

British Columbia (BC) COVID-19 Situation Report
Week 37: September 12- September 18, 2021

Table of Contents		COVID-19 incidence declining provincially and in most regions; testing rate and related incidence increased in children under 15 years
Epidemic curve and regional incidence	2	The provincial incidence by episode date was 78 per 100K with 4,058 cases in week 37
Likely sources of infection	3	Health authority incidence decreased in all regions except Northern Health where it is highest: <ul style="list-style-type: none"> • Since week 36, Fraser Health incidence decreased (75 to 68 per 100K). • Since week 36, Vancouver Coastal incidence decreased (55 to 45 per 100K). • Since week 36, Interior Health incidence decreased (154 to 115 per 100K). • Since week 36, Island Health incidence decreased (59 to 56 per 100K). • Since week 36, Northern Health incidence increased (199 to 248 per 100K).
Test rates and % positive	4	Incidence in all age groups has decreased, other than in children aged 0 to 14 years where it increased from weeks 36 to 37. This occurred in parallel with an increase in testing rate in this age group and a concomitant decrease in test positivity. The 10-14 year-old incidence increased from 101 per 100K in week 36 to 119 per 100K in week 37.
Age profile, testing and cases	5	By week 37 the single-dose vaccination coverage in the eligible 12+ year-olds reached 87%, and 79% were fully vaccinated.
Severe outcomes	8	Testing of MSP-funded specimens increased to ~60K specimens in week 37. Positivity of MSP-funded specimens decreased since week 36 from 9.7% to 7.8% in week 37.
Age profile, severe outcomes	9	The weekly number of hospital admissions have slightly increased from week 36 to week 37, from 260 to 274 admissions. ICU admissions also increased from week 36 to week 37, from 61 to 71 admissions. Deaths have been increasing since week 30, from 1 to 33 deaths in week 37.
Care facility outbreaks	10	By case of earliest onset date, 1 new outbreak was reported in healthcare settings in week 37.
Additional resources	10	

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 September 27, 2021, laboratory data on September 24, 2021, PIR vaccine coverage date on September 24, 2021, and PCMS hospitalization data on September 27, 2021.

A. COVID-19 case counts and epidemic curves

Up to week 37, 2021, there have been 180,738 cases for a cumulative incidence of 3,472 per 100K (Table 1, Figure 1). The provincial incidence by episode date was 78 per 100K (4,058 cases) in week 37, a decrease from 94 per 100K in week 34, the peak of the fourth wave. As shown by the higher incidence using surveillance date, incidence by episode date will increase as data become more complete for recent weeks.

As shown in Figure 2, incidence has decreased in every Health Authority (HA) from weeks 36 to 37, other than Northern Health (NH). Incidence increased in Northern Health (NH), from 199 to 248 per 100K. All other HAs reported a decrease in incidence by episode date: Fraser Health (FHA) decreased from 75 to 68 per 100K, Interior Health (IH) from 154 to 115 per 100K, Vancouver Coastal (VCH) from 55 to 45 per 100K and Island Health (VIHA), from 59 to 56 per 100K. These rates may increase as data become more complete. Incidence increased in all NH Health Service Delivery Areas (HSDAs) and South Vancouver Island HSDA.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – Sep 18, 2021 (week 37) (N= 180,738)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 37, case counts	1,329	967	490	717	553	2	4,058
Cumulative case counts	95,126	25,923	8,020	10,778	40,599	292	180,738
Week 37, cases per 100K population	68	115	56	248	45	NA	78
Cumulative cases per 100K population	4,835	3,084	917	3,725	3,315	NA	3,472

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – September 18, 2021 (week 37) (N= 180,738)

