



# COVID-19 daily epidemiology update

Updated: January 24, 2022, 9 am EST

## **i** 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 24, 2022, 9 am EST

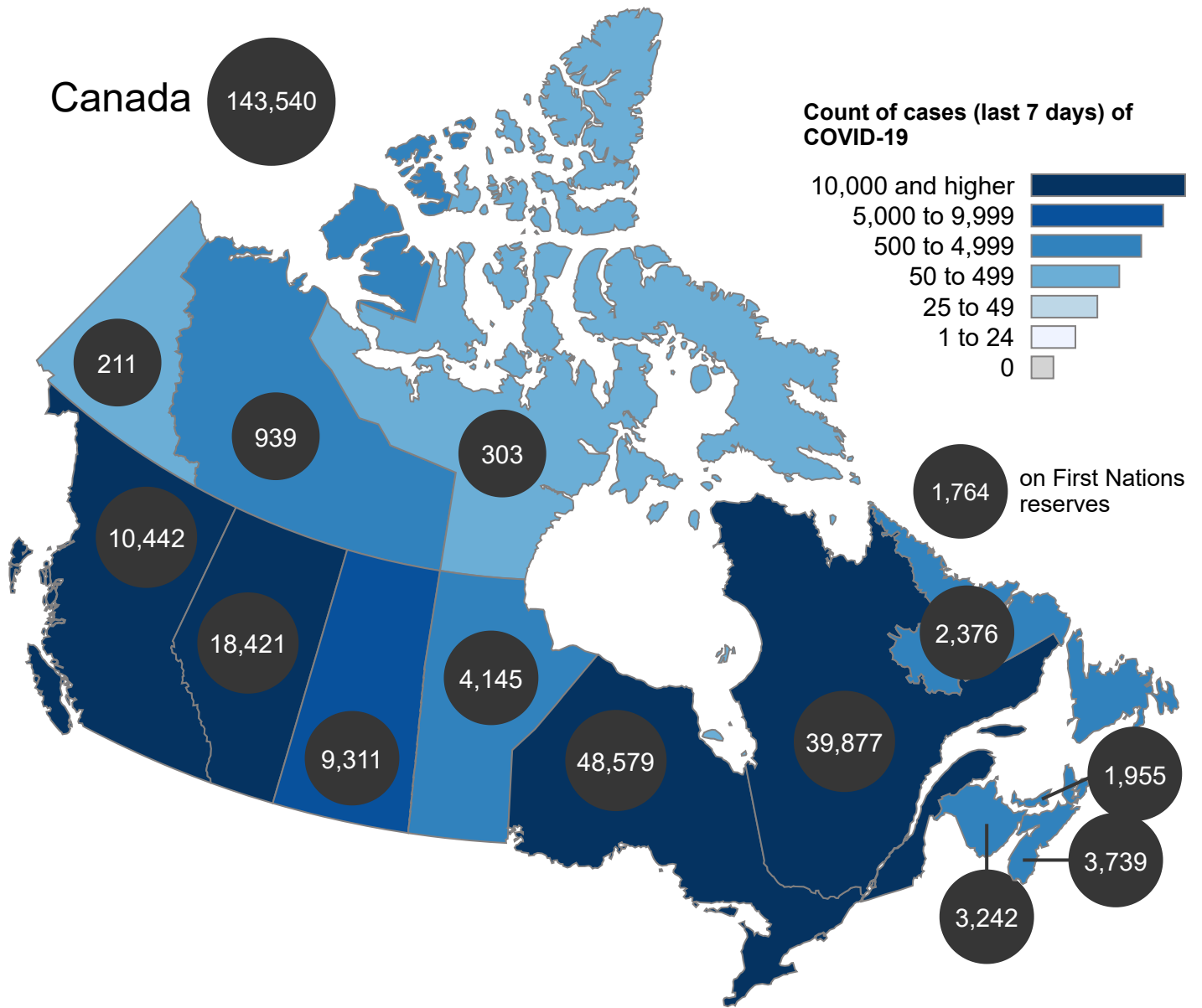
Cases today <b>14,295</b>	Total cases <b>2,921,385</b>	Active cases <b>295,261</b>	Total resolved <b>2,593,527</b>	Deaths today <b>92</b>	Total deaths <b>32,597</b>
Total tests performed <b>55,781,376</b>	Daily percent positive (last 7 days) <b>20.6%</b>	Daily tests per 100,000 population (last 7 days) <b>292</b>			

- 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 21, 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 8 jurisdictions reporting updates, no new cases were reported in 0 provinces and territories in the past 24 hours.
- Of the 7 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.

# Current situation

Figure 1a. **Count** of **cases (last 7 days)** of COVID-19, by **province/territory** as of **January 23, 2022** (Last data update January 24, 2022, 9 am EST)



The count of cases (last 7 days) of COVID-19 in **Canada** was **143,540** as of January 23, 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 23, 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.

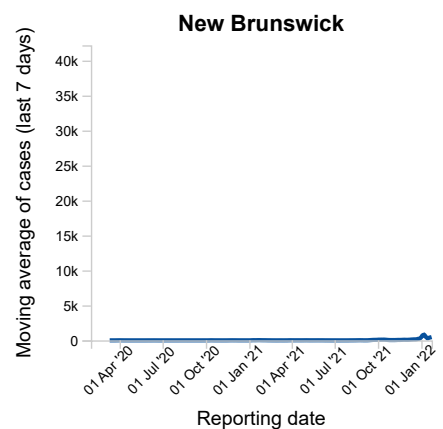
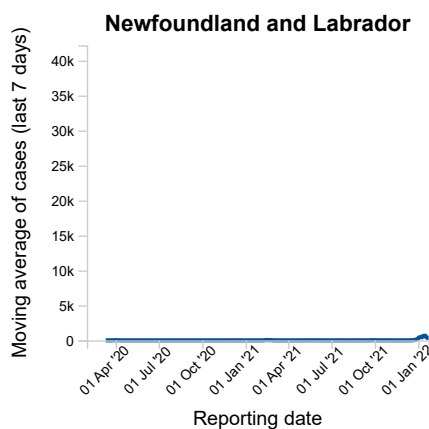
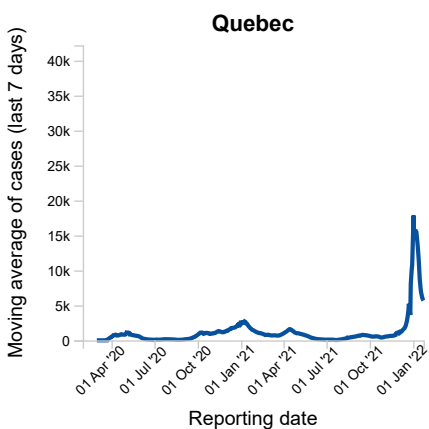
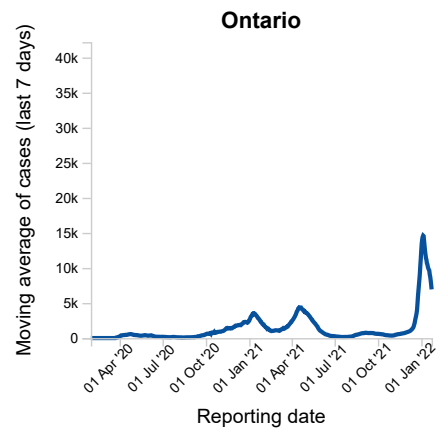
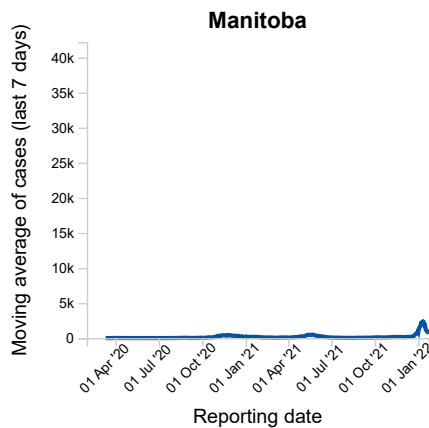
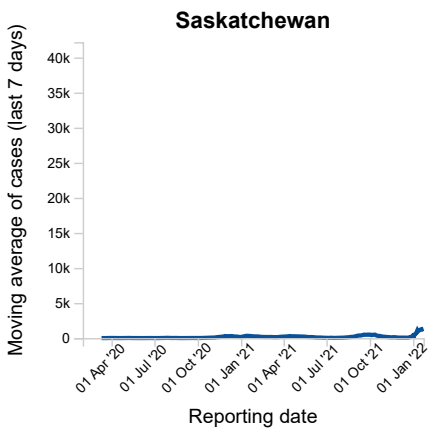
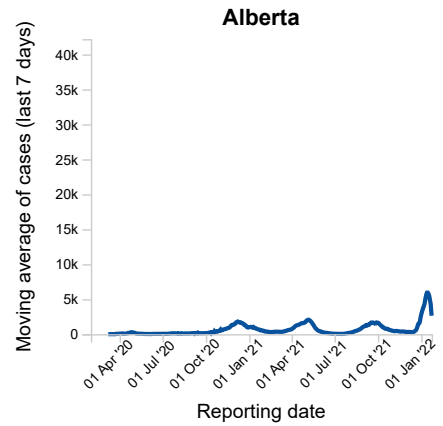
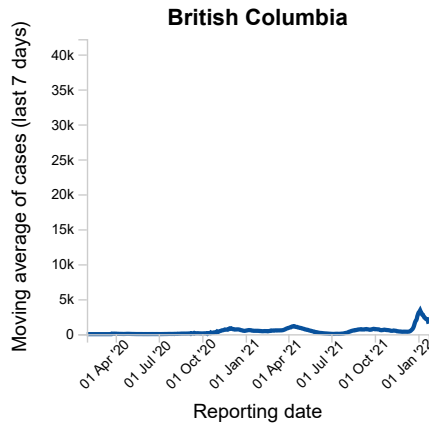
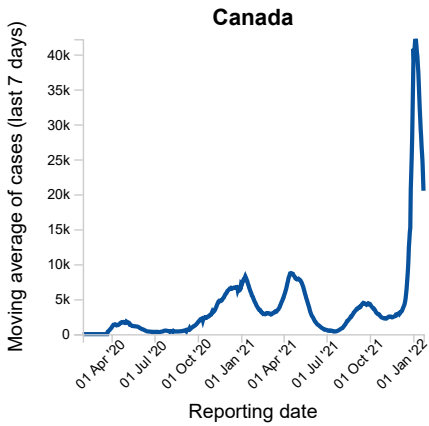
Areas in Canada with cases of COVID-19 as of January 23, 2022

