

British Columbia (BC) COVID-19 Situation Report
Week 7: February 14 – February 20, 2021

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Epidemic curve and regional incidence	2	There were 3,071 COVID-19 cases in week 7. Provincial incidence has been stable since week 4. Regional incidence has varied:	
Likely sources of infection	3	<ul style="list-style-type: none"> Since week 2, incidence has decreased in Interior Health (from 75 to 23 per 100K) and in Northern Health (from 127 to 73 per 100K). Vancouver Coastal Health incidence has remained generally stable since week 53. Fraser Health incidence increased since week 4 (70 to 89 per 100K). Island Health incidence increased since week 6 (15 to 21 per 100K). 	
Test rates and % positive	4	Incidence in 80+ year-olds continues to decrease; they have the lowest incidence (17 per 100K) for the second week in a row since the start of Phase 3c. Since week 5, incidence increased in children <10 years (from 32 to 47 per 100K) and in adults 20-29 years (from 90 to 98 per 100K).	
Age profile, testing and cases	5	Testing of MSP-funded specimens was similar in weeks 6 and 7 (>43,000), while positivity increased from 7.2% to 8.0%.	
Severe outcome counts	7	Hospital admissions decreased from 211 in week 2 to 144 hospitalizations in week 7. Deaths decreased from 72 in week 3 to 23 deaths in week 7.	
Age profile, severe outcomes	8	There was one new confirmed case of multi-system inflammatory syndrome in children and adolescents (MIS-C) since last report.	
Care facility outbreaks	9	Care facility outbreaks decreased from 16 to 2 outbreaks in weeks 51 to 7.	
Emerging respiratory pathogens update	9	COVID-19 variants of concern have been identified in 180 samples in BC; 157 with the B.1.1.7 variant and 23 with the B.1.351 variant.	

BELOW ARE IMPORTANT NOTES relevant to the interpretation of data displayed in this bulletin:

- Episode dates are defined by dates of illness onset, hospital admission, or death. 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. 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. Analyses based on episode date (or illness onset date) may better represent the timing of epidemic evolution.
- Per capita rates/incidences are based on PEOPLE2020 population estimates (n=5,139,568 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.

Table of pandemic phases defined by implementation or relaxation of population-level mitigation measures in BC:

PRE-PHASE 1	PHASE 1	PHASE 2	PHASE 3A	PHASE 3B	PHASE 3C
Pre-implementation Jan 15 (wk 3) to Mar 13 (wk 11) 2020	Implementation Mar 14 (wk 11) to May 18 (wk 21) 2020	Initial relaxation May 19 (wk 21) to Jun 23 (wk 26) 2020	Further relaxation Jun 24 (wk 26) to Sept 12 (wk 37) 2020	Start of school year Sept 13 (wk 38) to Nov 7 (wk 45) 2020	Re-implementation Nov 8 (wk 46) to Current wk, 2021
From earliest symptom onset date	Initial restrictions	Re-opening of services	Broader re-opening	From first complete epidemiological week of 2020-21 school year	Core bubble interaction only

A. COVID-19 case counts and epidemic curve

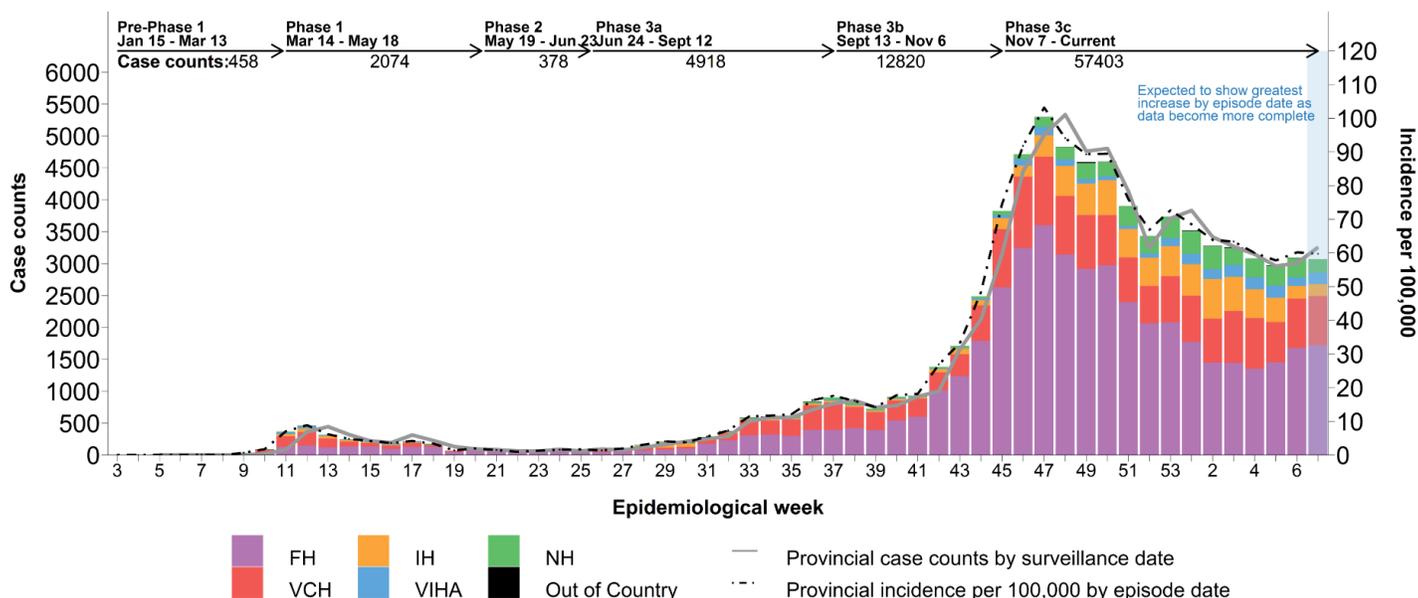
Provincially, from week 3 2020 to week 7 2021, there have been 78,051 cases, corresponding to a cumulative incidence of 1,516 per 100K (Table 1, Figure 1). As shown in Figure 1, cases have been relatively stable from week 4 to week 7 at around 3,000 cases per week.

