British Columbia (BC) COVID-19 Situation Report Week 28: July 11- July 17, 2021

Table of Contents		COVID-19 incidence stable in most of BC with the exception of an increase in Interior Health; severity indicators continue to decline						
Epidemic curve and	2	Provincial incidence has stabilized since week 25 at 6 per 100K per week, with 337 COVID-19 cases in week 28.						
regional incidence	<u>2</u>	Incidence by health authority has stabilized or increased slightly since weeks 25 and 26:						
Likely sources of infection	<u>3</u>	 Since week 26, Fraser Health incidence was stable (at 6 per 100K). Since week 25, Vancouver Coastal incidence was stable (at 6 per 100K). Since week 25, Interior Health incidence increased (10 to 15 per 100K). 						
Test rates and % positive	<u>4</u>	 Since week 25, Island Health incidence was stable (at 1 per 100K). Since week 26, Northern Health incidence was stable (at 1 per 100K). 						
Age profile, testing and cases	<u>5</u>	Most age-specific incidences have been stable, except for increases in the 20-29 year-olds from 11 to 15 per 100K between weeks 25- 28; and in the 30-39 and 40-49 from 7 to 10 per 100K and 5 to 8 per 100K, respectively, between weeks 26-28.						
Severe outcomes	<u>8</u>	By week 28, the single-dose vaccination coverage in 12+ year-olds reached 80%; 52% were fully vaccinated.						
Age profile, severe outcomes	<u>9</u>	Testing of MSP-funded specimens has stabilised at ~17,000 specimens since week 26. Positivity of MSP-funded specimens has also stabilized at 2.0% since week 26.						
Care facility outbreaks	<u>10</u>	Hospital and intensive care unit admissions have both been declining since week 15, with 16 and 2 admissions reported in week 28, respectively. The number of deaths decreased since week 19 with 2 deaths reported in week 28.						
Additional resources	<u>10</u>	By case of earliest onset date, there were two new outbreaks reported in care settings in week 28.						

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	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 12+ 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.
- 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 July 26, 2021, laboratory data on July 23, 2021, PIR vaccine coverage date on July 23, 2021, and PCMS hospitalization data on July 26, 2021.

A. COVID-19 case counts and epidemic curves

As shown in Figure 1, provincial incidence has stabilized since week 25 at ~6 per 100K per week. Up to week 28, 2021, there have been 148,601 cases for a cumulative incidence of 2,855 per 100K (Table 1, Figure 1). Rates may increase as data by episode date become more complete.

Incidence by health authority (HA) has stabilized or increased slightly since weeks 25 and 26. As shown in <u>Figure 2</u>, incidence increased from week 25 to week 28 in Interior Health (IH) from 10 to 15 per 100K. Incidence has stabilized since week 25 in Vancouver Coastal Health (VCH) at 6 per 100K and Island Health (VIHA) at 1 per 100K, and since week 26 in Fraser Health (FH) at ~6 per 100K and Northern Health (NHA) at ~1 per 100K per week. Regional increases were driven mainly by Kootenay Boundary health service delivery area (HSDA) which increased from 1 (week 24) to 42 (week 28) per 100K, and by Northern Interior which increased from 0 (week 26) to 3 (week 28) per 100K.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – July 17, 2021 (week 28) (N= 148,601)

Casa tallias hu anisada data	F	Health Authority of Residence					Total	
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	rotar	
Week 28, case counts	124	122	10	6	73	2	337	
Cumulative case counts	86,194	13,507	5,199	7,812	35,670	219	148,601	
Week 28, cases per 100K population	6	15	1	2	6	NA	6	
Cumulative cases per 100K population	4,381	1,607	594	2,700	2,913	NA	2,855	

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – July 17, 2021 (week 28) (N= 148,601)

