

British Columbia (BC) COVID-19 Situation Report
Week 47: November 21- November 27, 2021

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Provincial COVID-19 incidence steadily declining; hospital admissions decreasing and deaths remain stable.

The provincial incidence by episode date was 41 per 100K, with 2,152 cases in week 47.

Incidence by Health Authority in week 47:

- Since week 38, Fraser Health incidence decreased from 99 to 34 per 100K.
- Since week 38, Vancouver Coastal incidence decreased from 53 to 24 per 100K.
- Since week 44, Interior Health incidence decreased from 99 to 56 per 100K.
- Since week 44, Northern Health incidence decreased from 215 to 89 per 100K.
- Since week 46, Island Health incidence increased from 41 to 52 per 100K.

Age-specific incidences continued to decrease in all age groups from week 46 to week 47. After a recent increase in week 44, the incidence rate in children <10 of age declined from 127 per 100K to 73 per 100K in week 47. Similarly, the incidence rate in 10-14 year-olds declined since week 44, from 134 per 100K to 87 per 100K in week 47. The incidence rate in 80+ age groups has been declining since week 42 from 68 per 100K to 13 per 100K in week 47.

91% of those eligible for COVID-19 vaccine (i.e. 12+ year-olds) received a single dose of vaccine and 88% received two doses of vaccine by week 47.

Testing of MSP-funded specimens decreased from ~80,500K in week 39 to ~49,800 in week 47. The positivity of MSP-funded specimens decreased from 6.8% in week 43 to 4.9% in week 46.

The number of hospital admissions decreased since week 42; there was an average of 242 hospitalizations per week from weeks 42 to 47. In week 47, 60-79 year-olds had the highest number of hospital admissions. The weekly number of deaths remained stable at 28 in week 46 and week 47. Those aged 60-79 accounted for the highest number of deaths in week 47.

By case of earliest onset date, one new outbreak was reported in healthcare settings in week 47.

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 Apr 2021	VACCINATION PHASE 3 Apr to May 2021	VACCINATION PHASE 4 May to Nov 2021	VACCINATION PHASE 5 Nov 2021 to 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. In September, third dose is available for people who are clinically extremely vulnerable.	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.

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 December 06, 2021, laboratory data on December 06, 2021, PIR vaccine coverage date on December 06, 2021, and PCMS hospitalization data on December 06, 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 47, 2021, there have been 218,774 cases for a cumulative incidence of 4,206 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 41 per 100K (2,152 cases) in week 47, 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 decreased in all Health Authorities (HAs) from week 38 to week 47. Incidence has been trending downward since week 38 in FH (from 99 to 34 per 100k) and in VCH (from 53 to 24 per 100k). Incidence started to decrease since week 44 in IH (from 99 to 56 per 100K) and NH (from 215 to 89 per 100K). Incidence in VIHA increased from 41 per 100K in week 46 to 52 per 100K in week 47, with North Vancouver Island Health Service Delivery Area increasing from 68 per 100K in week 46 to 114 per 100K in week 47. 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 27, 2021 (week 47) (N= 218,774)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 47, case counts	667	463	452	269	300	1	2,152
Cumulative case counts	109,384	33,621	12,795	17,646	45,029	299	218,774
Week 47, cases per 100K population	34	56	52	89	24	NA	41
Cumulative cases per 100K population	5,589	4,096	1,476	5,833	3,612	NA	4,206

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Nov 27, 2021 (week 47) (N= 210,924)

