

British Columbia (BC) COVID-19 Situation Report
Week 23: June 06- June 12, 2021

Table of Contents		Continued decline in COVID-19 cases, hospital and ICU admissions and deaths as vaccination coverage increases
Epidemic curve and regional incidence	2	There were 756 COVID-19 cases (15 per 100K) in week 23, a 90% decrease since the peak in week 14.
Likely sources of infection	3	Regional incidence is decreasing: <ul style="list-style-type: none"> • Since week 14, Fraser Health incidence decreased (218 to 20 per 100K). • Since week 13, Vancouver Coastal incidence decreased (192 to 10 per 100K). • Since week 14, Interior Health incidence decreased (87 to 20 per 100K). • Since week 13, Island Health incidence decreased (47 to 5 per 100K). • Since week 13, Northern Health incidence decreased (119 to 11 per 100K).
Test rates and % positive	4	Age-specific incidences decreased from weeks 13-14 to week 23 for all age groups. Sharpest declines were seen in the 15-39-year-olds.
Age profile, testing and cases	5	Single-dose vaccine coverage for 12+ year-olds reached 74% in week 23. Highest coverage was in 70+ year-olds at almost 90%, met by 35 cases in week 23, comparable to case counts in Wave 1 for that age group.
Severe outcomes	8	Testing of MSP-funded specimens decreased by 60% from week 14 to week 23. Positivity of MSP-funded specimens has also been decreasing since week 14 (12.1%), reaching 3.7% in week 23.
Age profile, severe outcomes	9	There has been 1 new confirmed cases of Multi-system Inflammatory Syndrome in children and adolescents (MIS-C) since last report, for a total of 15 cases in BC.
Care facility outbreaks	10	Weekly hospital admissions declined by 83% since week 15, reaching 65 admissions in week 23. Intensive care unit (ICU) admissions decreased by 85% since week 15, reaching 16 admissions in week 23. The number of deaths has been declining from 31 deaths in week 19 to 12 deaths in week 23.
Emerging respiratory pathogens update	10	By case of earliest onset date, there was 1 new outbreak reported in a care setting in week 23.

Table of [pandemic phases](#) defined by implementation or relaxation of population-level mitigation measures in BC:

PRE-PHASE 1 Jan 15 (wk 3) - Mar 13 (wk 11) 2020	PHASE 1 Mar 14 (wk 11) - May 18 (wk 21) 2020	PHASE 2 May 19 (wk 21) - Jun 23 (wk 26) 2020	PHASE 3 Jun 24 2020 (wk 26) - Current wk, 2021 (DATES START FROM BEGINNING OF COMPLETE EPIWEEK)
From earliest symptom onset date	Initial restrictions	Re-opening of services	PHASE 3A: Jun 24 (wk 26)-Sept 12 (wk 37) 2020: Broader re-opening 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

Table of [vaccination phases](#) defined by vaccine eligibility of target populations in BC:

VACCINATION PHASE 1 Dec 2020 to Feb 2021	VACCINATION PHASE 2 Feb to April 2021	VACCINATION PHASE 3 April to May 2021	VACCINATION PHASE 4 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 June 21, 2021, laboratory data on June 18, 2021, PIR vaccine coverage date on June 18, 2021, and PCMS hospitalization data on June 18, 2021.

A. COVID-19 case counts and epidemic curves

Provincially, up to week 23, 2021, there have been 146,615 cases, for a cumulative incidence of 2,817 per 100K (Table 1, Figure 1). As shown in Figure 1, following the peak of Wave 3 in week 14 at 150 per 100K, incidence has decreased by 90% to reach 15 per 100K in week 23. The incidence in week 23 is comparable to early weeks of September 2020 during Phase 3a. Rates may increase as data by episode date become more complete. Due to an update to the provincial population estimates used to calculate rates, there is a slight change in rates compared to reports in week 21 and earlier.

As shown in Figure 2, incidence decreased or stabilized in most health authorities in the 8-9 weeks prior to week 23. Fraser Health (FH) and Interior Health (IH) have the highest incidence rate at 20 per 100K; Vancouver Coastal Health (VCH) at 10 per 100K; Northern Health (NH) at 11 per 100K; and Island Health (VIHA) at 5 per 100K. Incidence has decreased in all health service delivery areas (HSDA), except in VIHA HSDAs where it increased slightly in week 23. Rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – June 12, 2021 (week 23) (N= 146,615)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 23, case counts	390	166	48	31	119	2	756
Cumulative case counts	85,345	12,894	5,132	7,773	35,268	203	146,615
Week 23, cases per 100K population	20	20	5	11	10	NA	15
Cumulative cases per 100K population	4,338	1,534	587	2,686	2,880	NA	2,817

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – June 12, 2021 (week 23) (N= 146,615)