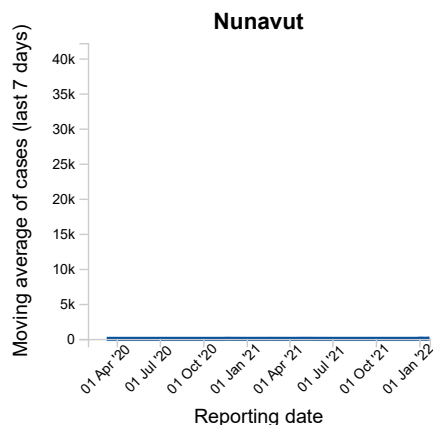
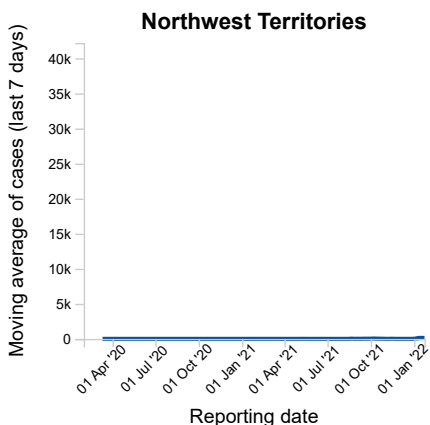
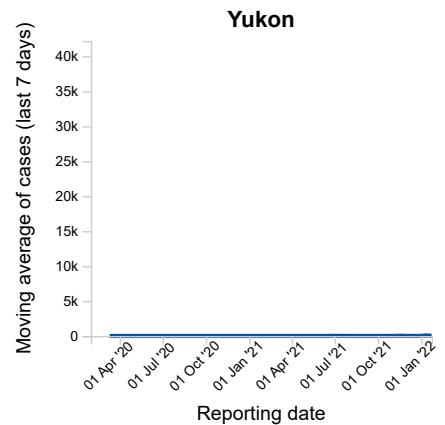
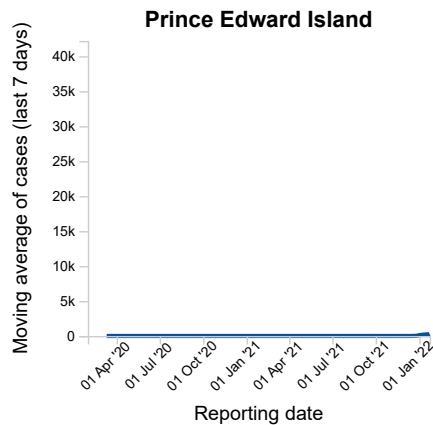
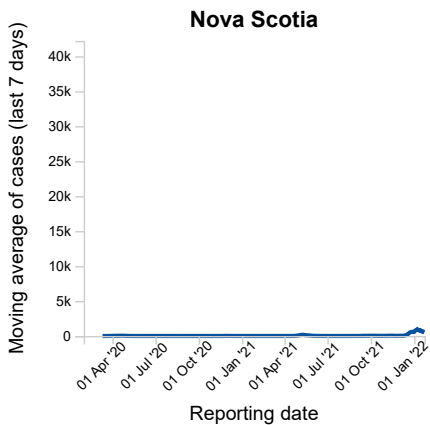
Location	Total cases		Cases last 7 days		Active cases		Resolved	Deaths		Deaths last 7 days		Total tests performed	Moving average tests performed last 7 days		Moving average positivity last 7 days
	Count	Rate*	Count	Rate*	Count	Rate*	Count	Count	Rate*	Count	Rate*	Count	Count	Rate*	Percent
British Columbia	308,079	5,908	10,442	200	36,413	698	269,137	2,529	49	61	1.2	5,329,956	11,363	218	21.9%
Alberta	466,616	10,503	18,421	415	61,615	1,387	401,572	3,429	77	49	1.1	6,629,724	11,378	256	37.0%
Saskatchewan	109,484	9,280	9,311	789	13,290	1,126	95,222	972	82	11	0.9	1,407,122	4,255	361	32.7%
Manitoba	114,021	8,240	4,145	300	36,575	2,643	75,954	1,492	108	35	2.5	1,404,521	2,542	184	32.9%
Ontario	996,665	6,722	48,579	328	67,674	456	918,023	10,968	74	363	2.5	22,190,612	40,019	270	21.0%
Quebec	835,630	9,712	39,877	463	61,616	716	761,215	12,799	149	489	5.7	15,600,291	33,533	390	13.2%
Newfoundland and Labrador	15,166	2,913	2,376	456	2,656	510	12,480	30	6	4	0.8	525,688	2,071	398	17.6%
New Brunswick	26,010	3,296	3,242	411	5,258	666	20,543	209	26	22	2.8	680,810	2,483	315	17.7%
Nova Scotia	34,689	3,497	3,739	377	6,246	630	28,315	128	13	11	1.1	1,681,720	3,726	376	15.6%
Prince Edward Island	6,125	3,728	1,955	1,190	2,484	1,512	3,635	6	4	4	2.4	254,375	118	72	12.2%
Yukon	2,849	6,628	211	491	196	456	2,637	16	37	1	2.3	9,129	N/A	N/A	N/A
Northwest Territories	4,680	10,285	939	2,064	982	2,158	3,684	14	31	2	4.4	39,403	29	63	22.0%
Nunavut	1,358	3,446	303	769	256	650	1,097	5	13	1	2.5	27,949	100	255	43.0%
<b>Canada</b>	<b>2,921,385</b>	<b>7,638</b>	<b>143,540</b>	<b>375</b>	<b>295,261</b>	<b>772</b>	<b>2,593,527</b>	<b>32,597</b>	<b>85</b>	<b>1,053</b>	<b>2.8</b>	<b>55,781,376</b>	<b>111,616</b>	<b>292</b>	<b>20.6%</b>

\* Rate per 100,000 population

Figure 1b. **Moving average** of **cases (last 7 days)** of **COVID-19 in Canada as of January 23, 2022** (Last data update January 24, 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 23, 2022. Laboratory data includes specimens received by labs up to January 21, 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 \(in .csv format\)](#).

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



# National overview

There have been over **55,781,376** COVID-19 tests performed in Canada or **1,458,485 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 23, 2022** (Last data update January 24, 2022, 9 am EST)

Location	New cases	New deaths	Tests performed
British Columbia	N/A	N/A	N/A
Alberta	N/A	N/A	N/A
Saskatchewan	1,642	0	4,594
Manitoba	N/A	N/A	N/A
Ontario	5,833	56	N/A
Quebec	5,141	33	N/A
Newfoundland and Labrador	361	0	N/A
New Brunswick	545	2	2,710
Nova Scotia	503	N/A	3,706
Prince Edward Island	209	1	N/A
Yukon	N/A	N/A	N/A
Northwest Territories	N/A	N/A	N/A
Nunavut	61	0	N/A
<b>Canada</b>	<b>14,295</b>	<b>92</b>	<b>11,010</b>

\* 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.