As shown in Figure 2, incidence has decreased since week 2 in Interior Health (IH) (from 75 to 23 per 100K) and in Northern Health (NH) (from 127 to 73 per 100K). Incidence has remained generally stable in Vancouver Coastal Health (VCH) since week 53. Since week 4, Fraser Health (FH) has increased in incidence from 70 to 89 per 100K, and more recently, Island Health (VIHA) has increased in incidence from week 6 to week 7 (15 to 21 per 100K). By health service delivery areas (HSDA), incidence increased since week 4 in Fraser North and North Vancouver Island, since week 5 in Richmond and Vancouver, and since week 6 in Fraser East, East Kootenay, Kootenay Boundary, and Central Vancouver Island.

Table 1. Episode-based case tallies by health authority, BC^a
January 15, 2020 (week 3) – February 20, 2021 (week 7) (N= 78,051)

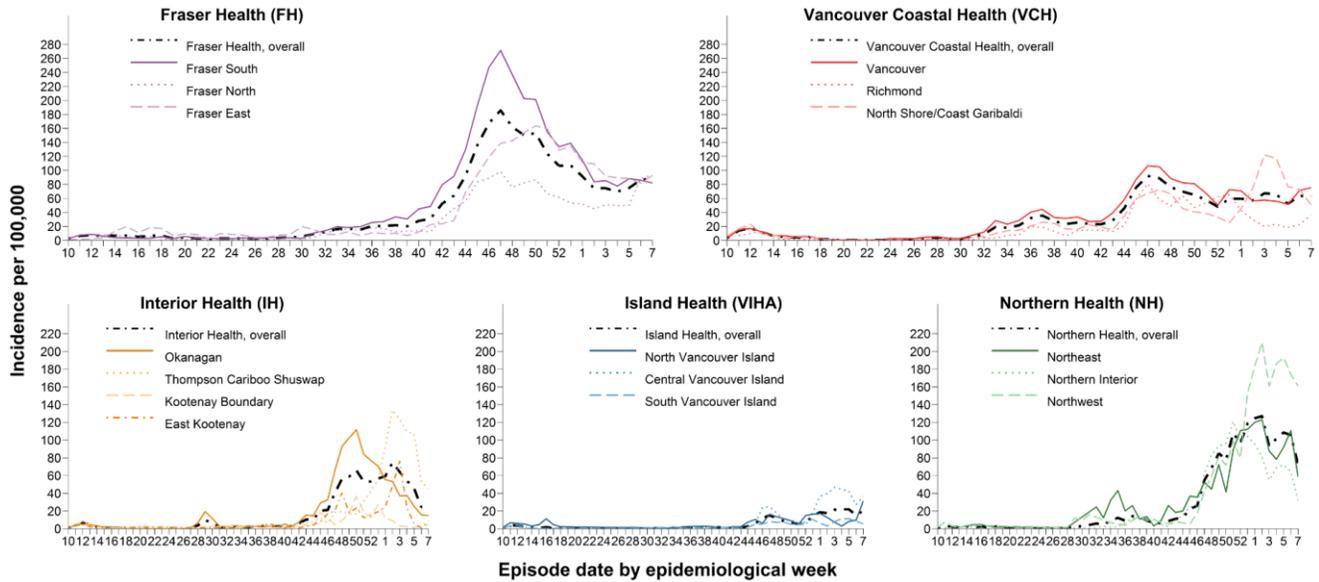
Case tallies by episode date	Health Authority of Residence					Residing Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 7, case counts	1,726	188	179	208	767	3	3,071
Cumulative case counts	45,955	7,244	2,231	4,444	18,027	150	78,051
Week 7, cases per 100K population	89	23	21	72	63	NA	60
Cumulative cases per 100K population	2,370	868	257	1,547	1,489	NA	1,516

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC^a
January 15, 2020 (week 3) – February 20, 2021 (week 7) (N= 78,051)



a. Displayed data extracted on March 1, 2021.

Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 1, 2020 (week 10) – February 20, 2021 (week 7)



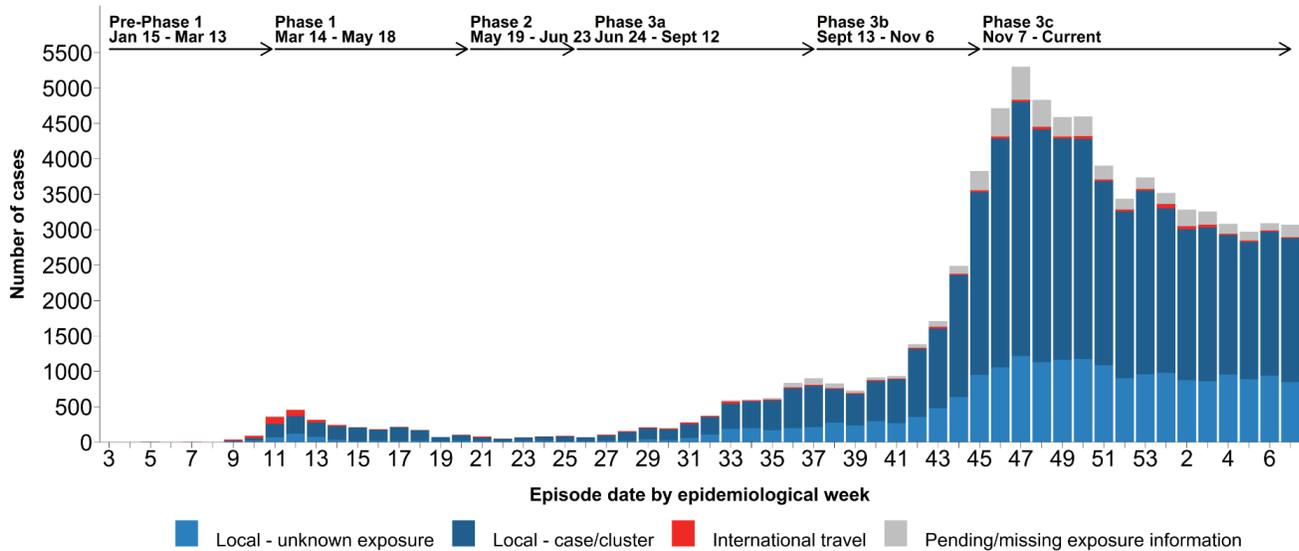
B. Likely sources of infection

As shown in [Table 2](#) and [Figure 3](#), local 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) – February 20, 2021 (week 7)

Likely exposure (row %)	International travel	Local – case/cluster	Local – unknown	Pending/missing
Week 7, Exposures	13 (<1)	2,036 (66)	846 (28)	176 (6)
Cumulative Exposures	1,132 (1)	52,236 (67)	20,287 (26)	4,396 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – February 20, 2021 (week 7)

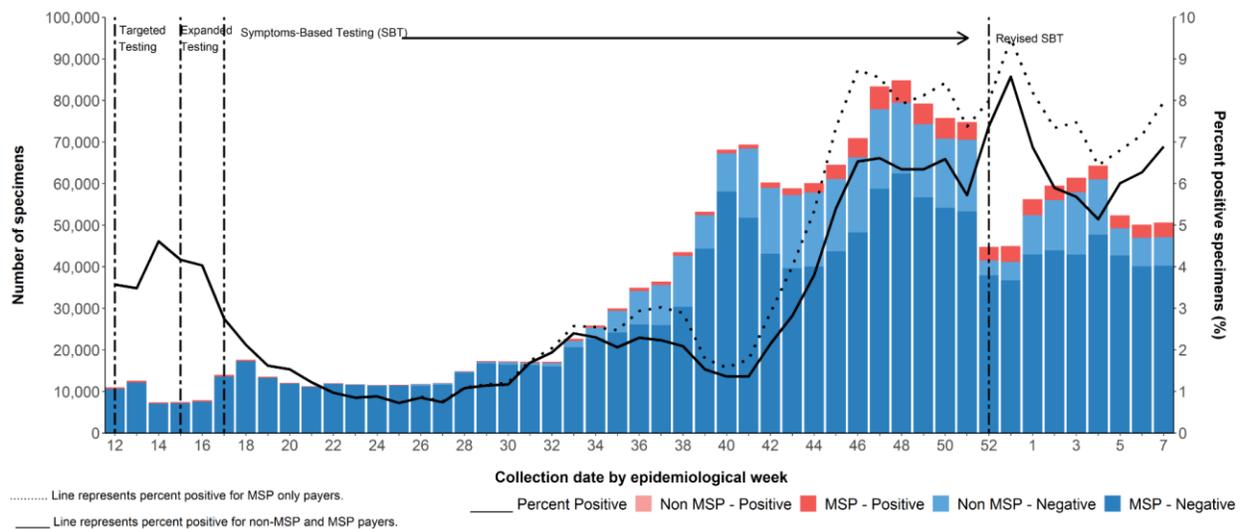


C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing was stable in weeks 6 and 7 (>43,000 specimens). However, positivity of MSP-funded specimens increased from 7.2% in week 6 to 8.0% in week 7.

