

British Columbia (BC) COVID-19 Situation Report
Week 11: March 13- March 19, 2022

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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 March 28, 2022, laboratory data on March 25, 2022, and PCMS hospitalization data on March 28, 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 11, there have been 354,135 cases for a cumulative incidence of 6,720 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 27 per 100K (1,432 cases) in week 11, 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 10 to week 11. From week 10 to week 11, incidence rates decreased the most in Vancouver Island Health (VIHA) and Northern Health (NH) from 40 to 28 per 100K and from 63 to 49 per 100K, respectively. In week 11, the highest incidence rate was in IH at 59 per 100K.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – Mar 19, 2022 (week 11) (N= 354,135)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 11, case counts	337	489	246	149	211	0	1,432
Cumulative case counts	158,268	61,889	32,726	29,174	71,688	390	354,135
Week 11, cases per 100K population	17	59	28	49	17	NA	27
Cumulative cases per 100K population	7,964	7,471	3,718	9,531	5,681	NA	6,720

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Mar 19, 2022 (week 11) (N= 346,288)

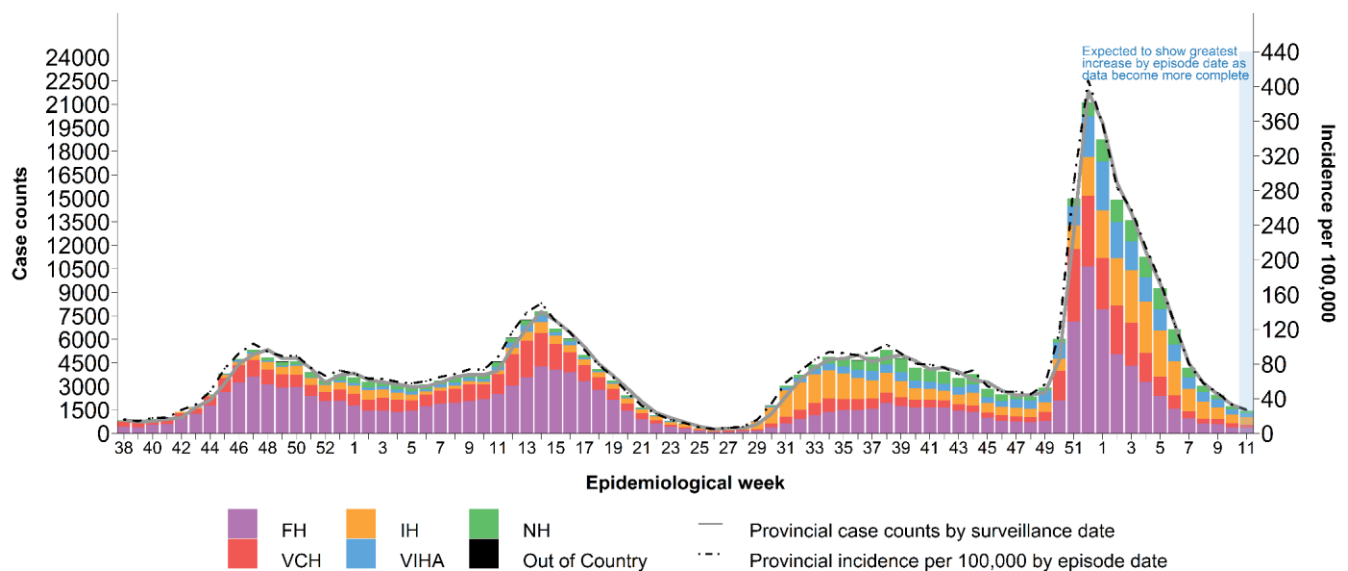
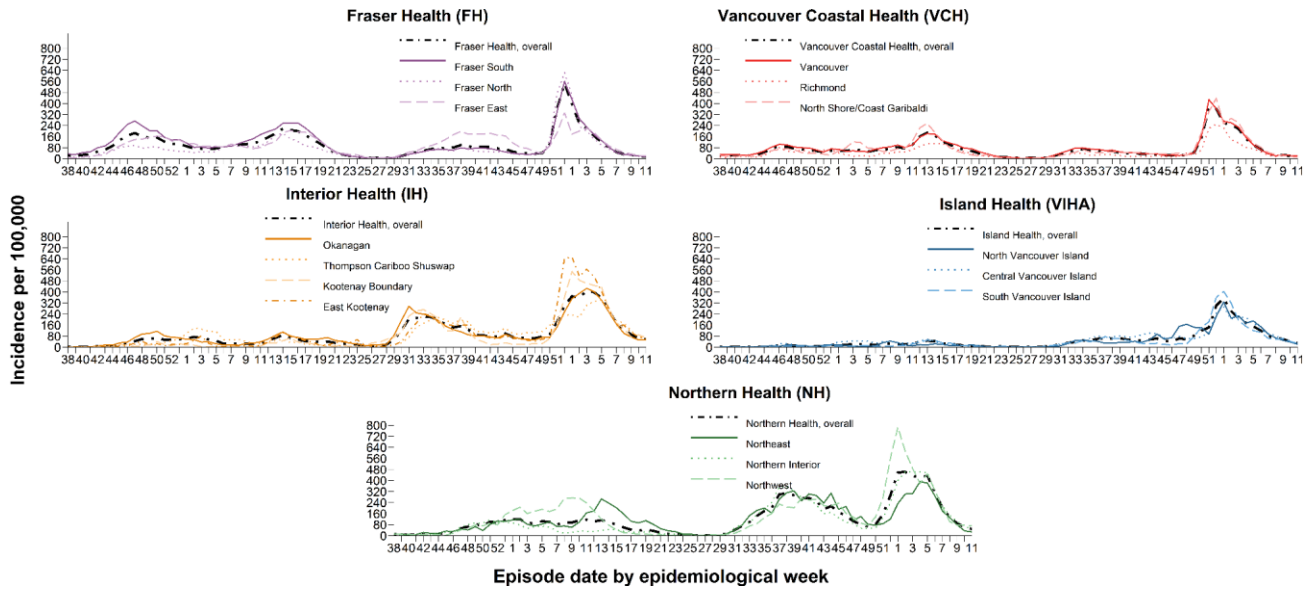


