

British Columbia (BC) COVID-19 Situation Report
Week 19: May 09 - May 15, 2021

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Epidemic curve and regional incidence	2	There were 3,099 COVID-19 cases (60 per 100K) in week 19, a 61% decrease since the peak in week 14.	
Likely sources of infection	3	Regional incidence is decreasing: <ul style="list-style-type: none"> • Since week 14, Fraser Health incidence decreased (221 to 103 per 100K). • Since week 13, Vancouver Coastal incidence decreased (194 to 53 per 100K). • Since week 14, Interior Health incidence decreased (86 to 34 per 100K). • Since week 13, Island Health incidence decreased (48 to 10 per 100K). • Since week 13, Northern Health incidence decreased (119 to 35 per 100K). 	
Test rates and % positive	4	All age specific incidences decreased from weeks 13-15 to week 19. Sharpest declines were seen in the 15-19-year-olds and 20-29-year-olds from week 14 to week 19 (from 219 to 95 per 100k and 257 to 96 per 100k, respectively), and in the 30-39-year-olds from week 13 to week 19 (from 201 to 81 per 100k).	
Age profile, testing and cases	5	Testing of MSP-funded specimens decreased from ~67,500 specimens in week 14 to ~45,000 in week 19. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 8.5% in week 19.	
Severe outcomes	7	The number of weekly hospital admissions peaked in week 15 (383) and has declined since then, reaching 246 in week 19. The number of intensive care unit (ICU) admissions also peaked in week 15 (107) and decreased in week 19 to 48 ICU admissions. The number of deaths was stable in weeks 7-19 with an average of 26 deaths per week.	
Age profile, severe outcomes	8	Following increasing vaccination rates in the elderly, the weekly number of deaths in 70+ year-olds has decreased substantially to 21 deaths in week 19.	
Care facility outbreaks	9	By case of earliest onset date, there were three outbreaks reported in care settings in week 19. There has been a large and sustained decline in the number of cases and deaths among residents of long-term care settings aged 70+ years old.	
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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 3A	PHASE 3B	PHASE 3C
Jan 15 (wk 3) to Mar 13 (wk 11) 2020	Mar 14 (wk 11) to May 18 (wk 21) 2020	May 19 (wk 21) to Jun 23 (wk 26) 2020	Jun 24 (wk 26) to Sept 12 (wk 37) 2020	Sept 13 (wk 38) to Nov 7 (wk 45) 2020	Nov 8 (wk 46) to Current wk, 2021
From earliest symptom onset date	Initial restrictions	Re-opening of services	Broader re-opening	From 1 st epiweek of 2020-21 school year	Core bubble interaction only

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 18+ 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.
- Per capita rates/incidences are based on PEOPLE2020 population estimates (n=5,139,568 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.
- Case data were extracted on May 24, 2021 and laboratory data on May 21, 2021.

A. COVID-19 case counts and epidemic curves

Provincially, from week 3, 2020 to week 17, 2021, there have been 140,296 cases, corresponding to a cumulative incidence of 2,726 per 100K (Table 1, Figure 1). As shown in Figure 1, following the peak of Wave 3 in week 14 at 152 per 100K, incidence has decreased by 61% to reach 60 per 100K in week 19. The incidence in week 19 is lower than the peak in week 47 of Wave 2 (104 per 100K) and comparable to the nadir between Waves 2 and 3. Rates may increase as data by episode date become more complete.

As shown in Figure 2, incidence decreased in all health authorities over the past 5-6 weeks. From week 14 to week 19, Fraser Health (FH) incidence decreased from 221 to 103 per 100K and Interior Health (IH) incidence decreased from 86 to 34 per 100K. Incidence decreased from week 13 to 19 in Vancouver Coastal Health (VCH) from 194 to 53 per 100K; in Island Health (VIHA) from 48 to 10 per 100K; and in Northern Health (NH) from 119 to 35 per 100K. Incidence decreased in all health service delivery areas since weeks 13-14. Rates may increase as data become more complete.

**Table 1. Episode-based case tallies by health authority, BC^a
 January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 140,296)**

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 19, case counts	1,991	281	86	100	641	0	3,099
Cumulative case counts	81,807	11,827	4,959	7,499	34,008	196	140,296
Week 19, cases per 100K population	103	34	10	35	53	NA	60
Cumulative cases per 100K population	4,218	1,417	571	2,611	2,809	NA	2,726

**Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC^a
 January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 140,296)**