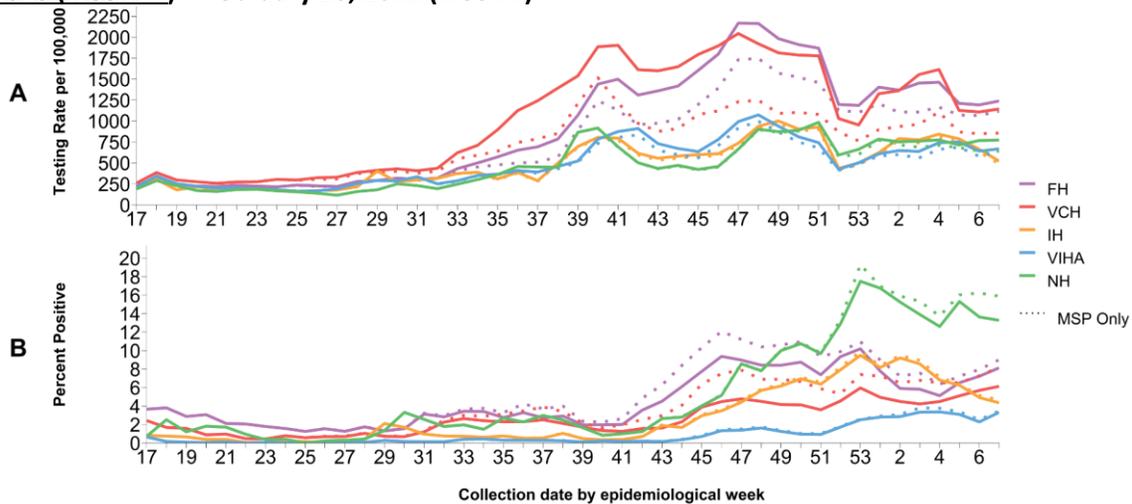
As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens in week 7 were highest in FH and VCH, and stable compared to week 6. Testing was lower and stable in NH and VIHA, while it has been decreasing in IH since week 4. As shown in **Panel B**, week 7 percent positivity remains highest in NH at 15.9% followed by FH at 9.0%, VCH at 8.2%, IH at 4.7%, and lowest in VIHA at 3.5%. Since week 5, MSP-funded test positivity has been increasing in FH (7.2%) and VCH (6.5%), while VIHA has only shown an increase since week 6 (2.5%). Positivity remained stable in NH since week 5 (16.0%), and has been decreasing since week 1 in IH (8.4%).

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – February 20, 2021 (week 7) ^{a,b,c}



a. Invalid (n=980) and indeterminate (n=4,861) 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) – February 20, 2021 (week 7) ^{b,c}



b. PLOVER extract on March 1, 2021.

c. Laboratory testing guidelines were updated on Dec 17 (week 51) to include new evidence of COVID-19 symptoms: <https://www.healthlinkbc.ca/covid-19/testing>

D. Age profile – Testing and cases

Testing rates and percent positivity by age group

As shown by the coloured bars in [Figure 6](#), compared to prior weeks of Phase 3c, testing rates in week 7 were lower in all age groups except ages 0-14 years. The highest testing rates in week 7 were among adults 20-39 years of age, similar to weeks 46-6 of phase 3c.

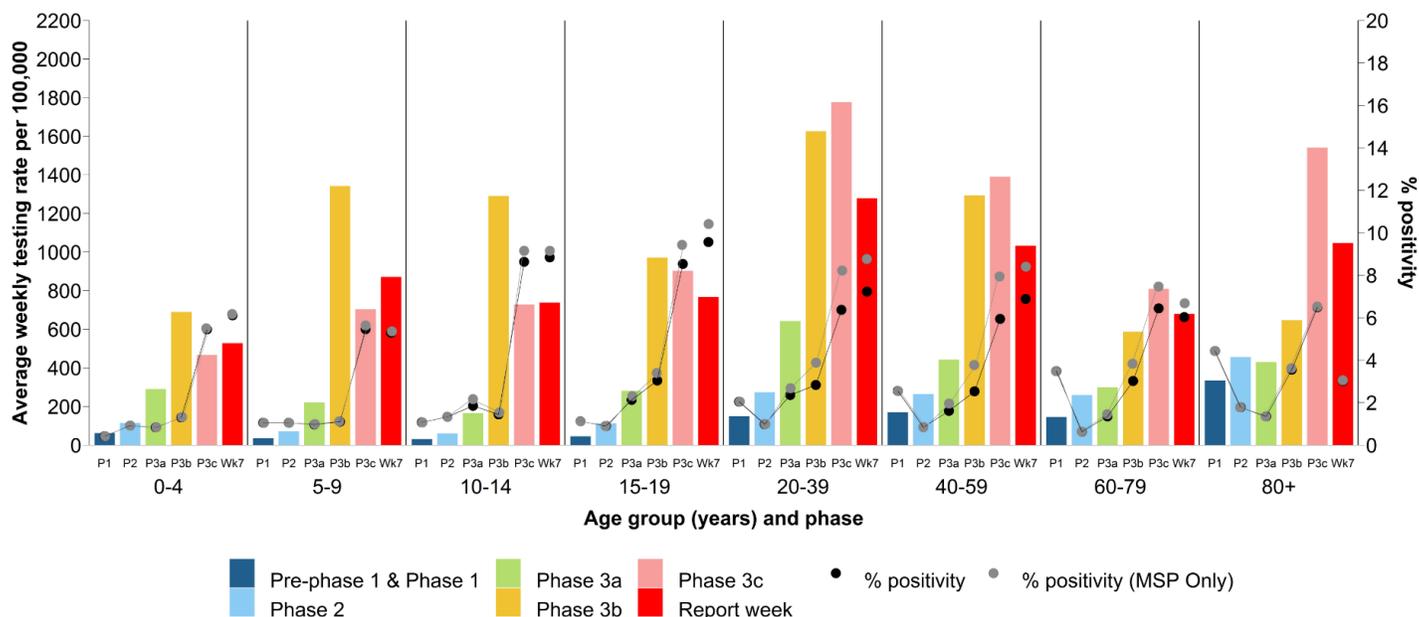
As shown by the grey dots in [Figure 6](#), the percent positivity for MSP-only specimens in week 7 was higher or comparable in age groups under 60 years relative to prior weeks of Phase 3c. However, positivity was lower in adults 60+ years, most notably the 80+ where it dropped from 6.5% to 3.1%, and continues to be the age group with lowest percent positivity in week 7. The highest percent positivity for week 7 was in ages 15-19 years (10.4%), 10-14 years (9.2%), 20-39 (8.8%), and 45-59 years (8.4%).

