

British Columbia (BC) COVID-19 Situation Report
Week 43: October 24- October 30, 2021

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Provincial COVID-19 incidence steadily declining; hospital admissions, ICU admissions, and deaths are stable

The provincial incidence by episode date was 59 per 100K, with 3,090 cases in week 43.

Incidence by episode date decreased in all HAs in week 43 compared to prior weeks of Wave 4:

- Since week 38, Fraser Health decreased from 99 to 68 per 100K.
- Since week 34, Vancouver Coastal decreased from 69 to 28 per 100K.
- Since week 33, Interior Health decreased from 223 to 62 per 100K.
- Since week 37, Island Health decreased from 67 to 47 per 100K.
- Since week 38, Northern Health decreased from 306 to 159 per 100K.

Age-specific incidences decreased in all age groups from week 42 to 43. Incidence rates in children <10 of age have continued to decline since week 38. The incidence rate in the 80+ year-olds steadily increased from week 31 to week 42, followed by a decrease in week 43. Among those who were fully vaccinated, incidence has been relatively stable in all age groups across recent weeks. The highest incidence rate among the unvaccinated in weeks 34 to 43 has been in the 80+ year-olds (1,887 per 100K in week 43).

By week 43, the single-dose vaccination coverage in the eligible 12+ year-olds reached 90% and 86% were fully vaccinated.

Testing of MSP-funded specimens has continued to decrease since the peak in week 39, from ~80,500K to ~59,500K in week 43. Positivity increased slightly from 6.0% in week 40 to 6.8% in week 43.

The number of hospital admissions has been stable since week 36 at an average of 295 hospitalizations per week. ICU admissions have also been relatively stable since week 36, with an average of 70 ICU admissions per week. Death has been stable at 46 deaths per week in weeks 42 and 43. The rate of hospital and ICU admissions was higher in unvaccinated as compared to fully vaccinated people throughout 2021.

By case of earliest onset date, eight new outbreaks were reported in healthcare settings in week 43.

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 08, 2021, laboratory data on November 05, 2021, PIR vaccine coverage date on November 05, 2021, and PCMS hospitalization data on November 08, 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 43, 2021, there have been 207,004 cases for a cumulative incidence of 3,980 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 59 per 100K (3,090 cases) in week 43, which has decreased from the peak of Wave 4 (week 38) at 102 per 100K. Incidence by episode date may increase as data become more complete in recent weeks.

As shown in Figure 2, incidence has decreased in every Health Authority (HA) compared to prior weeks of Wave 4. Incidence in Interior Health (IH) decreased from 223 per 100K in week 33 to 62 per 100K in week 43. Since week 34, incidence in Vancouver Coastal Health (VCH) decreased from 69 per 100K to 28 per 100K in week 43. Incidence in Island Health (VIHA) decreased from 67 per 100K in week 37 to 47 per 100K in week 43. Incidence in the Central Vancouver Island health service delivery area has been increasing since week 41 from 74 per 100K to 87 per 10K in week 43. From weeks 38 to 43, Fraser Health (FH) and Northern Health (NH) decreased from 99 per 100K to 68 per 100K and 306 per 100K to 159 per 100K, respectively. These rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 (week 3) – Oct 30, 2021 (week 43) (N= 207,004)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 43, case counts	1,339	511	410	481	347	2	3,090
Cumulative case counts	105,405	31,016	10,983	15,672	43,629	299	207,004
Week 43, cases per 100K population	68	62	47	159	28	NA	59
Cumulative cases per 100K population	5,386	3,779	1,267	5,181	3,500	NA	3,980

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC Sept 13, 2020 (week 38) – Oct 30, 2021 (week 43) (N= 199,154)

