

British Columbia (BC) COVID-19 Situation Report
Week 21: May 23- May 29, 2021

Table of Contents	
Epidemic curve and regional incidence	2
Likely sources of infection	3
Test rates and % positive	4
Age profile, testing and cases	5
Severe outcomes	7
Age profile, severe outcomes	8
Care facility outbreaks	9
Emerging respiratory pathogens update	10

Continued decline in COVID-19 incidence and hospital and ICU admissions

There were 1,529 COVID-19 cases (30 per 100K) in week 21, an 80% decrease since the peak in week 14.

Regional incidence is decreasing:

- Since week 14, Fraser Health incidence decrease (220 to 43 per 100K).
- Since week 13, Vancouver Coastal incidence decreased (194 to 30 per 100K).
- Since week 14, Interior Health incidence decreased (86 to 28 per 100K).
- Since week 13, Island Health incidence decreased (48 to 4 per 100K).
- Since week 13, Northern Health incidence decreased (119 to 19 per 100K).

Age specific incidences decreased from weeks 13-14 to week 21 for all age groups. Sharpest declines were seen in the 15-19-year-olds, 20-29-year-olds and 30-39-year-olds.

Testing of MSP-funded specimens decreased by 50% from ~67,500 specimens in week 14 to ~34,000 in week 21. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 6.1% in week 21.

The number of weekly hospital admissions peaked in week 15 and has declined since then, reaching 160 admissions in week 21. The number of intensive care unit (ICU) admissions also peaked in week 15 and has decreased since then, reaching 33 admissions in week 21. The number of deaths has been stable from weeks 7 to 21 with an average of 26 deaths.

There have been two new confirmed cases of Multi-system Inflammatory Syndrome in children and adolescents (MIS-C) since last report, for a total of 14 confirmed cases in BC.

By case of earliest onset date, there were two outbreaks reported in care settings in week 21. 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 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

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 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.
- Data sources include: health authority case line list data, laboratory PLOVER data, and Hospital data (PHSA Provincial COVID19 Monitoring Solution (PCMS))
- Case data were extracted on June 07, 2021, laboratory data on June 04, 2021 and PCMS hospitalization data on June 8, 2021

A. COVID-19 case counts and epidemic curves

Provincially, up to week 21, 2021, there have been 144,559 cases, for a cumulative incidence of 2,809 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 80% to reach 30 per 100K in week 21. The incidence in week 21 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 over the past 6-8 weeks. Fraser Health (FH) maintains the highest incidence rate at 43 per 100K, followed by Vancouver Coastal Health (VCH) at 30 per 100K; Interior Health (IH) at 28 per 100K; Northern Health (NH) at 19 per 100K; and Island Health (VIHA) at 4 per 100K. Incidence has decreased in all health service delivery areas to week 20; however, East Kootenay, Kootenay Boundary and Northshore/Coast Garibaldi areas increased slightly in week 21. Rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020– May 29, 2021 (week 21) (N= 144,559)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 21, case counts	835	237	33	55	367	2	1,529
Cumulative case counts	84,231	12,444	5,061	7,688	34,935	200	144,559
Week 21, cases per 100K population	43	28	4	19	30	0	30
Cumulative cases per 100K population	4,343	1,491	583	2,676	2,886	0	2,809

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – May 29, 2021 (week 21) (N= 144,559)

