

British Columbia (BC) COVID-19 Situation Report
Week 5: January 31 – February 6, 2021

Table of Contents		Continued provincial decrease in COVID-19 cases with recent decrease in severe outcomes
Epidemic curve and regional incidence	2	There have been 71,602 COVID-19 cases in BC to the end of week 5 2021 (1,390 per 100K population). Incidence in Interior Health (IH) and Vancouver Coastal Health (VCH) has decreased since weeks 2 and 3, respectively (74 to 38 per 100K and 67 to 49 per 100K, respectively). Incidence in Northern Health (NH), Fraser Health (FH), and Island Health (VIHA) have been stable. There continues to be a decrease in incidence in ages 20+ years, most prominently in the 20-29 year olds (120 to 85 per 100K). Conversely, incidence increased in the 15-19 year-olds (49 to 65 per 100K) and the 10-14 year-olds (51 to 61 per 100K).
Likely sources of infection	3	The number of MSP-funded tests decreased in week 5, while percent positivity increased slightly to 6.8%. In week 5, positivity increased in NH and FH, decreased in IH, and remained stable in VCH and VIHA. Positivity was lowest in 80+ year olds (3.2%). This is the first week in Phase 3c when positivity in 80+ year olds was also lower than in Phase 3b. In week 5, positivity was highest in children 15-19 years (9.1%) and 10-14 years (8.2%).
Test rates and % positive	4	The number of hospital admissions has decreased since week 2, from 213 hospitalizations per week to 152 in week 5. Cumulatively, there have been 3,953 cases hospitalized in BC.
Age profile, testing and cases	5	The number of deaths has decreased from week 3 to week 5 (72 to 44 deaths). Of the 44 deaths in week 5, 28 (64%) were associated with care facility settings, and of those 28 deaths, 25 (89%) were among elderly adults 70+ years. Cumulatively, there have been 1,272 deaths in BC.
Severe outcome counts	7	The number of care facility outbreaks has been declining since week 51. Cumulatively, there have been 277 care facility outbreaks.
Age profile, severe outcomes	8	There have been 59 cases infected with COVID-19 variants of concern reported in BC. To date, 40 cases have been identified with the B.1.1.7 variant and 19 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

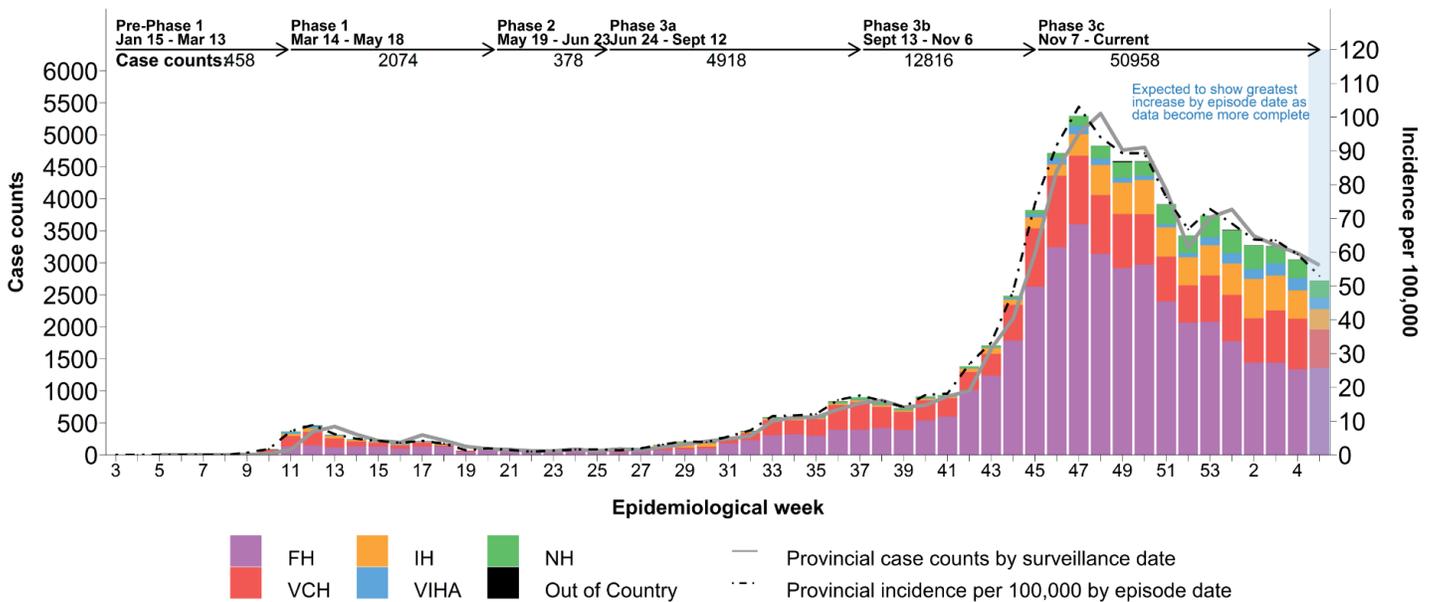
Provincially, from week 3 2020 to week 5 2021, there have been 71,602 cases, corresponding to a cumulative incidence of 1,390 per 100K (Table 1, Figure 1). As shown in Figure 1, since the peak in week 47 (103 per 100K), there has been a general decline in cases reaching 2,724 (53 per 100K) in week 5.