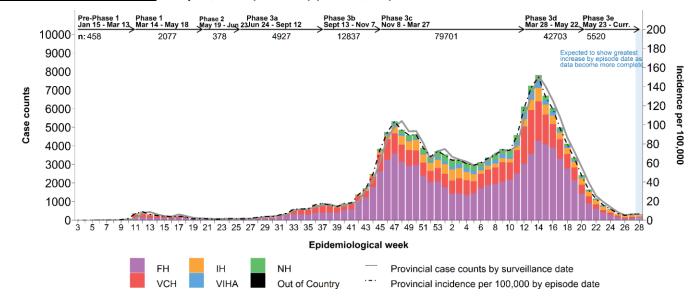
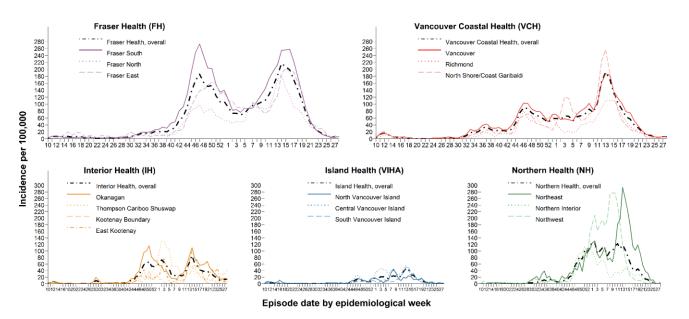


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC <u>March 01, 2020 (week 10)</u> – July 17, 2021 (week 28) (N= 148,601)



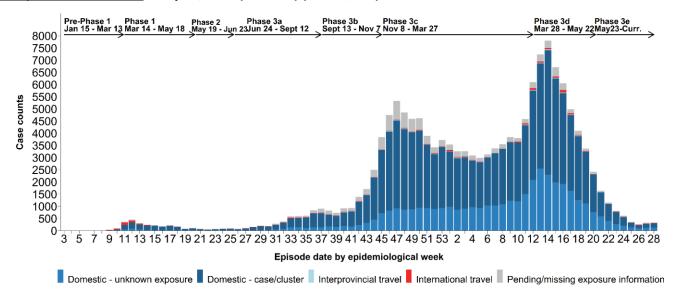
B. Likely sources of infection

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) – July 17, 2021 (week 28) (N= 148,601)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 28 , Exposures	19 (6)	5 (1)	171 (51)	124 (37)	18 (5)
Cumulative Exposures	1,664 (1)	621 (<1)	95,498 (64)	40,227 (27)	10,591 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – July 17, 2021 (week 28) (N= 148,601)

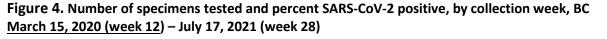


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C. Test rates and percent positive

As shown by the darker-colored bars in <u>Figure 4</u>, testing of MSP-funded specimens has stabilised at ~17,000 specimens in week 26. Positivity of MSP-funded specimens has also stabilized at 2.0% in week 26; this is comparable to positivity in early August 2020 (week 32, 2020).

As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens has been stable across HAs since week 26. As shown in **Panel B**, percent positivity for MSP-funded tests has been stable since week 26 for FH (~1.5%) and IH (~3.5%). From week 27 to 28, positivity has slightly decreased in VCH from 2.4% to 1.8% and in VIHA from 1.3% to 0.8%, and has increased in NH from 1.1 to 3.1%.



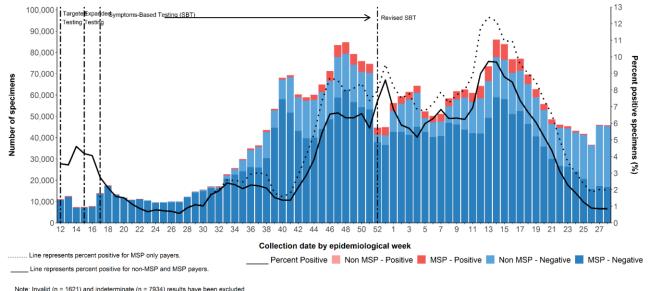
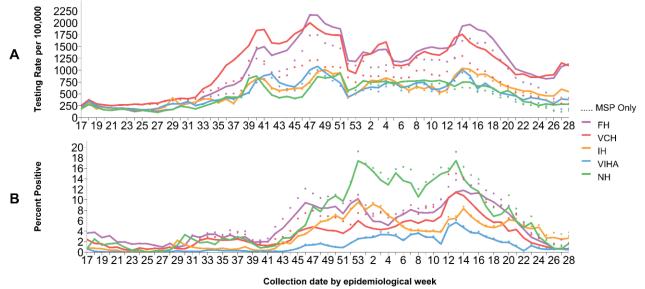


