British Columbia (BC) COVID-19 Situation Report Week 34: August 22- August 28, 2021

Table of Contents

Epidemic curve and regional incidence	<u>2</u>
Likely sources of infection	<u>3</u>
Test rates and % positive	<u>4</u>
Age profile, testing and cases	<u>5</u>
Severe outcomes	<u>8</u>
Age profile, severe outcomes	<u>9</u>
Care facility outbreaks	<u>10</u>
Additional resources	<u>10</u>

Stabilizing incidence in Interior Health and Vancouver Coastal, while remaining regions show recent increases; hospitalizations continue to rise

Provincial COVID-19 incidence was 78 cases per 100K with 4,070 COVID-19 cases recorded in week 34.

Incidence by episode date decreased in Interior Health and Vancouver Coastal, but increased in all other regions. From weeks 33 to 34:

- Fraser Health: increased from 57 to 62 per 100K
- Vancouver Coastal: decreased from 63 to 54 per 100K
- Interior Health: decreased from 213 to 177 per 100K
- Island Health: increased from 38 to 44 per 100K
- Northern Health: increased from 76 to 107 per 100K

Age-specific incidences are either increasing or showing early signs of stabilization, except for the 10-14-year-olds which have continued to increase since week 27 (3 per 100K) reaching 95 per 100K in week 34.

By week 34, the single-dose vaccination coverage in eligible 12+ year-olds was at 84%, and 76% were fully vaccinated.

Testing of MSP-funded specimens has increased to ~53K specimens in week 34. Positivity of MSP-funded specimens has recently declined starting week 32 (from 9.3% to 8.9%).

The weekly number of hospital admissions has been increasing from week 28 to 34, from 16 to 175 admissions. ICU admissions have decreased from weeks 33 to 34, from 54 to 43 per week. Deaths were comparable in weeks 33 and 34 at 17 and 16, respectively.

By case of earliest onset date, 4 new outbreaks were reported in care settings in week 34.

Table of pandemic phases defined by implementation or relaxation of population-level mitigation measures in BC:

		•	, ,
Pre-Phase 1	PHASE 1	PHASE 2	Phase 3
Jan 15 (wk 3) -	Mar 14 (wk 11) -	May 19 (wk 21) -	Jun 24 2020 (wk 26) - Current wk, 2021
Mar 13 (wk 11) 2020	May 18 (wk 21) 2020	Jun 23 (wk 26) 2020	(DATES START FROM BEGINNING OF COMPLETE EPIWEEK)
From earliest	Initial restrictions	Re-opening of services	PHASE 3A: Jun 24 (wk 26)-Sept 12 (wk 37) 2020: Broader re-opening
symptom onset date			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 <u>vaccination phases</u> 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.

C***VID-19** Situation Report

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 7, 2021, laboratory data on September 3, 2021, PIR vaccine coverage date on September 3, 2021, and PCMS hospitalization data on September 7, 2021.

A. COVID-19 case counts and epidemic curves

Up to week 34, 2021, there have been 166,287 cases for a cumulative incidence of 3,195 per 100K (<u>Table 1, Figure 1</u>). The provincial incidence by episode date was 78 per 100K in week 34, similar to weeks 32-33. As shown by the higher incidence using surveillance date, incidence by episode date will likely increase as data become more complete.

As shown in <u>Figure 2</u>, incidence increased from week 33 to 34 in: Northern Health (NH) from 76 to 107 per 100K, Vancouver Island (VIHA) from 38 to 44 per 100K, and Fraser Heath (FH) from 57 to 62 per 100K. Interior Health (IH) and Vancouver Coastal (VCH) have decreased by episode date (213 to 177 per 100K and 63 to 54 per 100k, respectively), but may increase as data become more complete. Incidence increased mainly in Northeast and Northern Interior, Fraser East, and South Vancouver Island Health Service Delivery Areas.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 - August 28, 2021 (week 34) (N= 166,287)

Cose tellies by enicede date	Health Authority of Residence					Outside	Total	
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	IUlai	
Week 34, case counts	1,222	1,490	383	309	666	0	4,070	
Cumulative case counts	90,667	21,650	6,524	8,736	38,476	234	166,287	
Week 34, cases per 100K population	62	177	44	107	54	NA	78	
Cumulative cases per 100K population	4,608	2,575	746	3,019	3,142	NA	3,195	

