COVID-19 epidemiology update: Summary

Last updated: 2024-10-01 PDF

Summary of COVID-19 cases, hospitalizations and deaths, testing and variants of concern, and outbreaks across Canada and over time. Older versions of this report are available on the archived reports page.

This page was last updated on October 1, 2024, 2 pm ET.

Change in report

As of October 4, 2024, this webpage will no longer be updated. Information on COVID-19 can now be found on the Canadian respiratory virus surveillance report, where it is presented along other respiratory viruses including Influenza, and RSV.

Weekly highlights

For information on other respiratory viruses circulating in Canada, and comparisons with COVID-19, please visit the new Respiratory Virus Detections dashboard, and the weekly Fluwatch report.

General trends

- Nationally, COVID-19 indicators are stable at elevated levels compared to the spring. However, trends vary across the provinces and territories.
- In the latest reporting week, two reporting provinces reported high COVID-19 Activity Levels that were stable or increasing, while three reporting provinces and territories reported low to moderate Activity Levels that were stable or decreasing.
- Since April 2024, COVID-19 outbreaks have been slowly increasing with some periods of stabilization. Following a period of stable trends in June 2024, outbreak incidence has been steadily increasing, up to the beginning of the accumulating data period on August 24, 2024.

Hospitalizations and deaths

- Weekly COVID-19 deaths remain low overall.

Variants

- Nationally, the JN.1* group continues to be the dominant lineage group in Canada, with KP.3* sub-lineages like KP.3.1.1 being the primary sub-lineages showing growth.
- On September 14, KP.3.1.1 is projected to have represented 68% of sequences, with the next closest lineage being KP.2.3 at only 6%.

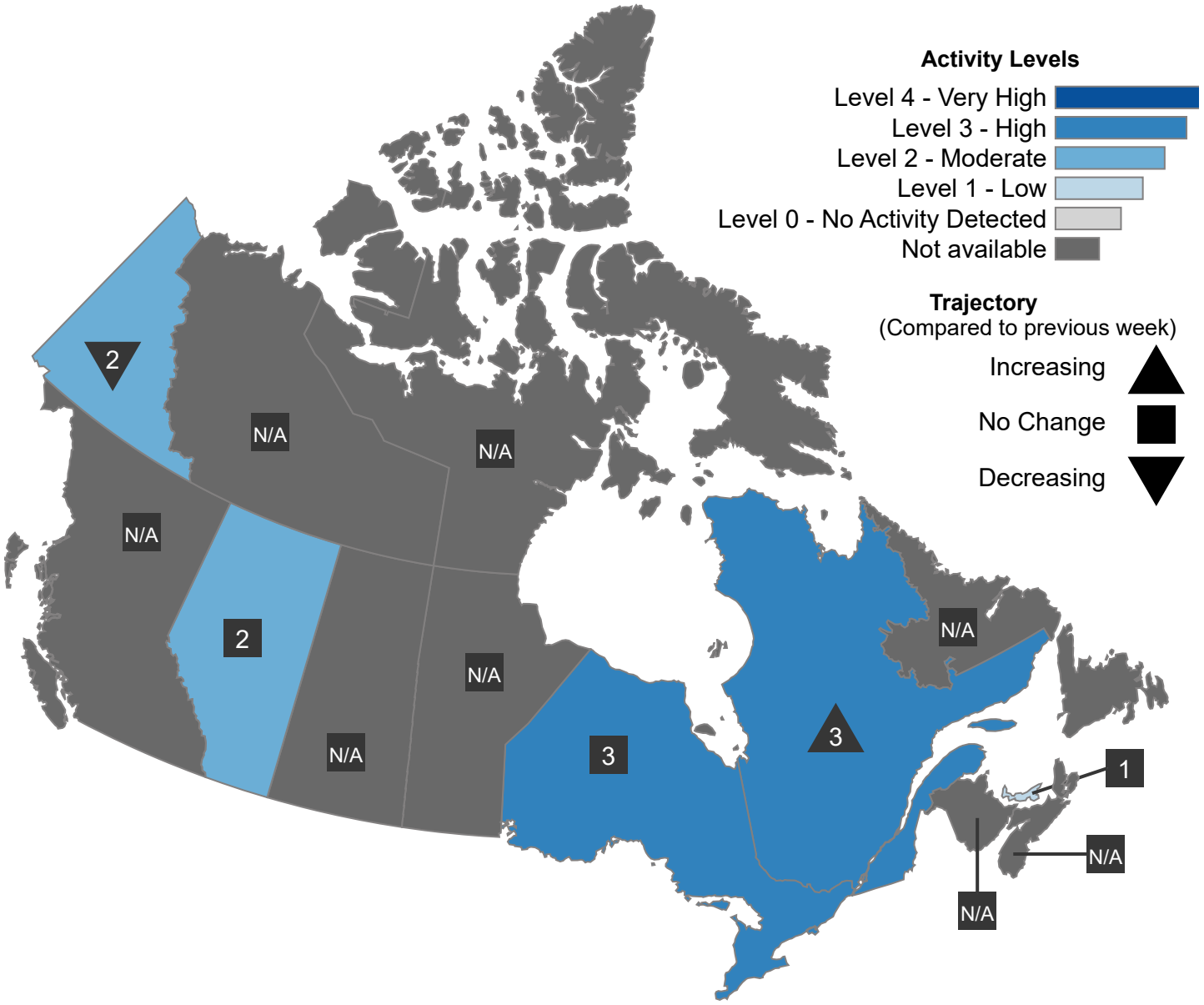
- While the data we publish in the Current Situation tab may include provincial or territorial data corrections or backfill (sometimes described as bulk reporting) in the week they are reported, the weekly highlights account for these data corrections and focus on recent trends.
- * Includes all descendant lineages, unless otherwise specified.

COVID-19 Activity Levels

COVID-19 activity levels provide a high-level summary to describe when and where COVID-19 is circulating across Canada. The level of COVID-19 activity for each jurisdiction is determined by provincial and territorial ministries of health. The weekly COVID-19 activity level is based on:

- percent positivity
- long-term care facility outbreaks per 1,000,000 population, and
- wastewater trends.

Figure 1. Map of COVID-19 activity levels in Canada, by province or territory for the week of September 15 to September 21, 2024 (Last updated October 1, 2024, 2 pm ET)



COVID-19 activity levels in Canada, by province or territory for the week of September 15 to September 21, 2024 (Last updated October 1, 2024, 2 pm ET)

Province or territory	Overall COVID-19 activity level	Overall change
British Columbia	Not available	Not available
Alberta	Moderate Activity (2)	No change
Saskatchewan	Not available	Not available
Manitoba	Not available	Not available
Ontario	High Activity (3)	No change
Quebec	High Activity (3)	Increasing

Newfoundland and Labrador	Not available	Not available
New Brunswick	Not available	Not available
Nova Scotia	Not available	Not available
Prince Edward Island	Low Activity (1)	No change
Yukon	Moderate Activity (2)	Decreasing
Northwest Territories	Not available	Not available
Nunavut	Not available	Not available

a. COVID-19 activity level assessments are based on data from provincial and territorial partners for the week of September 15 to September 21, 2024. For more information on public health recommendations or risk assessments, please refer to the provincial and territorial websites. More information on COVID-19 activity levels, how they are calculated, and relevant data caveats, can be found in the Technical Notes.

COVID-19 activity levels are based on data from provincial and territorial (PT) partners. National COVID-19 activity levels were developed with PT partners to monitor COVID-19 activity at the national and PT levels using a standard set of core indicators. Based on these indicators, COVID-19 activity can range from level 0 (no activity) to level 4 (high activity). They are presented with the overall change (increase, decrease, no change) from the previous week.

Indicators: The overall COVID-19 activity level is assessed based on the following three indicators, where available:

1. **Weekly percent positivity**
   Weekly number of lab positive tests / Weekly total number of tests x 100.
   Note: This indicator is only incorporated into overall assessment if the testing rate is greater than or equal to 100 tests per 100,000 population per week. This indicator is used to provide information about overall activity level and trajectory.

2. **Weekly long term care facility (LTCF) outbreaks per 1,000,000 population**
   Weekly number of LTCF outbreaks / Total population in jurisdiction x 1,000,000.
   Note: This indicator is used to provide information on overall activity level and trajectory.

3. **Weekly COVID-19 wastewater trajectory**
   Trajectory of weekly COVID-19 wastewater viral levels compared to the previous week.
   Note: This indicator is used to provide information on overall trajectory only.

Assessment process: The overall COVID-19 activity level is assessed based on the following three indicators, where available:

- Each indicator is assigned a level ranging from ‘no activity detected’ (level 0) to ‘very high activity’ (level 4), based on established thresholds (increasing, decreasing, or no change) of a change of 10% or more compared to the previous week.
- Overall activity level is then determined using the average level of the available indicators (rounding to the nearest whole number).
- Overall trajectory, or the direction of change (based on 10% change compared to the previous week), is calculated based on the mode of the trajectories from available indicators.