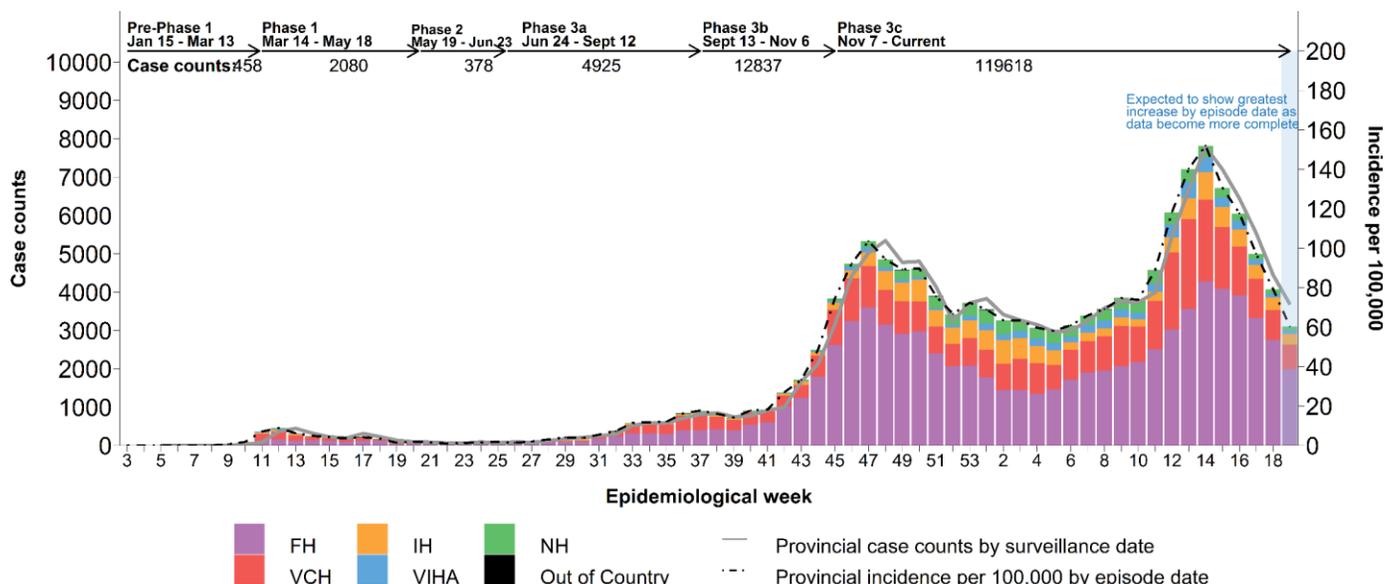
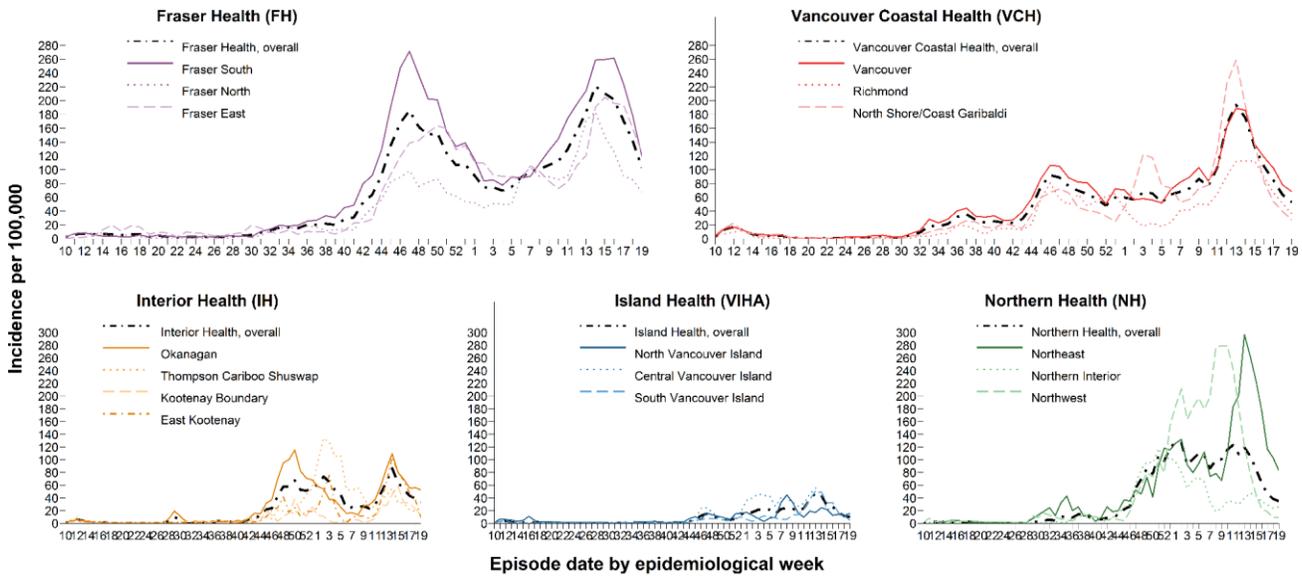


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – May 15, 2021 (week 19) (N= 140,296)



