

British Columbia (BC) COVID-19 Situation Report
Week 6: February 7 – February 13, 2021

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Epidemic curve and regional incidence	2	There were 2,777 COVID-19 cases in week 6 and cumulatively, 74,612 cases in BC since the start of the pandemic. Provincial incidence is stabilizing. Incidence in Interior Health (IH) and Northern Health (NH) has decreased since week 2 and in Island Health (VIHA), since week 5. Incidence in Fraser Health (FH) and Vancouver Coastal Health (VCH) has been stable in the past few weeks but a recent slight increase in some areas warrants close monitoring.
Likely sources of infection	3	There continues to be a decrease in incidence in adults, most prominently in the 20-29 and 80+ year age groups. Conversely, incidence has increased in children <15 years since week 3.
Test rates and % positive	4	The number of MSP-funded tests decreased in week 6, while percent positivity increased slightly to 7.2%. In week 6, positivity increased in FH and VCH, decreased in IH and VIHA, and remained elevated but stable in NH. Positivity continued to be lowest in 80+ year-olds (3.2%) and was highest in children 15-19 years (9.9%).
Age profile, testing and cases	5	The number of hospital admissions has decreased since week 2, from 210 to 139 hospitalizations in week 6. Cumulatively, there have been 4,088 cases hospitalized in BC.
Severe outcome counts	7	The number of deaths has decreased since week 3, from 72 to 39 deaths in week 6. Cumulatively, there have been 1,316 deaths in BC.
Age profile, severe outcomes	8	The number of care facility outbreaks has been declining since week 51. Cumulatively, there have been 280 care facility outbreaks.
Care facility outbreaks	9	One hundred cases infected with COVID-19 variants of concern have been reported in BC; 80 cases with the B.1.1.7 variant and 20 cases with the B.1.351 variant.
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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, 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

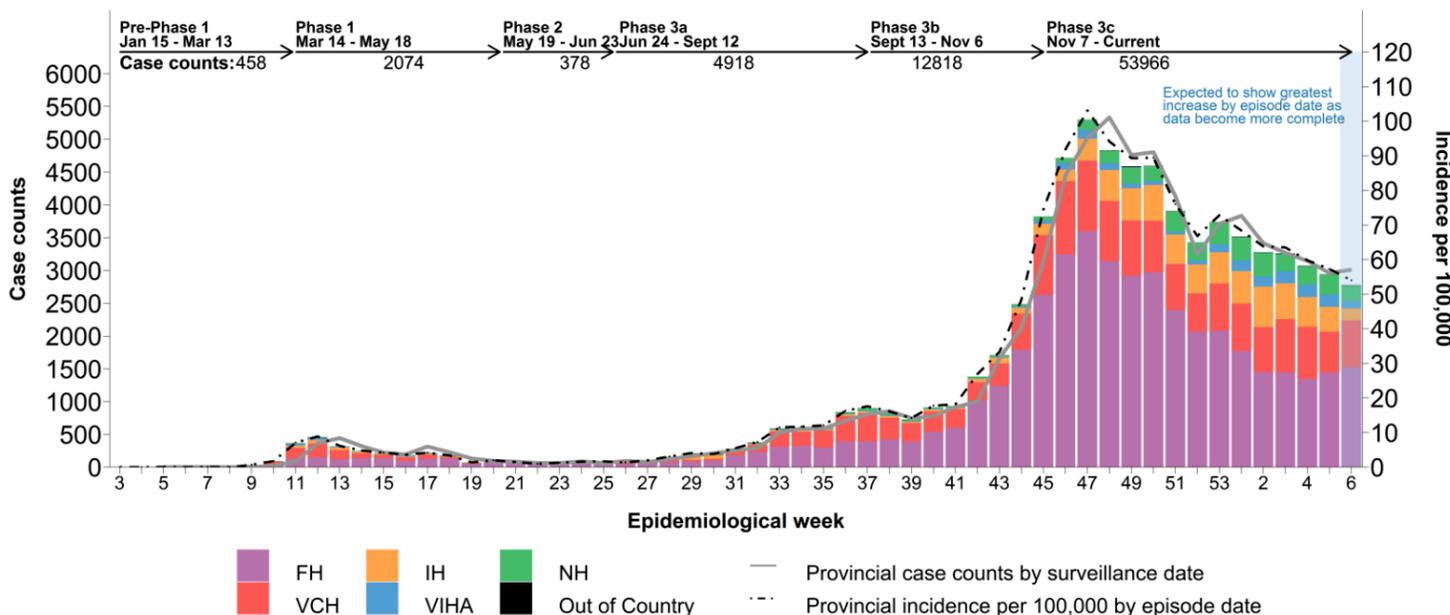
Provincially, from week 3 2020 to week 6 2021, there have been 74,612 cases, corresponding to a cumulative incidence of 1,449 per 100K (Table 1, Figure 1). As shown in Figure 1, since the peak in week 47 (103 per 100K), there has been a general decline in cases reaching 2,777 (54 per 100K) in week 6.

