

British Columbia (BC) COVID-19 Situation Report
Week 22: May 30- June 05, 2021

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Continued decline in COVID-19 cases, and hospital and ICU admissions, as vaccination coverage increases

There were 1,078 COVID-19 cases (21 per 100K) in week 22, an 86% decrease since the peak in week 14.

Regional incidence is decreasing*:

- Since week 14, Fraser Health incidence decreased (218 to 30 per 100K).
- Since week 13, Vancouver Coastal incidence decreased (192 to 17 per 100K).
- Since week 14, Interior Health incidence decreased (86 to 25 per 100K).
- Since week 13, Island Health incidence decreased (48 to 3 per 100K).
- Since week 13, Northern Health incidence decreased (119 to 14 per 100K).

Age-specific incidences decreased from weeks 13-14 to week 22 for all age groups. Sharpest declines were seen in the 15-19-year-olds, 20-29-year-olds and 30-39-year-olds.

Single-dose vaccine coverage for 12+ year-olds exceeded 70% by week 22. Highest coverage was in 70+ year-olds at almost 90%, met by 34 cases in week 22, comparable to case counts in Wave 1 for that age group.

Testing of MSP-funded specimens decreased by 58% from ~67,500 specimens in week 14 to ~28,000 in week 22. Positivity of MSP-funded specimens decreased from 12.1% in week 14 to 5.0% in week 22.

The number of weekly hospital admissions peaked in week 15 and has declined since then, reaching 92 admissions in week 22. The number of intensive care unit (ICU) admissions also peaked in week 15 and has decreased since then, reaching 22 admissions in week 22. The number of deaths has been stable from weeks 7 to 22, with 18 deaths in week 22.

By case of earliest onset date, there were no outbreaks reported in care settings in week 22.

*Update in BC denominators may affect past rates

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 14, 2021, laboratory data on June 11, 2021, PIR vaccine coverage date on June 11, 2021, and PCMS hospitalization data on June 14, 2021.

A. COVID-19 case counts and epidemic curves

Provincially, up to week 22, 2021, there have been 145,768 cases, for a cumulative incidence of 2,801 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 86% to reach 21 per 100K in week 22. The incidence in week 22 is comparable to early weeks of October 2020 during Phase 3b. 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 from previous reports.

As shown in Figure 2, incidence decreased in all health authorities in the 8-9 weeks prior to week 22. Fraser Health (FH) maintains the highest incidence rate at 30 per 100K, followed by Interior Health (IH) at 25 per 100K; Vancouver Coastal Health (VCH) at 17 per 100K; Northern Health (NH) at 14 per 100K; and Island Health (VIHA) at 3 per 100K. Incidence has decreased in all health service delivery areas to week 19; however, East Kootenay and Kootenay Boundary in IHA have both increased slightly since week 20 and 21, respectively. Rates may increase as data become more complete.

Table 1. Episode-based case tallies by health authority, BC, Jan 15, 2020 – June 05, 2021 (week 22) (N= 145,768)

Case tallies by episode date	Health Authority of Residence					Outside Canada	Total
	FH	IH	VIHA	NH	VCH		
Week 22, case counts	590	212	23	39	212	2	1,078
Cumulative case counts	84,913	12,686	5,089	7,738	35,141	201	145,768
Week 22, cases per 100K population	30	25	3	13	17	NA	21
Cumulative cases per 100K population	4,316	1,509	582	2,674	2,870	NA	2,801

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and health authority (HA), BC January 15, 2020 (week 3) – June 05, 2021 (week 22) (N= 145,768)

