

British Columbia (BC) COVID-19 Situation Report
Week 20: May 16- May 22, 2021

Table of Contents		Continued rapid decline in COVID-19 incidence and hospital and ICU admissions, while deaths remain stable
Epidemic curve and regional incidence	2	There were 2,227 COVID-19 cases (43 per 100K) in week 20, a 72% 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 decrease (220 to 69 per 100K). • Since week 13, Vancouver Coastal incidence decreased (194 to 37 per 100K). • Since week 14, Interior Health incidence decreased (86 to 35 per 100K). • Since week 13, Northern Health incidence decreased (119 to 33 per 100K). • Since week 13, Island Health incidence decreased (48 to 7 per 100K).
Test rates and % positive	4	Age-specific incidences decreased from weeks 13-14 to week 20 for all age groups with the exception of the incidence in people aged 80+ years which increased slightly from week 19 to week 20 (18 to 23 per 200k).
Age profile, testing and cases	5	Testing of MSP-funded specimens decreased by 40% from ~67,500 specimens in week 14 to ~41,000 in week 20. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 7.0% in week 20.
Severe outcomes	7	Weekly hospital and ICU admissions have declined since week 15, reaching 168 and 34 in week 20, respectively. The number of deaths was stable in weeks 7-20 with an average of 26 deaths per week.
Age profile, severe outcomes	8	There was one new confirmed case of Multi-system Inflammatory Syndrome in children and adolescents (MIS-C) since last report, for a total of 12 cases.
Care facility outbreaks	9	Following increasing vaccination rates in the elderly, the weekly number of deaths in 70+ year-olds has decreased substantially to 11 deaths in week 20.
Emerging respiratory pathogens update	10	By case of earliest onset date, there was one outbreak reported in care settings in week 20. 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.

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 31, 2021 and laboratory data on May 31, 2021.

A. COVID-19 case counts and epidemic curves

Provincially, from week 3, 2020 to week 20, 2021, there have been 142,812 cases, corresponding to a cumulative incidence of 2,775 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 72% to reach 43 per 100K in week 20. The incidence in week 20 is lower than both the peak in week 47 of Wave 2 (104 per 100K) and 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 and health service delivery areas over the past 6-7 weeks. Fraser Health (FH) maintains the highest incidence rate at 69 per 100K, followed by Vancouver Coastal Health (VCH) at 37 per 100K; Interior Health (IH) at 35 per 100K; Northern Health (NH) at 33 per 100K; and Island Health (VIHA) at 7 per 100K. Rates may increase as data become more complete.

**Table 1. Episode-based case tallies by health authority, BC
 January 15, 2020 (week 3) – May 22, 2021 (week 20) (N= 142,812)**

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 20, case counts	1,337	291	60	94	443	2	2,227
Cumulative case counts	83,278	12,165	5,025	7,617	34,529	198	142,812
Week 20, cases per 100K population	69	35	7	33	37	NA	43
Cumulative cases per 100K population	4,294	1,457	579	2,652	2,852	NA	2,775

**Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC
 January 15, 2020 (week 3) – May 22, 2021 (week 20) (N= 142,812)**

