

British Columbia (BC) COVID-19 Situation Report
Week 38: September 19- September 25, 2021

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Epidemic curve and regional incidence	2	The provincial incidence by episode date was 85 per 100K, with 4,437 cases in week 38.	
Likely sources of infection	3	Health authority incidence decreased slightly in all regions except Fraser Health; it remains highest in Northern Health: <ul style="list-style-type: none"> • Since week 37, Fraser Health incidence increased (78 to 85 per 100K). • Since week 37, Vancouver Coastal incidence decreased (51 to 47 per 100K). • Since week 37, Interior Health incidence decreased (137 to 124 per 100K). • Since week 37, Island Health incidence decreased (66 to 52 per 100K). • Since week 37, Northern Health incidence decreased (296 to 242 per 100K). 	
Test rates and % positive	4	Incidence in all age groups has decreased or stabilized except in children aged 0 to 14 years, where it increased from weeks 36 to 38. This occurred in parallel with a continued increase in testing rate in this age group and a concomitant decrease in test positivity. The 10-14 year-old incidence increased from 103 to 171 per 100K in weeks 36 to 38.	
Age profile, testing and cases	5	By week 38, the single-dose vaccination coverage in the eligible 12+ year-olds reached 87% and 80% were fully vaccinated.	
Severe outcomes	8	MSP-funded testing increased to the highest level since Jan 2020 at ~73K specimens in week 38. However, positivity of MSP-funded specimens decreased from 9.7% to 7.0% in weeks 36 to 38.	
Age profile, severe outcomes	9	The weekly number of hospital and ICU admissions have been relatively stable between weeks 35 and 38, reaching 273 hospital admissions and 66 ICU admissions in week 38. Deaths have been increasing since week 30, reaching 35 deaths in week 38.	
Care facility outbreaks	10	By case of earliest onset date, 3 new outbreaks were reported in healthcare settings in week 38.	
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Table of [pandemic phases](#) defined by implementation or relaxation of population-level mitigation measures in BC:

PRE-PHASE 1 Jan 15 (wk 3) - Mar 13 (wk 11) 2020	PHASE 1 Mar 14 (wk 11) - May 18 (wk 21) 2020	PHASE 2 May 19 (wk 21) - Jun 23 (wk 26) 2020	PHASE 3 Jun 24 2020 (wk 26) - Current wk, 2021 (DATES START FROM BEGINNING OF COMPLETE EPIWEEK)
From earliest symptom onset date	Initial restrictions	Re-opening of services	PHASE 3A: Jun 24 (wk 26)-Sept 12 (wk 37) 2020: Broader re-opening PHASE 3B: Sept 13 (wk 38)-Nov 7 (wk 45) 2020: Start of 2020-21 school year PHASE 3C: Nov 8 (wk 46)-Mar 27 (wk 12) 2021: Core bubble interaction only PHASE 3D: Mar 28 (wk 13)-May 22 (wk 20) 2021: Circuit breaker restrictions PHASE 3E: May 23 (wk 21)- Current wk, 2021: Step 1 BC Restart Plan (wk 21-23); Step 2 BC Restart Plan (wk 24-25); Step 3 BC Restart Plan (wk 26- current wk, 2021)

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= 5,139,568 for BC overall) and for year 2021 are based on PEOPLE 2020 estimates (n= 5,197,224 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 October 03, 2021, laboratory data on October 01, 2021, PIR vaccine coverage date on October 01, 2021, and PCMS hospitalization data on October 03, 2021.

A. COVID-19 case counts and epidemic curves

Up to week 38, 2021, there have been 185,965 cases for a cumulative incidence of 3,572 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 85 per 100K (4,437 cases) in week 38, a slight decrease from 93 per 100K in week 34, the peak of the fourth wave. As shown by the higher incidence using surveillance date, 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) from weeks 37 to 38, other than in Fraser Health (FH) where it increased from 78 to 85 per 100K. Notably, for the first time since week 26, incidence in Northern Health (NH) decreased from 296 to 242 per 100K. All other HAs also reported a decrease in incidence by episode date: Interior Health (IH) from 137 to 124 per 100K, Vancouver Coastal (VCH) from 51 to 47 per 100K and Island Health (VIHA) from 66 to 52 per 100K. These rates may increase as data become more complete. From weeks 37 to 38, incidence increased in the Kootenay Boundary, Fraser North, Fraser South, and Fraser East Health Service Delivery Areas (HSDAs).

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – Sep 25, 2021 (week 38) (N= 185,965)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 38, case counts	1,671	1,041	451	701	573	0	4,437
Cumulative case counts	97,031	27,180	8,568	11,637	41,254	295	185,965
Week 38, cases per 100K population	85	124	52	242	47	NA	85
Cumulative cases per 100K population	4,931	3,233	979	4,021	3,369	NA	3,572

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 185,965)