Data assessment caveats: The overall COVID-19 activity level is assessed based on the following three indicators, where available:

- This information is based on data from PT partners. For more up to date information and for public health recommendations or risk assessments, please refer to PT websites.
- Weekly changes in tests performed, and LTCF outbreaks reflect changes in counts between the end of the latest epidemiological week and the end of the previous epidemiological week. Data are updated on an ongoing basis and are subject to change.
- PT testing practices, data sources and reporting to PHAC vary across jurisdictions.
- There may be variations in the COVID-19 activity across a jurisdiction. It’s possible that if there are outbreaks occurring in one area, it may result in a higher level of COVID-19 activity. Weekly activity level assessments are intended to provide a high-level overview of COVID-19 spread using standard indicators at the national and PT level. They may not reflect the true extent of geographic spread of COVID-19.

COVID-19 data products

COVID-19 surveillance

- COVID-19 wastewater surveillance dashboard
- Interactive data map of COVID-19 cases around the world
- Viral respiratory infection data (CNISP (Canadian Nosocomial Infection Surveillance Program))

COVID-19 vaccination

- Reported side effects following vaccination
- Number of people vaccinated in Canada
- Number of COVID-19 vaccine doses administered in Canada
- Vaccines distributed in Canada

COVID-19 and mental health

- Mental Illness during the Pandemic: Survey on COVID-19 and Mental Health (Cycles 1 and 2)
- Map of Canadian mental health during the COVID-19 pandemic
- Inequalities in the mental health of adults before and during the COVID-19 pandemic

Impacts of COVID-19

- Frequency and impact of longer-term symptoms following COVID-19 in Canadian adults
- Impacts of the COVID-19 Pandemic on Canadian Children with Cognitive, Behavioural or Emotional Disabilities

COVID-19 inequalities

- Social inequalities in COVID-19 deaths in Canada

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

For more information, please refer to international COVID-19 webpages:

- World Health Organization
- US Centers for Disease Control and Prevention
- European Centre for Disease Control and Prevention

You might also be interested in

COVID-19 wastewater surveillance dashboard

Trend data about the levels of COVID-19 in the wastewater.

COVID-19 vaccination

Number of COVID-19 vaccine doses that have been administed in Canada.

All Health Infobase data products

Did you find what you were looking for?

What was wrong?

Answers to frequently asked questions can be found in the Understanding the data section!

- ○ The answer I need is missing
- ○ The information isn't clear
- ○ I'm not in the right place
- ○ Something is broken or incorrect
- ○ Other reason

Please provide more details

(Don’t include any personal information. Note that you will not receive a reply.)

Maximum 300 characters

COVID-19 epidemiology update: Current situation

Last updated: 2024-10-01 PDF

Summary of COVID-19 cases, hospitalizations and deaths across Canada and over time. Older versions of this report are available on the archived reports page.

This page was last updated on October 1, 2024, 2 pm ET.

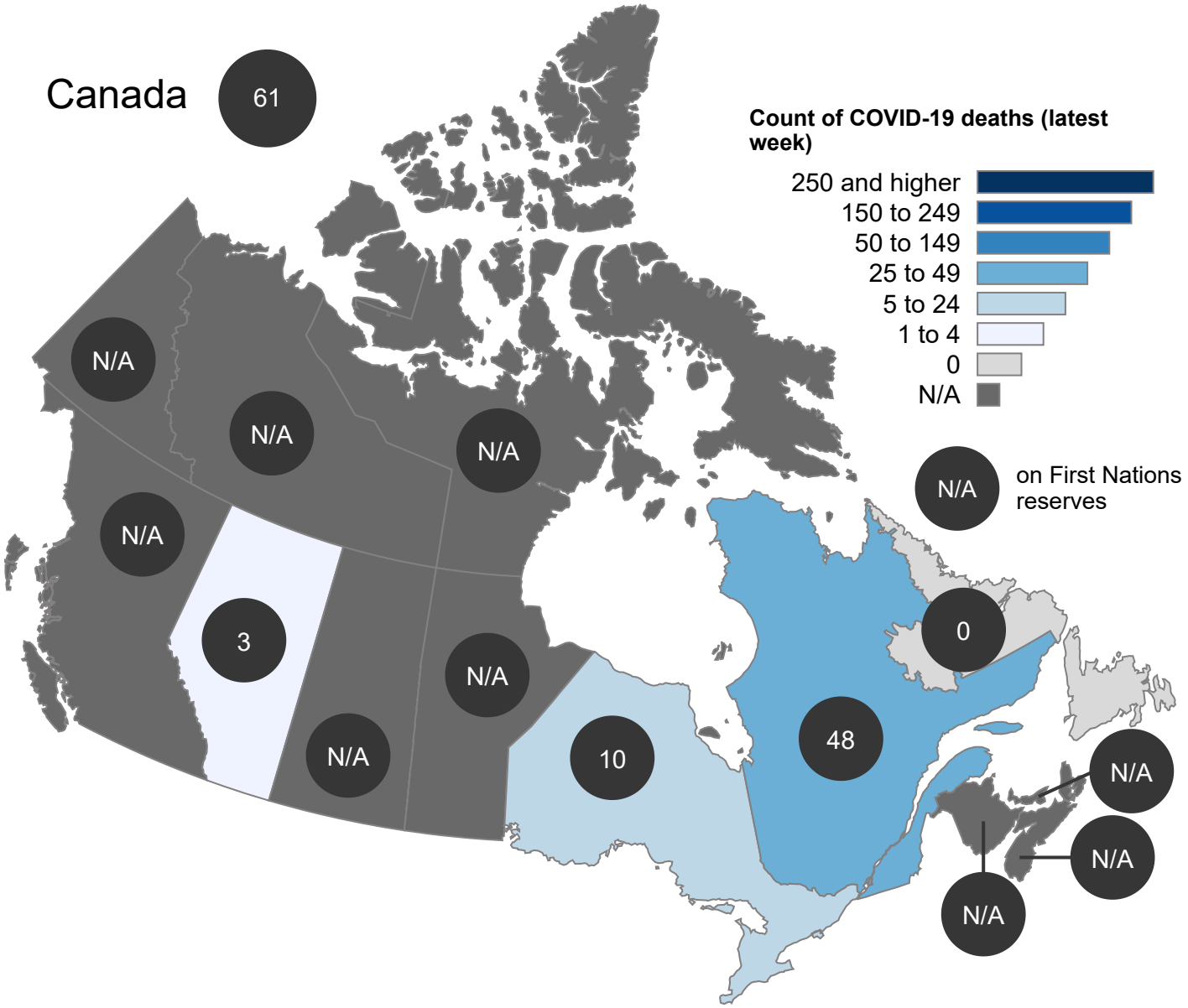
Change in report

As of October 4, 2024, this webpage will no longer be updated. Information on COVID-19 can now be found on the Canadian respiratory virus surveillance report, where it is presented along other respiratory viruses including Influenza, and RSV.

National and regional trends

Figure 1. Count of deaths (latest week) of COVID-19, province/territory for the week of September 15 to September 21, 2024

(Last data update October 1, 2024, 2 pm ET)



The count of deaths of COVID-19 for the week of September 15 to September 21, 2024 in **Canada** was **61**.

- This information is based on data our provincial and territorial partners published on deaths. For the most up to date data for any province, territory or city, please visit their website. The number of deaths reported may differ slightly from those on the provincial and territorial websites as these websites may update historic death counts as new information becomes available.

- Prior to April 7, 2022, all COVID-19 related deaths were reported by BC Health Authorities. From April 7, 2022, to April 22, 2023, all deaths occurring within 30 days of a first positive COVID-19 test were reported by BC, regardless of the cause of death. As a result, COVID-19 deaths have been over-estimated for BC since April, 2022. On April 23, 2023, BC started reporting all deaths within 30 days of any positive COVID-19 test. Death data from BC should not be directly compared across time frames that reflect different definitions.
- Prior to September 3, 2023, New Brunswick (NB) reported a COVID-19 death if the attending physician identified that COVID-19 was a primary or contributing factor in the death of a confirmed COVID-19 case. As of September 3, 2023, NB changed the COVID-19 death definition to a confirmed case who was admitted to hospital and whose death occurred during their stay. Death data from NB should not be directly compared across time frames that reflect different definitions.
- As of April 11, 2022, Nunavut no longer publishes regular COVID-19 updates.
- As of June 13, 2022, Northwest Territories no longer publishes regular COVID-19 updates.
- As of November 16, 2022, Yukon no longer publishes regular COVID-19 updates.

Areas in Canada with deaths from COVID-19

	Total deaths		Deaths (latest week)		Deaths (latest 2 weeks)	
Location	**Count**	**Rate***	**Count**	**Rate***	**Count**	**Rate***
British Columbia	7,394	134	0	0.0	0	0.0
Alberta	6,613	141	3	0.1	7	0.1
Saskatchewan	2,066	171	0	0.0	0	0.0
Manitoba	2,571	177	0	0.0	0	0.0
Ontario	18,873	121	10	0.1	18	0.1
Quebec	20,553	232	48	0.5	87	1.0
Newfoundland and Labrador	429	80	0	0.0	1	0.2
New Brunswick	1,067	128	0	0.0	0	0.0
Nova Scotia	1,115	105	0	0.0	0	0.0
Prince Edward Island	129	74	0	0.0	0	0.0
Yukon	32	71	0	0.0	0	0.0
Northwest Territories	22	49	0	0.0	0	0.0
Nunavut	7	17	0	0.0	0	0.0
Canada	**60,871**	**152**	**61**	**0.1**	**113**	**0.3**

a. * Rate per 100,000 population

Epidemic curve

As of July 30, 2024, 1 pm ET, PHAC has received detailed case report data on 4,562,906 cases.

