

British Columbia (BC) COVID-19 Situation Report

Week 19: May 08- May 14, 2022

Data for week 19 (May 08 - May 14, 2022) may differ from the data published in the BCCDC weekly report. Data was extracted on May 24, 2022 for this situation report compared to May 25, 2022 for the latest weekly report.

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Epidemic curve and regional incidence 3	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 31 per 100K (1,631 cases) in week 19,
Test rates and % positive 4	Incidence by Health Authority from week 18 to week 19: <ul style="list-style-type: none"> • Fraser Health incidence decreased from 36 to 30 per 100K • Interior Health incidence decreased from 52 to 46 per 100K • Vancouver Island Health incidence decreased from 43 to 29 per 100K • Northern Health decreased from 31 to 29 per 100K • Vancouver Coastal Health incidence was stable at 25 per 100K
Age profile, testing and cases 5	Testing of MSP-funded specimens decreased slightly from ~10,500 in week 18 to ~9,900 in week 19, and the percent positivity of MSP-funded specimens decreased from 20.5% in week 18 to 18.9% in week 19.
Severe outcomes 7	The per capita testing rates for MSP-funded specimens decreased or remained stable from week 18 to week 19 in all HAs. The percent positivity for MSP-funded specimens decreased or remained stable from week 18 to week 19 in all HAs as well, other than in VCH where it increased slightly.
Age profile, severe outcomes 8	Age-specific incidence rates between week 18 and week 19 decreased or remained stable in all age groups. Incidence rates decreased the most in the 80+ age group from 224 per 100K in week 18 to 185 per 100K in week 19.
Care facility outbreaks 9	The number of people in hospital with a positive COVID-19 test decreased from 395 in week 18 to 359 in week 19. In week 19, 60+ year-olds had the highest number of people in hospital with a positive COVID-19 test, with 127 hospitalizations in 60-79 years-olds and 136 hospitalizations in 80+ year-olds.
Wastewater surveillance 10	The weekly number of deaths from any cause among people testing positive for COVID-19 was stable at 86 in week 18 and 85 in week 19. In week 19, 60+ year-olds had the highest number of deaths from any cause among people testing positive for COVID-19, with 23 deaths in 60-79 years-olds and 57 in 80+ year-olds.
Additional resources 12	In week 19, based on earliest date, 4 new outbreaks in acute care facilities were declared. There were no new outbreaks in long-term care facilities
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BELOW ARE IMPORTANT NOTES relevant to the interpretation of cases, hospitalizations, and deaths:

- 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.
- 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.
- Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths include people who died from any cause recorded in Vital Statistics within 30 days of their first positive COVID-19 lab result date. Since death registration is recorded before the underlying cause of death is determined, deaths reported after the system transition use a broader definition and will overestimate deaths due to COVID-19. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.

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

- Cases include lab confirmed, lab probable, and epi-linked cases. Case definition can be found at [http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-\(novel-coronavirus\)](http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus)). Cases include those reported in Health Authority case line lists and positive laboratory results in the Provincial Laboratory Information Solution (PLIS) up to April 1, 2022. As of April 2, 2022, only positive laboratory results in the PLIS are included and cases who are residents from outside of BC are not included.
 - Episode date is defined by date of illness onset when available. When illness onset date is unavailable, earliest laboratory date is used (collection or result date); if also unavailable, then public health case report date is used. As of April 2, 2022, episode date reflects earliest laboratory date (collection or result date) only. Analyses based on episode date may better represent the timing of epidemic evolution. Episode-based tallies for recent weeks are expected to increase as case data are more complete.
 - Surveillance date is defined by lab result date, if unavailable, then public health case report date is used. As of April 2, 2022, surveillance date reflects lab result date only. The weekly tally by surveillance date includes cases with illness onset date in preceding weeks.
 - Hospitalizations include those reported by Health Authorities up to April 1, 2022. As of April 2, 2022, hospitalizations are defined as individuals who had any COVID-19 hospitalization recorded in the PHSA Provincial COVID-19 Monitoring Solution (PCMS). Hospitalizations for individuals 0-19 years-old are reported by linked hospitalization episodes from the PCMS since the beginning of the pandemic. Episode date for hospitalization is defined by admission date, if unavailable, surveillance date is used.
 - Critical care admissions (HAU, ICU, and critical care surge beds) include individuals who had any COVID-19 positive critical care admission (regardless of timing) from the PCMS. Episode date for critical care admission is defined by critical care admission date, if unavailable, surveillance date is used. Previously only ICU admissions were presented in this report. Critical care admissions comprises a broader category than ICU admissions and therefore, the number of critical care admissions should not be compared to number of ICU admissions from previous weeks.
 - Deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Episode date for death is defined by death date, if unavailable, surveillance date is used.
 - As of April 2, 2022, data on Health Authority outbreaks are compiled from outbreak files provided by the Health Authorities.
 - Laboratory PLOVER data include Medical Service Plan (MSP) funded (e.g. clinical diagnostic tests) and non-MSP funded (e.g. screening tests) specimens.
 - 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).
 - Data sources include Health Authority case line lists, PHSA Provincial COVID-19 Monitoring Solution (PCMS), Vital Statistics, laboratory PLOVER data, and aggregate outbreak files from Health Authorities.
 - Integrated case data (including surveillance variables created using Health Authority case line lists, PCMS, and Vital Statistics) were extracted on May 23, 2022, laboratory PLOVER data on May 19, 2022, and Health Authority outbreak files on May 18, 2022.
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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 19, there have been 369,284 cases for a cumulative incidence of 7,016 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 31 per 100K (1,631 cases) in week 19, which decreased from 37 per 100K in week 18. Incidence by episode date may increase as data become more complete in recent weeks.