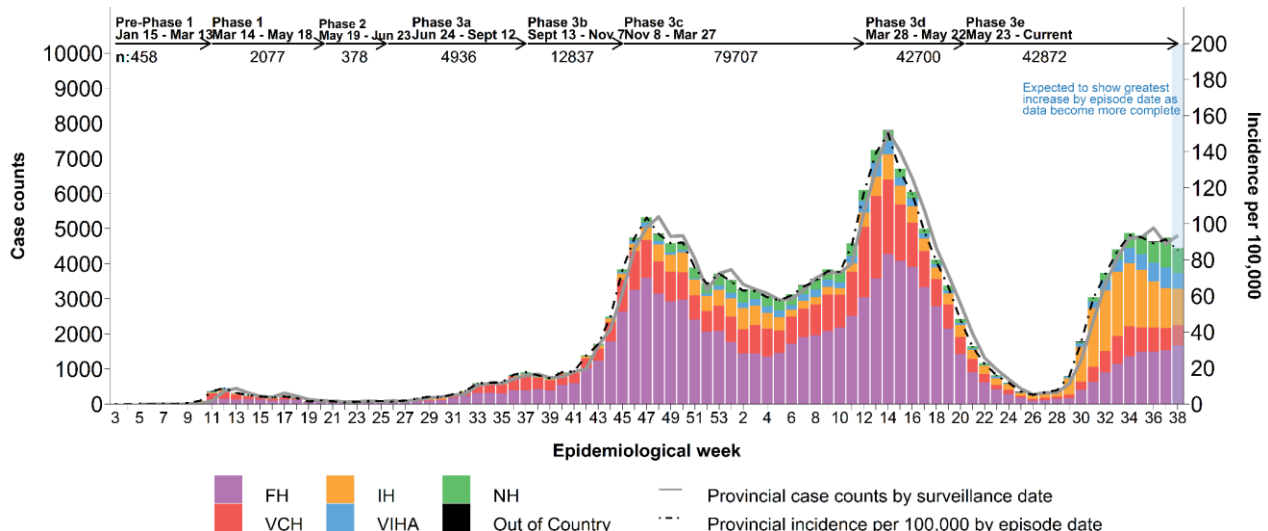
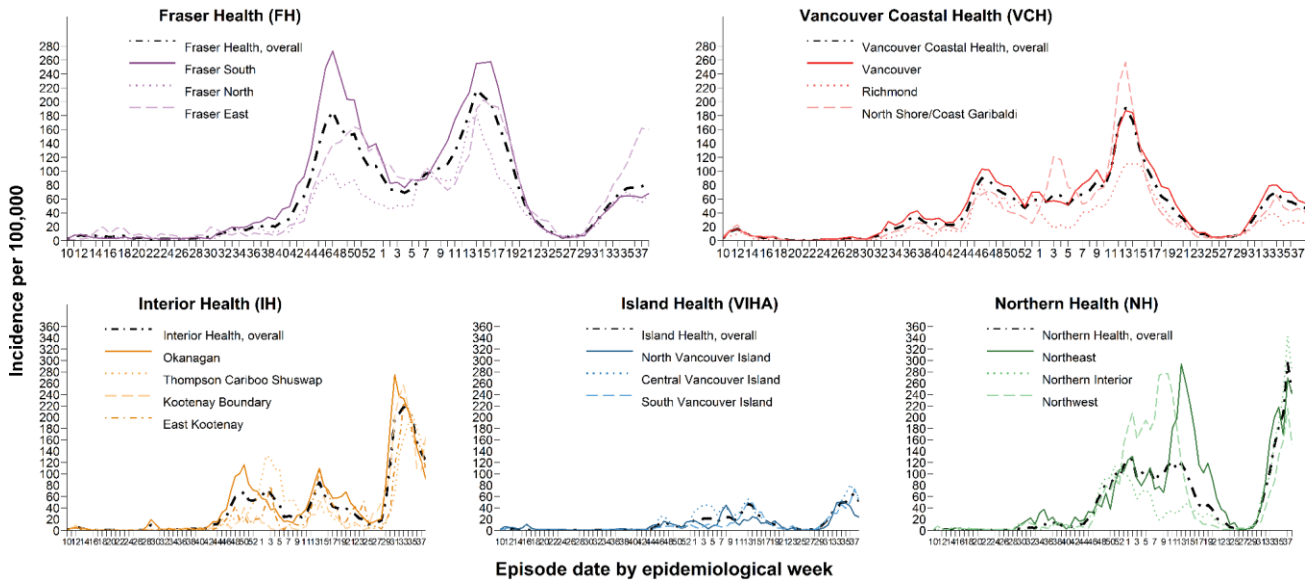


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC Mar 01, 2020 (week 10) – Sept 25, 2021 (week 38) (N= 185,965)