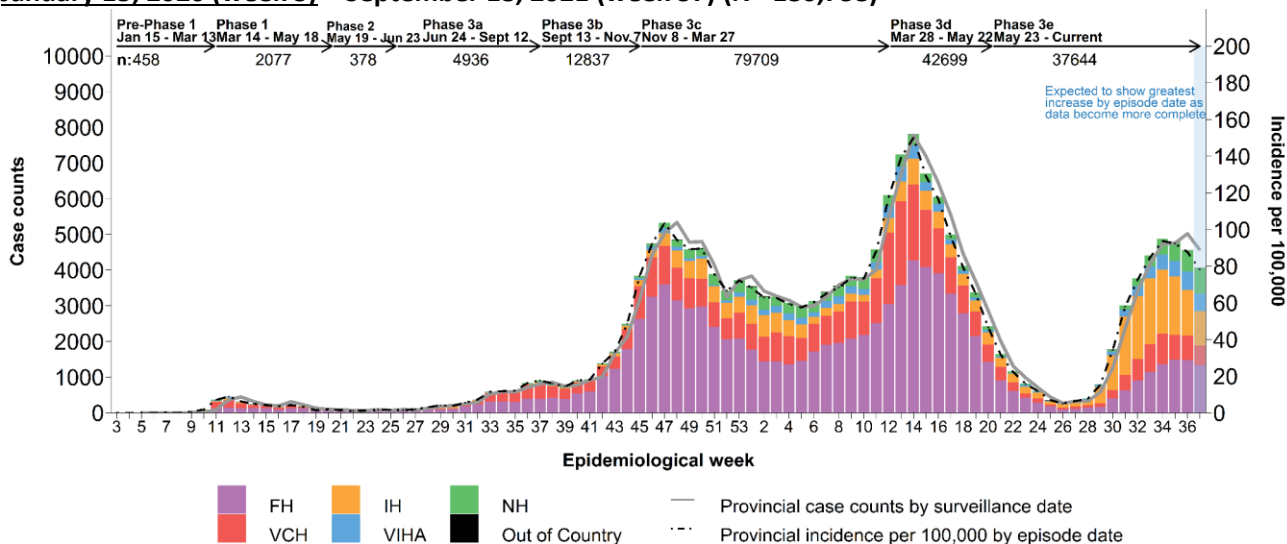
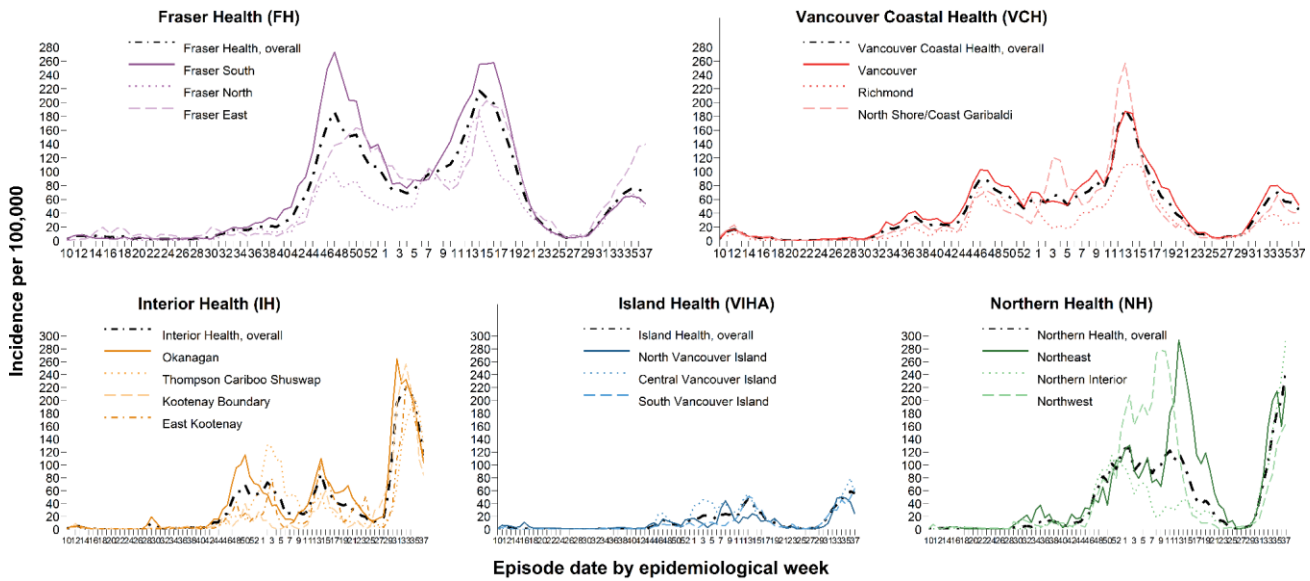


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – September 18, 2021 (week 37) (N= 180,738)



