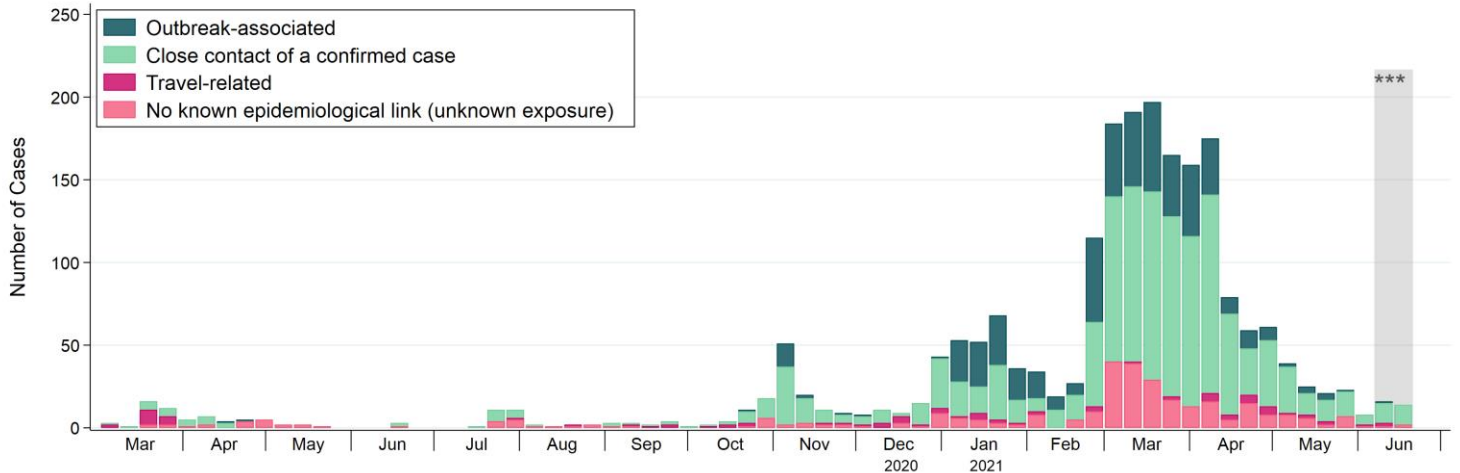
TABLE 2. Cases, by probable exposure, Sudbury and districts

Exposure	Total Cases	Percentage (%)	Active Cases	Percentage (%)
Outbreak-associated	503	23.5%	1	3.6%
Close contact of a confirmed case	1,239	57.8%	21	75.0%
Travel-related	83	3.9%	3	10.7%
No known epidemiological link (unknown exposure)	316	14.7%	3	10.7%
Under investigation	0	0.0%	0	0.0%