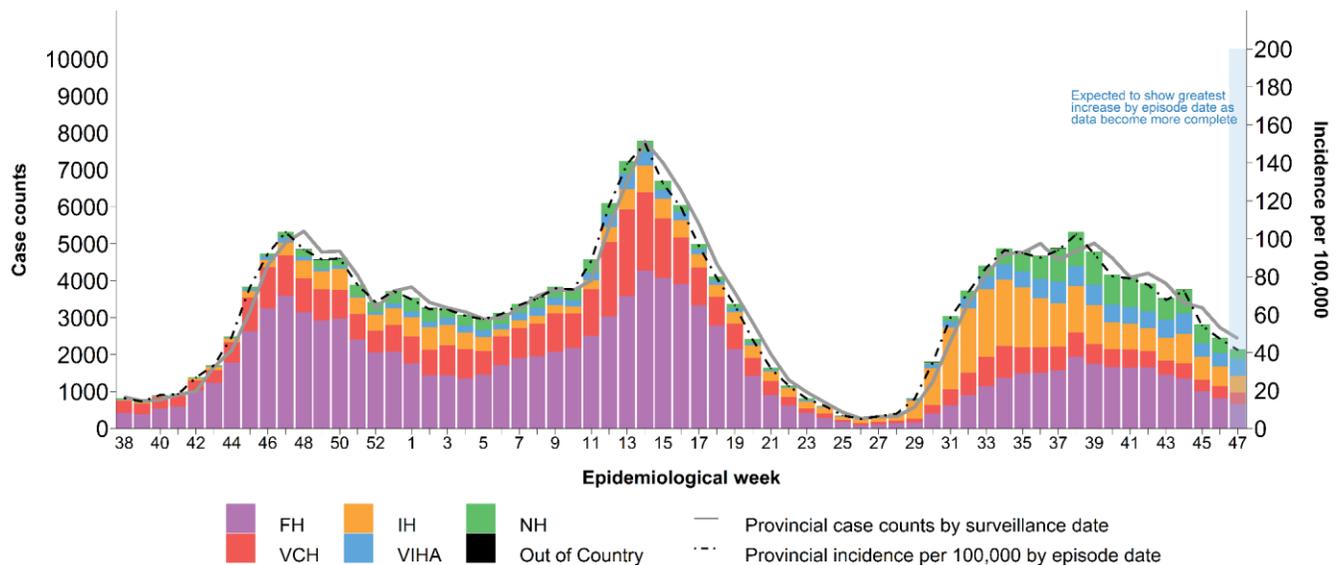
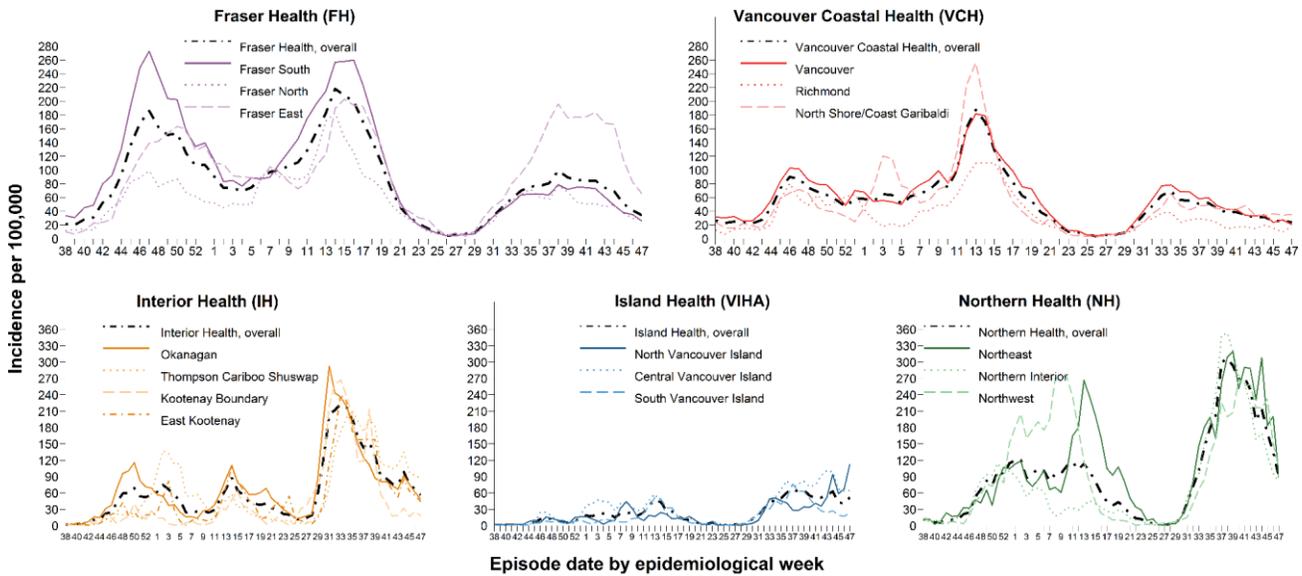


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Sept 13, 2020 (week 38) – Nov 27, 2021 (week 47) (N= 210,924)



B. Test rates and percent positive

As shown by the darker-colored bars in [Figure 3](#), testing of MSP-funded specimens decreased from its peak in ~80,500K in week 39 to ~49,800 in week 47. The positivity of MSP-funded specimens decreased from 6.8% in week 43 to 4.9% in week 47.

As shown in [Figure 4](#), the per capita testing rates (Panel A) decreased from week 46 to week 47 in FH (from 1,147 per 100K to 1,089 per 100K), IH (from 1,020 per 100K to 916 per 100K), and NH (from 880 per 100K to 754 per 100K). Testing rates remained stable at 815 per 100K for VCH since week 46. For VIHA, testing rates increased slightly from 680 per 100K in week 46 to 685 per 100K in week 47. MSP testing rates in FH remained highest at 1,089 per 100K followed by IH at 916 per 100K in week 47. Percent positivity (Panel B) for MSP-only specimens decreased in all HAs except VIHA. Between weeks 46 and 47, percent positivity in FH decreased from 4.4% to 3.8%, in VCH decreased from 3.5% to 3.2%, in IH decreased 6.6% to 6.1%, and in NH decreased from 17.8% to 16.8%. Percent positivity increased in VIHA from 6.2% in week 46 to 7.5% in week 47. Percent positivity was highest in NH at 16.8% in week 47.

