

British Columbia (BC) COVID-19 Situation Report Week 17: April 25- May 1, 2021

Table of Contents	Provincial COVID-19 incidence steadily declining; hospital and ICU admissions stable
Epidemic curve and regional incidence 2	There were 4,639 COVID-19 cases (90 per 100K) in week 17, a 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 (221 to 160 per 100K). • Since week 13, Vancouver Coastal incidence decreased (194 to 78 per 100K). • Since week 14, Interior Health incidence decreased (86 to 40 per 100K). • Since week 13, Island Health incidence decreased (48 to 16 per 100K). • Since week 13, Northern Health incidence decreased (119 to 41 per 100K).
Test rates and % positive 4	All age specific incidences decreased from weeks 13-15 to week 17. Most notably, 15-19-year-olds, 20-29-year-olds and 40-49-year-olds peaked in week 14 and have seen the sharpest decline up to week 17 from 219 to 122 per 100k, 257 to 149 per 100k and 176 to 101 per 100k, respectively.
Age profile, testing and cases 5	Testing of MSP-funded specimens decreased from ~67,500 specimens in week 14 to ~58,000 in week 17. Positivity of MSP-funded specimens decreased from 12.0% in week 14 to 9.5% in week 17.
Severe outcomes 7	The number of weekly hospital admissions peaked in week 15 (387) and has declined slightly since then, reaching 349 in week 17. The number of intensive care unit (ICU) admissions also peaked in week 15 (110) and decreased slightly, at 91 ICU admissions, in week 17. The number of deaths was stable in weeks 7-16 but decreased to 16 deaths in week 17.
Age profile, severe outcomes 8	Following increasing vaccination rates in the elderly, the weekly number of deaths in 70+ year-olds has decreased substantially.
Care facility outbreaks 9	By case of earliest onset date, there were no outbreaks reported in care settings in week 17. 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.
Emerging respiratory pathogens update 10	

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 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.
- Case data were extracted on May 10, 2021, laboratory data on May 7, 2021, and variants of concern data on May 6, 2021

A. COVID-19 case counts and epidemic curves

Provincially, from week 3 2020 to week 17 2021, there have been 132,717 cases, corresponding to a cumulative incidence of 2,578 per 100K (Table 1, Figure 1). As shown in Figure 1, after peaking in week 14 at 152 per 100K, incidence has steadily decreased to 90 per 100K in week 17. Rates may increase further as data by episode date become more complete.

As shown in Figure 2, incidence decreased in all health authorities over the past 2-4 weeks. From week 14 to week 17, Fraser Health (FH) incidence decreased from 221 to 160 per 100K and Interior Health (IH) incidence decreased from 86 to 40 per 100K. Incidence decreased from week 13 to 17 in Vancouver Coastal Health (VCH), from 194 to 78 per 100K; in Island Health (VIHA), from 48 to 16 per 100K; and in Northern Health (NH), from 119 to 41 per 100K. Incidence decreased in most health service delivery areas since weeks 13-14, with the largest declines in Northwest, Northeast and Northshore/Coast Garibaldi. 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 1, 2021 (week 17) (N= 132,717)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 17, case counts	3,106	332	136	117	947	1	4,639
Cumulative case counts	76,817	11,175	4,759	7,270	32,502	194	132,717
Week 17, cases per 100K population	160	40	16	41	78	0	90
Cumulative cases per 100K population	3,961	1,339	548	2,531	2,685	0	2,578

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC^a
January 15, 2020 (week 3) – May 1, 2021 (week 17) (N= 132,717)