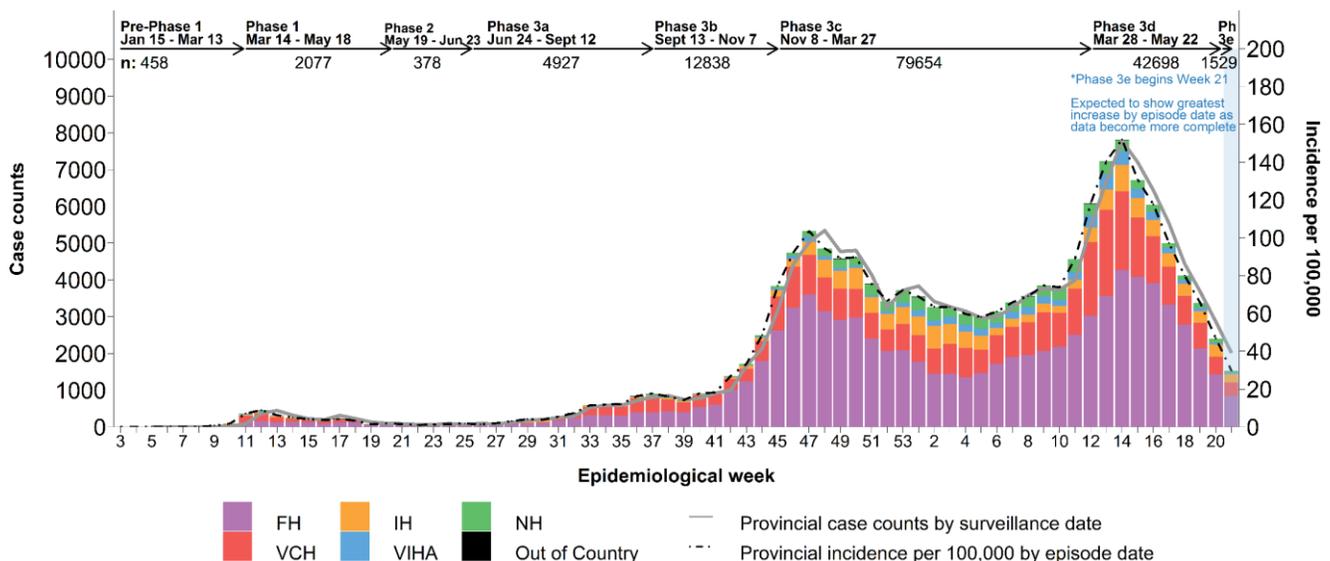
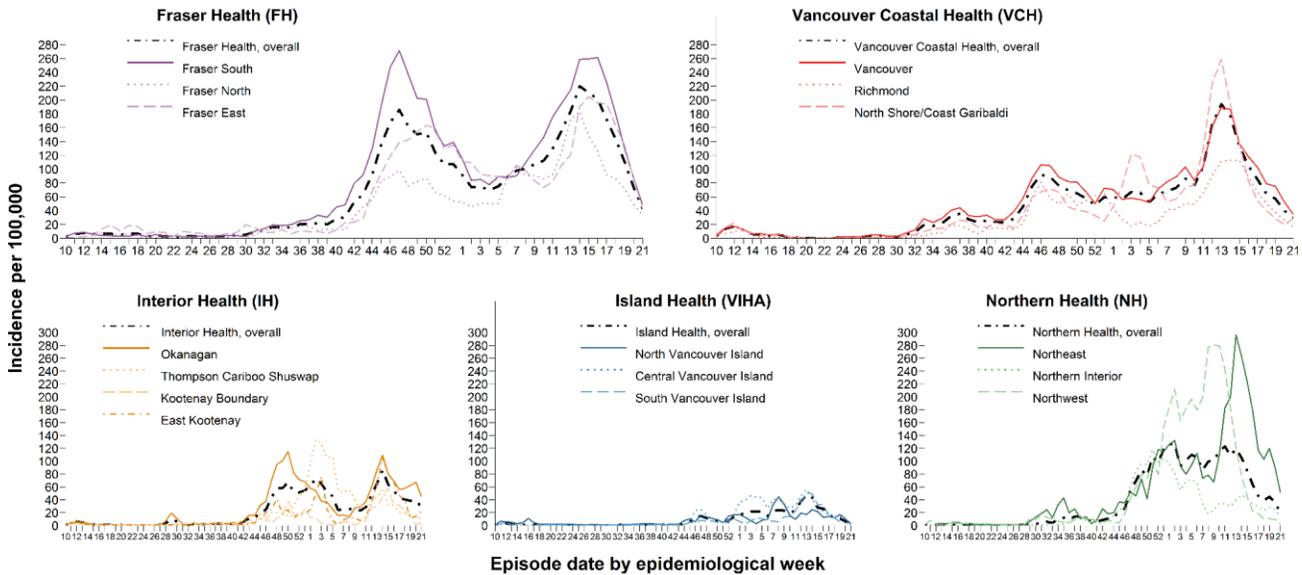


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – May 29, 2021 (week 21) (N= 144,559)



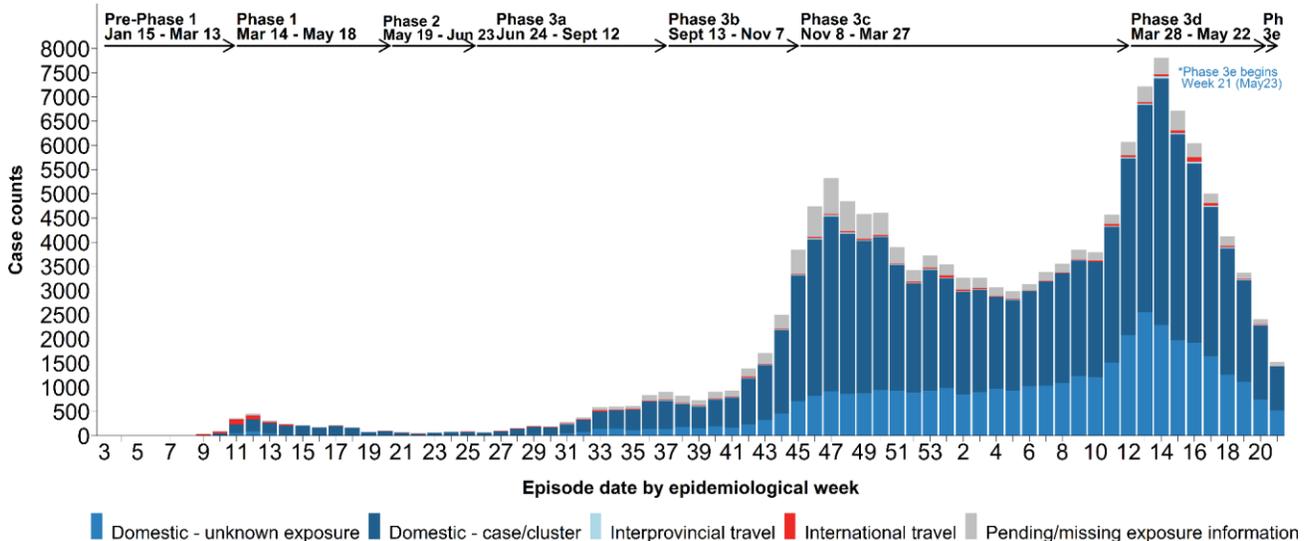
B. Likely sources of infection

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 29, 2021 (week 21) (N= 144,559)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 21 , Exposures	2 (<1)	5 (<1)	909 (59)	527 (34)	86 (6)
Cumulative Exposures	1,487 (1)	607 (<1)	93,047 (64)	38,714 (27)	10,704 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – May 29, 2021 (week 21) (N= 144,559)



C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing of MSP-funded specimens decreased by 50% from ~67,500 specimens in week 14 to ~34,000 in week 21. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 6.1% in week 21.