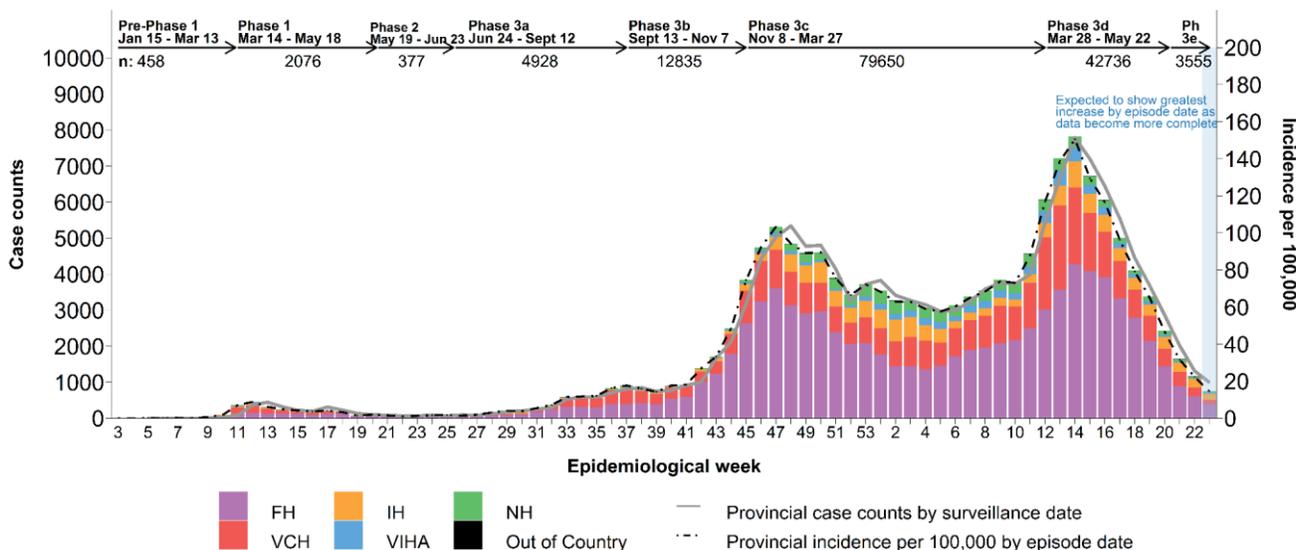
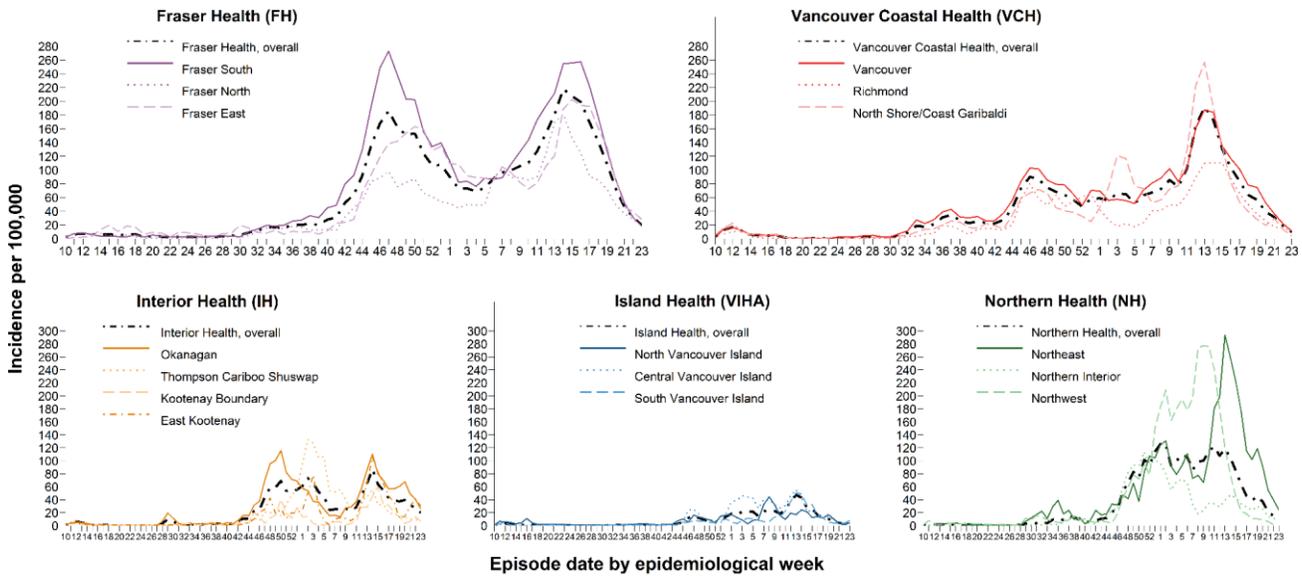


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – June 12, 2021 (week 23) (N= 146,615)



