

British Columbia (BC) COVID-19 Situation Report
Week 44: October 31- November 06, 2021

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Epidemic curve and regional incidence	2	The provincial incidence by episode date was 62 per 100K, with 3,227 cases in week 44.
Test rates and % positive	3	Incidence in HAs between week 43 and week 44: <ul style="list-style-type: none"> Fraser Health decreased from 74 to 64 per 100K. Northern Health decreased from 188 to 163 per 100K. Vancouver Coastal decreased from 31 to 28 per 100K. Island Health decreased from 55 to 52 per 100K. Interior Health increased from 74 to 83 per 100K.
Age profile, testing and cases	4	Age-specific incidences decreased in most age groups from week 43 to 44, except in the <10, 15-19, and 20-29 year-olds in whom they increased slightly. Among those who are fully vaccinated, incidence has been relatively stable across recent weeks, with a slight increase in week 44 for the 12-19, 20-29, and 30-39 year-olds. Among the unvaccinated, the highest incidence rate in weeks 34 to 44 has been in the 80+ year-olds, which saw a recent decline from 2,204 per 100K in week 42 to 1,178 per 100K in week 44.
Severe outcomes	7	By week 44, the single-dose vaccination coverage in the eligible 12+ year-olds reached 91% and 86% were fully vaccinated.
Age profile, severe outcomes	8	Testing of MSP-funded specimens decreased from ~80,500K in week 39 to ~59,500K in week 43, and stabilized to ~60,300K in week 44. Positivity decreased from 6.8% in week 43 to 6.0% in week 44.
Care facility outbreaks	9	Since week 42, the number of hospital and ICU admissions have decreased to 261 and 49, respectively, in week 44. Death counts have been stable since week 39 with a slight decrease to 41 deaths in week 44. The rate of hospital and ICU admissions was higher in unvaccinated as compared to fully vaccinated people throughout 2021.
Additional resources	9	By case of earliest onset date, five new outbreaks were reported in healthcare settings in week 44.

Table of [vaccination phases](#) defined by vaccine eligibility of target populations in BC:

VACCINATION PHASE 1 Dec 2020 to Feb 2021	VACCINATION PHASE 2 Feb to April 2021	VACCINATION PHASE 3 April to May 2021	VACCINATION PHASE 4 May 2021- Present
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.	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.	Target populations include people aged 60-79 years, Indigenous peoples aged 18-64 and people aged 16-74 who are clinically extremely vulnerable.	Target populations include everyone 12+ years.

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 November 15, 2021, laboratory data on November 12, 2021, PIR vaccine coverage date on November 12, 2021, and PCMS hospitalization data on November 15, 2021.
- Some figures are displayed by vaccination status. "Unvaccinated" refers to individuals who did not receive a vaccine or <3 weeks has passed since the first dose was administered. "Vaccinated" refers to fully vaccinated individuals with 2 weeks after receipt of 2nd dose.

A. COVID-19 case counts and epidemic curves

Up to week 44, 2021, there have been 210,745 cases for a cumulative incidence of 4,052 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 62 per 100K (3,227 cases) in week 44, which has decreased from 102 per 100K at the peak of Wave 4 (week 38). Incidence by episode date may increase as data become more complete in recent weeks.

As shown in Figure 2, incidence has continued to decrease in Fraser Health (FH), Northern Health (NH), and Vancouver Coastal Health (VCH) since week 41. Between week 43 and week 44, incidence in FH, NH, and VCH decreased from 74 to 64 per 100K, 188 to 163 per 100K, and 31 to 28 per 100K, respectively. Incidence in Interior Health (IH) decreased from 86 per 100K in week 41 to 74 per 100K in week 43, and increased slightly to 83 per 100K in week 44. Incidence in Island Health (VIHA) increased from 51 per 100K in week 41 to 55 per 100K in week 43, followed by a slight decrease to 52 per 100K in week 44. Incidence rate in North Vancouver Island Health Service Delivery Area has been increasing since week 42, from 36 per 100K to 68 per 100K. These rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 (week 3) – Nov 06, 2021 (week 44) (N= 210,745)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 44, case counts	1,256	683	450	494	344	0	3,227
Cumulative case counts	106,788	31,840	11,526	16,274	44,018	299	210,745
Week 44, cases per 100K population	64	83	52	163	28	NA	62
Cumulative cases per 100K population	5,456	3,879	1,329	5,380	3,531	NA	4,052

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC Sept 13, 2020 (week 38) – Nov 06, 2021 (week 44) (N= 202,895)