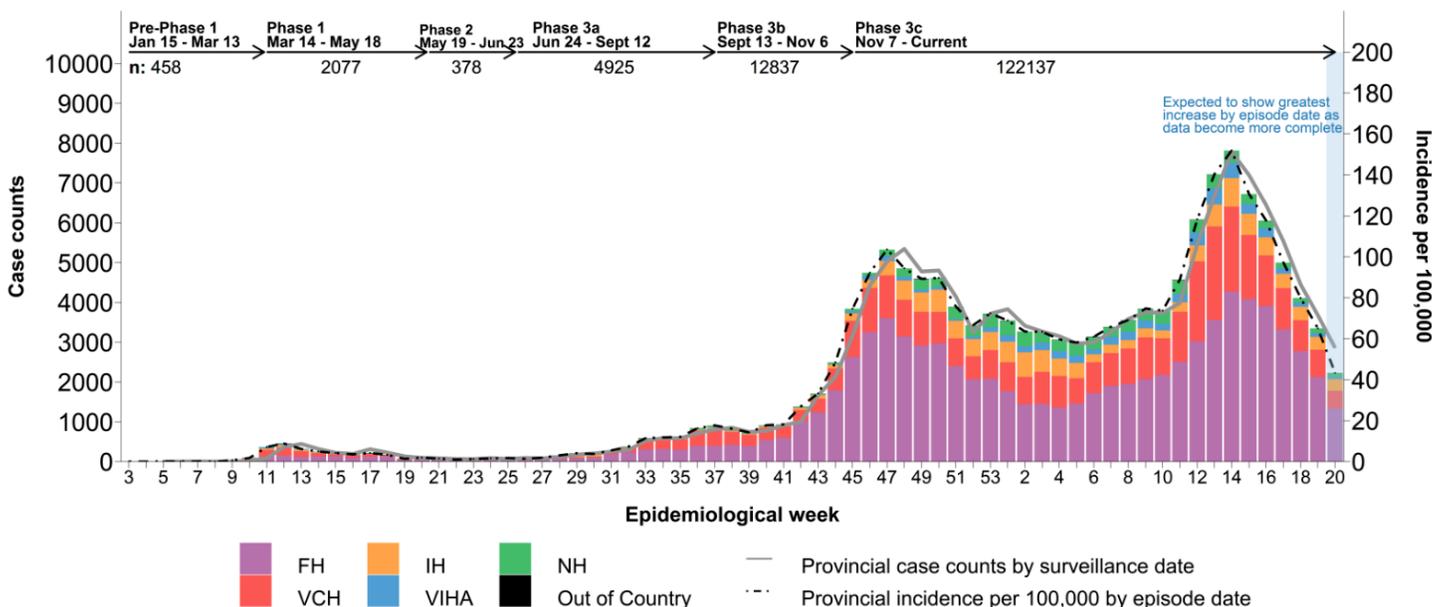
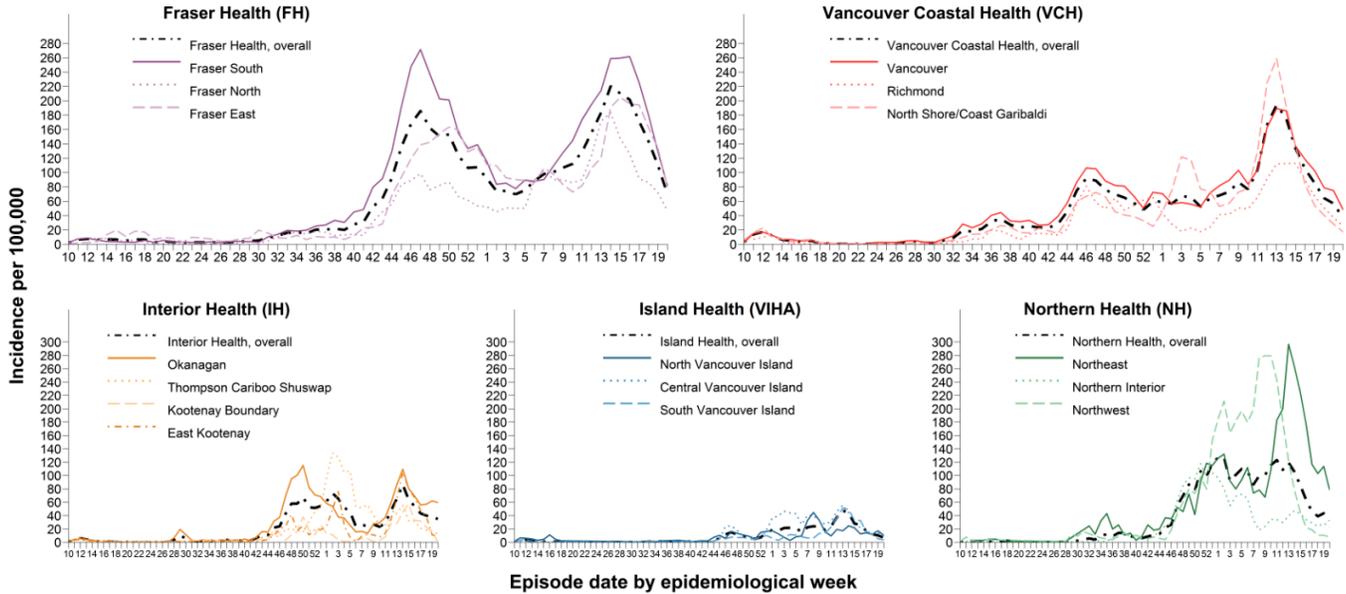


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – May 22, 2021 (week 20) (N= 142,812)



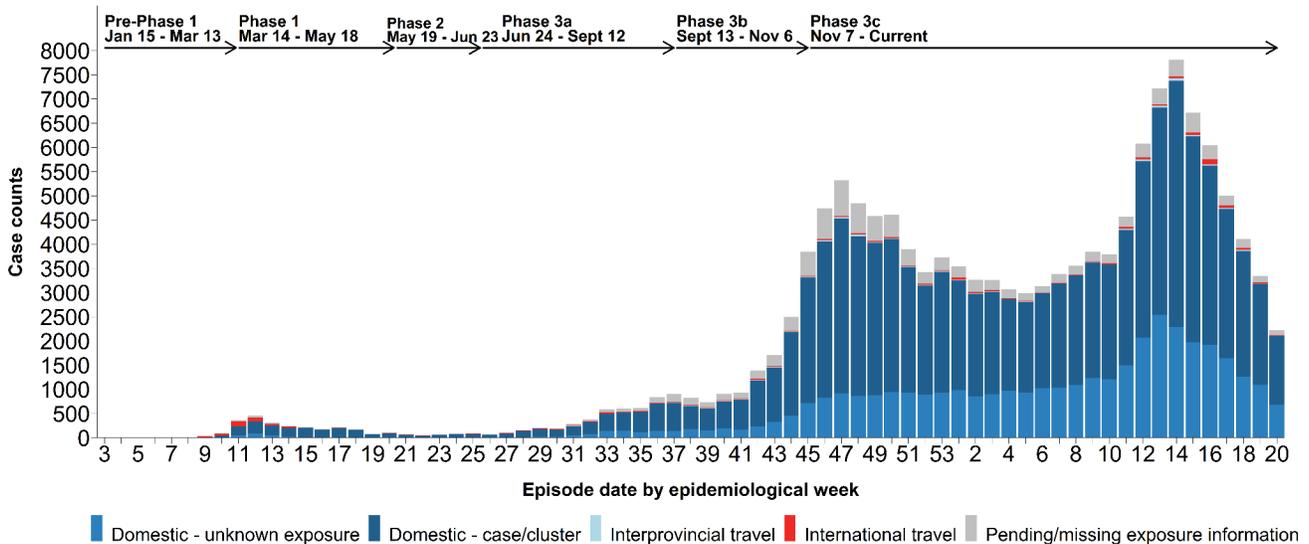
B. Likely sources of infection

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 22, 2021 (week 20) (N= 142,812)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 20 , Exposures	8 (<1)	10 (<1)	1,418 (64)	684 (31)	107 (5)
Cumulative Exposures	1,486 (1)	606 (<1)	91,952 (64)	38,089 (27)	10,679 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – May 22, 2021 (week 20) (N= 142,812)



C. Test rates and percent positive

As shown by the darker-colored bars in [Figure 4](#), testing of MSP-funded specimens decreased by 40% from ~67,500 specimens in week 14 to ~41,000 in week 20. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 7.0% in week 20.

