Archived: COVID-19 Situation Report

September 26, 2024

This report is an archive of the data previously included in the COVID-19 Situation Report, from **January 1, 2020, to August 31, 2024**. For current trends of COVID-19 and other respiratory viruses, please refer to the BCCDC Respiratory Virus Data webpage.

Contents

Note: Data sources and definitions have changed over time because of system transitions. In addition, public health measures and interventions also changed over the course of the COVID-19 pandemic. Therefore, severe outcome measures (i.e., hospitalizations, critical care admissions, and deaths) and cases may not be comparable over time. Further information can be found in the Supplementary Information.

Figures: COVID-19 Cases, Hospitalizations, Critical Care Admissions, and Deaths

Overall

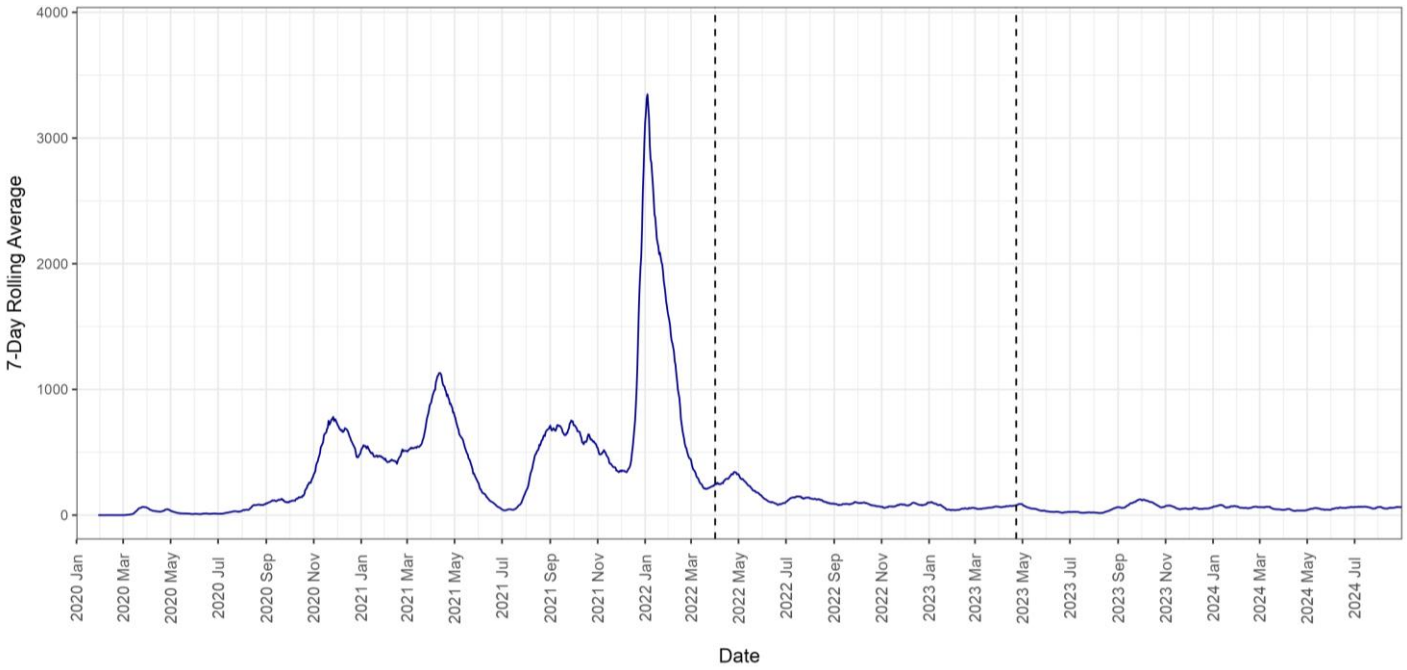

Figure 1. COVID-19 cases. The number of COVID-19 cases (7-day rolling average) from January 1, 2020, to August 31, 2024. Dashed lines represent system transitions. See Supplementary Information for details.

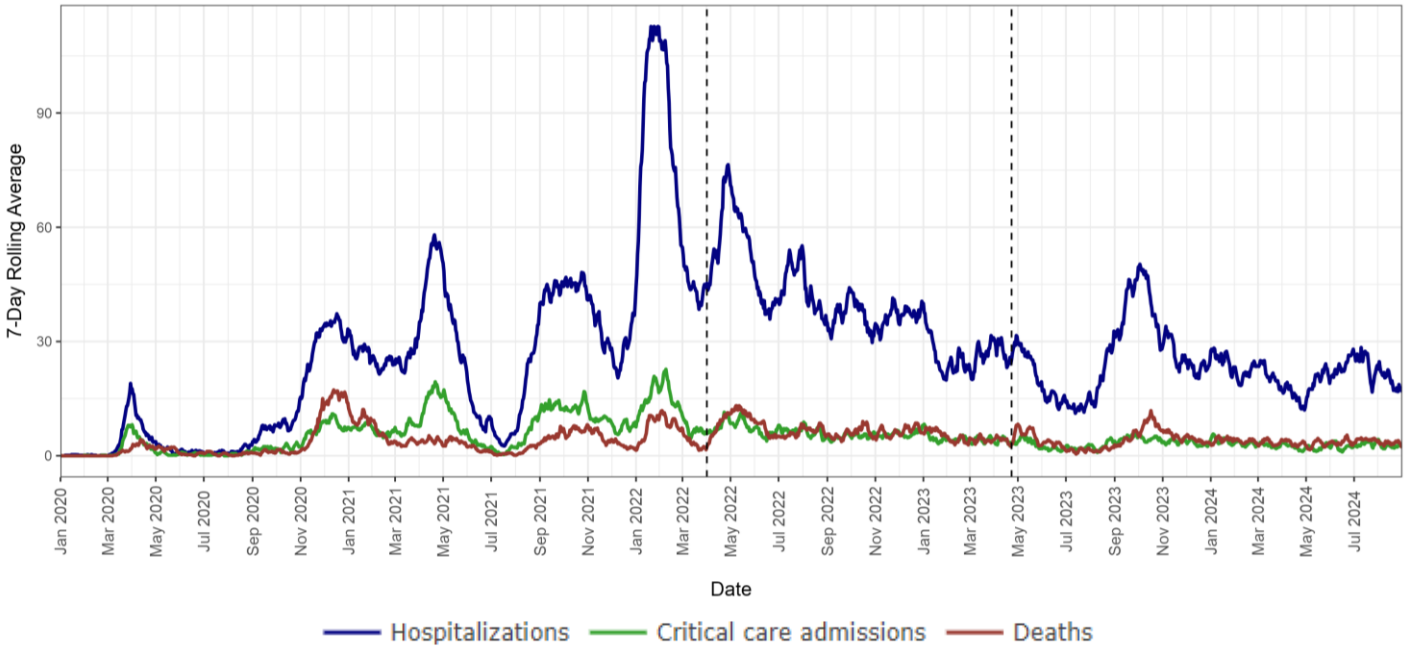

Figure 2. COVID-19 hospitalizations, critical care admissions, and deaths. The number of COVID-19 hospitalizations (blue), critical care admissions (green), and deaths (brown) (all using a 7-day rolling average) from January 1, 2020, to August 31, 2024. Dashed lines represent system transitions. See Supplementary Information for details.

