

British Columbia (BC) COVID-19 Situation Report
Week 39: September 26- October 02, 2021

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Test rates and % positive	4	Incidence from weeks 38 to 39 has decreased in all age groups, other than the 80+ year-olds where it increased slightly from weeks 41 to 44 per 100K. Highest incidence rates in week 39 are in children <10 and 10-14 years of age at 143 and 129 per 100K, respectively.	
Age profile, testing and cases	5	By week 39, the single-dose vaccination coverage in the eligible 12+ year-olds reached 89% and 82% were fully vaccinated.	
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Age profile, severe outcomes	9	The number of hospital and ICU admissions has been relatively stable between weeks 36 and 39, ranging between 263 to 274 weekly hospital admissions, and 58 to 70 weekly ICU admissions. Death counts have been stable since week 37, ranging between 36 and 39 weekly deaths.	
Care facility outbreaks	10	By case of earliest onset date, 4 new outbreaks were reported in healthcare settings in week 39.	
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Table of [pandemic phases](#) defined by implementation or relaxation of population-level mitigation measures in BC:

PRE-PHASE 1	PHASE 1	PHASE 2	PHASE 3
Jan 15 (wk 3) - Mar 13 (wk 11) 2020	Mar 14 (wk 11) - May 18 (wk 21) 2020	May 19 (wk 21) - Jun 23 (wk 26) 2020	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	VACCINATION PHASE 2	VACCINATION PHASE 3	VACCINATION PHASE 4
Dec 2020 to Feb 2021	Feb to April 2021	April to May 2021	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 11, 2021, laboratory data on October 08, 2021, PIR vaccine coverage date on October 08, 2021, and PCMS hospitalization data on October 11, 2021.

A. COVID-19 case counts and epidemic curves

Up to week 39, 2021, there have been 190,880 cases for a cumulative incidence of 4,002 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 77 per 100K (4,437 cases) in week 39, a decrease from the stable level observed in recent prior weeks of wave 4. However, 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 38 to 39. The most notable decreases in incidence by episode date were in Northern Health (NH) from 307 to 214 per 100K and Interior Health (IH) from 145 to 109 per 100K. Smaller decreases were seen in Fraser Health (FH) from 97 to 77 per 100K, Vancouver Coastal Health (VCH) from 53 to 40 per 100K, and Island Health (VIHA) from 61 to 52 per 100K. These rates may increase as data become more complete. No Health Service Delivery Areas (HSDAs) showed any increase from weeks 38 to 39.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – October 02, 2021 (week 39) (N= 190,880)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 39, case counts	1,523	920	453	620	486	0	4,002
Cumulative case counts	98,846	28,306	9,115	12,487	41,831	295	190,880
Week 39, cases per 100K population	77	109	52	214	40	NA	77
Cumulative cases per 100K population	5,024	3,367	1,042	4,315	3,416	NA	3,667

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 190,880)