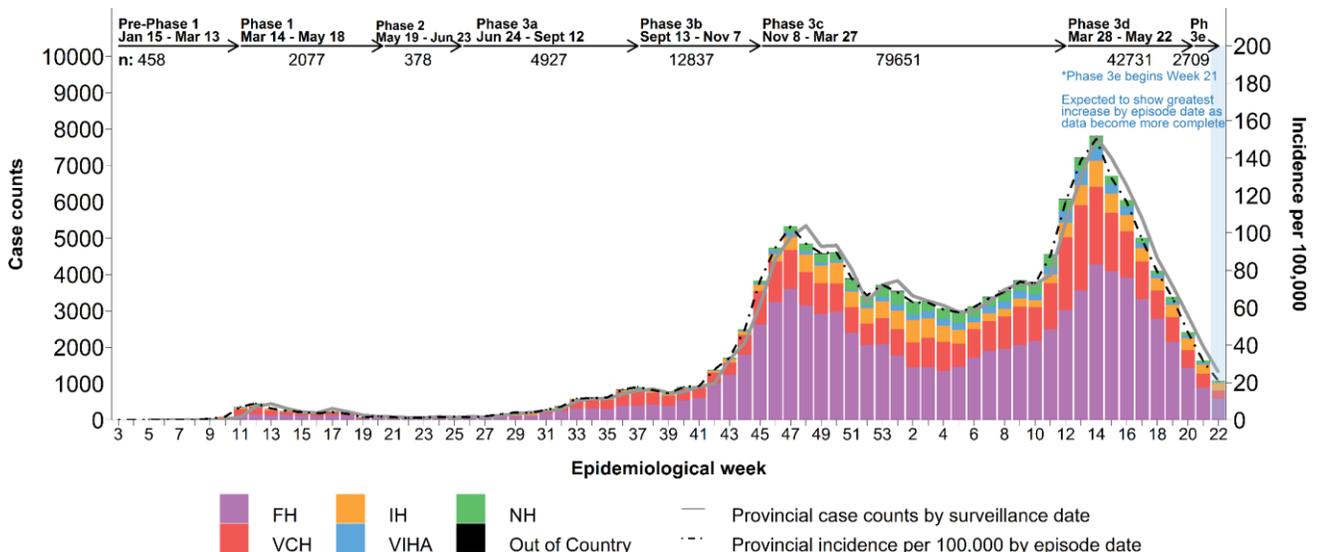
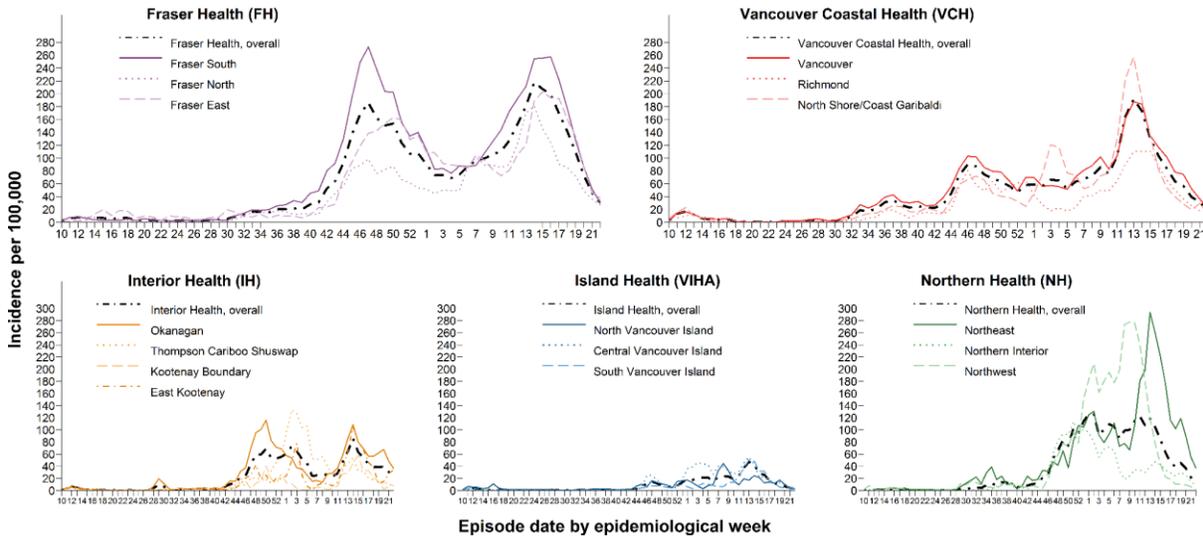


Figure 2. Weekly episode-based incidence rates by HA and health service delivery area (HSDA), BC March 01, 2020 (week 10) – June 05, 2021 (week 22) (N= 145,768)



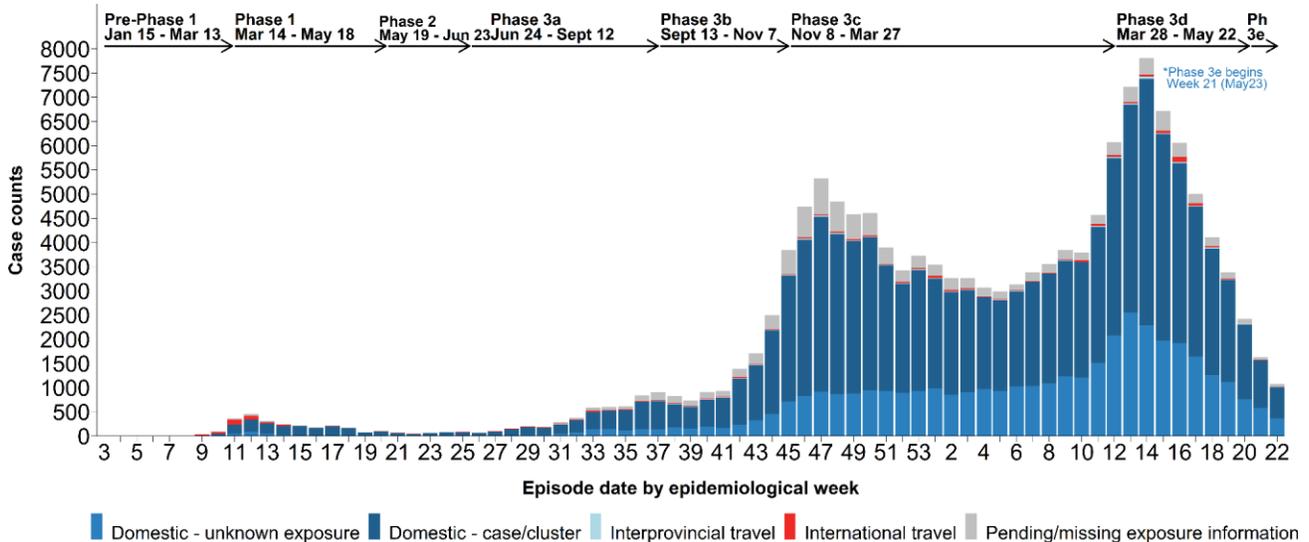
B. Likely sources of infection

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 05, 2021 (week 22) (N= 145,768)

Likely exposure (row %)	International travel	Interprovincial travel	Domestic – case/cluster	Domestic – unknown	Pending/missing
Week 22 , Exposures	8 (1)	4 (<1)	644 (60)	361 (33)	61 (6)
Cumulative Exposures	1,493 (1)	616 (<1)	93,806 (64)	39,167 (27)	10,686 (7)

Figure 3. Likely source of COVID-19 infection by episode date, BC January 15, 2020 (week 3) – June 05, 2021 (week 22) (N= 145,768)



C. Test rates and percent positive

As shown by the darker-colored bars in **Figure 4**, testing of MSP-funded specimens decreased by 58% from ~67,500 specimens in week 14 to ~28,000 in week 22. Positivity of MSP-funded specimens has been decreasing rapidly since week 14 (12.1%) reaching 5.0% in week 22.

