### British Columbia (BC) COVID-19 Situation Report Week 33: August 15- August 21, 2021

Table of Contents		While increasing in most regions, provincial COVID-19 incidence shows early signs of stabilisation; hospital and ICU admissions and deaths continue to increase provincially					
Epidemic curve and regional incidence	<u>2</u>	Provincial COVID-19 incidence stabilized at 71 per 100K in week 33. There were 3,673 COVID-19 cases recorded in week 33.					
Likely sources of infection	<u>3</u>	<ul> <li>Incidence decreased in IH, but increased in all other regions. From weeks 32 to 33:</li> <li>Fraser Health: increased from 46 to 51 per 100K</li> <li>Vancouver Coastal: increased from 49 to 53 per 100K</li> </ul>					
Test rates and % positive	<u>4</u>	<ul> <li>Interior Health: decreased from 229 to 182 per 100K</li> <li>Island Health: increased from 31 to 33 per 100K</li> <li>Northern Health: increased from 61 to 60 per 100K</li> </ul>					
Age profile, testing and cases	<u>5</u>	<ul> <li>Northern Health: increased from 61 to 69 per 100K</li> <li>Age-specific incidences are increasing or showing early signs of stabilization. In week 33, the highest age-specific incidence (133 per 100K) was in 20-29 year-olds followed by 30-39-year-olds</li> </ul>					
Severe outcomes	<u>8</u>	(113 per 100K) and 15-19-year-olds (101 per 100K). The lowest incidence rate were in the 70+ year-olds at <25 per 100K for each age group (70-79-year-olds and 80+ year-olds).					
Age profile, severe outcomes	<u>9</u>	By week 33, the single-dose vaccination coverage in eligible 12+ year-olds exceeded 83% and 75% were fully vaccinated.					
Care facility outbreaks	<u>10</u>	Testing of MSP-funded specimens has increased to ~45K specimens in week 33. Positivity of MSP-funded specimens has also increased to 9.0% in week 33, with recent stabilization in weeks 32-33.					
Additional resources	<u>10</u>	The weekly number of hospital admissions has been increasing from 16 to 150 admissions in weeks 28 to 33. ICU admissions have increased from 9 to 53 admissions in weeks 30 to 33. Deaths have increased from 1 to 15 deaths in weeks 30 to 33.					
		By case of earliest onset date, 2 new outbreaks were reported in care settings in week 33.					

### 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 August 30, 2021, laboratory data on August 26, 2021, PIR vaccine coverage date on August 26, 2021, and PCMS hospitalization data on August 30, 2021.

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

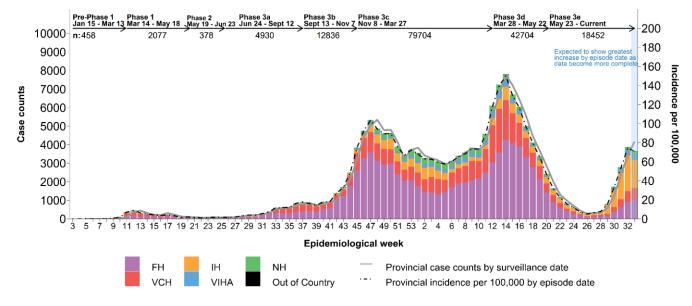
Up to week 33, 2021, there have been 161,539 cases for a cumulative incidence of 3,104 per 100K (<u>Table 1, Figure 1</u>). The provincial incidence by episode date was 71 per 100K in week 33. As shown by the higher incidence using surveillance date, incidence by episode date will likely increase as data become more complete.

Incidence continues to be highest in Interior Health (IH). As shown in <u>Figure 2</u>, incidence in IH decreased from weeks 32 to 33 (229 to 182 per 100K) but may increase as data become more complete. From weeks 32 to 33, incidence slightly increased in all other regions: Fraser Health (46 to 51), Vancouver Coastal Health (49 to 53 per 100K), Island Health (31 to 33 per 100K) and Northern Health (61 to 69 per 100K).