By Age Group

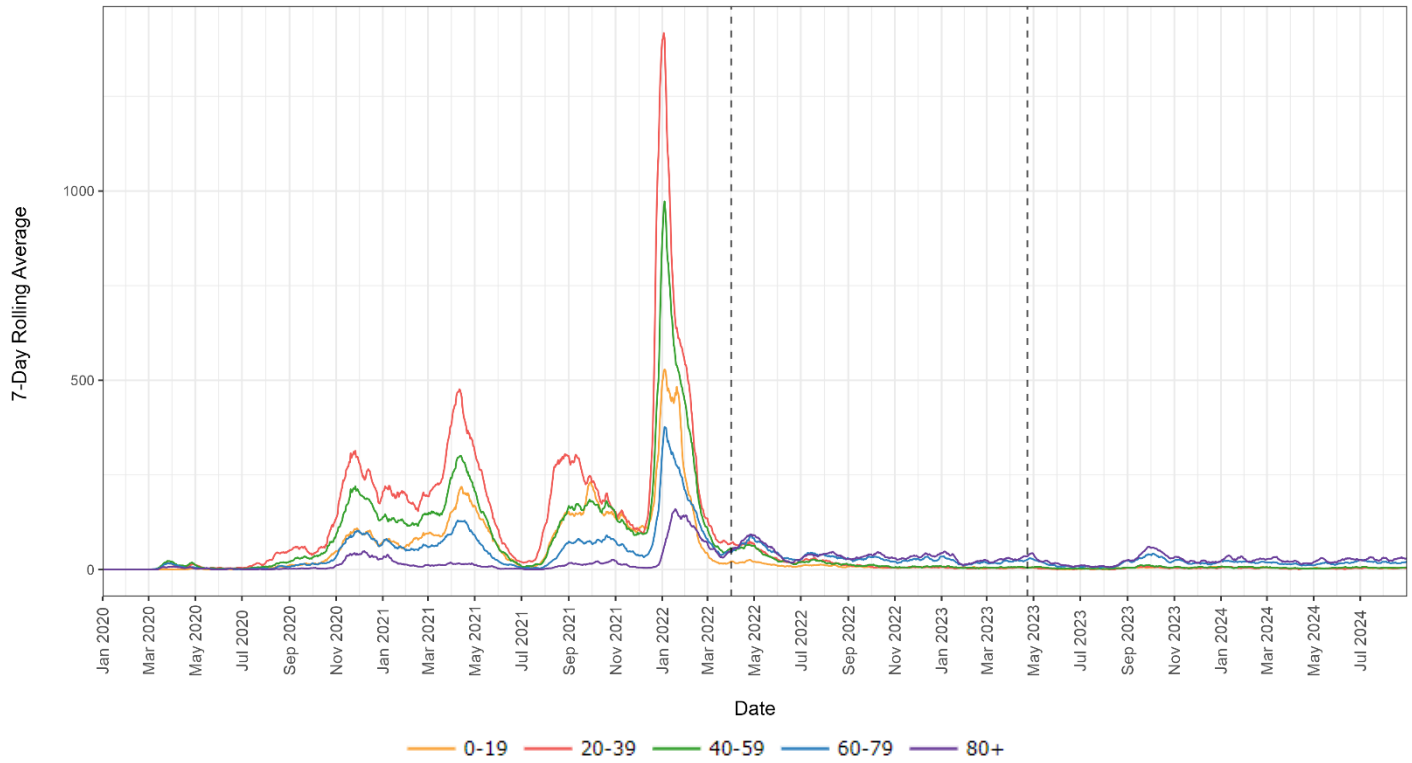

Figure 3. COVID-19 cases by age group. The number of COVID-19 cases (7-day rolling average) from January 1, 2020, to August 31, 2024, by age group: 0-19 - orange, 20-39 - red, 40-59 - green, 60-79 - blue, 80+ - purple. Dashed lines represent system transitions. See Supplementary Information for details.