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the percentage contribution increased from week 6 to week 7 in the 20-29-year-olds (from 20.7% to 22.2%) and in the 50-59-year-olds (from 12.3% to 13.6%). This was offset by small decreases of <1% in other age groups: 10-14, 30-39, 40-49, 70-79, and 80+ years.

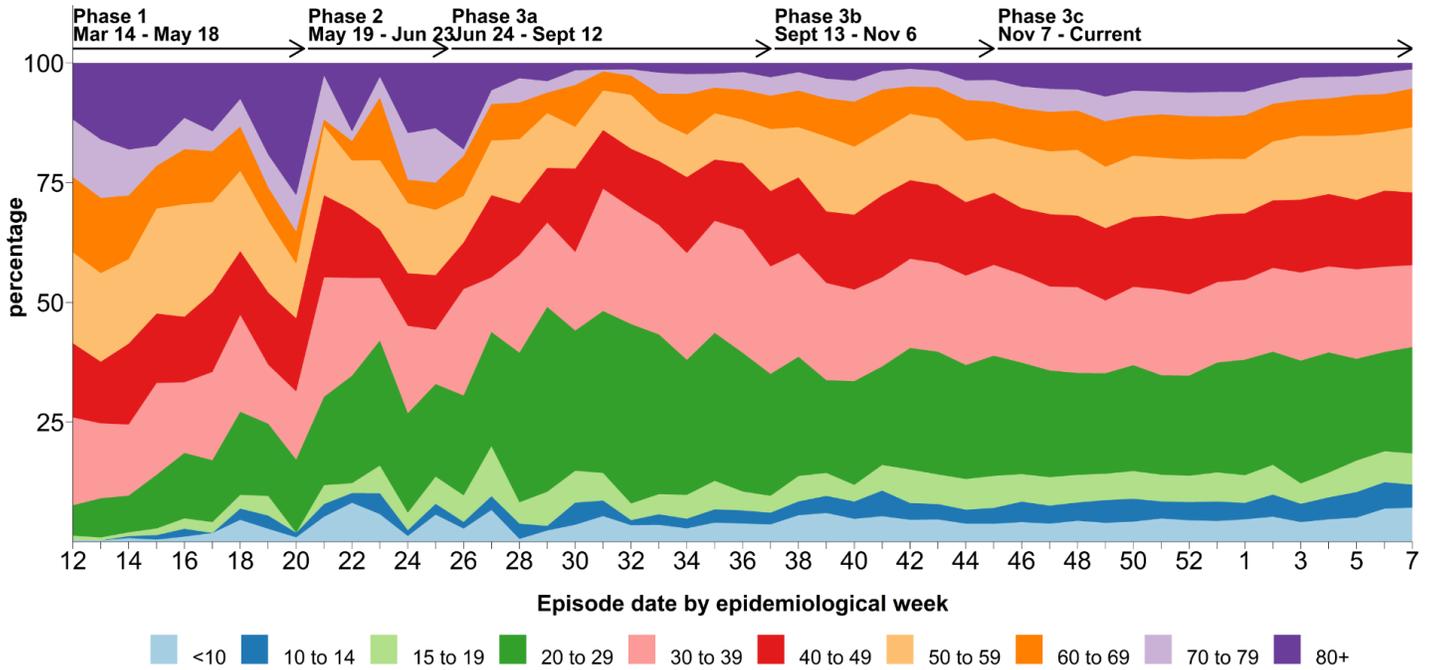
As shown in [Figure 8](#), since week 5, children of different age bands have shown different trends: the <10 age group increased (from 32 to 47 per 100K), the 10-14 group decreased (from 63 to 59 per 100K), while the 15-19 group were stable (from 71 to 72 per 100K). Incidence in the 20-29 year olds has increased since week 5 (from 90 to 98 per 100K), while adults from 30 to 79 years have had stable incidence rates since week 2. The 80+ year-olds' incidence continues to decrease. They have the lowest incidence of all age groups for the second week since the start of Phase 3c with an incidence of 17 per 100K in week 7.

