

British Columbia (BC) COVID-19 Situation Report

Week 8: February 20- February 26, 2022

Table of Contents

Epidemic curve and regional incidence	2
Test rates and % positive	3
Age profile, testing and cases	4
Severe outcomes	6
Age profile, severe outcomes	7
Care facility outbreaks	8
Wastewater surveillance	8
Additional resources	9
Appendix	10

Hospital admissions and deaths are declining; provincial COVID-19 incidence continues to decrease.

Due to changes in testing strategies in BC, case counts in this report likely underestimate the true number of COVID-19 cases in BC. This underestimation has increased compared to the period prior to the emergence of the Omicron variant in BC. The provincial incidence by episode date decreased from 80 per 100K (4,194 cases) in week 7 to 57 per 100K (3,006 cases) in week 8.

Incidence by Health Authority decreased from week 7 to week 8:

- Fraser Health incidence decreased from 48 to 33 per 100K
- Interior Health incidence decreased from 175 to 130 per 100K
- Vancouver Island Health incidence decreased from 80 to 68 per 100K
- Northern Health incidence decreased from 203 to 128 per 100K
- Vancouver Coastal Health incidence decreased from 36 to 23 per 100K

Testing of MSP-funded specimens decreased from ~18,400 in week 7 to ~15,600 in week 8. The positivity of MSP-funded specimens decreased from 23.6% in week 7 to 20.5% in week 8.

The per capita testing rates and percent positivity for MSP-only specimens decreased in all HAS from week 7 to week 8. Testing rates and percent positivity decreased in all age groups from week 7 to week 8 as well.

Age-specific incidence rates decreased across all age groups from week 7 to week 8. Incidence rate decreased the most in the 40-49 and 80+ age groups.

The number of hospital admissions decreased from 337 in week 7 to 224 in week 8. In week 8, 60-79 year-olds had the highest number of hospital admissions (72 hospitalizations).

The weekly number of deaths decreased from 61 in week 7 to 40 in week 8. Those aged 80+ accounted for the highest number of deaths in week 8 (21 deaths).

In week 8, five new care facility outbreaks were declared, based on earliest case onset date. 7 of the 40 deaths (17.5%) reported in week 8 were associated with care facility outbreaks.

BELOW ARE IMPORTANT NOTES relevant to the interpretation of data displayed in this bulletin:

- Episode dates are defined by dates of illness onset. When those dates are unavailable, earliest laboratory date is used (collection or result date); if also unavailable, then public health care report date is used. Analyses based on episode date (or illness onset date) may better represent the timing of epidemic evolution. Episode-based tallies for recent weeks are expected to increase as case data, in particular onset dates, are more complete.
- The weekly tally by surveillance date (result date, if unavailable then report date) includes cases with illness onset date in preceding weeks. Episode dates for hospital admission, ICU, and death are defined by admission and death dates. When unavailable, surveillance date is used.
- As of June 15, 2021, per capita rates/incidences for year 2020 are based on Population Estimates 2020 (n= 5,147,772 for BC overall) and for year 2021 are based on PEOPLE 2021 estimates (n= 5,194,137 for BC overall).
- Laboratory data include Medical Service Plan (MSP) funded (e.g. clinical diagnostic tests) and non-MSP funded (e.g. screening tests) specimens.
- Data sources include: Health Authority case line list data, laboratory PLOVER data, and hospital data (PHSA Provincial COVID19 Monitoring Solution (PCMS)).
- Case data were extracted on March 06, 2022, laboratory data on March 04, 2022, and PCMS hospitalization data on March 06, 2022.

A. COVID-19 case counts and epidemic curves

Due to changes in testing strategies in BC, case counts in this report likely underestimate the true number of COVID-19 cases in BC. This underestimation has increased compared to the period prior to the emergence of the Omicron variant in BC. Up to week 8, there have been 348,409 cases for a cumulative incidence of 6,612 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 57 per 100K (3,006 cases) in week 8, which has decreased from the most recent peak of 407 per 100K in week 52. Incidence by episode date may increase as data become more complete in recent weeks.

As shown in Figure 2, incidence has decreased in all HAs from week 7 to week 8. From week 7 to week 8 incidence rates decreased the most in Northern Health (NH) and Interior Health (IH) from 203 to 128 per 100K and from 175 to 130 per 100K, respectively. In week 8, the highest incidence rate was in IH at 130 per 100K.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – Feb 26, 2022 (week 8) (N= 348,409)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 8, case counts	646	1,076	596	392	294	2	3,006
Cumulative case counts	156,984	60,041	31,584	28,539	70,872	389	348,409
Week 8, cases per 100K population	33	130	68	128	23	NA	57
Cumulative cases per 100K population	7,900	7,248	3,588	9,324	5,616	NA	6,612

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8) (N= 340,562)