As shown in Figure 2, incidence rates decreased from week 18 to week 19 in all HAs other than in Vancouver Coastal Health (VCH), where it remained stable. Incidence rates decreased the most in Island Health (VIHA) and Fraser Health (FH) from 43 per 100K in week 18 to 29 per 100K in week 19 and from 36 per 100K in week 18 to 30 per 100K in week 19, respectively. In week 19, the highest incidence rate was in Interior Health (IH) at 46 per 100K.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – May 14, 2022 (week 19) (N= 369,284)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 19, case counts	587	380	256	90	318	0	1,631
Cumulative case counts	163,081	65,828	35,534	30,134	74,316	391	369,284
Week 19, cases per 100K population	30	46	29	29	25	NA	31
Cumulative cases per 100K population	8,206	7,946	4,037	9,845	5,889	NA	7,016

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – May 14, 2022 (week 19) (N= 361,437)

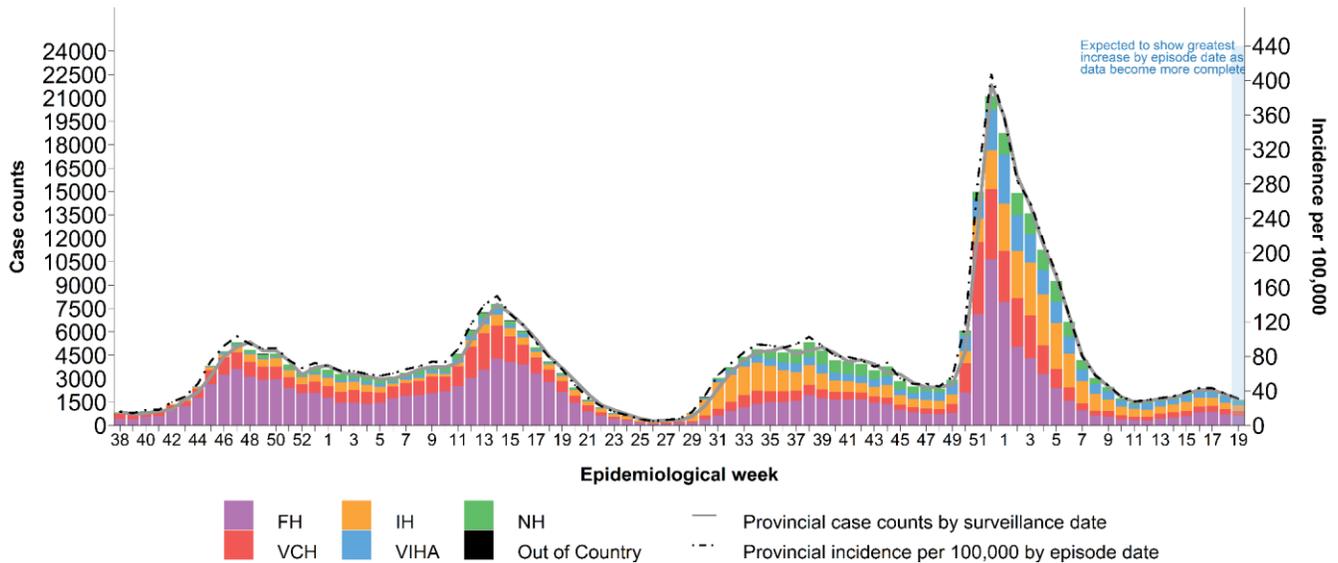
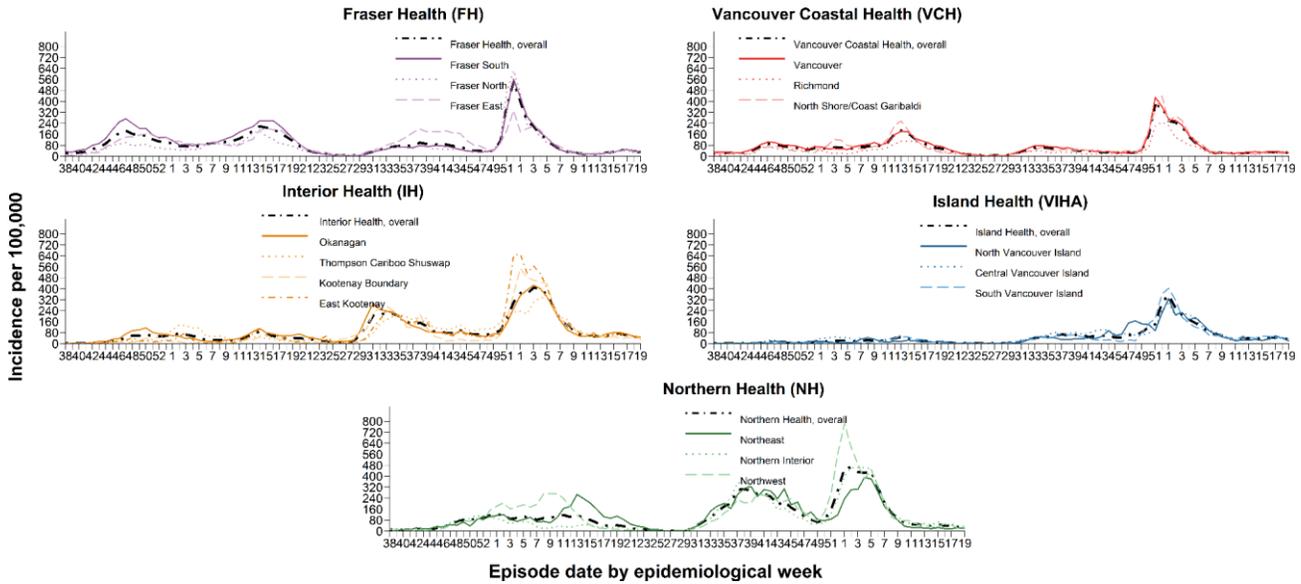


