British Columbia (BC) COVID-19 Situation Report Week 24: June 13- June 19, 2021

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Continued decline in COVID-19 cases, hospital and ICU admissions and deaths as vaccination coverage increases

There were 562 COVID-19 cases (11 per 100K) in week 24, a 93% decrease since the peak in week 14.

Regional incidence is decreasing:

- Since week 14, Fraser Health incidence decrease (217 to 14 per 100K).
- Since week 13, Vancouver Coastal incidence decreased (191 to 8 per 100K).
- Since week 14, Interior Health incidence decreased (86 to 18 per 100K).
- Since week 13, Island Health incidence decreased (47 to 3 per 100K).
- Since week 13, Northern Health incidence decreased (119 to 6 per 100K).

Age-specific incidences decreased from weeks 13-14 to week 24 for almost all age groups. Sharpest declines were seen in the 15-39-year-olds.

Single-dose vaccine coverage for 12+ year-olds reached 76% in week 24. Highest coverage was in 70+ year-olds at almost 90%, met by 42 cases in week 24, comparable to case counts in Wave 1 for that age group.

Testing of MSP-funded specimens decreased by 61% from week 14 to week 24. Positivity of MSP-funded specimens has also been decreasing since week 14 (12.1%), reaching 2.9% in week 24.

There has been 1 new confirmed cases of Multi-system Inflammatory Syndrome in children and adolescents (MIS-C) since last report, for a total of 16 cases in BC.

Weekly hospital admissions declined by 87% since week 15, reaching 50 admissions in week 24. Intensive care unit (ICU) admissions decreased by 86% since week 15, reaching 15 admissions in week 24. The number of deaths has been declining from 31 deaths in week 19 to 6 deaths in week 24.

By case of earliest onset date, there were 3 new outbreaks reported in a care setting in week 24.

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 and 2 BC Restart Plan

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 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 June 28, 2021, laboratory data on June 25, 2021, PIR vaccine coverage date on June 25, 2021, and PCMS hospitalization data on June 28, 2021.

A. COVID-19 case counts and epidemic curves

Provincially, up to week 24, 2021, there have been 147,228 cases, for a cumulative incidence of 2,829 per 100K (<u>Table 1</u>, <u>Figure 1</u>). As shown in <u>Figure 1</u>, following the peak of Wave 3 in week 14 at 150 per 100K, incidence has decreased by 93% to reach 11 per 100K in week 24. The incidence in week 24 is comparable to mid-August 2020 during Phase 3a. Rates may increase as data by episode date become more complete. Due to an update to the provincial population estimates used to calculate rates, there is a slight change in rates compared to reports in week 21 and earlier.

As shown in <u>Figure 2</u>, incidence decreased or stabilized in most health authorities in the 9-11 weeks prior to week 24. In week 24, Interior Health (IH) has the highest incidence rate at 18 per 100K; Fraser Health (FH) at 14 per 10K; Vancouver Coastal Health (VCH) at 8 per 100K; Northern Health (NH) at 6 per 100K; and Island Health (VIHA) at 3 per 100K. Incidence has decreased in all health service delivery areas (HSDA), except in East Kootenay and Central Vancouver Island HSDAs where it increased slightly in week 24. Rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – June 19, 2021 (week 24) (N= 147,228)

Casa tallias bu anisada data	H	Health Authority of Residence					Total	
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	Total	
Week 24, case counts	270	148	24	17	102	1	562	
Cumulative case counts	85,621	13,058	5,149	7,795	35,400	205	147,228	
Week 24, cases per 100K population	14	18	3	6	8	NA	11	
Cumulative cases per 100K population	4,352	1,553	588	2,694	2,891	NA	2,829	

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – June 19, 2021 (week 24) (N= 147,228)