As shown in Figure 2, incidence in Interior Health (IH) and Vancouver Coastal Health (VCH) has shown a decreasing trend since weeks 2 and 3, respectively (from 74 to 38 per 100K and 67 to 49 per 100K, respectively). Incidence in Northern Health (NH), Fraser Health (FH), and Island Health (VIHA) has remained stable. The health service delivery areas (HSDAs) experiencing recent increasing incidence rates are: Fraser South, Northeast, and North Vancouver Island.

Table 1. Episode-based case tallies by health authority, BC^a
January 15, 2020 (week 3) – February 6, 2021 (week 5) (N= 71,602)

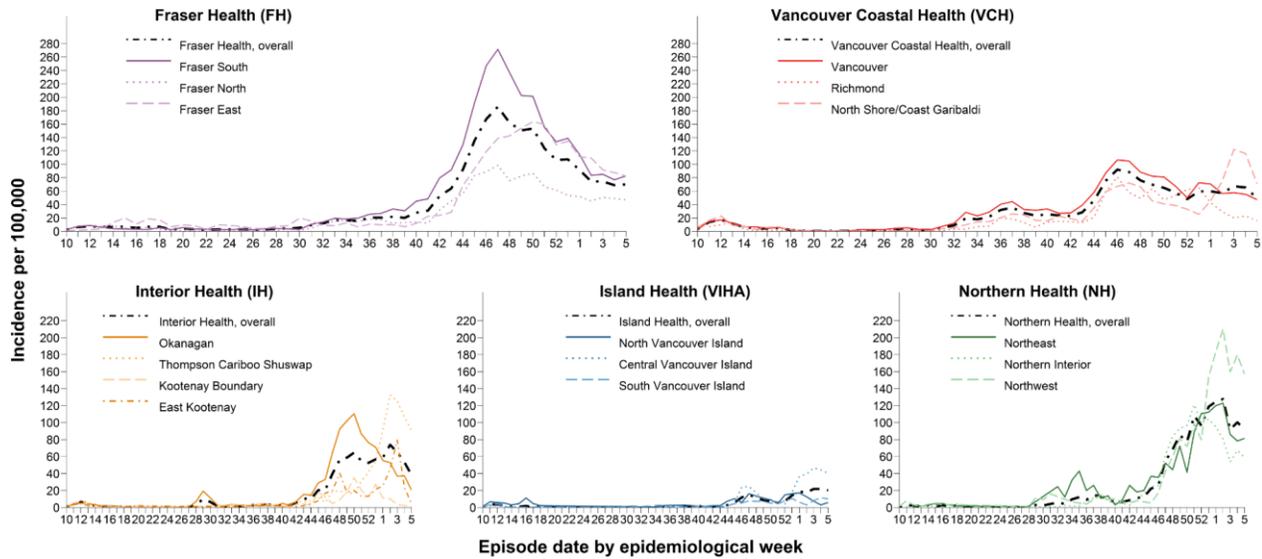
Case tallies by episode date	Health Authority of Residence					Residing Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 5, case counts	1,362	320	176	265	597	4	2,724
Cumulative case counts	42,434	6,782	1,914	3,881	16,450	141	71,602
Week 5, cases per 100K population	70	38	20	92	49	NA	53
Cumulative cases per 100K population	2,188	812	221	1,351	1,359	NA	1,390

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC^a
January 15, 2020 (week 3) – February 6, 2021 (week 5) (N=71,602)



a. Displayed data extracted on February 15, 2021.

Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 1, 2020 (week 10) – February 6, 2021 (week 5)