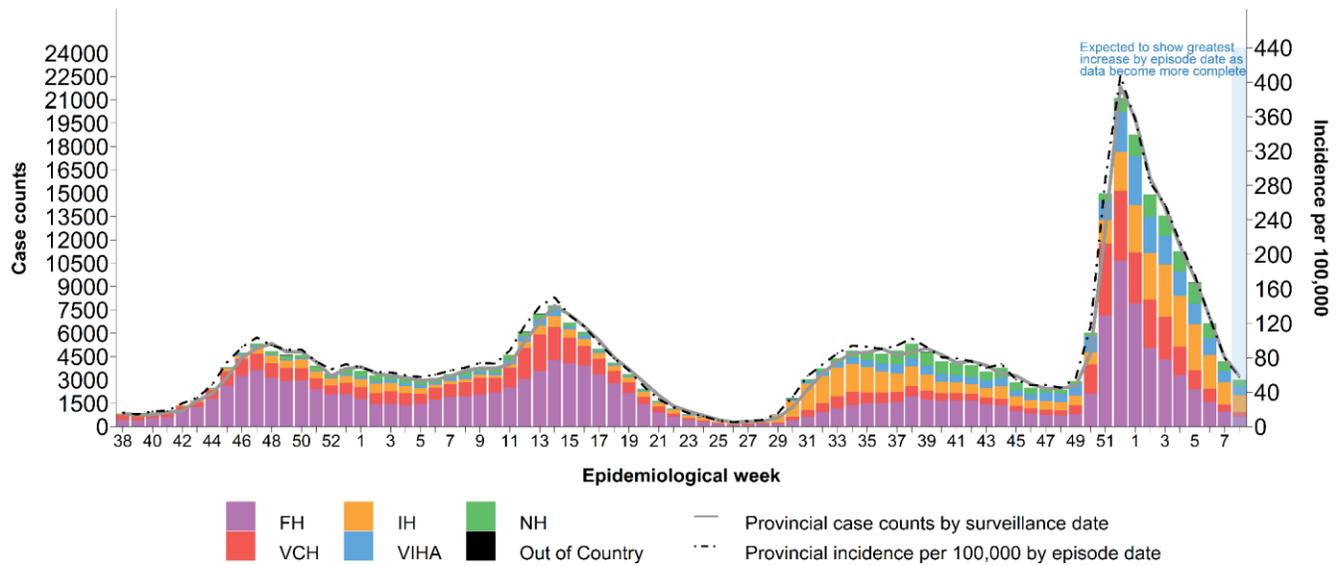
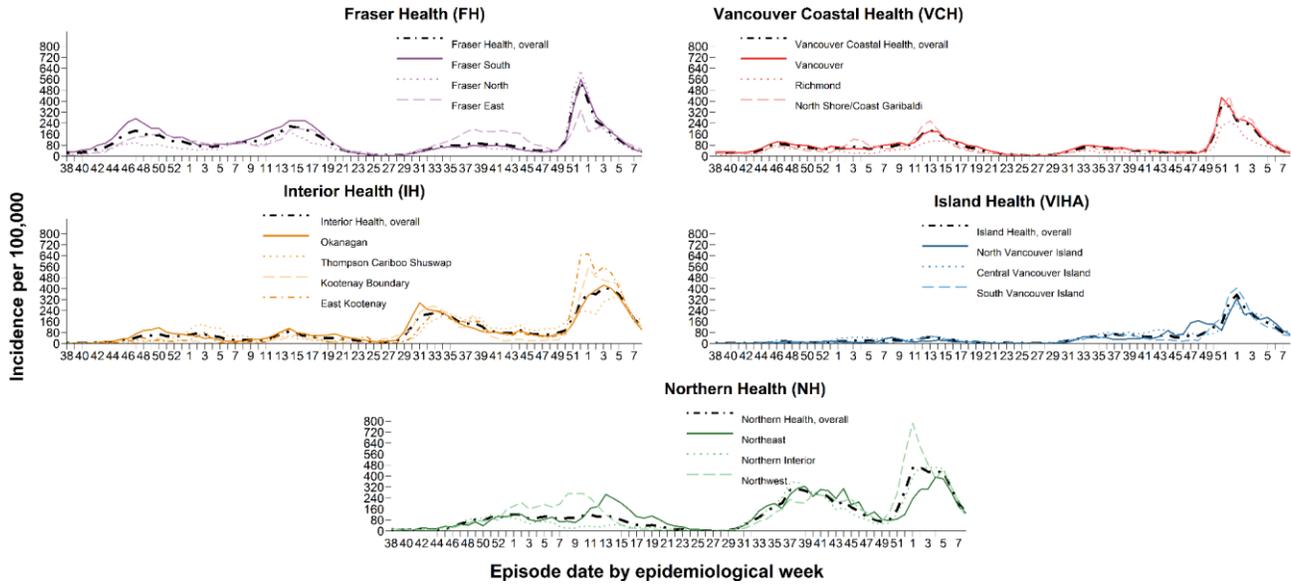