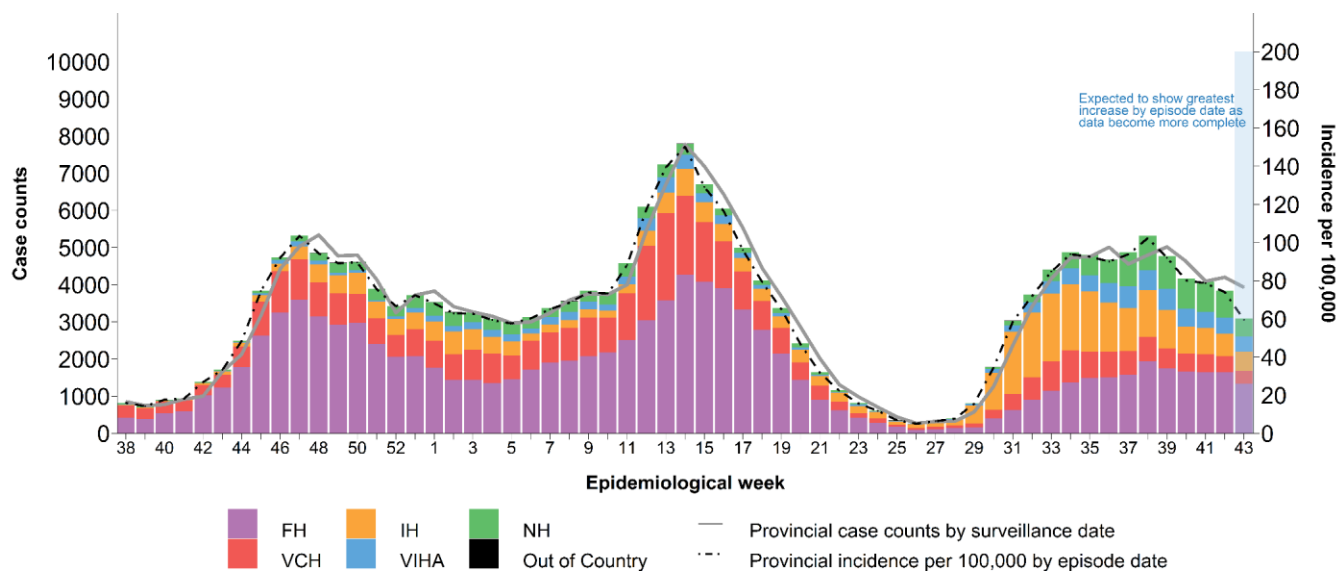
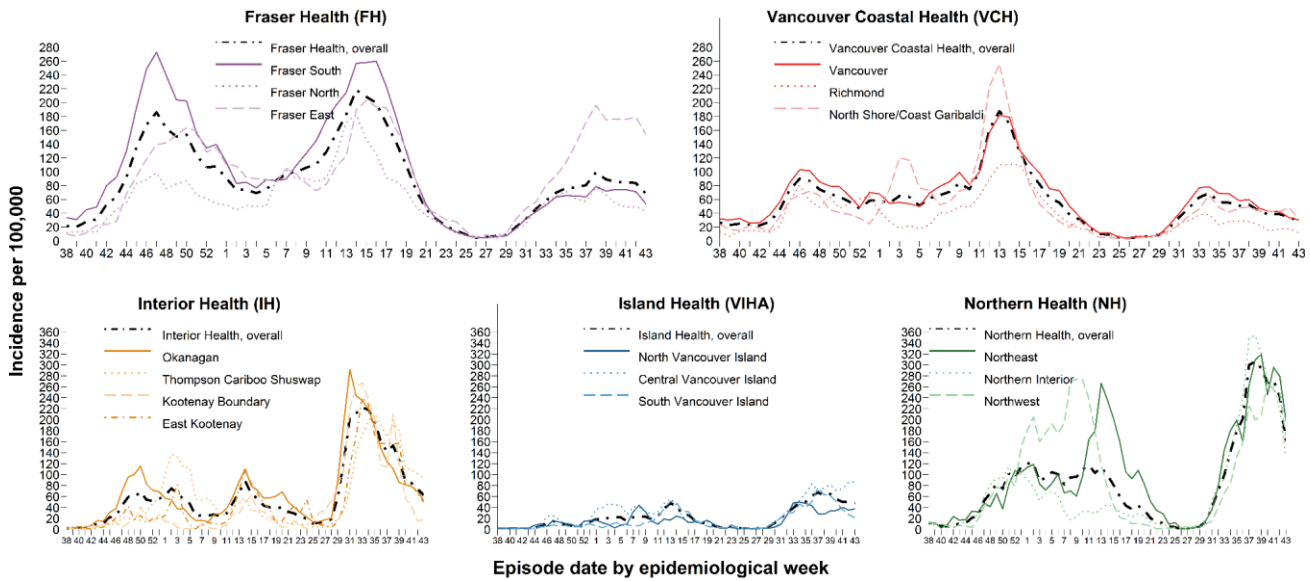


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Oct 30, 2021 (week 43) (N= 199,154)



B. Test rates and percent positive

As shown by the darker-colored bars in [Figure 3](#), testing of MSP-funded specimens has continued to decrease since the peak in week 39, from ~80,500K to ~59,500K in week 43. The positivity of MSP-funded specimens increased slightly from 6.0% in week 40 to 6.8% in week 43.