Data Source: Public Health Sudbury & Districts

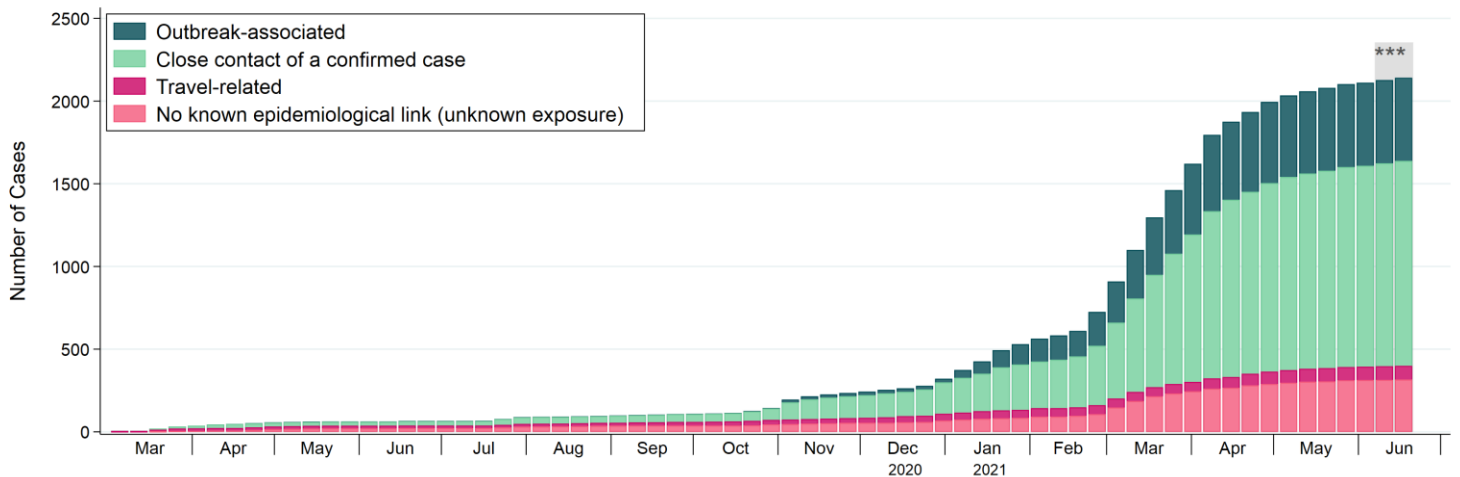
Figures 6 and 7, below, summarize the weekly and cumulative weekly COVID-19 case counts by the cases' probable exposure, respectively. The bars in the graph are stacked to illustrate the proportion of total cases each week that each exposure category represents.

FIGURE 6. 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. *** 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: Public Health Sudbury & Districts.

FIGURE 7. Cumulative COVID-19 cases, by week and probable exposure, Sudbury and districts

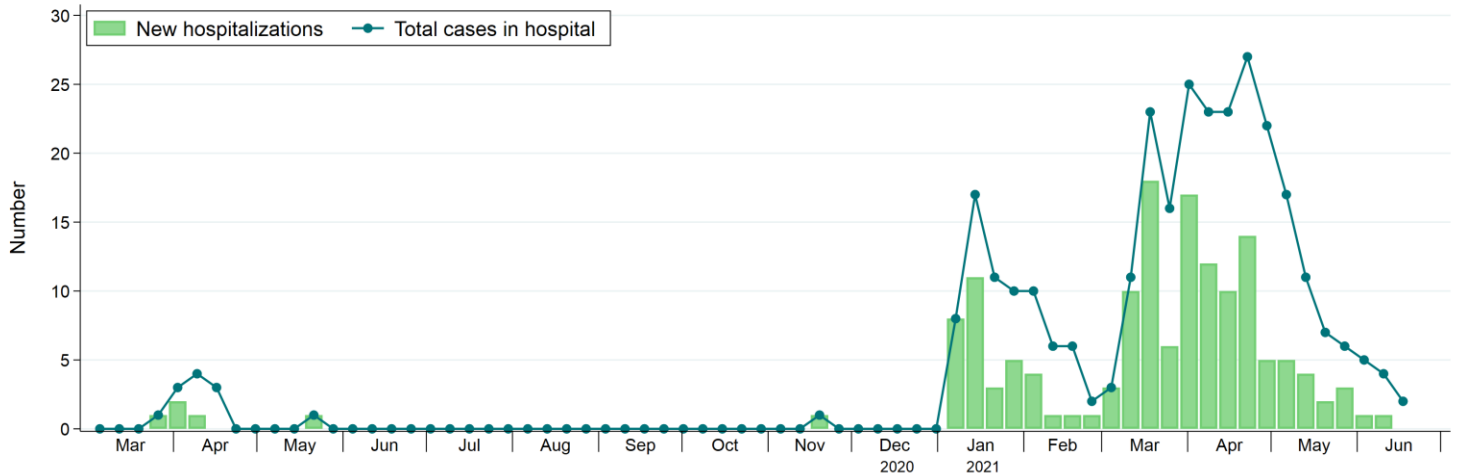


Weeks start on Monday and are the earliest of the following: the case's date of symptom onset, their date of testing, or the date the case was reported to public health. *** Infections occurring during this period may not yet be detected and/or reported. Cases for which the probable exposure is currently under investigation have been excluded. Data source: Public Health Sudbury & Districts.