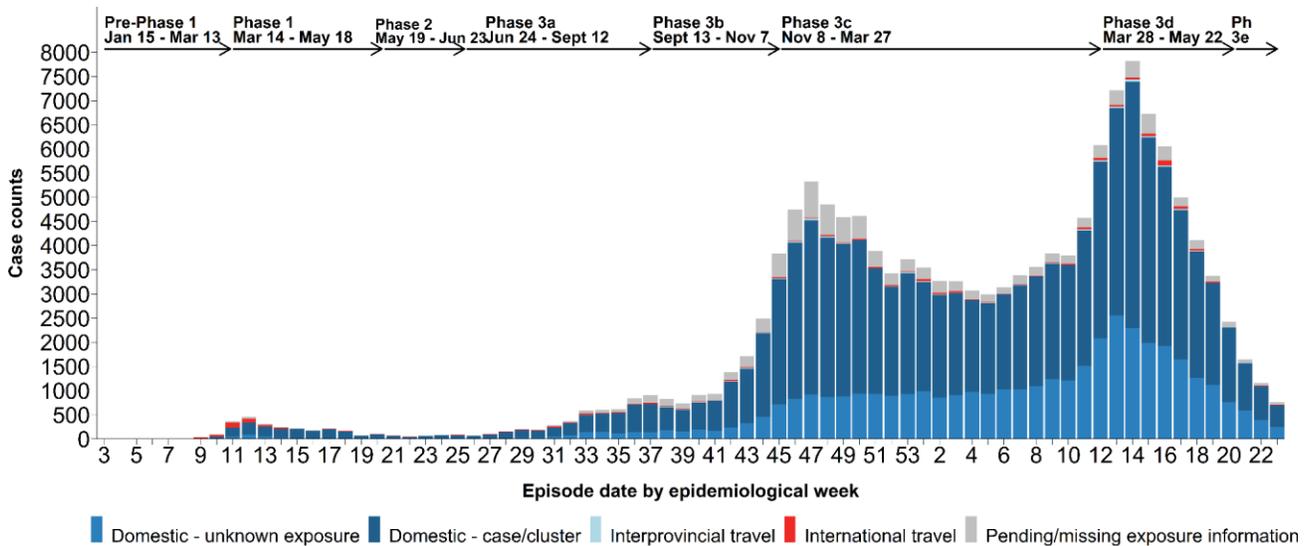
B. Likely sources of infection

As shown in [Table 2](#) and [Figure 3](#), 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) – June 12, 2021 (week 23) (N= 146,615)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 23 , Exposures	9 (1)	3 (<1)	446 (59)	250 (33)	48 (6)
Cumulative Exposures	1,504 (1)	618 (<1)	94,335 (64)	39,475 (27)	10,683 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – June 12, 2021 (week 23) (N= 146,615)



C. Test rates and percent positive

As shown by the darker-colored bars in [Figure 4](#), testing of MSP-funded specimens decreased by 60% from ~67,500 specimens in week 14 to ~27,500 in week 23. Positivity of MSP-funded specimens has been decreasing rapidly since week 14 (12.1%) reaching 3.7% in week 23.

As shown in [Panel A of Figure 5](#), the per capita testing rates for MSP-only specimens have been declining in all HAs since weeks 14-15, but increased slightly in VIHA in week 23. As shown in Panel B, percent positivity for week 23 MSP-funded tests is highest in NH at 6.8% followed by IH at 4.9%, FHA at 3.7%, VCH at 3.3%, and lowest in VIHA at 1.6%. After decreasing since weeks 13-14, Percent positivity increased in VIHA and NH in week 23.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – June 12, 2021 (week 23)

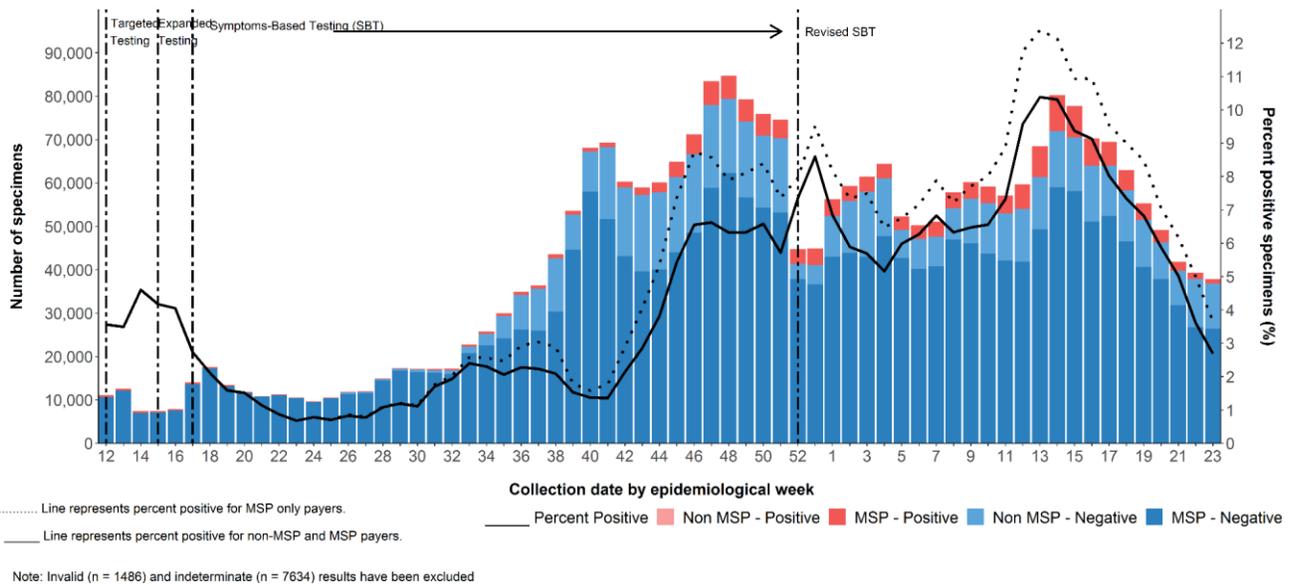
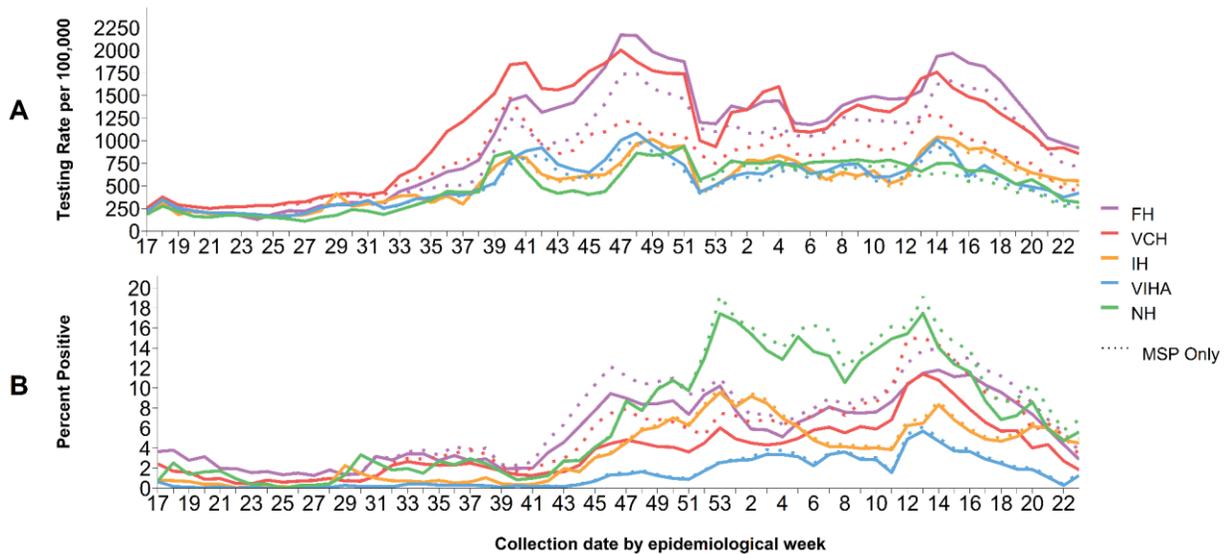