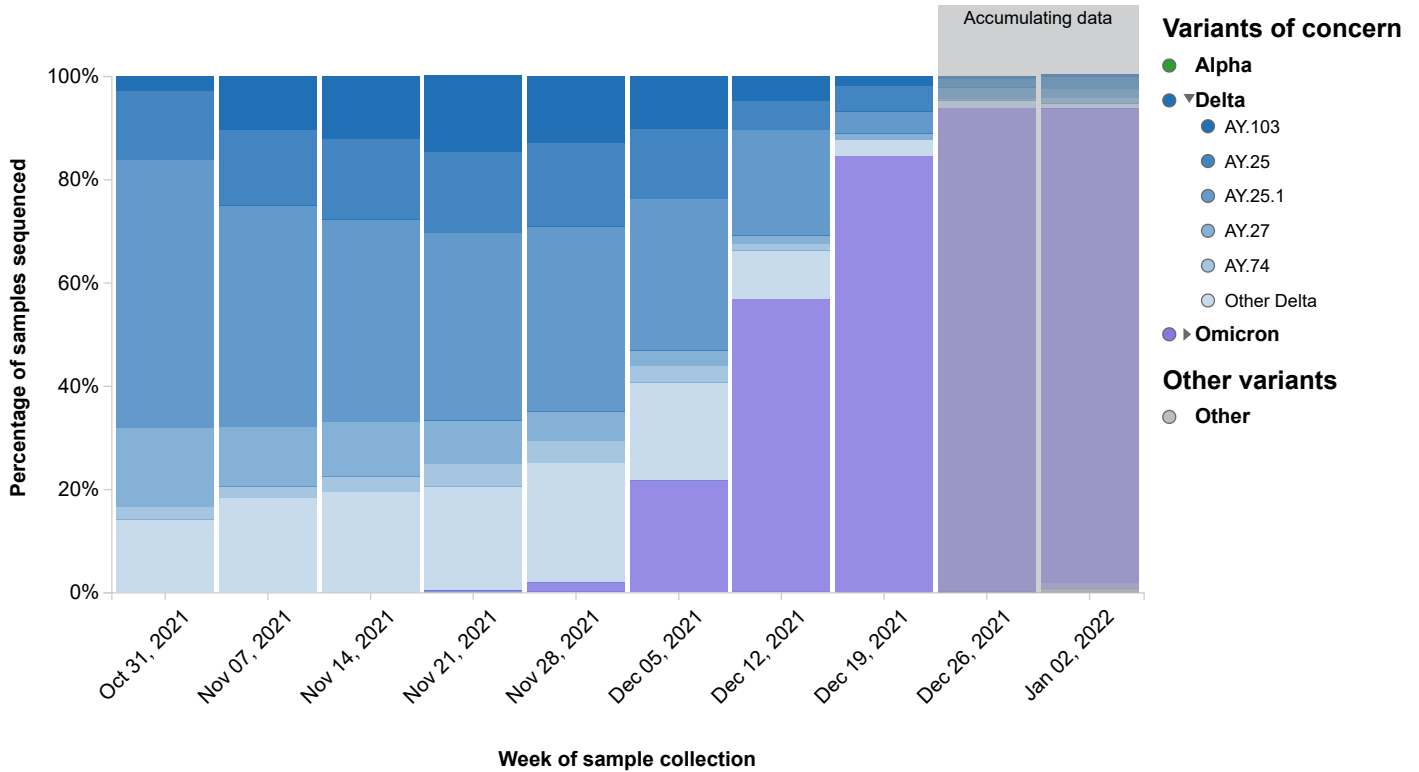
Current variants of concern in Canada include:

- 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 14, 2022, 4 pm EDT

**i** 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 31, 2021 (n=4,821)	Nov 07, 2021 (n=4,843)	Nov 14, 2021 (n=5,324)	Nov 21, 2021 (n=6,103)	Nov 28, 2021 (n=6,240)	Dec 05, 2021 (n=6,156)	Dec 12, 2021 (n=6,589)	Dec 19, 2021 (n=8,548)	Dec 26, 2021 (n=6,563)	Jan 02, 2022 (n=1,000)
<b>Variants of concern</b>	<b>99.9%</b>	<b>99.9%</b>	<b>100.0%</b>	<b>100.1%</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.9%</b>	<b>99.5%</b>
<b>Alpha</b>	<b>0.0%</b>	-	<b>0.0%</b>	-	-	-	-	-	-	-
B.1.1.7	0.0%	-	0.0%	-	-	-	-	-	-	-
<b>Delta</b>	<b>99.9%</b>	<b>99.9%</b>	<b>100.0%</b>	<b>99.8%</b>	<b>98.0%</b>	<b>78.3%</b>	<b>43.2%</b>	<b>15.4%</b>	<b>6.1%</b>	<b>6.5%</b>
AY.103	2.9%	10.4%	12.1%	14.9%	12.9%	10.1%	4.7%	1.8%	0.5%	0.4%
AY.25	13.3%	14.6%	15.7%	15.6%	16.1%	13.7%	5.8%	5.0%	1.7%	2.5%
AY.25.1	51.9%	42.9%	39.2%	36.3%	35.9%	29.3%	20.4%	4.3%	2.2%	1.7%
AY.27	15.3%	11.5%	10.6%	8.4%	5.8%	3.0%	1.7%	1.0%	0.3%	1.0%
AY.74	2.4%	2.3%	3.0%	4.4%	4.2%	3.2%	1.2%	0.1%	0.0%	-
Other Delta	14.1%	18.2%	19.4%	20.2%	23.1%	19.0%	9.4%	3.2%	1.4%	0.9%
<b>Omicron</b>	-	-	-	<b>0.3%</b>	<b>1.9%</b>	<b>21.6%</b>	<b>56.7%</b>	<b>84.5%</b>	<b>93.8%</b>	<b>93.0%</b>
B.1.1.529	-	-	-	0.1%	0.0%	-	0.0%	0.0%	0.0%	0.1%
BA.1	-	-	-	0.2%	1.8%	21.6%	56.7%	84.5%	93.6%	91.9%
BA.2	-	-	-	-	0.1%	-	-	0.0%	0.2%	1.0%
<b>Other variants</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	-	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.8%</b>
<b>Other</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	-	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.8%</b>