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Mar 19, 2022 (week 11) (N= 346,288)



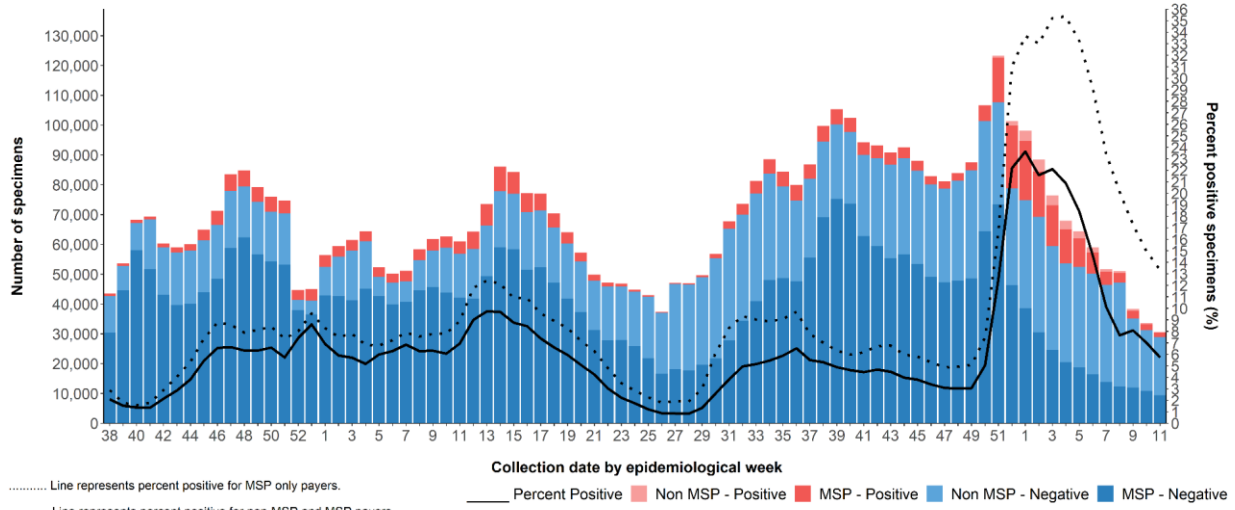
B. Test rates and percent positive

[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 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 10 and week 11, the number of MSP-funded specimens decreased from ~13,000 to ~11,000 and the percent positivity of MSP-funded specimens decreased from 14.9% to 13.3%.

As shown in [Figure 4](#), the per capita testing rates for MSP-funded specimens (Panel A) decreased in all HAs from week 10 to week 11. From week 10 to week 11, testing rates decreased the most in IH, from 372 to 272 per 100K. In week 11, NH had the highest testing rate at 372 per 100K.

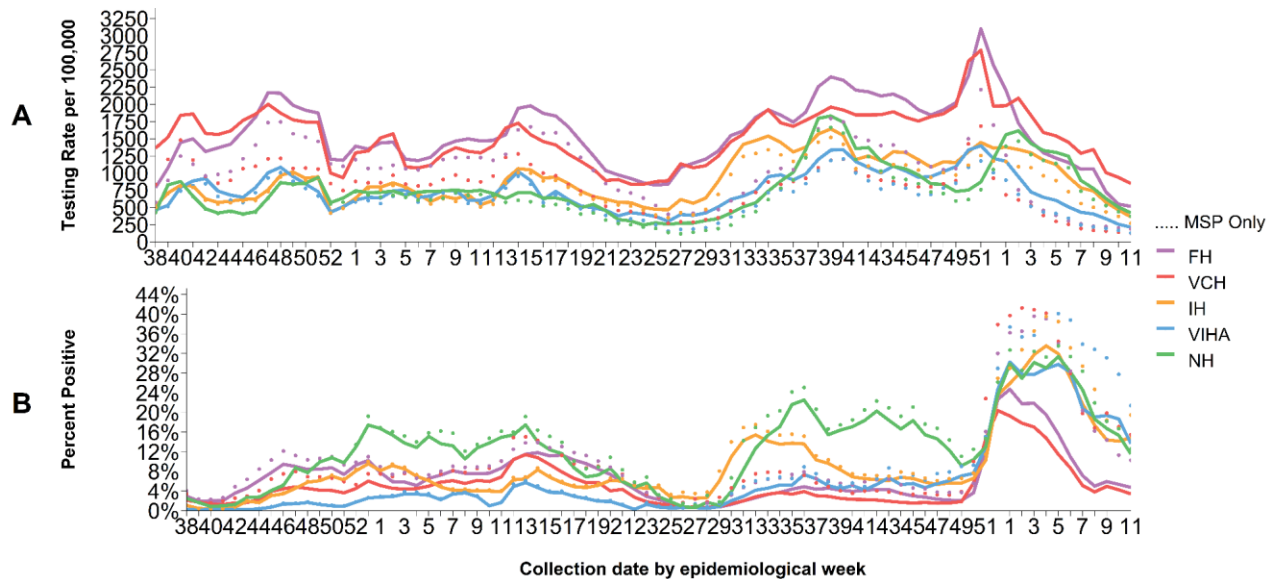
Percent positivity (Panel B) for MSP-funded specimens from week 10 to week 11 decreased in all HAs other than IH, where it increased from 16.8% in week 10 to 19.5% in week 11. Percent positivity in week 11 ranged from 10.2% in FH to 21.4% in VIHA.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Mar 19, 2022 (week 11)



Note: Invalid (n = 3422) and indeterminate (n = 17645) 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 19, 2022 (week 11)