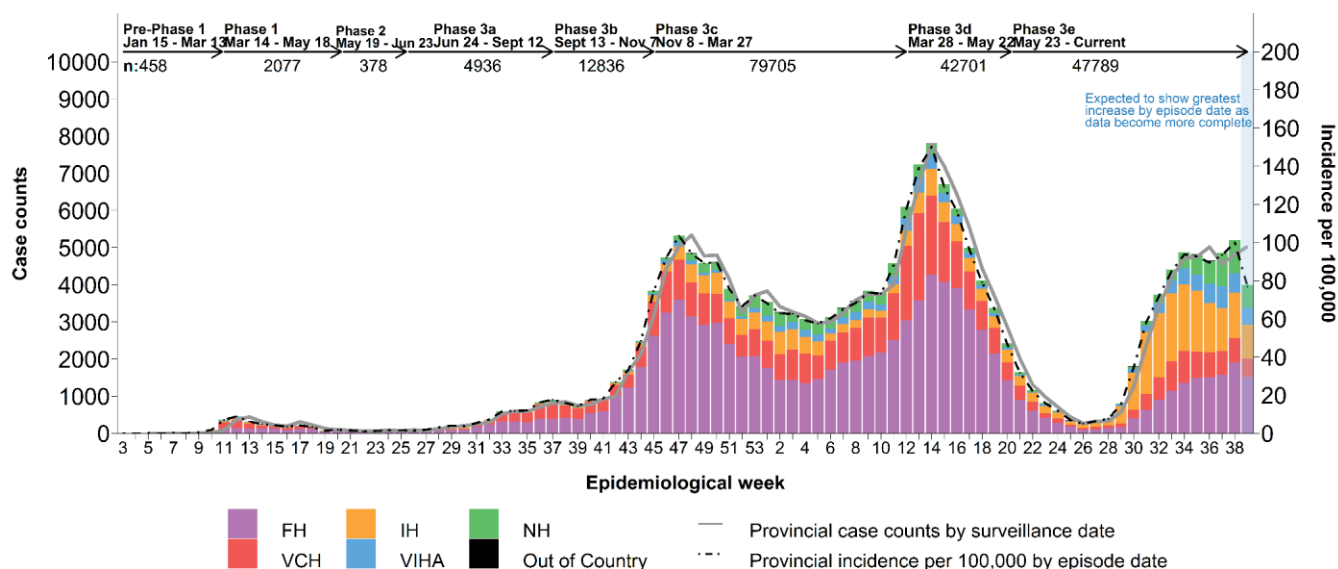
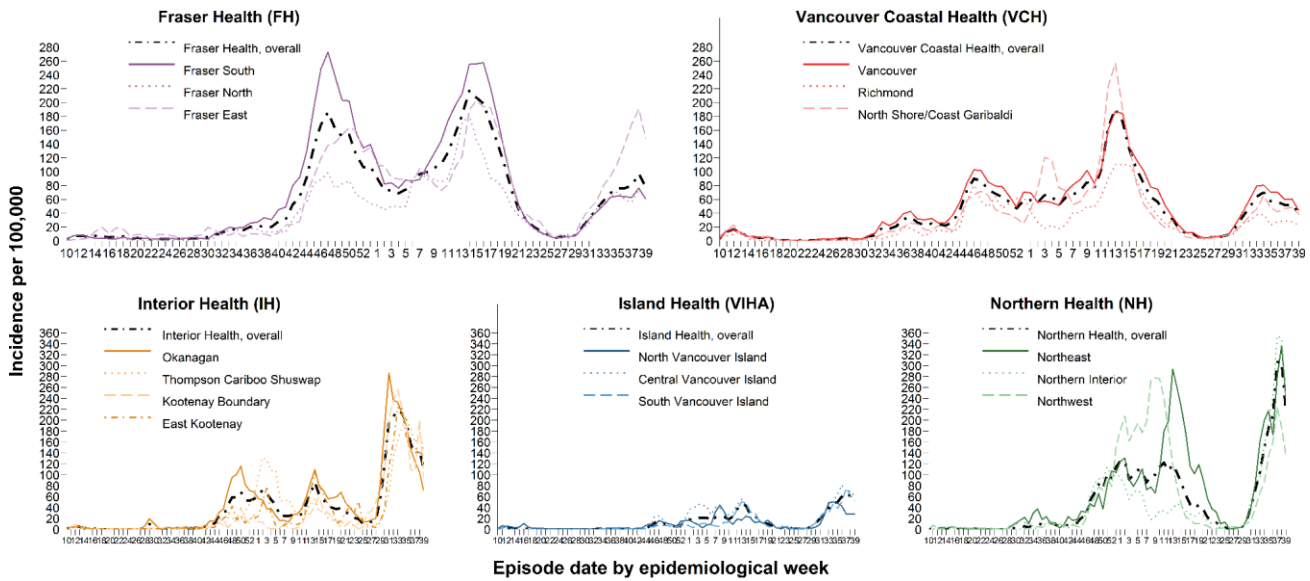


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – October 02, 2021 (week 39) (N= 190,880)



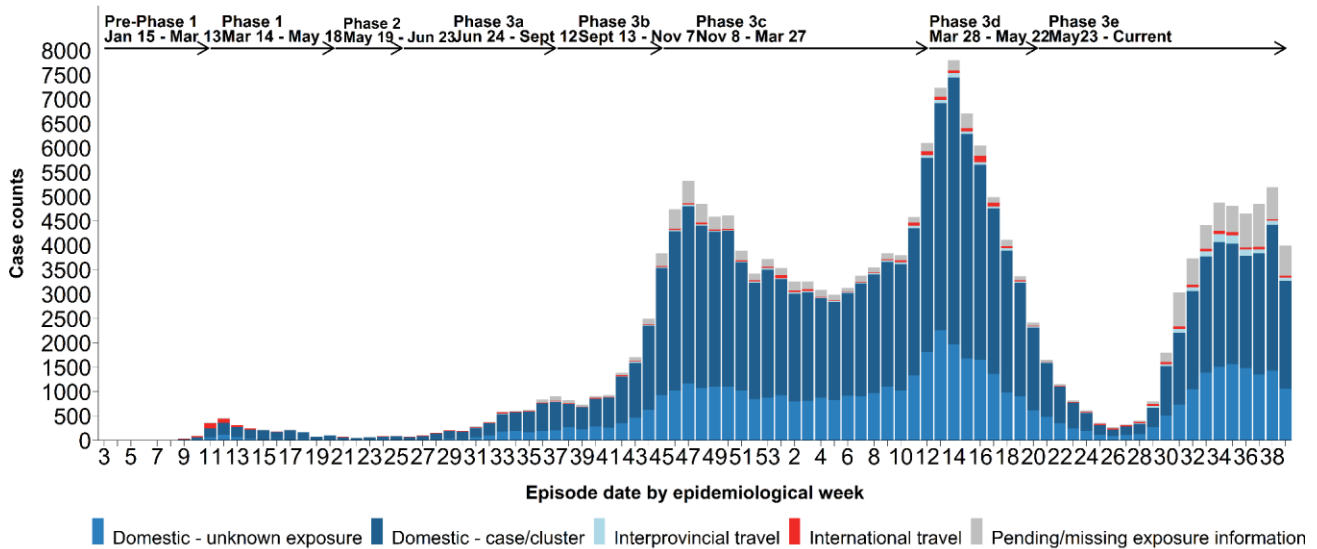
B. Likely sources of infection

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 January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 190,880)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 39 , Exposures	36 (1)	67 (2)	2,218 (55)	1,057 (26)	624 (16)
Cumulative Exposures	2,369 (1)	2,178 (1)	122,782 (64)	51,230 (27)	12,321 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 190,880)