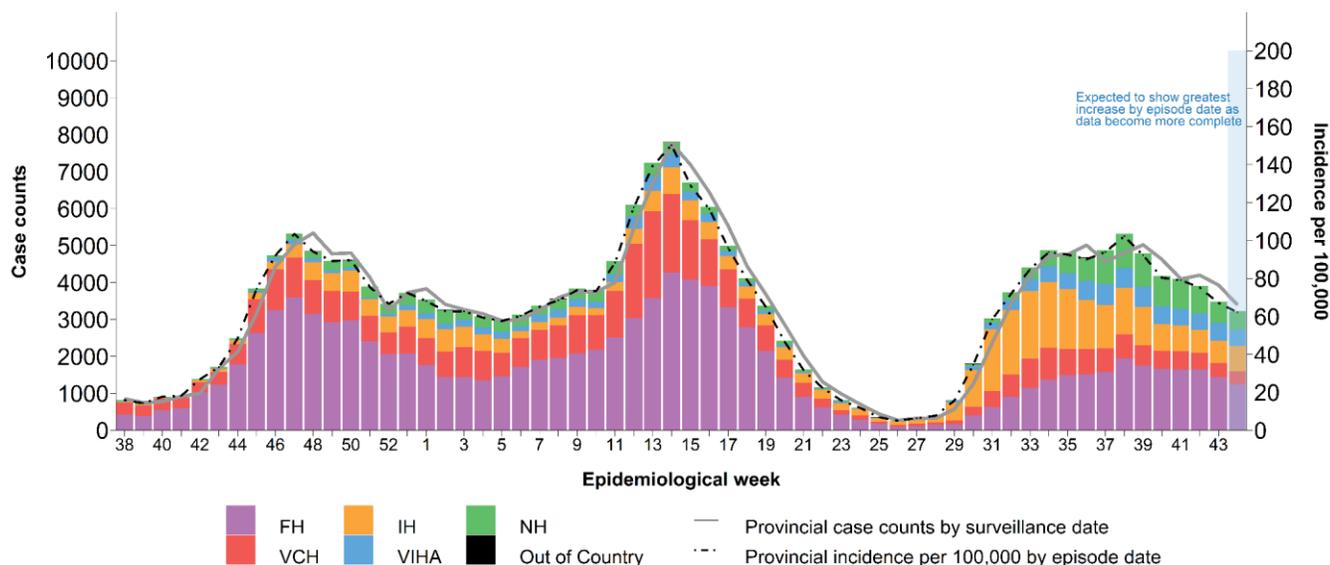
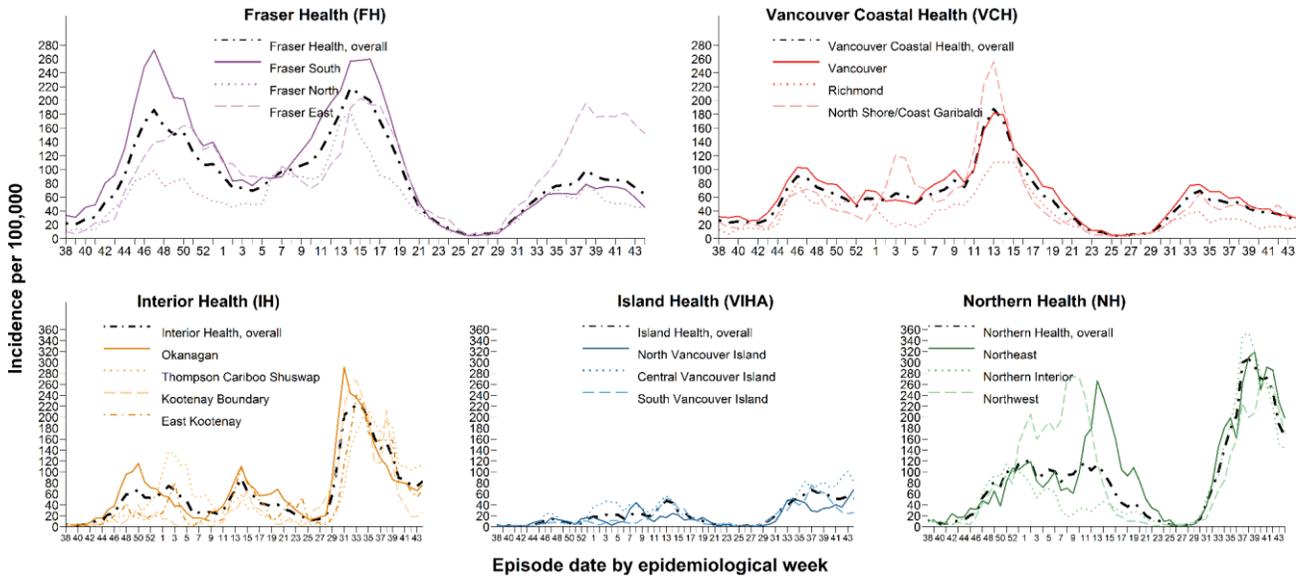


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Nov 06, 2021 (week 44) (N= 202,895)



B. Test rates and percent positive

As shown by the darker-colored bars in [Figure 3](#), testing of MSP-funded specimens decreased from ~80,500K in week 39 to ~59,500K in week 43, and stabilized to ~60,300K in week 44. The positivity of MSP-funded specimens decreased from 6.8% in week 43 to 6.0% in week 44.

