

British Columbia (BC) COVID-19 Situation Report
Week 7: February 13- February 19, 2022

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Test rates and % positive	3	Incidence by Health Authority decreased from week 6 to week 7: <ul style="list-style-type: none"> • Fraser Health incidence decreased from 80 to 48 per 100K • Interior Health incidence decreased from 262 to 170 per 100K • Vancouver Island Health incidence decreased from 121 to 80 per 100K • Northern Health incidence decreased from 315 to 192 per 100K • Vancouver Coastal Health incidence decreased from 68 to 36 per 100K
Age profile, testing and cases	4	Testing of MSP-funded specimens decreased from the peak of ~88,900 in week 51 to ~18,300 in week 7. The positivity of MSP-funded specimens decreased from 29.4% in week 6 to 23.7% in week 7.
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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, PHSA Provincial Immunization Registry (PIR), and hospital data (PHSA Provincial COVID19 Monitoring Solution (PCMS)).
- Case data were extracted on February 28, 2022, laboratory data on February 25, 2022, PIR vaccine coverage date on February 25, 2022, and PCMS hospitalization data on February 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 7, there have been 345,307 cases for a cumulative incidence of 6,553 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 78 per 100K (4,120 cases) in week 7, 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 6 to week 7. From week 6 to week 7 incidence rates decreased the most in Northern Health (NH) and Interior Health (IH) from 315 to 192 per 100K and from 262 to 170 per 100K, respectively. In week 7, the incidence rate of 192 per 100K in NH was the highest in BC.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – Feb 19, 2022 (week 7) (N= 345,307)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 7, case counts	958	1,410	702	587	454	9	4,120
Cumulative case counts	156,339	58,909	30,988	28,101	70,583	387	345,307
Week 7, cases per 100K population	48	170	80	192	36	NA	78
Cumulative cases per 100K population	7,867	7,111	3,521	9,181	5,594	NA	6,553

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Feb 19, 2022 (week 7) (N= 337,460)

