Gorodnichy v. CBSA (FPSLREB 566-02-48305)
Exhibit G-20

Exhibit sheet description:

Grievor's book of documents # 2 filed initially, pg. 2 COVID-19 daily epidemiology update (the grievor specifically directed the Board's attention to pgs. 42, 66, 114 and 143).

Source documents and page ranges:

566-02-48305_Grievor_Book-02-data-evidence-phac.pdf:

PDF pages 2-152

Reader guidance:

Grievor's Book of Documents No. 2, filed initially, beginning on page 2: COVID-19 Daily Epidemiology Updates. The Grievor specifically directed the Board's attention to pages 42, 66, 114, and 143.

See also: G-23 (OPQ 8555-451-849)

Archived PHAC COVID-19 Epidemiology Updates (July 2021 – February 2022)

Official link: https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html (Archive of past reports: web.archive.org)

Evidence:

1. CHANGE IN WORDING: REMOVAL OF "SMALL".

Search for the phrase "percentage of the" throughout the archived PHAC reports between July 2021 and February 2022.

Observe how, starting in December 2021 (page 114), the word "small" disappeared from the following sentence:

"There is still a [small] percentage of the population who are vaccinated that will still be infected with COVID-19."

2. STEADY INCREASE IN THE PERCENTAGE OF COVID-19 DEATHS AMONG THE "FULLY PROTECTED"

Observe the monotonically increasing percentage of COVID-19 deaths among "fully protected" in Figure 5:

1.2% as of June 10, 2021 (page 17)

5.8% as of October 2, 2021 (page 42)

7.9% as of October 30, 2021 (page 66)

10.2% as of December 18, 2021 (page 114) — the word "small" was removed from the sentence cited

above.

19.5% as of January 22, 2022 (page 143)

3. ADDITIONAL ANALYSIS

Pages 90–91 contain tables and plots automatically generated from the statistics published by PHAC.

4. ARCHIVED SOURCE REPORTS

All published PHAC reports have been archived in the open-canada/vitals GitHub repository:

https://github.com/open-canada/vitals/tree/main/docs/COVID-19%20epidemiology%20updates (the screenshot of which is shown on page 76)

566-02-48305

Government of Canada / Gouvernement du Canada

COVID-19 daily epidemiology update

Updated: July 30, 2021, 7 pm EST

Summary of COVID-19 cases across Canada and over time. Contains detailed data about the spread of the virus over time and in different regions of the country. Includes breakdowns by age and sex or gender. Provides an overview of hospitalizations and deaths, testing, variants of concern and exposures.

Key updates as of July 30, 2021, 7 pm EST

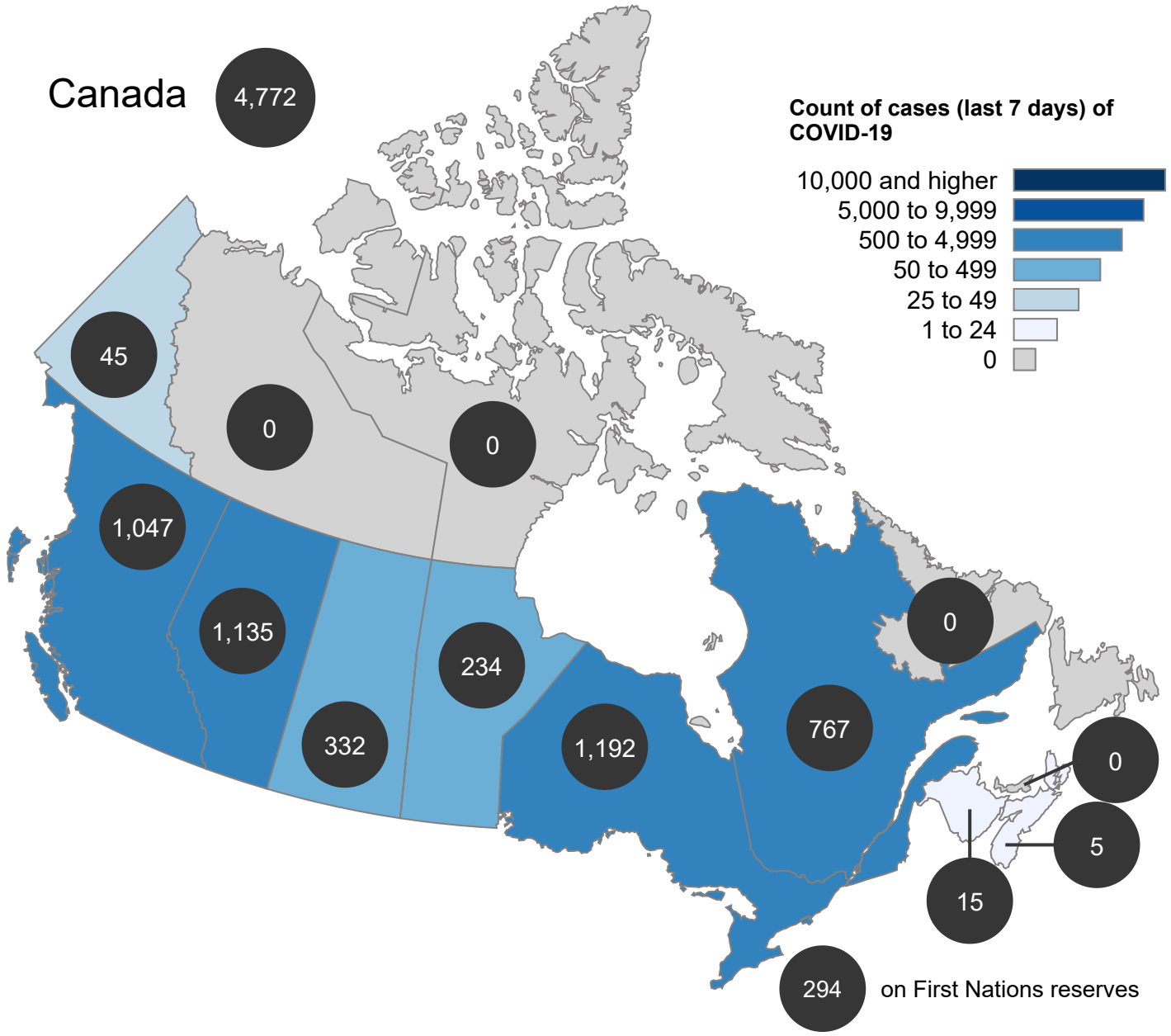
Cases today	Total cases	Active cases	Total resolved	Deaths today	Total deaths
907	1,430,483	6,440	1,397,451	17	26,592

Total tests performed	Daily percent positive (last 7 days)	Daily tests per 100,000 population (last 7 days)
38,466,868	1.4%	134

- Civic Holiday First Monday in August: The health region data in the Current situation section will be updated daily between July 31st and August 2nd by 11 p.m. EST. The regular update schedule for all other sections will resume on Tuesday, August 3. Laboratory data represents specimens received by labs up to July 28, 2021 to allow time to process results.
- We update these sections daily at 7:00 PM EST: Key updates, Current situation and National overview.
- We update these sections every Friday: Epidemic curve, Demographics, How people were exposed, and Severe illness and outcomes.
- Most cases (64.8%) and deaths (77.4%) were reported by Ontario and Quebec.
- Of the 11 of jurisdictions reporting updates, no new cases were reported in 2 of provinces or territories in the past 24 hours.
- Of the 11 jurisdictions reporting updates, no new deaths were reported in 6 provinces or territories in the past 24 hours.

Current situation

Figure 1a. Count of cases (last 7 days) of COVID-19, by province/territory as of July 30, 2021



The count of cases (last 7 days) of COVID-19 in **Canada** was **4,772** as of July 30, 2021.

This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of July 30, 2021, 7 pm EST. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

Areas in Canada with cases of COVID-19 as of July 30, 2021

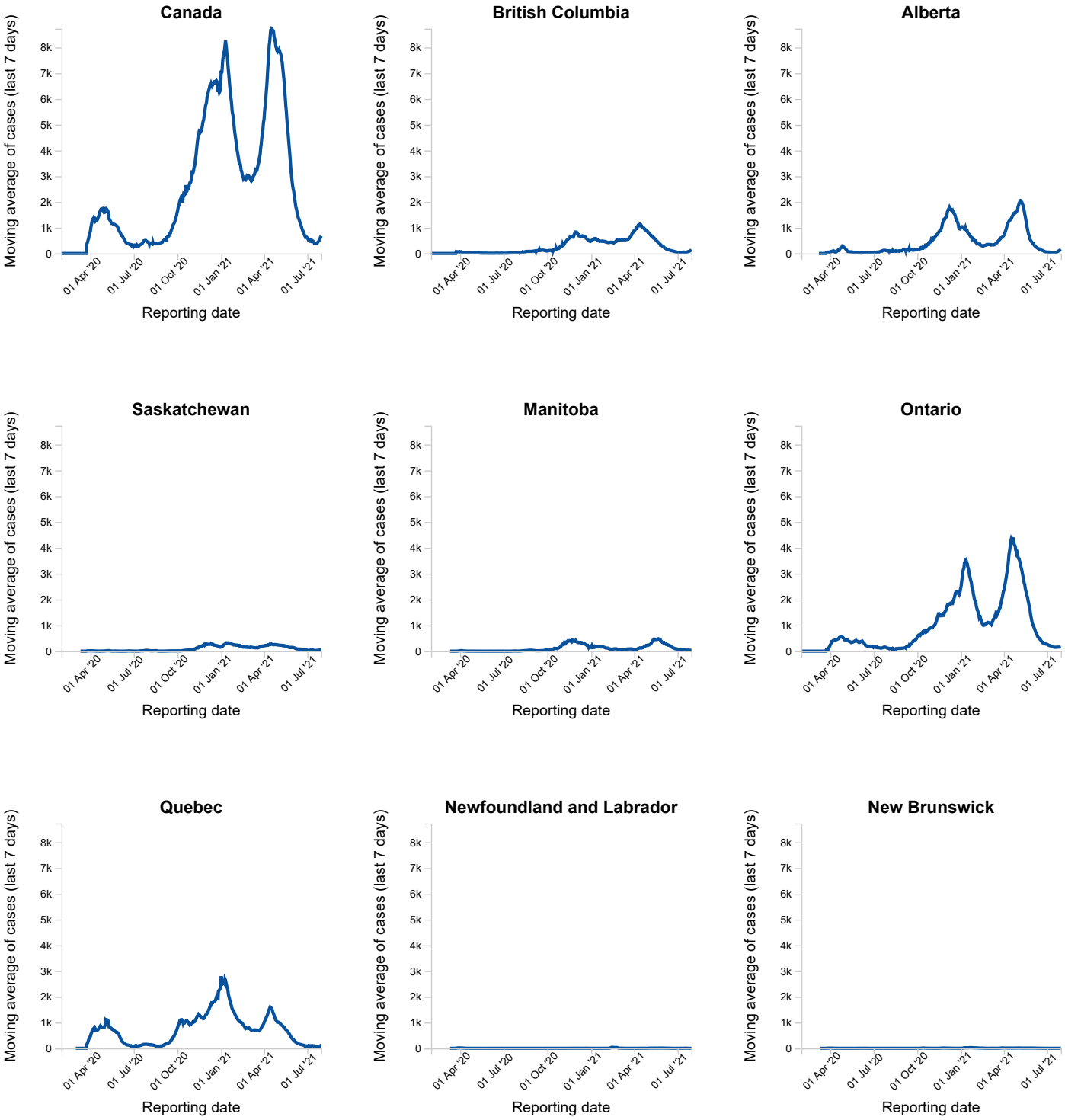
	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
Location	Count	Rate*	Count	Rate*	Count	Rate*	Count	Count	Rate*	Count	Rate*	Count	Count	Rate*	Percent
Canada	**1,430,483**	**3,764**	**4,772**	**13**	**6,440**	**17**	**1,397,451**	**26,592**	**70**	**53**	**0**	**38,466,868**	**50,769**	**134**	**1.4%**
British Columbia	149,889	2,912	1,047	20	1,242	24	146,876	1,771	34	4	0	3,075,178	7,295	142	2.0%
Alberta	234,295	5,299	1,135	26	1,655	37	230,312	2,328	53	6	0	4,845,318	6,538	148	2.4%
Saskatchewan	49,940	4,237	332	28	448	38	48,914	578	49	1	0	955,609	1,404	119	3.7%
Manitoba	57,593	4,176	234	17	542	39	55,873	1,178	85	8	1	916,288	1,649	120	2.5%
Ontario	550,178	3,734	1,192	8	1,491	10	539,348	9,339	63	31	0	16,397,277	16,902	115	1.0%
Quebec	377,297	4,400	767	9	951	11	365,105	11,241	131	2	0	10,314,394	13,369	156	0.8%
Newfoundland and Labrador	1,437	275	0	0	9	2	1,421	7	1	0	0	313,254	266	51	0.1%
New Brunswick	2,365	303	15	2	20	3	2,299	46	6	0	0	392,001	602	77	0.3%
Nova Scotia	5,887	601	5	1	9	1	5,785	93	10	0	0	1,024,860	2,559	261	0.0%
Prince Edward Island	208	130	0	0	0	0	208	0	0	0	0	179,191	144	91	0.4%
Yukon	596	1,417	45	107	73	174	516	7	17	1	2	9,129	N/A	N/A	N/A
Northwest Territories	128	283	0	0	0	0	128	0	0	0	0	25,739	32	70	0.5%
Nunavut	657	1,670	0	0	0	0	653	4	10	0	0	18,554	9	23	0.0%

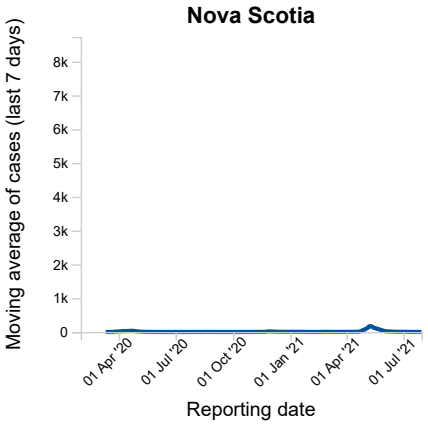
* Rate per 100,000 population

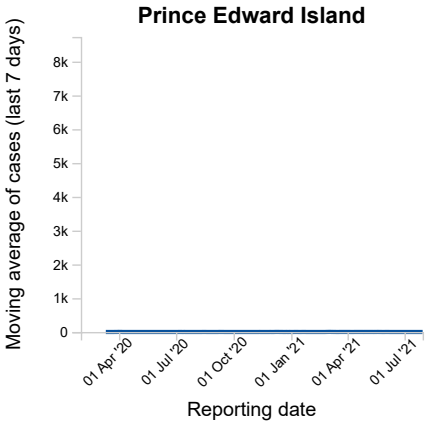
566-02-48305

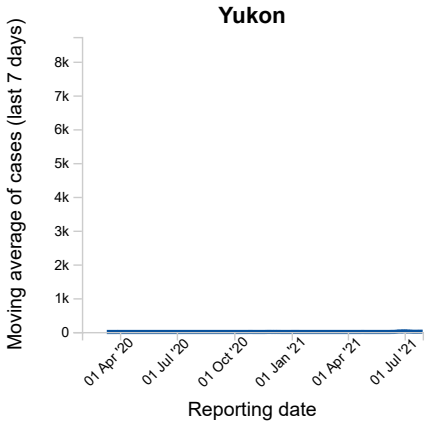
Figure 1b. Moving average of cases (last 7 days) of COVID-19 in Canada as of July 30, 2021, 7 pm EST

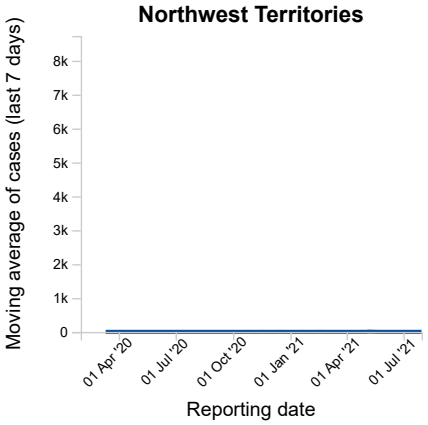
The figures below show cases over time. The range of dates (January 31st, 2020 - present date) is the same for each figure. This allows you to compare the provinces and territories on the same timescale.

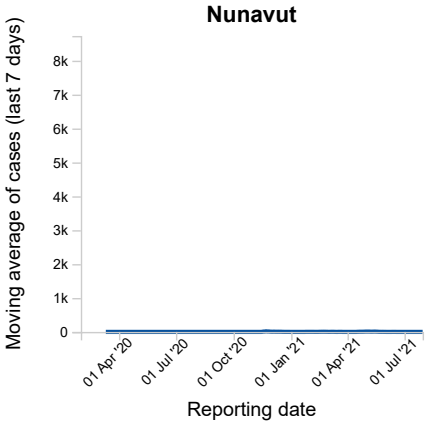












This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of July 30, 2021, 7 pm EST. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

Downloadable data (in .csv format).

Note: Out of the total number of people tested, 76 were repatriated travellers, of which 13 were cases.

National overview

There have been over **38,466,868** COVID-19 tests performed in Canada or **457,522 tests per 1 million people**. For information about testing trends, please see the Detailed weekly epidemiological report (PDF).

Table 1. Daily* change in the number of cases, deaths and tests performed, by province or territory, as of July 30, 2021, 7 pm EST

Location	New cases	New deaths	Tests performed
Canada	**907**	**17**	**57,498**
British Columbia	243	0	7,877
Alberta	187	3	7,857
Saskatchewan	58	0	1,779
Manitoba	46	1	1,874
Ontario	226	11	19,425
Quebec	125	1	14,611
Newfoundland and Labrador	0	0	237
New Brunswick	7	0	805
Nova Scotia	1	0	2,846
Prince Edward Island	N/A	N/A	141
Yukon	14	1	N/A
Northwest Territories	0	0	31
Nunavut	N/A	N/A	15

* The new cases, deaths and tests reflect the difference between a province or territory's current report and their last report. Some provinces and territories do not update daily.

N/A means that no daily update was provided by the province or territory.

COVID-19 variants in Canada

All viruses, including COVID-19, change over time. These changes are called mutations, and result in variants of the virus. Not all mutations are of concern. Most do not cause more severe illness. However, some mutations result in variants of concern or variants of interest.

A variant of concern has mutations that are significant to public health. Before a variant of interest is considered one of concern, scientists and public health professionals must determine if the mutations result in an actual change in the behaviour of the virus. For example, it might:

- spread more easily
- cause more severe illness
- require different treatments, or
- reduce vaccine effectiveness

There are several variants of interest that have mutations similar to variants of concern, but we don't yet know if they pose a higher risk to public health.

The Public Health Agency of Canada (PHAC) works with provincial and territorial partners and the Canadian COVID-19 Genomics Network (CanCOGeN) to sequence a percentage of all positive COVID-19 test results. Sequencing reveals the genetic code of the virus, which tells us which variant is involved in a specific case of COVID-19. We report the proportion of COVID-19 variants in Canada every week.

We collect evidence to determine if new variants meet the definition for a variant of concern or a variant of interest. Many variants are being tracked across Canada and around the world. Variants of concern now represent a majority of COVID-19 cases in Canada.

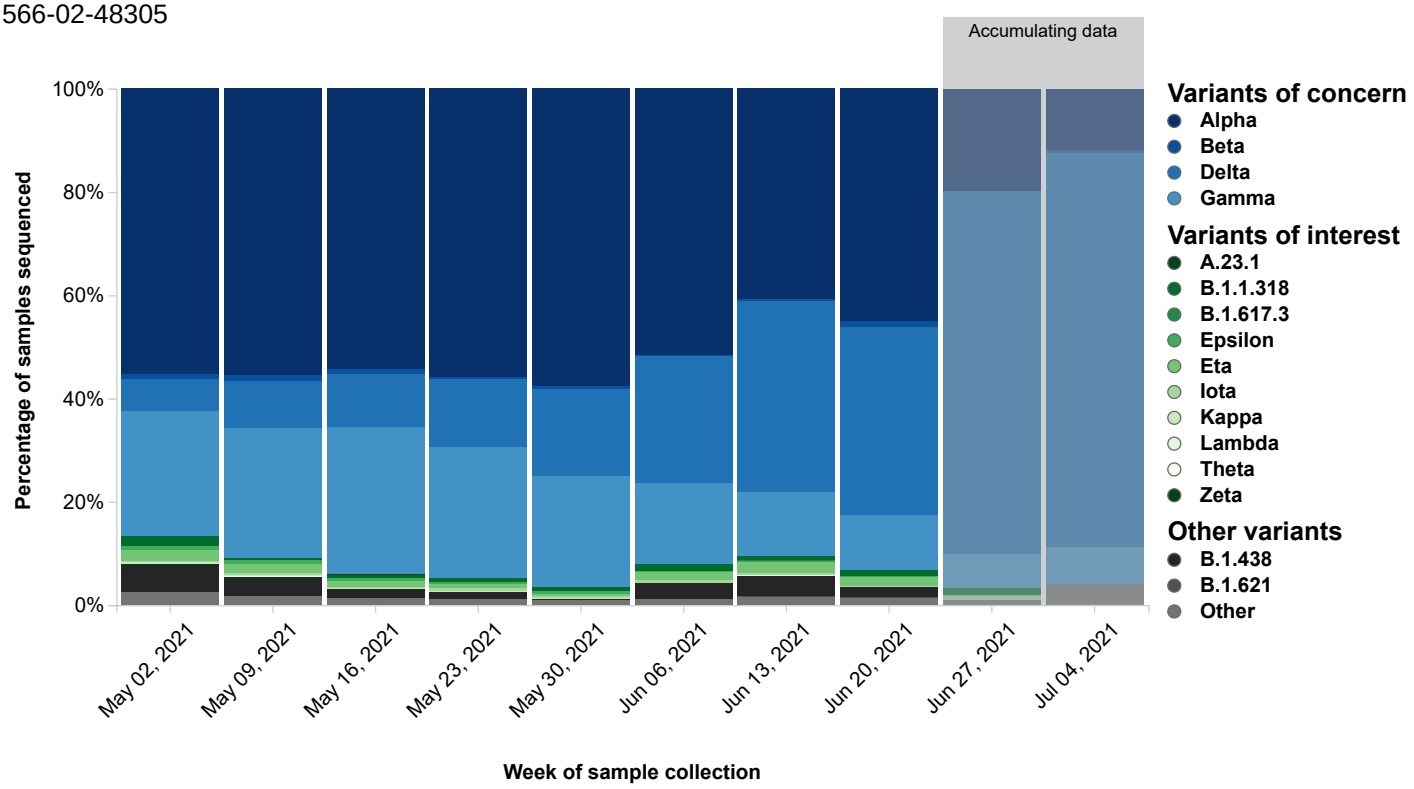
Four VOC (Variants of concern)s have been detected in most provinces and territories:

- B.1.1.7 (Alpha)
- B.1.351 (Beta)
- P.1 (Gamma)
- B.1.617.2 (Delta)

New variants will continue to appear. We must remain vigilant and take all available measures to limit spread.

Figure 2. Weekly variant breakdown Updated: July 30, 2021, 4 pm EST

The graphic shows the percentage mix of COVID-19 variants detected in Canada through whole genome sequencing, by week of sample collection. You can see the numbers for each date by hovering over, tabbing to, or long-pressing any of the bars. To see a specific variant or variant grouping, click or press return. Repeat to restore the complete graph.



This information is based on whole genome sequencing from surveillance testing in all provinces and territories. In addition to sequencing done by the National Microbiology Laboratory in Winnipeg, data is included from provincial and territorial laboratories.

Sequencing takes from 1 to 3 weeks to complete, so the proportions for recent weeks may change as more data are added. Surveillance in each province or territory is organized and prioritized according to local needs and may change from time to time. Because of differences in local sampling and reporting, the percentages illustrate trends rather than precise measurements.

Weekly variant breakdown

Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection.

Variant Grouping	May 02, 2021 (n=4,235)	May 09, 2021 (n=3,603)	May 16, 2021 (n=3,094)	May 23, 2021 (n=2,507)	May 30, 2021 (n=2,628)	Jun 06, 2021 (n=2,620)	Jun 13, 2021 (n=2,674)	Jun 20, 2021 (n=2,103)	Jun 27, 2021 (n=704)	Jul 04, 2021 (n=170
Variants of concern	**86.5%**	**90.8%**	**94.0%**	**94.8%**	**96.5%**	**92.1%**	**90.4%**	**93.1%**	**96.7%**	**95.9%**
Alpha	55.3%	55.5%	54.3%	55.8%	57.6%	51.6%	40.8%	45.0%	19.7%	11.8%
Beta	0.9%	1.0%	0.9%	0.3%	0.6%	0.2%	0.3%	1.0%	-	0.6%
Delta	6.2%	9.1%	10.3%	13.2%	16.7%	24.5%	37.0%	36.6%	70.3%	76.5%
Gamma	24.1%	25.2%	28.4%	25.4%	21.5%	15.8%	12.3%	10.5%	6.7%	7.1%
Variants of interest	**5.6%**	**3.7%**	**2.8%**	**2.6%**	**2.3%**	**3.7%**	**3.9%**	**3.4%**	**2.3%**	**-**
A.23.1	0.0%	0.0%	0.0%	-	-	-	-	-	-	-
B.1.1.318	1.9%	0.4%	0.7%	0.6%	0.8%	1.3%	0.9%	1.2%	1.3%	-
B.1.617.3	-	-	-	-	-	0.0%	0.1%	0.0%	-	-
Epsilon	0.9%	0.6%	0.6%	0.4%	0.5%	0.2%	0.1%	0.1%	-	-
Eta	2.0%	1.7%	1.2%	0.8%	0.4%	1.5%	2.2%	1.9%	0.3%	-
Iota	0.3%	0.5%	0.2%	0.8%	0.5%	0.6%	0.4%	0.2%	0.7%	-
Kappa	0.3%	0.2%	0.2%	0.0%	0.0%	-	-	-	-	-
Lambda	-	0.1%	-	-	-	0.0%	0.0%	0.0%	-	-
Theta	-	0.0%	-	-	-	-	0.0%	-	-	-
Zeta	0.1%	-	-	-	-	-	-	-	-	-
Other variants	**7.9%**	**5.5%**	**3.2%**	**2.6%**	**1.3%**	**4.3%**	**5.7%**	**3.5%**	**1.0%**	**4.1%**
B.1.438	5.2%	3.7%	1.9%	1.4%	0.3%	3.0%	4.0%	1.9%	-	-
B.1.621	-	-	-	-	-	-	0.0%	0.0%	-	-
Other	2.6%	1.8%	1.3%	1.2%	1.0%	1.3%	1.6%	1.5%	1.0%	4.1%

Contributing laboratories:

- Public Health Ontario (PHO)
- Newfoundland and Labrador – Eastern Health
- New Brunswick – Vitalité Health Network
- Manitoba Cadham Provincial Laboratory
- LSPQ
- BCCDC Public Health Laboratory
- Alberta Precision Labs (APL)
- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

Detailed case information

The tables and figures below reflect detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.

Updated: July 30, 2021, 7 pm EST

Epidemic curve

As of July 30, 2021, 7 pm EST, PHAC has received detailed case report data on 1,427,313 cases. Both exposure and symptom onset date were available for 1,277,385 (89.5%) cases [1].

The shaded area on the far right of Figure 3 represents lag time. This is the period of time (1 to 2 weeks) before the latest cases are reported to PHAC. This delay is a result of the time required to seek health care, get tested and receive results. It also takes time for public health authorities to gather information on cases. We update this information as it becomes available.

Figure 3. COVID-19 cases (n=1,427,313 [1]) in Canada by date of illness onset [2] as of July 30, 2021, 7 pm EST (total cases)

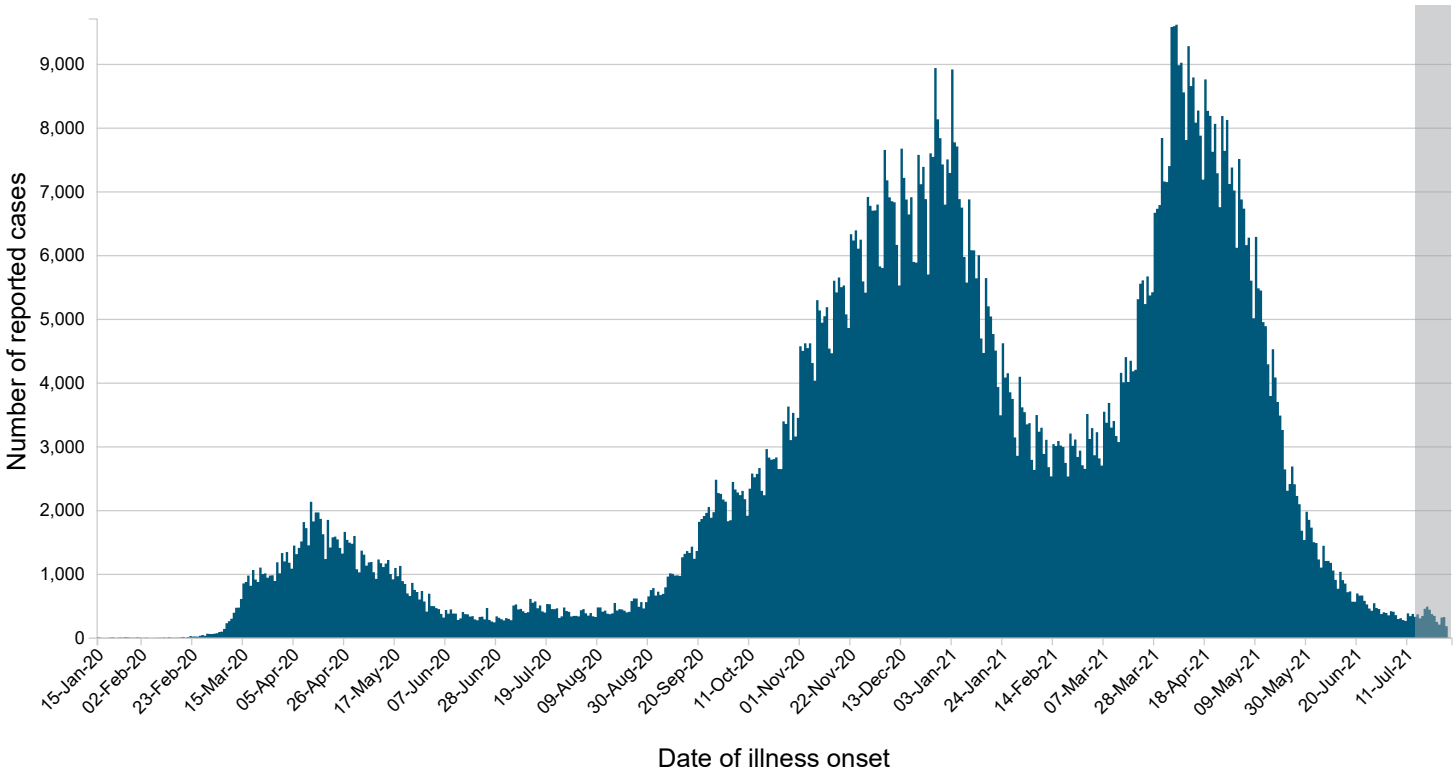


Figure 3. COVID-19 cases (n=1,277,385 [1]) in Canada by date of illness onset [2] as of July 30, 2021, 7 pm EST (by exposure)

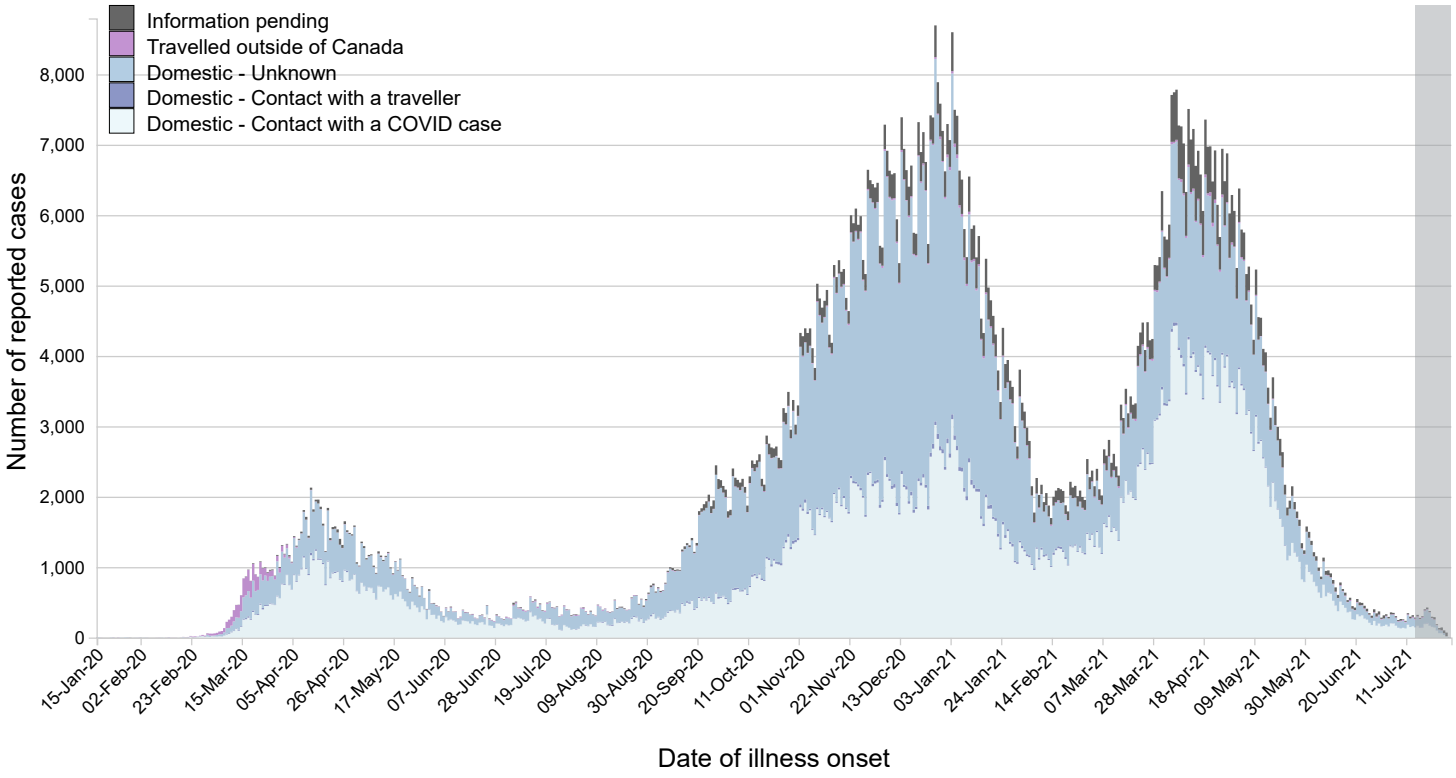


Figure 3. COVID-19 cases (n=1,426,929 [1]) in Canada by date of illness onset [2] as of July 30, 2021, 7 pm EST (by age - 10 year groups)

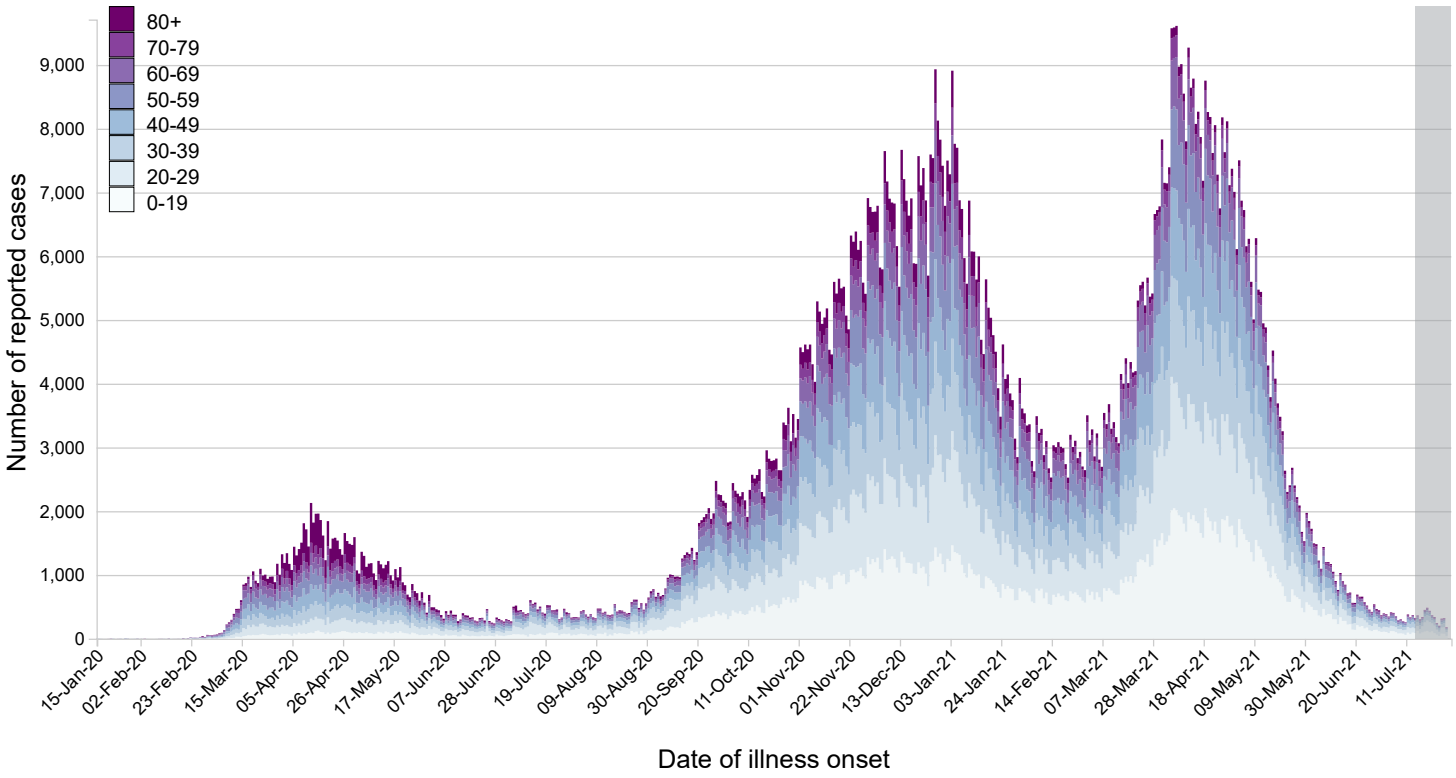
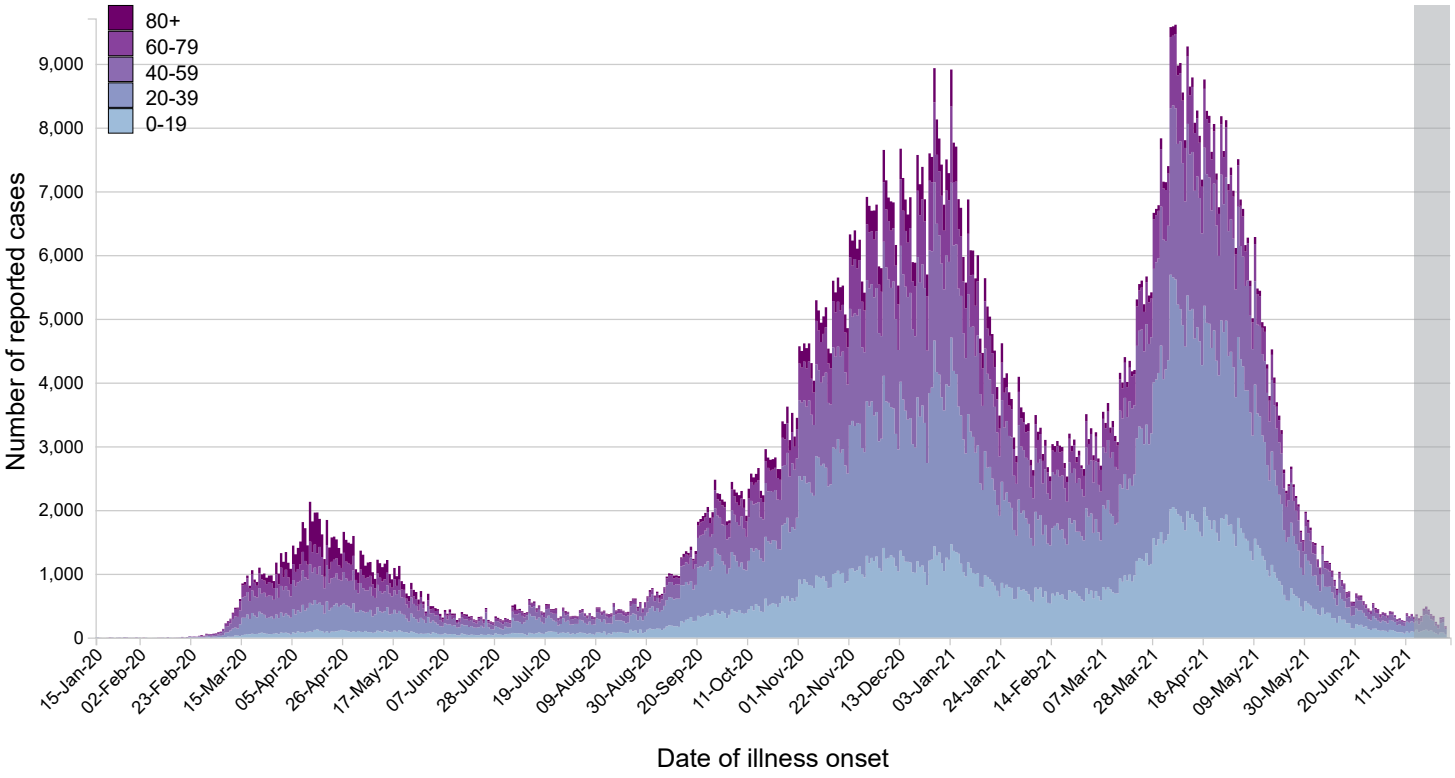


Figure 3. COVID-19 cases (n=1,426,929 [1]) in Canada by date of illness onset [2] as of July 30, 2021, 7 pm EST (by age - 20 year groups)



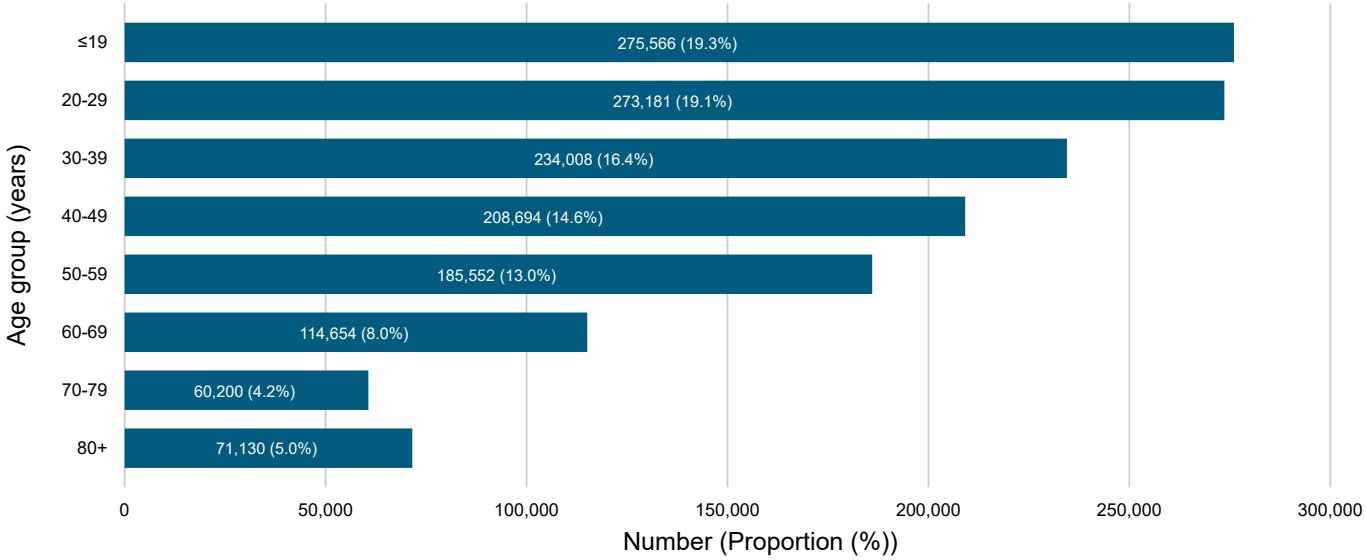
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

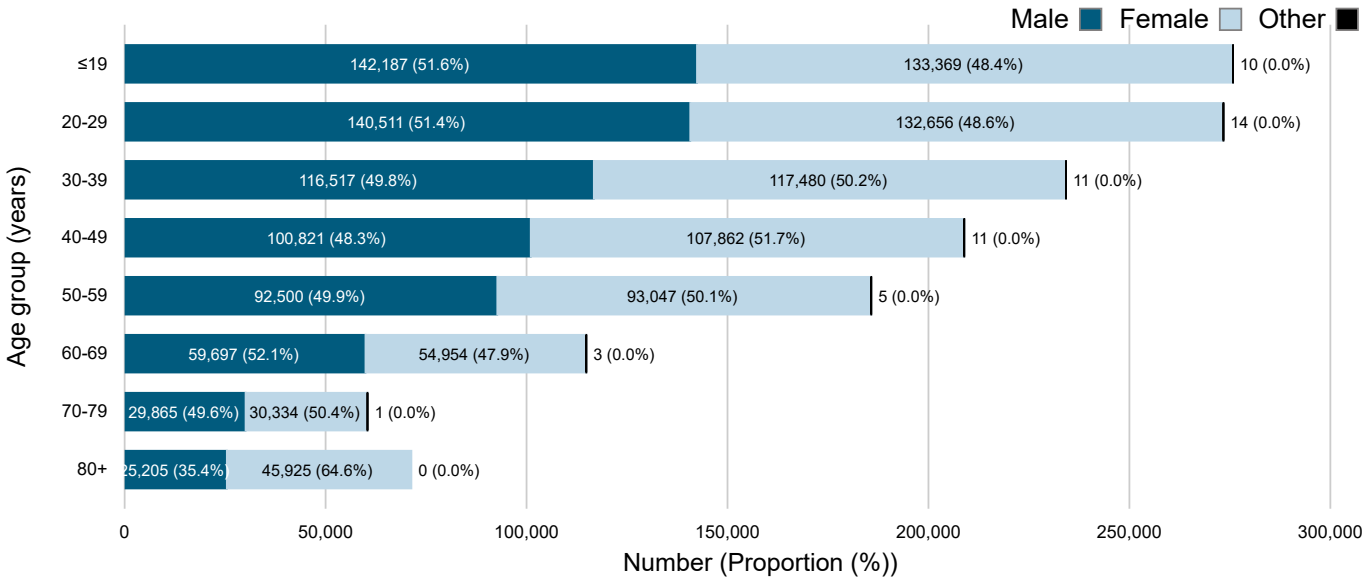
Demographics

We have detailed case report data from 1,427,313 cases. We know the age of patients in 100.00% of cases, and both age and gender in 99.70% of cases.

Of the cases reported in Canada so far, 50.3% were female and 35.6% were between 20 and 39 years old (Figure 4).

Figure 4. Age distribution of COVID-19 cases (n=1,427,313 [1]) in Canada as of July 30, 2021, 7 pm EST [4]





Age by gender [4] distribution of COVID-19 cases (n=1,427,313 [1]) in Canada, July 30, 2021, 7 pm EST

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
≤19	275,566 (19.3%)	142,187 (20.1%)	133,369 (18.6%)	10 (18.2%)
20-29	273,181 (19.1%)	140,511 (19.9%)	132,656 (18.5%)	14 (25.5%)
30-39	234,008 (16.4%)	116,517 (16.5%)	117,480 (16.4%)	11 (20.0%)
40-49	208,694 (14.6%)	100,821 (14.3%)	107,862 (15.1%)	11 (20.0%)
50-59	185,552 (13.0%)	92,500 (13.1%)	93,047 (13.0%)	5 (9.1%)
60-69	114,654 (8.0%)	59,697 (8.4%)	54,954 (7.7%)	3 (5.5%)
70-79	60,200 (4.2%)	29,865 (4.2%)	30,334 (4.2%)	1 (1.8%)
80+	71,130 (5.0%)	25,205 (3.6%)	45,925 (6.4%)	0 (0.0%)
Total	1,422,985 (100%)	707,303 (100%)	715,627 (100%)	55 (100%)

How people were exposed [3]

In Canada, detailed case report data were provided for 1,427,313 cases. We have exposure history for 1,277,385 (89.5%) cases. The probable exposure setting of these cases [1] are:

- any exposure that occurred in Canada: **1,189,527 (93.1%)**, including
  - from contact with a known COVID case: **592,946 (46.4%)**
  - from contact with a traveller: **8,574 (0.7%)**
  - from an unknown source: **588,007 (46.0%)**
- currently unknown (information pending): **77,845 (6.1%)**
- travelled outside of Canada: **10,013 (0.8%)**

Cases following vaccination

Data extracted on July 28, 2021 for cases from December 14, 2020 up until July 10, 2021.

While the COVID-19 vaccines are effective, there is still a small percentage of the population who are vaccinated that will still be infected with COVID-19 if they are exposed to the virus that causes it. This means that even with high vaccine effectiveness, a small percentage of the population who are vaccinated against COVID-19 will still get sick and some may be hospitalized or even die as a result of their illness. It is also possible that a person could be infected just before or just after vaccination and still get sick. It typically takes about 2 weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

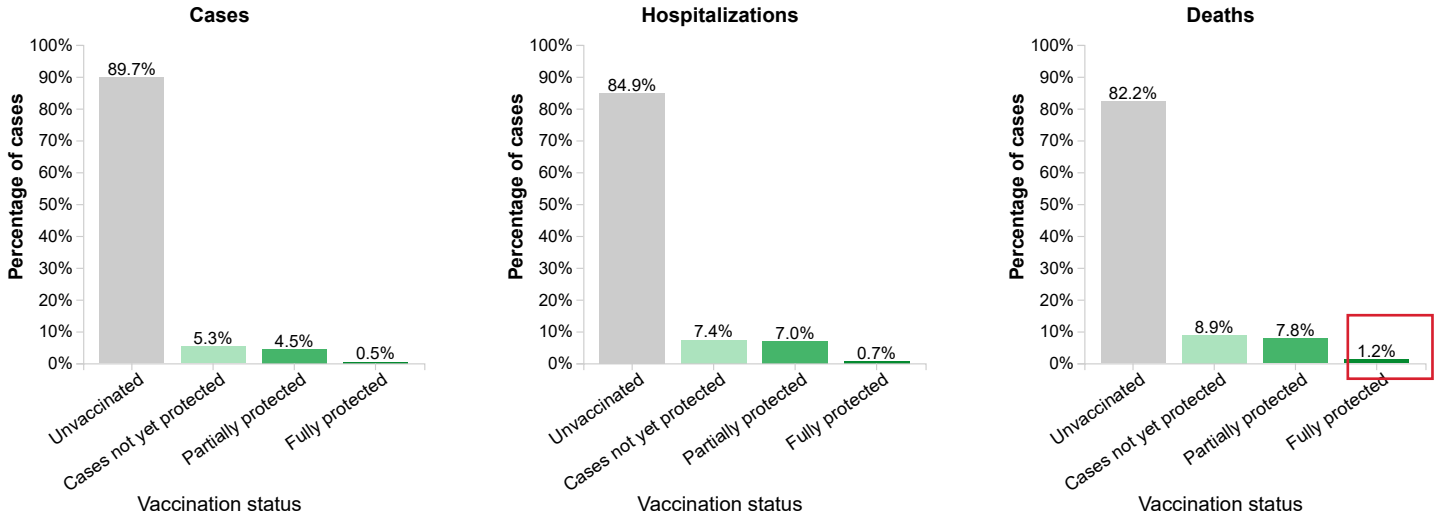
Cases reported since the start of the vaccination campaign, as of July 10, 2021

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 75.4% (n=615,893) of COVID-19 cases aged 12 years or older.

Of these cases:

- 552,262 (89.7%) were unvaccinated at the time of their episode date
- 32,684 (5.3%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 28,011 (4.5%) were only partially protected by the vaccine, as their episode date occurred either 14 days or more after their first dose or less than 14 days after their second dose
- 2,936 (0.5%) were fully protected by the vaccine, as their episode date occurred 14 days or more after their second dose

Figure 5. Distribution of confirmed COVID-19 cases reported to PHAC by vaccination status as of July 10, 2021



Characteristics and severe outcomes associated unvaccinated, partially vaccinated and

fully vaccinated confirmed cases reported to PHAC, as of July 10, 2021

Status	Cases	Hospitalizations	Deaths
Unvaccinated	89.7%	84.9%	82.2%
Cases not yet protected	5.3%	7.4%	8.9%
Partially protected	4.5%	7.0%	7.8%
Fully protected	0.5%	0.7%	1.2%

Among the eleven jurisdictions currently reporting case-level vaccine history data to PHAC, a total of 19.3 million people have received at least one dose of the COVID-19 vaccine as of of the COVID-19 vaccine as of July 10, 2021.

Of these people:

- 18.7 million achieved partial vaccination status, of which 28,011 (0.15%) were diagnosed with COVID-19 while partially vaccinated
- 7.8 million achieved full vaccination status, of which 2,936 (0.04%) were diagnosed with COVID-19 while fully vaccinated

Based on detailed case information reported to PHAC from provinces and territories, cases following vaccination were reported more frequently among females and those aged 60 years and older (Table 2). This may be the result of higher vaccination coverage in Canada among females and those aged 60 years and older due to the prioritization of older age groups and healthcare workers as part of the vaccine rollout.

Table 2. Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of July 10, 2021

		Unvaccinated (n=552,262)	**Cases not yet protected** (n=32,684)	**Partially protected** (n=28,011)	**Fully protected** (n=2,936)	**Total cases** (n=615,893)
Gender*	Male	281,716 (90.7%)	15,563 (5.0%)	12,424 (4.0%)	814 (0.3%)	310,517 (100%)
	Female	267,910 (88.6%)	17,003 (5.6%)	15,488 (5.1%)	2,109 (0.7%)	302,510 (100%)
Hospitalizations		27,889 (84.9%)	2,443 (7.4%)	2,303 (7.0%)	226 (0.7%)	32,861 (100%)
Deaths		5,863 (82.2%)	633 (8.9%)	555 (7.8%)	85 (1.2%)	7,136 (100%)

Source: Detailed case information received by PHAC from provinces and territories, since December 14, 2020

Note:

- There are currently eleven jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset. A data cutoff of July 10, 2021 was used to account for any reporting delays associated with vaccine history information.
- *Cases with missing gender were excluded. Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Fully vaccinated individuals diagnosed with COVID-19 were significantly protected from severe outcomes. Compared to unvaccinated cases, fully vaccinated cases were 70% less likely to be hospitalized and 50% less likely to die as a result of their illness (Table 3).

Table 3. Risk of severe outcomes among fully vaccinated cases compared to unvaccinated cases as of July 10, 2021

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.30 (0.26 - 0.35)
Deaths	0.50 (0.39 - 0.63)

*Adjusted for 10-year age groups and month of episode date

Source: Detailed case information received by PHAC from provinces and territories

Note: Due to the nature of the dataset (i.e. confirmed cases of COVID-19 in Canada), the odds of severe outcomes among cases following vaccination only considers vaccinated individuals that contracted COVID-19. It does not reflect the protection conferred by the vaccines to prevent COVID-19 infection.

