British Columbia (BC) COVID-19 Situation Report Week 28: July 10- July 16, 2022

Data for week 28 (July 10 - July 16, 2022) may differ from the data published in the BCCDC weekly report. Data was extracted on July 25, 2022 for this situation report compared to July 28, 2022 for the latest weekly report.

| Table of Contents | |
|---|-----------|
| COVID-19 case counts and epidemic curve | <u>3</u> |
| Testing rates and percent positivity | <u>4</u> |
| Age profile, testing and cases | <u>5</u> |
| Severe outcomes | <u>6</u> |
| Age profile, severe outcomes | <u>7</u> |
| Care facility outbreaks | <u>9</u> |
| Wastewater surveillance | <u>10</u> |
| Additional resources | <u>12</u> |

Report Summary

Due to changes in testing strategies in BC, current case counts are an underestimate of the true number of COVID-19 cases in BC. This underestimation has increased compared to the period prior to the emergence of the Omicron variant in BC. The provincial incidence by episode date was 20 per 100K (1,049 cases) in week 28, which increased from 19 per 100K in week 27.

Incidence by Health Authority from week 27 to week 28:

- Fraser Health incidence remained stable at 20 and 19 per 100K
- Interior Health incidence increased from 13 to 18 per 100K
- Vancouver Island Health incidence increased from 22 to 24 per 100K
- Northern Health incidence decreased from 20 to 17 per 100K
- Vancouver Coastal Health incidence increased from 17 to 21 per 100K

Testing of MSP-funded specimens decreased from $^{\sim}6,750$ in week 27 to $^{\sim}6,150$ in week 28, and the percent positivity of MSP-funded specimens increased from 16.2% in week 27 to 19.6% in week 28.

The per capita testing rates for MSP-funded specimens between week 27 and week 28 decreased in all age groups except in the 0-4 year-olds, where testing rates increased from 155 per 100K in week 27 to 160 per 100K in week 28. Percent positivity increased the most in 10-14 year-olds, where it increased from 8.6% in week 27 to 15.4% in week 28.

Age-specific incidence rates between week 27 and week 28 increased or remained stable in all age groups. Incidence rates increased the most in the 40-49 and 80+ year-olds from 9 per 100K in week 27 to 13 per 100K in week 28 and from 104 per 100K in week 27 to 109 per 100K in week 28, respectively.

The number of people in hospital with a positive COVID-19 test remained stable at 262 in week 27 and 257 in week 28. The number of people in critical care decreased from 45 in week 27 to 33 in week 28. In week 28, 60+ year-olds had the highest number of people in hospital with a positive COVID-19 test, with 96 hospitalizations in 60-79 year-olds and 97 hospitalizations in 80+ year-olds. In week 28, 60-79 year-olds had the highest number of people in critical care (16 critical care admissions).

The weekly number of deaths from any cause among people testing positive for COVID-19 increased from 29 in week 27 to 37 in week 28. In week 28, 80+ year-olds had the highest number of deaths from any cause among people testing positive for COVID-19 (20 deaths). From week 14 to week 23 where the UCD has been reported for at least 95% of the post-transition deaths, an average of 43% of these deaths were reported to have COVID-19 as their UCD.

In week 28, based on earliest symptom onset date (if unavailable, then outbreak declared date is used), 2 new care facility outbreaks were declared in acute care.

BELOW ARE IMPORTANT NOTES relevant to the interpretation of cases, hospitalizations, and deaths:

- Due to changes in testing strategies in BC in 2022 focusing on targeted higher risk populations, current case counts are an underestimate of the true number of COVID-19 cases in BC. This underestimation has increased compared to the period prior to the emergence of the Omicron variant in BC.
- Hospital data include admissions for people who test positive for COVID-19 through hospital screening practices, regardless of the reason for admission. Therefore, reported hospitalizations overestimate the true number of people who are hospitalized specifically due to COVID-19 infection.
- Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths include people who died from any cause recorded in Vital Statistics within 30 days of their first positive COVID-19 lab result date. Deaths reported after the system transition use a broader definition and will overestimate the true number of deaths due to COVID-19 since death registration is recorded before the underlying cause of death is determined. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.