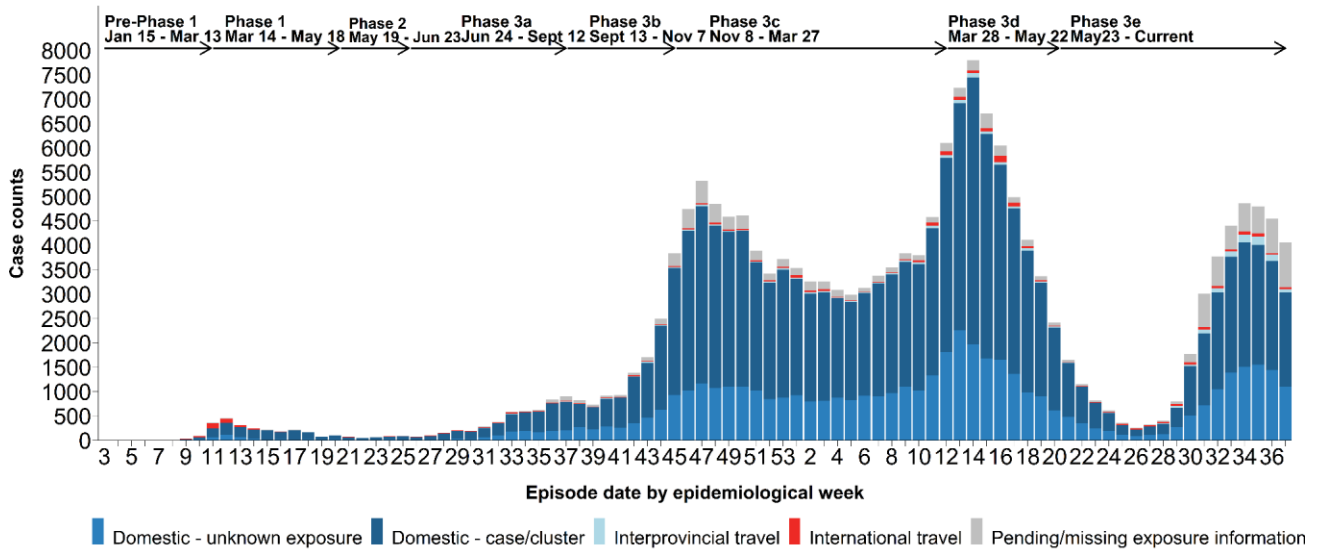
B. Likely sources of infection

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) – September 18, 2021 (week 37) (N= 180,738)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 37 , Exposures	42 (1)	67 (2)	1,933 (48)	1,102 (27)	914 (23)
Cumulative Exposures	2,298 (1)	1,994 (1)	116,917 (65)	48,415 (27)	11,114 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – September 18, 2021 (week 37) (N= 180,738)



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 to 36, to ~60K specimens in week 37. While the total number of specimens has increased, the positivity of MSP-funded specimens has decreased slightly since week 36 from 9.7% to 7.8%.

As shown in [Figure 5](#), the per capita testing rates (Panel A) have increased in all HAs since at least week 36, most significantly in NH, from 939 per 100K in week 36 to 1267 per 100K in week 37. Conversely, percent positivity (Panel B) for MSP-only specimens has decreased from week 36 to 37 in all HAs, most sharply in NH, from 25.1% to 20.9%, and in IHA from 15.2% to 11.2%.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – September 18, 2021 (week 37)

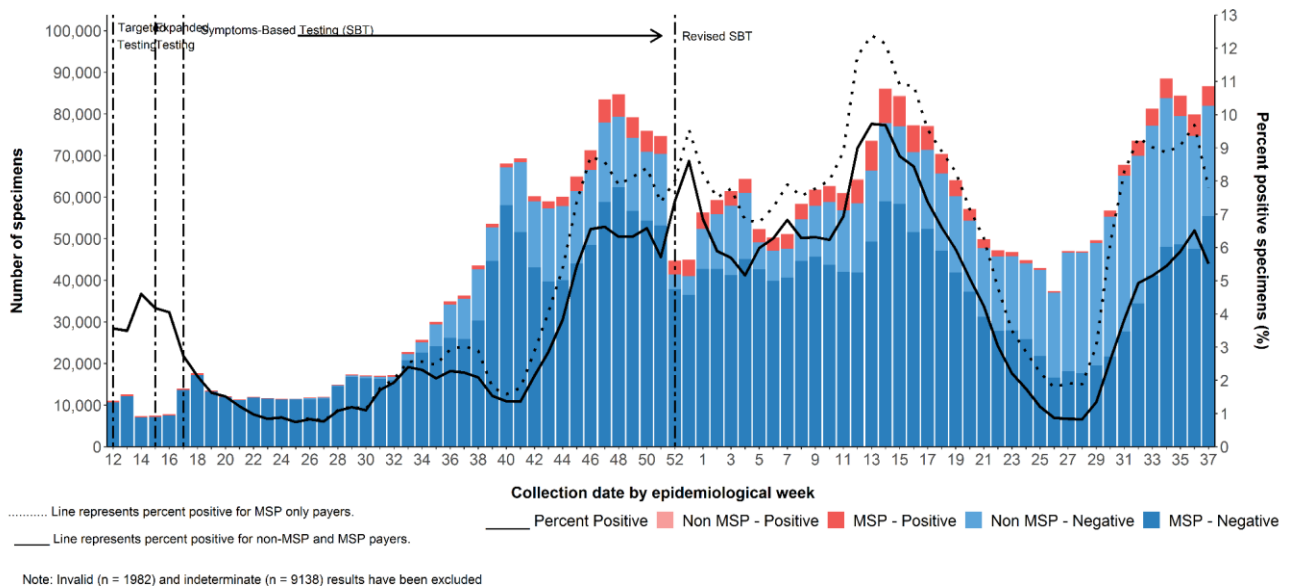
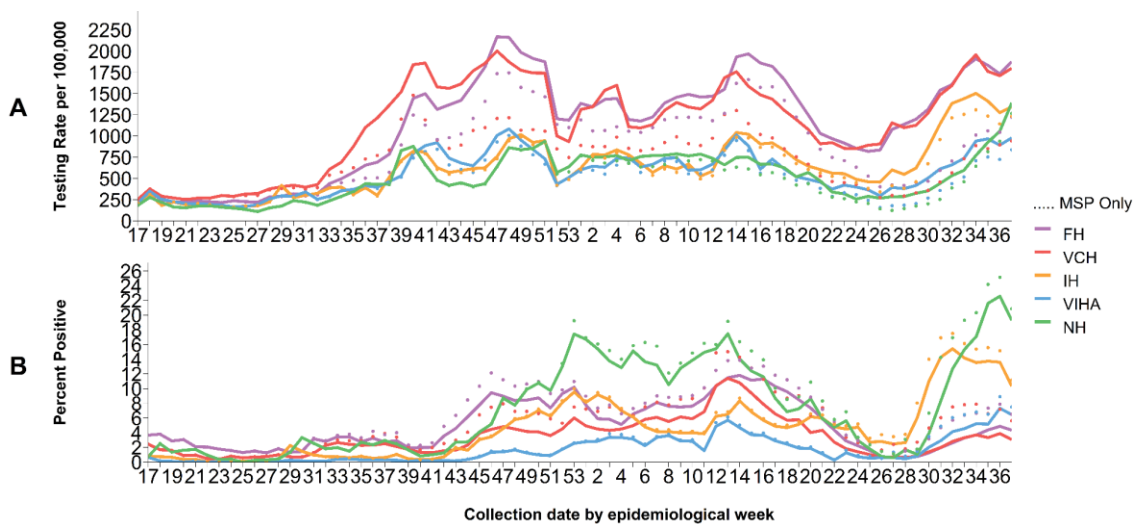