As shown in Figure 2, incidence has decreased since week 2 in Interior Health (IH) (from 74 to 22 per 100K) and in Northern Health (NH) (from 127 to 83 per 100K), and since week 5 in Island Health (VIHA) (from 22 to 13 per 100K). Incidence has remained stable in Vancouver Coastal Health (VCH) and Fraser Health (FH) in the last few weeks although Fraser North and Vancouver health service delivery areas have experienced increases in incidence since week 5.

Table 1. Episode-based case tallies by health authority, BC^a
January 15, 2020 (week 3) – February 13, 2021 (week 6) (N= 74,612)

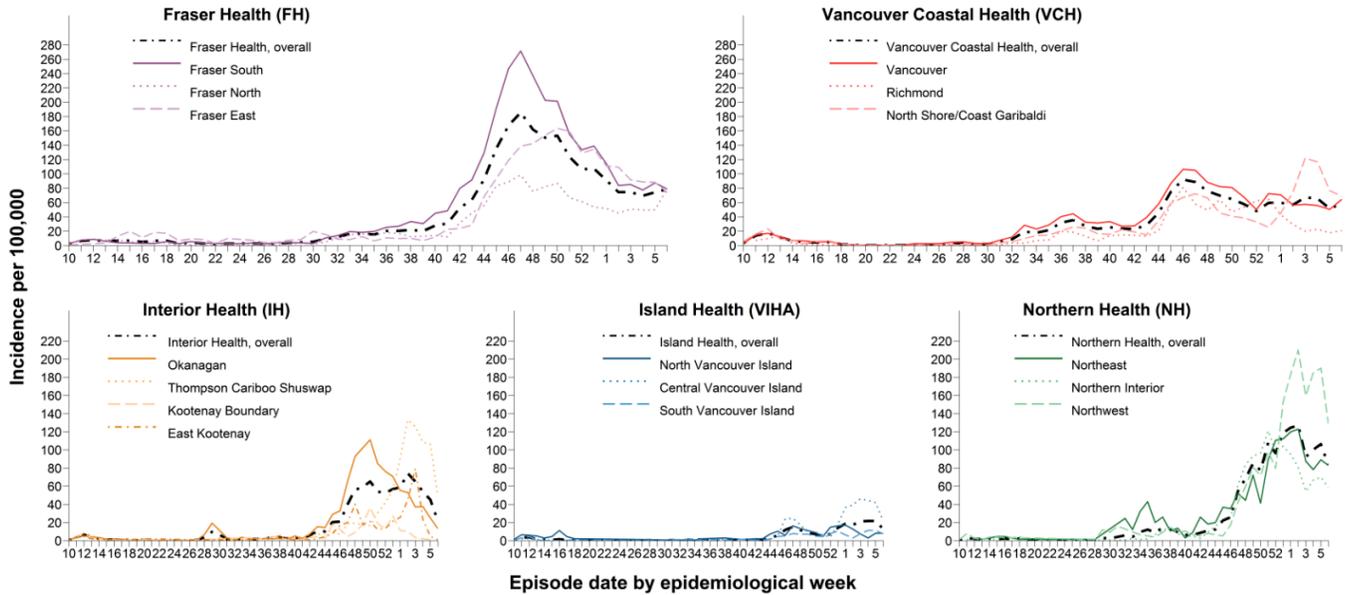
Case tallies by episode date	Health Authority of Residence					Residing Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 6, case counts	1,528	181	112	239	711	6	2,777
Cumulative case counts	44,057	7,031	2,031	4,160	17,186	147	74,612
Week 6, cases per 100K population	79	22	13	83	59	NA	54
Cumulative cases per 100K population	2,272	842	234	1,448	1,420	NA	1,449

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC^a
January 15, 2020 (week 3) – February 13, 2021 (week 6) (N=74,612)



a. Displayed data extracted on February 22, 2021.

Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 1, 2020 (week 10) – February 13, 2021 (week 6)