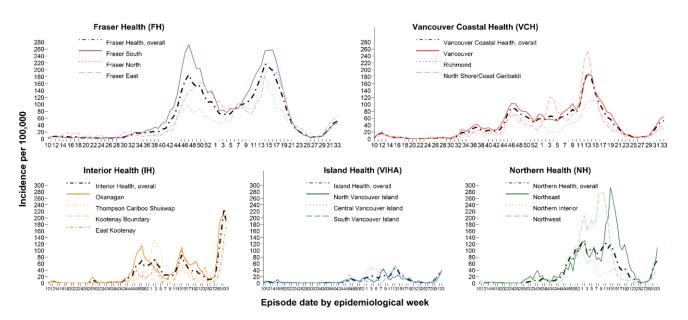
#### Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – August 21, 2021 (week 33) (N= 161,539)

Case tellios hy enisede dete	н	lealth Aut	hority of	Outside	Total			
Case tallies by episode date	FH	IH	VIHA	NH	VCH	Canada	TOLAT	
Week 33, case counts	1,005	1,528	286	201	650	3	3,673	
Cumulative case counts	89,305	19,836	6,087	8,378	37,699	234	161,539	
Week 33, cases per 100K population	51	182	33	69	53	NA	71	
Cumulative cases per 100K population	4,539	2,360	696	2,895	3,078	NA	3,104	

### Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – August 21, 2021 (week 33) (N= 161,539)



## Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC <u>March 01, 2020 (week 10)</u> – August 21, 2021 (week 33) (N= 161,539)



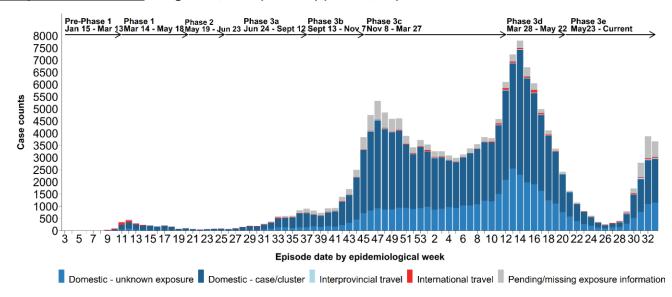
### B. Likely sources of infection

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 21, 2021 (week 33) (N= 161,539)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 33 , Exposures	33 (1)	47 (1)	1,786 (49)	1,156 (31)	651 (18)
<b>Cumulative Exposures</b>	1,830 (1)	821 (1)	101,841 (63)	44,077 (27)	12,970 (8)

## Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – August 21, 2021 (week 33) (N= 161,539)

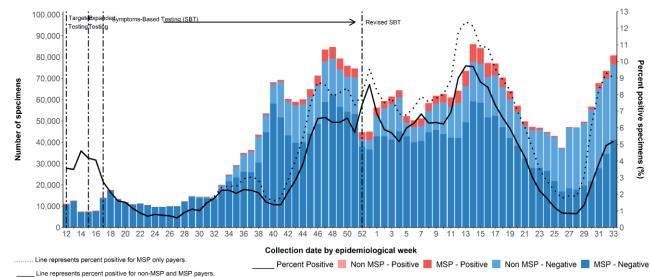


Note: Invalid (n = 1815) and indeterminate (n = 8409) results have been excluded

### C. Test rates and percent positive

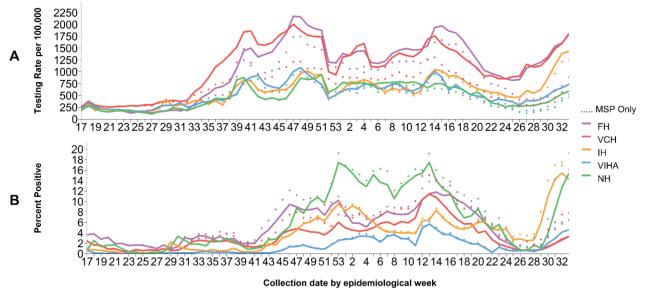
As shown by the darker-colored bars in Figure 4, testing of MSP-funded specimens has increased from ~17-18K specimens weekly between weeks 26-28 to ~45K specimens in week 33. Positivity of MSP-funded specimens has also increased from ~2% in week 26-28 to 9.0% in week 33, with recent stabilization between weeks 32-33.