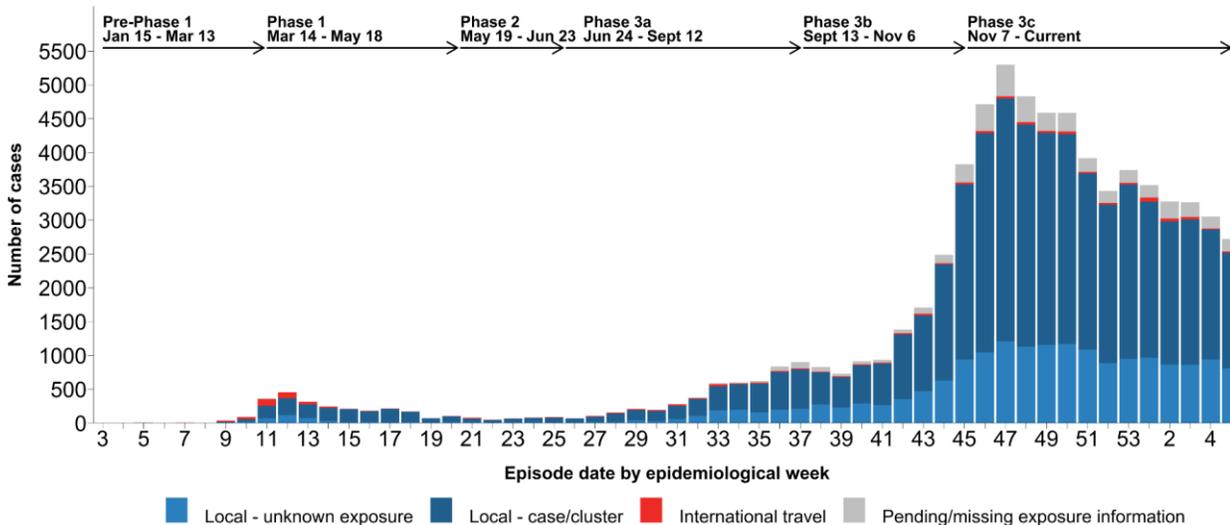
B. Likely sources of infection

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 6, 2021 (week 5)

Likely exposure (row %)	International travel	Local – case/cluster	Local – unknown	Pending/missing
Week 5, Exposures	19 (1)	1,714 (63)	806 (30)	185 (7)
Cumulative Exposures	1,090 (2)	47,848 (67)	18,264 (26)	4,400 (6)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – February 6, 2021 (week 5)

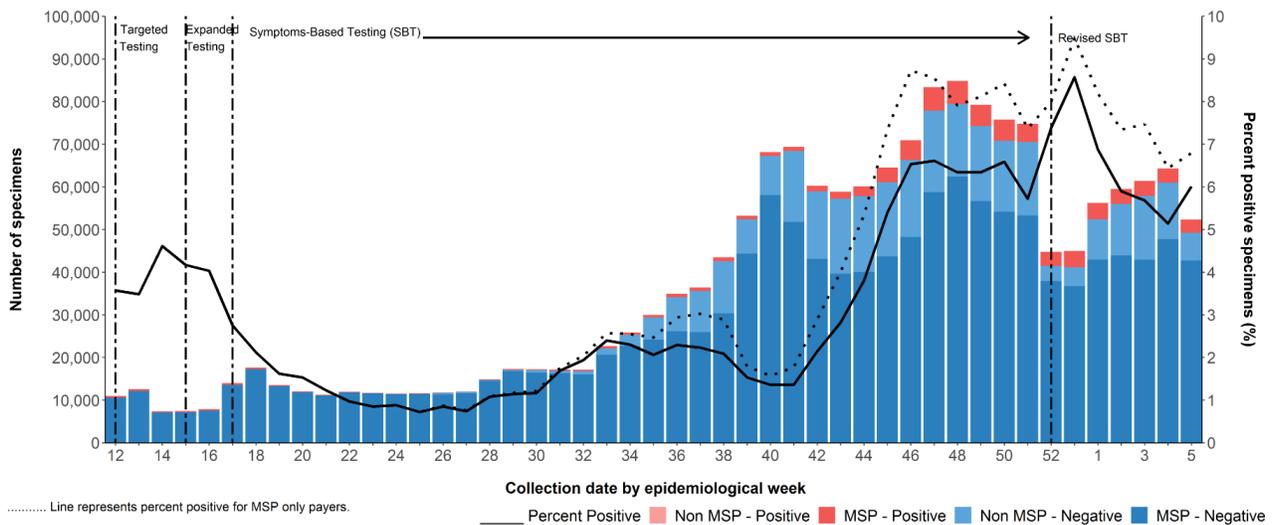


C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, after an increase in the number MSP-funded tests in week 4 (>51,000), testing decreased in week 5 (>46,000 tests) to reach a similar number as in weeks 1-3. Positivity of MSP-funded specimens increased slightly to 6.8% in week 5.