As shown in **Panel A** of **Figure 5**, the per capita testing rates for MSP-only specimens has been declining in all HAs. Testing rates have decreased in VCH, IH, NH and VIHA since week 14 and in FH since week 15. As shown in **Panel B**, percent positivity for week 22 MSP-funded tests is highest in NH at 5.9% followed by FH at 5.6%, VCH at 5.2%, IH at 5.1%, and lowest in VIHA at 0.4%. Percent positivity has decreased all HAs: VIHA and VCH since week 13, FH since week 14, NHA and IHA since week 20.

Figure 4. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC March 15, 2020 (week 12) – June 05, 2021 (week 22)

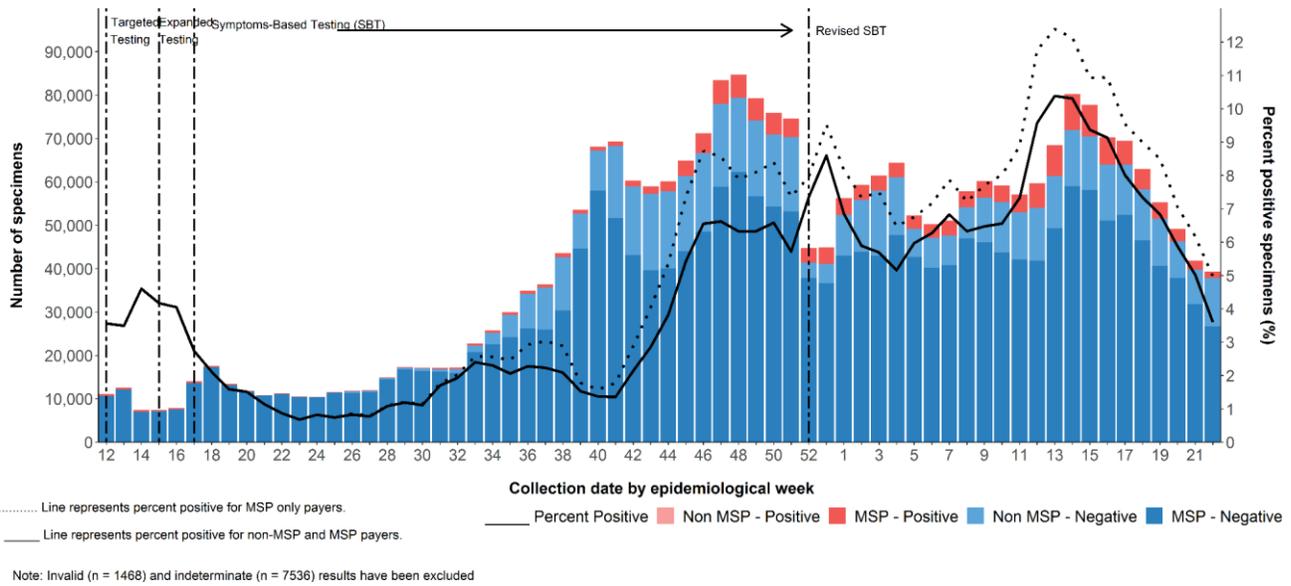
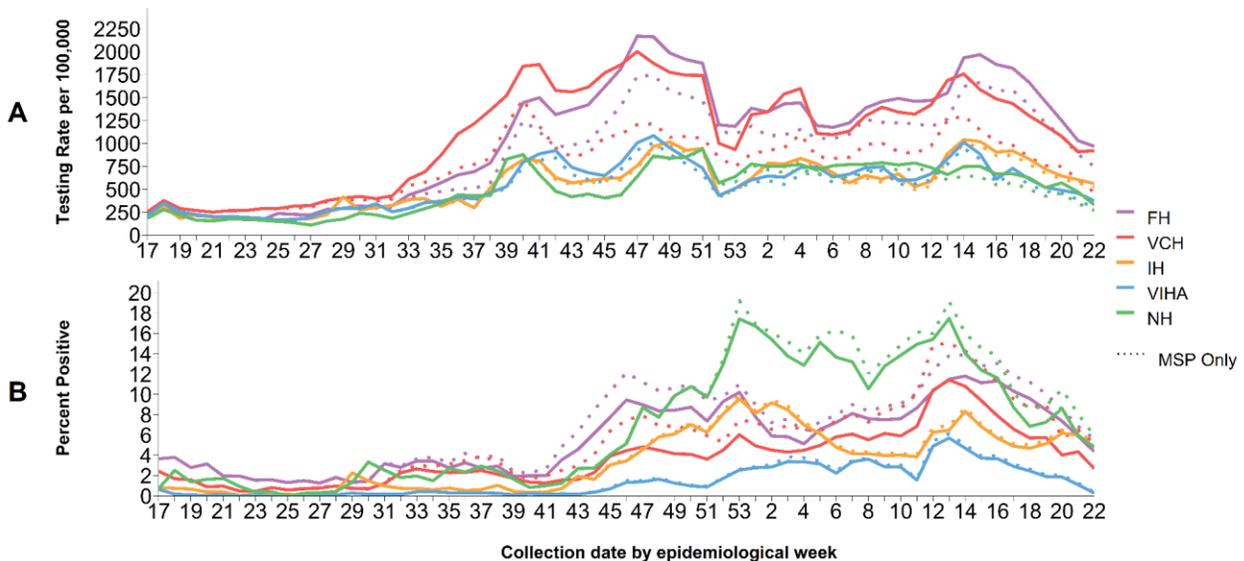