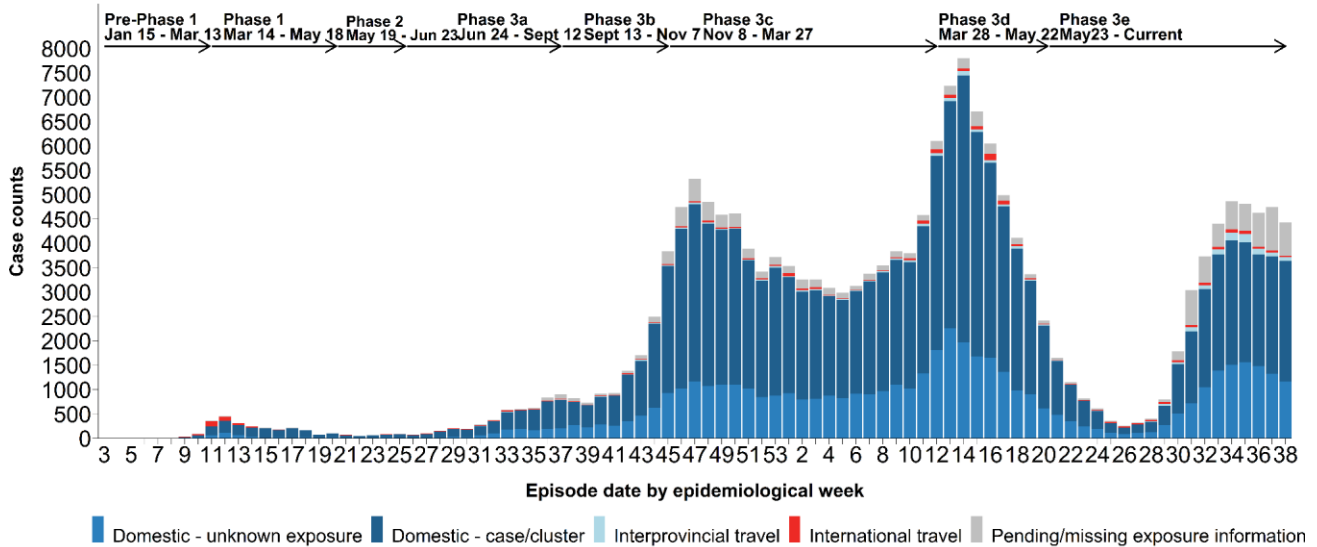
B. Likely sources of infection

As shown in [Table 2](#) and [Figure 3](#), domestic contact with a known case or cluster has been the most commonly reported source of infection across the pandemic to date.

Table 2. Likely source of COVID-19 infection by episode date, BC, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 185,965)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 38 , Exposures	24 (1)	74 (2)	2,484 (56)	1,163 (26)	692 (16)
Cumulative Exposures	2,329 (1)	2,089 (1)	119,952 (65)	49,849 (27)	11,746 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 185,965)



C. Test rates and percent positive

As shown by the darker-colored bars in [Figure 4](#), testing of MSP-funded specimens increased from an average of ~53K specimens per week in weeks 34-36, to ~74K specimens in week 38, the highest number since the start of the pandemic. Concurrently, the positivity of MSP-funded specimens has decreased since week 36, from 9.7% to 7.0% in week 38.

As shown in [Figure 5](#), the per capita testing rates (Panel A) have increased across all HAs since week 36. NH saw the biggest increase, from 939 per 100K in week 36, to 1,654 per 100K in week 38. Conversely, percent positivity (Panel B) for MSP-only specimens decreased from weeks 36 to 38 in all HAs, most sharply in NH, from 25.1% to 16.8%.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Mar 15, 2020 (week 12) – Sept 25, 2021 (week 38)

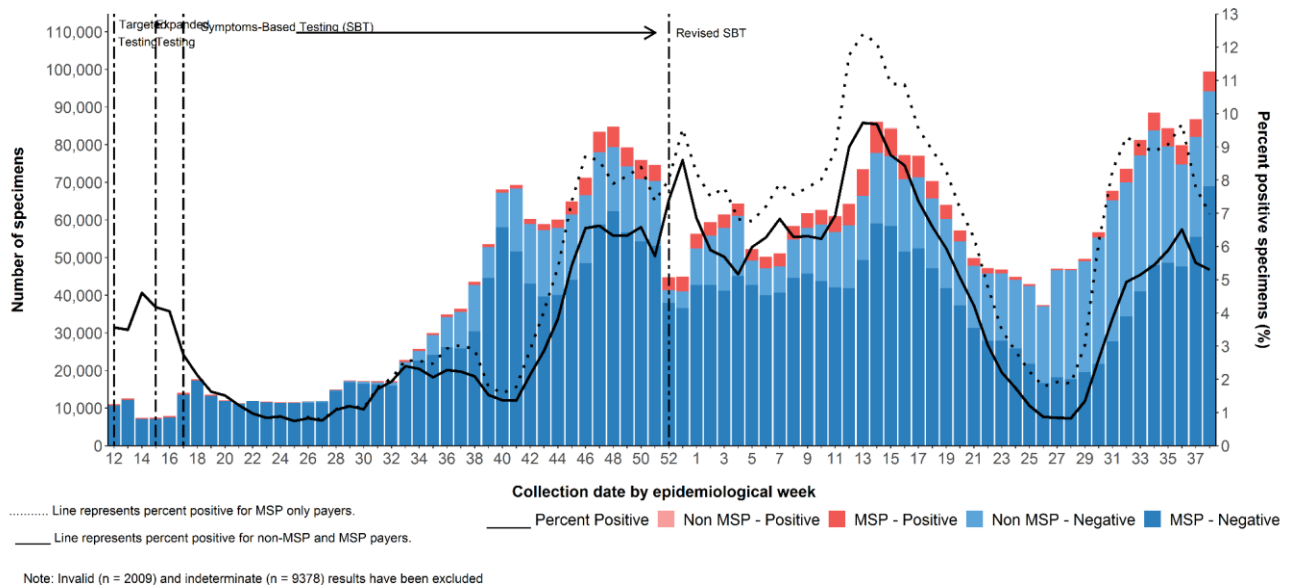
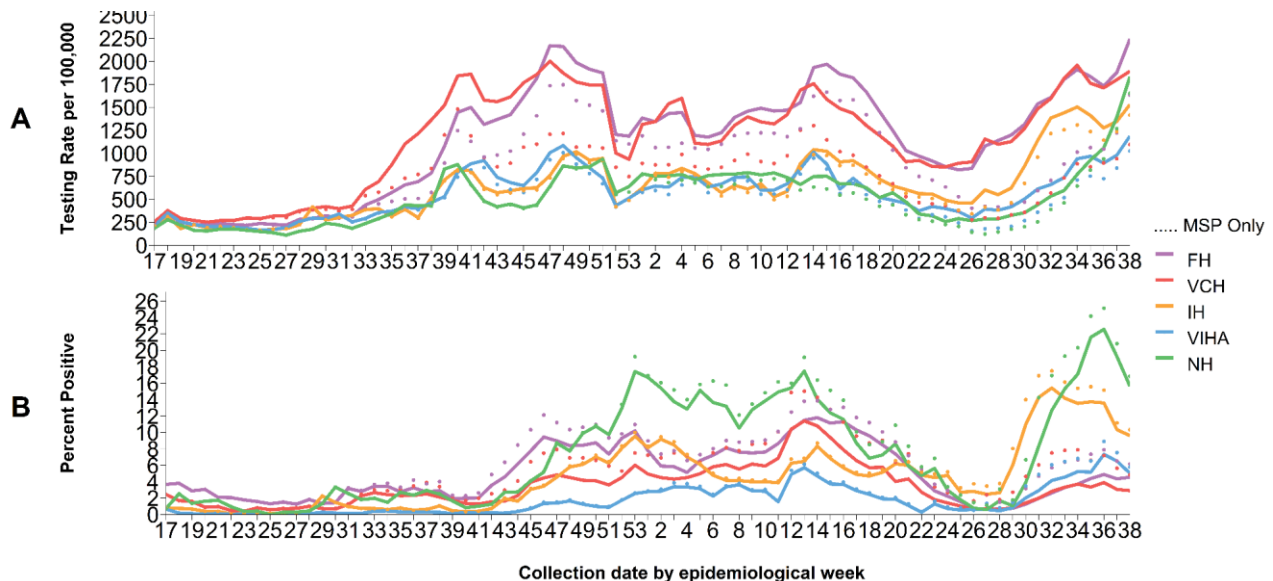