Data source: laboratory PLOVER data

C. Age profile – Testing and cases

Testing rates and percent positivity by age group

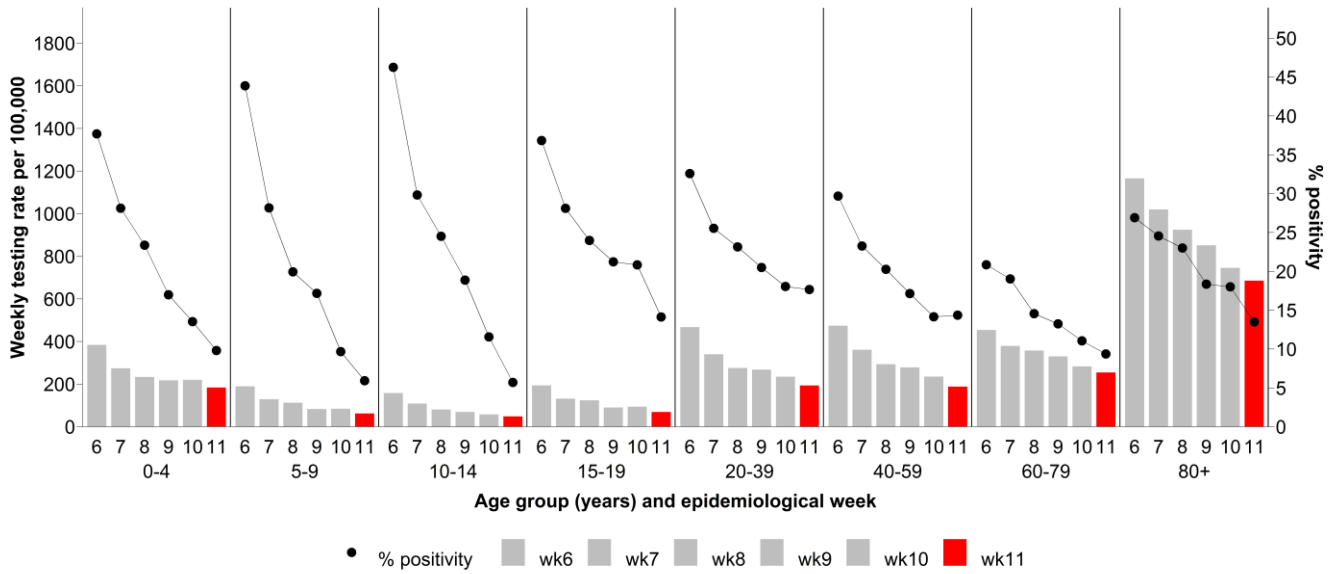
As shown by the bars in [Figure 5](#), testing rates decreased or remained stable in all age groups from week 10 to week 11. Testing rates in week 11 were highest in those aged 80+ at 686 per 100K, which likely reflected the age group prioritized for testing.

As shown by the black dots in [Figure 5](#), the percent positivity decreased or remained stable in all age groups from week 10 to week 11. The highest percent positivity in week 10 was in the 20-39 year-olds at 17.7%.