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – July 17, 2021 (week 28)



Data source: laboratory PLOVER data

D. Age profile – Testing and cases

Testing rates and percent positivity by age group

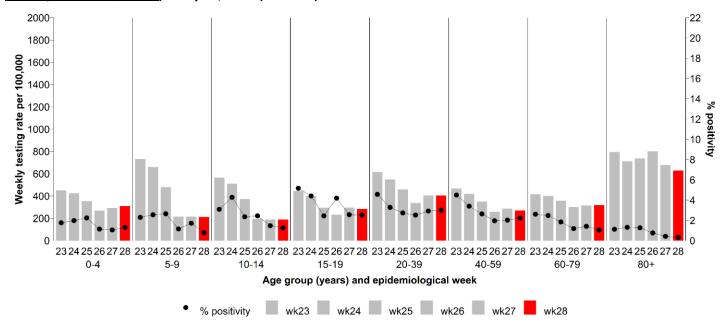
As shown by the bars in **Figure 6**, testing rates in all age groups remained stable since week 26, with the exception of the 80+ year-olds showing a decrease. The 80+ year-olds, however, continue to have the highest testing rate for week 28 at 628 per 100K.

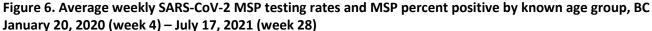
As shown by the black dots in <u>Figure 6</u>, the percent positivity has shown recent stabilizations since weeks 26 and 27 in all age groups. In week 28, the percent positivity was highest in the 20-39 year-olds at 3.0%, followed by the 15-19 and 40-59 year age groups, which were comparable at ~2.5%.

Case distribution and weekly incidence by age group

As shown in **Figure 7**, recent fluctuations in the proportion of affected age groups reflect small case counts, which are more pronounced starting week 22. Generally, adults between 20 and 49 years of age comprise half of the cases.

As shown in Figure 8, age-specific incidences have been generally stable since week 25 with minor changes in trends in some age groups: the 20-29 year-olds have increased since week 25 from 11 to 15 per 100K (highest incidence in week 28); the 30-39 and 40-49 have increased since week 26 from 7 to 10 per 100K and 5 to 8 per 100K, respectively; and the <10, 15-19, and 60-69 year-olds have decreased since week 27 from 6 to 3, 12 to 8, and 4 to 2 per 100K, respectively.





Data source: laboratory PLOVER data

Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC <u>March 15, 2020 (week 12)</u> – July 17, 2021 (week 28) (N= 148,065)

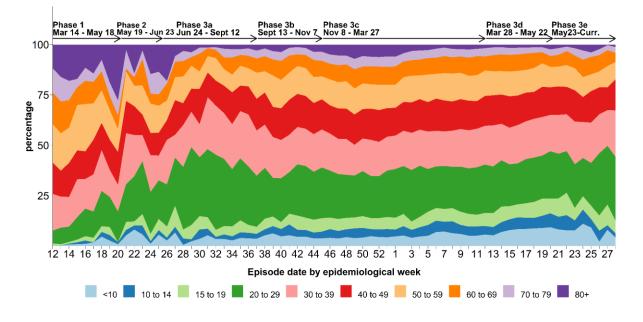
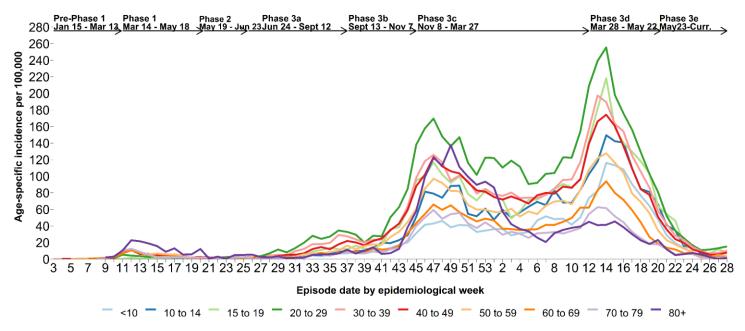