As shown in **Panel A of Figure 5**, the per capita testing rates for MSP-only specimens has been declining 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 21 MSP-funded tests is highest in NH at 8.1% followed by FH at 6.9%, VCH at 6.5%, IH at 6.4%, and lowest in VIHA at 1.2%. Percent positivity has decreased in VIHA, FH and NHA since weeks 13, 14 and 20, respectively, and has stabilized in week 21 in IH and VCH.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – May 29, 2021 (week 21)

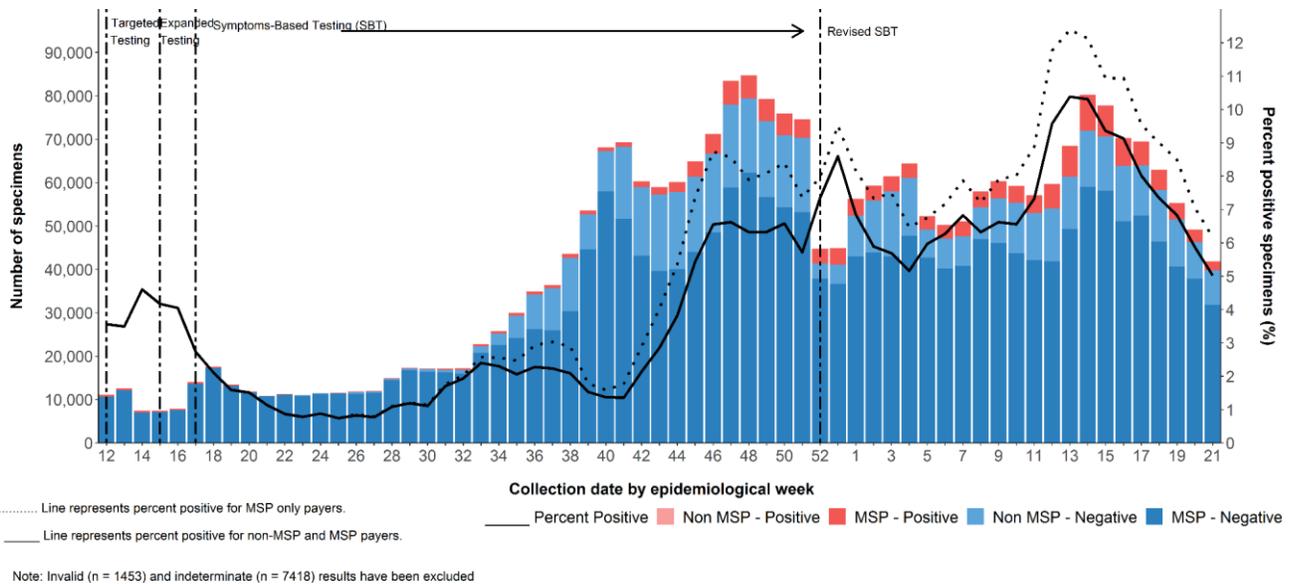
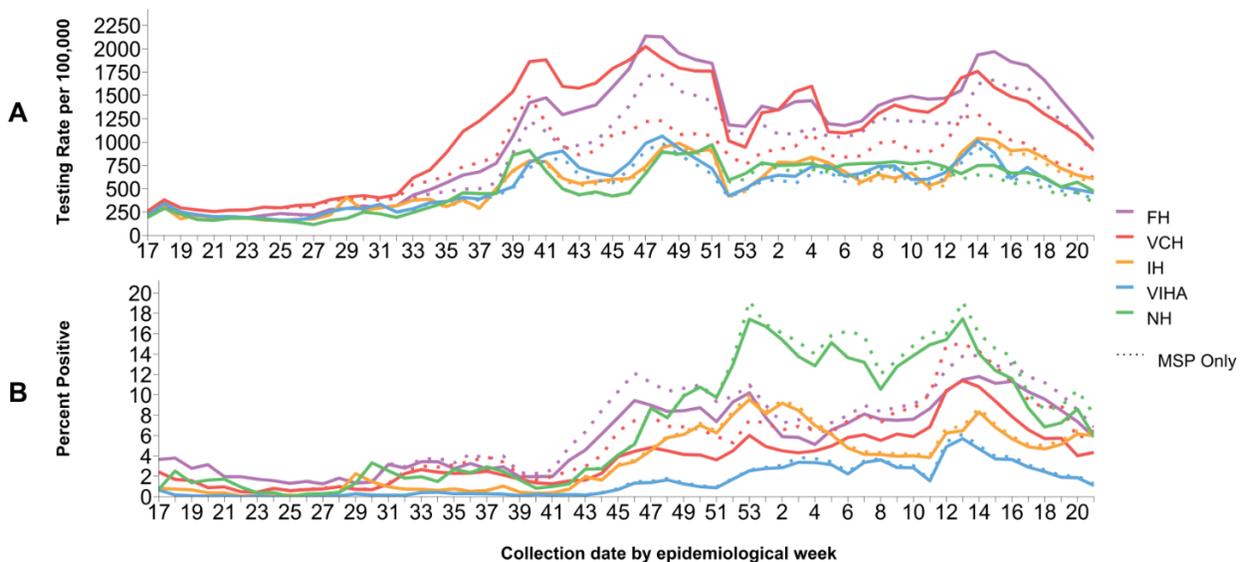


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – May 29, 2021 (week 21)



D. Age profile – Testing and cases

Testing rates and percent positivity by age group

As shown in [Figure 6](#), testing rates in week 21 have decreased in all age groups since week 17. The highest testing rate in week 21 was in the 80 year olds at 849 per 100K and the 5-9 year-olds at 824 per 100K.