Case distribution and weekly incidence by age group

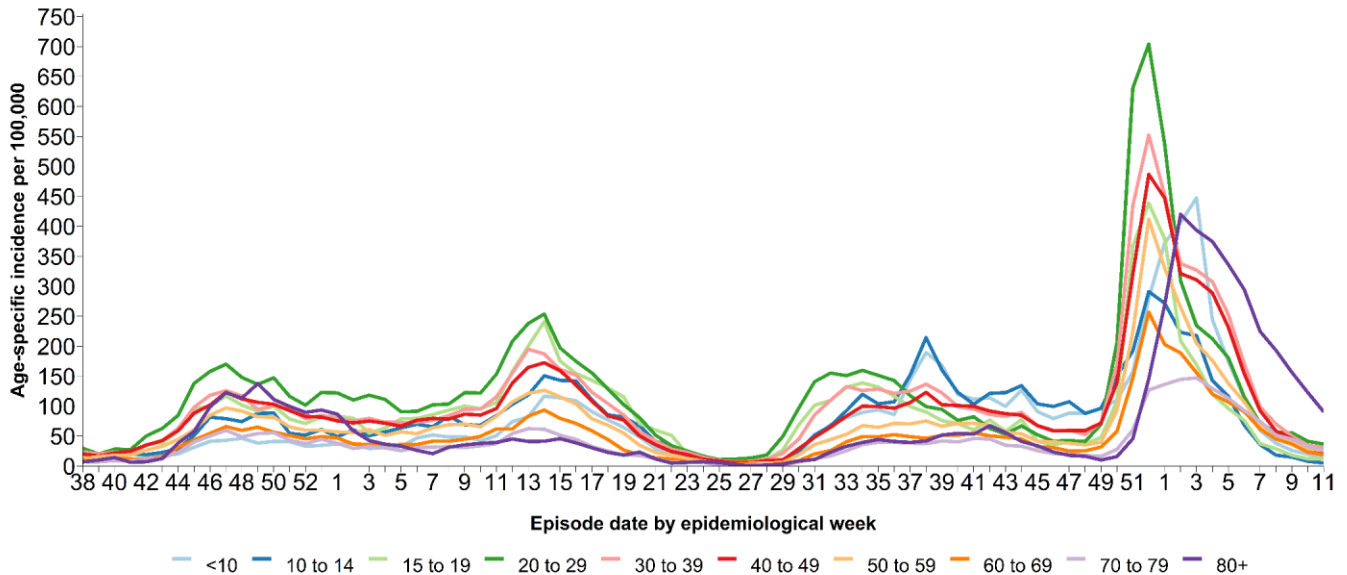
As shown in [Figure 6](#), age-specific incidence rates decreased or stabilized across all age groups from week 10 to week 11. From week 10 to week 11, incidence rates decreased the most in the 80+ age group from 123 to 90 per 100K. Age-specific incidences may increase as data become more complete. Detailed 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 12, 2022 (week 6) – Mar 19, 2022 (week 11)



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 19, 2022 (week 11) (N= 346,199)



D. Severe outcome counts and epi-curve

The number of hospital admissions decreased from 264 in week 10 to 211 in week 11. In week 11, 80+ year-olds had the highest number of hospital admissions (68 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 was stable from 21 in week 10 to 20 in week 11 ([Table 2, Figure 8](#)). Detailed information about outcomes by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

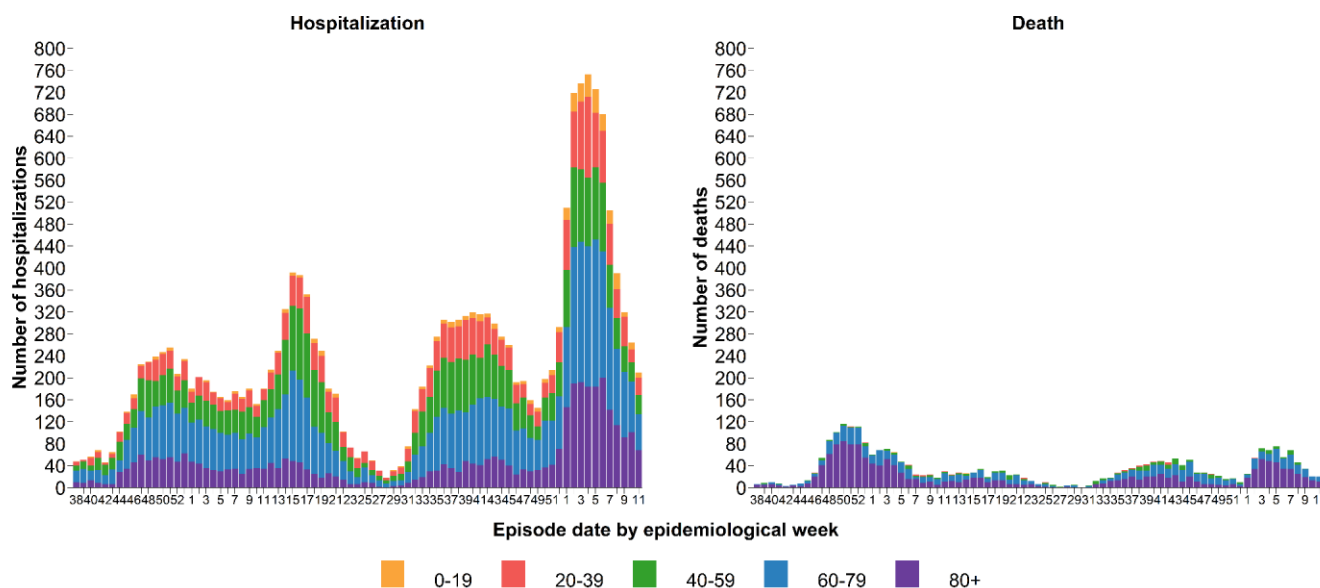
Cumulatively, there have been 29 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There has been one new confirmed case of MIS-C since the last report. The median age of all cases is 9 years old (range from 1 to 16 years old).

Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC Jan 15, 2020 (week 3) – Mar 19, 2022 (week 11)

Severe outcomes by episode date	Health Authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 11, hospitalizations	78	53	24	20	36	0	211
Cumulative hospitalizations^b	8,963	3,371	1,491	1,807	3,735	17	19,384/354,135 (5)
Week 11, ICU admissions	9	5	1	4	8	0	27
Cumulative ICU admissions^b	1,430	814	332	409	829	2	3,816/354,135 (1)
Week 11, deaths	6	0	9	2	3	0	20
Cumulative deaths	1,341	364	238	323	713	0	2,979/354,135 (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 19, 2022 (week 11)



- 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 11, 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 7 to week 11, there has been a weekly average of 1 death in those <50 years of age, 2 deaths in 50-59 year-olds, 5 deaths in 60-69 year-olds, 10 deaths in the 70-79 year-olds, and 20 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 19, 2022 (week 11) (N= 354,027)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	29,440	368 (1)	29 (<1)	2 (<1)
10-19	35,318	291 (1)	36 (<1)	0 (<1)
20-29	70,998	1,169 (2)	128 (<1)	6 (<1)
30-39	67,394	2,011 (3)	312 (<1)	31 (<1)
40-49	52,156	1,980 (4)	409 (1)	64 (<1)
50-59	41,705	2,701 (6)	746 (2)	165 (<1)
60-69	27,968	3,436 (12)	959 (3)	350 (1)
70-79	14,586	3,545 (24)	845 (6)	649 (4)
80-89	9,564	2,831 (30)	328 (3)	981 (10)
90+	4,898	1,100 (22)	37 (1)	731 (15)
Total	354,027	19,432	3,829	2,979
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.