The shaded area for Figures 2 and 3 represents a period of accumulating data where it is known or expected that cases, and severe outcomes have occurred but have not yet been reported nationally. We update this information as it becomes available.

Due to changes in COVID-19 testing policies in many jurisdictions since December 2021, case counts are under-estimated.

Figure 2a. COVID-19 cases (n=4,562,902) in Canada by date as of July 20, 2024 (total cases)

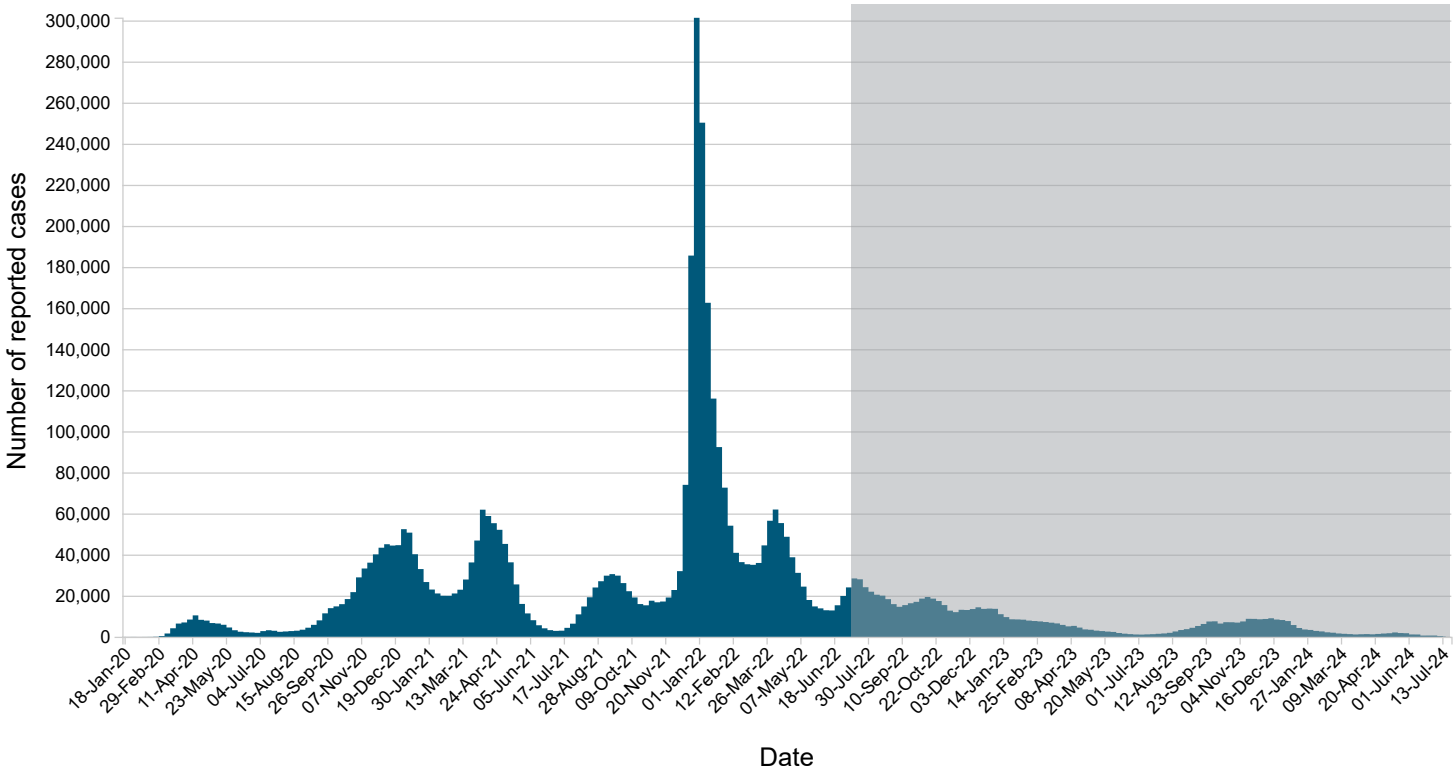
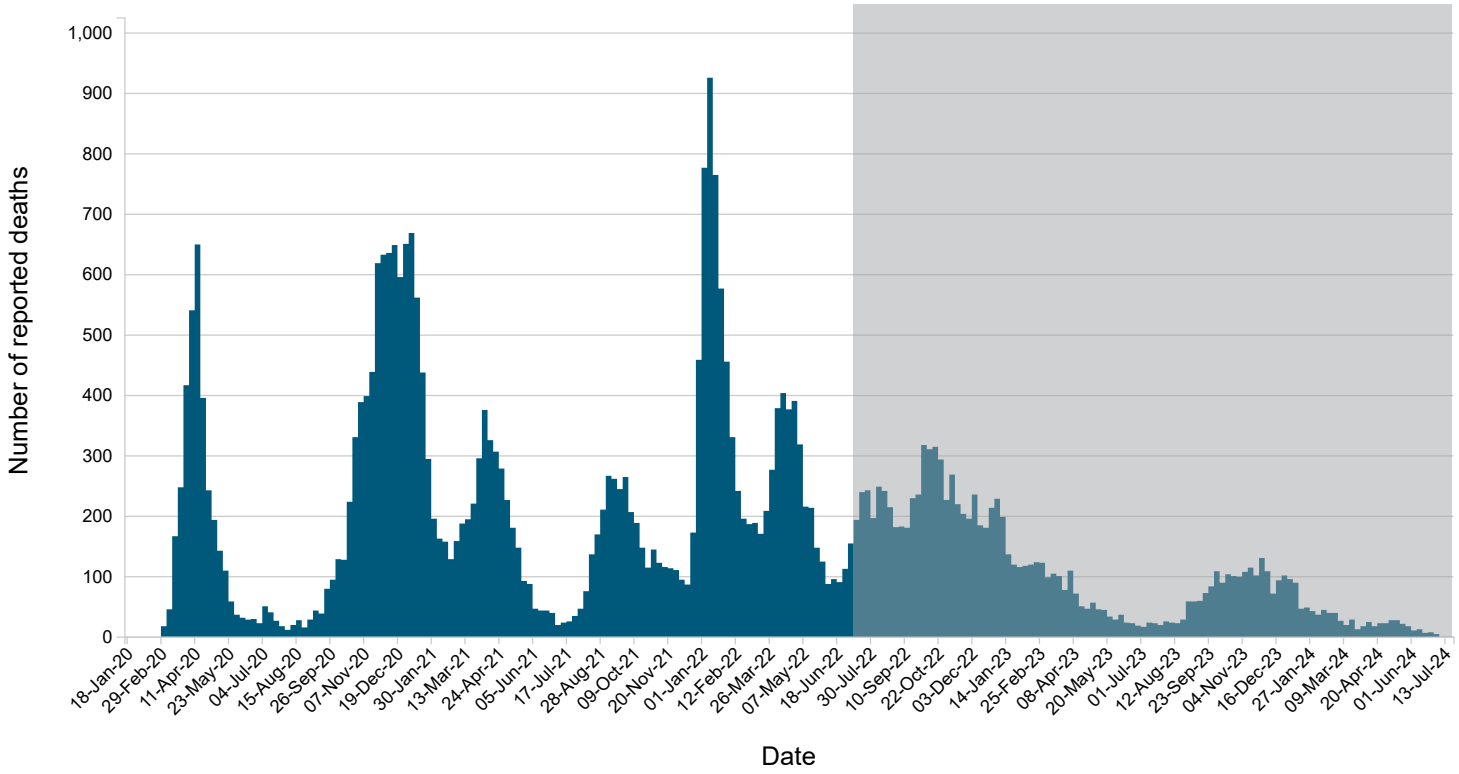


Figure 2b. COVID-19 deaths (n=38,340) in Canada by date as of July 20, 2024 (total deaths)