As shown in [Figure 4](#), the per capita testing rates (Panel A) declined in week 43 in all HAs compared to week 39. MSP testing rates in FH remained highest at 1,395 per 100K (decreased from 1,787 per 100K in week 39) followed by NH at 1,061 per 100K (decreased from 1,739 per 100K in week 39). Percent positivity (Panel B) for MSP-only specimens was highest in NH at 21.3%, increasing since week 38 from 16.6%. Percent positivity in FH and VIHA increased from 5.2% in week 40 to 6.4% in week 43, and 4.9% in week 41 to 8.7% in week 43, respectively. Percent positivity in VCH decreased slightly from 4.0% in week 40 to 3.8% in week 43. IH is the only HA with decreasing percent positivity since week 36 from 15.2% to 7.0% in week 43.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Oct 30, 2021 (week 43)

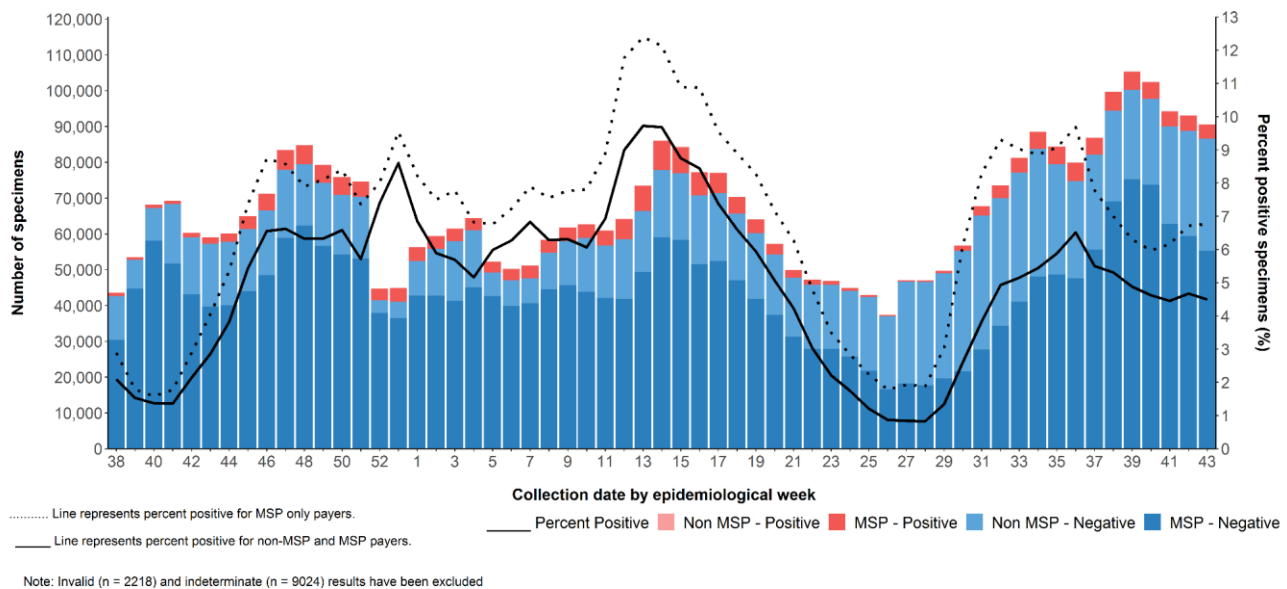
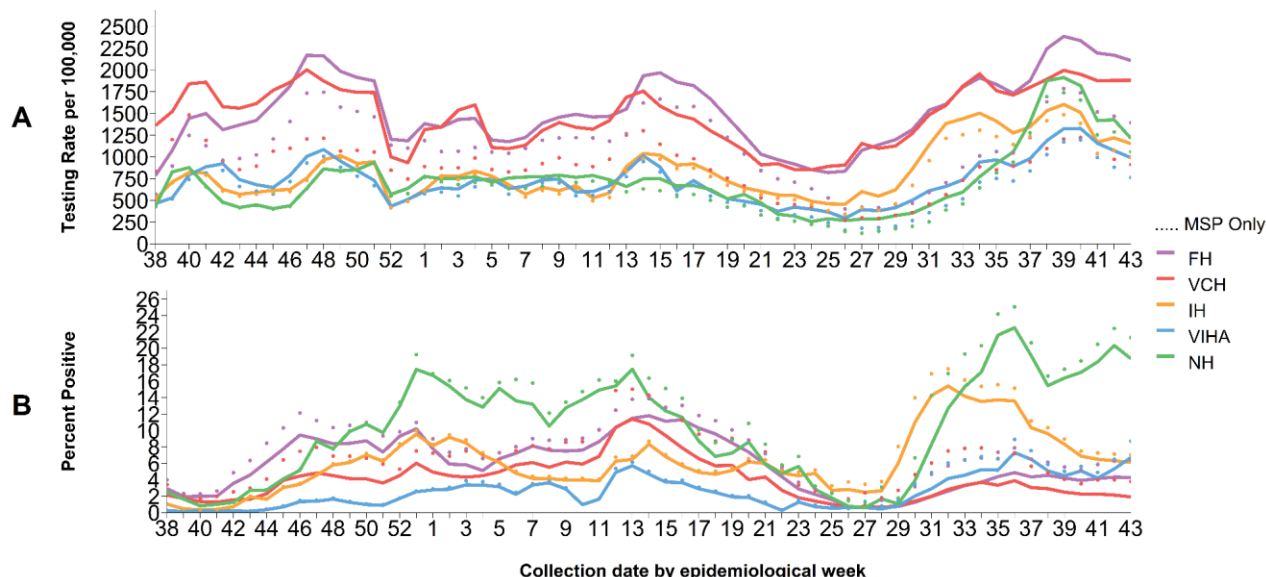


Figure 4. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC Sept 13, 2020 (week 38) – Oct 30, 2021 (week 43)



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](#), the testing rates have stabilized or decreased in all age groups in week 43 except for the 80+ age group. After reaching the highest weekly testing rate of any age group since the start of the pandemic, testing rates in the 5-9 year-olds decreased from 3,933 per 100K in week 39 to 1,869 per 100K in week 43. A decrease was also observed in 10-14 year-olds, from 2,902 per 100K to 1,223 per 100K.