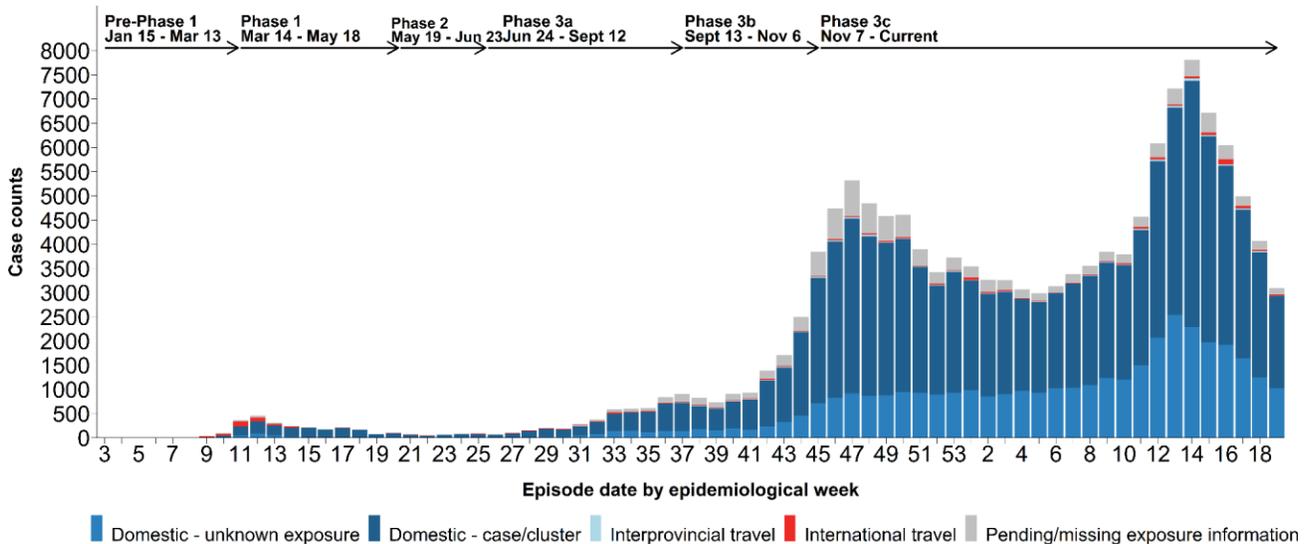
B. Likely sources of infection

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) – May 15, 2021 (week 19) (N= 140,296)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 19 , Exposures	21 (1)	9 (<1)	1,910 (62)	1,019 (33)	140 (5)
Cumulative Exposures	1,475 (1)	598 (<1)	90,334 (64)	37,304 (27)	10,585 (8)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 140,296)



C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing of MSP-funded specimens decreased from ~67,500 specimens in week 14 to ~45,000 in week 19. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 8.5% in week 19.

As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens recently decreased in all HAs. Testing rates have decreased in VCH, IH, NH and VIHA since week 14 and in FH since week 15. As shown in **Panel B**, percent positivity for week 19 MSP-funded tests is highest in FH at 10.1% followed by VCH at 9.0%, NH at 8.9%, and lowest in IH and VIHA at 5.5% and 2.1%, respectively. Percent positivity has decreased in VIHA and FHA since weeks 13 and 14, respectively, but has stabilized or slightly increased in VCH, IHA, and NHA in the prior week.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – May 15, 2021 (week 19)

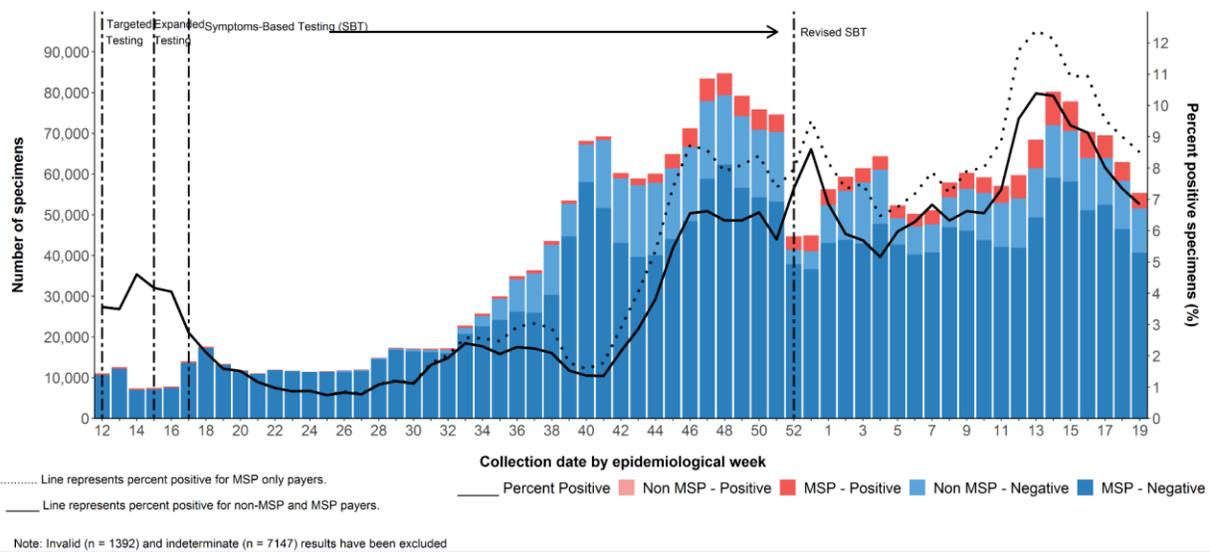
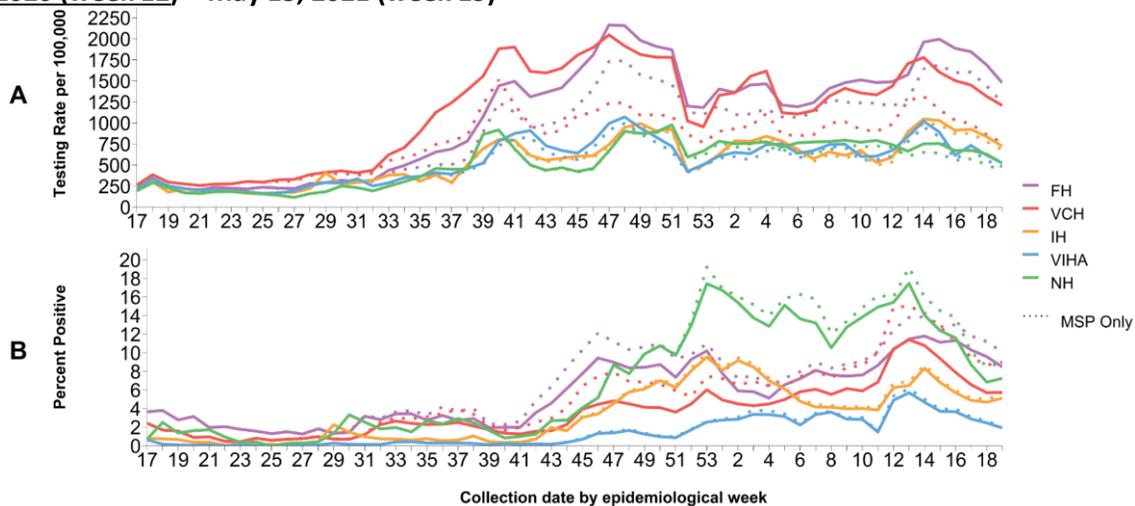