C. Test rates and percent positive

As shown by the darker-colored bars in [Figure 4](#), testing of MSP-funded specimens has been increasing since week 36 at ~53K specimens to >80K specimens in week 39, 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 6.3% in week 39.

As shown in [Figure 5](#), the per capita testing rates (Panel A) have increased across all HAs since week 36. The two HAs that experienced the highest increases from weeks 36 to 39 were NH (from 939 to 1,691 per 100K) and FH (from 1,046 to 1786 per 100K). Conversely, percent positivity (Panel B) for MSP-only specimens decreased from weeks 36 to 39 in all HAs, with the exception of NH which experienced a slight increase in percent positivity from weeks 38 to 39 from 16.9% to 17.9%.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – October 02, 2021 (week 39)

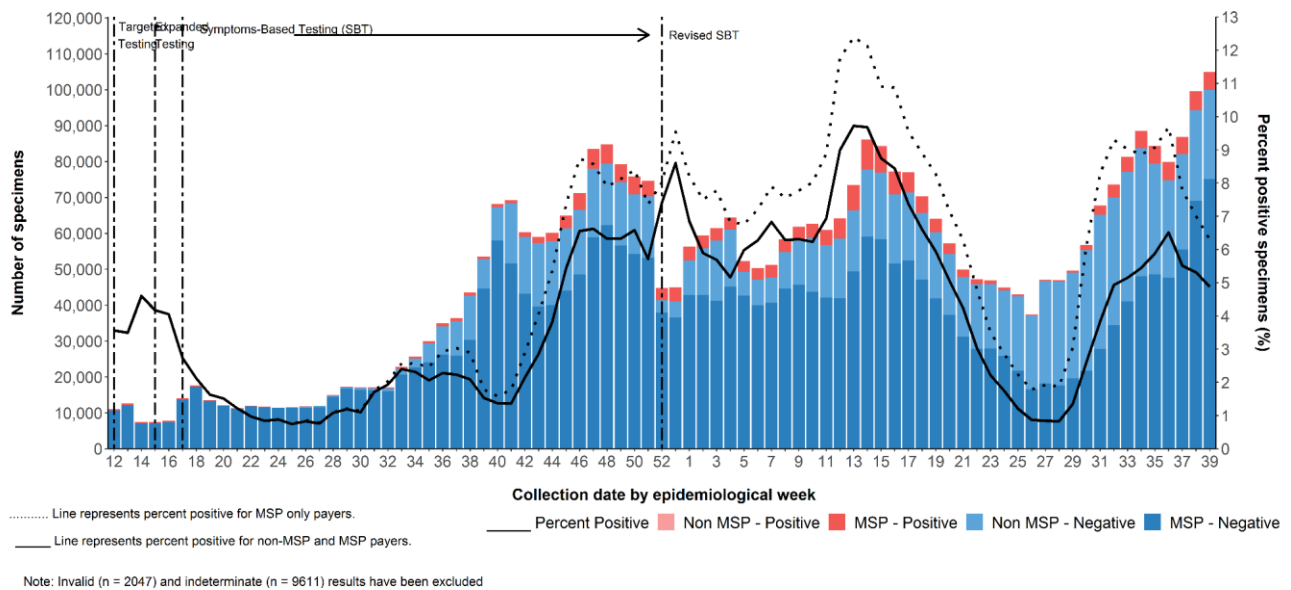
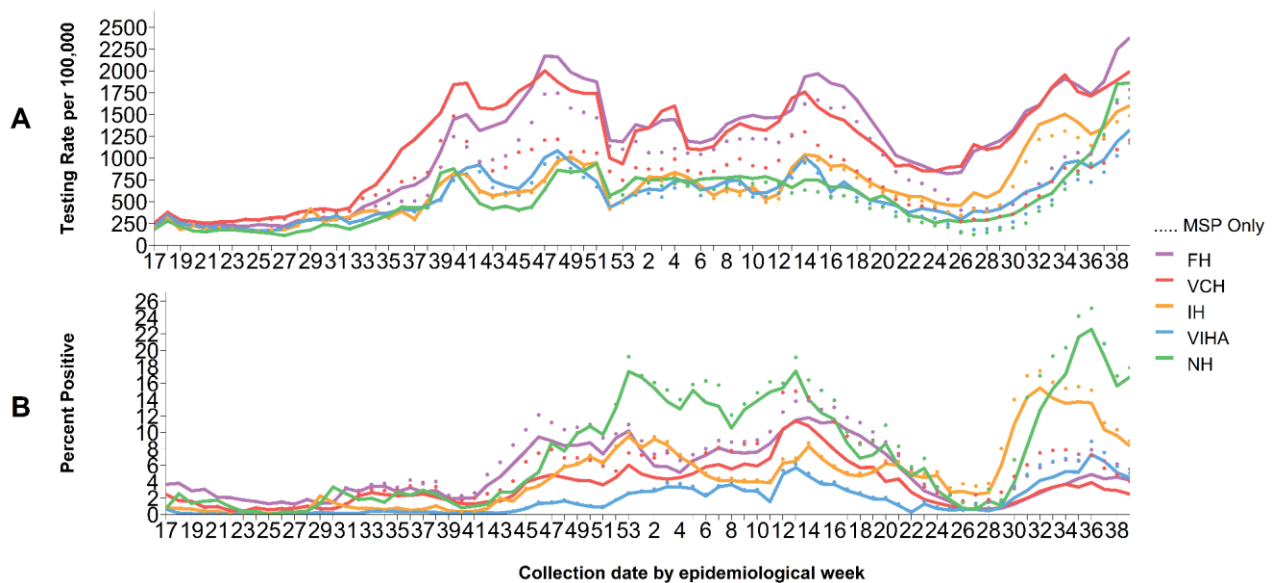