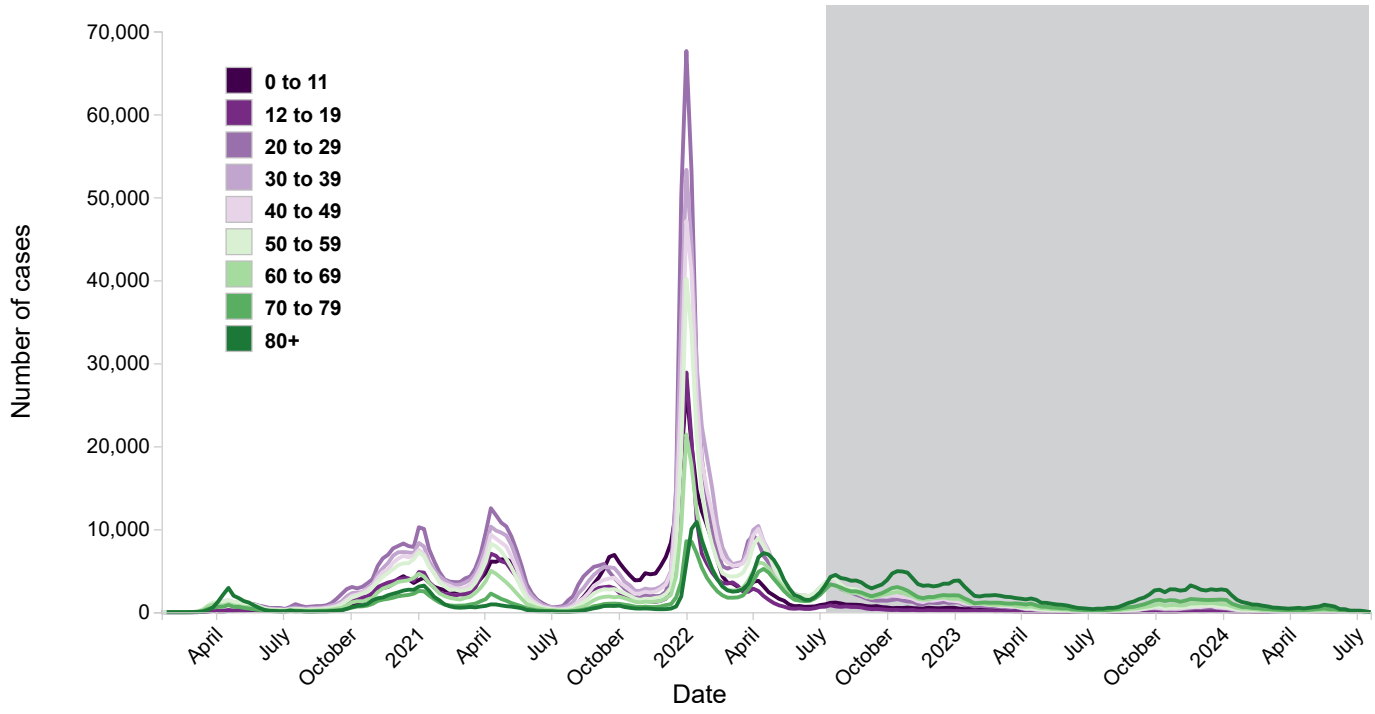
- This figure reflects detailed case information provided to the Public Health Agency of Canada (PHAC) by health authorities in the provinces and territories. This data is updated every week. It may change as we get more information about cases.
- The deaths graph includes data from the twelve of Canada's thirteen provinces and territories that provide detailed death information to the public health agency of Canada (PHAC).
- The earliest of the following dates were used to determine the week in which a case or death is presented: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.
- Due to changes in COVID-19 testing policies in many jurisdictions since December 2021, case counts are under-estimated.

Cases by age and gender

We have detailed case report data from 4,562,906 cases. We know the age of patients in 99.9% of cases, and both age and gender in 99.6% of cases.

Of the cases reported in Canada so far, 54.8% were female and 32.7% were between 20 and 39 years old (Figure 3).

Figure 3. Weekly number of COVID-19 cases by age group in Canada as of July 20, 2024



- This figure reflects 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.
- The earliest of the following dates were used to determine the week in which a case or death is presented: Onset date, Specimen Collection Date, Laboratory Testing Date, Date Reported to Province or Territory, or Date Reported to PHAC.
- Due to changes in COVID-19 testing policies in many jurisdictions since December 2021, case counts are under-estimated.
- This figure includes COVID-19 cases hospitalized, admitted to ICU, and deceased for which age information were available. Therefore, some COVID-19 cases, hospitalizations, ICU admissions, and deaths may not be included.
- As of March 26, 2024, the Statistics Canada population estimates as of July 1, 2023 are being used for denominators in rate calculations.

Figure 4a. Age and gender distribution of COVID-19 cases in Canada as of July 20, 2024 (n=4,546,866)

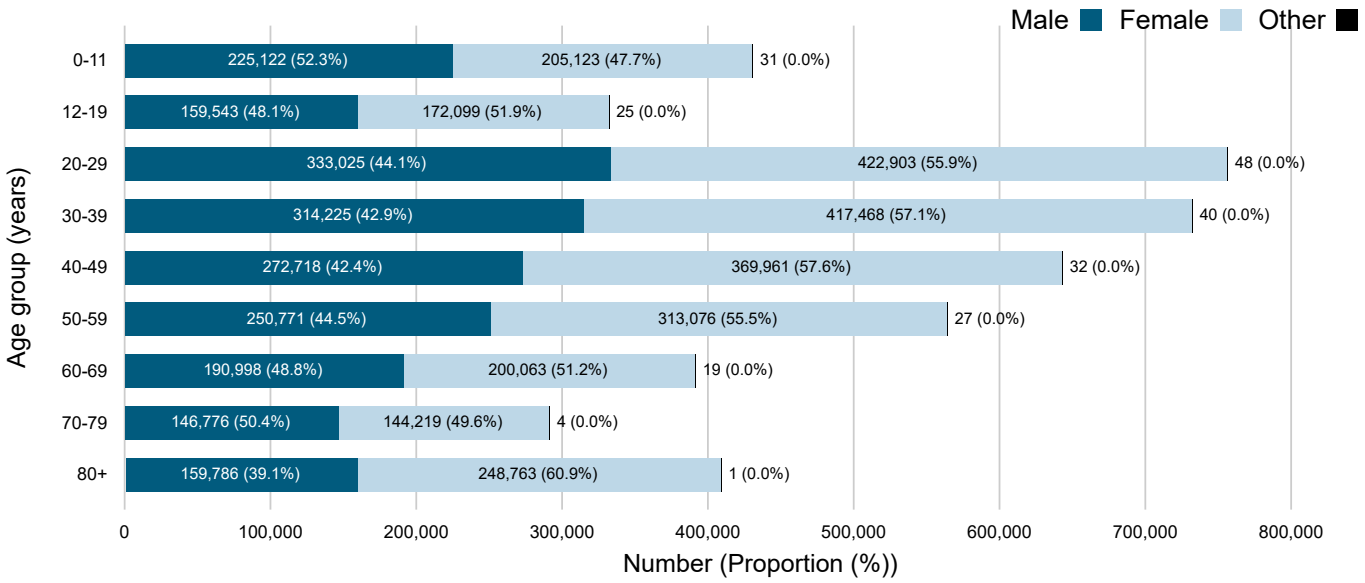


Figure 4b. Age and gender distribution of COVID-19 cases hospitalized in Canada as of July 20, 2024 (n=297,583)

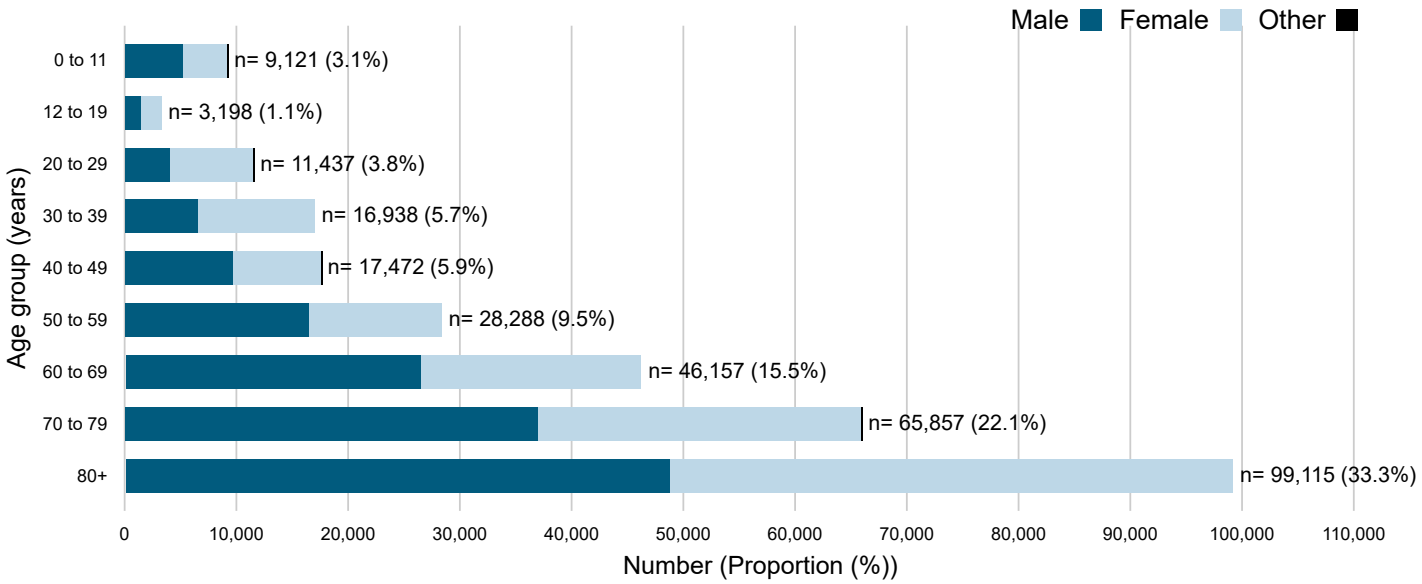


Figure 4c. Age and gender distribution of COVID-19 cases admitted to ICU in Canada as of July 20, 2024 (n=37,564)