Hospitalizations

In total there have been **151** hospitalizations due to COVID-19 among cases in Sudbury and districts. Figure 8, 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.

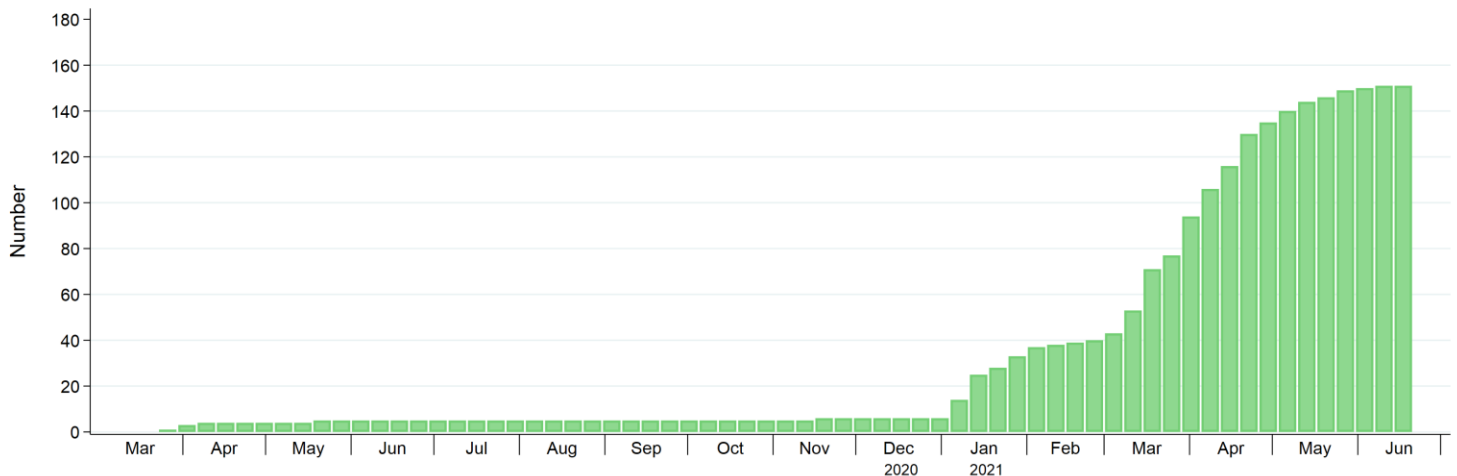
FIGURE 8. New and total COVID-19 cases in hospital, by week, Sudbury and districts



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 receiving treatment at local hospitals unless their case is being managed by Public Health Sudbury & District. Data source: Public Health Sudbury & Districts.

Figure 9 presents the cumulative count of new hospitalizations for COVID-19, by week.

FIGURE 9. Cumulative hospitalizations among COVID-19 cases, by week, Sudbury and districts