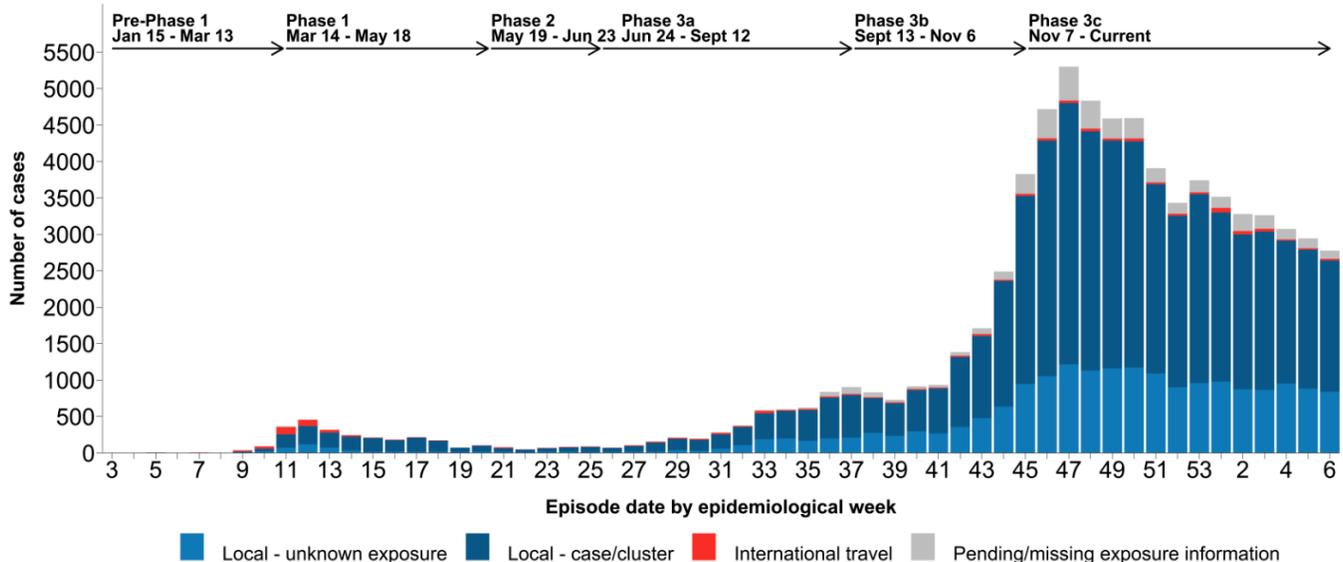
B. Likely sources of infection

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 13, 2021 (week 6)

Likely exposure (row %)	International travel	Local – case/cluster	Local – unknown	Pending/missing
Week 6, Exposures	22 (1)	1,800 (65)	841 (30)	114 (4)
Cumulative Exposures	1,117 (1)	49,913 (67)	19,338 (26)	4,244 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – February 13, 2021 (week 6)

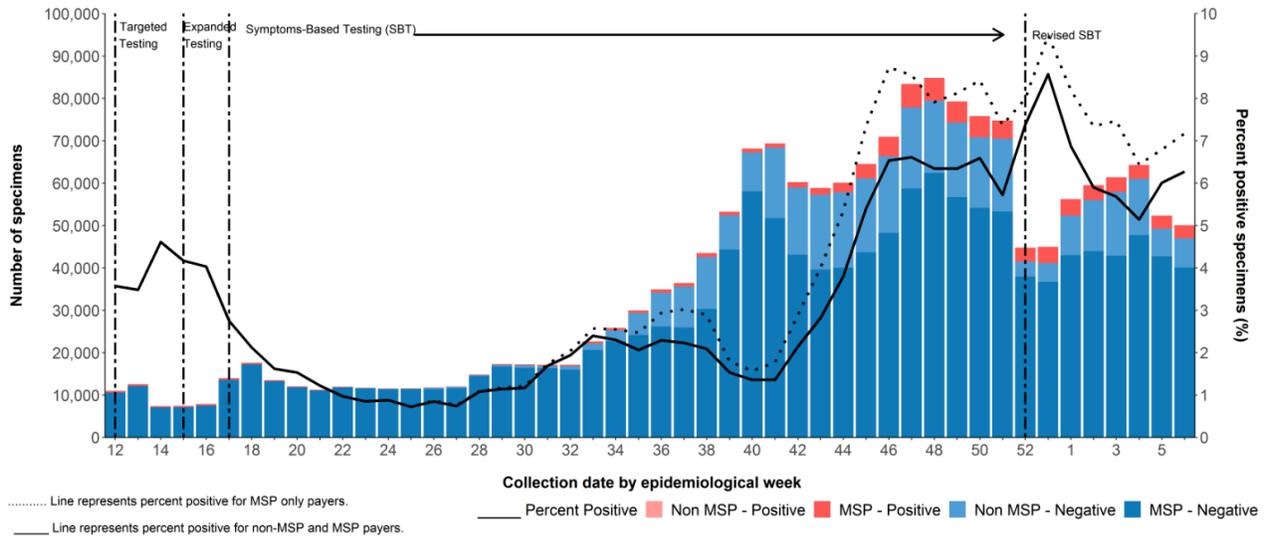


C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing decreased slightly in week 6 (>43,000 tests). Positivity of MSP-funded specimens increased slightly to 7.2% in week 6.