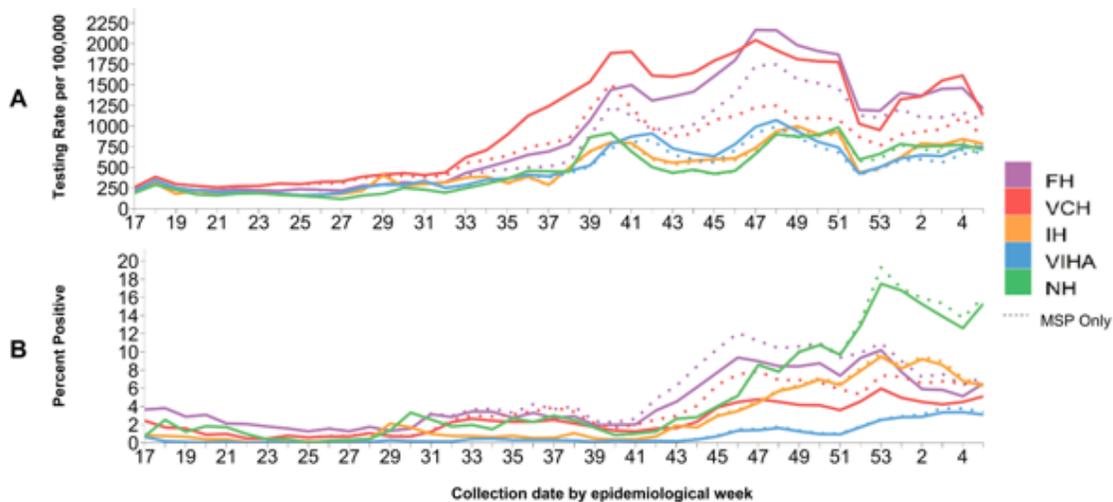
As shown in **Panel A** of **Figure 5**, the per capita testing rate in week 5 remains highest in FH and VCH. As shown in **Panel B**, week 5 percent positivity remains highest in NH at 16.0% followed by FH at 7.3%, VCH at 6.5%, IH at 6.4%, and lowest in VIHA at 3.4%. In week 5, MSP-funded test positivity increased in NH and FH. IH has shown a continuous decreasing trend from week 53 (9.9%) to week 5. Since week 2, positivity trends in VCH and VIHA have been stable.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – February 6, 2021 (week 5) ^{a,b,c}



a. Invalid (n=928) and indeterminate (n=4,525) 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 6, 2021 (week 5) ^{b,c}



b. PLOVER extract on Friday, February 12, 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 5 were lower in all age groups except ages 0-14 years. The highest testing rates in week 5 were among adults 20-39 years of age, similar to weeks 46-4 of phase 3c.

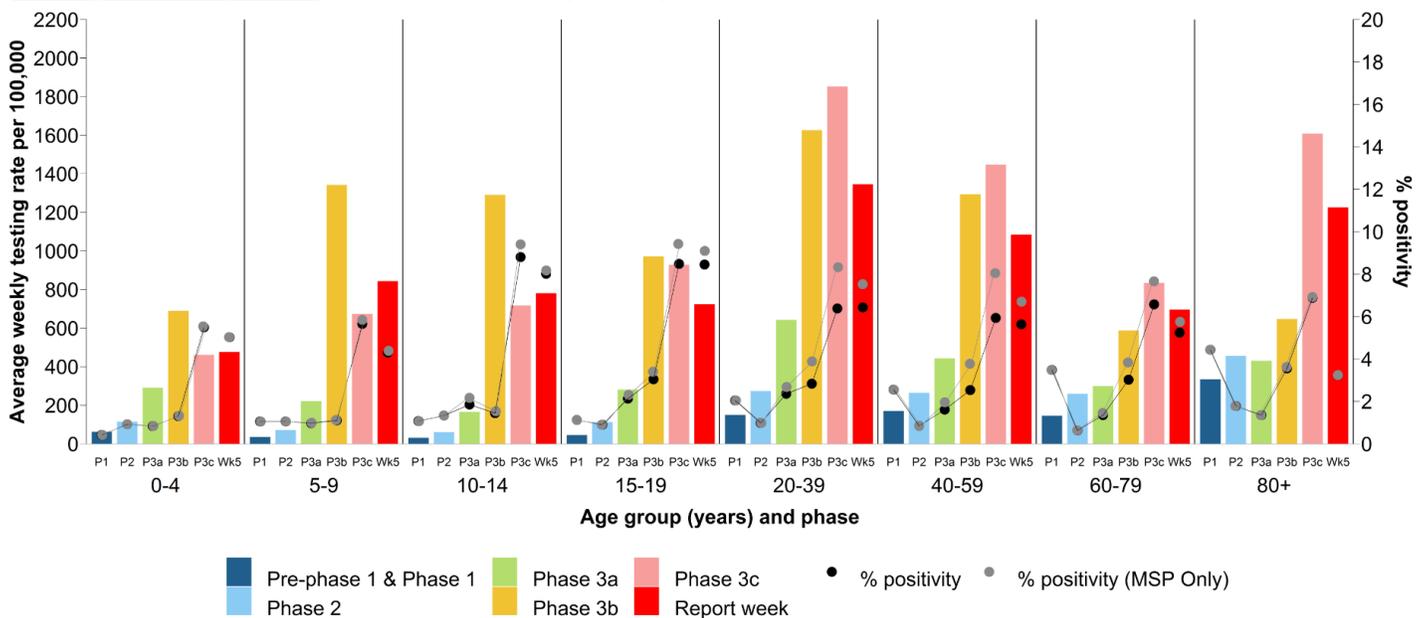
As shown by the grey dots in **Figure 6**, the percent positivity for MSP only specimens in week 5 was lower in all age groups than prior weeks in Phase 3c. The difference was most notable in the elderly adults 80+ years where it dropped from 6.9% to 3.2%, to become the age group with lowest percent positivity in week 5. Also, week 5 is the first week of Phase 3c when percent positivity in the 80+ was lower than in Phase 3b. The highest percent positivity for week 5 was in children 15-19 years (9.1%) and 10-14 years (8.2%).