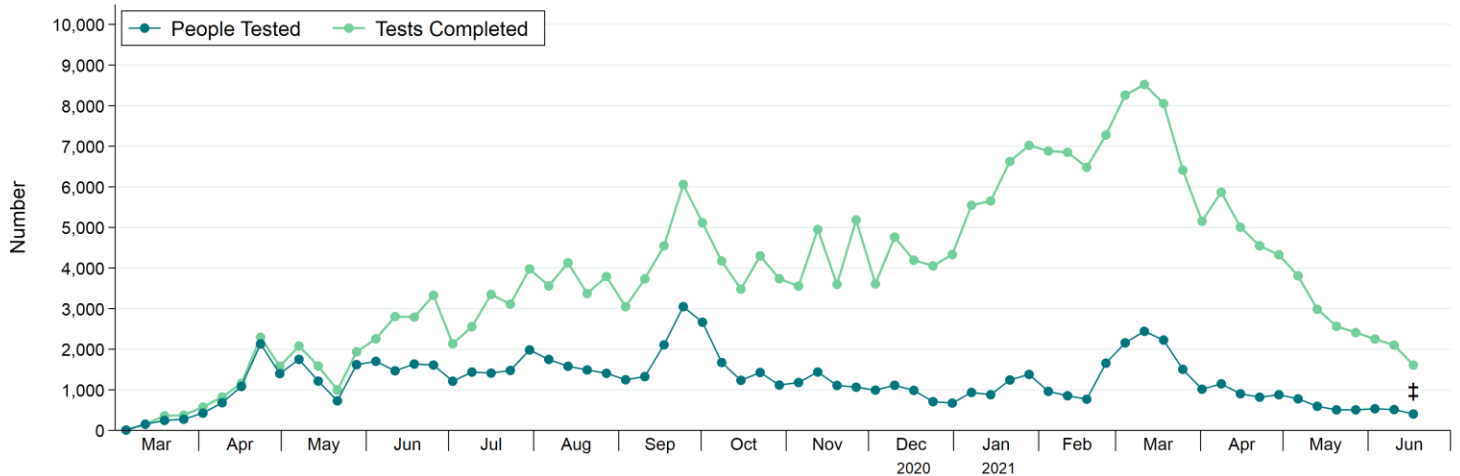
Weeks start on Monday. Cases hospitalized prior to acquiring their infection are counted only when they became an active case of COVID-19. These data exclude residents of other geographic regions receiving treatment at local hospitals unless their case is being managed by Public Health Sudbury & District.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

Testing

As of June 19, 2021, there have been **257,828** test 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 10 shows the number of tests completed each week, as well as the number of individual people tested.

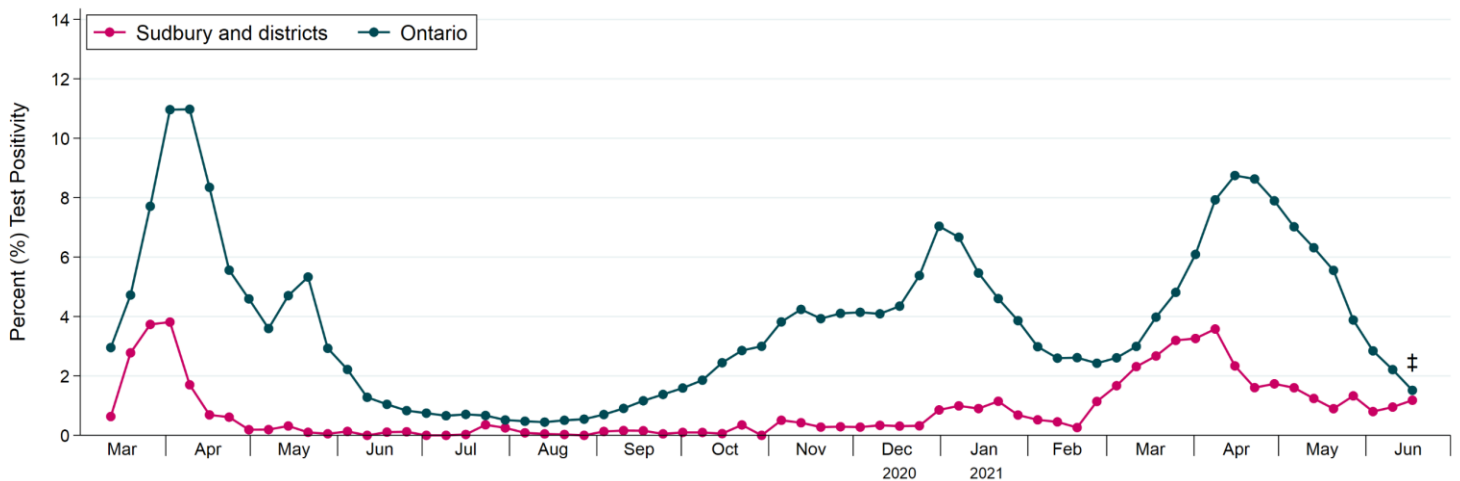
FIGURE 10. Number of tests and people tested, by week, Sudbury and districts



‡ 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: COVID-19 Testing Report (SAS Visual Analytics), Ministry of Health, June 21, 2021

Figure 11, 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.