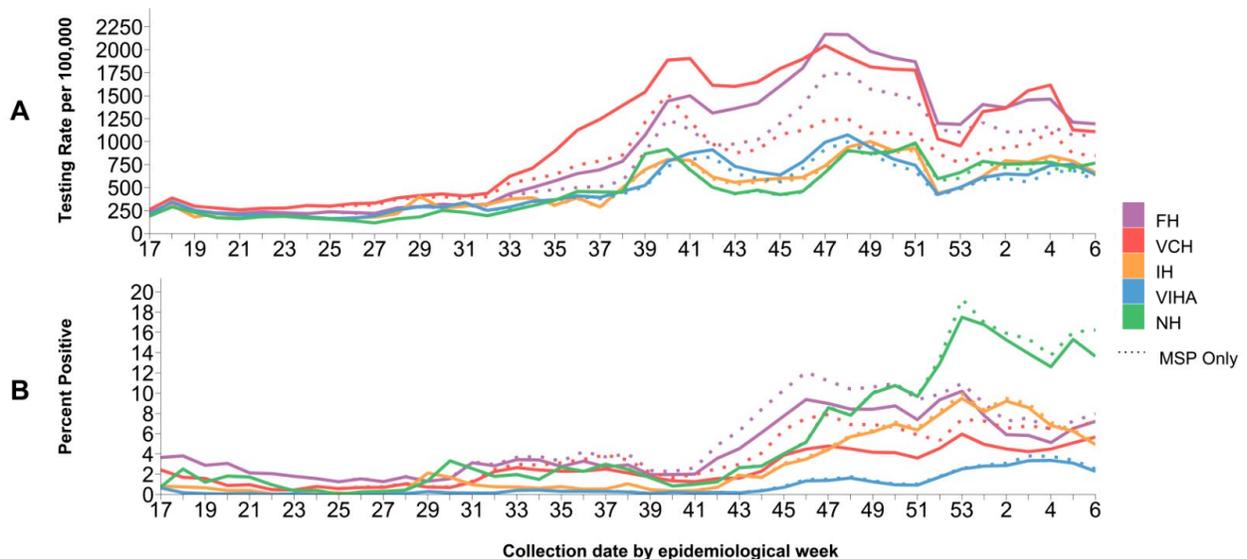
As shown in **Panel A** of **Figure 5**, the per capita testing rate in week 6 remains highest in FH and VCH and has been stable in IH, NH and VIHA. As shown in **Panel B**, week 6 percent positivity remains highest in NH at 16.2% followed by FH at 8.0%, VCH at 7.3%, IH at 5.2%, and lowest in VIHA at 2.5%. Between week 4 and week 6, MSP-funded test positivity increased in NH (13.7%), FH (6.4%) and VCH (6.5%). IH has shown a decreasing trend from week 2 (9.5%) and VIHA has shown a decreasing trend from week 3 (3.8%).

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – February 13, 2021 (week 6) ^{a,b,c}



a. Invalid (n=964) and indeterminate (n=4,708) 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 13, 2021 (week 6) ^{b,c}



b. PLOVER extract on Friday, February 19, 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 6 were lower in all age groups except ages 0-14 years. The highest testing rates in week 6 were among adults 20-39 years of age, similar to weeks 46-5 of phase 3c.

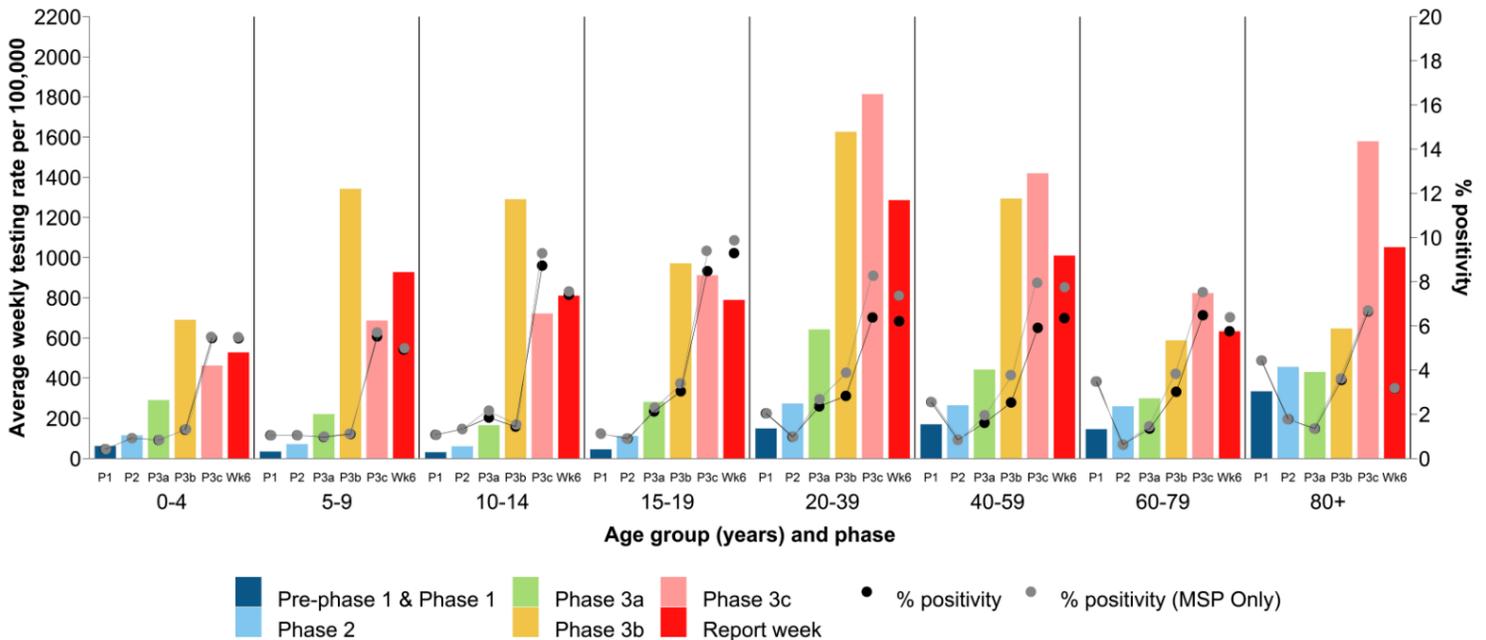
As shown by the grey dots in [Figure 6](#), the percent positivity for MSP only specimens in week 6 was lower or stable in all age groups except in 15-19-year-olds compared to prior weeks in Phase 3c. The difference was most notable in the elderly adults 80+ years where it dropped from 6.7% to 3.2%, and continues to be the age group with lowest percent positivity in week 6. The highest percent positivity for week 6 was in ages 15-19 years (9.9%), 40-59 years (7.8%), and 10-14 years (7.6%).