Figure 5. Testing rates and percent SARS-CoV-2 positive by health authority and collection week, BC March 15, 2020 (week 12) – June 05, 2021 (week 22)



Data source: laboratory PLOVER data

D. Age profile – Testing and cases

Testing rates and percent positivity by age group

As shown in [Figure 6](#), testing rates in week 22 have decreased in all age groups since week 17. The highest testing rate in week 22 was in the 80+ year-olds at 833 per 100K and the 5-9 year-olds at 752 per 100K.

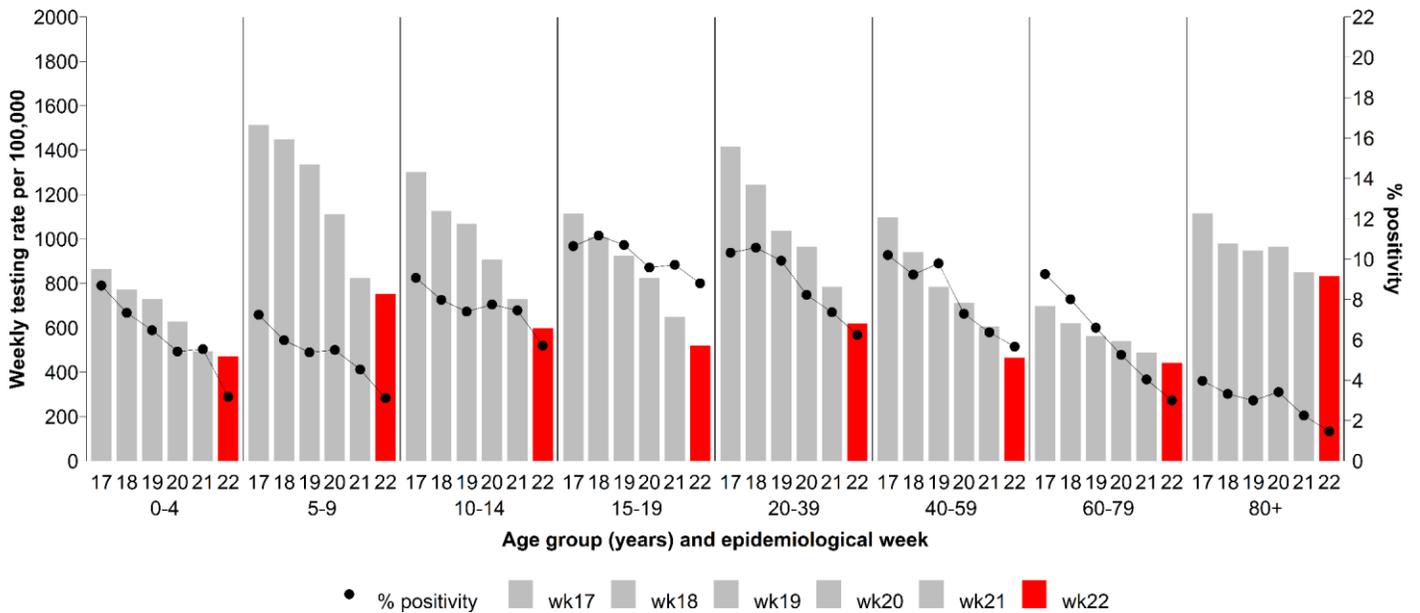
As shown in [Figure 6](#), the percent positivity has decreased in all age groups since weeks 17-18. The percent positivity in the 60-79 and the 0-4 year age groups have experienced the sharpest decline since week 17. In week 22, the highest percent positivity was in the 15-19 year-olds at 8.8% followed by the 20-39-year-olds at 6.2% and the 10-14 and 40-59-year-olds at 5.7%. The lowest percent positivity was in the 80+ year-olds at 1.5%.

Case distribution and weekly incidence by age group

As shown in [Figure 7](#), the percentage contribution of the 10-14 and 15-19 year-olds increased by 2.0% and 1.3% since week 21, met mainly by a decrease of 1.3%, 1.1%, and 0.9% among the 20-29, 70-79, and 40-49 year-olds, respectively. The remaining age groups' contributions remained relatively stable.