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – October 02, 2021 (week 39)



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](#), the testing rate increased in all age groups in week 39, but was stable in the >80-year age group. The largest increases occurred in children, most prominently in the 10-14 year-olds, from 22,723 per 100K in week 38 to 2,903 per 100K in week 39. The testing rate in the 5-9-year-olds reached 3,933 per 100K in week 39, which is the highest weekly testing rate of any age group since the start of the pandemic.

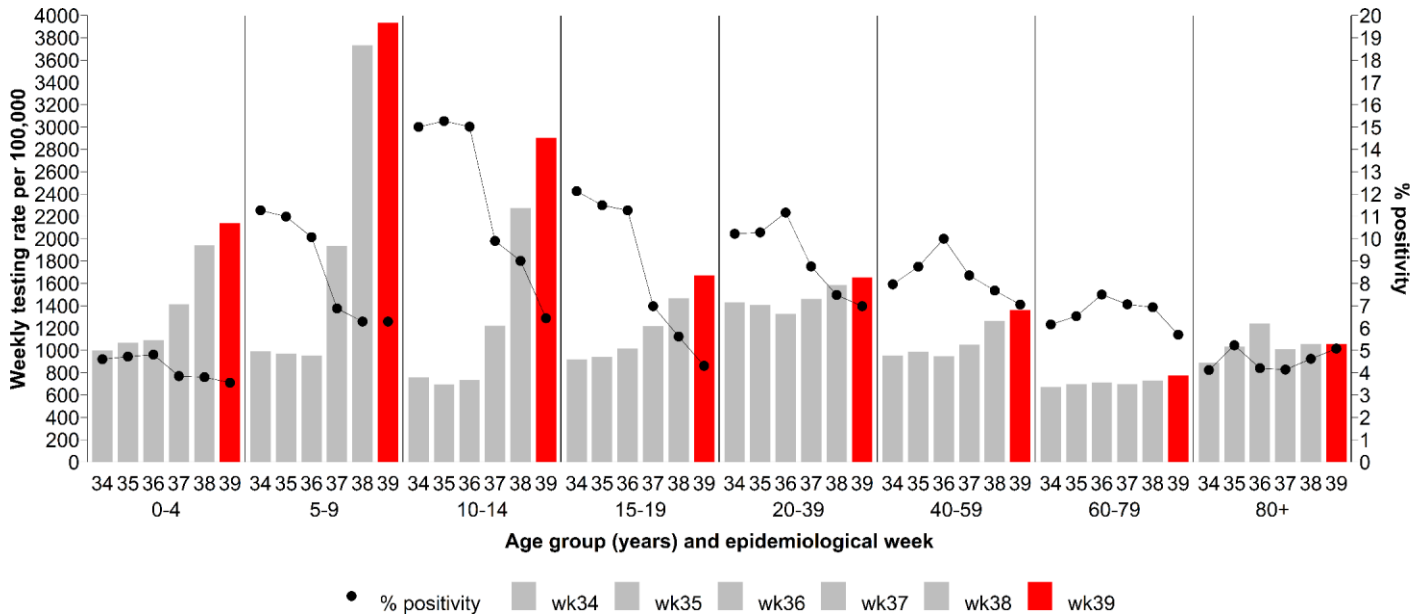
As shown by the black dots in [Figure 6](#), the percent positivity has conversely decreased or stabilized in all age groups since week 38, but slightly increased in the >80-year age group. From weeks 38 to 39, the percent positivity decreased most prominently in the 10-14-year age group from 9.0% to 6.4%.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the contribution of <10 year olds increased by 8.2% and that of 10-14 years olds increased by 2.5% from week 36 to week 38. The contribution of those aged 20-29 years decreased by 7.4% and that of 15-19 years olds decreased 2.2% from week 36 to week 38. The remaining age groups' contributions remained relatively stable.