FIGURE 11. Percent positivity of COVID-19 tests, by week and geographic region



‡ Preliminary data. Weeks start on Monday. Samples collected may undergo multiple tests, each counted separately. Data source: COVID-19 Testing Report (SAS Visual Analytics), Ministry of Health, June 21, 2021

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 **32** COVID-19 outbreaks in local hospitals, long-term care homes and retirement homes.
- 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 3. Summary of recent outbreaks in hospitals, long-term care and retirement homes, Sudbury and districts

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

Data Source: Public Health Sudbury & Districts

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 **25** 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: Public Health Sudbury & Districts

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 **39** COVID-19 outbreaks in community settings.
- Of the declared outbreaks, **1** is currently active, and **38** have been declared over.

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

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

Location	Type of Setting	Status	Date Active	Date Declared Over
Flying Post Camp Logistics at IAM GOLD	Workplace	Active	June 12	-

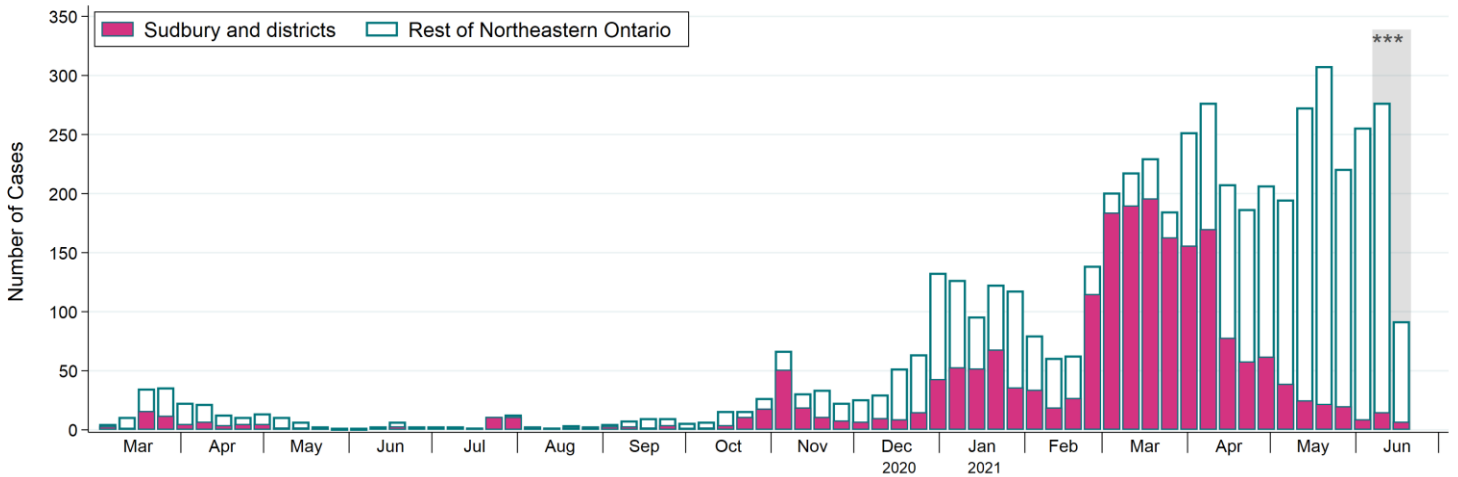
Data Source: Public Health Sudbury & Districts