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – May 14, 2022 (week 19) (N= 361,437)

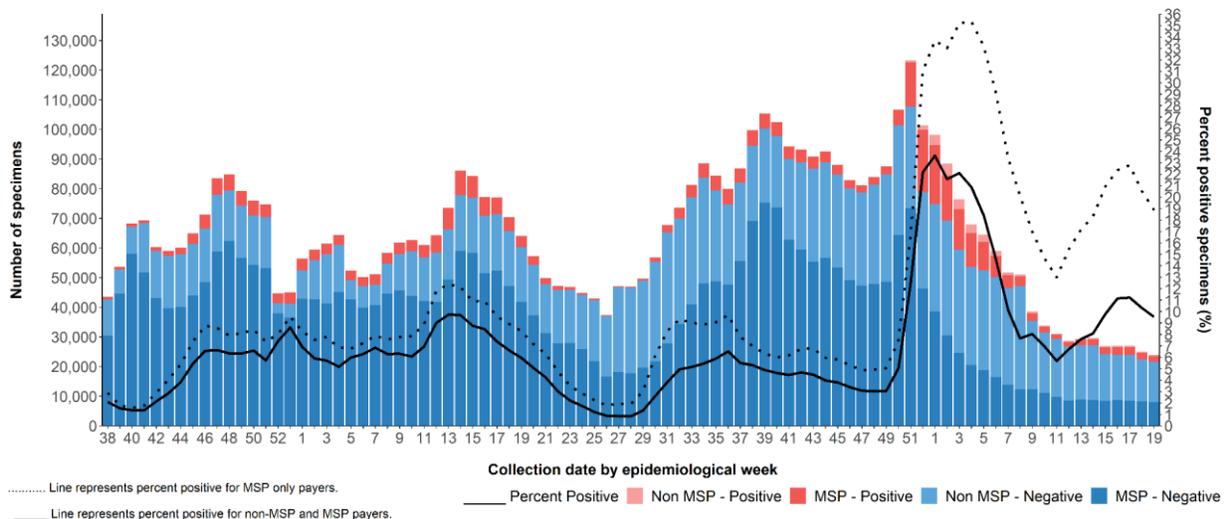


B. Test rates and percent positive

[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 decreased slightly from ~10,500 in week 18 to ~9,900 in week 19, and the percent positivity of MSP-funded specimens decreased from 20.5% in week 18 to 18.9% in week 19.

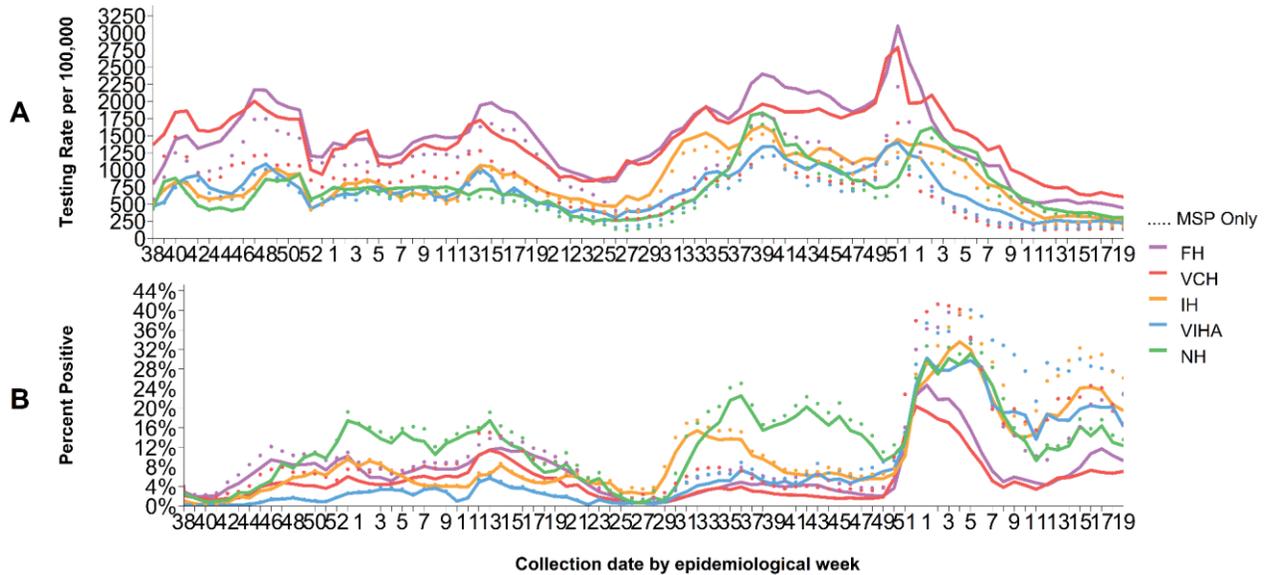
As shown in [Figure 4](#), the per capita testing rates for MSP-funded specimens (dotted lines in Panel A) decreased or remained stable from week 18 to week 19 in all HAs. The percent positivity (dotted lines in Panel B) for MSP-funded specimens decreased or remained stable from week 18 to week 19 in all HAs as well, other than in VCH where it increased slightly from 20.8% in week 18 to 23.0% in week 19. In week 19, NH had the highest testing rate at 262 per 100K. In week 19, percent positivity ranged from 13.6% in NH to 26.2% in IH.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – May 14, 2022 (week 19)