As shown in [Figure 8](#), age-specific incidences decreased in all age groups from week 38 to 39, with the exception of the 80+ year-olds that slightly increased from 41 to 44 per 100K. Highest incidence rates remain in children <10 and 10-14 years of age at 143 and 129 per 100K, respectively. 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 January 20, 2020 (week 4) – October 02, 2021 (week 39)



Data source: laboratory PLOVER data

Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC March 15, 2020 (week 12) – October 02, 2021 (week 39) (N= 190,339)

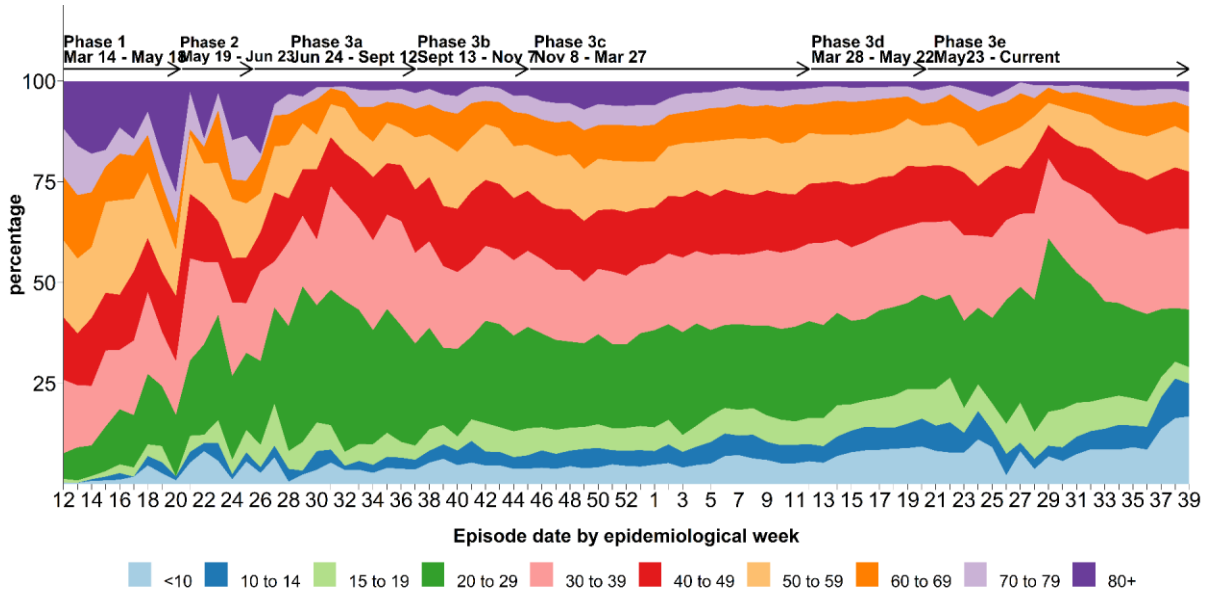
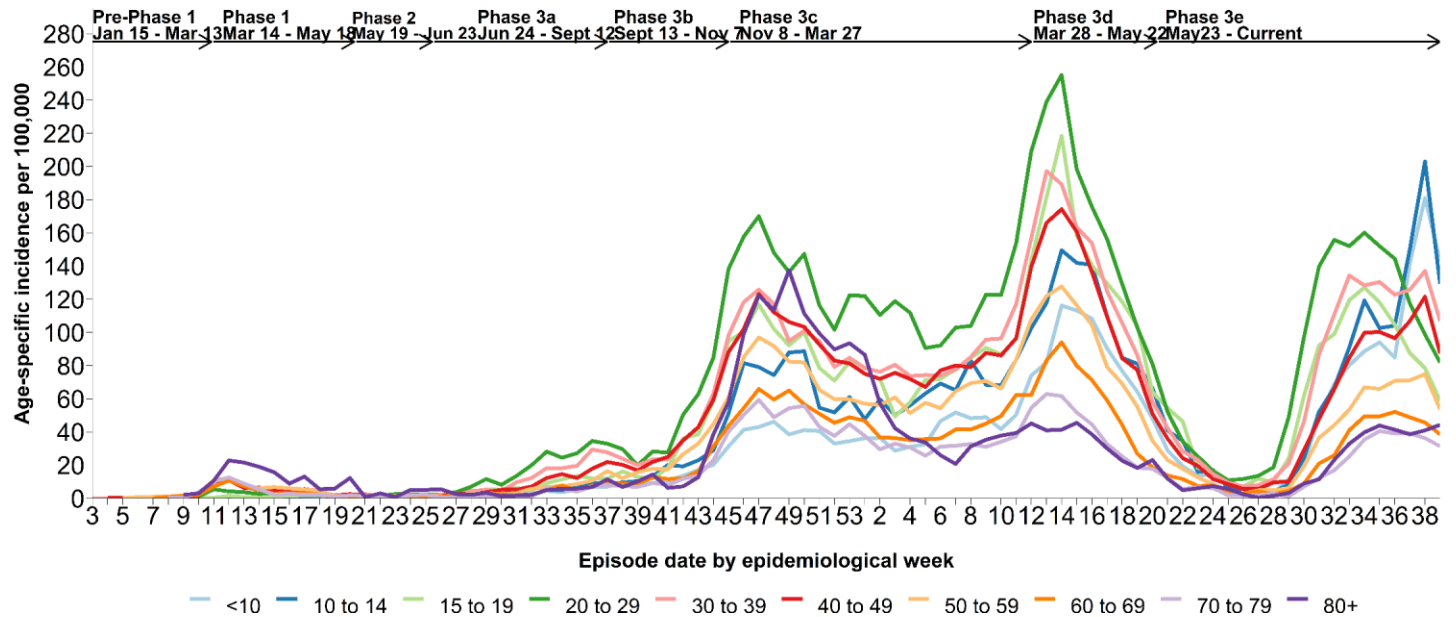