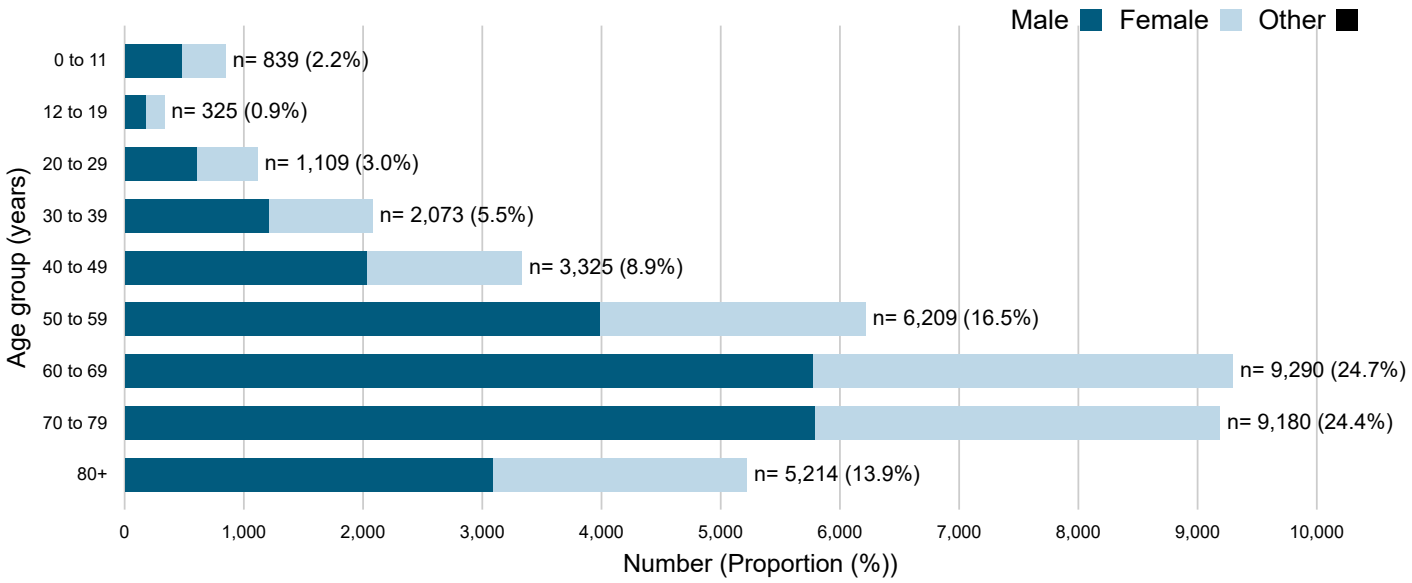
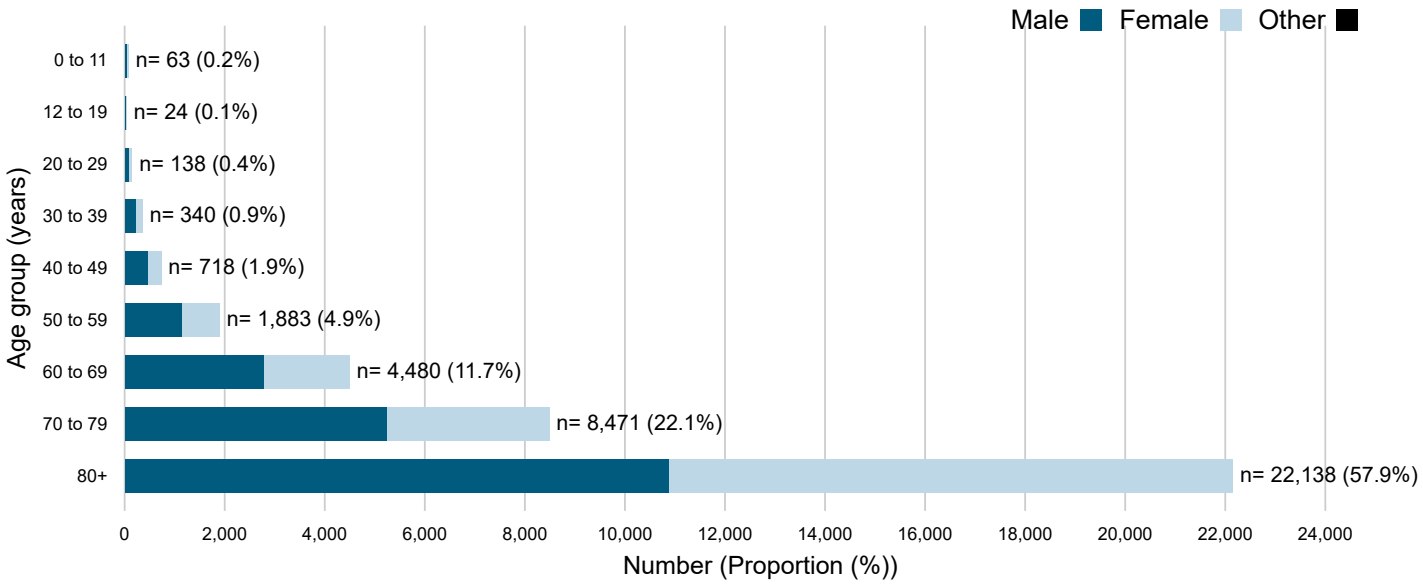


Figure 4d. Age and gender distribution of COVID-19 cases deceased in Canada as of July 20, 2024 (n=38,255)



- This figure reflects 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.
- The cases deceased, and cases admitted to ICU graphs include data from the twelve of Canada's thirteen provinces and territories that provide detailed death, and ICU information to the public health agency of Canada (PHAC).

- This figure 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.

Age and gender distribution of COVID-19 cases in Canada as of July 20, 2024 (n=4,546,866)

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	432,407 (9.5%)	225,122 (11.0%)	205,123 (8.2%)	31 (13.7%)
12-19	333,296 (7.3%)	159,543 (7.8%)	172,099 (6.9%)	25 (11.0%)
20-29	759,549 (16.7%)	333,025 (16.2%)	422,903 (17.0%)	48 (21.1%)
30-39	734,122 (16.1%)	314,225 (15.3%)	417,468 (16.7%)	40 (17.6%)
40-49	644,463 (14.1%)	272,718 (13.3%)	369,961 (14.8%)	32 (14.1%)
50-59	565,321 (12.4%)	250,771 (12.2%)	313,076 (12.6%)	27 (11.9%)
60-69	391,960 (8.6%)	190,998 (9.3%)	200,063 (8.0%)	19 (8.4%)
70-79	291,481 (6.4%)	146,776 (7.1%)	144,219 (5.8%)	4 (1.8%)
80+	409,185 (9.0%)	159,786 (7.8%)	248,763 (10.0%)	1 (0.4%)

Age and gender distribution of COVID-19 cases hospitalized in Canada as of July 20, 2024 (n=297,583)

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 to 11	9,121 (3.1%)	5,130 (1.7%)	3,990 (1.3%)	1 (0.0%)
12 to 19	3,198 (1.1%)	1,369 (0.5%)	1,829 (0.6%)	0 (0.0%)
20 to 29	11,437 (3.8%)	3,990 (1.3%)	7,446 (2.5%)	1 (0.0%)
30 to 39	16,938 (5.7%)	6,507 (2.2%)	10,431 (3.5%)	0 (0.0%)
40 to 49	17,472 (5.9%)	9,599 (3.2%)	7,872 (2.6%)	1 (0.0%)
50 to 59	28,288 (9.5%)	16,437 (5.5%)	11,851 (4.0%)	0 (0.0%)
60 to 69	46,157 (15.5%)	26,486 (8.9%)	19,671 (6.6%)	0 (0.0%)
70 to 79	65,857 (22.1%)	36,874 (12.4%)	28,982 (9.7%)	1 (0.0%)
80+	99,115 (33.3%)	48,768 (16.4%)	50,347 (16.9%)	0 (0.0%)

Age and gender distribution of COVID-19 cases admitted to ICU in Canada as of July 20, 2024 (n=37,564)

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 to 11	839 (2.2%)	471 (1.3%)	368 (1.0%)	0 (0.0%)
12 to 19	325 (0.9%)	172 (0.5%)	153 (0.4%)	0 (0.0%)
20 to 29	1,109 (3.0%)	598 (1.6%)	511 (1.4%)	0 (0.0%)
30 to 39	2,073 (5.5%)	1,208 (3.2%)	865 (2.3%)	0 (0.0%)
40 to 49	3,325 (8.9%)	2,031 (5.4%)	1,294 (3.4%)	0 (0.0%)
50 to 59	6,209 (16.5%)	3,985 (10.6%)	2,224 (5.9%)	0 (0.0%)
60 to 69	9,290 (24.7%)	5,773 (15.4%)	3,517 (9.4%)	0 (0.0%)
70 to 79	9,180 (24.4%)	5,784 (15.4%)	3,396 (9.0%)	0 (0.0%)
80+	5,214 (13.9%)	3,087 (8.2%)	2,127 (5.7%)	0 (0.0%)

Age and gender distribution of COVID-19 cases deceased in Canada as of July 20, 2024 (n=38,255)

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 to 11	63 (0.2%)	31 (0.1%)	32 (0.1%)	0 (0.0%)
12 to 19	24 (0.1%)	12 (0.0%)	12 (0.0%)	0 (0.0%)
20 to 29	138 (0.4%)	80 (0.2%)	58 (0.2%)	0 (0.0%)
30 to 39	340 (0.9%)	212 (0.6%)	128 (0.3%)	0 (0.0%)
40 to 49	718 (1.9%)	443 (1.2%)	275 (0.7%)	0 (0.0%)
50 to 59	1,883 (4.9%)	1,133 (3.0%)	750 (2.0%)	0 (0.0%)
60 to 69	4,480 (11.7%)	2,779 (7.3%)	1,701 (4.4%)	0 (0.0%)
70 to 79	8,471 (22.1%)	5,226 (13.7%)	3,245 (8.5%)	0 (0.0%)
80+	22,138 (57.9%)	10,871 (28.4%)	11,267 (29.5%)	0 (0.00%)

You might also be interested in

COVID-19 wastewater surveillance dashboard

Trend data about the levels of COVID-19 in the wastewater.