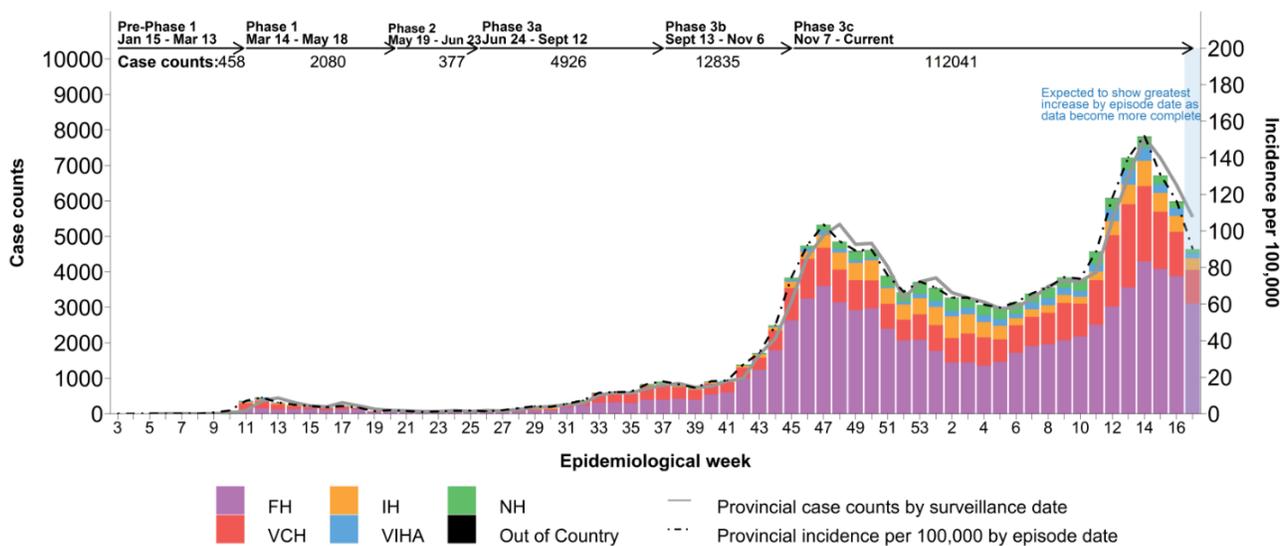
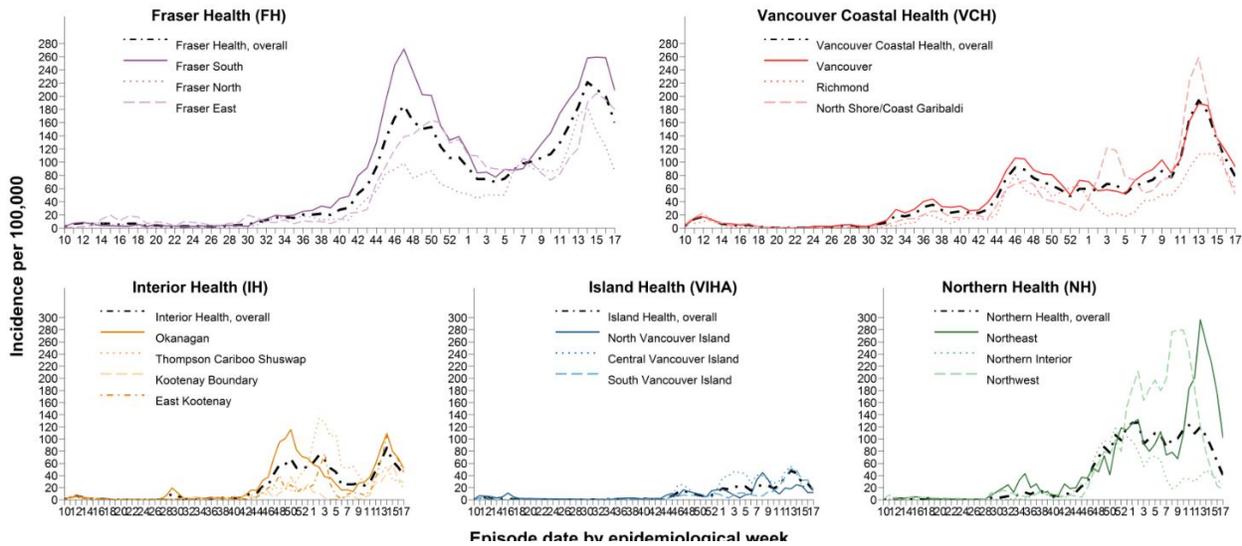


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 1, 2020 (week 10) – May 1, 2021 (week 17) (N= 132,717)



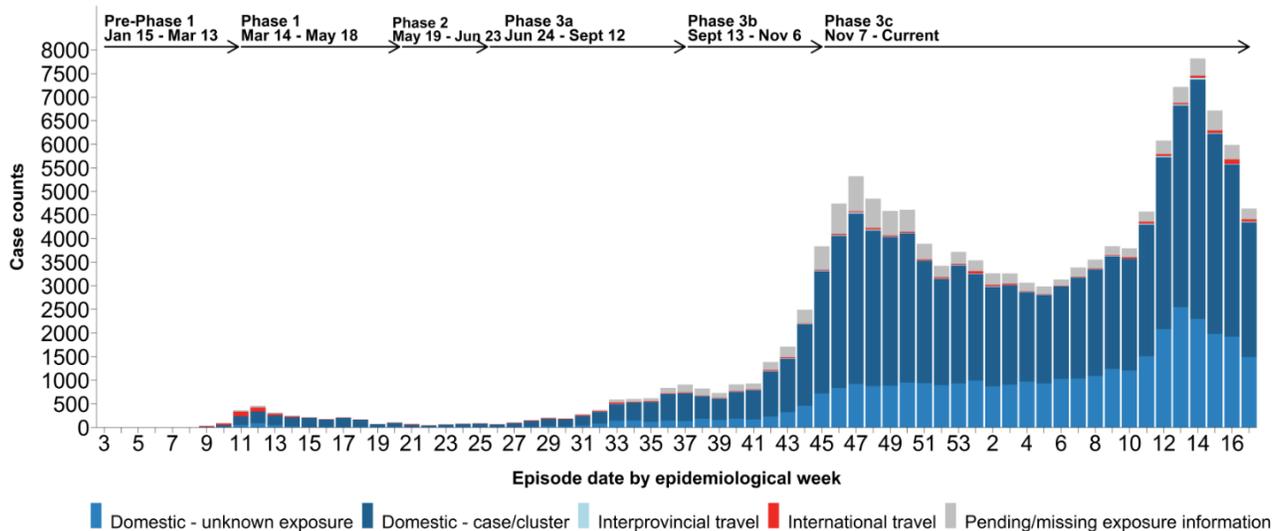
B. Likely sources of infection

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 1, 2021 (week 17) (N= 132,717)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 17, Exposures	48 (1)	17 (<1)	2,853 (62)	1,492 (32)	229 (5)
Cumulative Exposures	1,391 (1)	489 (<1)	85,390 (64)	35,068 (26)	10,379 (8)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – May 1, 2021 (week 17) (N= 132,717)