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC <u>January 15, 2020 (week 3)</u> – August 28, 2021 (week 34) (N= 166,287)

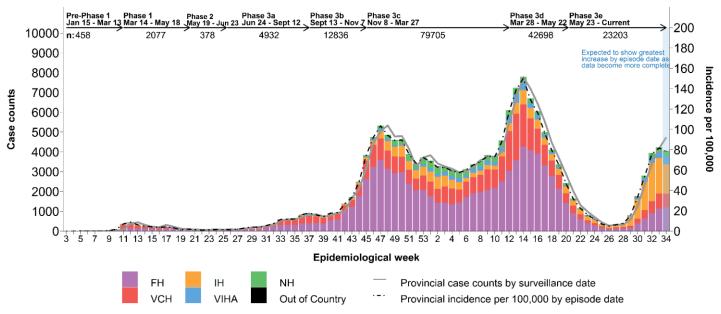
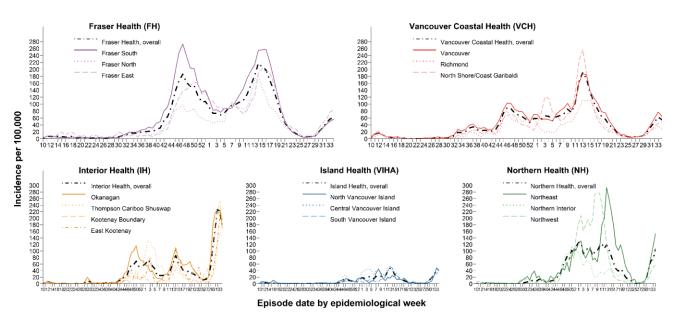


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – August 28, 2021 (week 34) (N= 166,287)



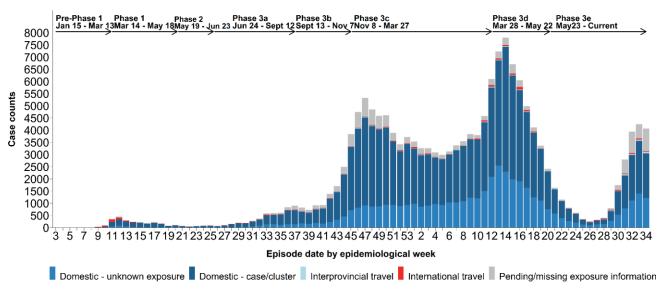
B. Likely sources of infection

As shown in <u>Table 2</u> and <u>Figure 3</u>, 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) – August 28, 2021 (week 34) (N= 166,287)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 34 , Exposures	37 (1)	66 (2)	1,821 (45)	1,224 (30)	922 (23)
Cumulative Exposures	1,876 (1)	904 (1)	104,111 (63)	45,601 (27)	13,795 (8)

Figure 3. Likely source of COVID-19 infection by episode date, BC <u>January 15, 2020 (week 3)</u> – August 28, 2021 (week 34) (N= 166,287)



C***VID-19** Situation Report

C. Test rates and percent positive

As shown by the darker-colored bars in <u>Figure 4</u>, testing of MSP-funded specimens increased from ~38K specimens in week 32 to ~53K specimens in week 34. Positivity of MSP-funded specimens declined slightly during this time (from 9.3% to 8.9%).

As shown in <u>Figure 5</u>, the per capita testing rates (Panel A) and percent positivity (Panel B) for MSP-only specimens have both increased since week 32 in all HAs, with the exception of percent positivity in IH which decreased from 17.5% to 15.4% from week 32 to week 34. Most notably, percent positivity in NHA increased from 16.9% in week 32 to 20.2% in week 34.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – August 28, 2021 (week 34)