Figure 3. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Sept 13, 2020 (week 38) – Nov 27, 2021 (week 47)

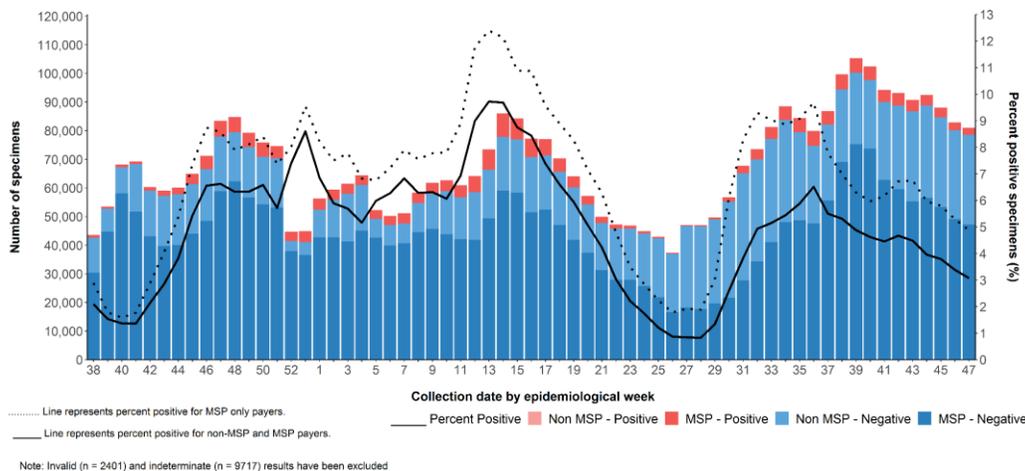
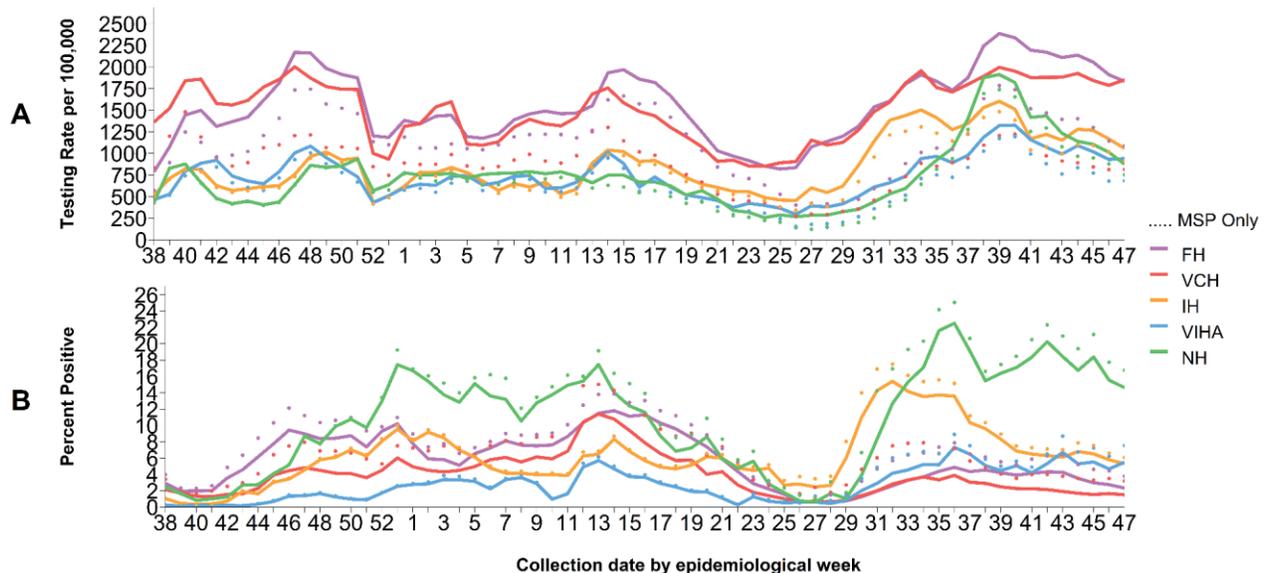


Figure 4. Testing rates and percent SARS-CoV-2 positive by Health Authority and collection week, BC Sept 13, 2020 (week 38) – Nov 27, 2021 (week 47)



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 stabilized or decreased in all age groups from week 46 to week 47. Testing rates remain highest in 0-4 and 5-9 year-olds at 1,640 per 100K and 1,636 per 100K, respectively.