Regional Context

Case Counts by Week

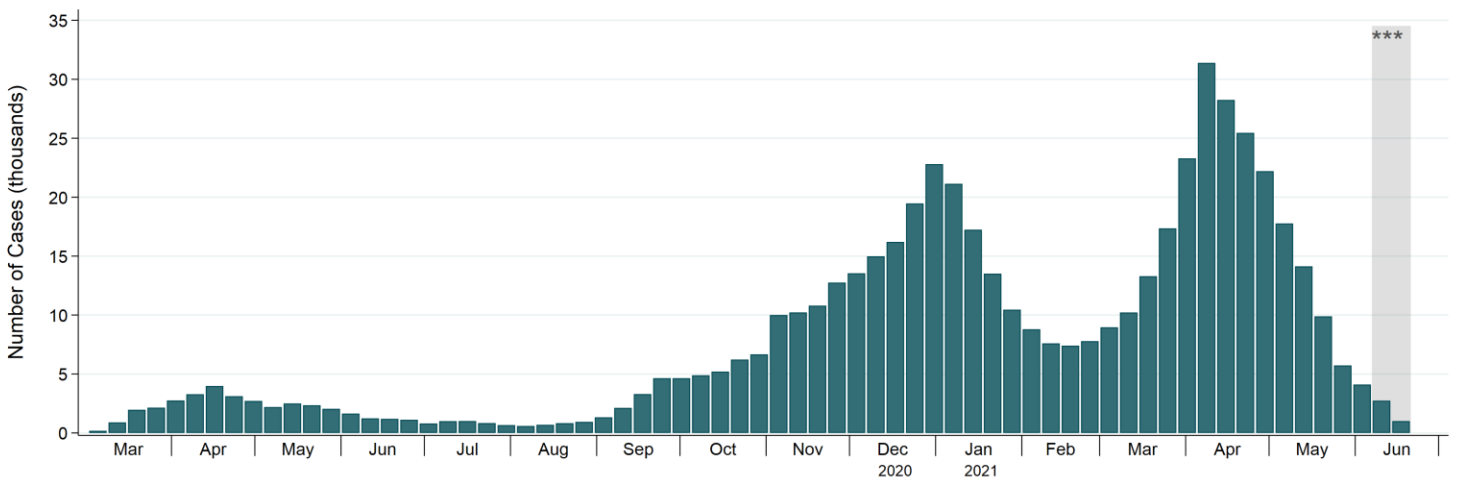
Figure 12, below, shows the number of new COVID-19 cases by week in both Sudbury and districts and Northeastern Ontario. Figure 13 shows the weekly count in Ontario overall. Note that the vertical axis in the Ontario graph is very different, since provincial case counts are much higher than local counts.

FIGURE 12. 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. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

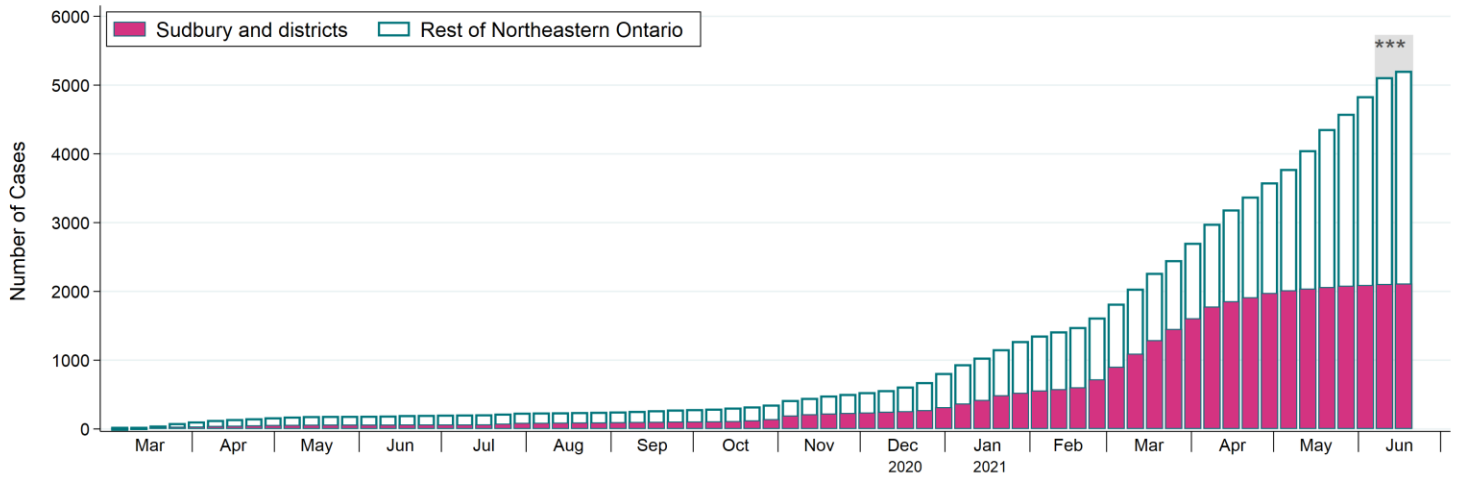
FIGURE 13. Confirmed COVID-19 cases, by week, Ontario