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the percentage contribution decreased in the 20-29-year-olds, from 26% in week 3 to 21% of all cases in week 6. This was offset by an increase in the proportion of children <20 years from 12% in week 3 to 19% in week 6.

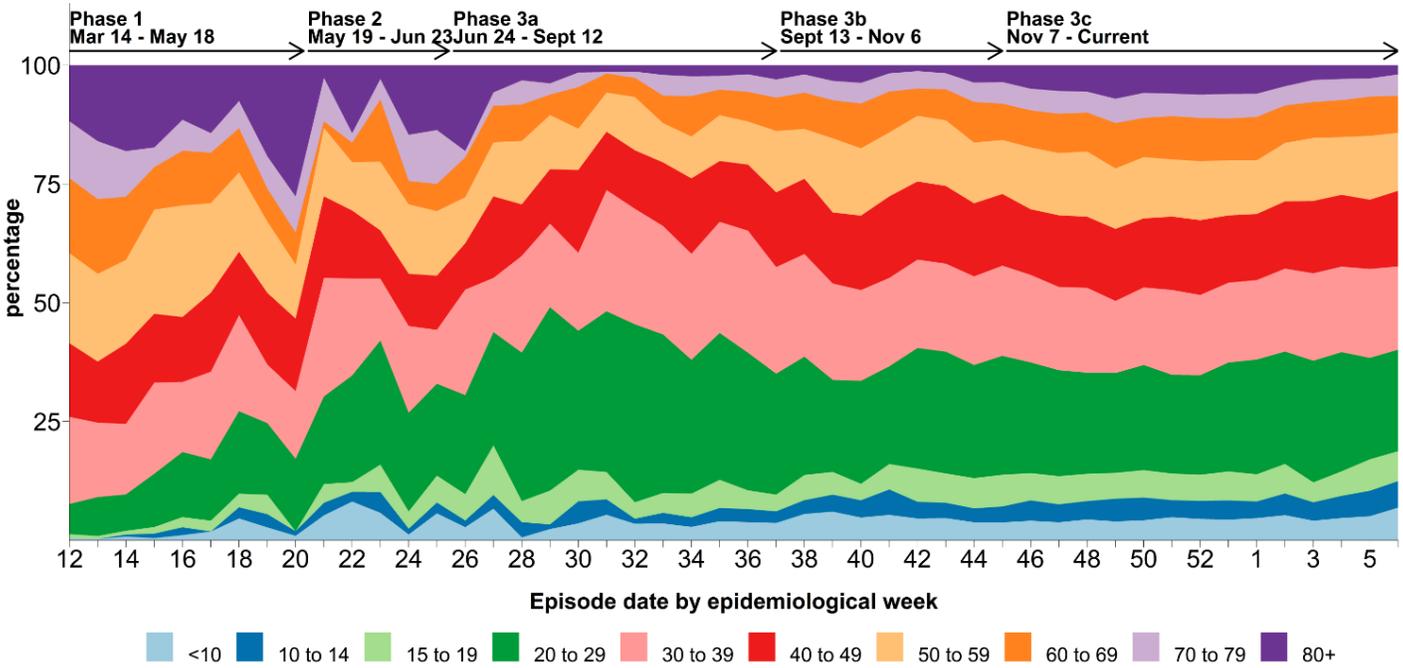
As shown in [Figure 8](#), between week 3 and 6, there has been a decrease in incidence in age groups 20 years and older, most prominently in the 20-29-year-olds (from 120 to 85 per 100K) and in elderly adults 80+ years (from 95 to 23 per 100K between week 53 and week 6). Conversely, incidence increased in children, especially in the 10-14-year-olds (from 51 to 62 per 100K) and in the <10-year-olds (29 to 41 per 100K). Children aged 15-19 years increased in incidence in weeks 3 to 5 (from 49 to 70 per 100K) before decreasing slightly in week 6 (63 per 100K).