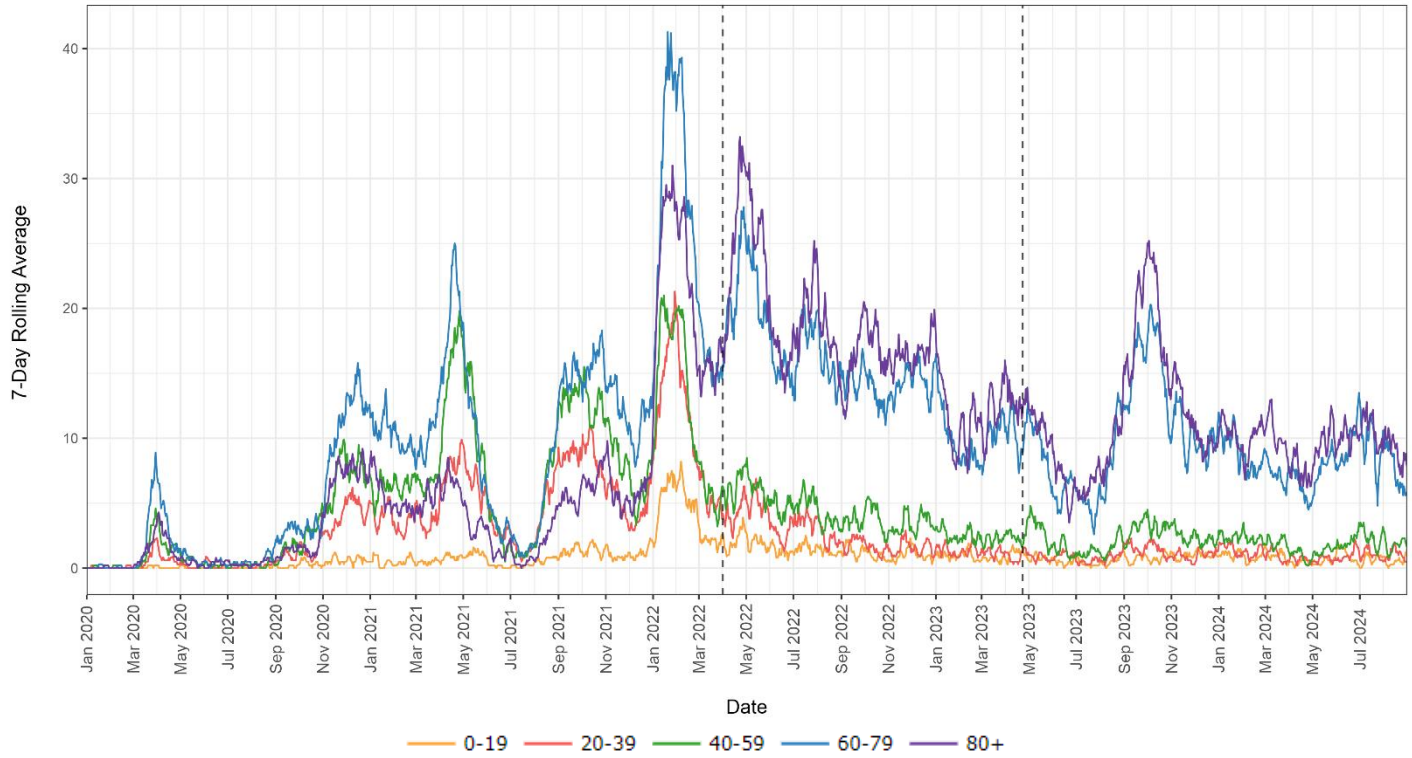

Figure 4. COVID-19 hospitalizations by age group. The number of COVID-19 hospitalizations (7-day rolling average) from January 1, 2020, to August 31, 2024, by age group: 0-19 - orange, 20-39 - red, 40-59 - green, 60-79 - blue, 80+ - purple. Dashed lines represent system transitions. See Supplementary Information for details.

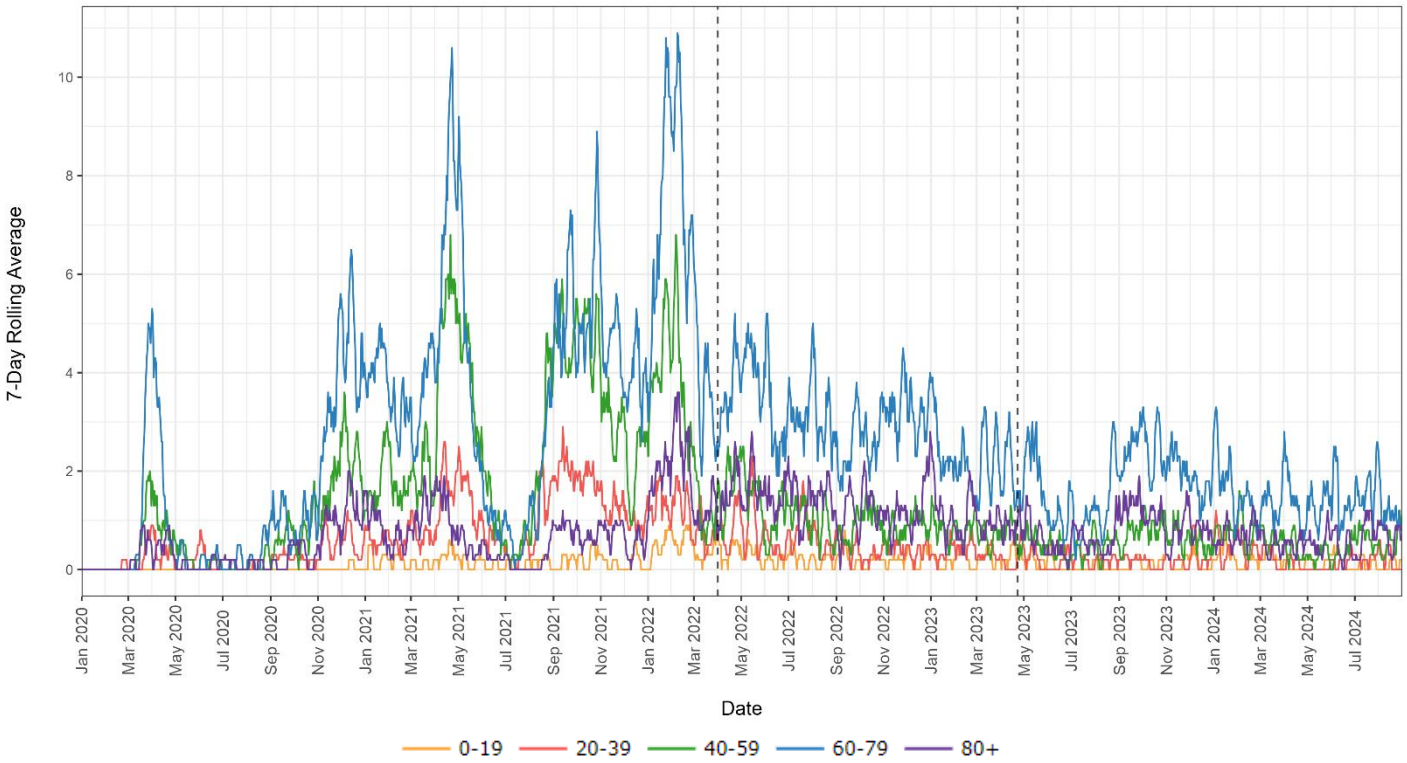

Figure 5. COVID-19 critical care admissions by age group. The number of COVID-19 critical care admissions (7-day rolling average) from January 1, 2020, to August 31, 2024, by age group: 0-19 - orange, 20-39 - red, 40-59 - green, 60-79 - blue, 80+ - purple. Dashed lines represent system transitions. See Supplementary Information for details.