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 16.1% from week 32 to week 33. Most notably, percent positivity in NHA increased from 16.9% in week 32 to 19.3% in week 33.



## Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC <u>March 15, 2020 (week 12)</u> – August 21, 2021 (week 33)

Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – August 21, 2021 (week 33)



Data source: laboratory PLOVER data

### D. Age profile – Testing and cases

#### Testing rates and percent positivity by age group

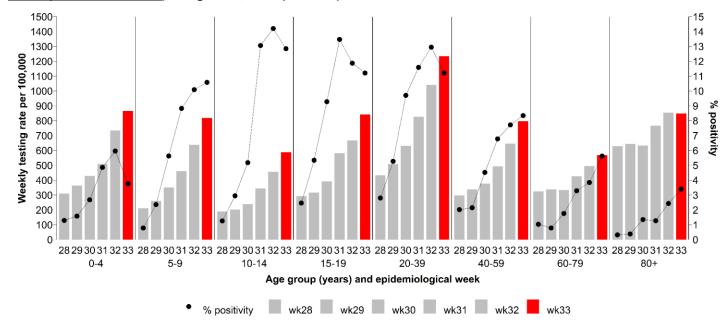
As shown by the bars in **Figure 6**, testing rates in all age groups increased since week 32, with the exception of the 80+ yearolds in which it was stable. In week 33, the highest testing rate by far was in the 20-39 year-olds.

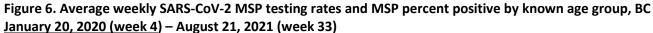
As shown by the black dots in <u>Figure 6</u>, the percent positivity has been increasing in most age groups since weeks 28-29. Recent declines have been noted since weeks 31-32 in the 10-39 year-olds. The highest percent positivity in week 33 was in the 10-14 year-olds at 12.8%, followed by the 15-19 years olds and 20-39 year olds at 11.2%.

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

As shown in Figure 7, adults between 20 and 39 years of age generally comprise half of the cases. The contribution of the 20-29 year-olds decreased from 43% in week 29 to 25% of cases in week 33, while the 30-59 year olds, increased by ~3% in each age group during the same period.

As shown in **Figure 8**, age-specific incidences are increasing or showing early signs of stabilisation. In week 33, the highest agespecific incidence (133 per 100K) was in 20-29 year-olds followed by the 30-39-year-olds (113 per 100K) and the 15-19-yearolds (101 per 100K). The lowest incidence rates were in the 70-79 and 80+ year-olds, at <25 per 100K for each age group. Agespecific incidences may increase as data become more complete.





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> – August 21, 2021 (week 33) (N= 161,003)

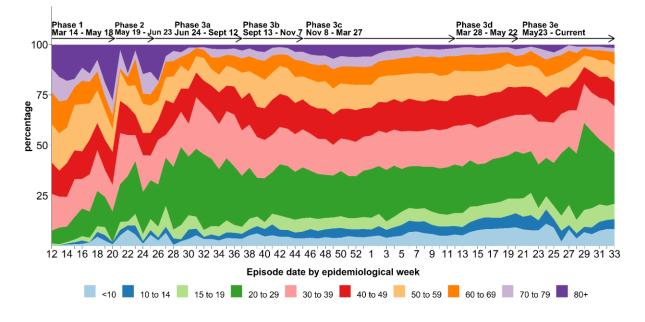
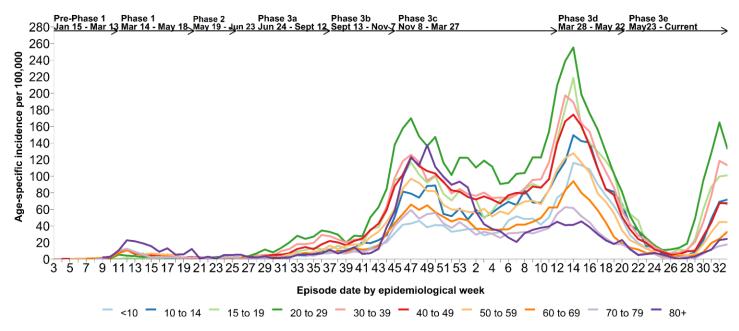