**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.

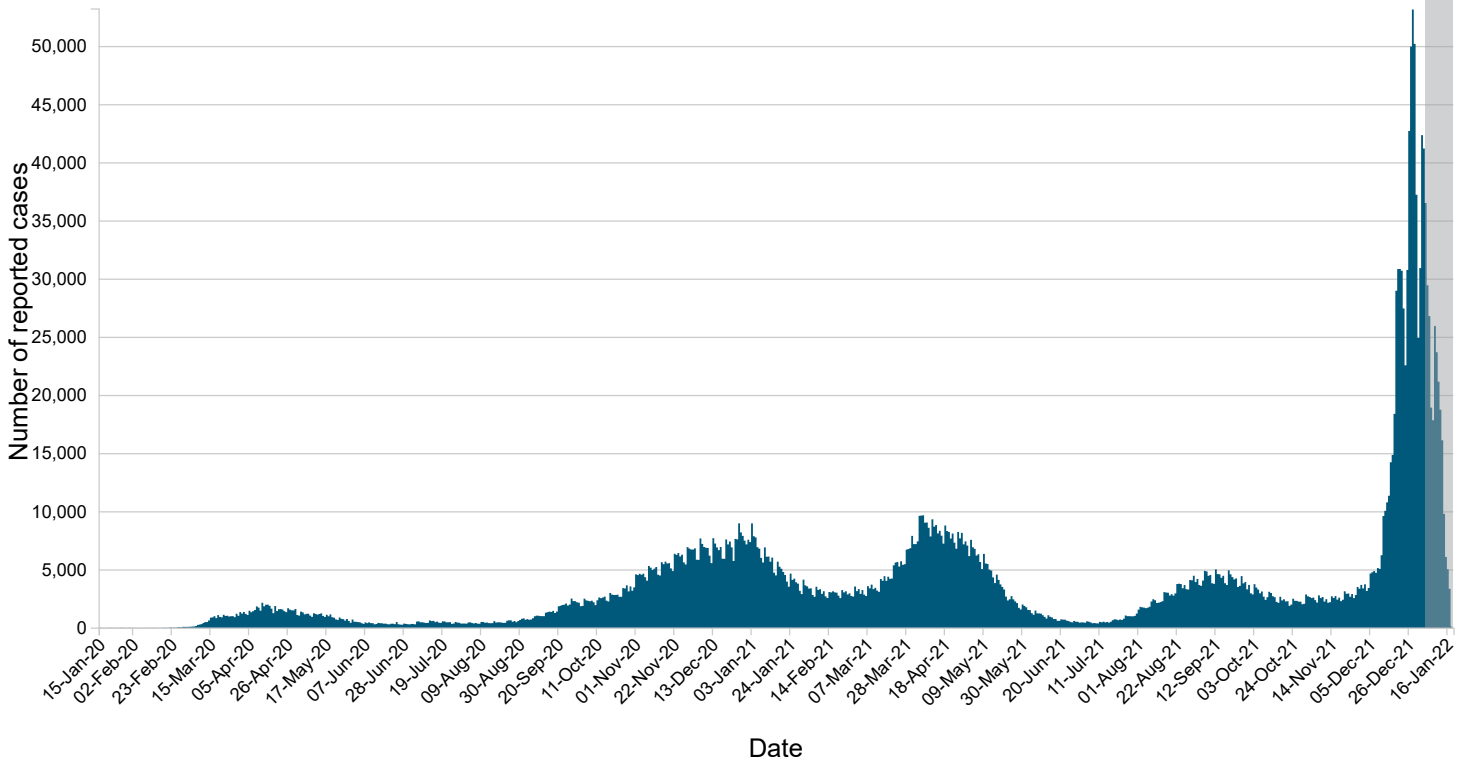
Updated: January 21, 2022, 8 am EST

## Epidemic curve

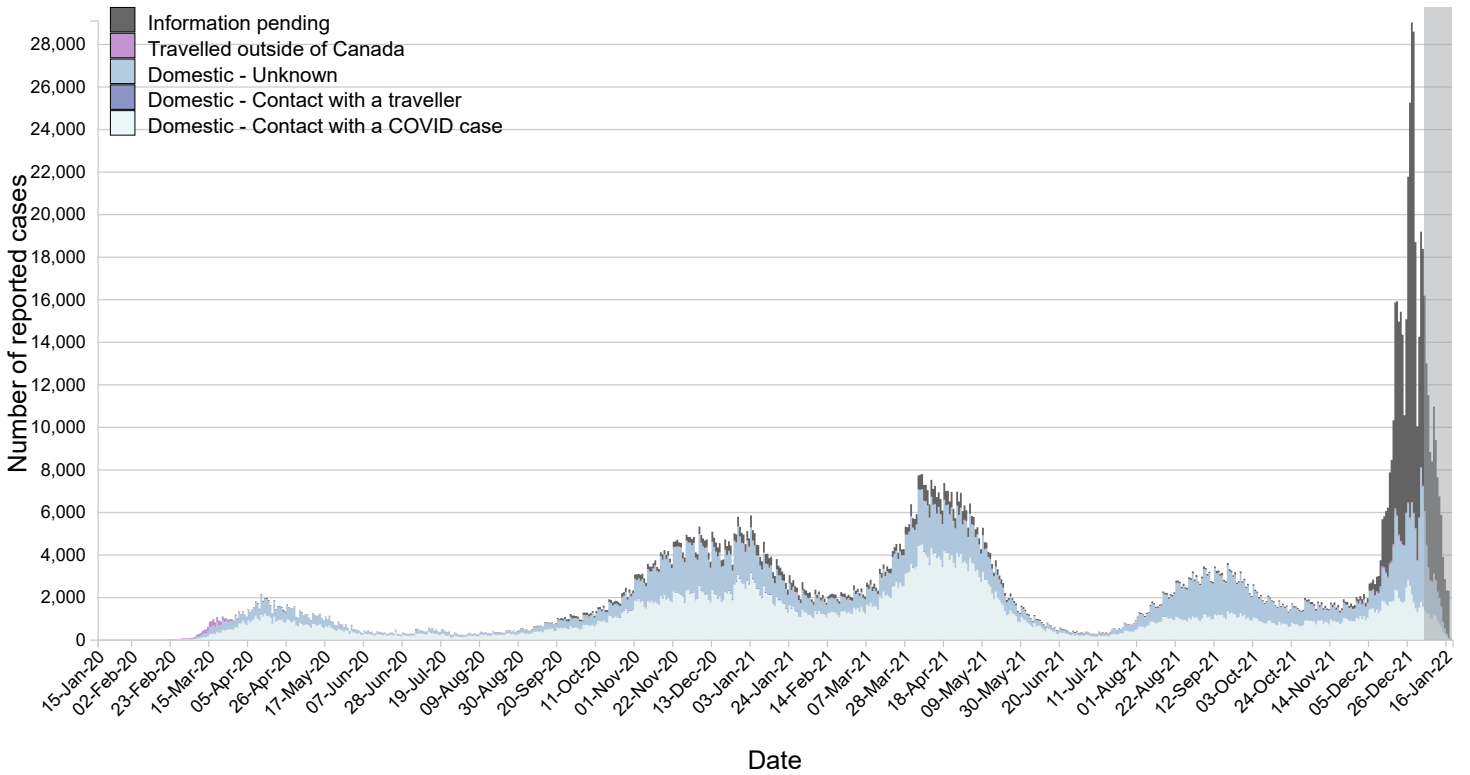
As of January 21, 2022, 8 am EST, PHAC has received detailed case report data on 2,784,304 cases. Both exposure and symptom onset date were available for 1,810,205 (65.0%) cases <sup>1</sup>.

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.

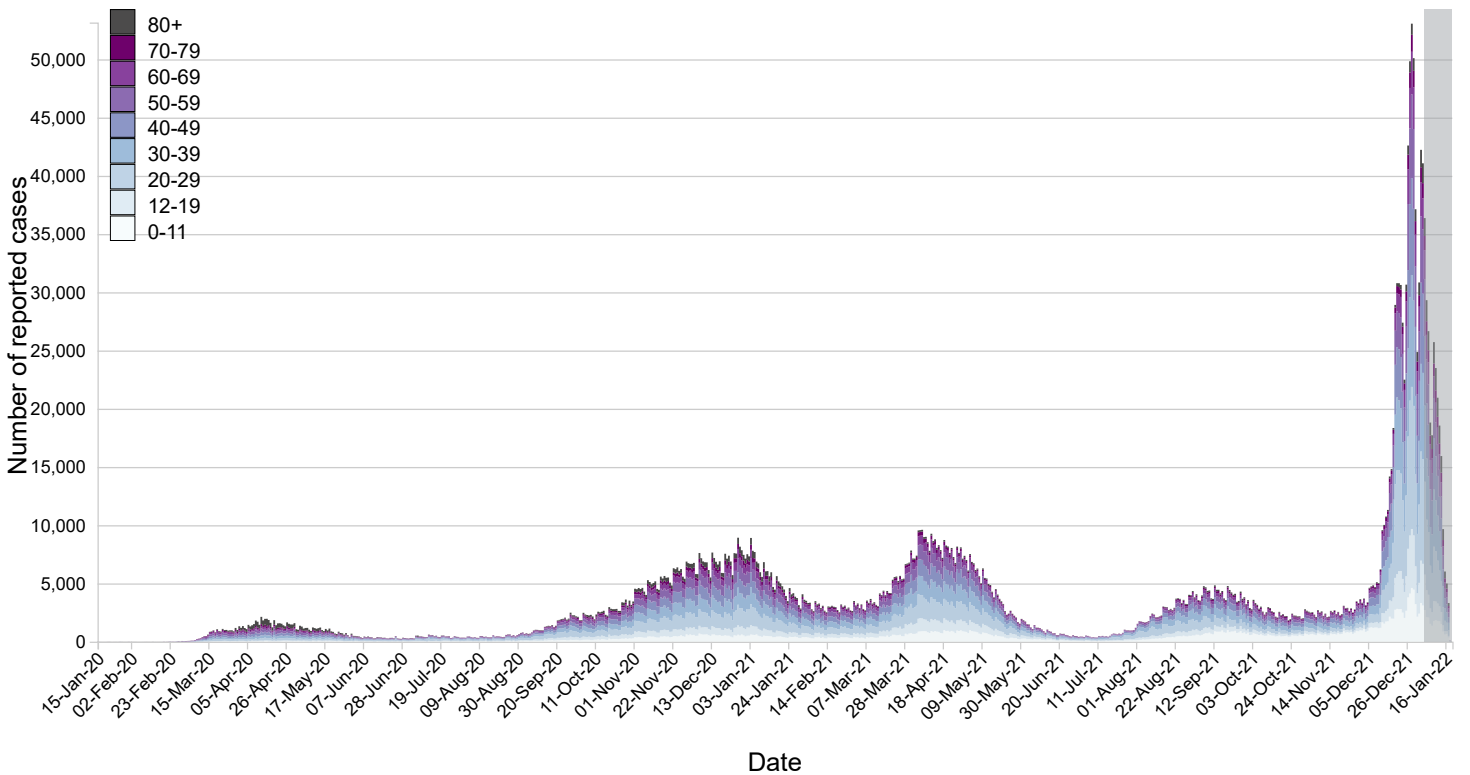
Figure 3. COVID-19 cases (n=2,784,304 <sup>1</sup>) in Canada by date <sup>2</sup> as of January 21, 2022, 8 am EST (total cases)