Note: Invalid (n = 3716) and indeterminate (n = 19157) 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) – May 14, 2022 (week 19)



Data source: Laboratory PLOVER data

C. Age profile – Testing and cases

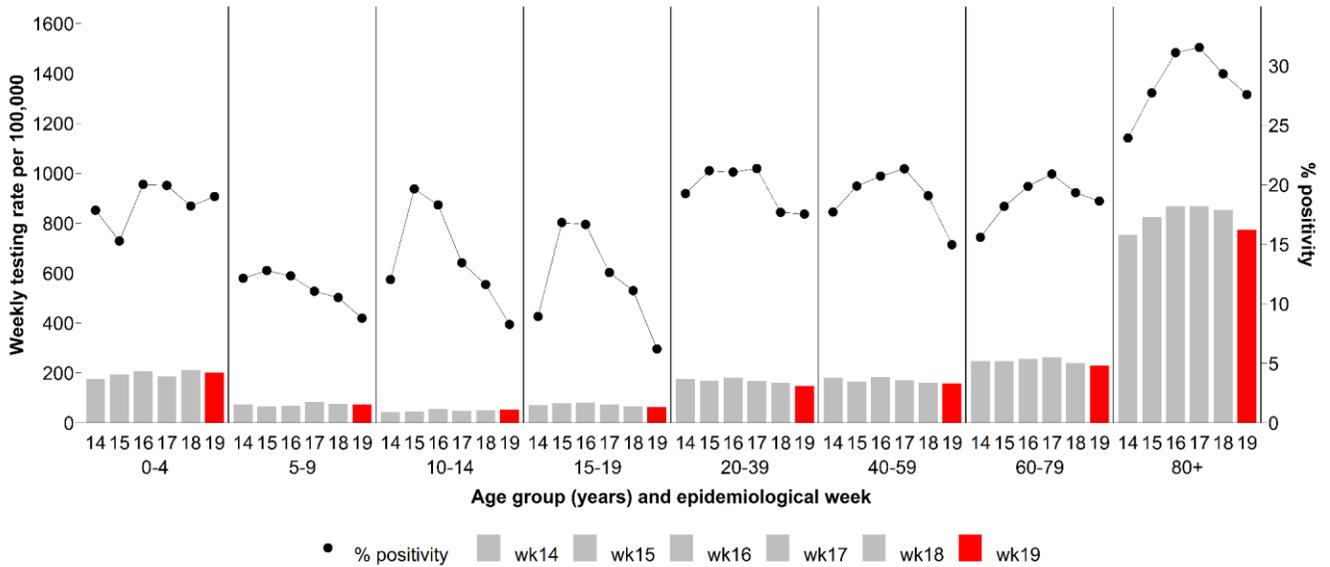
Testing rates and percent positivity by age group

As shown by the bars in [Figure 5](#), testing rates between week 18 and week 19 decreased or remained stable in all age groups. As shown by the black dots in [Figure 5](#), percent positivity between week 18 and week 19 decreased or remained stable in all age groups. Percent positivity ranged from 6.2% in 15-19 year-olds to 27.6% in 80+ year-olds.

Case distribution and weekly incidence by age group

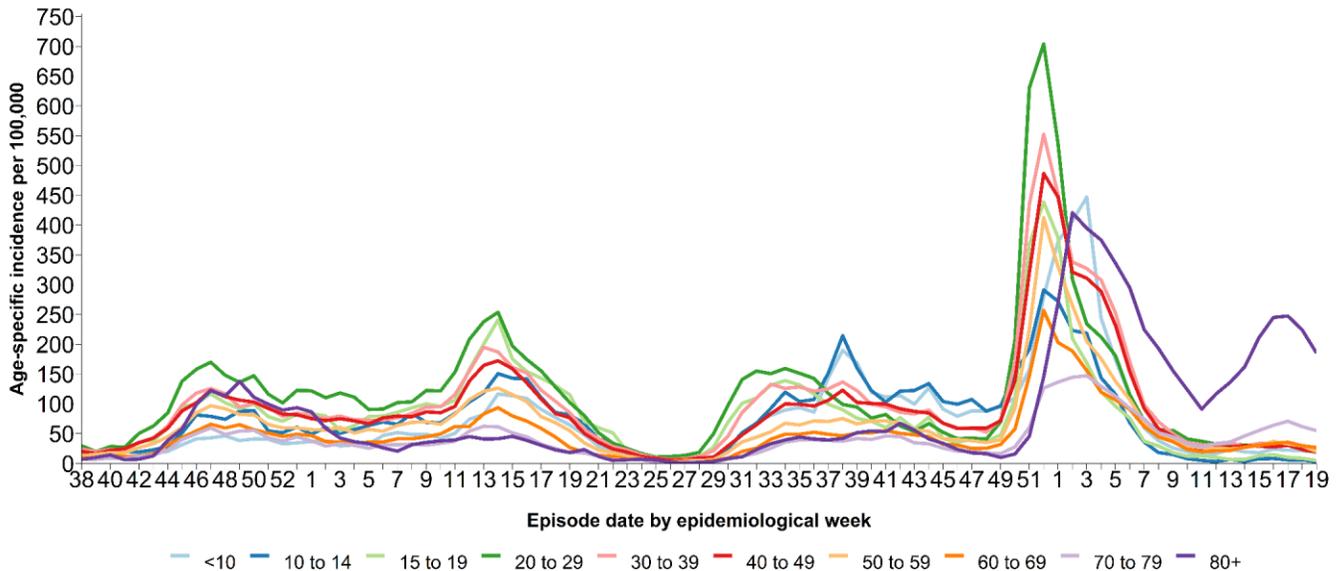
As shown in [Figure 6](#), age-specific incidence rates between week 18 and week 19 decreased or remained stable in all age groups. Incidence rates decreased the most in the 80+ age group from 224 per 100K in week 18 to 185 per 100K in week 19. Age-specific incidence may increase as data become more 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 Apr 09, 2022 (week 14) – May 14, 2022 (week 19)