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8) (N= 340,562)



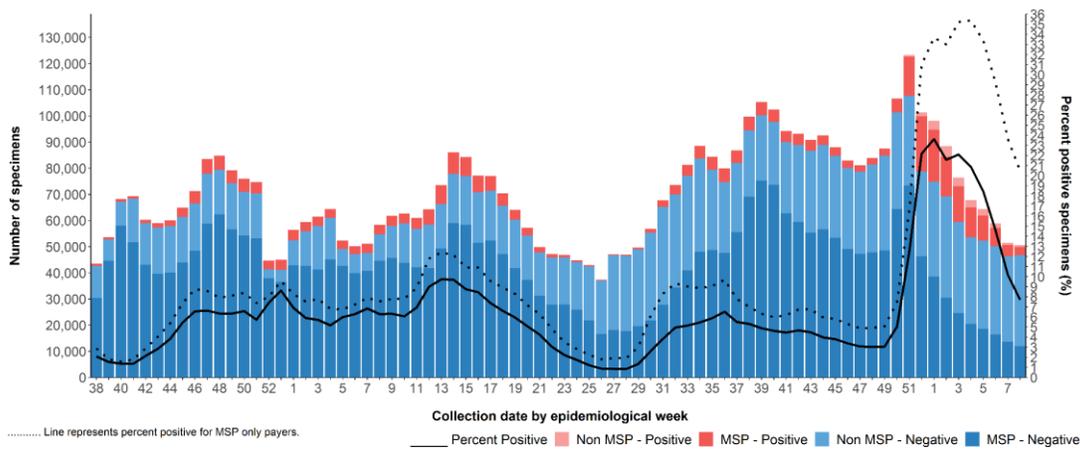
B. Test rates and percent positive

[COVID-19 testing guidelines](#) recommend testing for people who have COVID-19 symptoms, and are at risk of more severe disease or live/work in high-risk settings. As shown by the darker-colored bars in [Figure 3](#), testing of MSP-funded specimens has continued to decrease from the peak of ~88,900 in week 51 and the positivity of MSP-funded specimens has continued to decrease from the peak of 35.4% in week 4. Between week 7 and week 8, number of MSP-funded specimens decreased from ~18,400 to ~15,600 and percent positivity of MSP-funded specimens decreased from 23.6% to 20.5%.

As shown in [Figure 4](#), the per capita testing rates (Panel A) decreased in all HAs from week 7 to week 8. From week 7 to week 8, testing rates decreased the most in NH, from 688 to 501 per 100K. In week 8, IH had the highest testing rate at 503 per 100K.

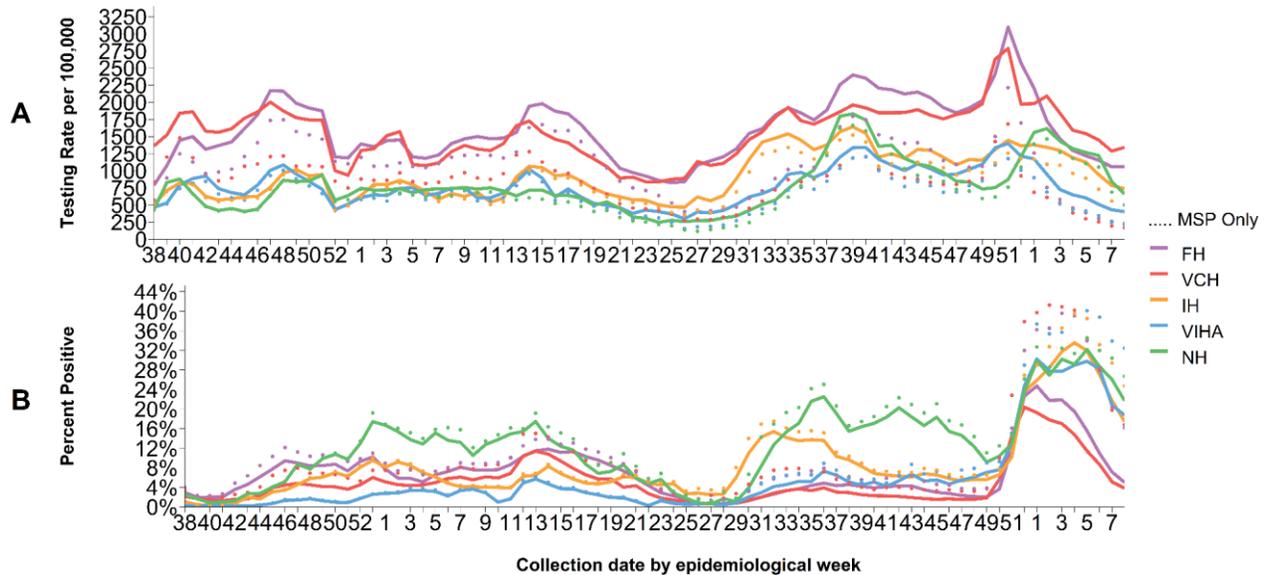
Percent positivity (Panel B) for MSP-only specimens decreased in all HAs from week 7 to week 8. Percent positivity in week 8 ranged from 16.2% in FH to 32.5% in VIHA.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8)