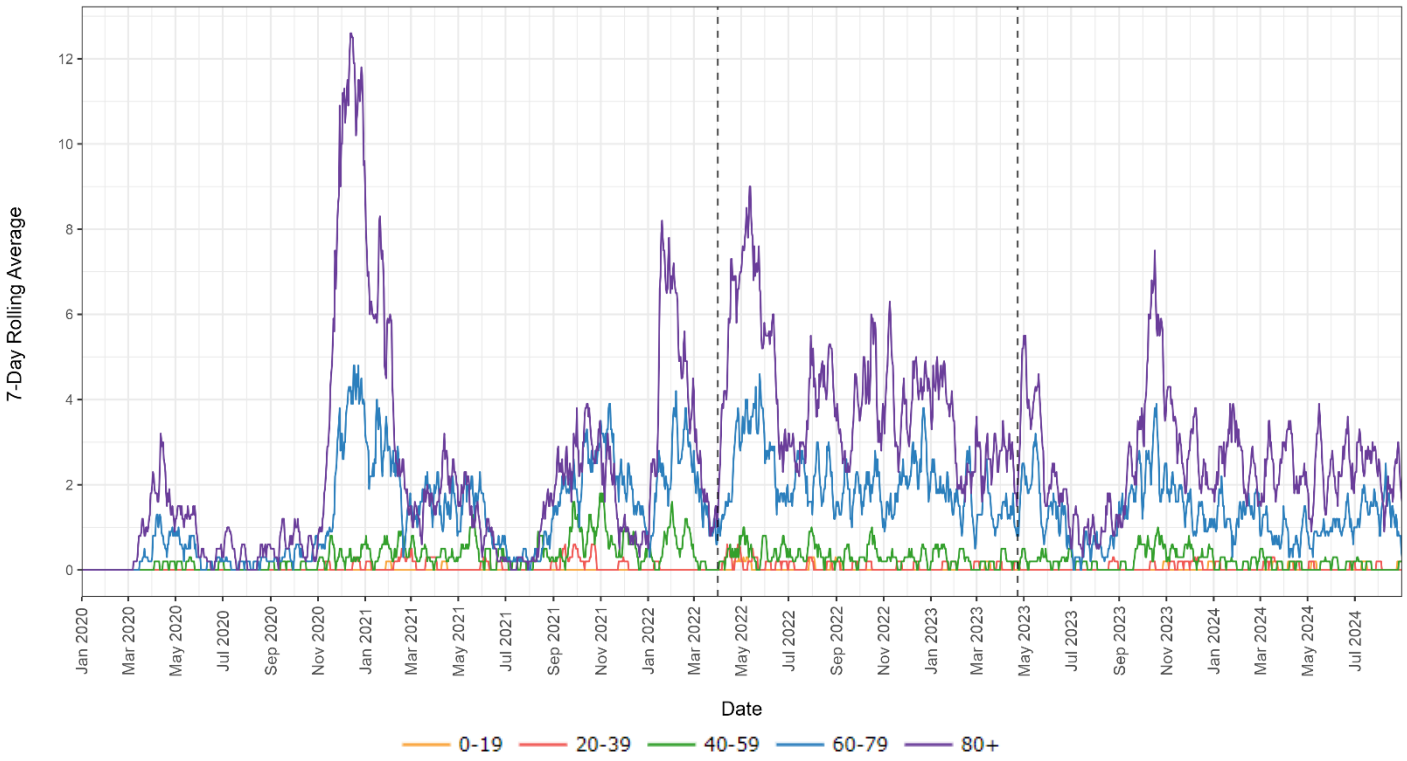

Figure 6. COVID-19 deaths by age group. The number of COVID-19 deaths (7-day rolling average) from January 1, 2020, to August 31, 2024, by age group: 0-19 - orange, 20-39 - red, 40-59 - green, 60-79 - blue, 80+ - purple. Dashed lines represent system transitions. See Supplementary Information for details.

By Health Authority

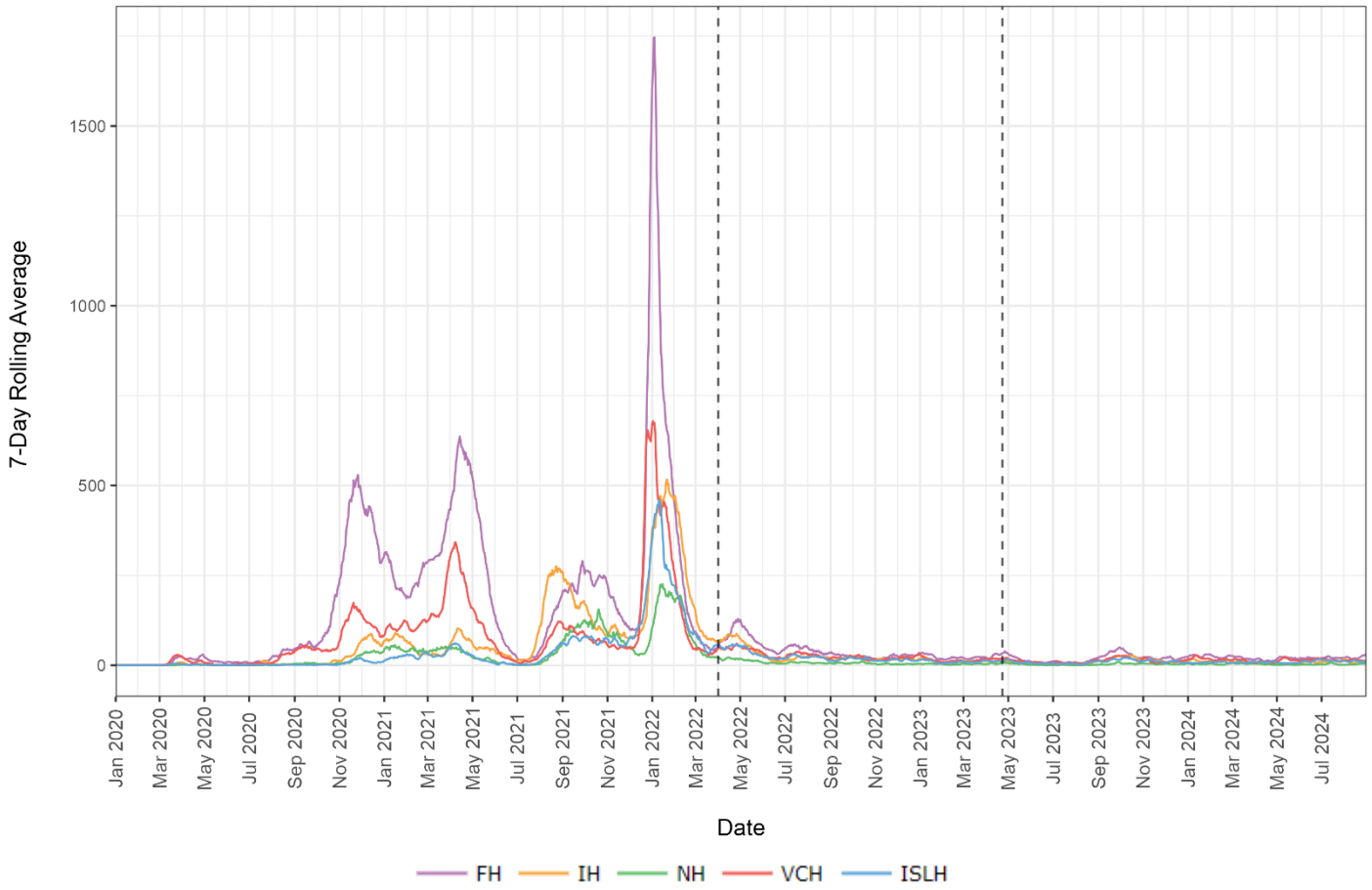

Figure 7. COVID-19 cases by health authority. The number of COVID-19 cases (7-day rolling average) from January 1, 2020, to August 31, 2024, by health authority: Fraser Health (FH) - purple, Interior Health (IH) - orange, Northern Health (NH) - green, Vancouver Coastal Health (VCH) - red, Island Health (ISLH) - blue. Dashed lines represent system transitions. See Supplementary Information for details.