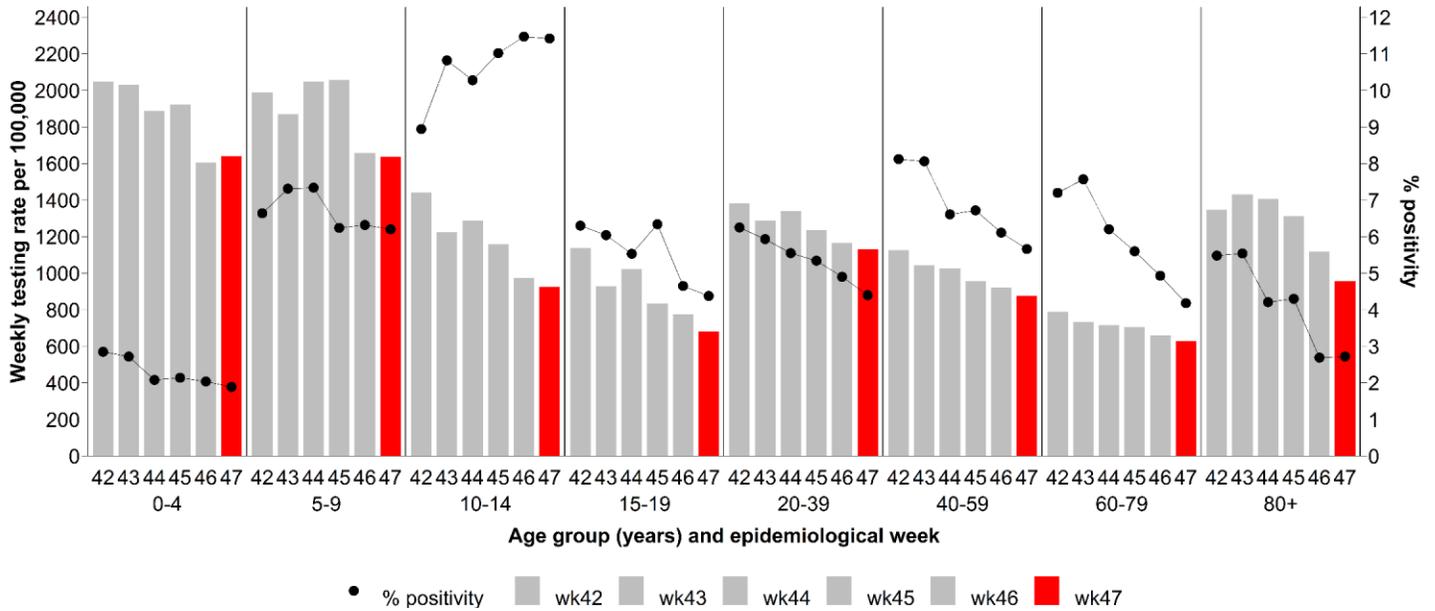
As shown by the black dots in [Figure 5](#), the percent positivity stabilized or decreased in all age groups from week 46 to week 47. The highest percent positivity in week 47 remains in the 10-14 year-olds at 11.4%.

Case distribution and weekly incidence by age group

As shown in [Figure 6](#), age-specific incidences continued to decrease in all age groups from week 46 to week 47. After a recent increase in week 44, the incidence rate in children <10 of age declined from 127 per 100K to 73 per 100K in week 47. Similarly, the incidence rate in 10-14 year-olds declined since week 44, from 134 per 100K to 87 per 100K in week 47. The incidence rate in 80+ age groups has been declining since week 42 from 68 per 100K to 13 per 100K in week 47. 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 46, incidence in the unvaccinated group has decreased in all age groups. Those aged 12-19 have the highest incidence rate among the unvaccinated in week 47, with an incidence of 209 per 100K. Among those who are fully vaccinated, incidence has decreased in all age groups in week 47, except in those aged 50-59, where it increased slightly from 26 per 100K in week 46 to 27 per 100K in week 47. The highest incidence rate among fully vaccinated people was in the 40-49 year-olds, at 37 per 100K in week 47, which is 4.5 times lower than unvaccinated people of the same age group for the same week (165 per 100K). Figure 7 will be removed in the next report and can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#) moving forward.

Figure 5. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC Oct 23, 2021 (week 42) – Nov 27, 2021 (week 47)



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 27, 2021 (week 47) (N= 210,914)