As shown in [Figure 4](#), the per capita testing rates (Panel A) increased slightly in week 44 from week 43 in FH (from 1,395 per 100K to 1,404 per 100K), VIHA (from 763 per 100K to 836 per 100K), and IH (from 996 per 100K to 1,100 per 100K), while per capita testing rates have decreased in VCH and NH since week 39. MSP testing rates in FH remained highest at 1,404 per 100K followed by IH at 1,100 per 100K in week 44. Percent positivity (Panel B) for MSP-only specimens decreased in all HAs except IH, which increased from 7.0% in week 43 to 7.9% in week 44. Percent positivity was highest in NH at 19.7% in week 44, decreasing from 21.3% in week 43. Comparing week 44 with week 43, percent positivity decreased from 6.4% to 5.2% in FH, from 3.8% to 3.5% in VCH, and from 8.7% to 6.8% in VIHA.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Nov 06, 2021 (week 44)

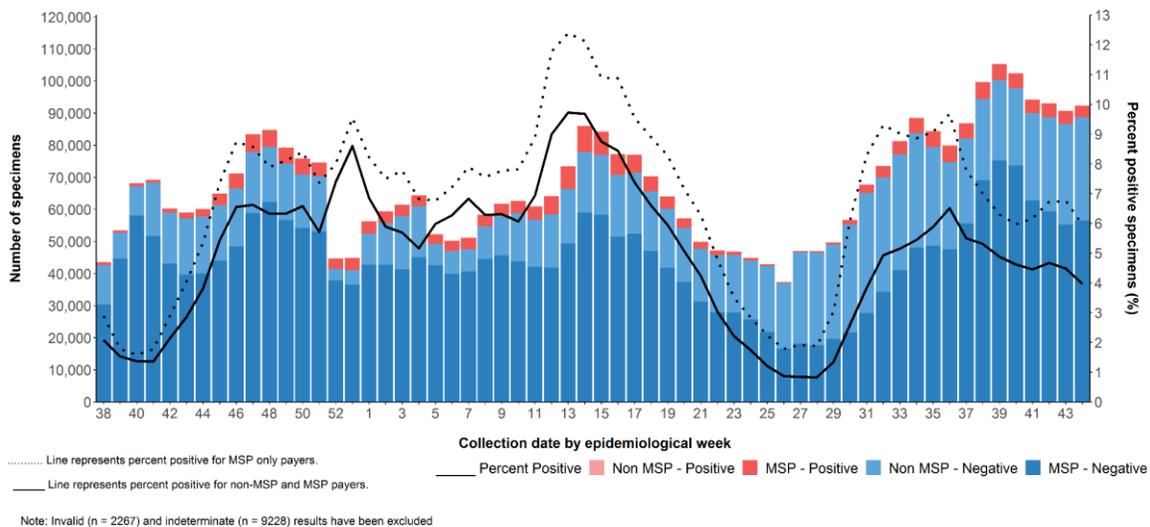
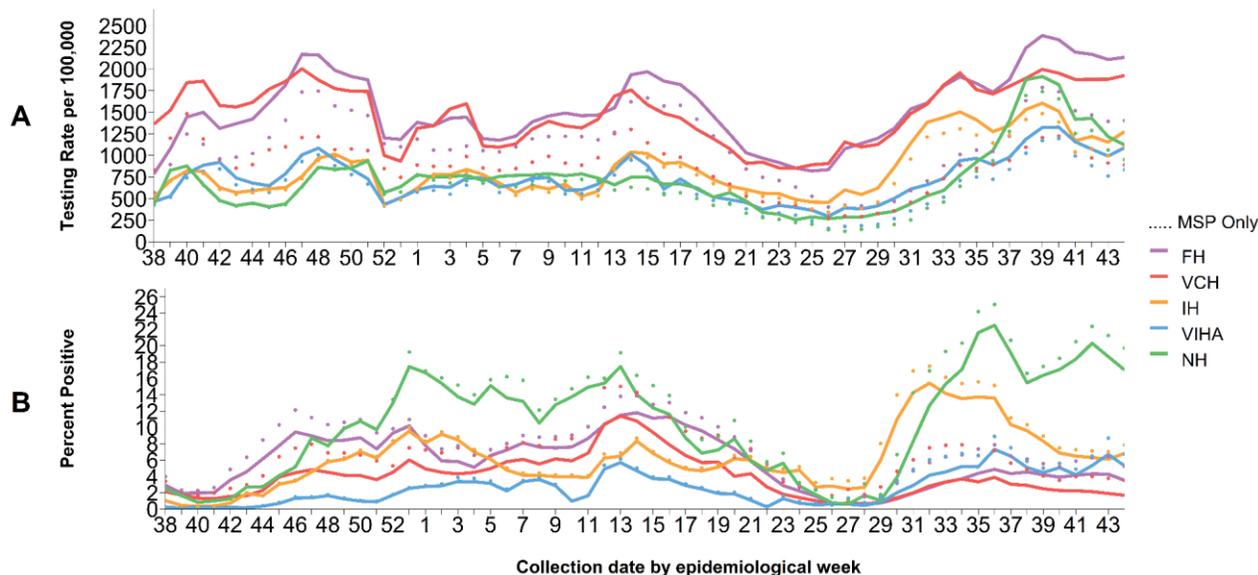


Figure 4. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC Sept 13, 2020 (week 38) – Nov 06, 2021 (week 44)



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 have stabilized in all age groups except for the 5-9 year-olds in whom testing rates are the highest in week 44, with an increase from 1,869 per 100K in week 43 to 2,047 per 100K in week 44.