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 13, 2021 (week 6)^b

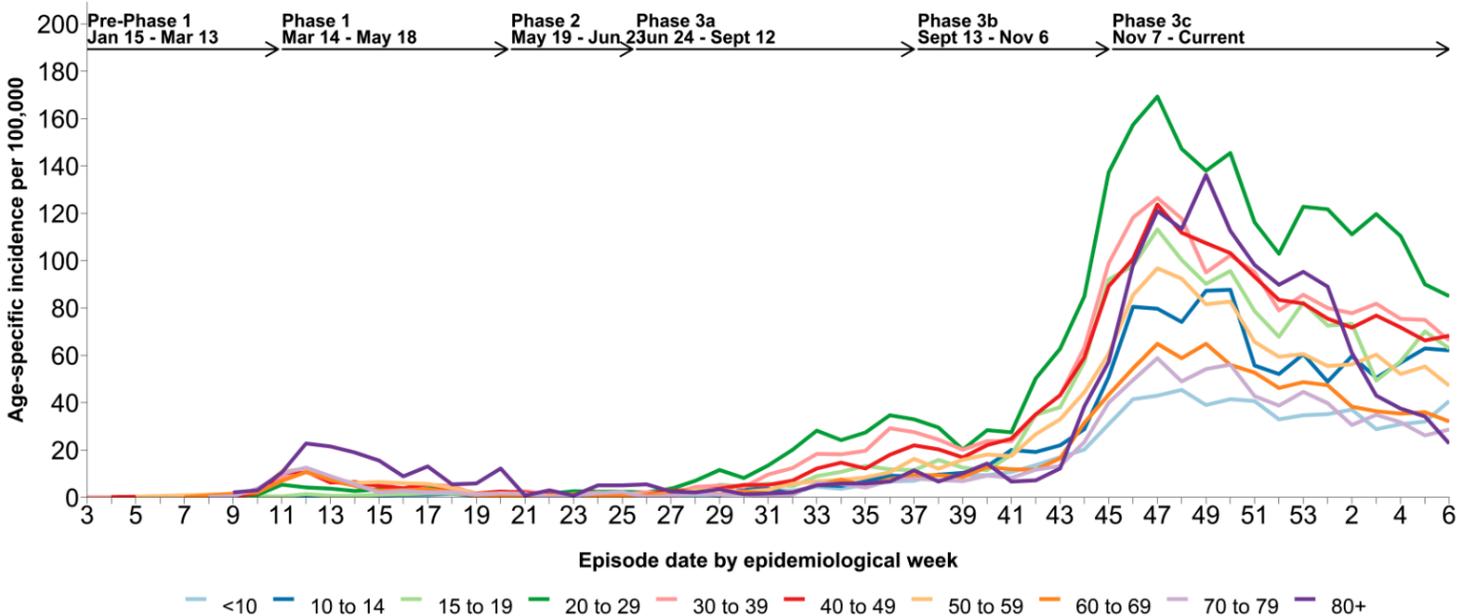


- a. Phase based on specimen collection date, of which January 20 was the earliest. The average weekly rate by phase is derived as the phase-specific per capita test rate divided by the number of weeks for Pre-Phase 1 + Phase 1 (P1: 17 weeks), Phase 2 (P2: 5 weeks), Phase 3a (P3a: 11.5 weeks), Phase 3b (P3b: 8 weeks), and Phase 3c, excluding the current report week (P3c: 13 weeks). The current report week, although part of Phase 3c, is excluded from Phase 3c as displayed here to enable comparison.
- b. Laboratory extract from PLOVER on February 19, 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 13, 2021 (week 6) (N= 74,076)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
 January 15, 2020 (week 3) – February 13, 2021 (week 6) (N= 74,589)**



E. Severe outcome counts and epi-curve

The number of hospital admissions has decreased since week 2, from 210 hospitalizations per week to 139 in week 6. The number of deaths has also decreased from week 3 to week 6 (72 to 39 deaths) ([Table 3, Figure 9](#)).