Data for this analysis is extracted from the COVID-19 national data set, which contains detailed case-level information received by PHAC from all provinces and territories. Note that a data cut-off of July 10, 2021 was used to account for any reporting delays associated with vaccine history information. There are currently eleven jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset.

PHAC monitors cases following vaccination using the following categories:

Unvaccinated cases: include those who were unvaccinated at the time of their episode date.

Cases not yet protected from vaccination include those whose episode date occurred less than 14 days after their first dose of the vaccine.

Partially vaccinated cases include those whose episode date occurred 14 days or more after their first vaccine dose or less than 14 days after their second dose of the vaccine.

Fully vaccinated cases include those whose episode date occurred 14 days or more after their second dose of a two dose vaccine series or those whose episode date occurred 14 days or more after one dose of a one-dose

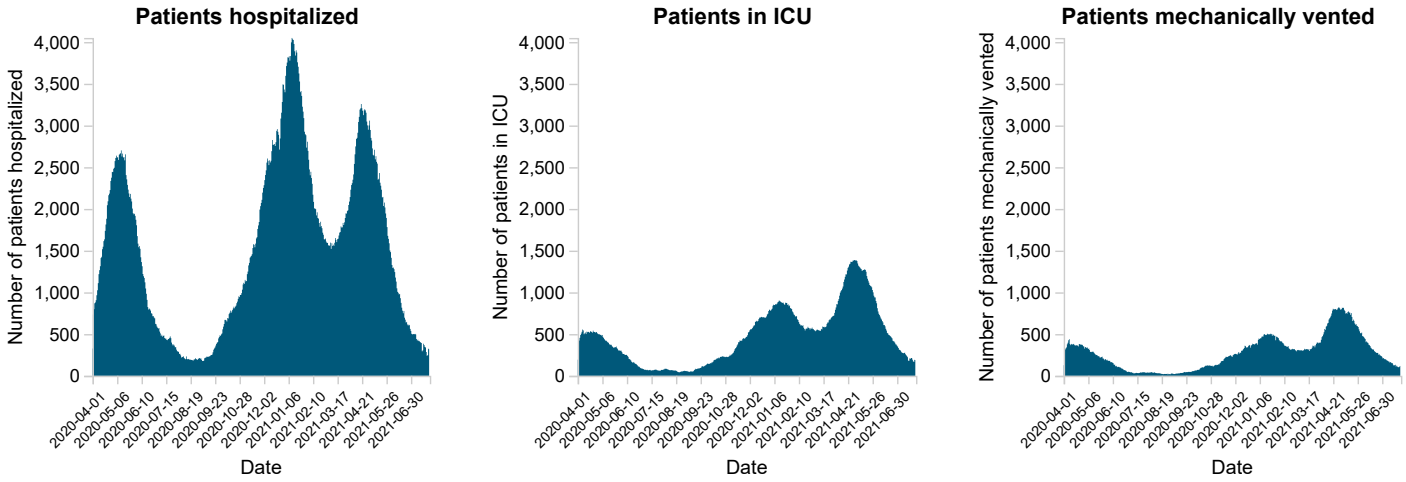
566-02-48305
vaccine.

Note: When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

Severe illness and outcomes

Hospital use

Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of July 26, 2021



Between July 19, 2021 and July 26, 2021:

- the number of **hospital beds** occupied by COVID-19 patients **decreased** from **368** to **318** beds.
- the number of **ICU beds** occupied by COVID-19 patients **decreased** from **203** to **188** beds.
- the number of **COVID-19 patients who were mechanically vented decreased** from **132** to **118**.

Hospitalizations and deaths to date

We have detailed case report data on 1,427,313 cases, and hospitalization status for 1,000,715 (70.1%) of them:

- **75,378** cases **(7.5%)** were hospitalized, of whom:
  - **14,298 (19.0%)** were admitted to the ICU
  - **1,923 (2.6%)** needed mechanical ventilation

The provinces and territories provided detailed case report forms for **26,560** deaths related to COVID-19.

Figure 7a. Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of July 30, 2021, 7 pm EST (n=75,235 [1])

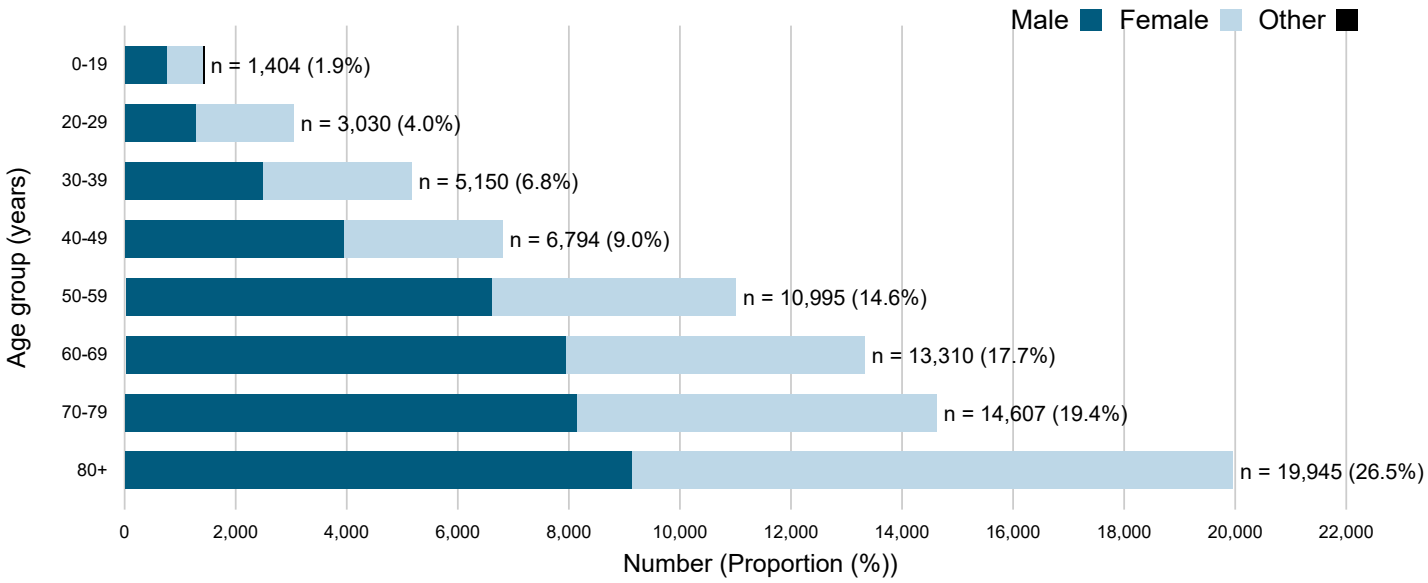


Figure 7b. Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of July 30, 2021, 7 pm EST (n=14,140 [1])

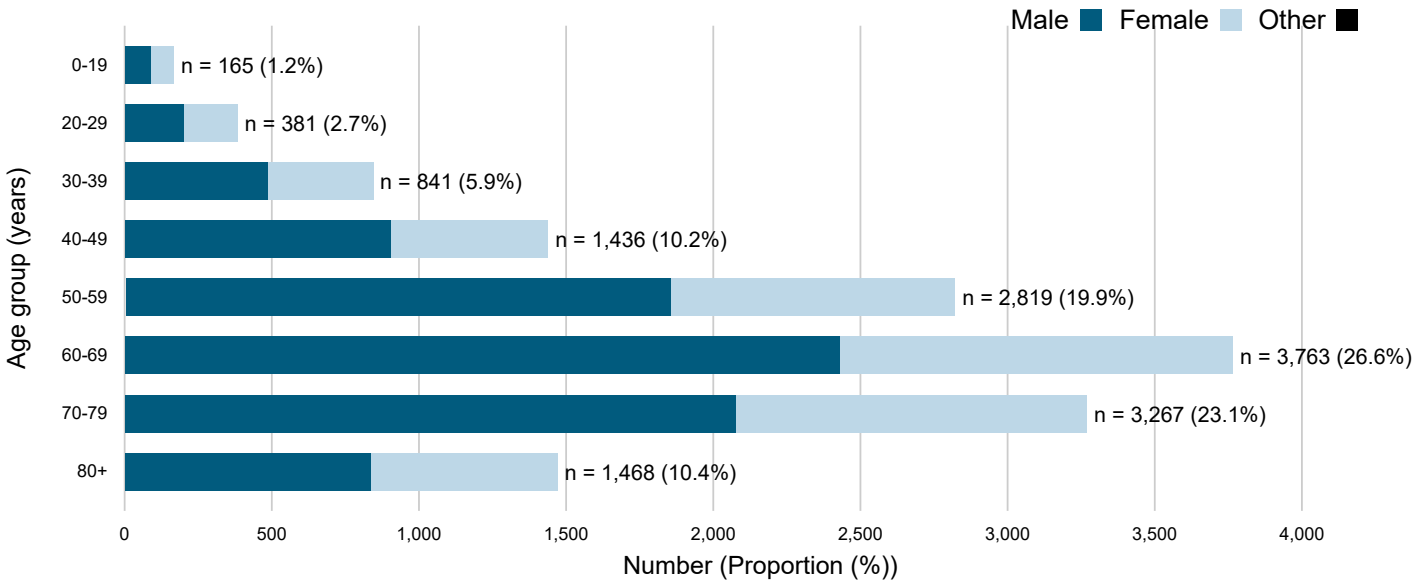
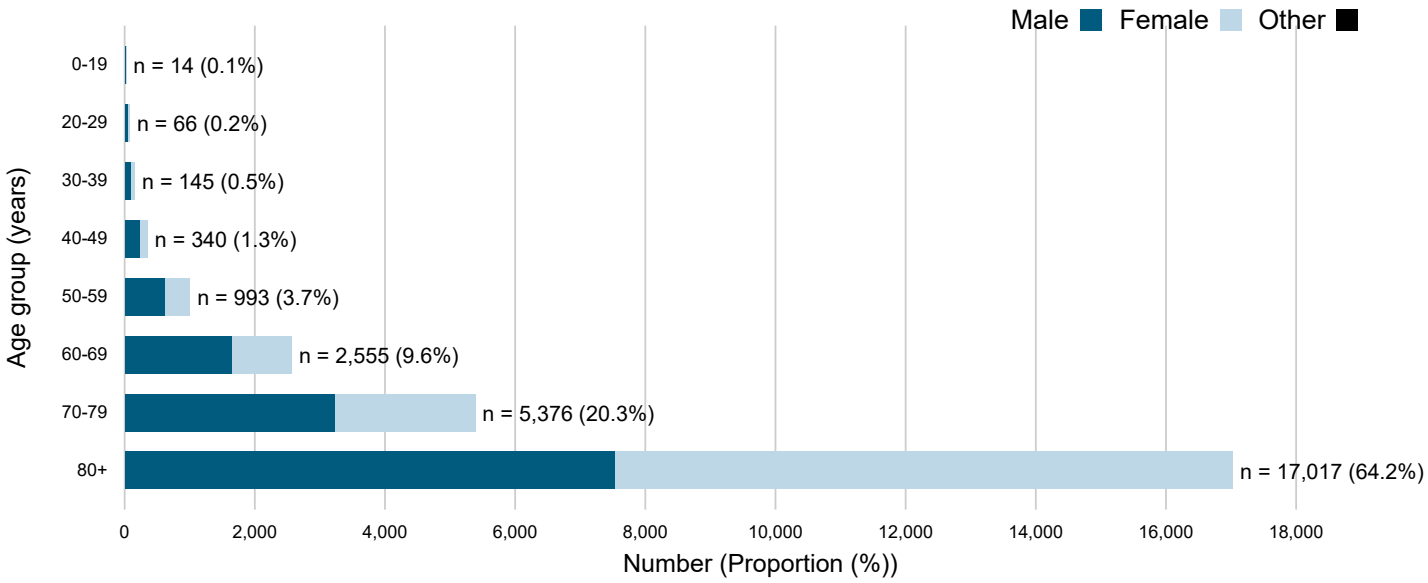


Figure 7c. Age and gender [4] distribution of COVID-19 cases deceased in Canada as of July 30, 2021, 7 pm EST (n=26,506 [1])



Data note: Figure 7 includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age and gender information were available. Therefore, some COVID-19 hospitalizations, ICU admissions, and deaths may not be included in Figure 7.

Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of July 30, 2021, 7 pm EST (n=75,235 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	1,404 (1.9%)	752 (1.0%)	651 (0.9%)	1 (0.0%)
20-29	3,030 (4.0%)	1,274 (1.7%)	1,756 (2.3%)	0 (0.0%)
30-39	5,150 (6.8%)	2,470 (3.3%)	2,680 (3.6%)	0 (0.0%)
40-49	6,794 (9.0%)	3,939 (5.2%)	2,855 (3.8%)	0 (0.0%)
50-59	10,995 (14.6%)	6,608 (8.8%)	4,387 (5.8%)	0 (0.0%)
60-69	13,310 (17.7%)	7,941 (10.6%)	5,369 (7.1%)	0 (0.0%)
70-79	14,607 (19.4%)	8,127 (10.8%)	6,480 (8.6%)	0 (0.0%)
80+	19,945 (26.5%)	9,131 (12.1%)	10,814 (14.4%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of July 30, 2021, 7 pm EST (n=14,140 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	165 (1.2%)	89 (0.6%)	76 (0.5%)	0 (0.0%)
20-29	381 (2.7%)	199 (1.4%)	182 (1.3%)	0 (0.0%)
30-39	841 (5.9%)	484 (3.4%)	357 (2.5%)	0 (0.0%)
40-49	1,436 (10.2%)	903 (6.4%)	533 (3.8%)	0 (0.0%)
50-59	2,819 (19.9%)	1,855 (13.1%)	964 (6.8%)	0 (0.0%)
60-69	3,763 (26.6%)	2,430 (17.2%)	1,333 (9.4%)	0 (0.0%)
70-79	3,267 (23.1%)	2,077 (14.7%)	1,190 (8.4%)	0 (0.0%)
80+	1,468 (10.4%)	833 (5.9%)	635 (4.5%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases deceased in Canada as of July 30, 2021, 7 pm EST (n=26,506 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	14 (0.1%)	6 (0.0%)	8 (0.0%)	0 (0.0%)
20-29	66 (0.2%)	42 (0.2%)	24 (0.1%)	0 (0.0%)
30-39	145 (0.5%)	95 (0.4%)	50 (0.2%)	0 (0.0%)
40-49	340 (1.3%)	222 (0.8%)	118 (0.4%)	0 (0.0%)
50-59	993 (3.7%)	617 (2.3%)	376 (1.4%)	0 (0.0%)
60-69	2,555 (9.6%)	1,635 (6.2%)	920 (3.5%)	0 (0.0%)
70-79	5,376 (20.3%)	3,213 (12.1%)	2,163 (8.2%)	0 (0.0%)
80+	17,017 (64.2%)	7,527 (28.4%)	9,490 (35.8%)	0 (0)

Provincial, territorial and international reporting

For more information, please refer to provincial or territorial COVID-19 webpages:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut
- World Health Organization
- Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

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1 This figure is based on cases for which a case report form was received by the Public Health Agency of Canada from provincial or territorial partners.

2 The shaded area represents a period of time (lag time) where it is expected that cases have occurred but have not yet been reported nationally. The earliest of the following dates were used as an estimate: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.

3 Exposure information may not be available for all cases. Some jurisdictions haven't consistently reported to PHAC how people were exposed throughout the pandemic. As a result, this may underestimate the total number of cases by different exposures, especially among returning travelers.

4 Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Date modified:

2021-07-30

Government of Canada | Gouvernement du Canada

COVID-19 daily epidemiology update

Updated: October 19, 2021, 7 pm EDT

Summary of COVID-19 cases across Canada and over time. Contains detailed data about the spread of the virus over time and in different regions of the country. Includes breakdowns by age and sex or gender. Provides an overview of hospitalizations and deaths, testing, variants of concern and exposures.

Key updates as of October 19, 2021, 7 pm EDT

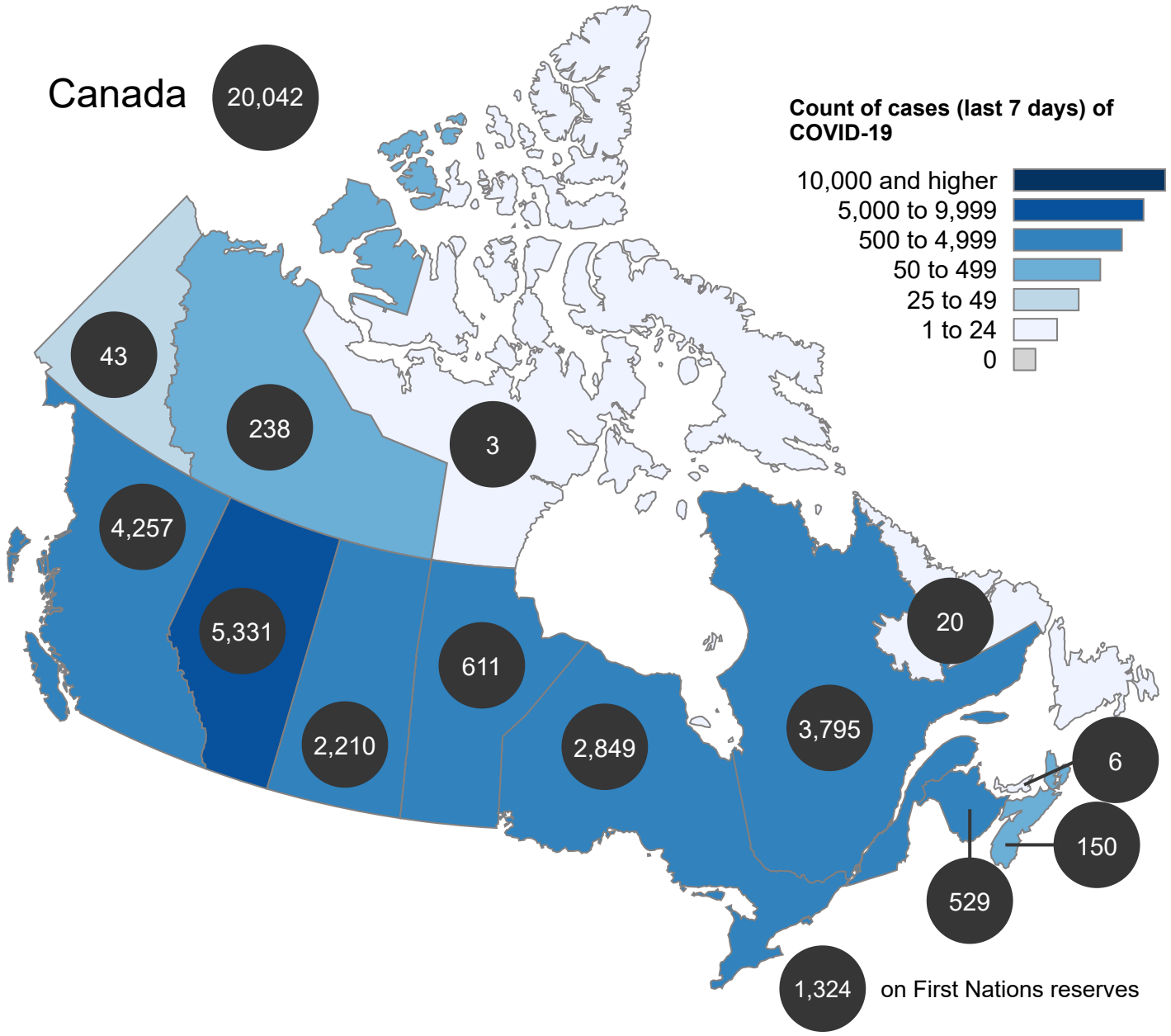
Cases today	Total cases	Active cases	Total resolved	Deaths today	Total deaths
2,258	1,687,617	30,997	1,628,017	39	28,603

Total tests performed	Daily percent positive (last 7 days)	Daily tests per 100,000 population (last 7 days)
45,212,799	3.2%	240

- We update these sections Monday to Friday at 7:00 PM EDT: Key updates, Current situation and National overview. Laboratory data represents specimens received by labs up to October 17, 2021 to allow time to process results.
- We update these sections every Friday: Epidemic curve, Demographics, How people were exposed, and Severe illness and outcomes.
- Of the 12 jurisdictions reporting updates, no new cases were reported in 1 provinces and territories in the past 24 hours.
- Of the 12 jurisdictions reporting updates, no new deaths were reported in 5 provinces and territories in the past 24 hours.

Current situation

Figure 1a. Count of cases (last 7 days) of COVID-19, by province/territory as of October 19, 2021



The count of cases (last 7 days) of COVID-19 in **Canada** was **20,042** as of October 19, 2021.

This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of October 19, 2021, 2021, 7 PM EDT. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

Areas in Canada with cases of COVID-19 as of October 19, 2021

	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
Location	Count	Rate*	Count	Rate*	Count	Rate*	Count	Count	Rate*	Count	Rate*	Count	Count	Rate*	Percent
Canada	**1,687,617**	**4,440**	**20,042**	**53**	**30,997**	**82**	**1,628,017**	**28,603**	**75**	**314**	**0.8**	**45,212,799**	**91,351**	**240**	**3.2%**
British Columbia	198,838	3,863	4,257	83	5,276	102	191,476	2,086	41	57	1.1	4,081,715	13,332	259	4.5%
Alberta	316,964	7,168	5,331	121	11,402	258	302,574	2,988	68	125	2.8	5,731,505	10,426	236	7.5%
Saskatchewan	74,940	6,358	2,210	188	3,434	291	70,713	793	67	40	3.4	1,192,163	2,762	234	12.8%
Manitoba	62,332	4,519	611	44	1,007	73	60,091	1,234	89	10	0.7	1,106,851	2,673	194	3.9%
Ontario	595,563	4,042	2,849	19	3,672	25	582,072	9,819	67	27	0.2	18,478,331	27,611	187	1.6%
Quebec	420,471	4,904	3,795	44	4,861	57	404,157	11,453	134	31	0.4	12,164,763	27,530	321	1.9%
Newfoundland and Labrador	1,889	362	20	4	54	10	1,820	15	3	2	0.4	378,768	863	165	0.6%
New Brunswick	5,896	754	529	68	775	99	5,027	94	12	19	2.4	520,843	2,507	321	3.4%
Nova Scotia	7,161	731	150	15	187	19	6,876	98	10	0	0.0	1,280,272	2,971	303	0.8%
Prince Edward Island	315	197	6	4	7	4	308	0	0	0	0.0	212,863	549	344	0.2%
Yukon	867	2,062	43	102	52	124	805	10	24	0	0.0	9,129	N/A	N/A	N/A
Northwest Territories	1,694	3,751	238	527	263	582	1,422	9	20	3	6.6	34,062	89	197	9.2%
Nunavut	674	1,713	3	8	7	18	663	4	10	0	0.0	21,458	37	95	1.1%

* Rate per 100,000 population

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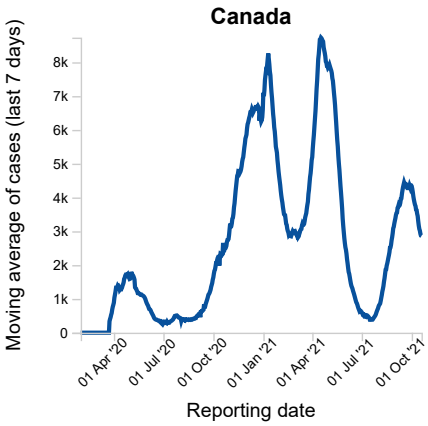
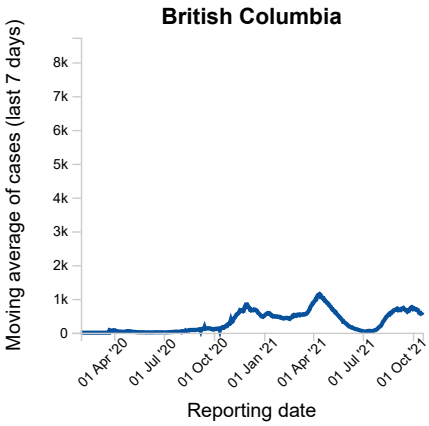
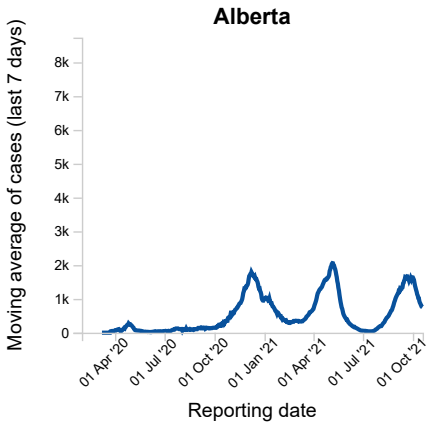
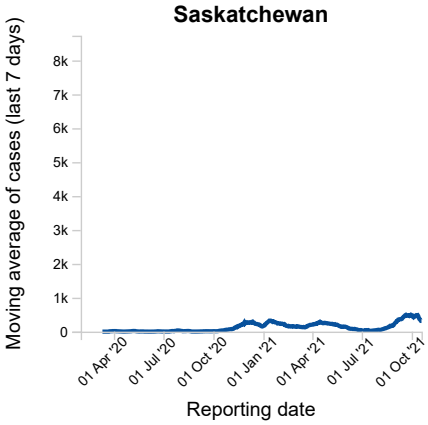
Figure 1b. Moving average of cases (last 7 days) of COVID-19 in Canada as of October 19, 2021, 7 pm EDT

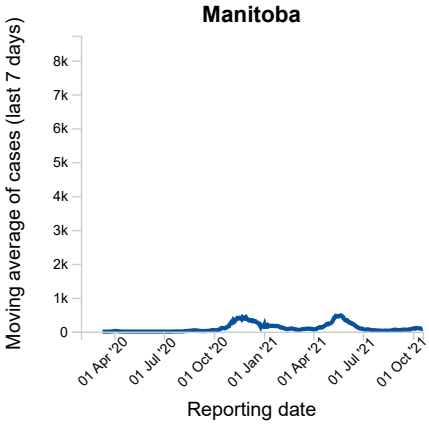
The figures below show cases over time. The range of dates (January 31st, 2020 - present date) is the same for each figure. This allows you to compare the provinces and territories on the same timescale.

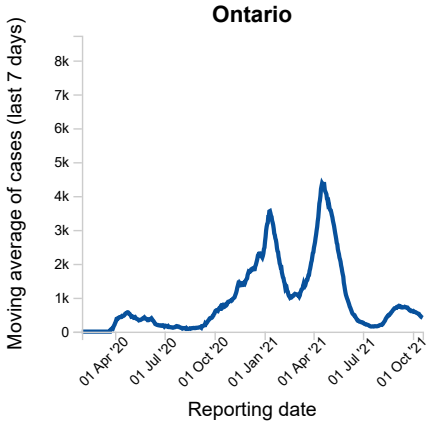


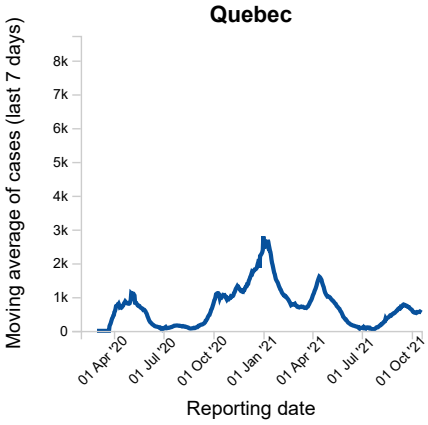


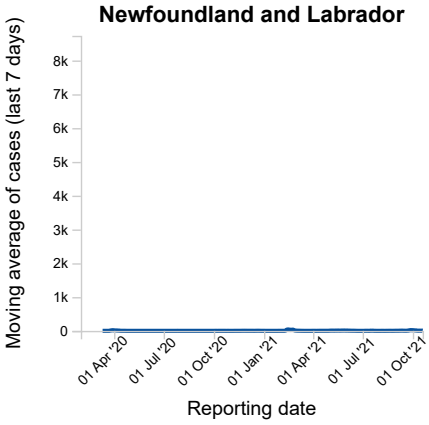


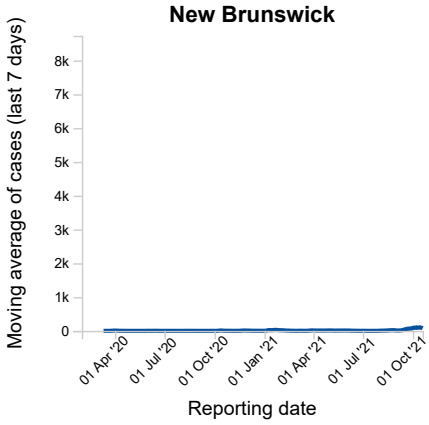


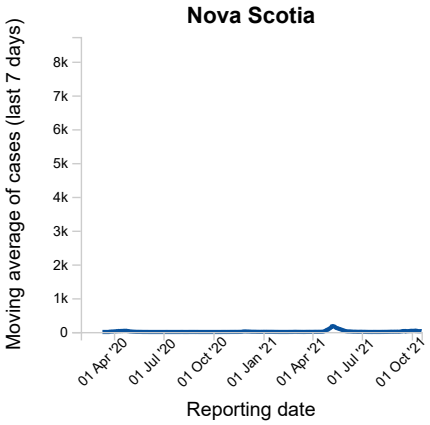


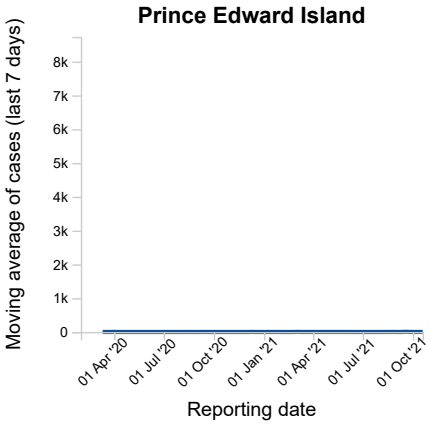


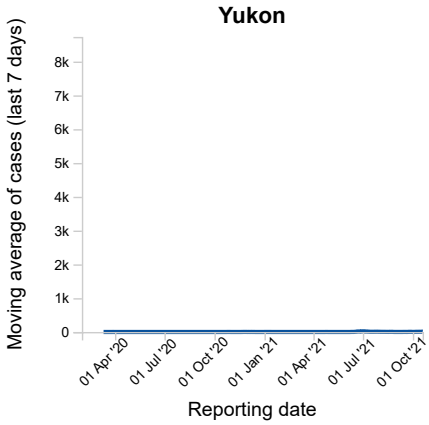


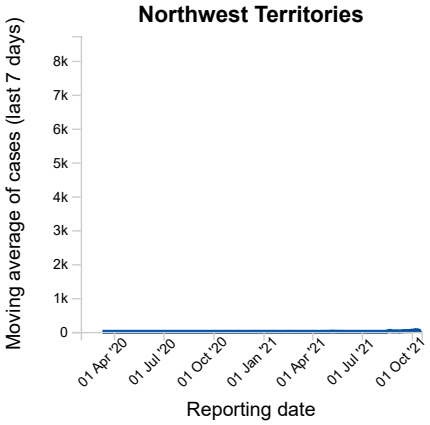


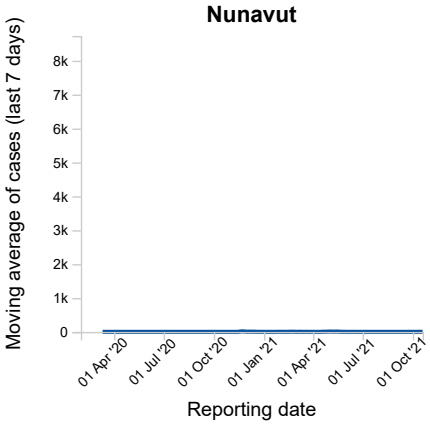












a. This information is based on data from our provincial and territorial partners. Data about cases was last updated on October 19, 2021. Laboratory data includes specimens received by labs up to October 17, 2021. For the most up to date data for any province, territory or city, please visit their web site.
b. The 7-day moving average is the total of the daily numbers for the previous 7 days (up to and including the day of the last update), divided by the number of days for which data is available. We go back and update the moving averages as provinces and territories submit more data. We calculate the national 7-day moving average by summing the 7-day moving average from the provinces and territories then dividing by the national population if a rate is calculated.

Downloadable data (in .csv format).

Note: Out of the total number of people tested, 76 were repatriated travellers, of which 13 were cases.

National overview

There have been over **45,212,799** COVID-19 tests performed in Canada or **1,189,647 tests per 1 million people**. For information about testing trends, please see the Detailed weekly epidemiological report (PDF).

Table 1. Daily* change in the number of cases, deaths and tests performed, by province or territory, as of October 19, 2021, 7 pm EDT

Location	New cases	New deaths	Tests performed
Canada	**2,258**	**39**	**72,387**
British Columbia	560	5	11,400
Alberta	531	12	7,165
Saskatchewan	271	8	2,092
Manitoba	102	3	2,019
Ontario	328	4	20,432
Quebec	342	4	23,269
Newfoundland and Labrador	N/A	N/A	714
New Brunswick	50	3	2,002
Nova Scotia	6	0	2,833
Prince Edward Island	3	0	363
Yukon	9	0	N/A
Northwest Territories	56	0	60
Nunavut	0	0	38

* The new cases, deaths and tests reflect the difference between a province or territory's current report and their last report. Some provinces and territories do not update daily.

N/A means that no daily update was provided by the province or territory.

COVID-19 variants in Canada

All viruses, including COVID-19, change over time. These changes are called mutations, and result in variants of the virus. Not all mutations are of concern. Most do not cause more severe illness. However, some mutations result in variants of concern or variants of interest.

A variant of concern has mutations that are significant to public health. Before a variant of interest is considered one of concern, scientists and public health professionals must determine if the mutations result in an actual change in the behaviour of the virus. For example, it might:

- spread more easily
- cause more severe illness
- require different treatments, or
- reduce vaccine effectiveness

There are several variants of interest that have mutations similar to variants of concern, but we don’t yet know if they pose a higher risk to public health.

The Public Health Agency of Canada (PHAC) works with provincial and territorial partners and the Canadian COVID-19 Genomics Network (CanCOGeN) to sequence a percentage of all positive COVID-19 test results. Sequencing reveals the genetic code of the virus, which tells us which variant is involved in a specific case of COVID-19. We report the proportion of COVID-19 variants in Canada every week.

We collect evidence to determine if new variants meet the definition for a variant of concern or a variant of interest. Many variants are being tracked across Canada and around the world. Variants of concern now represent a majority of COVID-19 cases in Canada.

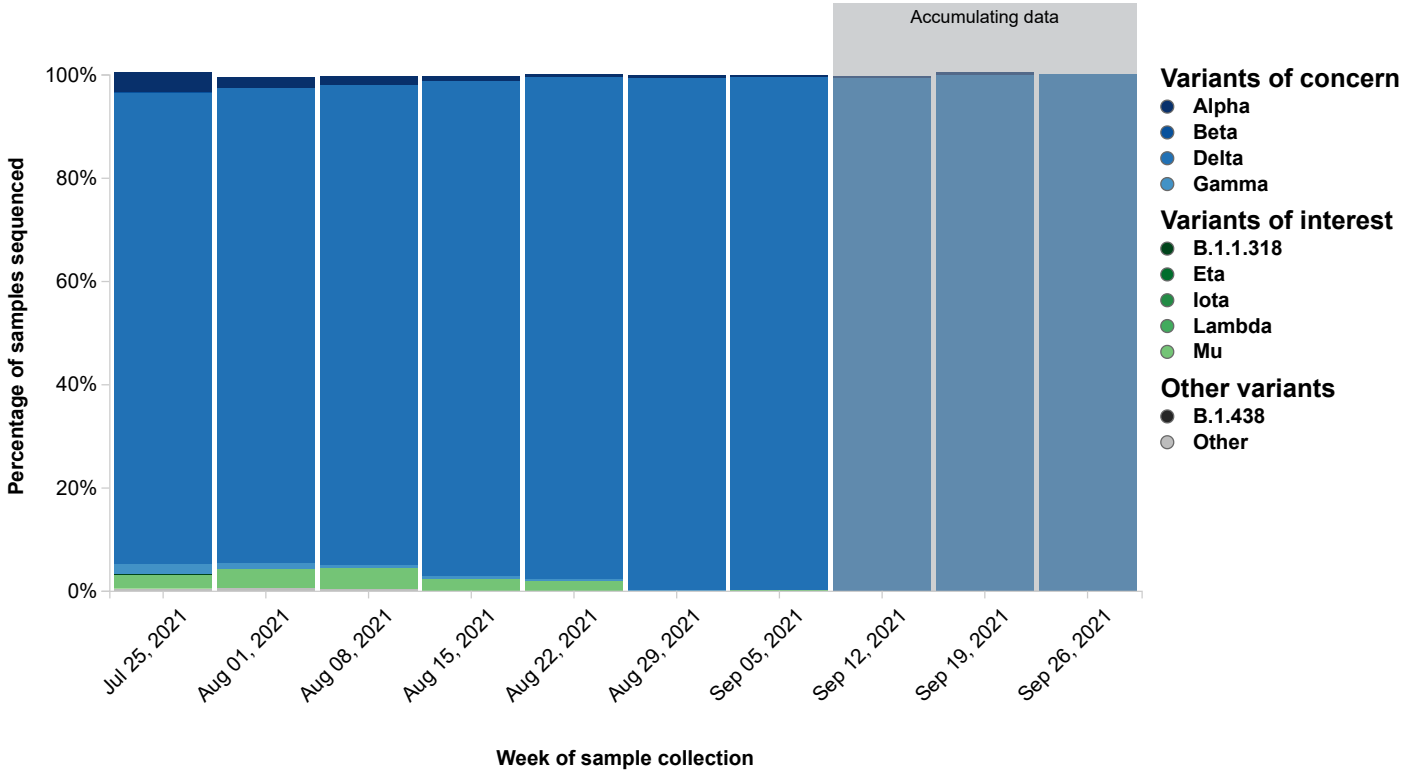
Four VOC (Variants of concern)s have been detected in most provinces and territories:

- B.1.1.7 (Alpha)
- B.1.351 (Beta)
- P.1 (Gamma)
- B.1.617.2 (Delta)

New variants will continue to appear. We must remain vigilant and take all available measures to limit spread.

Figure 2. Weekly variant breakdown Updated: October 15, 2021, 4 pm EDT

The graphic shows the percentage mix of COVID-19 variants detected in Canada through whole genome sequencing, by week of sample collection. You can see the numbers for each date by hovering over, tabbing to, or long-pressing any of the bars. To see a specific variant or variant grouping, click or press return. Repeat to restore the complete graph.



This information is based on whole genome sequencing from surveillance testing in all provinces and territories. In addition to sequencing done by the National Microbiology Laboratory in Winnipeg, data is included from provincial and territorial laboratories.

Sequencing takes from 1 to 3 weeks to complete, so the proportions for recent weeks may change as more data are added. Surveillance in each province or territory is organized and prioritized according to local needs and may change from time to time. Because of differences in local sampling and reporting, the percentages illustrate trends rather than precise measurements.

Weekly variant breakdown

Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection.

Variant Grouping	Jul 25, 2021 (n=3,324)	Aug 01, 2021 (n=4,929)	Aug 08, 2021 (n=6,872)	Aug 15, 2021 (n=7,894)	Aug 22, 2021 (n=8,444)	Aug 29, 2021 (n=7,430)	Sep 05, 2021 (n=5,813)	Sep 12, 2021 (n=2,389)	Sep 19, 2021 (n=1,292)	Sep 2 2021 (n=45
Variants of concern	**97.2%**	**95.3%**	**95.3%**	**97.2%**	**98.1%**	**99.6%**	**99.7%**	**99.4%**	**100.2%**	**100.**
Alpha	3.8%	2.1%	1.6%	0.8%	0.4%	0.4%	0.3%	0.2%	0.4%	-
Beta	0.1%	-	-	-	-	-	-	-	-	-
Delta	91.3%	92.0%	93.1%	96.0%	97.4%	99.0%	99.3%	99.2%	99.8%	100.
Gamma	2.0%	1.2%	0.6%	0.4%	0.3%	0.2%	0.1%	-	-	-
Variants of interest	**2.8%**	**3.5%**	**4.0%**	**2.4%**	**1.9%**	**0.1%**	**0.1%**	**0.0%**	**-**	**-**
A.23.1	-	-	-	-	-	-	-	-	-	-
B.1.1.318	0.1%	-	-	-	-	-	-	-	-	-
B.1.617.3	-	-	-	-	-	-	-	-	-	-
Epsilon	-	-	-	-	-	-	-	-	-	-
Eta	-	-	-	-	-	-	-	-	-	-
Iota	0.1%	-	-	-	-	-	-	-	-	-
Kappa	-	-	-	-	-	-	-	-	-	-
Lambda	-	-	-	-	-	-	-	-	-	-
Mu	2.5%	3.5%	4.0%	2.4%	1.9%	0.1%	0.1%	-	-	-
Theta	0.1%	-	-	-	-	-	-	-	-	-
Zeta	-	-	-	-	-	-	-	-	-	-
Other variants	**0.4%**	**0.7%**	**0.4%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**	**0.1%**	**-**
B.1.438	-	-	-	-	-	-	-	0.1%	-	-
Other	0.4%	0.7%	0.4%	-	-	-	-	-	0.1%	-

Contributing laboratories:

- Saskatchewan - Roy Romanow Provincial Laboratory (RRPL)
- Public Health Ontario (PHO)
- Newfoundland and Labrador - Eastern Health
- New Brunswick – Vitalité Health Network
- Manitoba Cadham Provincial Laboratory
- Laboratoire de santé publique du Québec (LSPQ)
- Dynacare Manitoba
- BCCDC Public Health Laboratory
- Alberta Precision Labs - Edmonton (APL)
- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

Detailed case information

The tables and figures below reflect detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.

Updated: October 15, 2021, 7 pm EDT

Epidemic curve

As of October 15, 2021, 7 pm EDT, PHAC has received detailed case report data on 1,665,583 cases. Both exposure and symptom onset date were available for 1,238,935 (74.4%) cases [1].

The shaded area on the far right of Figure 3 represents a period of accumulating data. This is the period of time (1 to 2 weeks) before the latest cases are reported to PHAC. This delay is a result of the time required to seek health care, get tested and receive results. It also takes time for public health authorities to gather information on cases. We update this information as it becomes available.

Figure 3. COVID-19 cases (n=1,665,583 [1]) in Canada by date of illness onset [2] as of October 15, 2021, 7 pm EDT (total cases)

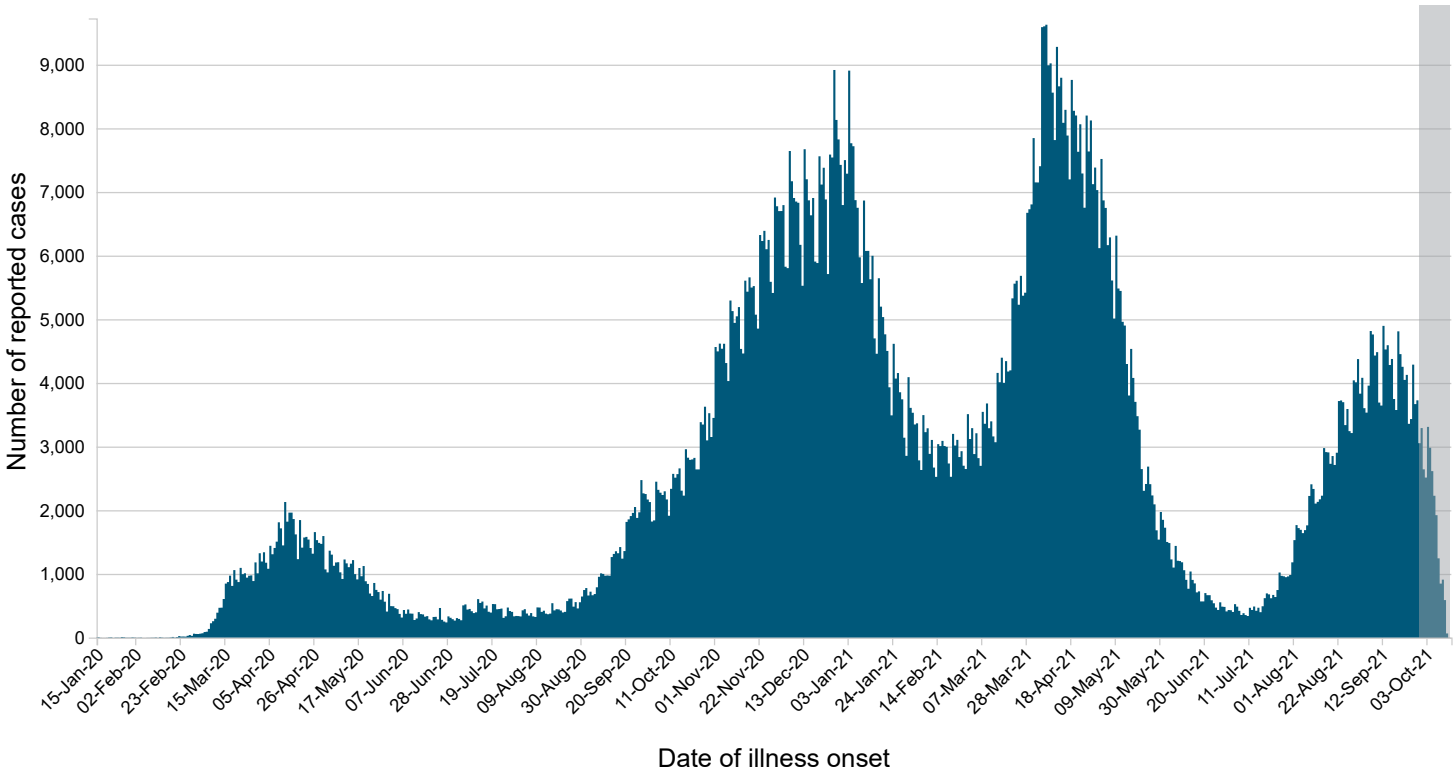


Figure 3. COVID-19 cases (n=1,238,935 [1]) in Canada by date of illness onset [2] as of October 15, 2021, 7 pm EDT (by exposure)

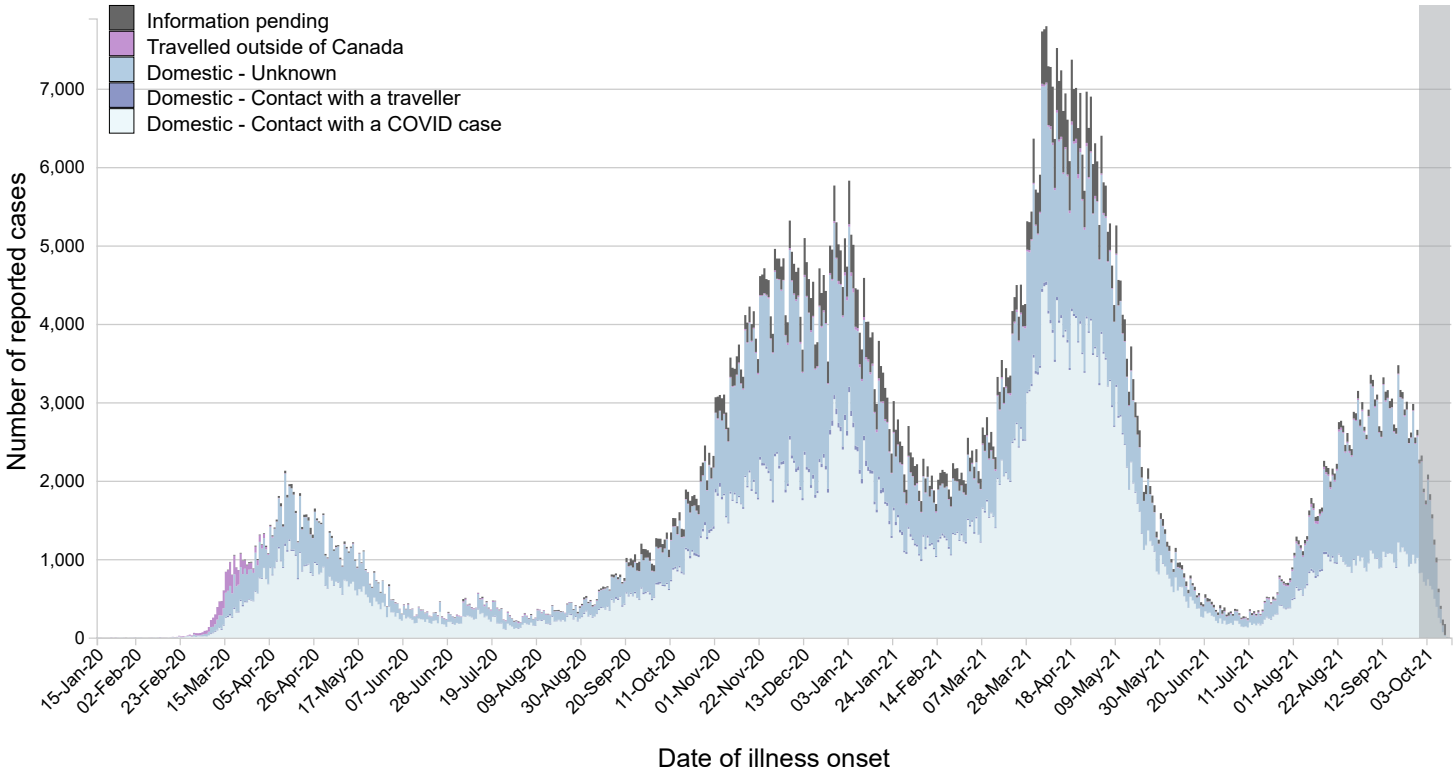


Figure 3. COVID-19 cases (n=1,665,069 [1]) in Canada by date of illness onset [2] as of October 15, 2021, 7 pm EDT (by age - 10 year groups)

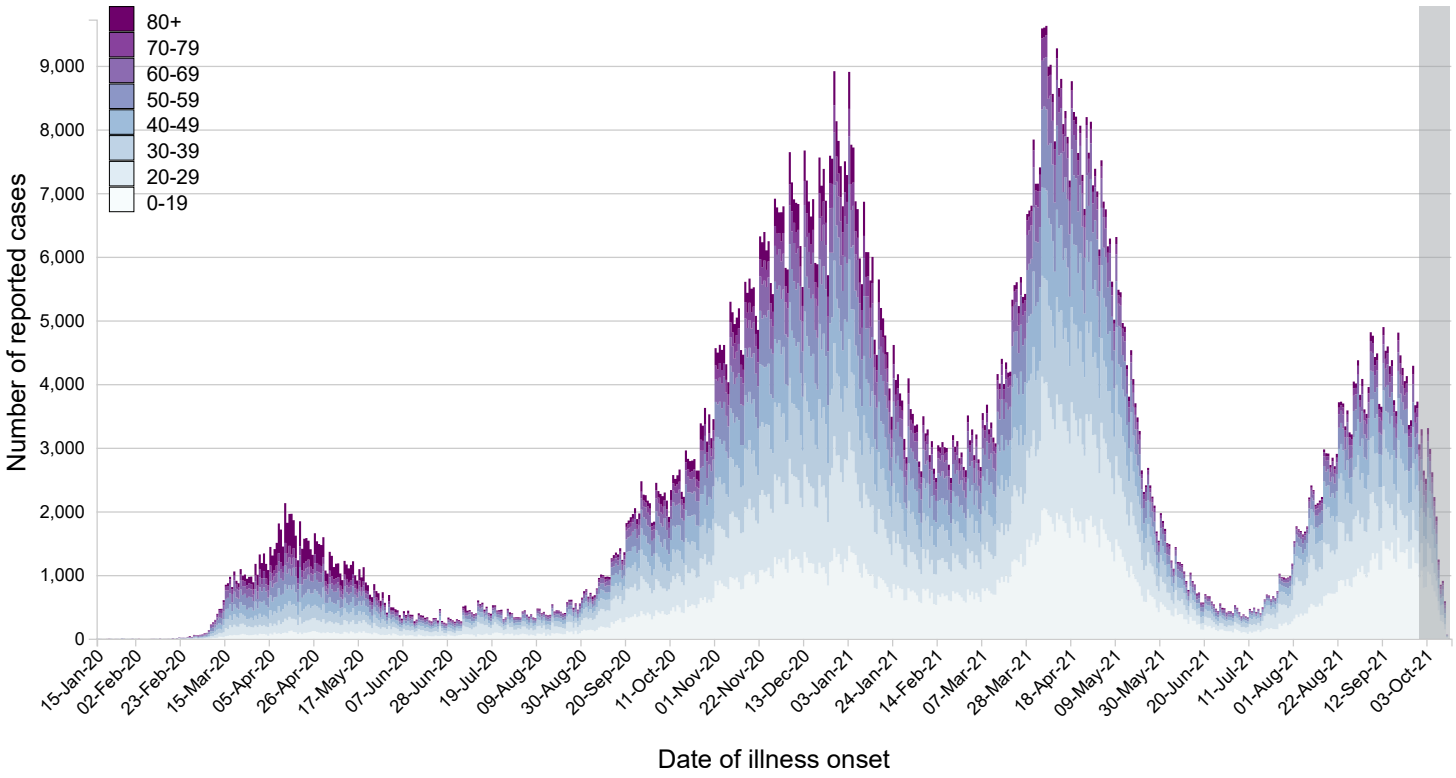
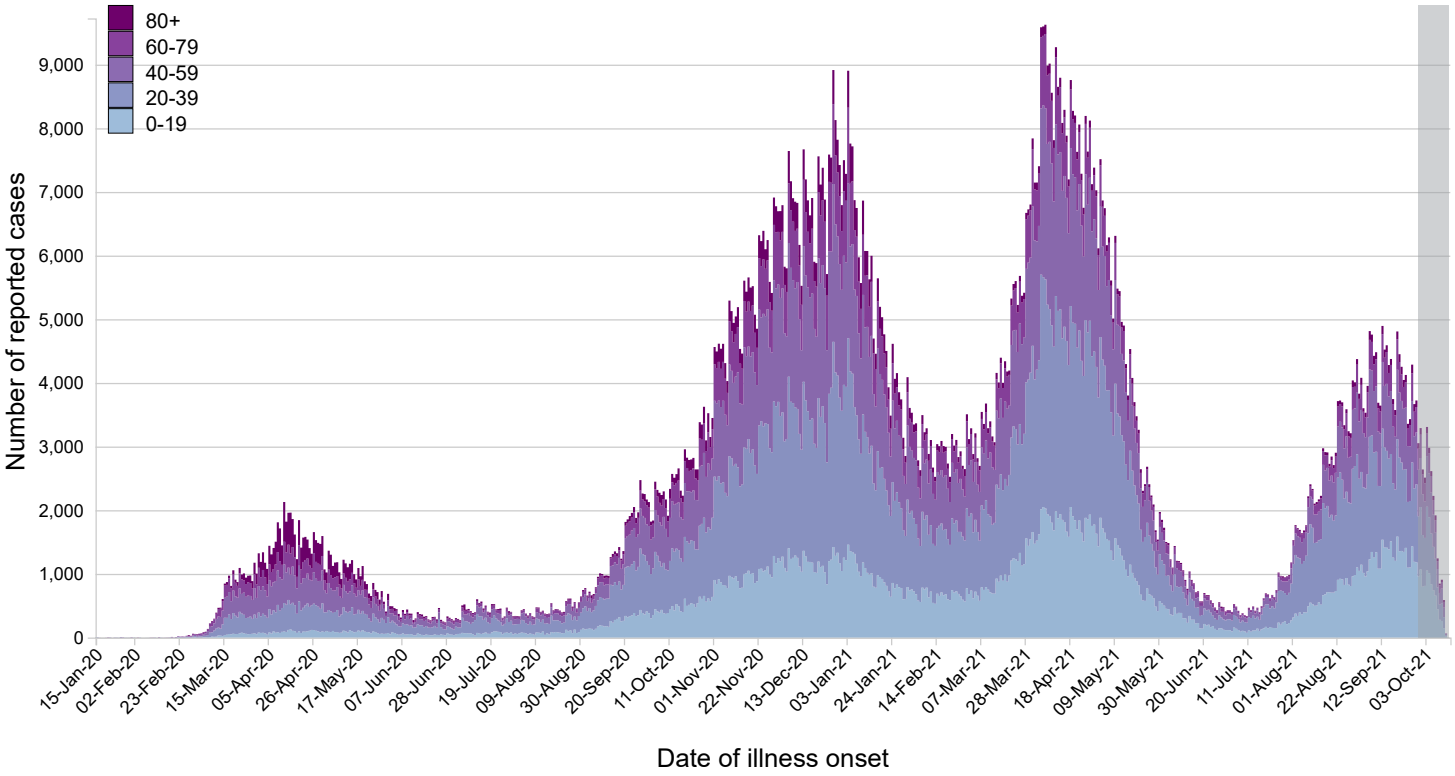


Figure 3. COVID-19 cases (n=1,665,069 [1]) in Canada by date of illness onset [2] as of October 15, 2021, 7 pm EDT (by age - 20 year groups)



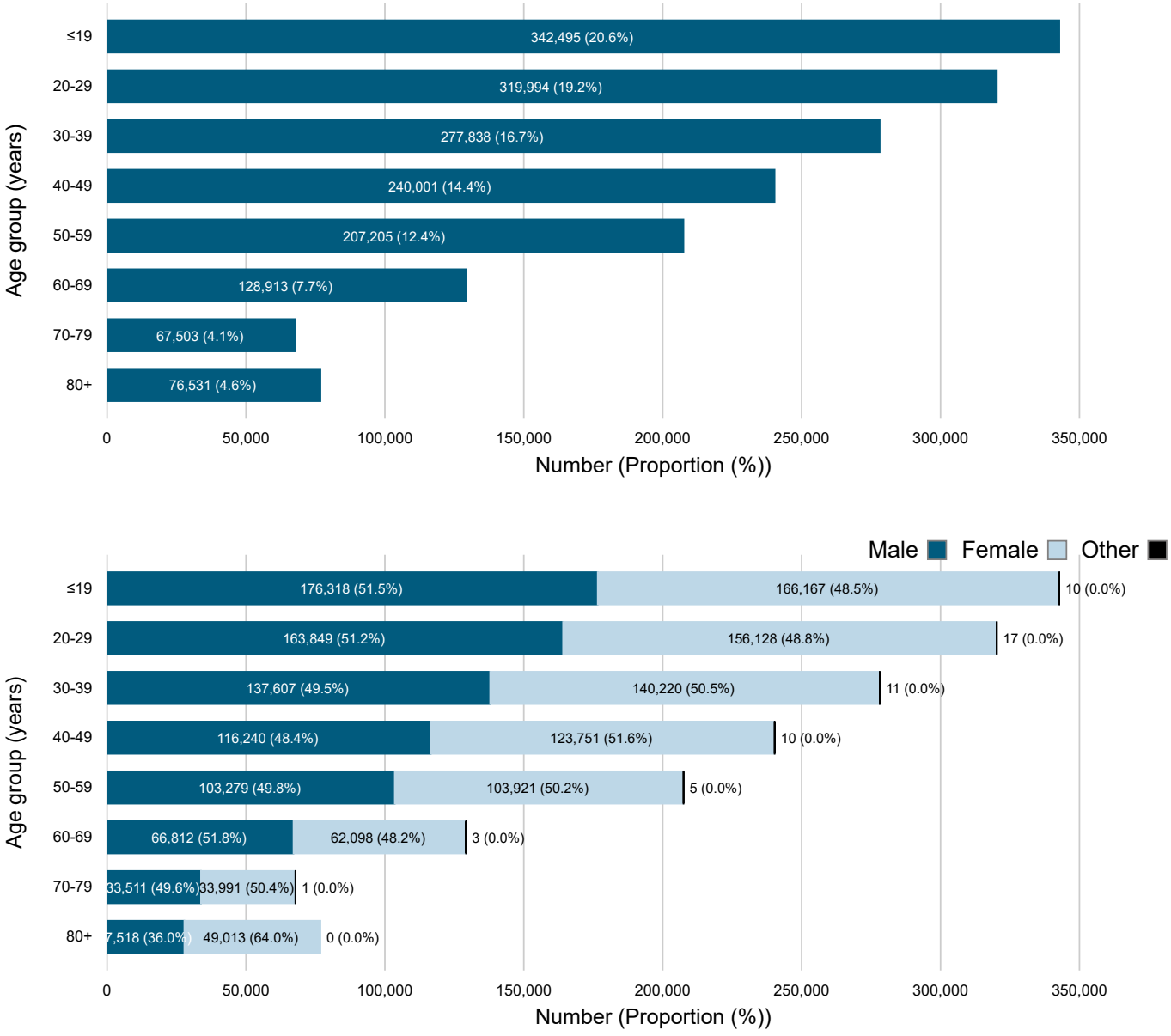
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

Demographics

We have detailed case report data from 1,665,583 cases. We know the age of patients in 100.00% of cases, and both age and gender in 99.69% of cases.