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

- Cases include lab confirmed, lab probable, and epi-linked cases. Case definition can be found at http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus). Cases include those reported in Health Authority case line lists and positive laboratory results in the Provincial Laboratory Information Solution (PLIS) up to April 1, 2022. As of April 2, 2022, only positive laboratory results in the PLIS are included and cases who are residents from outside of BC are not included.
- Episode date is defined by date of illness onset when available. When illness onset date is unavailable, earliest laboratory date is used (collection or result date); if also unavailable, then public health case report date is used. As of April 2, 2022, episode date reflects earliest laboratory date (collection or result date) only. Analyses based on episode date may better represent the timing of epidemic evolution. Episode-based tallies for recent weeks are expected to increase as case data are more complete.
- Surveillance date is defined by lab result date, if unavailable, then public health case report date is used. As of April 2, 2022, surveillance date reflects lab result date only. The weekly tally by surveillance date includes cases with illness onset date in preceding weeks.
- Hospitalizations include those reported by Health Authorities up to April 1, 2022. As of April 2, 2022, hospitalizations are
 defined as individuals who test positive for COVID-19 and are hospitalized as recorded in the PHSA Provincial COVID-19
 Monitoring Solution (PCMS). Hospitalizations for individuals 0-19 years-old are reported by linked hospitalization episodes
 from the PCMS since the beginning of the pandemic. Episode date for hospitalization is defined by admission date, if
 unavailable, surveillance date is used.
- Critical care admissions (HAU, ICU, and critical care surge beds) include individuals who test positive for COVID-19 and are
 in critical care admission as recorded in the PCMS. Episode date for critical care admission is defined by critical care
 admission date, if unavailable, surveillance date is used. Previously only ICU admissions were presented in this report.
 Critical care admissions comprises a broader category than ICU admissions and therefore, the number of critical care
 admissions should not be compared to number of ICU admissions from previous weeks.
- Deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Episode date for death is defined by death date, if unavailable, surveillance date is used.
- As of April 2, 2022, data on Health Authority outbreaks are compiled from outbreak files provided by the Health Authorities.
- Laboratory PLOVER data include Medical Service Plan (MSP) funded (e.g. clinical diagnostic tests) and non-MSP funded (e.g. screening tests) specimens.
- Per capita rates/incidences for year 2020 are based on Population Estimates 2020 (n= 5,147,772 for BC overall), for year 2021 are based on PEOPLE 2021 estimates (n= 5,194,137 for BC overall), and for year 2022 is based on PEOPLE 2021 estimates (n= 5,263,772 for BC overall).
- Data sources include Health Authority case line lists, PHSA Provincial COVID-19 Monitoring Solution (PCMS), Vital Statistics, laboratory PLOVER data, and aggregate outbreak files from Health Authorities.
- Integrated case data (including surveillance variables created using Health Authority case line lists, PCMS, and Vital Statistics) were extracted on July 25, 2022, laboratory PLOVER data on July 21, 2022, and Health Authority outbreak files on July 20, 2022.

A. COVID-19 case counts and epidemic curve

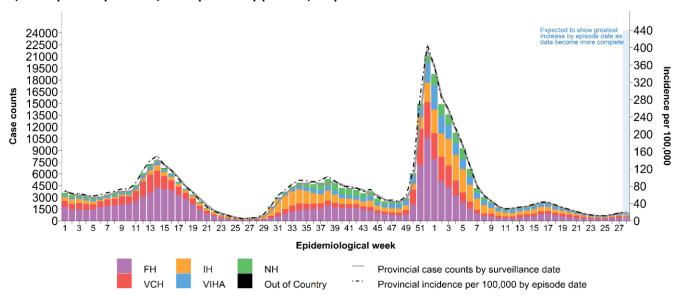
Due to changes in testing strategies in BC in 2022 focusing on targeted higher risk populations, current case counts are an underestimate of the true number of COVID-19 cases in BC. This underestimation has increased compared to the period prior to the emergence of the Omicron variant in BC. Up to week 28, there have been 377,437 cases for a cumulative incidence of 7,170 per 100K (<u>Table 1, Figure 1</u>). The provincial incidence by episode date was 20 per 100K (1,049 cases) in week 28, which remained stable from 19 per 100K in week 27.