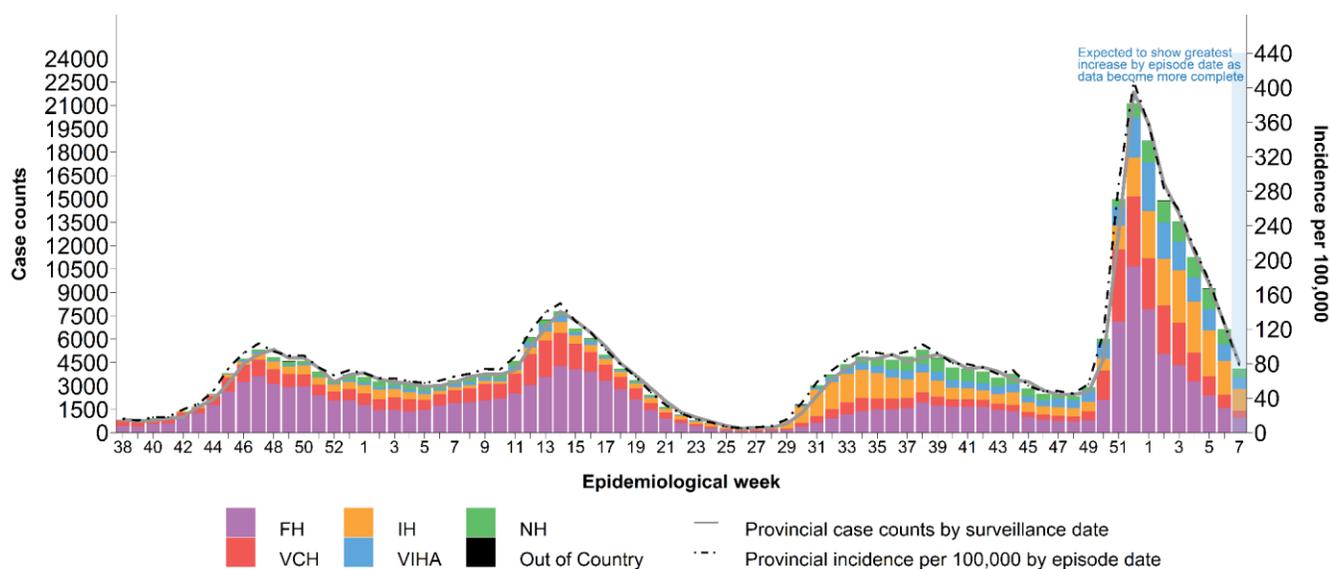
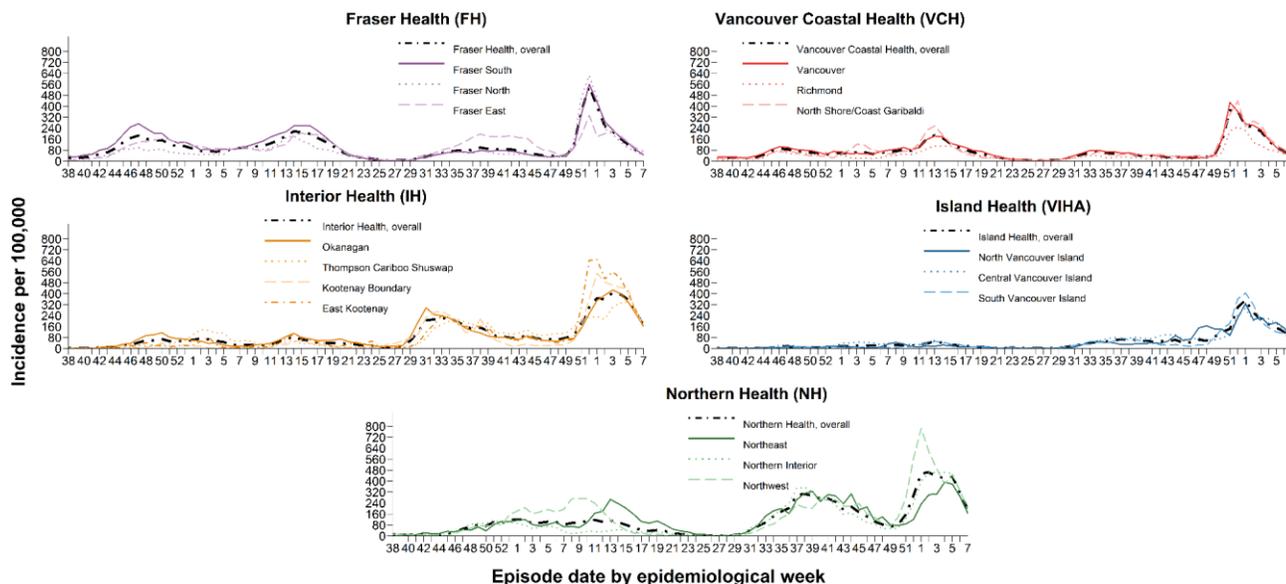


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Feb 19, 2022 (week 7) (N= 337,460)



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 to ~18,300 in week 7. The positivity of MSP-funded specimens decreased from 29.4% in week 6 to 23.7% in week 7.

As shown in [Figure 4](#), the per capita testing rates (Panel A) decreased in all HAs from week 6 to week 7. From week 6 to week 7 testing rates decreased the most in NH, from 1020 per 100K to 660 per 100K. In week 7 NH had the highest testing rate at 660 per 100K.

Percent positivity (Panel B) for MSP-only specimens decreased in all HAs from week 6 to week 7. Percent positivity in week 7 ranged from 19.8% in VCH to 33.8% in VIHA.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Feb 19, 2022 (week 7)