**Figure 3. COVID-19 cases (n=1,810,205 <sup>1</sup>) in Canada by date <sup>2</sup> as of January 21, 2022, 8 am EST (by exposure)**

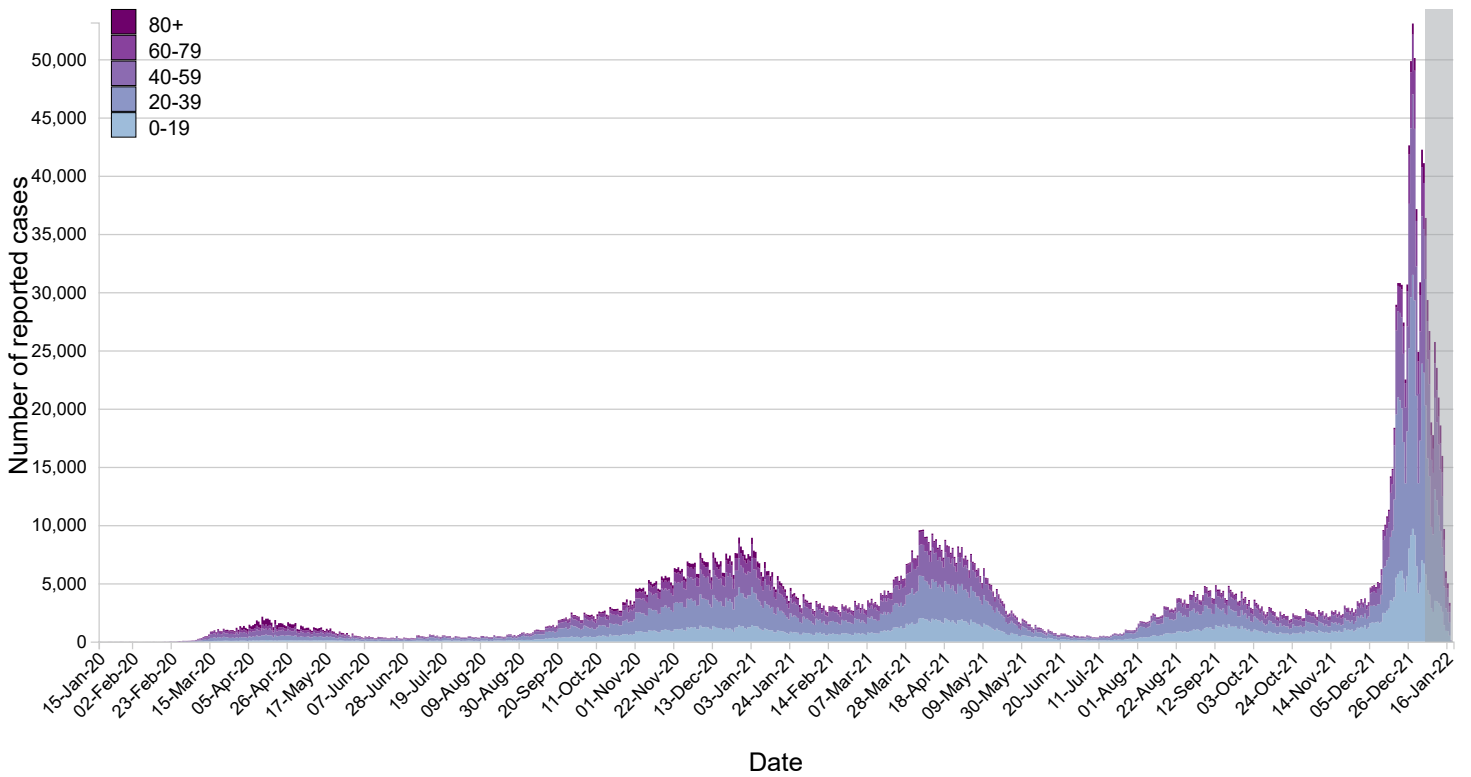


**Figure 3. COVID-19 cases (n=2,766,991 <sup>1</sup>) in Canada by date <sup>2</sup> as of January 21, 2022, 8 am EST (by age - 10 year groups)**





**Figure 3. COVID-19 cases (n=2,766,991<sup>1</sup>) in Canada by date<sup>2</sup> as of January 21, 2022, 8 am EST (by age - 20 year groups)**



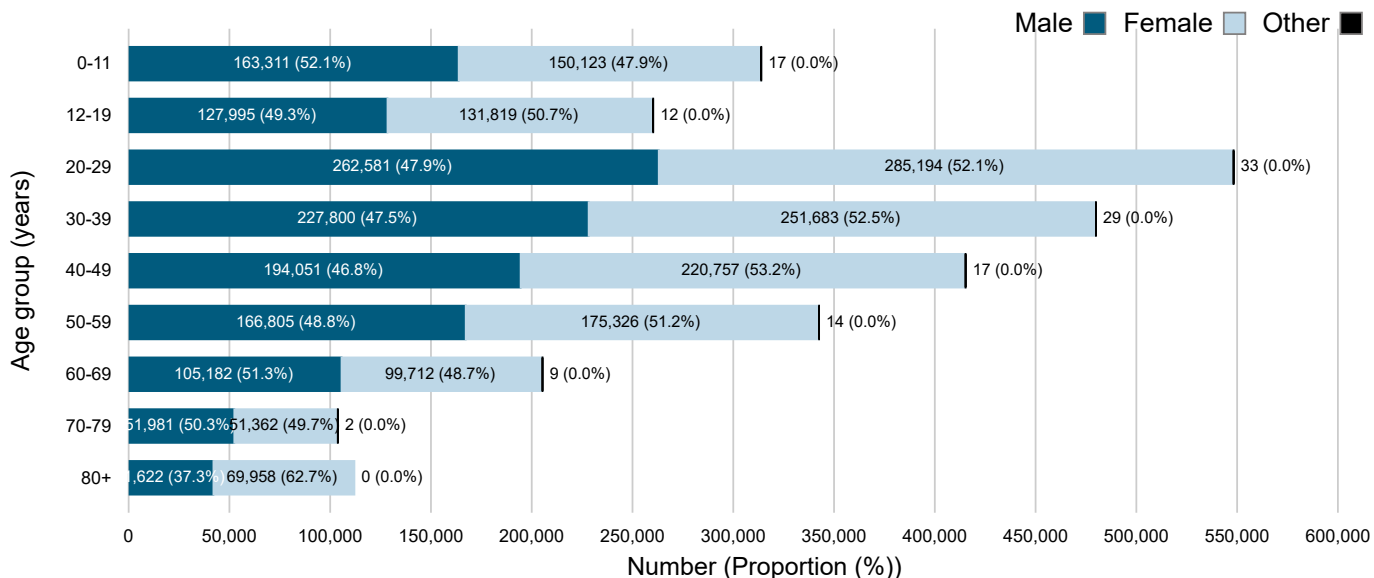
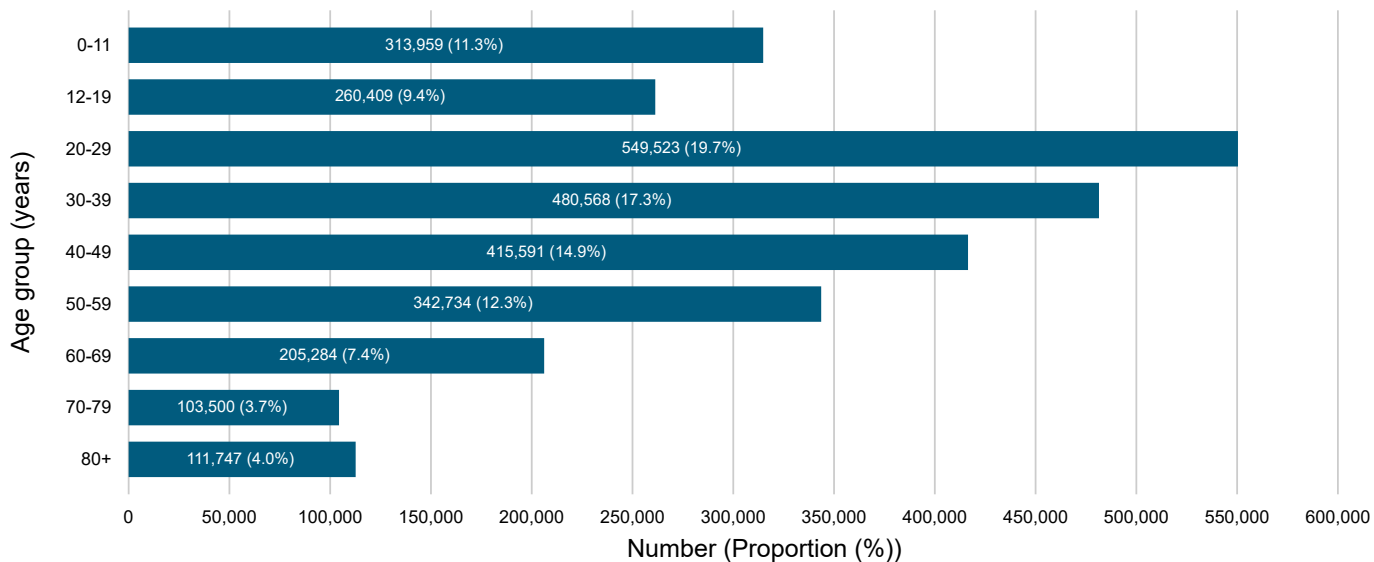
This figure may underestimate the total number of cases among returning travelers. Exposure history is not available for all cases and jurisdictions have not all consistently reported exposure history to PHAC throughout the pandemic.