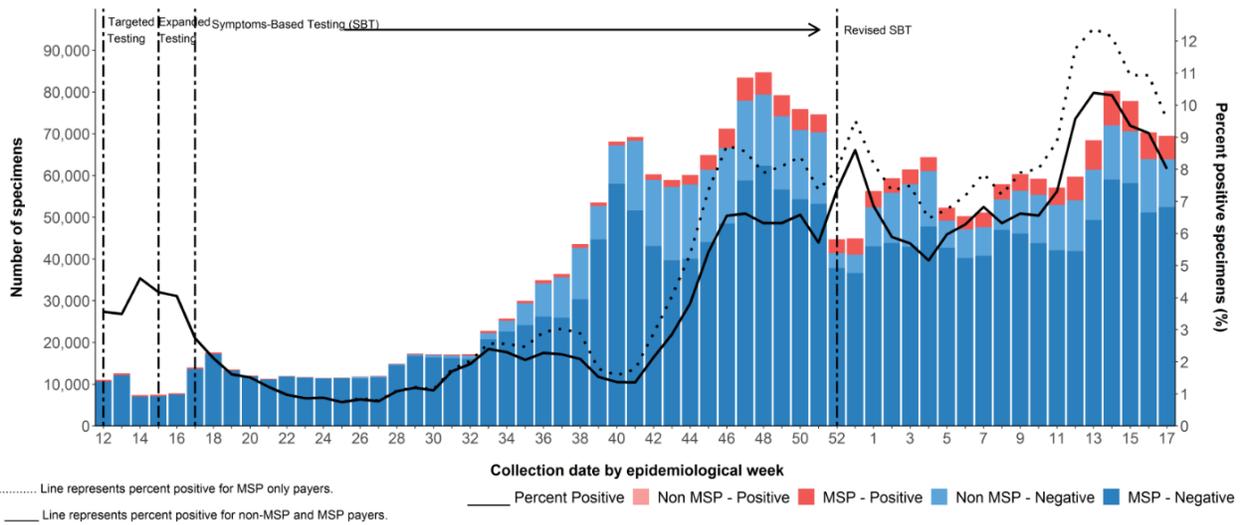


C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing of MSP-funded specimens decreased from ~67,500 specimens in week 14 to ~57,500 in week 16 and stabilized in week 17 to ~58,000. Positivity of MSP-funded specimens decreased from 12.0% in week 14 to 9.5% in week 17.

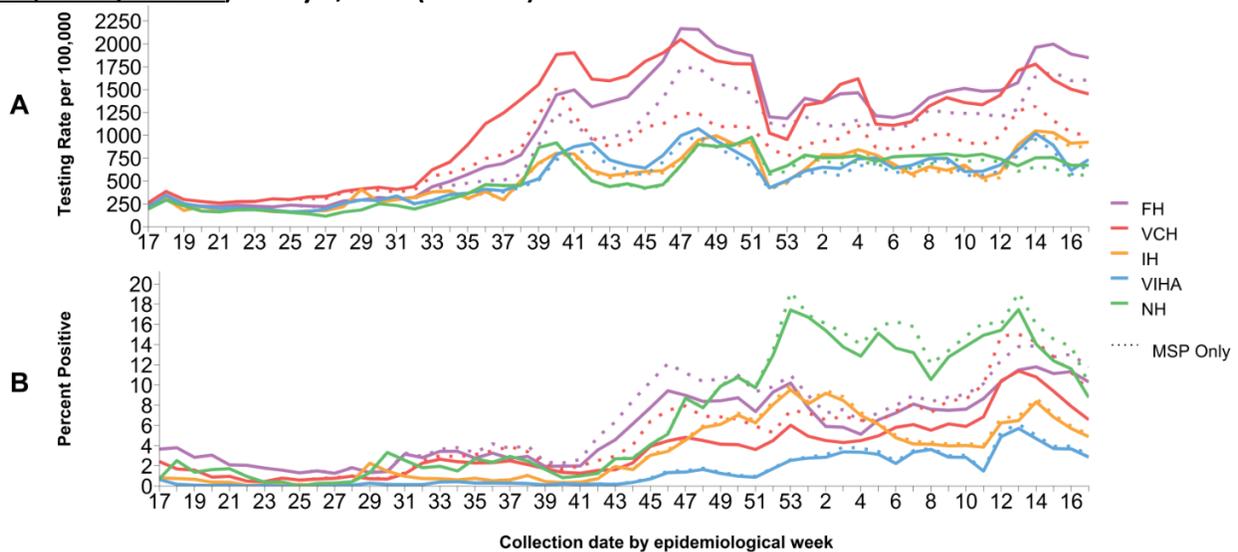
As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens in week 17 continue to be highest in FH; the testing rate has stabilized in FH since week 15, decreased in VCH since week 14, stabilized in IH and NHA since week 14, and slightly increased in VIHA since week 16. As shown in **Panel B**, percent positivity for week 17 MSP-funded tests is highest in FHA at 11.8% followed by NH at 10.0%, VCH at 9.5%, and lowest in IH and VIHA at 5.1% and 3.1%, respectively. Percent positivity has decreased in all HAs since weeks 13-14.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – April 24, 2021 May 1, 2021 (week 17) ^{a,b,c}



a. Invalid (n=1,292) and indeterminate (n=6,758) results have been excluded.

Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – May 1, 2021 (week 17) ^{b,c}



b. PLOVER extract on May 7, 2021.

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 17 (shown in red) have decreased or remained stable since peak testing rates in most age groups in week 14-16 (shown in grey bars), except in 5-9-year-olds where the testing rate has increased continually since week 12. The highest testing rate in week 17 was among 5-9 year-olds and 20-39-year-olds.

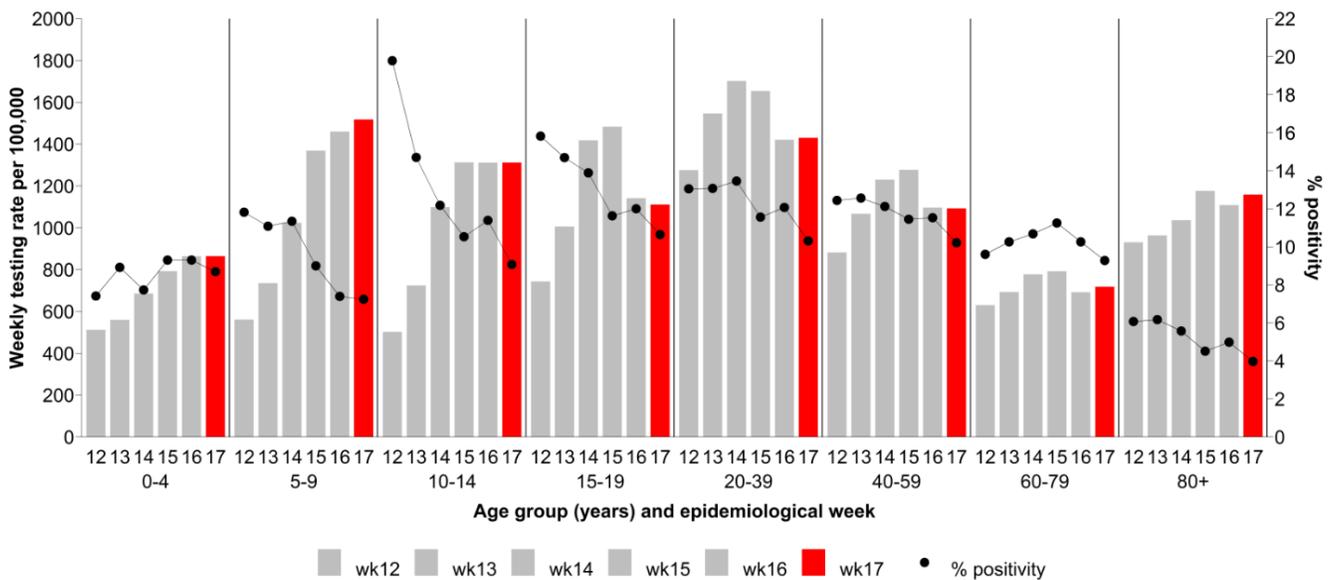
As shown by the black dots in [Figure 6](#), the percent positivity for MSP-only specimens in week 17 has remained stable or decreased in all age groups since weeks 12-14. Most prominently, the percent positivity in the 10-14-year-olds has seen the sharpest decline since week 12. In week 17, the highest percent positivity was in the 15-19-year-olds followed by 20-30-year-olds and 40-59-year-olds, at 10.6%, 10.3% and 10.2%, respectively.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the percentage contribution of age groups <10 years and 10 to 14-year-olds stabilized since week 14, and was met mainly by an increase in 20-29 by 1.9% and a decrease in 50-59 year-olds by 1.1%. The remaining age groups' contributions remained relatively stable.