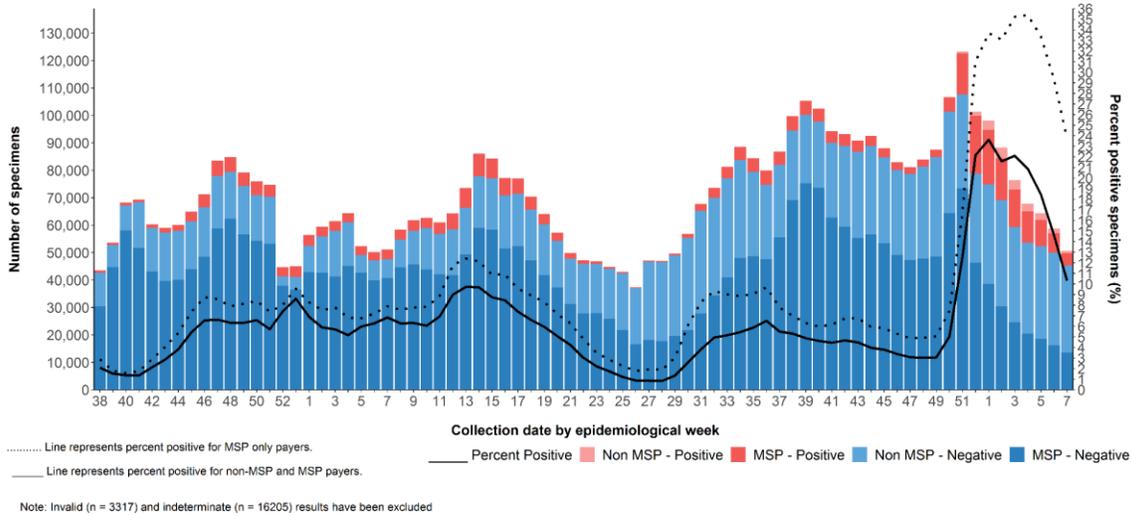
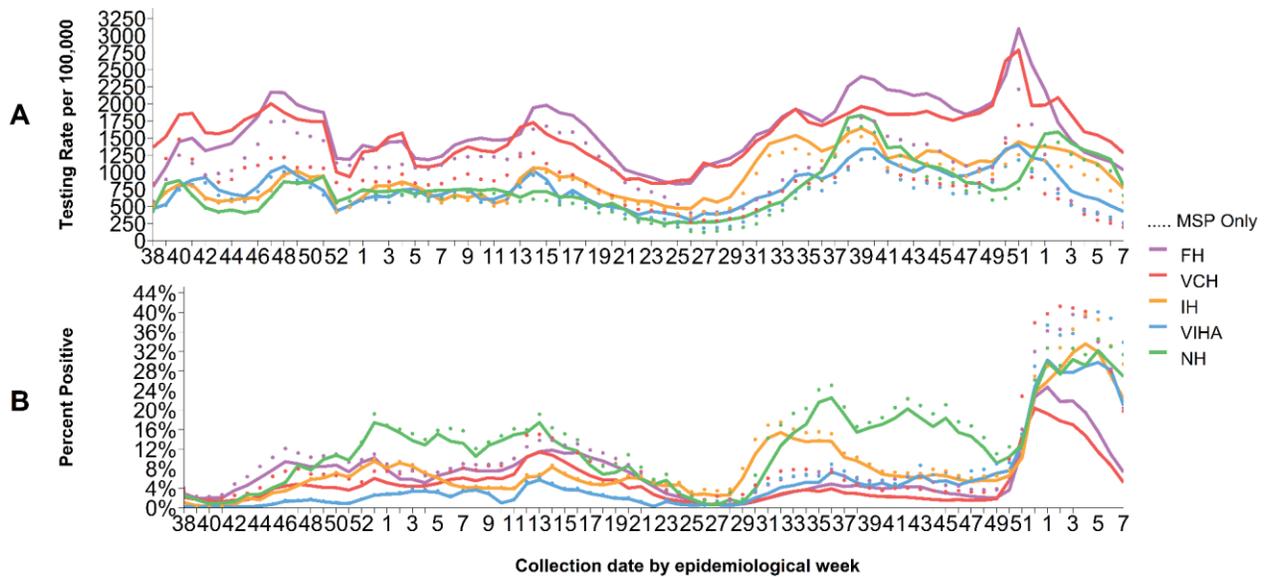


Figure 4. Testing rates and percent SARS-CoV-2 positive by Health Authority and collection week, BC Sept 13, 2020 (week 38) – Feb 19, 2022 (week 7)