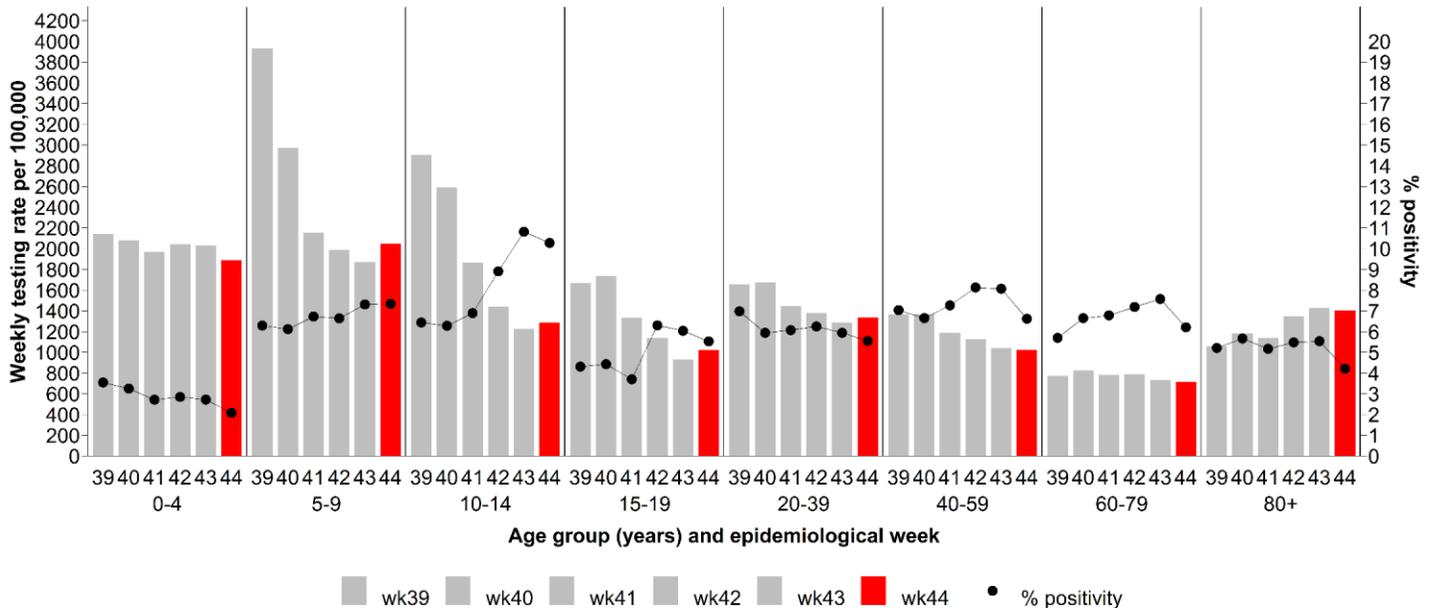
As shown by the black dots in [Figure 5](#), the percent positivity in week 44 comparing to week 43 has stabilized or decreased in all age groups. The biggest decreases between week 43 and week 44 were seen in the 40-59 (from 8.1% to 6.6%), 60-79 (from 7.6% to 6.2%), and 80+ year-olds (from 5.5% to 4.2%). The highest percent positivity in week 44 was observed in the 10-14 year-olds at 10.3%.

Case distribution and weekly incidence by age group

As shown in [Figure 6](#), age-specific incidences decreased in most age groups from week 43 to 44, except in the <10, 15-19, and 20-29 year-olds. After a steep increase, the incidence rates in children <10 of age declined from 189 per 100K in week 38 to 97 per 100K in week 43, with a recent increase to 106 per 100K in week 44. From week 43 to week 44, the incidence rates in 15-19 and 20-29 year-olds also increased from 56 to 69 per 100K and 53 to 58 per 100K, respectively. The incidence rate in 80+ age groups decreased from 55 per 100K in week 43 to 35 per 100K in week 44. Age-specific incidences may increase as data become more complete.

As shown in [Figure 7](#), incidence is much higher in unvaccinated than in fully vaccinated people in all age groups across time. Compared to week 43, incidence in the unvaccinated group has decreased or stabilized in all age groups, except in the <12 year-olds (from 115 per 100K to 123 per 100K). The highest incidence rate among the unvaccinated in weeks 34 to 44 has been in the 80+ year age group, with an incidence of 1,178 per 100K in week 44, down from the peak of 2,203 per 100K in week 42. This is 40 times higher than in fully vaccinated 80+ year-olds for the same week. Among those who are fully vaccinated, incidence has been relatively stable across recent weeks, with a slight increase in week 44 for the 12-19 (from 16 per 100K to 22 per 100K), 20-29 (from 21 per 100K to 29 per 100K), and 30-39 (from 44 per 100K to 50 per 100K) year-olds. The highest incidence rate among fully vaccinated people was in the 30-39 year-olds, at 50 per 100K in week 44, which is 5 times lower than in unvaccinated people of the same age for the same week.