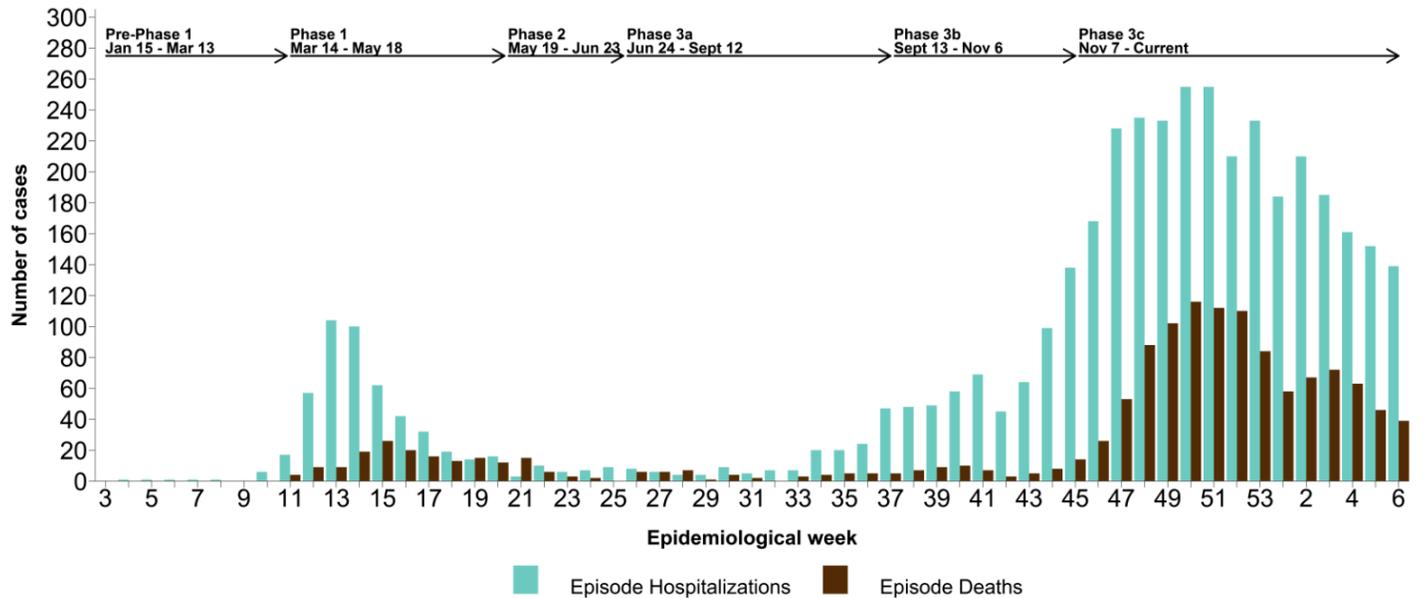
Cumulatively, there have been eight confirmed cases (with one new case since last report) of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. The median age of these cases is 10 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – February 13, 2021 (week 6)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 6, hospitalizations	61	21	8	21	28	0	139
Cumulative hospitalizations	2,262	370	118	376	953	9	4,088/74,612 (5)
Week 6, ICU admissions	19	5	3	5	2	0	34
Cumulative ICU admissions	440	109	30	97	275	2	953/74,612 (1)
Week 6, deaths	17	7	2	11	2	0	39
Cumulative deaths	721	94	22	99	380	0	1,316/74,612 (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 13, 2021 (week 6)



F. Age profile, severe outcomes

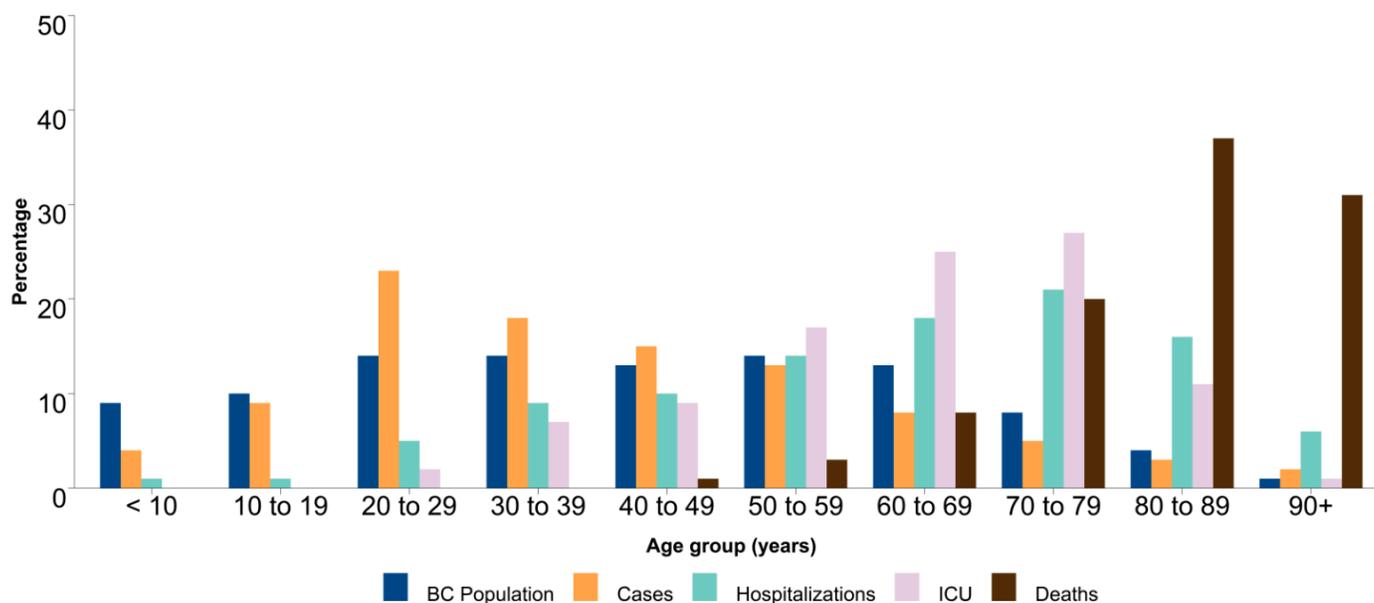
Table 4 and **Figure 10** display the distribution of cases and severe outcomes as well as the BC population for each age group. The distribution has not changed substantially over time. In week 6, median age of hospitalization was 66 years, while median age of death was 76 years.