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC Mar 15, 2020 (week 12) – Sept 25, 2021 (week 38)



Data source: laboratory PLOVER data

D. Age profile – Testing and cases

Testing rates and percent positivity by age group

As shown by the bars in [Figure 6](#), testing rates increased in all age groups in week 38. The largest increases occurred in children, most prominently in the 5-9 year-olds, where testing rates nearly doubled from 1,933 per 100K in week 37 to 3,731 per 100K in week 38 – the highest testing rate of any age group so far in 2021. Testing rates have also notably increased the 10-14 year-olds from 1,221 per 100K in week 37 to 2,273 per 100K in week 38.

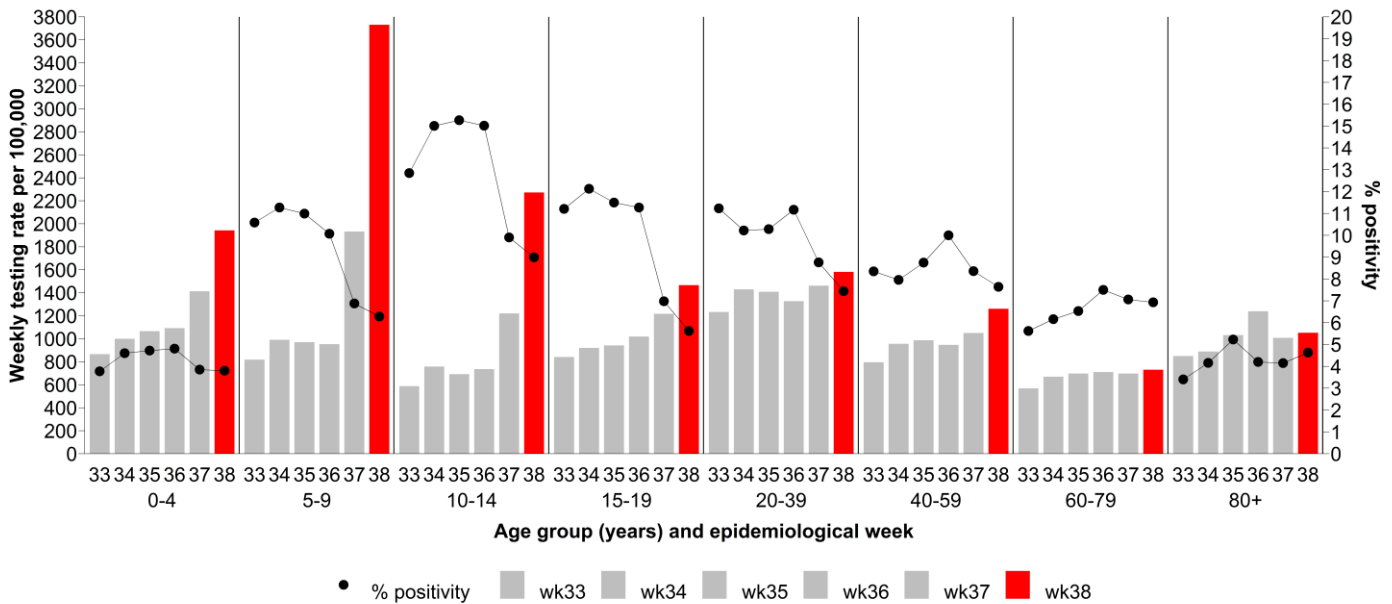
As shown by the black dots in [Figure 6](#), the percent positivity has decreased or stabilized in all age groups since week 37. From weeks 37 to 38, the percent positivity has decreased from 7.0% to 5.6% in 15-19 year-olds, from 8.8% to 7.4% in 20-39 year-olds, and from 10.0% to 9.0% in 10-14 year olds.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the contribution of <10 year olds increased by 7.6% and that of 10-14 years olds increased by 4.1% from week 36 to week 38. The contribution of those aged 20-29 years decreased by 7.9% from week 36 to 38. The remaining age groups’ contributions remained relatively stable.

