British Columbia (BC) COVID-19 Situation Report Week 29: July 18- July 24, 2021

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Provincial COVID-19 incidence increasing, led by surges in Interior Health; hospital and ICU admissions and deaths remain low

Provincial incidence has increased from 6 to 12 per 100K in weeks 28 to 29, with 648 COVID-19 cases in week 29.

Incidence by health authority has stabilized or increased since weeks 25 and 26:

- Since week 26, Fraser Health incidence was stable (at 7 per 100K).
- Since week 26, Vancouver Coastal incidence slightly increased (4 to 8 per 100K).
- Since week 25, Interior Health incidence increased (10 to 43 per 100K).
- Since week 28, Island Health incidence slightly increased (1 to 4 per 100K).
- Since week 26, Northern Health incidence was stable (at 3 per 100K).

Age-specific incidences have been generally stable up to week 27, with recent upward trends in most age groups. The 20-29 year-olds report the highest incidence in week 29; it has increased since week 25 from 11 to 42 per 100. The incidence also increased in 15-19 year-olds since week 28, from 10 to 21 per 100K, and in 30-39 year-olds since week 26, from 7 to 17 per 100K.

By week 29, the single-dose vaccination coverage in eligible 12+ year-olds reached 80.5%; 60.5% were fully vaccinated.

Testing of MSP-funded specimens increased slightly from ~17,000 in week 28 to ~19,000 in week 29. Positivity of MSP-funded specimens also increased from 2.0% to 3.2% from week 28 to 29.

The number of weekly hospital admissions increased slightly, reaching 20 admissions in week 29, up from 15 in week 28. Intensive care unit (ICU) admissions also increased slightly, reaching 9 admissions in week 29, up from 2 in week 28. The number of deaths remain low and stable with 4 deaths reported in week 29.

By case of earliest onset date, there were no new outbreaks reported in care settings in week 29.

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 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

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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 August 02, 2021, laboratory data on July 30, 2021, PIR vaccine coverage date on July 30, 2021, and PCMS hospitalization data on August 02, 2021.

A. COVID-19 case counts and epidemic curves

As shown in <u>Figure 1</u>, provincial incidence has increased since week 28 from 8 to 12 per 100K, after a period of stabilization between week 25 and week 27. Up to week 29, 2021, there have been 149,308 cases for a cumulative incidence of 2,869 per 100K (<u>Table 1, Figure 1</u>). Rates may increase as data by episode date become more complete.

Incidence by health authority (HA) has stabilized or increased since weeks 25 and 28. As shown in <u>Figure 2</u>, incidence increased in Interior Health (IH) from week 25 to week 29 from 10 to 43 per 100K. This was driven mainly by the Okanagan health service delivery area (HSDA) which increased from 20 (week 28) to 64 (week 29) cases per 100K. Incidence has been increasing slightly since week 26 in Vancouver Coastal Health (VCH) from 4 to 8 per 100K and from week 28 in Island Health (VIHA) from 1 to 4 per 100K. Incidence has been stable since week 26 in Fraser Health (FH) at 6-7 per 100K and Northern Health (NHA) at ~3 per 100K per week.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – July 24, 2021 (week 29) (N= 149,308)

Case tallies by enisade date	Health Authority of Residence					Outside	Total	
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	Total	
Week 29, case counts	147	361	34	10	96	0	648	
Cumulative case counts	86,358	13,900	5,236	7,825	35,770	219	149,308	
Week 29, cases per 100K population	7	43	4	3	8	NA	12	
Cumulative cases per 100K population	4,389	1,654	598	2,704	2,921	NA	2,869	

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC <u>January 15, 2020 (week 3)</u> – July 24, 2021 (week 29) (N= 149,308)