Incidence rates from week 27 to week 28 increased or remained stable in all HAs except Northern Health (NHA), where the incidence rate decreased from 20 per 100K in week 27 to 17 per 100K in week 28. Incidence rates increased the most in the Interior Health (IHA) from 13 per 100K in week 27 to 18 per 100K in week 28. In week 28, the highest incidence rate was in Vancouver Island Health (VIHA) at 24 per 100K. Incidence by episode date may increase as data become more complete in recent weeks.

Table 1. Episode-based case tallies by Health Authority, BC, Jan 15, 2020 (week 3) – Jul 16, 2022 (week 28) (N= 377.437)

| Case tallies by enicode date | | Health Aut | Outside | Total | | | | |
|--------------------------------------|---------|------------|---------|--------|--------|--------|---------|--|
| Case tallies by episode date | FH | IH | VIHA | NH | VCH | Canada | iotai | |
| Week 28, case counts | 373 | 152 | 209 | 51 | 264 | 0 | 1,049 | |
| Cumulative case counts | 166,173 | 67,087 | 37,028 | 30,598 | 76,160 | 391 | 377,437 | |
| Week 28, cases per 100K population | 19 | 18 | 24 | 17 | 21 | NA | 20 | |
| Cumulative cases per 100K population | 8,362 | 8,098 | 4,207 | 9,997 | 6,036 | NA | 7,170 | |

Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28) (N= 321,587)



B. Testing rates and percent positivity

<u>COVID-19 testing guidelines</u> recommend testing for people who have COVID-19 symptoms, and are at risk of more severe disease or live/work in high-risk settings. As shown by the darker-colored bars and dotted line in <u>Figure 2</u>, the number of MSP-funded specimens decreased from ~6,750 in week 27 to ~6,150 in week 28, and the percent positivity of MSP-funded specimens increased from 16.2% in week 27 to 19.6% in week 28.

As shown by the dotted lines in Figure 3, the per capita testing rates for MSP-funded specimens (dotted lines in Panel A) increased in all HAs except Fraser Health (FH), where it decreased from 167 per 100K in week 27 to 122 per 100K in week 28. In week 28, FH had the highest testing rate at 122 per 100K. The percent positivity (dotted lines in Panel B) for MSP-funded specimens increased in all HAs except for NH, where the percent positivity decreased from 24% in week 27 to 21% in week 28. In week 28, percent positivity ranged from 17.1% in FH to 26.1% in VIHA.

Figure 2. Number of specimens tested and percent SARS-CoV-2 positive, by collection week, BC Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28)

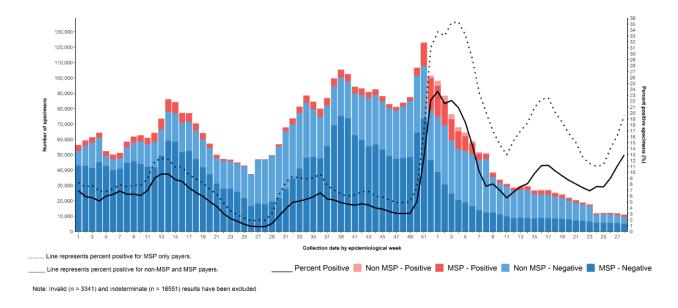
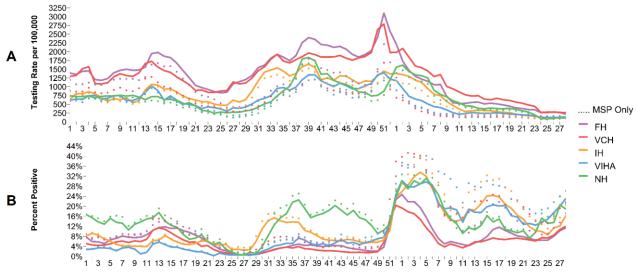