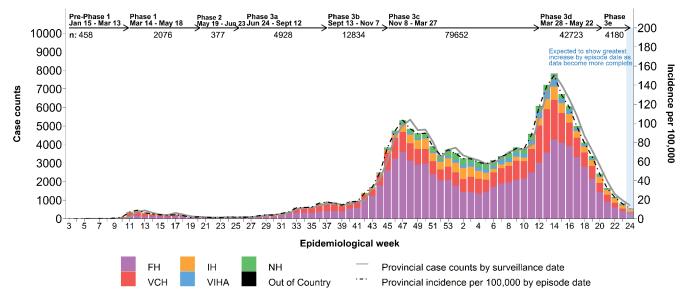
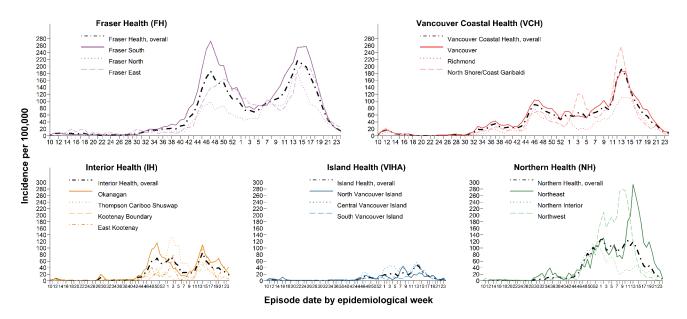


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – June 19, 2021 (week 24) (N= 147,228)



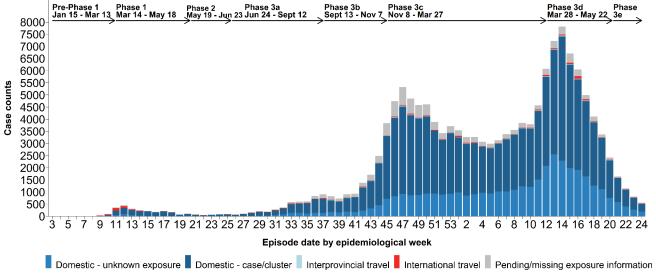
B. Likely sources of infection

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) – June 19, 2021 (week 24) (N= 147,228)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 24 , Exposures	10 (2)	6 (1)	313 (56)	195 (35)	38 (7)
Cumulative Exposures	1,517 (1)	612 (<1)	94,796 (64)	39,711 (27)	10,592 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – June 19, 2021 (week 24) (N= 147,228)



C. Test rates and percent positive

As shown by the darker-colored bars in Figure 4, testing of MSP-funded specimens decreased by 61% from ~67,500 specimens in week 14 to ~26,200 in week 24. From weeks 22 to 24, the decrease in specimens tested slowed from ~28,000 to ~26,000 specimens tested. Positivity of MSP-funded specimens has been decreasing rapidly since week 14 (12.1%) reaching 2.9% in week 24; this is comparable to positivity in mid-August of 2020.

As shown in **Panel A** of <u>Figure 5</u>, the per capita testing rates for MSP-only specimens have been declining in all HAs since weeks 14-15. As shown in Panel B, percent positivity for week 24 MSP-funded tests is highest in IH at 5.1% followed by NH at 3.3%, FHA at 2.8%, VCH at 2.5%, and lowest in VIHA at 0.9%. After decreasing since weeks 13-14, percent positivity stabilized in IH in weeks 22-24. Generally, percent positivity has decreased in all other 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) – June 19, 2021 (week 24)

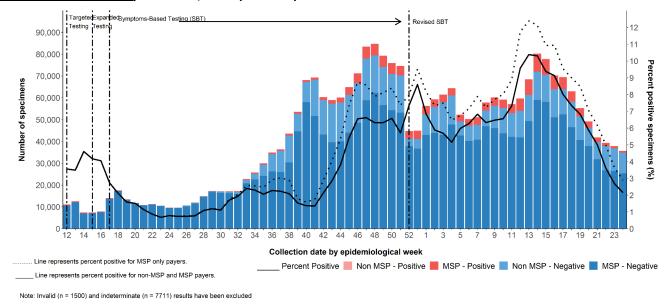
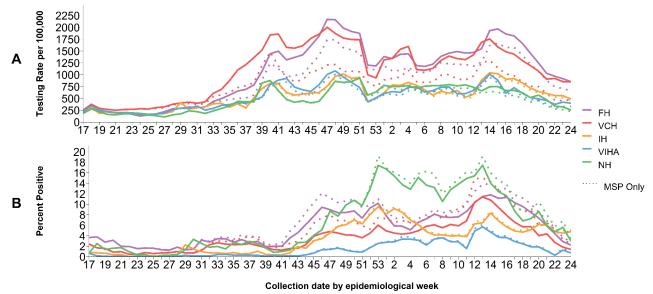


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – June 19, 2021 (week 24)



Data source: laboratory PLOVER data

D. Age profile - Testing, cases and vaccine coverage

Testing rates and percent positivity by age group

As shown by the bars in <u>Figure 6</u>, testing rates in week 24 have decreased in all age groups since at least week 19. The highest testing rates in week 24 were in the 80+ year-olds at 713 per 100K and the 5-9 year-olds at 670 per 100K.