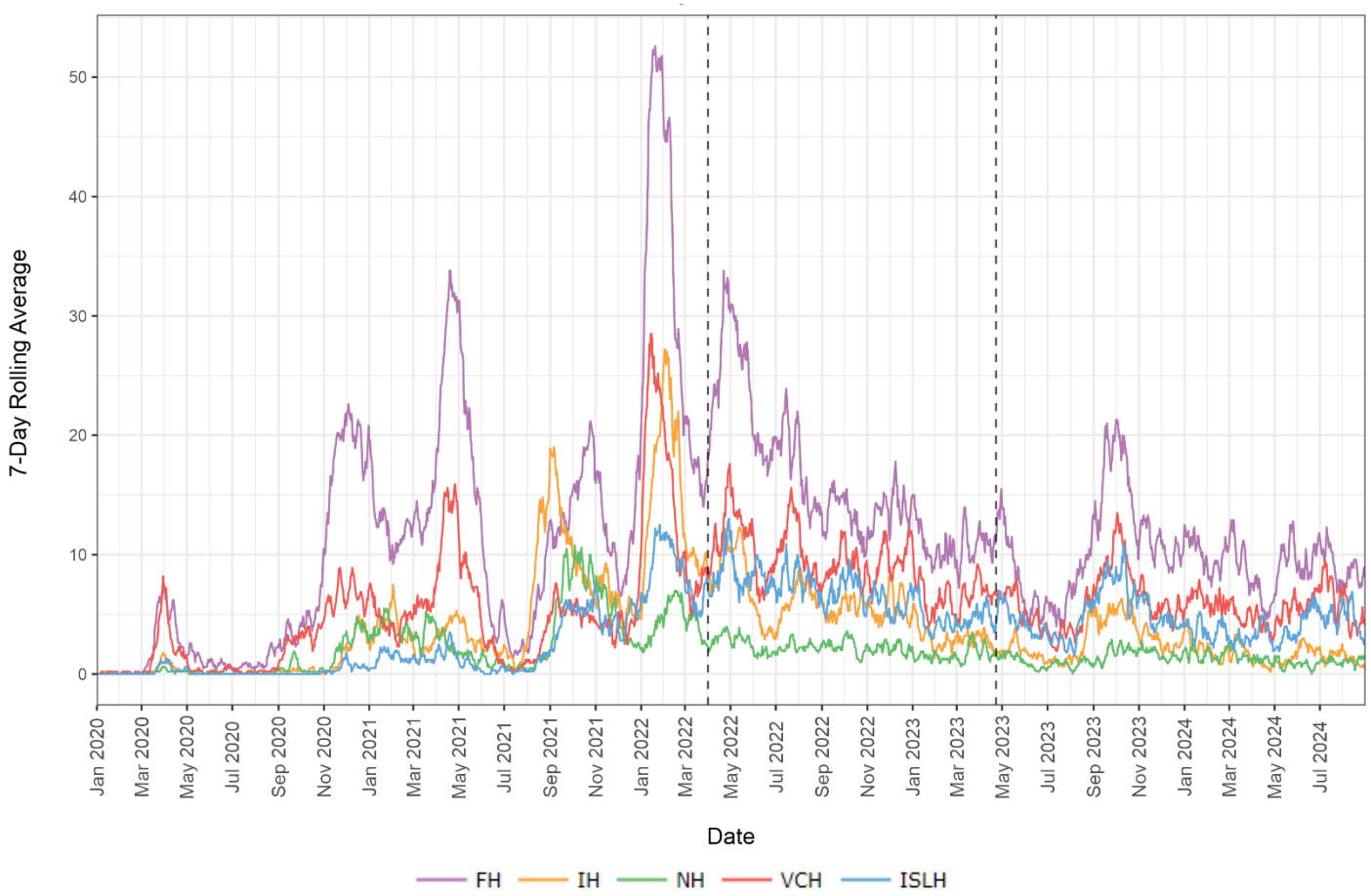

Figure 8. COVID-19 hospitalizations by health authority. The number of COVID-19 hospitalizations (7-day rolling average) from January 1, 2020, to August 31, 2024, by health authority: Fraser Health (FH) - purple, Interior Health (IH) - orange, Northern Health (NH) - green, Vancouver Coastal Health (VCH) - red, Island Health (ISLH) - blue. Dashed lines represent system transitions. See Supplementary Information for details.