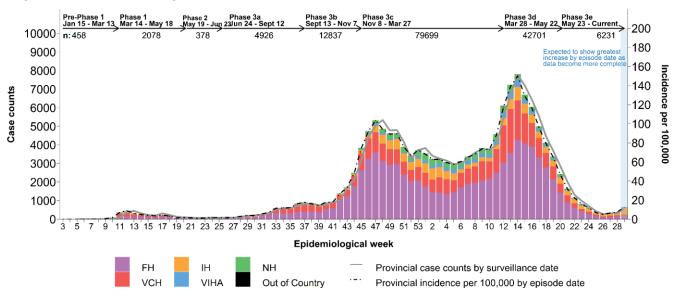
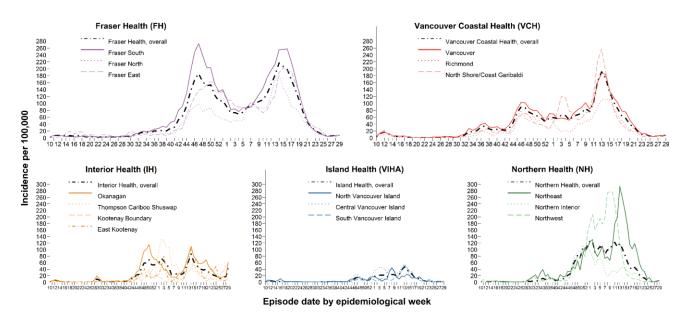


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – July 24, 2021 (week 29) (N= 149,308)



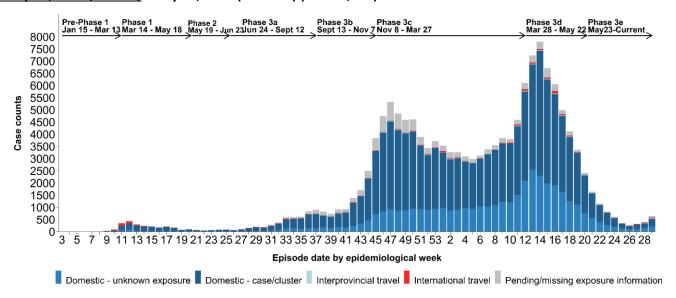
B. Likely sources of infection

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 24, 2021 (week 29) (N= 149,308)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 29 , Exposures	24 (4)	28 (4)	312 (48)	215 (33)	69 (11)
Cumulative Exposures	1,694 (1)	651 (<1)	95,908 (64)	40,407 (27)	10,648 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – July 24, 2021 (week 29) (N= 149,308)



C. Test rates and percent positive

As shown by the darker-colored bars in <u>Figure 4</u>, testing of MSP-funded specimens has slightly increased from $^{\sim}17,000$ in week 28 to $^{\sim}19,000$ specimens in week 29. Positivity of MSP-funded specimens has also increased from 2.0% to 3.2% from week 28 to 29.

As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens has been stable across HAs since week 26-28, with slight increases in all HAs in week 29. As shown in **Panel B**, percent positivity for MSP-funded tests has been stable since week 26 for FH (~1.5%). All other HAs, except NHA, have seen increases in percent positivity from week 28 to week 29, notably in IH from 3.8% to 8.0%, VCH from 1.8% to 2.7% and VIHA from 0.8% to 1.5%. NHA saw a decrease from 3.1% to 1.8%.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – July 24, 2021 (week 29)

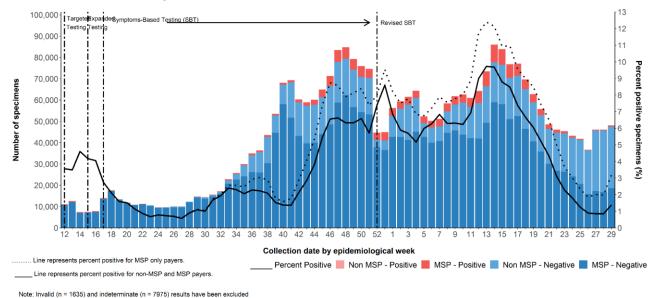
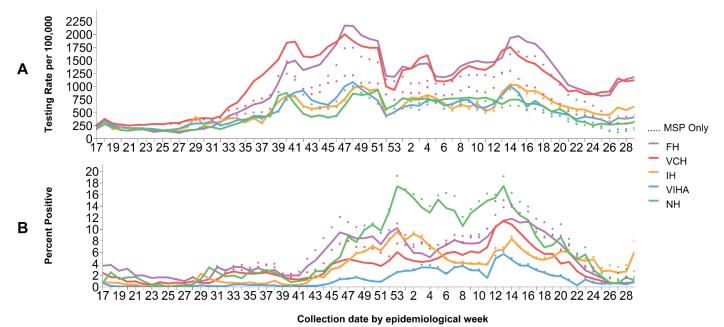