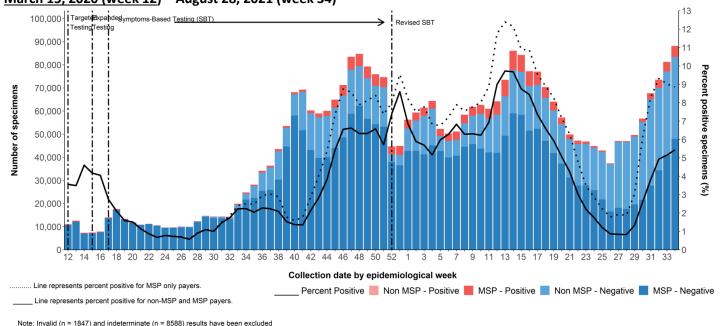
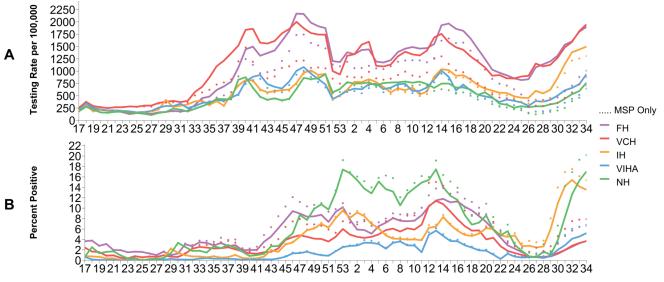


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – August 28, 2021 (week 34)



Collection date by epidemiological week

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 <u>Figure 6</u>, testing rates in all age groups increased since week 30, with the exception of the 80+ year-olds in which it was stable since week 32. In week 34, the highest testing rate by far was in the 20-39 year-olds.

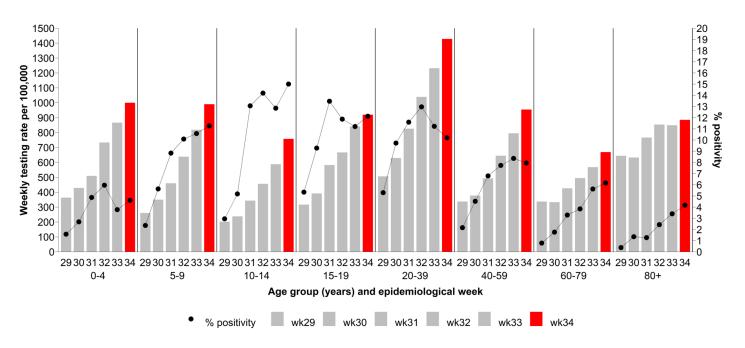
As shown by the black dots in <u>Figure 6</u>, the percent positivity has been increasing in all age groups since weeks 29-32, except in the 15-19 year-olds where it declined since week 31. The highest percent positivity has consistently been in the 10-14 year-olds, since week 32.

Case distribution and weekly incidence by age group

As shown in <u>Figure 7</u>, the contribution of adults 20-39 year-olds decreased from 63% in week 29 to 45% of cases in week 34, while the 40-59 year olds increased by 8% and the <14 years of age increased by 5% during the same period.

As shown in <u>Figure 8</u>, age-specific incidences are either increasing or showing early signs of stabilisation across all age groups, except for the 10-14-year-olds which have continued to increase since week 27 (3 per 100K) reaching 95 per 100K in week 34. In week 34, the highest age-specific incidence (143 per 100K) was in 20-29 year-olds followed by the 15-19-year-olds and 30-39-year-olds (both at 108 per 100K). The lowest incidence rates were in the 60+ year-olds ranging from 29 to 37 per 100K. 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) – August 28, 2021 (week 34)



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) – August 28, 2021 (week 34) (N= 165,749)

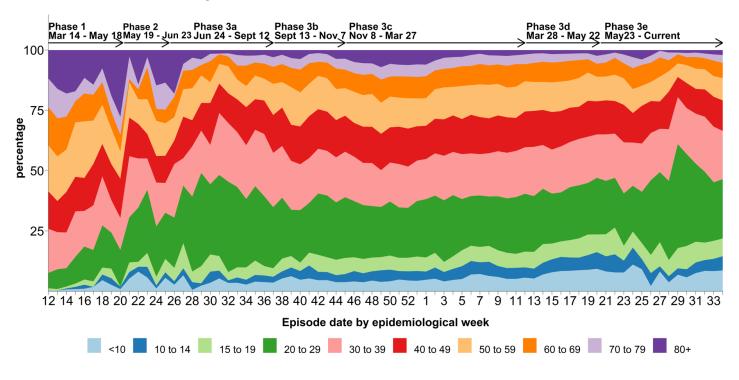
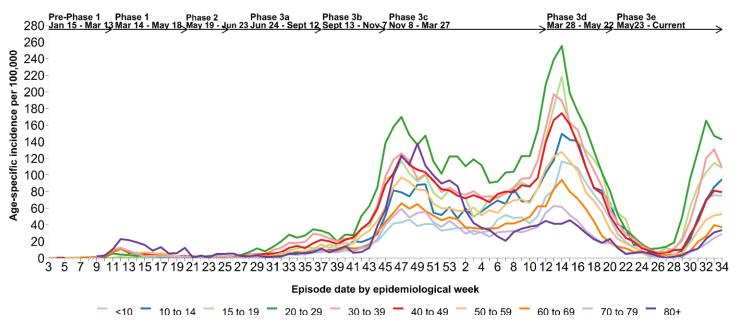