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – May 15, 2021 (week 19)



D. Age profile – Testing and cases

Testing rates and percent positivity by age group

As shown by the bars in **Figure 6**, testing rates in week 19 (shown in red) have decreased in all age groups since the prior two weeks 17 and 18 (shown in grey bars). The highest testing rate in week 19 was in 5-9 year-olds at 1,340 per 100K.

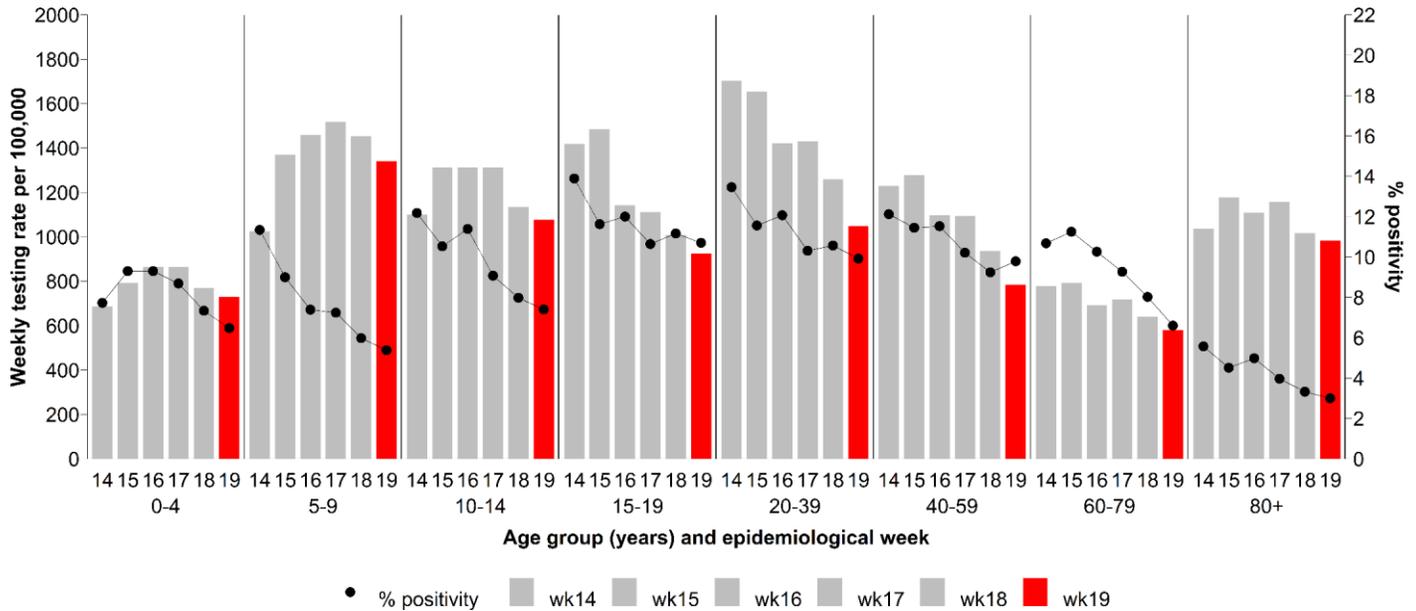
As shown by the black dots in **Figure 6**, the percent positivity for MSP-only specimens has decreased in all age groups since weeks 14-16. However, positivity increased from week 18 to 19 in the 40-59 year age group. Most prominently, the percent positivity in the 5 to 14 year age group has seen the sharpest decline since week 14. In week 19, the highest percent positivity was in the 15-19-year-olds followed by 20-39-year-olds and 40-59-year-olds, at 10.7%, 9.9% and 9.2%, respectively.

Case distribution and weekly incidence by age group

As shown in **Figure 7**, the percentage contribution of the 60-69 year-olds decreased by 2% since week 18, met mainly by an increase of 1.5% among the 40-49 year-olds and 0.7% among the 10-14 year-olds. The remaining age groups' contributions remained relatively stable.

As shown in **Figure 8**, all age specific incidences decreased from weeks 13-15 to week 19. Sharpest declines were seen in the 15-19-year-olds and 20-29-year-olds from week 14 to week 19 (from 219 to 95 per 100k and 257 to 96 per 100k, respectively), and in the 30-39-year-olds from week 13 to week 19 (from 201 to 81 per 100k). Week 19 age-specific incidences are likely to increase as data become more complete.

Figure 6. Average weekly SARS-CoV-2 testing rates and percent positive by known age group, BC January 20, 2020 (week 4) – May 15, 2021 (week 19)^a



a. Testing rates and percent positivity displayed are based on MSP testing only.

Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC March 15, 2020 (week 12) – May 15, 2021 (week 19) (N= 139,760)

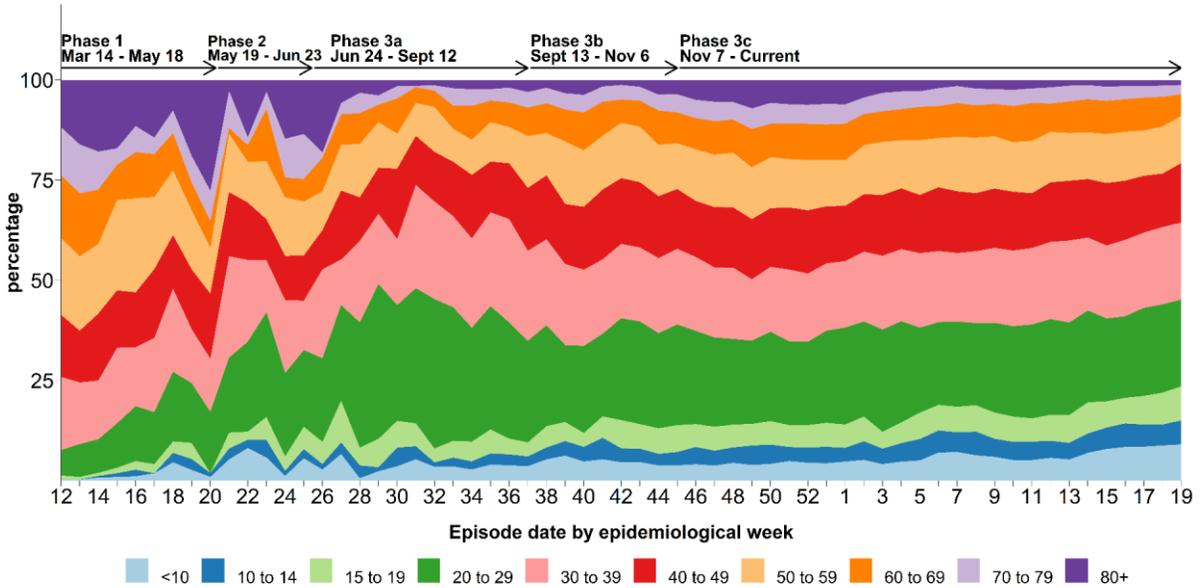
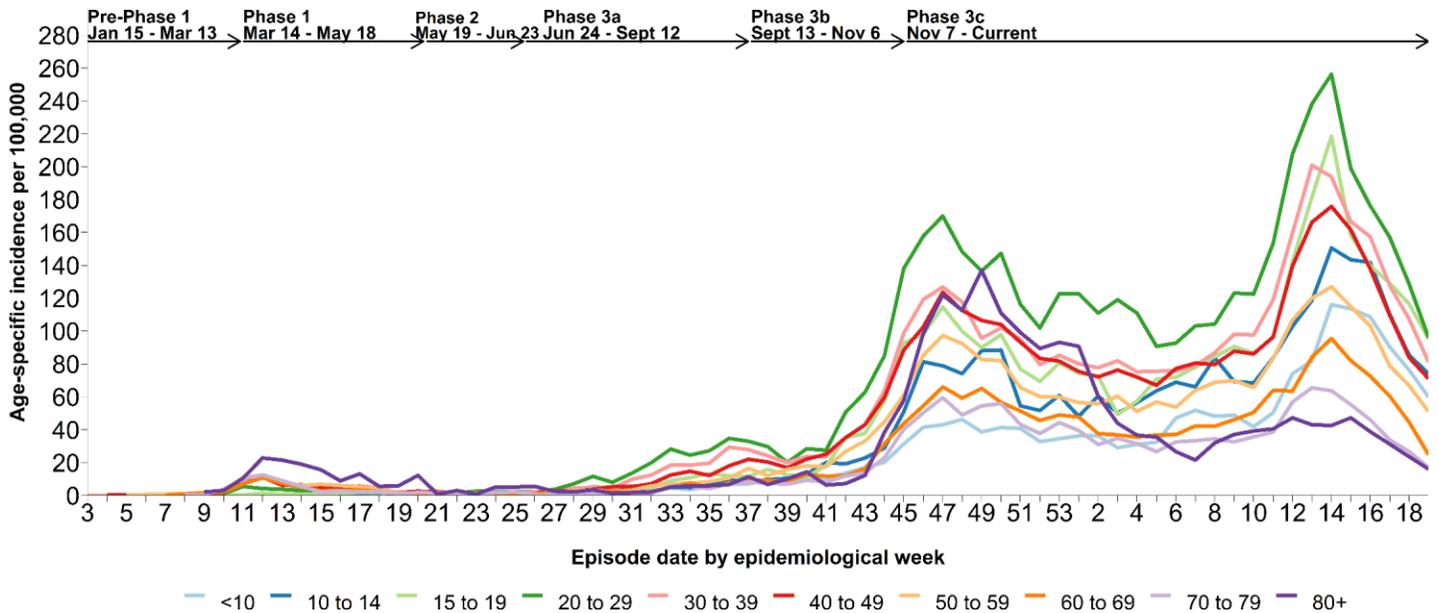


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 140,273)



E. Severe outcome counts and epi-curve

The number of weekly hospital admissions peaked in week 15 (383) and has declined since then, reaching 246 admissions in week 19. The number of intensive care unit (ICU) admissions also peaked in week 15 (107) and has decreased since then, reaching 48 admissions in week 19. The number of deaths has been stable from weeks 7 to 19 with an average of 26 deaths per week ([Table 3, Figure 9](#)). These numbers may increase in future reports as more data become available.