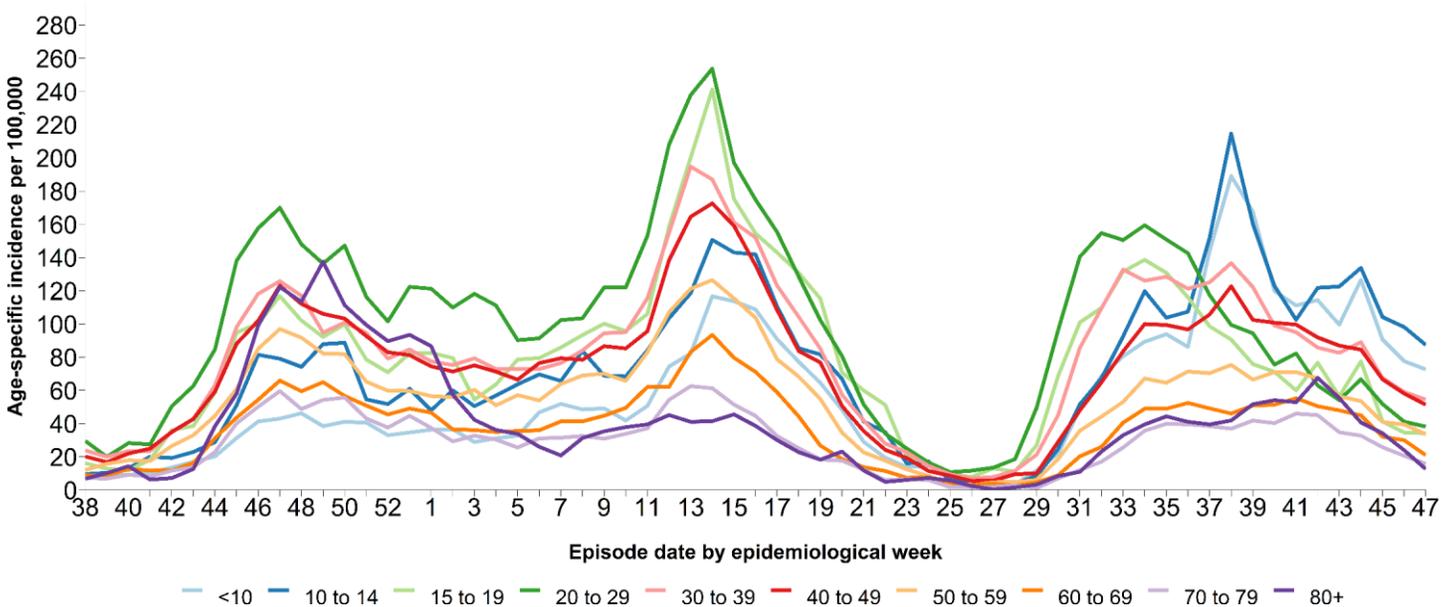
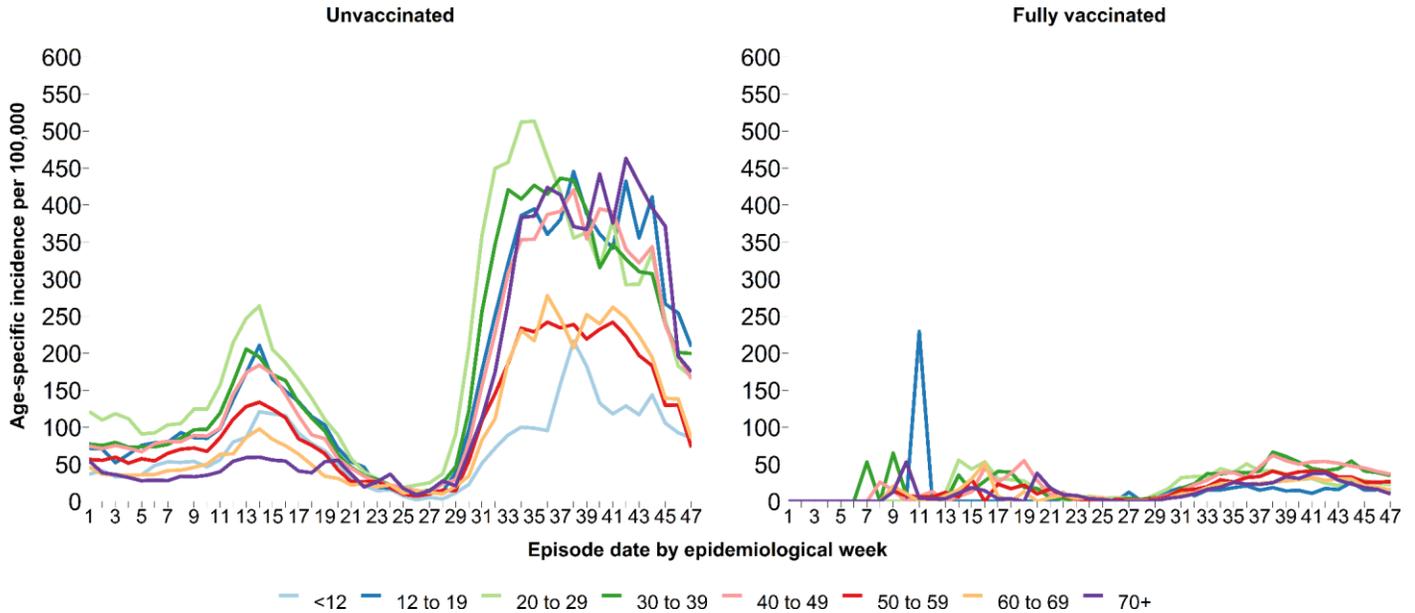