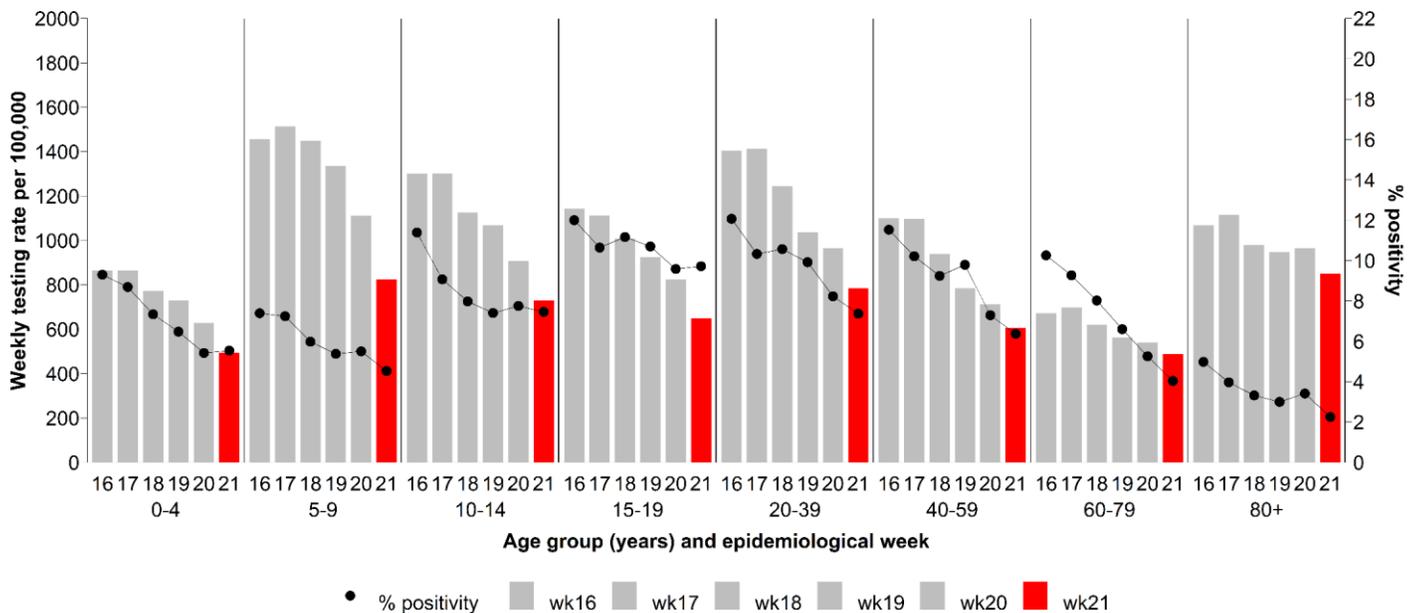
As shown in [Figure 6](#), the percent positivity has decreased in all age groups since weeks 15-16. However, positivity has stabilised in weeks 20 to 21 in the 0-4, 10-14, and 15-19 year age groups. The percent positivity in the 60 to 79 year age group has seen the sharpest decline since week 15. In week 21, the highest percent positivity was in the 15-19-year-olds followed by 10-14-year-olds, at 9.7% and 7.5% respectively. The lowest percent positivity was in the 80+ year-olds at 2.3%.