As shown in [Panel A of Figure 5](#), the per capita testing rates for MSP-only specimens recently decreased in all HAs; however, the testing rate in NH increased from weeks 19 to 20. 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 20 MSP-funded tests is highest in NH at 10.6% followed by FH at 8.5%, IH at 6.5%, VCH at 5.7%, and lowest in VIHA at 2.0%, respectively. Percent positivity has decreased in VIHA and FH since weeks 13 and 14, respectively, but has increased slightly in IH and NH since week 18.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – May 22, 2021 (week 20)

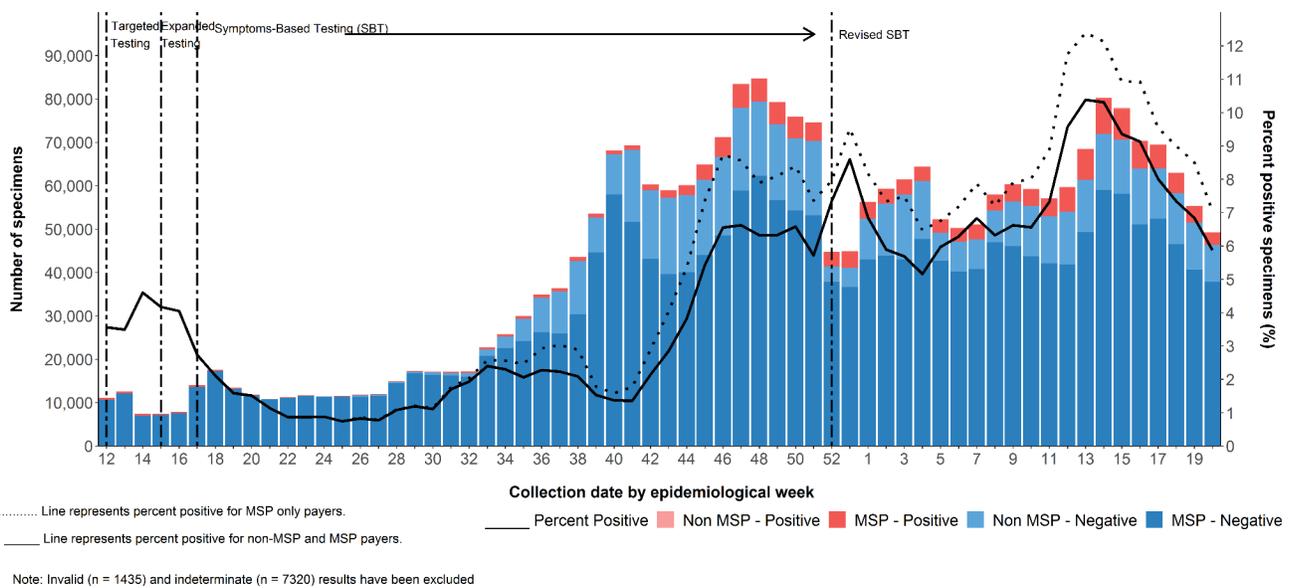
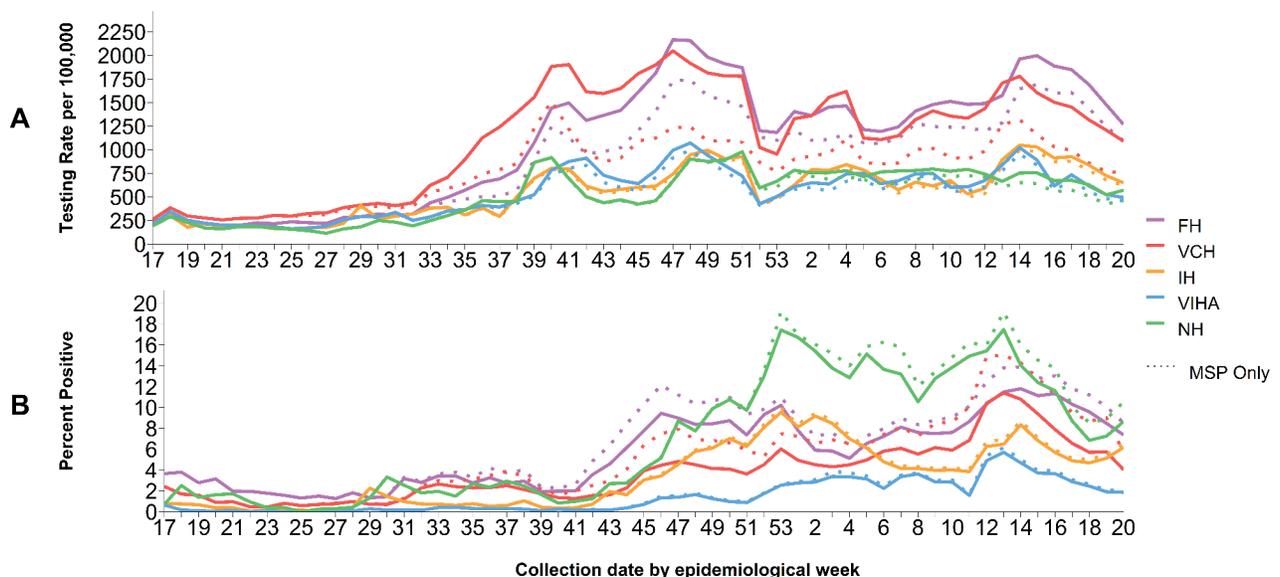