COVID-19 vaccination

Number of COVID-19 vaccine doses that have been administered in Canada.

All Health Infobase data products

Did you find what you were looking for?

What was wrong?

Answers to frequently asked questions can be found in the Understanding the data section!

- ○ The answer I need is missing
- ○ The information isn't clear
- ○ I'm not in the right place
- ○ Something is broken or incorrect
- ○ Other reason

Please provide more details

(Don't include any personal information. Note that you will not receive a reply.)

Maximum 300 characters

COVID-19 epidemiology update: Testing and variants

Last updated: 2024-10-01 PDF

Summary of COVID-19 testing and variants of concern across Canada and over time. Older versions of this report are available on the archived reports page.

This page was last updated on October 1, 2024, 2 pm ET.

Change in report

As of October 4, 2024, this webpage will no longer be updated. Information on COVID-19 can now be found on the Canadian respiratory virus surveillance report, where it is presented along other respiratory viruses including Influenza, and RSV.

Testing in Canada

For information on respiratory viruses circulating in Canada, visit:

- the respiratory virus detections dashboard
- the weekly Fluwatch report

Presenting COVID-19 testing data with other respiratory viruses like flu and RSV allows us to make more informed decisions. This is part of our ongoing work to integrate COVID-19 and respiratory virus reporting.

Variants in Canada

All viruses change over time, including SARS-CoV-2, the virus that causes COVID-19 disease. These changes are called **mutations** and viruses with mutations are called **variants**. A percentage of all positive COVID-19 PCR test results in Canada undergo whole genome sequencing. Sequencing tells us which variant is involved in a specific case of COVID-19.

Many variants are being tracked across Canada and around the world. Some variants are classified as:

- variant under monitoring (VUM)
  - is being monitored to assess its mutations and characteristics
- variant of interest (VOI)
  - has mutations or characteristics of interest and is being monitored to see if they pose significant risk to public health
- variant of concern (VOC)
  - has mutations and characteristics that are significant to public health

For detailed definitions, refer to SARS-CoV-2 variants: National definitions, designations, and public health actions.

Occasionally, a person may be infected with 2 different variants at the same time. The genetic material from each variant can mix to form a combined variant, referred to as a recombinant virus. Recombinant viruses inherit the properties of their parents, which can change how the virus behaves. The scientific names of the variants discussed below that start with “X” are known as recombinant variants (for example, XBB.1).

Some viruses evolve quickly, making many variants over time. To simplify tracking, variants are grouped into **lineages**, which are variants that share recent ancestry. For example, variant BA.1 (also known as the original Omicron variant) had several offspring lineages such as BA.1.1 and BA.1.1.1.

As of March 2023, the World Health Organization (WHO) assigns Greek letters only to VOCs, while VOIs and VUMs are referred to using established scientific nomenclature systems. There are no current VOCs in Canada because Omicron has moved to the “de-escalation” category.

A variant is “de-escalated” once it becomes clear that the variant does not pose an elevated risk to the population or that it is being replaced by newer variants.

Recent variants

This graphic shows the percentage mix of variant lineages detected in Canada through whole genome sequencing over the last 10 weeks. Each week is represented by a bar. The most dominant lineage in each week has the largest block of that week’s bar.

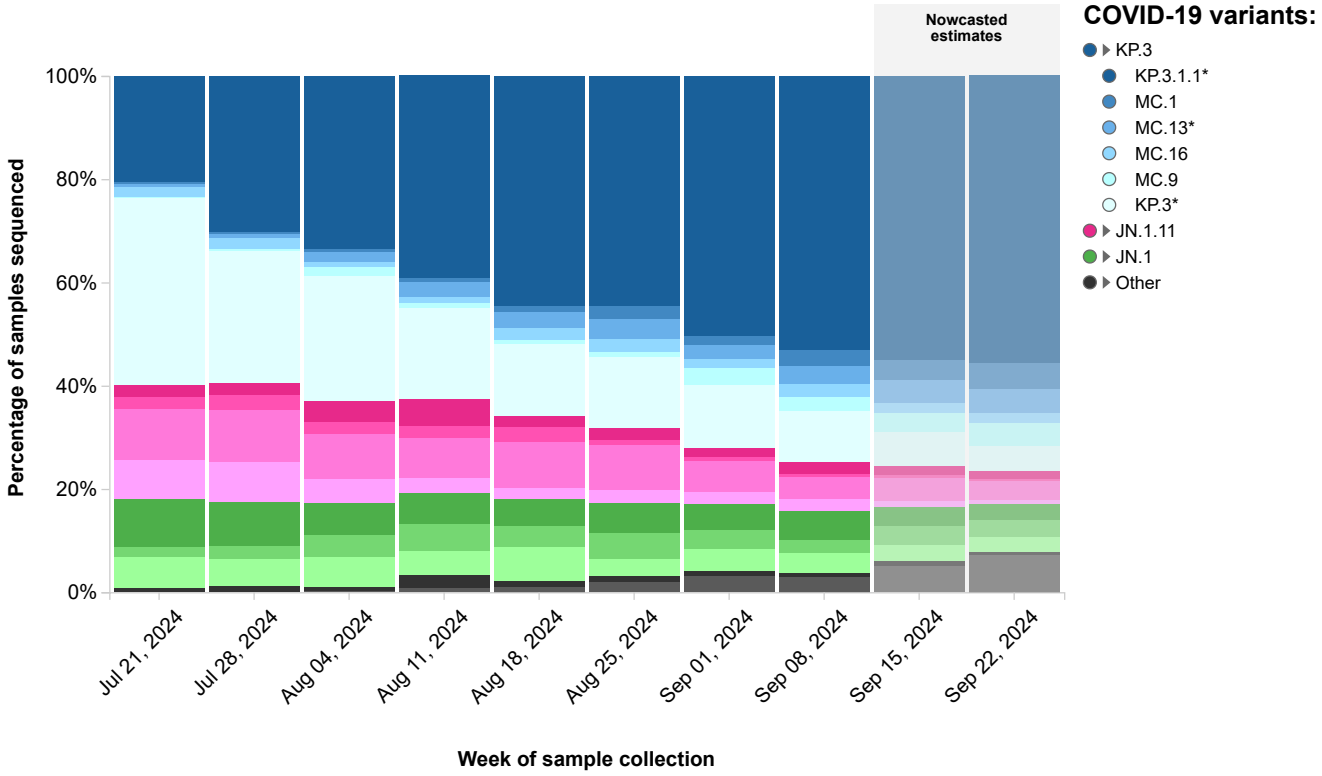
The first 8 weeks of the figure reflect the actual data from the National Genomic Database. The last 2 weeks reflect the **nowcasted estimates**. Nowcasting uses statistical models to estimate the current situation based on earlier trends. It provides estimates for the most recent weeks when the data is still accumulating and is therefore incomplete.

For more detailed information about how nowcasting works, refer to Nowcasting methods.

The numerical values for each lineage are shown in the legend, along with predictive intervals. Predictive intervals are ranges (for example, 16-19%) that indicate the confidence of each estimate. The narrower the range, the more confident we are that the prediction is accurate.

Figure 1. Weekly variant breakdown Updated: October 01, 2024, 9 am ET

ℹ 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. Click on the name of the variant in the legend to reveal or hide any descendants or offshoots.



It takes time to collect, sequence and process viral genomes, so there is often a period of 2 to 3 weeks where data are still being processed. We use a nowcasting model to estimate the current variant proportions for this period.

* Includes all descendant lineages, unless otherwise specified.

† More data is needed to estimate the growth and proportion of this lineage with more certainty.

Important note: When a new lineage first emerges, its detection levels will be too low to include it in the nowcasting model. Once it is included, data will still be limited at first and its growth and overall proportion will be estimated with lower confidence. As data rolls in, the accuracy and precision of the predictions improve and the predictive interval shrinks. During periods of slow data collection, the overall proportions may be skewed and the predictions may be less accurate. Under such conditions, interpret the model projections with caution.