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) – May 14, 2022 (week 19) (N= 361,343)



D. Severe outcome counts and epi-curve

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 number of people in hospital with a positive COVID-19 test decreased from 395 in week 18 to 359 in week 19. In week 19, 60+ year-olds had the highest number of people in hospital with a positive COVID-19 test, with 127 hospitalizations in 60-79 year-olds and 136 hospitalizations in 80+ year-olds.

As of April 2, 2022, death data include people testing positive for COVID-19 and died from any cause (COVID-19 or non-COVID-19) within 30 days of their first positive lab result date. The weekly number of deaths from any cause among people testing positive for COVID-19 was stable at 86 in week 18 and 85 in week 19. In week 19, 60+ year-olds had the highest number of deaths from any cause among people testing positive for COVID-19, with 23 deaths in 60-79 year-olds and 57 in 80+ year-olds ([Table 2](#), [Figure 8](#)). Detailed information about outcomes by vaccination status can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#).

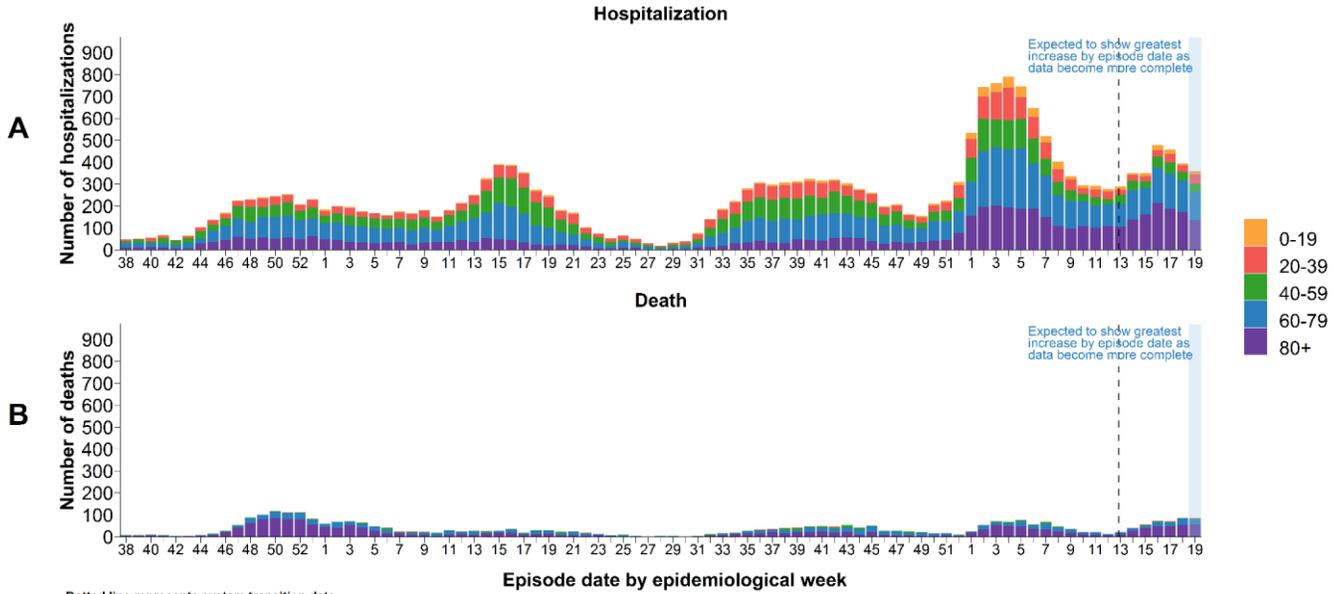
Cumulatively, there have been 33 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There have been 2 new confirmed cases of MIS-C since the last report. The median age of all cases is 9 years old (range from 4 months old to 16 years old).

**Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC
Jan 15, 2020 (week 3) – May 14, 2022 (week 19)**

Severe outcomes by episode date	Health Authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 19, hospitalizations	161	69	35	18	76	0	359
Cumulative hospitalizations	10,422	3,919	1,952	1,979	4,409	17	22,698/369,284 (6)
Week 19, critical care admissions ^b	32	16	6	5	12	0	71
Cumulative critical care admissions^b	2,256	924	369	761	1,017	4	5,331/369,284 (1)
Week 19, deaths	38	14	10	5	18	0	85
Cumulative deaths, pre-transition (case line list)^c	1,348	367	241	330	716	0	3,002/356,632 (1)
Cumulative deaths, post-transition (automated linkage)^c	136	95	82	16	95	0	424/12,652 (3)

- Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- Due to the change in data source for hospitalization data, ICU admissions are no longer available. Critical care admissions are now being provided, which comprises a broader category than ICU admissions (please see Important Notes on Page 2 for more information). Number of critical care admissions should not be compared to number of ICU admissions from previous weeks.
- Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Since death registration is recorded before the underlying cause of death is determined, post-transition deaths use a broader definition and will overestimate deaths due to COVID-19. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.