Of the cases reported in Canada so far, 50.3% were female and 36.0% were between 20 and 39 years old (Figure 4).

Figure 4. Age distribution of COVID-19 cases (n=1,665,583 [1]) in Canada as of October 15, 2021, 7 pm EDT [4]



Age by gender [4] distribution of COVID-19 cases (n=1,665,583 [1]) in Canada, October 15, 2021, 7 pm EDT

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
≤19	342,495 (20.6%)	176,318 (21.4%)	166,167 (19.9%)	10 (17.5%)
20-29	319,994 (19.2%)	163,849 (19.9%)	156,128 (18.7%)	17 (29.8%)
30-39	277,838 (16.7%)	137,607 (16.7%)	140,220 (16.8%)	11 (19.3%)
40-49	240,001 (14.4%)	116,240 (14.1%)	123,751 (14.8%)	10 (17.5%)
50-59	207,205 (12.4%)	103,279 (12.5%)	103,921 (12.4%)	5 (8.8%)
60-69	128,913 (7.7%)	66,812 (8.1%)	62,098 (7.4%)	3 (5.3%)
70-79	67,503 (4.1%)	33,511 (4.1%)	33,991 (4.1%)	1 (1.8%)
80+	76,531 (4.6%)	27,518 (3.3%)	49,013 (5.9%)	0 (0.0%)
Total	1,660,480 (100%)	825,134 (100%)	835,289 (100%)	57 (100%)

How people were exposed [3]

In Canada, detailed case report data were provided for 1,665,583 cases. We have exposure history for 1,238,935 (74.4%) cases. The probable exposure setting of these cases [1] are:

- any exposure that occurred in Canada: **1,144,015 (92.3%)**, including
  - from contact with a known COVID case: **663,310 (53.5%)**
  - from contact with a traveller: **9,379 (0.8%)**
  - from an unknown source: **471,326 (38.0%)**
- currently unknown (information pending): **83,444 (6.7%)**
- travelled outside of Canada: **11,476 (0.9%)**

Cases following vaccination

Data extracted on October 15, 2021 for cases from December 14, 2020 up until October 02, 2021.

While the COVID-19 vaccines are effective, there is still a small percentage of the population who are vaccinated that will still be infected with COVID-19 if they are exposed to the virus that causes it. This means that even with high vaccine effectiveness, a small percentage of the population who are vaccinated against COVID-19 will still get sick and some may be hospitalized or even die as a result of their illness. It is also possible that a person could be infected just before or just after vaccination and still get sick. It typically takes about two weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

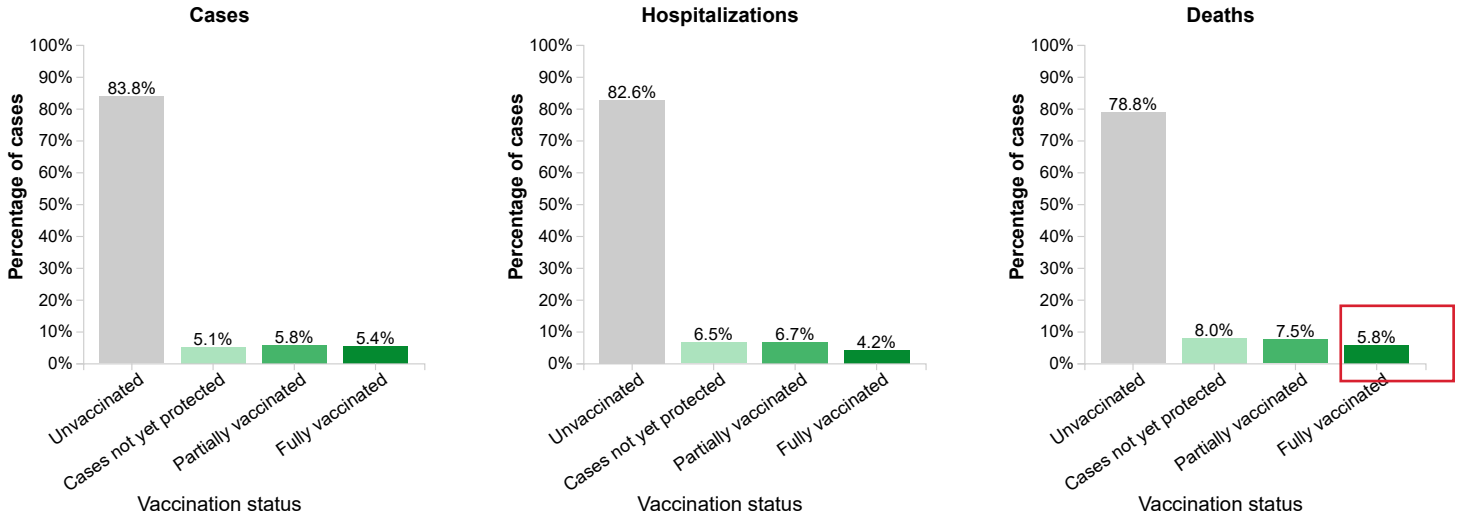
Cases reported since the start of the vaccination campaign, as of October 02, 2021

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 79.8% (n=801,278) of COVID-19 cases aged 12 years or older.

Of these cases:

- 671,339 (83.8%) were unvaccinated at the time of their episode date
- 40,590 (5.1%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 46,083 (5.8%) were only partially vaccinated, as their episode date occurred either 14 days or more after their first dose or less than 14 days after their second dose
- 43,266 (5.4%) were fully vaccinated, as their episode date occurred 14 days or more after their second dose

Figure 5. Distribution of confirmed COVID-19 cases reported to PHAC by vaccination status as of October 02, 2021



Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of October 02, 2021

Status	Cases	Hospitalizations	Deaths
Unvaccinated	83.8%	82.6%	78.8%
Cases not yet protected	5.1%	6.5%	8.0%
Partially vaccinated	5.8%	6.7%	7.5%
Fully vaccinated	5.4%	4.2%	5.8%

Among the twelve jurisdictions currently reporting case-level vaccine history data to PHAC, a total of 22.4 million people have received at least one dose of the COVID-19 vaccine as of October 02, 2021.

Of these people:

- 22.0 million achieved partial vaccination status, of which 46,083 (0.21%) were diagnosed with COVID-19 while partially vaccinated
- 20.2 million achieved full vaccination status, of which 43,266 (0.21%) were diagnosed with COVID-19 while fully vaccinated

Based on detailed case information reported to PHAC from provinces and territories, cases following vaccination were reported more frequently among females and those aged 60 years and older (Table 2). This may be the result of higher vaccination coverage in Canada among females and those aged 60 years and older due to the prioritization of older age groups and healthcare workers as part of the vaccine rollout.

Table 2. Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of October 02, 2021

		Unvaccinated (n=671,339)	**Cases not yet protected** (n=40,590)	**Partially vaccinated** (n=46,083)	**Fully vaccinated** (n=43,266)	**Total cases** (n=801,278)
Gender*	Male	342,516 (85.2%)	19,457 (4.8%)	21,383 (5.3%)	18,499 (4.6%)	401,855 (100%)
	Female	325,837 (82.3%)	21,012 (5.3%)	24,555 (6.2%)	24,637 (6.2%)	396,041 (100%)
Hospitalizations		35,848 (82.6%)	2,823 (6.5%)	2,919 (6.7%)	1,813 (4.2%)	43,403 (100%)
Deaths		7,120 (78.8%)	719 (8.0%)	681 (7.5%)	520 (5.8%)	9,040 (100%)

Source: Detailed case information received by PHAC from provinces and territories, since December 14, 2020

Note:

- There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset. A data cut-off of October 02, 2021 was used to account for any reporting delays associated with vaccine history information.
- *Cases with missing gender were excluded. Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Fully vaccinated individuals diagnosed with COVID-19 were significantly protected from severe outcomes. Compared to unvaccinated cases, fully vaccinated cases were 79% less likely to be hospitalized and 64% less likely to die as a result of their illness (Table 3).

Table 3. Risk of severe outcomes among fully vaccinated cases compared to unvaccinated cases as of October 02, 2021

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.21 (0.19 - 0.22)
Deaths	0.36 (0.32 - 0.4)

*Adjusted for 10-year age groups and month of episode date

Source: Detailed case information received by PHAC from provinces and territories

Note: Due to the nature of the dataset (i.e. confirmed cases of COVID-19 in Canada), the odds of severe outcomes among cases following vaccination only considers vaccinated individuals that contracted COVID-19. It does not reflect the protection conferred by the vaccines to prevent COVID-19 infection.

Data for this analysis is extracted from the COVID-19 national data set, which contains detailed case-level information received by PHAC from all provinces and territories. Note that a data cut-off of October 02, 2021 was used to account for any reporting delays associated with vaccine history information. There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset.

PHAC monitors cases following vaccination using the following categories:

Unvaccinated cases: include those who were unvaccinated at the time of their episode date.

Cases not yet protected from vaccination include those whose episode date occurred less than 14 days after their first dose of the vaccine.

Partially vaccinated cases include those whose episode date occurred 14 days or more after their first vaccine dose or less than 14 days after their second dose of the vaccine.

Fully vaccinated cases include those whose episode date occurred 14 days or more after their second dose of a two dose vaccine series or those whose episode date occurred 14 days or more after one dose of a one-dose vaccine.

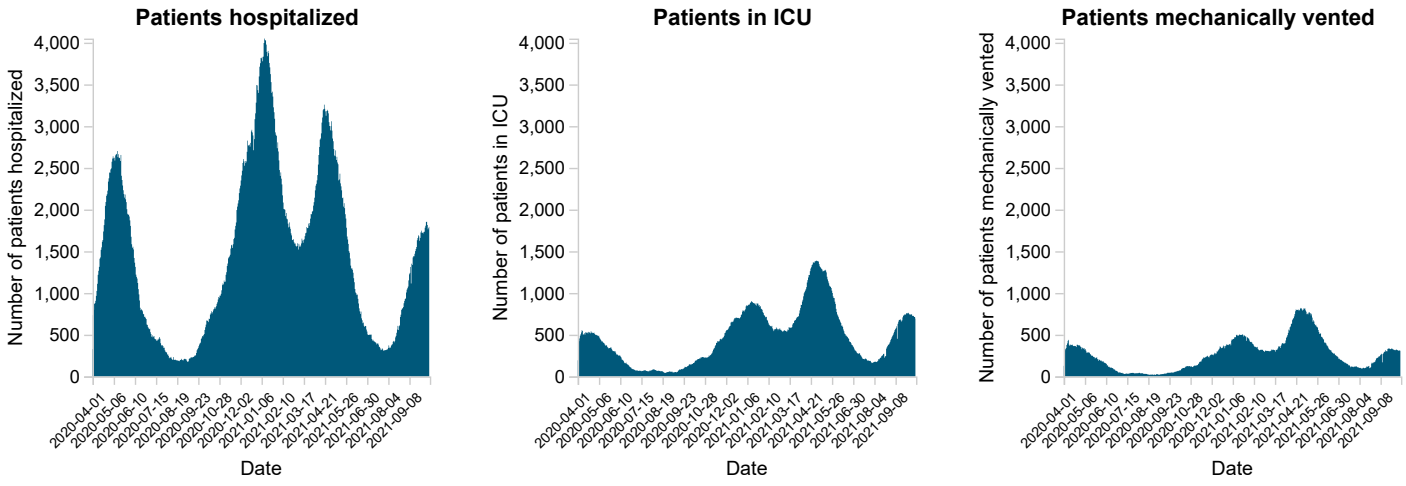
Note: When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

For more information on cases following vaccination, please see the Weekly epidemiology report (PDF) available on the Government of Canada's COVID-19 data trends page.

Severe illness and outcomes

Hospital use

Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of October 11, 2021



Between October 4, 2021 and October 11, 2021:

- the number of **hospital beds** occupied by COVID-19 patients **increased** from **1,782** to **1,793** beds.
- the number of **ICU beds** occupied by COVID-19 patients **decreased** from **744** to **693** beds.
- the number of **COVID-19 patients who were mechanically vented decreased** from **323** to **308**.

Hospitalizations and deaths to date

We have detailed case report data on 1,665,583 cases, and hospitalization status for 1,203,931 (72.3%) of them:

- **86,297** cases **(7.2%)** were hospitalized, of whom:
  - **16,491 (19.1%)** were admitted to the ICU
  - **2,046 (2.4%)** needed mechanical ventilation

The provinces and territories provided detailed case report forms for **28,249** deaths related to COVID-19.

Figure 7a. Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of October 15, 2021, 7 pm EDT (n=86,140 [1])

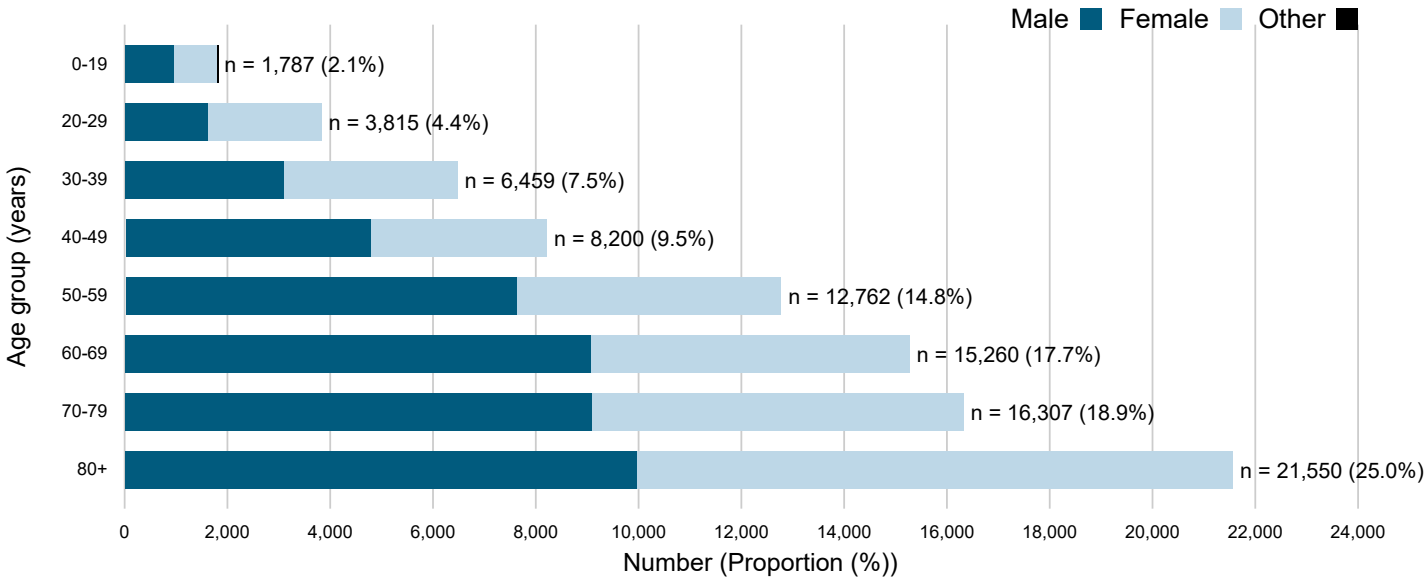


Figure 7b. Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of October 15, 2021, 7 pm EDT (n=16,452 [1])

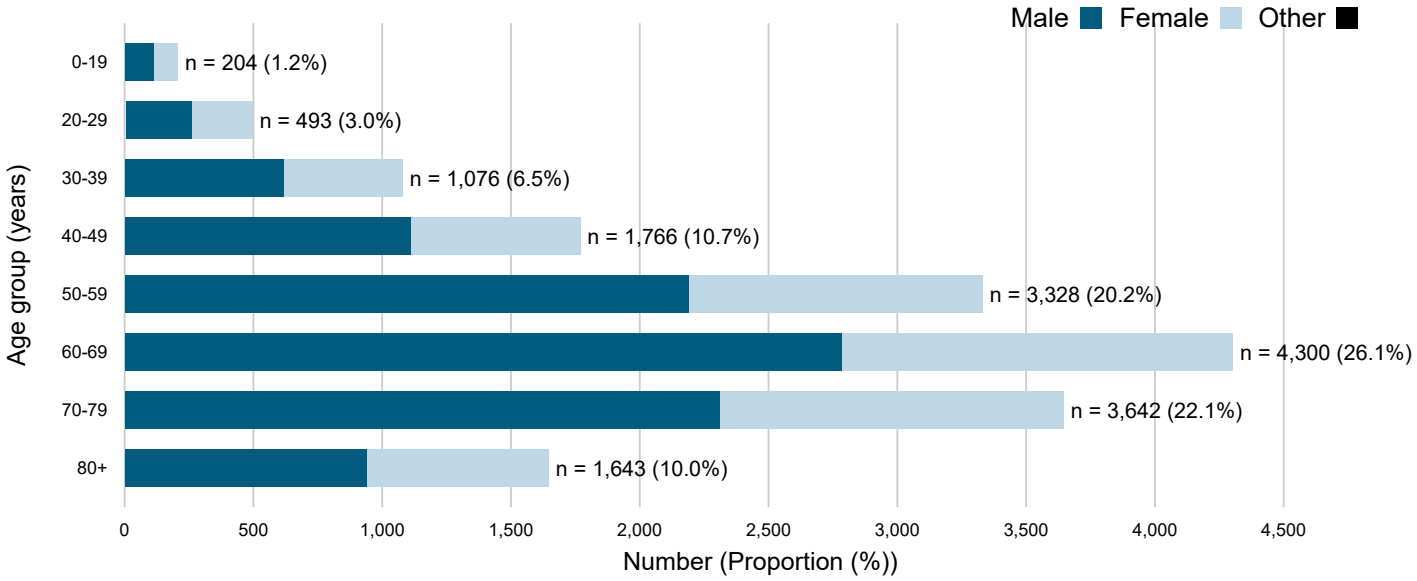
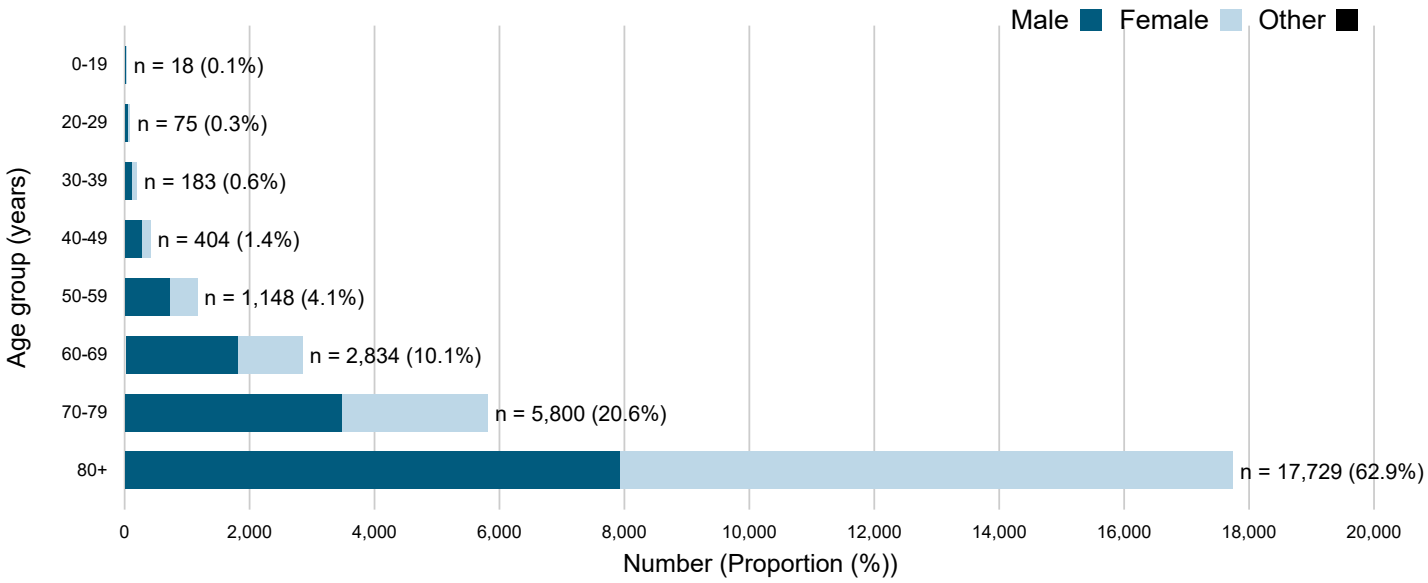


Figure 7c. Age and gender [4] distribution of COVID-19 cases deceased in Canada as of October 15, 2021, 7 pm EDT (n=28,191 [1])



Data note: Figure 7 includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age and gender information were available. Therefore, some COVID-19 hospitalizations, ICU admissions, and deaths may not be included in Figure 7.

Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of October 15, 2021, 7 pm EDT (n=86,140 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	1,787 (2.1%)	954 (1.1%)	832 (1.0%)	1 (0.0%)
20-29	3,815 (4.4%)	1,611 (1.9%)	2,204 (2.6%)	0 (0.0%)
30-39	6,459 (7.5%)	3,079 (3.6%)	3,380 (3.9%)	0 (0.0%)
40-49	8,200 (9.5%)	4,786 (5.6%)	3,414 (4.0%)	0 (0.0%)
50-59	12,762 (14.8%)	7,627 (8.9%)	5,135 (6.0%)	0 (0.0%)
60-69	15,260 (17.7%)	9,055 (10.5%)	6,205 (7.2%)	0 (0.0%)
70-79	16,307 (18.9%)	9,085 (10.5%)	7,222 (8.4%)	0 (0.0%)
80+	21,550 (25.0%)	9,970 (11.6%)	11,580 (13.4%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of October 15, 2021, 7 pm EDT (n=16,452 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	204 (1.2%)	114 (0.7%)	90 (0.5%)	0 (0.0%)
20-29	493 (3.0%)	260 (1.6%)	233 (1.4%)	0 (0.0%)
30-39	1,076 (6.5%)	616 (3.7%)	460 (2.8%)	0 (0.0%)
40-49	1,766 (10.7%)	1,107 (6.7%)	659 (4.0%)	0 (0.0%)
50-59	3,328 (20.2%)	2,188 (13.3%)	1,140 (6.9%)	0 (0.0%)
60-69	4,300 (26.1%)	2,785 (16.9%)	1,515 (9.2%)	0 (0.0%)
70-79	3,642 (22.1%)	2,307 (14.0%)	1,335 (8.1%)	0 (0.0%)
80+	1,643 (10.0%)	937 (5.7%)	706 (4.3%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases deceased in Canada as of October 15, 2021, 7 pm EDT (n=28,191 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	18 (0.1%)	7 (0.0%)	11 (0.0%)	0 (0.0%)
20-29	75 (0.3%)	49 (0.2%)	26 (0.1%)	0 (0.0%)
30-39	183 (0.6%)	114 (0.4%)	69 (0.2%)	0 (0.0%)
40-49	404 (1.4%)	265 (0.9%)	139 (0.5%)	0 (0.0%)
50-59	1,148 (4.1%)	708 (2.5%)	440 (1.6%)	0 (0.0%)
60-69	2,834 (10.1%)	1,808 (6.4%)	1,026 (3.6%)	0 (0.0%)
70-79	5,800 (20.6%)	3,466 (12.3%)	2,334 (8.3%)	0 (0.0%)
80+	17,729 (62.9%)	7,928 (28.1%)	9,801 (34.8%)	0 (0.00%)

Provincial, territorial and international reporting

For more information, please refer to provincial or territorial COVID-19 webpages:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut
- World Health Organization
- Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

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1 This figure is based on cases for which a case report form was received by the Public Health Agency of Canada from provincial or territorial partners.

2 The shaded area represents a period of accumulating data where it is expected that cases have occurred but have not yet been reported nationally. The earliest of the following dates were used as an estimate: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.

3 Exposure information may not be available for all cases. Some jurisdictions haven't consistently reported to PHAC how people were exposed throughout the pandemic. As a result, this may underestimate the total number of cases by different exposures, especially among returning travelers.

4 Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Date modified:

2021-10-19

Government of Canada / Gouvernement du Canada

COVID-19 daily epidemiology update

Updated: November 19, 2021, 7 pm EST

Summary of COVID-19 cases across Canada and over time. Contains detailed data about the spread of the virus over time and in different regions of the country. Includes breakdowns by age and sex or gender. Provides an overview of hospitalizations and deaths, testing, variants of concern and exposures.

Key updates as of November 19, 2021, 7 pm EST

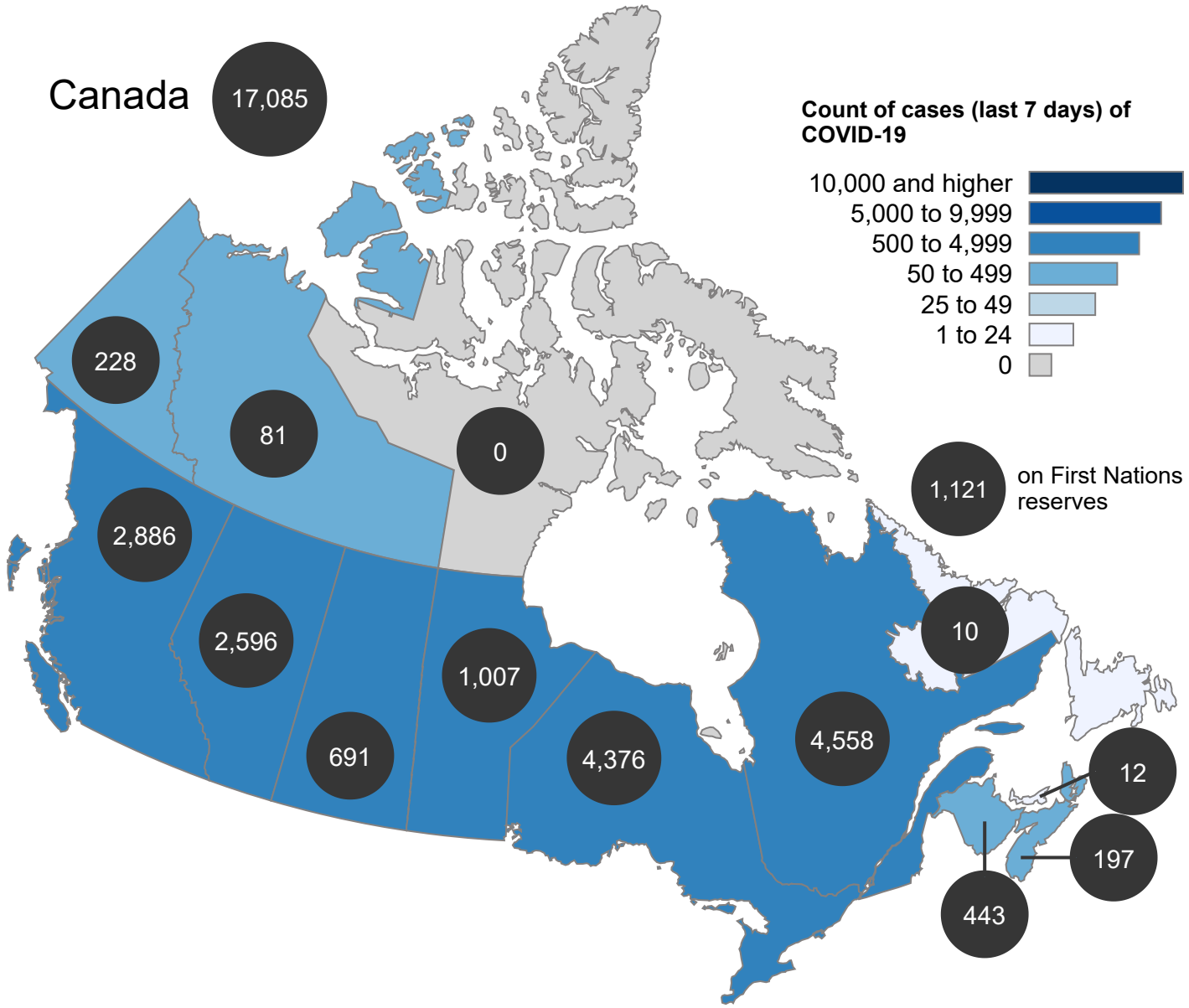
Cases today	Total cases	Active cases	Total resolved	Deaths today	Total deaths
2,875	1,762,434	23,841	1,709,112	19	29,481

Total tests performed	Daily percent positive (last 7 days)	Daily tests per 100,000 population (last 7 days)
47,889,820	3.0%	216

- We update these sections Monday to Friday at 7:00 PM EST: Key updates, Current situation and National overview. Laboratory data represents specimens received by labs up to November 17, 2021 to allow time to process results.
- We update these sections every Friday: Epidemic curve, Demographics, How people were exposed, and Severe illness and outcomes.
- Of the 12 jurisdictions reporting updates, no new cases were reported in 1 provinces and territories in the past 24 hours.
- Of the 12 jurisdictions reporting updates, no new deaths were reported in 5 provinces and territories in the past 24 hours.

Current situation

Figure 1a. Count of cases (last 7 days) of COVID-19, by province/territory as of November 19, 2021



The count of cases (last 7 days) of COVID-19 in **Canada** was **17,085** as of November 19, 2021.

This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of November 19, 2021, 2021, 7 PM EDT. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

Areas in Canada with cases of COVID-19 as of November 19, 2021

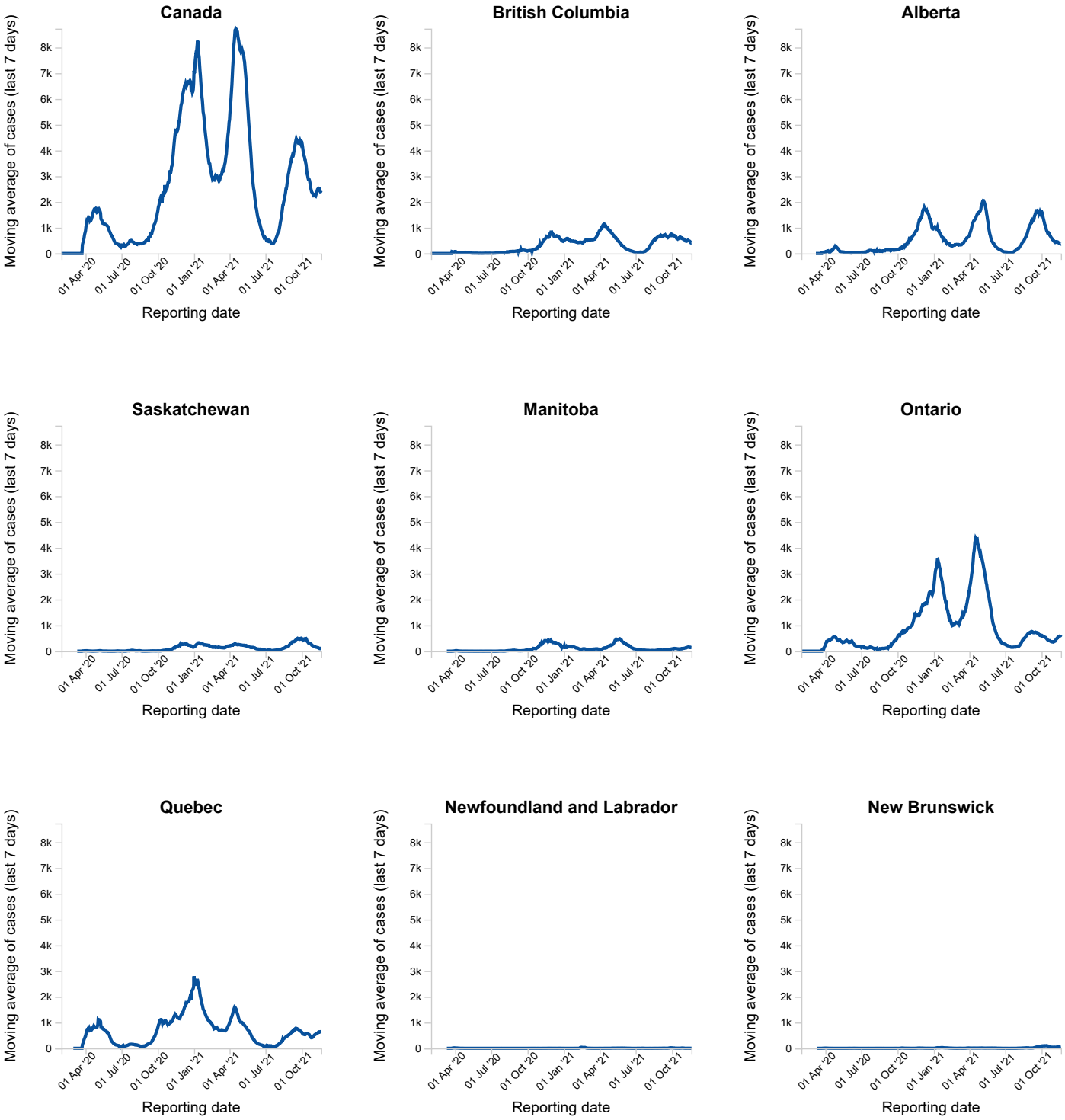
	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
Location	Count	Rate*	Count	Rate*	Count	Rate*	Count	Count	Rate*	Count	Rate*	Count	Count	Rate*	Percent
Canada	**1,762,434**	**4,608**	**17,085**	**45**	**23,841**	**62**	**1,709,112**	**29,481**	**77**	**172**	**0.5**	**47,889,820**	**82,607**	**216**	**3.0%**
British Columbia	214,636	4,116	2,886	55	3,641	70	208,702	2,293	44	36	0.7	4,478,793	11,790	226	3.6%
Alberta	331,626	7,464	2,596	58	5,293	119	323,122	3,211	72	40	0.9	6,018,618	7,958	179	4.7%
Saskatchewan	80,025	6,783	691	59	1,102	93	78,015	908	77	17	1.4	1,254,854	1,535	130	6.2%
Manitoba	66,378	4,797	1,007	73	1,449	105	63,644	1,285	93	16	1.2	1,189,454	2,793	202	6.2%
Ontario	610,222	4,116	4,376	30	5,094	34	595,169	9,959	67	38	0.3	19,311,894	26,465	179	2.4%
Quebec	437,549	5,085	4,558	53	6,128	71	419,869	11,552	134	17	0.2	13,032,770	27,506	320	2.4%
Newfoundland and Labrador	2,035	391	10	2	26	5	1,992	17	3	1	0.2	389,137	N/A	N/A	N/A
New Brunswick	7,512	952	443	56	608	77	6,782	122	15	1	0.1	554,382	1,026	130	5.8%
Nova Scotia	8,012	808	197	20	222	22	7,684	106	11	4	0.4	1,366,618	3,044	307	1.0%
Prince Edward Island	339	206	12	7	12	7	327	0	0	0	0.0	226,003	414	252	0.4%
Yukon	1,381	3,213	228	530	152	354	1,217	12	28	2	4.7	9,129	N/A	N/A	N/A
Northwest Territories	2,032	4,466	81	178	114	251	1,906	12	26	0	0.0	35,661	37	81	3.9%
Nunavut	674	1,711	0	0	0	0	670	4	10	0	0.0	22,431	38	97	0.0%

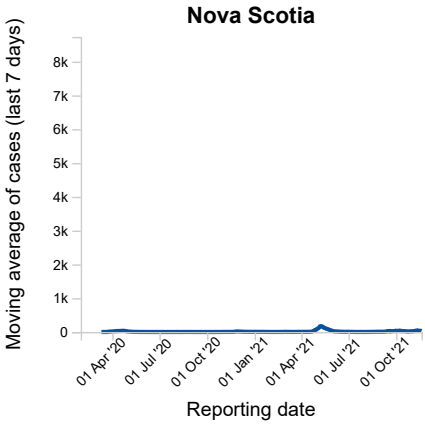
* Rate per 100,000 population

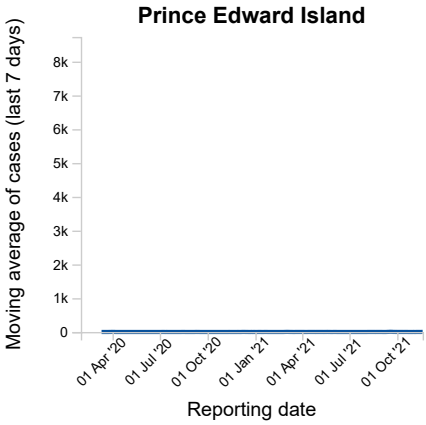
566-02-48305

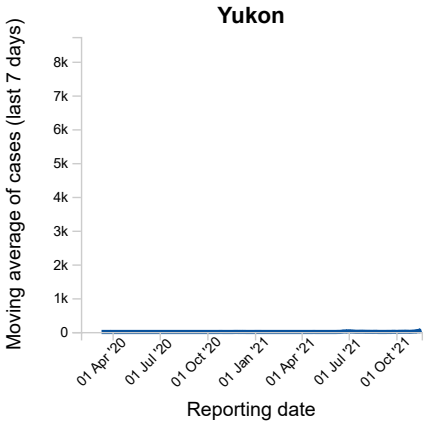
Figure 1b. Moving average of cases (last 7 days) of COVID-19 in Canada as of November 19, 2021, 7 pm EDT

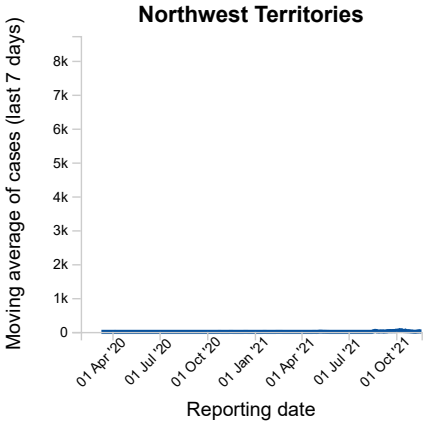
The figures below show cases over time. The range of dates (January 31st, 2020 - present date) is the same for each figure. This allows you to compare the provinces and territories on the same timescale.

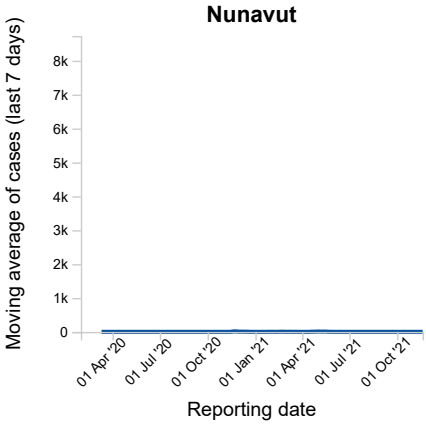












a. This information is based on data from our provincial and territorial partners. Data about cases was last updated on November 19, 2021. Laboratory data includes specimens received by labs up to November 17, 2021. For the most up to date data for any province, territory or city, please visit their web site.
b. The 7-day moving average is the total of the daily numbers for the previous 7 days (up to and including the day of the last update), divided by the number of days for which data is available. We go back and update the moving averages as provinces and territories submit more data. We calculate the national 7-day moving average by summing the 7-day moving average from the provinces and territories then dividing by the national population if a rate is calculated.

Downloadable data (in .csv format).

Note: Out of the total number of people tested, 76 were repatriated travellers, of which 13 were cases.

National overview

There have been over **47,889,820** COVID-19 tests performed in Canada or **1,252,149 tests per 1 million people**. For information about testing trends, please see the Detailed weekly epidemiological report (PDF).

Table 1. Daily* change in the number of cases, deaths and tests performed, by province or territory, as of November 19, 2021, 7 pm EST

Location	New cases	New deaths	Tests performed
Canada	**2,875**	**19**	**116,838**
British Columbia	486	3	14,062
Alberta	412	2	8,948
Saskatchewan	89	3	1,644
Manitoba	194	4	3,768
Ontario	793	4	34,347
Quebec	745	2	48,490
Newfoundland and Labrador	4	0	N/A
New Brunswick	90	0	1,089
Nova Scotia	27	1	3,726
Prince Edward Island	3	0	663
Yukon	32	0	N/A
Northwest Territories	N/A	N/A	27
Nunavut	0	0	74

* The new cases, deaths and tests reflect the difference between a province or territory's current report and their last report. Some provinces and territories do not update daily.

N/A means that no daily update was provided by the province or territory.

COVID-19 variants in Canada

All viruses, including COVID-19, change over time. These changes are called mutations, and result in variants of the virus. Not all mutations are of concern. Most do not cause more severe illness. However, some mutations result in variants of concern or variants of interest.

A variant of concern has mutations that are significant to public health. Before a variant of interest is considered one of concern, scientists and public health professionals must determine if the mutations result in an actual change in the behaviour of the virus. For example, it might:

- spread more easily
- cause more severe illness
- require different treatments, or
- reduce vaccine effectiveness

There are several variants of interest that have mutations similar to variants of concern, but we don’t yet know if they pose a higher risk to public health.

The Public Health Agency of Canada (PHAC) works with provincial and territorial partners and the Canadian COVID-19 Genomics Network (CanCOGeN) to sequence a percentage of all positive COVID-19 test results. Sequencing reveals the genetic code of the virus, which tells us which variant is involved in a specific case of COVID-19. We report the proportion of COVID-19 variants in Canada every week.

We collect evidence to determine if new variants meet the definition for a variant of concern or a variant of interest. Many variants are being tracked across Canada and around the world. Variants of concern now represent a majority of COVID-19 cases in Canada.

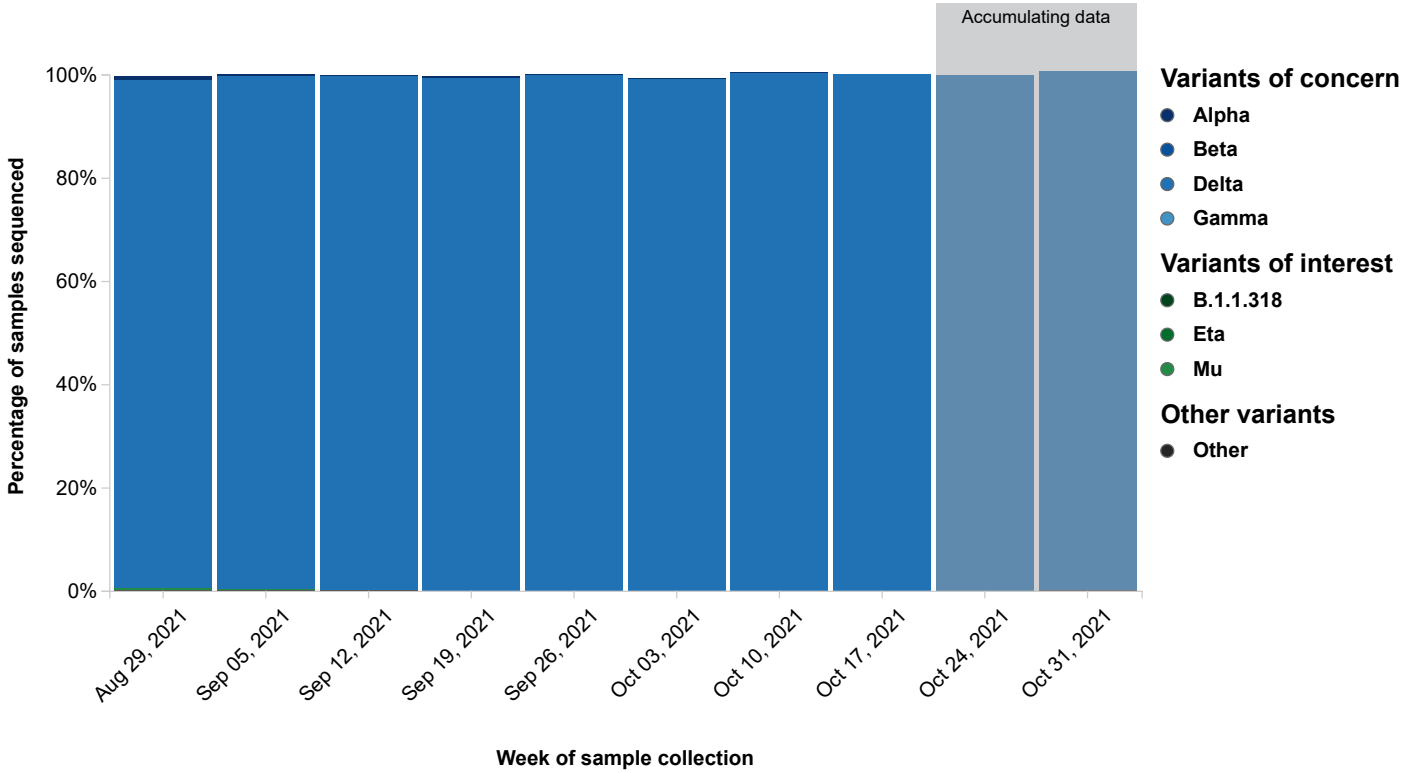
Four VOC (Variants of concern)s have been detected in most provinces and territories:

- B.1.1.7 (Alpha)
- B.1.351 (Beta)
- P.1 (Gamma)
- B.1.617.2 (Delta)

New variants will continue to appear. We must remain vigilant and take all available measures to limit spread.

Figure 2. Weekly variant breakdown Updated: November 19, 2021, 4 pm EST

The graphic shows the percentage mix of COVID-19 variants detected in Canada through whole genome sequencing, by week of sample collection. You can see the numbers for each date by hovering over, tabbing to, or long-pressing any of the bars. To see a specific variant or variant grouping, click or press return. Repeat to restore the complete graph.



This information is based on whole genome sequencing from surveillance testing in all provinces and territories. In addition to sequencing done by the National Microbiology Laboratory in Winnipeg, data is included from provincial and territorial laboratories.

Sequencing takes from 1 to 3 weeks to complete, so the proportions for recent weeks may change as more data are added. Surveillance in each province or territory is organized and prioritized according to local needs and may change from time to time. Because of differences in local sampling and reporting, the percentages illustrate trends rather than precise measurements.

Weekly variant breakdown

Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection.

Variant Grouping	Aug 29, 2021 (n=7,705)	Sep 05, 2021 (n=6,445)	Sep 12, 2021 (n=3,865)	Sep 19, 2021 (n=3,515)	Sep 26, 2021 (n=4,052)	Oct 03, 2021 (n=5,527)	Oct 10, 2021 (n=4,278)	Oct 17, 2021 (n=4,416)	Oct 24, 2021 (n=3,029)	Oct 3 2021 (n=1,3
Variants of concern	**99.1%**	**99.7%**	**99.7%**	**99.7%**	**100.1%**	**99.3%**	**100.4%**	**100.1%**	**99.8%**	**100.**
Alpha	0.6%	0.3%	0.1%	0.3%	0.1%	0.1%	0.1%	-	-	-
Beta	-	-	-	-	-	-	-	-	-	-
Delta	98.5%	99.4%	99.6%	99.4%	100.0%	99.2%	100.3%	100.1%	99.8%	100.
Gamma	-	-	-	-	-	-	-	-	-	-
Variants of interest	**0.3%**	**0.3%**	**0.0%**	**-**	**-**	**-**	**-**	**-**	**0.0%**	**-**
B.1.1.318	-	-	-	-	-	-	-	-	-	-
B.1.617.3	-	-	-	-	-	-	-	-	-	-
Eta	-	-	-	-	-	-	-	-	-	-
Iota	-	-	-	-	-	-	-	-	-	-
Lambda	-	-	-	-	-	-	-	-	-	-
Mu	0.3%	0.3%	-	-	-	-	-	-	-	-
Theta	-	-	-	-	-	-	-	-	-	-
Other variants	**0.2%**	**0.1%**	**0.2%**	**0.0%**	**-**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**
Other	0.2%	0.1%	0.2%	-	-	-	-	-	-	0.1%

Contributing laboratories:

- Saskatchewan - Roy Romanow Provincial Laboratory (RRPL)
- Public Health Ontario (PHO)
- Newfoundland and Labrador - Eastern Health
- New Brunswick – Vitalité Health Network
- Manitoba Cadham Provincial Laboratory
- Laboratoire de santé publique du Québec (LSPQ)
- BCCDC Public Health Laboratory

- Alberta Precision Labs - Edmonton (APL)
- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

Detailed case information

The tables and figures below reflect detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.

Updated: November 19, 2021, 7 pm EST

Epidemic curve

As of November 19, 2021, 7 pm EST, PHAC has received detailed case report data on 1,750,490 cases. Both exposure and symptom onset date were available for 1,298,966 (74.2%) cases [1].

The shaded area on the far right of Figure 3 represents a period of accumulating data. This is the period of time (1 to 2 weeks) before the latest cases are reported to PHAC. This delay is a result of the time required to seek health care, get tested and receive results. It also takes time for public health authorities to gather information on cases. We update this information as it becomes available.