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. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

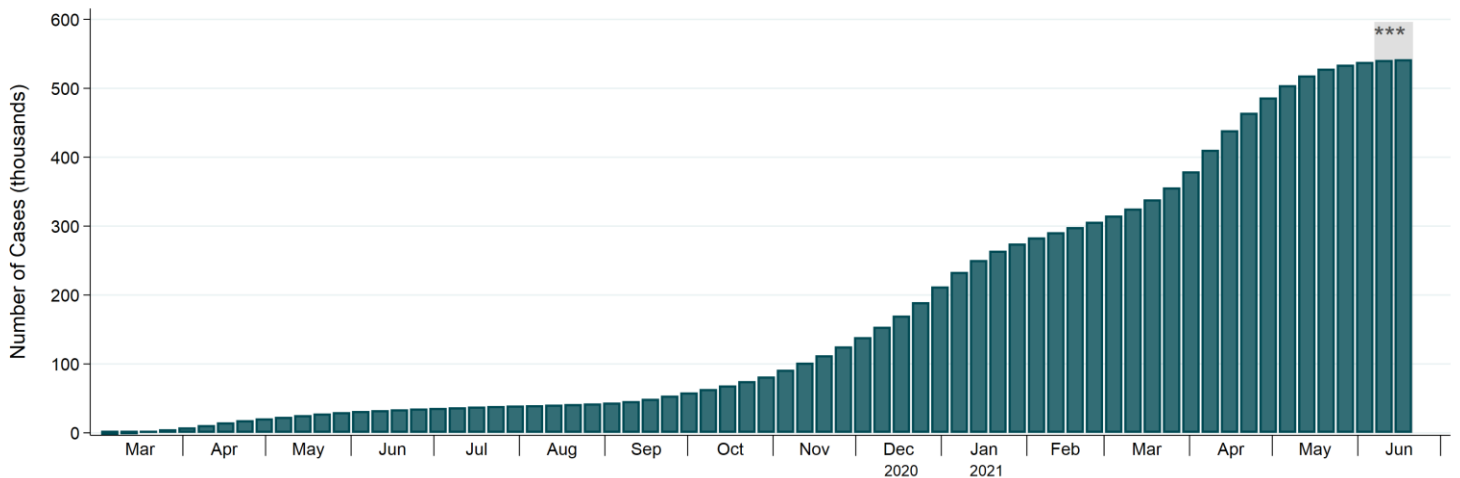
Figures 14 and 15 present a comparison of cumulative weekly case counts by region. Again, note the difference in the vertical axis for the Ontario graph.