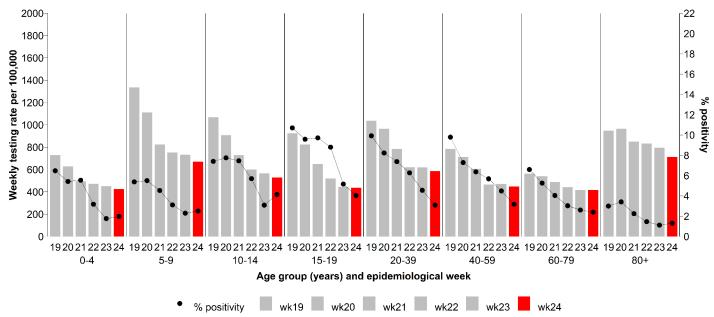
As shown by the black dots in Figure 6, the percent positivity has decreased in all age groups since week 19, but has stabilized or increased slightly in ages 0-14 and 80+ years since week 23. The percent positivity in the 15-19, 20-39 and 40-59 year age groups have experienced the sharpest decline since week 19. In week 24, the highest percent positivity was in the 10-14 year-olds at 4.1%, followed by the 15-19-year-olds at 4.0%. The lowest percent positivity was in the 80+ year-olds at 1.3%.

Case distribution and weekly incidence by age group

As shown in <u>Figure 7</u>, the percentage contribution of the <10, 70-79, and 80+ year-olds increased by 3.0%, 2.1%, and 2.0% since week 22, met mainly by a decrease of 3.7%, 1.4%, and 1.2% among the 15-19 year-olds and 40-49 year-olds, respectively. The remaining age groups' contributions remained relatively stable. With smaller case numbers per week, the percentage contributions fluctuate over time, as occurred prior to week 42.

As shown in <u>Figure 8</u>, age specific incidences decreased from weeks 13-14 to week 24 for almost all age groups; incidence for age group 80+ decreased from week 15 to week 23 and increased slightly in week 24 (from 5.7 to 6.9 per 100K). Sharpest declines were seen in the 20-29-year-olds and 15-19-year-olds from week 14 to week 24 (from 256 to 16 per 100k and 219 to 15 per 100k, respectively), a decrease of ~93% in both age groups. In the 30-39-year-olds, incidence decreased by 93% from week 13 to week 24 (from 197 to 13 per 100k). Week 24 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 May 9, 2021 (week 19) – June 19, 2021 (week 24)



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) – June 19, 2021 (week 24) (N= 146,692)

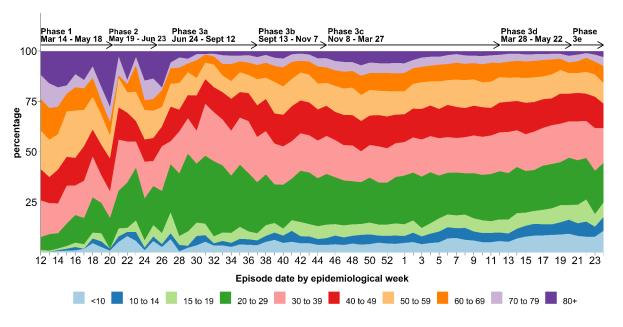
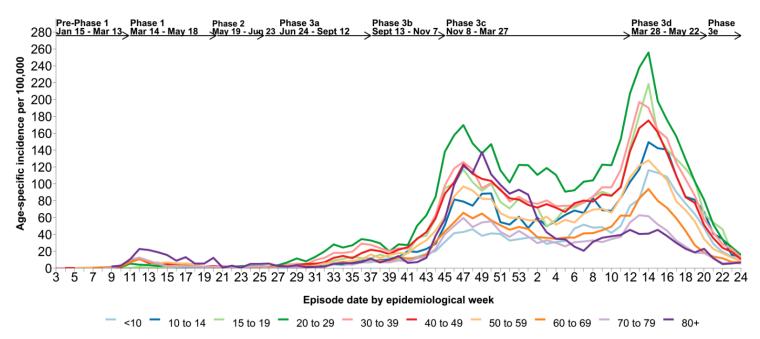


