BCCDC Weekly Data Summary

27 May 2021
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 Weekly Summary

• **Case rates** are stable or declining in all HAs, and provincially **cases are at the lowest count** since October 2020; **test positivity** is declining, ~7% provincially for publicly funded tests and 6% for all tests.

• **New hospitalizations** are elevated, but continuing to decline; **hospital/critical care census** is declining across BC; **new deaths** are stable and low.
  - Majority of hospitalizations continue to be among individuals aged >40 years

• **The share of VOCs** among screened cases in BC is ~84% in epi week 20 (May 16-22). Among sequenced samples provincially based on information for epi week 19, P.1 (~40%) and B.1.1.7 (~56%) remain two dominant VOCs.
  - B.1.617 (newly declared by WHO as a VOC) currently represents ~3% of VOCs

• As of May 25, two thirds of the adult population in BC has received at least one dose of **vaccine**; ~80% of individuals ≥50 years have received at least one dose.
May 20 to May 26: BC COVID-19 Profile

- Total cases: 142,886
- New this week: 2,290
- Ever hospitalized: 7,583
- New this week: 156
- Total deaths: 1,683
- New this week: 25
- Removed from isolation: 137,517
- New this week: 3,532

New daily COVID-19 cases, hospitalizations and deaths, Aug 01 2020 - May 25 2021

* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW May-28-2021
Case rates are declining or stable in all HAs; new hospitalizations continue to decline and are below Fall 2020 peaks; 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 in all regions.

* Data are by census date for hospitalizations.

Data source: PHSA Provincial COVID19 Monitoring Solution (PCMS) May-28-2021
Number of hospitalizations decreasing in all age groups < 80 years. 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
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.
1 in 4 cases over the last week were among Surrey residents. The case rate over the past week declined >3x faster in Surrey than the rest of BC (>2x faster over the past 2 weeks).
Incidence is decreasing or stable in all HAs. Percent positivity is at or below 10% in all HAs.


Data source: PLOVER 25-May-2021
BC, as of May 25th:
~80% of those 50+ are now vaccinated, ~2/3 of 18+ and >50% total population.
For latest version of this map, see the new COVID-19 Surveillance Dashboard
COVID-19 Vaccination Coverage by CHSA: Ages 18+ 1st Dose (up to May 24, 2021)

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.
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: **COVID-19 Tracker Canada**
Visualization: BCCDC
Extracted: 2021-05-27

Data source: **Our World in Data**
Visualization: BCCDC
Extracted: 2021-05-27
1. **Percent positivity** among publicly funded tests is 7% and among all tests, it is 6%.
   - Testing rates decreased 11% this week (~49,000 total tests May 16 to 22)
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 individuals aged 13 to 24 years.
4. The provincial weekly median turnaround time (time from specimen collection to lab result) is 13 hours, indicating good testing capacity; only 1 in 4 tests took ≥21 hours to result.
5. Among SARS-COV-2 screened samples, the proportion that were presumptive or confirmed VOCs for the past epi week was ~84%.
6. VOCs have been detected in all regions of the province.
   - Among sequenced samples provincially based on information for epi week 19, P.1 and B.1.1.7 remain two dominant VOCs, accounting for roughly 40% and 56% of VOCs respectively.
   - B.1.617 (newly declared by WHO as a VOC) currently represents ~3% of VOCs
### Weekly Summary of ALL lab tests performed

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Change from Last Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total specimens</td>
<td>2,706,180</td>
<td>↓11%</td>
</tr>
<tr>
<td>Tested</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New this epi week</td>
<td>49,442</td>
<td></td>
</tr>
<tr>
<td>Total positive</td>
<td>149,814</td>
<td>5.9% positivity</td>
</tr>
<tr>
<td>Specimens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New positive this epi week</td>
<td>2,898</td>
<td>↓1.0% absolute change from last week</td>
</tr>
</tbody>
</table>

### Weekly Summary of Lab tests paid Publicly

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
<th>Change from Last Week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total specimens</td>
<td>2,230,331</td>
<td>↓8%</td>
</tr>
<tr>
<td>Tested</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New this epi week</td>
<td>40,952</td>
<td></td>
</tr>
<tr>
<td>Total positive</td>
<td>148,453</td>
<td>7.0% positivity</td>
</tr>
<tr>
<td>Specimens</td>
<td></td>
<td></td>
</tr>
<tr>
<td>New positive this epi week</td>
<td>2,881</td>
<td>↓1.5% absolute change from last week</td>
</tr>
</tbody>
</table>

**Data source:** PLOVER extract at 10:30am on May 26, 2021.
Epi week 20 (May 16 – 22)
For latest version of this map, see the new (note: change symbols not included) COVID-19 Surveillance Dashboard
COVID-19 Recent 7-Day Test Positivity by CHSA (May 19 to 25, 2021)

Includes all tests

For latest version of this map, see the new (note: change symbols not included) COVID-19 Surveillance Dashboard
Incidence remains elevated, but is stable or decreasing across regions; positivity is >10% in health service delivery areas in FH and NH.
Incidence continues to decline in all age groups. Percent positivity is >10% in individuals aged 19 to 24 years.
The proportion of screened samples remains high >80%

As of week 13, we now include dual assay qPCR SNP screening for N501Y and E484K mutations for BCCDC PHL
Of all COVID-19 positive test samples in epi week 20 (May 16 - May 22) in BC, ~84% were presumptive VOCs. Note that in Northern 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 18, P.1 (~40%) and B.1.1.7 (~56%) remain two dominant VOCs. B.1.617 (newly declared by WHO as a VOC) currently represents ~3% of VOCs.

Weeks 13 onward include specimens from qPCR SNP screening that resulted as presumptive positive for B.1.1.7 and P.1.

* The B.1.1.7 VoC lineage is captured either by qPCR SNP screen or WGS for randomly selected samples; all other circulating VoCs are WGS confirmed and exclude samples sequenced for cluster and outbreak investigation. In week 12, we used a qPCR SNP that is comprised of a dual N501Y and E484K assay.
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 stabilizing in MB and declining or low everywhere else. 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.
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 in all regions in BC.

- **BC (0.74 → 0.63)**
- **Fraser (0.70 → 0.60)**
- **Vancouver (0.74 → 0.65)**
- **Coastal**
- **Interior (0.94 ≈ 0.90)**
- **Vancouver (0.69 ≈ 0.63)**
- **Island**
- **Northern (0.90 ≈ 0.88)**

Solid black line: median $R_t$, modeled using all reported cases up to May 25, 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 linelist.
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 by LHA 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](#).