As shown in [Figure 8](#), age-specific incidences decreased or were stable since week 36 across all age groups, other than in children. The 10-14 year-olds saw an increase from 103 per 100K in week 36 to 171 per 100K in week 38, and had the highest age-specific incidence of all age groups for the second epiweek in a row. In those <10 years, the incidence increased from 86 per 100K in week 36, to 152 per 100K in week 38. Age-specific incidences may increase as data become more complete.

Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC Jan 20, 2020 (week 4) – Sept 25, 2021 (week 38)



Data source: laboratory PLOVER data

Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC Mar 15, 2020 (week 12) – Sept 25, 2021 (week 38) (N= 185,425)

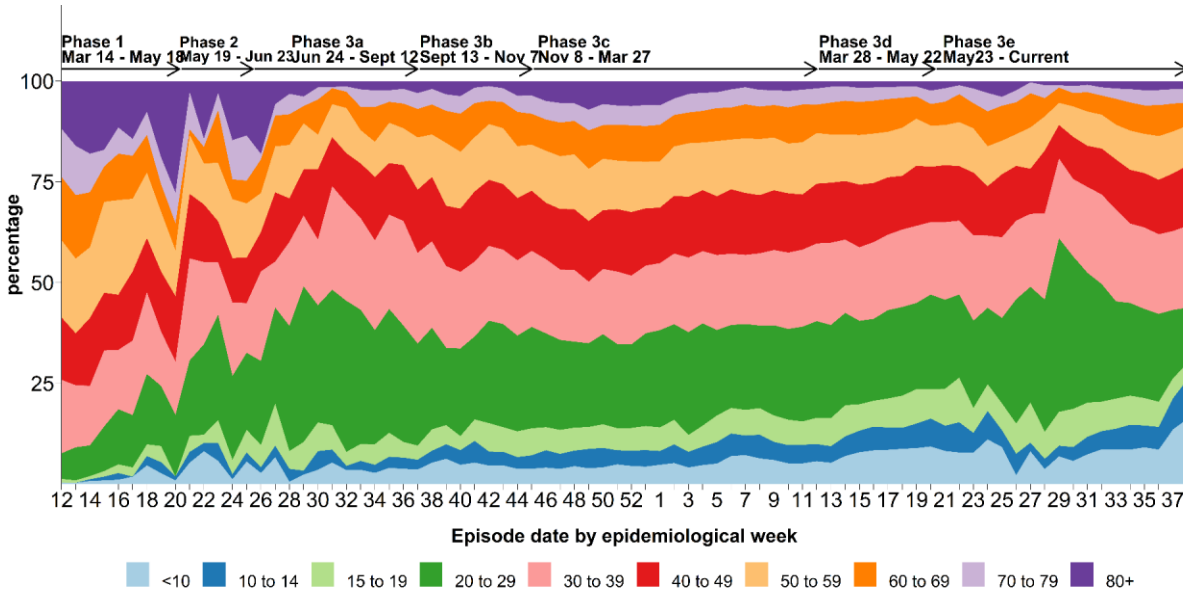
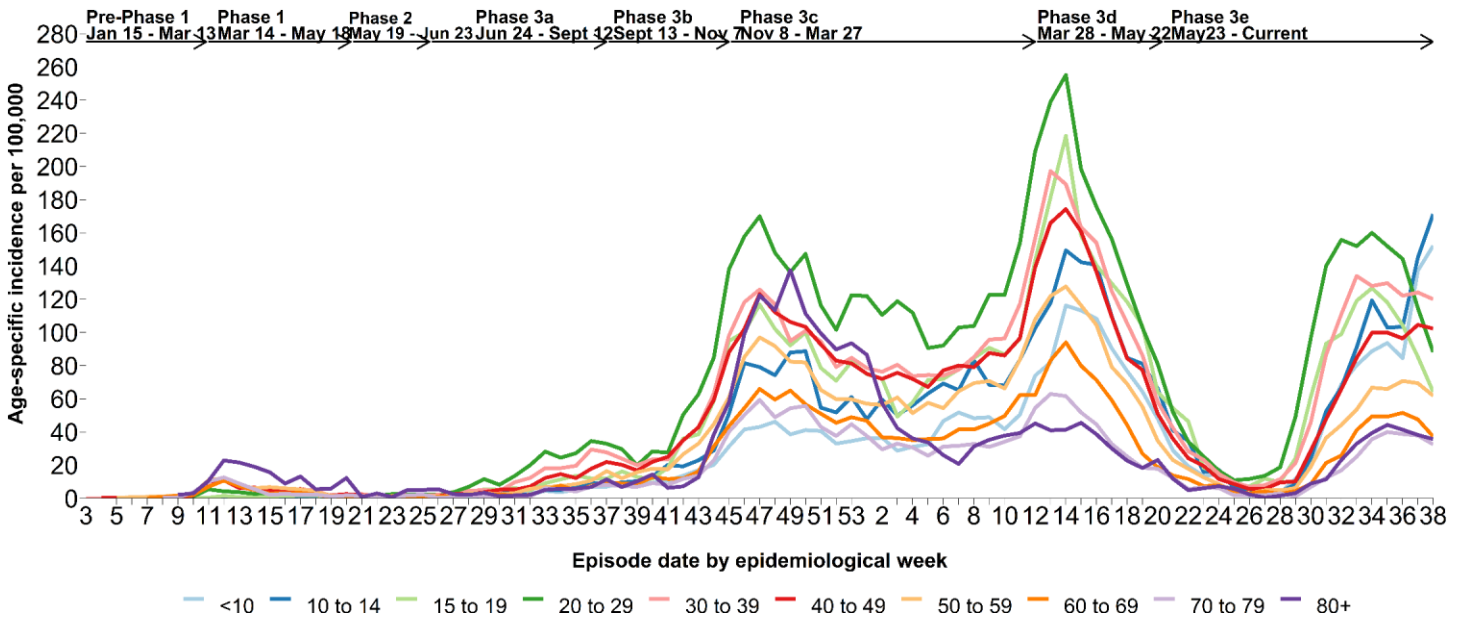


