

British Columbia (BC) COVID-19 Situation Report

Week 12: March 20 - March 26, 2022

Data for week 12 (March 20 - March 26, 2022) may differ from the data published in the BCCDC weekly report. Data was extracted on April 01, 2022 for the situation report compared to April 06, 2022 for the weekly report. The situation report uses the pre-transition data sources.

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Epidemic curve and regional incidence	2	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 was 29 per 100K (1,543 cases) in week 12.
Test rates and % positive	3	Incidence by Health Authority from week 11 to week 12: <ul style="list-style-type: none"> • Fraser Health incidence decreased from 17 to 15 per 100K • Interior Health incidence decreased from 62 to 55 per 100K • Vancouver Island Health incidence increased from 28 to 44 per 100K • Northern Health incidence decreased from 51 to 47 per 100K • Vancouver Coastal Health incidence increased from 17 to 21 per 100K
Age profile, testing and cases	4	Testing of MSP-funded specimens decreased from ~11,200 in week 11 to ~10,200 in week 12. The percent positivity of MSP-funded specimens increased from 13.1% in week 11 to 15.5% in week 12.
Severe outcomes	6	The per capita testing rates for MSP-funded specimens decreased from week 11 to week 12 in all HAs except VIHA. The percent positivity for MSP-funded specimens increased from week 11 to week 12 in all HAs except FH. From week 11 to week 12, the testing rates decreased or remained stable in all age groups while the percent positivity increased in most age groups.
Age profile, severe outcomes	7	Age-specific incidence rates increased in most age groups from week 11 to week 12. Incidence rate increased the most in the 80+ year-olds from 91 per 100K in week 11 to 116 per 100K in week 12.
Care facility outbreaks	8	The number of hospital admissions decreased from 233 in week 11 to 197 in week 12. In week 12, 80+ year-olds had the highest number of hospital admissions (70 hospitalizations). The weekly number of deaths decreased from 20 in week 11 to 13 in week 12.
Wastewater surveillance	8	In week 12, 2 new care facility outbreaks were declared, based on earliest case onset date. 1 of the 13 deaths (8%) reported in week 12 were associated with a care facility outbreak.
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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 April 01, 2022, laboratory data on April 01, 2022, and PCMS hospitalization data on April 01, 2022.
- Data for week 12 (March 20 - March 26, 2022) may differ from the data published in the BCCDC weekly report. Data was extracted on April 01, 2022 for the situation report compared to April 06, 2022 for the weekly report. The situation report uses the pre-transition data sources.

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 12, there have been 355,672 cases for a cumulative incidence of 6,750 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 29 per 100K (1,543 cases) in week 12, 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 rate decreased in Fraser Health (FH), Interior Health (IH), and Northern Health (NH) from week 11 to week 12. From week 11 to week 12, incidence rate increased from 28 per 100K to 44 per 100K and 17 per 100K to 21 per 100K in Vancouver Island Health (VIHA) and Vancouver Coastal Health (VCH), respectively. In week 12, the highest incidence rate was in IH at 55 per 100K.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – Mar 26, 2022 (week 12) (N= 355,672)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 12, case counts	293	453	391	145	261	0	1,543
Cumulative case counts	158,555	62,362	33,110	29,309	71,946	390	355,672
Week 12, cases per 100K population	15	55	44	47	21	NA	29
Cumulative cases per 100K population	7,979	7,528	3,762	9,575	5,702	NA	6,750

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Mar 26, 2022 (week 12) (N= 347,825)