FIGURE 14. 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. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021)

FIGURE 15. Cumulative confirmed COVID-19 cases, by week, Ontario

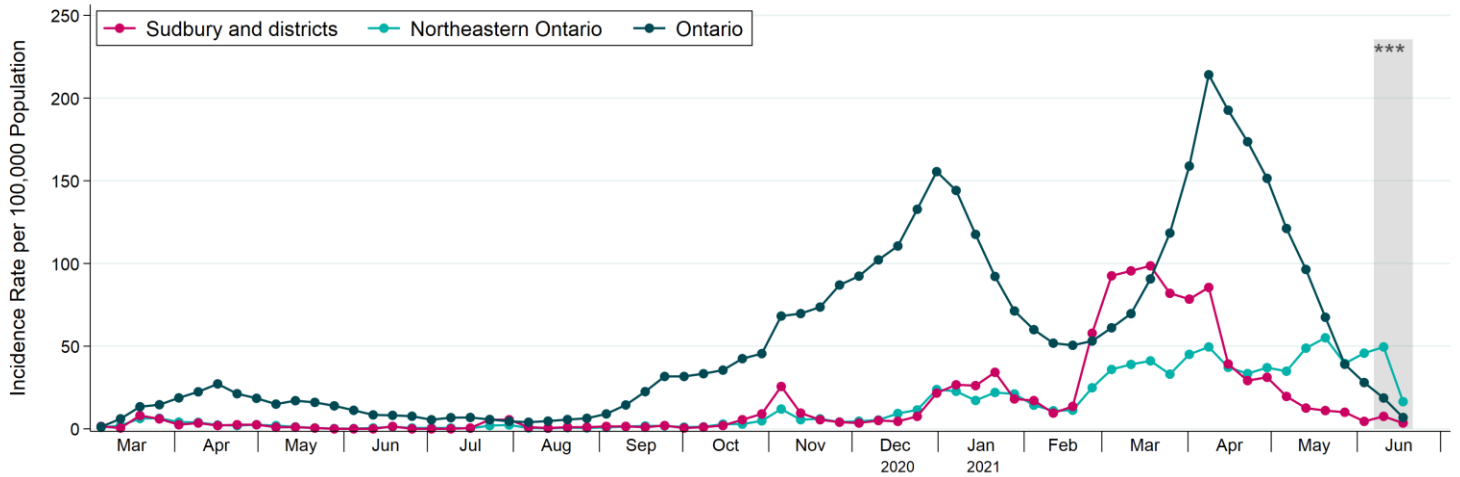


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Incidence Rates by Week

Figure 16, 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 16. Incidence rate of COVID-19 per 100,000 population, by, 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. *** Infections occurring during this period may not yet be detected and/or reported. Data Source: Ontario Treasury Board Secretariat, Data Catalogue, Confirmed positive cases of COVID-19 in Ontario. <https://data.ontario.ca/dataset/confirmed-positive-cases-of-covid-19-in-ontario> (Access Date: June 21, 2021) 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. 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	1,408,835	3,748.0	11,759	31.3	1,397,076	99.2%	26,076	1.9%	June 20
Ontario	542,468	3,700.3	3,454	23.6	539,014	99.4%	9,022	1.7%	June 20
Northern Ontario	9,599	1,204.5	396	49.7	9,203	95.9%	140	1.5%	June 18
Northeastern Ontario	5,196	928.8	359	64.2	4,837	93.1%	69	1.3%	June 18
Public Health Sudbury & Districts	2,142	1,077.2	29	14.6	2,113	98.6%	30	1.4%	June 20

* 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	36,111,298	96,068	Not Available	Not Available	Not Available	Not Available	June 20
Ontario	13,911,618	94,894	3.8%	5,317,307	36,270	10.2%	June 19
Northern Ontario	957,997	120,214	1.0%	305,829	38,377	3.1%	June 19
Northeastern Ontario	663,204	118,555	0.8%	208,362	37,247	2.5%	June 19
Public Health Sudbury & Districts	257,828	129,658	0.9%	82,663	41,570	2.6%	June 19

* 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, June 21, 2021