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – May 22, 2021 (week 20)



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 20 (shown in red) have decreased in all age groups since week 17 (shown in grey). The highest testing rate in week 20 was in 5-9 year-olds at 1,115 per 100K.

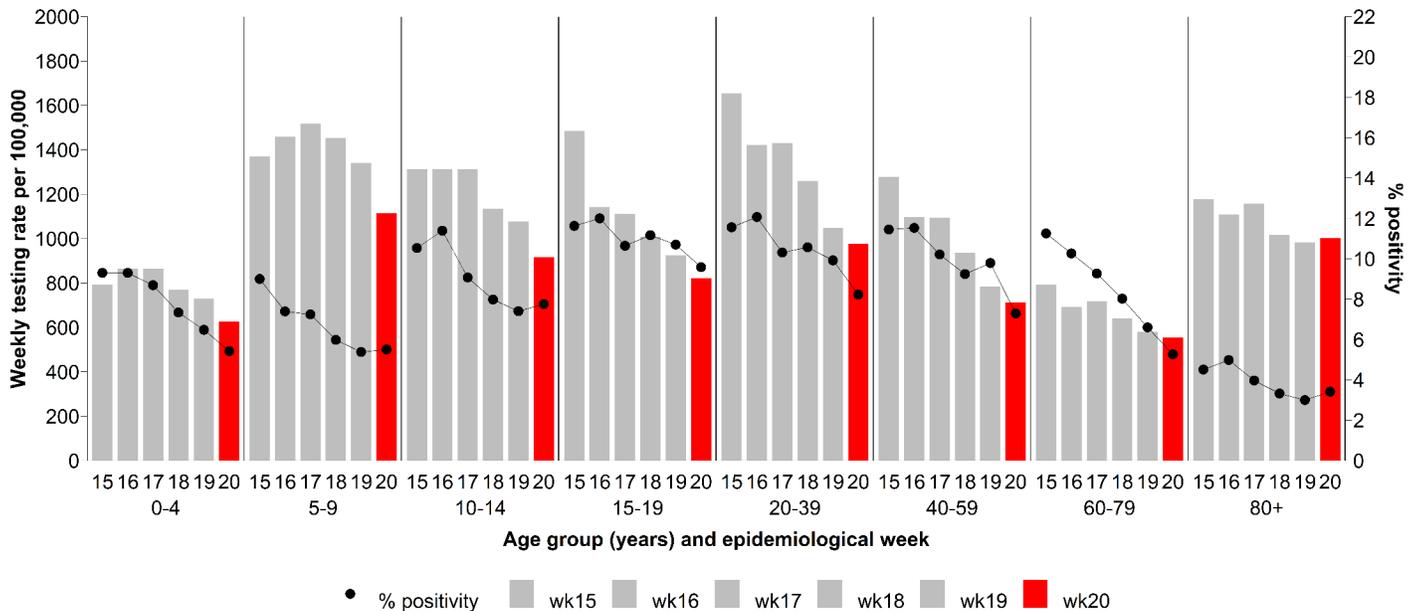
As shown by the black dots in [Figure 6](#), the percent positivity has decreased in all age groups since weeks 15-16. However, positivity has stabilised in weeks 18 to 20 in the 5-9, 10-14, and 80+ year age groups. The percent positivity in the 60 to 79 year age group has seen the sharpest decline since week 15. In week 20, the highest percent positivity was in the 15-19-year-olds followed by 20-39-year-olds, at 9.6% and 8.2% respectively.