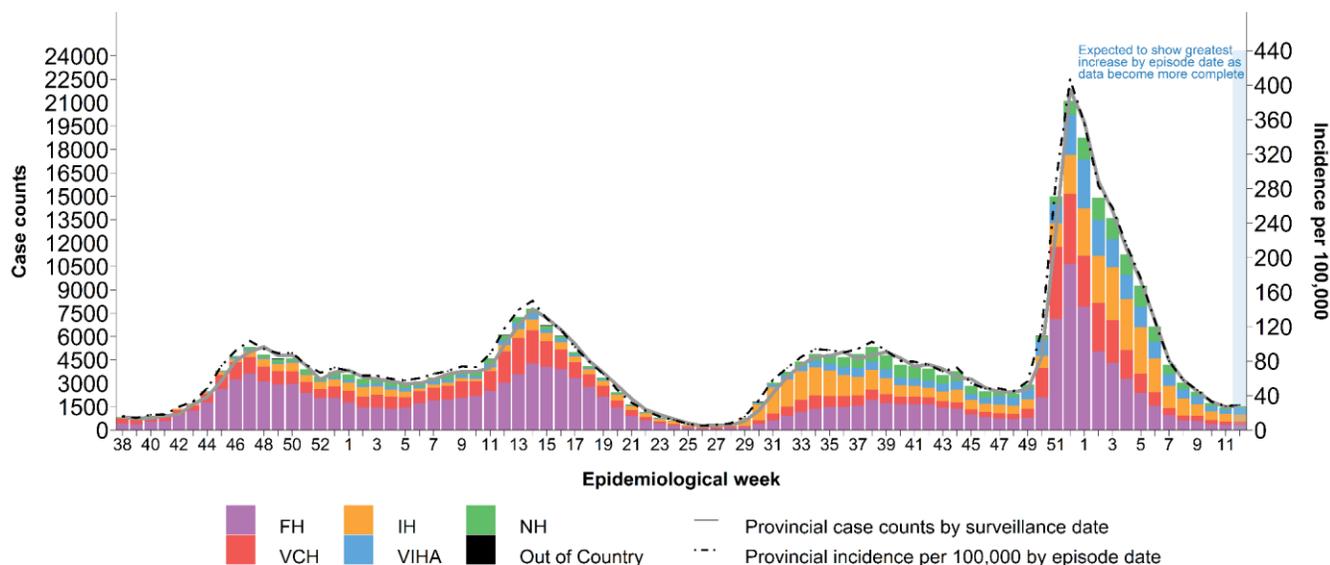
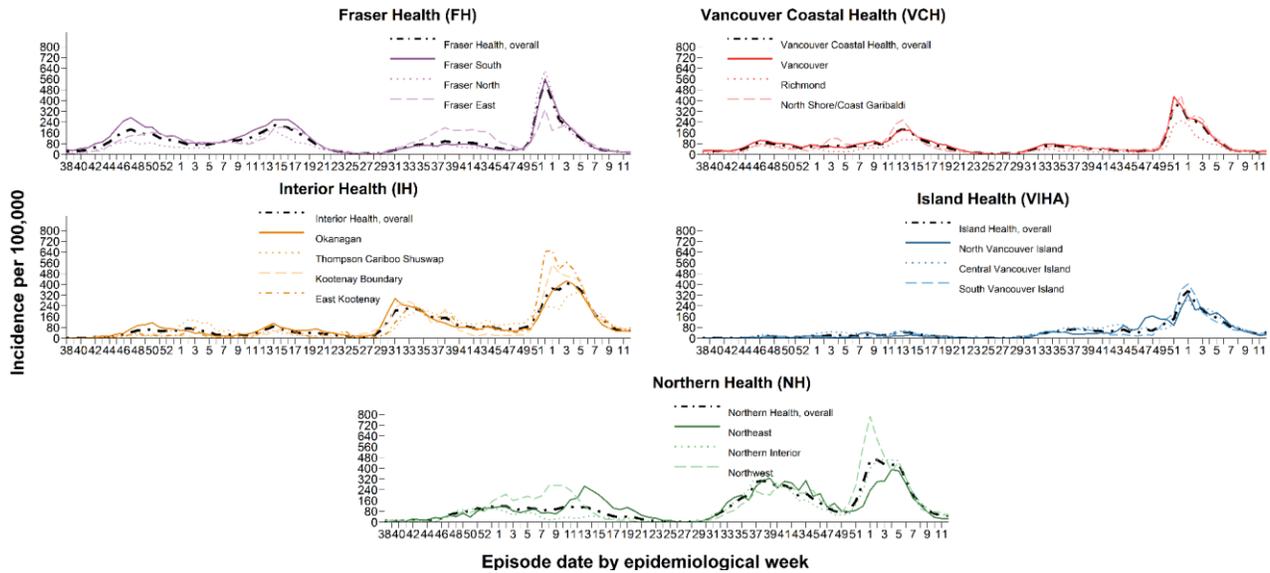


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Mar 26, 2022 (week 12) (N= 347,825)