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – July 24, 2021 (week 29)



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 28. The 80+ year-olds continue to have the highest testing rate for week 29 at 644 per 100K.

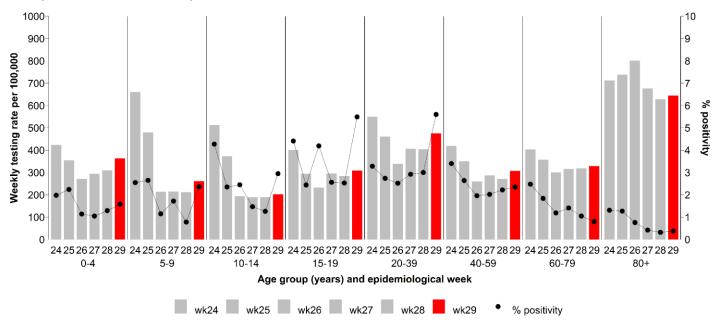
As shown by the black dots in Figure 6, the percent positivity has increased since week 28 in all age groups, except the 60-79 and 80+ year olds. In week 29, most notably the 20-39 and 15-19 year-olds saw sharp increases from week 28 to 29, from 2.5% and 3%, respectively to \sim 5.5% (highest percent positivity). The 10-14 and 5-9 year-olds increased from week 28 to 29 from 1.2% to 2.9% and 0.8% to 2.4%, respectively.

Case distribution and weekly incidence by age group

As shown in <u>Figure 7</u>, 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 up to week 27, with recent upward trends in most age groups. The 20-29 year-olds report the highest incidence in week 29; it increased since week 25 from 11 to 42 per 100K; the 15-19 year-olds have increased since week 28 from 10 to 21 per 100K, the 30-39 year-olds have increased since week 26 from 7 to 17 per 100K, and the <10, 10-14 and 80+ year-olds have increased since weeks 27-28 from 3.2 to 9.4 per 100K, 2.8 to 6.4 per 100K, and 0.4 to 2.4 per 100K, respectively. The 40-79 year-olds have stabilized or declined since week 28.

Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC January 20, 2020 (week 4) – July 24, 2021 (week 29)



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) – July 24, 2021 (week 29) (N= 148,772)

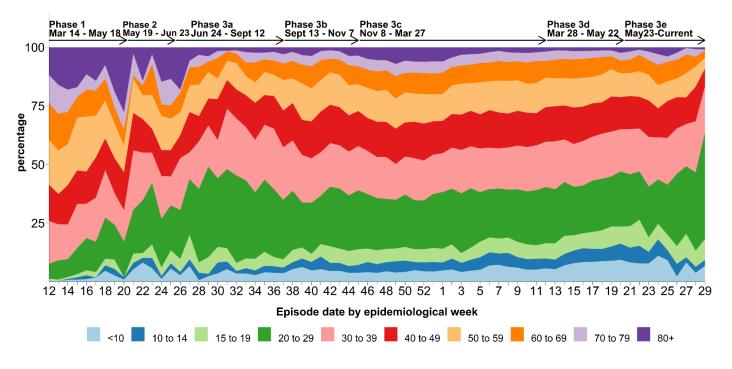
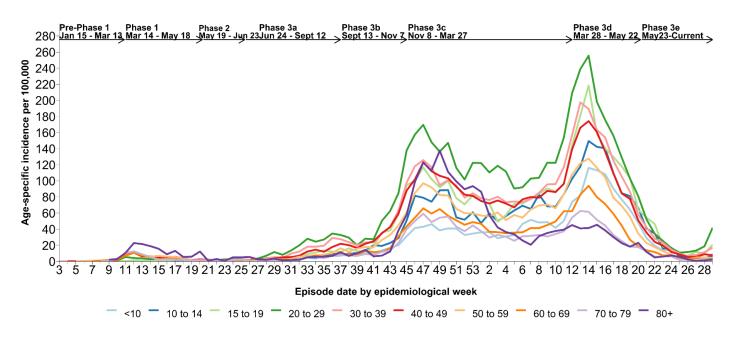


