### British Columbia (BC) COVID-19 Situation Report Week 36: September 05- September 11, 2021

Table of Contents	5	Provincial COVID-19 incidence, hospital and ICU admissions stable while deaths slightly increase
Epidemic curve and	2	Provincial COVID-19 incidence was 79 cases per 100K with 4,134 COVID-19 cases recorded in week 36.
regional incidence	<u>2</u>	From weeks 35 to 36, incidence by episode date:
Likely sources of infection	<u>3</u>	<ul> <li>Fraser Health: decreased from 75 to 68 per 100K</li> <li>Vancouver Coastal: decreased from 57 to 52 per 100K</li> <li>Interior Health: decreased from 192 to 130 per 100K</li> </ul>
Test rates and % positive	<u>4</u>	<ul> <li>Island Health: increased from 49 to 52 per 100K</li> <li>Northern Health: increased from 156 to 206 per 100K</li> </ul>
Age profile, testing and cases	<u>5</u>	Incidence in all age groups has decreased or stabilised since weeks 32-35. The highest age- specific incidence continues to occur in 20-29 year-olds (135 per 100K), followed by 30-39-year- olds (110 per 100K).
Severe outcomes	<u>8</u>	By week 36 the single-dose vaccination coverage in the eligible 12+ year-olds reached 86%, and 78% were fully vaccinated.
Age profile, severe outcomes	<u>9</u>	Testing of MSP-funded specimens stabilized at ~53K specimens in weeks 34 to 36. Positivity of MSP-funded specimens has been increasing slightly since week 34 from 8.9% to 9.7%.
Care facility outbreaks	<u>10</u>	The weekly number of hospital admissions have slightly decreased from week 35 to week 36, from 258 to 251 admissions. ICU admissions also decreased from week 35 to week 36, from 81 to 59 admissions. Deaths have been increasing since week 30, from 1 to 30 deaths in week 36.
Additional resources	<u>10</u>	By case of earliest onset date, 2 new outbreaks were reported in healthcare settings in week 36.

#### Table of <u>pandemic phases</u> 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 September 20, 2021, laboratory data on September 17, 2021, PIR vaccine coverage date on September 17, 2021, and PCMS hospitalization data on September 20, 2021.

#### A. COVID-19 case counts and epidemic curves

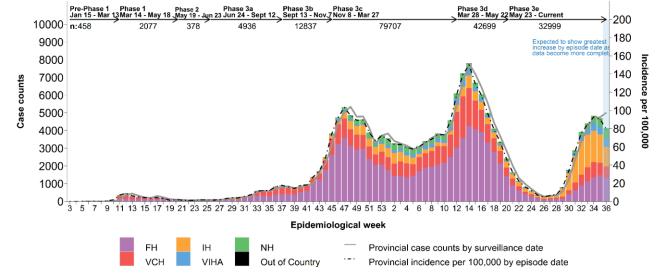
Up to week 36, 2021, there have been 176,091 cases for a cumulative incidence of 3,383 per 100K (<u>Table 1, Figure 1</u>). The provincial incidence by episode date was 79 per 100K in week 36, compared to 90 per 100K week 35. As shown by the higher incidence using surveillance date, incidence by episode date will increase as data become more complete for recent weeks.

As shown in <u>Figure 2</u>, incidence varied by Health Authority (HAs) from weeks 35 to 36. Incidence increased in Northern Health (NH), from 156 to 206 per 100K, and Island Health (VIHA), from 49 to 53 per 100K. All other HAs reported a decrease in incidence by episode date: Fraser Health (FHA) decreased from 75 to 68 per 100K, Interior Health (IH) from 193 to 130 per 100K and Vancouver Coastal (VCH) from 57 to 52 per 100K. These rates may increase as data become more complete. Incidence increased mainly in the Northern Interior, Northwest, Fraser East and Central Vancouver Island Health Service Delivery Areas.