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – September 18, 2021 (week 37)



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 most age groups in week 37. The largest increases occurred in children, most prominently in the 5-9 year-olds, where testing rates doubled from 736 per 100K in week 36 to 1,221 per 100K in week 37. Testing rates have stabilised since week 34 in the 60-79 year age group and have decreased since week 36 in those aged 80+ years.

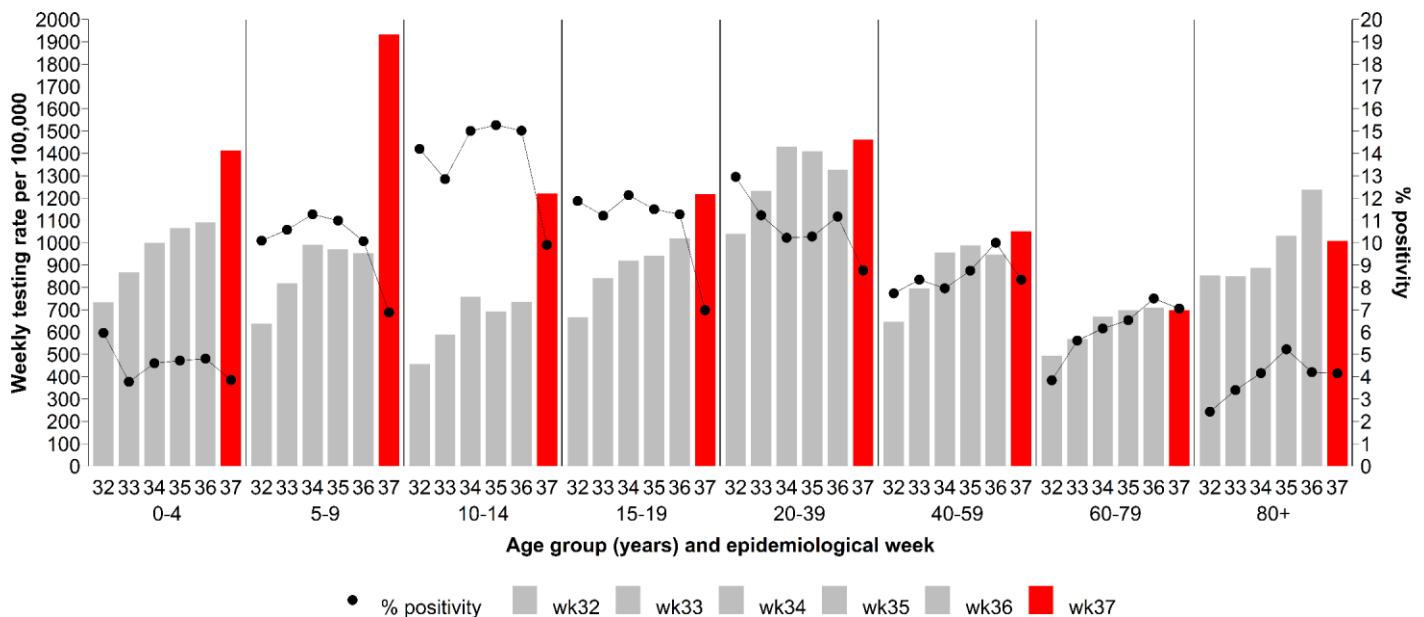
As shown by the black dots in [Figure 6](#), the percent positivity has decreased in most age groups since week 36, particularly in children, consistent with an increase in testing rates. From weeks 36 to 37, the percent positivity has decreased from 15.2% to 9.9% in 10-14 year-olds, from 10.0% to 6.9% in 5-9 year-olds and from 4.8% to 3.9% in 0-4 year-olds. Percent positivity remained stable in 60-79 year-olds and 80+ year-olds.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the contribution of <10 year olds increased by 4.5% and that of 10-14 years olds increased by 1.8% from week 36 to 37. The contribution of those aged 20-29 years decreased by 4.4% from week 36 to 37. The remaining age groups' contributions remained relatively stable.