Case distribution and weekly incidence by age group

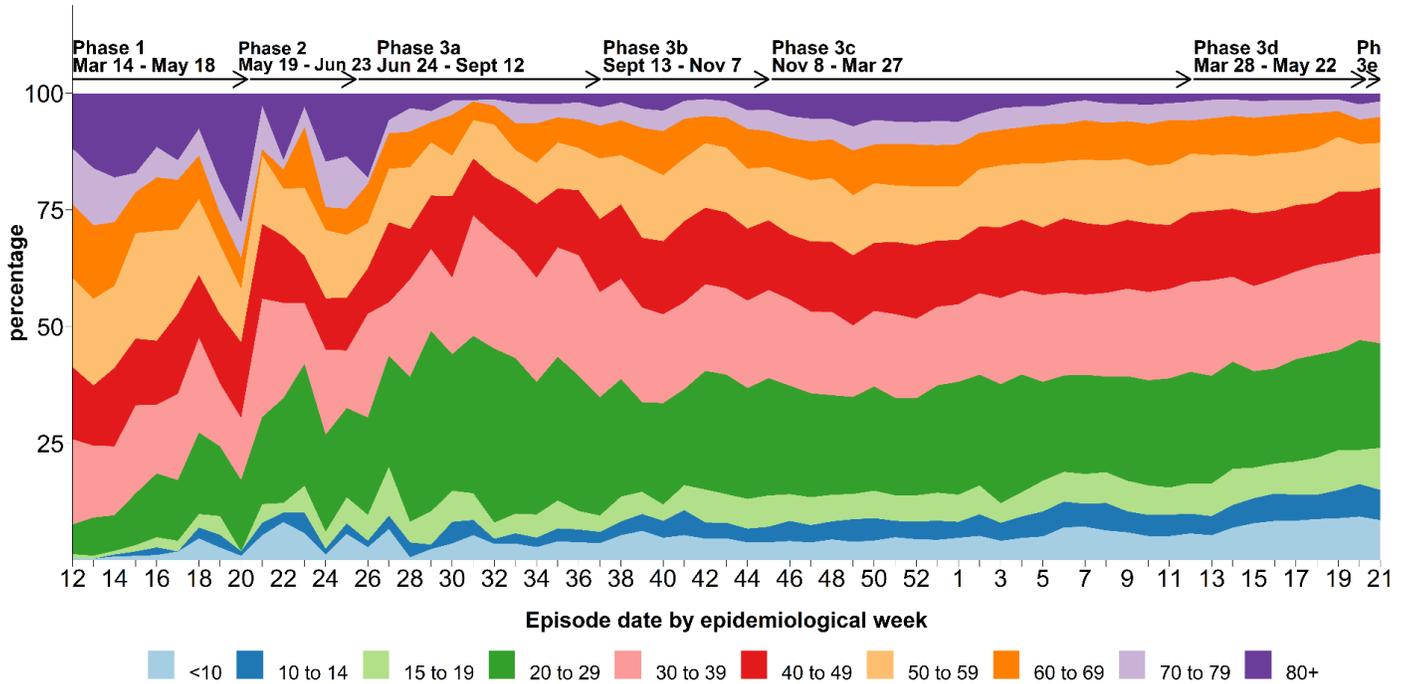
As shown in [Figure 7](#), the percentage contribution of the 15-19 and 30-39 year-olds decreased by 1.7% and 1.3% since week 20, met mainly by an increase of 1.2% among the 20-29 year-olds. The remaining age groups' contributions remained relatively stable.

As shown in [Figure 8](#), age specific incidences decreased from weeks 13-14 to week 21 for all age groups. Sharpest declines were seen in the 15-19-year-olds and 20-29-year-olds from week 14 to week 21 (from 219 to 50 per 100k and 256 to 49 per 100k, respectively), and in the 30-39-year-olds from week 13 to week 21 (from 201 to 40 per 100k). Week 21 age-specific incidences are likely to increase as data become more complete.

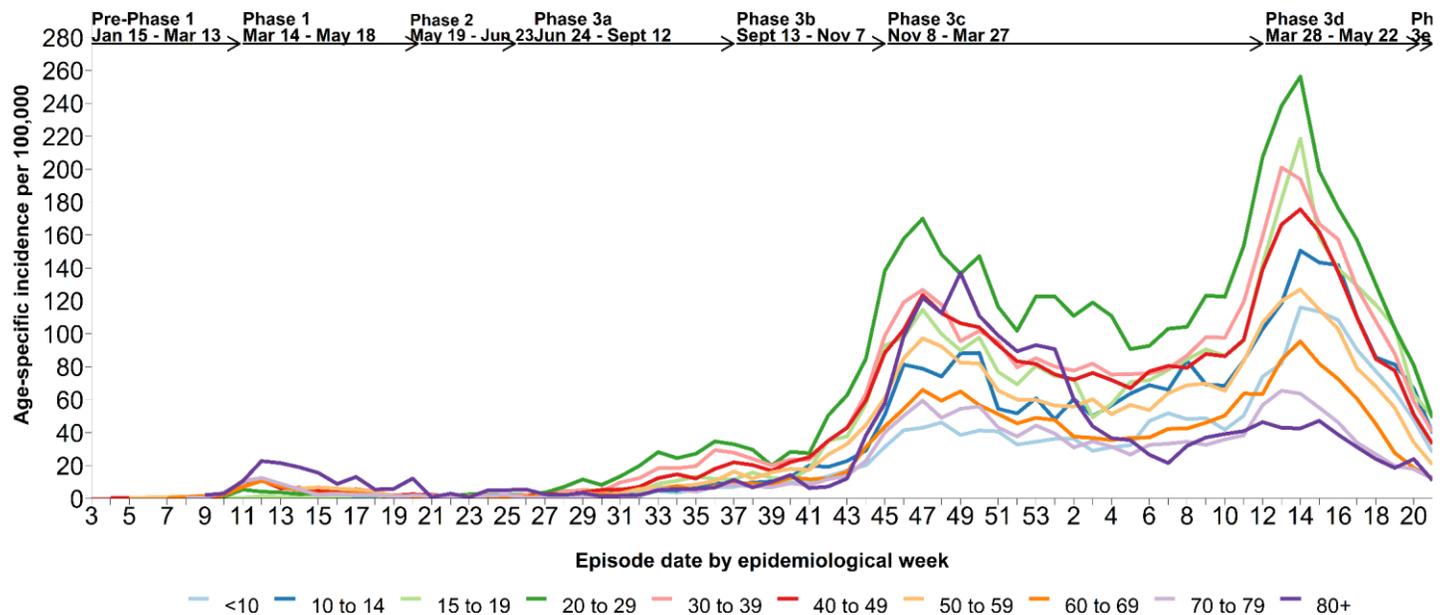
Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC January 20, 2020 (week 4) – May 29, 2021 (week 21)



**Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC
 March 15, 2020 (week 12) – May 29, 2021 (week 21) (N= 144,023)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
 January 15, 2020 (week 3) – May 29, 2021 (week 21) (N= 144,536)**



E. Severe outcome counts and epi-curve

The number of weekly hospital admissions peaked in week 15 (383) and has declined since then, reaching 160 admissions in week 21. The number of intensive care unit (ICU) admissions also peaked in week 15 (108) and has decreased since then, reaching 33 admissions in week 21. The number of deaths has been stable from weeks 7 to 21 with an average of 26 deaths ([Table 3, Figure 9](#)). These numbers may increase in future reports as more data become available.