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 190,852)



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](#)).

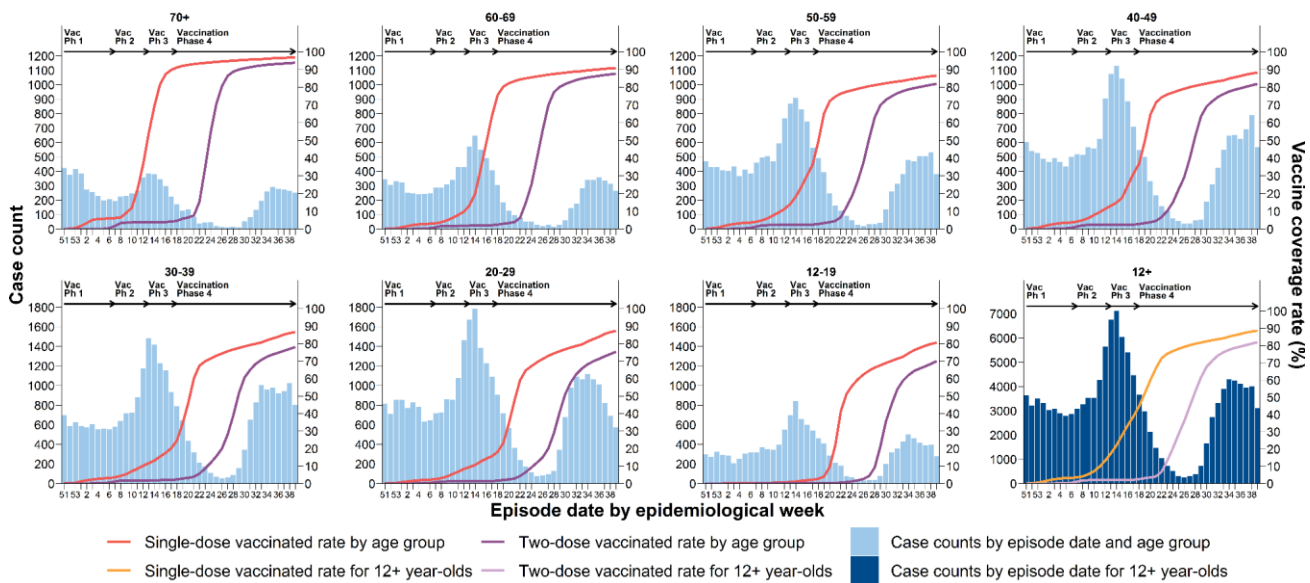
By week 39, 89% of eligible 12+ year-olds had received a single dose of vaccine and 82% were fully vaccinated.

The single-dose coverage for age groups 50+ years ranged from 87-97%, and two-dose coverage ranged from 82-94%, with 899 cases reported for those age groups combined.

In week 39, single-dose coverage in the 20-49 year-olds was between 87-88% and two-dose coverage ranged between 75-82%, with 1,941 cases reported for those age groups combined.

Single-dose coverage in the 12-19 year-olds was 82% and 70% were fully vaccinated, with 558 cases reported for that age group in week 39.

Figure 9. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC December 13, 2020 (week 51) – October 02, 2021 (week 39)



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

E. Severe outcome counts and epi-curve

Between weeks 36 and 39, the weekly number of hospital and ICU admissions have been relatively stable ranging between 263 to 274 hospital admissions, and 58 to 70 ICU admissions per week (Table 3, Figure 10). Death counts have also shown stability since week 37, ranging between 36 and 39 deaths per week.