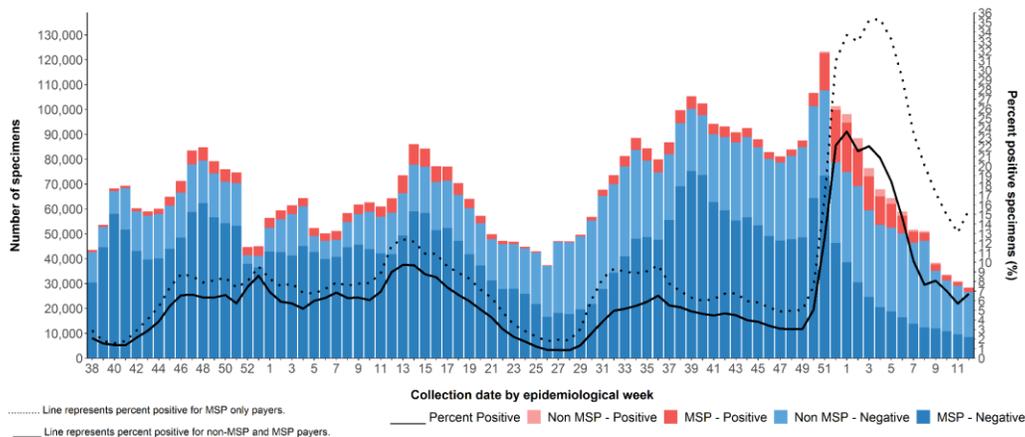
B. Test rates and percent positive

[COVID-19 testing guidelines](#) recommend testing for people who have COVID-19 symptoms, and are at risk for severe disease or live/work in high-risk settings. As shown by the darker-colored bars and dotted line in [Figure 3](#), the number of MSP-funded specimens and the percent positivity of MSP-funded specimens have continued to decrease from the peak of ~88,900 in week 51 and the peak of 35.4% in week 4, respectively. Between week 11 and week 12, the number of MSP-funded specimens decreased from ~11,200 to ~10,200 while the percent positivity of MSP-funded specimens increased from 13.1% to 15.5%.

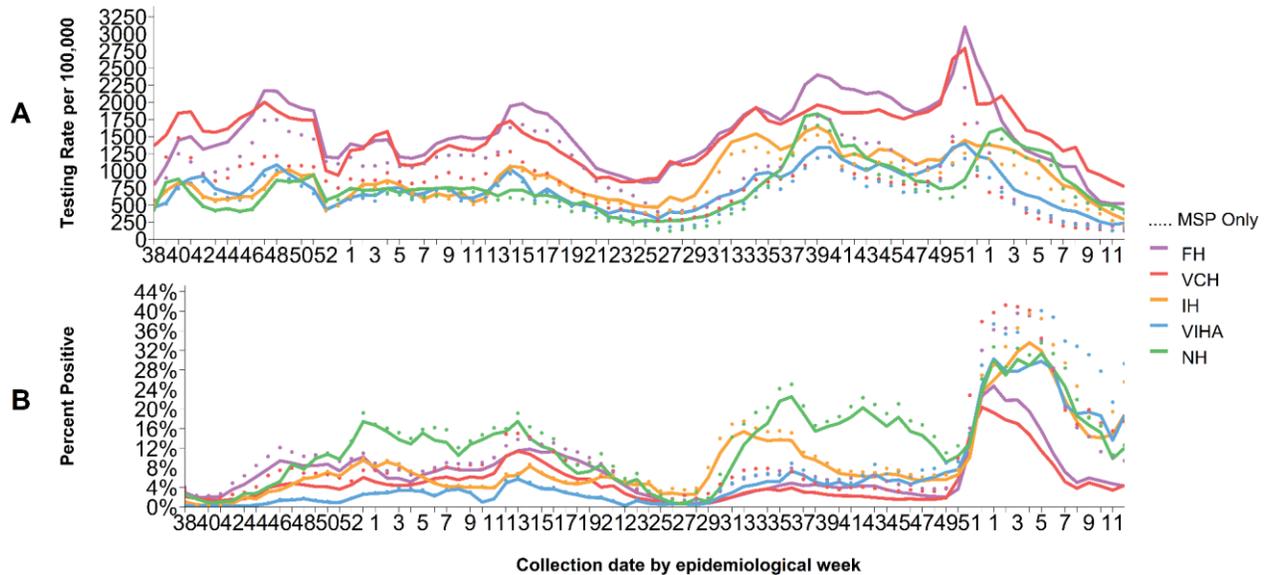
As shown by the dotted lines in [Figure 4](#), the per capita testing rates for MSP-funded specimens (Panel A) decreased from week 11 to week 12 in all HAs except VIHA, where testing rate increased from 130 per 100K in week 11 to 144 per 100K in week 12. In week 12, NH had the highest testing rate at 380 per 100K.