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC <u>January 15, 2020 (week 3)</u> – June 19, 2021 (week 24) (N= 147,205)



Single-dose vaccine coverage and weekly cases by age group

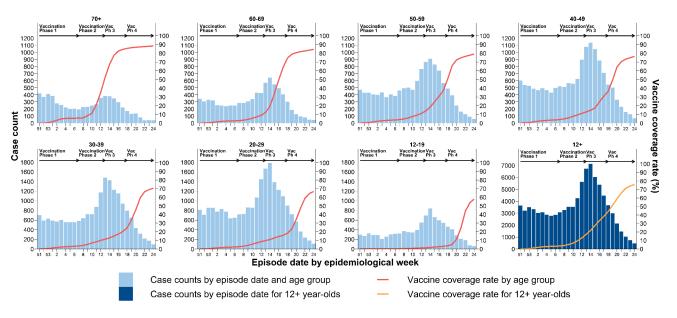
As vaccination coverage increases, case counts are expected to decrease a few weeks later. The vaccination of community-based older adults 70+ years of age started between weeks 10 and 14. As shown in <u>Figure 9,</u> by week 24, the single-dose vaccination coverage in this age group reached almost 90% and was met with only 42 cases, comparable to case counts in Wave 1 for that age group.

The vaccination of community-based (not residing in healthcare facilities, not healthcare workers and not clinically extremely vulnerable) adults 40 to 69 years of age started in weeks 15-19; by week 24, coverage reached 85%, 79%, and 76% reflecting case counts of 47, 58, and 68 for the 60-69, 50-59, and 40-49 year-olds, respectively.

The vaccination of community-based adults 20 to 39 year of age started in weeks 19-20; by week 24, coverage was 71% and 67% with 97 and 110 cases for the 30-39 and 20-29 year-old groups, respectively.

The lowest coverage was in children 12-19 years of age at 58% coverage in week 24. Overall, single-dose vaccine coverage for all age groups 12+ years reached 76% by week 24.

<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> – June 19, 2021 (week 24)



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 (384) and has declined by 87% since then, reaching 50 admissions in week 24 (Table 3, Figure 9). Intensive care unit (ICU) admissions decreased by 86% since week 15, reaching 15 admissions in week 24. The number of deaths decreased by 81% since week 19 with 6 deaths reported in week 24. These numbers may increase in future reports as more data become available.

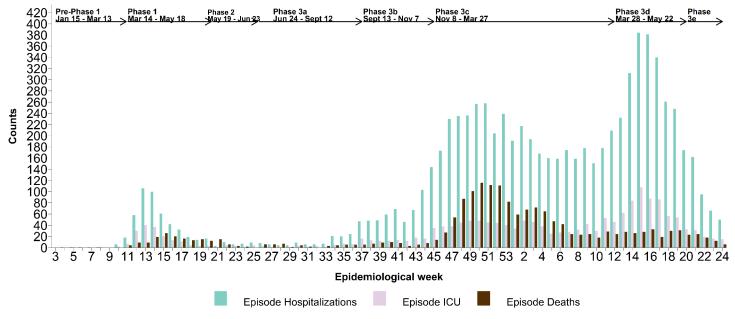
Cumulatively, there have been 16 confirmed cases of <u>Multi-system Inflammatory Syndrome in children and adolescents</u> (MIS-C) in BC from January 1, 2020 to week 24. The median age of these cases is 7 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – June 19, 2021 (week 24)