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – August 21, 2021 (week 33) (N= 161,516)



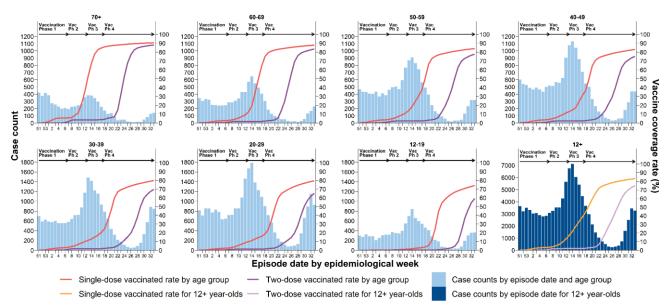
#### Vaccine coverage and weekly cases by age group

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 33, the overall single-dose vaccination coverage in the eligible 12+ year-olds reached 83% and 75% were fully vaccinated. The single-dose coverage for age groups 50+ years ranged from 84-90%, and two-dose coverage ranged from 77-88%, with 689 cases reported for those age groups combined.

For younger adults, single-dose coverage in the 20-49 year-olds was between 79-83%, and two-dose coverage ranged between 65-75%, with 2,213 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 21, 2021 (week 33)



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 33 from 16 to 150 admissions. (<u>Table 3, Figure</u> <u>10</u>). ICU admissions have increased from 9 to 53 admissions in weeks 30 to 33. Deaths have increased from 1 to 15 deaths in weeks 30 to 33. Severe outcomes may increase with delay relative to cases and as data become more complete.

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 33 in 2021, with no new cases reported since the last report. The median age of these cases is 8 (range 1-15) years.

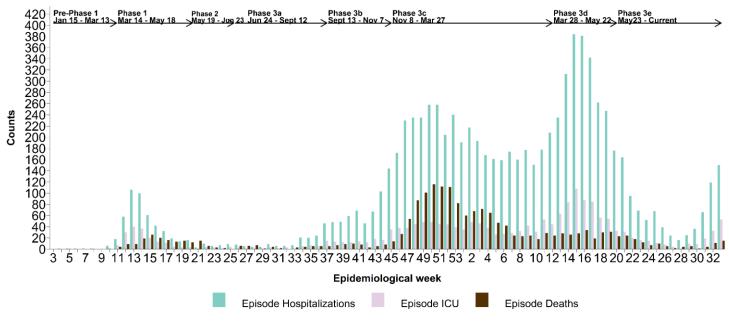
## Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – August 21, 2021 (week 33)

Severe outcomes by episode date		lealth a	uthority o	of reside	nce	Residing	Total n/N <sup>a</sup> (%)	
Severe outcomes by episode date	FH	H	VIHA	NH	VCH	outside of Canada		
Week 33, hospitalizations	44	76	9	4	17	0	150	
Cumulative hospitalizations <sup>b</sup>	4,606	956	275	680	1,958	14	8,489/161,539 (5)	
Week 33, ICU admissions	20	19	6	3	5	0	53	
Cumulative ICU admissions <sup>b</sup>	910	251	81	189	528	2	1,961/161,539 (1)	
Week 33, deaths	2	10	2	1	0	0	15	
Cumulative deaths	929	185	43	160	487	0	1,804/161,539 (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) – August 21, 2021 (week 33)