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC <u>January 15, 2020 (week 3)</u> – July 24, 2021 (week 29) (N= 149,285)



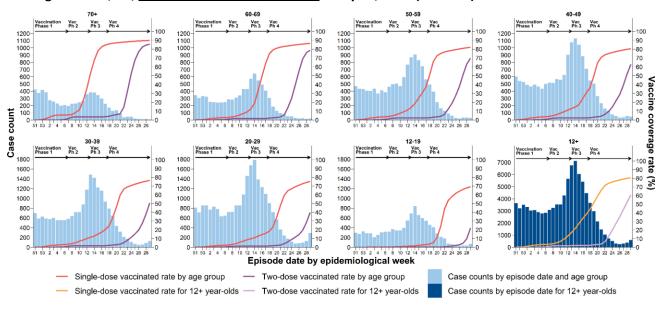
Vaccine coverage and weekly cases by age group

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 29, the overall single-dose vaccination coverage in the eligible 12+ year-olds reached 80.5%, and 60.5% were fully vaccinated. The single-dose coverage for age groups 50+ years of age ranged from 82-90%, and two-dose coverage ranged from 69-86%, with 59 cases reported for those age groups combined.

For younger adults, single-dose coverage in the 20-49 year-olds was between 75-80.5%, and two-dose coverage ranged between 40-63%, with 471 cases reported for those age groups combined.

<u>Figure 9.</u> Weekly age-specific single-dose and two-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC, December 13, 2020 (week 51) – July 24, 2021 (week 29)



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 increased slightly reaching 20 admissions in week 29, up from 15 admissions in week 28. (<u>Table 3, Figure 9</u>). Intensive care unit (ICU) also increased slightly, reaching 9 admissions in week 29, up from 2 admissions in week 28. The number of deaths remain low and stable with 4 deaths reported in week 29. These numbers may increase in future reports as more data become available.

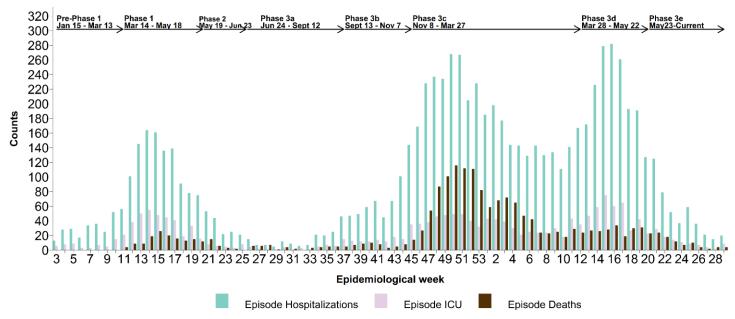
Cumulatively, there have been 16 confirmed cases of <u>Multi-system Inflammatory Syndrome in children and adolescents (MIS-C)</u> in BC from January 1, 2020 to week 29. No new cases were reported in week 29. The median age of these cases is 7 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – July 24, 2021 (week 29)

Severe outcomes by episode date	ŀ	Health authority of residence				Residing	= /a/3 /a/)	
	FH	IH	VIHA	NH	VCH	outside of Canada	Total n/N ^a (%)	
Week 29, hospitalizations	11	5	1	3	0	0	20	
Cumulative hospitalizations ^b	4,486	765	257	668	1,927	14	8,117/149,308 (5)	
Week 29, ICU admissions	2	5	0	2	0	0	9	
Cumulative ICU admissions ^b	876	198	71	179	521	2	1,847/149,308 (1)	
Week 29, deaths	1	0	0	1	2	0	4	
Cumulative deaths	925	161	41	157	486	0	1,770/149,308 (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 10. COVID-19 hospital admissions and deaths by episode date, BC January 15, 2020 (week 3) – July 24, 2021 (week 29)



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

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F. Age profile, severe outcomes

<u>Table 4</u> displays the distribution of cases and severe outcomes. In week 29, median age of hospital admissions, ICU admissions and deaths was 46 years, 58 years and 66 years, respectively, based on health authority case line lists only (data not shown).