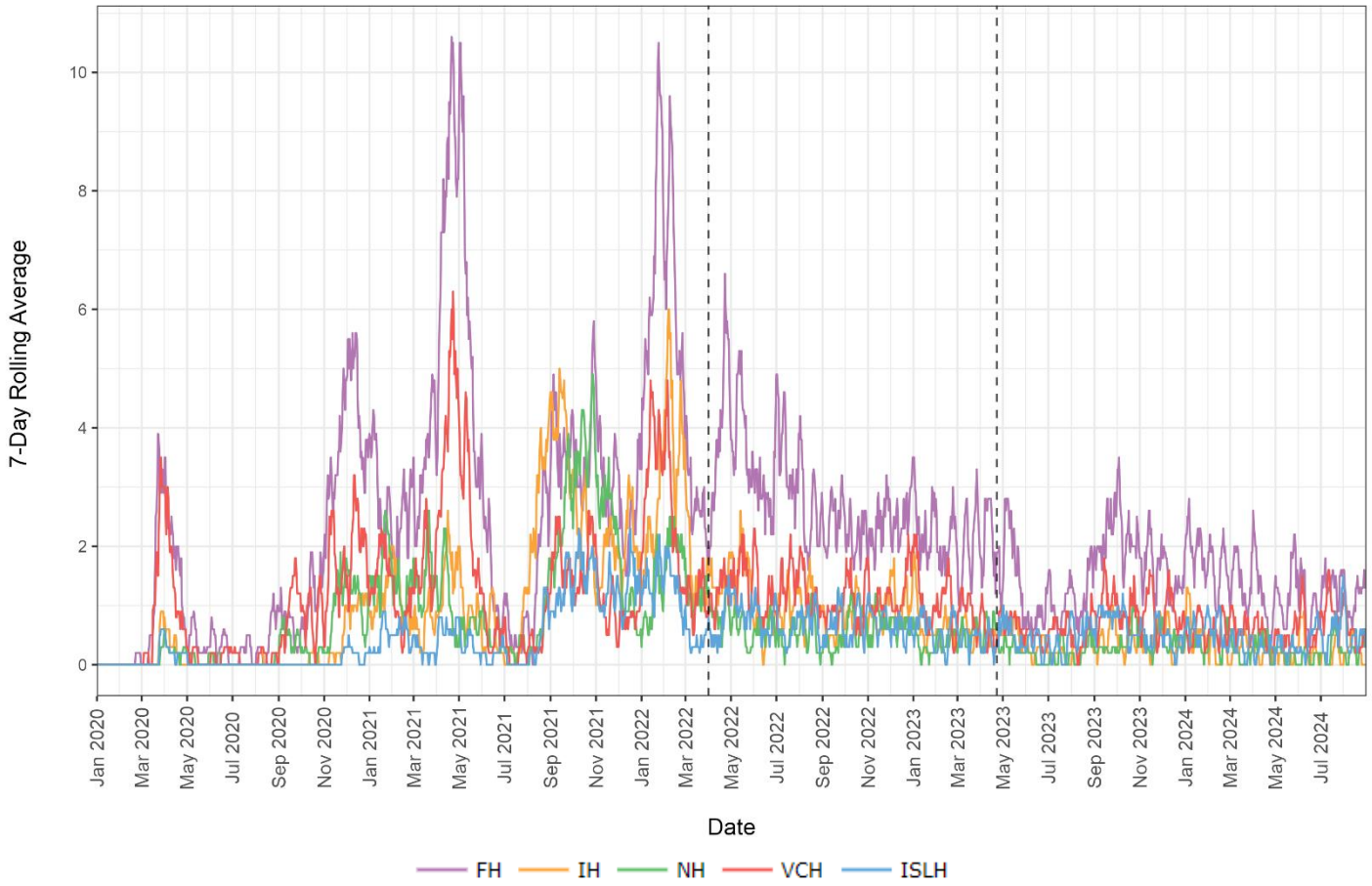

Figure 9. COVID-19 critical care admissions by health authority. The number of COVID-19 critical care admissions (7-day rolling average) from January 1, 2020, to August 31, 2024, by health authority: Fraser Health (FH) - purple, Interior Health (IH) - orange, Northern Health (NH) - green, Vancouver Coastal Health (VCH) - red, Island Health (ISLH) - blue. Dashed lines represent system transitions. See Supplementary Information for details.

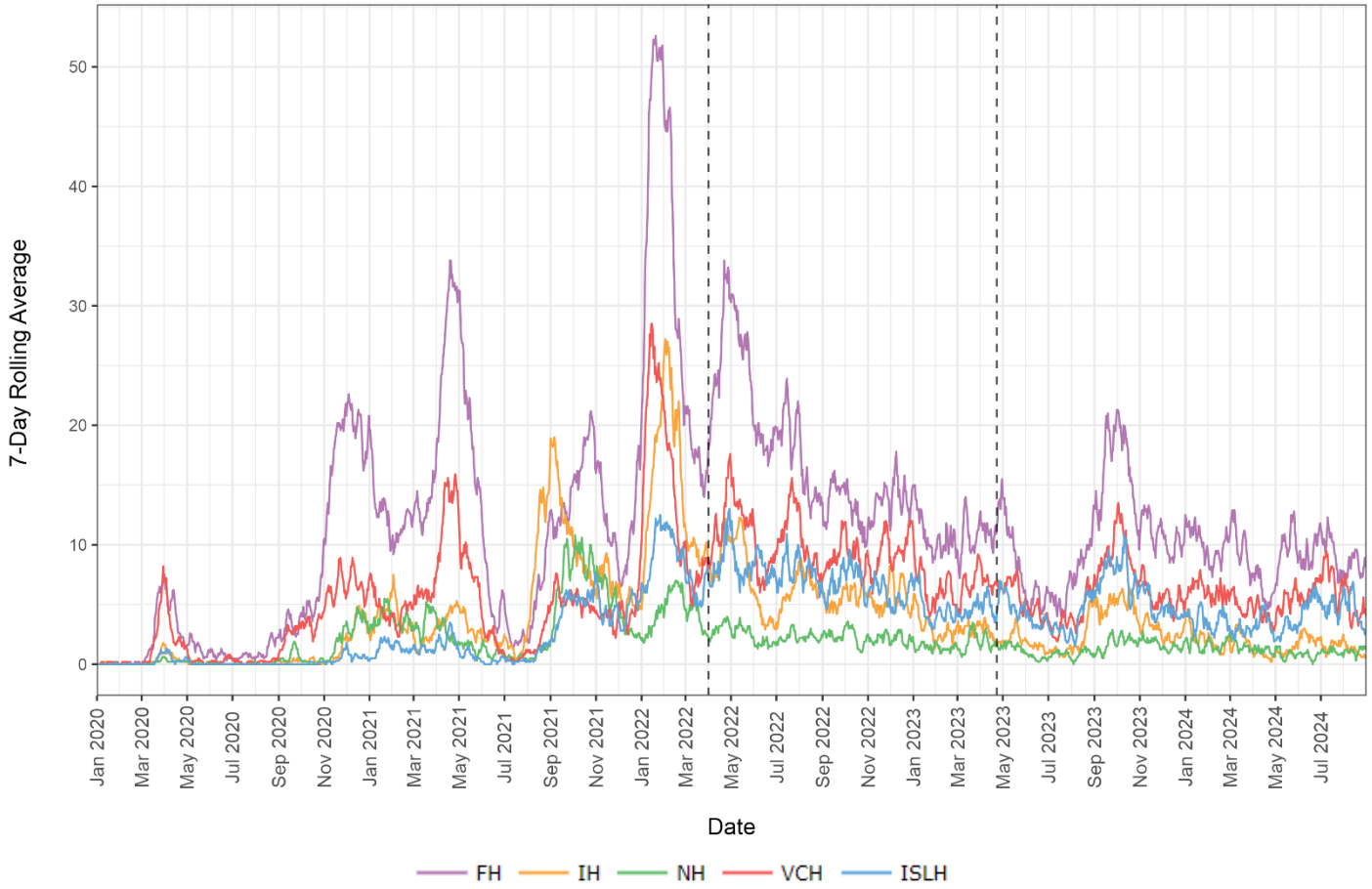

Figure 10. COVID-19 deaths by health authority. The number of COVID-19 deaths (7-day rolling average) from January 1, 2020, to August 31, 2024, by health authority: Fraser Health (FH) - purple, Interior Health (IH) - orange, Northern Health (NH) - green, Vancouver Coastal Health (VCH) - red, Island Health (ISLH) - blue. Dashed lines represent system transitions. See Supplementary Information for details.