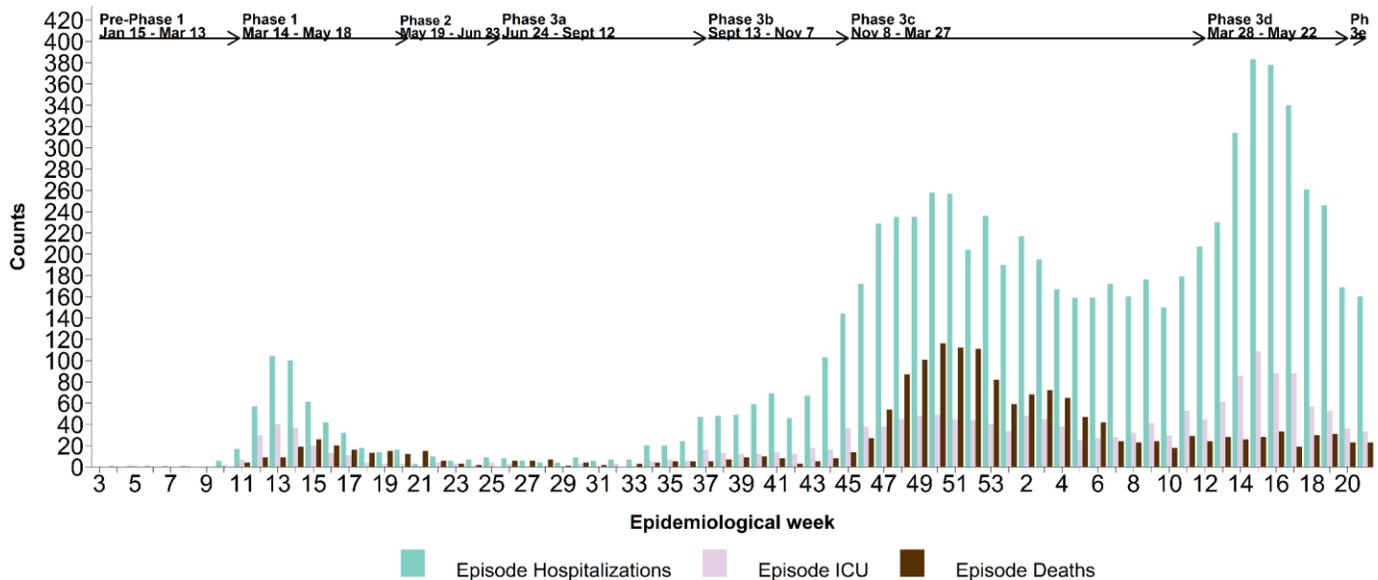
There have been two new confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) since last report for a total of 14 confirmed cases in BC from January 1, 2020 to week 21. The median age of these cases is 8.5 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – May 29, 2021 (week 21)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 21, hospitalizations	93	19	3	6	39	0	160
Cumulative hospitalizations^b	4,249	687	247	640	1,855	14	7,692/144,559 (5)
Week 21, ICU admissions	24	4	1	2	2	0	33
Cumulative ICU admissions^b	860	177	67	155	509	2	1,770/144,559 (1)
Week 21, deaths	11	2	1	2	7	0	23
Cumulative deaths	896	152	41	153	465	0	1,707/144,559 (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 9. COVID-19 hospital admissions^a and deaths by episode date, BC January 15, 2020 (week 3) – May 29, 2021 (week 21)



- a. Data source: health authority case line lists only. Data may be incomplete and subject to change

F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes. In week 21, median age of hospital admissions, ICU admissions and deaths was 53 years, 56 years and 76 years, respectively (data not shown).

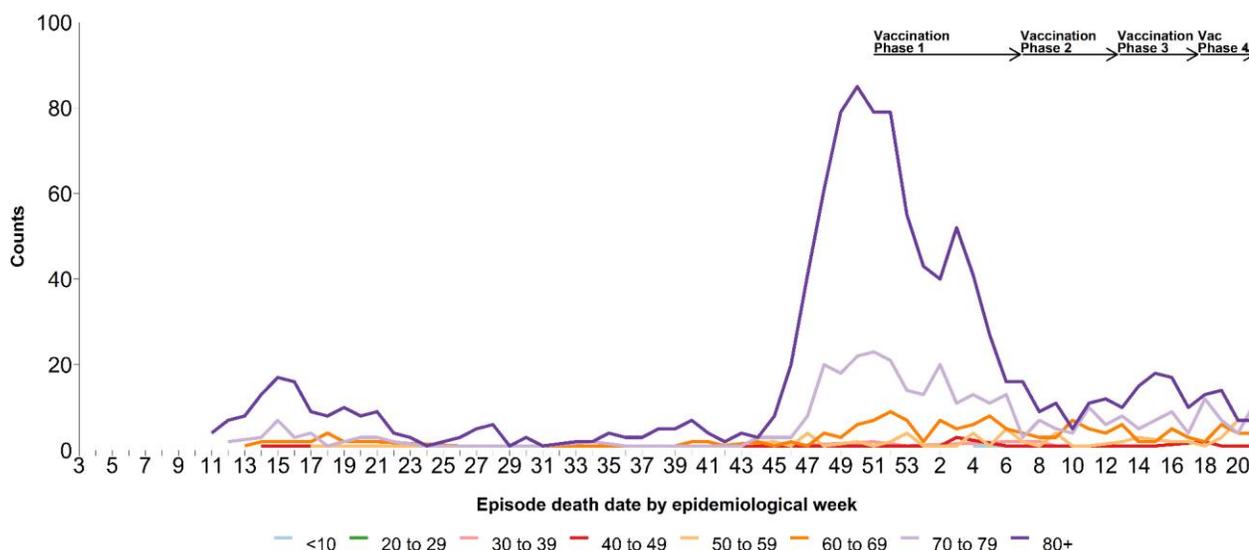
As shown in **Figure 10**, following increasing vaccination rates in the elderly, the weekly number of deaths in 80+ year-olds decreased by 81% between weeks 50 and 6 (from 85 to 16 deaths). Since week 7, the number of deaths has remained low, with an average of 12 per week. The number of weekly deaths also decreased in 70-79-year-olds between weeks 51 and 7 by 87% (from 23 to 3 deaths) with fluctuations in weeks 8-21 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).

