Purpose

The weekly surveillance deck is a summary of COVID-19 related indicators that can help inform the pandemic response in British Columbia. This surveillance monitoring constitutes the medical chart for population health assessment that guides the public health community of practice. As such this is a working document that reflects a snapshot in time and may differ from other published reports.

Data Sources

The collection, use and disclosure of case data is subject to the Public Health Act. COVID-19 cases are reported under the Public Health Act to the health authority of residence. Public health case notification, clinical management, contact tracing and follow-up contributes surveillance data for regional and provincial COVID-19 monitoring. Each regional health authority have their own workflows and information systems for capture of relevant data. This data foremost serves the public health and clinical management of the case and their contacts.

Disclaimer

• Data and key messages within these documents are not finalized and considered to be work in progress that is subject to retroactive changes as more data and information become available.

• Accurate interpretation of figures may be difficult with the limited inclusion of data notes and methodology descriptions in this document.
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Overall Summary

- **Case rates** are declining or stable in all HAs, and provincially **cases are at the lowest count** since October 2020; **test positivity** is declining, ~6% provincially for publicly funded tests and 5% for all tests.

- **New hospitalizations** are elevated, and decline has slowed over the past week; **hospital/critical care census** is declining or stable across BC; **new deaths** are stable and low.
  - Majority of hospitalizations continue to be among individuals aged >40 years

- The share of **VOCs** among all positive cases in BC is ~85% in epi week 21 (May 23-29). Among screened or sequenced samples provincially based on information for epi week 20, **P.1 (~42%)** and **B.1.1.7 (~54%)** remain two dominant VOCs.
  - B.1.617 currently represents ~4% of VOCs

- BC, as of June 2: ~70% of those 12+ have received at least 1 dose.
May 27 to Jun 02: BC COVID-19 Profile

- Total cases: 144,667
- New this week: 1,781
- Ever hospitalized: 7,726
- New this week: 143
- Total deaths: 1,707
- New this week: 24
- Removed from isolation: 140,238
- New this week: 2,721

New daily COVID-19 cases, hospitalizations and deaths, Aug 01 2020 - Jun 01 2021

* Data are by surveillance date for cases and deaths, and admission date for hospitalizations

Data source: PHRDW Jun-02-2021
Case rates and new hospitalizations are declining or stable in all HAs; new deaths are stable and low.

For latest version of a graph similar to this one (difference: hospital census, not new hospitalizations), see the Epi App.
Hospital and critical care census is declining or stable in all regions.

Current COVID-19 hospitalizations, Apr 01 2020 - Jun 01 2021

- BC
- Fraser
- Interior
- Northern
- Vancouver Coastal
- Island

*Data are by census date for hospitalizations.
Data source: PHSA Provincial COVID19 Monitoring Solution (PCMS) Jun-02-2021
Number of hospitalizations is decreasing. The number of hospitalizations among individuals <40 years is low. Deaths are decreasing and mostly among individuals ≥ 60 years.
For latest version of this map, see the new (note: change symbols not included) COVID-19 Surveillance Dashboard.
COVID-19 Recent 7-Day Case Incidence Rates by CHSA (May 26 to June 1, 2021)

For latest version of this map, see the new (note: change symbols not included) COVID-19 Surveillance Dashboard
For latest version of this map, see the new COVID-19 Surveillance Dashboard.
For latest version of this map, see the new COVID-19 Surveillance Dashboard.
Average daily rate of new cases per 100,000 population, by local health area, May 26 - Jun 01, 2021

For latest version of this map, see the new COVID-19 Surveillance Dashboard
Incidence is decreasing or stable in all HAs. Percent positivity is at or below 10% in all HAs.

BC, as of June 2: ~70% of those 12+ have received at least 1 dose
For latest version of this map, see the new COVID-19 Surveillance Dashboard
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For latest version of this map, see the new COVID-19 Surveillance Dashboard.
Nationally, BC’s vaccination rate is very close to Canadian average; internationally, Canada is one of the countries with the highest proportion of the population with at least one dose.

Data source: Open Data
Visualization: BCCDC
1. **Percent positivity** among publicly funded tests is 6% and among all tests, it is 5%.
   - Testing rates decreased 15% this week (~42,000 total tests May 23 to 29)
2. There are regional differences in percent positivity, which range from 1.8% in VIHA to 10% in NH.
3. Incidence continues to decline in all age groups; percent positivity is <10% in all age groups.
4. The provincial weekly median *turnaround time* (time from specimen collection to lab result) is 12 hours, indicating good testing capacity; only 1 in 4 tests took ≥21 hours to result.
5. The share of **VOCs** among all positive cases in BC is ~85% in epi week 21 (May 23-29).
6. Among screened or sequenced samples provincially based on information for epi week 20, P.1 (~42%) and B.1.1.7 (~54%) remain two dominant VOCs.
   - B.1.617 currently represents ~4% of VOCs
### Weekly Summary of ALL lab tests performed