Death by underlying cause of death

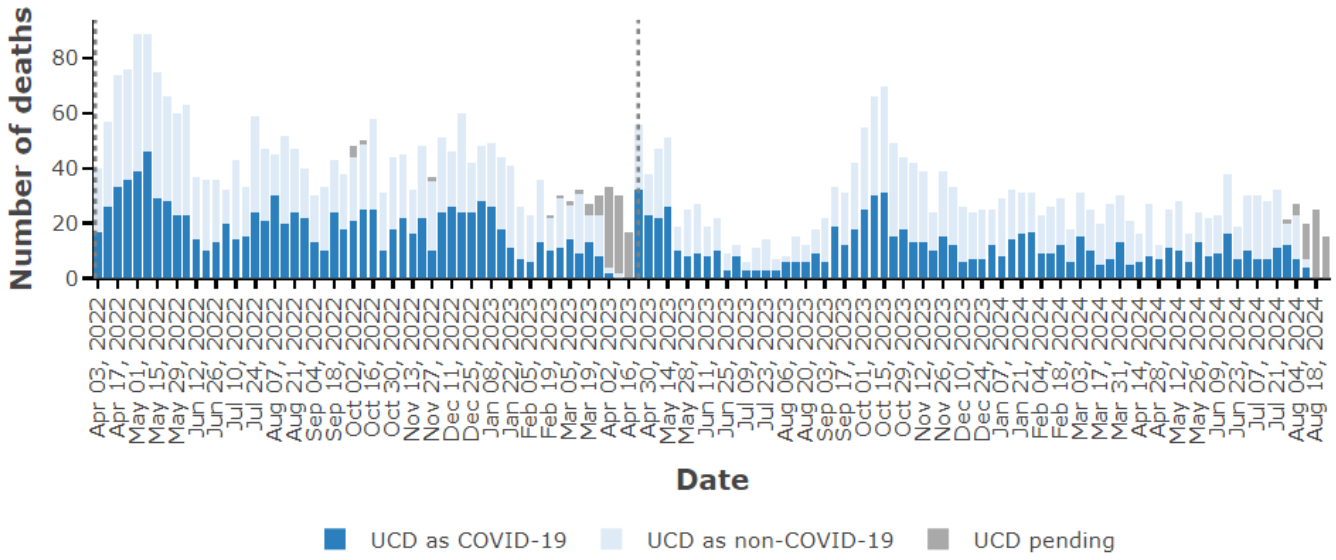

Figure 11. COVID-19 deaths by underlying cause. The weekly number of COVID-19 deaths within 30 days of a positive COVID-19 laboratory test. The underlying cause of death (UCD) refers to a disease or condition that resulted in a series of events leading to a person's death. The UCD takes approximately 8 weeks to determine. If the UCD is primarily attributed to COVID-19, it is defined as "UCD as COVID-19", otherwise it is "UCD as non-COVID-19". Deaths with no record of UCD are shown as "UCD pending". The number of deaths attributed to COVID-19 is overestimated until the UCD is determined. Dashed lines represent system transitions. See Supplementary Information for details.

Cumulative Summary Tables: COVID-19 Cases, Hospitalizations, Critical Care Admissions, and Deaths

By Age Group

Table 1. 2023/2024 season: cumulative summary of COVID-19 cases and severe outcomes by age group[a,b,c].

Age group (years)	Cases	Hospitalizations	Critical care admissions	Deaths		
				UCD as COVID-19	UCD as non-COVID-19	UCD pending
<10	1,469	237	42	0	5	1
10-19	254	46	4	0	1	0
20-29	656	162	27	1	4	1
30-39	874	229	44	2	7	0
40-49	818	266	74	5	16	1
50-59	1,273	519	133	4	43	0
60-69	2,541	1,181	228	35	85	4
70-79	4,911	2,433	378	128	218	13
80-89	6,520	2,914	216	209	316	25
90+	3,839	1,346	42	199	222	15
Total	**23,155**	**9,333**	**1,188**	**583**	**917**	**60**
Median age	**77**	**78**	**71**	**86**	**82**	**83**

[a]Data are shown from August 27, 2023, to August 31, 2024.
[b]Cases and severe outcome measures include those with available age information
[c]All deaths within 30 days of any positive COVID-19 lab test are reported. The underlying cause of death (UCD) refers to a disease or condition that resulted in a series of events leading to a person's death.

Table 2. Cumulative summary of COVID-19 cases and severe outcomes by age group from January 1, 2020, to August 26, 2023[a,b,c,d].

Age group (years)	Cases	Hospitalizations	Critical care admissions	Deaths (Jan 2020 - Mar 2022)	Deaths (Apr 2022 - Aug 2023)		
					UCD as COVID-19	UCD as non-COVID-19	UCD pending
<10	32,433	824	115	2	3	3	0
10-19	36,152	420	62	0	0	3	0
20-29	74,366	1,553	247	6	2	9	1
30-39	71,660	2,676	510	31	3	15	0
40-49	55,388	2,583	677	64	5	26	1
50-59	45,878	3,911	1,254	166	25	68	3
60-69	33,737	5,953	1,838	353	111	172	12
70-79	23,282	7,926	1,805	655	230	366	21
80-89	20,313	8,194	908	989	475	485	27
90+	11,133	3,681	137	736	380	391	30
Total	**404,342**	**37,721**	**7,553**	**3,002**	**1,234**	**1,538**	**95**
Median age	**38**	**71**	**65**	**82**	**85**	**82**	**83**

[a]Data are shown from January 1, 2020, to August 26, 2023.
[b]Cases and severe outcome measures include those with available age information
[c]Case definition for deaths varied by time period. See Supplementary Information for more details. The underlying cause of death (UCD) refers to a disease or condition that resulted in a series of events leading to a person's death.
[d]Cases and severe outcome measures should not be compared across system transitions due to changes to the data sources and definitions. Please see Supplementary Information for more details.

By Health Authority

Table 3. 2023/2024 season: cumulative summary of COVID-19 cases and severe outcomes by health authority[a,b,c].

	Health Authority					OOC	Total
	FH	IH	NH	VCH	ISLH		
Hospital admissions	3,929	872	497	2,277	1,699	0	9,333
Critical care admissions	553	107	100	249	166	0	1,188
Deaths	586	307	61	325	262	0	1,558
Cases	8,430	4,198	1,198	5,482	3,848	0	23,156

[a]Data are shown from August 27, 2023, to August 31, 2024
[b]Cases and severe outcome measures include those with available health authority information
[c]All deaths within 30 days of any positive COVID-19 lab test are reported.
OOC – Out of Country

Table 4. Cumulative summary of COVID-19 cases and severe outcomes by health authority from January 1, 2020, to August 26, 2023[a,b,c,d].