Figure 3. COVID-19 cases (n=1,750,490 [1]) in Canada by date [2] as of November 19, 2021, 7 pm EST (total cases)

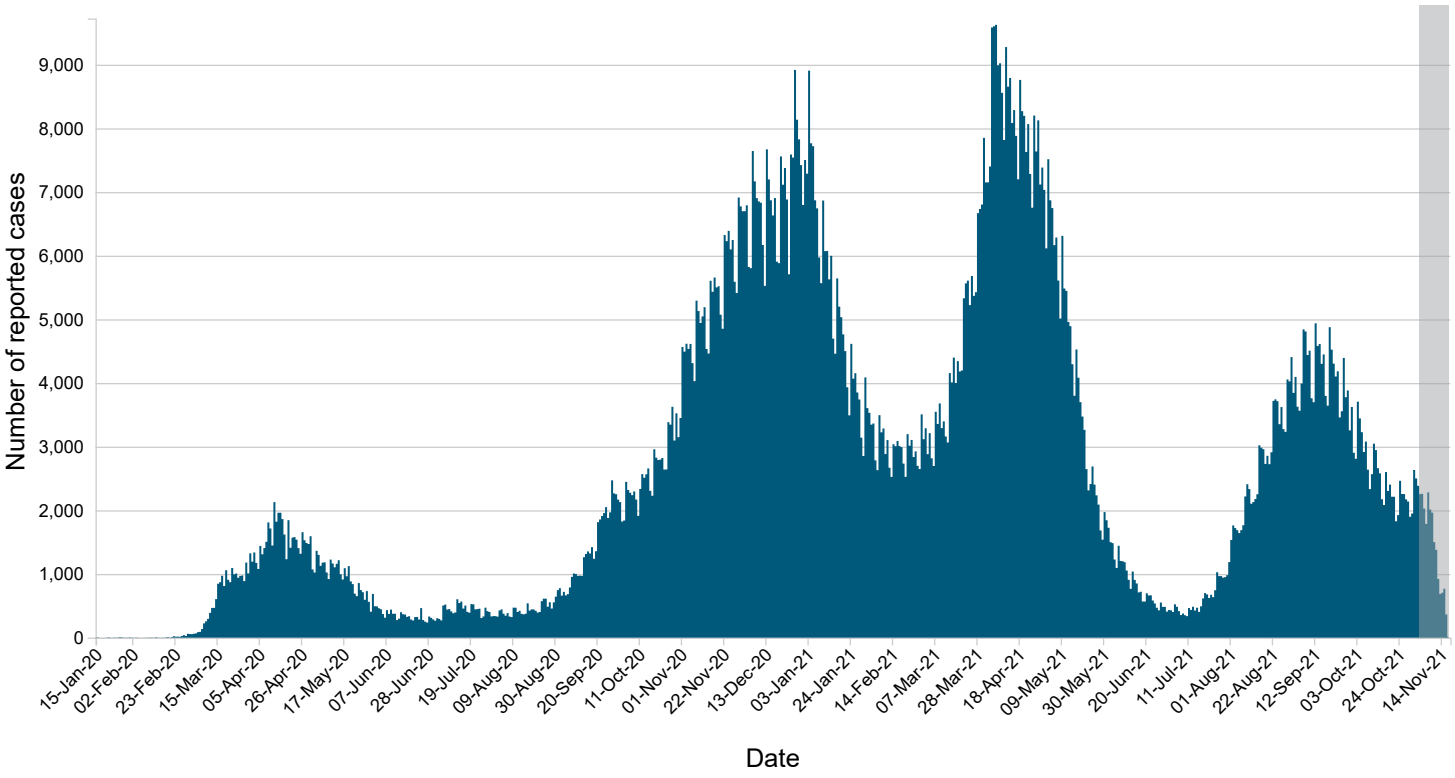


Figure 3. COVID-19 cases (n=1,298,966 [1]) in Canada by date [2] as of November 19, 2021, 7 pm EST (by exposure)

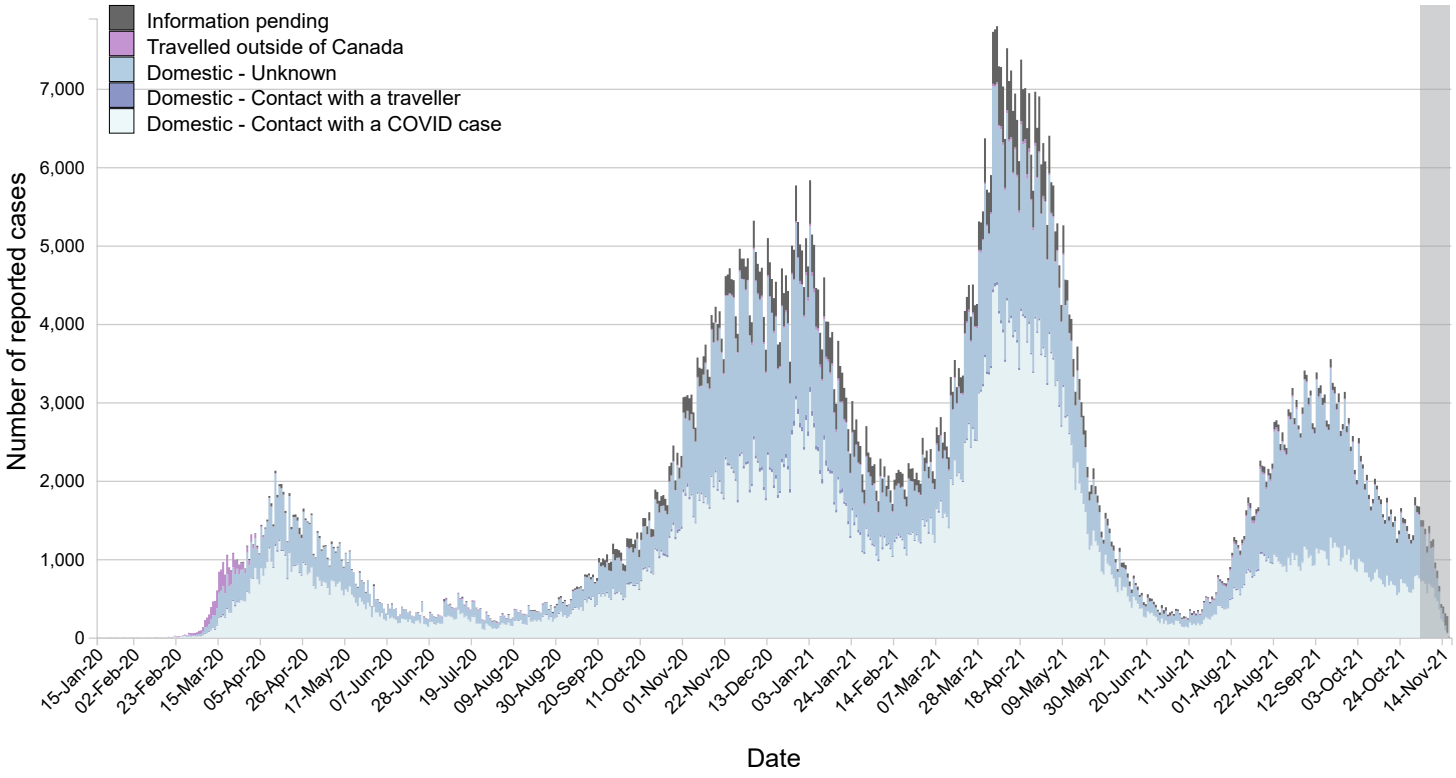


Figure 3. COVID-19 cases (n=1,671,066 [1]) in Canada by date [2] as of November 19, 2021, 7 pm EST (by age - 10 year groups)

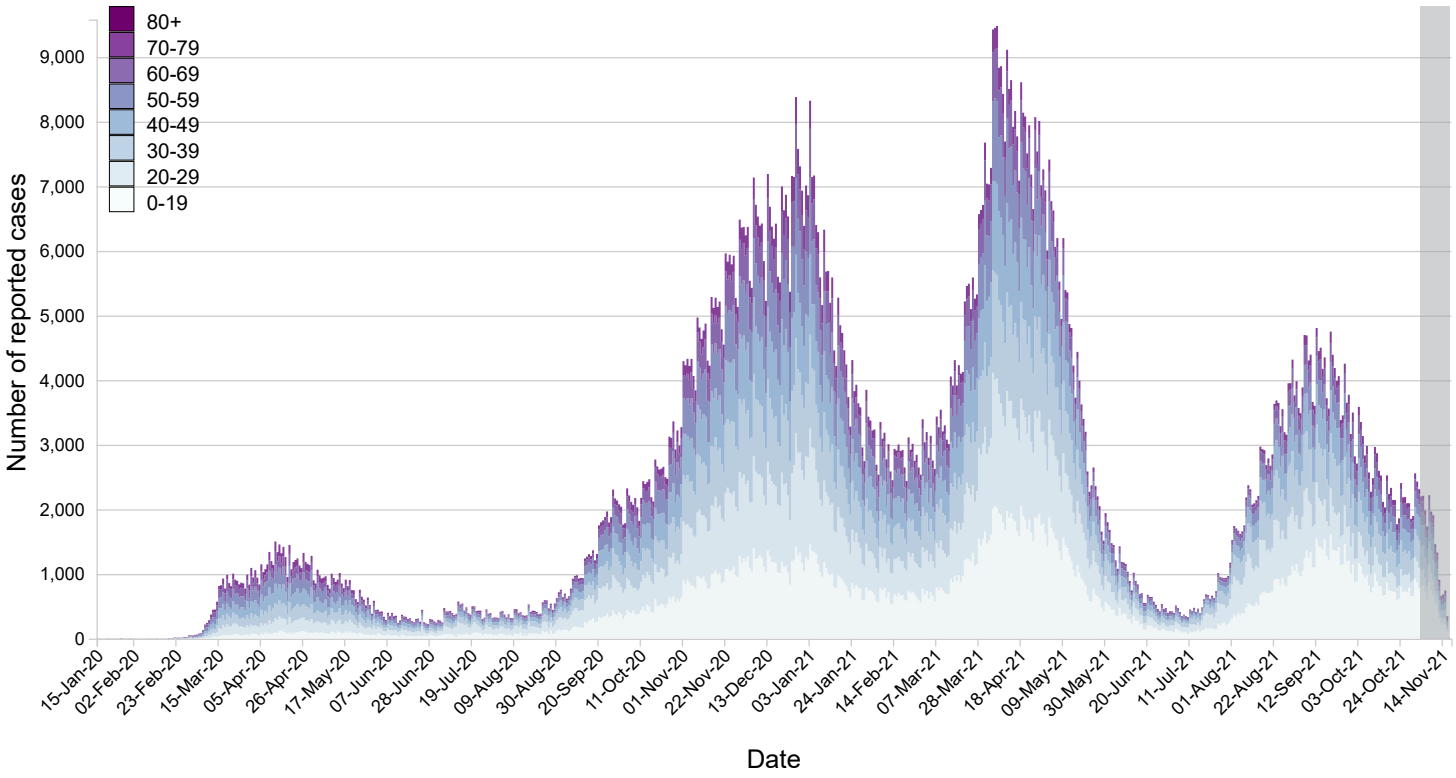
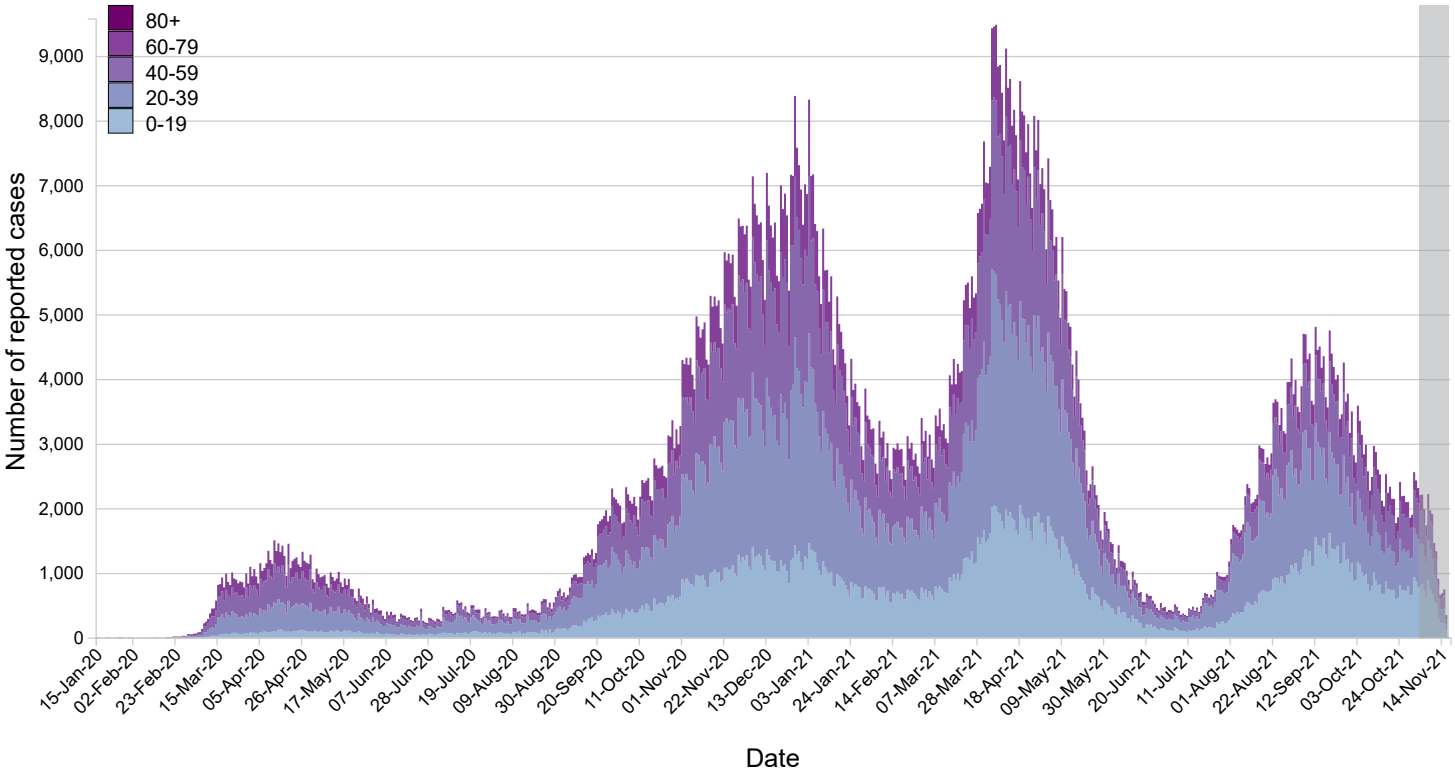


Figure 3. COVID-19 cases (n=1,671,066 [1]) in Canada by date [2] as of November 19, 2021, 7 pm EST (by age - 20 year groups)



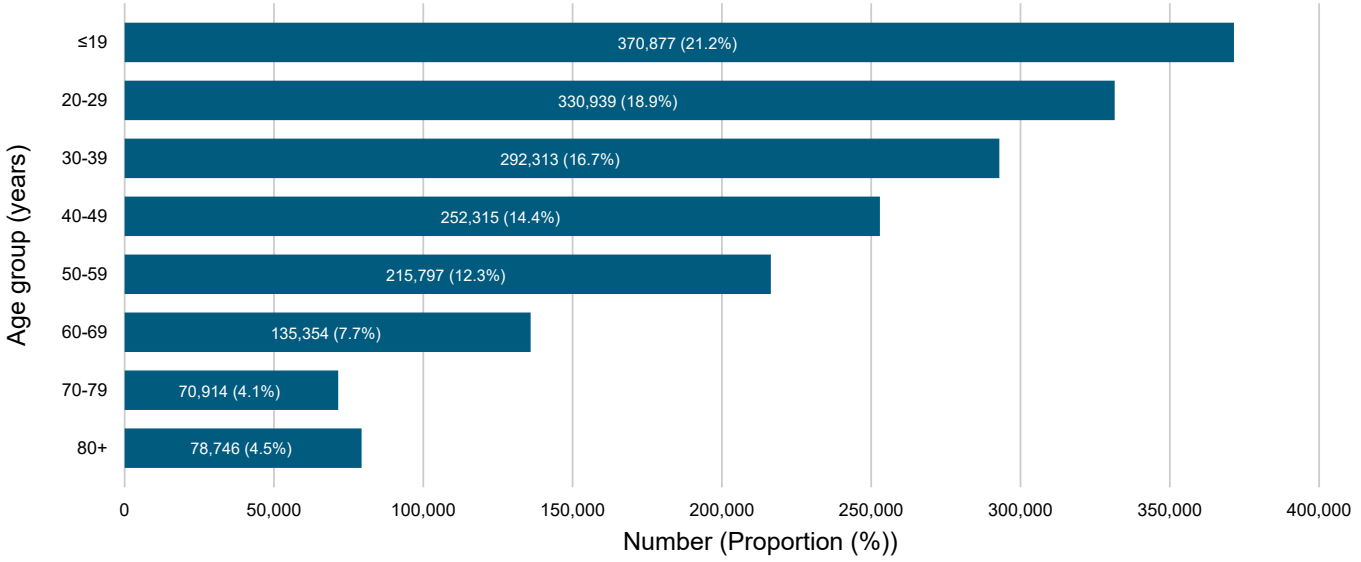
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

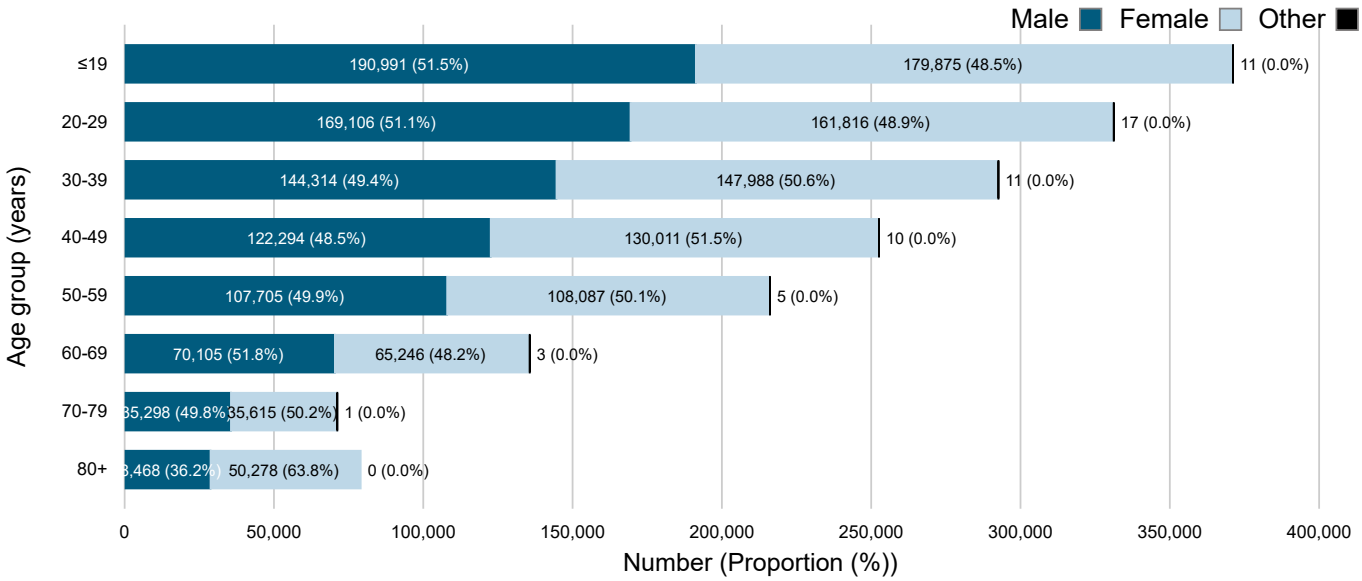
Demographics

We have detailed case report data from 1,750,490 cases. We know the age of patients in 100.00% of cases, and both age and gender in 99.82% of cases.

Of the cases reported in Canada so far, 50.3% were female and 35.7% were between 20 and 39 years old (Figure 4).

Figure 4. Age distribution of COVID-19 cases (n=1,750,490 [1]) in Canada as of November 19, 2021, 7 pm EST [4]





Age by gender [4] distribution of COVID-19 cases (n=1,750,490 [1]) in Canada, November 19, 2021, 7 pm EST

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
≤19	370,877 (21.2%)	190,991 (22.0%)	179,875 (20.5%)	11 (19.0%)
20-29	330,939 (18.9%)	169,106 (19.5%)	161,816 (18.4%)	17 (29.3%)
30-39	292,313 (16.7%)	144,314 (16.6%)	147,988 (16.8%)	11 (19.0%)
40-49	252,315 (14.4%)	122,294 (14.1%)	130,011 (14.8%)	10 (17.2%)
50-59	215,797 (12.3%)	107,705 (12.4%)	108,087 (12.3%)	5 (8.6%)
60-69	135,354 (7.7%)	70,105 (8.1%)	65,246 (7.4%)	3 (5.2%)
70-79	70,914 (4.1%)	35,298 (4.1%)	35,615 (4.1%)	1 (1.7%)
80+	78,746 (4.5%)	28,468 (3.3%)	50,278 (5.7%)	0 (0.0%)
Total	1,747,255 (100%)	868,281 (100%)	878,916 (100%)	58 (100%)

How people were exposed [3]

In Canada, detailed case report data were provided for 1,750,490 cases. We have exposure history for 1,298,966 (74.2%) cases. The probable exposure setting of these cases [1] are:

- any exposure that occurred in Canada: **1,200,853 (92.4%)**, including
  - from contact with a known COVID case: **691,524 (53.2%)**
  - from contact with a traveller: **9,467 (0.7%)**
  - from an unknown source: **499,862 (38.5%)**
- currently unknown (information pending): **86,218 (6.6%)**
- travelled outside of Canada: **11,895 (0.9%)**

Cases following vaccination

Data extracted on November 12, 2021 for cases from December 14, 2020 up until October 30, 2021.

While the COVID-19 vaccines are effective, there is still a small percentage of the population who are vaccinated that will still be infected with COVID-19 if they are exposed to the virus that causes it. This means that even with high vaccine effectiveness, a small percentage of the population who are vaccinated against COVID-19 will still get sick and some may be hospitalized or even die as a result of their illness. It is also possible that a person could be infected just before or just after vaccination and still get sick. It typically takes about two weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

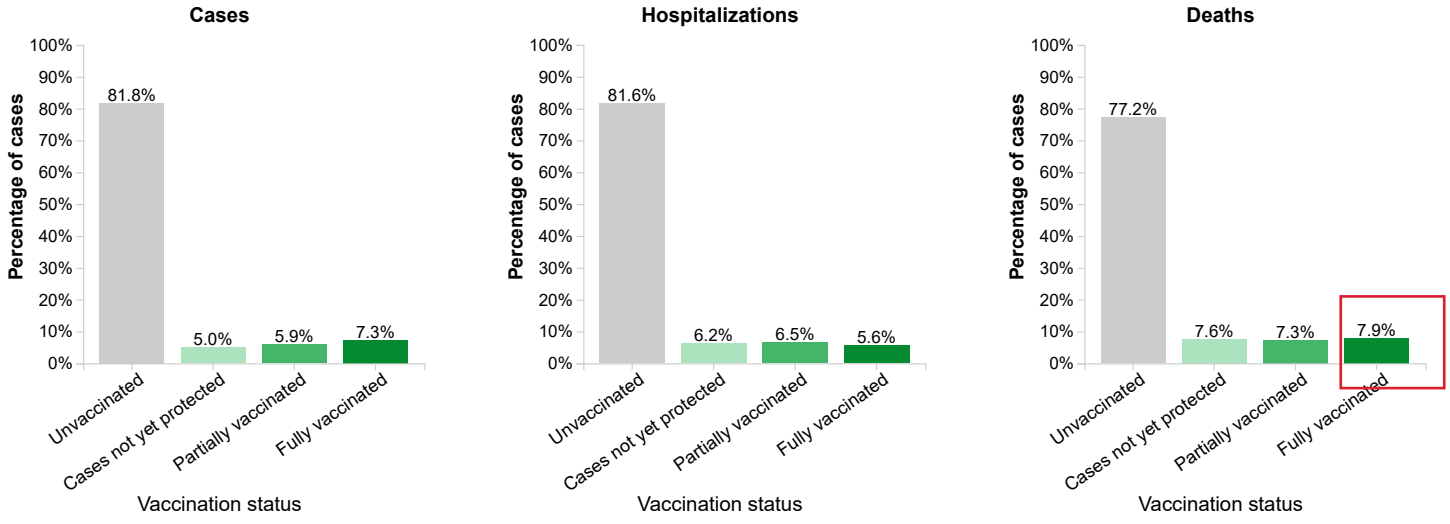
Cases reported since the start of the vaccination campaign, as of October 30, 2021

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 79.7% (n=845,177) of COVID-19 cases aged 12 years or older.

Of these cases:

- 691,361 (81.8%) were unvaccinated at the time of their episode date
- 42,321 (5.0%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 49,670 (5.9%) were only partially vaccinated, as their episode date occurred either 14 days or more after their first dose or less than 14 days after their second dose
- 61,825 (7.3%) were fully vaccinated, as their episode date occurred 14 days or more after their second dose

Figure 5. Distribution of confirmed COVID-19 cases reported to PHAC by vaccination status as of October 30, 2021



Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of October 30, 2021

Status	Cases	Hospitalizations	Deaths
Unvaccinated	81.8%	81.6%	77.2%
Cases not yet protected	5.0%	6.2%	7.6%
Partially vaccinated	5.9%	6.5%	7.3%
Fully vaccinated	7.3%	5.6%	7.9%

Among the twelve jurisdictions currently reporting case-level vaccine history data to PHAC, a total of 23.0 million people have received at least one dose of the COVID-19 vaccine as of October 30, 2021.

Of these people:

- 22.7 million achieved partial vaccination status, of which 49,670 (0.22%) were diagnosed with COVID-19 while partially vaccinated
- 21.3 million achieved full vaccination status, of which 61,825 (0.29%) were diagnosed with COVID-19 while fully vaccinated

Based on detailed case information reported to PHAC from provinces and territories, cases following vaccination were reported more frequently among females and those aged 60 years and older (Table 2). This may be the result of higher vaccination coverage in Canada among females and those aged 60 years and older due to the prioritization of older age groups and healthcare workers as part of the vaccine rollout.

Table 2. Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of October 30, 2021

		Unvaccinated (n=691,361)	**Cases not yet protected** (n=42,321)	**Partially vaccinated** (n=49,670)	**Fully vaccinated** (n=61,825)	**Total cases** (n=845,177)
Gender*	Male	353,515 (83.4%)	20,346 (4.8%)	23,187 (5.5%)	26,981 (6.4%)	424,029 (100%)
	Female	336,312 (80.2%)	21,915 (5.2%)	26,409 (6.3%)	34,778 (8.3%)	419,414 (100%)
Hospitalizations		37,742 (81.6%)	2,883 (6.2%)	3,015 (6.5%)	2,610 (5.6%)	46,250 (100%)
Deaths		7,540 (77.2%)	741 (7.6%)	710 (7.3%)	776 (7.9%)	9,767 (100%)

Source: Detailed case information received by PHAC from provinces and territories, since December 14, 2020

Note:

- There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset. A data cut-off of October 30, 2021 was used to account for any reporting delays associated with vaccine history information.
- *Cases with missing gender were excluded. Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Fully vaccinated individuals diagnosed with COVID-19 were significantly protected from severe outcomes. Compared to unvaccinated cases, fully vaccinated cases were 80% less likely to be hospitalized and 67% less likely to die as a result of their illness (Table 3).

Table 3. Risk of severe outcomes among fully vaccinated cases compared to unvaccinated cases as of October 30, 2021

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.20 (0.19 - 0.21)
Deaths	0.33 (0.3 - 0.36)

*Adjusted for 10-year age groups and month of episode date

Source: Detailed case information received by PHAC from provinces and territories

Note: Due to the nature of the dataset (i.e. confirmed cases of COVID-19 in Canada), the odds of severe outcomes among cases following vaccination only considers vaccinated individuals that contracted COVID-19. It does not reflect the protection conferred by the vaccines to prevent COVID-19 infection.

Data for this analysis is extracted from the COVID-19 national data set, which contains detailed case-level information received by PHAC from all provinces and territories. Note that a data cut-off of October 30, 2021 was used to account for any reporting delays associated with vaccine history information. There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset.

PHAC monitors cases following vaccination using the following categories:

Unvaccinated cases: include those who were unvaccinated at the time of their episode date.

Cases not yet protected from vaccination include those whose episode date occurred less than 14 days after their first dose of the vaccine.

Partially vaccinated cases include those whose episode date occurred 14 days or more after their first vaccine dose or less than 14 days after their second dose of the vaccine.

Fully vaccinated cases include those whose episode date occurred 14 days or more after their second dose of a two dose vaccine series or those whose episode date occurred 14 days or more after one dose of a one-dose vaccine.

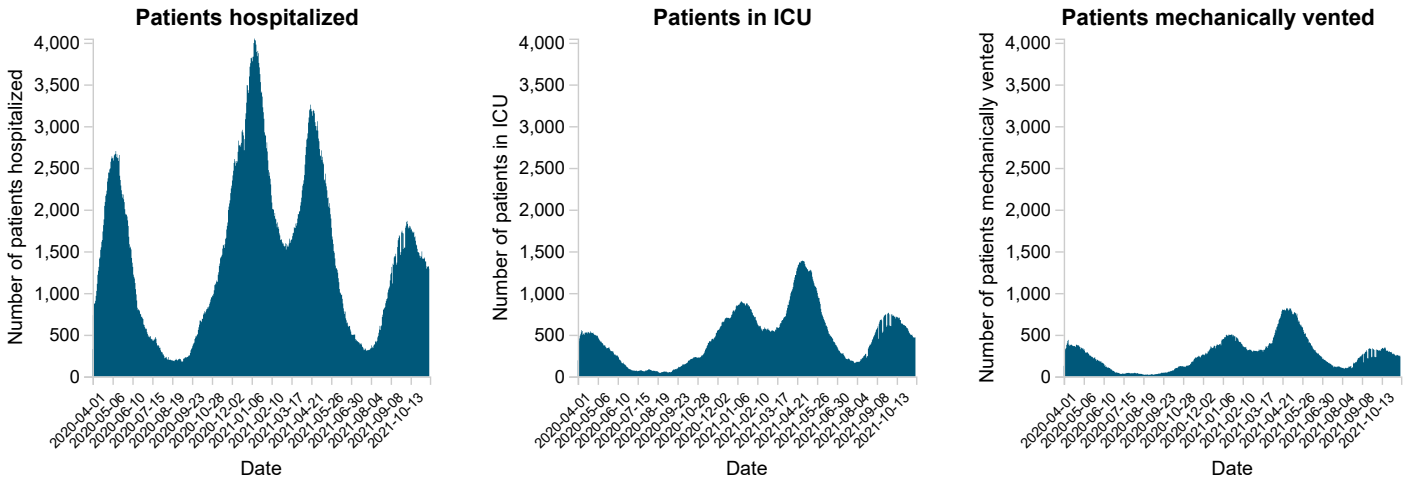
Note: When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

For more information on cases following vaccination, please see the Weekly epidemiology report (PDF) available on the Government of Canada's COVID-19 data trends page.

Severe illness and outcomes

Hospital use

Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of November 15, 2021



Between November 8, 2021 and November 15, 2021:

- the number of **hospital beds** occupied by COVID-19 patients **decreased** from **1,379** to **1,290** beds.
- the number of **ICU beds** occupied by COVID-19 patients **decreased** from **496** to **467** beds.
- the number of **COVID-19 patients who were mechanically vented decreased** from **252** to **239**.

Hospitalizations and deaths to date

We have detailed case report data on 1,750,490 cases, and hospitalization status for 1,274,671 (72.8%) of them:

- **91,139** cases **(7.2%)** were hospitalized, of whom:
  - **17,574 (19.3%)** were admitted to the ICU
  - **2,091 (2.3%)** needed mechanical ventilation

The provinces and territories provided detailed case report forms for **29,302** deaths related to COVID-19.

Figure 7a. Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of November 19, 2021, 7 pm EST (n=91,044 [1])

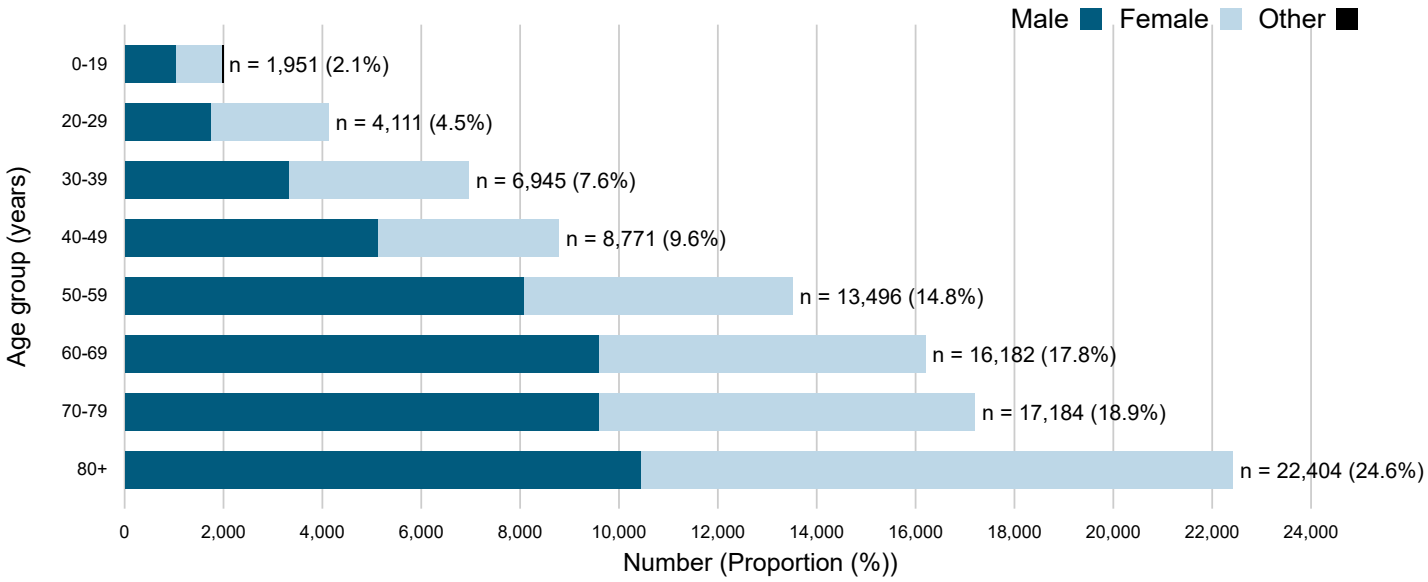


Figure 7b. Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of November 19, 2021, 7 pm EST (n=17,552 [1])

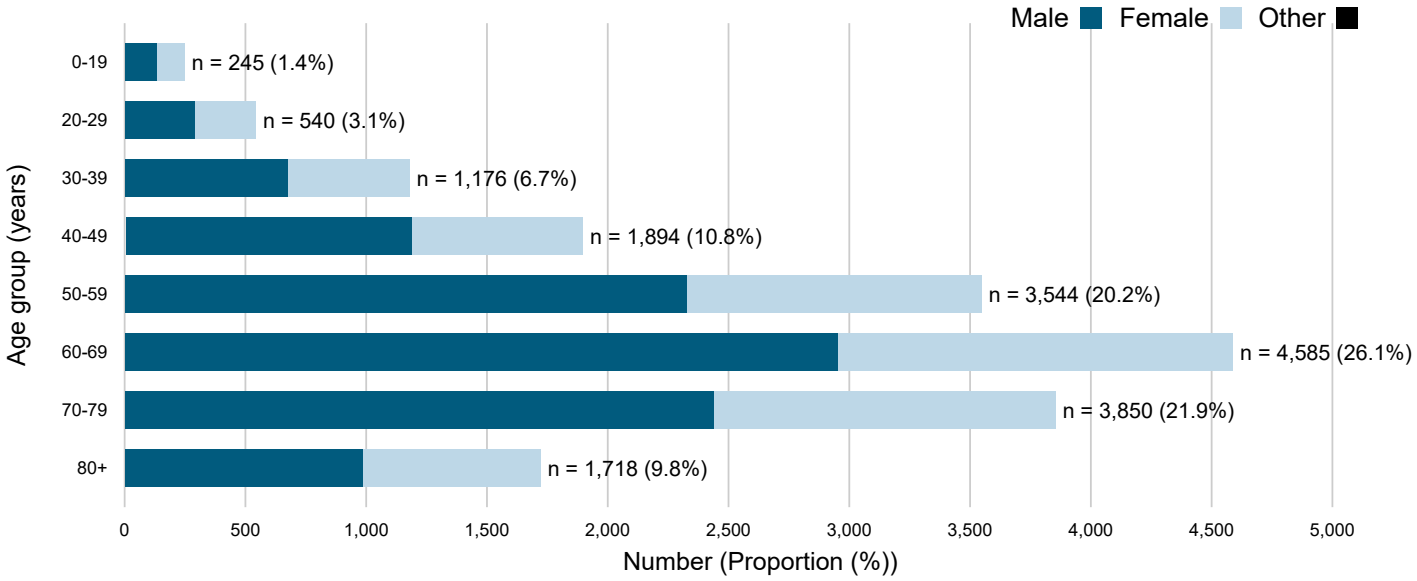
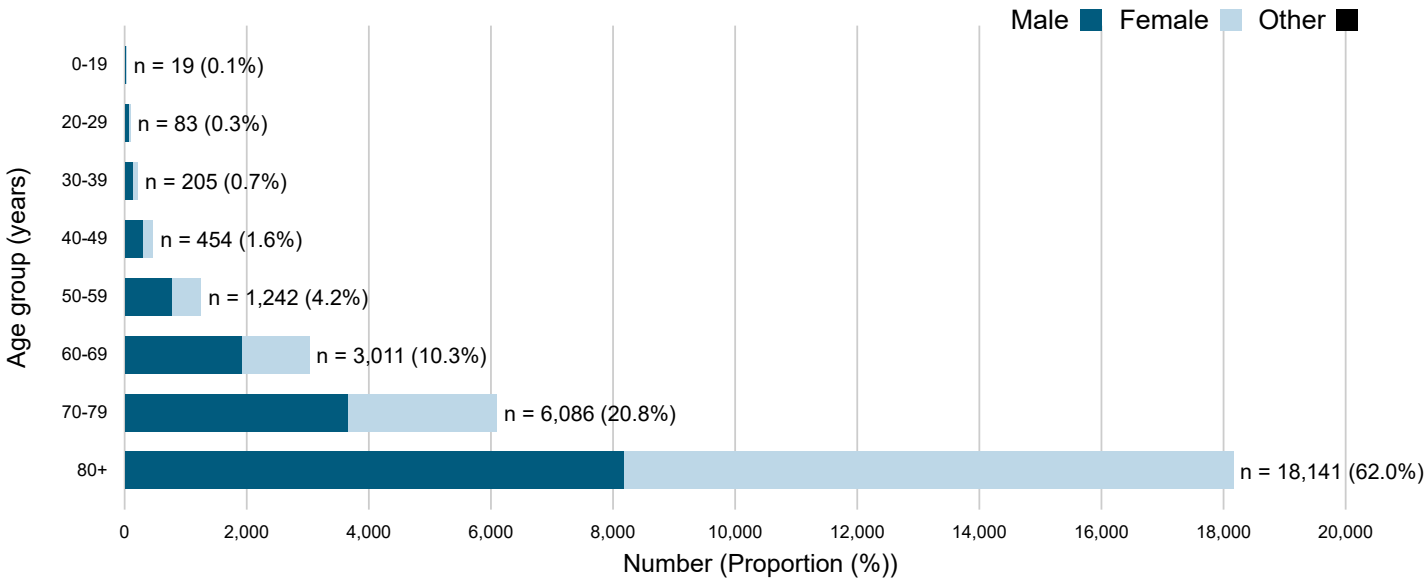


Figure 7c. Age and gender [4] distribution of COVID-19 cases deceased in Canada as of November 19, 2021, 7 pm EST (n=29,241 [1])



Data note: Figure 7 includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age and gender information were available. Therefore, some COVID-19 hospitalizations, ICU admissions, and deaths may not be included in Figure 7.

Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of November 19, 2021, 7 pm EST (n=91,044 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	1,951 (2.1%)	1,034 (1.1%)	916 (1.0%)	1 (0.0%)
20-29	4,111 (4.5%)	1,734 (1.9%)	2,377 (2.6%)	0 (0.0%)
30-39	6,945 (7.6%)	3,310 (3.6%)	3,635 (4.0%)	0 (0.0%)
40-49	8,771 (9.6%)	5,111 (5.6%)	3,660 (4.0%)	0 (0.0%)
50-59	13,496 (14.8%)	8,068 (8.9%)	5,428 (6.0%)	0 (0.0%)
60-69	16,182 (17.8%)	9,582 (10.5%)	6,600 (7.2%)	0 (0.0%)
70-79	17,184 (18.9%)	9,592 (10.5%)	7,592 (8.3%)	0 (0.0%)
80+	22,404 (24.6%)	10,433 (11.5%)	11,971 (13.1%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of November 19, 2021, 7 pm EST (n=17,552 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	245 (1.4%)	131 (0.7%)	114 (0.6%)	0 (0.0%)
20-29	540 (3.1%)	290 (1.7%)	250 (1.4%)	0 (0.0%)
30-39	1,176 (6.7%)	672 (3.8%)	504 (2.9%)	0 (0.0%)
40-49	1,894 (10.8%)	1,188 (6.8%)	706 (4.0%)	0 (0.0%)
50-59	3,544 (20.2%)	2,325 (13.2%)	1,219 (6.9%)	0 (0.0%)
60-69	4,585 (26.1%)	2,951 (16.8%)	1,634 (9.3%)	0 (0.0%)
70-79	3,850 (21.9%)	2,438 (13.9%)	1,412 (8.0%)	0 (0.0%)
80+	1,718 (9.8%)	983 (5.6%)	735 (4.2%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases deceased in Canada as of November 19, 2021, 7 pm EST (n=29,241 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-19	19 (0.1%)	7 (0.0%)	12 (0.0%)	0 (0.0%)
20-29	83 (0.3%)	52 (0.2%)	31 (0.1%)	0 (0.0%)
30-39	205 (0.7%)	125 (0.4%)	80 (0.3%)	0 (0.0%)
40-49	454 (1.6%)	295 (1.0%)	159 (0.5%)	0 (0.0%)
50-59	1,242 (4.2%)	767 (2.6%)	475 (1.6%)	0 (0.0%)
60-69	3,011 (10.3%)	1,913 (6.5%)	1,098 (3.8%)	0 (0.0%)
70-79	6,086 (20.8%)	3,653 (12.5%)	2,433 (8.3%)	0 (0.0%)
80+	18,141 (62.0%)	8,165 (27.9%)	9,976 (34.1%)	0 (0.00%)

Provincial, territorial and international reporting

For more information, please refer to provincial or territorial COVID-19 webpages:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut
- World Health Organization
- Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

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1 This figure is based on cases for which a case report form was received by the Public Health Agency of Canada from provincial or territorial partners.

2 The shaded area represents a period of accumulating data where it is expected that cases have occurred but have not yet been reported nationally. The earliest of the following dates were used as an estimate: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.

3 Exposure information may not be available for all cases. Some jurisdictions haven't consistently reported to PHAC how people were exposed throughout the pandemic. As a result, this may underestimate the total number of cases by different exposures, especially among returning travelers.

4 Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Date modified:

2021-11-19

github.com/open-canada/vitals/tree/main/docs/COVID-19%20epidemiology%20updates

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- R
- docs
  - COVID-19 epidemiol...
    - 04-April 29, 2021 E...
    - 07-July 30, 2021 Epi...
    - 09-September 24, 2...
    - 10-October 01, 202...
    - 10-October 19, 202...
    - 11-November 19, 2...
    - 11-November 19, 2...
    - 12-December 17, 2...
    - 12-December 23, 2...
    - readme.md
    - x01-January 05, 202...
    - x01-January 07 (till ...
    - x01-January 12, 202...
    - x02-February 04, 20...
    - x02-February 10 (till...
  - OneYearOfVaccineIn...
  - OneYearOfVaccineIn...
  - OneYearOfVaccineIn...
  - OneYearOfVaccineIn...
  - SideEffectReporting-...
  - _config.yml
  - analysis.md

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M-IVI rearranged 14896e9 · 4 years ago History

Name	Last commit message	Last commit date
..		
04-April 29, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
07-July 30, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
09-September 24, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
10-October 01, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
10-October 19, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
11-November 19, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
11-November 19, 2021, 7 pm ESTEpidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	rearranged	4 years ago
12-December 17, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
12-December 23, 2021 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
readme.md	Create readme.md	4 years ago
x01-January 05, 2022 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
x01-January 07 (till Dec 18), 2022 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	rearranged	4 years ago
x01-January 12, 2022 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
x02-February 04, 2022 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	Add files via upload	4 years ago
x02-February 10 (till Jan 22), 2022 Epidemiological-summary-of-COVID-19-cases-in-Canada-Canada.ca.pdf	rearranged	4 years ago

readme.md

This directory contains 'COVID-19 daily epidemiology update' reports cached from https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html using the using "WayBackMachine" Internet Archive (https://web.archive.org/)

PHAC-1: Cases following vaccination table and plots

Between Sept 25 and June 12,2022 (Evidence)

https://health-infobase.canada.ca/covid-19/

Excessed 2023-01-10

https://health-infobase.canada.ca/covid-19/archive/

Archived Report for 2022-07-01

Since the start of the vaccination campaign on **December 14, 2020**, PHAC received case-level vaccine history data for 73% (n=2,457,576) of COVID-19 cases aged 5 years or older.

Cases reported since the start of the vaccination campaign, as of **September 25, 2022**

Status	Cases	Hospitalizations	Deaths
Unvaccinated	1,002,452	55,668	10,800
Primary series co	794,145	23,297	3,821
Primary series co	460,280	25,966	5,209
Primary series co	49,056	3,287	1,031

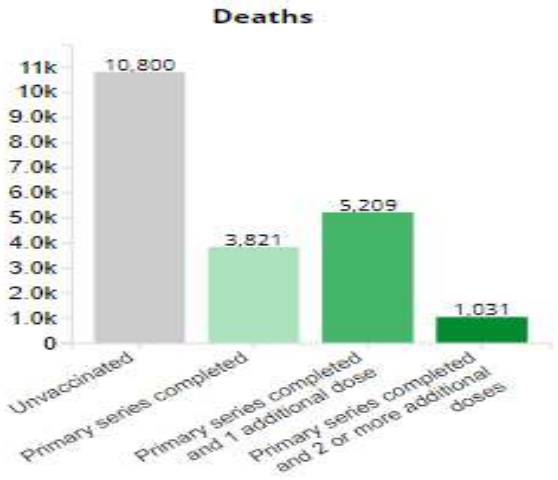
Cases reported since the start of the vaccination campaign, as of **June 12, 2022**

Status	Cases	Hospitalizations	Deaths
Unvaccinated	969,484	53,177	10,369
Fully vaccinated	780,941	20,693	3,550
Fully vaccinated with 1 additional dose	353,930	17,653	3,707
Fully vaccinated with 2 or more additional dos	13,157	694	242

Subtract numbers into two tables to find the cases **BETWEEN June 12, 2022 and September 25, 2022**

Status	Cases	Hospitalizations	Deaths
Unvaccinated	32,968	2,491	431
Primary series co	13,204	2,604	271
Primary series co	106,350	8,313	1,502
Primary series co	35,899	2,593	789

COMPARE THIS



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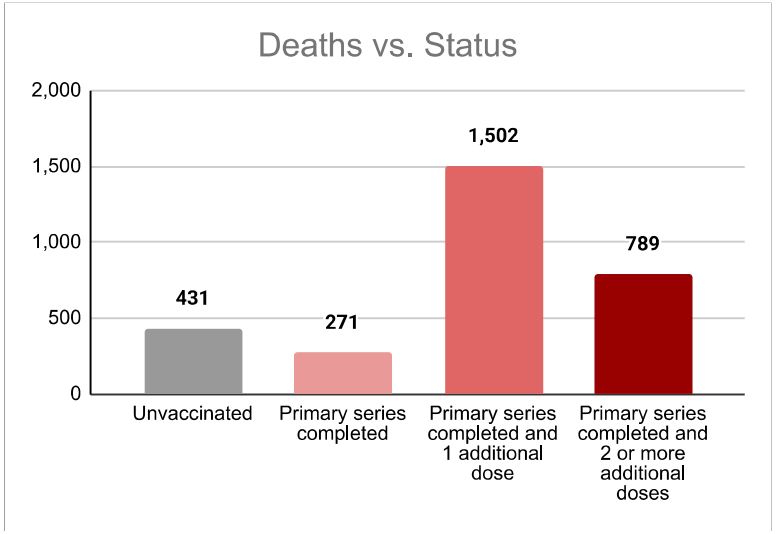


566-02-48305

Google: "cases following vaccination canada" https://health-infobase.canada.ca/covid-19/ Full log: https://docs.google.com/spreadsheets/d/1CXkNAOSLoRIr6bZb0NJ46hT4FYHaKSB6MkUJG3IMbbk

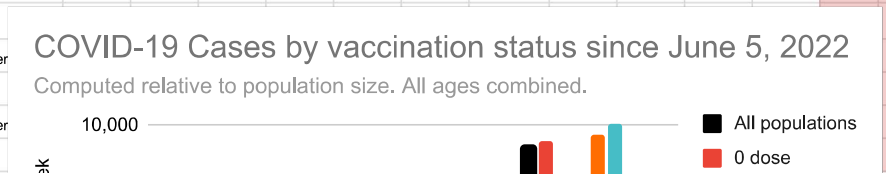
Source: Cases following vaccination NOTE: This report publishes the total number of CASES for each population since 14 Dec 2020 In Red - published numbers, in Black - computed from published numbers

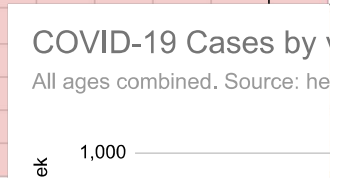
Public Health Agency of Canada

		0 doses			1 dose			2 doses			3 doses			4 doses						DEATHS BY VACCINATION STATUS						
		Unvaccinated			partially vaccinated - compu			Primary series completed			Primary series completed a			Primary series completed a			TOTALS			Cases counted weekly						Number
Published on:	Between Dec 14, 2020 and	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Unvax cases / Total cases	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	In reporting period
06-24-2022	June 05, 2022	968,043	53,078	10,354	149680			779,299	20,510	3,532	349,893	17,242	3,639	12,424	649	231	2,259,339			42.8%							
07-01-2022	June 12, 2022	969484	53177	10369	149784			780941	20693	3550	353930	17653	3,707	13,157	694	242	2,267,296			42.8%		15		18	68	11	June 12
07-08-2022	**June 19, 2022**	**970,057**	**53,283**	**10,385**	**149907**			**782,476**	**20,853**	**3,577**	**357914**	**18,021**	**3,781**	**13,987**	**764**	**265**	**2,274,341**			42.7%		16		27	74	23	June 19
07-15-2022	June 26, 2022	971,483	53399	10395	150020			784,122	20993	3597	363,073	18454	3,833	15,105	834	282	2,283,803			42.5%		10		20	52	17	June 26
07-22-2022	July 03, 2022	972,661	53,516	10,421	150134			785,824	21,165	3,616	368,890	18,941	3,907	16,495	916	303	2,294,004			42.4%		26		19	74	21	July 03,
07-29-2022	July 10, 2022	974,901	53,692	10,445	150263			787,786	21,367	3,635	375,936	19,545	3,981	18,342	1,057	334	2,307,228			42.3%		24		19	74	31	July 10,
08-05-2022	July 17, 2022	976,961	53,834	10,466	150494			773,183	21,362	3,540	402,140	20,441	4,142	21,288	1,252	372	2,324,066			42.0%		21			161	38	July 17,
08-12-2022	July 24, 2022	980,246	54,059	10,501	151019			776,474	21,596	3,570	410,390	21,058	4,256	24,045	1,438	446	2,342,174			41.9%		35		30	114	74	July 24,
Aug 19 2022	July 31, 2022	982,952	54,308	10,533	151206			779,042	21,806	3,602	417,825	21,730	4,365	26,719	1,659	502	2,357,744			41.7%		32		32	109	56	July 31,
Aug 26 2022	August 07, 2022	986,067	54,536	10,567	151387			781,213	22,046	3,639	424,530	22,313	4,489	29,431	1,840	560	2,372,628			41.6%		34		37	124	58	August
09-02-2022	August 14, 2022	988,250	54,707	10,610	151585			783,486	22,235	3,670	430,707	22,885	4,612	32,181	2,040	635	2,386,209			41.4%		43		31	123	75	August
09-09-2022	August 21, 2022	991,021	54,889	10,645	151768			785,391	22,414	3,699	436,089	23,377	4,727	34,795	2,232	708	2,399,064			41.3%		35		29	115	73	August
09-23-2022	August 28, 2022	993,242	55,040	10,673	151976			787,721	22,601	3,730	442,357	23,909	4,830	37,924	2,444	780	2,413,220			41.2%		28		31	103	72	August
12-23-2022	**September 25, 2022**	**1,002,45**	**55,668**	**10,800**	**151643**			**794,145**	**23,297**	**3,821**	**460,280**	**25,966**	**5,209**	**49,056**	**3,287**	**1,031**	**2,457,576**			40.8%		32		23	95	63	Septem
10-14-2022																											

All cases

from 06-05-2022 to 08-21-2022							
			Unvaccinated		Primary s	Primary s	Primary ser
Deaths		NA	446	NA	289	1,570	800
			Unvaccinated		Primary s	Primary s	Primary ser
Hospitalizations		NA	2,590	NA	2,787	8,724	2,638





566-02-48305

Google: "cases following vaccination can																													
Source: Cases following vaccination																													
Public Health Agency of Canada								Hospitalizations												Cases									
		of cases relative to population size (in Million)												**Number of cases relative to population size (in Million)**													**Number of cases relative to population si**			
Published on:	Between Dec 14, 2020 and	**All populations**	**0 dose**	**1 dose**	**2 dose**	**3 dose**	**4 dose**	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	**In reporting period**	**All populations**	**0 dose**	**1 dose**	**2 dose**	**3 dose**	**4 dose**	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	**In reporting period**	**All populations**	**0 dose**	**1 dose**	**2 dose**
06-24-2022	June 05, 2022																													
07-01-2022	June 12, 2022		**2.6**		**1.4**	**4.5**	**3.2**		99		183	411	45	**June 12**		**17**		**15**	**27**	**13**	7,957	1,441	104	1,642	4,037	733	**June 12**	**208**	**251**	**87**	**130**
07-08-2022	**June 19, 2022**		**2.8**		**2.1**	**4.8**	**6.6**		106		160	368	70	**June 19**		**18**		**13**	**24**	**20**	7,045	573	123	1,535	3,984	830	**June 19**	**184**	**100**	**102**	**122**
07-15-2022	June 26, 2022		**1.7**		**1.6**	**3.4**	**4.9**		116		140	433	70	**June 26**		**20**		**11**	**28**	**20**	9,462	1,426	113	1,646	5,159	1,118	**June 26**	**247**	**249**	**94**	**131**
07-22-2022	July 03, 2022		**4.5**		**1.5**	**4.8**	**6.1**		117		172	487	82	**July 03,**		**20**		**14**	**32**	**24**	10,201	1,178	114	1,702	5,817	1,390	**July 03,**	**267**	**205**	**95**	**135**
07-29-2022	July 10, 2022		**4.2**		**1.5**	**4.8**	**9.0**		176		202	604	141	**July 10,**		**31**		**16**	**40**	**41**	13,224	2,240	129	1,962	202	1,847	**July 10,**	**346**	**390**	**107**	**156**
08-05-2022	July 17, 2022		**3.7**		**0.0**	**10.5**	**11.0**		142			896	195	**July 17,**		**25**		**0**	**59**	**56**	16,838	2,060	231			2,946	**July 17,**	**440**	**359**	**192**	**0**
08-12-2022	July 24, 2022		**6.1**		**2.4**	**7.5**	**21.4**		225		234	617	186	**July 24,**		**39**		**19**	**40**	**54**	18,108	3,285	525	3,291	8,250	2,757	**July 24,**	**473**	**573**	**437**	**262**
Aug 19 2022	July 31, 2022		**5.6**		**2.5**	**7.1**	**16.2**		249		210	672	221	**July 31,**		**43**		**17**	**44**	**64**	15,570	2,706	187	2,568	7,435	2,674	**July 31,**	**407**	**472**	**156**	**204**
Aug 26 2022	August 07, 2022		**5.9**		**2.9**	**8.1**	**16.8**		228		240	583	181	**August**		**40**		**19**	**38**	**52**	14,884	3,115	181	2,171	6,705	2,712	**August**	**389**	**543**	**151**	**173**
09-02-2022	August 14, 2022		**7.5**		**2.5**	**8.1**	**21.7**		171		189	572	200	**August**		**30**		**15**	**37**	**58**	13,581	2,183	198	2,273	6,177	2,750	**August**	**355**	**381**	**165**	**181**
09-09-2022	August 21, 2022		**6.1**		**2.3**	**7.5**	**21.1**		182		179	492	192	**August**		**32**		**14**	**32**	**55**	12,855	2,771	183	1,905	5,382	2,614	**August**	**336**	**483**	**152**	**151**
09-23-2022	August 28, 2022		**4.9**		**2.5**	**6.7**	**20.8**		151		187	532	212	**August**		**26**		**15**	**35**	**61**	14,156	2,221	208	2,330	6,268	3,129	**August**	**370**	**387**	**173**	**185**
12-23-2022	**September 25, 2022**		**5.5**		**1.8**	**6.2**	**18.1**		157		174	514	211	**Septem**		**27**		**14**	**34**	**61**	11089	2,303		1,606	4,481	2,783	**Septem**	**290**	**401**	**0**	**128**
10-14-2022																													