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 22% of all cases in week 5. This was offset by an increase in the proportion of children <20 years from 12% in week 3 to 18% in week 5.

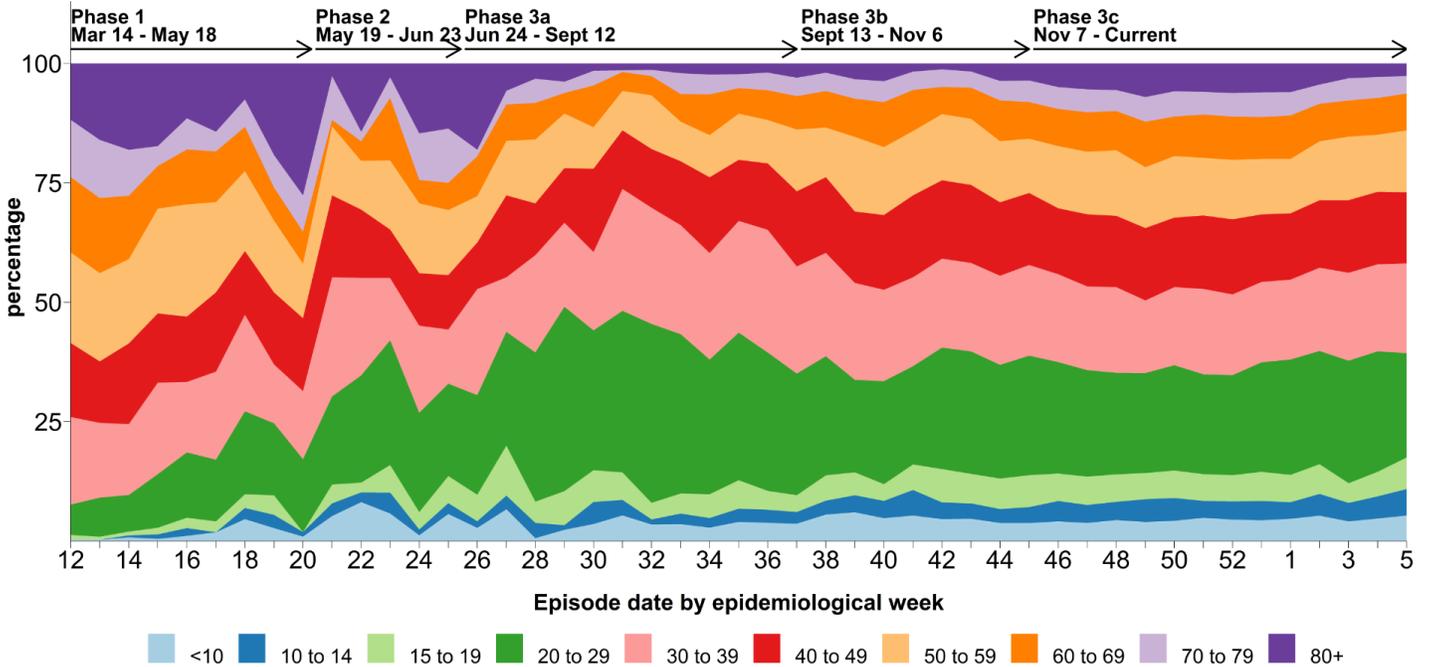
As shown in **Figure 8**, between week 3 and 5, there has been a decrease in incidence in age groups 20 years and older, most prominently in the 20-29 year olds (from 120 to 85 per 100K). Conversely, incidence increased in children especially in the 15-19 year-olds (from 49 to 65 per 100K) and the 10-14 year-olds (from 51 to 61 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 6, 2021 (week 5)^b