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – July 17, 2021 (week 28) (N= 148,578)



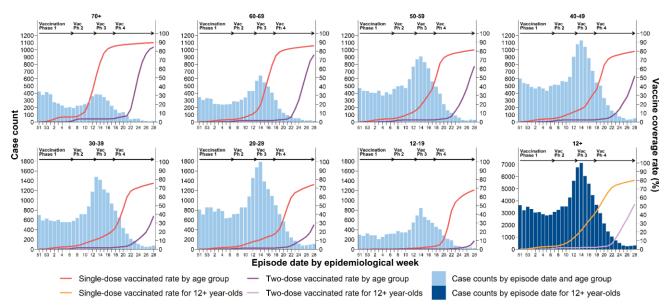
Vaccine coverage and weekly cases by age group

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, case counts are expected to decrease a few weeks later (Figure 9).

By week 28, the overall single-dose vaccination coverage in the eligible 12+ year-olds reached 80%, and 52% in the fully vaccinated. The single-dose coverage for age groups 50+ years of age ranged from 81-90%, and two-dose coverage ranged from 63-85%, with 58 cases reported for those age groups combined.

For younger adults, single-dose coverage in the 20-49 year-olds was between 74-80%, and two-dose coverage ranged between 28-52%, with 237 cases reported for those age groups combined.

<u>Figure 9.</u> Weekly age-specific COVID-19 vaccine coverage and case counts by epidemiological week, BC <u>December 13, 2020 (week 51)</u> – July 17, 2021 (week 28)



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

E. Severe outcome counts and epi-curve

The number of weekly hospital admissions peaked in week 15 (383) and has declined by 96% since then, reaching 16 admissions in week 28. (Table 3, Figure 9). Intensive care unit (ICU) admissions decreased by 98% since week 15 (107 admissions), reaching 2 admissions in week 28. The number of deaths decreased by 93% since week 19 (31 deaths) with 2 deaths reported in week 28. These numbers may increase in future reports as more data become available.

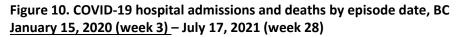
Cumulatively, there have been 16 confirmed cases of <u>Multi-system Inflammatory Syndrome in children and adolescents (MIS-</u> <u>C)</u> in BC from January 1, 2020 to week 28. No new cases were reported in week 28. The median age of these cases is 7 (range 1-15) years.

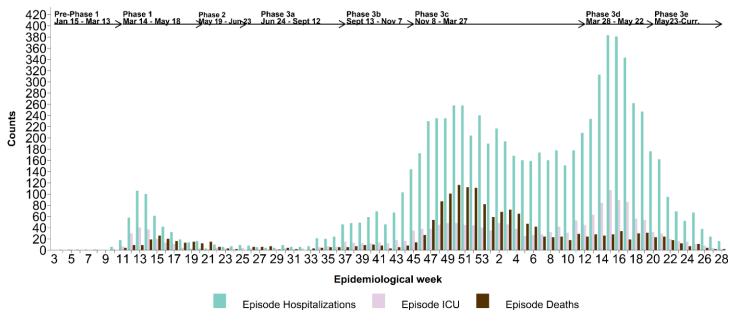
Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – July 17, 2021 (week 28)

Severe outcomes by episode date		Health a	uthority	of reside	nce	Residing	Total n/N ^a (%)	
Severe outcomes by episode date	FH	IH	VIHA	NH	VCH	outside of Canada		
Week 28, hospitalizations	11	2	1	1	1	0	16	
Cumulative hospitalizations ^b	4,475	760	256	664	1,921	14	8,090/148,601 (5)	
Week 28, ICU admissions	1	0	0	1	0	0	2	
Cumulative ICU admissions ^b	873	193	71	177	521	2	1,837/148,601 (1)	
Week 28, deaths	0	1	0	0	1	0	2	
Cumulative deaths	924	160	41	157	483	0	1,765/148,601 (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





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

F. Age profile, severe outcomes

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<u>Table 4</u> displays the distribution of cases and severe outcomes. In week 28, median age of hospital admissions, ICU admissions and deaths was 58 years, 42 years and 89 years, respectively, based on health authority case line lists only (data not shown).