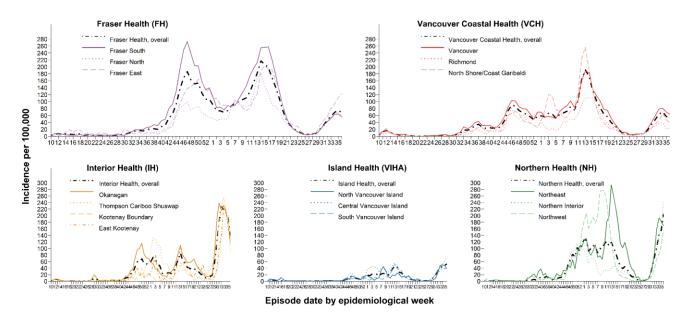
### Table 1. Episode-based case tallies by health authority, BC, <u>Jan 15, 2020 – September 11, 2021 (week 36) (N= 176,091)</u>

Case tellies by enjaged date	H	lealth Aut	hority of	Outside	Total			
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	rotar	
Week 36, case counts	1,336	1,097	461	595	642	3	4,134	
Cumulative case counts	93,644	24,724	7,462	9,976	40,009	276	176,091	
Week 36, cases per 100K population	68	130	53	206	52	NA	79	
Cumulative cases per 100K population	4,759	2,941	853	3,447	3,267	NA	3,383	

# Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 176,091)



# Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC <u>March 01, 2020 (week 10)</u> – September 11, 2021 (week 36) (N= 176,091)



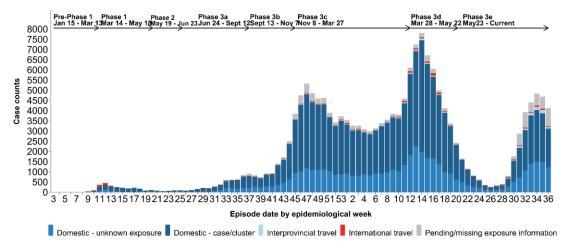
#### B. Likely sources of infection

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, BCJanuary 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 176,091)

Likely exposure <sup>a</sup> (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 36 , Exposures	33 (1)	90 (2)	1,892 (46)	1,218 (29)	901 (22)
<b>Cumulative Exposures</b>	2,253 (1)	1,880 (1)	114,520 (65)	46,992 (27)	10,446 (6)

#### Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 176,091)<sup>a</sup>

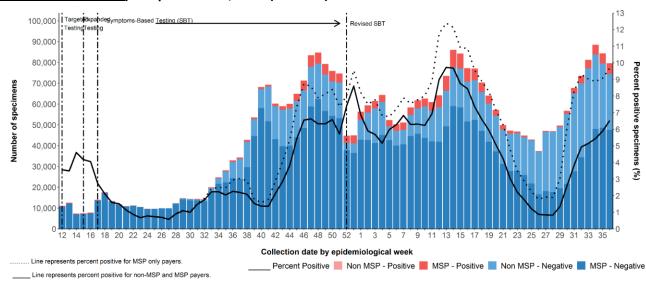


a. On September 13 2021, the likely source algorithm was changed to improve exposure classification, which resulted in a decrease in the number of pending/missing and unknown domestic cases and reassignment of these to other classifications.

#### C. Test rates and percent positive

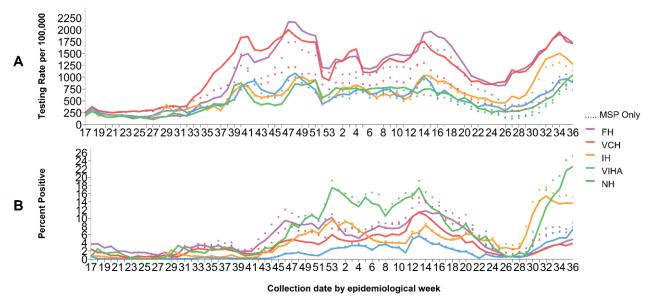
As shown by the darker-colored bars in Figure 4, testing of MSP-funded specimens stabilized at ~53K specimens from weeks 34 to 36. Positivity of MSP-funded specimens has been increasing slightly since week 34 from 8.9% to 9.7%.

As shown in <u>Figure 5</u>, the per capita testing rates (Panel A) have varied by HA. Testing rates have increased most significantly in NHA, from 818 per 100K in week 35 to 938 per 100K in week 36. Testing rates have also increased in VCH, from 852 per 100k in week 35 to 895 per 100K in week 36. Since week 35, testing rates in IHA and VIHA have decreased from 1,236 to 1,144 per 100k, and 753 to 725 per 100K, respectively. Testing rates have stabilized in FHA. Percent positivity (Panel B) for MSP-only specimens have been mostly stable since week 35 in all HAs, with the exception of VIHA and NHA: VIHA increased from 6.5% to 8.9% in weeks 35 to 36 and NHA increased from 1.8% to 25.2% in weeks 29 to 36.



# Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC <u>March 15, 2020 (week 12)</u> – September 11, 2021 (week 36)

Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC <u>March 15, 2020 (week 12)</u> – September 11, 2021 (week 36)



Data source: laboratory PLOVER data

Note: Invalid (n = 1943) and indeterminate (n = 8937) results have been excluded

#### 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 the 5-9, 10-14, 40-5, and 60-79 year age groups have stabilised since week 34. Since week 26, testing rates have increased in the 0-4, 15-19 and 80+ year-olds. Testing rates in the 20-39 year olds decreased since week 34. In week 36, the highest testing rate continues to be in 20-39 year-olds.

As shown by the black dots in **Figure 6**, the percent positivity has stabilized in most age groups since week 35, with the exception of 60+ year-olds and 40-59 year olds where it has been increasing in the last 6 weeks. The highest percent positivity has consistently been in the 10-14 year-olds, at 15.2% in week 36.

#### Case distribution and weekly incidence by age group

As shown in **Figure 7**, the contribution of adults 40-59 year olds increased by 1.6% and the <10 years olds decreased by 1% during the same period. The remaining age groups' contributions remained relatively stable.

As shown in <u>Figure 8</u>, age-specific incidences have decreased or stabilised starting in weeks 32-35 across all age groups. Most notably, the 10-14 year-olds saw a recent decrease from 118 per 100K in week 34 to 88 per 100K in week 36 after multiple weeks of increases. The highest age-specific incidence (135 per 100K) continued to be in 20-29 year-olds, followed by the 30-39-year-olds (110 per 100K). The lowest incidence rates were in the 70-79 year-olds at 31 per 100K. Age-specific incidences may increase as data become more complete.

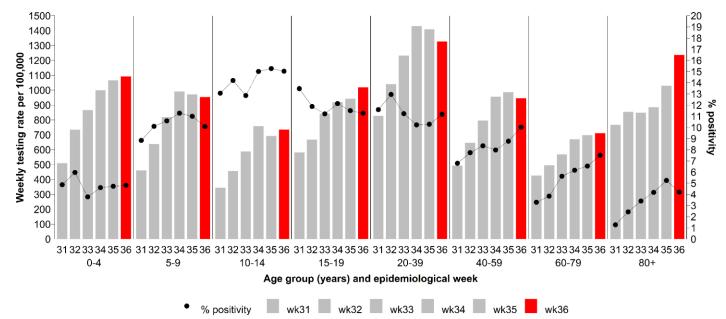


Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC January 20, 2020 (week 4) – September 11, 2021 (week 36)

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> – September 11, 2021 (week 36) (N= 175,552)

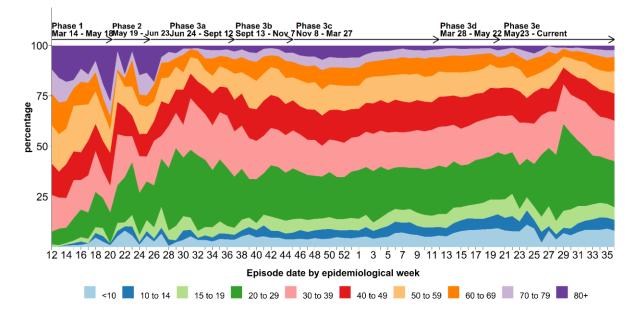
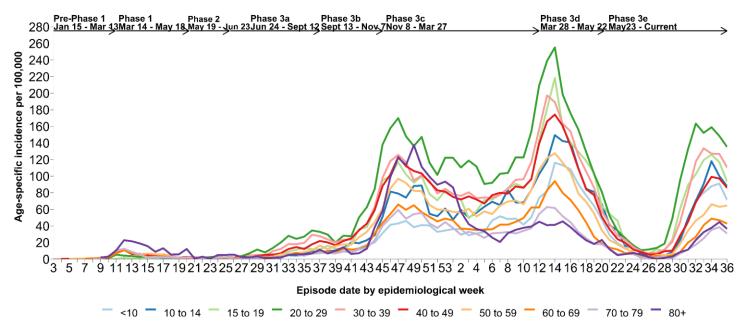