Percent positivity (Panel B) for MSP-funded specimens increased from week 11 to week 12 in all HAs except FH, where it remained stable at 10.3% in week 11 and 9.4% in week 12. Percent positivity increased the most in VIHA from 21.4% in week 11 to 29.3% in week 12. In week 12, percent positivity ranged from 9.4% in FH to 29.3% in VIHA.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Mar 26, 2022 (week 12)



Note: Invalid (n = 3446) and indeterminate (n = 17843) 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) – Mar 26, 2022 (week 12)

Data source: laboratory PLOVER data

C. Age profile – Testing and cases

Testing rates and percent positivity by age group

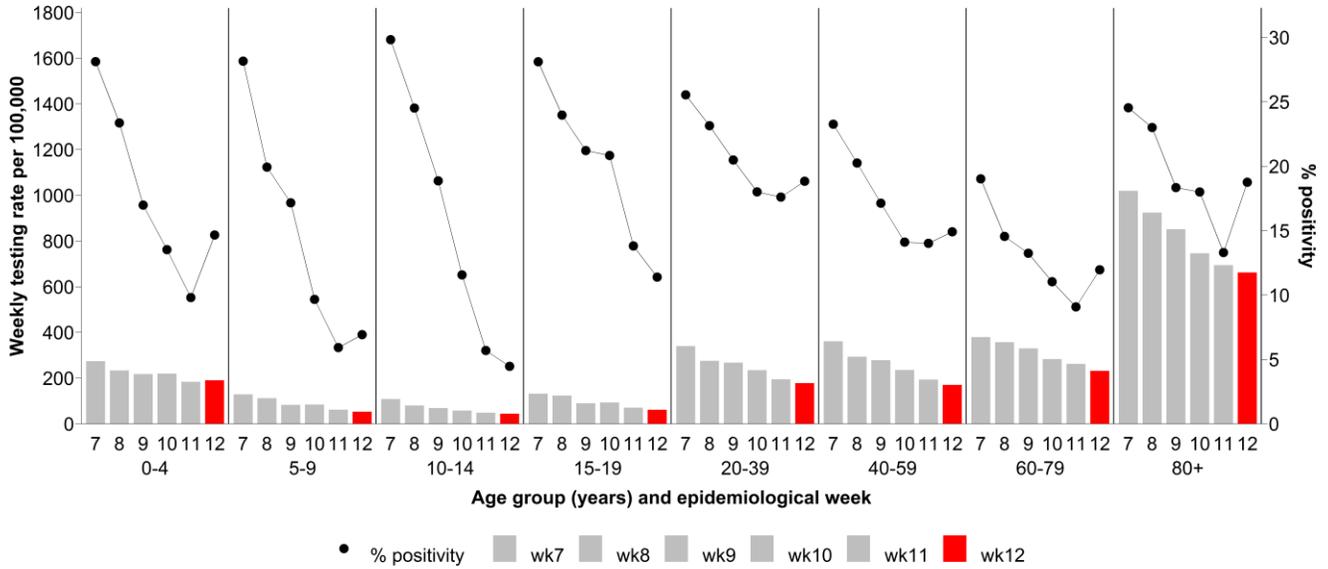
As shown by the bars in [Figure 5](#), testing rates decreased or remained stable in all age groups from week 11 to week 12. In week 12, testing rate was highest in those aged 80+ at 662 per 100K, which likely reflected the age group prioritized for testing.

As shown by the black dots in [Figure 5](#), the percent positivity increased from week 11 to week 12 all age groups other than the 10-14 and 15-19 age groups. Between week 11 and week 12, percent positivity increased the most in the 80+ and 0-4 year-olds from 13.3% to 18.8% and 9.8% to 14.7%, respectively. In week 12, 20-39 and 80+ year-olds had the highest percent positivity at 18.8%.