# Demographics

We have detailed case report data from 2,784,304 cases. We know the age of patients in 99.96% of cases, and both age and gender in 99.75% of cases.

Of the cases reported in Canada so far, 51.7% were female and 37.0% were between 20 and 39 years old (Figure 4).

Figure 4.  distribution of COVID-19 cases (n=2,783,315 <sup>1</sup>) in Canada as of January 21, 2022, 8 am EST <sup>4</sup>



## Age by gender <sup>4</sup> distribution of COVID-19 cases (n=2,783,315 <sup>1</sup>) in Canada, January 21, 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	313,959 (11.3%)	163,311 (12.2%)	150,123 (10.5%)	17 (12.8%)
12-19	260,409 (9.4%)	127,995 (9.5%)	131,819 (9.2%)	12 (9.0%)
20-29	549,523 (19.7%)	262,581 (19.6%)	285,194 (19.9%)	33 (24.8%)
30-39	480,568 (17.3%)	227,800 (17.0%)	251,683 (17.5%)	29 (21.8%)
40-49	415,591 (14.9%)	194,051 (14.5%)	220,757 (15.4%)	17 (12.8%)
50-59	342,734 (12.3%)	166,805 (12.4%)	175,326 (12.2%)	14 (10.5%)
60-69	205,284 (7.4%)	105,182 (7.8%)	99,712 (6.9%)	9 (6.8%)
70-79	103,500 (3.7%)	51,981 (3.9%)	51,362 (3.6%)	2 (1.5%)
80+	111,747 (4.0%)	41,622 (3.1%)	69,958 (4.9%)	0 (0.0%)
Total	2,783,315 (100%)	1,341,328 (100%)	1,435,934 (100%)	133 (100%)

## How people were exposed <sup>3</sup>

In  , detailed case report data were provided for 2,784,304 cases. We have exposure history for 1,810,205 (65.0%) cases. The probable exposure setting of these cases <sup>1</sup> are:

- any exposure that occurred in Canada: **1,402,666 (77.5%)**, including
  - from contact with a known COVID case: **780,184 (43.1%)**
  - from contact with a traveller: **9,965 (0.6%)**
  - from an unknown source: **612,517 (33.8%)**
- currently unknown (information pending): **391,940 (21.7%)**
- travelled outside of Canada: **15,599 (0.9%)**

# Cases following vaccination

Data extracted on January 14, 2022 for cases from December 14, 2020 up until January 01, 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.

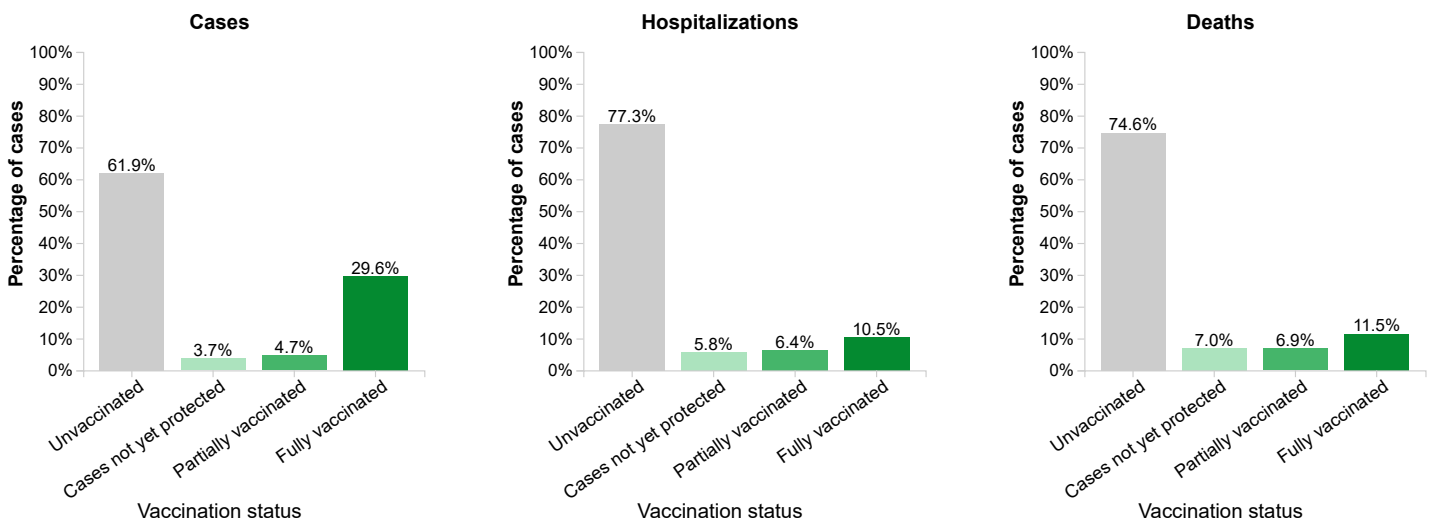
## Cases reported since the start of the vaccination campaign, as of January 01, 2021

Since the start of the vaccination campaign on December 14, 2020, PHAC received case-level vaccine history data for 73.6% (n=1,197,597) of COVID-19 cases aged 12 years or older.

Of these cases:

- 741,789 (61.9%) were unvaccinated at the time of their episode date
- 44,037 (3.7%) were not yet protected by the vaccine, as their episode date occurred less than 14 days after their first dose
- 56,831 (4.7%) 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
- 354,940 (29.6%) 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 01, 2021



**Characteristics and severe outcomes associated unvaccinated, partially vaccinated and fully vaccinated confirmed cases reported to PHAC, as of January 01, 2021**

Status	Cases	Hospitalizations	Deaths
Unvaccinated	61.9%	77.3%	74.6%
Cases not yet protected	3.7%	5.8%	7.0%
Partially vaccinated	4.7%	6.4%	6.9%
Fully vaccinated	29.6%	10.5%	11.5%

Among the twelve jurisdictions that have reported case-level vaccine history data to PHAC, a total of 24.3 million people have received at least one dose of the COVID-19 vaccine as of January 01, 2021.

Of these people:

- 24.1 million achieved partial vaccination status, of which 56,831 (0.24%) were diagnosed with COVID-19 while partially vaccinated
- 22.5 million achieved full vaccination status, of which 354,940 (1.57%) 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 01, 2021**

		Unvaccinated (n=741,789)	Cases not yet protected (n=44,037)	Partially vaccinated (n=56,831)	Fully vaccinated (n=354,940)	Total cases (n=1,197,597)
<b>Gender*</b>	Male	378,908 (64.3%)	21,249 (3.6%)	26,811 (4.5%)	162,331 (27.5%)	589,299 (100%)
	Female	360,876 (59.6%)	22,729 (3.8%)	29,930 (4.9%)	191,563 (31.7%)	605,098 (100%)
<b>Hospitalizations</b>		41,561 (77.3%)	3,092 (5.8%)	3,453 (6.4%)	5,657 (10.5%)	53,763 (100%)
<b>Deaths</b>		8,149 (74.6%)	762 (7.0%)	754 (6.9%)	1,253 (11.5%)	10,918 (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 01, 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 80% less likely to be hospitalized and 80% 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 01, 2021**

Severe Outcome	Adjusted* Odds Ratio (95% CI)
Hospitalizations	0.20 (0.19 - 0.2)
Deaths	0.20 (0.18 - 0.21)

\*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 01, 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.