Figure 3. Testing rates and percent SARS-CoV-2 positive by Health Authority and collection week, BC Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28)



Collection date by epidemiological week

C. Age profile, testing and cases

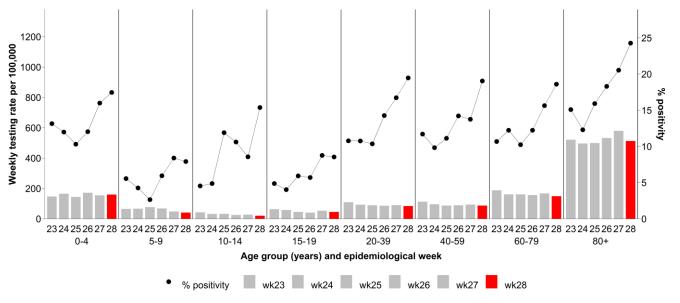
Testing rates and percent positivity by age group

As shown by the bars in <u>Figure 4</u>, the per capita testing rates for MSP-funded specimens between week 27 and week 28 decreased in all age groups except in the 0-4 year-olds, where testing rates increased from 155 per 100K in week 27 to 160 per 100K in week 28. As shown by the black dots in <u>Figure 4</u>, percent positivity between week 27 and week 28 increased or remained stable in all age groups. Percent positivity increased the most in 10-14 year-olds, where it increased from 8.6% in week 27 to 15.4% in week 28. In week 28, percent positivity ranged from 7.9% in 5-9 year-olds to 24.3% in 80+ year-olds.

Case distribution and weekly incidence by age group

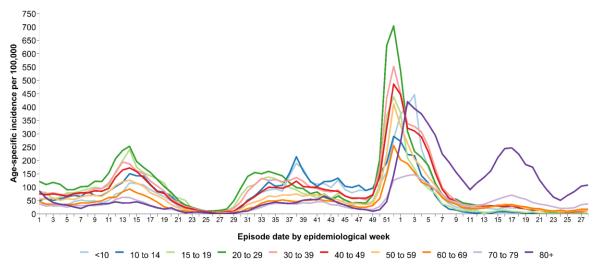
As shown in <u>Figure 5</u>, age-specific incidence rates between week 27 and week 28 increased or remained stable in all age groups. Incidence rates increased the most in the 40-49 and 80+ year-olds from 9 per 100K in week 27 to 13 per 100K in week 28 and from 104 per 100K in week 27 to 109 per 100K in week 28, respectively.

Figure 4. Average weekly SARS-CoV-2 MSP testing rates and MSP percent positive by known age group, BC Jun 11, 2022 (week 23) – Jul 16, 2022 (week 28)



Data source: Laboratory PLOVER data

Figure 5. Weekly age-specific COVID-19 incidence per 100K population by epidemiological week, BC Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28) (N= 321,495)



D. Severe outcomes

Hospital data include admissions for people who test positive for COVID-19 through hospital screening practices, regardless of the reason for admission. Therefore, reported hospitalizations overestimate the true number of people who are hospitalized specifically due to COVID-19 infection. The number of people in hospital with a positive COVID-19 test remained stable at 262 in week 27 and 257 in week 28. The number of people in critical care decreased from 45 in week 27 to 33 in week 28.

As of April 2, 2022, death data include people who test positive for COVID-19 and died from any cause (COVID-19 or non-COVID-19) within 30 days of their first positive lab result date. The weekly number of deaths from any cause among people testing positive for COVID-19 increased from 29 in week 27 to 37 in week 28 (Table 2).

Cumulatively, there have been 32 confirmed cases of <u>Multi-system Inflammatory Syndrome in children and adolescents (MIS-C)</u> in BC since January 1, 2020. There have been no new confirmed cases of MIS-C since the last report. The median age of all cases is 9 years old (range from 4 months old to 16 years old).