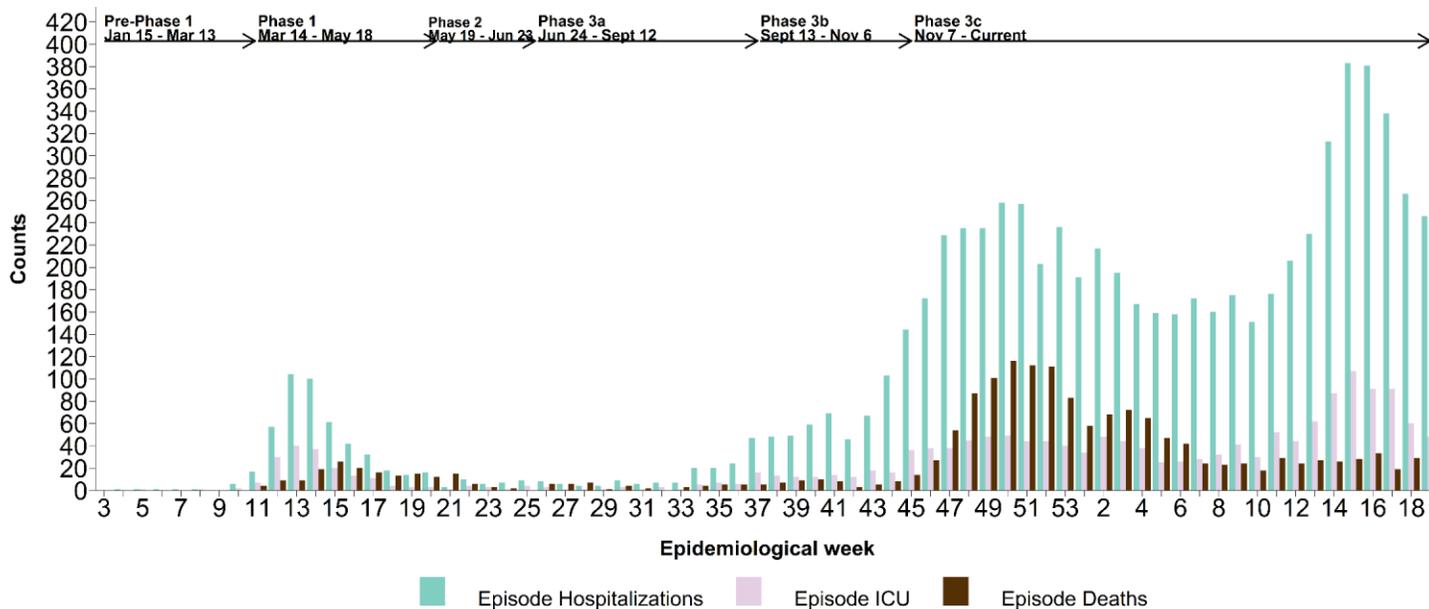
Cumulatively, there have been 11 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 19 (no new confirmed cases since last report). The median age of these cases is 6 (range 1-15) years.

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

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 19, hospitalizations	157	21	9	8	51	0	246
Cumulative hospitalizations	4,069^b	655	242	628	1,756	13	7,363/140,296 (5)
Week 19, ICU admissions	26	6	4	2	10	0	48
Cumulative ICU admissions	821^b	167	65	149	496	2	1,700/140,296 (1)
Week 19, deaths	19	6	0	4	2	0	31
Cumulative deaths	875	146	39	147	452	0	1,659/140,296 (1)

- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. The health authority is undergoing hospital and ICU admission data review.

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC January 15, 2020 (week 3) – May 15, 2021 (week 19)



F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes as well as the BC population for each age group. In week 19, median age of hospital admissions, ICU admissions and deaths was 55 years, 58 years and 77 years, respectively (data not shown).

As shown in **Figure 10**, following increasing vaccination rates in the elderly, the weekly number of deaths in 80+ year-olds decreased by 81% between weeks 50 and 6 (from 85 to 16 deaths). Since week 7, the weekly number of deaths has been fluctuating but remains low, with an average of 12 deaths per week. The number of weekly deaths also decreased in 70-79-year-olds between weeks 51 and 7 by 87% (from 23 to 3 deaths) stabilizing in weeks 8-19 with an average of 7 deaths per week. Since weeks 50-51, the weekly number of deaths in the 60-69-year-olds has remained small with weekly fluctuations (between 0 and 9 deaths).

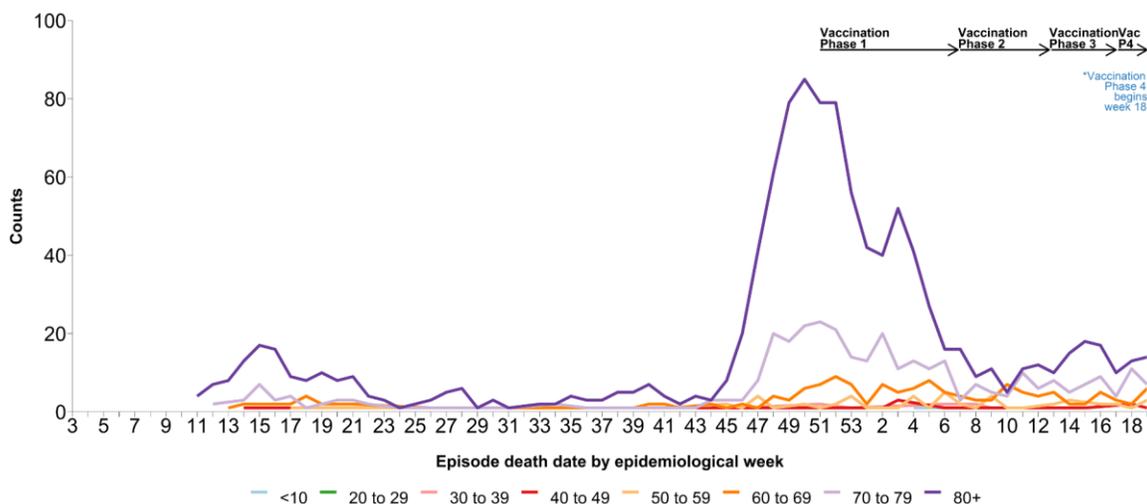
In week 19, 111/3,099 (4%) cases, 48/246 (20%) hospitalizations, 9/48 (19%) ICU admissions, and 21/31 (68%) deaths were in 70+ year-olds (data not shown).