Figure 5. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC Oct 02, 2021 (week 39) – Nov 06, 2021 (week 44)



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) – Nov 06, 2021 (week 44) (N= 202,883)

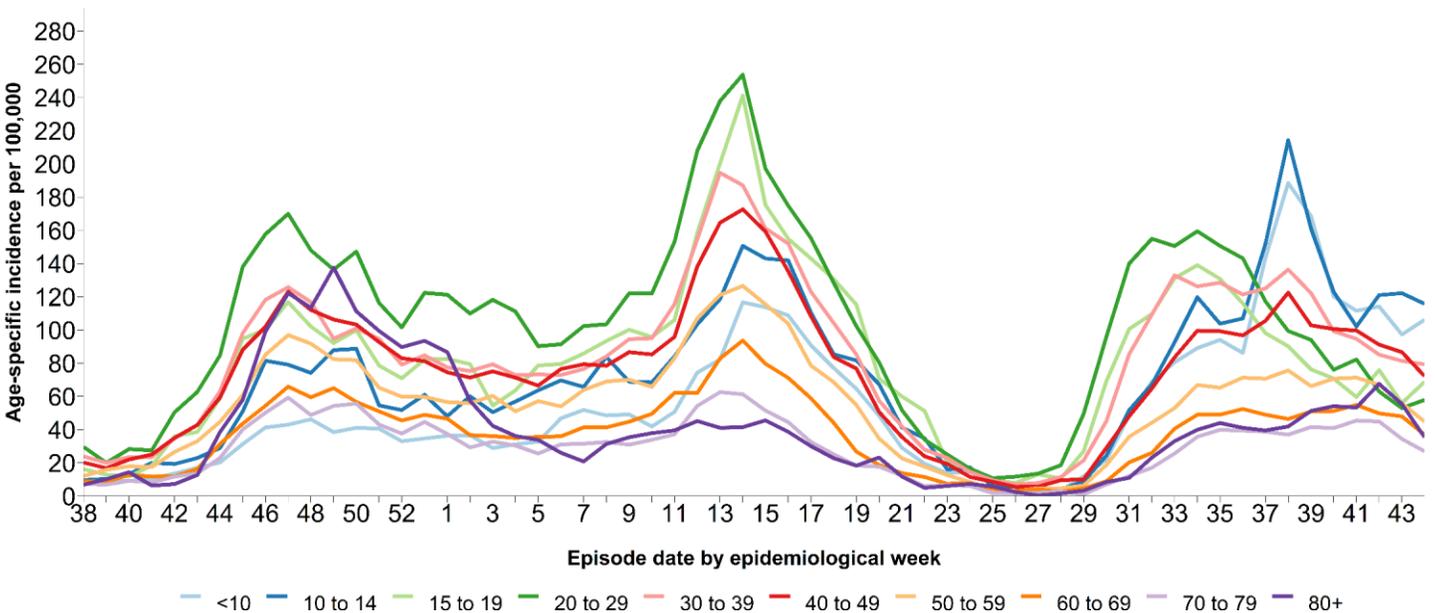
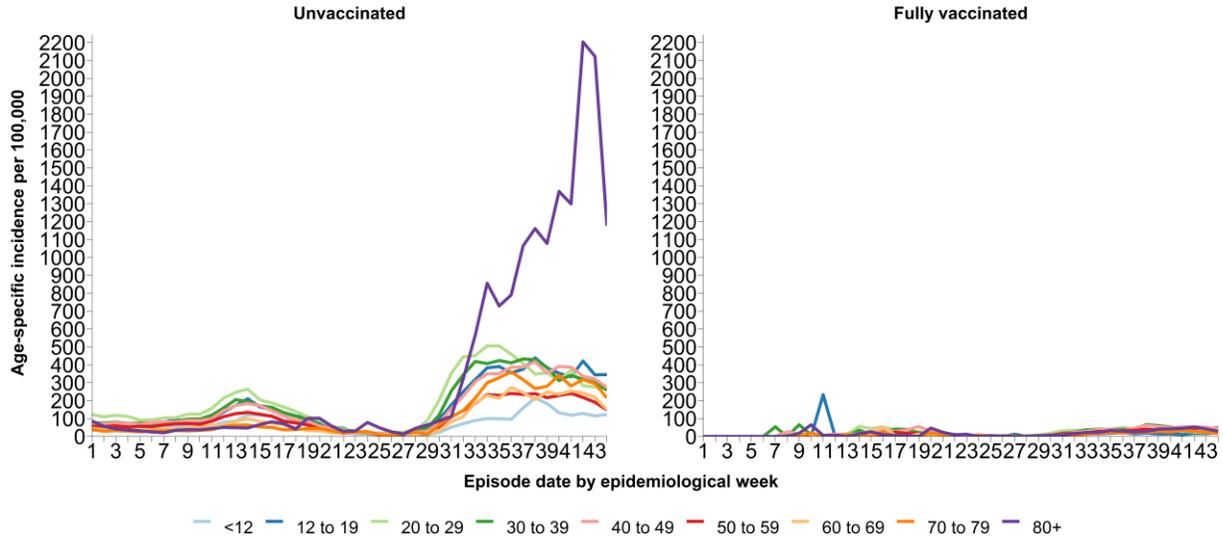


Figure 7. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week and vaccination status, BC Jan 3, 2021 (week 1) – Nov 06, 2021 (week 44) (N= 210,714)