Note: Invalid (n = 3360) and indeterminate (n = 16700) results have been excluded

Figure 4. Testing rates and percent SARS-CoV-2 positive by Health Authority and collection week, BC Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8)



Data source: laboratory PLOVER data

C. Age profile – Testing and cases

Testing rates and percent positivity by age group

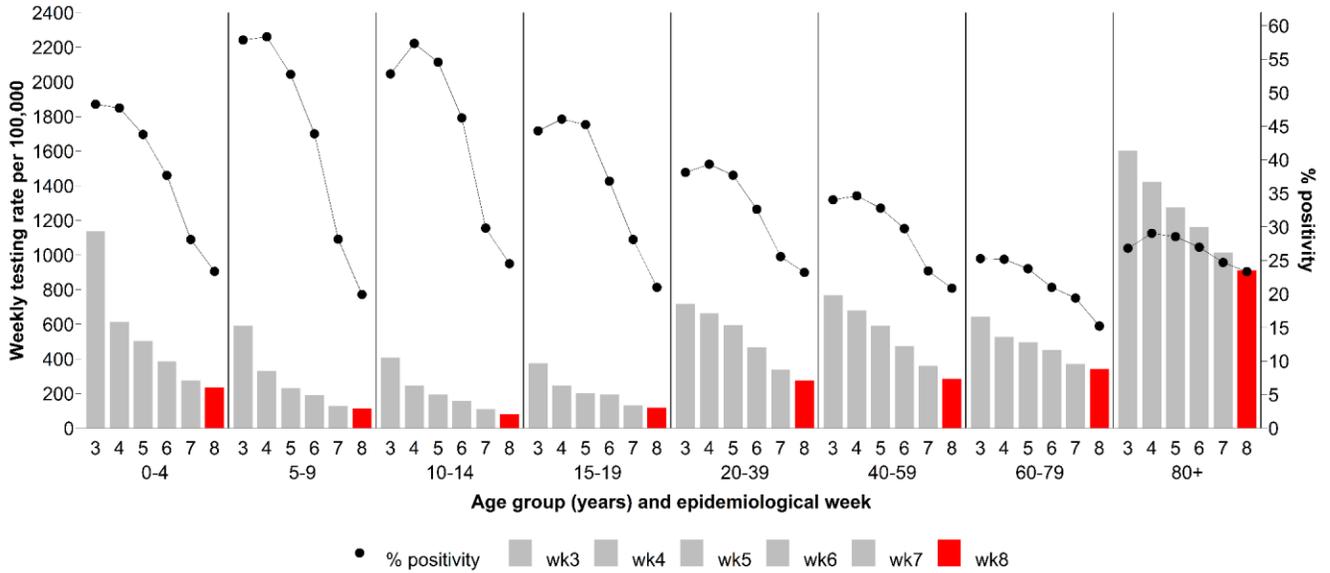
As shown by the bars in [Figure 5](#), testing rates decreased in all age groups from week 7 to week 8. Testing rates in week 8 was highest in those aged 80+ at 911 per 100K, which likely reflected the age group prioritized for testing.

As shown by the black dots in [Figure 5](#), the percent positivity decreased in all age groups from week 7 to week 8. The highest percent positivity in week 8 was in the 10-14 year-olds at 24.5%.