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total specimens tested</td>
<td>2,747,041</td>
<td>↓15% relative to last week</td>
</tr>
<tr>
<td>New this epi week</td>
<td>42,066</td>
<td></td>
</tr>
<tr>
<td>Total positive specimens</td>
<td>151,902</td>
<td>5.0% positivity</td>
</tr>
<tr>
<td>New positive this epi week</td>
<td>2,108</td>
<td>↓0.9% absolute change from last week</td>
</tr>
<tr>
<td>Mean turnaround time (TAT)</td>
<td>14 hr</td>
<td></td>
</tr>
<tr>
<td>Median [Q1 – Q3] TAT</td>
<td>12 [8-21]</td>
<td></td>
</tr>
<tr>
<td>TAT relative to last week</td>
<td>↓8%</td>
<td></td>
</tr>
</tbody>
</table>

### Weekly Summary of Lab tests paid Publicly

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total specimens tested</td>
<td>2,263,258</td>
<td>↓17% relative to last week</td>
</tr>
<tr>
<td>New this epi week</td>
<td>34,132</td>
<td></td>
</tr>
<tr>
<td>Total positive specimens</td>
<td>150,536</td>
<td>6.2% positivity</td>
</tr>
<tr>
<td>New positive this epi week</td>
<td>2,103</td>
<td>↓0.9% absolute change from last week</td>
</tr>
</tbody>
</table>

Data source: PLOVER extract at 10:30am on June 6, 2021.
Epi week 21 (May 23 – 29)
COVID-19 Recent 7-Day Test Positivity by CHSA (May 26 to June 1, 2021) Includes all tests

For latest version of this map, see the new (note: change symbols not included) COVID-19 Surveillance Dashboard
Incidence is stable or decreasing across regions; positivity is >10% in Northeast HSDA.

Case incidence rate, test percent positivity, and testing rate by HSDA (Public Payers Only).

For latest version of a graph similar to this one (difference: all tests, not public tests), see the Epi App.
Incidence continues to decline in all age groups; percent positivity is <10% in all age groups.

Of all COVID-19 positive test samples in epi week 21 (May 23 - May 29) in BC, ~85% were presumptive VOCs. Note that in Island Health the proportion was lower, ~61%.

Data from the PLOVER system at the BCCDC Public Health Lab.

This figure can also be found in the weekly VOC report
Among sequenced samples provincially based on information for epi week 20, P.1 (~42%) and B.1.1.7 (~54%) remain two dominant VOCs. B.1.617 (newly declared by WHO as a VOC) currently represents ~4% of VOCs.

Weeks 13 onward include specimens from qPCR SNP screening that resulted as presumptive positive for B.1.1.7 and P.1.
Overview of the screening and sequencing process applied to positive COVID-19 tests in BC, May 2021

Please note the differences in turnaround time for screening and sequencing: screening results usually come back within 1-2 days, while sequencing results come back after approximately one week, but it could also take longer if there are lab backlogs.

This figure can also be found in the weekly VOC report.
Across Canada, cases are declining everywhere. Hospital census increasing in MB and declining or stable everywhere else. Deaths rates are low and stable.

For latest version of this graph and data notes, see the Epi App.
Compared with other large provinces, BC has the lowest case rate, similar to QC, and 2nd lowest hospitalization census.

For latest version of this graph and data notes, see the Epi App.
BC’s case rate and hospitalization census is similar to what is observed in the Nordic countries.
Dynamic compartmental modeling: recent trends

Our model shows that $R_t$ remains below 1 and is trending downward in all regions in BC.

- **BC (0.69 → 0.60)**
- **Fraser (0.63 → 0.55)**
- **Vancouver (0.71 → 0.65)**
  - Coastal
- **Interior (0.96 → 0.85)**
- **Vancouver (0.61 → 0.56)**
  - Island
- **Northern (0.89 → 0.69)**

Solid black line: median $R_t$, modeled using all reported cases up to June 1, 2021; Grey band: 5%-95% credible interval; Purple bars: all reported cases. Due to lag from symptom onset to reporting, most recent case counts and $R_t$ are not shown. Recent trend shown comparing 7 day average $R_t$ from (last week → this week). Data source: BCCDC HA line list.
Model notes and assumptions

• $R_t$ modelling: a dynamic compartmental model was fit to COVID-19 data for BC using a Bayesian framework (Anderson et al. 2020. PLoS Comp. Biol. 16(12): e1008274). Results are presented as provincial and regional time-varying estimates of average daily transmission rate ($R_t$).
  • the model does not consider importation of cases, hence all transmission is assumed to arise from local cases
  • the model does not distinguish cases arising from variants of concern (VoCs) versus ‘wild-type’ COVID-19, hence model estimates represent average rates of transmission
Additional Resources

- BCCDC COVID-19 Surveillance Dashboard showing maps, vertical plots, and trends at local health authority level can be found [here](#).

- More BC COVID-19 data, including the latest Situation Report, maps, and BC COVID-19 public dashboard, can be found [here](#).

- For more information on variants of concern and whole genome sequencing, the latest report is posted [here](#).

- To put BC provincial, Health Authority, and HSDA trajectories into national and international context, see [BCCDC COVID-19 Epidemiology app](#).

- COVID SPEAK 2020 Round 1 Survey results

- Slides for previous public and modelling briefings by Dr. Bonnie Henry can be found [here](#).

- PHAC’s COVID-19 Epidemiology update can be found [here](#).