Figure 8. Weekly COVID-19 hospital admissions (A) and deaths (B) by age groups, BC, Sept 13, 2020 (week 38) – May 14, 2022 (week 19)^a



a. Among those with available age information only.

E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 19, median age of hospital admissions, critical care admissions, pre-transition deaths, and post-transition deaths with underlying cause of death (UCD) as COVID-19 was 65 years, 63 years, 82 years, and 87 years, respectively.

In the past four weeks (from week 16 to week 19), there has been a weekly average of 5 deaths in those <60 years of age, 6 deaths in 60-69 year-olds, 16 deaths in 70-79 year-olds and 52 deaths in the 80+ year-olds (data not shown). The number of deaths may increase over time as data becomes more complete.

Table 3: COVID-19 cases, hospitalizations, critical care admissions, and deaths by age group, BC, Jan 15, 2020 (week 3) – May 14, 2022 (week 19) (N= 369,252)^a

Age group (years)	Cases	Hospitalizations n (%)	Critical care admissions ^b n (%)	Pre-transition (case line list) deaths ^c n (%)	Post-transition (automated linkage) deaths ^c		
					UCD as COVID-19 ^d n (%)	UCD as non-COVID-19 ^d n (%)	UCD pending ^d n (%)
<10	30,210	479 (2)	60 (<1)	2 (<1)	0 (<1)	0 (<1)	2 (<1)
10-19	35,635	321 (1)	45 (<1)	0 (<1)	0 (<1)	1 (<1)	0 (<1)
20-29	72,633	1,280 (2)	190 (<1)	6 (<1)	0 (<1)	1 (<1)	1 (<1)
30-39	69,315	2,177 (3)	401 (1)	31 (<1)	2 (<1)	4 (<1)	1 (<1)
40-49	53,582	2,118 (4)	558 (1)	64 (<1)	0 (<1)	3 (<1)	2 (<1)
50-59	43,327	2,912 (7)	995 (2)	166 (<1)	1 (<1)	5 (<1)	5 (<1)
60-69	29,564	3,857 (13)	1,331 (5)	353 (1)	7 (1)	11 (1)	18 (1)
70-79	16,608	4,286 (26)	1,185 (7)	655 (4)	12 (1)	18 (1)	49 (3)
80-89	11,994	3,722 (31)	500 (4)	989 (10)	34 (2)	38 (2)	73 (3)
90+	6,384	1,546 (24)	66 (1)	736 (15)	38 (3)	31 (2)	67 (5)
Total	369,252	22,698	5,331	3,002	94	112	218
Median age	36	65	63	82	87	82	83

- Among those with available age information only.
- Due to the change in data source for hospitalization data, ICU admissions are no longer available. Critical care admissions are now being provided, which comprises a broader category than ICU admissions (please see Important Notes on Page 2 for more information). Number of critical care admissions should not be compared to number of ICU admissions from previous weeks.
- Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Since death registration is recorded before the underlying cause of death is determined, post-transition deaths use a broader definition and will overestimate deaths due to COVID-19. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.
- Since underlying cause of death (UCD) takes approximately 8 weeks to be recorded, all-cause mortality is initially reported and then retrospective evaluations of underlying cause of death are provided here to better understand true COVID-19 mortality. UCD as COVID-19 are deaths that have been determined to be caused by COVID-19 in their Vital Stats record. UCD as non-COVID-19 are deaths that have been determined to be not attributable to COVID-19 in their Vital Stats record that are reported as deaths due to a lab positive COVID-19 test within 30 days of death. UCD pending are all post-transition deaths that do not yet have a recorded UCD.