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – June 12, 2021 (week 23)



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 week 23 have decreased in all age groups since at least week 18. The highest testing rates in week 23 were in the 80+ year-olds at 796 per 100K and the 5-9 year-olds at 733 per 100K.

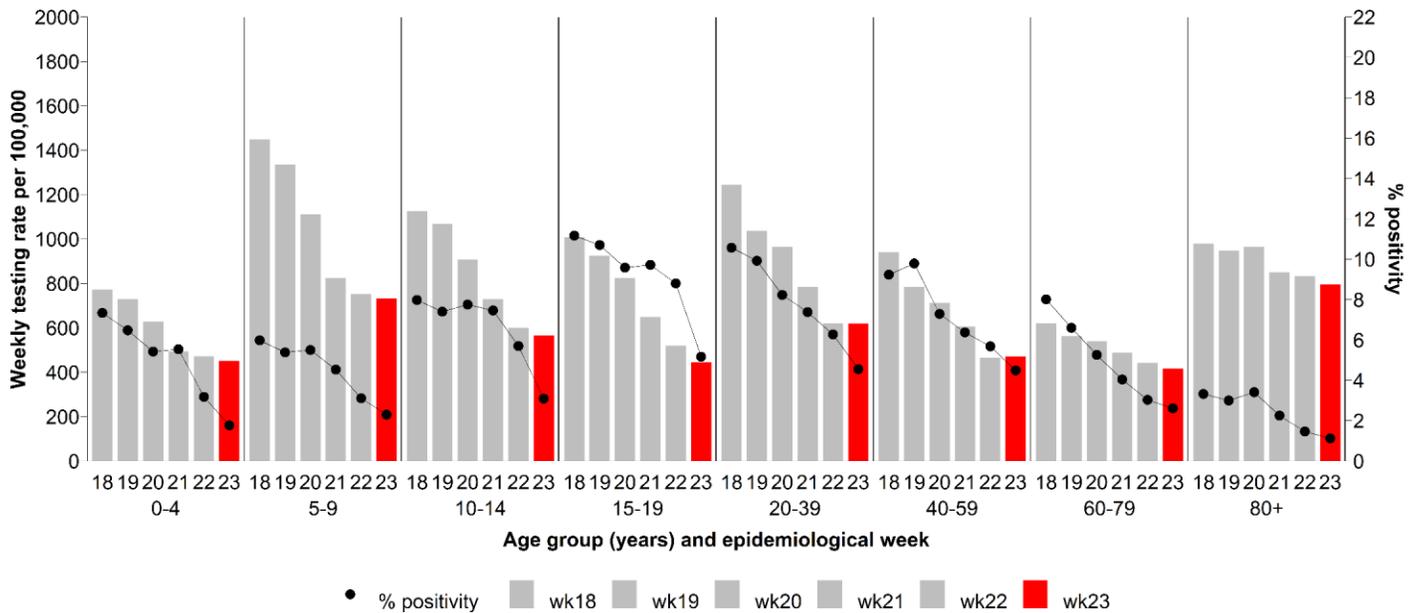
As shown by the black dots in [Figure 6](#), the percent positivity has decreased in all age groups since weeks 18-19. The percent positivity in the 20-39 and the 0-4 year age groups have experienced the sharpest decline since week 17. In week 23, the highest percent positivity was in the 15-19 year-olds at 5.2% followed by the 20-39-year-olds at 4.6% and the 40-59-year-olds at 4.5%. The lowest percent positivity was in the 80+ year-olds at 1.1%.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the percentage contribution of the 30-39, 40-49, 20-29 year-olds increased by 3.4%, 1.9%, and 1.7% since week 22, met mainly by a decrease of 4.7% and 2.8% among the 15-19 year-olds and 10-14 year-olds, respectively. The remaining age groups' contributions remained relatively stable.