Table 2. COVID-19 severe outcomes by episode date, Health Authority of residence, BC Jan 15, 2020 (week 3) – Jul 16, 2022 (week 28)

| Severe outcomes by episode date | | Health Au | thority of r | esidence | Residing | = /a/3 /a/) | |
|---|--------|-----------|--------------|----------|----------|-------------------|----------------------------|
| | FH | IH | VIHA | NH | VCH | outside of Canada | Total n/N ^a (%) |
| Week 28, hospitalizations | 109 | 29 | 44 | 10 | 65 | 0 | 257 |
| Cumulative hospitalizations | 11,719 | 4,238 | 2,467 | 2,095 | 5,023 | 17 | 25,559/377,437 (7) |
| Week 28, critical care admissions ^b | 16 | 7 | 1 | 1 | 8 | 0 | 33 |
| Cumulative critical care admissions ^b | 2,460 | 985 | 410 | 790 | 1,098 | 4 | 5,747/377,437 (2) |
| Week 28, deaths | 15 | 6 | 9 | 0 | 7 | 0 | 37 |
| Cumulative deaths, pre-transition (case line list) ^c | 1,348 | 367 | 241 | 330 | 716 | 0 | 3,002/356,537 (1) |
| Cumulative deaths, post-transition (automated linkage) ^c | 298 | 184 | 165 | 30 | 193 | 0 | 870/20,900 (4) |

- a. Cases with unknown outcome are included in the denominators (i.e. assumed not to have the specified severe outcome).
- b. Due to the change in data source for hospitalization data, ICU admissions are no longer available. Critical care admissions are now being provided, which comprises a broader category than ICU admissions (please see Important Notes on Page 2 for more information). Number of critical care admissions should not be compared to number of ICU admissions from previous weeks.
- c. Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Deaths reported after the system transition use a broader definition and will overestimate the true number of deaths due to COVID-19 since death registration is recorded before the underlying cause of death is determined. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.

C***VID-19** Situation Report

E. Age profile, severe outcomes

Table 3 displays the distribution of cases and severe outcomes. In week 28, median age of hospital admissions, critical care admissions, pre-transition deaths, and post-transition deaths with underlying cause of death (UCD) as COVID-19 was 66 years, 63 years, 82 years, and 85 years, respectively.

In week 28, 60+ year-olds had the highest number of people in hospital with a positive COVID-19 test, with 96 hospitalizations in 60-79 year-olds and 97 hospitalizations in 80+ year-olds. In week 28, 60-79 year-olds had the highest number of people in critical care (16 critical care admissions). In week 28, 80+ year-olds had the highest number of deaths from any cause among people testing positive for COVID-19 (20 deaths) (Figure 6).

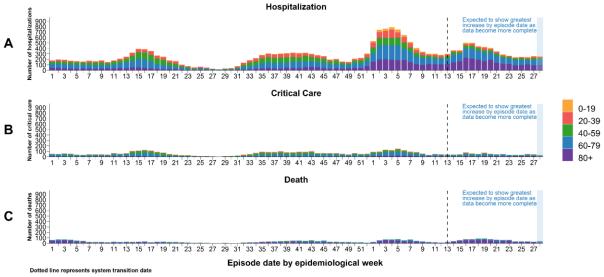
In the past four weeks (from week 25 to week 28), there has been a weekly average of 3 deaths in those <60 years of age, 4 deaths in 60-69 year-olds, 8 deaths in 70-79 year-olds and 19 deaths in the 80+ year-olds (data not shown). The number of deaths may increase over time as data becomes more complete.

Table 3: COVID-19 cases, hospitalizations, critical care admissions, and deaths by age group, BC, Jan 15, 2020 (week 3) - Jul 16, 2022 (week 28) (N= 377,406)^a