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 185,938)



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 9](#)).

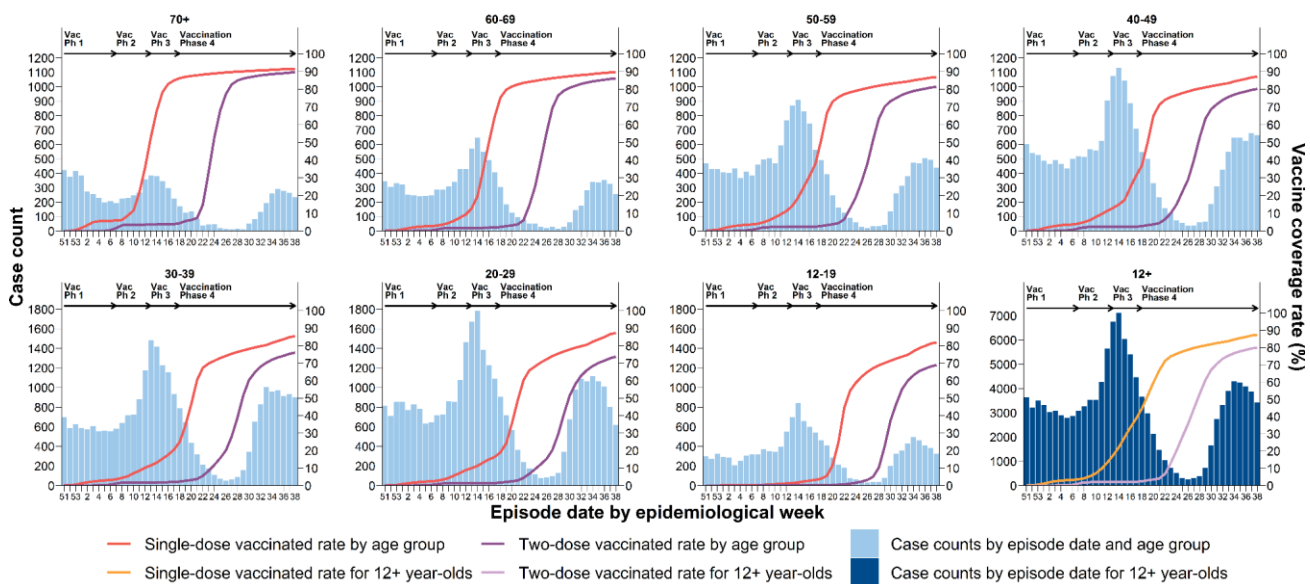
By week 38, 87% of eligible 12+ year-olds had received a single dose of vaccine and 80% were fully vaccinated.

The single-dose coverage for age groups 50+ years ranged from 87-92%, and two-dose coverage ranged from 81-90%, with 932 cases reported for those age groups combined.

In week 38, single-dose coverage in the 20-49 year-olds was between 85-87% and two-dose coverage ranged between 74-80%, with 2,179 cases reported for those age groups combined.

Single-dose coverage in the 12-19 year-olds was 82% and 69% were fully vaccinated, with 325 cases reported for that age group in week 38.

Figure 9. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC Dec 13, 2020 (week 51) – Sept 25, 2021 (week 38)



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

E. Severe outcome counts and epi-curve

Between weeks 35 and 38, the weekly number of hospital and ICU admissions have been relatively stable from 258 to 273 hospital admissions and from 79 to 66 ICU admissions ([Table 3, Figure 10](#)). Deaths have been increasing since week 30 but more slowly in weeks 35 to 38, from 27 to 35 deaths.