Case distribution and weekly incidence by age group

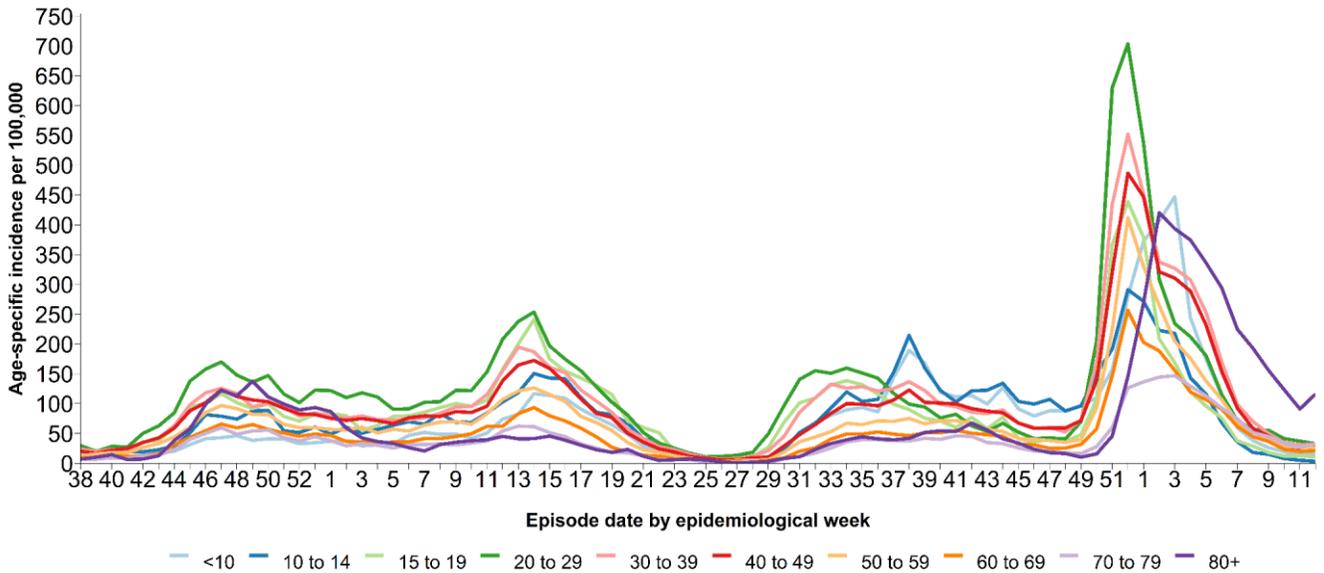
As shown in [Figure 6](#), age-specific incidence rates increased in the <10, 40-49, 60-69, 70-79, and 80+ age groups from week 11 to week 12. Incidence rate increased the most in the 80+ year-olds from 91 per 100K in week 11 to 116 per 100K in week 12. Age-specific incidences may increase as data become 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 Feb 19, 2022 (week 7) – Mar 26, 2022 (week 12)



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) – Mar 26, 2022 (week 12) (N= 347,734)



D. Severe outcome counts and epi-curve

The number of hospital admissions decreased from 233 in week 11 to 197 in week 12. In week 12, 80+ year-olds had the highest number of hospital admissions (70 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 20 in week 11 to 13 in week 12 ([Table 2, Figure 8](#)). Detailed information about outcomes by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

