British Columbia (BC) COVID-19 Situation Report Week 27: July 04- July 10, 2021

Table of Contents		COVID-19 incidence low and stable; hospitalizations and deaths continue to decline
Epidemic curve and regional incidence	<u>2</u>	There were 280 COVID-19 cases in week 27; incidence has decreased by 96% since the peak in Wave 3 to reach 5 per 100K, unchanged from week 26.
Likely sources of infection	<u>3</u>	Incidence decreased in all health authorities in the 10-14 weeks prior to week 26 with stabilization in week 27. After a slight increase in IH incidence in week 26, incidence decreased again in week 27. Incidence in VCH increased slightly from 4/100K in week 26 to 6/100K in week 27.
Test rates and % positive	4	Age specific incidences decreased from weeks 13-14 to week 25-26 in all age groups and
Age profile, testing and cases	<u>5</u>	stabilized or slightly increased in week 27. Notably, the <10, 15-19 and 20-29 year age group incidences increased slightly from week 26 to week 27.
Severe outcomes	<u>8</u>	Up to week 27, single-dose vaccine coverage for all age groups 12+ years reached 79%; the highest coverage was in the 70+ year-olds at almost 90%, met by 6 cases in week 27.
Age profile, severe	<u>9</u>	Testing of MSP-funded specimens has stabilised at ~17,500 specimens in week 27. Positivity of MSP-funded specimens has also stabilized at 2.0% in week 27.
Care facility outbreaks <u>1</u>	<u>0</u>	Compared to week 26, there has been a decrease from 38 to 23 hospital admissions and a decrease from 4 to 2 deaths in week 27. Intensive care admissions have been decreasing since week 15 (107 admissions), reaching 4 admissions in week 27.
Emerging respiratory pathogens update	<u>0</u>	By case of earliest onset date, there were no new outbreaks reported in a care setting in week 27.

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	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 19, 2021, laboratory data on July 16, 2021, PIR vaccine coverage date on July 16, 2021, and PCMS hospitalization data on July 19, 2021.

A. COVID-19 case counts and epidemic curves

As shown in **Figure 1**, incidence has decreased by 96% since the peak in Wave 3 to reach 5 per 100K in week 27, unchanged from week 26. Provincially, up to week 27, 2021, there have been 148,217 cases for a cumulative incidence of 2,848 per 100K (**Table 1, Figure 1**). Rates may increase as data by episode date become more complete.

As shown in <u>Figure 2</u>, incidence decreased in all health authorities in the 10-14 weeks prior to week 26 with stabilization in week 27. In week 27, Interior Health (IH) had the highest incidence at 10/100K, followed by Vancouver Coastal Health (VCH) at 6/100K, Fraser Health (FH) at 5/100K, Island Health (VIHA) at 2/100K and Northern Health (NH) at 1/100K. After a slight increase in IH incidence in week 26, incidence decreased in all IH health service delivery areas (HSDAs) in week 27. Incidence in VCH increased slightly from 4/100K in week 26 to 6/100K in week 27. This was driven by slight increases in North Shore/Coast Garibaldi and Richmond HSDAs. Rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – July 10, 2021 (week 27) (N= 148,217)

Case tallies by enisode date	н	ealth Aut	hority of	Outside	Total			
Case talles by episode date	FH	IH	VIHA	NH	VCH	Canada	TOtal	
Week 27, case counts	98	87	16	2	73	4	280	
Cumulative case counts	86,058	13,359	5,187	7,805	35,591	217	148,217	
Week 27, cases per 100K population	5	10	2	1	6	0	5	
Cumulative cases per 100K population	4,374	1,589	593	2,697	2,906	0	2,848	

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – July 10, 2021 (week 27) (N= 148,217)



Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC <u>March 01, 2020 (week 10)</u> – July 10, 2021 (week 27) (N= 148,217)



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. In week 27, 6% of cases were attributed to international travel; this proportion has been increasing since week 24.

Table 2. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – July 10, 2021 (week 27) (N= 148,217)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/ missing
Week 27 , Exposures	18 (6)	0 (0)	141 (50)	103 (37)	18 (6)
Cumulative Exposures	1,643 (1)	615 (<1)	95,309 (64)	40,082 (27)	10,568 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – July 10, 2021 (week 27) (N= 148,217)



British Columbia (BC) C VID-19 Situation Report

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 ~17,500 specimens in week 27. Positivity of MSP-funded specimens has also stabilized at 2.0% in week 27; this is comparable to positivity at the end of August 2020.

As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens increased slightly from week 26 to week 27 in most HAs, with the exception of NHA. As shown in **Panel B**, percent positivity for MSP-funded tests decreased slightly in FHA, IHA and NHA and increased slightly in VCH and VIHA since week 26. For week 27, positivity was highest in IH at 3.5% followed by VCH at 2.4%, NHA at 1.3%, and lowest in VIHA and FH at 1.3%.





Note: Invalid (n = 1602) and indeterminate (n = 7861) results have been excluded

Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – July 10, 2021 (week 27)



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>, in week 27, testing rates in all age groups remained stable or slightly increased, with 80+ year-olds decreasing compared to week 26. The 80+ year-olds continue to have the highest testing rate by far for week 27 at 677 per 100K.