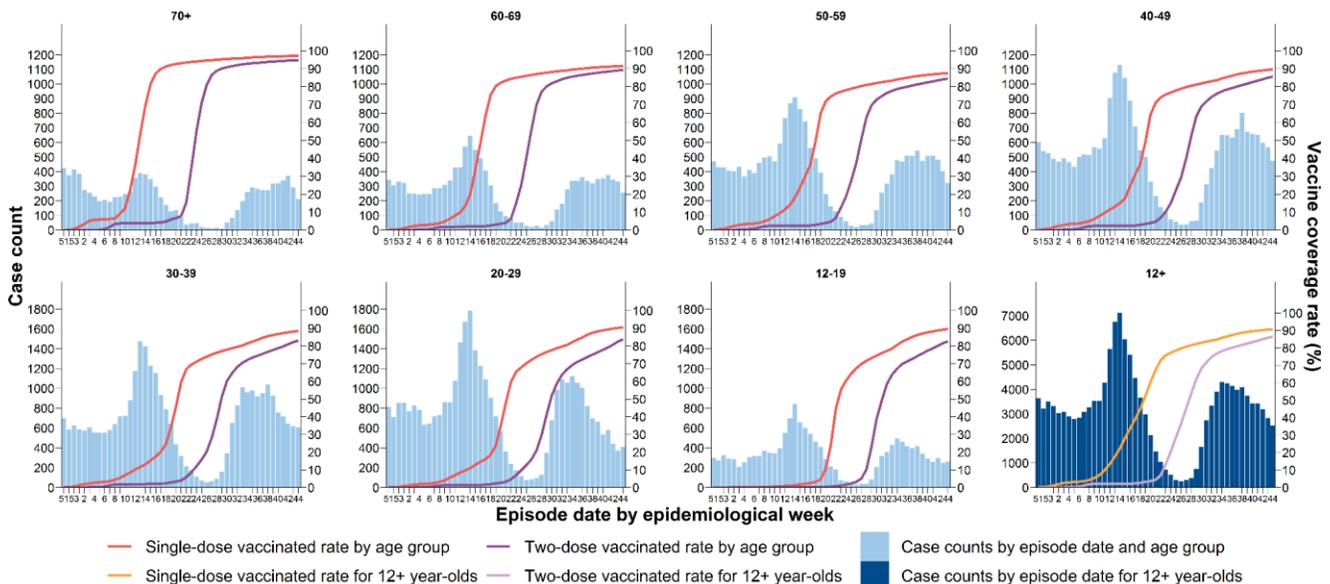
^a The peak in week 11 among 12 to 19-year-olds was caused by one case among a small number of vaccinated individuals

Vaccine coverage and weekly cases by age group

As shown in [Figure 8](#), 91% of eligible 12+ year-olds had received a single dose of vaccine and 86% were fully vaccinated by week 44.

In week 44, the single-dose coverage for age groups 50+ years ranged from 88-97%, and two-dose coverage ranged from 85-95%, with 786 cases reported for those age groups combined. Single-dose coverage in the 20-49 year-olds was between 89-91% and two-dose coverage ranged between 83-86%, with 1,482 cases reported for those age groups combined in week 44. Single-dose coverage in the 12-19 year-olds was 90% and 83% were fully vaccinated, with 262 cases reported for that age group in week 44.

Figure 8. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC Dec 13, 2020 (week 51) – Nov 06, 2021 (week 44)



Data sources: health authority case line list data and PHSA Provincial Immunization Registry

D. Severe outcome counts and epi-curve

The number of hospital admissions has decreased since week 42, at an average of 281 hospitalizations per week in weeks 42 to 44. ICU admissions have also been decreasing since week 42, with an average of 67 ICU admissions per week. Between week 43 and week 44, hospital admissions and ICU admissions decreased from 280 to 261 and 67 to 49, respectively ([Table 2](#), [Figure 9](#)). Death counts have been relatively stable since week 39, with a slight decrease to 41 deaths in week 44.

As shown in [Figure 10](#), the rate of hospital and ICU admission was higher in unvaccinated as compared to fully vaccinated people throughout 2021. In week 44, the hospital admission rate was 17 per 100K among those who were unvaccinated as compared to 2 per 100K among those who were fully vaccinated. The ICU admission rate among unvaccinated people was 4 per 100K as compared to 0 per 100K among fully vaccinated people.