Case distribution and weekly incidence by age group

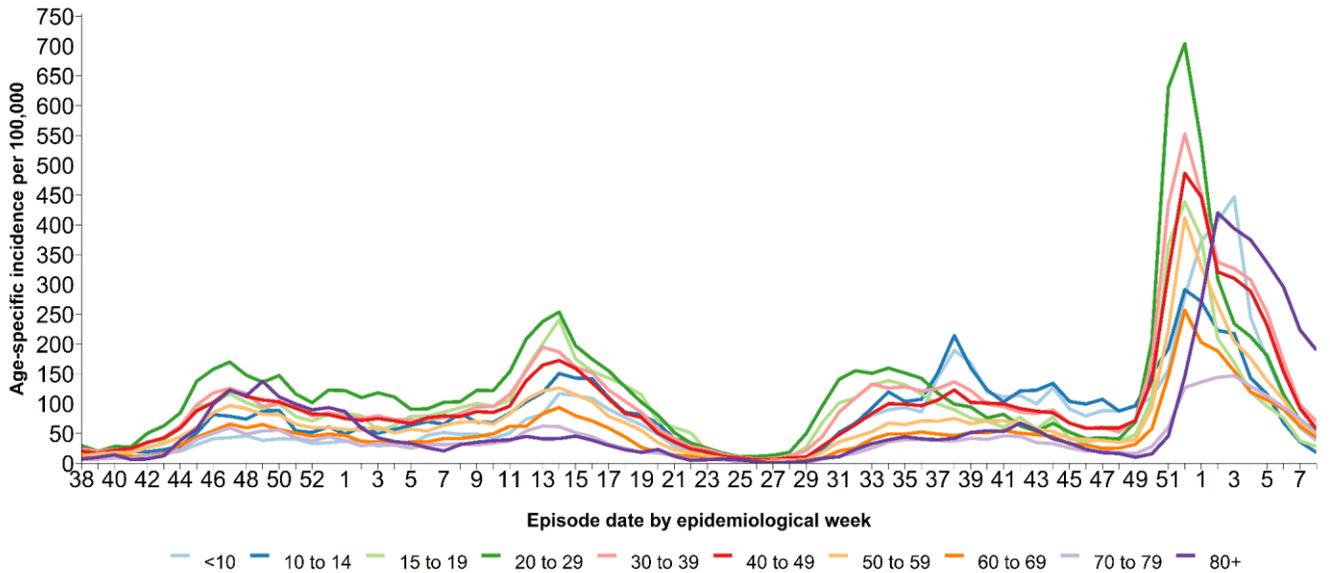
As shown in [Figure 6](#), age-specific incidence rates decreased across all age groups from week 7 to week 8. From week 7 to week 8, incidence rates decreased the most in the 40-49 and 80+ age groups from 92 to 58 per 100K and 224 to 190 per 100K, respectively. Age-specific incidences may increase as data become more complete. Detailed information about age-specific incidence by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

Figure 5. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC Jan 22, 2022 (week 3) – Feb 26, 2022 (week 8)



Data source: laboratory PLOVER data

Figure 6. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8) (N= 340,478)



D. Severe outcome counts and epi-curve

The number of hospital admissions decreased from 337 in week 7 to 224 in week 8. In week 8, 60-79 year-olds had the highest number of hospital admissions (72 hospitalizations). Hospital data include admissions for people diagnosed with COVID-19 through hospital SARS-COV-2 screening practices, and will overestimate the number of people who are hospitalized specifically due to severe symptoms of COVID-19 infection. The weekly number of deaths decreased from 61 in week 7 to 40 in week 8. Those aged 80+ accounted for the highest number of deaths in week 8 (21 deaths) ([Table 2, Figure 8](#)). Detailed information about outcomes by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

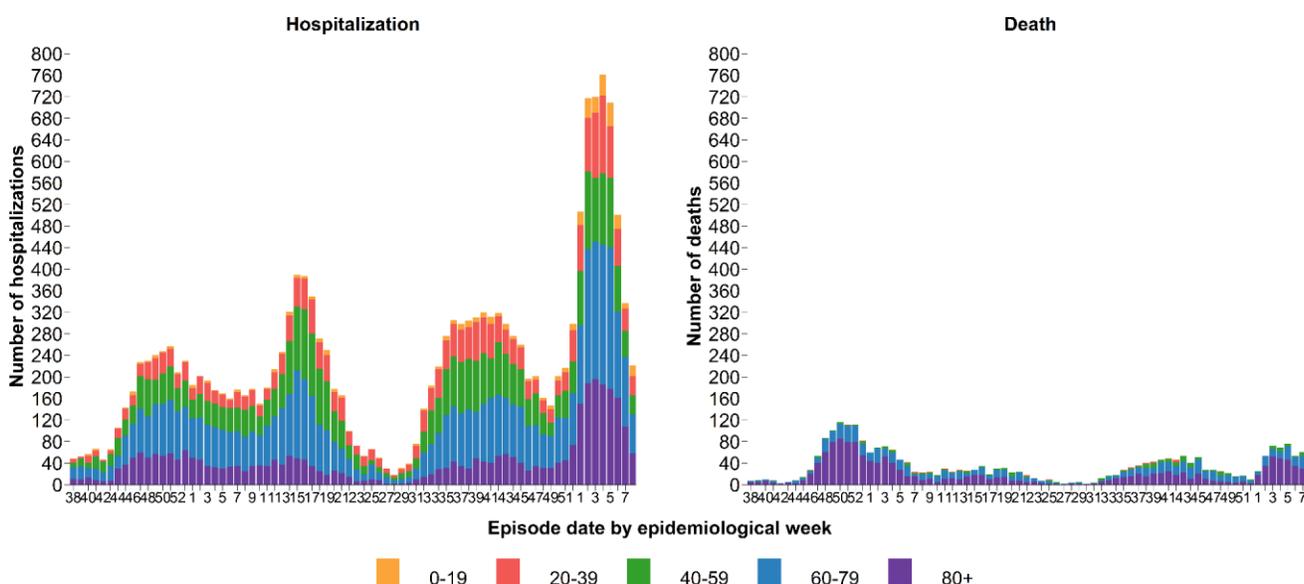
Cumulatively, there have been 25 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There has been one new confirmed case of MIS-C since the last report. The median age of all cases is 9 years old (range from 1 to 16 years old).

**Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC
 Jan 15, 2020 (week 3) – Feb 26, 2022 (week 8)**

Severe outcomes by episode date	Health Authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 8, hospitalizations	39	80	51	37	17	0	224
Cumulative hospitalizations^b	8,192	3,186	1,372	1,718	3,557	17	18,042/348,409 (5)
Week 8, ICU admissions	4	16	5	10	3	0	38
Cumulative ICU admissions^b	1,378	792	324	399	801	2	3,696/348,409 (1)
Week 8, deaths	10	7	7	9	7	0	40
Cumulative deaths	1,304	355	219	314	696	0	2,888/348,409 (1)

- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. Data source: Health Authority case line lists only. Data may be incomplete and subject to change

Figure 8. Weekly COVID-19 hospital admissions and deaths by age groups, BC, Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8)



- a. Among those with available age information only.
- b. Data source: Health Authority case line list data only. Data may be incomplete and subject to change.

E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 8, median age of hospital admissions, ICU admissions and deaths was 63 years, 62 years and 82 years, respectively, based on Health Authority case line lists only (data not shown).

Since week 1 of 2022, there has been a weekly average of 1 death in those <50 years of age, 3 deaths in 50-59 year-olds, 7 deaths in 60-69 year-olds, 10 deaths in the 70-79 year-olds, and 36 deaths in the 80+ year-olds (data not shown). The number of deaths may increase over time as data becomes more complete.

Table 3: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group Jan 15, 2020 (week 3) – Feb 26, 2022 (week 8) (N= 348,306)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	29,164	332 (1)	27 (<1)	2 (<1)
10-19	35,136	261 (1)	34 (<1)	0 (<1)
20-29	70,044	1,083 (2)	121 (<1)	6 (<1)
30-39	66,482	1,873 (3)	309 (<1)	31 (<1)
40-49	51,477	1,875 (4)	399 (1)	62 (<1)
50-59	41,016	2,581 (6)	734 (2)	164 (<1)
60-69	27,389	3,215 (12)	924 (3)	341 (1)
70-79	14,084	3,295 (23)	813 (6)	621 (4)
80-89	8,968	2,588 (29)	314 (4)	958 (11)
90+	4,546	983 (22)	34 (1)	703 (15)
Total	348,306	18,086	3,709	2,888
Median age^c	35	63	62	82

- Among those with available age information only.
- Data sources: Health Authority case line lists and a subset of PHSA Provincial COVID19 Monitoring Solution (PCMS) data for children <20 years of age. PCMS data were included as of June 8 2021. Due to this change in data source, additional admissions that occurred since the start of the pandemic are now included in age groups 0-9 and 10-19 years.
- Median ages calculated are based on Health Authority case line lists only.

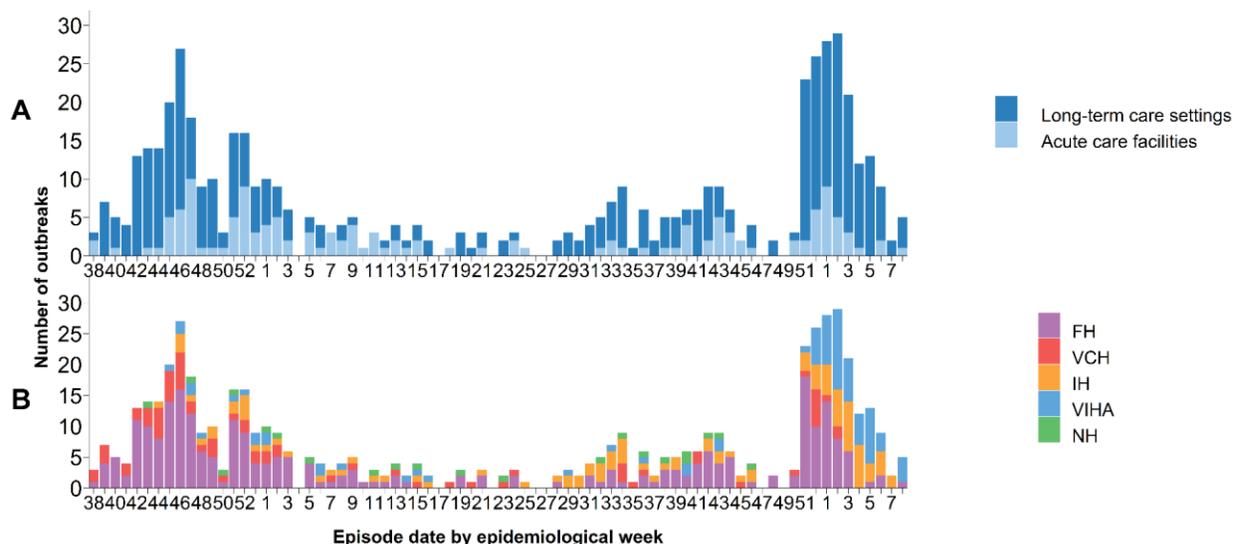
F. Care facility outbreaks

As shown in [Table 4](#) and [Figure 9](#), 600 care facility (acute care and long-term care settings) outbreaks were reported in total in BC to the end of week 8. In week 8, based on earliest case onset date, there were five new outbreaks declared. Since week 1 of 2022, the number of new outbreaks have been declining and the majority have been in long-term care settings. 7 of the 40 deaths (17.5%) reported in week 8 were associated with care facility outbreaks. The number of deaths may increase over time as data becomes more complete.