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 176,065)



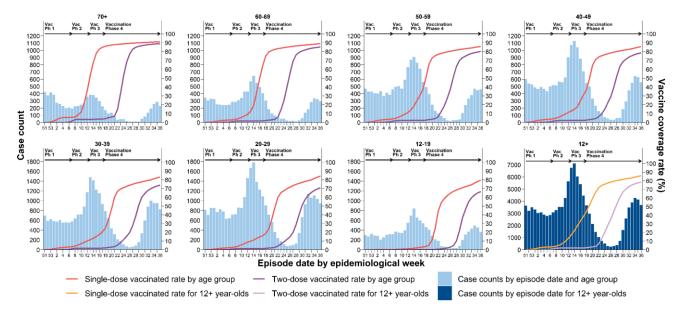
#### Vaccine coverage and weekly cases by age group

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 36, 86% of eligible 12+ year-olds had received a single dose of vaccine and 78% were fully vaccinated. The single-dose coverage for age groups 50+ years ranged from 85-91%, and two-dose coverage ranged from 80-89%, with 986 cases reported for those age groups combined.

In week 36, single-dose coverage in the 20-49 year-olds was between 83-86% and two-dose coverage ranged between 71-79%, with 2,332 cases reported for those age groups combined. Single-dose coverage in the 12-19 year-olds was 79% and 66% were fully vaccinated, with 363 cases reported for that age group.

# <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> – September 11, 2021 (week 36)



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 have slightly decreased from week 35 to week 36, from 258 to 251 admissions (<u>Table 3, Figure 10</u>). ICU admissions also decreased from week 35 to week 36, from 81 to 59 admissions. Deaths have been increasing since week 30, from 1 to 30 deaths in week 36.

Cumulatively, there have been 17 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 36 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

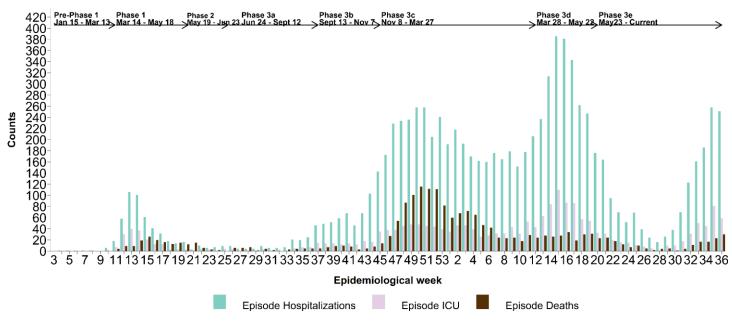
### Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – September 11, 2021 (week 36)

Severe outcomes by episode date		lealth aut	hority of	residen	ce	Residing	Total n/N <sup>a</sup> (%)	
Severe outcomes by episode date	FH	IH	VIHA	NH	VCH	outside of Canada		
Week 36, hospitalizations	76	77	18	39	41	0	251	
Cumulative hospitalizations <sup>b</sup>	4,839	1,229	313	767	2,071	14	9,233/176,091 (5)	
Week 36, ICU admissions	20	16	5	7	11	0	59	
Cumulative ICU admissions <sup>b</sup>	973	307	93	214	563	2	2,152/176,091 (1)	
Week 36, deaths	8	9	5	1	7	0	30	
Cumulative deaths	942	216	56	164	498	0	1,876/176,091 (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) – September 11, 2021 (week 36)



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

#### F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes. In week 36, median age of hospital admissions, ICU admissions and deaths was 58 years, 59 years and 80 years, respectively, based on health authority case line lists only (data not shown).

As shown in **Figure 11**, death counts in the 80+ age group have been increasing since week 31, reaching 16 deaths in week 36. Death counts in the 60-69 year olds have been increasing since week 34, from 1 to 8 deaths in week 36. Since week 32, there has been a weekly average of 1 death in the 50-59 year old age group, 2.5 deaths in the 60-69 year old age group, and 3 deaths in the 70-79 year-olds. There have been an average of 9 deaths per week in 80+ year-olds from week 31 to week 36. There was a weekly average of <1 death in the entire 0-49-year-old group since week 32.

# Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 176,065)<sup>a</sup>

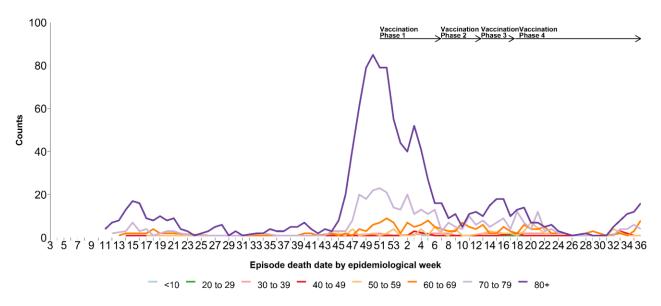
Age group	Cases	Hospitalizations	ICU	Deaths	General BC population n (%)	
(years)	n (%)	n (%) <sup>ь</sup>	n (%)	n (%)		
<10	10,747 (6)	110 (1)	10 (<1)	2 (<1)	470,017 (9)	
10-19	19,434 (11)	88 (1)	18 (1)	0 (<1)	529,387 (10)	
20-29	40,692 (23)	521 (6)	64 (3)	2 (<1)	699,476 (13)	
30-39	33,132 (19)	966 (10)	184 (9)	16 (1)	750,054 (14)	
40-49	25,249 (14)	1,050 (11)	243 (11)	33 (2)	648,377 (12)	
50-59	20,989 (12)	1,452 (16)	424 (20)	80 (4)	711,930 (14)	
60-69	13,579 (8)	1,728 (19)	532 (25)	190 (10)	686,889 (13)	
70-79	6,899 (4)	1,700 (18)	484 (22)	396 (21)	454 <i>,</i> 855 (9)	
80-89	3,683 (2)	1,216 (13)	180 (8)	650 (35)	193,351 (4)	
90+	1,661 (1)	416 (4)	18 (1)	507 (27)	52,885 (1)	
Total	176,065	9,247	2,157	1,876	5,197,221	
Median age <sup>c</sup>	34	62	62	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.</li>
 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.

# Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – September 11, 2021 (week 36) (N= 1,876)<sup>a</sup>



#### G. Care facility outbreaks

As shown in <u>Table 5</u> and <u>Figure 12</u>, 365 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 36. In week 36, two new outbreaks were declared based on earliest case onset date. Since week 28, 31 (89%) outbreaks were reported in long-term care settings and 16 outbreaks (~50%) occurred in IH.

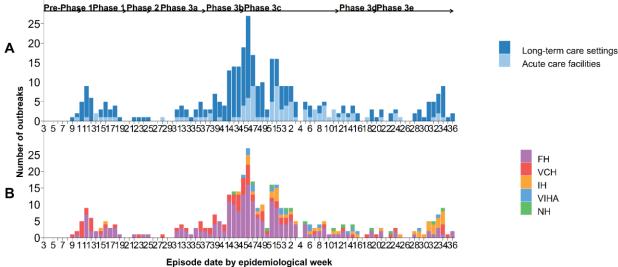
Twelve (40%) out of the 30 deaths reported in week 36 were associated with an outbreak in a care facility setting.

### Table 5. COVID-19 care facility<sup>a,b</sup> outbreaks by earliest case onset<sup>a,c</sup>, associated cases and deaths by episode date, BC<sup>d</sup> January 15, 2020 (week 3) – September 11, 2021 (week 36) (N=365)

Care facility outbreaks and cases		Cases				Deaths			
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total
Week 36, Care Facility Outbreaks	2	50	19	0	69	12	0	0	12
Cumulative, Care Facility Outbreaks	365	3,868	2,423	6	6,297	1,079	0	0	1,079

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<sup>b</sup> outbreaks by earliest case onset<sup>c</sup>, facility type (A) and health authority (B), BC<sup>d</sup> January 15, 2020 (week 3) – September 11, 2021 (week 36) (N=365)



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**

b.

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: <a href="https://public.tableau.com/app/profile/bccdc/viz/BCCDCCOVID-19SurveillanceDashboard/Introduction">https://public.tableau.com/app/profile/bccdc/viz/BCCDCCOVID-19SurveillanceDashboard/Introduction</a>

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>