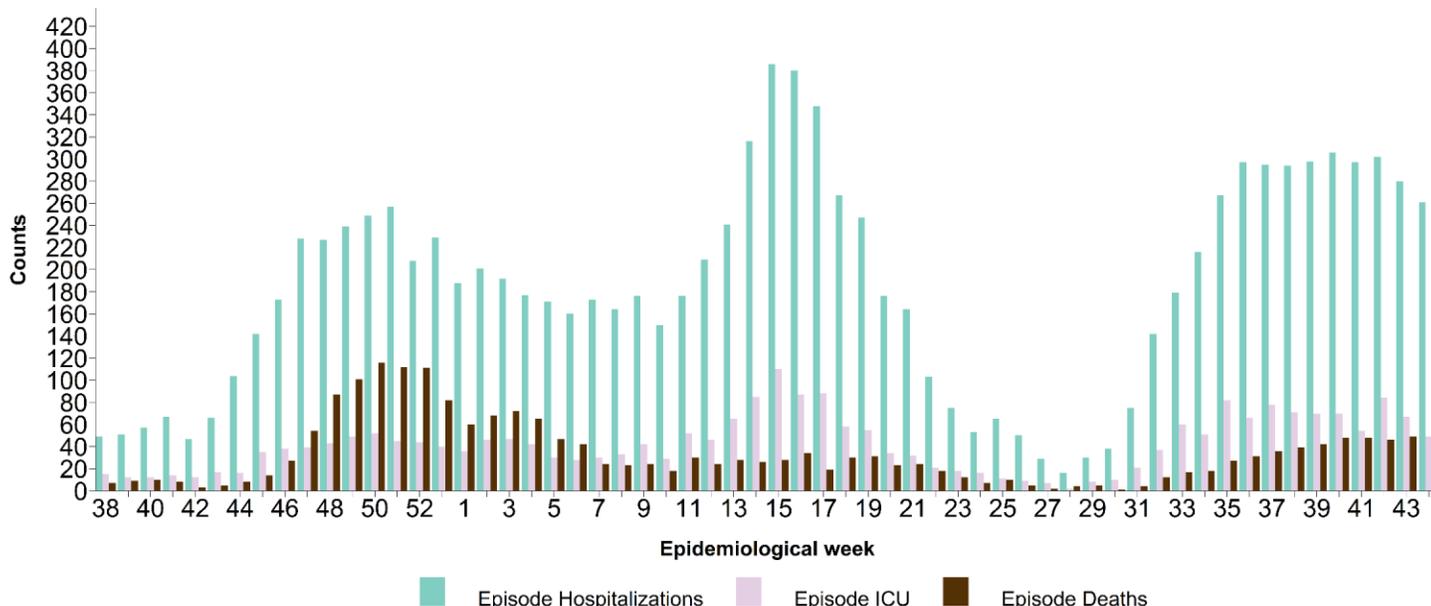
Cumulatively, there have been 19 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There have been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 (range 1-15) years.

Table 2. COVID-19 severe outcomes by episode date, health authority of residence, BC Jan 15, 2020 (week 3) – Nov 06, 2021 (week 44)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 44, hospitalizations	110	55	35	46	15	0	261
Cumulative hospitalizations^b	5,679	1,834	601	1,231	2,336	14	11,695/210,745 (6)
Week 44, ICU admissions	23	8	5	9	4	0	49
Cumulative ICU admissions^b	1,146	524	167	288	627	2	2,754/210,745 (1)
Week 44, deaths	13	2	5	13	8	0	41
Cumulative deaths	1,067	281	101	231	553	0	2,233/210,745 (1)

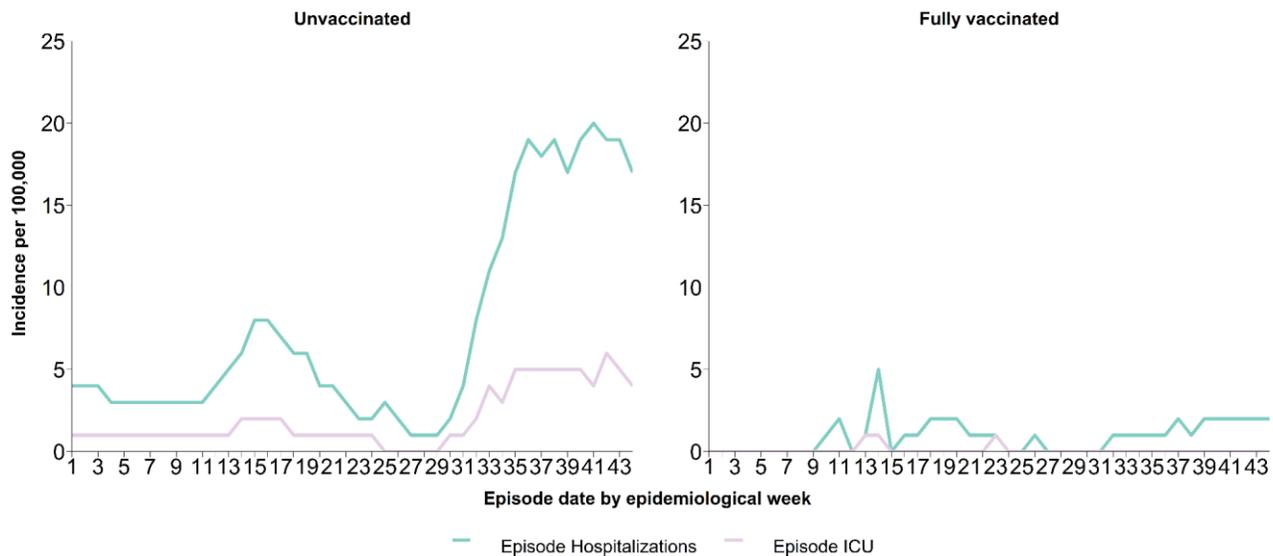
- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. Data source: health authority case line lists only. Data may be incomplete and subject to change

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC, Sept 13, 2020 (week 38) – Nov 06, 2021 (week 44)



Data sources: health authority case line list data and PHSA Provincial Immunization Registry

Figure 10. COVID-19 hospital admissions and deaths incidence per 100K population by episode date and vaccination status, BC, Jan 3, 2021 (week 1) – Nov 06, 2021 (week 44)



E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 44, median age of hospital admissions, ICU admissions and deaths was 61 years, 62 years and 83 years, respectively, based on health authority case line lists only (data not shown).