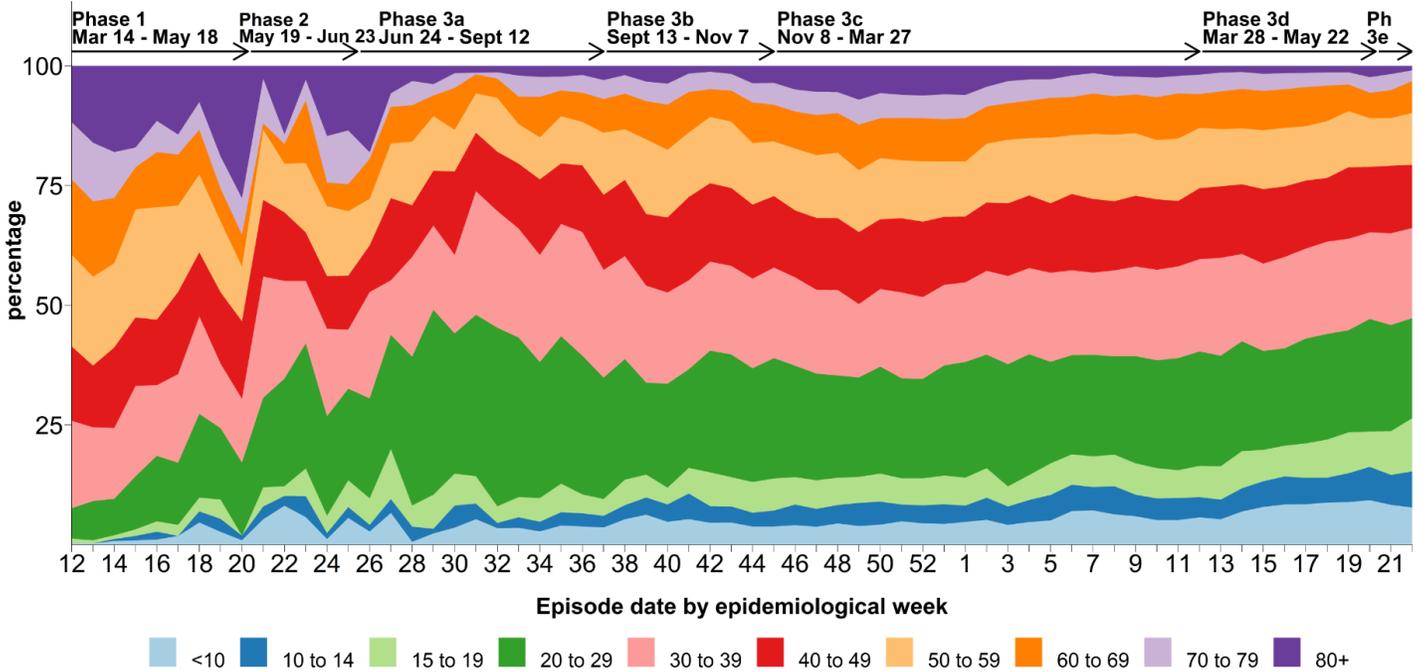
As shown in [Figure 8](#), age specific incidences decreased from weeks 13-14 to week 22 for all age groups. Sharpest declines were seen in the 15-19-year-olds and 20-29-year-olds from week 14 to week 22 (from 219 to 43 per 100k and 256 to 32 per 100k, respectively), and in the 30-39-year-olds from week 13 to week 22 (from 197 to 27 per 100k). Week 22 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 05, 2021 (week 22)

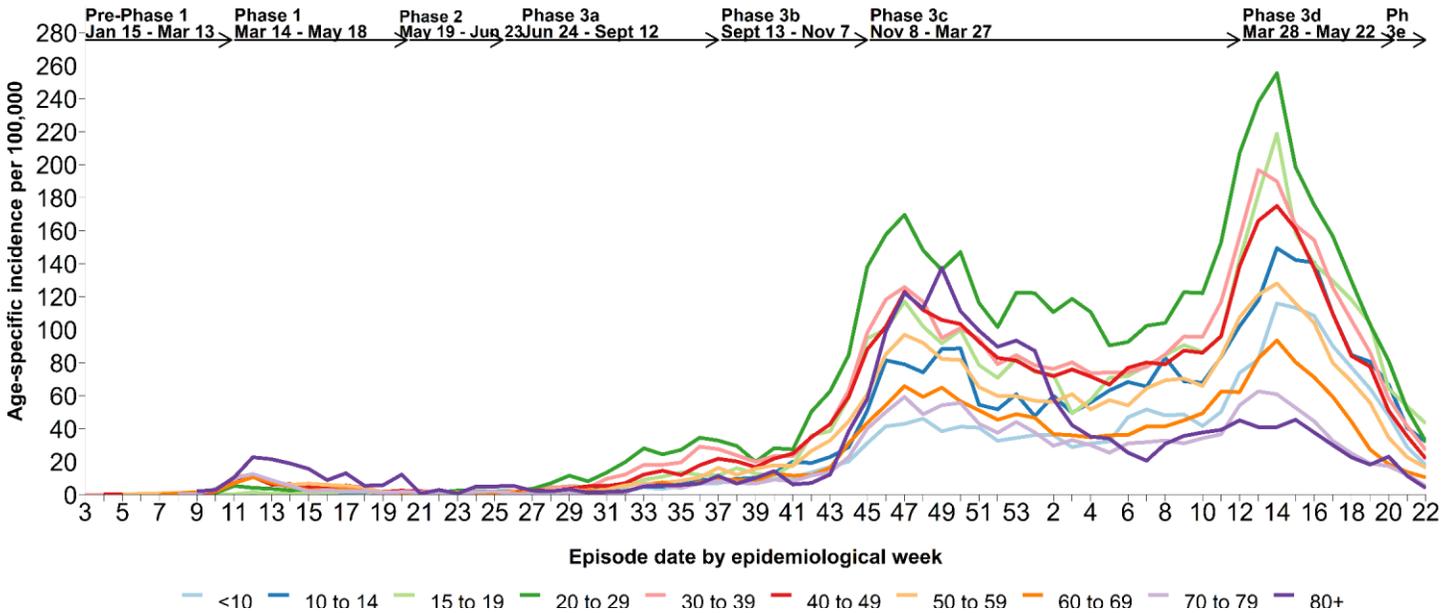


Data source: laboratory PLOVER data

**Figure 7. COVID-19 case distribution by known age group (years) and episode date, BC
March 15, 2020 (week 12) – June 05, 2021 (week 22) (N= 145,232)**