Data source: laboratory PLOVER data

C. Age profile – Testing and cases

Testing rates and percent positivity by age group

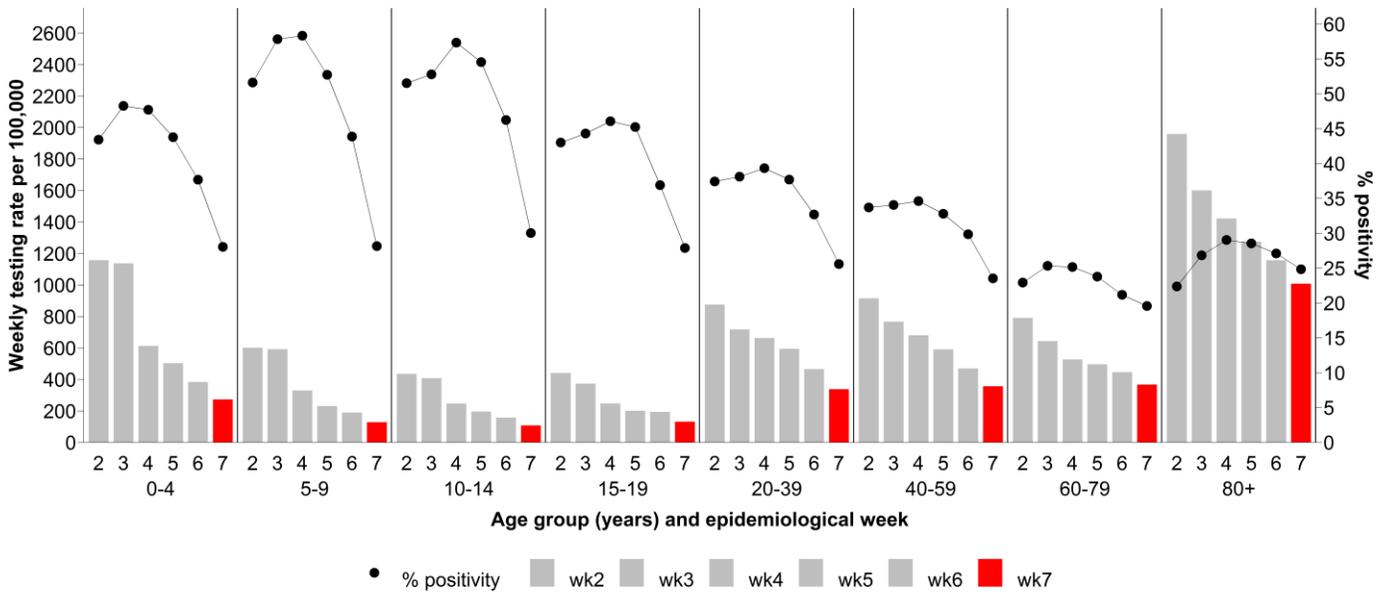
As shown by the bars in [Figure 5](#), testing rates decreased in all age groups from week 6 to week 7. Testing rates in week 7 was highest in those aged 80+ at 1,008 per 100K which likely reflects the age group most prioritized for testing.

As shown by the black dots in [Figure 5](#), the percent positivity decreased in all age groups from week 6 to week 7. The highest percent positivity in week 7 was in the 5-9 and 10-14 year-olds at 28.2% and 30%, respectively.