Table 4. COVID-19 care facility^{a,b} outbreaks by earliest case onset^{a,c}, associated cases and deaths by episode date, BC^d Jan 15, 2020 (week 3) – Feb 26, 2022 (week 8) (N=600)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 8, Care Facility Outbreaks	5	159	18	0	177	7	0	0	7
Cumulative, Care Facility Outbreaks	600	7,588	3,573	7	11,168	1,361	0	0	1,361

Figure 9. COVID-19 care facility^b outbreaks by earliest case onset^c, facility type (A) and Health Authority (B), BC^d Sept 13, 2020 (week 38) – Feb 26, 2022 (week 8) (N=532)



- New outbreaks reported since the last report with an earliest case onset date prior to the current reporting week will be included in the cumulative care facility outbreak total.
- Care facility settings include acute care or long-term care settings (defined as long-term care facility or assisted living).
- Earliest dates of onset of outbreak cases are subject to change as investigations and data are updated.
- As of week 46, VCH and FH no longer declare outbreaks with single staff cases unless there is evidence of transmission within the facility.

G. Wastewater surveillance

The BCCDC and Metro Vancouver have been testing for SARS-CoV-2 in wastewater at five wastewater treatment plants (representing 50% of BC’s population) since May 2020, in order to assess whether COVID-19 virus is present and how it might be changing over time. To account for possible effects of wastewater volume, SARS-CoV-2 concentrations have been normalized by daily wastewater flow. As shown in [Figure 10](#) and [Figure 11](#), viral signal from the wastewater surveillance correlates with COVID-19 case counts.

Key messages with results through to March 5: SARS-CoV-2 viral loads remain low in wastewater from all five wastewater treatment plants tested, in VCH and FH.