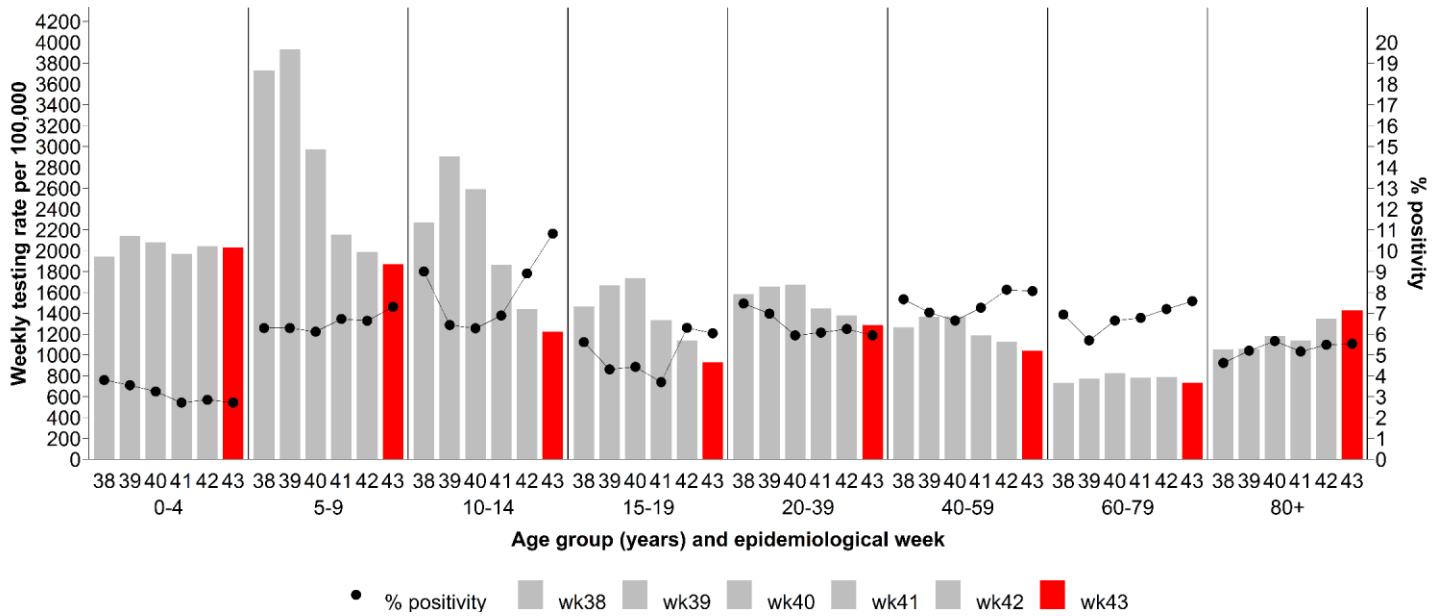
As shown by the black dots in [Figure 5](#), the percent positivity in week 43 comparing to week 42 has stabilized or decreased in all age groups except for the 5-9, 10-14, and 60-79 age groups. The biggest increases between week 42 and week 43 were seen in the 5-9 (6.6% to 7.3%), 10-14 (from 8.9% to 10.8%), and 60-79 year-olds (from 7.2% to 7.6%). The highest percent positivity in week 43 was observed in the 10-14 year-olds.

Case distribution and weekly incidence by age group

As shown in [Figure 6](#), age-specific incidences decreased in all age groups from week 42 to 43. After a steep increase, the incidence rates in children <10 of age have continued to decline from 189 per 100K in week 38 to 86 per 100K in week 43. The incidence rate in 80+ age groups steadily increased from 11 per 100K in week 31 to 66 per 100K in week 42, then decreased to 53 per 100K in week 43. From week 40 to week 43, incidence rate increased most rapidly in 80+ year-olds in Fraser East health service delivery area from 133 per 100K to 215 per 100K (data not shown). 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 42, incidence in the unvaccinated group has decreased in all age groups. The highest incidence rate among the unvaccinated in weeks 34 to 43 has been in the 80+ year age group, with an incidence of 1,887 per 100K in week 43. This is 48 times higher than in fully vaccinated 80+ year-olds for the same week. Among those who are fully vaccinated, incidence has been relatively stable in all age groups across recent weeks. The highest incidence rate among fully vaccinated people was in the 40-49 age group, at 46 per 100K in week 43, which is 6 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 Sep 25, 2021 (week 38) – Oct 30, 2021 (week 43)