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – May 29, 2021 (week 21) (N= 144,536)^{a,b}

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	8,179 (6)	92 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	15,450 (11)	68 (1)	14 (1)	0 (<1)	529,387 (10)
20-29	32,483 (22)	376 (5)	42 (2)	1 (<1)	699,476 (13)
30-39	26,625 (18)	740 (10)	144 (8)	14 (1)	750,054 (14)
40-49	21,315 (15)	858 (11)	181 (10)	24 (1)	648,377 (12)
50-59	18,054 (12)	1,207 (16)	341 (19)	65 (4)	711,930 (14)
60-69	11,639 (8)	1,439 (19)	437 (25)	158 (9)	686,889 (13)
70-79	6,012 (4)	1,471 (19)	435 (25)	362 (21)	454,855 (9)
80-89	3,292 (2)	1,077 (14)	157 (9)	610 (36)	193,351 (4)
90+	1,487 (1)	377 (5)	16 (1)	471 (28)	52,885 (1)
Total	144,536	7,705	1,774	1,707	5,139,568
Median age	35	63	63	84	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.

Figure 10. Weekly age-specific COVID-19 deaths by episode date, BC, January 15, 2020 (week 3) – May 29, 2021 (week 21) (N= 1,707)^a



G. Care facility outbreaks

As shown in [Table 4](#) and [Figure 11](#), 323 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 21, with 2 new outbreaks in week 21. 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.

None of the 23 deaths reported in week 21 were associated with an outbreak in a long-term care setting.

[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 21, from 384 to 70 cases, following the vaccination of community-dwelling adults aged 70+ years starting in vaccination phase 3.

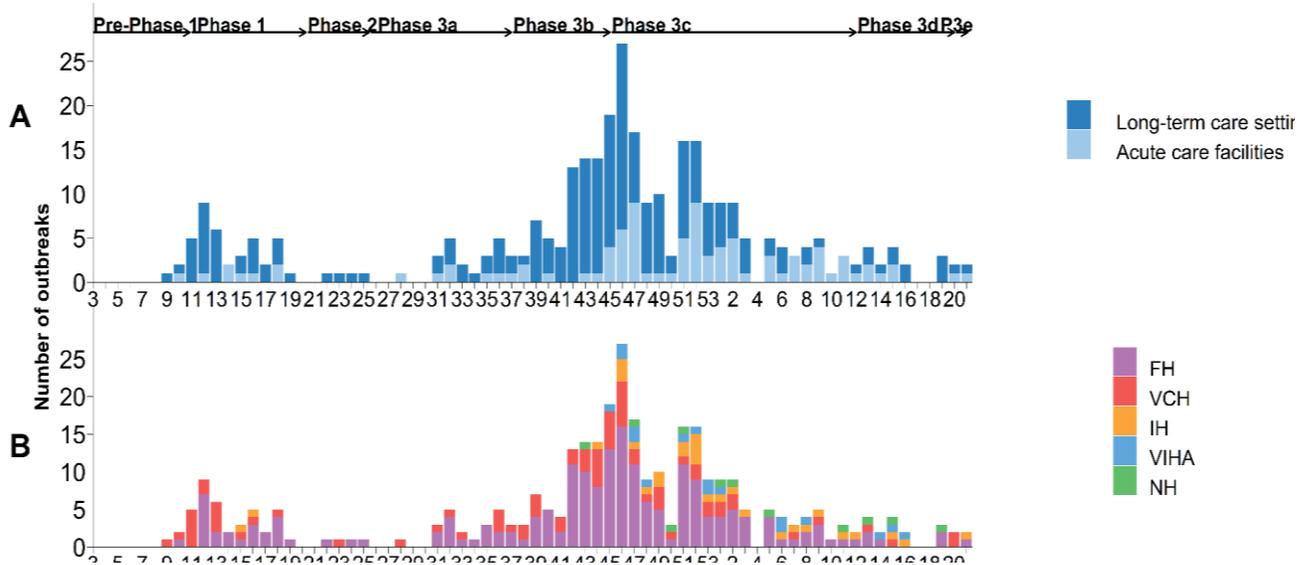
[Figure 13](#) shows a decrease in long-term care setting resident deaths 70+ years of age following the start of the vaccination of the LTCF population in week 51. Since week 7, there has been an average of two deaths per week within long-term care these settings. There has been average of 15 deaths 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 29, 2021 (week 21) (N=323)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 21, Care Facility Outbreaks	2	1	2	0	3	0	0	0	0
Cumulative, Care Facility Outbreaks	323	3,549	2,271	7	5,827	1,019	0	0	1,019