Figure 7. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week and vaccination status, BC Jan 3, 2021 (week 1) – Nov 27, 2021 (week 47) (N= 218,745)



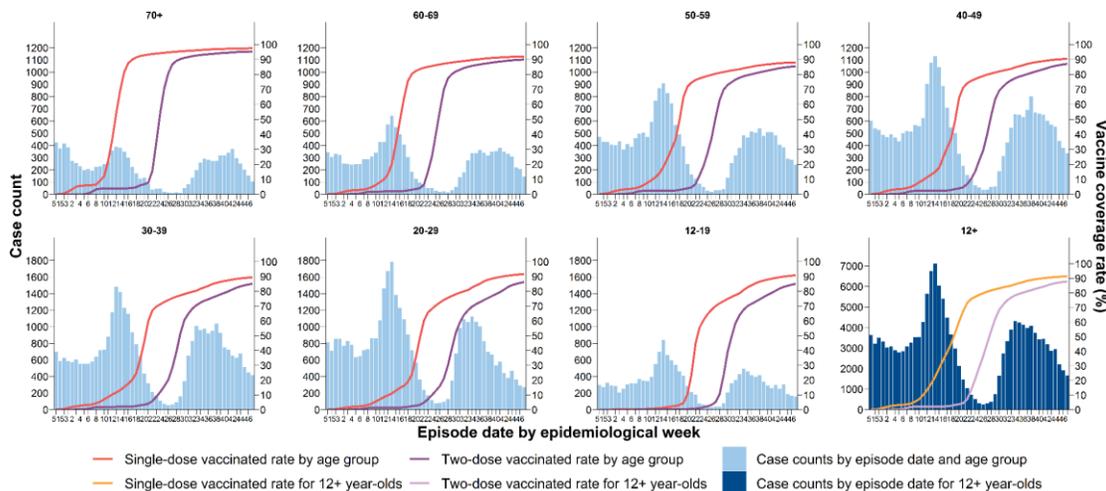
^a The peak in week 11 among 12 to 19-year-olds was caused by one case among a small number of vaccinated individuals

Vaccine coverage and weekly cases by age group

As shown in [Figure 8](#), 91% of those eligible for COVID-19 vaccine (i.e. 12+ year-olds) received a single dose of vaccine and 88% received two doses of vaccine by week 47.

In week 47, the single-dose coverage for those aged 50+ years ranged from 88-97%, and two-dose coverage ranged from 85-95%. There were 489 cases reported for those age groups combined, regardless of vaccination status in week 47. Single-dose coverage in the 20-49 year-olds was between 89-92% and two-dose coverage ranged between 85-87%, with 1,019 cases reported for those age groups combined in week 47. Single-dose coverage in the 12-19 year-olds was 91% and 85% had received two doses, with 158 cases reported for that age group in week 47.

Figure 8. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC Dec 13, 2020 (week 51) – Nov 27, 2021 (week 47)



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 decreased since week 42; there was an average of 242 hospitalizations per week from weeks 42 to 47. In week 47, 60-79 year-olds had the highest number of hospital admissions (59 hospitalizations). The weekly number of deaths remained stable at 28 in week 46 and week 47. Those aged 60-79 accounted for the highest number of deaths in week 47 (18 deaths) ([Table 2](#), [Figure 9](#)).

As shown in [Figure 10](#), the rate of hospitalizations and ICU admissions were higher in unvaccinated than in fully vaccinated people throughout 2021. In week 47, the hospital admission rate was 13 per 100K among those who were unvaccinated and 1 per 100K among those who were fully vaccinated. The ICU admission rate among unvaccinated people was 3 per 100K and 0 per 100K among fully vaccinated people. Figure 10 will be removed in the next report and can be accessed at [BCCDC COVID-19 Regional Surveillance Dashboard](#) moving forward (Note that the dashboard uses a related, but different metric – new daily critical care admissions (smoothed) – and a different data source – PHSA Provincial COVID19 Monitoring Solution (PCMS) instead of the Health Authority line list).