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) – Oct 30, 2021 (week 43) (N= 199,142)

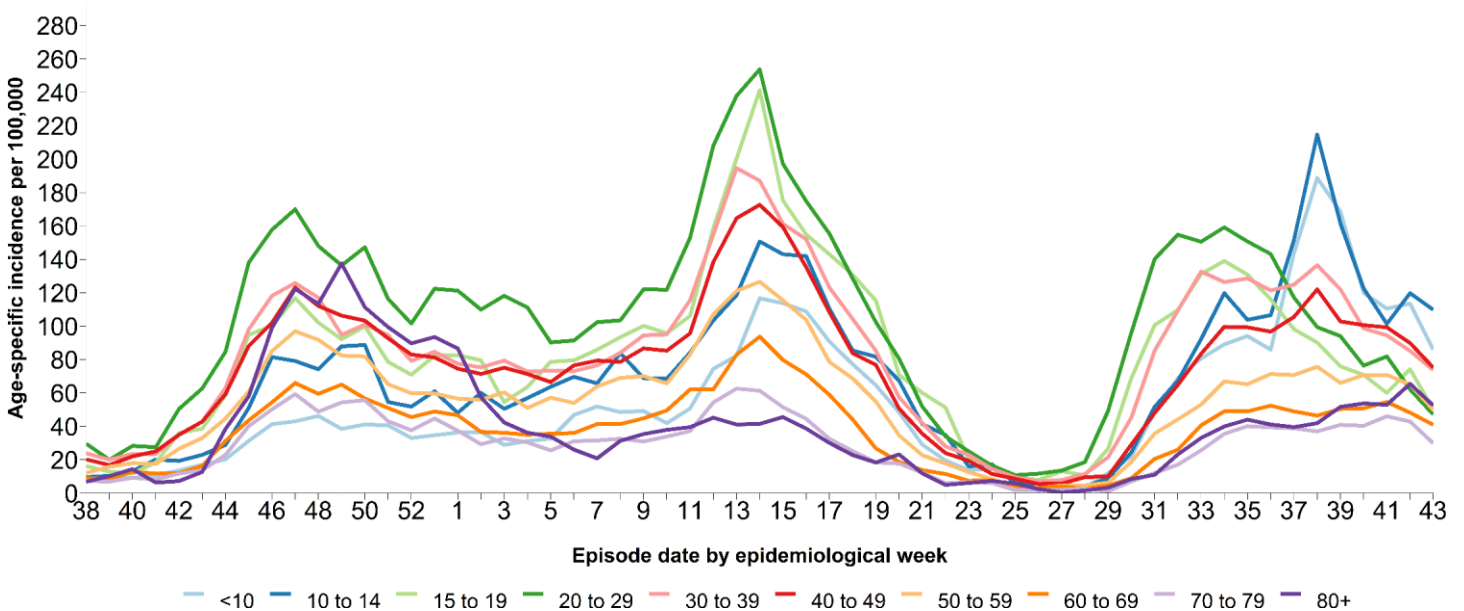
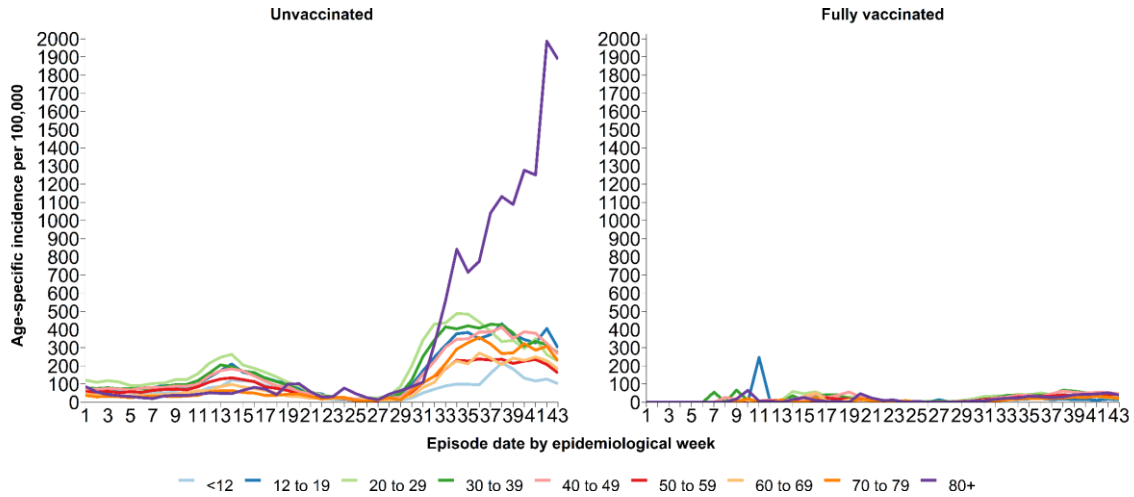