Figure 6. Average weekly SARS-CoV-2 testing rates and percent positive by known age group and phase^a, BC January 20, 2020 (week 4) – February 20, 2021 (week 7)^b

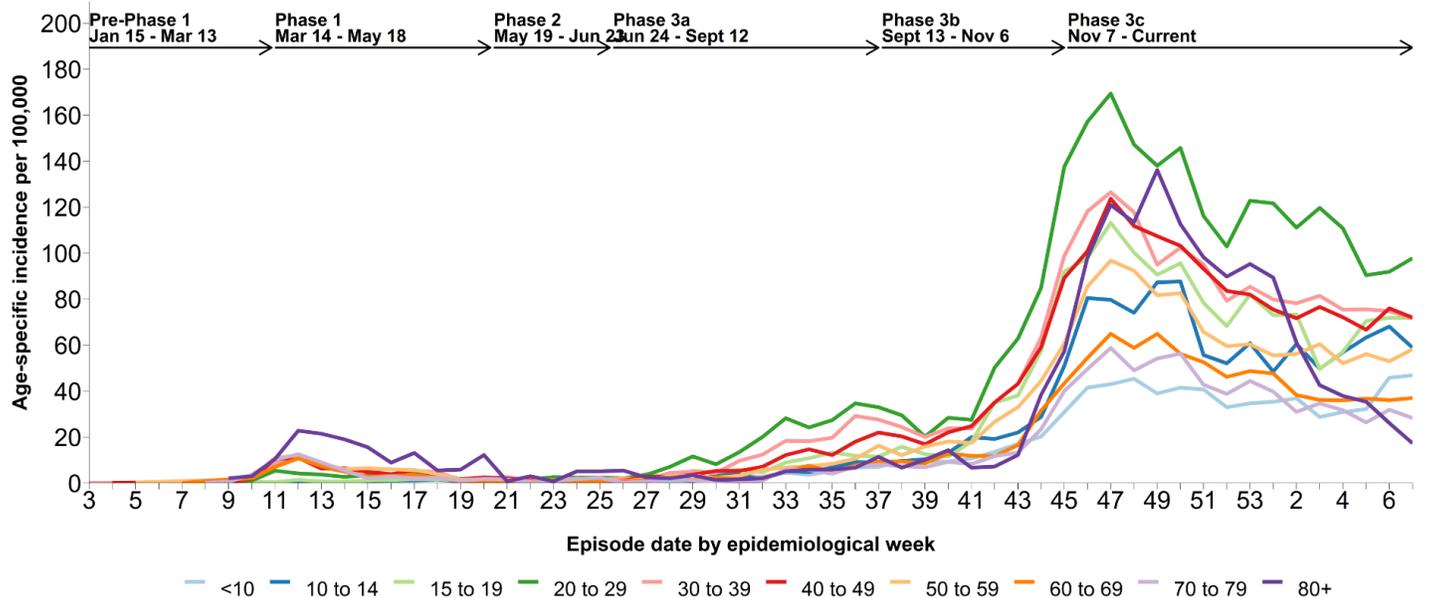


- Phase based on specimen collection date, of which January 20 was the earliest. The average weekly rate by phase is derived as the phase-specific per capita test rate divided by the number of weeks for Pre-Phase 1 + Phase 1 (P1: 17 weeks), Phase 2 (P2: 5 weeks), Phase 3a (P3a: 11.5 weeks), Phase 3b (P3b: 8 weeks), and Phase 3c, excluding the current report week (P3c: 14 weeks). The current report week, although part of Phase 3c, is excluded from Phase 3c as displayed here to enable comparison.
- Laboratory extract from PLOVER on March 1, 2021. Testing rates displayed are based on all specimens (MSP and non-MSP).

**Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC
 March 15, 2020 (week 12) – February 20, 2021 (week 7) (N= 77,515)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
 January 15, 2020 (week 3) – February 20, 2021 (week 7) (N= 78,028)**



E. Severe outcome counts and epi-curve

The number of hospital admissions has decreased since week 2, from 211 hospitalizations per week to 144 in week 7. The number of deaths has also decreased from week 3 to week 7 (72 to 23 deaths) ([Table 3, Figure 9](#)).