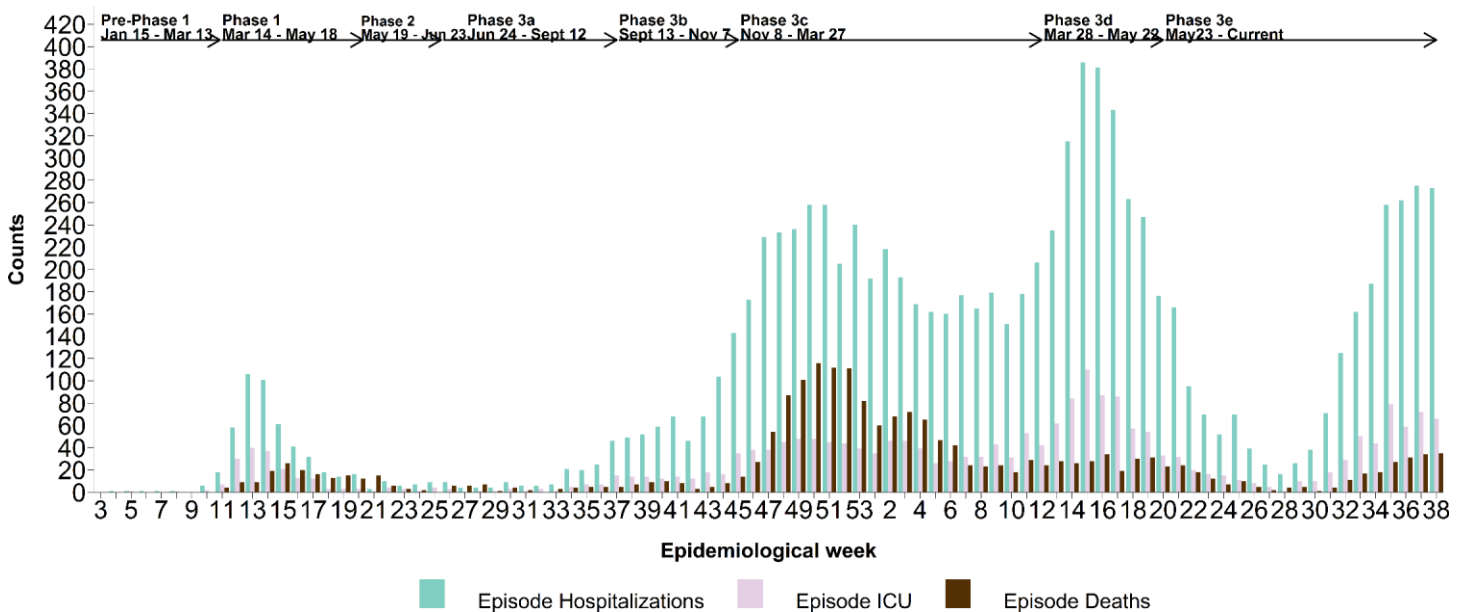
Cumulatively, there have been 17 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 38 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 38, hospitalizations	75	61	37	65	35	0	273
Cumulative hospitalizations^b	5,000	1,355	381	896	2,153	14	9,799/185,965 (5)
Week 38, ICU admissions	26	9	11	14	6	0	66
Cumulative ICU admissions^b	1,017	341	113	231	580	2	2,284/185,965 (1)
Week 38, deaths	14	5	5	4	7	0	35
Cumulative deaths	971	231	63	173	513	0	1,951/185,965 (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 10. COVID-19 hospital admissions and deaths by episode date, BC, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38)



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

F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes. In week 38, median age of hospital admissions, ICU admissions and deaths was 55 years, 58 years and 74 years, respectively, based on health authority case line lists only (data not shown).

As shown in **Figure 11**, death counts in the 80+ year age group have decreased since week 37, from 20 deaths in week 37 to 14 deaths in week 38. In the 70-79 year age group, death counts have stabilized at 8 deaths since week 37. Death counts in the 60-69 year olds increased since week 37, from 3 to 5 deaths in week 38.