As shown in [Figure 8](#), age specific incidences decreased from weeks 13-14 to week 23 for all age groups. Sharpest declines were seen in the 20-29-year-olds and 15-19-year-olds from week 14 to week 23 (from 256 to 23 per 100k and 219 to 18 per 100k, respectively), a decrease of 91% in both age groups. In the 30-39-year-olds, incidence decreased by 89% from week 13 to week 23 (from 197 to 22 per 100k). Week 23 age-specific incidences are likely to increase as data become more complete.

Figure 6. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC January 20, 2020 (week 4) – June 12, 2021 (week 23)



Data source: laboratory PLOVER data

Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC March 15, 2020 (week 12) – June 12, 2021 (week 23) (N= 146,078)

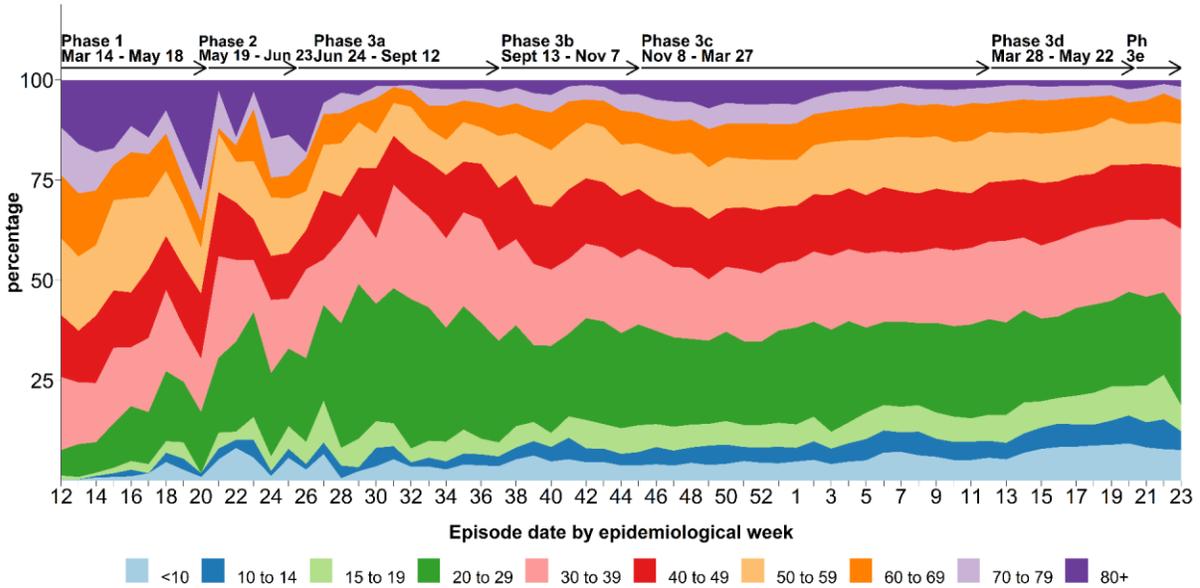
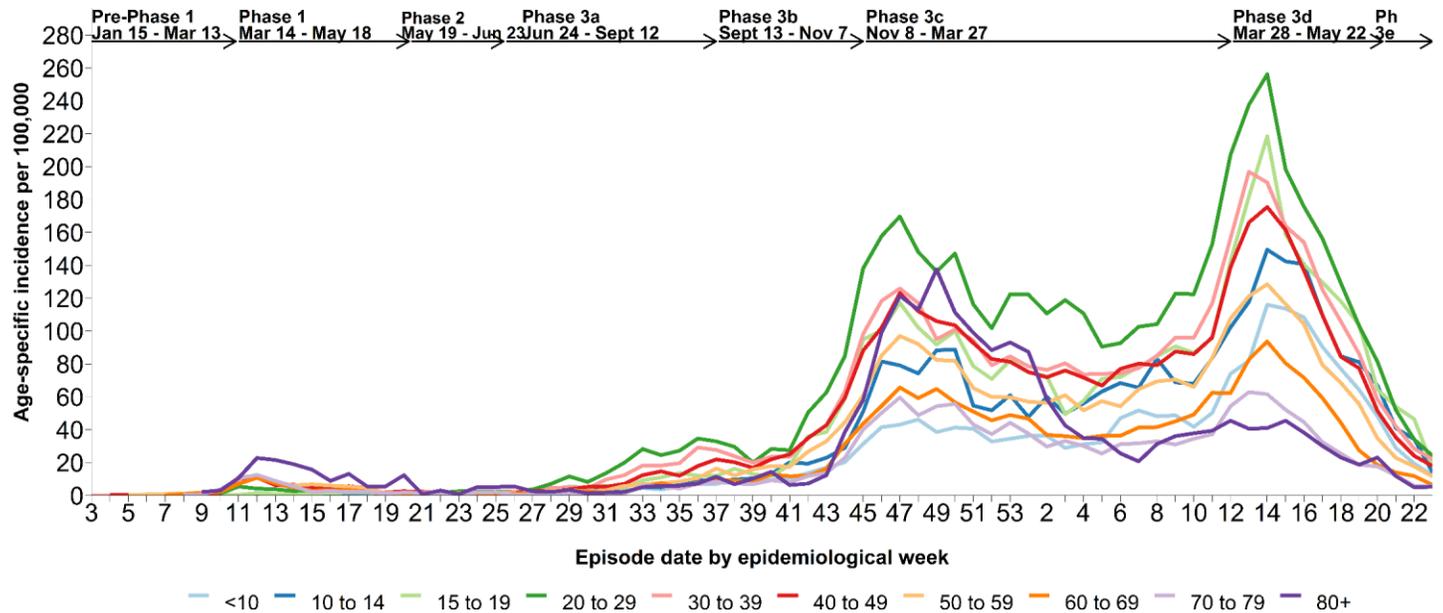


Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC January 15, 2020 (week 3) – June 12, 2021 (week 23) (N= 146,591)



Single-dose vaccine coverage and weekly cases by age group

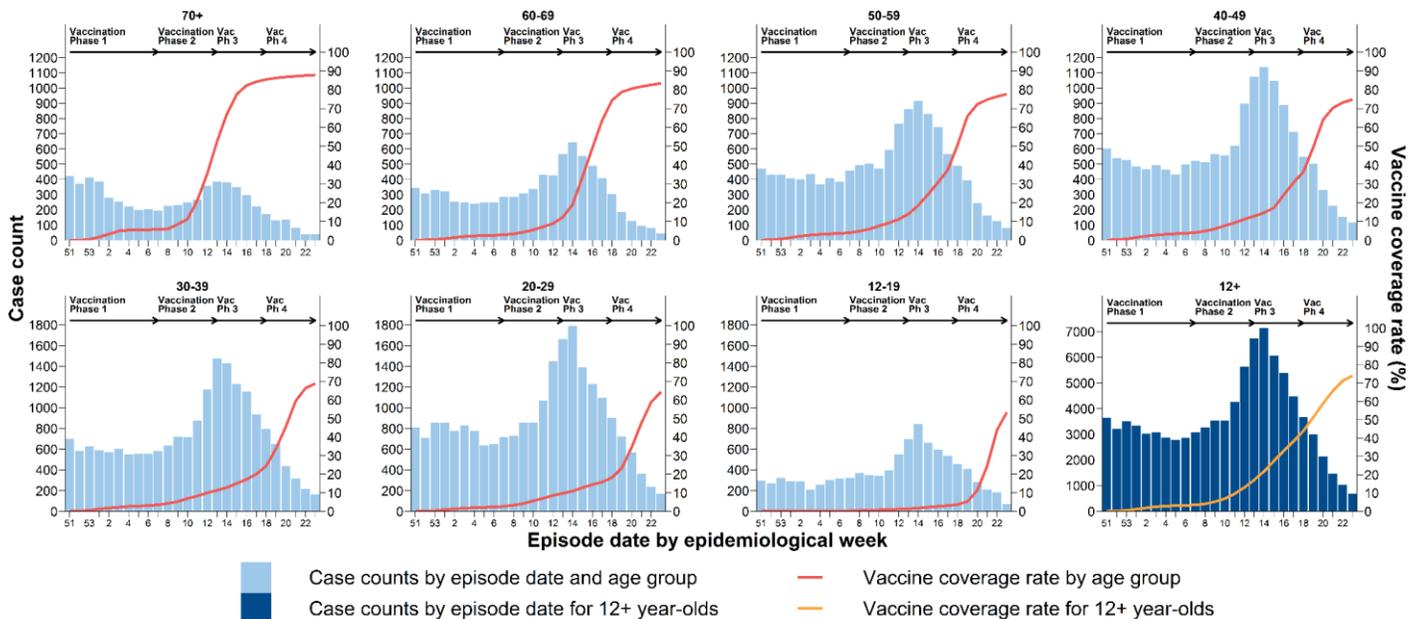
As vaccination coverage increases, case counts are expected to decrease a few weeks later. The vaccination of community-based older adults 70+ years of age started between weeks 10 and 14. As shown in **Figure 9**, by week 23, the single-dose vaccination coverage in this age group reached almost 90% and was met with only 35 cases, comparable to case counts in Wave 1 for that 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 23, coverage reached 83%, 78%, and 75% reflecting case counts of 44, 82, and 116 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 23, coverage was 64% and 69% with ~165 cases for each of the 20-29 and 30-39 year-old groups.

The lowest coverage was in children 12-19 years of age at 53% coverage in week 23. Overall, single-dose vaccine coverage for all age groups 12+ years reached 74% by week 23.

Figure 9. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC December 13, 2020 (week 51) – June 12, 2021 (week 23)



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 83% since then, reaching 65 admissions in week 23. The number of intensive care unit (ICU) admissions also peaked in week 15 (109) and has decreased by 85% since then, reaching 16 admissions in week 23. The number of deaths has also declined from 31 deaths in week 19 to 12 deaths in week 23 ([Table 3, Figure 9](#)). These numbers may increase in future reports as more data become available.