| Age group (years) | | | Critical care | Pre-transition | Post-transition (automated linkage) deaths ^c | | | |
|-------------------|---------|---------------------------|-------------------------------|--|---|--|-----------------------------------|--|
| | Cases | Hospitalizations n (%) | admissions ^b n (%) | (case line list) deaths ^c n (%) | UCD as COVID-19 ^d n (%) | UCD as non-COVID-19 ^d n (%) | UCD pending ^d n (%) | |
| <10 | 30,725 | 547 (2) | 68 (<1) | 2 (<1) | 1 (<1) | 2 (<1) | 0 (<1) | |
| 10-19 | 35,770 | 347 (1) | 51 (<1) | 0 (<1) | 0 (<1) | 1 (<1) | 0 (<1) | |
| 20-29 | 73,302 | 1,355 (2) | 203 (<1) | 6 (<1) | 0 (<1) | 6 (<1) | 1 (<1) | |
| 30-39 | 70,194 | 2,308 (3) | 423 (1) | 31 (<1) | 2 (<1) | 6 (<1) | 0 (<1) | |
| 40-49 | 54,234 | 2,219 (4) | 578 (1) | 64 (<1) | 1 (<1) | 7 (<1) | 0 (<1) | |
| 50-59 | 44,098 | 3,122 (7) | 1,050 (2) | 166 (<1) | 3 (<1) | 21 (1) | 5 (<1) | |
| 60-69 | 30,536 | 4,256 (14) | 1,416 (5) | 353 (1) | 26 (1) | 43 (2) | 9 (<1) | |
| 70-79 | 17,933 | 4,968 (28) | 1,301 (7) | 655 (4) | 64 (2) | 102 (3) | 21 (1) | |
| 80-89 | 13,438 | 4,539 (34) | 577 (4) | 989 (10) | 117 (3) | 145 (4) | 30 (1) | |
| 90+ | 7,176 | 1,898 (26) | 80 (1) | 736 (15) | 114 (5) | 124 (6) | 19 (1) | |
| Total | 377,406 | 25,559 | 5,747 | 3,002 | 328 | 457 | 85 | |
| Median age | 36 | 66 | 63 | 82 | 85 | 82 | 82 | |

- Among those with available age information only.
- Due to the change in data source for hospitalization data, ICU admissions are no longer available. Critical care admissions are now being provided, which comprises a broader category than ICU admissions (please see Important Notes on Page 2 for more information). Number of critical care admissions should not be compared to number of ICU admissions from previous weeks.
- c. Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, posttransition (automated linkage) deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Deaths reported after the system transition use a broader definition and will overestimate the true number of deaths due to COVID-19 since death registration is recorded before the underlying cause of death is determined. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.
- Since underlying cause of death (UCD) takes approximately 8 weeks to be recorded, all-cause mortality is initially reported and then retrospective evaluations of underlying cause of death are provided here to better understand true COVID-19 mortality. UCD as COVID-19 are deaths that have been determined to be caused by COVID-19 in their Vital Stats record. UCD as non-COVID-19 are deaths that have been determined to be not attributable to COVID-19 in their Vital Stats record that are reported as deaths due to a lab positive COVID-19 test within 30 days of death. UCD pending are all posttransition deaths that do not yet have a recorded UCD.

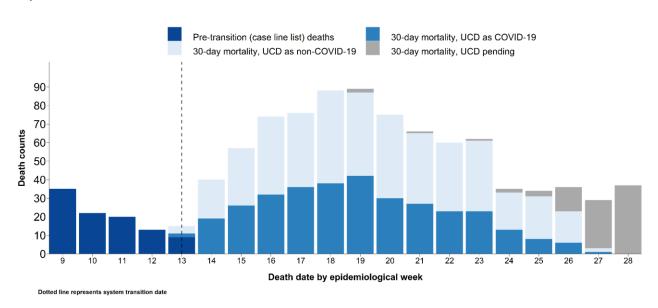
Figure 6. Weekly COVID-19 hospital admissions (A), critical care admissions (B), and deaths (C) by age groups, BC, Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28)^a



Among those with available age information only.

Figure 7 displays the number of pre-transition deaths and post-transition deaths (i.e. people who test positive for COVID-19 and died from any cause within 30 days of their first positive lab result date) by underlying cause of death as recorded in Vital Statistics from week 9 to week 28 in 2022. From week 14 to week 23 where the UCD has been reported for at least 95% of the post-transition deaths, an average of 43% of these death were reported to have COVID-19 as their UCD. Post-transition deaths with complete UCD are expected to increase over time.