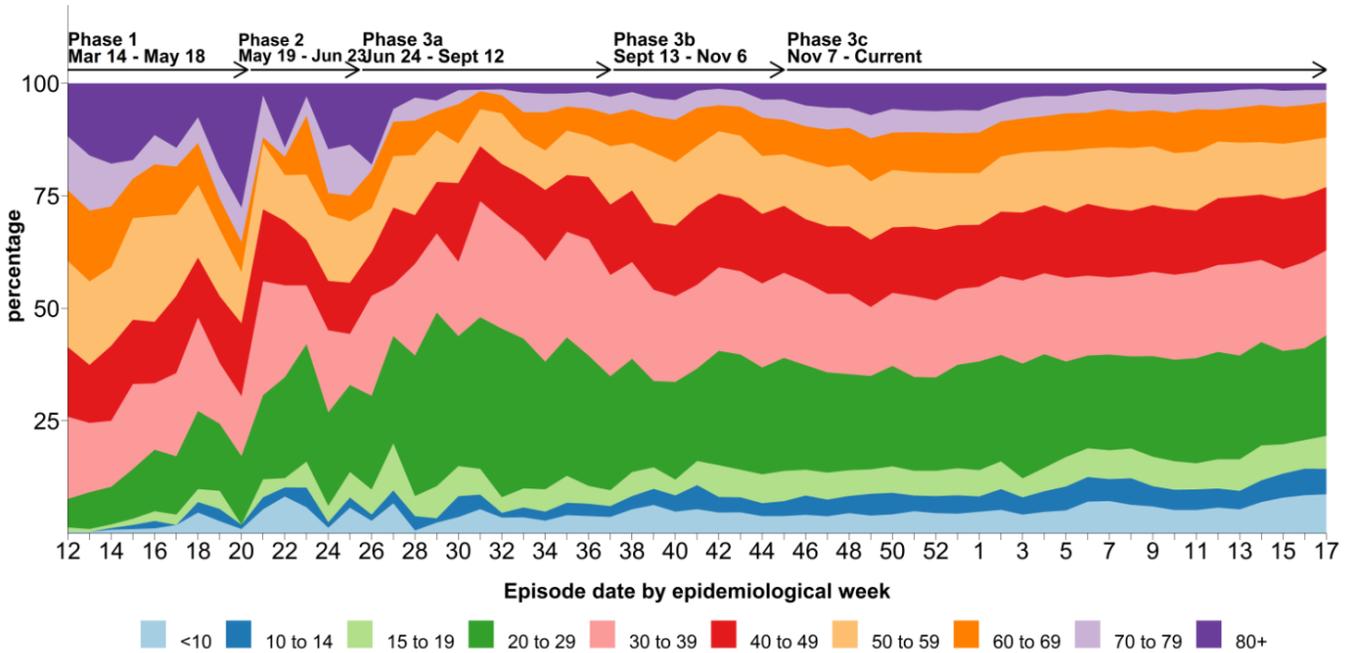
As shown in [Figure 8](#), all age specific incidences decreased from weeks 13-15 to week 17. Most notably, 15-19-year-olds, 20-29-year-olds and 40-49-year-olds peaked in week 14 and have seen the sharpest decline up to week 17 from 219 to 122 per 100k, 257 to 149 per 100k and 176 to 101 per 100k, respectively. Since week 13, 30-39-year-olds also experienced a sharp decrease from 201 to 119 per 100k. Week 17 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 1, 2021 (week 17)^a

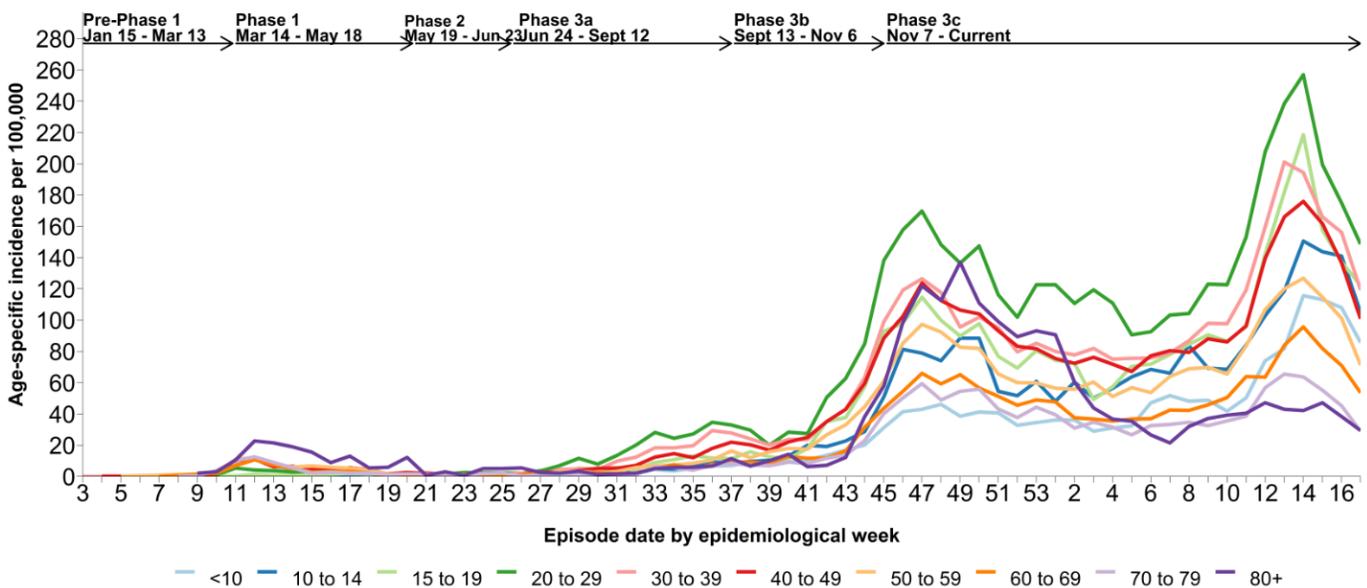


a. Testing rates and percent positivity displayed are based on MSP testing only.

**Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC
March 15, 2020 (week 12) – May 1, 2021 (week 17) (N= 132,177)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
January 15, 2020 (week 3) – May 1, 2021 (week 17) (N= 132,690)**



E. Severe outcome counts and epi-curve

The number of weekly hospital admissions peaked in week 15 (387) and has declined slightly since then, reaching 349 in week 17. The number of intensive care unit (ICU) admissions also peaked in week 15 (110) and decreased slightly, at 91 ICU admissions, in week 17. The number of deaths has been stable from week 7 to 16 with an average of 25 deaths per week; however, deaths in week 17 decreased to 16 ([Table 3, Figure 9](#)). These numbers may increase in future reports as more data become available.