As shown in [Figure 8](#), age-specific incidences decreased since week 36 across all age groups, other than in children. The 10-14 year-olds saw an increase from 101 per 100K in week 36 to 119 per 100K in week 37, and, for the first time, had the highest age-specific incidence of all age groups. In those <10 years, the incidence increased from 82 per 100K in week 36, to 112 per 100K in week 37. 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) – September 18, 2021 (week 37)



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) – September 18, 2021 (week 37) (N= 180,199)

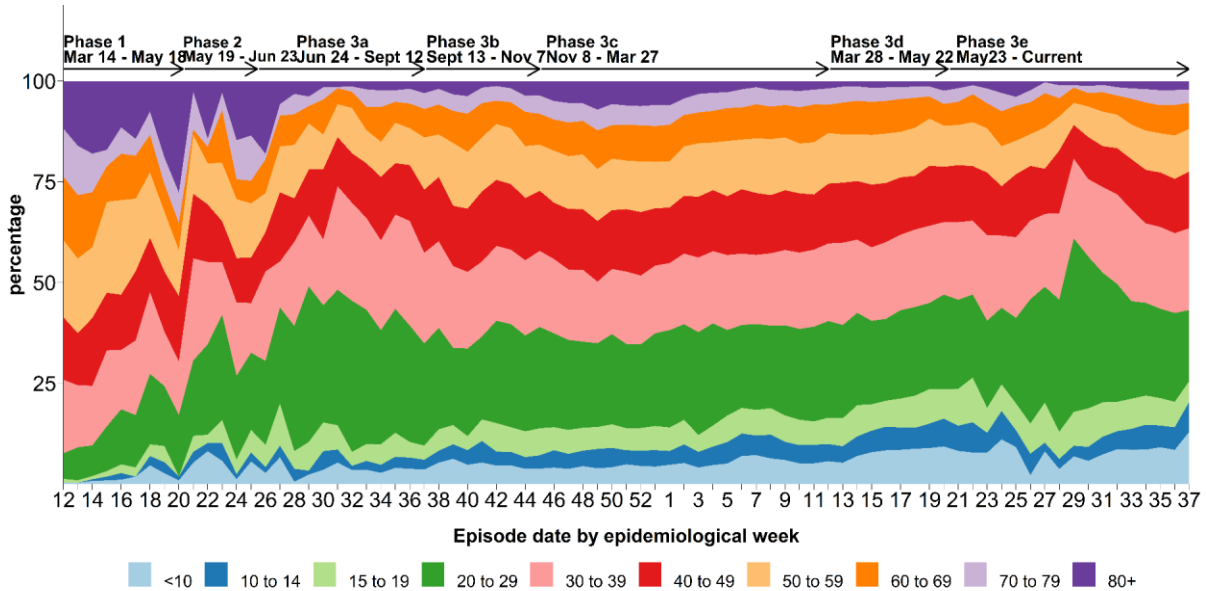
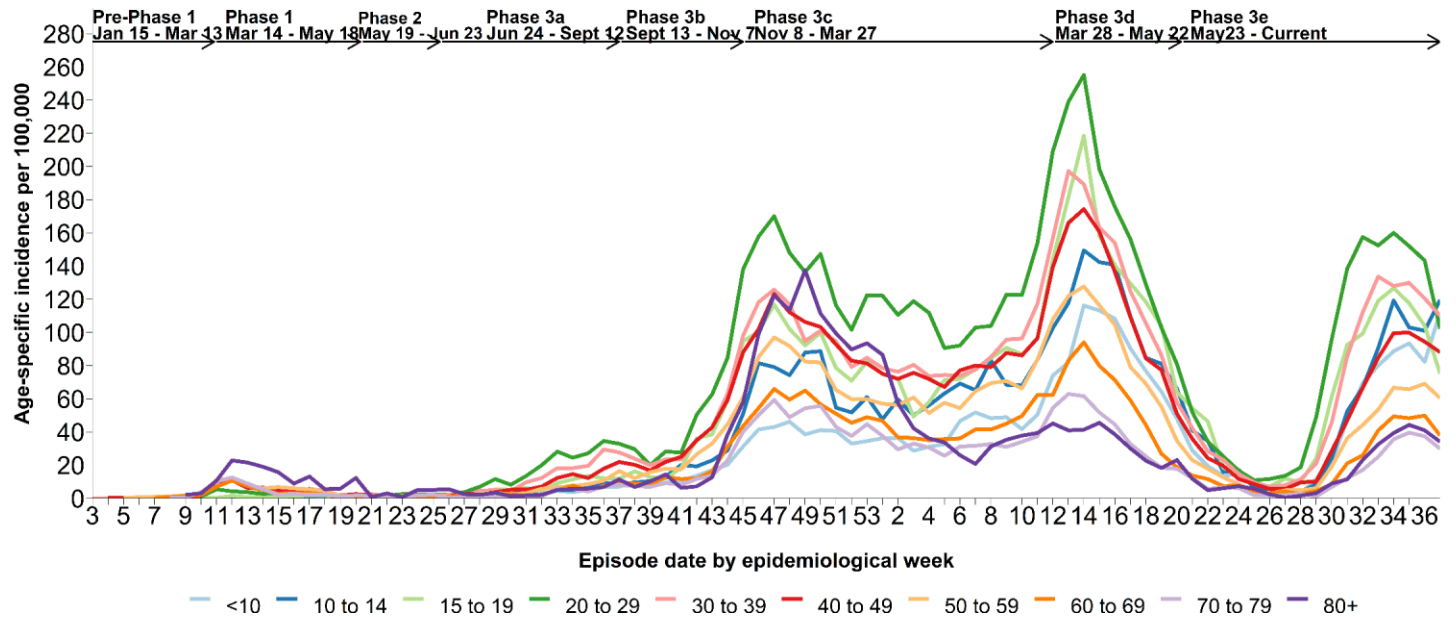