Figure 7. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week and vaccination status, BC Jan 3, 2021 (week 1) – Oct 30, 2021 (week 43) (N= 206,973)



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

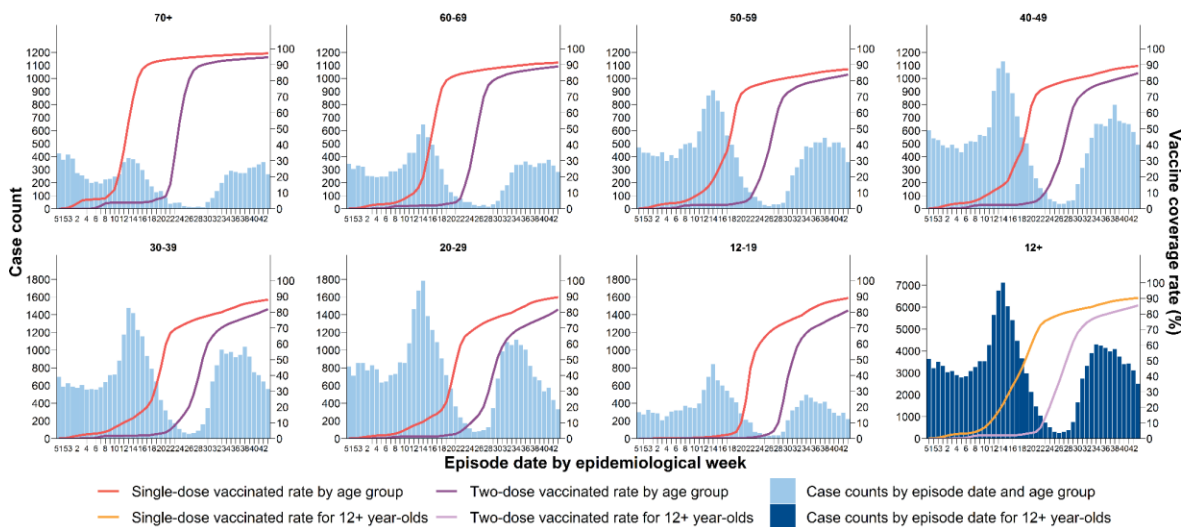
Vaccine coverage and weekly cases by age group

Vaccine roll-out in the community (i.e. individuals not residing in healthcare facilities, not healthcare workers and not clinically extremely vulnerable) was phased by age groups. The 70+ year-olds were eligible between weeks 10 and 14, the 40 to 69 year-olds started in weeks 15-19, the 20 to 39 year-olds started in weeks 19-20, and children 12-19 years of age started in week 20. As vaccination coverage increases, an impact on case counts is expected a few weeks later (Figure 8).

By week 43, 90% of eligible 12+ year-olds had received a single dose of vaccine and 86% were fully vaccinated.

In week 43, the single-dose coverage for age groups 50+ years ranged from 87-97%, and two-dose coverage ranged from 84-95%, with 905 cases reported for those age groups combined. Single-dose coverage in the 20-49 year-olds was between 88-90% and two-dose coverage ranged between 82-85%, with 1,383 cases reported for those age groups combined in week 43. Single-dose coverage in the 12-19 year-olds was 89% and 81% were fully vaccinated, with 222 cases reported for that age group in week 43.

Figure 8. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC Dec 13, 2020 (week 51) – Oct 30, 2021 (week 43)



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

D. Severe outcome counts and epi-curve

The number of hospital admissions has been stable since week 36 at an average of 295 hospitalizations per week. ICU admissions have also been relatively stable since week 36, with an average of 70 ICU admissions per week. There was a recent decrease from 84 ICU admissions in week 42 to 69 ICU admissions in week 43 (Table 2, Figure 9). Death counts had been increasing slowly from 31 deaths in week 36 to 49 deaths in week 41, then stabilized to 46 deaths per week in the past two epi-weeks.

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 43, the hospital admission rate was 19 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 6 per 100K as compared to <1 per 100K among fully vaccinated people.