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 140,273)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	7,796 (6)	75 (1)	5 (<1)	2 (<1)	469,351 (9)
10-19	14,823 (11)	61 (1)	11 (1)	0 (<1)	527,805 (10)
20-29	31,512 (22)	351 (5)	37 (2)	1 (<1)	697,691 (14)
30-39	25,839 (18)	691 (9)	137 (8)	14 (1)	735,052 (14)
40-49	20,721 (15)	818 (11)	175 (10)	22 (1)	646,035 (13)
50-59	17,624 (13)	1,144 (16)	318 (19)	58 (3)	718,272 (14)
60-69	11,402 (8)	1,380 (19)	425 (25)	149 (9)	673,131 (13)
70-79	5,866 (4)	1,433 (19)	422 (25)	346 (21)	435,062 (8)
80-89	3,224 (2)	1,045 (14)	154 (9)	601 (36)	187,443 (4)
90+	1,466 (1)	365 (5)	16 (1)	466 (28)	49,726 (1)
Total	140,273	7,363	1,700	1,659	5,139,568
Median age	35	63	64	84	41

a. Among those with available age information only.

Figure 10. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – May 15, 2021 (week 19) (N= 1,659)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 319 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 19, with 3 new outbreaks in week 19. Outbreaks in long-term care settings (i.e. long-term care or assisted living facilities) have decreased since week 51 and outbreaks in acute care facilities have decreased since week 9.

Six (19%) of the 31 deaths reported in week 19 were associated with an outbreak in a long-term care setting. This compares with a peak of 94 (81%) of 116 deaths associated with a long-term care outbreak in week 50.

[Figure 12](#) displays a decrease in long-term care setting resident cases 70+ years of age as opposed to other cases of the same age group following the start of the vaccination of the LTCF population in week 51. Since week 5, there has been an average of 8 cases per week for long-term care setting residents 70+ years of age. In contrast, cases among community-dwelling 70+ year-olds decreased more recently from weeks 13 to 19, from 384 to 103 cases, following the vaccination of community-dwelling adults aged 70+ years starting in weeks 8 to 14.

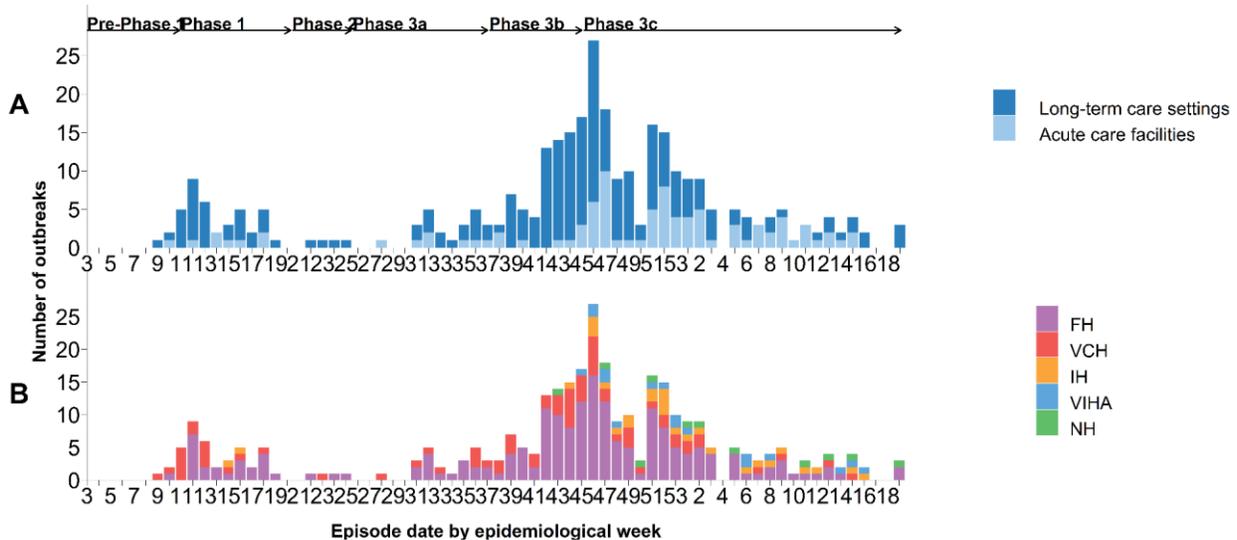
[Figure 13](#) shows a larger decrease in long-term care setting resident deaths 70+ years of age as compared to deaths in the same age group outside of these settings following the start of the vaccination of the LTCF population in week 51. Since week 7, there has been an average of two deaths per week within long-term care these settings, while there has been an average of 17 deaths per week in 70+ years outside these settings where weekly death counts have been relatively stable. This number may increase in future reports as more data become available.

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) – May 15, 2021 (week 19) (N=319)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 19, Care Facility Outbreaks	3	11	4	0	15	6	0	0	6
Cumulative, Care Facility Outbreaks	319	3,506	2,265	7	5,778	1,011	0	0	1,011

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 January 15, 2020 (week 3) – May 15, 2021 (week 19) (N=319)



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.