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – September 18, 2021 (week 37) (N= 180,712)



Vaccine coverage and weekly cases by age group

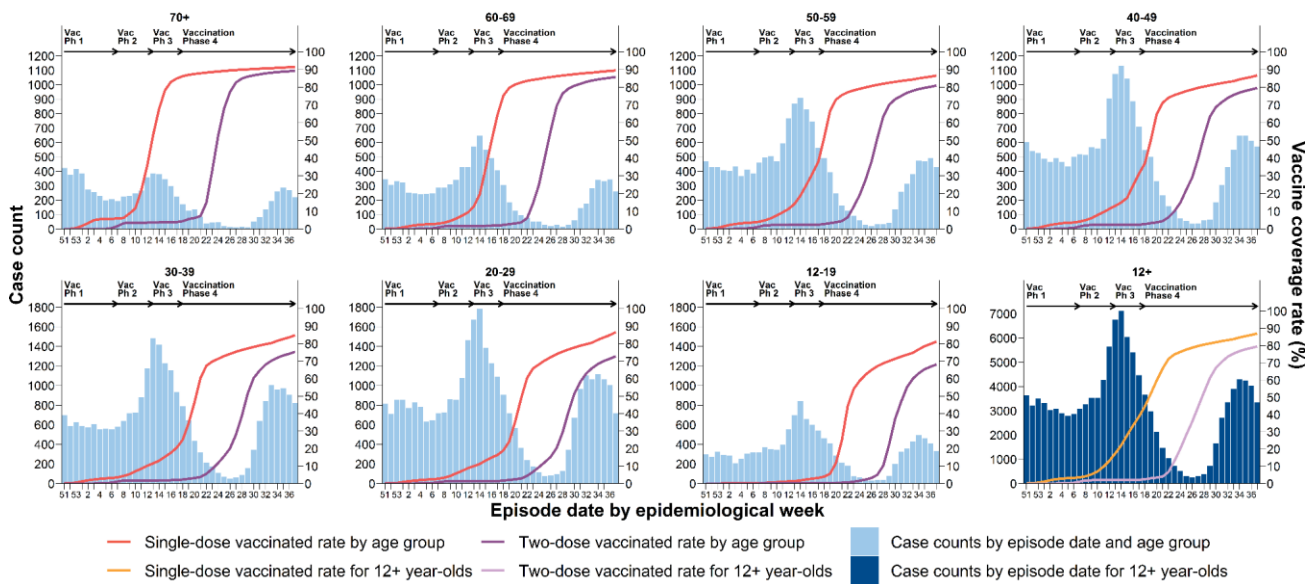
Vaccine roll-out in the community (i.e. individuals not residing in healthcare facilities, not healthcare workers and not clinically extremely vulnerable) was phased by age groups. The 70+ year-olds were eligible between weeks 10 and 14, the 40 to 69 year-olds started in weeks 15-19, the 20 to 39 year-olds 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 37, 87% of eligible 12+ year-olds had received a single dose of vaccine and 79% were fully vaccinated. The single-dose coverage for age groups 50+ years ranged from 87-91%, and two-dose coverage ranged from 81-89%, with 910 cases reported for those age groups combined.

In week 37, single-dose coverage in the 20-49 year-olds was between 85-87% and two-dose coverage ranged between 73-80%, with 2,111 cases reported for those age groups combined.

Single-dose coverage in the 12-19 year-olds was 81% and 68% were fully vaccinated, with 331 cases reported for that age group in week 37.

Figure 9. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC December 13, 2020 (week 51) – September 18, 2021 (week 37)



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

E. Severe outcome counts and epi-curve

The weekly number of hospital admissions have increased from week 36 to week 37, from 260 to 274 admissions ([Table 3](#), [Figure 10](#)). ICU admissions also increased from week 36 to week 37, from 61 to 71 admissions. Deaths have been increasing since week 30, from 1 to 33 deaths in week 37.