As shown by the black dots in <u>Figure 6</u>, the percent positivity has decreased in all age groups since at least week 21, with recent stabilizations. In week 27, the percent positivity was highest in the 20-39 year-olds at 2.9%, followed by the 15-19, 40-59, 5-9 year age groups, which were comparable at ~2%.

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 decreased from weeks 13-14 to week 25-27 in all age groups with relative decreases ranging from 95% to 98%, and stabilized or slightly increased in week 27. Notably, the <10, 15-19 and 20-29-year-old incidences increased slightly from week 26 to week 27. The highest incidences in week 27 were in the 20-29-year-olds, 15-19-year-olds and 30-39-year-olds at 12, 11 and 7 per 100K, respectively and the lowest was in the 80+ year-olds at 0.4 per 100K. Week 27 age-specific incidences are likely to 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> – July 10, 2021 (week 27) (N= 147,681)



Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – July 10, 2021 (week 27) (N= 148,194)



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 communitybased older adults 70+ years of age started between weeks 10 and 14. As shown in <u>Figure 9</u>, compared to the very steep increase in vaccination coverage from week 10 (11%) to week 16 (83%), rates have increased at a slower rate since week 17 reaching 89% in week 27 when there were only 6 cases reported in this 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 27, coverage reached 86%, 81%, and 79% reflecting case counts of 19, 24, and 30 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 27, coverage was 75% and 73% with 54 and 89 cases for the 30-39 and 20-29 year-old groups, respectively.

The vaccination of children 12-19 years of age started in week 20; by week 27, coverage has steadily risen to 66% with 32 cases in this age group. Overall, single-dose vaccine coverage for all age groups 12+ years reached 79% by week 27, a 1% increase since week 26.

<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> – July 10, 2021 (week 27)



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 94% since then, reaching 23 admissions in week 27. (Table 3, Figure 9). Intensive care unit (ICU) admissions decreased by 96% since week 15 (107 admissions), reaching 4 admissions in week 27. The number of deaths decreased by 93% since week 19 (31 deaths) with 2 deaths reported in week 27. 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 27. No new cases were reported in week 27. 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 10, 2021 (week 27)

Source outcomes by onleads data	ł	lealth a	uthority o	of reside	nce	Residing	Total n/N ^a (%)	
Severe outcomes by episode date	FH	IH	VIHA	NH	VCH	outside of Canada		
Week 27, hospitalizations	12	6	1	1	3	0	23	
Cumulative hospitalizations ^b	4,463	757	255	664	1,920	14	8,073/148,217 (5)	
Week 27, ICU admissions	2	1	0	1	0	0	4	
Cumulative ICU admissions ^b	874	193	71	175	521	2	1,836/148,217 (1)	
Week 27, deaths	0	0	0	0	2	0	2	
Cumulative deaths	924	159	41	157	482	0	1,763/148,217 (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 10, 2021 (week 27)



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 27, median age of hospital admissions, ICU admissions and deaths was 49 years, 54 years and 66 years, respectively, based on health authority case line lists only (data not shown).

As shown in Figure 11, since week 6, death counts have been low and stable in elderly adults with an average of 10 deaths per week in the 80+ year-olds, 6 in the 70-79-year-olds, 4 in the 60-69-year-olds, and 2 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) – July 10, 2021 (week 27) (N= 148,194)^a

Age group (years)	Cases n (%)	Hospitalizations n (%) ^b	ICU n (%) ^ь	Deaths n (%)	General BC population n (%)
<10	8,470 (6)	94 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	15,970 (11)	67 (1) ^d	14 (1) ^d	0 (<1)	529,387 (10)
20-29	33,305 (22)	413 (5)	45 (2)	2 (<1)	699,476 (13)
30-39	27,324 (18)	811 (10)	156 (8)	16 (1)	750,054 (14)
40-49	21,812 (15)	900 (11)	190 (10)	27 (2)	648,377 (12)
50-59	18,433 (12)	1,249 (15)	348 (19)	71 (4)	711,930 (14)
60-69	11,907 (8)	1,525 (19)	460 (25)	170 (10)	686,889 (13)
70-79	6,123 (4)	1,521 (19)	439 (24)	376 (21)	454,855 (9)
80-89	3,344 (2)	1,115 (14)	165 (9)	621 (35)	193,351 (4)
90+	1,506 (1)	391 (5)	17 (1)	478 (27)	52,885 (1)
Total	148,194	8,086	1,841	1,763	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 calculated are based on health authority case line lists only.

d. Decrease of 1 hospitalization and 1 ICU admission since last report due to changes in source data

Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – July 10, 2021 (week 27) (N= 1,763)^a



G. Care facility outbreaks

As shown in <u>Table 5</u> and <u>Figure 12</u>, 330 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 27, with no new outbreaks in week 27. 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.

Neither of the 2 deaths reported in week 27 were 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 10, 2021 (week 27) (N=330)

Care facility outbreaks and cases	Outbreaks		ies	Deaths						
by episode date		Residents	Staff/ other	Unknown	Total	Residents	Staff/ other	Unknown	Total	
Week 27, Care Facility Outbreaks	0	0	0	0	0	0	0	0	0	
Cumulative, Care Facility Outbreaks	330	3,596	2,278	6	5,880	1,032	0	0	1,032	

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 10, 2021 (week 27) (N=330)



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: 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>