In week 6, 179/2,777 (6%) cases, 49/139 (35%) hospitalizations, 16/34 (47%) ICU admissions, and 28/39 (72%) 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 13, 2021 (week 6) (N=74,589)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	3,246 (4)	40 (1)	3 (<1)	0 (0)	469,351 (9)
10-19	7,028 (9)	31 (1)	3 (<1)	0 (0)	527,805 (10)
20-29	17,020 (23)	187 (5)	22 (2)	0 (0)	697,691 (14)
30-39	13,431 (18)	357 (9)	67 (7)	6 (<1)	735,052 (14)
40-49	11,109 (15)	391 (10)	84 (9)	13 (1)	646,035 (13)
50-59	9,508 (13)	569 (14)	161 (17)	36 (3)	718,272 (14)
60-69	6,158 (8)	745 (18)	239 (25)	100 (8)	673,131 (13)
70-79	3,499 (5)	859 (21)	254 (27)	258 (20)	435,062 (8)
80-89	2,347 (3)	669 (16)	106 (11)	493 (37)	187,443 (4)
90+	1,243 (2)	240 (6)	14 (1)	410 (31)	49,726 (1)
Total	74,589	4,088	953	1,316	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 13, 2021 (week 6) (N=74,589)^a



a. Among those with available age information only.

G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 280 care facility outbreaks were reported in total in BC to the end of week 6. There has been a decreasing trend in care facility outbreaks since week 51. From week 51 to week 6, 38/67 (57%) of care facility outbreaks were in long-term care settings, and 39/67 (58%) were in FH.

Almost three-quarters of all COVID-19 deaths in BC have been associated with care facility outbreaks (929/1,316; 71%). Of these deaths, 886 (95%) were 70+ years old. In week 6, 16/39 (41%) deaths were associated with care facility outbreaks. This is a decrease since week 5 when 29/46 (63%) deaths were associated with care facility outbreaks.

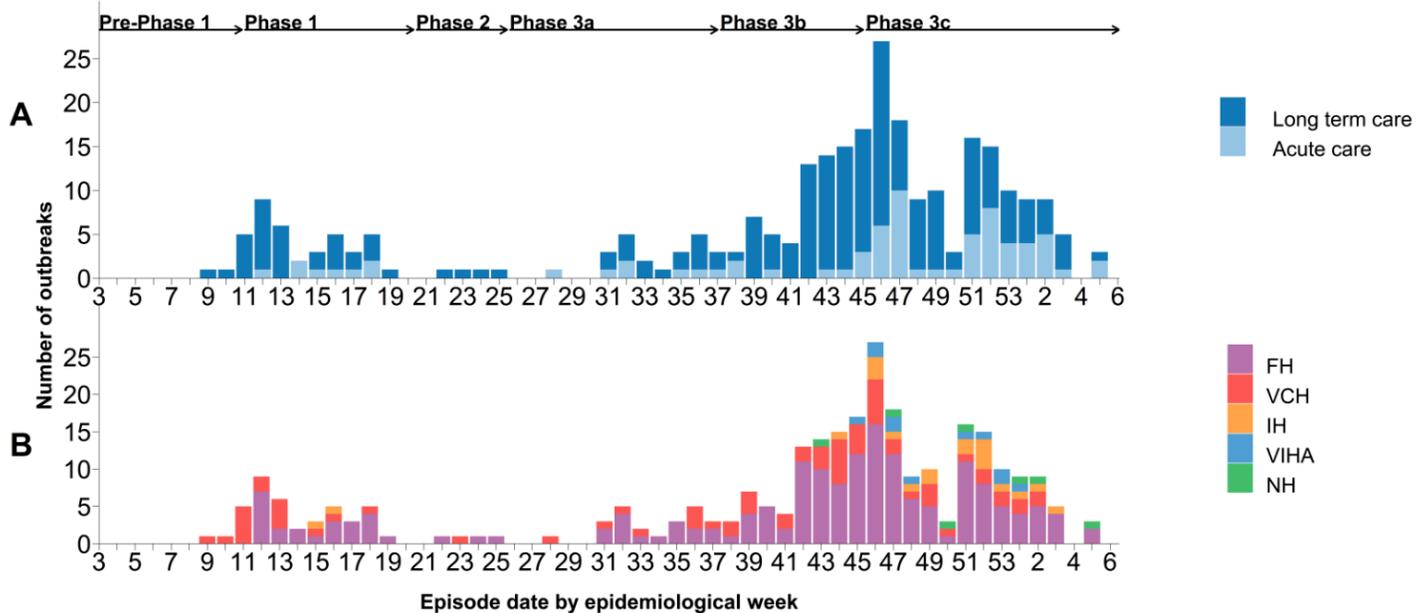
Table 5. COVID-19 care facility^{a,b} outbreaks by earliest case onset^{a,c}, associated cases and deaths by episode date, BC^d

January 15, 2020 (week 3) – February 13, 2021 (week 6) (N=280)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 6, Care Facility Outbreaks	0	19	9	0	28	16	0	0	16
Cumulative, Care Facility Outbreaks	280	3,180	2,139	4	5,323	929	0	0	929

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 13, 2021 (week 6) (N=280)



- 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 100 cases infected with variants of concern. Of those, 80 (80%) were infected with variant B.1.1.7, of which 19 (24%) reported travel outside of Canada and 13 (16%) reported contact with travelers. Twenty cases were infected with variant B.1.351, two of which reported travel outside of Canada. Episode dates range from week 51 to week 6.