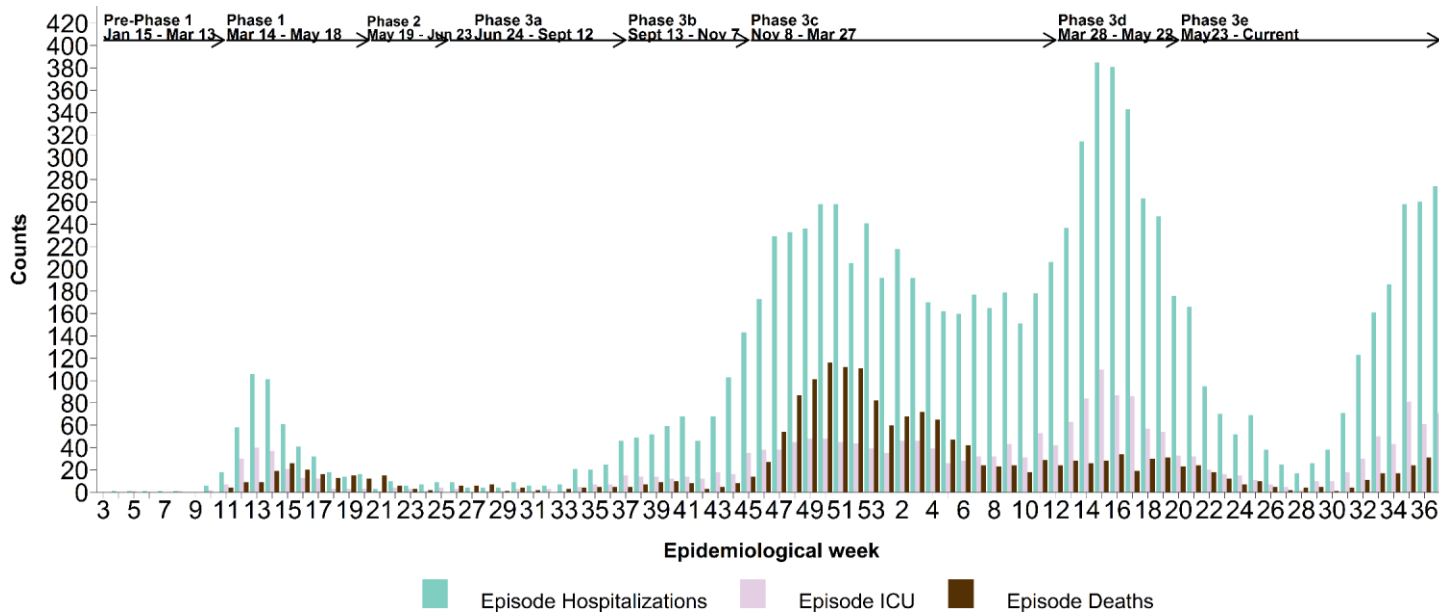
Cumulatively, there have been 17 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 36 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – September 18, 2021 (week 37)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 37, hospitalizations	88	61	33	56	36	0	274
Cumulative hospitalizations^b	4,928	1,293	344	824	2,115	14	9,518/180,738 (5)
Week 37, ICU admissions	24	19	8	13	7	0	71
Cumulative ICU admissions^b	996	328	101	222	573	2	2,222/180,738 (1)
Week 37, deaths	15	5	2	5	6	0	33
Cumulative deaths	957	222	58	169	505	0	1,911/180,738 (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) – September 18, 2021 (week 37)



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 37, median age of hospital admissions, ICU admissions and deaths was 56 years, 59 years and 82 years, respectively, based on health authority case line lists only (data not shown).