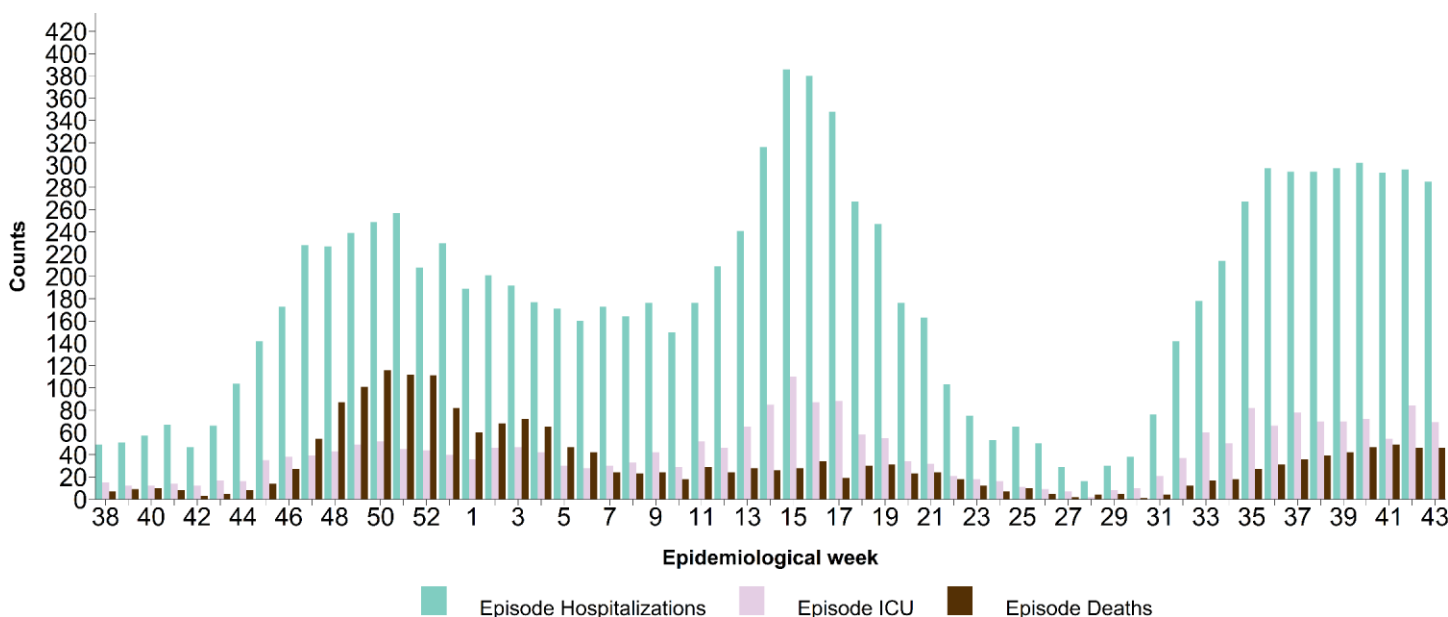
Cumulatively, there have been 19 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There have been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 (range 1-15) years.

Table 2. COVID-19 severe outcomes by episode date, health authority of residence, BC Jan 15, 2020 (week 3) – Oct 30, 2021 (week 43)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 43, hospitalizations	122	35	42	59	27	0	285
Cumulative hospitalizations^b	5,561	1,779	557	1,190	2,321	14	11,422/207,004 (6)
Week 43, ICU admissions	28	8	8	17	8	0	69
Cumulative ICU admissions^b	1,122	516	160	284	623	2	2,707/207,004 (1)
Week 43, deaths	18	10	6	10	2	0	46
Cumulative deaths	1,052	279	96	218	543	0	2,188/207,004 (1)

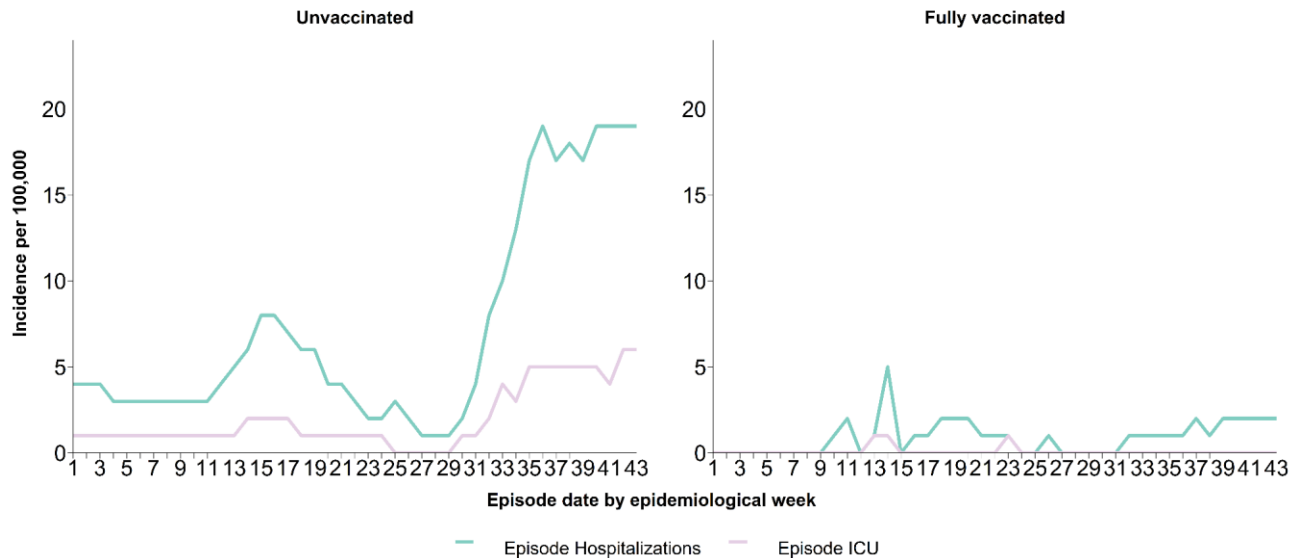
- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. Data source: health authority case line lists only. Data may be incomplete and subject to change