Figure 7. Pre- and post-transition deaths by underlying cause of death, BC, Feb 27, 2022 (week 9) – Jul 16, 2022 (week 28)^{a,b}



- a. Pre-transition (case line list) deaths include COVID-19 related deaths reported by Health Authorities up to April 1, 2022. As of April 2, 2022, post-transition (automated linkage) deaths are any COVID-19 lab positive cases who died from any cause recorded in Vital Statistics within 30 days of their first positive lab result date. Deaths reported after the system transition use a broader definition and will overestimate the true number of deaths due to COVID-19 since death registration is recorded before the underlying cause of death is determined. Due to the change in data source for death data, the number of pre-transition deaths should not be compared to the number of post-transition deaths.
- b. Since underlying cause of death (UCD) takes approximately 8 weeks to be recorded, all-cause mortality is initially reported and then retrospective evaluations of underlying cause of death are provided here to better understand true COVID-19 mortality. UCD as COVID-19 are deaths that have been determined to be caused by COVID-19 in their Vital Stats record. UCD as non-COVID-19 are deaths that have been determined to be not attributable to COVID-19 in their Vital Stats record that are reported as deaths due to a lab positive COVID-19 test within 30 days of death. UCD pending are all post-transition deaths that do not yet have a recorded UCD.

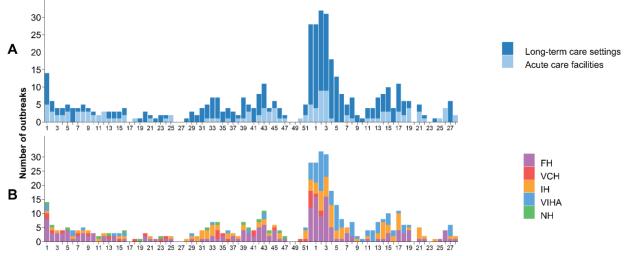
F. Care facility outbreaks

As shown in <u>Table 4</u> and <u>Figure 8</u>, 688 care facility (acute care and long-term care settings) outbreaks were reported in total in BC to the end of week 28. In week 28, based on earliest symptom onset date (if unavailable, then outbreak declared date is used), 2 new care facility outbreaks were declared in acute care facilities. In the past four weeks (from week 25 to week 28), there has been a weekly average of 3 care facility outbreaks

Table 4. COVID-19 care facility^a outbreaks by earliest case onset^{b,c}, associated cases and deaths by episode date, BC Jan 15, 2020 (week 3) – Jul 16, 2022 (week 28) (N=688)^{d,e}

| Care facility outbreaks and | | | Cases | | Deaths | | |
|-------------------------------------|-----------|-----------|-------------|--------|-----------|-------------|-------|
| cases by episode date | Outbreaks | Residents | Staff/other | Total | Residents | Staff/other | Total |
| Week 28, Care Facility Outbreaks | 2 | 17 | 0 | 17 | 0 | 0 | 0 |
| Cumulative, Care Facility Outbreaks | 688 | 9,719 | 3,818 | 13,537 | 1,453 | 0 | 1,453 |

Figure 8. COVID-19 care facility ^a, outbreaks by earliest case onset^{b,c}, facility type (A) and Health Authority (B), BC Jan 3, 2021 (week 1) – Jul 16, 2022 (week 28) (N=437)^{d,e}



Earliest onset date by epidemiological week

- a. Case and death counts include PCR positive cases only for outbreaks in NHA and VIHA. Vancouver Coastal Health, Fraser Health Authority, and Interior Health Authority outbreaks may also include those diagnosed by rapid antigen tests or considered as susepct reinfection.
- b. Earliest dates of onset of outbreak cases are subject to change as investigations and data are updated. If unavailable, outbreak declared date is used.
- c. New outbreaks reported since the last report with an earliest case onset date (if unavailable, outbreak declared date is used) prior to the current reporting week will be included in the cumulative care facility outbreak total.
- d. Cases with unknown role are included in the case count for Staff/other.
- e. Data might be incomplete or vary from what was reported previously due to updates by Health Authorities.