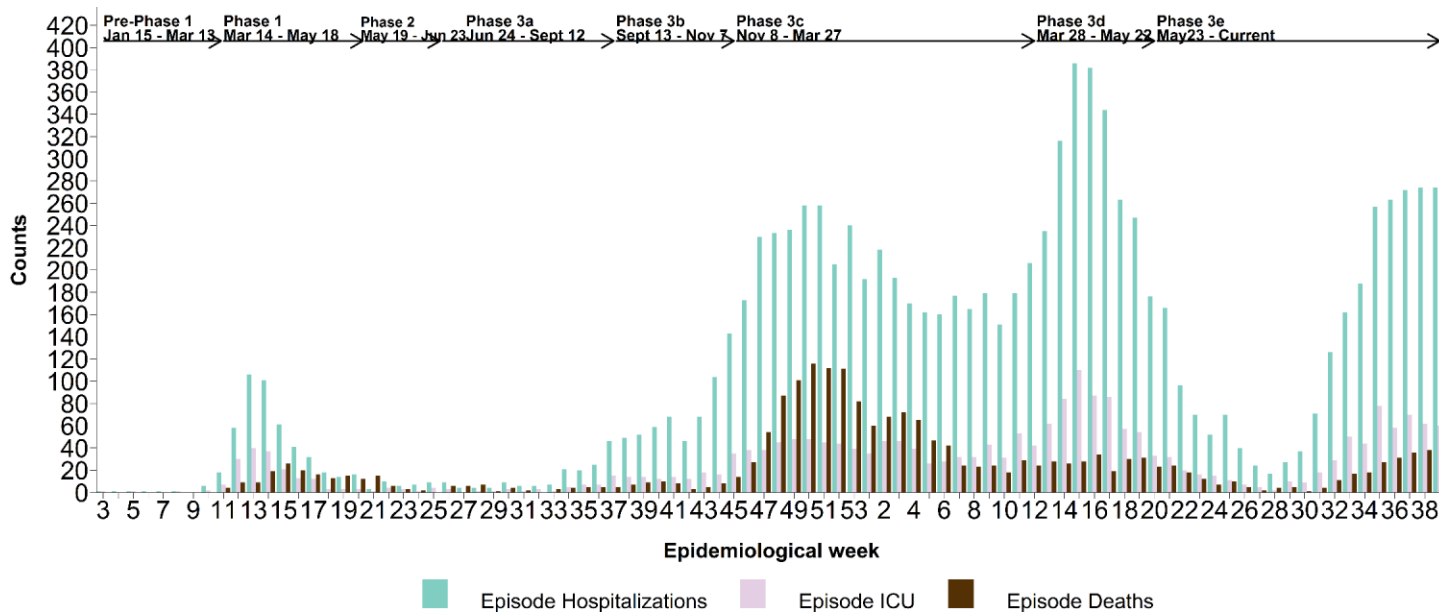
Cumulatively, there have been 17 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 39 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – October 02, 2021 (week 39)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 39, hospitalizations	90	53	34	63	34	0	274
Cumulative hospitalizations^b	5,086	1,409	417	968	2,188	14	10,082/190,880 (5)
Week 39, ICU admissions	22	12	7	14	5	0	60
Cumulative ICU admissions^b	1,035	352	120	242	585	2	2,336/190,880 (1)
Week 39, deaths	12	6	7	2	9	0	36
Cumulative deaths	984	238	70	176	524	0	1,992/190,880 (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 January 15, 2020 (week 3) – October 02, 2021 (week 39)



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 39, median age of hospital admissions, ICU admissions and deaths was 54 years, 56 years and 78 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 been stable since week 35 ranging between 14 to 20 deaths per week. In the 70-79 year age group, death counts have stabilized at 8-9 deaths since week 37. Death counts in the 60-69 year olds decreased since week 38, from 6 to 2 deaths in week 39.