**Figure 8. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC
January 15, 2020 (week 3) – June 05, 2021 (week 22) (N= 145,745)**



Single-dose vaccine coverage and weekly cases by age group

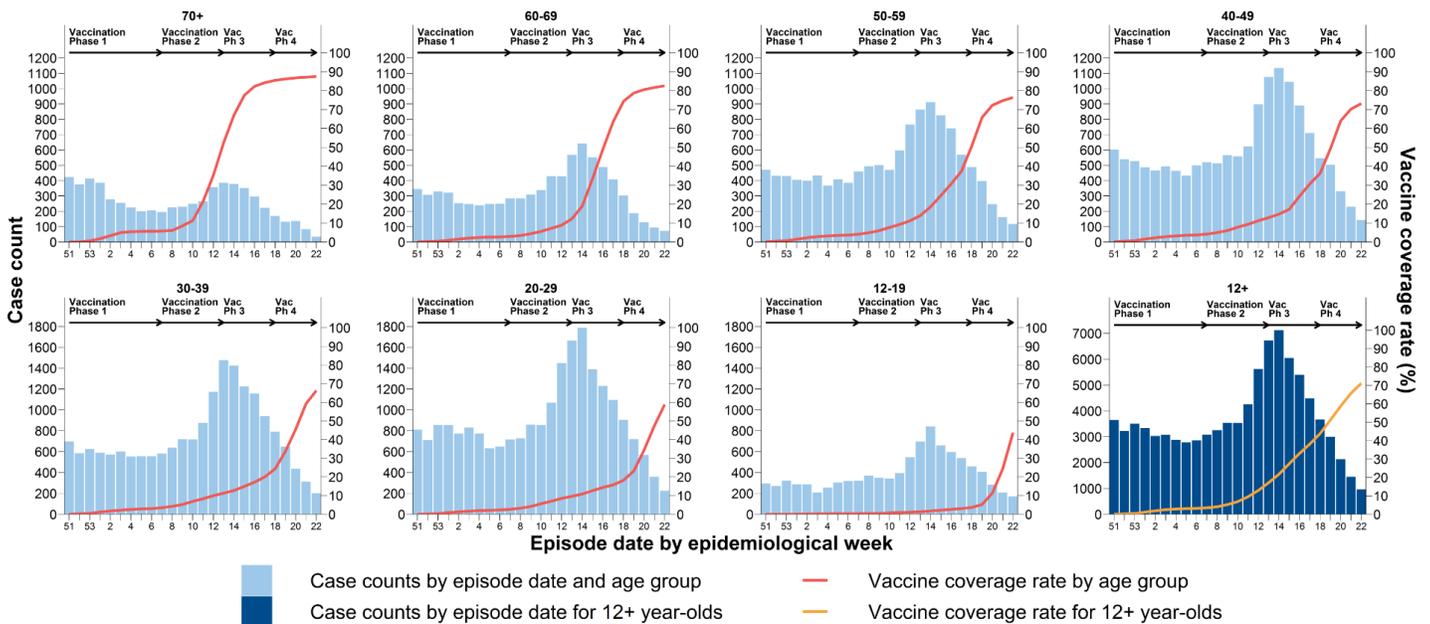
As vaccination coverage increases, case counts are expected to decrease a few weeks later. The vaccination of community-based older adults 70+ years of age started between weeks 10 and 14. As shown in [Figure 9](#), by week 22, the single-dose vaccination coverage in this age group reached almost 90% and was met with only 34 cases with, comparable to case counts in Wave 1 for that age group.

The vaccination of adults 40 to 69 years of age started in weeks 15-19; by week 22, coverage exceeded 80%, 75%, and 70% reflecting case counts of 72, 117, and 142 for the 60-69, 50-59, and 40-49 year-olds, respectively.

The vaccination of adults 20 to 39 year of age started in weeks 19-20; by week 22, coverage was less than 70% with ~200 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 <50% coverage in week 22. Overall, single-dose coverage for all age groups 12+ exceeded 70% by week 22.

Figure 9. Weekly age-specific single-dose COVID-19 vaccine coverage and case counts by epidemiological week, BC December 13, 2020 (week 51) – June 05, 2021 (week 22)



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 since then, reaching 92 admissions in week 22. The number of intensive care unit (ICU) admissions also peaked in week 15 (109) and has decreased since then, reaching 22 admissions in week 22. The number of deaths has been stable from weeks 7 to 22 with an average of 25 deaths ([Table 3, Figure 10](#)). These numbers may increase in future reports as more data become available.