Case distribution and weekly incidence by age group

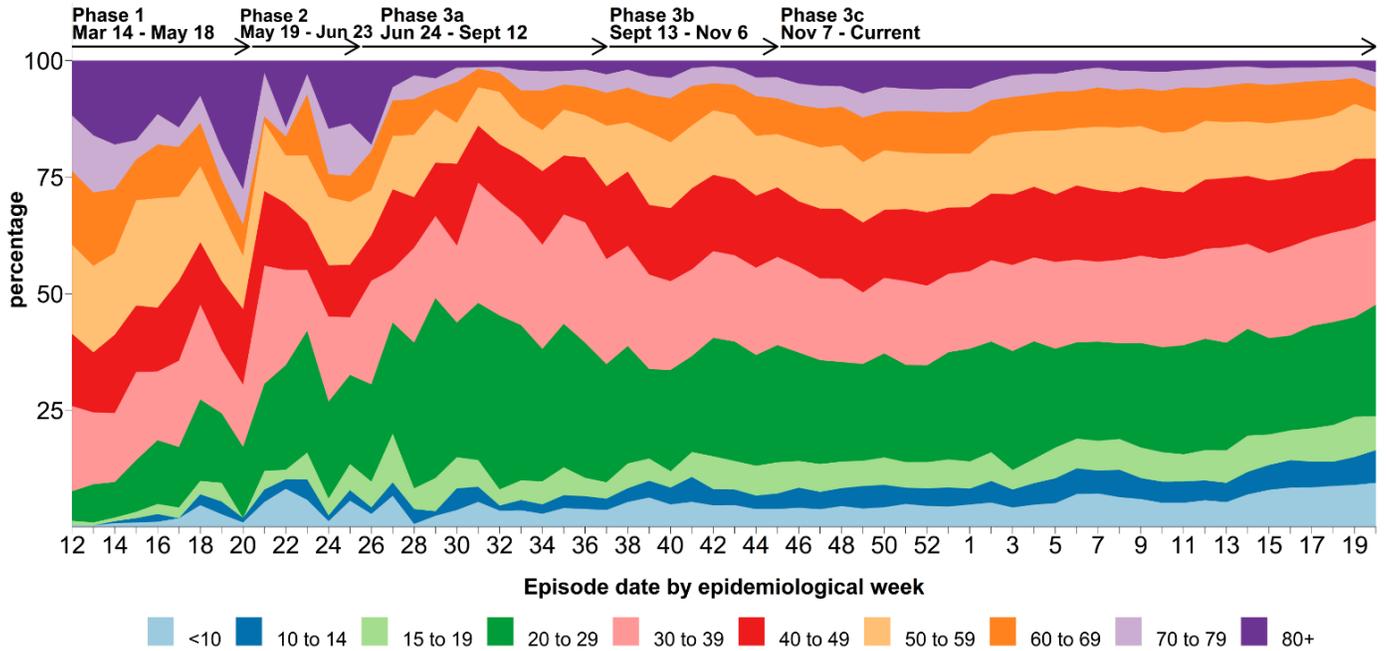
As shown in [Figure 7](#), the percentage contribution of the 40-49 and 50-59 year-olds decreased by 1.5 and 1.7% since week 19, met mainly by an increase of 2.6% among the 20-29 year-olds, 1.2% among the 80+ year olds, and 1.0% among the 10-14 year-olds. The remaining age groups' contributions remained relatively stable.

As shown in [Figure 8](#), age specific incidences decreased from weeks 13-14 to week 20 for most age groups. Sharpest declines were seen in the 15-19-year-olds and 20-29-year-olds from week 14 to week 20 (from 219 to 59 per 100k and 256 to 76 per 100k, respectively), and in the 30-39-year-olds from week 13 to week 20 (from 201 to 55 per 100k). Age specific incidence for ages 80+ decreased between weeks 15 to 19 but increased slightly in week 20. Week 20 age-specific incidences are likely to increase as data become more complete.

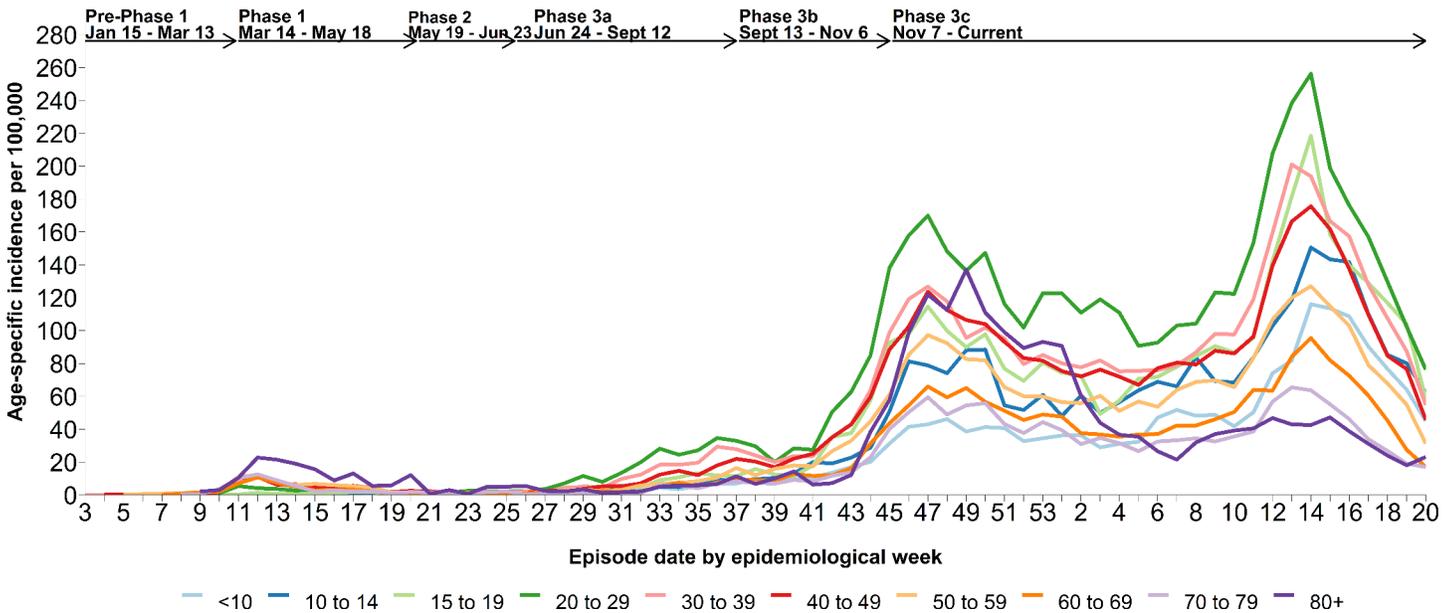
Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC April 11, 2021 (week 15) – May 22, 2021 (week 20)



**Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC
 March 15, 2020 (week 12) – May 22, 2021 (week 20) (N=142,276)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
 January 15, 2020 (week 3) – May 22, 2021 (week 20) (N=142,789)**



E. Severe outcome counts and epi-curve

The number of weekly hospital admissions peaked in week 15 (383) and has declined since then, reaching 168 admissions in week 20. The number of intensive care unit (ICU) admissions also peaked in week 15 (108) and has decreased since then, reaching 34 admissions in week 20. The number of deaths has been stable from weeks 7 to 20 with an average of 26 deaths per week ([Table 3, Figure 9](#)). These numbers may increase in future reports as more data become available.

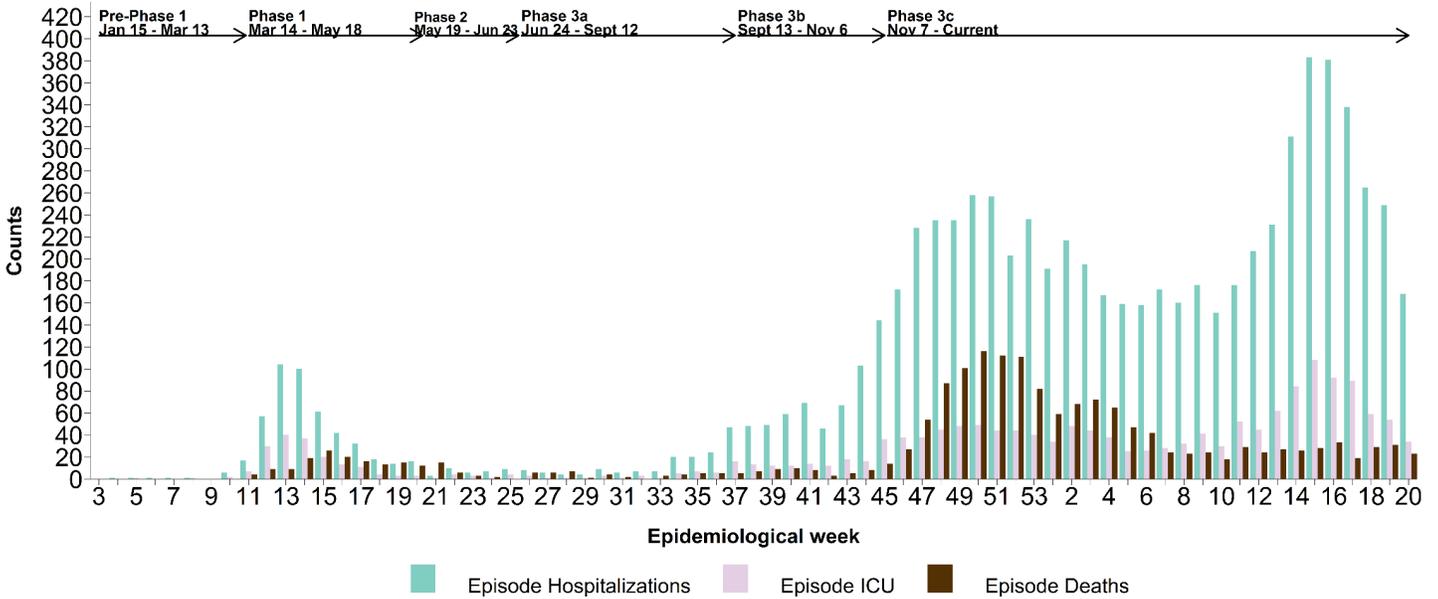
Cumulatively, there have been 12 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 20 (one new confirmed cases since last report). The median age of these cases is 7 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – May 22, 2021 (week 20)^a

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 20, hospitalizations	100	13	3	7	45	0	168
Cumulative hospitalizations	4,164	666	245	635	1,810	13	7,533/142,812 (5)
Week 20, ICU admissions	17	3	1	4	9	0	34
Cumulative ICU admissions	840	169	66	154	506	2	1,737/142,812 (1)
Week 20, deaths	9	4	1	4	5	0	23
Cumulative deaths	884	150	40	151	457	0	1,682/142,812 (1)

a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC January 15, 2020 (week 3) – May 22, 2021 (week 20)