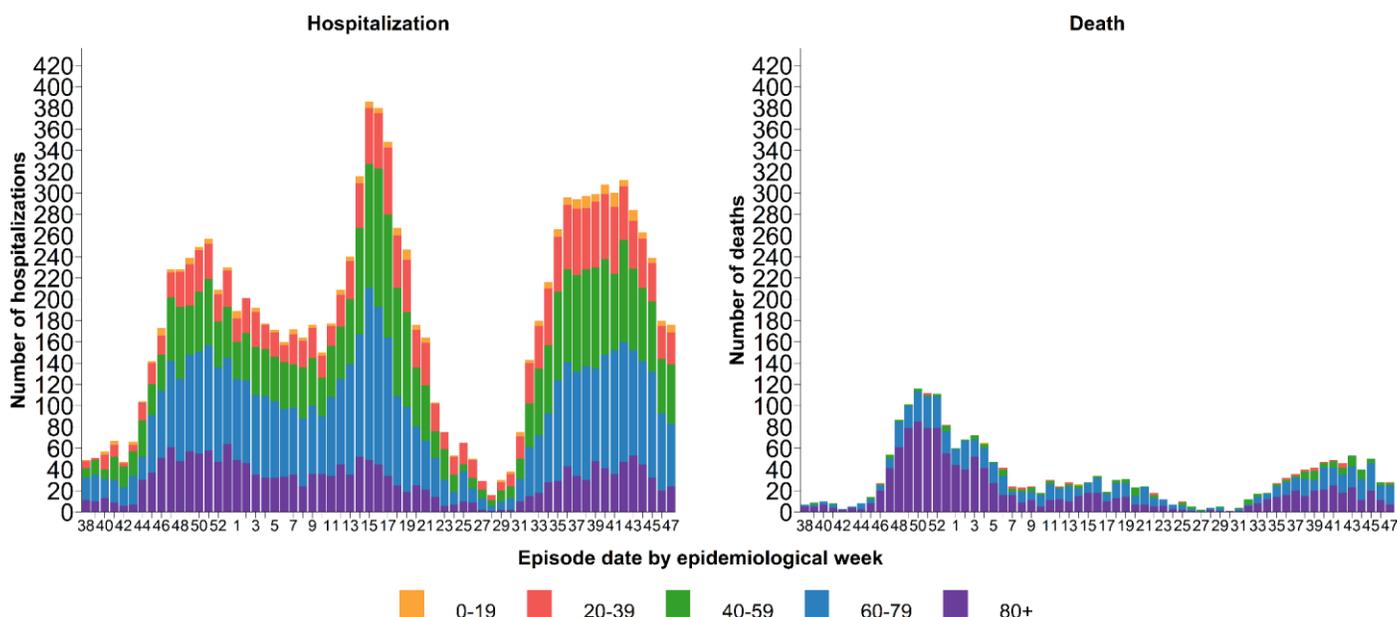
Cumulatively, there have been 19 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. There have been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 (range 1-15) years.

Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC Jan 15, 2020 (week 3) – Nov 27, 2021 (week 47)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 47, hospitalizations	60	37	27	44	8	0	176
Cumulative hospitalizations^b	5,900	1,977	669	1,352	2,404	14	12,316/218,774 (6)
Week 47, ICU admissions	14	10	10	10	1	0	45
Cumulative ICU admissions^b	1,180	569	191	322	640	2	2,904/218,774 (1)
Week 47, deaths	10	5	3	7	3	0	28
Cumulative deaths	1,102	293	122	256	571	0	2,344/218,774 (1)

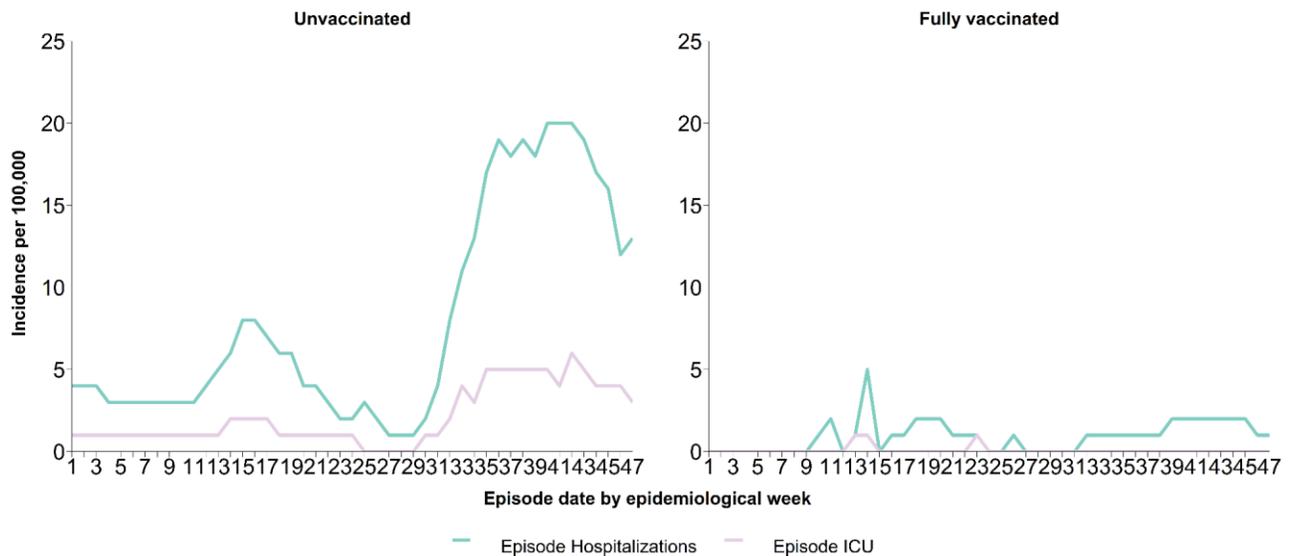
- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. Data source: Health Authority case line lists only. Data may be incomplete and subject to change