		Health Authority					OOC	Total
		FH	IH	NH	VCH	ISLH		
Hospital admissions		16,358	5,844	2,788	8,015	4,691	17	37,721
Critical care admissions		3,267	1,239	954	1,458	628	4	7,553
Deaths	Jan 2020 - Mar 2022	1,348	367	330	716	241	0	3,002
	Apr 2022 - Aug 2023	955	589	112	629	566	0	2,851
Cases		175,290	72,244	32,067	82,585	41,801	391	404,378

[a]Data are shown from January 1, 2020, to August 26, 2023.
[b]Cases and severe outcome measures include those with available health authority information
[c]Case definition for deaths varied by time period. See Supplementary Information for more details.
[d]Cases and severe outcome measures should not be compared across system transitions due to changes to the data sources and definitions. Please see Supplementary Information for more details. for more details.
OOC – Out of Country

Supplementary Information

Data Notes

Data Sources

January 2020 to March 31, 2022:

- Detailed case information: COVID-19 case report form submitted by Regional Health Authorities to the BC Centre for Disease Control (BCCDC)
- Cases: Provincial Laboratory Information Solution (PLIS) or BCCDC Public Health Laboratory information system

April 1, 2022, to August 31, 2024:

- Cases: Provincial Laboratory Information Solution (PLIS) or BCCDC Public Health Laboratory information system
- Hospitalizations: Provincial Health Services Authority Provincial COVID-19 Monitoring Solution
- Deaths: BC Vital Statistics Agency

Data Interpretation

Data sources and definitions have changed over time as a result of system transitions. The most recent transition was April 23, 2023, when the surveillance system was updated to capture potential reinfection episodes in addition to first-time episodes. Therefore, severe outcome measures (e.g., hospitalizations, critical care admissions, and deaths) and cases should not be compared across system transitions.

Hospitalizations: Reported hospitalization numbers are an overestimate of COVID-attributable hospitalizations because they include people who test positive for COVID-19 regardless of the reason for admission.

Deaths: Reported deaths are an overestimate of COVID-attributable deaths since the registration of a death is recorded before the underlying cause of death (COVID-19 or non-COVID-19-related) is determined.

Cases: From January 2020 to March 31, 2022, cases were reported by the health authority of residence or the reporting health authority; cases whose primary residence was outside of Canada were reported as “Out of Canada”. As of April 1, 2022, the health authority was based on the case’s address provided during laboratory testing and cases from outside of BC were not included. Please note that the health authority of residence and the health authority reporting the case do not necessarily indicate the location of exposure or transmission.

In September 2022, BC changed its testing strategies to focus on high-risk populations. Therefore, case counts were an underestimate of the true number of COVID-19 cases in BC. This underestimation has increased compared to the period before the emergence of the Omicron sub-lineages in BC.

Definitions

The definitions used in this data analysis have changed over time.

Cases:

January 2020 to March 31, 2022: Total COVID-19 cases include lab-confirmed, lab-probable and epi-linked cases. Cases included those reported by the health authorities for the first time and any individual with a first positive lab-confirmed COVID-19 test reported in the Provincial Laboratory Information Solution (PLIS) or Sunquest.

April 1, 2022, to April 22, 2023: Any individual with a first positive lab-confirmed COVID-19 test reported in PLIS or Sunquest. Subsequent positive lab-confirmed COVID-19 tests were not included.

April 23, 2023, to August 31, 2024: Positive lab-confirmed COVID-19 test(s) belonging to the same individual are grouped together and considered part of the same infection episode if they are within 30 days. Positive lab-confirmed COVID-19 tests that are 30 or more days apart (regardless of negative tests in between) are considered a separate infection episode, and therefore an individual may have more than one infection episode of COVID-19.

Hospitalizations:

January 2020 to March 31, 2022: Any person admitted to a hospital for at least an overnight stay, or with a prolonged hospital stay, for reasons directly or indirectly related to their COVID-19 infection, and with no period of complete recovery between illness and admission. This includes persons admitted to hospital but without transfer to a ward/unit.

April 1, 2022, to April 22, 2023: A single hospitalization is linked to a first positive lab test and counted as a hospitalization if it meets one of the following criteria:

1. The hospitalization was related to an individual identified as a COVID-19 patient by the facility based on a positive lab test (regardless time between positive test date and admission date)
2. The hospitalization was initiated within 0-14 days of the first positive lab test (regardless of whether they were identified by the facility as being a COVID-19 patient).

Single day hospital stays (e.g. admission, discharge on same date) are excluded.

April 23, 2023, to August 31, 2024: All hospitalizations related to an individual identified by the facility as a COVID-19 patient (based on a positive test). Single day hospital stays (e.g. admission, discharge on same date) are excluded.

Critical care admissions:

January 2020 to March 31, 2022: Any person with a COVID-19 related hospitalization and an admission to the intensive care unit.

April 1, 2022, to April 22, 2023: Any individual hospitalized (see above) and admitted to critical care (Intensive Care Unit, High Acuity Unit, or critical care surge beds) during that hospitalization.

April 23, 2023, to August 31, 2024: Any individual hospitalized (see above) and admitted to critical care (Intensive Care Unit, High Acuity Unit, or critical care surge beds) during that hospitalization.

Deaths:

January 2020 to March 31, 2022: A death occurring in any individual with no period of complete recovery between illness with COVID-19 and death, unless there is evidence that COVID-19 did not contribute to the death (e.g., trauma, poisoning, and drug overdose).

April 1, 2022, to April 22, 2023: A death (related or not related to COVID-19) that occurred within 30 days of a first positive lab-confirmed COVID-19 test.

April 23, 2023, to August 31, 2024: A death (related or not related to COVID-19) that has a positive lab COVID-19 test within 30 days of date of death.

Acknowledgements

We acknowledge the assistance of the BC Centre for Disease Control; BC Centre for Disease Control Public Health Laboratory; Data Analytics, Reporting and Evaluation; Provincial Health Services Authority; Fraser Health Authority; Interior Health Authority; Island Health Authority; Northern Health Authority; Vancouver Coastal Health Authority; First Nations Health Authority; British Columbia Vital Statistics; and British Columbia Ministry of Health partners involved in data collection, access, management, analysis and reporting.

Figures in this report were developed using the R computing language and the tidyverse and ggplot packages. R Core Team (2021). R: A language and environment for statistical computing. R Foundation for Statistical Computing, Vienna, Austria. URL https://www.R-project.org/.

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All inferences, opinions, and conclusions drawn in this report are those of the authors, and do not reflect the opinions or policies of the Data Steward(s).

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