All cases



566-02-48305

Google: "cases following vaccination cana

Source: Cases following vaccination

Public Health Agency of Canada

Numbers published by PHAC - counting cases since December 14, 2020

OBSERVE: Unvaccinated WILL ALWAYS GO DOWN with time

With Additional doses WILL ALWAYS GO UP with time

		ze (in Million)		Unvaccinated			Partially vaccinated			Fully vaccinated			With 1 additional dose			With 2+ additional dose		
Published on:	Between Dec 14, 2020 and	3 dose	4 dose	Cases	Hospita	Deaths	Cases	Hospita	Deaths	Cases	Hospita	Deaths	Cases	Hospita	Deaths	Cases	Hospita	Deaths
06-24-2022	June 05, 2022			42.80%	53.10%	**53.00%**				34.50%	20.50%	18.10%	15.50%	17.30%	**18.60%**	0.50%	0.60%	**1.20%**
07-01-2022	June 12, 2022	**264**	**212**	42.80%	52.80%	**52.80%**							15.60%	17.50%	**18.90%**	0.60%	0.70%	**1.20%**
07-08-2022	**June 19, 2022**	**261**	**240**															
07-15-2022	June 26, 2022	**338**	**323**	42.50%	52.30%	**52.30%**							15.90%	18.10%	**19.30%**	0.70%	0.80%	**1.40%**
07-22-2022	July 03, 2022	**381**	**402**	42.40%	51.90%	**52.00%**				34.30%	20.50%	18.00%	16.10%	18.40%	**19.50%**	0.70%	0.90%	**1.50%**
07-29-2022	July 10, 2022	**13**	**534**	42.30%	51.50%	**51.70%**				34.10%	20.50%	18.00%	16.30%	18.80%	**19.70%**	0.80%	1.00%	**1.70%**
08-05-2022	July 17, 2022	**0**	**851**															
08-12-2022	July 24, 2022	**540**	**797**	41.90%	50.70%	**51.10%**				33.20%	20.20%	17.40%	17.50%	19.70%	20.70%	1.00%	1.30%	2.20%
Aug 19 2022	July 31, 2022	**487**	**773**															
Aug 26 2022	August 07, 2022	**439**	**784**															
09-02-2022	August 14, 2022	**405**	**795**															
09-09-2022	August 21, 2022	**353**	**755**															
09-23-2022	August 28, 2022	**411**	**904**															
12-23-2022	**September 25, 2022**	**294**	**804**															
10-14-2022																		

All cases

June 17

Characteristics and severe outcomes associated unvaccinated,

Status	Cases	Hospitalizati
Unvaccinated	**42,9%**	**53,2%**
Cases not yet protected	2.3%	3.3%
Partially vaccinated	4.3%	5.1%
Fully vaccinated	**34.4%**	**20.5%**
Fully vaccinated with an additional	**16.0%**	**17.8%**

June 24

Figure 5. Distribution Number of confirmed COVID-19 cases repor

Status	Cases	Hospitalizati
Unvaccinated	**42.8%**	**53.1%**

566-02-48305

Google: "cases following vaccination cana			
Source: Cases following vaccination			
Public Health Agency of Canada			
Published on:	Between Dec 14, 2020 and	partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of June 05	
06-24-2022	June 05, 2022	**Deaths**	
07-01-2022	June 12, 2022	**53.2%**	
07-08-2022	**June 19, 2022**	4.1%	**Old way**
07-15-2022	June 26, 2022	5.0%	
07-22-2022	July 03, 2022	**18.1%**	
07-29-2022	July 10, 2022	**19.5%**	
08-05-2022	July 17, 2022		
08-12-2022	July 24, 2022		
Aug 19 2022	July 31, 2022		
Aug 26 2022	August 07, 2022		
09-02-2022	August 14, 2022		
09-09-2022	August 21, 2022		
09-23-2022	August 28, 2022		
12-23-2022	**September 25, 2022**		
10-14-2022			
All cases		rted to PHAC by vaccination status as of June 05, 2022	
		Deaths	
		53.0%	

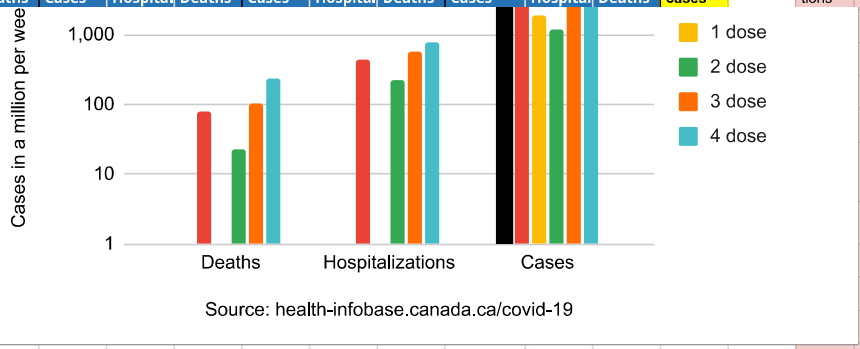
566-02-48305

Google: "cases following vaccination canada" https://health-infobase.canada.ca/covid-19/ Full log: https://docs.google.com/spreadsheets/d/1CXkNAOSLoRIr6bZb0NJ46hT4FYHaKSB6MkUJG3IMbbk

Source: Cases following vaccination NOTE: This report publishes the total number of CASES for each population since 14 Dec 2020 In Red - published numbers, in Black - computed from published numbers

Public Health Agency of Canada

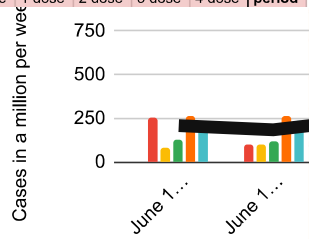
		0 doses			1 dose			2 doses			3 doses			4 doses						
		Unvaccinated			partially vaccinated - compu			Primary series completed			Primary series completed a			Primary series completed a			TOTALS			Unvax cases / Total cases
Published on:	Between Dec 14, 2020 and	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	Cases	Hospital	Deaths	
					Unvaccinated		Primary s	Primary s	Primary ser											
		Cases		198,237	34,409	2296	14,846	110,387	36,632											
		Distribution of cas			17.4%	1.2%	7.5%	55.7%	18.5%											
		Relative to population size																		
				All populat ions	0 dose	1 dose	2 dose	3 dose	4 dose											
		Deaths			78		23	103	231											
		Hospitalizations			451		221	572	762											
		Cases		5,183	5,998	1,912	1,180	7,232	10,583											



DEATHS BY VACCINATION STATUS

Cases counted weekly

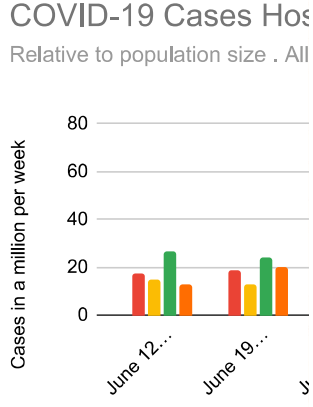
All populations	0 dose	1 dose	2 dose	3 dose	4 dose	Number In reporting period



Vac/rates from PHAC

	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	0 + 1 dose	1+ dose	2+	3+	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	0 + 1 dose	1+ dose	2+	3+
	Vaccination rates										Population size (in Million)			38,246,1(						
06-12-2022																				
06-19-2022	100%	15.00%	3.14%	32.90%	39.91%	9.05%	18.14%	85.00%	81.86%	48.96%	38.2	5.7	1.2	12.6	15.3	3.5	6.9	32.5	31.3	18.7
07-10-2022	100%		3.10%	32.65%	39.80%	10.99%														

0 dose	1 dose	2 dose	3 dose	4 dose
5,728,80	1,183,96	12,487,0	15223083	3623229



Cases Hospitalizations Deaths COVID-19 C...

566-02-48305

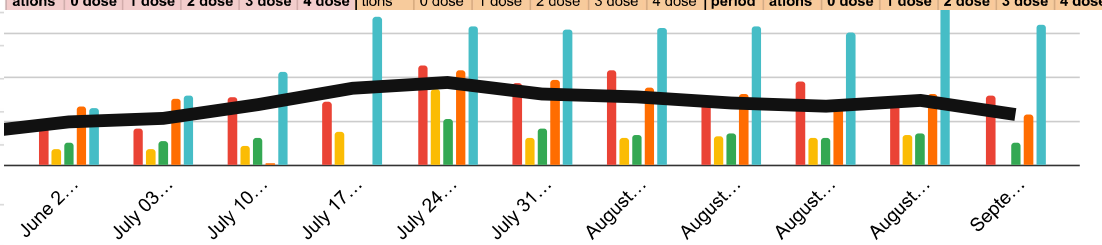
Google: "cases following vaccination can

Source: Cases following vaccination

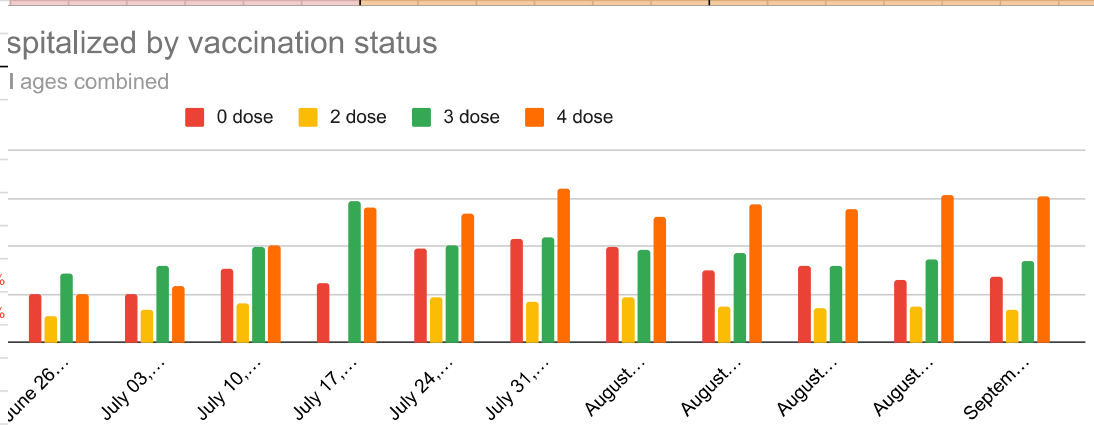
Public Health Agency of Canada

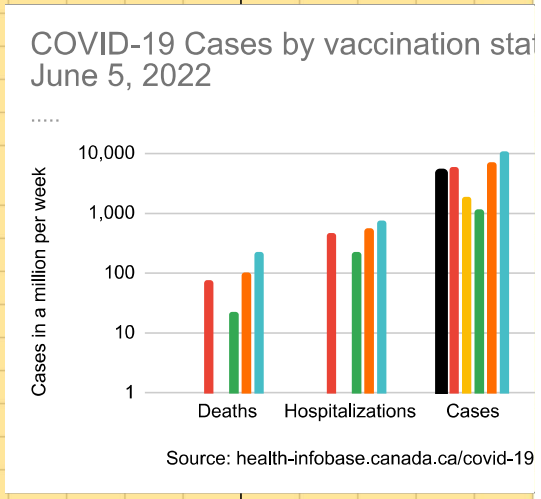
Published on: Between Dec 14, 2020 and

								Hospitalizations													Cases										
		r of cases relative to population size (in Million)												**Number of cases relative to population size (in Million)**													**Number of cases relative to population si**				
		All populations	**0 dose**	**1 dose**	**2 dose**	**3 dose**	**4 dose**	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	**In reporting period**	**All populations**	**0 dose**	**1 dose**	**2 dose**	**3 dose**	**4 dose**	All populations	0 dose	1 dose	2 dose	3 dose	4 dose	**In reporting period**	**All populations**	**0 dose**	**1 dose**	**2 dose**



Automatically generated from the source data





Vac/rates from PHAC

	All populations
	Vaccination rates
06-12-2022	
06-19-2022	100%
07-10-2022	100%

566-02-48305

Not updated since June 2022

from Aug 2021 to May 2022

Deaths 13,240

SAR #REF!

Weekly Statistics, counting cases in the reported week

Numbers below are computed as difference between numbers reported in two consecutive reports, averaged over (3) weeks.

				Cases							Hospitalizations							Deaths in the reported week					
Report Date (Reports archive)	As of:	Full vaccination rate		**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)	Total	Fully vaccinated / Total	**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)	Total	Fully vaccinated / Total	**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)	Total
06-22-22	06-05-22	81.7%		**1,463**	182	1,080	**27,380**	16,710	30,105	91%	**174**	4	51	**1,216**	886	1,444	84%	**41**	1	10	**307**	244	359
06-14-22	05-29-22	81.7%		**1,248**	183	1,120	**33,012**	21,621	35,564	93%	**201**	4	53	**1,503**	1,127	1,762	85%	**47**	1	9	**381**	312	438
06-08-22	05-22-22	81.7%		**2,032**	15	288	**17,488**	13,223	19,823	88%	**255**	1	35	**1,321**	1,001	1,612	82%	**62**	1	6	**295**	254	363
06-02-22	05-15-22	81.7%		**2,340**	17	319	**18,130**	13,379	20,807	87%	**277**	1	44	**1,418**	1,025	1,741	81%	**160**	5	20	**426**	287	611
05-24-22	05-08-22	81.6%		**5,780**	-11	395	**19,463**	13,433	25,626	76%	**470**	2	52	**1,460**	1,005	1,985	74%	**217**	5	21	**395**	249	638
05-18-22	05-01-22	81.6%		**6,239**	-9	454	**25,622**	18,612	32,307	79%	**516**	1	58	**1,688**	1,183	2,263	75%	**196**	4	21	**420**	281	641
05-11-22	04-24-22	81.6%		**6,848**	-4	499	**27,949**	20,060	35,293	79%	**509**	3	53	**1,592**	1,120	2,157	74%	**88**	0	5	**229**	166	321
05-03-22	04-17-22	81.6%		**4,123**	30	531	**27,618**	19,432	32,302	85%	**356**	3	50	**1,415**	971	1,824	78%	**29**	0	4	**182**	126	215
04-27-22	04-10-22	81.5%		**4,188**	30	533	**25,828**	17,345	30,578	84%	**408**	9	52	**1,197**	782	1,666	72%	**46**	1	3	**149**	97	199
04-19-22	04-03-22	81.4%		**3,824**	41	704	**26,680**	14,045	31,249	85%	**413**	9	54	**1,037**	601	1,513	69%	**51**	1	5	**131**	69	187
04-13-22	03-27-22	81.3%		**3,414**	38	658	**23,283**	11,364	27,393	85%	**406**	9	48	**928**	521	1,391	67%	**56**	1	6	**130**	63	193
04-01-22	03-20-22	81.2%		**3,145**	36	655	**20,901**	9,664	24,737	84%	**365**	4	43	**919**	484	1,330	69%	**64**	1	7	**140**	64	212
03-31-22	03-13-22	81.0%		**2,906**	35	562	**17,025**	9,764	20,528	83%	**415**	4	47	**964**	516	1,429	67%	**24**	-2	0	**112**	69	134
03-24-22	03-06-22	80.9%		**3,063**	51	743	**18,371**	9,867	22,227	83%	**438**	5	59	**981**	500	1,483	66%	**37**	-2	1	**132**	79	168
03-18-22	02-27-22	80.7%		**3,415**	69	1,040	**21,835**	11,059	26,359	83%	**483**	8	73	**1,030**	516	1,593	65%	**52**	0	2	**174**	101	228
03-11-22	02-20-22	80.4%		**4,728**	111	1,511	**27,551**	13,063	33,902	81%	**597**	13	97	**1,336**	625	2,043	65%	**119**	3	8	**262**	139	392
03-04-22	02-13-22	79.9%		**6,793**	225	2,240	**37,634**	41,033	46,892	80%	**762**	19	121	**1,795**	1,554	2,697	67%	**144**	3	13	**320**	378	480
03-01-22	02-06-22	79.4%		**43,950**	2,173	7,679	**50,595**	37,048	104,397	48%	**1,004**	27	157	**2,229**	1,361	3,416	65%	**173**	3	17	**377**	333	570
02-21-22	01-30-22	78.7%		**28,385**	1,247	4,883	**94,526**	16,203	129,041	73%	**835**	19	115	**1,859**	561	2,829	66%	**142**	3	14	**296**	141	455

566-02-48305

https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html#9a

from Aug 2021 to May 2022

Table 2. Characteristics and severe outcomes among unvaccinated, partially vaccinated, fully vaccinated.

Deaths

SAR

Published Statistics, counting cases since December 14, 2020 (Note: There were NO fully vaccinated in December 2020, which skews the

Numbers below are copied directly from the source (Table 2). "Fully vaccinated" includes those with booster

						Deaths since December 14, 2020:							**Hospitalizations**							**Cases**				
Report Date (Reports archive)	As of:	Full vaccination rate	Fully vaccinated / Total	Boosted / Total		**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)	Total	Fully vaccinated / Total	**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)	Total	Fully vaccinated / Total	**Unvaccinated (0 doses)**	Not yet protected (1 dose)	Partially vaccinated (1 dose)	**Fully vaccinated (2+ doses)**	With boosters (3+ doses)
06-22-22	06-05-22	81.7%	86%	68%		**10,333**	800	975	**7,297**	3,790	19,405	37.6%	**53,074**	3,282	5,115	**38,211**	17,762	99,682	38.3%	**968,620**	52,284	97,189	**1,137,650**	360,592
06-14-22	05-29-22	81.7%	87%	71%		**10,305**	800	969	**7,156**	3,676	19,230	37.2%	**52,918**	3,281	5,092	**37,547**	17,257	98,838	38.0%	**966,267**	52,274	97,063	**1,131,789**	356,115
06-08-22	05-22-22	81.7%	81%	70%		**10,284**	798	955	**6,750**	3,438	18,787	35.9%	**52,774**	3,270	4,992	**35,856**	16,176	96,892	37.0%	**966,280**	51,748	94,253	**1,075,668**	326,144
06-02-22	05-15-22	81.7%	70%	47%		**10,209**	797	946	**6,376**	3,059	18,328	34.8%	**52,553**	3,270	4,963	**34,564**	15,105	95,349	36.2%	**964,231**	51,737	93,950	**1,055,510**	310,462
05-24-22	05-08-22	81.6%	62%	39%		**10,164**	797	943	**6,012**	2,741	17,916	33.6%	**52,314**	3,269	4,933	**33,037**	13,875	93,553	35.3%	**962,522**	51,724	93,702	**1,032,754**	291,251
05-18-22	05-01-22	81.6%	66%	44%		**10,098**	796	938	**5,866**	2,677	17,698	33.1%	**52,009**	3,267	4,888	**31,893**	13,172	92,057	34.6%	**960,184**	51,704	93,388	**1,023,205**	286,474
05-11-22	04-24-22	81.6%	71%	52%		**9,728**	782	887	**5,097**	2,197	16,494	30.9%	**51,721**	3,266	4,831	**30,309**	12,030	90,127	33.6%	**957,210**	51,685	92,994	**1,001,119**	270,325
05-03-22	04-17-22	81.6%	85%	59%		**9,512**	782	881	**4,827**	1,995	16,002	30.2%	**50,903**	3,264	4,776	**28,656**	10,861	87,599	32.7%	**945,183**	51,758	92,518	**974,366**	250,951
04-27-22	04-10-22	81.5%	75%	49%		**9,511**	783	876	**4,605**	1,835	15,775	29.2%	**50,461**	3,263	4,713	**26,830**	9,623	85,267	31.5%	**941,467**	51,730	92,025	**946,339**	230,639
04-19-22	04-03-22	81.4%	70%	37%		**9,465**	782	872	**4,411**	1,700	15,530	28.4%	**50,193**	3,258	4,673	**25,532**	8,670	83,656	30.5%	**936,665**	51,696	91,496	**917,272**	210,146
04-13-22	03-27-22	81.3%	67%	33%		**9,426**	781	870	**4,281**	1,616	15,358	27.9%	**49,836**	3,254	4,626	**24,412**	7,947	82,128	29.7%	**932,814**	51,668	90,925	**891,511**	192,656
04-01-22	03-20-22	81.2%	66%	30%		**9,372**	781	867	**4,158**	1,543	15,178	27.4%	**49,237**	3,237	4,557	**23,238**	7,278	80,269	29.0%	**928,904**	51,640	90,427	**868,856**	178,604
03-31-22	03-13-22	81.0%	84%	52%		**9,313**	780	856	**4,019**	1,494	14,968	26.9%	**48,954**	3,231	4,512	**22,421**	6,868	79,118	28.3%	**925,193**	51,572	89,384	**837,233**	168,011
03-24-22	03-06-22	80.9%	79%	47%		**9,258**	779	852	**3,891**	1,426	14,780	26.3%	**48,618**	3,227	4,482	**21,627**	6,383	77,954	27.7%	**922,571**	51,554	88,952	**821,663**	158,563
03-18-22	02-27-22	80.7%	76%	45%		**9,179**	779	846	**3,738**	1,351	14,542	25.7%	**48,143**	3,226	4,428	**20,481**	5,827	76,278	26.9%	**919,468**	51,531	88,463	**806,154**	149,613
03-11-22	02-20-22	80.4%	67%	36%		**9,240**	786	857	**3,683**	1,286	14,566	25.3%	**47,710**	3,220	4,370	**19,530**	5,320	74,830	26.1%	**916,475**	51,466	87,698	**786,158**	138,720
03-04-22	02-13-22	79.9%	67%	79%		**9,147**	785	849	**3,495**	1,189	14,276	24.5%	**47,303**	3,213	4,305	**18,685**	4,884	73,506	25.4%	**913,383**	51,402	86,724	**766,549**	128,961
03-01-22	02-06-22	79.4%	66%	58%		**9,023**	780	840	**3,216**	1,047	13,859	23.2%	**46,694**	3,203	4,210	**17,391**	4,278	71,498	24.3%	**909,222**	51,324	85,344	**740,649**	116,436
02-21-22	01-30-22	78.7%	65%	31%		**8,884**	776	833	**2,897**	868	13,390	21.6%	**45,918**	3,181	4,080	**15,521**	3,445	68,700	22.6%	**902,290**	51,132	83,164	**703,505**	99,531

566-02-48305

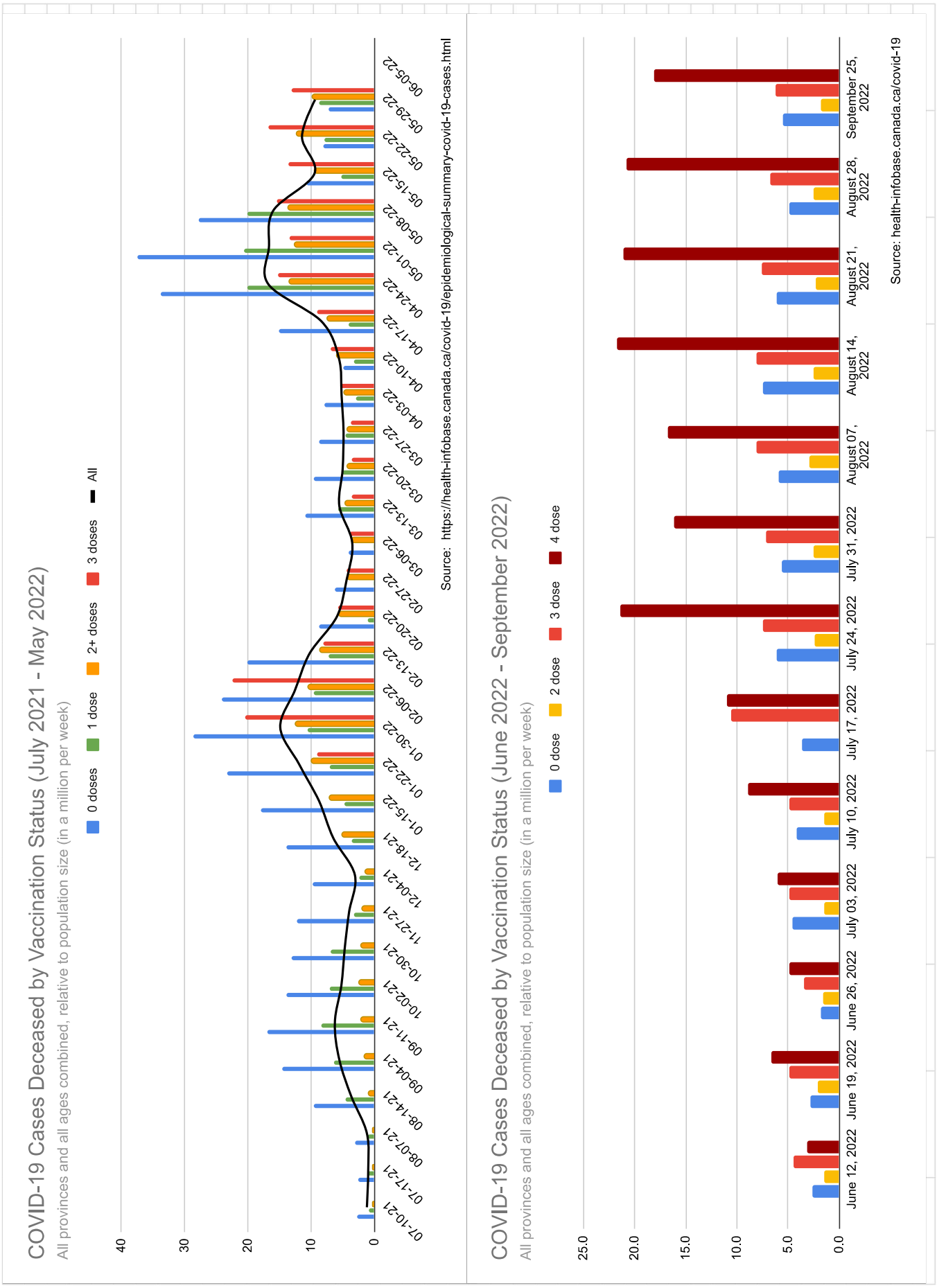
							0 doses	1 dose	2+ doses	3 doses	All	0 doses / 1 dose	0 doses / 2+ doses	0 doses / 3 doses	1 doses / 2+ doses	1 doses / 3 doses	2+ doses / 3 doses					
from Aug 2021 to May 2022																						
Deaths						**Relative proportions of COVID casesd in vaccinated vs. unvaccinated populations**																	
			e results)			**Average weekly number of cases in each vaccination status group (per million)**																	
SAR						**All ages combined**																	
						COVID-19 Cases Deceased						**Odds of cases (averaged over last 5 weeks)**						**COVID* Hospitalization**				
Report Date (Reports archive)	As of:	Full vaccination rate	Total	**Fully vaccinated / Total**	**"Not yet protected" / Total**	0 doses	1 doses	2+ doses	3 doses	All	0 doses / 1 doses	0 doses / 2+ doses	0 doses / 3 doses	1 doses / 2+ doses	1 doses / 3 doses	2+ doses / 3 doses	0 doses	1 doses	2+ doses	3 doses	All
06-22-22	06-05-22	81.7%	2,255,743	50.4%	0%	7	9	10	13	9	1.46	1.58	1.26	1.08	0.86	0.80	30	41	39	48	38
06-14-22	05-29-22	81.7%	2,247,393	50.4%	0%	8	8	12	17	11	1.60	1.92	1.58	1.20	0.99	0.82	35	43	48	61	46
06-08-22	05-22-22	81.7%	2,187,949	49.2%	0%	11	5	9	14	9	1.78	2.21	1.87	1.24	1.05	0.85	44	28	42	54	42
06-02-22	05-15-22	81.7%	2,165,428	48.7%	1%	28	20	14	15	16	1.75	2.25	1.98	1.29	1.13	0.88	48	36	45	55	46
05-24-22	05-08-22	81.6%	2,140,702	48.2%	1%	37	21	13	13	17	1.95	2.25	1.99	1.15	1.02	0.88	81	42	47	54	52
05-18-22	05-01-22	81.6%	2,128,481	48.1%	1%	34	20	13	15	17	2.02	1.98	1.75	0.98	0.86	0.88	89	47	54	64	59
05-11-22	04-24-22	81.6%	2,103,008	47.6%	0%	15	4	7	9	8	2.33	1.76	1.62	0.75	0.69	0.92	88	42	51	61	56
05-03-22	04-17-22	81.6%	2,063,825	47.2%	0%	5	3	6	7	6	1.96	1.79	1.82	0.91	0.93	1.02	61	40	45	53	48
04-27-22	04-10-22	81.5%	2,031,561	46.6%	0%	8	3	5	5	5	2.49	1.94	2.05	0.78	0.82	1.06	70	41	38	43	44
04-19-22	04-03-22	81.4%	1,997,129	45.9%	0%	9	5	4	4	5	3.05	1.91	2.06	0.63	0.68	1.08	71	42	33	33	40
04-13-22	03-27-22	81.3%	1,966,918	45.3%	0%	10	5	4	4	5	4.20	1.79	1.87	0.43	0.45	1.04	70	36	30	29	36
04-01-22	03-20-22	81.2%	1,939,827	44.8%	0%	11	6	5	4	6	4.33	1.89	1.95	0.44	0.45	1.03	62	32	30	27	35
03-31-22	03-13-22	81.0%	1,903,382	44.0%	-1%	4	-2	4	4	4	4.10	1.95	1.42	0.48	0.35	0.73	71	34	31	29	37
03-24-22	03-06-22	80.9%	1,884,740	43.6%	-1%	6	-1	4	4	4	3.17	2.13	1.44	0.67	0.45	0.67	75	41	32	28	39
03-18-22	02-27-22	80.7%	1,865,616	43.2%	0%	9	1	6	6	6	2.95	2.24	1.59	0.76	0.54	0.71	82	48	33	30	42
03-11-22	02-20-22	80.4%	1,841,797	42.7%	1%	20	7	9	8	10	2.90	2.36	1.60	0.81	0.52	0.80	101	61	43	36	53
03-04-22	02-13-22	79.9%	1,818,058	42.2%	1%	24	10	10	22	13	3.03	2.40	1.46	0.79	0.52	0.63	128	71	59	92	71
03-01-22	02-06-22	79.4%	1,786,539	41.5%	1%	29	11	12	20	15	3.28	2.60	1.75	0.79	0.60	0.75	166	85	73	84	89
02-21-22	01-30-22	78.7%	1,740,091	40.4%	1%	23	7	10	9	12	3.65	3.03	2.54	0.83	0.78	1.08	137	56	62	36	74

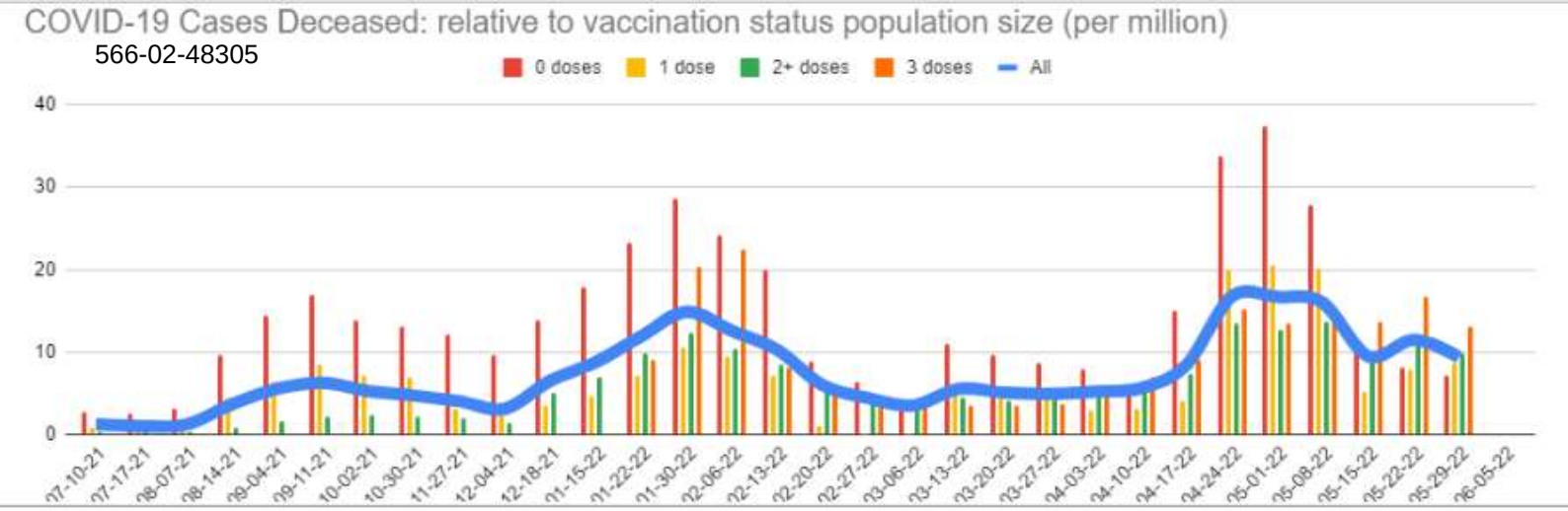
566-02-48305

																							As of
from Aug 2021 to May 2022																							06-05-22
Deaths																							
SAR																							
			Odds of cases (averaged over last 5 weeks)						Cases per million for each population					Odds of cases (averaged over last 5 weeks)								
Report Date (Reports archive)	As of:	Full vaccination rate	0 doses / 1 doses	0 doses / 2+ doses	0 doses / 3 doses	1 doses / 2+ doses	1 doses / 3 doses	2+ doses / 3 doses	0 doses	1 doses	2+ doses	3 doses	All	0 doses / 1 doses	0 doses / 2+ doses	0 doses / 3 doses	1 doses / 2+ doses	1 doses / 3 doses	2+ doses / 3 doses				As of:
06-22-22	06-05-22	81.7%	1.25	1.08	0.72	0.86	0.70	0.82	254	882	876	899	787	0.85	0.60	0.53	0.71	0.62	0.88				06-05-22
06-14-22	05-29-22	81.7%	1.51	1.26	0.93	0.83	0.68	0.82	216	915	1,056	1,163	930	1.46	0.84	0.70	0.57	0.48	0.84				05-29-22
06-08-22	05-22-22	81.7%	1.79	1.46	1.15	0.82	0.68	0.83	352	236	560	711	518	2.54	1.15	0.94	0.45	0.37	0.82				05-22-22
06-02-22	05-15-22	81.7%	1.77	1.51	1.30	0.85	0.72	0.84	406	260	580	720	544	2.47	1.15	0.95	0.46	0.38	0.83				05-15-22
05-24-22	05-08-22	81.6%	1.84	1.65	1.37	0.90	0.77	0.86	996	317	623	727	670	2.43	1.15	0.97	0.48	0.40	0.84				05-08-22
05-18-22	05-01-22	81.6%	1.79	1.71	1.39	0.95	0.83	0.87	1,075	364	821	1,007	845	2.01	1.01	0.89	0.50	0.44	0.88				05-01-22
05-11-22	04-24-22	81.6%	1.79	1.82	1.52	1.02	0.92	0.90	1,180	400	896	1,094	923	1.68	0.91	0.85	0.54	0.51	0.93				04-24-22
05-03-22	04-17-22	81.6%	1.75	1.89	1.72	1.08	1.03	0.95	711	426	885	1,059	845	1.35	0.80	0.81	0.60	0.60	1.01				04-17-22
04-27-22	04-10-22	81.5%	1.86	2.12	2.06	1.14	1.14	1.01	719	419	829	955	800	1.27	0.82	0.87	0.64	0.68	1.06				04-10-22
04-19-22	04-03-22	81.4%	1.89	2.24	2.31	1.19	1.26	1.06	656	546	857	777	817	1.14	0.82	0.91	0.71	0.80	1.12				04-03-22
04-13-22	03-27-22	81.3%	1.88	2.31	2.44	1.23	1.34	1.09	585	500	749	632	716	1.05	0.83	0.93	0.79	0.89	1.12				03-27-22
04-01-22	03-20-22	81.2%	1.81	2.31	2.54	1.28	1.44	1.13	538	485	673	540	647	0.96	0.86	0.96	0.89	1.00	1.13				03-20-22
03-31-22	03-13-22	81.0%	1.78	2.30	2.67	1.29	1.19	0.92	496	401	549	550	537	0.91	0.89	0.72	0.98	0.79	0.81				03-13-22
03-24-22	03-06-22	80.9%	1.80	2.29	2.07	1.27	1.13	0.89	521	512	594	559	581	1.35	2.02	1.55	1.50	1.14	0.77				03-06-22
03-18-22	02-27-22	80.7%	1.91	2.26	1.97	1.19	1.16	0.97	579	693	708	632	689	1.52	1.89	2.02	1.24	1.33	1.07				02-27-22
03-11-22	02-20-22	80.4%	2.02	2.26	2.14	1.12	1.27	1.14	798	959	896	758	886	1.71	1.88	2.13	1.10	1.35	1.06				02-20-22
03-04-22	02-13-22	79.9%	2.18	2.27	2.03	1.04	1.00	0.91	1,137	1,316	1,231	2,436	1,226	1.83	1.68	2.27	0.92	1.36	1.05				02-13-22
03-01-22	02-06-22	79.4%	2.24	2.50	2.53	1.07	1.18	1.13	7,278	4,140	1,667	2,275	2,730	2.01	1.80	3.59	0.90	1.97	1.45				02-06-22
02-21-22	01-30-22	78.7%	2.55	2.94	3.77	1.13	1.56	1.71	4,644	2,395	3,141	1,046	3,374	2.17	1.34	4.44	0.62	2.29	3.00				01-30-22

566-02-48305

					Population size:		All canadians	**38,246,108**																
from Aug 2021 to May 2022							**with 0 doses**	**5,801,935**																
							with 1 dose	**1,254,472**																
Deaths							with 2+ doses	**31,206,274**																
							with 3+ doses	**17,392,418**																
SAR																								
			Vaccination rates																					
Report Date (Reports archive)	As of:	Full vaccination rate	0 doses: Cumulative percent of UNVACCINATED	Cumulative percent of partially vaccinated people	Cumulative percent of fully vaccinated (2 doses after 14 days) people	Cumulative percent of fully vaccinated people with at least 1 additional dose																		
									Percentage of complications once infected - by vaccination status														
									Cases resulting in Deaths							**Cases resulting in Hospitalizations**							
									0 doses	Not yet protected (1 dose)	Partially vaccinated (1 dose)	Fully vaccinated (2+ doses)	With boosters (3+ doses)	Total		Unvaccinated (0 doses)	Partially vaccinated (1 dose)	Not yet protected (1 dose)	Fully vaccinated (2+ doses)	With boosters (3+ doses)	Total		
06-22-22	06-05-22	81.7%	15.08%	3.20%	81.72%	48.60%			1.1%	1.5%	1.0%	0.6%	1.1%	0.9%		5.5%	5.3%	6.3%	3.4%	4.9%	4.4%			
06-14-22	05-29-22	81.7%	15.08%	3.20%	81.72%	48.60%			1.1%	1.5%	1.0%	0.6%	1.0%	0.9%		5.5%	5.2%	6.3%	3.3%	4.8%	4.4%			
06-08-22	05-22-22	81.7%	15.08%	3.20%	81.72%	48.60%			1.1%	1.5%	1.0%	0.6%	1.1%	0.9%		5.5%	5.3%	6.3%	3.3%	5.0%	4.4%			
06-02-22	05-15-22	81.7%	15.08%	3.20%	81.72%	48.60%			1.1%	1.5%	1.0%	0.6%	1.0%	0.8%		5.5%	5.3%	6.3%	3.3%	4.9%	4.4%			
05-24-22	05-08-22	81.6%	15.2%	3.3%	81.6%	48.3%			1.1%	1.5%	1.0%	0.6%	0.9%	0.8%		5.4%	5.3%	6.3%	3.2%	4.8%	4.4%			
05-18-22	05-01-22	81.6%	15.2%	3.3%	81.6%	48.3%			1.1%	1.5%	1.0%	0.6%	0.9%	0.8%		5.4%	5.2%	6.3%	3.1%	4.6%	4.3%			
05-11-22	04-24-22	81.6%	15.2%	3.3%	81.6%	48.0%			1.0%	1.5%	1.0%	0.5%	0.8%	0.8%		5.4%	5.2%	6.3%	3.0%	4.5%	4.3%			
05-03-22	04-17-22	81.6%	15.2%	3.3%	81.6%	48.0%			1.0%	1.5%	1.0%	0.5%	0.8%	0.8%		5.4%	5.2%	6.3%	2.9%	4.3%	4.2%			
04-27-22	04-10-22	81.5%	15.2%	3.3%	81.5%	47.5%			1.0%	1.5%	1.0%	0.5%	0.8%	0.8%		5.4%	5.1%	6.3%	2.8%	4.2%	4.2%			
04-19-22	04-03-22	81.4%	15.2%	3.4%	81.4%	47.3%			1.0%	1.5%	1.0%	0.5%	0.8%	0.8%		5.4%	5.1%	6.3%	2.8%	4.1%	4.2%			
04-13-22	03-27-22	81.3%	15.3%	3.4%	81.3%	47.0%			1.0%	1.5%	1.0%	0.5%	0.8%	0.8%		5.3%	5.1%	6.3%	2.7%	4.1%	4.2%			
04-01-22	03-20-22	81.2%	15.3%	3.5%	81.2%	46.8%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.3%	5.0%	6.3%	2.7%	4.1%	4.1%			
03-31-22	03-13-22	81.0%	15.3%	3.7%	81.0%	46.5%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.3%	5.0%	6.3%	2.7%	4.1%	4.2%			
03-24-22	03-06-22	80.9%	15.4%	3.8%	80.9%	46.1%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.3%	5.0%	6.3%	2.6%	4.0%	4.1%			
03-18-22	02-27-22	80.7%	15.4%	3.9%	80.7%	45.7%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.2%	5.0%	6.3%	2.5%	3.9%	4.1%			
03-11-22	02-20-22	80.4%	15.5%	4.1%	80.4%	45.1%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.2%	5.0%	6.3%	2.5%	3.8%	4.1%			
03-04-22	02-13-22	79.9%	15.6%	4.5%	79.9%	44.0%			1.0%	1.5%	1.0%	0.5%	0.9%	0.8%		5.2%	5.0%	6.3%	2.4%	3.8%	4.0%			
03-01-22	02-06-22	79.4%	15.8%	4.9%	79.4%	42.6%			1.0%	1.5%	1.0%	0.4%	0.9%	0.8%		5.1%	4.9%	6.2%	2.3%	3.7%	4.0%			
02-21-22	01-30-22	78.7%	16.0%	5.3%	78.7%	40.5%			1.0%	1.5%	1.0%	0.4%	0.9%	0.8%		5.1%	4.9%	6.2%	2.2%	3.5%	3.9%			


COVID-19 Cases Deceased by Vaccination Status (July 2021 - May 2022)
All provinces and all ages combined, relative to population size (in a million per week)
0 doses
1 dose
2+ doses
3 doses
All
40
30
20
10
0
07-10-21
07-17-21
08-07-21
08-14-21
09-04-21
09-11-21
10-02-21
10-30-21
11-27-21
12-04-21
12-18-21
01-15-22
01-22-22
01-30-22
02-06-22
02-13-22
02-20-22
02-27-22
03-06-22
03-13-22
03-20-22
03-27-22
04-03-22
04-10-22
04-17-22
04-24-22
05-01-22
05-08-22
05-15-22
05-22-22
05-29-22
06-05-22
Source: https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html
COVID-19 Cases Deceased by Vaccination Status (June 2022 - September 2022)
All provinces and all ages combined, relative to population size (in a million per week)
0 dose
2 dose
3 dose
4 dose
25.0
20.0
15.0
10.0
5.0
0.0
June 12, 2022
June 19, 2022
June 26, 2022
July 03, 2022
July 10, 2022
July 17, 2022
July 24, 2022
July 31, 2022
August 07, 2022
August 14, 2022
August 21, 2022
August 28, 2022
September 25, 2022
Source: health-infobase.canada.ca/covid-19


COVID-19 Cases Deceased: relative to vaccination status population size (per million)
0 doses
1 dose
2+ doses
3 doses
All
40
30
20
10
0
07-10-21
07-17-21
08-07-21
08-14-21
09-04-21
09-11-21
10-02-21
10-30-21
11-27-21
12-04-21
12-18-21
01-15-22
01-22-22
01-30-22
02-06-22
02-13-22
02-20-22
02-27-22
03-06-22
03-13-22
03-20-22
03-27-22
04-03-22
04-10-22
04-17-22
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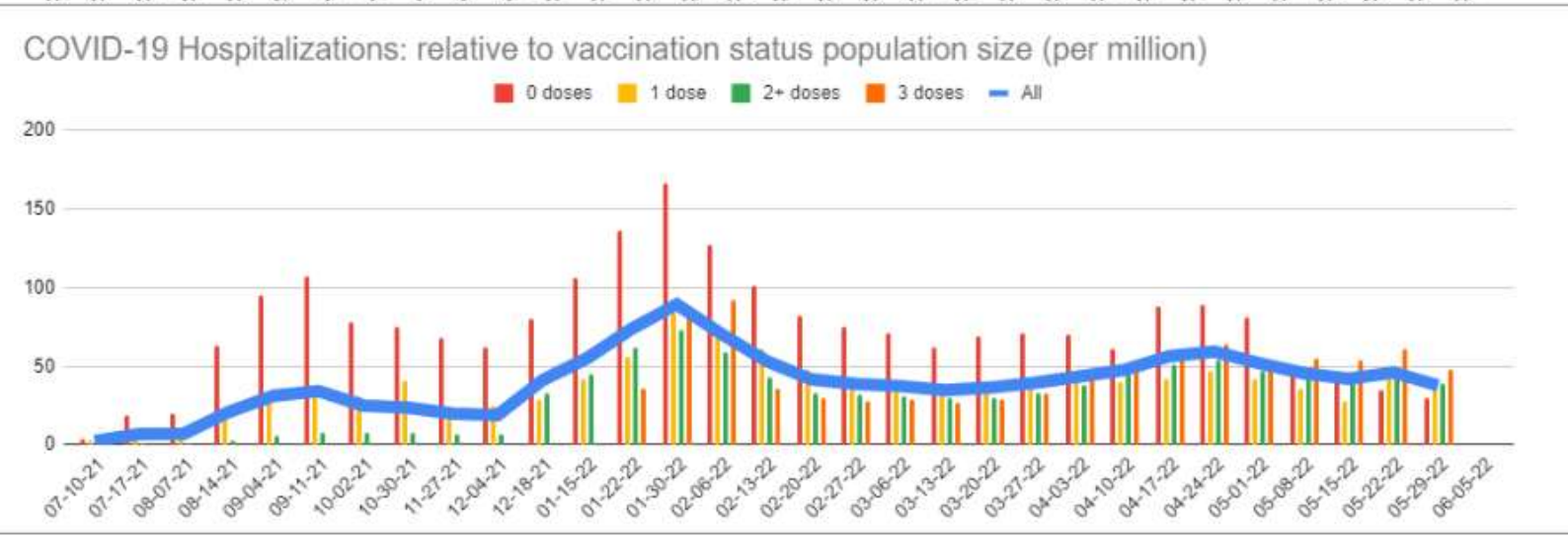
05-15-22
05-22-22
05-29-22
06-05-22


COVID-19 Hospitalizations: relative to vaccination status population size (per million)
0 doses
1 dose
2+ doses
3 doses
All
200
150
100
50
0
07-10-21
07-17-21
08-07-21
08-14-21
09-04-21
09-11-21
10-02-21
10-30-21
11-27-21
12-04-21
12-18-21
01-15-22
01-22-22
01-30-22
02-06-22
02-13-22
02-20-22
02-27-22
03-06-22
03-13-22
03-20-22
03-27-22
04-03-22
04-10-22
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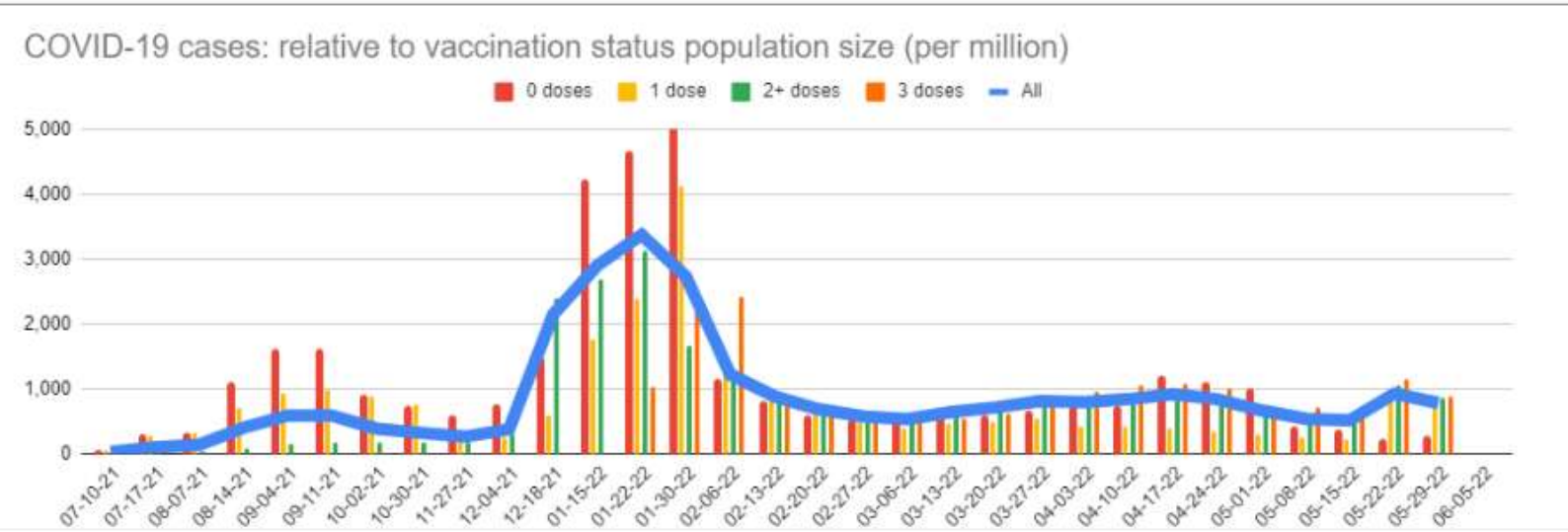
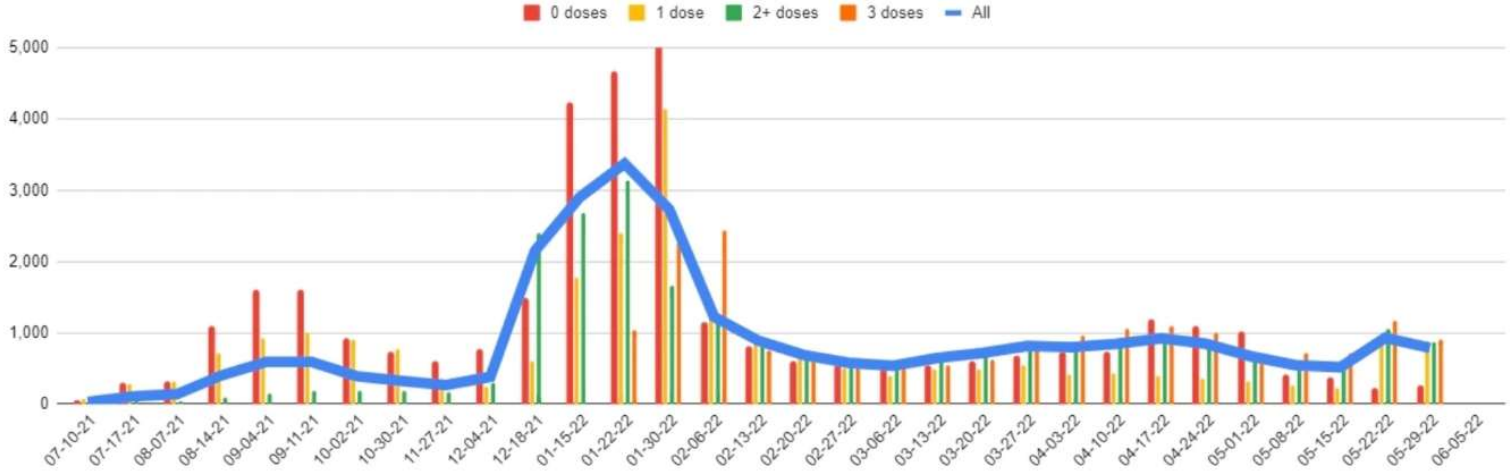
05-08-22
05-15-22
05-22-22
05-29-22
06-05-22

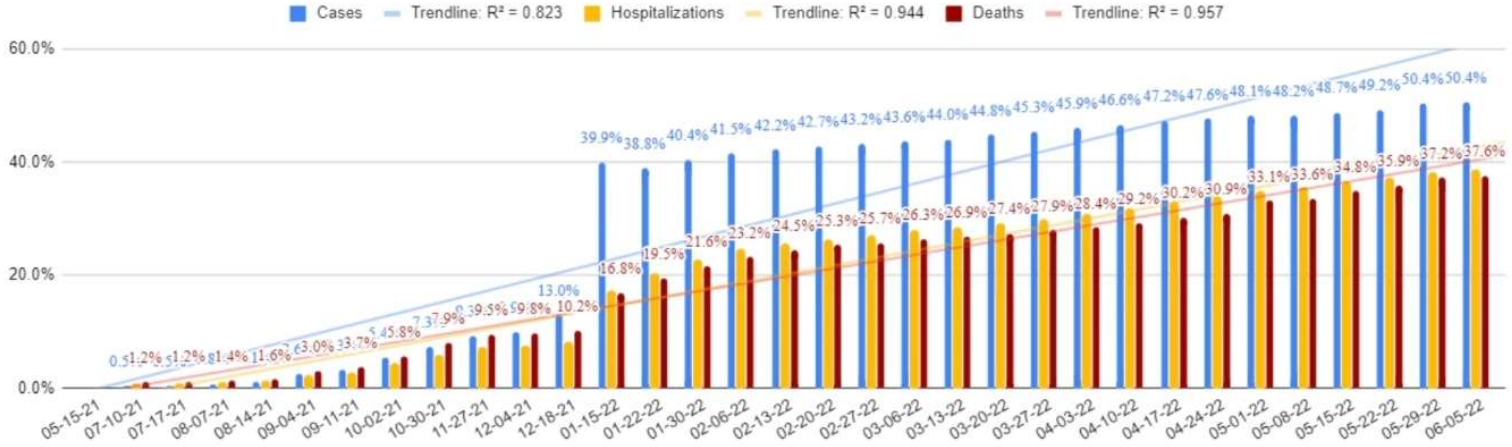

COVID-19 cases: relative to vaccination status population size (per million)
0 doses
1 dose
2+ doses
3 doses
All
5,000
4,000
3,000
2,000
1,000
0
07-10-21
07-17-21
08-07-21
08-14-21
09-04-21
09-11-21
10-02-21
10-30-21
11-27-21
12-04-21
12-18-21
01-15-22
01-22-22
01-30-22
02-06-22
02-13-22
02-20-22
02-27-22
03-06-22
03-13-22
03-20-22
03-27-22
04-03-22
04-10-22
04-17-22
04-24-22
05-01-22
05-08-22
05-15-22
05-22-22
05-29-22
06-05-22

COVID-19 cases: relative to vaccination status population size (per million)



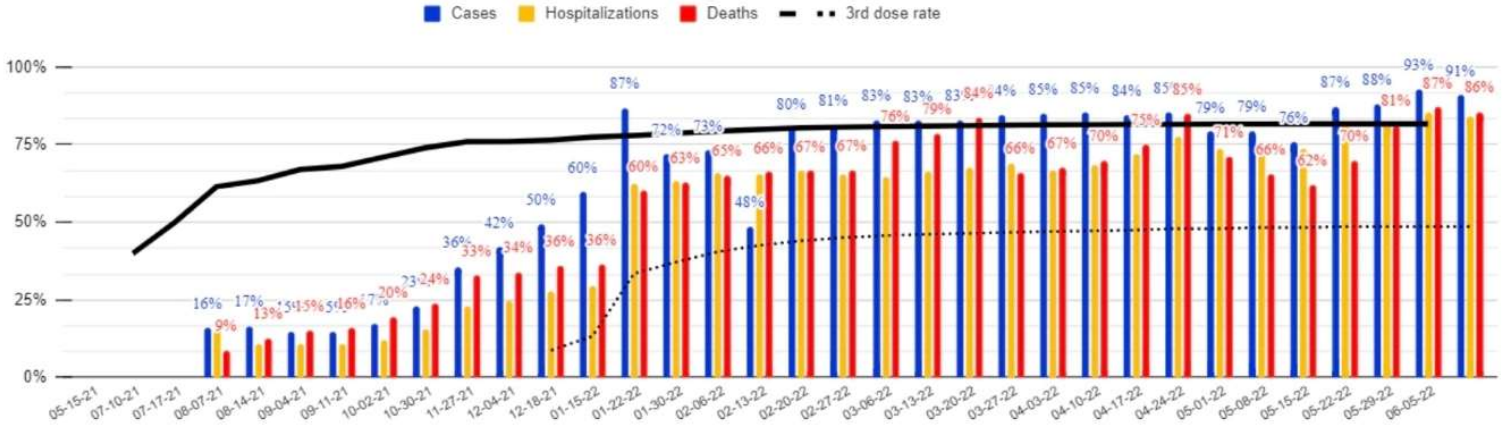
Reported Percentage of Fully Vaccinated among Cases (rPFVAC)

NB: Percentages are computed counting cases since December 2020, when there were no Fully Vaccinated, which creates bias that dissipates with time



Percentage of Fully Vaccinated among Cases (based on weekly count of Cases)

Data: COVID-19 Daily Epidemiology Updates, Public Health Agency of Canada. Analysis: www.IVIM.ca



https://health-infobase.canada.ca/covid-19/epidemiological-summary-covid-19-cases.html#9a

566-02-48305

Table 2. Characteristics and severe outcomes among unvaccinated, partially vaccinated, fully vaccinated.