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

### F. Age profile, severe outcomes

<u>Table 4</u> displays the distribution of cases and severe outcomes. In week 33, median age of hospital admissions, ICU admissions and deaths was 56 years, 55 years and 78 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 a weekly average of three deaths in the 80+ year-olds, and one death in each of the following age groups: 50-59-year-olds, 60-69-year-olds, 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
<u>January 15, 2020 (week 3</u> ) – August 21, 2021 (week 33) (N= 161,516) <sup>a</sup>

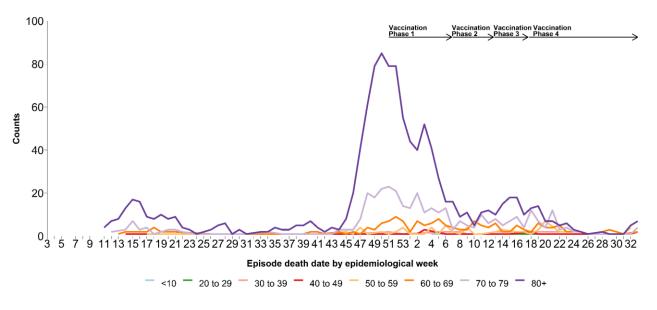
Age group (years)	Cases n (%)	Hospitalizations n (%) <sup>b</sup>	ICU n (%)	Deaths n (%)	General BC population n (%)	
<10	9,494 (6)	99 (1)	8 (<1)	2 (<1)	470,017 (9)	
10-19	17,608 (11)	76 (1)	18 (1)	0 (<1)	529,387 (10)	
20-29	37,428 (23)	458 (5)	54 (3)	2 (<1)	699,476 (13)	
30-39	30,214 (19)	872 (10)	170 (9) 16 (1)		750,054 (14)	
40-49	23,289 (14)	956 (11)	213 (11)	30 (2)	648,377 (12)	
50-59	19,522 (12)	1,322 (16)	381 (19)	77 (4)	711,930 (14)	
60-69	12,550 (8)	1,594 (19)	486 (25)	178 (10)	686,889 (13)	
70-79	6,383 (4)	1,578 (19)	452 (23)	382 (21)	454,855 (9)	
80-89	3,455 (2)	1,147 (14)	168 (9)	629 (35)	193,351 (4)	
90+	1,573 (1)	402 (5)	17 (1)	488 (27)	52,885 (1)	
Total	161,516	8,504	1,967	1,804	5,197,221	
Median age <sup>c</sup>	35	62	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.</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) – August 21, 2021 (week 33) (N= 1,804)<sup>a</sup>



### **G.** Care facility outbreaks

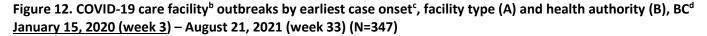
As shown in <u>Table 5</u> and <u>Figure 12</u>, 347 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 33. After a period of no new outbreaks declared in weeks 26 and 27, 2-5 outbreaks have been reported each week in weeks 28 to 33. All these recent outbreaks but one were reported from long term care settings. In week 33, one outbreak was declared in a long-term care facility and one, in an acute care facility.

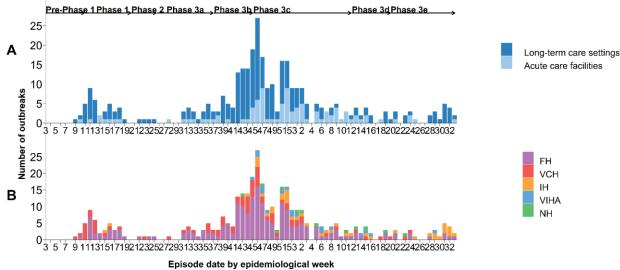
Six (40%) out of the fifteen deaths reported in week 33 were associated with an outbreak in a care facility setting.

## 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) – August 21, 2021 (week 33) (N=347)

Care facility outbreaks and cases			es	Deaths					
by episode date	Outbreaks	Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total
Week 33, Care Facility Outbreaks	2	42	10	0	52	6	0	0	6
Cumulative, Care Facility Outbreaks	347	3,693	2,345	6	6,044	1,047	0	0	1,047

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.





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: <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>