Weekly variant breakdown

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

Table 1. Percentage of COVID-19 cases identified through whole genome sequencing, presented by variant and by week of sample collection

Variant grouping	Variant	Jul 21, 2024 (n=1,176)	Jul 28, 2024 (n=1,268)	Aug 04, 2024 (n=1,060)	Aug 11, 2024 (n=1,184)	Aug 18, 2024 (n=1,300)	Aug 25, 2024 (n=1,381)	Sep 01, 2024 (n=1,584)	Sep 08, 2024 (n=1,534)	Sep 15, 2024 Nowcasted estimates [Confidence interval]	Sep 22, 2024 Nowcasted estimates [Confidence interval]
KP.3	**KP.3.1.1***	20.5%	30.1%	33.5%	39.2%	44.5%	44.5%	50.3%	53.1%	55.0% [52.7, 57.1]	55.6% [52.5, 58.4]
	MC.1	0.3%	0.4%	0.6%	0.6%	1.2%	2.5%	1.8%	3.1%	3.9% [2.9, 5.2]	5.0% [3.4, 7.0]
	MC.13*	0.7%	0.9%	1.9%	3.0%	3.0%	4.1%	2.7%	3.5%	4.3% [3.5, 5.4]	4.7% [3.6, 6.1]
	MC.16	1.8%	2.1%	1.0%	1.3%	2.5%	2.5%	1.8%	2.5%	2.1% [1.6, 2.7]	2.0% [1.4, 2.7]
	MC.9	0.3%	0.4%	1.8%	0.8%	0.8%	0.8%	3.3%	2.9%	3.6% [2.7, 4.8]	4.4% [3.0, 6.2]
	KP.3*	36.2%	25.7%	24.2%	17.7%	13.8%	13.8%	12.2%	9.8%	6.5% [5.7, 7.2]	4.8% [4.2, 5.5]
JN.1.11	**KP.1.1.3***	2.3%	2.3%	4.1%	5.3%	2.2%	2.4%	1.6%	2.3%	1.8% [1.4, 2.4]	1.6% [1.1, 2.2]
	KP.2.2	2.4%	2.8%	2.3%	2.2%	2.9%	1.1%	0.9%	0.5%	0.6% [0.4, 0.9]	0.5% [0.3, 0.7]
	KP.2.3*	9.8%	10.1%	8.8%	7.9%	8.8%	8.5%	5.9%	4.4%	4.4% [3.7, 5.1]	3.6% [2.9, 4.3]
	JN.1.11*	7.6%	7.7%	4.7%	2.9%	2.3%	2.6%	2.3%	2.3%	1.2% [0.9, 1.5]	0.8% [0.6, 1.1]
JN.1	**LB.1***	9.4%	8.5%	6.0%	6.0%	5.1%	5.9%	5.1%	5.5%	3.7% [3.1, 4.5]	3.1% [2.5, 3.8]
	LB.1.3*	1.9%	2.6%	4.3%	5.1%	4.2%	4.9%	3.6%	2.5%	3.5% [2.8, 4.3]	3.3% [2.5, 4.1]
	JN.1*	5.9%	5.0%	5.8%	4.8%	6.6%	3.5%	4.4%	3.8%	3.3% [2.7, 3.9]	2.8% [2.2, 3.4]
Other variants	**Other**	0.9%	1.2%	0.8%	2.4%	1.2%	1.0%	0.9%	0.8%	0.8% [0.5, 1.2]	0.7% [0.4, 1.1]
	XEC*	0.0%	0.2%	0.3%	0.8%	1.0%	2.0%	3.2%	2.9%	5.2% [3.9, 6.7]	7.2% [5.0, 9.9]

* Includes all descendant lineages, unless otherwise designated.

† The growth rate of this lineage is likely to decrease once more data accumulates.

Contributing laboratories

- National Microbiology Laboratory (NML) - supplemental sequencing for all provinces and territories

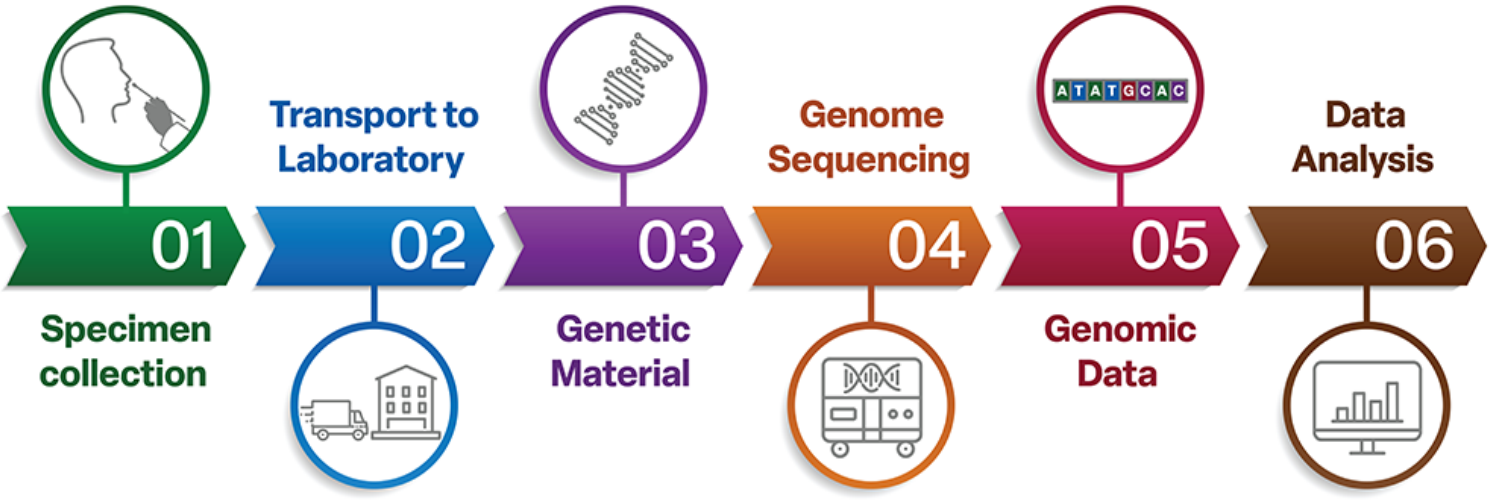
How Canada sequences SARS-CoV-2 genomes

Canada has a strong viral genomic sequencing program. Public health authorities across the country collect and analyze PCR-based test samples to identify the variant involved in each sample.

Samples are taken and tested from people suspected of having COVID-19. The material from the positive tests is sent to the laboratory, where the viral genetic material, or ribonucleic acid (RNA), is extracted. A specimen is prepared and run through a sequencing machine. The sequencing machine identifies the nucleotide bases present in the RNA sequence. This results in strings of letters that are stitched together to give the genetic code of the specimen's variant. The genetic code of the virus is used to classify and name the variant.

Viral sequences also shows us which variants are in Canada, how they are spreading, and whether the genetic changes are impacting public health.

Figure 3. How Canada sequences SARS-CoV-2 genomes



The diagram shows how Canada sequences SARS-CoV-2 genomes in six steps.

- Step 1: Specimen collection
- Step 2: Transport to laboratory
- Step 3: Genetic material
- Step 4: Genome sequencing
- Step 5: Genomic data

- Step 6: Data analysis

You might also be interested in

COVID-19 wastewater surveillance dashboard

Trend data about the levels of COVID-19 in the wastewater.

COVID-19 vaccination

Number of COVID-19 vaccine doses that have been administed in Canada.

All Health Infobase data products

Did you find what you were looking for?

What was wrong?

Answers to frequently asked questions can be found in the Understanding the data section!

- ○ The answer I need is missing
- ○ The information isn't clear
- ○ I'm not in the right place
- ○ Something is broken or incorrect
- ○ Other reason

Please provide more details
(Don't include any personal information. Note that you will not receive a reply.)

Maximum 300 characters

COVID-19 epidemiology update: Outbreaks

Last updated: 2024-10-01 PDF

Summary of COVID-19 outbreaks across Canada and over time. Older versions of this report are available on the archived reports page.

This page was last updated on October 1, 2024, 2 pm ET.

Change in report

As of October 4, 2024, this webpage will no longer be updated. Information on COVID-19 can now be found on the Canadian respiratory virus surveillance report, where it is presented along other respiratory viruses including Influenza, and RSV.

The Public Health Agency of Canada (PHAC) regularly receives COVID-19 outbreak data from health authorities in the provinces and territories. This page summarizes outbreaks in Canada by setting and by size, and is updated every 4 weeks. Data may change retroactively if there are changes to:

- provincial or territorial COVID-19 testing strategies
- provincial or territorial reporting of outbreaks
- data collection methods, or
- outbreak management methods

Outbreak definitions vary across the country, but we use a national outbreak definition for all outbreaks. An outbreak is 2 or more test-confirmed cases of COVID-19 which are epidemiologically linked to a specific setting or location. It does **not** include:

- households (since household cases may not be declared or managed as an outbreak if the risk of transmission is contained)
- cases that are geographically clustered (such as in a region, city, or town) but not epidemiologically linked
- cases attributed to community transmission

Test-confirmed cases include positive COVID-19 results from nucleic acid amplification tests (NAAT) or rapid antigen tests (RAT).

In December 2021, the highly contagious Omicron variant caused a rapid increase in cases. This surge affected public health and testing capacity, which led to a change in testing strategies and limited contact tracing. This made it harder for provinces and territories to link cases. As a result, outbreaks were

undercounted. The provinces and territories still consistently report cases of COVID-19 in high-priority settings. However, most no longer report cases in community settings, such as schools, recreational facilities and stores.

- **Acute care**: Hospital or similar setting where patients receive short-term treatment for an injury or severe episode of illness, an urgent medical condition, or during recovery from surgery. Acute care settings include:
  - hospitals
  - emergency departments
  - urgent care
  - transitional care
  - convalescent care
  - short-term inpatient rehabilitation centres
- **Congregate living** includes:
  - retirement residences
  - assisted/supportive living
  - group homes
  - residential treatment centres
  - transition centres
  - shelters
  - student dormitories
- **Long-term care facilities** include both public and private facilities that provide living accommodations for people who require full-time supervised care, including professional health services, personal care, and other services (meals, laundry, cleaning)

Showing outbreaks data from 2022-01-08 to 2024-09-14.