Published Statistics, counting cases since December 14, 2020 (Note: There were NO fully vaccinated in December 2020, which skews the results)

Numbers below are copied directly from the source (Table 2). "Fully vaccinated" includes those with booster

			Deaths since December 14, 2020:							Hospitalizations							Cases						
Report Date (Reports archive)	As of:	Full vaccination rate	Unvaccinated (0 doses)	Not yet protected (1 dose)	Partially vaccinated (1 dose)	Fully vaccinated (2+ doses)	With boosters (3+ doses)	Total	Fully vaccinated / Total	Unvaccinated (0 doses)	Not yet protected (1 dose)	Partially vaccinated (1 dose)	Fully vaccinated (2+ doses)	With boosters (3+ doses)	Total	Fully vaccinated / Total	Unvaccinated (0 doses)	Not yet protected (1 dose)	Partially vaccinated (1 dose)	Fully vaccinated (2+ doses)	With boosters (3+ doses)	Total	Fully vaccinated / Total
06-22-22	06-05-22	81.7%	10,333	800	975	7,297	3,790	19,405	37.6%	53,074	3,282	5,115	38,211	17,762	99,682	38.3%	968,620	52,284	97,189	1,137,650	360,592	2,255,743	50.4%
06-14-22	05-29-22	81.7%	10,305	800	969	7,156	3,676	19,230	37.2%	52,918	3,281	5,092	37,547	17,257	96,838	38.8%	966,267	52,274	97,063	1,131,789	356,115	2,247,393	50.4%
06-08-22	05-22-22	81.7%	10,284	798	955	6,750	3,438	18,787	35.9%	52,774	3,270	4,992	35,856	16,176	96,892	37.0%	966,280	51,748	94,253	1,075,668	326,144	2,187,949	49.2%
06-02-22	05-15-22	81.7%	10,209	797	946	6,376	3,059	18,328	34.8%	52,553	3,270	4,963	34,564	15,105	95,349	36.2%	964,231	51,737	93,950	1,055,510	310,462	2,165,428	48.7%
05-24-22	05-08-22	81.6%	10,164	797	943	6,012	2,741	17,916	33.6%	52,314	3,269	4,933	33,037	13,875	93,553	35.3%	962,522	51,724	93,702	1,032,754	291,251	2,140,702	48.2%
05-18-22	05-01-22	81.6%	10,058	796	938	5,866	2,677	17,698	33.1%	52,009	3,267	4,868	31,893	13,172	92,057	34.6%	960,184	51,704	93,368	1,023,205	286,474	2,126,481	48.1%
05-11-22	04-24-22	81.6%	9,728	782	887	5,097	2,197	16,494	30.9%	51,721	3,266	4,831	30,309	12,030	90,127	33.6%	957,210	51,685	92,994	1,001,119	270,325	2,103,008	47.6%
05-03-22	04-17-22	81.6%	9,512	782	881	4,827	1,995	16,002	30.2%	50,903	3,264	4,776	28,656	10,861	87,599	32.7%	945,183	51,758	92,518	974,366	250,951	2,063,825	47.2%
04-27-22	04-10-22	81.5%	9,511	783	876	4,605	1,835	15,775	29.2%	50,461	3,263	4,713	26,830	9,623	85,267	31.5%	941,467	51,730	92,025	946,339	230,639	2,031,561	46.6%
04-19-22	04-03-22	81.4%	9,465	782	872	4,411	1,700	15,530	28.4%	50,153	3,258	4,673	25,532	8,670	83,656	30.5%	936,665	51,696	91,496	917,272	210,146	1,997,129	45.9%
04-13-22	03-27-22	81.3%	9,426	781	870	4,281	1,616	15,358	27.9%	49,836	3,254	4,626	24,412	7,947	82,128	29.7%	932,814	51,668	90,925	891,511	192,656	1,966,918	45.3%
04-01-22	03-20-22	81.2%	9,372	781	867	4,158	1,543	15,178	27.4%	49,237	3,237	4,557	23,238	7,278	80,269	29.0%	928,904	51,640	90,427	868,856	178,604	1,939,827	44.8%
03-31-22	03-13-22	81.0%	9,313	780	856	4,019	1,494	14,968	26.9%	48,954	3,231	4,512	22,421	6,868	79,118	28.3%	925,153	51,572	89,384	837,233	168,011	1,903,382	44.0%
03-24-22	03-06-22	80.9%	9,258	779	852	3,851	1,426	14,780	26.3%	48,618	3,227	4,482	21,627	6,363	77,954	27.7%	922,571	51,554	88,952	821,663	158,563	1,884,740	43.6%
03-18-22	02-27-22	80.7%	9,179	779	846	3,738	1,351	14,542	25.7%	48,143	3,226	4,426	20,481	5,827	76,278	26.9%	919,468	51,531	88,463	806,154	149,613	1,865,616	43.2%
03-11-22	02-20-22	80.4%	9,240	786	857	3,683	1,286	14,566	25.3%	47,710	3,220	4,370	19,530	5,320	74,830	26.1%	916,475	51,468	87,698	786,158	138,720	1,841,797	42.7%
03-04-22	02-13-22	79.9%	9,147	785	849	3,495	1,189	14,276	24.5%	47,303	3,213	4,305	18,685	4,864	73,506	25.4%	913,383	51,402	86,724	766,549	128,961	1,816,058	42.2%
03-01-22	02-06-22	79.4%	9,023	780	840	3,216	1,047	13,859	23.2%	46,694	3,203	4,210	17,391	4,278	71,498	24.3%	909,222	51,324	85,344	740,649	116,436	1,786,539	41.5%
02-21-22	01-30-22	78.7%	8,884	776	833	2,897	868	13,390	21.6%	45,918	3,181	4,080	15,521	3,445	68,700	22.6%	902,290	51,132	83,164	703,505	99,531	1,740,091	40.4%
	01-22-22	77.9%	8,693	775	808	2,490	0	12,766	19.5%	44,907	3,154	3,925	13,043		65,029	20.1%	892,033	50,695	79,683	648,271		1,670,682	38.8%
	01-15-22	77.5%	8,479	770	788	2,032		12,069	16.8%	43,540	3,118	3,717	10,387		60,762	17.1%	771,095	44,494	61,209	581,636		1,458,434	39.9%
01-07-22	12-18-21	76.5%	8,013	759	744	1,077		10,593	10.2%	40,788	3,062	3,374	4,099		51,323	8.0%	727,925	43,471	53,171	122,843		947,410	13.0%
	12-04-21	76.0%	7,917	753	734	1,017		10,421	9.8%	40,287	3,000	3,277	3,705		50,269	7.4%	705,123	43,114	52,116	88,742		893,095	9.9%
	11-27-21	76.0%	7,861	752	731	981		10,325	9.5%	39,967	2,988	3,258	3,514		49,727	7.1%	705,725	43,022	51,728	82,513		882,988	9.3%
	10-30-21	74.0%	7,540	741	710	776		9,767	7.9%	37,742	2,883	3,015	2,610		46,250	5.6%	691,361	42,321	49,670	61,825		845,177	7.3%
	10-02-21	71.0%	7,120	719	681	520		9,040	5.8%	35,848	2,823	2,919	1,813		43,403	4.2%	671,339	40,590	46,083	43,266		801,278	5.4%
	09-11-21	68.0%	6,700	699	639	312		8,350	3.7%	33,303	2,668	2,712	1,059		39,742	2.7%	642,016	37,321	41,562	24,717		745,616	3.3%
	09-04-21	67.0%	6,587	696	632	246		8,161	3.0%	32,432	2,636	2,677	844		38,589	2.2%	625,774	36,579	39,784	19,174		725,291	2.6%
	08-14-21	63.4%	6,035	639	570	119		7,363	1.6%	28,975	2,474	2,416	377		34,242	1.1%	585,216	33,486	32,971	6,903		642,576	1.1%
	08-07-21	61.5%	5,974	639	570	104		7,287	1.4%	28,575	2,459	2,392	329		33,755	1.0%	582,343	33,178	31,543	5,139		632,203	0.8%
08-11-21	07-17-21	49.9%	5,896	636	561	89		7,182	1.2%	27,941	2,448	2,327	241		32,955	0.7%	552,688	32,751	28,484	3,119		617,042	0.5%
07-30-21	07-10-21	40.0%	5,863	633	555	85		7,136	1.2%	27,889	2,443	2,303	226		32,861	0.7%	552,262	32,684	28,011	2,936		615,893	0.5%

Evidence from official government data related to the number of people with different number of doses dying of Covid.

The image below shows two screenshots from two official Government of Canada documents:

- one (on the top) compares the percentage of COVID-19 Cases for people with different number of vaccine doses (link to source - https://health-infobase.canada.ca/covid-19/cases-following-vaccination.html), and
- the other one (on the bottom) shows when Canada started administering additional doses (link to source - https://health-infobase.canada.ca/covid-19/vaccination-coverage/archive/2022-07-22/index.html).

Question: *"Do you see that Distributions of Cases (which is percentage of each population among all cases - shown on the top graph) are published by the Government of Canada in such a way as to* ***significantly minimize*** *the percentage of Cases for people with more doses (dark green bars on the right)* ***compared to*** *the percentage of Cases for people with less or no doses (grey and light green bars on the left)?".*

In answering this question, please take into account that Canada has started administering additional doses only recently (since Dec 2021 – 1st additional dose, and since April 2022 – 2nd additional dose), whereas PHAC plots and compares TOTAL number of cases since December 2020.

Observation (Evidence):

- Data shows that **since 2nd additional doses started to be administered, people with 2nd additional doses were dying of COVID more often than unvaccinated and people with less doses.**
- PHAC picture however **shows the opposite.** It is printed in a such a way as to created a visual illusion that **people with 2nd additional doses die of COVID significantly less than** unvaccinated and less than people with less number of doses.

By the principle of analogy, it can be shown that this has been always the case – i.e., since their very first report when PHAC started publishing Cases following vaccination data, PHAC has been always publishing the data in such a way as to create a "visual illusion" that people with more doses die (hospitalised) less then people with less doses, when in reality (when recomputed on weekly basis) it was not always the case.

COVID-19 epidemiology update: ×

https://health-infobase.canada.ca/covid-19/cases-following-vaccination.html

Cases reported since the start of the vaccination campaign, as of September 25, 2022

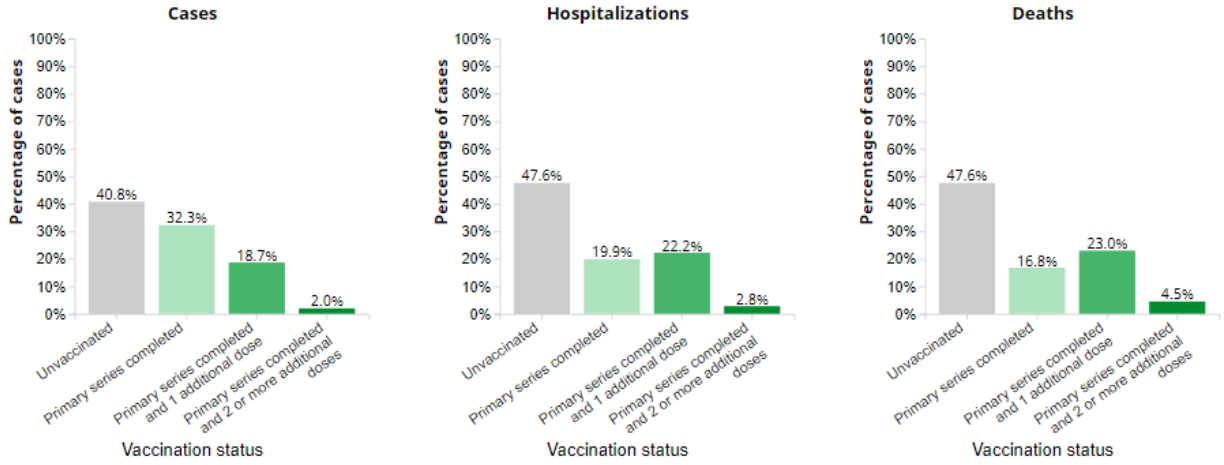
Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 73% (n=2,457,576) of COVID-19 cases aged 5 years or older.

Of these cases:

- 1,002,452 (40.8%) were unvaccinated
- 794,145 (32.3%) had completed their primary vaccine series
- 460,280 (18.7%) had completed their primary vaccine series and 1 additional dose
- 49,056 (2.0%) had completed their primary vaccine series and 2 or more additional doses

For definitions of the different vaccination statuses, please refer to the Technical notes and definitions section.

Figure 1. Distribution of outcomes of confirmed COVID-19 cases reported to PHAC by vaccination status as of September 25, 2022

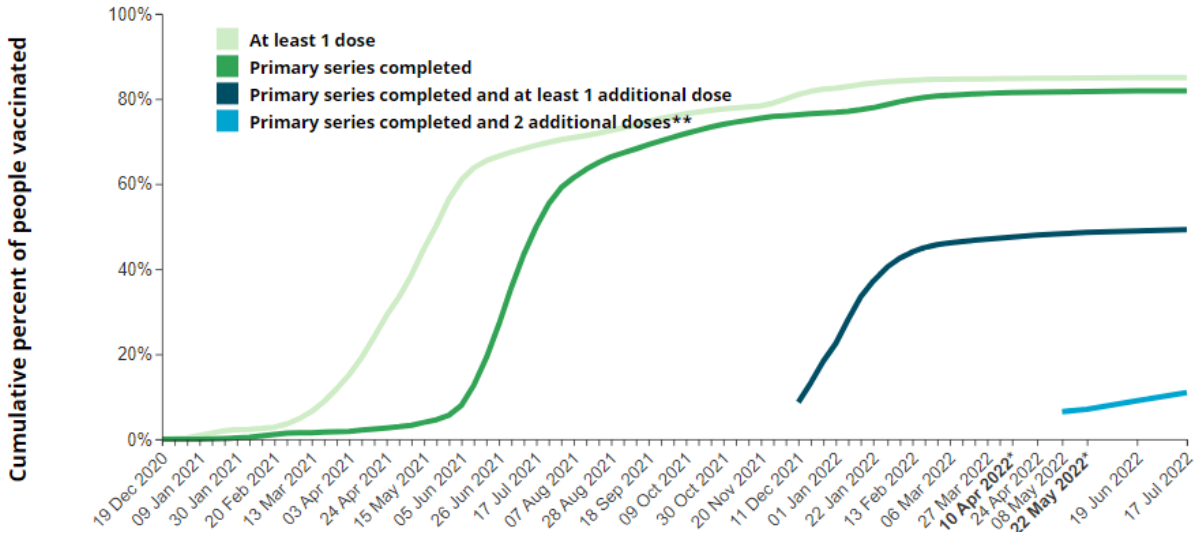


COVID-19 vaccination coverage in ×

https://health-infobase.canada.ca/covid-19/vaccination-coverage/archive/2022-07-22/index.html

Figure 2. Cumulative percent of people who have received a COVID-19 vaccine in Canada by vaccination status and report week, July 17, 2022

Hover over or select a portion of the line graph to see the cumulative number or percentages of people vaccinated by vaccination status and report week.



Government of Canada / Gouvernement du Canada

COVID-19 daily epidemiology update

Updated: January 12, 2022, 9 am EST

⚠ Changes to update schedule

Beginning January 4, 2022, we'll update this data at 9:00 am each day.

Summary of COVID-19 cases across Canada and over time. Contains detailed data about the spread of the virus over time and in different regions of the country. Includes breakdowns by age and sex or gender. Provides an overview of hospitalizations and deaths, testing, variants of concern and exposures.

Key updates as of January 12, 2022, 9 am EST

Cases today	Total cases	Active cases	Total resolved	Deaths today	Total deaths
28,827	2,624,787	402,114	2,191,716	114	30,957

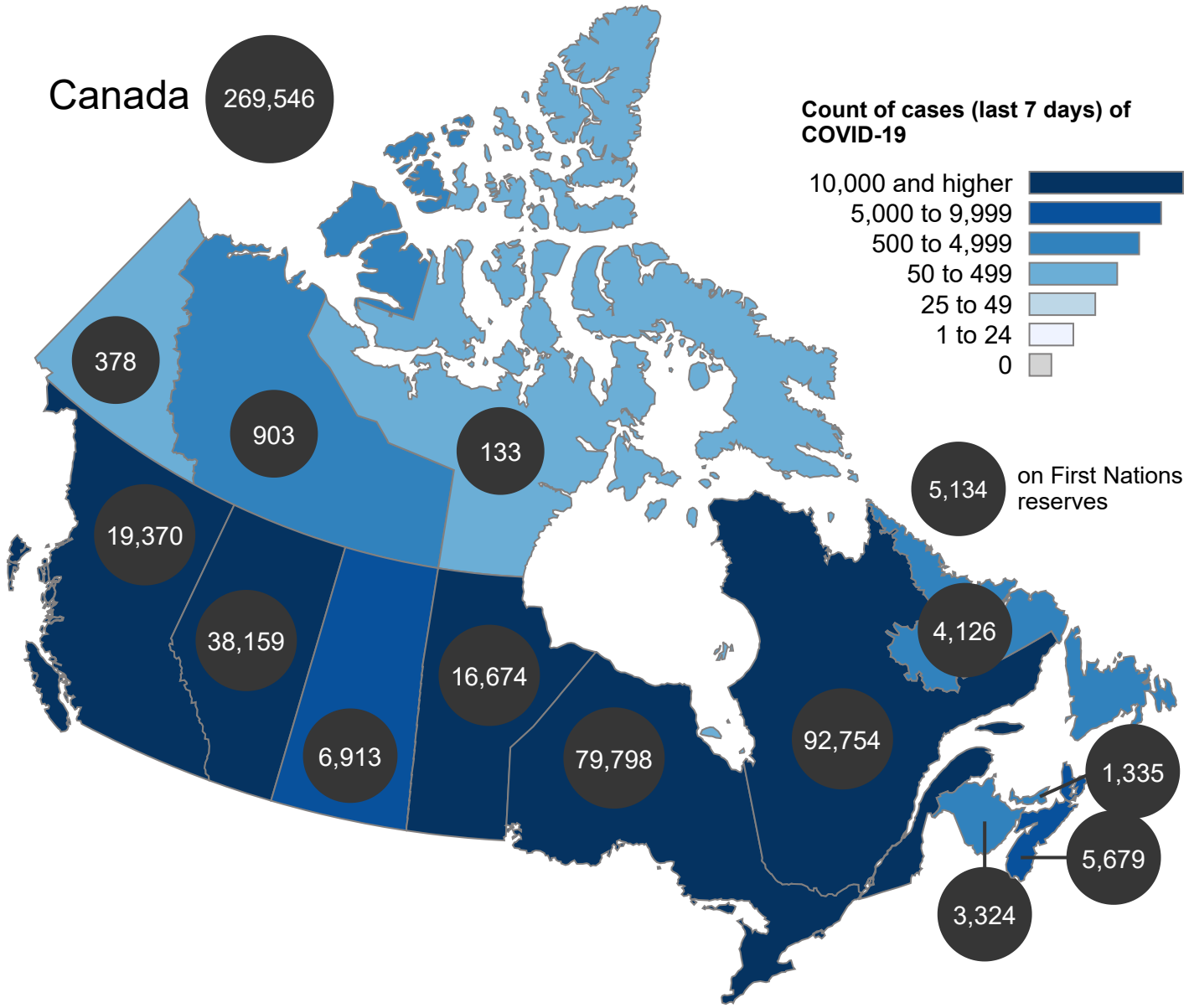
Total tests performed	Daily percent positive (last 7 days)	Daily tests per 100,000 population (last 7 days)
54,405,632	27.5%	392

- We update these sections Monday to Friday at 9:00 AM EST: Key updates, Current situation and National overview. Laboratory data represents specimens received by labs up to January 9, 2022 to allow time to process results.
- We update these sections every Friday: COVID-19 variants in Canada, Epidemic curve, Demographics, How people were exposed, and Severe illness and outcomes.
- The Cases following vaccination section is updated every Tuesday
- Of the 12 jurisdictions reporting updates, no new cases were reported in 0 provinces and territories in the past 24 hours.
- Of the 13 jurisdictions reporting updates, no new deaths were reported in 6 provinces and territories in the past 24 hours.
- Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.
- Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be

temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

Current situation

Figure 1a. Count of cases (last 7 days) of COVID-19, by province/territory as of January 11, 2022 (Last data update January 12, 2022, 9 am EST)



The count of cases (last 7 days) of COVID-19 in **Canada** was **269,546** as of January 11, 2022.

a. This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of January 11, 2022. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

b. Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

c. Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

Areas in Canada with cases of COVID-19 as of January 11, 2022

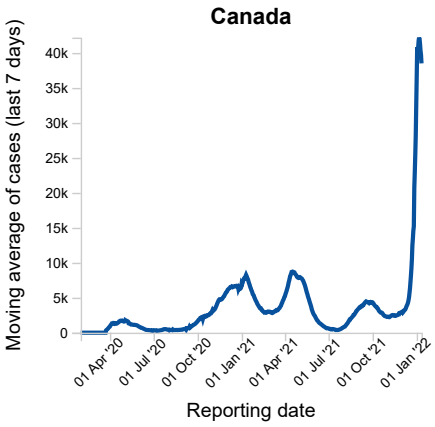
	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
Location	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Count**	**Rate***	**Percent**
British Columbia	286,080	5,486	19,370	371	39,080	749	244,551	2,449	47	22	0.4	5,204,126	13,722	263	23.8%
Alberta	417,533	9,398	38,159	859	58,613	1,319	355,568	3,352	75	30	0.7	6,461,833	12,374	279	37.7%
Saskatchewan	94,080	7,974	6,913	586	8,229	697	84,890	961	81	1	0.1	1,359,067	3,227	274	28.3%
Manitoba	103,935	7,511	16,674	1,205	33,617	2,429	68,892	1,426	103	26	1.9	1,370,188	5,049	365	47.3%
Ontario	896,248	6,045	79,798	538	138,560	935	747,289	10,399	70	161	1.1	21,675,447	53,584	361	28.6%
Quebec	758,576	8,816	92,754	1,078	100,448	1,167	646,100	12,028	140	247	2.9	15,224,398	49,142	571	26.5%
Newfoundland and Labrador	10,201	1,960	4,126	793	6,218	1,195	3,960	23	4	3	0.6	497,479	4,700	903	13.7%
New Brunswick	20,890	2,647	3,324	421	7,349	931	13,368	173	22	8	1.0	652,119	2,367	300	23.4%
Nova Scotia	27,357	2,758	5,679	572	6,796	685	20,446	115	12	4	0.4	1,632,736	5,324	537	16.8%
Prince Edward Island	3,197	1,946	1,335	812	1,694	1,031	1,503	0	0	0	0.0	253,169	48	29	4.2%
Yukon	2,322	5,402	378	879	291	677	2,016	15	35	0	0.0	9,129	N/A	N/A	N/A
Northwest Territories	3,322	7,300	903	1,984	1,025	2,253	2,285	12	26	0	0.0	38,906	105	230	25.9%
Nunavut	1,033	2,622	133	338	194	492	835	4	10	0	0.0	26,959	228	580	8.7%
Canada	**2,624,787**	**6,863**	**269,546**	**705**	**402,114**	**1,051**	**2,191,716**	**30,957**	**81**	**502**	**1.3**	**54,405,632**	**149,869**	**392**	**27.5%**

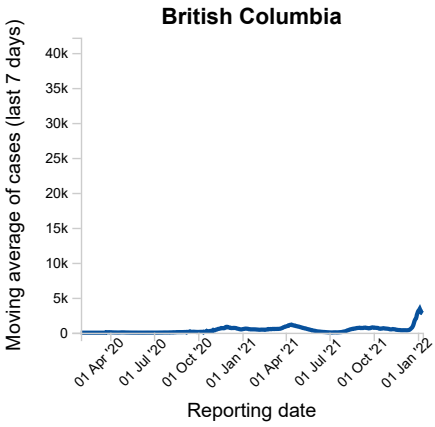
* Rate per 100,000 population

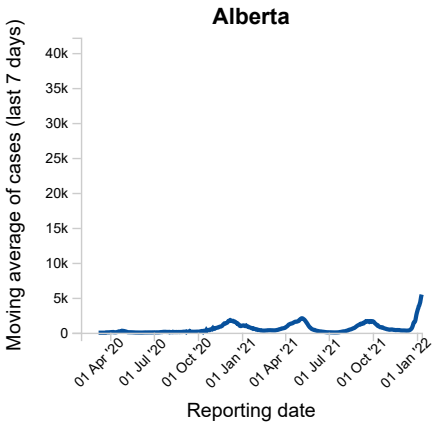
566-02-48305

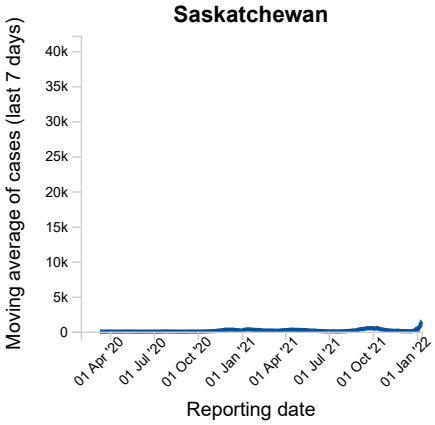
Figure 1b. Moving average of cases (last 7 days) of COVID-19 in Canada as of January 11, 2022 (Last data update January 12, 2022, 9 am EST)

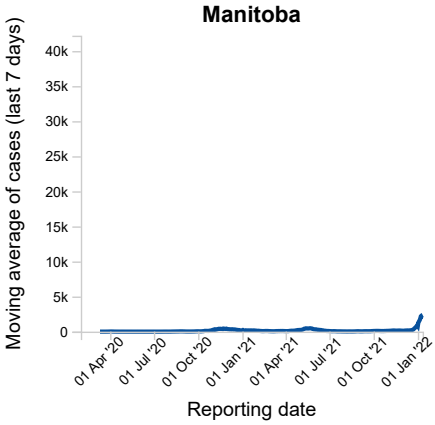
The figures below show cases over time. The range of dates (January 31st, 2020 - present date) is the same for each figure. This allows you to compare the provinces and territories on the same timescale.

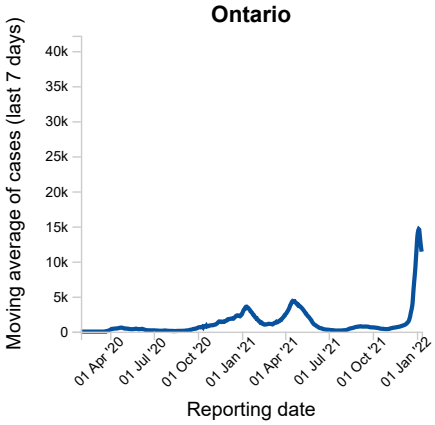


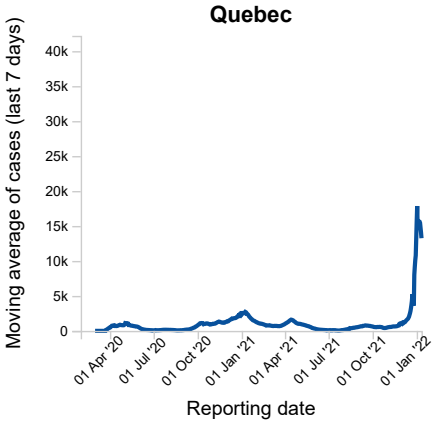


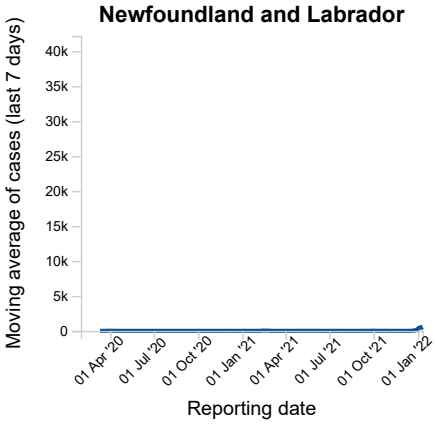


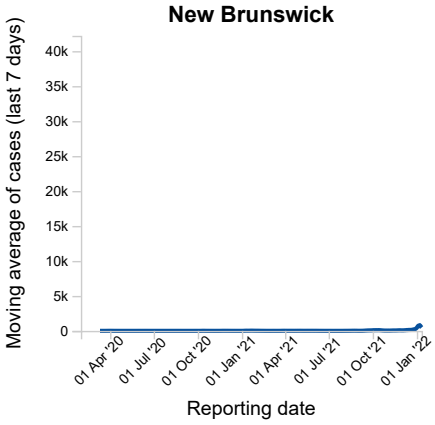


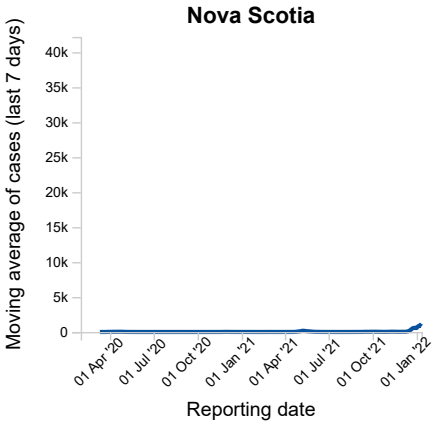


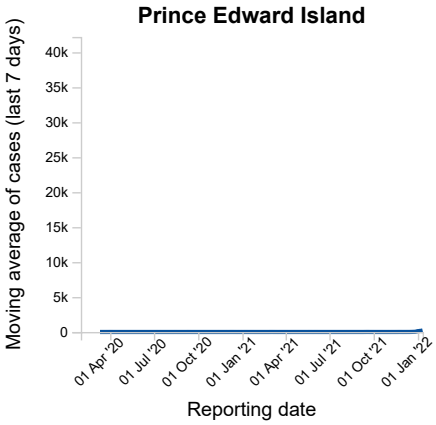


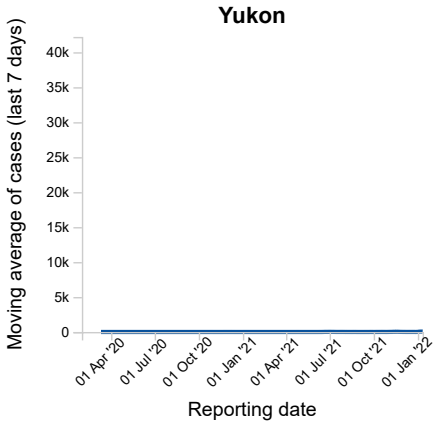


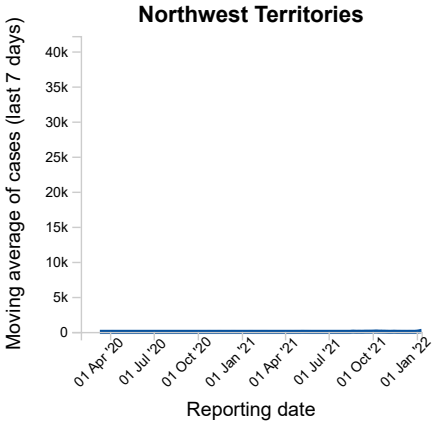


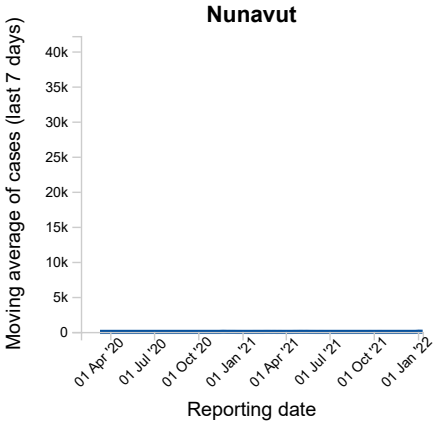












a. Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.
b. This information is based on data from our provincial and territorial partners. Data about cases was last updated on January 11, 2022. Laboratory data includes specimens received by labs up to January 9, 2022. For the most up to date data for any province, territory or city, please visit their web site.
c. The 7-day moving average is the total of the daily numbers for the previous 7 days (up to and including the day of the last update), divided by the number of days for which data is available. We go back and update the moving averages as provinces and territories submit more data. We calculate the national 7-day moving average by summing the 7-day moving average from the provinces and territories then dividing by the national population if a rate is calculated.
d. Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

Downloadable data (in .csv format).

Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

Note: Out of the total number of people tested, 76 were repatriated travellers, of which 13 were cases.

National overview

There have been over **54,405,632** COVID-19 tests performed in Canada or **1,422,514 tests per 1 million people**. For information about testing trends, please see the Detailed weekly epidemiological report (PDF).

Table 1. Daily* change in the number of cases, deaths and tests performed, by province or territory, as of January 11, 2022 (Last data update January 12, 2022, 9 am EST)

Location	New cases	New deaths	Tests performed
British Columbia	2,239	3	11,476
Alberta	4,704	8	N/A
Saskatchewan	1,140	0	3,661
Manitoba	2,002	18	4,650
Ontario	7,951	21	40,692
Quebec	8,710	62	42,379
Newfoundland and Labrador	750	0	7,339
New Brunswick	191	1	1,368
Nova Scotia	616	1	4,111
Prince Edward Island	304	0	37
Yukon	N/A	0	N/A
Northwest Territories	215	0	44
Nunavut	5	0	110
Canada	**28,827**	**114**	**115,867**

* The new cases, deaths and tests reflect the difference between a province or territory's current report and their last report. Some provinces and territories do not update daily.

N/A means that no daily update was provided by the province or territory.

Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia’s cumulative cases up until December 9 and add the daily lab

positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

COVID-19 variants in Canada

All viruses, including COVID-19, change over time. These changes are called mutations, and result in variants of the virus. Not all mutations are of concern. Most do not cause more severe illness. However, some mutations result in variants of concern or variants of interest.

A variant of concern has mutations that are significant to public health. Before a variant of interest is considered one of concern, scientists and public health professionals must determine if the mutations result in an actual change in the behaviour of the virus. For example, it might:

- spread more easily
- cause more severe illness
- require different treatments, or
- reduce vaccine effectiveness

There are several variants of interest that have mutations similar to variants of concern, but we don’t yet know if they pose a higher risk to public health.

The Public Health Agency of Canada (PHAC) works with provincial and territorial partners and the Canadian COVID-19 Genomics Network (CanCOGeN) to sequence a percentage of all positive COVID-19 test results. Sequencing reveals the genetic code of the virus, which tells us which variant is involved in a specific case of COVID-19. We report the proportion of COVID-19 variants in Canada every week.

We collect evidence to determine if new variants meet the definition for a variant of concern or a variant of interest. Many variants are being tracked across Canada and around the world. Variants of concern now represent a majority of COVID-19 cases in Canada.

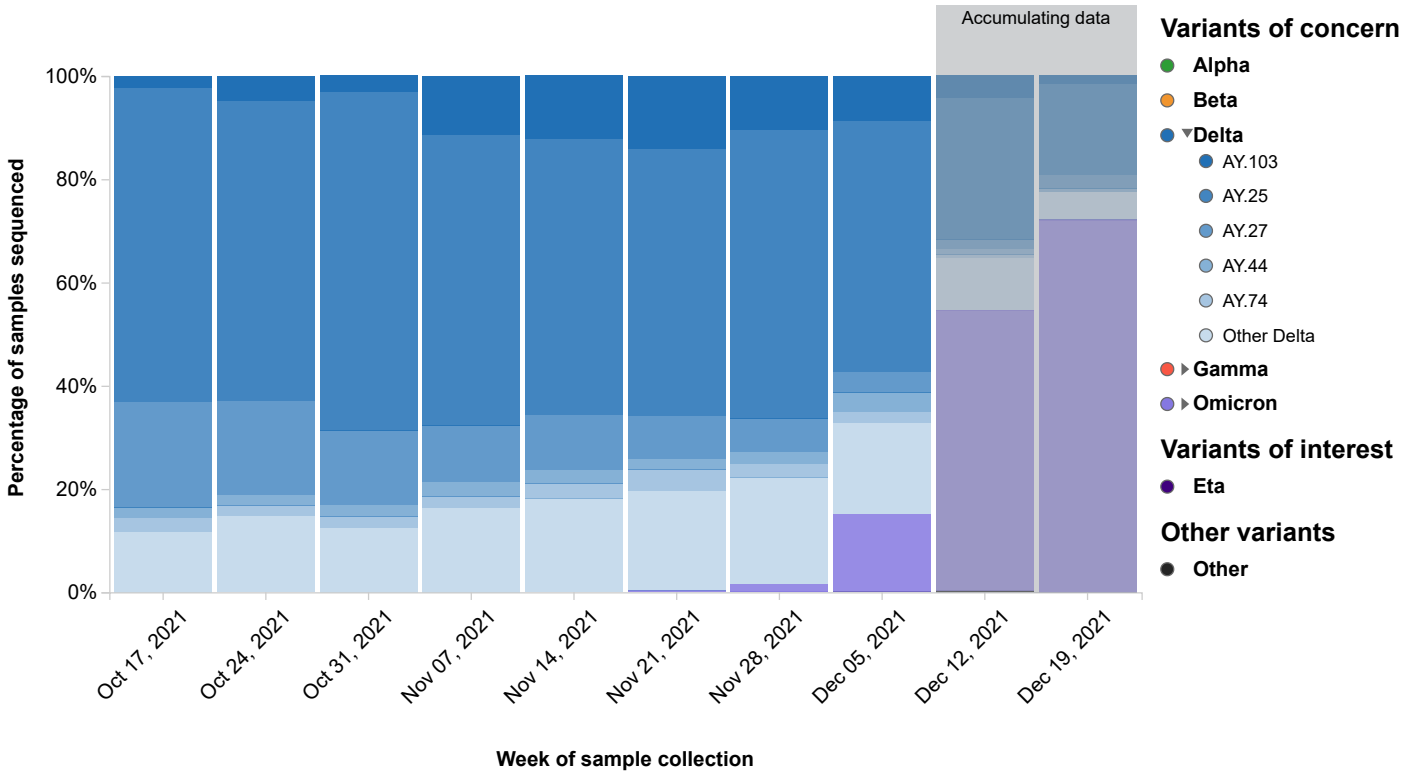
Current variants of concern in Canada include:

- Alpha (B.1.1.7)
- Beta (B.1.351)
- Gamma (P.1)
- Delta (B.1.617.2)
- Omicron (B.1.1.529)

New variants will continue to appear. We must remain vigilant and take all available measures to limit spread.

Figure 2. Weekly variant breakdown Updated: January 7, 2022, 4 pm EDT

The graphic shows the percentage mix of COVID-19 variants detected in Canada through whole genome sequencing, by week of sample collection. You can see the numbers for each date by hovering over, tabbing to, or long-pressing any of the bars. To see a specific variant or variant grouping, click or press return. Repeat to restore the complete graph. Sublineages or offshoots for some variants can be revealed or hidden by clicking on the name of the variant in the legend.



This information is based on whole genome sequencing from surveillance testing in all provinces and territories. In addition to sequencing done by the National Microbiology Laboratory in Winnipeg, data is included from provincial and territorial laboratories.

Sequencing takes from 1 to 3 weeks to complete, so the proportions for recent weeks may change as more data are added. Surveillance in each province or territory is organized and prioritized according to local needs and may change from time to time. Because of differences in local sampling and reporting, the percentages illustrate trends rather than precise measurements.

Weekly variant breakdown

Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection.

Variant Grouping	Oct 17, 2021 (n=4,770)	Oct 24, 2021 (n=3,756)	Oct 31, 2021 (n=4,447)	Nov 07, 2021 (n=4,337)	Nov 14, 2021 (n=5,272)	Nov 21, 2021 (n=5,881)	Nov 28, 2021 (n=5,167)	Dec 05, 2021 (n=2,943)	Dec 12, 2021 (n=2,203)	Dec 2021 (n=1,
Variants of concern	**99.9%**	**99.9%**	**100.1%**	**100.0%**	**100.1%**	**100.0%**	**100.0%**	**99.9%**	**99.8%**	**100.**
Alpha	**-**	**0.0%**	**-**	**-**	**0.0%**	**-**	**-**	**-**	**-**	**-**
B.1.1.7	-	0.0%	-	-	0.0%	-	-	-	-	-
Beta	**-**	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B.1.351	-	0.0%	-	-	-	-	-	-	-	-
Delta	**99.9%**	**99.9%**	**100.1%**	**100.0%**	**100.1%**	**99.7%**	**98.4%**	**84.8%**	**45.4%**	**28.0**
AY.103	2.3%	4.7%	3.1%	11.4%	12.3%	14.1%	10.4%	8.6%	4.3%	1.7%
AY.25	60.8%	58.1%	65.7%	56.3%	53.5%	51.8%	56.0%	48.8%	27.5%	17.6%
AY.27	20.4%	18.2%	14.4%	11.0%	10.6%	8.3%	6.4%	4.0%	1.9%	2.7%
AY.44	2.1%	2.1%	2.2%	2.8%	2.6%	2.0%	2.3%	3.7%	1.0%	0.4%
AY.74	2.6%	2.1%	2.3%	2.2%	3.0%	4.2%	2.7%	2.1%	0.7%	0.1%
Other Delta	11.7%	14.7%	12.4%	16.3%	18.1%	19.3%	20.6%	17.6%	10.0%	5.5%
Gamma	**0.0%**	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
P.1	-	0.0%	-	-	-	-	-	-	-	-
P.1.12	0.0%	-	-	-	-	-	-	-	-	-
Omicron	**-**	**-**	**-**	**-**	**-**	**0.3%**	**1.6%**	**15.1%**	**54.4%**	**72.1**
B.1.1.529	-	-	-	-	-	-	-	-	0.1%	0.2%
BA.1	-	-	-	-	-	0.3%	1.5%	15.1%	54.3%	71.9%
BA.2	-	-	-	-	-	-	0.1%	-	-	-
Variants of interest	**-**	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Eta	**-**	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B.1.525	-	0.0%	-	-	-	-	-	-	-	-

Variant Grouping	Oct 17, 2021 (n=4,770)	Oct 24, 2021 (n=3,756)	Oct 31, 2021 (n=4,447)	Nov 07, 2021 (n=4,337)	Nov 14, 2021 (n=5,272)	Nov 21, 2021 (n=5,881)	Nov 28, 2021 (n=5,167)	Dec 05, 2021 (n=2,943)	Dec 12, 2021 (n=2,203)	Dec 2021 (n=1,
Other variants	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**-**	**0.0%**	**0.1%**	**0.3%**	**-**
Other	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**0.0%**	**-**	**0.0%**	**0.1%**	**0.3%**	**-**

Note: The shaded columns on the right represent a period of accumulating data.

Contributing laboratories:

- Saskatchewan - Roy Romanow Provincial Laboratory (RRPL)
- Public Health Ontario (PHO)
- Newfoundland and Labrador - Eastern Health
- New Brunswick – Vitalité Health Network
- Manitoba Cadham Provincial Laboratory
- Laboratoire de santé publique du Québec (LSPQ)
- BCCDC Public Health Laboratory
- Alberta Precision Labs - Edmonton (APL)
- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

Detailed case information

The tables and figures below reflect detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.

Updated: January 7, 2022, 9 am EST

Epidemic curve

As of January 7, 2022, 9 am EST, PHAC has received detailed case report data on 2,262,496 cases. Both exposure and symptom onset date were available for 1,609,784 (71.2%) cases [1].

The shaded area on the far right of Figure 3 represents a period of accumulating data. This is the period of time (1 to 2 weeks) before the latest cases are reported to PHAC. This delay is a result of the time required to seek health care, get tested and receive results. It also takes time for public health authorities to gather information on cases. We update this information as it becomes available.

Figure 3. COVID-19 cases (n=2,262,496 [1]) in Canada by date [2] as of January 7, 2022, 9 am EST (total cases)

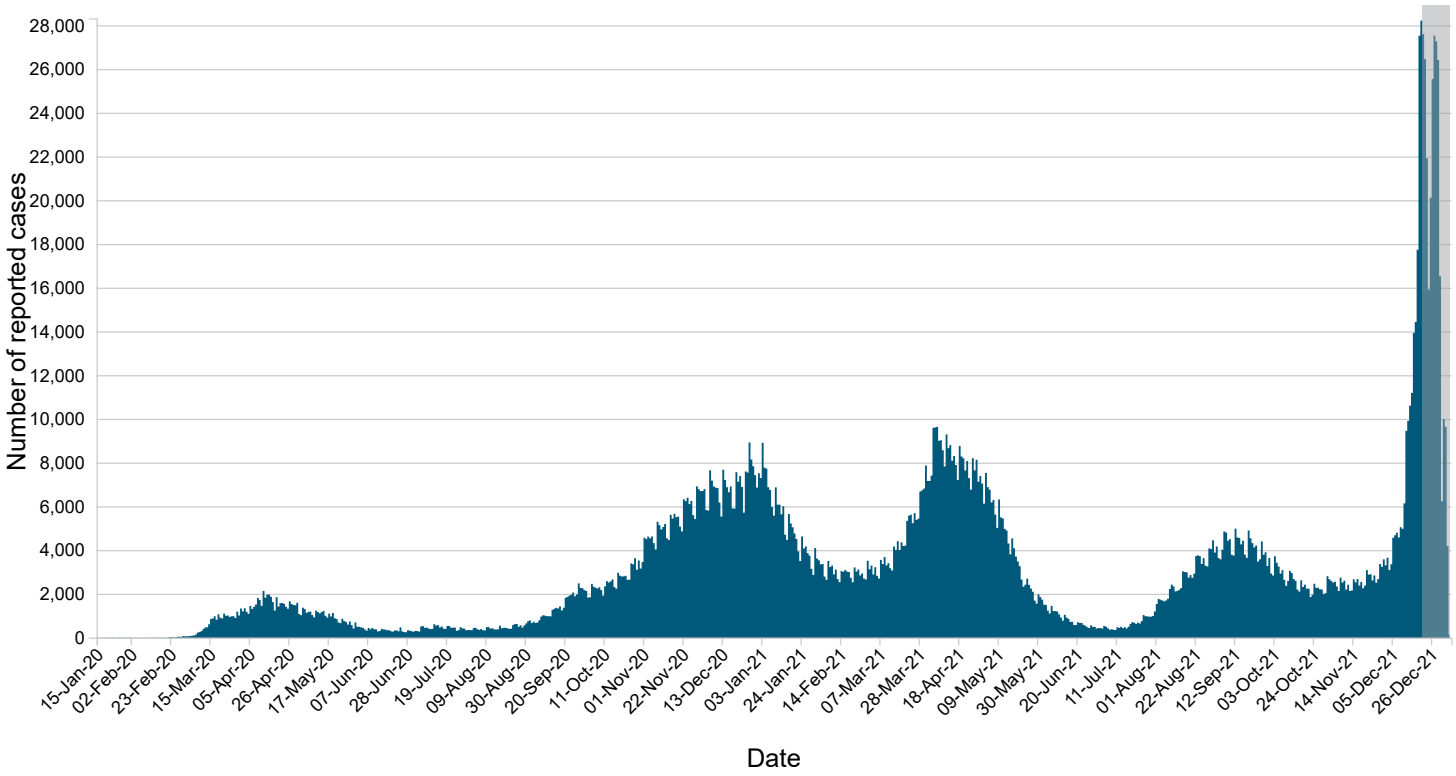


Figure 3. COVID-19 cases (n=1,609,784 [1]) in Canada by date [2] as of January 7, 2022, 9 am EST (by exposure)

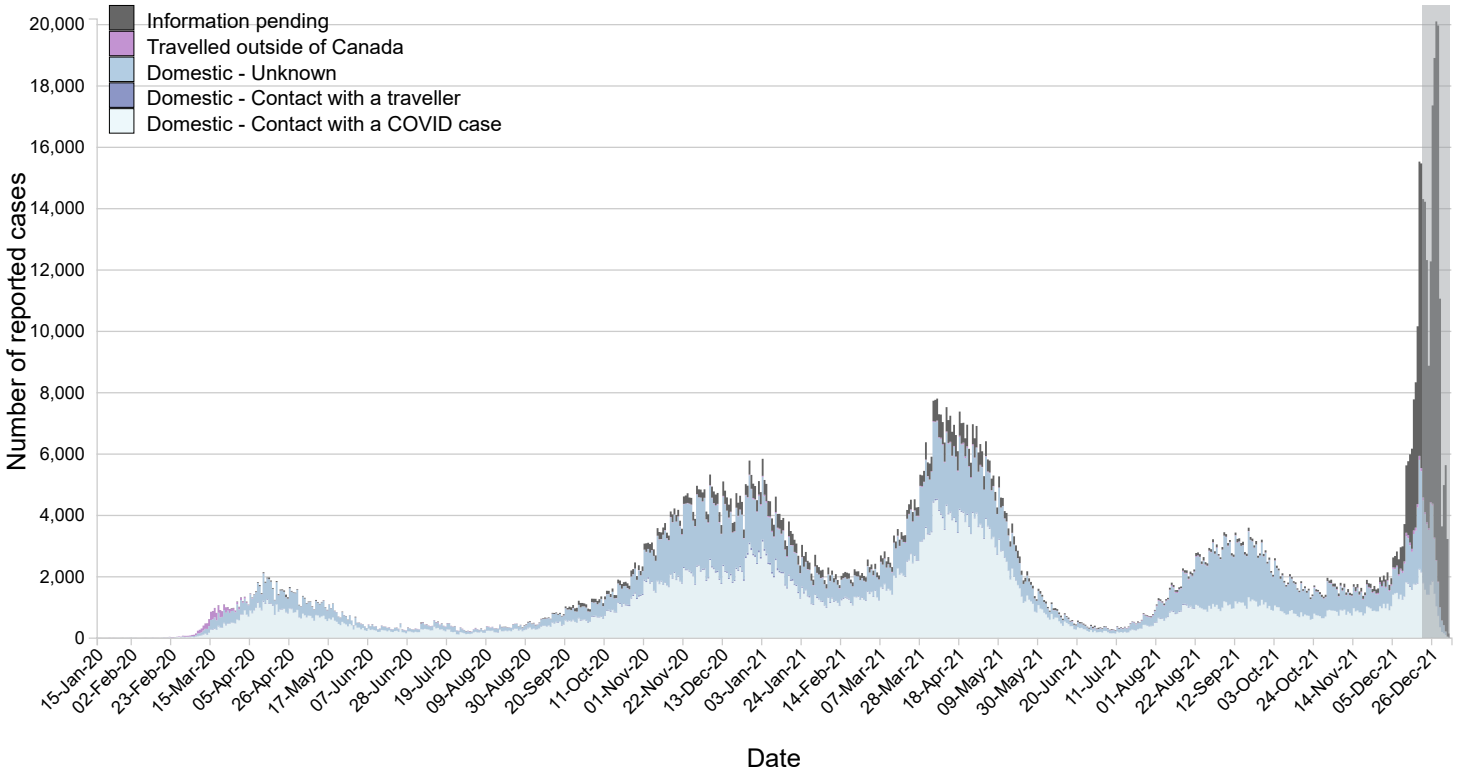


Figure 3. COVID-19 cases (n=2,160,132 [1]) in Canada by date [2] as of January 7, 2022, 9 am EST (by age - 10 year groups)