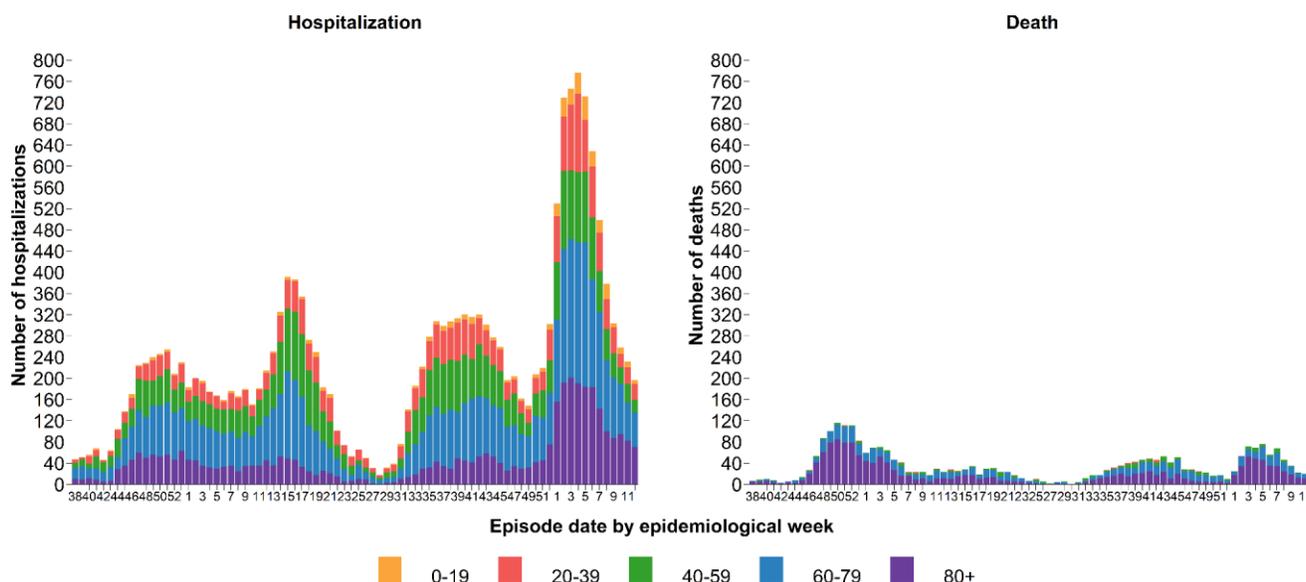
Cumulatively, there have been 29 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There have been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 years old (range from 1 to 16 years old).

**Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC
 Jan 15, 2020 (week 3) – Mar 26, 2022 (week 12)**

Severe outcomes by episode date	Health Authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 12, hospitalizations	76	48	26	15	32	0	197
Cumulative hospitalizations^b	9,057	3,432	1,527	1,826	3,785	17	19,644/355,672 (6)
Week 12, ICU admissions	2	3	1	4	3	0	13
Cumulative ICU admissions^b	1,432	820	335	412	835	2	3,836/355,672 (1)
Week 12, deaths	6	2	0	3	2	0	13
Cumulative deaths	1,347	366	238	326	716	0	2,993/355,672 (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) – Mar 26, 2022 (week 12)



- a. Among those with available age information only.
- b. Data source: Health Authority case line lists 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 12, 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).

From week 9 to week 12, there has been a weekly average of <1 death in those <50 years of age, <1 death in 50-59 year-olds, 2 deaths in 60-69 year-olds, 7 deaths in the 70-79 year-olds, and 13 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) – Mar 26, 2022 (week 12) (N= 355,562)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	29,517	376 (1)	32 (<1)	2 (<1)
10-19	35,356	294 (1)	36 (<1)	0 (<1)
20-29	71,215	1,182 (2)	128 (<1)	6 (<1)
30-39	67,640	2,038 (3)	313 (<1)	31 (<1)
40-49	52,328	1,998 (4)	412 (1)	64 (<1)
50-59	41,882	2,715 (6)	746 (2)	166 (<1)
60-69	28,114	3,480 (12)	965 (3)	351 (1)
70-79	14,748	3,593 (24)	849 (6)	654 (4)
80-89	9,750	2,891 (30)	332 (3)	986 (10)
90+	5,012	1,128 (23)	38 (1)	733 (15)
Total	355,562	19,695	3,851	2,993
Median age^c	36	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.