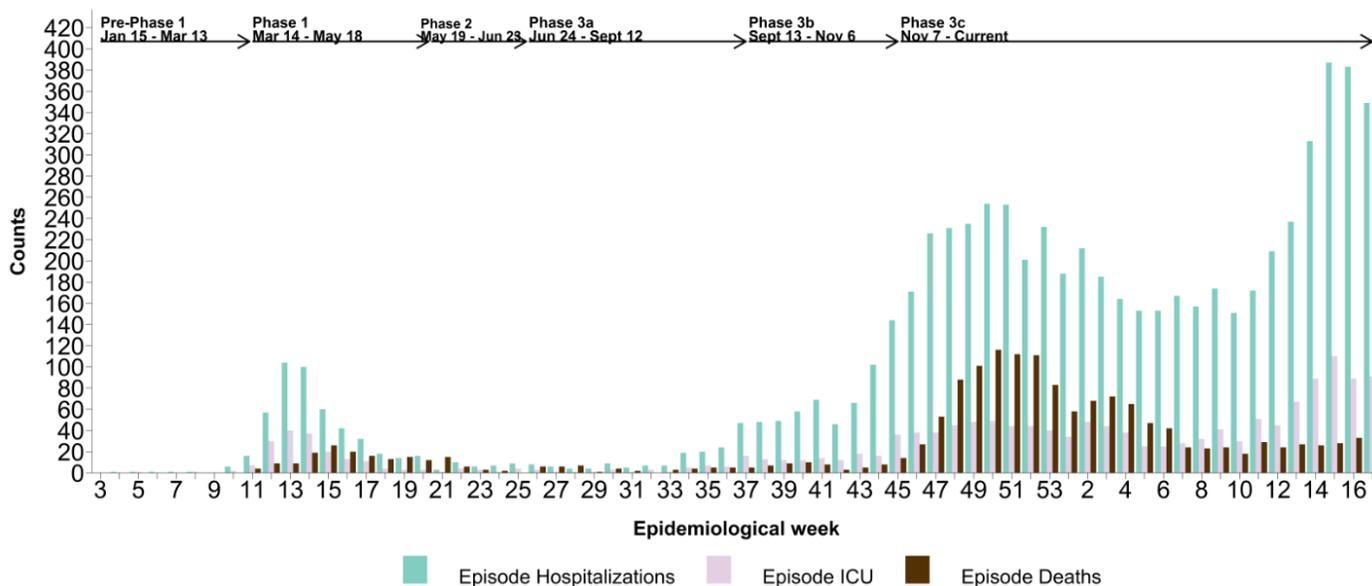
Cumulatively, there have been 11 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020 (no new confirmed cases since last report). The median age of these cases is 6 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – May 1, 2021 (week 17)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 17, hospitalizations	222	28	7	13	79	0	349
Cumulative hospitalizations	3,771	541	230	613	1,636	13	6,804/132,717 (5)
Week 17, ICU admissions	58	8	2	2	21	0	91
Cumulative ICU admissions	776	158	60	147	456	2	1,599/132,717 (1)
Week 17, deaths	8	3	2	0	3	0	16/1,596 (1)
Cumulative deaths	847	133	38	140	438	0	1,596/132,717 (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 1, 2021 (week 17)



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 17, median age of hospital admissions, ICU admissions and deaths was 59 years, 59 years and 83 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 88% between weeks 50 and 13 (from 85 to 10 deaths), with a slight increase in weeks 14-16 (~17 deaths per week); and a renewed decline in week 17 (~8 deaths). Similarly, the number of weekly deaths decreased in 70-79-year olds by 87% between weeks 51 and 7 (from 23 to 3 deaths) and has remained stable in weeks 8-17, with an average of 7 deaths per week.

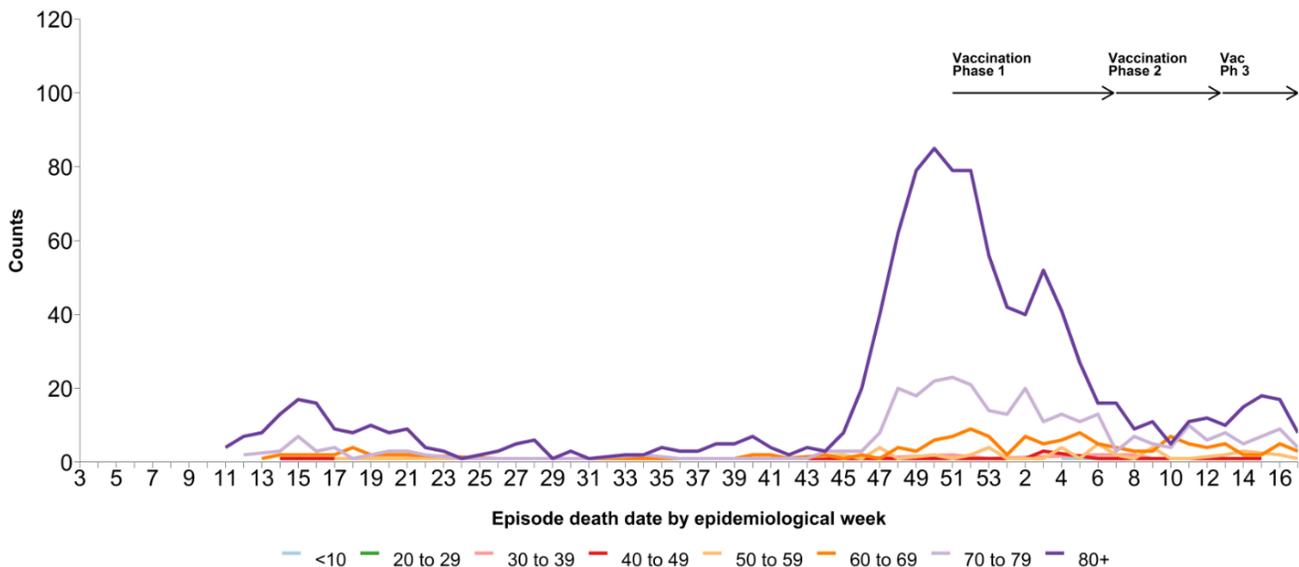
In week 17, 196/4,639 (4%) cases, 85/349 (24%) hospitalizations, 17/91 (19%) ICU admissions, and 12/16 (75%) deaths were in 70+ year-olds (data not shown).