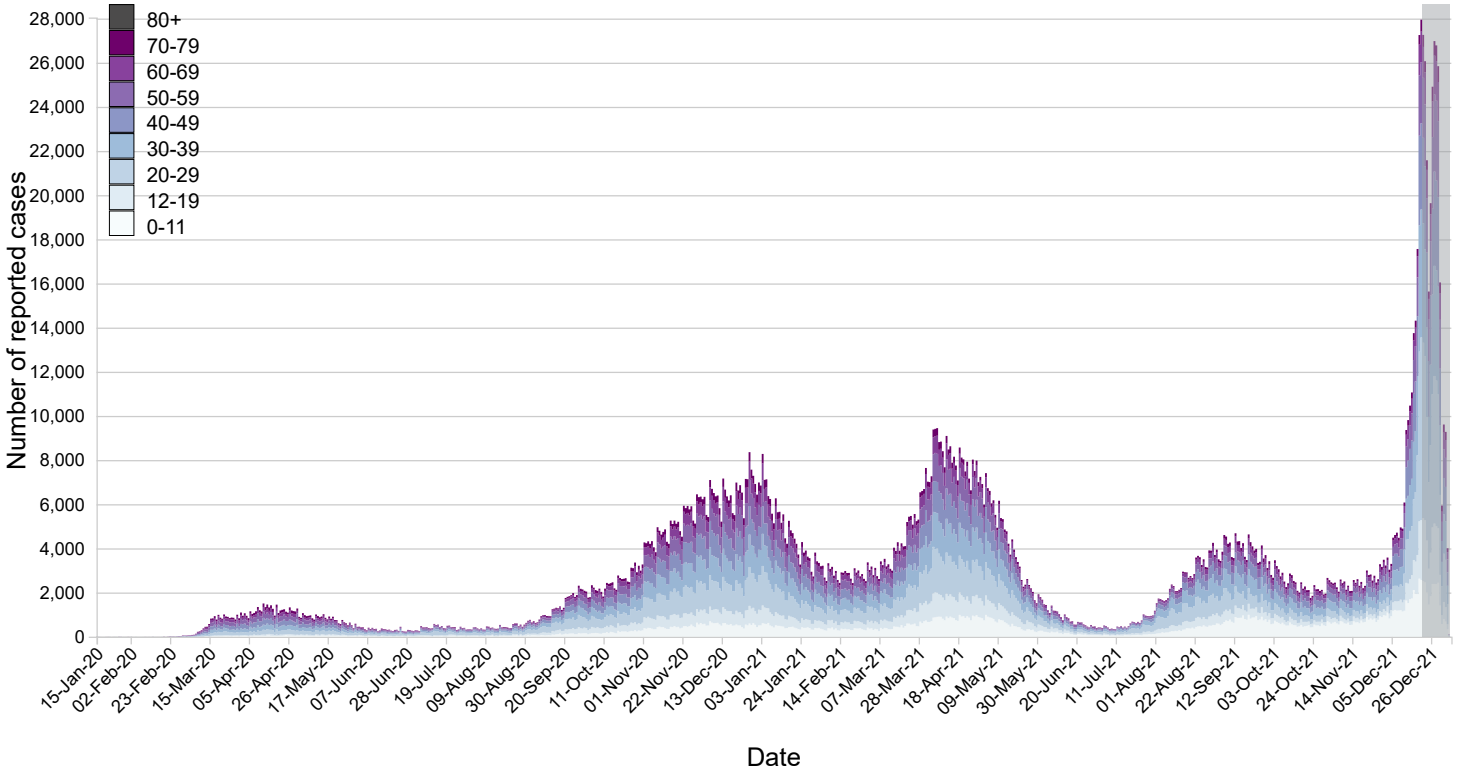
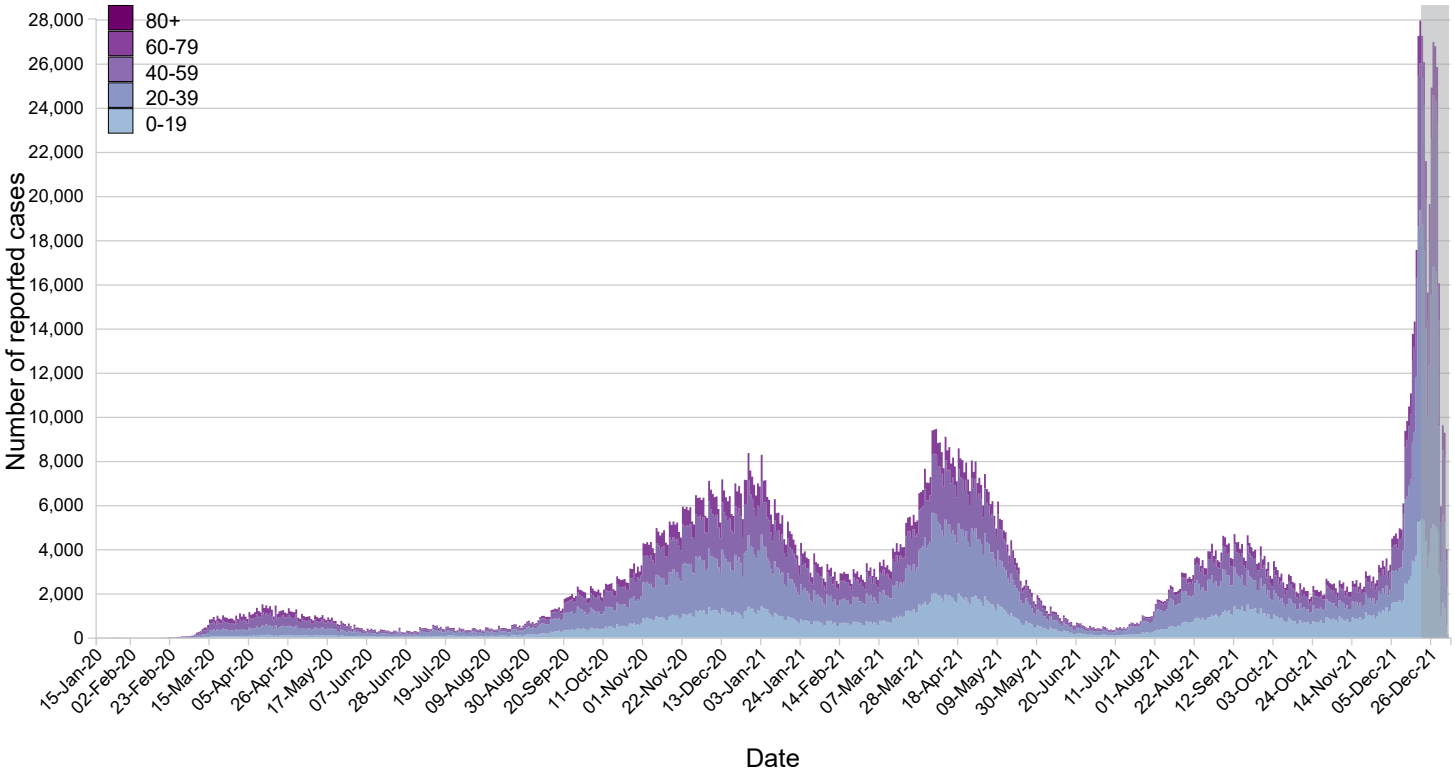


Figure 3. COVID-19 cases (n=2,160,132 [1]) in Canada by date [2] as of January 7, 2022, 9 am EST (by age - 20 year groups)



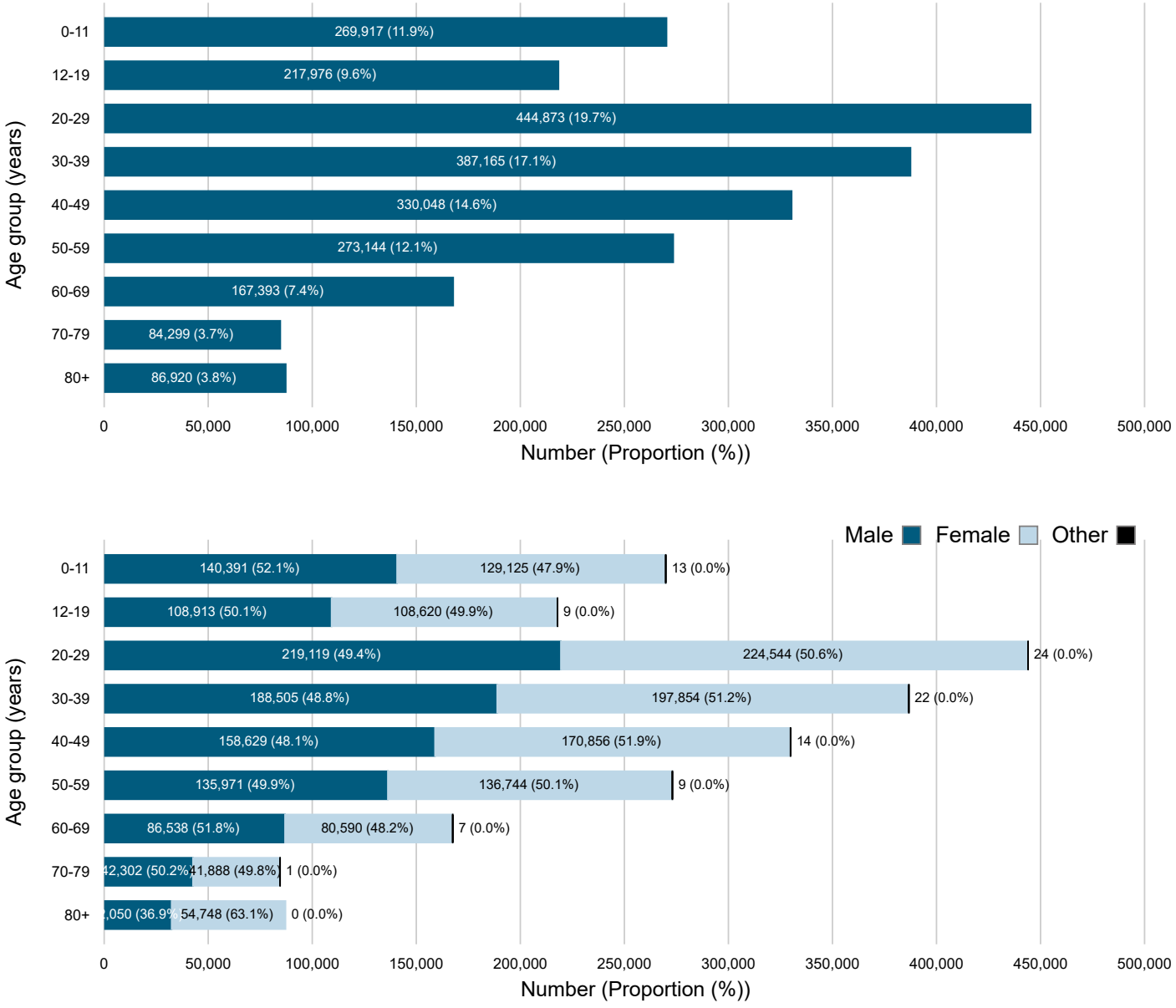
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

Demographics

We have detailed case report data from 2,262,496 cases. We know the age of patients in 99.97% of cases, and both age and gender in 99.78% of cases.

Of the cases reported in Canada so far, 50.7% were female and 36.8% were between 20 and 39 years old (Figure 4).

Figure 4. Age distribution of COVID-19 cases (n=2,261,735 [1]) in Canada as of January 7, 2022, 9 am EST [4]



Age by gender [4] distribution of COVID-19 cases (n=2,261,735 [1]) in Canada, January 7, 2022, 9 am EST

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	269,917 (11.9%)	140,391 (12.6%)	129,125 (11.3%)	13 (13.1%)
12-19	217,976 (9.6%)	108,913 (9.8%)	108,620 (9.5%)	9 (9.1%)
20-29	444,873 (19.7%)	219,119 (19.7%)	224,544 (19.6%)	24 (24.2%)
30-39	387,165 (17.1%)	188,505 (16.9%)	197,854 (17.3%)	22 (22.2%)
40-49	330,048 (14.6%)	158,629 (14.3%)	170,856 (14.9%)	14 (14.1%)
50-59	273,144 (12.1%)	135,971 (12.2%)	136,744 (11.9%)	9 (9.1%)
60-69	167,393 (7.4%)	86,538 (7.8%)	80,590 (7.0%)	7 (7.1%)
70-79	84,299 (3.7%)	42,302 (3.8%)	41,888 (3.7%)	1 (1.0%)
80+	86,920 (3.8%)	32,050 (2.9%)	54,748 (4.8%)	0 (0.0%)
Total	2,261,735 (100%)	1,112,418 (100%)	1,144,969 (100%)	99 (100%)

How people were exposed [3]

In Canada, detailed case report data were provided for 2,262,496 cases. We have exposure history for 1,609,784 (71.2%) cases. The probable exposure setting of these cases [1] are:

- any exposure that occurred in Canada: **1,324,540 (82.3%)**, including
  - from contact with a known COVID case: **754,948 (46.9%)**
  - from contact with a traveller: **9,893 (0.6%)**
  - from an unknown source: **559,699 (34.8%)**
- currently unknown (information pending): **270,630 (16.8%)**
- travelled outside of Canada: **14,614 (0.9%)**

Cases following vaccination

Data extracted on December 31, 2021 for cases from December 14, 2020 up until December 18, 2021.

While the COVID-19 vaccines are highly effective, a percentage of the population who are vaccinated may become infected with COVID-19 if they are exposed to the virus that causes it. This means that even with high vaccine effectiveness, a percentage of people who are vaccinated against COVID-19 will still get sick and some may be hospitalized or die.

It is also possible that a person could be infected just before or just after vaccination and still get sick. It typically takes about two weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

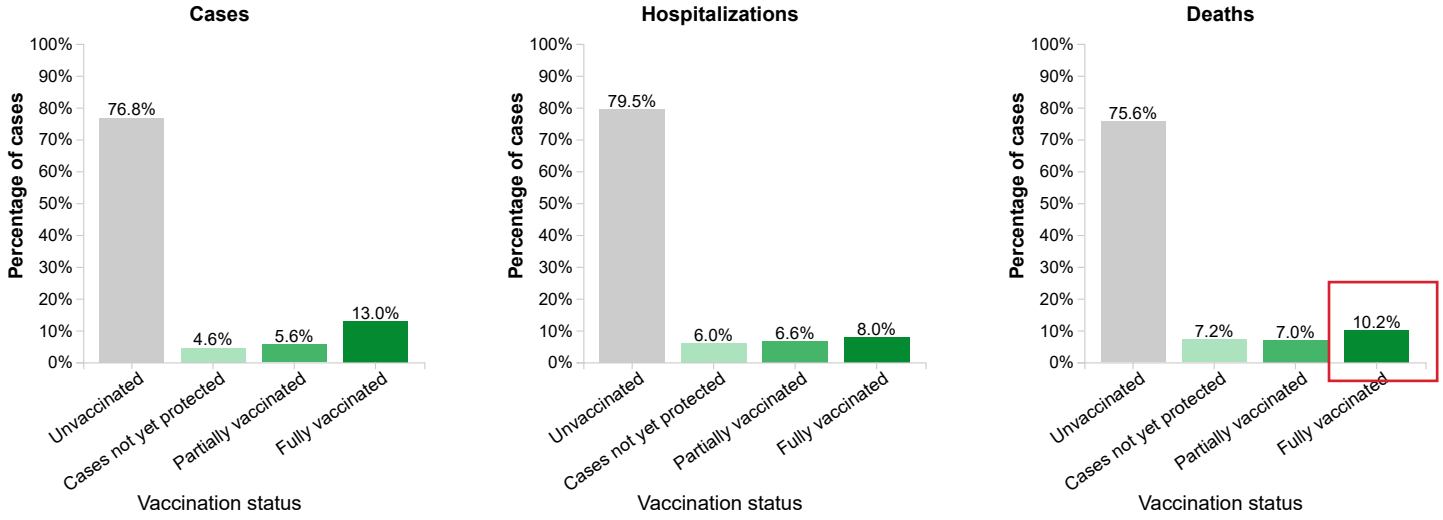
Cases reported since the start of the vaccination campaign, as of December 18, 2021

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 78.0% (n=1,214,966) of COVID-19 cases aged 12 years or older.

Of these cases:

- 727,925 (76.8%) were unvaccinated at the time of their episode date
- 43,471 (4.6%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 53,171 (5.6%) were only partially vaccinated, as their episode date occurred either 14 days or more after their first dose or less than 14 days after their second dose
- 122,843 (13.0%) were fully vaccinated, as their episode date occurred 14 days or more after their second dose

Figure 5. Distribution of confirmed COVID-19 cases reported to PHAC by vaccination status as of December 18, 2021



Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of December 18, 2021

Status	Cases	Hospitalizations	Deaths
Unvaccinated	76.8%	79.5%	75.6%
Cases not yet protected	4.6%	6.0%	7.2%
Partially vaccinated	5.6%	6.6%	7.0%
Fully vaccinated	13.0%	8.0%	10.2%

Among the twelve jurisdictions that have reported case-level vaccine history data to PHAC, a total of 24.1 million people have received at least one dose of the COVID-19 vaccine as of December 18, 2021.

Of these people:

- 23.6 million achieved partial vaccination status, of which 53,171 (0.23%) were diagnosed with COVID-19 while partially vaccinated
- 22.4 million achieved full vaccination status, of which 122,843 (0.55%) were diagnosed with COVID-19 while fully vaccinated

Based on detailed case information reported to PHAC from provinces and territories, cases following vaccination were reported more frequently among females (Table 2). This may be the result of higher vaccination coverage in Canada among females due to the prioritization healthcare workers as part of the vaccine rollout.

Table 2. Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of December 18, 2021

		Unvaccinated (n=727,925)	**Cases not yet protected** (n=43,471)	**Partially vaccinated** (n=53,171)	**Fully vaccinated** (n=122,843)	**Total cases** (n=947,410)
Gender*	Male	371,897 (78.5%)	20,959 (4.4%)	24,980 (5.3%)	56,197 (11.9%)	474,033 (100%)
	Female	354,365 (75.2%)	22,454 (4.8%)	28,113 (6.0%)	66,344 (14.1%)	471,276 (100%)
Hospitalizations		40,788 (79.5%)	3,062 (6.0%)	3,374 (6.6%)	4,099 (8.0%)	51,323 (100%)
Deaths		8,013 (75.6%)	759 (7.2%)	744 (7.0%)	1,077 (10.2%)	10,593 (100%)

Source: Detailed case information received by PHAC from provinces and territories, since December 14, 2020

Note:

- Twelve of thirteen provinces and territories have reported case-level vaccine history data to PHAC as part of the national COVID-19 dataset. Ten provinces and territories have reported complete case-level vaccine history data to PHAC since October 2021. A data cut-off of December 18, 2021 was used to account for routine reporting delays associated with vaccine history information.
- *Cases with missing gender were excluded. Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Fully vaccinated individuals diagnosed with COVID-19 were significantly protected from severe outcomes. Compared to unvaccinated cases, fully vaccinated cases were 79% less likely to be hospitalized and 71% less likely to die as a result of their illness (Table 3).

Table 3. Risk of severe outcomes among fully vaccinated cases compared to unvaccinated cases as of December 18, 2021

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.21 (0.2 - 0.22)
Deaths	0.29 (0.26 - 0.31)

*Adjusted for 10-year age groups and month of episode date

Source: Detailed case information received by PHAC from provinces and territories

Note: Due to the nature of the dataset (i.e. confirmed cases of COVID-19 in Canada), the odds of severe outcomes among cases following vaccination only considers vaccinated individuals that contracted COVID-19. It does not reflect the protection conferred by the vaccines to prevent COVID-19 infection.

Data for this analysis is extracted from the COVID-19 national data set, which contains detailed case-level information received by PHAC from all provinces and territories. Note that a data cut-off of December 18, 2021 was used to account for any reporting delays associated with vaccine history information. There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset.

PHAC monitors cases following vaccination using the following categories:

Unvaccinated cases: include those who were unvaccinated at the time of their episode date.

Cases not yet protected from vaccination include those whose episode date occurred less than 14 days after their first dose of the vaccine.

Partially vaccinated cases include those whose episode date occurred 14 days or more after their first vaccine dose or less than 14 days after their second dose of the vaccine.

Fully vaccinated cases include those whose episode date occurred 14 days or more after their second dose of a two dose vaccine series or those whose episode date occurred 14 days or more after one dose of a one-dose vaccine.

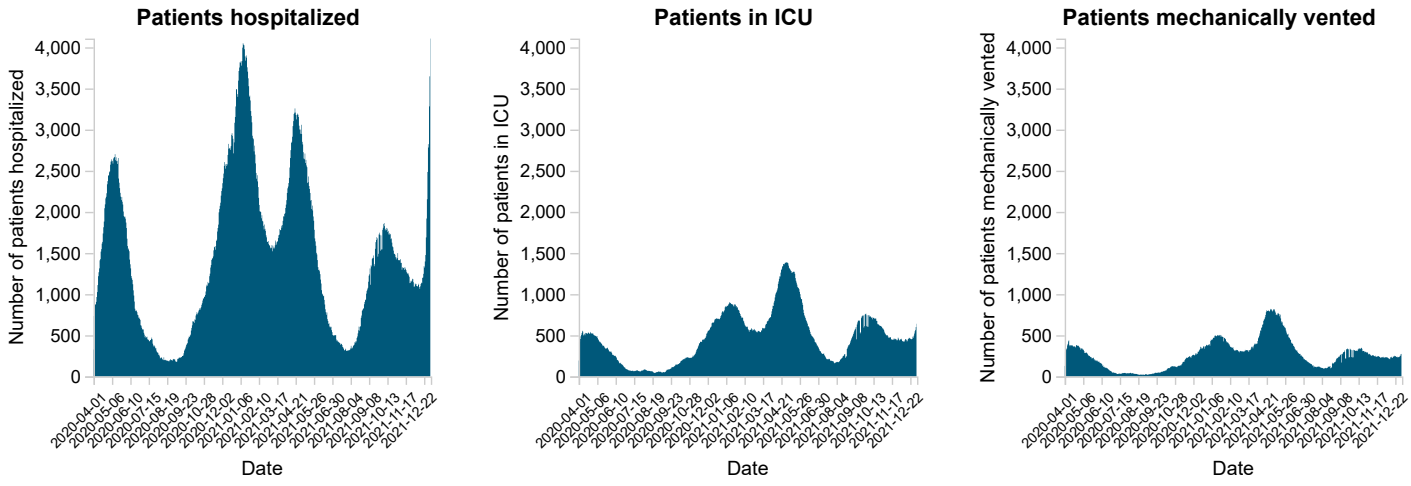
Note: When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

For more information on cases following vaccination, please see the Weekly epidemiology report (PDF) available on the Government of Canada's COVID-19 data trends page.

Severe illness and outcomes

Hospital use

Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of January 3, 2022



Between December 27, 2021 and January 3, 2022:

- the number of **hospital beds** occupied by COVID-19 patients **increased** from **1,919** to **4,106** beds.
- the number of **ICU beds** occupied by COVID-19 patients **increased** from **483** to **640** beds.
- the number of **COVID-19 patients who were mechanically vented increased** from **239** to **274**.

Hospitalizations and deaths to date

We have detailed case report data on 2,262,496 cases, and hospitalization status for 1,540,601 (68.1%) of them:

- **98,047** cases **(6.4%)** were hospitalized, of whom:
  - **18,924 (19.3%)** were admitted to the ICU
  - **2,187 (2.2%)** needed mechanical ventilation

The provinces and territories provided detailed case report forms for **30,254** deaths related to COVID-19.

Figure 7a. Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of January 7, 2022, 9 am EST (n=97,940 [1])

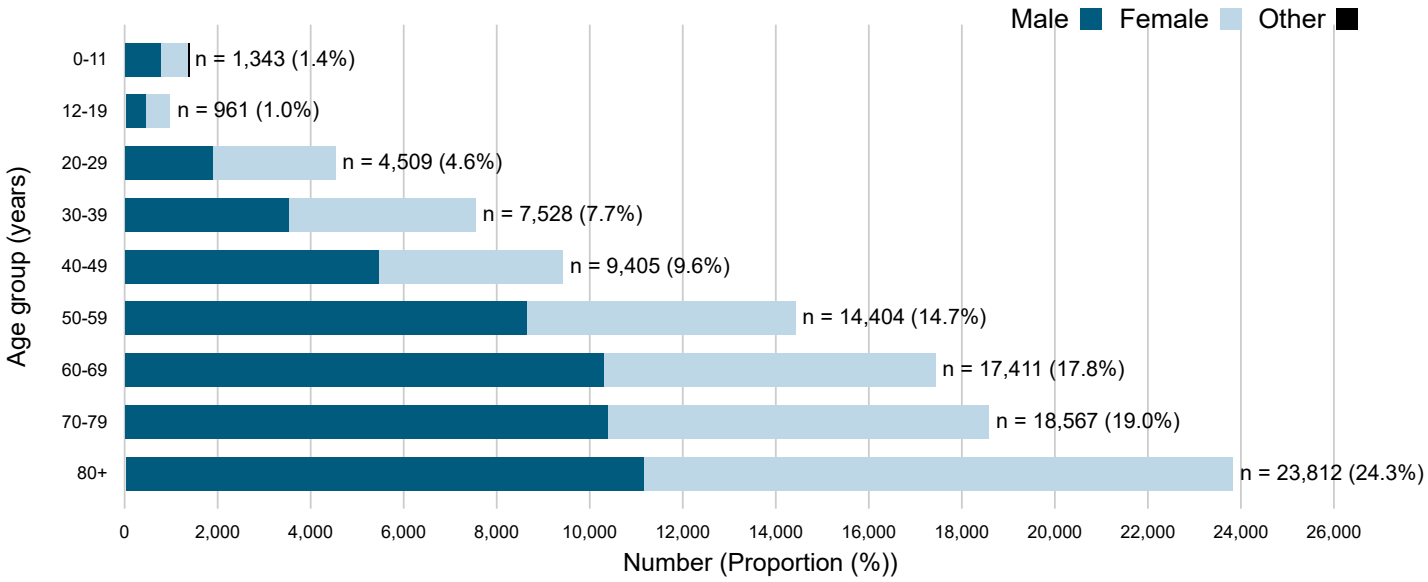


Figure 7b. Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of January 7, 2022, 9 am EST (n=18,901 [1])

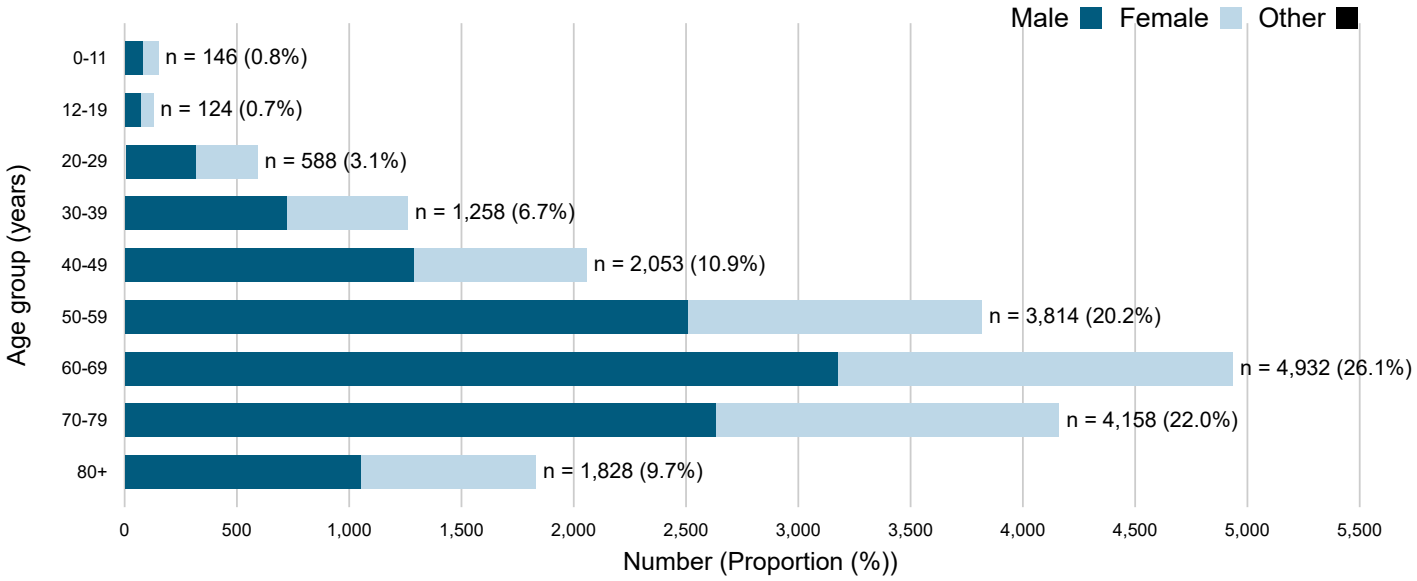
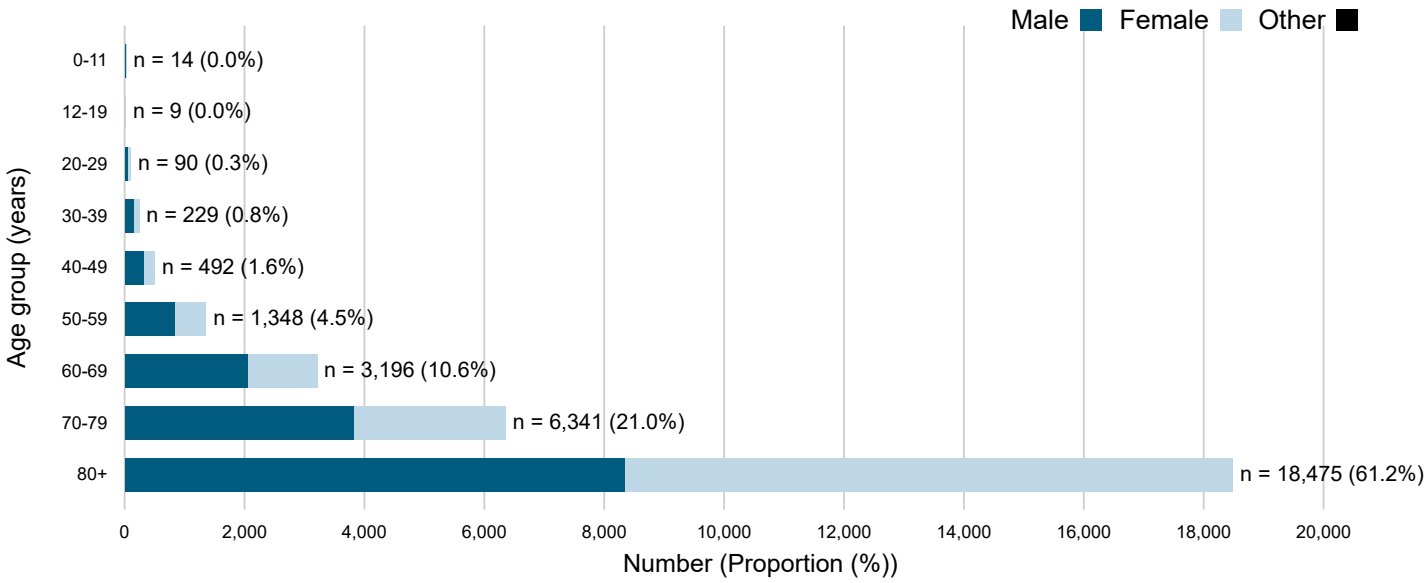


Figure 7c. Age and gender [4] distribution of COVID-19 cases deceased in Canada as of January 7, 2022, 9 am EST (n=30,194 [1])



Data note: Figure 7 includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age and gender information were available. Therefore, some COVID-19 hospitalizations, ICU admissions, and deaths may not be included in Figure 7.

Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of January 7, 2022, 9 am EST (n=97,940 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	1,343 (1.4%)	767 (0.8%)	575 (0.6%)	1 (0.0%)
12-19	961 (1.0%)	450 (0.5%)	511 (0.5%)	0 (0.0%)
20-29	4,509 (4.6%)	1,878 (1.9%)	2,631 (2.7%)	0 (0.0%)
30-39	7,528 (7.7%)	3,524 (3.6%)	4,004 (4.1%)	0 (0.0%)
40-49	9,405 (9.6%)	5,459 (5.6%)	3,946 (4.0%)	0 (0.0%)
50-59	14,404 (14.7%)	8,635 (8.8%)	5,769 (5.9%)	0 (0.0%)
60-69	17,411 (17.8%)	10,284 (10.5%)	7,127 (7.3%)	0 (0.0%)
70-79	18,567 (19.0%)	10,386 (10.6%)	8,181 (8.4%)	0 (0.0%)
80+	23,812 (24.3%)	11,157 (11.4%)	12,655 (12.9%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of January 7, 2022, 9 am EST (n=18,901 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	146 (0.8%)	77 (0.4%)	69 (0.4%)	0 (0.0%)
12-19	124 (0.7%)	68 (0.4%)	56 (0.3%)	0 (0.0%)
20-29	588 (3.1%)	316 (1.7%)	272 (1.4%)	0 (0.0%)
30-39	1,258 (6.7%)	720 (3.8%)	538 (2.8%)	0 (0.0%)
40-49	2,053 (10.9%)	1,285 (6.8%)	768 (4.1%)	0 (0.0%)
50-59	3,814 (20.2%)	2,508 (13.3%)	1,306 (6.9%)	0 (0.0%)
60-69	4,932 (26.1%)	3,174 (16.8%)	1,758 (9.3%)	0 (0.0%)
70-79	4,158 (22.0%)	2,632 (13.9%)	1,526 (8.1%)	0 (0.0%)
80+	1,828 (9.7%)	1,051 (5.6%)	777 (4.1%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases deceased in Canada as of January 7, 2022, 9 am EST (n=30,194 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	14 (0.0%)	5 (0.0%)	9 (0.0%)	0 (0.0%)
12-19	9 (0.0%)	5 (0.0%)	4 (0.0%)	0 (0.0%)
20-29	90 (0.3%)	56 (0.2%)	34 (0.1%)	0 (0.0%)
30-39	229 (0.8%)	141 (0.5%)	88 (0.3%)	0 (0.0%)
40-49	492 (1.6%)	322 (1.1%)	170 (0.6%)	0 (0.0%)
50-59	1,348 (4.5%)	831 (2.8%)	517 (1.7%)	0 (0.0%)
60-69	3,196 (10.6%)	2,044 (6.8%)	1,152 (3.8%)	0 (0.0%)
70-79	6,341 (21.0%)	3,813 (12.6%)	2,528 (8.4%)	0 (0.0%)
80+	18,475 (61.2%)	8,344 (27.6%)	10,131 (33.6%)	0 (0.00%)

Provincial, territorial and international reporting

For more information, please refer to provincial or territorial COVID-19 webpages:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut
- World Health Organization
- Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

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1 This figure is based on cases for which a case report form was received by the Public Health Agency of Canada from provincial or territorial partners.

2 The shaded area represents a period of accumulating data where it is expected that cases have occurred but have not yet been reported nationally. The earliest of the following dates were used as an estimate: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.

3 Exposure information may not be available for all cases. Some jurisdictions haven't consistently reported to PHAC how people were exposed throughout the pandemic. As a result, this may underestimate the total number of cases by different exposures, especially among returning travelers.

4 Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Date modified:

2022-01-12

Government of Canada / Gouvernement du Canada

COVID-19 daily epidemiology update

Updated: February 10, 2022, 9 am EST

Summary of COVID-19 cases across Canada and over time. Contains detailed data about the spread of the virus over time and in different regions of the country. Includes breakdowns by age and sex or gender. Provides an overview of hospitalizations and deaths, testing, variants of concern and exposures.

Key updates as of February 10, 2022, 9 am EST

Cases today	Total cases	Active cases	Total resolved	Deaths today	Total deaths
11,139	3,160,017	154,387	2,970,512	149	35,118

Total tests performed	Daily percent positive (last 7 days)	Daily tests per 100,000 population (last 7 days)
57,195,710	16.1%	180

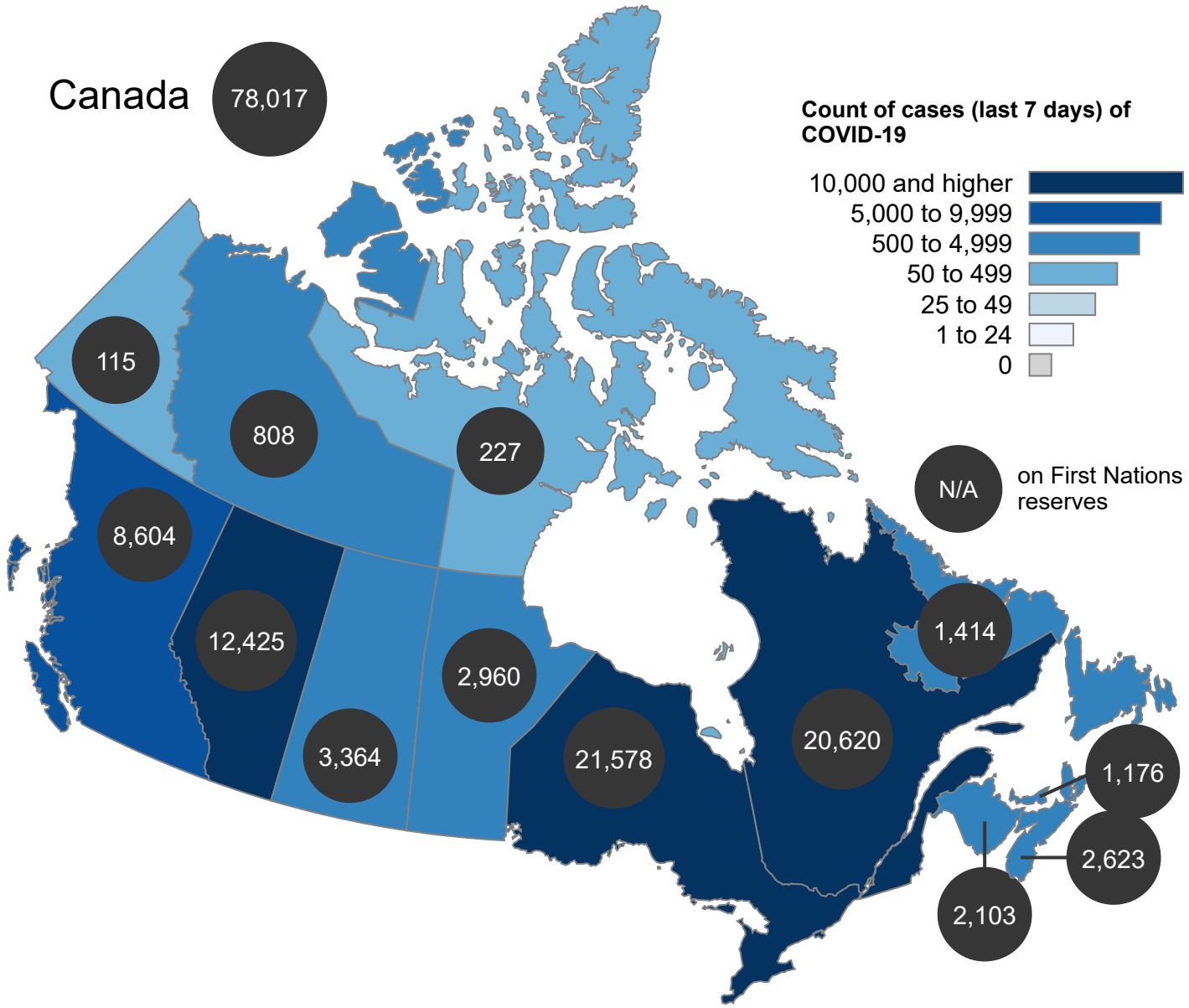
- We update these sections Monday to Friday at 9:00 AM EST: Key updates, Current situation and National overview. Laboratory data represents specimens received by labs up to February 7, 2022 to allow time to process results.
- We update these sections every Friday: COVID-19 variants in Canada, Epidemic curve, Demographics, How people were exposed, and Severe illness and outcomes.
- The Cases following vaccination section is updated every Tuesday
- Of the 12 jurisdictions reporting updates, no new cases were reported in 0 provinces and territories in the past 24 hours.
- Of the 12 jurisdictions reporting updates, no new deaths were reported in 4 provinces and territories in the past 24 hours.
- Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.
- Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active

cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

- On February 3, 2022, Saskatchewan issued a press release indicating that they would begin reporting COVID-19 epidemiological information weekly on Thursdays beginning the week of February 7, 2022, ceasing daily reporting of confirmed new cases, deaths, test, and vaccination information.

Current situation

Figure 1a. Count of cases (last 7 days) of COVID-19, by province/territory as of February 9, 2022 (Last data update February 10, 2022, 9 am EST)



The count of cases (last 7 days) of COVID-19 in **Canada** was **78,017** as of February 9, 2022.

a. This information is based on data our provincial and territorial partners published on cases, deaths, and testing daily, and are current as of the day they are published. Today's numbers are current as of February 9, 2022. For the most up to date data for any province, territory or city, please visit their website. The number of cases or deaths reported on previous days may differ slightly from those on the provincial and territorial websites as these websites may update historic case and death counts as new information becomes available.

b. Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

c. Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

d. On February 3, 2022, Saskatchewan issued a press release indicating that they would begin reporting COVID-19 epidemiological information weekly on Thursdays beginning the week of February 7, 2022, ceasing daily reporting of confirmed new cases, deaths, test, and vaccination information.

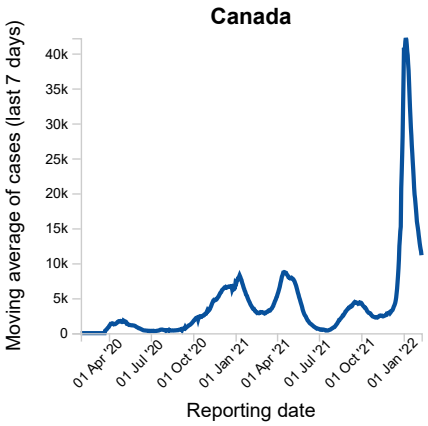
Areas in Canada with cases of COVID-19 as of February 9, 2022

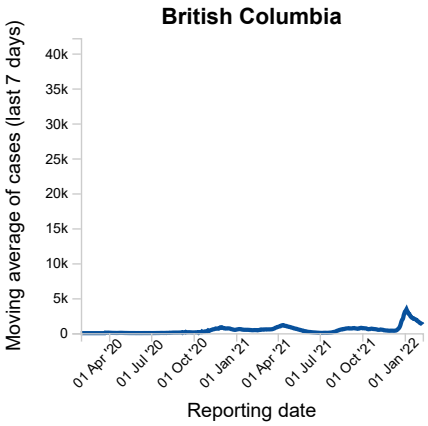
	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
Location	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Count**	**Rate***	**Percent**
British Columbia	336,229	6,448	8,604	165	22,971	441	310,533	2,725	52	82	1.6	5,510,028	8,848	170	18.4%
Alberta	511,402	11,511	12,425	280	26,896	605	480,810	3,696	83	103	2.3	6,771,484	5,550	125	33.2%
Saskatchewan	123,258	10,447	3,364	285	9,223	782	113,023	1,012	86	15	1.3	1,455,574	2,281	193	33.1%
Manitoba	124,615	9,006	2,960	214	19,420	1,403	103,582	1,613	117	37	2.7	1,436,777	1,603	116	28.8%
Ontario	1,061,403	7,159	21,578	146	30,182	204	1,019,277	11,944	81	368	2.5	22,634,901	21,433	145	12.9%
Quebec	889,057	10,332	20,620	240	34,275	398	841,200	13,582	158	246	2.9	16,055,715	23,479	273	11.4%
Newfoundland and Labrador	19,200	3,688	1,414	272	1,592	306	17,558	50	10	6	1.1	553,678	1,138	219	17.4%
New Brunswick	31,597	4,004	2,103	266	3,317	420	28,005	275	35	28	3.5	707,332	1,384	175	22.3%
Nova Scotia	41,351	4,168	2,623	264	3,232	326	37,953	166	17	13	1.3	1,732,496	2,828	285	13.7%
Prince Edward Island	9,555	5,815	1,176	716	1,994	1,214	7,548	13	8	2	1.2	255,702	65	40	12.9%
Yukon	3,261	7,586	115	268	83	193	3,158	20	47	4	9.3	9,129	N/A	N/A	N/A
Northwest Territories	7,029	15,447	808	1,776	800	1,758	6,212	17	37	2	4.4	39,903	24	54	21.1%
Nunavut	2,047	5,195	227	576	402	1,020	1,640	5	13	0	0.0	32,915	198	503	16.1%
Canada	**3,160,017**	**8,262**	**78,017**	**204**	**154,387**	**404**	**2,970,512**	**35,118**	**92**	**906**	**2.4**	**57,195,710**	**68,832**	**180**	**16.1%**

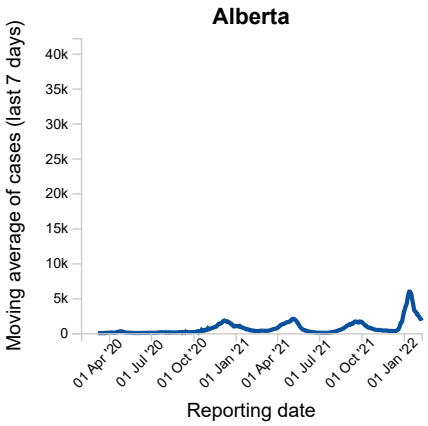
* Rate per 100,000 population

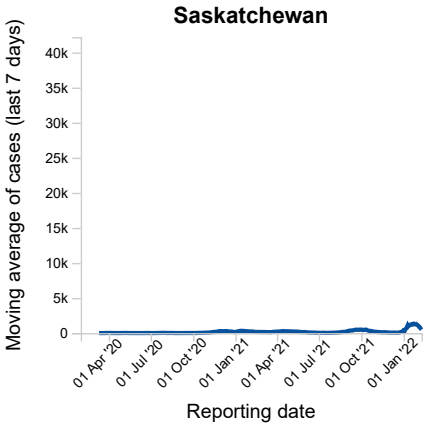
Figure 1b. Moving average of cases (last 7 days) of COVID-19 in Canada as of February 9, 2022 (Last data update February 10, 2022, 9 am EST)

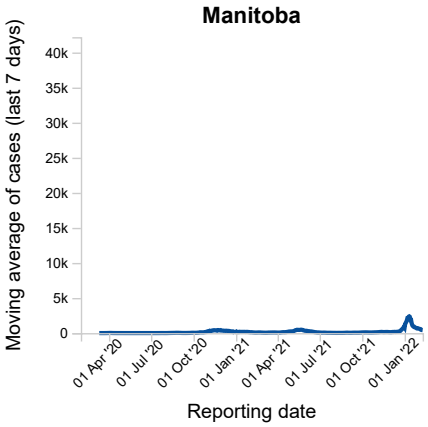
The figures below show cases over time. The range of dates (January 31st, 2020 - present date) is the same for each figure. This allows you to compare the provinces and territories on the same timescale.

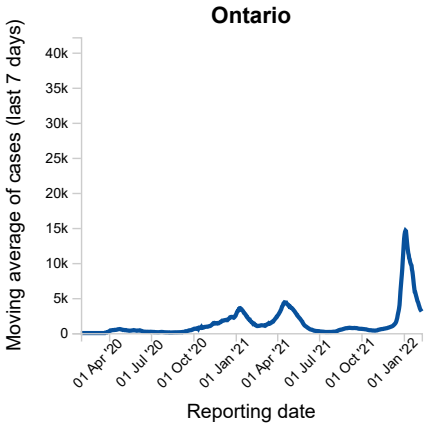


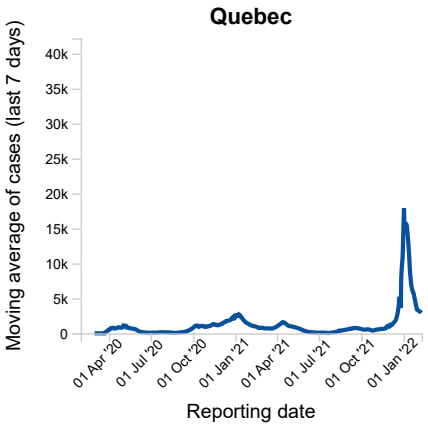


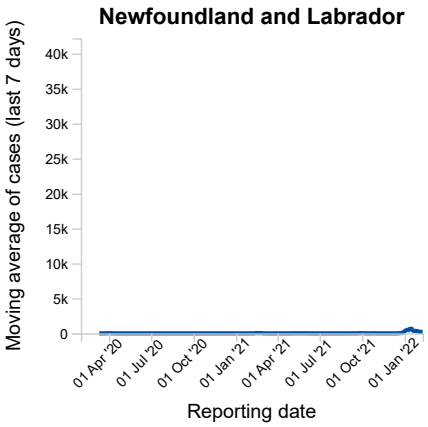


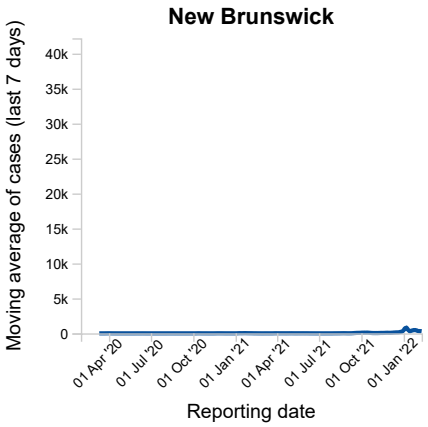


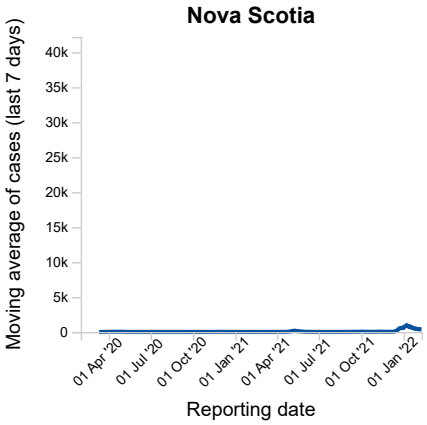


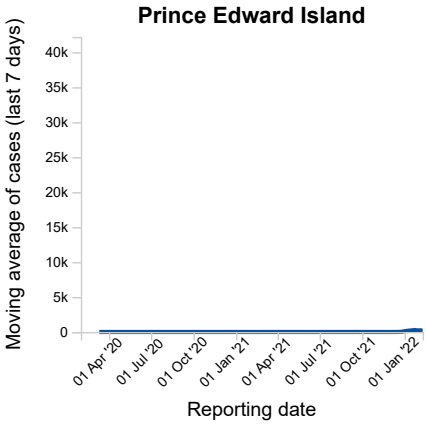


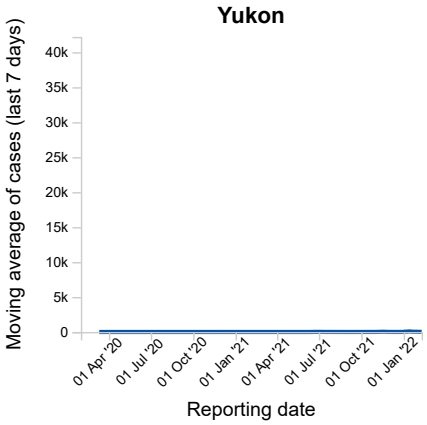


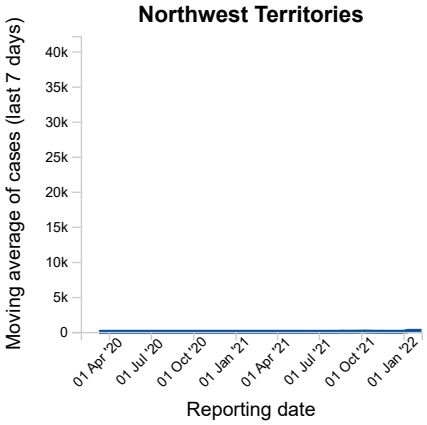


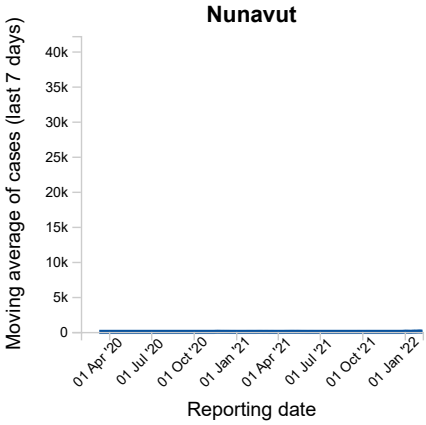












a. Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.
b. This information is based on data from our provincial and territorial partners. Data about cases was last updated on February 9, 2022. Laboratory data includes specimens received by labs up to February 7, 2022. For the most up to date data for any province, territory or city, please visit their web site.
c. The 7-day moving average is the total of the daily numbers for the previous 7 days (up to and including the day of the last update), divided by the number of days for which data is available. We go back and update the moving averages as provinces and territories submit more data. We calculate the national 7-day moving average by summing the 7-day moving average from the provinces and territories then dividing by the national population if a rate is calculated.
d. Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia's cumulative cases up until December 9 and add the daily lab positive cases reported. We will use the estimated number of active cases from Nova Scotia's updates to calculate the number of recoveries as of December 10. Once Nova Scotia resumes reporting case data from Panorama, our data will be retroactively corrected.

e. On February 3, 2022, Saskatchewan issued a press release indicating that they would begin reporting COVID-19 epidemiological information weekly on Thursdays beginning the week of February 7, 2022, ceasing daily reporting of confirmed new cases, deaths, test, and vaccination information.

Downloadable data (in .csv format).

Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

Note: Out of the total number of people tested, 76 were repatriated travellers, of which 13 were cases.

National overview

There have been over **57,195,710** COVID-19 tests performed in Canada or **1,495,465 tests per 1 million people**. For information about testing trends, please see the Detailed weekly epidemiological report (PDF).

Table 1. Daily* change in the number of cases, deaths and tests performed, by province or territory, as of February 9, 2022 (Last data update February 10, 2022, 9 am EST)

Location	New cases	New deaths	Tests performed
British Columbia	1,187	18	7,128
Alberta	1,684	10	4,269
Saskatchewan	N/A	N/A	1,626
Manitoba	467	11	1,276
Ontario	3,162	66	15,788
Quebec	3,361	31	23,092
Newfoundland and Labrador	250	2	860
New Brunswick	321	6	1,297
Nova Scotia	365	5	2,047
Prince Edward Island	187	0	63
Yukon	9	0	N/A
Northwest Territories	110	0	17
Nunavut	36	0	295
Canada	**11,139**	**149**	**57,758**

* The new cases, deaths and tests reflect the difference between a province or territory's current report and their last report. Some provinces and territories do not update daily.

N/A means that no daily update was provided by the province or territory.

Due to changes in COVID-19 testing policies in many jurisdictions starting in late December 2021, case counts will under estimate the total burden of disease.

Resulting from the delays in data entry caused by the recent high number of cases, Nova Scotia issued a press release on December 10 indicating that they would begin announcing the daily number of new cases using laboratory test results, not data from Panorama (their public health disease information system) on the Nova Scotia COVID-19 Dashboard. These reporting changes are expected to be temporary. In the absence of Panorama data, we will report Nova Scotia’s cumulative cases up until December 9 and add the daily lab

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On February 3, 2022, Saskatchewan issued a press release indicating that they would begin reporting COVID-19 epidemiological information weekly on Thursdays beginning the week of February 7, 2022, ceasing daily reporting of confirmed new cases, deaths, test, and vaccination information.

COVID-19 variants in Canada

All viruses, including COVID-19, change over time. These changes are called mutations, and result in variants of the virus. Not all mutations are of concern. Most do not cause more severe illness. However, some mutations result in variants of concern or variants of interest.

A variant of concern has mutations that are significant to public health. Before a variant of interest is considered one of concern, scientists and public health professionals must determine if the mutations result in an actual change in the behaviour of the virus. For example, it might:

- spread more easily
- cause more severe illness
- require different treatments, or
- reduce vaccine effectiveness

There are several variants of interest that have mutations similar to variants of concern, but we don’t yet know if they pose a higher risk to public health.