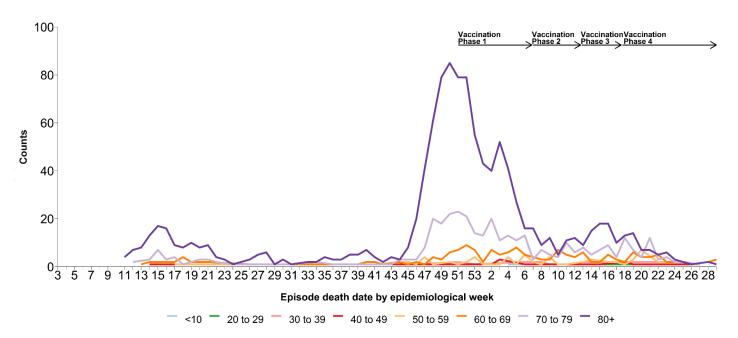
As shown in <u>Figure 11</u>, since week 23, death counts have been low and stable in elderly adults with an average of 2 deaths per week in each of the 80+ year-olds and the 70-79-year-olds, and 1 in each of the 60-69-year-olds and the 50-59-year-olds.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – July 24, 2021 (week 29) (N= 149,285)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	8,532 (6)	95 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	16,088 (11)	68 (1)	15 (1)	0 (<1)	529,387 (10)
20-29	33,737 (23)	418 (5)	45 (2)	2 (<1)	699,476 (13)
30-39	27,541 (18)	820 (10)	157 (9)	16 (1)	750,054 (14)
40-49	21,928 (15)	904 (11)	191 (10)	27 (2)	648,377 (12)
50-59	18,506 (12)	1,260 (16)	353 (19)	71 (4)	711,930 (14)
60-69	11,949 (8)	1,531 (19)	463 (25)	175 (10)	686,889 (13)
70-79	6,143 (4)	1,525 (19)	440 (24)	375 (21)	454,855 (9)
80-89	3,352 (2)	1,119 (14)	165 (9)	623 (35)	193,351 (4)
90+	1,509 (1)	391 (5)	17 (1)	479 (27)	52,885 (1)
Total	149,285	8,131	1,853	1,770	5,197,221
Median age ^c	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) – July 24, 2021 (week 29) (N= 1,770)^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. 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>, 332 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 29, with no new outbreaks in week 29. Since week 16, only five acute care and 13 long-term care (i.e. long-term care or assisted living) facility outbreaks were reported.

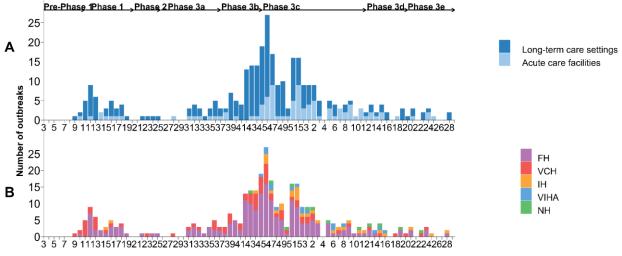
One of the four deaths reported in week 29 was associated with an outbreak in a care facility setting.

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 24, 2021 (week 29) (N=332)

Care facility outbreaks and cases		Cases				Deaths			
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total
Week 29, Care Facility Outbreaks	0	3	0	0	3	1	0	0	1
Cumulative, Care Facility Outbreaks	332	3,603	2,280	6	5,889	1,034	0	0	1,034

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 24, 2021 (week 29) (N=332)



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/