Case distribution and weekly incidence by age group

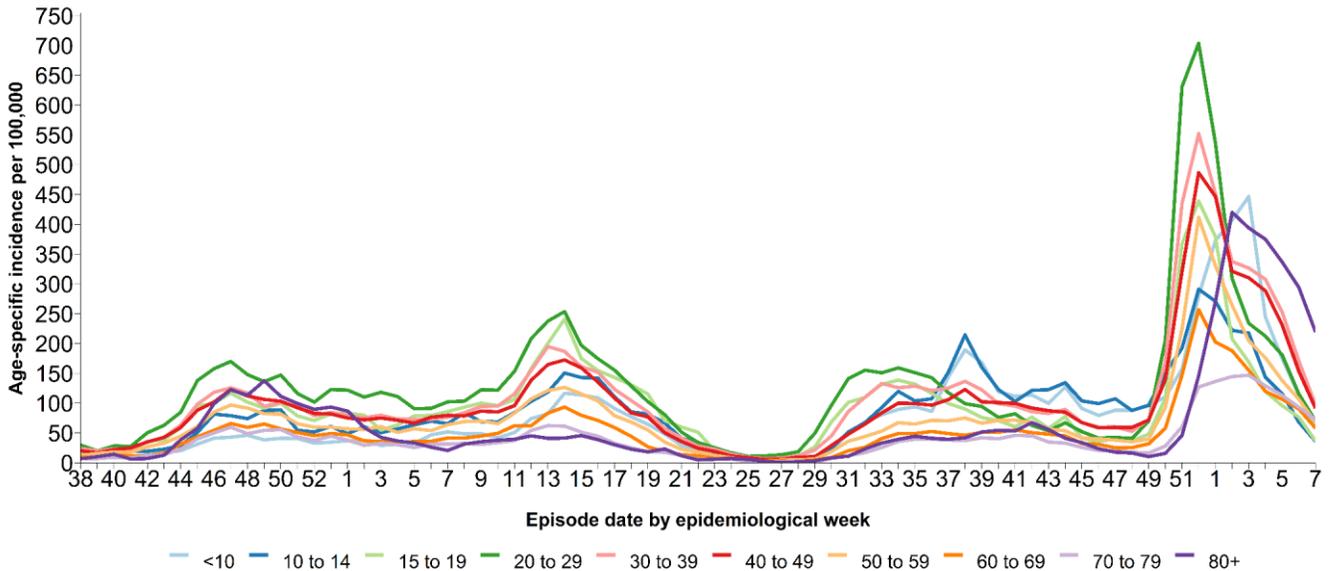
As shown in [Figure 6](#), age-specific incidence rates decreased across all age groups from week 6 to week 7. From week 6 to week 7, incidence rates decreased the most in the 30-39 and 80+ age groups from 171 to 97 per 100K and 294 to 219 per 100K, respectively. Age-specific incidences may increase 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 15, 2022 (week 2) – Feb 19, 2022 (week 7)



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 19, 2022 (week 7) (N= 337,373)



D. Severe outcome counts and epi-curve

The number of hospital admissions decreased from 452 in week 6 to 319 in week 7. In week 7, 60-79 year-olds had the highest number of hospital admissions (122 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 stabilized at 54 deaths per week in week 6 and 7. Those aged 80+ accounted for the highest number of deaths in week 6 (26 deaths) ([Table 2, Figure 8](#)). Detailed information about outcomes by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

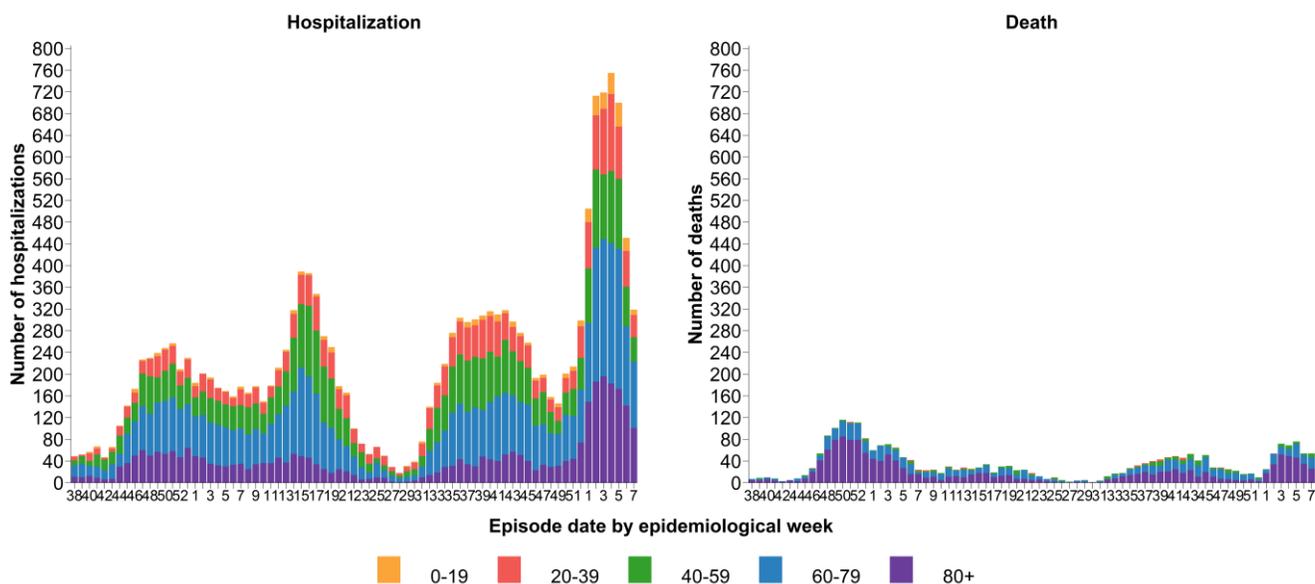
Cumulatively, there have been 24 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There has been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 years old (range from 1 to 16 years old).

**Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC
 Jan 15, 2020 (week 3) – Feb 19, 2022 (week 7)**

Severe outcomes by episode date	Health Authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 7, hospitalizations	39	138	47	41	54	0	319
Cumulative hospitalizations^b	8,083	3,092	1,295	1,664	3,527	17	17,678/345,307 (5)
Week 7, ICU admissions	2	21	9	12	10	0	54
Cumulative ICU admissions^b	1,376	773	317	388	795	2	3,651/345,307 (1)
Week 7, deaths	18	6	7	9	14	0	54
Cumulative deaths	1,292	347	211	304	687	0	2,841/345,307 (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 19, 2022 (week 7)



Data sources: Health Authority case line list data

E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 6, 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, 9 deaths in the 70-79 year-olds, and 37 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 19, 2022 (week 7) (N= 345,201)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	28,984	318 (1)	27 (<1)	2 (<1)
10-19	35,012	253 (1)	33 (<1)	0 (<1)
20-29	69,638	1,061 (2)	120 (<1)	6 (<1)
30-39	65,936	1,842 (3)	305 (<1)	31 (<1)
40-49	51,087	1,849 (4)	391 (1)	61 (<1)
50-59	40,640	2,549 (6)	730 (2)	162 (<1)
60-69	27,052	3,162 (12)	910 (3)	336 (1)
70-79	13,836	3,229 (23)	805 (6)	607 (4)
80-89	8,659	2,515 (29)	310 (4)	941 (11)
90+	4,357	949 (22)	33 (1)	695 (16)
Total	345,201	17,728	3,664	2,841
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

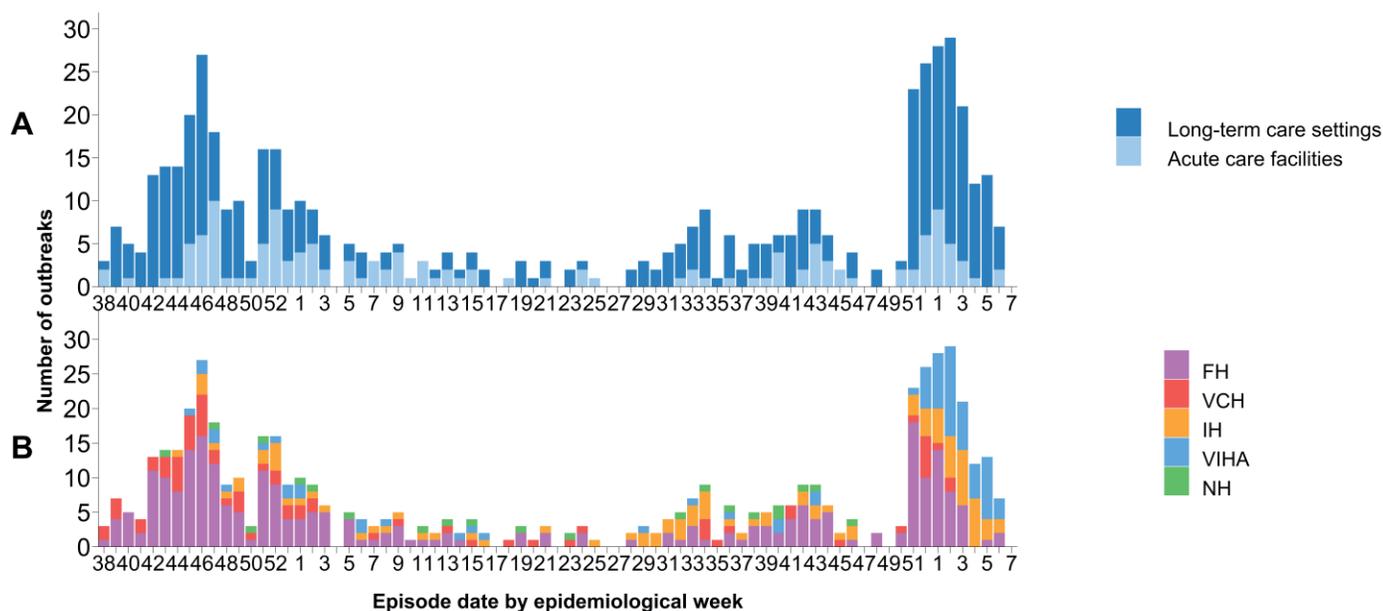
As shown in [Table 4](#) and [Figure 9](#), 591 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 7. In week 7, based on earliest case onset date, there were no new outbreaks declared. Since week 1 of 2022, the number of new outbreaks have been declining and the majority have been in long-term care facilities. 4 of the 54 deaths (7.4%) reported in week 7 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 19, 2022 (week 7) (N=591)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 7, Care Facility Outbreaks	0	148	13	0	161	4	0	0	4
Cumulative, Care Facility Outbreaks	591	7,391	3,543	8	10,942	1,351	0	0	1,351