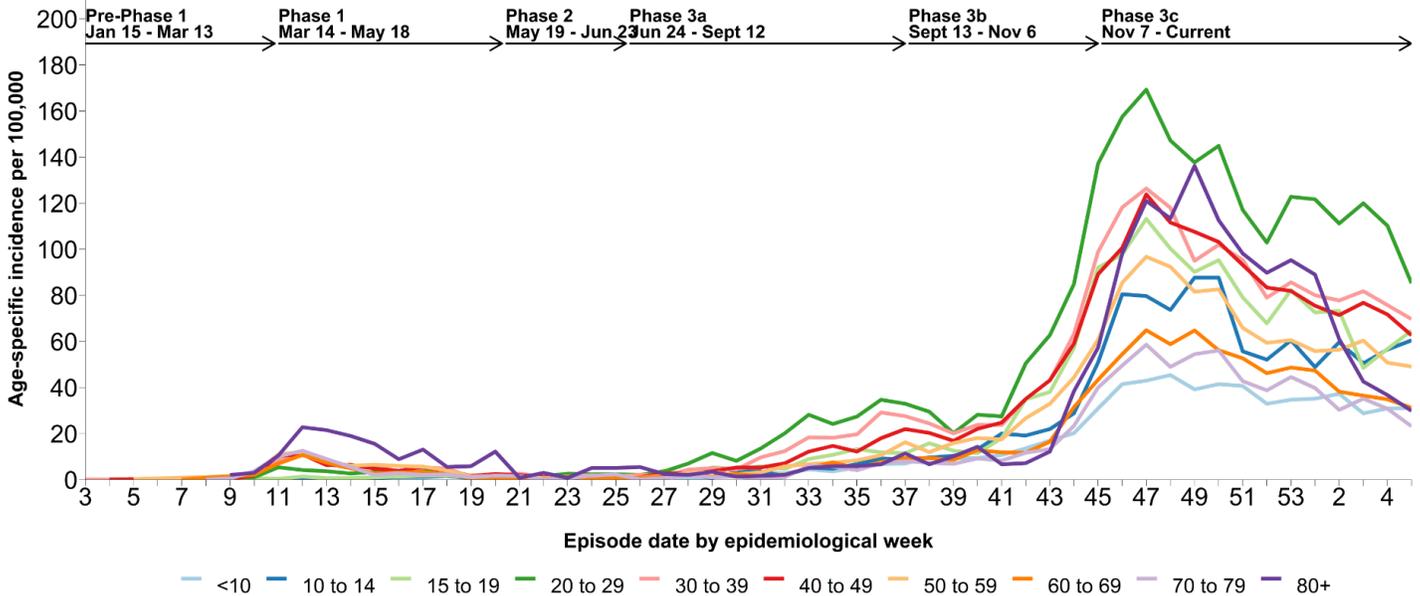


- a. Phase based on specimen collection date, of which January 20 was the earliest. The average weekly rate by phase is derived as the phase-specific per capita test rate divided by the number of weeks for Pre-Phase 1 + Phase 1 (P1: 17 weeks), Phase 2 (P2: 5 weeks), Phase 3a (P3a: 11.5 weeks), Phase 3b (P3b: 8 weeks), and Phase 3c, excluding the current report week (P3c: 12 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 12, 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 6, 2021 (week 5) (N= 71,067)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
January 15, 2020 (week 3) – February 6, 2021 (week 5) (N= 71,580)**



E. Severe outcome counts and epi-curve

The number of hospital admissions has decreased since week 2 from 213 hospitalizations per week to 152 in week 5. The number of deaths has also shown a recent decrease from week 3 to week 5 (72 to 44 deaths) ([Table 3, Figure 9](#)).

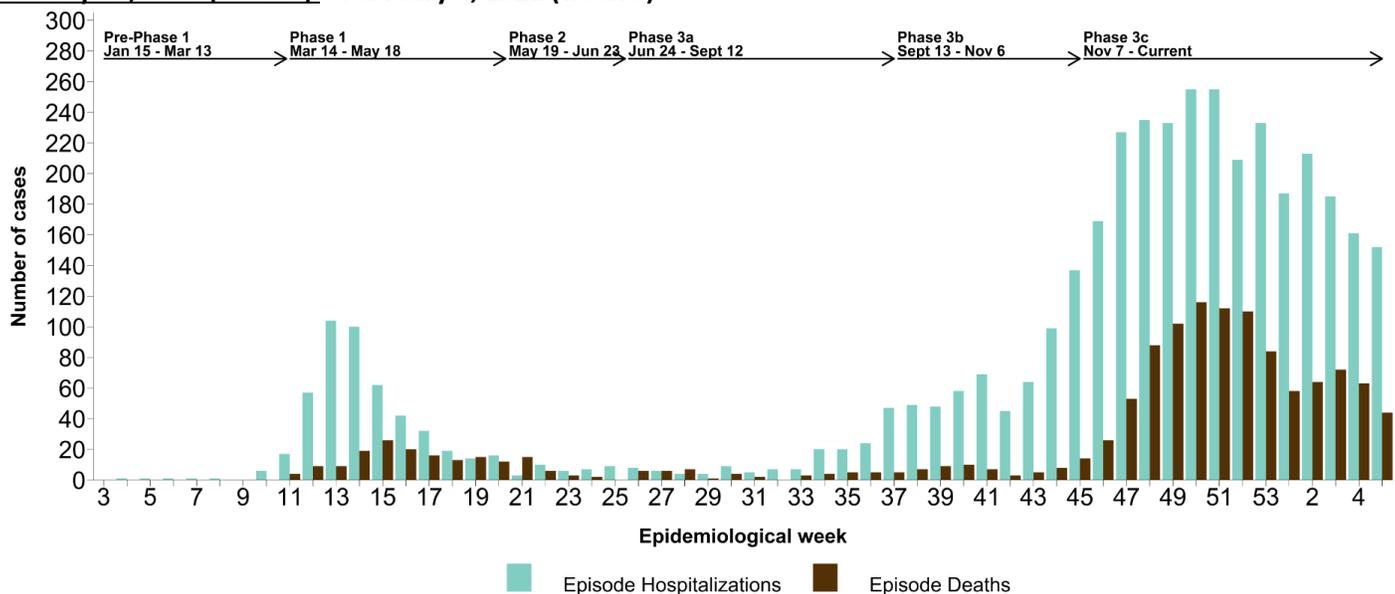
Cumulatively, there have been seven confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC since January 1, 2020. The median age of these cases is 10 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – February 6, 2021 (week 5)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 5, hospitalizations	68	31	12	24	17	0	152
Cumulative hospitalizations	2,200	358	108	355	923	9	3,953/71,602 (6)
Week 5, ICU admissions	12	9	1	5	3	0	30
Cumulative ICU admissions	421	104	27	95	273	2	922/71,602 (1)
Week 5, deaths	22	4	1	13	4	0	44
Cumulative deaths	704	82	20	88	378	0	1,272/71,602 (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 6, 2021 (week 5)