The shaded area on the far right of Figure 1 and Figure 2 represents a period of accumulating data. This is the period of time before the latest outbreaks are reported to PHAC. This delay is a result of the time required to identify cases and declare outbreaks. We update this figure as more data becomes available.

Figure 1. Weekly number of outbreaks by setting

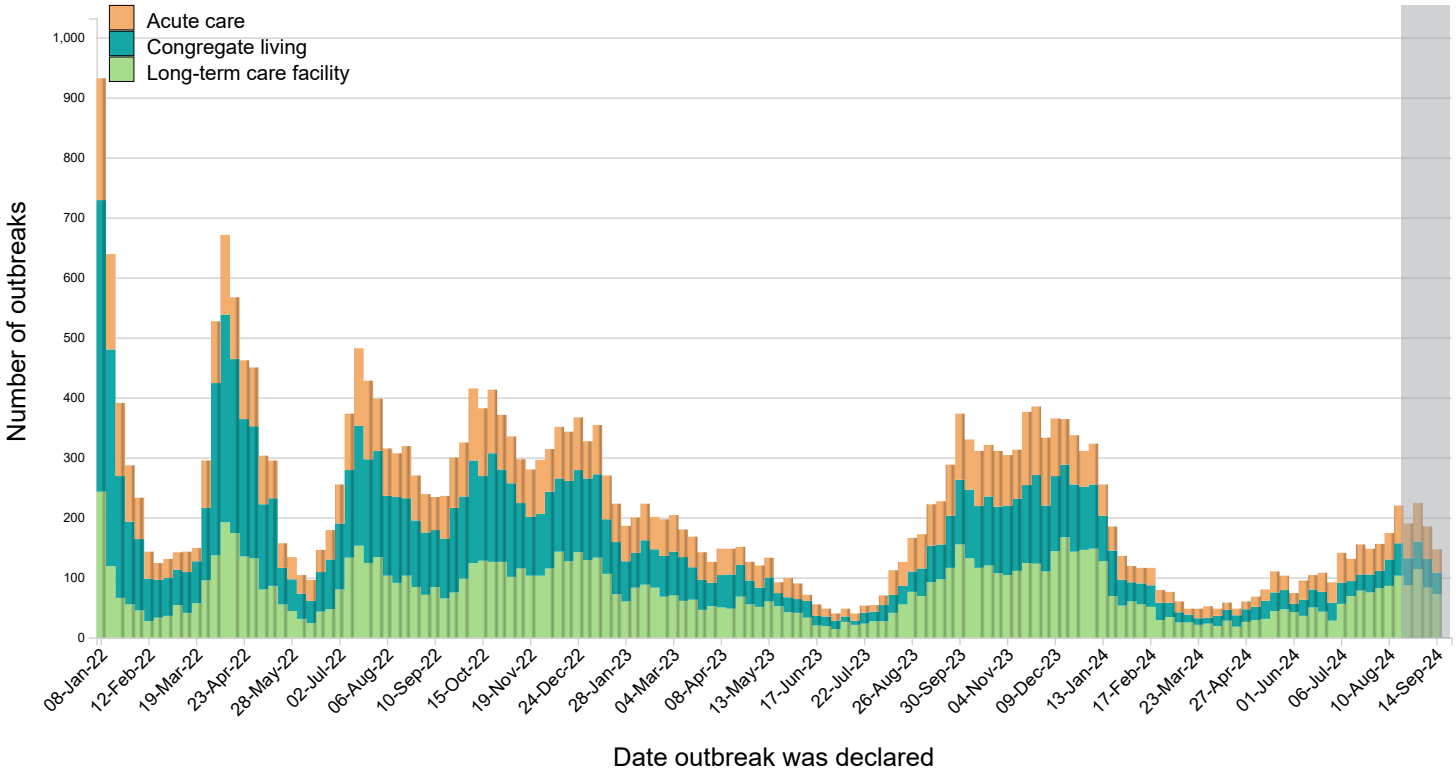
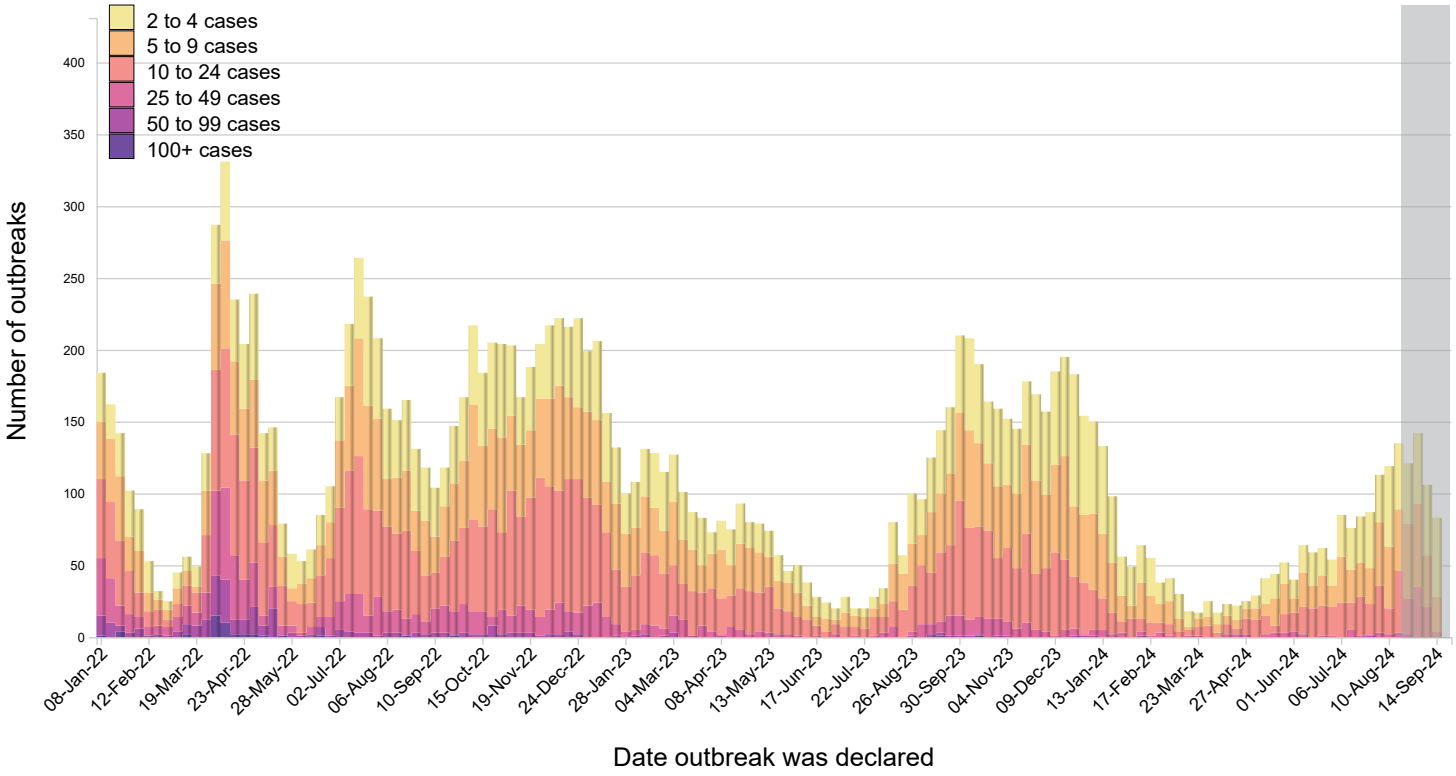


Figure 2. Weekly number of outbreaks by outbreak size for all settings



Between January 2, 2022 and September 14, 2024:

- Acute care accounted for 28% of outbreaks.

- Congregate living accounted for 35% of outbreaks.
- Long-term care facilities accounted for 36% of outbreaks.

Table 1. Summary statistics of COVID-19 outbreak size by setting, all time

Setting	Median case count	Average case count	Number of outbreaks
Acute care	6	9	4,439
Congregate living	9	14	5,579
Long-term care facility	8	12	5,714

- Outbreak information is provided to the Public Health Agency of Canada (PHAC) by health authorities in 8 of the 13 provinces and territories.
- This data is updated every 4 weeks. Data may change week-to-week or retroactively if there are changes to: provincial or territorial reporting of outbreaks, data collection methods, or outbreak management methods.
- Table 1 excludes data from the 4-week data accumulation period.
- Data is presented from January 2, 2022 onwards. Historical outbreak data from 2021 is still available on the archived reports page. The most recent report was on July 11, 2023.
- As of July 12, 2023, we no longer present data from correctional facilities. Historical outbreak data from correctional facilities is still available on the archived reports page. The most recent report was on July 11, 2023.

You might also be interested in

COVID-19 wastewater surveillance dashboard

Trend data about the levels of COVID-19 in the wastewater.

COVID-19 vaccination

Number of COVID-19 vaccine doses that have been administed in Canada.

All Health Infobase data products

(Don’t include any personal information. Note that you will not receive a reply.)

Maximum 300 characters

Date modified:

2024-10-01