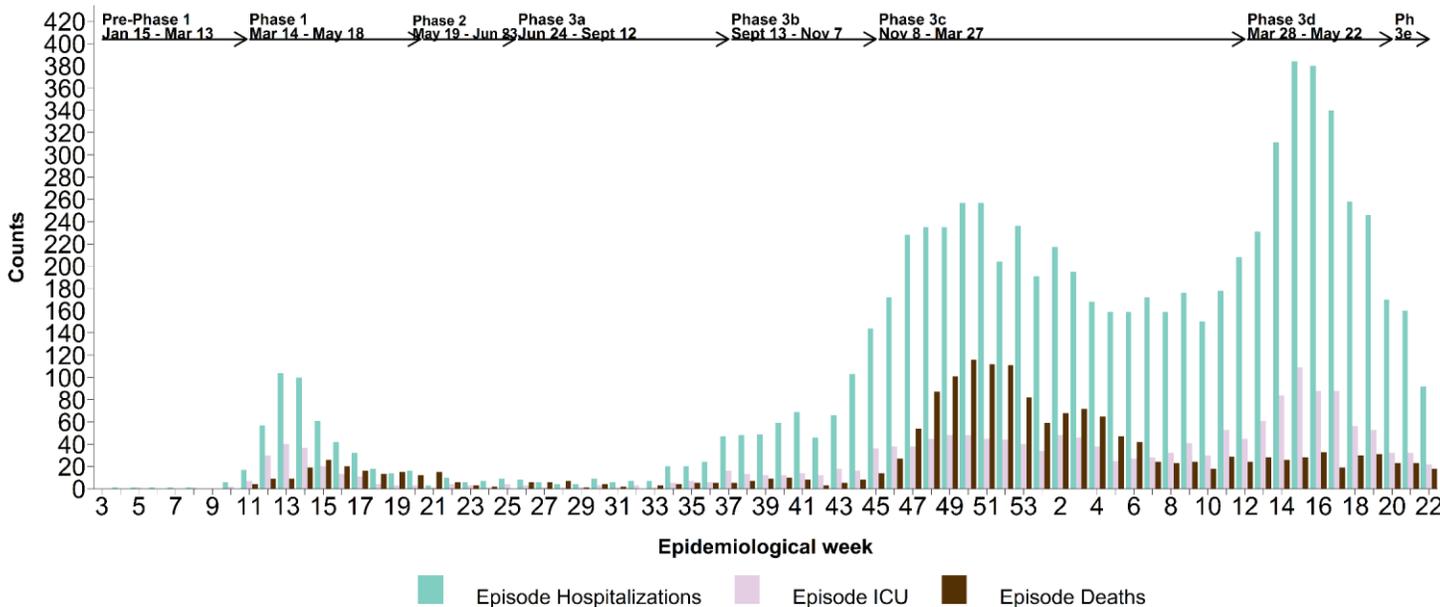
Cumulatively, there have been 14 confirmed cases of [Multi-system Inflammatory Syndrome in children and adolescents \(MIS-C\)](#) in BC from January 1, 2020 to week 22. The median age of these cases is 9 (range 1-15) years.

Table 3. COVID-19 severe outcomes by episode date, health authority of residence, BC January 15, 2020 (week 3) – June 05, 2021 (week 22)

Severe outcomes by episode date	Health authority of residence					Residing outside of Canada	Total n/N ^a (%)
	FH	IH	VIHA	NH	VCH		
Week 22, hospitalizations	57	8	2	8	16	1	92
Cumulative hospitalizations^b	4,301	700	249	648	1,869	14	7,781/145,768 (5)
Week 22, ICU admissions	11	2	0	7	2	0	22
Cumulative ICU admissions^b	862	181	67	161	511	2	1,784/145,768 (1)
Week 22, deaths	11	0	0	0	7	0	18
Cumulative deaths	907	152	41	153	472	0	1,725/145,768 (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 05, 2021 (week 22)



F. Age profile, severe outcomes

Table 4 displays the distribution of cases and severe outcomes. In week 22, median age of hospital admissions, ICU admissions and deaths was 59 years, 59 years and 65 years, respectively (data not shown).

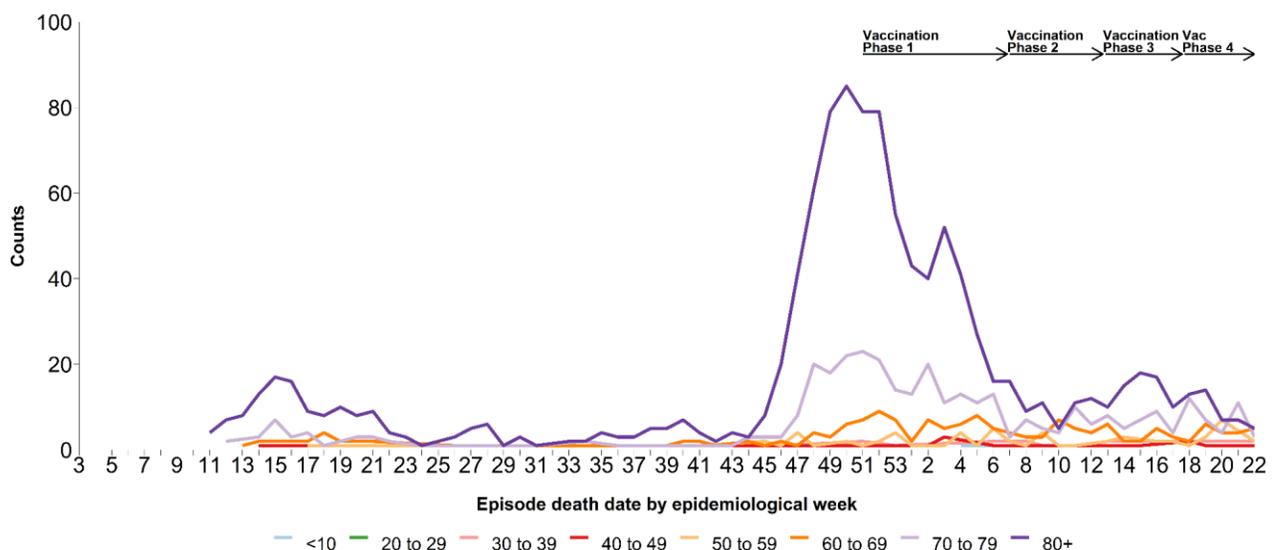
As shown in **Figure 11**, since week 6, death counts have been low and stable in elderly adults with an average number of 12 deaths per week in the 80+ year-olds, 7 deaths per week in the 70-79-year-olds, 4 deaths per week in the 60-69-year-olds, and 2 deaths per week in the 50-59-year-olds.