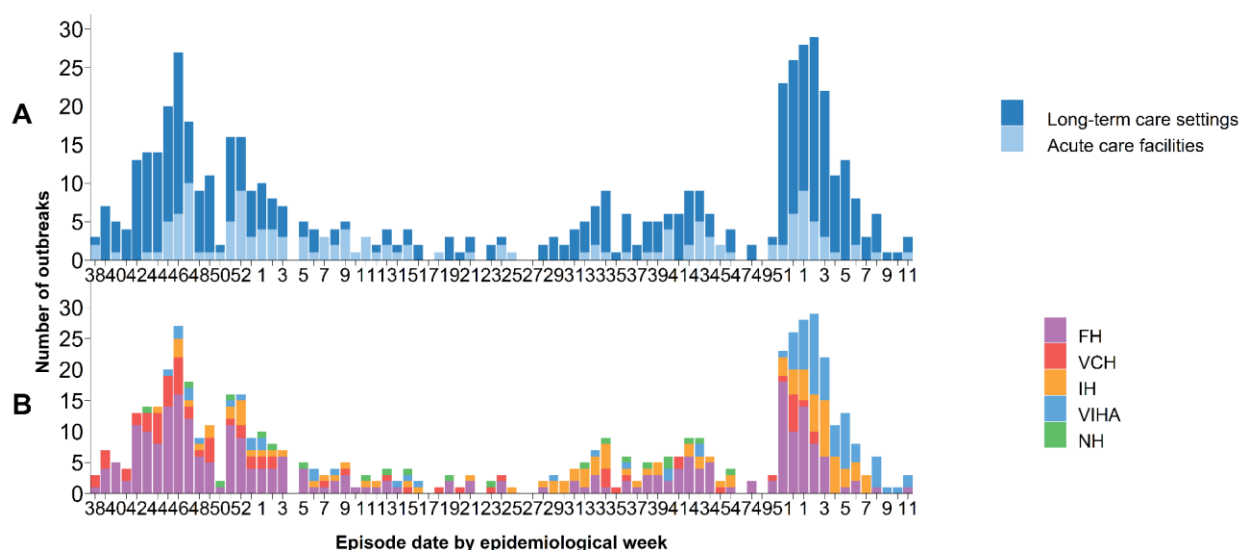
F. Care facility outbreaks

As shown in [Table 4](#) and [Figure 9](#), 606 care facility (acute care and long-term care settings) outbreaks were reported in total in BC to the end of week 11. In week 11, based on earliest case onset date, 3 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. 3 of the 20 deaths (15%) reported in week 11 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 19, 2022 (week 11) (N=606)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 11, Care Facility Outbreaks	3	28	3	0	31	3	0	0	3
Cumulative, Care Facility Outbreaks	606	7,767	3,610	7	11,384	1,376	0	0	1,376

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 19, 2022 (week 11) (N=538)



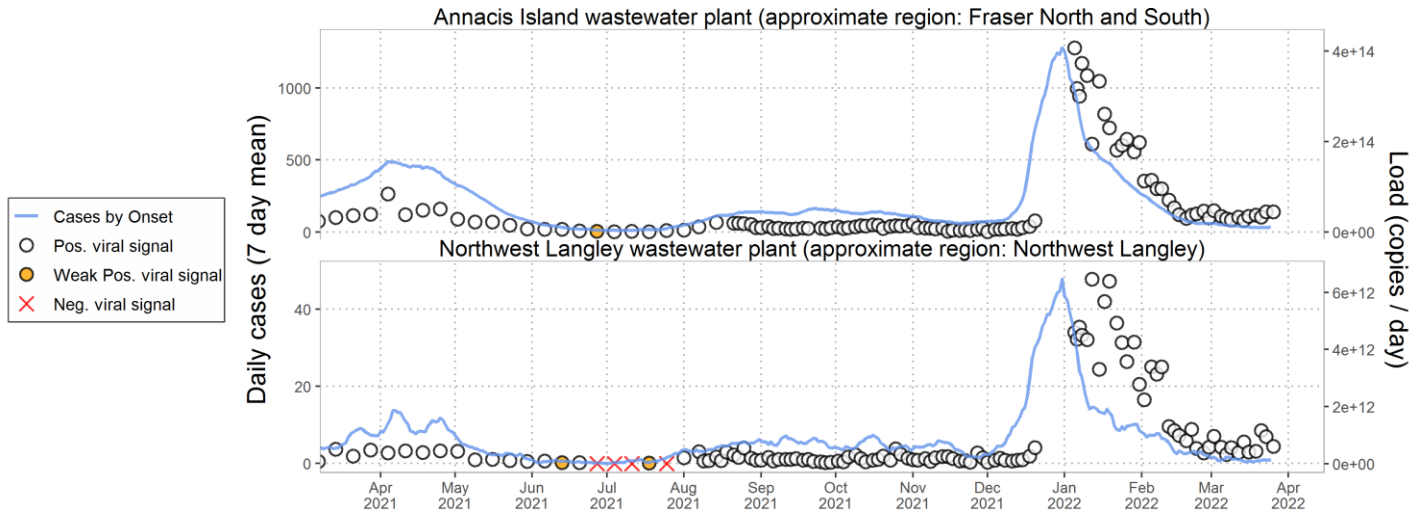
- New outbreaks reported since the last report with an earliest case onset date prior to the current reporting week will be included in the cumulative care facility outbreak total.
- Care facility settings include acute care or long-term care settings (defined as long-term care facility or assisted living).
- 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.