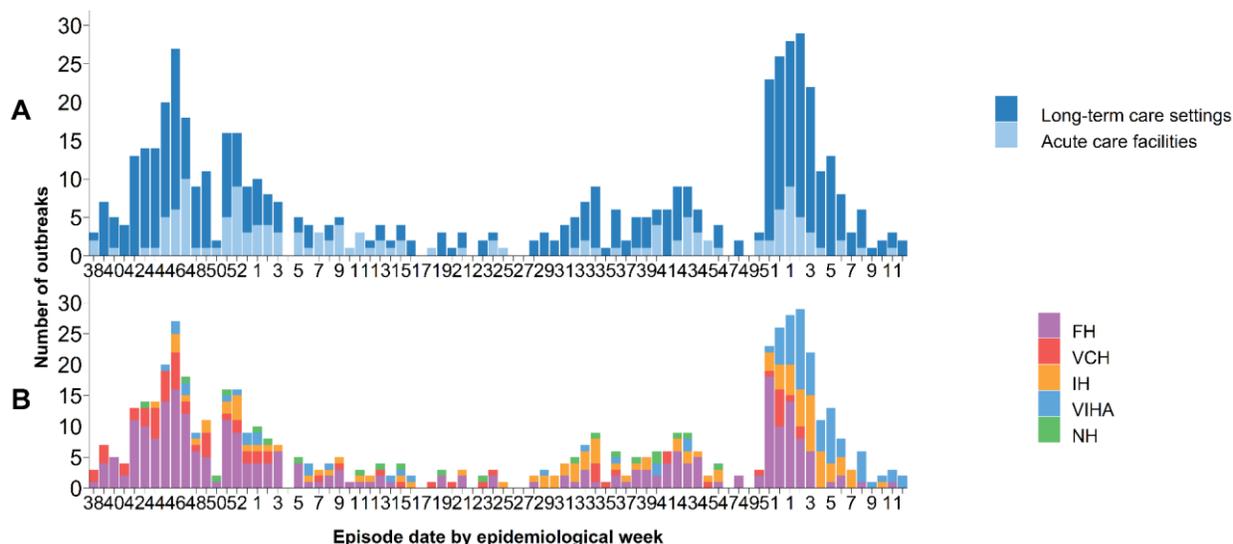
F. Care facility outbreaks

As shown in [Table 4](#) and [Figure 9](#), 609 care facility (acute care and long-term care settings) outbreaks were reported in total in BC to the end of week 12. In week 12, based on earliest case onset date, 2 new outbreaks were declared. Since week 1 of 2022, the number of new outbreaks have generally been declining and the majority of outbreaks have been in long-term care settings. 1 of the 13 deaths (8%) reported in week 12 were associated with a care facility outbreak. 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) – Mar 26, 2022 (week 12) (N=609)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 12, Care Facility Outbreaks	2	79	11	0	90	1	0	0	1
Cumulative, Care Facility Outbreaks	609	7,853	3,621	7	11,481	1,377	0	0	1,377

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) – Mar 26, 2022 (week 12) (N=541)



- 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. For each sample collected, Metro Vancouver measures the daily wastewater flow (i.e. volume coming into the wastewater treatment plants). Wastewater flows can change with rainfall and snowmelt. To account for possible effects of wastewater volume, SARS-CoV-2 concentrations have been normalized by daily wastewater flow and referred to as viral load to wastewater treatment plant (copies/day). All COVID-19 positive cases are mapped to each sewage catchment. As shown in [Figure 10](#) and [Figure 11](#), SARS-CoV-2 wastewater results are compared to the incidence of community COVID-19 cases.

Key messages with results through to April 2:

- After a period of stability following decreases from the peak of the Omicron wave, wastewater SARS-CoV-2 viral loads have increased in recent weeks.

- SARS-CoV-2 viral loads show an increasing trend in Annacis Island wastewater over the past three weeks.
- SARS-CoV-2 viral loads show an increasing trend in Northwest Langley wastewater over the past two weeks.
- SARS-CoV-2 viral loads show an increasing trend in Iona Island and Lulu Island over the past three weeks.
- SARS-CoV-2 viral loads are variable in Lions Gate wastewater and do not show a clear trend.