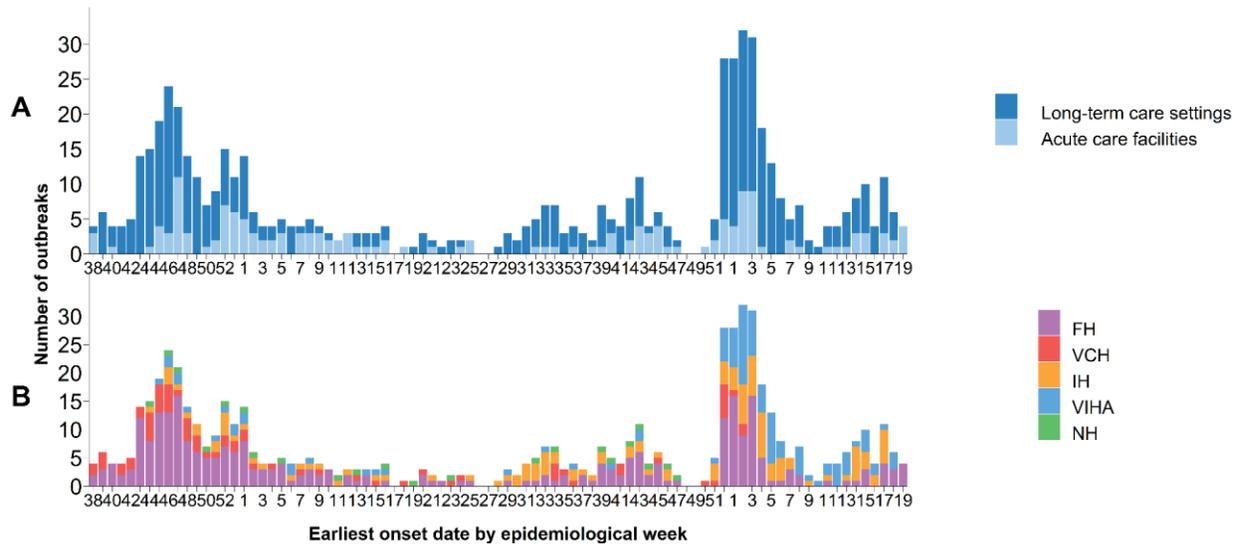
F. Care facility outbreaks

As shown in **Table 4** and **Figure 9**, 664 care facility (acute care and long-term care settings) outbreaks were reported in total in BC to the end of week 19. In week 19, based on earliest date, 4 new outbreaks in acute care facilities were declared. There were no new outbreaks in long-term care facilities. In the past four weeks (from week 16 to week 19), there has been a weekly average of 6 care facility outbreaks declared. In week 19, no deaths were associated with the new care facility outbreaks.

Table 4. COVID-19 care facility^a outbreaks by earliest case onset^{b,c}, associated cases and deaths by episode date, BC Jan 15, 2020 (week 3) – May 14, 2022 (week 19) (N=664)^{d,e}

Care facility outbreaks and cases by episode date	Outbreaks	Cases			Deaths		
		Residents	Staff/other	Total	Residents	Staff/other	Total
Week 19, Care Facility Outbreaks	4	59	0	59	0	0	0
Cumulative, Care Facility Outbreaks	664	9,355	3,803	13,158	1,424	0	1,424

Figure 9. COVID-19 care facility^a, outbreaks by earliest case onset^{b,c}, facility type (A) and Health Authority (B), BC Sept 13, 2020 (week 38) – May 14, 2022 (week 19) (N=596)^{d,e}



- Case and death counts include PCR positive cases only for outbreaks in NHA and VIHA. Vancouver Coastal Health, Fraser Health Authority, and Interior Health Authority outbreaks may also include those diagnosed by rapid antigen tests or considered as suspected reinfection.
- Earliest dates of onset of outbreak cases are subject to change as investigations and data are updated. If unavailable, outbreak declared date is used.
- New outbreaks reported since the last report with an earliest case onset date (if unavailable, outbreak declared date is used) prior to the current reporting week will be included in the cumulative care facility outbreak total.
- Cases with unknown role are included in the case count for Staff/other.
- Data might be incomplete or vary from what was reported previously due to updates by Health Authorities.

G. Wastewater surveillance

The BCCDC and Metro Vancouver measure SARS-CoV-2 in wastewater at five wastewater treatment plants (treating wastewater from 50% of BC’s population). To account for changing wastewater volume due to rainfall or snowmelt, SARS-CoV-2 concentrations are normalized to wastewater flow. Normalized SARS-CoV-2 wastewater levels (measured as viral copies per day) are shown alongside incident COVID-19 cases in each wastewater catchment area in [Figure 10](#) and [Figure 11](#). The BCCDC’s test results are obtained from the liquid fraction of the wastewater sample. Other organizations, such as the National Microbial Laboratory, test from the solid fraction of wastewater and therefore, their results are not directly comparable.

Key messages with results through to May 21, 2022:

For FH:

- Viral loads at Annacis Plant remain steady compared to the previous week
- Viral loads at Northwest Largely Plant are variable week-over-week but have increased for two weeks.

For VCH:

- Viral loads at Iona Island Plants are steady compared to the previous week.
- Viral loads at Lulu Island are variable week-over-week but are elevated and have decreased this week.
- Viral loads at Lions Gate Plant are variable week-over-week but have decreased this week.