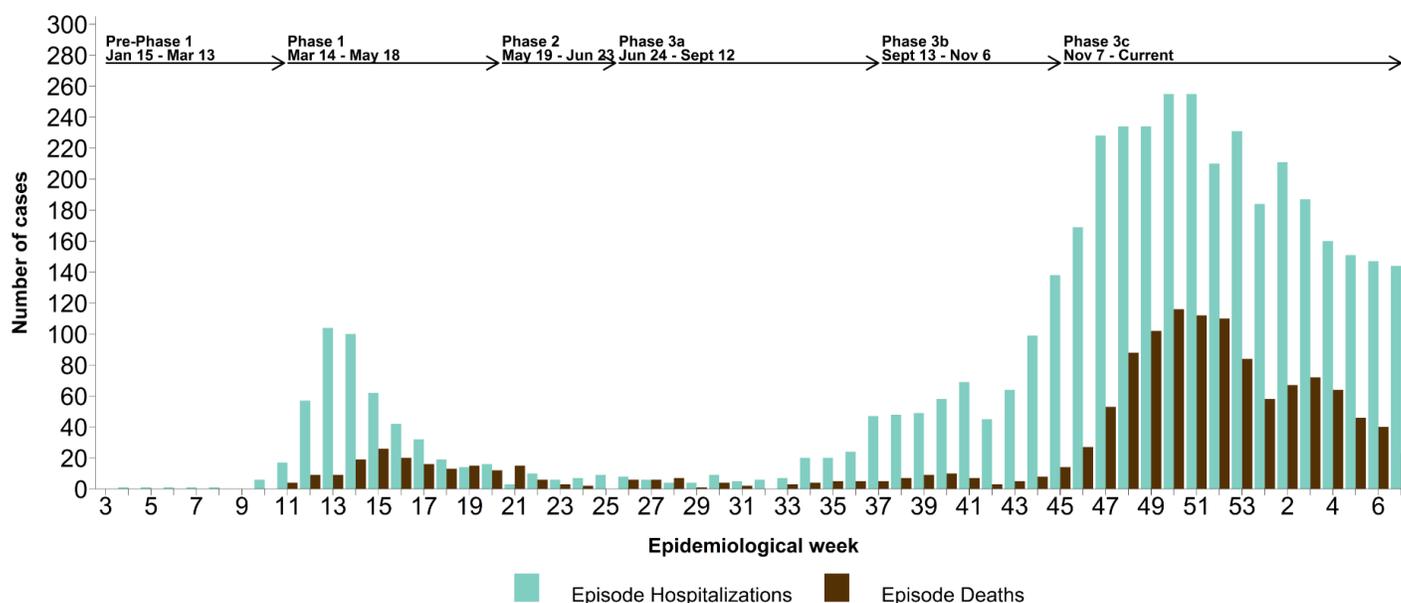
Cumulatively, there have been nine confirmed cases (with one new case since last report) of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. The median age of these cases is 9 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – February 20, 2021 (week 7)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 7, hospitalizations	69	17	7	27	24	0	144
Cumulative hospitalizations	2,338	388	125	401	978	9	4,239/78,051 (5)
Week 7, ICU admissions	11	4	4	8	4	0	31
Cumulative ICU admissions	450	113	35	104	279	2	983/78,051 (1)
Week 7, deaths	8	4	2	6	3	0	23
Cumulative deaths	729	101	24	105	383	0	1,342/78,051 (2)

a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).

Figure 9. COVID-19 hospital admissions and deaths by episode date, BC January 15, 2020 (week 3) – February 20, 2021 (week 7)



F. Age profile, severe outcomes

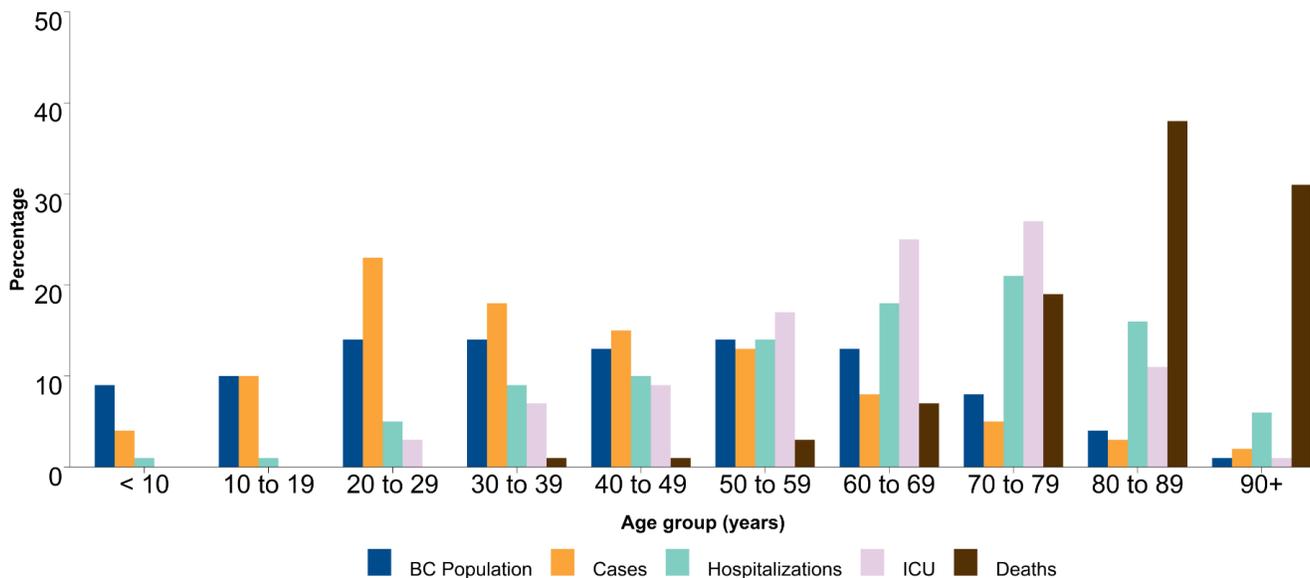
Table 4 and **Figure 10** display the distribution of cases and severe outcomes as well as the BC population for each age group. In week 7, median age of hospitalization was 55 years, while median age of death was 80 years. The younger median age of hospitalization in week 7 reflects a decrease in the number of hospital admissions among the elderly in recent weeks.

In week 7, 164/3,071 (5%) cases, 50/144 (35%) hospitalizations, 11/31 (35%) ICU admissions, and 17/23 (74%) deaths were in 70+-year-olds (data not shown).