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 29, 2021 (week 21) (N=323)



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= 2,167) vs other cases (n= 7,693) ≥70 years of age, by episode date, BC September 13, 2021 (week 38) – May 29, 2021 (week 21)

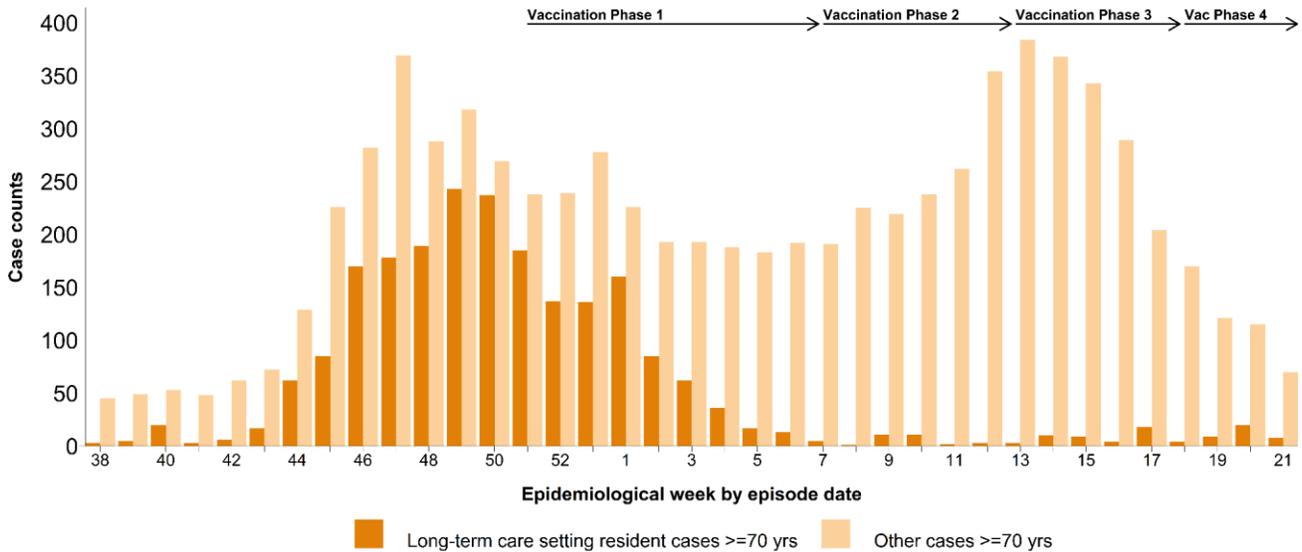
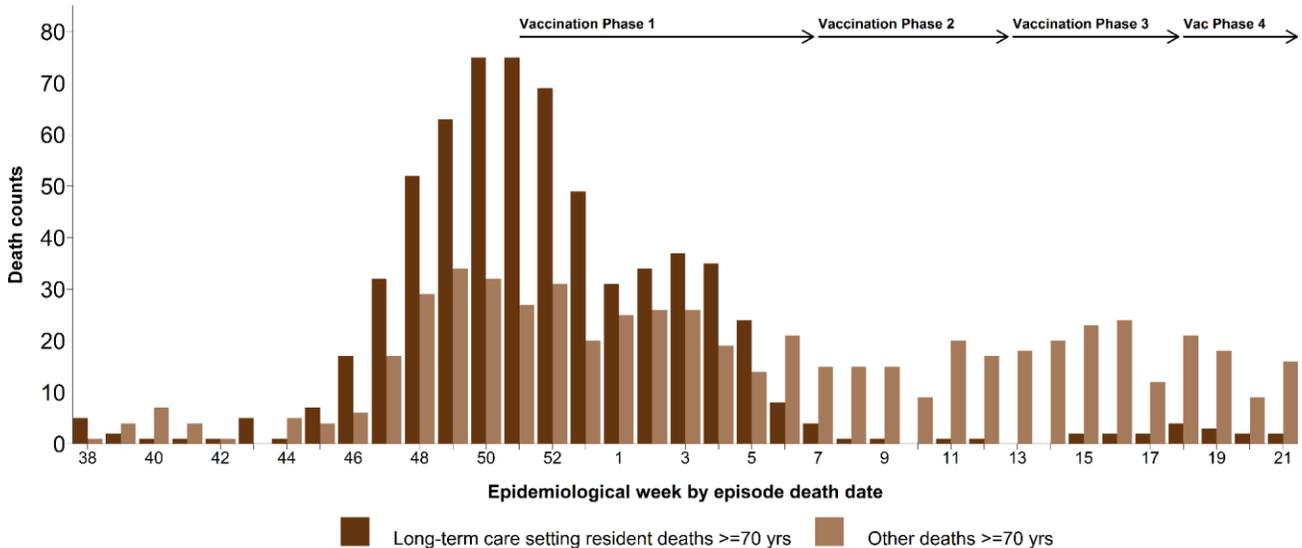


Figure 13. COVID-19 long-term care setting resident^a deaths (n= 649) vs other deaths (n= 605) ≥70 years of age, by episode death date, BC September 13, 2021 (week 38) – May 29, 2021 (week 21)



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>.