F. Age profile, severe outcomes

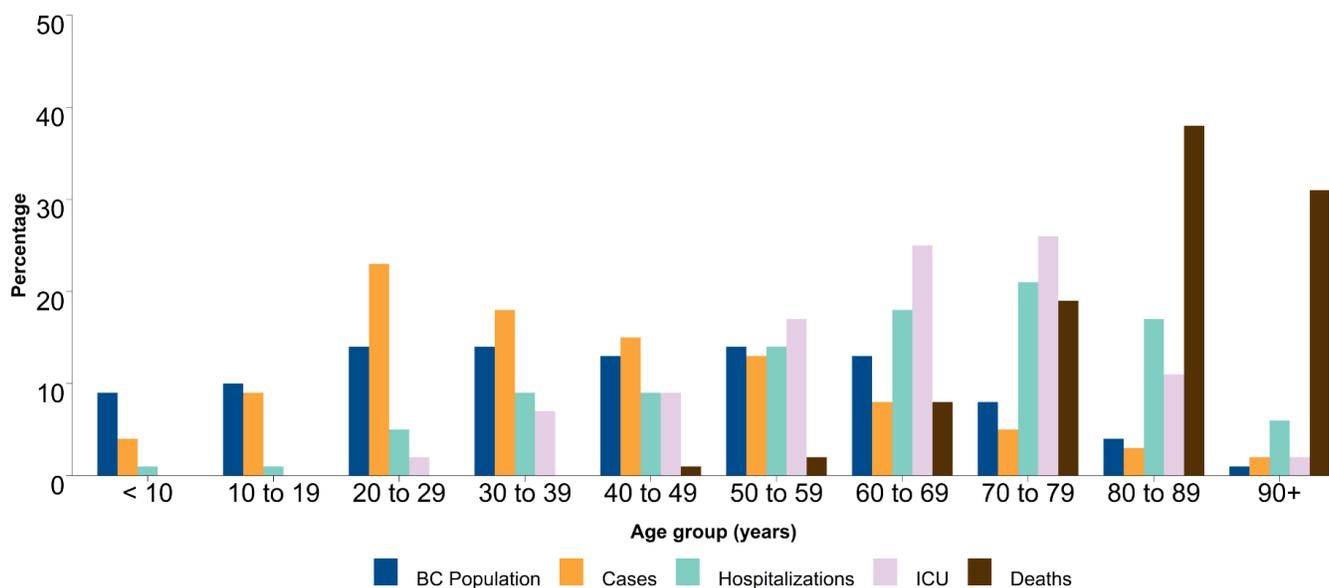
Table 4 and **Figure 10** display the distribution of cases and severe outcomes as well as the BC population for each age group. The distribution has not changed substantially over time. In week 5, median age of hospitalization was 66 years, while median age of death was 82 years.

In week 5, 172/2,724 (6%) cases, 59/152 (39%) hospitalizations, 13/30 (43%) ICU admissions, and 36/44 (82%) 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 6, 2021 (week 5) (N=71,580)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	3,053 (4)	38 (1)	2 (<1)	0 (0)	469,351 (9)
10-19	6,672 (9)	30 (1)	3 (<1)	0 (0)	527,805 (10)
20-29	16,396 (23)	180 (5)	21 (2)	0 (0)	697,691 (14)
30-39	12,910 (18)	343 (9)	68 (7)	4 (<1)	735,052 (14)
40-49	10,643 (15)	374 (9)	82 (9)	13 (1)	646,035 (13)
50-59	9,119 (13)	551 (14)	154 (17)	31 (2)	718,272 (14)
60-69	5,907 (8)	714 (18)	235 (25)	96 (8)	673,131 (13)
70-79	3,357 (5)	834 (21)	241 (26)	244 (19)	435,062 (8)
80-89	2,298 (3)	655 (17)	102 (11)	485 (38)	187,443 (4)
90+	1,225 (2)	234 (6)	14 (2)	399 (31)	49,726 (1)
Total	71,580	3,953	922	1,272	5,139,568
Median age	37	66	66	86	41

Figure 10. COVID-19 cases, hospitalizations, ICU admissions and deaths by age group, and BC population January 15, 2020 (week 3) – February 6, 2021 (week 5) (N=71,580)^a



a. Among those with available age information only.