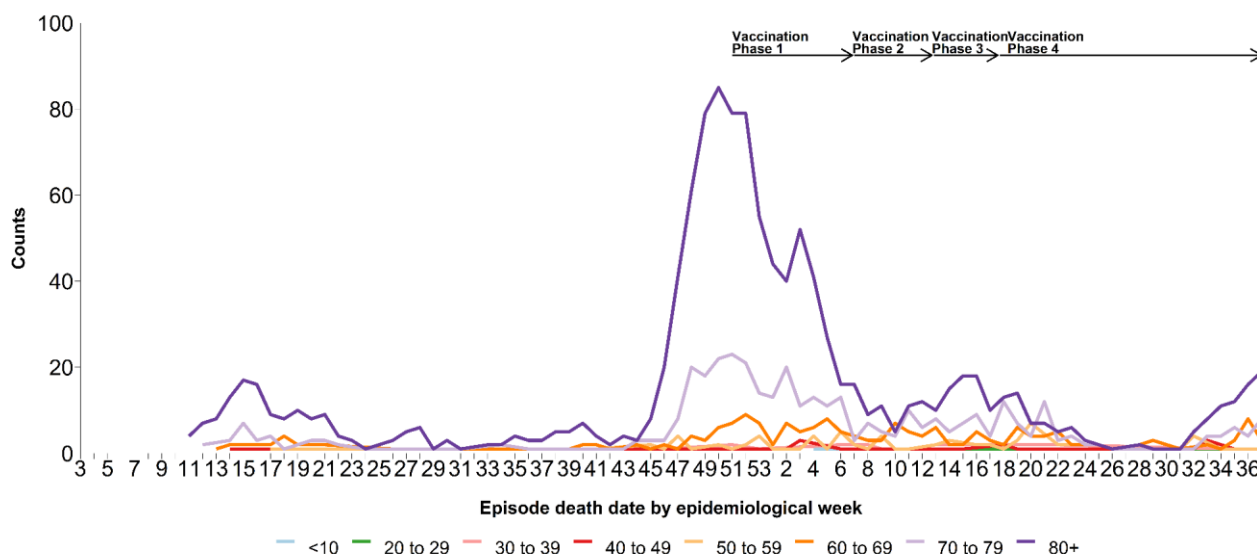
As shown in **Figure 11**, death counts in the 80+ year age group have been increasing since week 31, reaching 19 deaths in week 37. In the 70-79 year age group, death counts have also increased from 1 death in week 31 to 8 deaths in week 37. Death counts in the 60-69 year olds decreased since week 36, from 8 to 3 deaths in week 37. Since week 32, there has been a weekly average of 1 death in the 50-59 year old age group, 3 deaths in the 60-69 year old age group, and 5 deaths in the 70-79 year-olds. There has been a weekly average of 10 deaths in 80+ year-olds from week 31 to week 37. There was a weekly average of <1 death in the entire 0-49-year-old group since week 32.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – September 18, 2021 (week 37) (N= 180,712)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	11,341 (6)	116 (1)	11 (<1)	2 (<1)	470,017 (9)
10-19	20,022 (11)	92 (1)	18 (1)	0 (<1)	529,387 (10)
20-29	41,498 (23)	543 (6)	67 (3)	3 (<1)	699,476 (13)
30-39	34,063 (19)	1,001 (10)	192 (9)	18 (1)	750,054 (14)
40-49	25,897 (14)	1,089 (11)	252 (11)	34 (2)	648,377 (12)
50-59	21,476 (12)	1,502 (16)	442 (20)	81 (4)	711,930 (14)
60-69	13,901 (8)	1,780 (19)	548 (25)	193 (10)	686,889 (13)
70-79	7,072 (4)	1,747 (18)	494 (22)	404 (21)	454,855 (9)
80-89	3,759 (2)	1,240 (13)	186 (8)	662 (35)	193,351 (4)
90+	1,683 (1)	425 (4)	18 (1)	514 (27)	52,885 (1)
Total	180,712	9,535	2,228	1,911	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 January 15, 2020 (week 3) – September 18, 2021 (week 37) (N= 1,911)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 12](#), 368 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 37. In week 37, one new outbreak was declared based on earliest case onset date. Since week 28, 34 (89%) outbreaks were reported in long-term care settings and 18 outbreaks (~47%) occurred in IH.

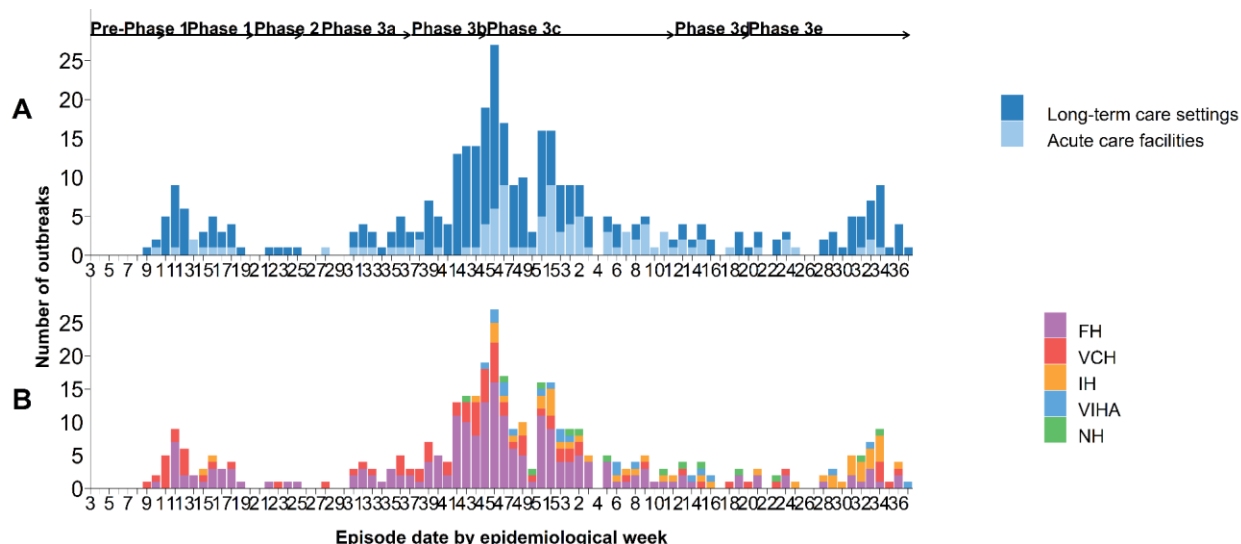
Thirteen (39%) out of the 33 deaths reported in week 37 were associated with an outbreak in a care facility setting.

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) – September 18, 2021 (week 37) (N=368)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 37, Care Facility Outbreaks	1	27	11	0	38	13	0	0	13
Cumulative, Care Facility Outbreaks	368	3,902	2,439	6	6,347	1,092	0	0	1,092

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) – September 18, 2021 (week 37) (N=368)



- 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/