Severe outcomes by episode date	ŀ	lealth a	uthority (of reside	nce	Residing	Total n/N ^a (%)	
	FH	IH	VIHA	NH	VCH	outside of Canada		
Week 24, hospitalizations	20	9	1	5	15	0	50	
Cumulative hospitalizations ^b	4,384	725	251	655	1,905	14	7,934/147,228 (5)	
Week 24, ICU admissions	6	1	0	4	4	0	15	
Cumulative ICU admissions ^b	867	190	68	167	518	2	1,812/147,228 (1)	
Week 24, deaths	2	0	0	0	4	0	6	
Cumulative deaths	915	155	41	155	478	0	1,744/147,228 (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) – June 19, 2021 (week 24)



Data sources: health authority case line list data

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

F. Age profile, severe outcomes

<u>Table 4</u> displays the distribution of cases and severe outcomes. In week 24, median age of hospital admissions, ICU admissions and deaths was 49 years, 52 years and 77 years, respectively (data not shown).

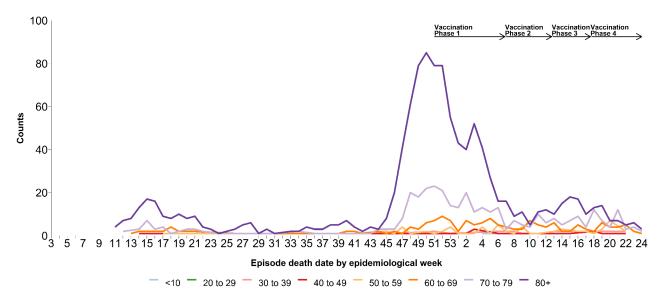
As shown in <u>Figure 11</u>, since week 6, death counts have been low and stable in elderly adults with an average of 11 deaths per week in the 80+ year-olds, 7 in the 70-79-year-olds, 4 in the 60-69-year-olds, and 3 in the 50-59-year-olds.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – June 19, 2021 (week 24) (N= 147,205)^{a,b}

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	8,400 (6)	94 (1) ^c	7 (<1)	2 (<1)	470,017 (9)
10-19	15,855 (11)	67 (1) ^c	14 (1)	0 (0)	529,387 (10)
20-29	33,023 (22)	403 (5)	46 (3)	1 (<1)	699,476 (13)
30-39	27,136 (18)	779 (10)	150 (8)	16 (1)	750,054 (14)
40-49	21,686 (15)	889 (11)	188 (10)	25 (1)	648,377 (12)
50-59	18,351 (12)	1,235 (16)	344 (19)	67 (4)	711,930 (14)
60-69	11,832 (8)	1,490 (19)	451 (25)	166 (10)	686,889 (13)
70-79	6,097 (4)	1,503 (19)	437 (24)	372 (21)	454,855 (9)
80-89	3,327 (2)	1,102 (14)	163 (9)	619 (35)	193,351 (4)
90+	1,498 (1)	386 (5)	17 (1)	476 (27)	52,885 (1)
Total	147,205	7,934	1,812	1,744	5,197,221
Median age	35	63	63	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) – June 19, 2021 (week 24) (N= 1,744)^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.

c. Due to changes in the source data, 1 case moved from age group 10-19 years to <10 years.

G. Care facility outbreaks

As shown in <u>Table 5</u> and <u>Figure 12</u>, 329 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 24, with 3 new outbreaks in week 24. 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.

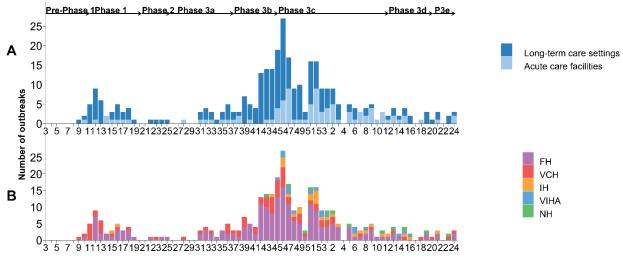
One of the 6 (17%) deaths reported in week 24 was associated with an outbreak in a care facility setting.

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) – June 19. 2021 (week 24) (N=329)

Care facility outbreaks and cases		Cases				Deaths			
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total
Week 24, Care Facility Outbreaks	3	10	1	0	11	1	0	0	1
Cumulative, Care Facility Outbreaks	329	3,574	2,278	6	5,858	1,030	0	0	1,030

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) – June 19, 2021 (week 24) (N=329)



- 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. 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.