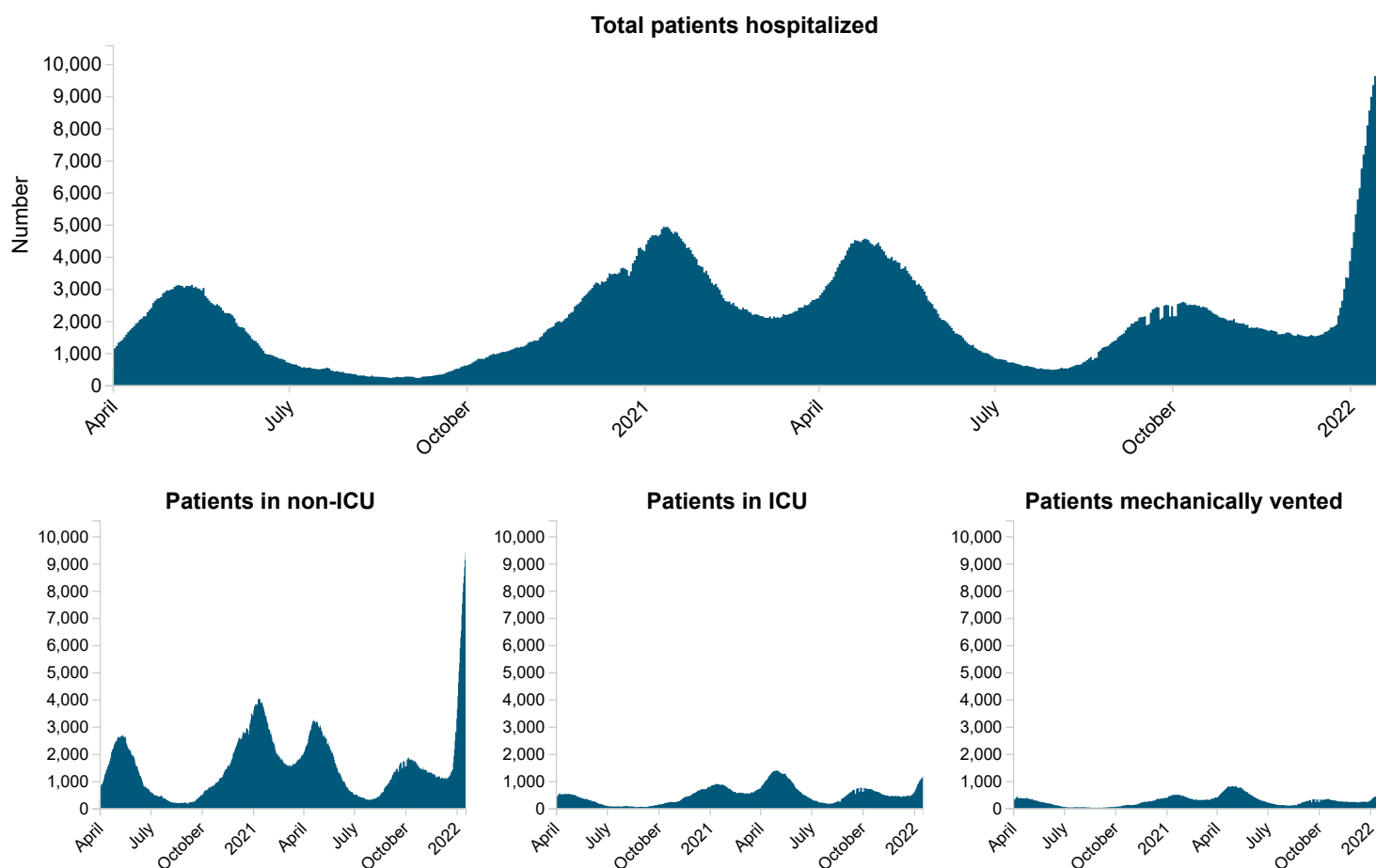
**Note:** When symptom onset date is unavailable or the case is asymptomatic, episode date uses the following dates as a proxy for classification: laboratory specimen collection date, or laboratory testing date.

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 17, 2022**



Between January 10, 2022 and January 17, 2022:

- the total number of **hospital beds** occupied by COVID-19 patients **increased** from **8,088** to **10,588** beds.
- the number of **non-ICU beds** occupied by COVID-19 patients **increased** from **7,115** to **9,408** beds.

- the number of **ICU beds** occupied by COVID-19 patients **increased** from **973** to **1,180** beds.
- the number of **COVID-19 patients who were mechanically vented** increased from **428** to **576**.

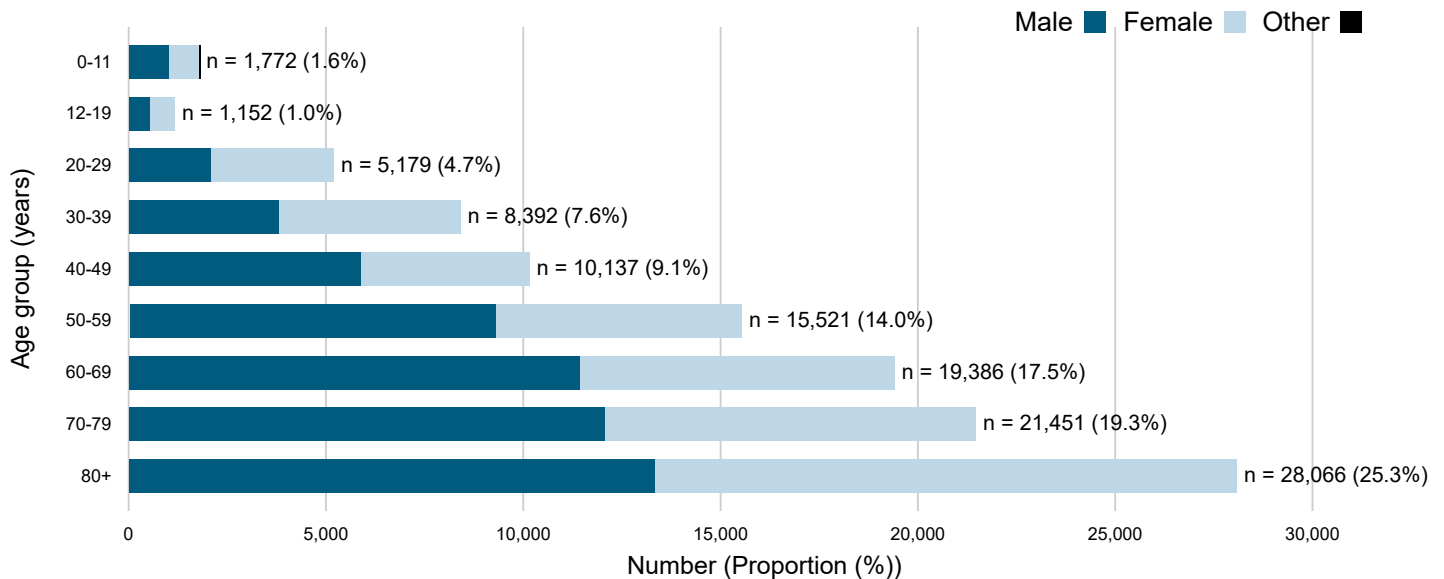
## Hospitalizations and deaths to date

We have detailed case report data on 2,784,304 cases, and hospitalization status for 1,917,115 (68.9%) of them:

- **111,179 cases (5.8%)** were hospitalized, of whom:
  - **20,372 (18.3%)** were admitted to the ICU
  - **2,432 (2.2%)** needed mechanical ventilation

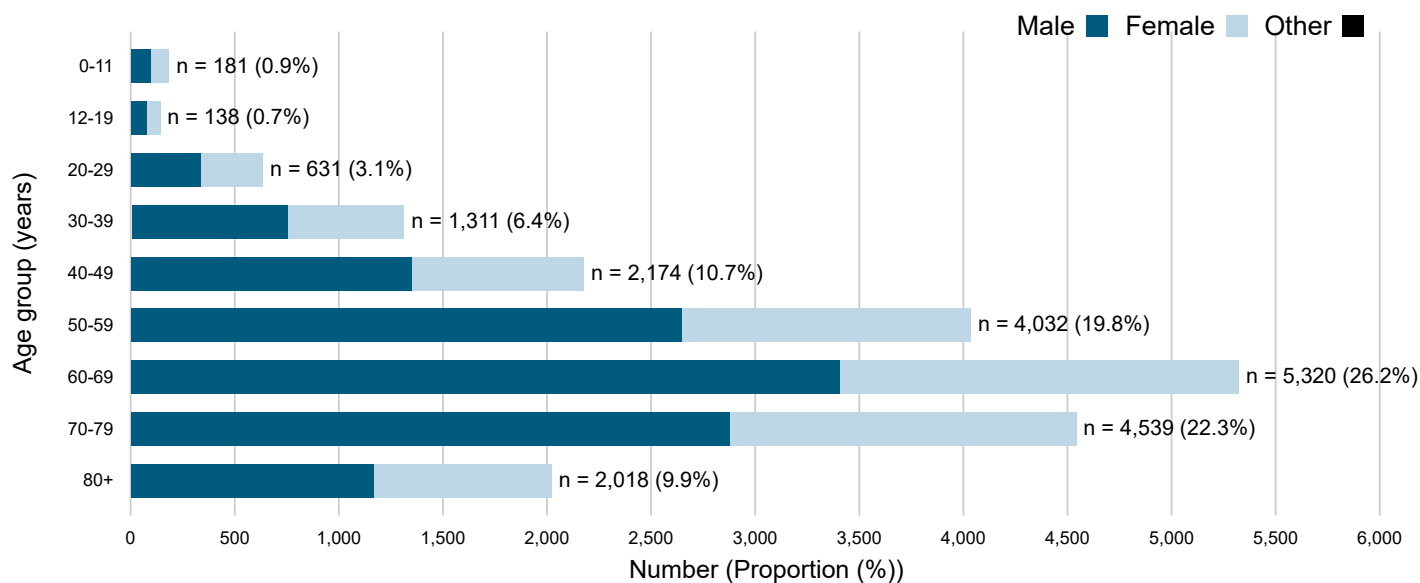
The provinces and territories provided detailed case report forms for **31,905** deaths related to COVID-19.