Figure 12. COVID-19 long-term care setting resident^a cases (n= 2,138) vs other cases (n= 7,487) ≥70 years of age, by episode date, BC September 13, 2021 (week 38) – May 15, 2021 (week 19)

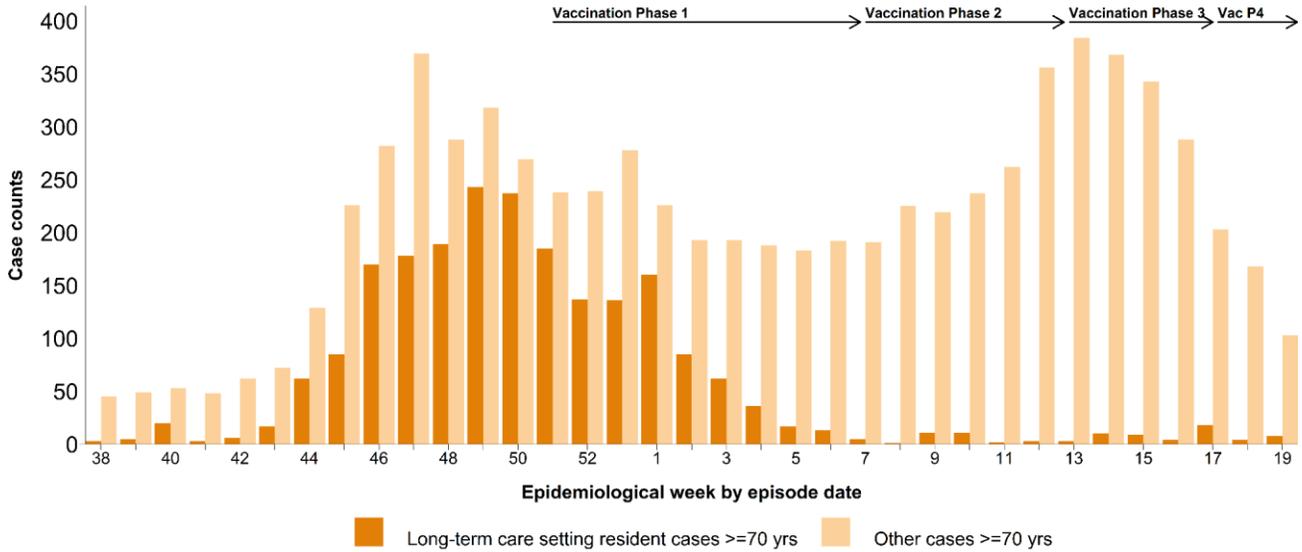
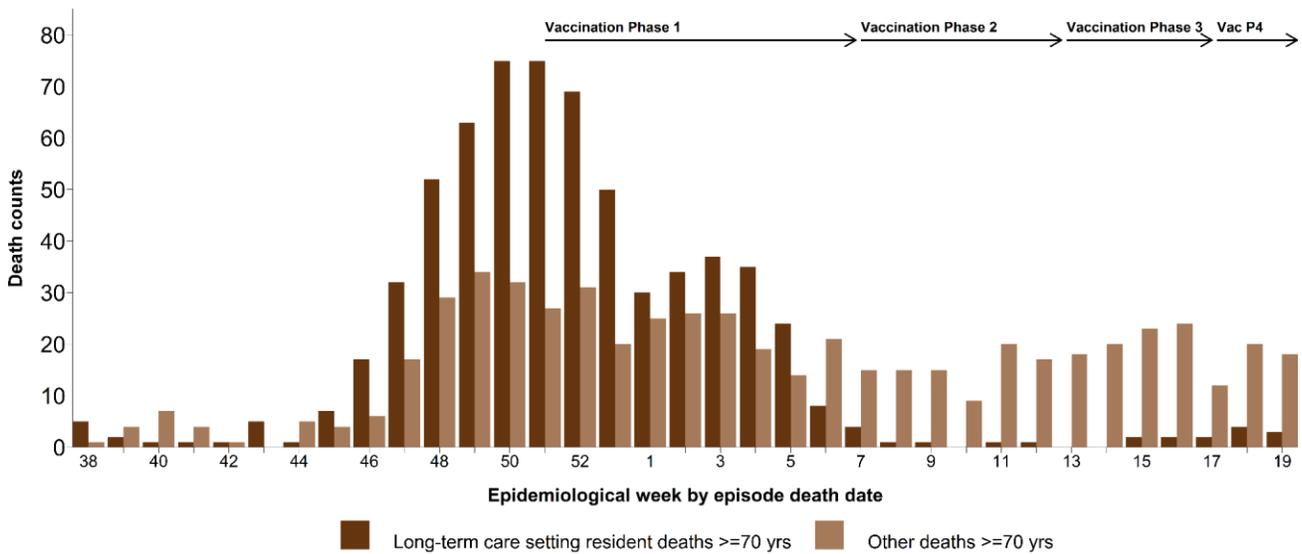


Figure 13. COVID-19 long-term care setting resident^a deaths (n= 645) vs other deaths (n= 579) ≥70 years of age, by episode death date, BC September 13, 2021 (week 38) – May 15, 2021 (week 19)



a. Long-term care setting residents are cases within long-term care or assisted living facilities who were part of reportable outbreaks only; these represent the majority of long-term care setting resident cases.

H. Emerging respiratory pathogens update

Variant of concern (VOC) findings are available weekly here: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/data#variants>.