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC, Sept 13, 2020 (week 38) – Oct 30, 2021 (week 43)



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) – Oct 30, 2021 (week 43)



E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 43, 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 4 deaths in age groups <50 years of age, 6 deaths in age group 50-59 years old, 6 deaths in age group 60-69 years old, 10 deaths in the 70-79 year-olds, and 20 deaths in the 80+ year-olds. 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) – Oct 30, 2021 (week 43) (N= 206,973)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	15,188	154 (1)	16 (<1)	2 (<1)
10-19	23,281	117 (<1)	24 (<1)	0 (<1)
20-29	44,859	670 (1)	87 (<1)	5 (<1)
30-39	38,856	1,236 (3)	250 (1)	28 (<1)
40-49	29,902	1,324 (4)	310 (1)	44 (<1)
50-59	24,429	1,828 (7)	548 (2)	114 (<1)
60-69	16,009	2,130 (13)	672 (4)	233 (1)
70-79	8,213	2,053 (25)	587 (7)	464 (6)
80-89	4,326	1,439 (33)	202 (5)	745 (17)
90+	1,910	493 (26)	20 (1)	553 (29)
Total	206,973	11,422	2,707	2,188
Median age^c	34	61	62	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](#), 409 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 43. In week 43, eight new outbreaks were declared based on earliest case onset date. Since week 38, 27 (71%) outbreaks were reported in long-term care settings and 18 (67%) were declared by FH.

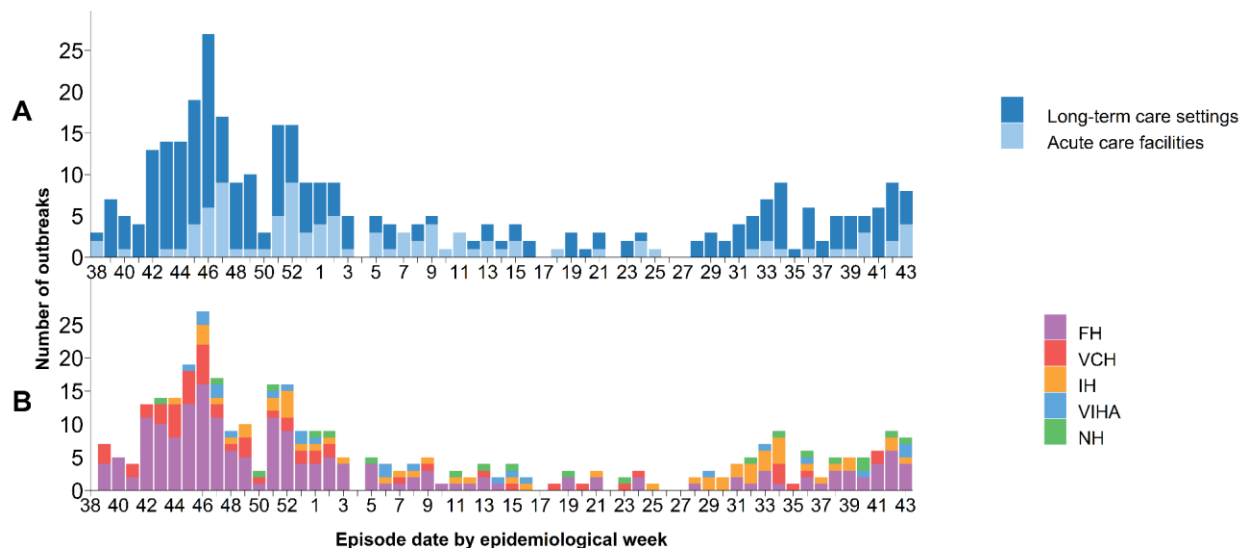
16 out of 46 (35%) deaths reported in week 43 were associated with an outbreak in a care facility.

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) – Oct 30, 2021 (week 43) (N=409)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 43, Care Facility Outbreaks	8	75	30	0	106	16	0	0	16
Cumulative, Care Facility Outbreaks	409	4,356	2,609	9	6,975	1,170	0	0	1,170

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) – Oct 30, 2021 (week 43) (N=341)



- 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. 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/