a. 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.

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 19, 2022 (week 7) (N=523)



- b. Care facility settings include acute care or long-term care settings (defined as long-term care facility or assisted living).
- c. Earliest dates of onset of outbreak cases are subject to change as investigations and data are updated.
- d. 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. Modeling

Current R_t estimates for BC are considered unreliable due to recent and ongoing changes in the ascertainment of case counts, including capacity limitations of PCR testing and the use of rapid antigen tests.

H. 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 sustained decreases following the Omicron wave, SARS-CoV-2 viral loads have stabilized in Metro Vancouver wastewater plants.

Figure 10. Wastewater surveillance, FHA

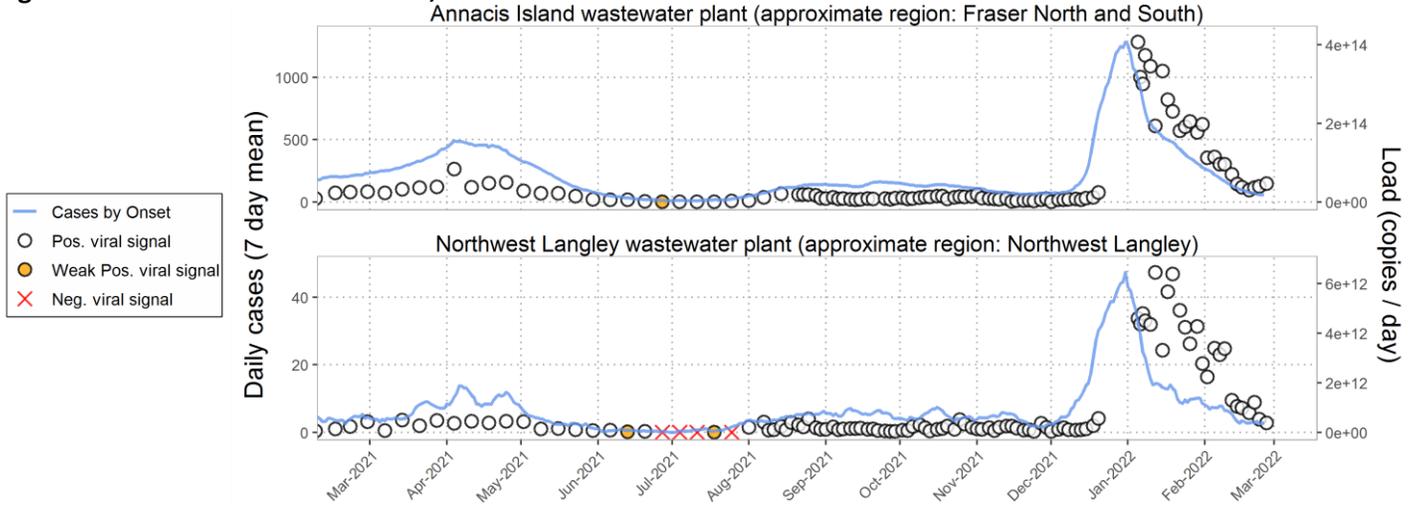
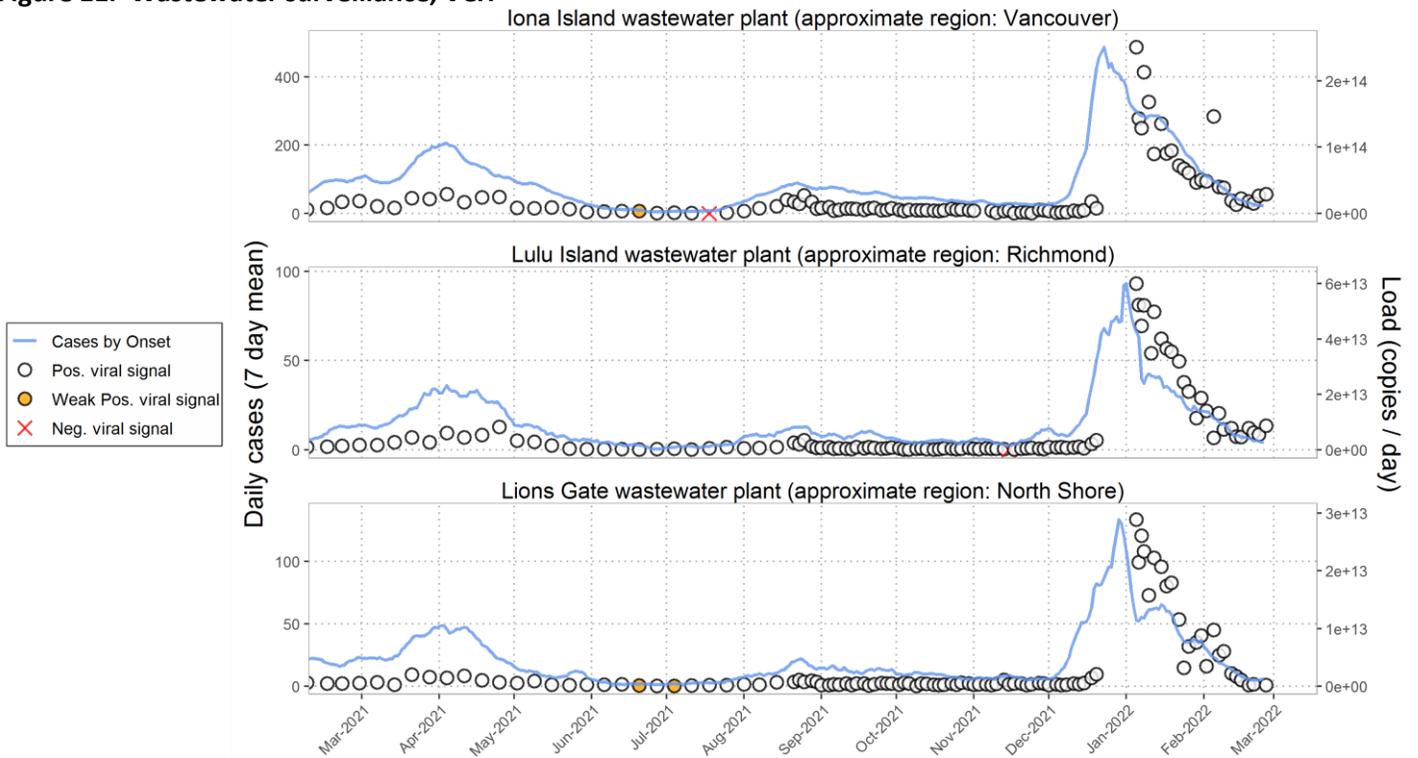


Figure 11. Wastewater surveillance, VCH



I. Additional resources

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

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>

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/

J. 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 – Present)

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.