**Figure 7a. Age and gender<sup>4</sup> distribution of COVID-19 cases hospitalized in Canada as of January 21, 2022, 8 am EST (n=111,056<sup>1</sup>)**

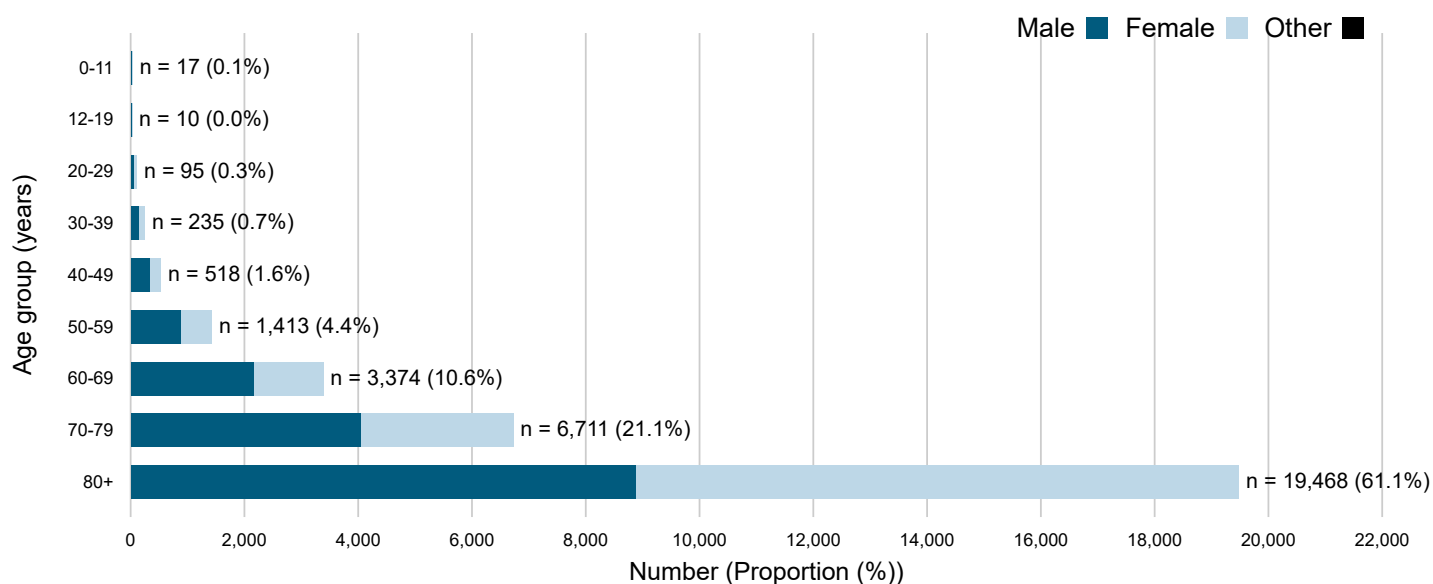


**Figure 7b. Age and gender<sup>4</sup> distribution of COVID-19 cases admitted to ICU in Canada as of January 21, 2022, 8 am EST (n=20,344<sup>1</sup>)**





**Figure 7c. Age and gender<sup>4</sup> distribution of COVID-19 cases deceased in Canada as of January 21, 2022, 8 am EST (n=31,841<sup>1</sup>)**



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 <sup>4</sup> distribution of COVID-19 cases hospitalized in Canada as of January 21, 2022, 8 am EST (n=111,056 <sup>1</sup>)**

<b>Age group (years)</b>	<b>Number of cases with case reports (percentage)</b>	<b>Number of male cases (percentage)</b>	<b>Number of female cases (percentage)</b>	<b>Number of other cases (percentage)</b>
0-11	1,772 (1.6%)	998 (0.9%)	773 (0.7%)	1 (0.0%)
12-19	1,152 (1.0%)	525 (0.5%)	627 (0.6%)	0 (0.0%)
20-29	5,179 (4.7%)	2,075 (1.9%)	3,104 (2.8%)	0 (0.0%)
30-39	8,392 (7.6%)	3,786 (3.4%)	4,606 (4.1%)	0 (0.0%)
40-49	10,137 (9.1%)	5,858 (5.3%)	4,279 (3.9%)	0 (0.0%)
50-59	15,521 (14.0%)	9,300 (8.4%)	6,221 (5.6%)	0 (0.0%)
60-69	19,386 (17.5%)	11,407 (10.3%)	7,979 (7.2%)	0 (0.0%)
70-79	21,451 (19.3%)	12,056 (10.9%)	9,395 (8.5%)	0 (0.0%)
80+	28,066 (25.3%)	13,338 (12.0%)	14,728 (13.3%)	0 (0.0%)

**Age and gender <sup>4</sup> distribution of COVID-19 cases admitted to ICU in Canada as of January 21, 2022, 8 am EST (n=20,344 <sup>1</sup>)**

<b>Age group (years)</b>	<b>Number of cases with case reports (percentage)</b>	<b>Number of male cases (percentage)</b>	<b>Number of female cases (percentage)</b>	<b>Number of other cases (percentage)</b>
0-11	181 (0.9%)	97 (0.5%)	84 (0.4%)	0 (0.0%)
12-19	138 (0.7%)	73 (0.4%)	65 (0.3%)	0 (0.0%)
20-29	631 (3.1%)	335 (1.6%)	296 (1.5%)	0 (0.0%)
30-39	1,311 (6.4%)	754 (3.7%)	557 (2.7%)	0 (0.0%)
40-49	2,174 (10.7%)	1,348 (6.6%)	826 (4.1%)	0 (0.0%)
50-59	4,032 (19.8%)	2,648 (13.0%)	1,384 (6.8%)	0 (0.0%)
60-69	5,320 (26.2%)	3,404 (16.7%)	1,916 (9.4%)	0 (0.0%)
70-79	4,539 (22.3%)	2,873 (14.1%)	1,666 (8.2%)	0 (0.0%)
80+	2,018 (9.9%)	1,165 (5.7%)	853 (4.2%)	0 (0.0%)

**Age and gender <sup>4</sup> distribution of COVID-19 cases deceased in Canada as of January 21, 2022, 8 am EST (n=31,841 <sup>1</sup>)**

<b>Age group (years)</b>	<b>Number of cases with case reports (percentage)</b>	<b>Number of male cases (percentage)</b>	<b>Number of female cases (percentage)</b>	<b>Number of other cases (percentage)</b>
0-11	17 (0.1%)	5 (0.0%)	12 (0.0%)	0 (0.0%)
12-19	10 (0.0%)	6 (0.0%)	4 (0.0%)	0 (0.0%)
20-29	95 (0.3%)	59 (0.2%)	36 (0.1%)	0 (0.0%)
30-39	235 (0.7%)	145 (0.5%)	90 (0.3%)	0 (0.0%)
40-49	518 (1.6%)	337 (1.1%)	181 (0.6%)	0 (0.0%)
50-59	1,413 (4.4%)	871 (2.7%)	542 (1.7%)	0 (0.0%)
60-69	3,374 (10.6%)	2,155 (6.8%)	1,219 (3.8%)	0 (0.0%)
70-79	6,711 (21.1%)	4,036 (12.7%)	2,675 (8.4%)	0 (0.0%)
80+	19,468 (61.1%)	8,871 (27.9%)	10,597 (33.3%)	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.
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**Date modified:**

2022-01-24