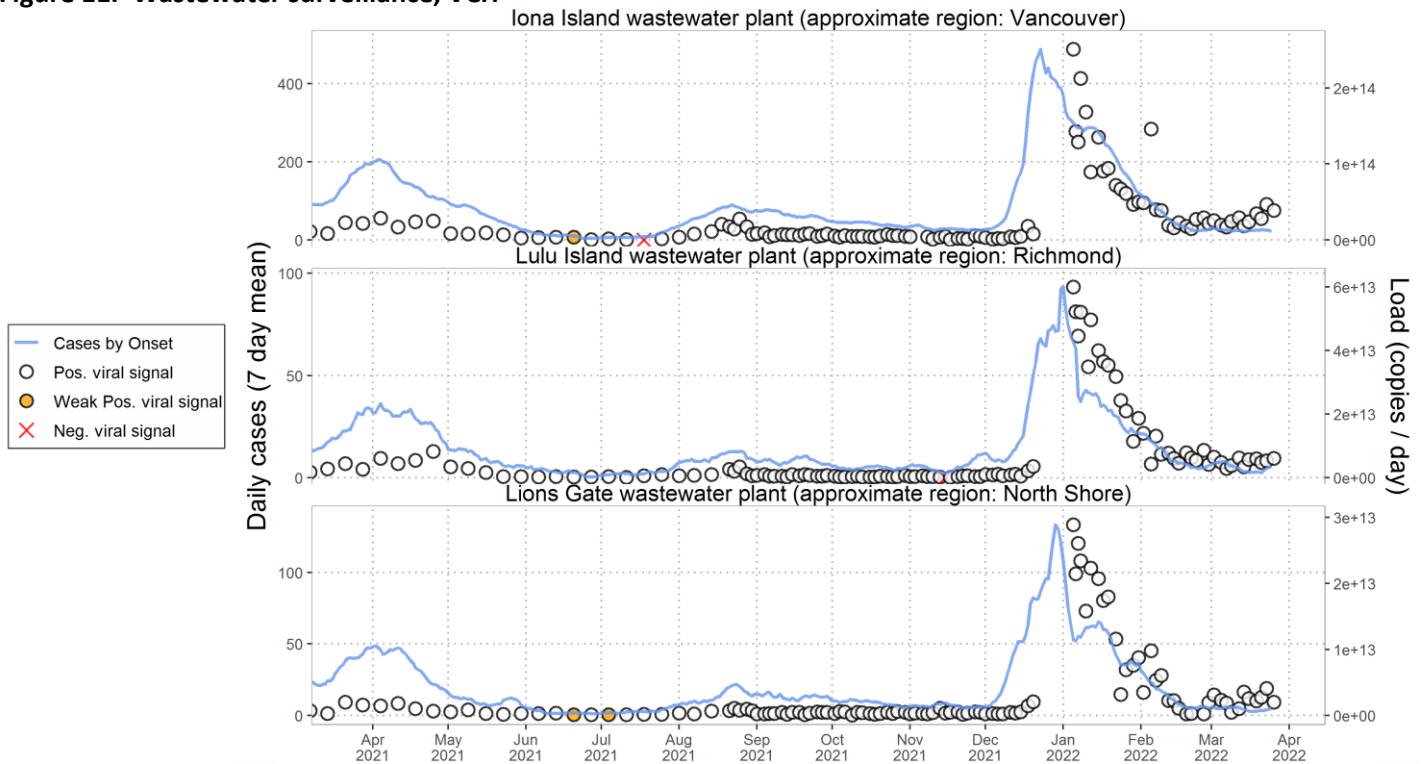
After a period of stability following decreases from the peak of the Omicron wave, wastewater levels of SARS-CoV-2 have increased in recent weeks. This trend is most notable in Vancouver but present in other monitored regions of Metro Vancouver.

Figure 10. Wastewater surveillance, FH



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

Figure 11. Wastewater surveillance, VCH



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

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.