As shown in **Figure 11**, since week 23, death counts have been low and stable in elderly adults with an average of 2 deaths per week in each of the 80+ year-olds and the 70-79-year-olds, and 1 in each of the 60-69-year-olds and the 50-59-year-olds.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group
<u>January 15, 2020 (week 3)</u> – July 17, 2021 (week 28) (N= 148,578) ^a

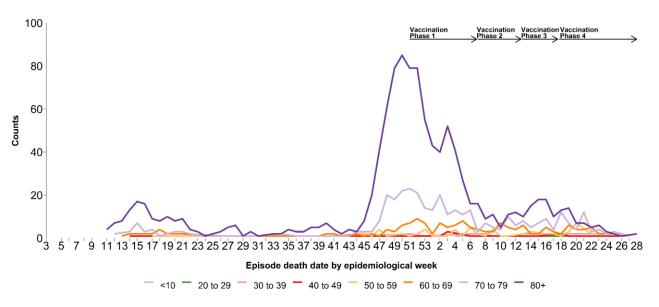
Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%) ^b	Deaths n (%)	General BC population n (%)
<10	8,487 (6)	94 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	16,005 (11)	68 (1)	15 (1)	0 (<1)	529,387 (10)
20-29	33,420 (22)	412 (5)	44 (2)	2 (<1)	699,476 (13)
30-39	27,404 (18)	815 (10)	157 (9)	16 (1)	750,054 (14)
40-49	21,871 (15)	902 (11)	191 (10)	27 (2)	648,377 (12)
50-59	18,471 (12)	1,253 (15)	349 (19)	71 (4)	711,930 (14)
60-69	11,929 (8)	1,530 (19)	460 (25)	170 (10)	686,889 (13)
70-79	6,136 (4)	1,522 (19)	439 (24)	376 (21)	454,855 (9)
80-89	3,347 (2)	1,117 (14)	164 (9)	622 (35)	193,351 (4)
90+	1,508 (1)	391 (5)	17 (1)	479 (27)	52,885 (1)
Total	148,578	8,104	1,843	1,765	5,197,221
Median age ^c	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.

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

Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – July 17, 2021 (week 28) (N= 1,765)^a



G. Care facility outbreaks

As shown in <u>Table 5</u> and <u>Figure 12</u>, 332 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 28, with two new outbreaks in week 28. Since week 16, few outbreaks have been reported with five acute care and 13 long-term care (i.e. long-term care or assisted living) facility outbreaks reported.

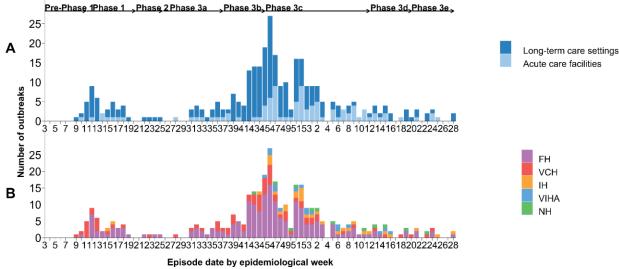
One death of the two deaths reported in week 28 was associated with an outbreak in a care facility setting.

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) – July 17, 2021 (week 28) (N=332)

Care facility outbreaks and cases			Cas	ses	Deaths				
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total
Week 28, Care Facility Outbreaks	2	4	2	0	6	1	0	0	1
Cumulative, Care Facility Outbreaks	332	3,600	2,280	6	5,886	1,033	0	0	1,033

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) – July 17, 2021 (week 28) (N=332)



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: <u>http://www.bccdc.ca/health-info/diseases-conditions/covid-19/data#variants</u>.

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: <u>https://bccdc.shinyapps.io/covid19_global_epi_app/</u>