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – May 1, 2021 (week 17) (N= 132,690)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	7,128 (5)	62 (1)	5 (<)	2 (0)	469,351 (9)
10-19	13,793 (10)	54 (1)	10 (1)	0 (0)	527,805 (10)
20-29	29,893 (23)	315 (5)	33 (2)	1 (0)	697,691 (14)
30-39	24,382 (18)	615 (9)	126 (8)	14 (1)	735,052 (14)
40-49	19,661 (15)	727 (11)	161 (10)	19 (1)	646,035 (13)
50-59	16,710 (13)	1,033 (15)	291 (18)	53 (3)	718,272 (14)
60-69	10,879 (8)	1,263 (19)	403 (25)	141 (9)	673,131 (13)
70-79	5,654 (4)	1,378 (20)	404 (25)	328 (21)	435,062 (8)
80-89	3,148 (2)	1,011 (15)	150 (9)	581 (36)	187,443 (4)
90+	1,442 (1)	346 (5)	16 (1)	457 (29)	49,726 (1)
Total	132,690	6,804	1,599	1,596	5,139,568
Median age	36	64	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 1, 2021 (week 17) (N= 1,596)



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 316 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 17, with no new outbreaks in week 17. 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.

Three (19%) of the 16 deaths reported in week 17 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, the weekly number of long-term care setting resident cases 70+ years of age has been below 20. In contrast, cases among community-dwelling 70+ year-olds increased from weeks 7 to 13 but decreased in weeks 14 to 17, from 367 to 179 cases, following the vaccination of community-dwelling adults aged 70+ years starting in weeks 8 to 14.

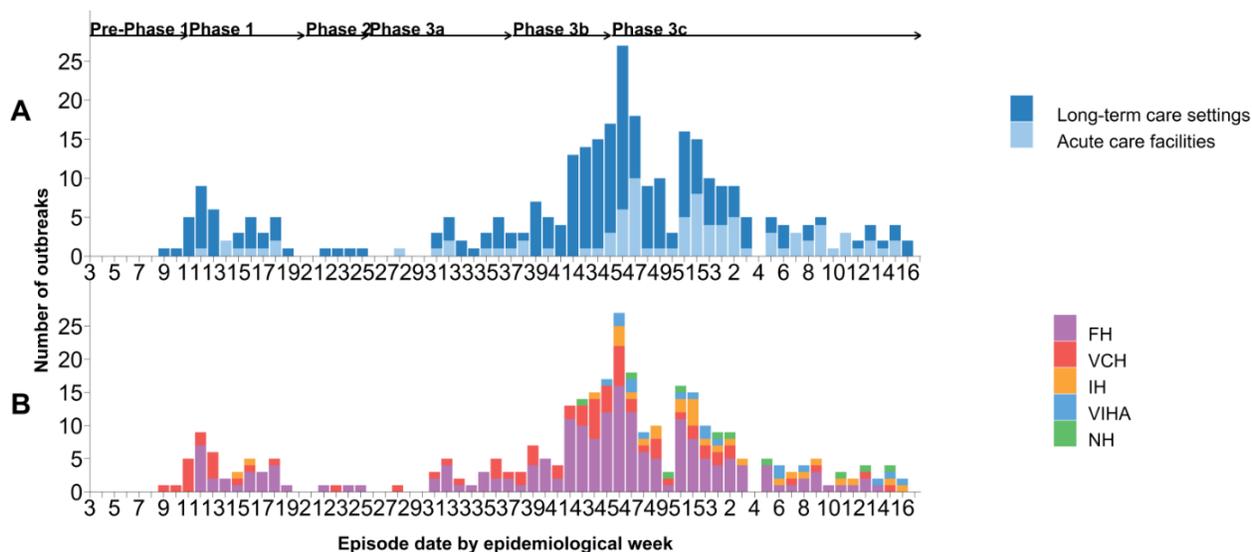
[Figure 13](#) shows a larger decrease in long-term care setting resident deaths 70+ years of age as compared to deaths in the same age group outside of these settings following the start of the vaccination of the LTCF population in week 51. Since week 7, there has been an average of two deaths per week within long-term care these settings, while there has been an average of 17 deaths per week in 70+ years outside these settings. Exceptionally, the number of community-dwelling case deaths dropped to 10 in week 17. 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 1, 2021 (week 17) (N=316)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 17, Care Facility Outbreaks	0	38	8	1	47	3	0	0	3
Cumulative, Care Facility Outbreaks	316	3,481	2,254	9	5,744	994	0	0	994