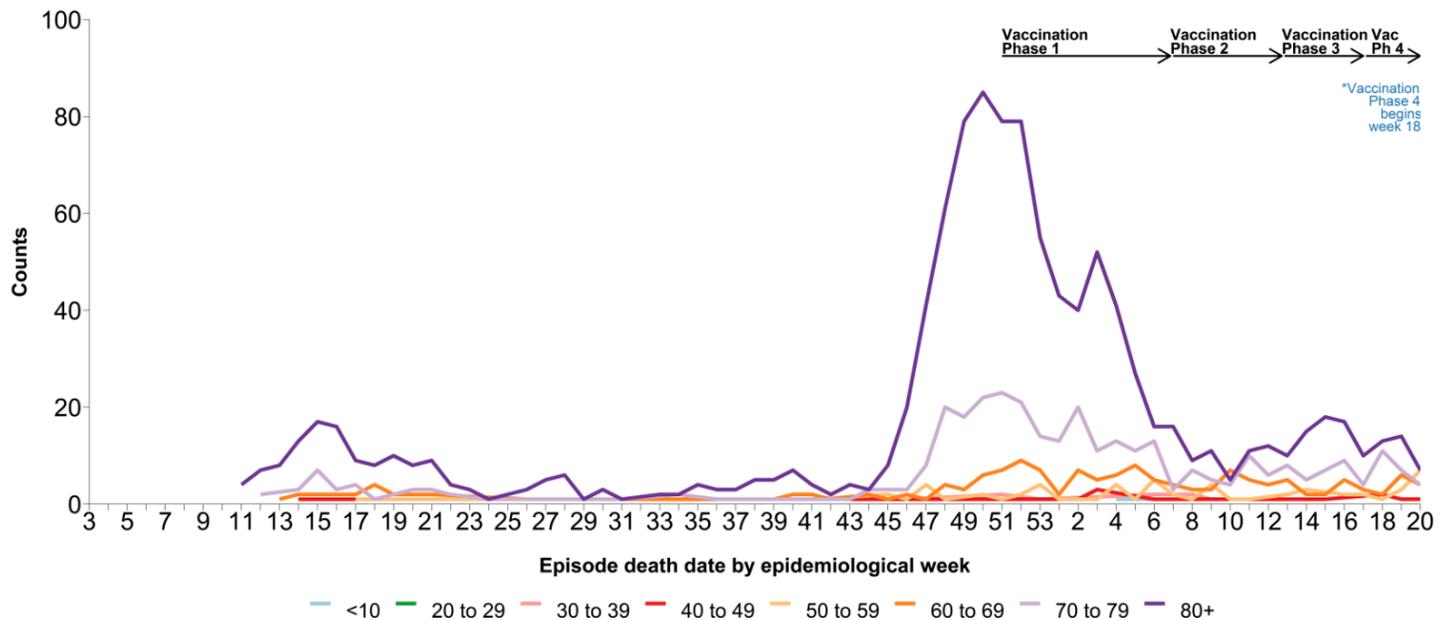
F. Age profile, severe outcomes

In week 20, median age of hospital admissions, ICU admissions and deaths was 57 years, 58 years and 65 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 8-20 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 20, 129/2,227 (6%) cases, 39/168 (23%) hospitalizations, 6/34 (18%) ICU admissions, and 11/23 (48%) deaths were in 70+ year-olds (data not shown).

Figure 10. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – May 22, 2021 (week 20) (N= 1,682)^a



G. Care facility outbreaks

As shown in [Table 4](#) and [Figure 11](#), 320 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 20, with 1 new outbreak in week 20. 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.

Four (17%) of the 23 deaths reported in week 20 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 following the start of the vaccination of the LTCF population in week 51. Since week 5, there has been an average of 9 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 20, from 384 to 109 cases, following the vaccination of community-dwelling adults aged 70+ years starting in vaccination phase 3.

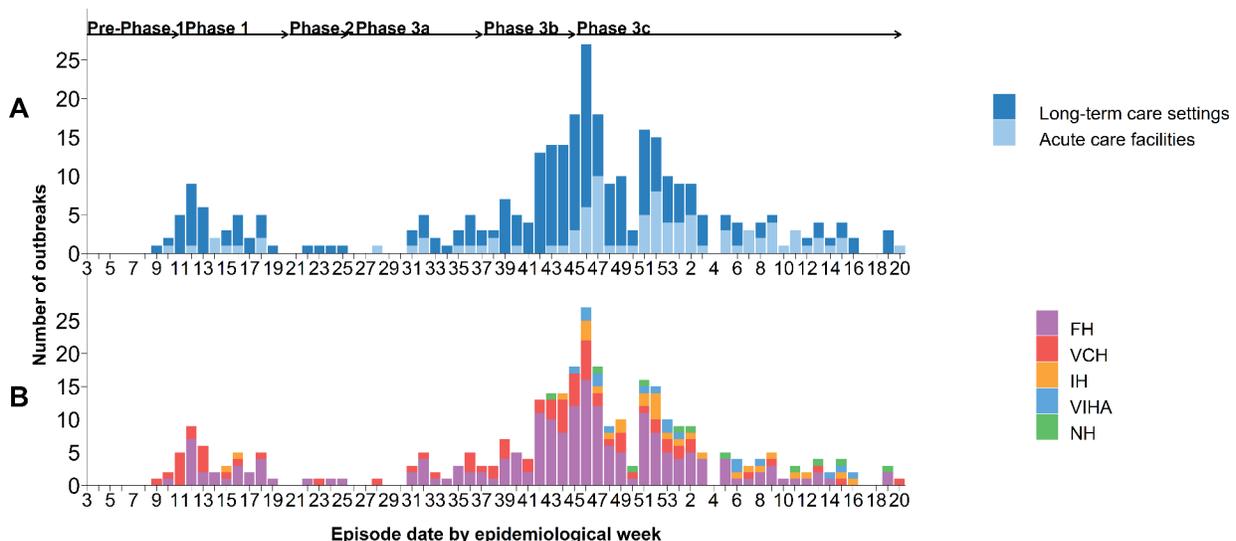
[Figure 13](#) shows a decrease in long-term care setting resident deaths 70+ years of age following the start of the vaccination of the LTCF population in week 51. Since week 7, there has been an average of two deaths per week within long-term care these settings. There has been average of 15 deaths per week since week 17 in 70+ year-olds outside these settings. This may increase in future reports as more data become available.