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC <u>January 15, 2020 (week 3)</u> – August 28, 2021 (week 34) (N= 166,262)



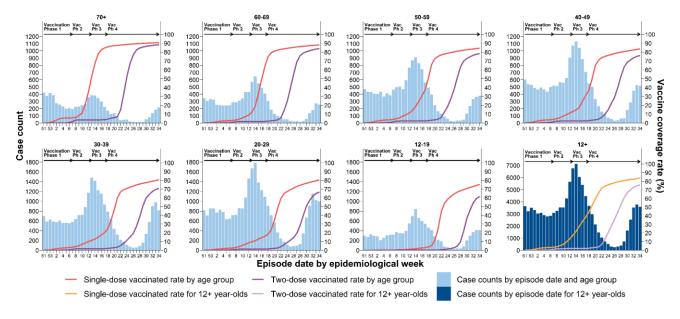
Vaccine coverage and weekly cases by age group

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 34, the overall single-dose vaccination coverage in the eligible 12+ year-olds reached 84% and 76% were fully vaccinated. The single-dose coverage for age groups 50+ years ranged from 84-91%, and two-dose coverage ranged from 78-88%, with 849 cases reported for those age groups combined.

For younger adults, single-dose coverage in the 20-49 year-olds was between 81-84%, and two-dose coverage ranged between 67-76%, with 2,356 cases reported for those age groups combined.

<u>Figure 9.</u> Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC <u>December 13, 2020 (week 51)</u> – August 28, 2021 (week 34)



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 has been increasing from week 28 to 34, from 16 to 175 admissions (<u>Table 3, Figure 10</u>). ICU admissions have decreased from weeks 33 to 34, from 54 to 43 per week. Deaths were comparable in weeks 33 and 34 at 17 and 16, respectively.

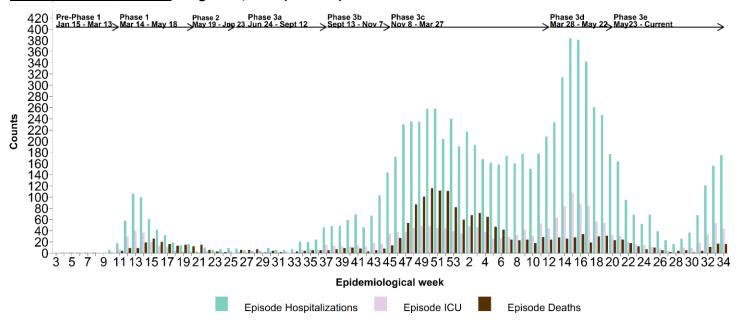
Cumulatively, there have been 17 confirmed cases of <u>Multi-system Inflammatory Syndrome in children and adolescents (MIS-C)</u> in BC from January 1, 2020 to week 34 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – August 28, 2021 (week 34)

Severe outcomes by episode date		Health au	thority of	residence	Residing	T-4-1 (NA (O/)	
	FH	IH	VIHA	NH	VCH	outside of Canada	Total n/N ^a (%)
Week 34, hospitalizations	68	67	9	7	24	0	175
Cumulative hospitalizations ^b	4,677	1,028	283	690	1,983	14	8,675/166,287 (5)
Week 34, ICU admissions	11	15	5	5	7	0	43
Cumulative ICU admissions ^b	922	267	86	194	535	2	2,006/166,287 (1)
Week 34, deaths	2	10	3	1	0	0	16
Cumulative deaths	931	197	46	161	487	0	1,822/166,287 (1)

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

Figure 10. COVID-19 hospital admissions and deaths by episode date, BC January 15, 2020 (week 3) – August 28, 2021 (week 34)



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

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

C*VID-19 Situation Report

F. Age profile, severe outcomes

<u>Table 4</u> displays the distribution of cases and severe outcomes. In week 34, median age of hospital admissions, ICU admissions and deaths was 54 years, 54 years and 87 years, respectively, based on health authority case line lists only (data not shown).