Figure 10. Wastewater surveillance, FH

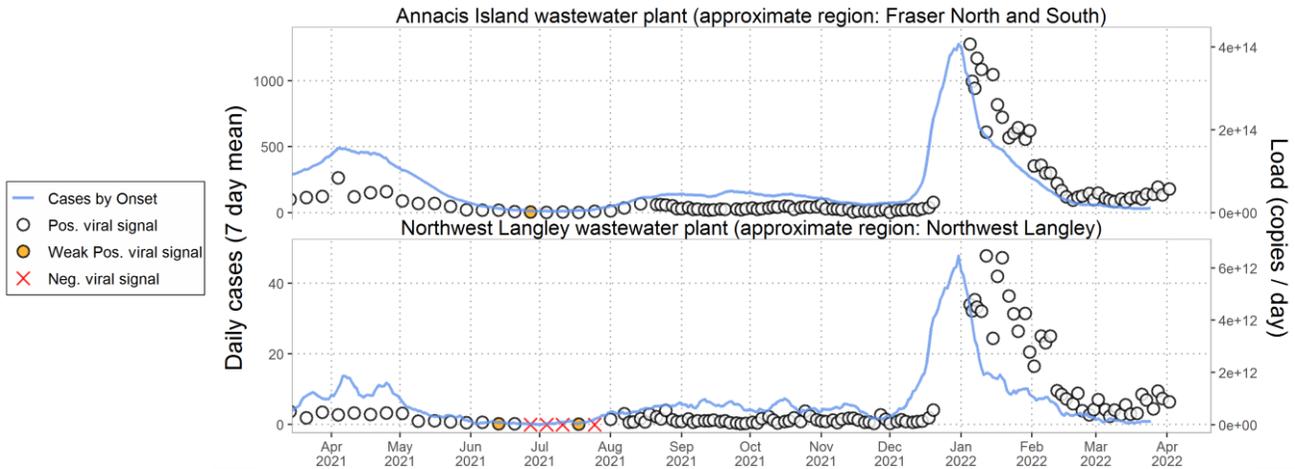
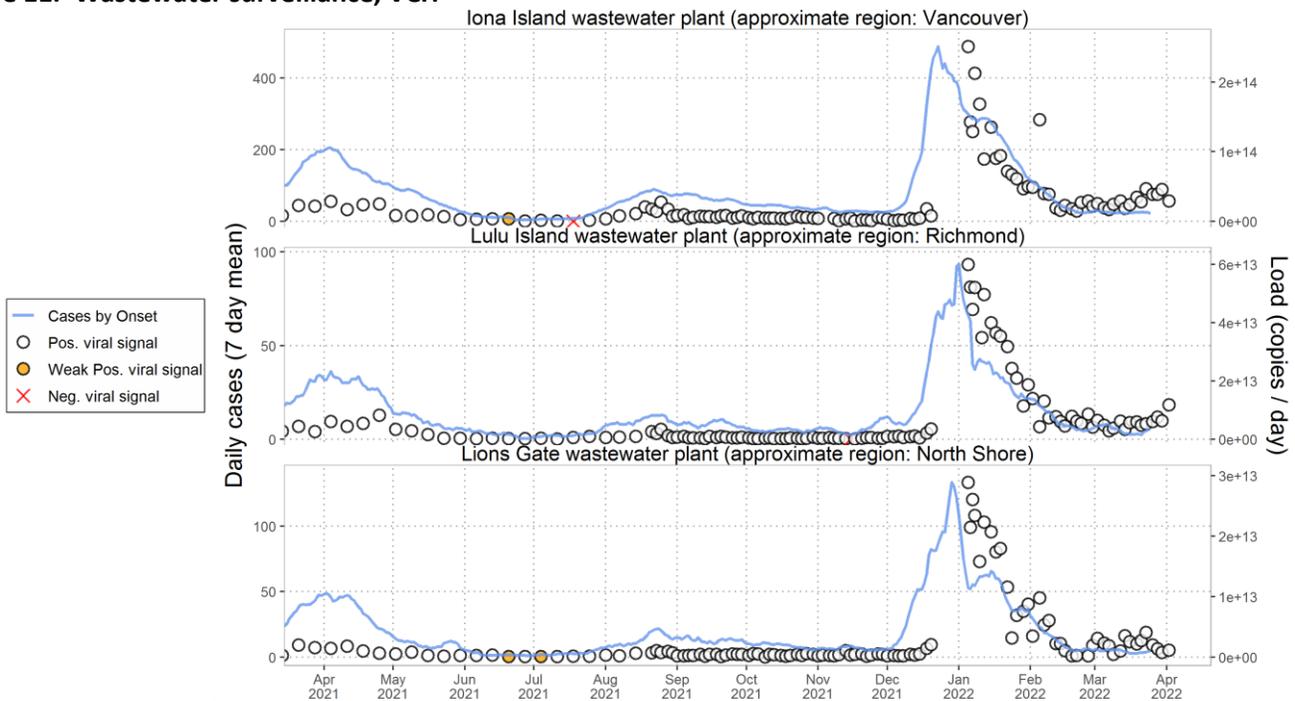


Figure 11. Wastewater surveillance, VCH



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.