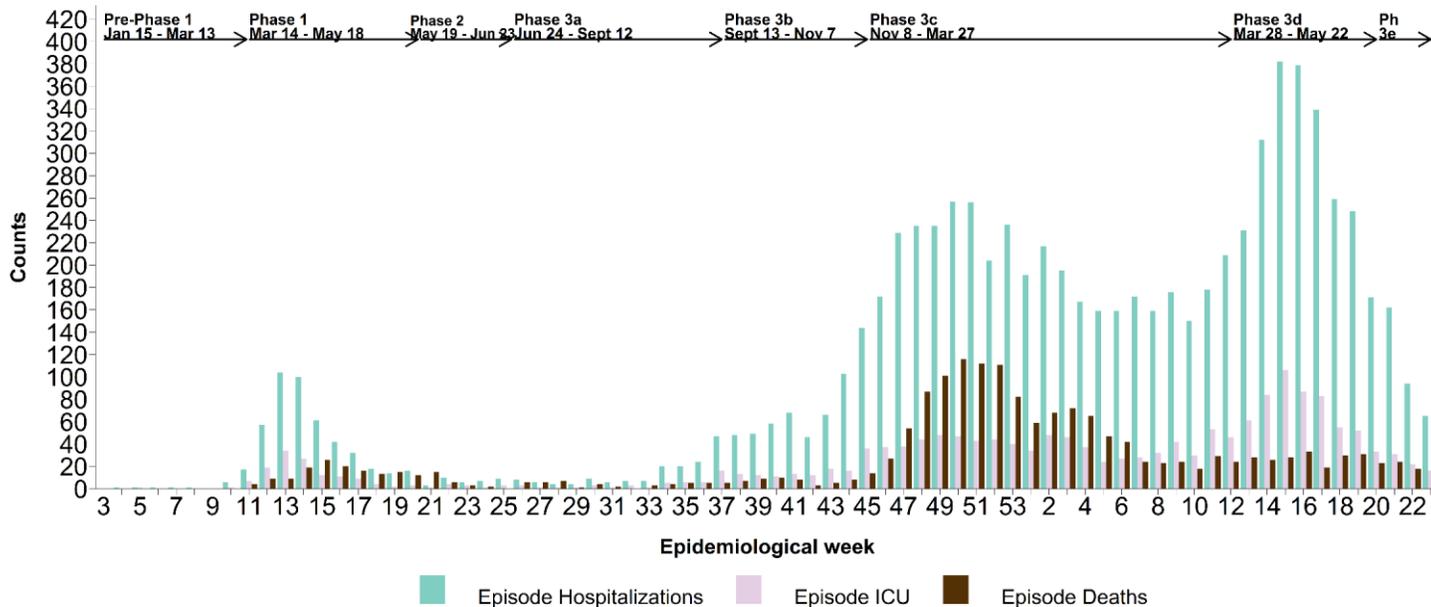
Cumulatively, there have been 15 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 23. The median age of these cases is 8 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – June 12, 2021 (week 23)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 23, hospitalizations	30	16	0	2	17	0	65
Cumulative hospitalizations^b	4,329	717	250	651	1,888	14	7,849/146,615 (5)
Week 23, ICU admissions	6	7	0	1	2	0	16
Cumulative ICU admissions^b	801	189	68	164	514	2	1,738/146,615 (1)
Week 23, deaths	5	3	0	2	2	0	12
Cumulative deaths	913	155	41	155	474	0	1,738/146,615 (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) – June 12, 2021 (week 23)



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

F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes. In week 23, median age of hospital admissions, ICU admissions and deaths was 54 years, 60.5 years and 79.5 years, respectively (data not shown).

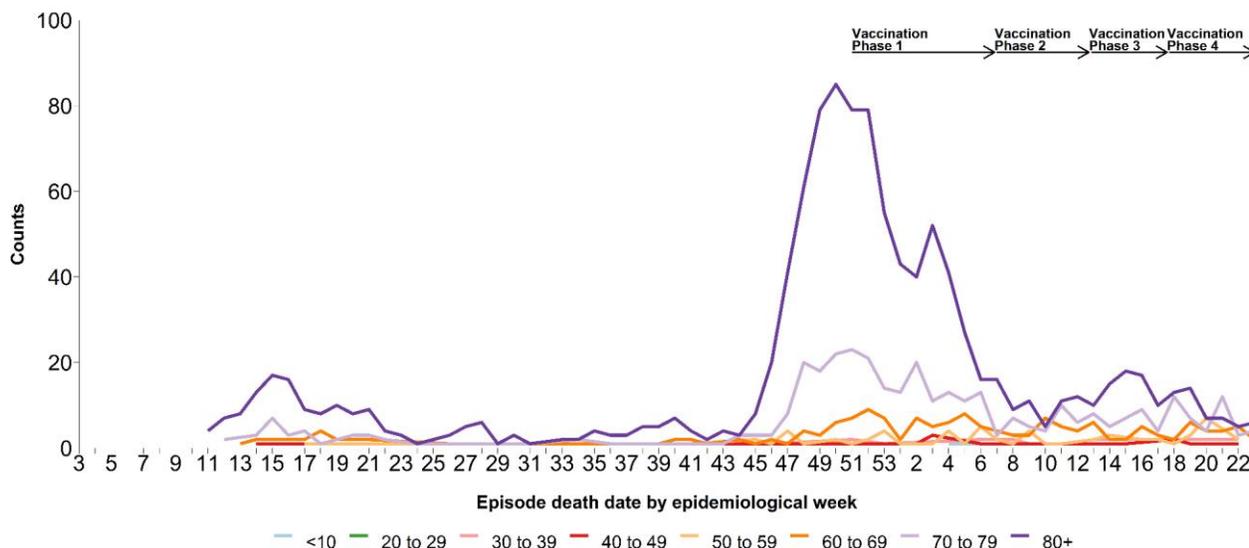
As shown in **Figure 11**, since week 6, death counts have been low and stable in elderly adults with an average of 11 deaths per week in the 80+ year-olds, 7 in the 70-79-year-olds, 4 in the 60-69-year-olds, and 2 in the 50-59-year-olds.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – June 12, 2021 (week 23) (N= 146,591)^a