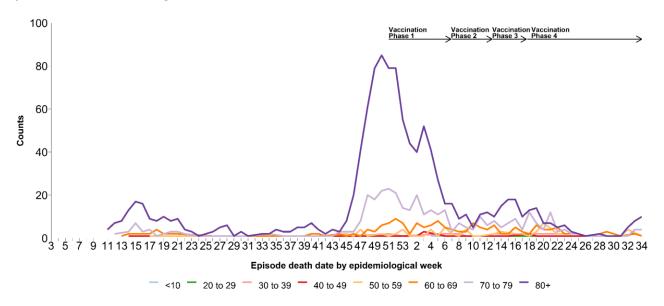
As shown in <u>Figure 11</u>, death counts have been increasing in the 80+ age group from 1 death to 10 deaths reported in weeks 31 to 34. Since week 23, there has been a weekly average of two deaths in the 60-69 and 80+ year-olds, and one death in the 50-59 and 70-79-year-olds. There was a weekly average of <1 death in the entire 0-49-year-old group since week 23.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – August 28, 2021 (week 34) (N= 166,262)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	9,903 (6)	104 (1)	8 (<1)	2 (<1)	470,017 (9)
10-19	18,235 (11)	78 (<1)	18 (1)	0 (<1)	529,387 (10)
20-29	38,543 (23)	481 (6)	58 (3)	2 (<1)	699,476 (13)
30-39	31,179 (19)	893 (10)	173 (9)	16 (1)	750,054 (14)
40-49	23,903 (14)	981 (11)	226 (11)	31 (2)	648,377 (12)
50-59	19,959 (12)	1,354 (16)	389 (19)	78 (4)	711,930 (14)
60-69	12,862 (8)	1,629 (19)	495 (25)	179 (10)	686,889 (13)
70-79	6,549 (4)	1,602 (18)	456 (23)	386 (21)	454,855 (9)
80-89	3,525 (2)	1,161 (13)	171 (8)	633 (35)	193,351 (4)
90+	1,604 (1)	408 (5)	18 (1)	495 (27)	52,885 (1)
Total	166,262	8,691	2,012	1,822	5,197,221
Median age c	34	62	62	84	41

a. Among those with available age information only.

Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – August 28, 2021 (week 34) (N= 1,822)^a



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.</p>

c. Median ages calculated are based on health authority case line lists only.

G. Care facility outbreaks

As shown in <u>Table 5</u> and <u>Figure 12</u>, 358 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 34. Since week 31, there have been 4 to 7 weekly outbreaks. In week 34, one outbreak was declared in a long-term care facility and three in acute care facilities. Since week 31, 11 outbreaks (52%) occurred in IH.

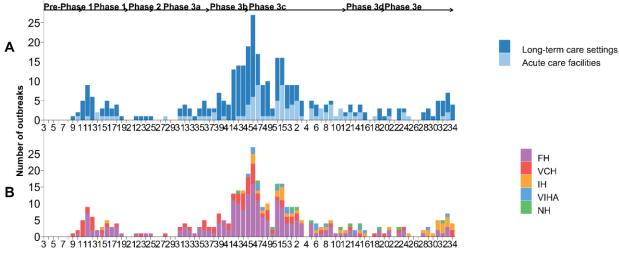
Nine (56%) out of the 16 deaths reported in week 34 were associated with an outbreak in a care facility setting.

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) – August 28, 2021 (week 34) (N=358)

are facility outbreaks and cases		Cases					Deaths			
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total	
Week 34, Care Facility Outbreaks	4	40	17	0	57	9	0	0	9	
Cumulative, Care Facility Outbreaks	358	3,735	2,359	6	6,100	1,057	0	0	1,057	

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) – August 28, 2021 (week 34) (N=358)



Episode date by epidemiological week

- 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/