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC, Sept 13, 2020 (week 38) – Nov 27, 2021 (week 47)



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 27, 2021 (week 47)



E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 47, median age of hospital admissions, ICU admissions and deaths was 61 years, 62 years and 82 years, respectively, based on Health Authority case line lists only (data not shown).

Since week 40, there was a weekly average of 2 deaths in <50 years of age, 4 deaths in 50-59 year-olds, 8 deaths in age group 60-69 years old, 11 deaths in the 70-79 year-olds, and 17 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 27, 2021 (week 47) (N= 218,745)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)
<10	16,979	167 (<1)	16 (<1)	2 (<1)
10-19	24,878	126 (<1)	25 (<1)	0 (<1)
20-29	46,318	718 (2)	91 (<1)	6 (<1)
30-39	40,993	1,333 (3)	268 (1)	29 (<1)
40-49	31,706	1,434 (5)	329 (1)	50 (<1)
50-59	25,694	1,967 (8)	589 (2)	127 (<1)
60-69	16,968	2,310 (14)	734 (4)	269 (2)
70-79	8,686	2,213 (25)	623 (7)	509 (6)
80-89	4,540	1,541 (34)	215 (5)	778 (17)
90+	1,983	528 (27)	23 (1)	574 (29)
Total	218,745	12,337	2,913	2,344
Median age^c	34	61	62	82

- 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](#), 422 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 47. In week 47, one new outbreak was declared, based on earliest case onset date. Since week 38, 32 (64%) outbreaks were reported in long-term care settings and 21 of these outbreaks (66%) were declared by FH.

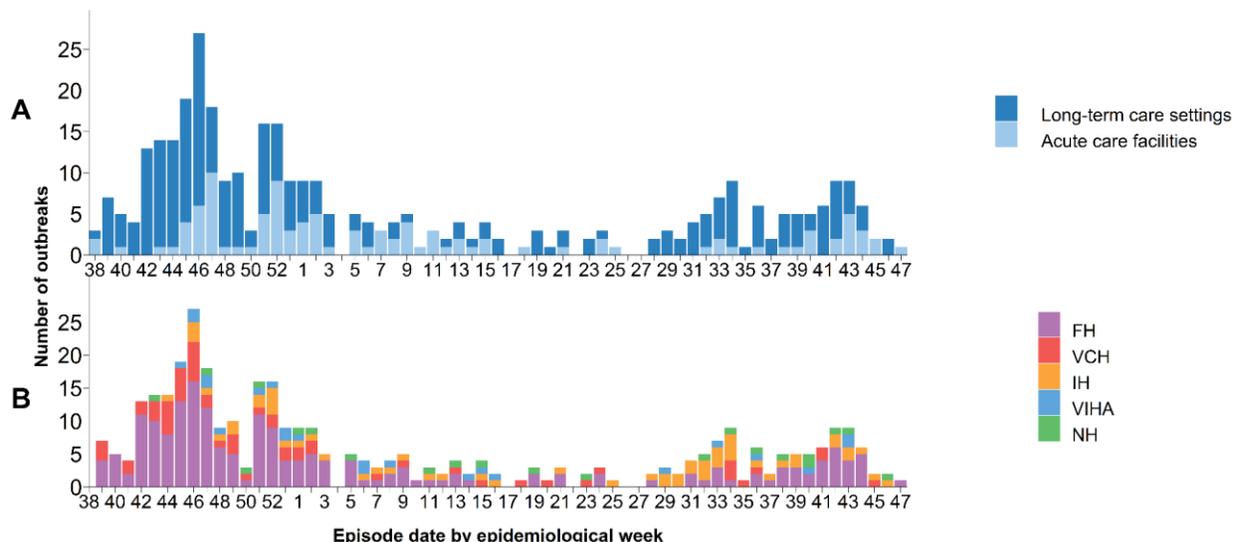
Four of the 28 (14.3%) deaths reported in week 47 were associated with an outbreak in a care facility.

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 27, 2021 (week 47) (N=422)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 47, Care Facility Outbreaks	1	14	2	0	16	4	0	0	4
Cumulative, Care Facility Outbreaks	422	4,520	2,655	8	7,183	1,205	0	0	1,205

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 27, 2021 (week 47) (N=354)



- 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 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/