G. Wastewater surveillance

The BCCDC and Metro Vancouver measure SARS-CoV-2 in wastewater at five wastewater treatment plants (treating wastewater from 50% of BC's population). To account for changing wastewater volume due to rainfall or snowmelt, SARS-CoV-2 concentrations are normalized to wastewater flow. Normalized SARS-CoV-2 wastewater levels (measured as viral copies per day) are shown alongside incident COVID-19 cases in each wastewater catchment area in <u>Figure 9</u> and <u>Figure 10</u>. The BCCDC's test results are obtained from the liquid fraction of the wastewater sample. Other organizations, such as the National Microbiology Laboratory, test from the solid fraction of wastewater and therefore, their results are not directly comparable.

Key messages with results through to July 23, 2022:

- Generally, SARS-CoV-2 viral loads in wastewater have continued their recent trend of plateauing or decreasing. With sustained trends in most regions, we have greater confidence these results are consistent with plateauing of COVID-19 incidence in Metro Vancouver.
- Over the past two weeks, viral loads at Annacis Island (Fraser North and South) have decreased by 30%.
- Over the past three weeks, viral loads at Northwest Langley (Northwest Langley) have decreased by 50%.
- Over the past two weeks, viral loads at Iona Island (Vancouver) have decreased by 45%.
- Over the past two weeks, viral loads at Lulu Island (Richmond) have decreased by 15%.
- Over the past week, viral loads at Lions Gate (North Shore) have increased by 16%.

Figure 9. Wastewater surveillance, FH

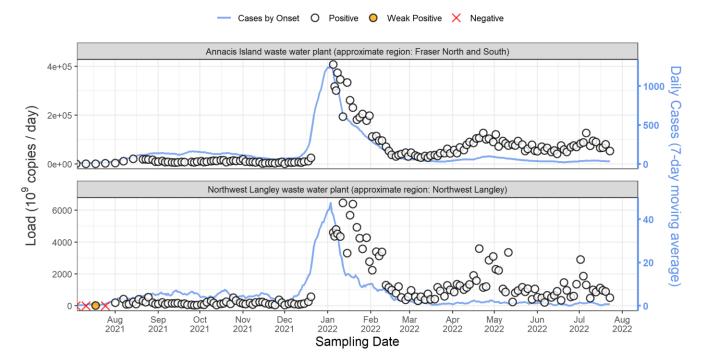
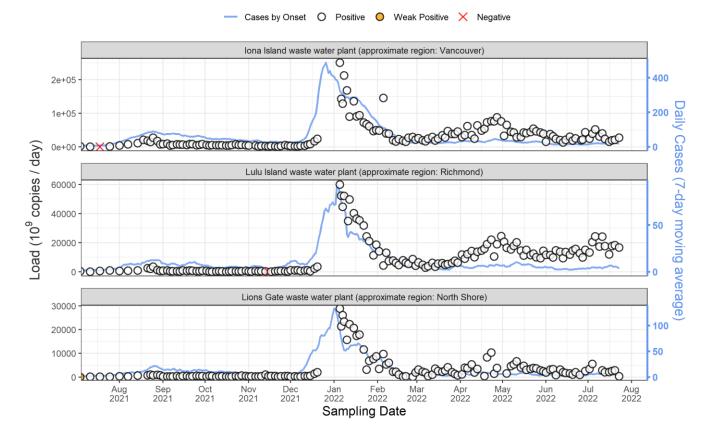


Figure 10. Wastewater surveillance, VCH



H. Additional resources

For COVID-19 vaccination coverage data, visit the COVID-19 Regional Surveillance Dashboard here: http://www.bccdc.ca/health-professionals/data-reports/covid-19-surveillance-dashboard

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

For local, national, and global comparisons of BC to other jurisdictions on key epidemiological metrics, visit the BCCDC COVID-19 Epidemiology App here: https://bccdc.shinyapps.io/covid19 global epi app/

BC's COVID-19 Immunization Plan is updated regularly here: https://www2.gov.bc.ca/gov/content/covid-19/vaccine/plan