G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 277 care facility outbreaks were reported in total in BC to the end of week 5. There has been a decreasing trend in care facility outbreaks since week 51. From week 51 to week 5, 36/64 (56%) of care facility outbreaks were in long-term care settings, and 38/64 (59%) were in FH.

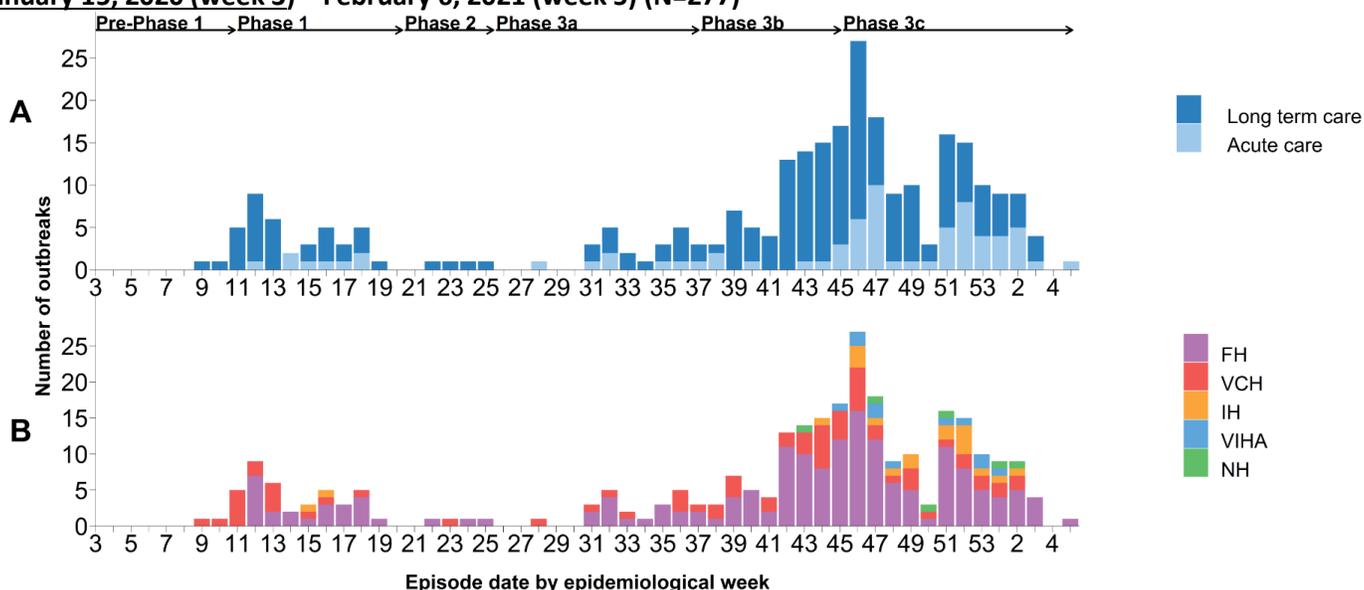
Almost three-quarters of all COVID-19 deaths in BC have been associated with care facility outbreaks (909/1,272; 72%) of these care facility deaths 875 (96%) were 70+ years old. Of the 44 deaths in week 5, 28 (64%) were associated with care facility settings, and of those 28 deaths, 25 (89%) were elderly adults 70+ years (data not shown).

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

January 15, 2020 (week 3) – February 6, 2021 (week 5) (N=277)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 5, Care Facility Outbreaks	1	36	24	0	60	28	0	0	28
Cumulative, Care Facility Outbreaks	277	3,151	2,127	5	5,283	909	0	0	909

Figure 11. COVID-19 care facility^a outbreaks by earliest case onset^b, facility type (A) and health authority (B), BC^c January 15, 2020 (week 3) – February 6, 2021 (week 5) (N=277)



- a. Care facility settings include acute care or long-term care settings (defined as long-term care facility or assisted living).
- b. Earliest dates of onset of outbreak cases are subject to change as investigations and data are updated.
- c. 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 59 cases infected with variants of concern. Of those, 40 (68%) were infected with variant B.1.1.7, of which 18 (45%) reported travel outside of Canada and 11 (28%) reported contact with travelers. Nineteen cases were infected with variant B.1.351, two of which reported travel outside of Canada. Episode dates range from week 51 to week 5.