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 1, 2021 (week 17) (N=316)



- 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=2,125) vs other cases (n=7,188) ≥70 years of age, by episode date, BC September 13, 2021 (week 38) – May 1, 2021 (week 17)

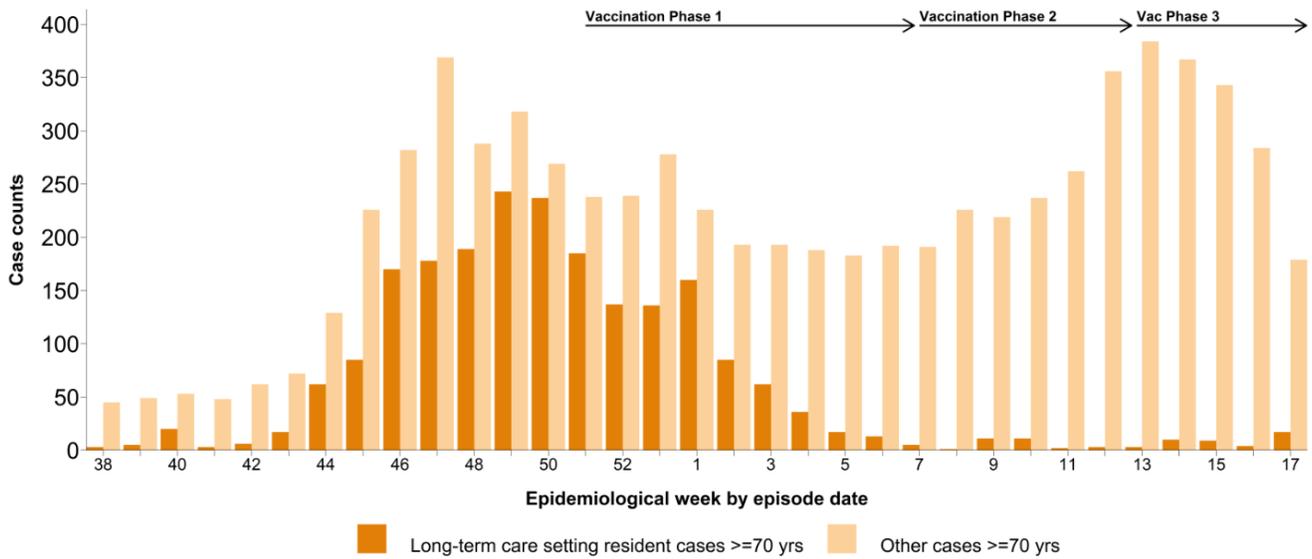
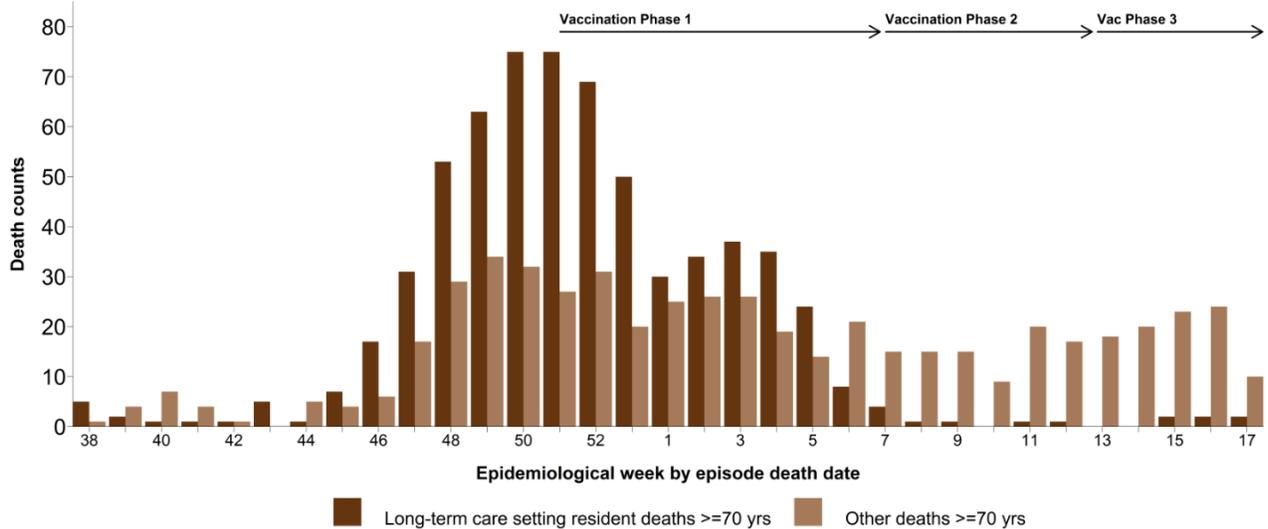


Figure 13. COVID-19 long-term care setting resident^a deaths (n=636) vs other deaths (n=525) ≥70 years of age, by episode death date, BC September 13, 2021 (week 38) – May 1, 2021 (week 17)



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>.