The Public Health Agency of Canada (PHAC) works with provincial and territorial partners and the Canadian COVID-19 Genomics Network (CanCOGeN) to sequence a percentage of all positive COVID-19 test results. Sequencing reveals the genetic code of the virus, which tells us which variant is involved in a specific case of COVID-19. We report the proportion of COVID-19 variants in Canada every week.

We collect evidence to determine if new variants meet the definition for a variant of concern or a variant of interest. Many variants are being tracked across Canada and around the world. Variants of concern now represent a majority of COVID-19 cases in Canada.

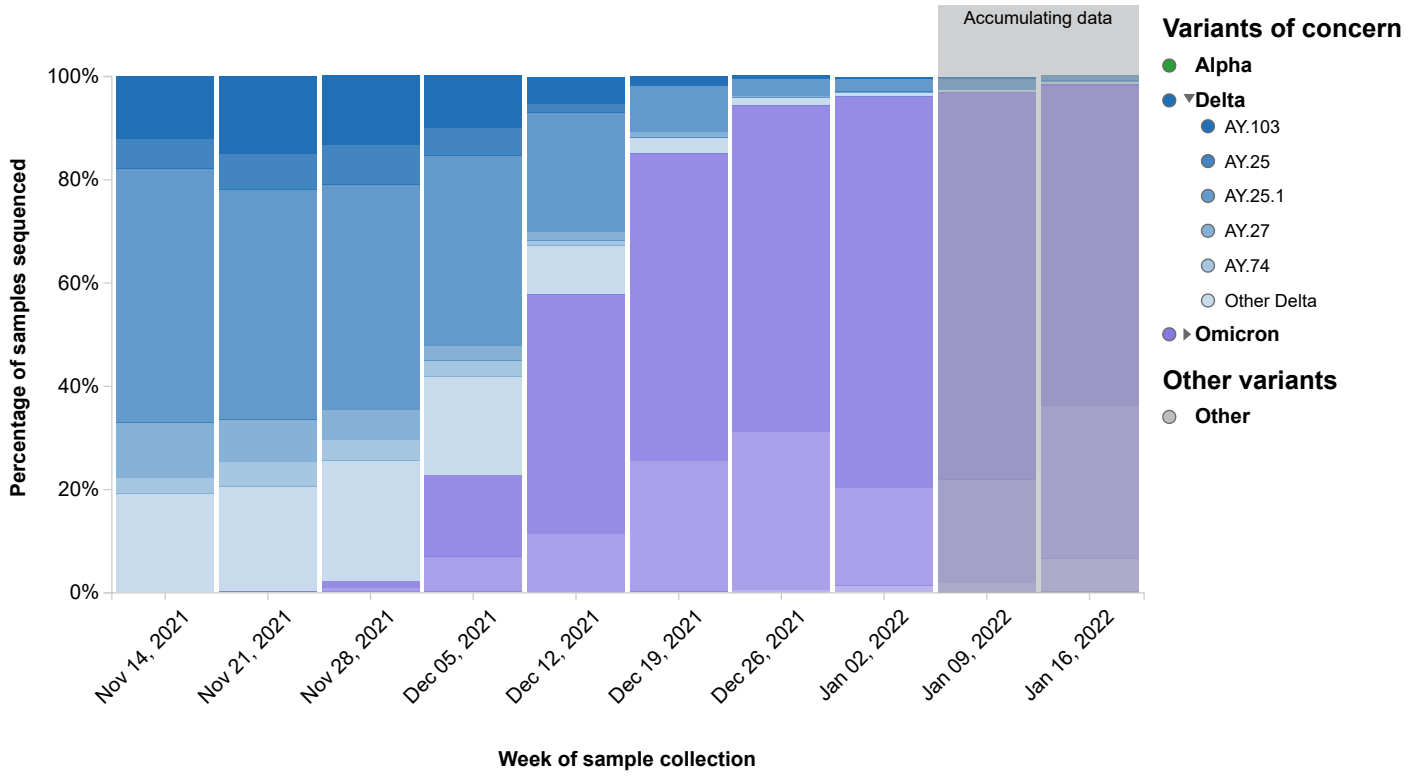
Current variants of concern in Canada include:

- Alpha (B.1.1.7)
- Beta (B.1.351)
- Gamma (P.1)
- Delta (B.1.617.2)
- Omicron (B.1.1.529)

New variants will continue to appear. We must remain vigilant and take all available measures to limit spread.

Figure 2. Weekly variant breakdown Updated: February 4, 2022, 4 pm EDT

The graphic shows the percentage mix of COVID-19 variants detected in Canada through whole genome sequencing, by week of sample collection. You can see the numbers for each date by hovering over, tabbing to, or long-pressing any of the bars. To see a specific variant or variant grouping, click or press return. Repeat to restore the complete graph. Sublineages or offshoots for some variants can be revealed or hidden by clicking on the name of the variant in the legend.



This information is based on whole genome sequencing from surveillance testing in all provinces and territories. In addition to sequencing done by the National Microbiology Laboratory in Winnipeg, data is included from provincial and territorial laboratories.

Sequencing takes from 1 to 3 weeks to complete, so the proportions for recent weeks may change as more data are added. Surveillance in each province or territory is organized and prioritized according to local needs and may change from time to time. Because of differences in local sampling and reporting, the percentages illustrate trends rather than precise measurements.

Weekly variant breakdown

Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection.

Variant Grouping	Nov 14, 2021 (n=5,363)	Nov 21, 2021 (n=6,226)	Nov 28, 2021 (n=6,571)	Dec 05, 2021 (n=6,399)	Dec 12, 2021 (n=7,756)	Dec 19, 2021 (n=8,777)	Dec 26, 2021 (n=8,918)	Jan 02, 2022 (n=7,906)	Jan 09, 2022 (n=4,836)	Jan 2022 (n=1,
Variants of concern	**99.9%**	**99.9%**	**100.1%**	**100.0%**	**99.8%**	**99.9%**	**100.1%**	**99.8%**	**99.8%**	**100.**
Alpha	**0.0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
B.1.1.7	0.0%	-	-	-	-	-	-	-	-	-
Delta	**99.9%**	**99.7%**	**98.0%**	**77.4%**	**42.2%**	**15.1%**	**5.8%**	**3.8%**	**3.0%**	**1.8%**
AY.103	12.1%	15.1%	13.5%	10.1%	5.2%	1.7%	0.5%	0.3%	0.3%	-
AY.25	5.8%	6.8%	7.7%	5.5%	1.7%	0.2%	0.2%	0.1%	0.0%	-
AY.25.1	49.2%	44.6%	43.6%	36.8%	23.2%	9.0%	3.3%	2.4%	2.0%	1.0%
AY.27	10.7%	8.2%	5.8%	2.9%	1.6%	1.0%	0.3%	0.2%	0.1%	0.2%
AY.74	3.0%	4.7%	4.0%	3.1%	1.0%	0.1%	0.1%	0.0%	0.0%	-
Other Delta	19.1%	20.3%	23.4%	19.0%	9.5%	3.1%	1.4%	0.8%	0.6%	0.6%
Omicron	**-**	**0.2%**	**2.1%**	**22.6%**	**57.6%**	**84.8%**	**94.3%**	**96.0%**	**96.8%**	**98.2**
B.1.1.529	-	-	-	-	-	-	-	-	0.0%	0.2%
BA.1	-	0.1%	1.3%	15.8%	46.3%	59.5%	63.3%	75.9%	75.0%	62.0%
BA.1.1	-	0.1%	0.7%	6.8%	11.3%	25.3%	30.6%	18.8%	20.0%	29.6%
BA.2	-	-	0.1%	-	-	0.0%	0.4%	1.3%	1.8%	6.4%
Other variants	**0.0%**	**-**	**0.0%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**
Other	**0.0%**	**-**	**0.0%**	**0.1%**	**0.0%**	**0.1%**	**0.0%**	**0.0%**	**0.0%**	**0.1%**

Note: The shaded columns on the right represent a period of accumulating data.

Contributing laboratories:

- Saskatchewan - Roy Romanow Provincial Laboratory (RRPL)
- Public Health Ontario (PHO)
- Newfoundland and Labrador - Eastern Health
- New Brunswick – Vitalité Health Network

- Manitoba Cadham Provincial Laboratory
- Laboratoire de santé publique du Québec (LSPQ)
- BCCDC Public Health Laboratory
- Alberta Precision Labs - Edmonton (APL)
- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

Detailed case information

The tables and figures below reflect detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.

Updated: February 4, 2022, 8 am EST

Epidemic curve

As of February 4, 2022, 8 am EST, PHAC has received detailed case report data on 3,011,786 cases. Both exposure and symptom onset date were available for 1,946,095 (64.6%) cases [1].

The shaded area on the far right of Figure 3 represents a period of accumulating data. This is the period of time (1 to 2 weeks) before the latest cases are reported to PHAC. This delay is a result of the time required to seek health care, get tested and receive results. It also takes time for public health authorities to gather information on cases. We update this information as it becomes available.

Figure 3. COVID-19 cases (n=3,011,786 [1]) in Canada by date [2] as of February 4, 2022, 8 am EST (total cases)

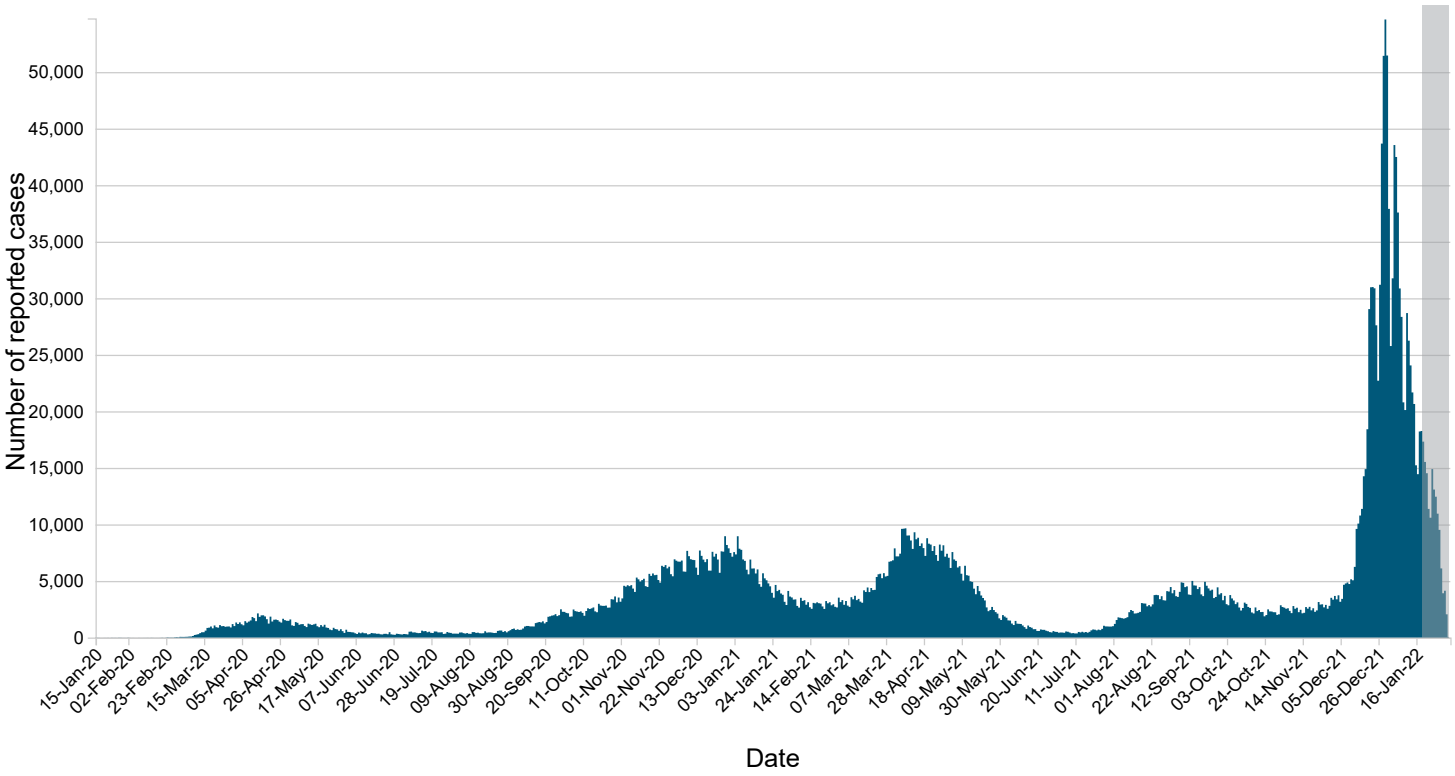


Figure 3. COVID-19 cases (n=1,946,095 [1]) in Canada by date [2] as of February 4, 2022, 8 am EST (by exposure)

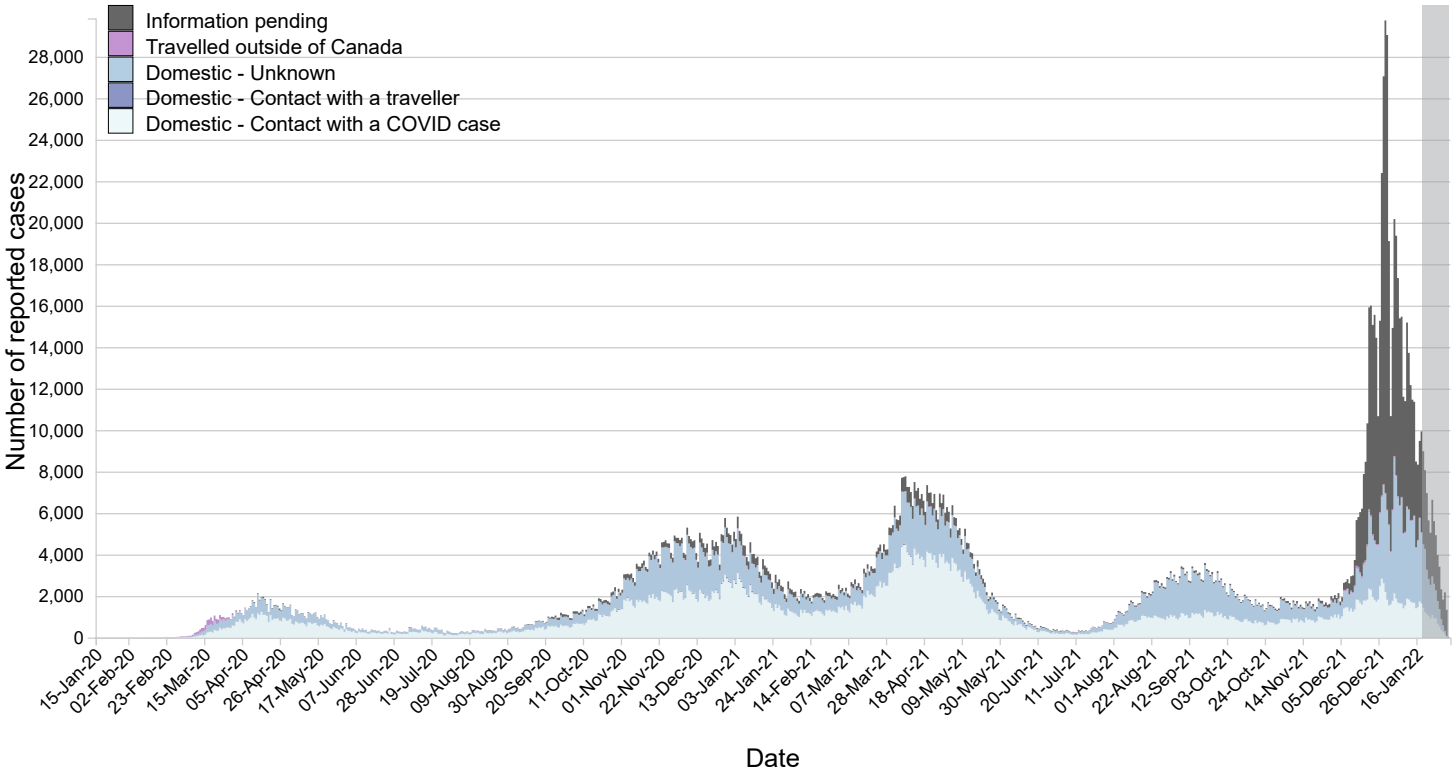


Figure 3. COVID-19 cases (n=3,010,668 [1]) in Canada by date [2] as of February 4, 2022, 8 am EST (by age - 10 year groups)

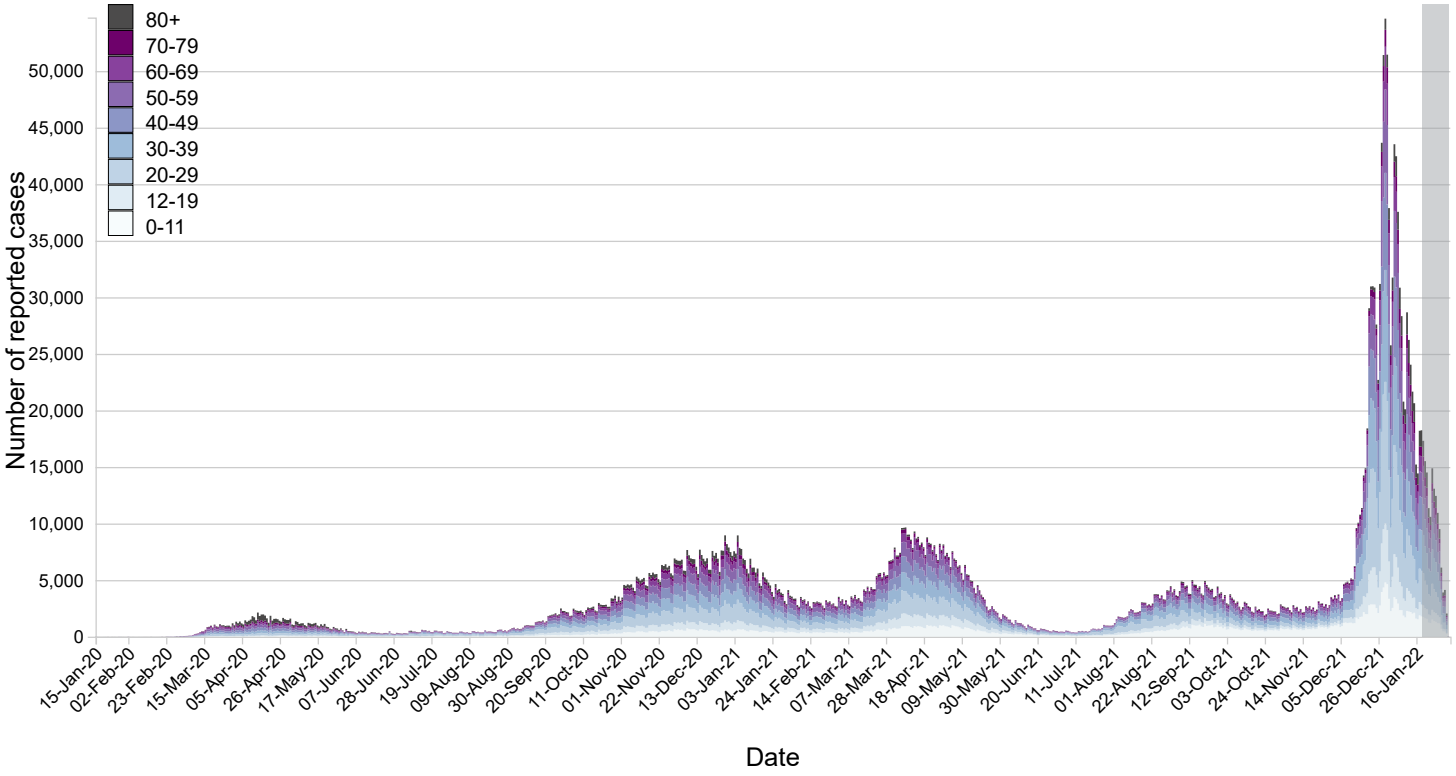
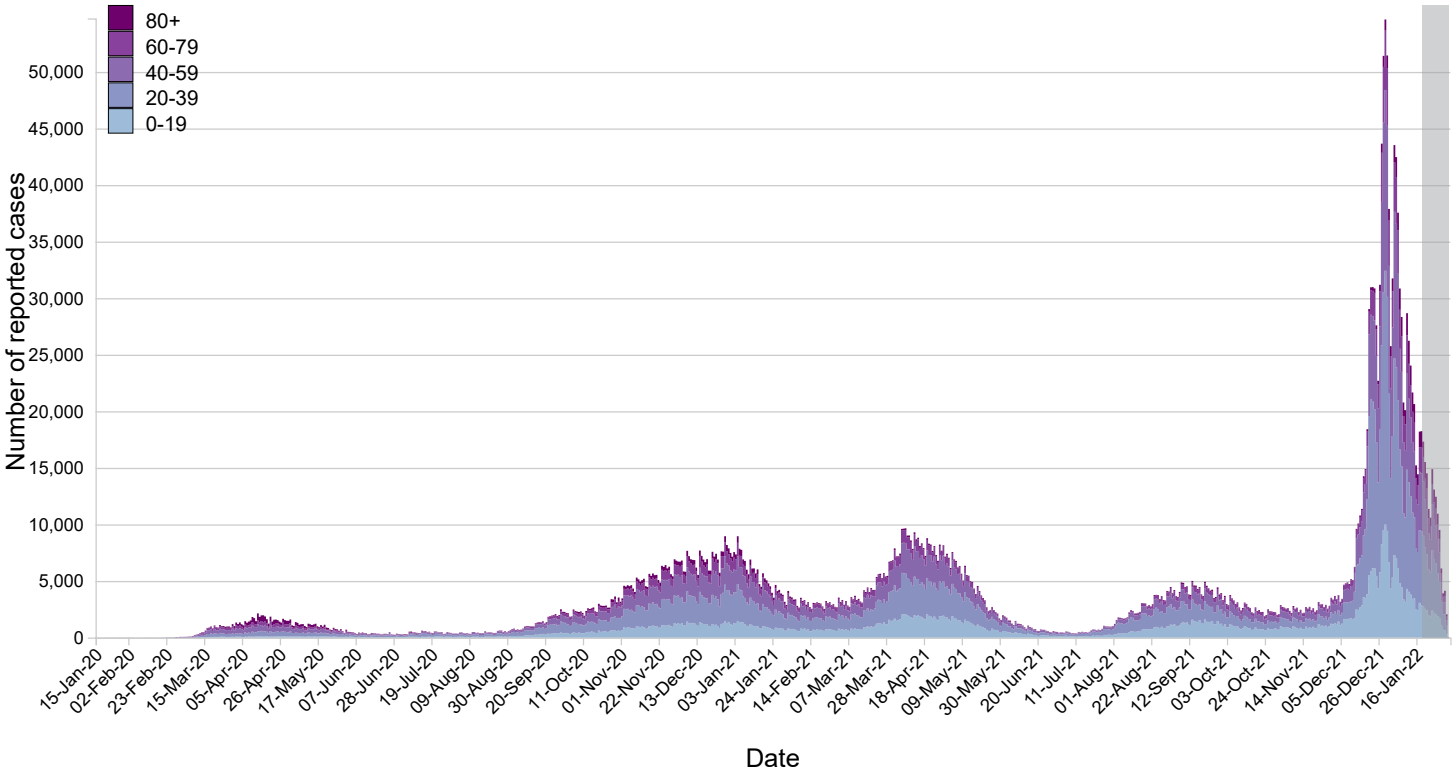


Figure 3. COVID-19 cases (n=3,010,668 [1]) in Canada by date [2] as of February 4, 2022, 8 am EST (by age - 20 year groups)



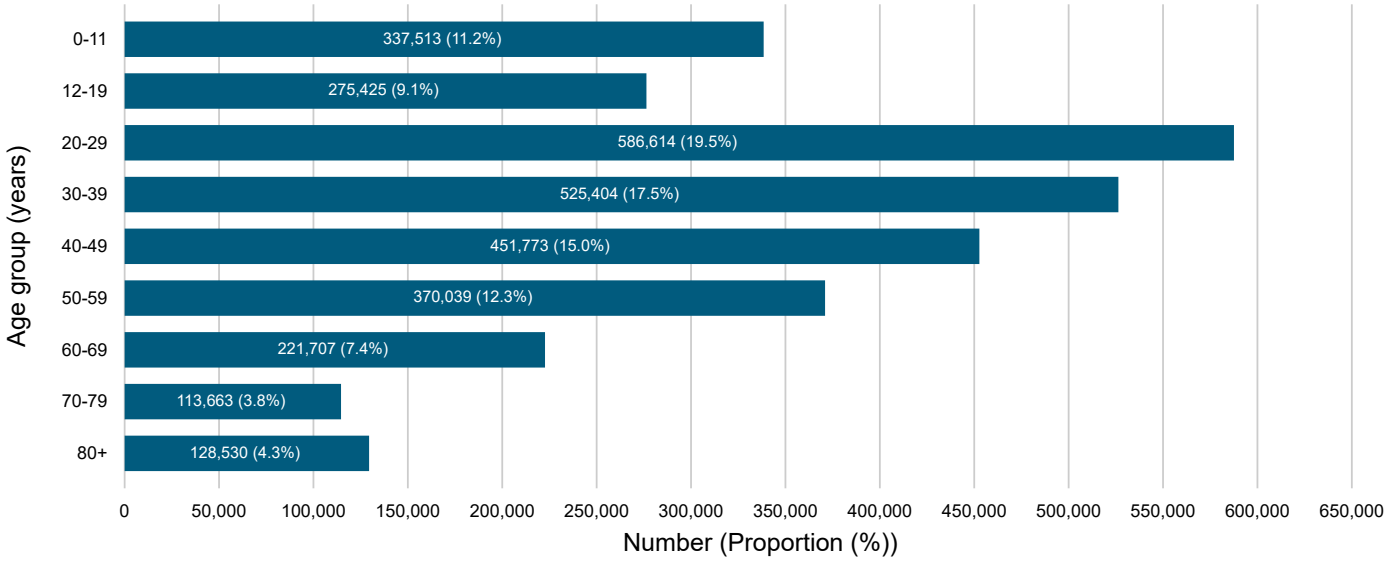
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

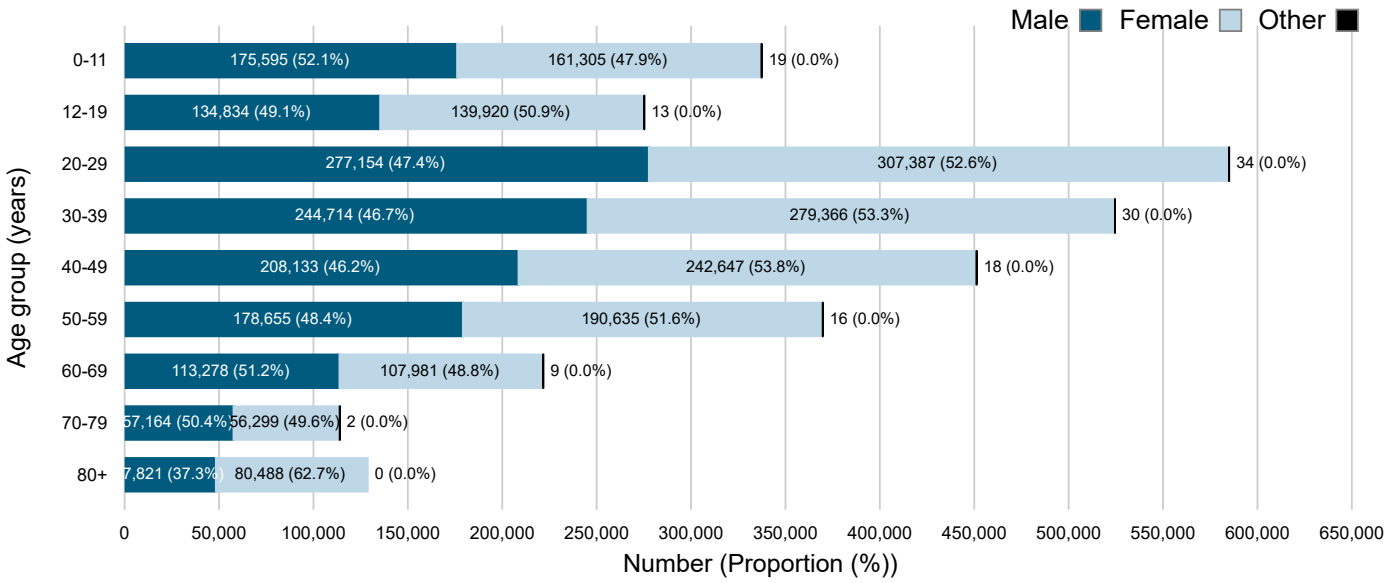
Demographics

We have detailed case report data from 3,011,786 cases. We know the age of patients in 99.96% of cases, and both age and gender in 99.73% of cases.

Of the cases reported in Canada so far, 52.1% were female and 36.9% were between 20 and 39 years old (Figure 4).

Figure 4. Age distribution of COVID-19 cases (n=3,010,668 [1]) in Canada as of February 4, 2022, 8 am EST [4]





Age by gender [4] distribution of COVID-19 cases (n=3,010,668 [1]) in Canada, February 4, 2022, 8 am EST

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	337,513 (11.2%)	175,595 (12.2%)	161,305 (10.3%)	19 (13.5%)
12-19	275,425 (9.1%)	134,834 (9.4%)	139,920 (8.9%)	13 (9.2%)
20-29	586,614 (19.5%)	277,154 (19.3%)	307,387 (19.6%)	34 (24.1%)
30-39	525,404 (17.5%)	244,714 (17.0%)	279,366 (17.8%)	30 (21.3%)
40-49	451,773 (15.0%)	208,133 (14.5%)	242,647 (15.5%)	18 (12.8%)
50-59	370,039 (12.3%)	178,655 (12.4%)	190,635 (12.2%)	16 (11.3%)
60-69	221,707 (7.4%)	113,278 (7.9%)	107,981 (6.9%)	9 (6.4%)
70-79	113,663 (3.8%)	57,164 (4.0%)	56,299 (3.6%)	2 (1.4%)
80+	128,530 (4.3%)	47,821 (3.3%)	80,488 (5.1%)	0 (0.0%)
Total	3,010,668 (100%)	1,437,348 (100%)	1,566,028 (100%)	141 (100%)

How people were exposed [3]

In Canada, detailed case report data were provided for 3,011,786 cases. We have exposure history for 1,946,095 (64.6%) cases. The probable exposure setting of these cases [1] are:

- any exposure that occurred in Canada: **1,483,283 (76.2%)**, including
  - from contact with a known COVID case: **804,048 (41.3%)**
  - from contact with a traveller: **9,965 (0.5%)**
  - from an unknown source: **669,270 (34.4%)**
- currently unknown (information pending): **446,436 (22.9%)**
- travelled outside of Canada: **16,376 (0.8%)**

Cases following vaccination

Data extracted on February 04, 2022 for cases from December 14, 2020 up until January 22, 2022.

While the COVID-19 vaccines are highly effective, a percentage of the population who are vaccinated may become infected with COVID-19 if they are exposed to the virus that causes it. This means that even with high vaccine effectiveness, a percentage of people who are vaccinated against COVID-19 will still get sick and some may be hospitalized or die.

It is also possible that a person could be infected just before or just after vaccination and still get sick. It typically takes about two weeks for the body to build protection after vaccination, so a person could get sick if the vaccine has not had enough time to provide protection.

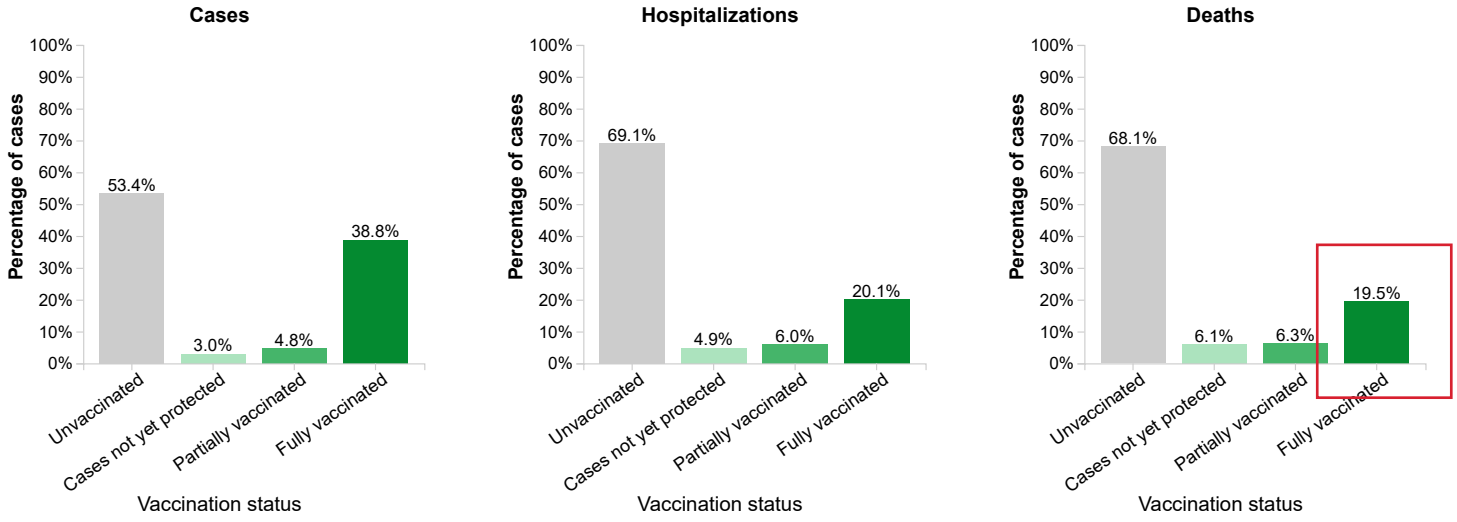
Cases reported since the start of the vaccination campaign, as of January 22, 2022

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 72.5% (n=1,670,682) of COVID-19 cases aged 5 years or older.

Of these cases:

- 892,033 (53.4%) were unvaccinated at the time of their episode date
- 50,695 (3.0%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 79,683 (4.8%) were only partially vaccinated, as their episode date occurred either 14 days or more after their first dose or less than 14 days after their second dose
- 648,271 (38.8%) were fully vaccinated, as their episode date occurred 14 days or more after their second dose

Figure 5. Distribution of confirmed COVID-19 cases reported to PHAC by vaccination status as of January 22, 2022



Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of January 22, 2022

Status	Cases	Hospitalizations	Deaths
Unvaccinated	53.4%	69.1%	68.1%
Cases not yet protected	3.0%	4.9%	6.1%
Partially vaccinated	4.8%	6.0%	6.3%
Fully vaccinated	38.8%	20.1%	19.5%

Among the twelve jurisdictions that have reported case-level vaccine history data to PHAC, a total of 24.7 million people have received at least one dose of the COVID-19 vaccine as of January 22, 2022.

Of these people:

- 24.4 million achieved partial vaccination status, of which 79,683 (0.33%) were diagnosed with COVID-19 while partially vaccinated
- 22.7 million achieved full vaccination status, of which 648,271 (2.85%) were diagnosed with COVID-19 while fully vaccinated

Based on detailed case information reported to PHAC from provinces and territories, cases following vaccination were reported more frequently among females (Table 2). This may be the result of higher vaccination coverage in Canada among females due to the prioritization healthcare workers as part of the vaccine rollout.

Table 2. Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of January 22, 2022

		Unvaccinated (n=892,033)	**Cases not yet protected** (n=50,695)	**Partially vaccinated** (n=79,683)	**Fully vaccinated** (n=648,271)	**Total cases** (n=1,670,682)
Gender*	Male	455,504 (56.7%)	24,804 (3.1%)	38,623 (4.8%)	284,820 (35.4%)	803,751 (100%)
	Female	433,379 (50.3%)	25,820 (3.0%)	40,899 (4.7%)	361,565 (42.0%)	861,663 (100%)
Hospitalizations		44,907 (69.1%)	3,154 (4.9%)	3,925 (6.0%)	13,043 (20.1%)	65,029 (100%)
Deaths		8,693 (68.1%)	775 (6.1%)	808 (6.3%)	2,490 (19.5%)	12,766 (100%)

Source: Detailed case information received by PHAC from provinces and territories, since December 14, 2020

Note:

- Twelve of thirteen provinces and territories have reported case-level vaccine history data to PHAC as part of the national COVID-19 dataset. Ten provinces and territories have reported complete case-level vaccine history data to PHAC since October 2021. A data cut-off of January 22, 2022 was used to account for routine reporting delays associated with vaccine history information.
- *Cases with missing gender were excluded. Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Fully vaccinated individuals diagnosed with COVID-19 were significantly protected from severe outcomes. Compared to unvaccinated cases, fully vaccinated cases were 72% less likely to be hospitalized and 79% less likely to die as a result of their illness (Table 3).

Table 3. Risk of severe outcomes among fully vaccinated cases compared to unvaccinated cases as of January 22, 2022

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.28 (0.27 - 0.28)
Deaths	0.21 (0.2 - 0.22)

*Adjusted for 10-year age groups and month of episode date

Source: Detailed case information received by PHAC from provinces and territories

Note: Due to the nature of the dataset (i.e. confirmed cases of COVID-19 in Canada), the odds of severe outcomes among cases following vaccination only considers vaccinated individuals that contracted COVID-19. It does not reflect the protection conferred by the vaccines to prevent COVID-19 infection.

Data for this analysis is extracted from the COVID-19 national data set, which contains detailed case-level information received by PHAC from all provinces and territories. Note that a data cut-off of January 22, 2022 was used to account for any reporting delays associated with vaccine history information. There are currently twelve jurisdictions reporting case-level vaccine history data to PHAC as part of the national COVID-19 dataset.

PHAC monitors cases following vaccination using the following categories:

Unvaccinated cases: include those who were unvaccinated at the time of their episode date.

Cases not yet protected from vaccination include those whose episode date occurred less than 14 days after their first dose of the vaccine.

Partially vaccinated cases include those whose episode date occurred 14 days or more after their first vaccine dose or less than 14 days after their second dose of the vaccine.

Fully vaccinated cases include those whose episode date occurred 14 days or more after their second dose of a two dose vaccine series or those whose episode date occurred 14 days or more after one dose of a one-dose vaccine.

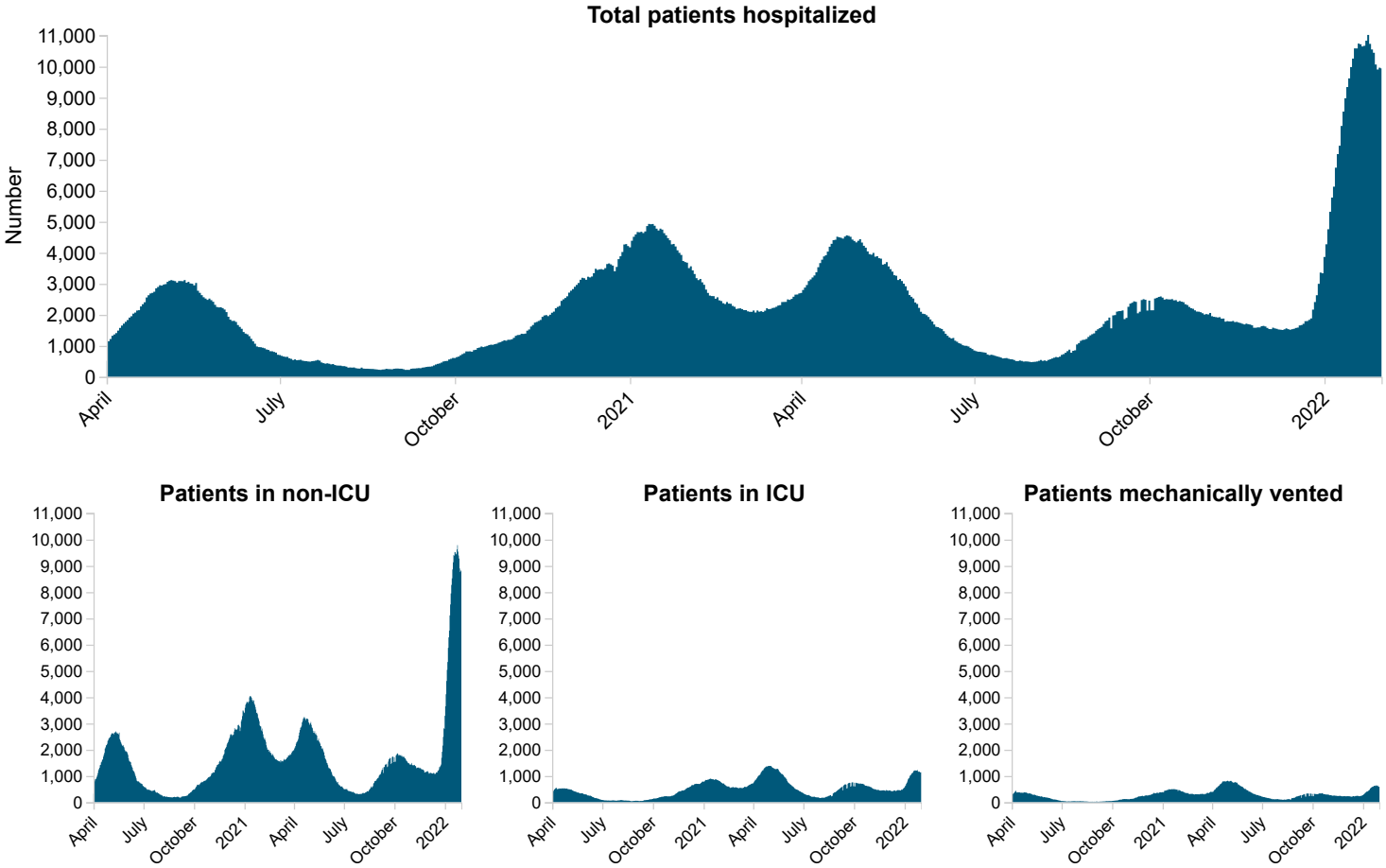
Note: When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

For more information on cases following vaccination, please see the Weekly epidemiology report (PDF) available on the Government of Canada's COVID-19 data trends page.

Severe illness and outcomes

Hospital use

Figure 6. Daily number of hospital beds and ICU beds occupied by COVID-19 patients as of January 31, 2022



Between January 24, 2022 and January 31, 2022:

- the total number of **hospital beds** occupied by COVID-19 patients **decreased** from **11,022** to **9,943** beds.
- the number of **non-ICU beds** occupied by COVID-19 patients **decreased** from **9,789** to **8,800** beds.

- the number of **ICU beds** occupied by COVID-19 patients **decreased** from **1,233** to **1,143** beds.
- the number of **COVID-19 patients who were mechanically vented decreased** from **638** to **595**.

Hospitalizations and deaths to date

We have detailed case report data on 3,011,786 cases, and hospitalization status for 3,007,529 (99.9%) of them:

- **122,292** cases **(4.1%)** were hospitalized, of whom:
  - **21,590 (17.7%)** were admitted to the ICU
  - **2,532 (2.1%)** needed mechanical ventilation

The provinces and territories provided detailed case report forms for **33,792** deaths related to COVID-19.

Figure 7a. Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of February 4, 2022, 8 am EST (n=122,074 [1])

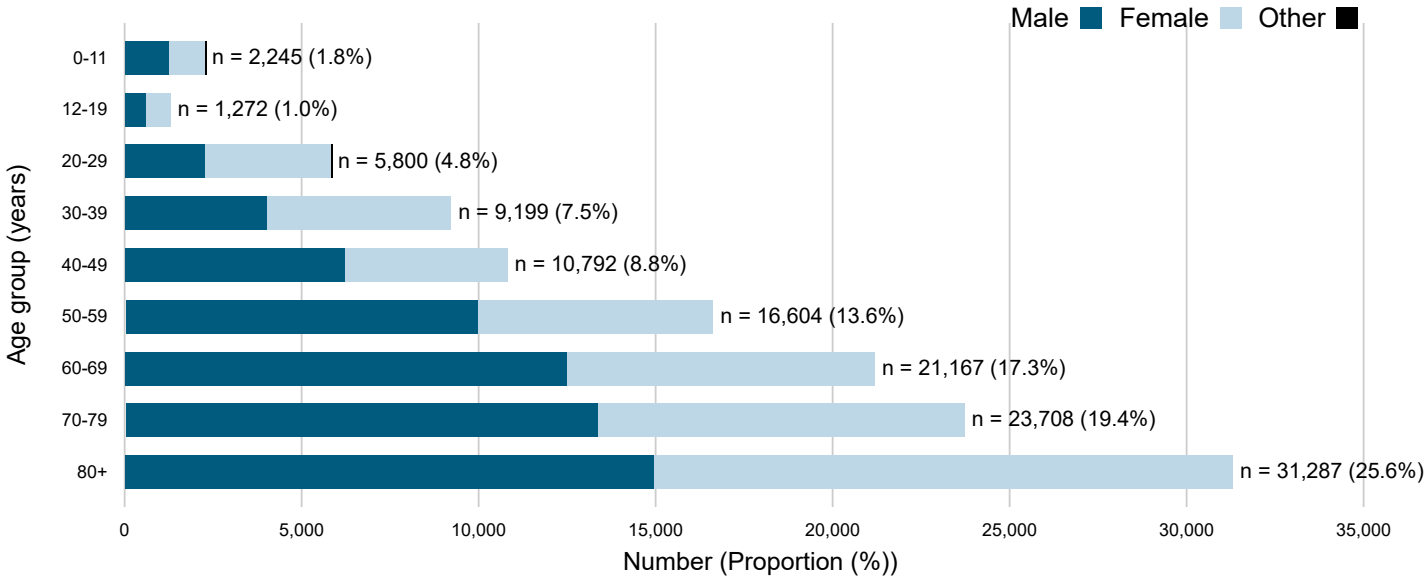


Figure 7b. Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of February 4, 2022, 8 am EST (n=21,560 [1])

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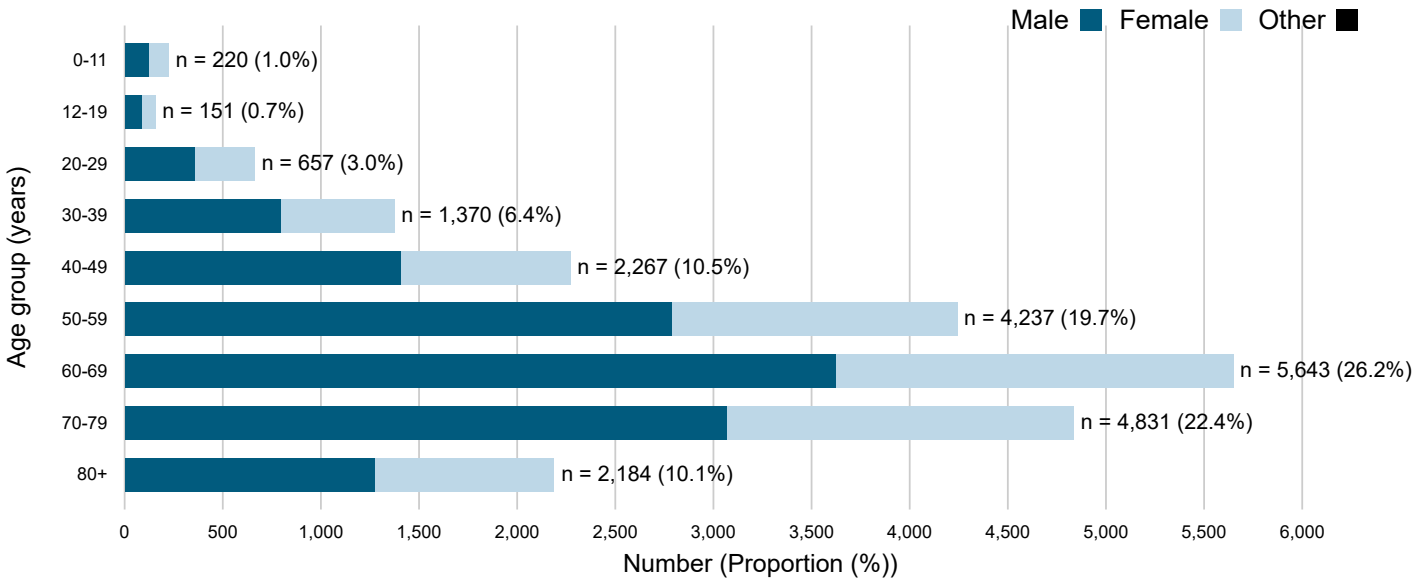
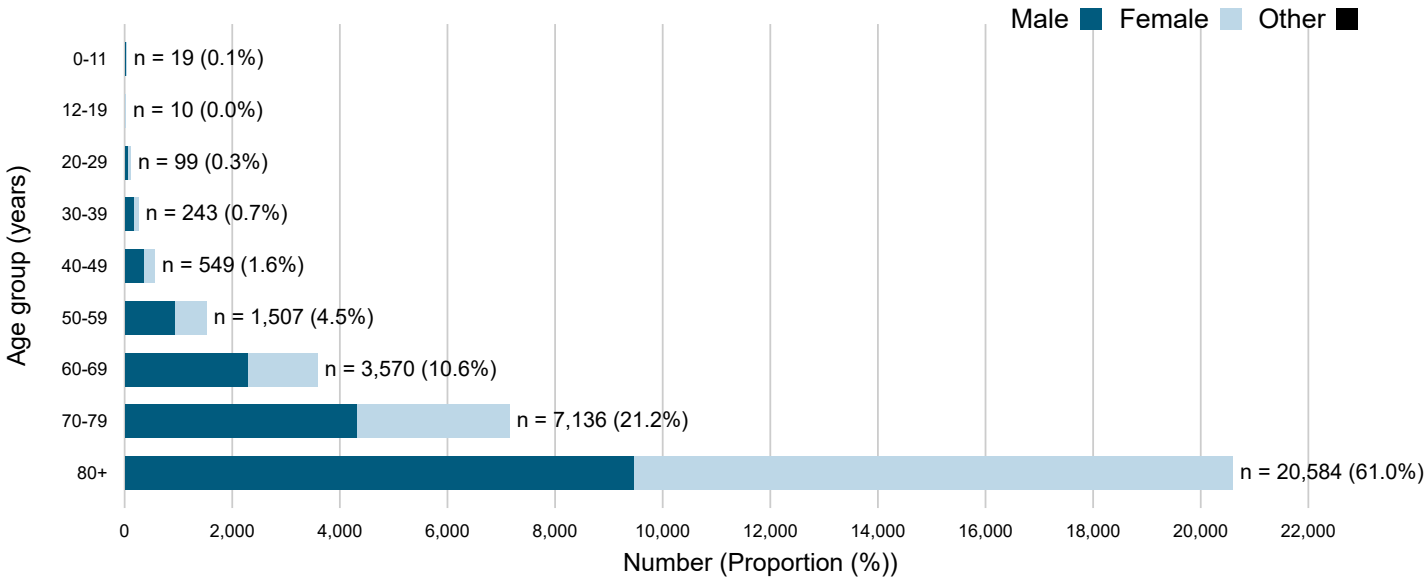


Figure 7c. Age and gender [4] distribution of COVID-19 cases deceased in Canada as of February 4, 2022, 8 am EST (n=33,717 [1])



Data note: Figure 7 includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age and gender information were available. Therefore, some COVID-19 hospitalizations, ICU admissions, and deaths may not be included in Figure 7.

Age and gender [4] distribution of COVID-19 cases hospitalized in Canada as of February 4, 2022, 8 am EST (n=122,074 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	2,245 (1.8%)	1,250 (1.0%)	994 (0.8%)	1 (0.0%)
12-19	1,272 (1.0%)	571 (0.5%)	701 (0.6%)	0 (0.0%)
20-29	5,800 (4.8%)	2,260 (1.9%)	3,539 (2.9%)	1 (0.0%)
30-39	9,199 (7.5%)	4,012 (3.3%)	5,187 (4.2%)	0 (0.0%)
40-49	10,792 (8.8%)	6,204 (5.1%)	4,588 (3.8%)	0 (0.0%)
50-59	16,604 (13.6%)	9,970 (8.2%)	6,634 (5.4%)	0 (0.0%)
60-69	21,167 (17.3%)	12,482 (10.2%)	8,685 (7.1%)	0 (0.0%)
70-79	23,708 (19.4%)	13,360 (10.9%)	10,348 (8.5%)	0 (0.0%)
80+	31,287 (25.6%)	14,937 (12.2%)	16,350 (13.4%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases admitted to ICU in Canada as of February 4, 2022, 8 am EST (n=21,560 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	220 (1.0%)	119 (0.6%)	101 (0.5%)	0 (0.0%)
12-19	151 (0.7%)	84 (0.4%)	67 (0.3%)	0 (0.0%)
20-29	657 (3.0%)	353 (1.6%)	304 (1.4%)	0 (0.0%)
30-39	1,370 (6.4%)	792 (3.7%)	578 (2.7%)	0 (0.0%)
40-49	2,267 (10.5%)	1,403 (6.5%)	864 (4.0%)	0 (0.0%)
50-59	4,237 (19.7%)	2,784 (12.9%)	1,453 (6.7%)	0 (0.0%)
60-69	5,643 (26.2%)	3,620 (16.8%)	2,023 (9.4%)	0 (0.0%)
70-79	4,831 (22.4%)	3,064 (14.2%)	1,767 (8.2%)	0 (0.0%)
80+	2,184 (10.1%)	1,275 (5.9%)	909 (4.2%)	0 (0.0%)

Age and gender [4] distribution of COVID-19 cases deceased in Canada as of February 4, 2022, 8 am EST (n=33,717 [1])

Age group (years)	Number of cases with case reports (percentage)	Number of male cases (percentage)	Number of female cases (percentage)	Number of other cases (percentage)
0-11	19 (0.1%)	6 (0.0%)	13 (0.0%)	0 (0.0%)
12-19	10 (0.0%)	6 (0.0%)	4 (0.0%)	0 (0.0%)
20-29	99 (0.3%)	61 (0.2%)	38 (0.1%)	0 (0.0%)
30-39	243 (0.7%)	151 (0.4%)	92 (0.3%)	0 (0.0%)
40-49	549 (1.6%)	348 (1.0%)	201 (0.6%)	0 (0.0%)
50-59	1,507 (4.5%)	930 (2.8%)	577 (1.7%)	0 (0.0%)
60-69	3,570 (10.6%)	2,282 (6.8%)	1,288 (3.8%)	0 (0.0%)
70-79	7,136 (21.2%)	4,294 (12.7%)	2,842 (8.4%)	0 (0.0%)
80+	20,584 (61.0%)	9,455 (28.0%)	11,129 (33.0%)	0 (0.00%)

Provincial, territorial and international reporting

For more information, please refer to provincial or territorial COVID-19 webpages:

- British Columbia
- Alberta
- Saskatchewan
- Manitoba
- Ontario
- Quebec
- Newfoundland and Labrador
- New Brunswick
- Nova Scotia
- Prince Edward Island
- Yukon
- Northwest Territories
- Nunavut
- World Health Organization
- Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

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1 This figure is based on cases for which a case report form was received by the Public Health Agency of Canada from provincial or territorial partners.

2 The shaded area represents a period of accumulating data where it is expected that cases have occurred but have not yet been reported nationally. The earliest of the following dates were used as an estimate: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.

3 Exposure information may not be available for all cases. Some jurisdictions haven't consistently reported to PHAC how people were exposed throughout the pandemic. As a result, this may underestimate the total number of cases by different exposures, especially among returning travelers.

4 Where available, gender data was used; when gender data was unavailable, sex data was used. Reliable data on gender diverse respondents are unavailable due to small counts.

Date modified:

2022-02-10