Since week 38, there was a weekly average of 3 deaths in age groups <50 years of age, 6 deaths in age group 50-59 years old, 7 deaths in age group 60-69 years old, 10 deaths in the 70-79 year-olds, and 19 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) – Nov 06, 2021 (week 44) (N= 210,714)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	15,747	157 (1)	16 (<1)	2 (<1)
10-19	23,802	119 (<1)	24 (<1)	0 (<1)
20-29	45,322	689 (2)	90 (<1)	5 (<1)
30-39	39,527	1,263 (3)	254 (1)	28 (<1)
40-49	30,465	1,356 (4)	315 (1)	47 (<1)
50-59	24,812	1,871 (8)	559 (2)	121 (<1)
60-69	16,333	2,177 (13)	684 (4)	240 (1)
70-79	8,370	2,098 (25)	593 (7)	477 (6)
80-89	4,397	1,478 (34)	208 (5)	756 (17)
90+	1,939	508 (26)	20 (1)	557 (29)
Total	210,714	11,716	2,763	2,233
Median age^c	34	61	61.5	83

- a. Among those with available age information only.
- b. 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.
- c. Median ages calculated are based on health authority case line lists only.

F. Care facility outbreaks

As shown in [Table 4](#) and [Figure 11](#), 415 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 44. In week 44, five new outbreaks were declared, based on earliest case onset date. Since week 38, 30 (68%) outbreaks were reported in long-term care settings and 21 (70%) were declared by FH.

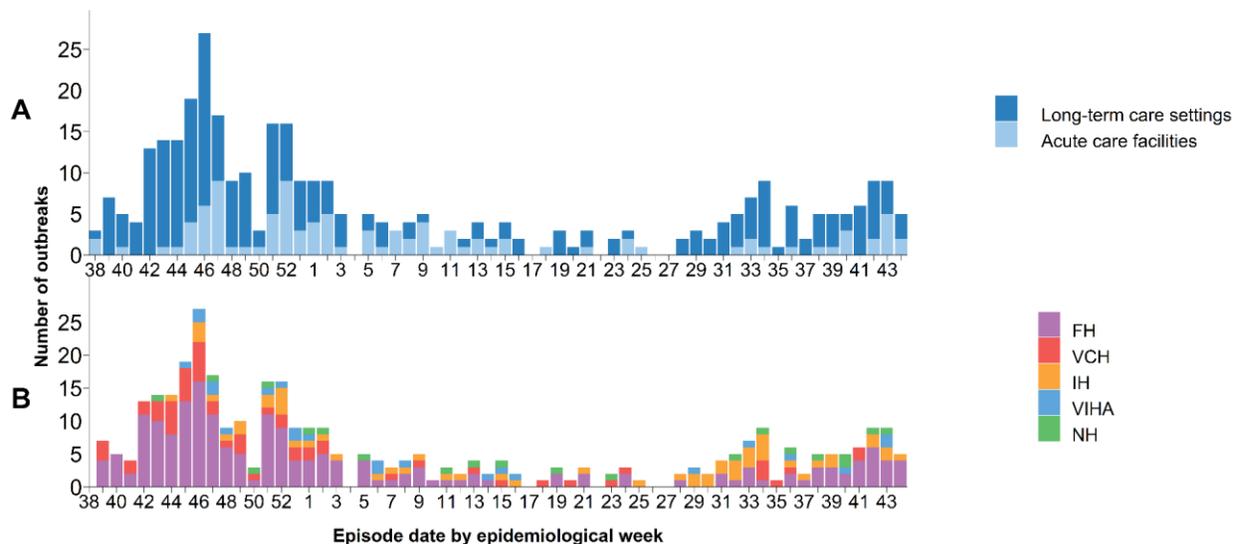
Four of the 41 (10%) deaths reported in week 44 were associated with an outbreak in a care facility.

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) – Nov 06, 2021 (week 44) (N=415)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 44, Care Facility Outbreaks	5	63	18	0	81	4	0	0	4
Cumulative, Care Facility Outbreaks	415	4,421	2,628	9	7,058	1,176	0	0	1,176

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 11. 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) – Nov 06, 2021 (week 44) (N=347)



- 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 2020, VCH and FH no longer declare outbreaks with single staff cases unless there is evidence of transmission within the facility.

G. 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 Surveillance Dashboard here: <https://public.tableau.com/app/profile/bccdc/viz/BCCDCCOVID-19SurveillanceDashboard/Introduction>

For global comparisons and additional epidemiological summaries on cases, severity and testing, visit the BCCDC COVID-19 Epidemiology App here: https://bccdc.shinyapps.io/covid19_global_epi_app/