Table 4. 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 22, 2021 (week 20) (N=320)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 20, Care Facility Outbreaks	1	29	5	0	34	4	0	0	4
Cumulative, Care Facility Outbreaks	320	3,536	2,271	7	5,814	1,015	0	0	1,015

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 22, 2021 (week 20) (N=320)



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= 2,159) vs other cases (n= 7,613) ≥70 years of age, by episode date, BC September 13, 2021 (week 38) – May 22, 2021 (week 20)

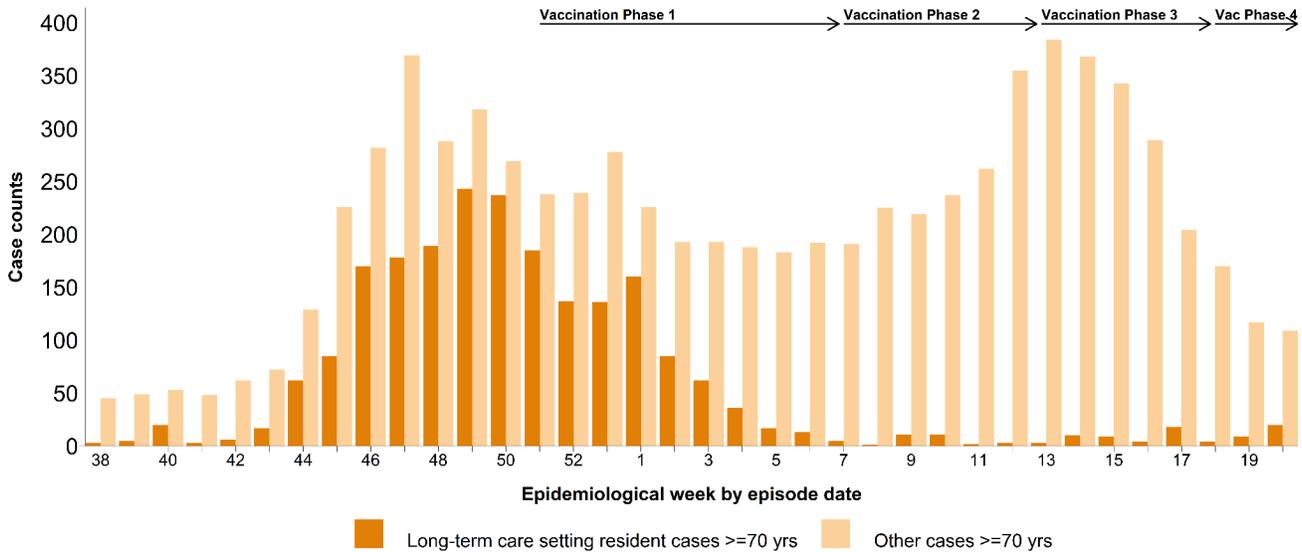
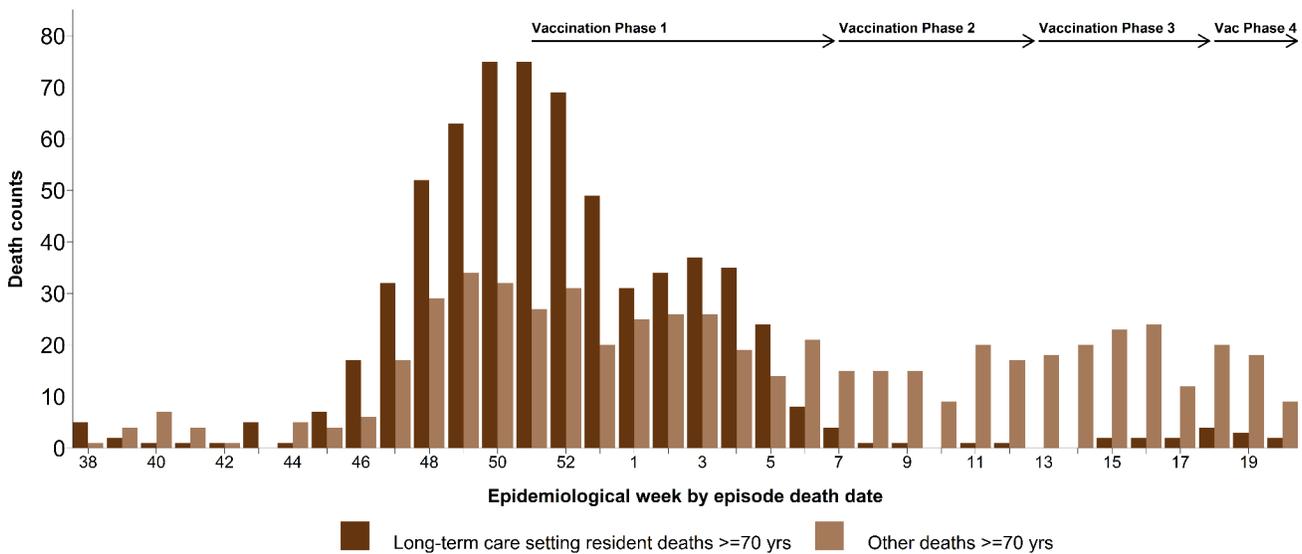


Figure 13. COVID-19 long-term care setting resident^a deaths (n= 647) vs other deaths (n= 588) ≥70 years of age, by episode death date, BC September 13, 2021 (week 38) – May 22, 2021 (week 20)



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?bcgovtm=20200509 EML NEWS 69 INFO BSD BCNDP EN ACTIVE%20-%20variants#variants>.