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – February 20, 2021 (week 7) (N= 78,028)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	3,491 (4)	43 (1)	3 (<1)	0 (0)	469,351 (9)
10-19	7,419 (10)	32 (1)	3 (<1)	0 (0)	527,805 (10)
20-29	17,760 (23)	198 (5)	25 (3)	0 (0)	697,691 (14)
30-39	14,026 (18)	370 (9)	69 (7)	8 (1)	735,052 (14)
40-49	11,631 (15)	408 (10)	86 (9)	15 (1)	646,035 (13)
50-59	9,975 (13)	593 (14)	164 (17)	38 (3)	718,272 (14)
60-69	6,445 (8)	772 (18)	249 (25)	100 (7)	673,131 (13)
70-79	3,638 (5)	883 (21)	262 (27)	261 (19)	435,062 (8)
80-89	2,393 (3)	692 (16)	108 (11)	506 (38)	187,443 (4)
90+	1,250 (2)	248 (6)	14 (1)	414 (31)	49,726 (1)
Total	78,028	4,239	983	1,342	5,139,568
Median age	37	66	66	85	41

Figure 10. COVID-19 cases, hospitalizations, ICU admissions and deaths by age group, and BC population January 15, 2020 (week 3) – February 20, 2021 (week 7) (N= 78,028)^a



a. Among those with available age information only.

G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 288 care facility outbreaks were reported in total in BC to the end of week 7. There has been a decreasing trend in care facility outbreaks since week 51. From week 5 to week 7, 5/11 (45%) of care facility outbreaks were in long-term care or assisted living settings, and 5/11 (45%) were in FH.

Almost three-quarters of all COVID-19 deaths in BC have been associated with care facility outbreaks (939/1,342; 70%). Of these deaths, 895 (95%) were 70+ years old. In week 7, 9/23 (39%) deaths were associated with care facility outbreaks.

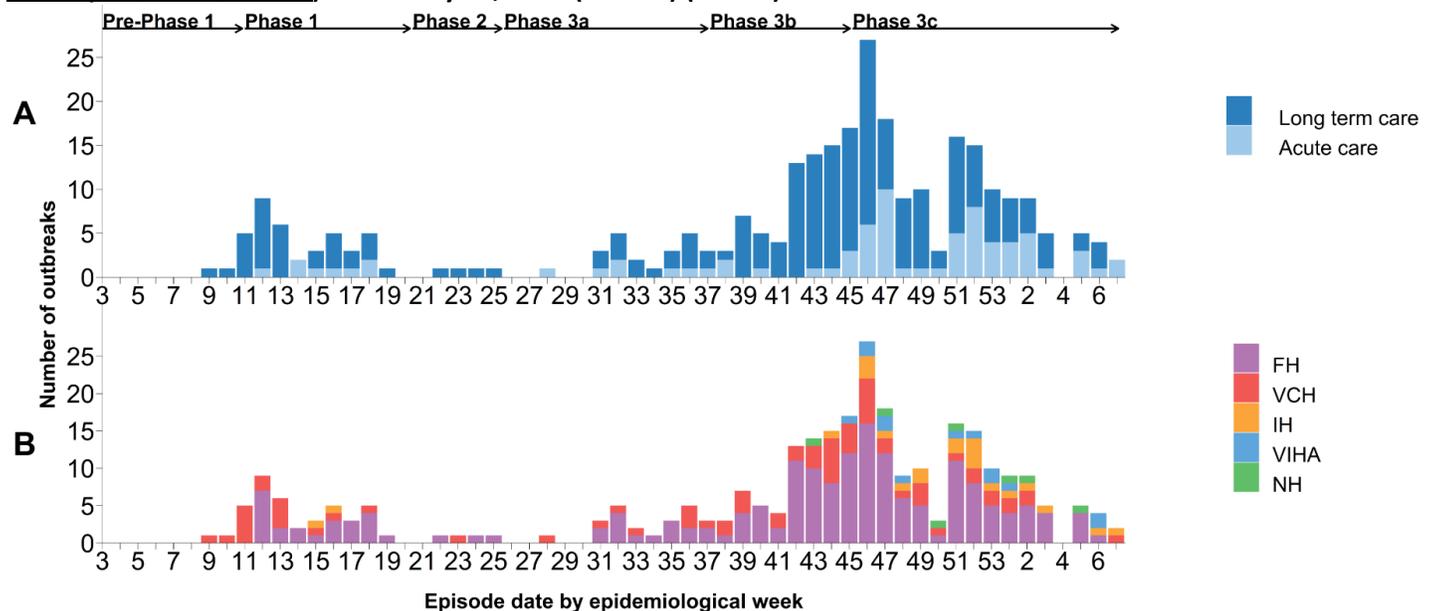
Table 5. COVID-19 care facility^{a,b} outbreaks by earliest case onset^{a,c}, associated cases and deaths by episode date, BC^d

January 15, 2020 (week 3) – February 20, 2021 (week 7) (N=288)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 7, Care Facility Outbreaks	2	16	12	0	28	9	0	0	9
Cumulative, Care Facility Outbreaks	288	3,200	2,155	4	5,359	939	0	0	939

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 11. 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) – February 20, 2021 (week 7) (N=288)



- 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

BC has identified 180 cases infected with variants of concern. Of those, 157 (87%) were infected with variant B.1.1.7, of which 20 (13%) reported travel outside of Canada. Twenty-three cases were infected with variant B.1.351, of which 3 (13%) reported travel outside of Canada. Episode dates range from week 51 to week 7.