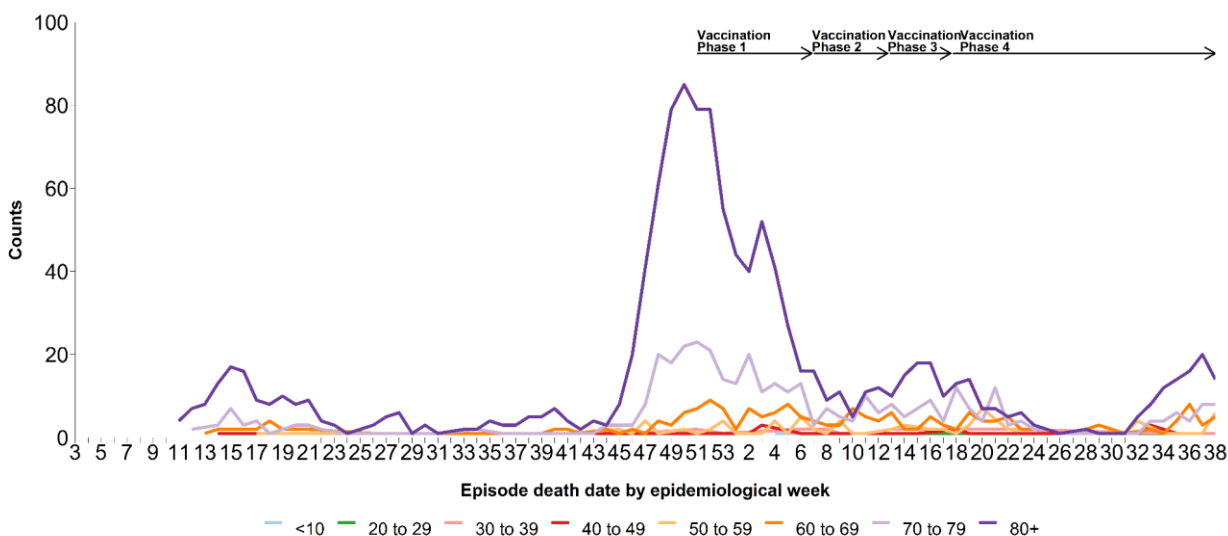
Since week 32, there was a weekly average of <1 death in the 0-49-year-old group, 2 deaths in the 50-59 year old age group, 3 deaths in the 60-69 year old age group, 4 deaths in the 70-79 year-olds and 12 deaths in the 80+ year-olds. The number of deaths may increase over time as data becomes more complete.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 185,938)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	12,187 (7)	126 (1)	13 (1)	2 (<1)	470,017 (9)
10-19	20,732 (11)	96 (1)	18 (1)	0 (<1)	529,387 (10)
20-29	42,210 (23)	567 (6)	70 (3)	4 (<1)	699,476 (13)
30-39	35,084 (19)	1,037 (11)	201 (9)	19 (1)	750,054 (14)
40-49	26,684 (14)	1,128 (11)	258 (11)	34 (2)	648,377 (12)
50-59	21,993 (12)	1,546 (16)	459 (20)	87 (4)	711,930 (14)
60-69	14,242 (8)	1,838 (19)	561 (24)	199 (10)	686,889 (13)
70-79	7,264 (4)	1,783 (18)	504 (22)	412 (21)	454,855 (9)
80-89	3,831 (2)	1,268 (13)	189 (8)	675 (35)	193,351 (4)
90+	1,711 (1)	431 (4)	18 (1)	519 (27)	52,885 (1)
Total	185,938	9,820	2,291	1,951	5,197,221
Median age^c	34	62	62	83	41

- 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.

Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N= 1,951)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 12](#), 374 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 38. In week 38, three new outbreaks were declared based on earliest case onset date. Since week 28, 86% outbreaks were reported in long-term care settings.

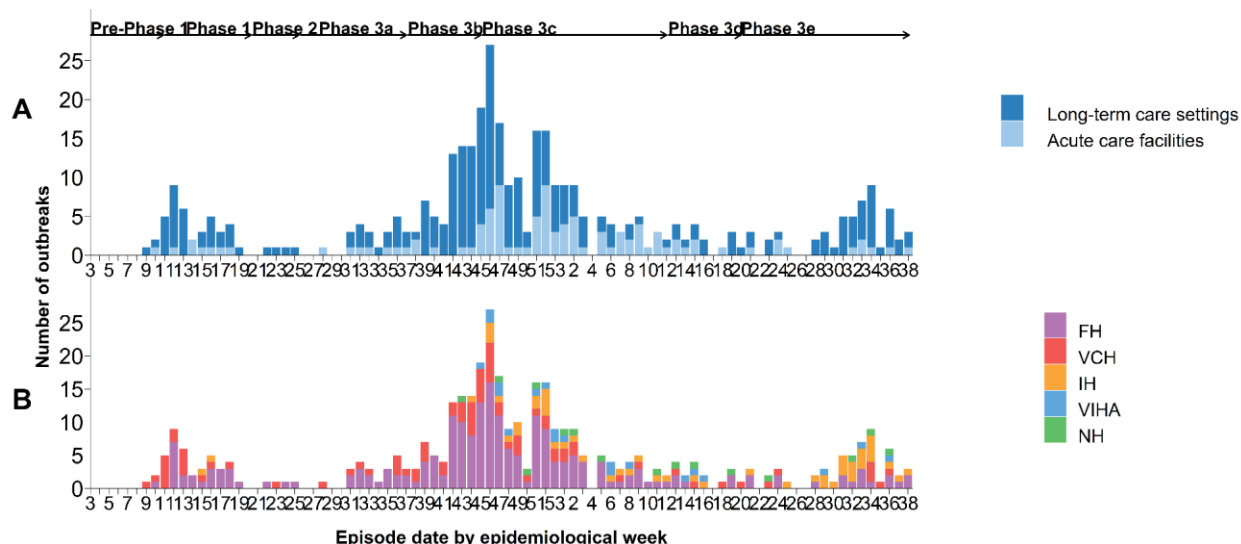
Eight (23%) out of the 35 deaths reported in week 38 were associated with an outbreak in a care facility setting.

Table 5. 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) – Sept 25, 2021 (week 38) (N=374)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 38, Care Facility Outbreaks	3	58	17	0	75	8	0	0	8
Cumulative, Care Facility Outbreaks	374	3,963	2,463	6	6,432	1,102	0	0	1,102

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 12. COVID-19 care facility^b outbreaks by earliest case onset^c, facility type (A) and health authority (B), BC^d, Jan 15, 2020 (week 3) – Sept 25, 2021 (week 38) (N=374)



- 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.

H. 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/