Figure 10. Wastewater surveillance, FH

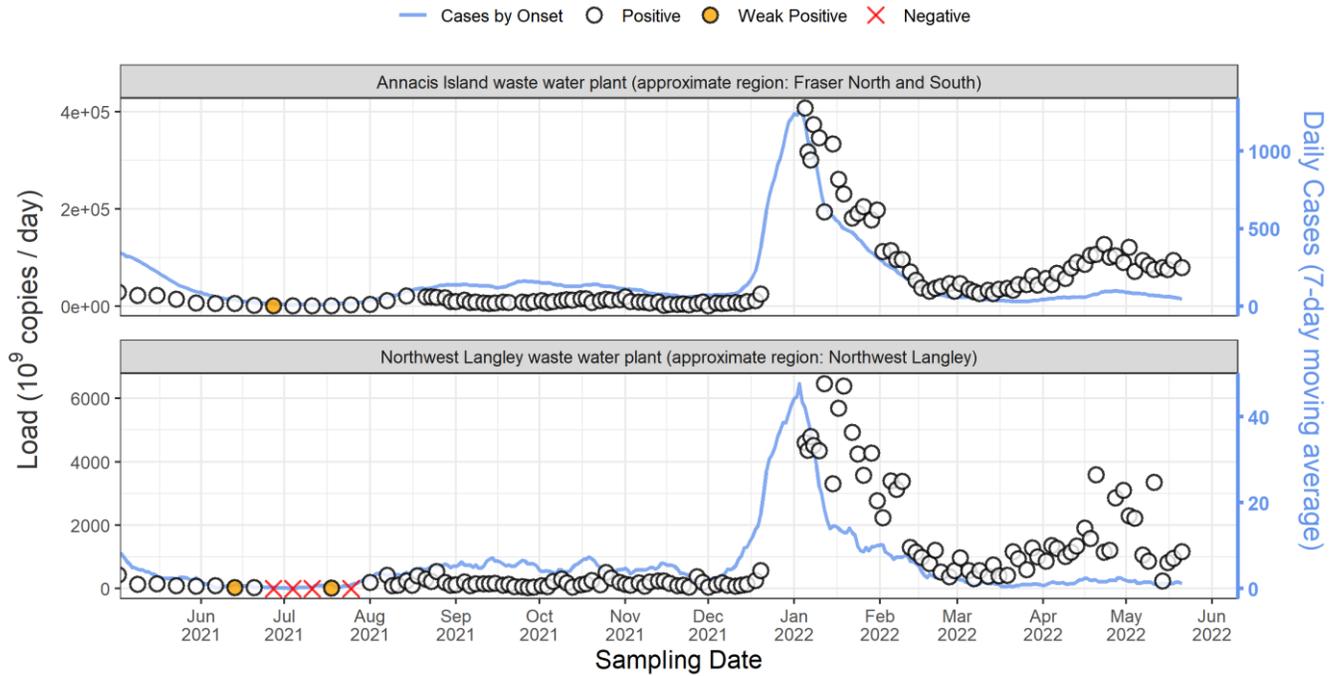
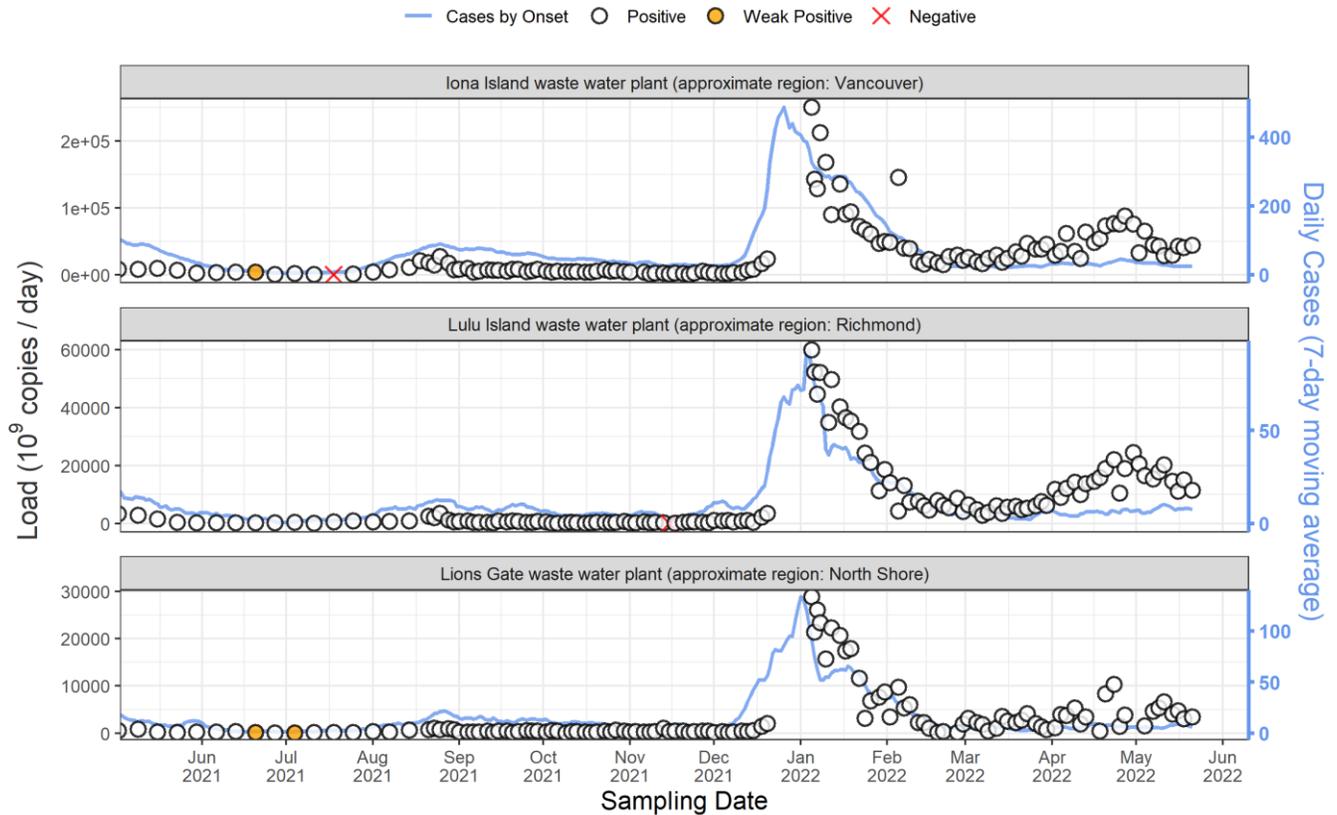


Figure 11. Wastewater surveillance, VCH



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 – April 2022)

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.

Vaccination Phase 7 (April 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. People in long-term care, assisted living, seniors and Indigenous people can get a second booster 6 months after the date of the first booster.