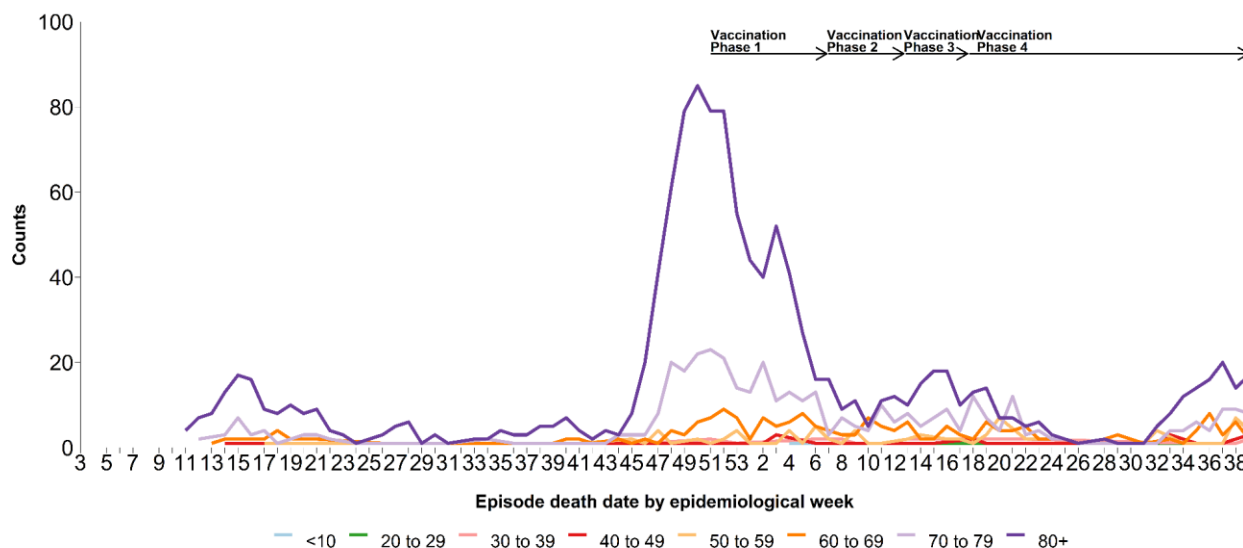
Since week 37, there was a weekly average of 1 death in age groups <50 years of age, 4 in age groups 50-79 years of age, 3 deaths in the 60-69 year old age group, 4 deaths in the 70-79 year-olds, and 17 deaths in the 80+ year-olds. The number of deaths may increase over time as data becomes more complete.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 190,852)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	13,019 (7)	130 (1)	13 (1)	2 (<1)	470,017 (9)
10-19	21,360 (11)	100 (1)	19 (1)	0 (<1)	529,387 (10)
20-29	42,876 (22)	594 (6)	74 (3)	4 (<1)	699,476 (13)
30-39	36,041 (19)	1,073 (11)	204 (9)	22 (1)	750,054 (14)
40-49	27,395 (14)	1,173 (12)	266 (11)	37 (2)	648,377 (12)
50-59	22,483 (12)	1,595 (16)	473 (20)	92 (5)	711,930 (14)
60-69	14,579 (8)	1,876 (19)	570 (24)	202 (10)	686,889 (13)
70-79	7,434 (4)	1,822 (18)	512 (22)	422 (21)	454,855 (9)
80-89	3,921 (2)	1,300 (13)	194 (8)	683 (34)	193,351 (4)
90+	1,744 (1)	439 (4)	18 (1)	528 (27)	52,885 (1)
Total	190,852	10,102	2,343	1,992	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 PHS 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 January 15, 2020 (week 3) – October 02, 2021 (week 39) (N= 1,992)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 12](#), 381 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 39. In week 39, four new outbreaks were declared based on earliest case onset date. Since week 35, 15 (83%) outbreaks were reported in long-term care settings, and 15 (83%) were declared by FH.

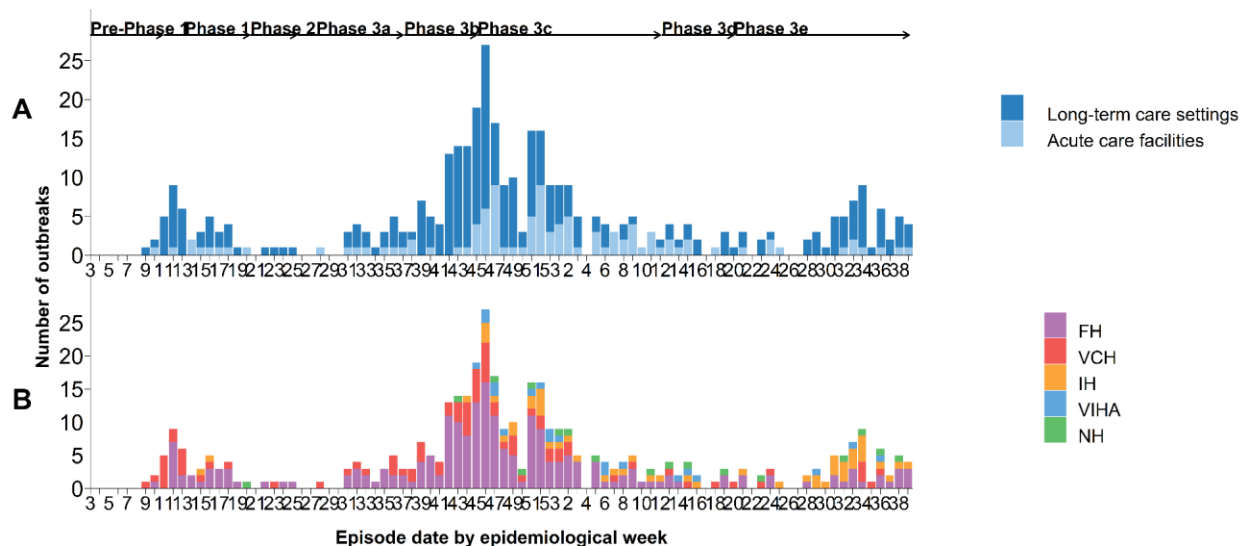
Nine (25%) out of the 36 deaths reported in week 39 were associated with an outbreak in a care facility setting.

Table 5. COVID-19 care facility^{a,b} outbreaks by earliest case onset^{a,c}, associated cases and deaths by episode date, BC^d January 15, 2020 (week 3) – October 02, 2021 (week 39) (N=381)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 39, Care Facility Outbreaks	4	84	24	0	108	9	0	0	9
Cumulative, Care Facility Outbreaks	381	4,050	2,492	6	6,548	1,111	0	0	1,111

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 January 15, 2020 (week 3) – October 02, 2021 (week 39) (N=381)



- 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/