Figure 10. Wastewater surveillance, FH

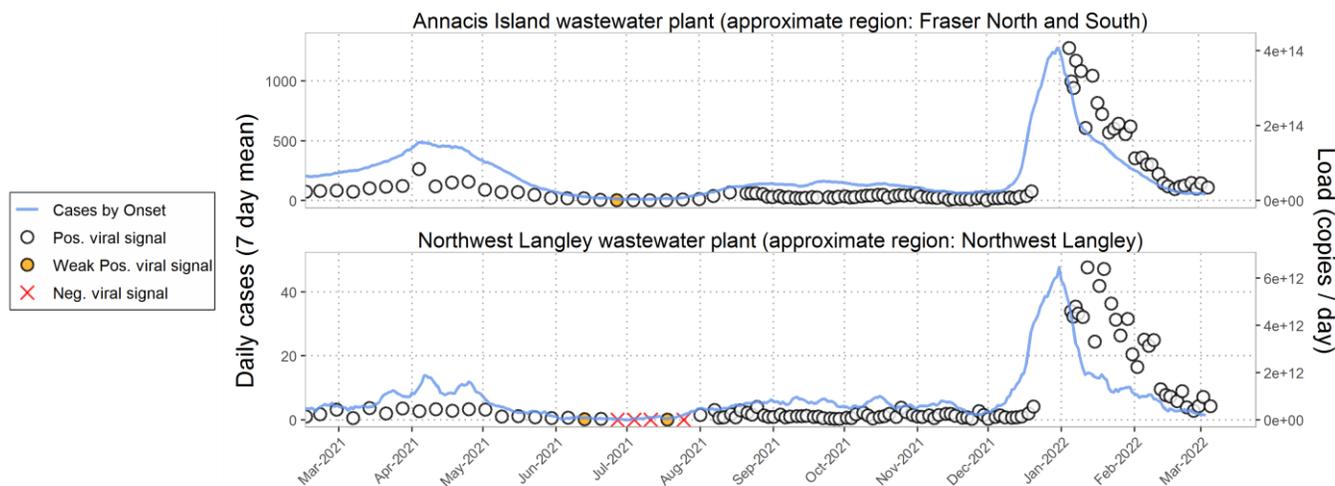
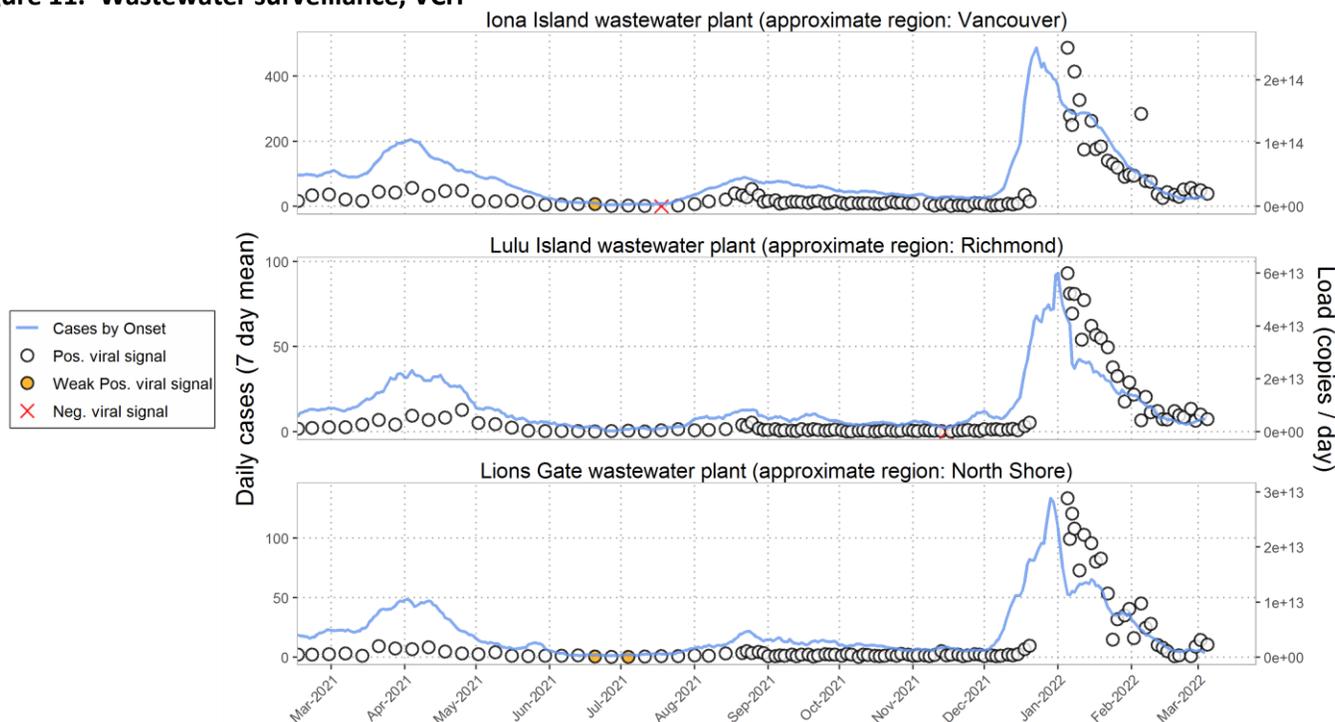


Figure 11. Wastewater surveillance, VCH



H. Additional resources

For maps and geographical distribution of cases and vaccinations, visit the BCCDC COVID-19 Regional Surveillance Dashboard here: <http://www.bccdc.ca/health-professionals/data-reports/covid-19-surveillance-dashboard>

Variant of concern (VOC) findings are available weekly here: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/data#variants>

For local, national, and global comparisons of BC to other jurisdictions on key epidemiological metrics, visit the BCCDC COVID-19 Epidemiology App here: https://bccdc.shinyapps.io/covid19_global_epi_app/

I. Appendix

[Vaccination phases](#) defined by vaccine eligibility of target populations in BC

Vaccination Phase 1 (December 2020 – February 2021)

Target populations include residents, staff and essential visitors to long-term care settings; individuals assessed and awaiting a long-term care placement; health care workers providing care for COVID-19 patients; and remote and isolated Indigenous communities.

Vaccination Phase 2 (February 2021 – April 2021)

Target populations include seniors, age ≥ 80 ; Indigenous peoples age ≥ 65 and Indigenous Elders; Indigenous communities; hospital staff, community general practitioners and medical specialists; vulnerable populations in select congregate settings; and staff in community home support and nursing services for seniors.

Vaccination Phase 3 (April 2021 – May 2021)

Target populations include people aged 60-79 years, Indigenous peoples aged 18-64 and people aged 16-74 who are clinically extremely vulnerable.

Vaccination Phase 4 (May 2021 – November 2021)

Target populations include everyone 12+ years. In September, third dose is available for people who are clinically extremely vulnerable.

Vaccination Phase 5 (November 2021 – February 2022)

Target populations include everyone 5+. Children aged 5-11 are eligible at the end of November. Everyone 18 and older will be invited to get a booster dose within 6-8 months of their second dose.

Vaccination Phase 6 (February 2022 – Present)

Target populations include everyone 5+. Everyone 12 and older will be invited to get a booster dose within 6-8 months of their second dose.