Age group (years)	Cases n (%)	Hospitalizations n (%)	ICU n (%)	Deaths n (%)	General BC population n (%)
<10	8,334 (6)	93 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	15,771 (11)	68 (1)	14 (1)	0 (<1)	529,387 (10)
20-29	32,913 (22)	392 (5)	43 (2)	1 (<1)	699,476 (13)
30-39	27,029 (18)	764 (10)	143 (8)	16 (1)	750,054 (14)
40-49	21,606 (15)	879 (11)	181 (10)	25 (1)	648,377 (12)
50-59	18,283 (12)	1,225 (16)	327 (19)	67 (4)	711,930 (14)
60-69	11,778 (8)	1,475 (19)	436 (25)	165 (9)	686,889 (13)
70-79	6,069 (4)	1,496 (19)	422 (24)	370 (21)	454,855 (9)
80-89	3,313 (2)	1,091 (14)	153 (9)	616 (35)	193,351 (4)
90+	1,495 (1)	380 (5)	17 (1)	476 (27)	52,885 (1)
Total	146,591	7,863	1,743	1,738	5,197,221
Median age	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.

Figure 11. Weekly age-specific COVID-19 deaths by episode date, BC January 15, 2020 (week 3) – June 12, 2021 (week 23) (N= 1,738)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 11](#), 325 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 23, with 1 new outbreak in week 23. 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.

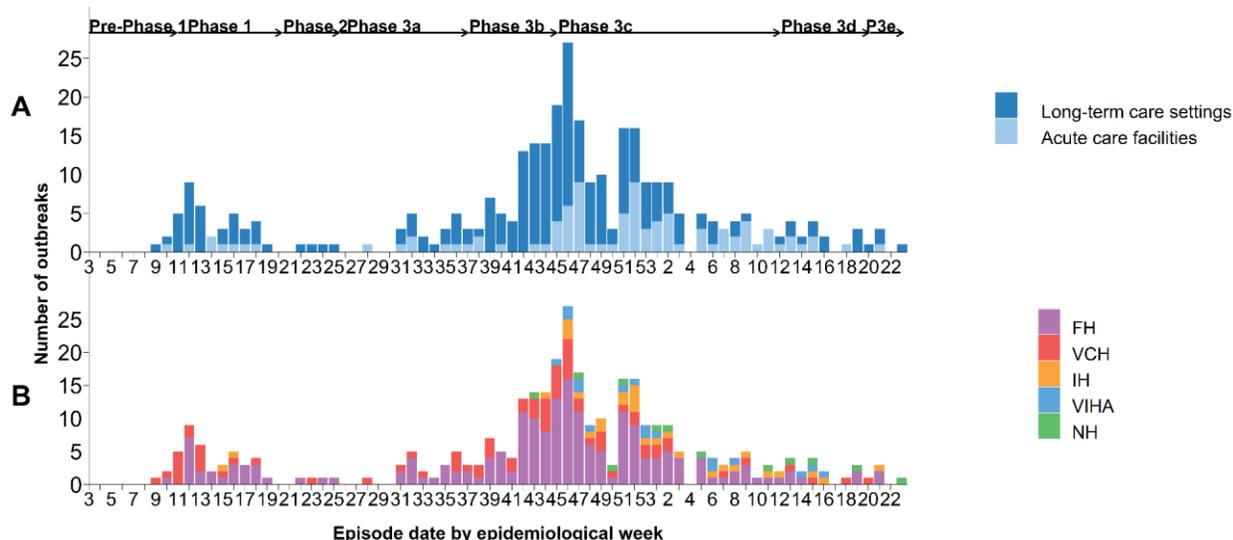
Four of the 12 (33%) deaths reported in week 23 were associated with an outbreak in a care facility setting (Figures of cases and deaths among 70+ years of age in previous reports have been replaced with [Figure 9](#) given several weeks of stable findings and to provide a more comprehensive display for all age groups).

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) – June 12, 2021 (week 23) (N=325)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 23, Care Facility Outbreaks	1	5	1	0	6	4	0	0	4
Cumulative, Care Facility Outbreaks	325	3,563	2,277	6	5,846	1,029	0	0	1,029

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) – June 12, 2021 (week 23) (N=325)



- 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

Variant of concern (VOC) findings are available weekly here: <http://www.bccdc.ca/health-info/diseases-conditions/covid-19/data#variants>.