Table 4: Age distribution: COVID-19 cases, hospitalizations, ICU admissions, deaths, and BC population by age group January 15, 2020 (week 3) – June 05, 2021 (week 22) (N= 145,745)^a

Age group (years)	Cases n (%)	Hospitalizations ^b n (%)	ICU ^b n (%)	Deaths n (%)	General BC population 2021 n (%)
<10	8,269 (6)	93 (1)	7 (<1)	2 (<1)	470,017 (9)
10-19	15,671 (11)	68 (1)	14 (1)	0 (<1)	529,387 (10)
20-29	32,729 (22)	387 (5)	44 (2)	1 (<1)	699,476 (13)
30-39	26,852 (18)	755 (10)	145 (8)	16 (1)	750,054 (14)
40-49	21,476 (15)	865 (11)	182 (10)	25 (1)	648,377 (12)
50-59	18,190 (12)	1,217 (16)	343 (19)	67 (4)	711,930 (14)
60-69	11,725 (8)	1,459 (19)	441 (25)	163 (9)	686,889 (13)
70-79	6,041 (4)	1,488 (19)	436 (24)	365 (21)	454,855 (9)
80-89	3,302 (2)	1,083 (14)	161 (9)	612 (35)	193,351 (4)
90+	1,490 (1)	380 (5)	16 (1)	474 (27)	52,885 (1)
Total	145,745	7,795	1,789	1,725	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 05, 2021 (week 22) (N= 1,725)^a



G. Care facility outbreaks

As shown in [Table 5](#) and [Figure 12](#), 324 care facility (acute and long-term care setting) outbreaks were reported in total in BC to the end of week 22, with no new outbreaks in week 22. 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.

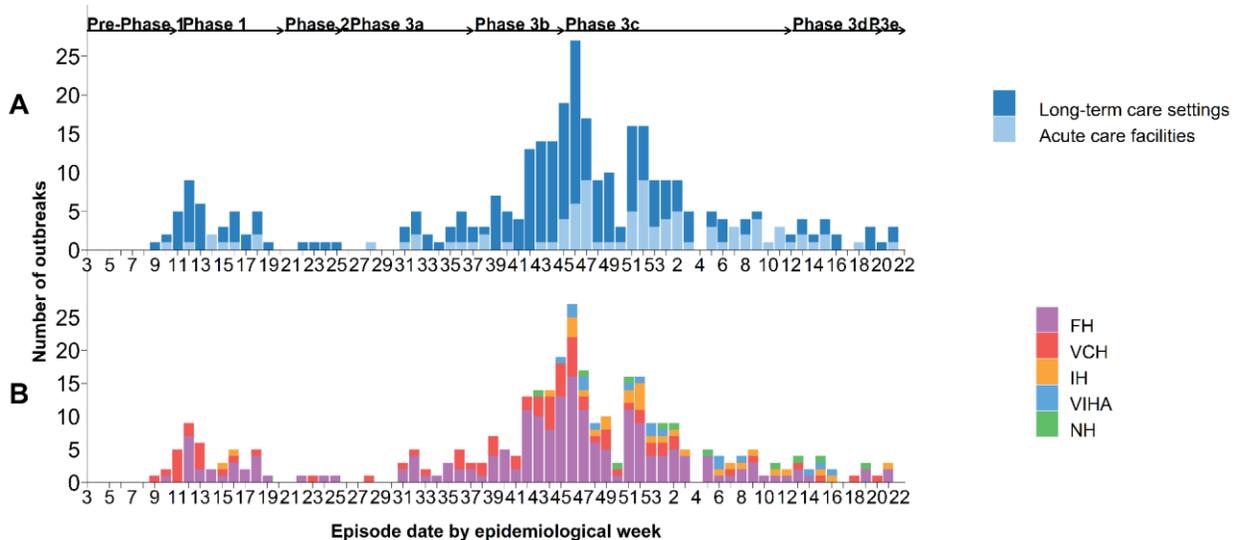
Five of the 18 (28%) deaths reported in week 22 were associated with an outbreak in a care facility setting (Figures of cases and deaths among 70+ years of age in previous reports have been replaced with [Figure 9](#) given several weeks of stable findings and to provide a more comprehensive display 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 05, 2021 (week 22) (N=324)

Care facility outbreaks and cases by episode date	Outbreaks	Cases				Deaths			
		Residents	Staff/other	Unknown	Total	Residents	Staff/other	Unknown	Total
Week 22, Care Facility Outbreaks	0	6	2	0	8	5	0	0	5
Cumulative, Care Facility Outbreaks	324	3,555	2,276	7	5,838	1,024	0	0	1,024

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 05, 2021 (week 22) (N=324)



- 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.

G. 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>.