Key Findings

BC continues to experience a high number of COVID-19 cases but hospitalisations and deaths remain low.

- The number of new cases reported this week (669) increased compared to last week (547) (Table 1, Fig 3).
- The number of active cases (1,175) also increased compared to last week (906) (Table 1).
- Over 90% of new cases in the last week were reported by Fraser and Vancouver Coastal Health (Table 1).
- The most likely source of infection remains contact with a local case or cluster (Table 2).
- While the number of tests conducted has increased, the proportion which tested positive has remained stable over the last few weeks (Fig 6).
- The number of cases reported among 10-29 year olds continues to increase whereas the majority of age groups saw a slight decrease or stable number of cases reports in the last week (Fig 9).
- New hospital admissions and deaths remain low, but the number of new hospital admissions has increased in the last two weeks (Fig 5). The number of cases currently in hospital and in critical care have also increased in the last 1-2 weeks but the numbers remain much lower than in phase 1 (Fig 11, Fig 12).
- The number of new daily cases in BC is increasing more rapidly than in some other parts of Canada and internationally (Fig 13, Fig 14).

Figure 1: Map of total and new COVID-19 cases reported since last week by health authority of residence, BC, January 1 – September 3, 2020 (**N=6,041**)^†

^New cases reported since last week by health authority are denoted in parentheses.
^† Cases reported as “Out of Canada” (n=79) are not reflected on the map.

*Findings are based on lab-confirmed, lab-probable, and epi-linked cases (case definition found here: [http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-corona-virus)] reported from Health Authorities to BCCDC as of 10am, except where otherwise noted. Data represent a subset of actual infections and are subject to change with changes in testing recommendations and practices, changes in case definitions, data reconciliation and/or as data become more complete. As of July 3, residents of other Canadian provinces/territories are reported by that province/territory.

** Produced weekly (Thursdays) effective July 16, 2020.
### Table 1: Epidemiological profile of reported cases by health authority of residence, BC, January 1 – September 3, 2020 (N=6,041)

<table>
<thead>
<tr>
<th>Health Authority of Residence</th>
<th>Total N (%)&lt;sup&gt;d&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fraser</td>
<td>3,155 (52%)</td>
</tr>
<tr>
<td>Interior</td>
<td>450 (7%)</td>
</tr>
<tr>
<td>Vancouver Island</td>
<td>178 (3%)</td>
</tr>
<tr>
<td>Northern</td>
<td>167 (3%)</td>
</tr>
<tr>
<td>Vancouver Coastal</td>
<td>2,012 (33%)</td>
</tr>
<tr>
<td>Out of Canada</td>
<td>79 (1%)</td>
</tr>
<tr>
<td>Total</td>
<td>6,041 (100%)</td>
</tr>
</tbody>
</table>

#### Total number of cases<sup>a,b</sup>
- Fraser: 3,155 cases
- Interior: 450 cases
- Vancouver Island: 178 cases
- Northern: 167 cases
- Vancouver Coastal: 2,012 cases
- Out of Canada: 79 cases
- Total: 6,041 cases

#### Number of lab-confirmed and lab-probable cases
- Fraser: 3,126 cases
- Interior: 426 cases
- Vancouver Island: 174 cases
- Northern: 160 cases
- Vancouver Coastal: 1,996 cases
- Out of Canada: 78 cases
- Total: 5,960 cases

#### Number of epi-linked probable cases<sup>c,e</sup>
- Fraser: 29 cases
- Interior: 24 cases
- Vancouver Island: 4 cases
- Northern: 7 cases
- Vancouver Coastal: 16 cases
- Out of Canada: 1 case
- Total: 81 cases

#### New cases since last week (August 27)<sup>f</sup>
- Fraser: 337 cases
- Interior: 21 cases
- Vancouver Island: 5 cases
- Northern: 30 cases
- Vancouver Coastal: 275 cases
- Out of Canada: 1 case
- Total: 669 cases

#### Median age in years, cases<sup>g</sup>
- Fraser: 39 years
- Interior: 37 years
- Vancouver Island: 44 years
- Northern: 42 years
- Vancouver Coastal: 40 years
- Out of Canada: 42 years
- Total: 40 years (range 0-104y)

#### Female sex, cases<sup>d</sup>
- Fraser: 1,522 cases
- Interior: 221 cases
- Vancouver Island: 92 cases
- Northern: 95 cases
- Vancouver Coastal: 1,038 cases
- Out of Canada: 12 cases
- Total: 2,980 cases (50%)

#### Cumulative incidence per 100,000 population<sup>h</sup>
- Fraser: 164.6
- Interior: 56.2
- Vancouver Island: 20.9
- Northern: 55.6
- Vancouver Coastal: 162.3
- Out of Canada: -
- Total: 116.7

#### Ever hospitalized<sup>i</sup>
- Fraser: 332 cases
- Interior: 34 cases
- Vancouver Island: 25 cases
- Northern: 19 cases
- Vancouver Coastal: 199 cases
- Out of Canada: 5 cases
- Total: 614 cases (10%)

#### Median age in years, ever hospitalized<sup>g</sup>
- Fraser: 69 years
- Interior: 62 years
- Vancouver Island: 72 years
- Northern: 50 years
- Vancouver Coastal: 68 years
- Out of Canada: 50 years (range 0-98y)

#### Currently hospitalized<sup>d</sup>
- Fraser: 21 cases
- Interior: 0 cases
- Vancouver Island: 0 cases
- Northern: 3 cases
- Vancouver Coastal: 7 cases
- Out of Canada: 1 case
- Total: 34 cases

#### Currently in critical care<sup>j</sup>
- Fraser: 6 cases
- Interior: 0 cases
- Vancouver Island: 0 cases
- Northern: 0 cases
- Vancouver Coastal: 2 cases
- Out of Canada: -
- Total: 11 cases

#### Total deaths, case fatality and cumulative mortality<sup>k</sup>
- Fraser: 93 deaths
- Interior: 2 deaths
- Vancouver Island: 5 deaths
- Northern: 0 deaths
- Vancouver Coastal: 110 deaths
- Out of Canada: 0 deaths
- Total: 210 deaths (3%)

#### New deaths since last week (August 27)<sup>i</sup>
- Fraser: 6 deaths
- Interior: 0 deaths
- Vancouver Island: 0 deaths
- Northern: 0 deaths
- Vancouver Coastal: 0 deaths
- Out of Canada: 0 deaths
- Total: 6 deaths

#### Median age in years, deaths<sup>g</sup>
- Fraser: 84 years
- Interior: 73 years
- Vancouver Island: 85 years
- Northern: NA
- Vancouver Coastal: 87 years
- Out of Canada: NA
- Total: 85 years (range 44-103y)

#### Discontinued isolation<sup>k</sup>
- Fraser: 2,519 cases
- Interior: 427 cases
- Vancouver Island: 165 cases
- Northern: 123 cases
- Vancouver Coastal: 1,334 cases
- Out of Canada: 76 cases
- Total: 4,644 cases (77%)

#### Currently active cases<sup>m</sup>
- Fraser: 532 cases
- Interior: 21 cases
- Vancouver Island: 8 cases
- Northern: 44 cases
- Vancouver Coastal: 568 cases
- Out of Canada: 2 cases
- Total: 1,175 cases (19%)

---

a. Total COVID-19 cases includes lab-confirmed, lab-probable and epi-linked cases. Case definitions can be found at: [http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-novel-coronavirus](http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-novel-coronavirus). As of July 3, residents of other Canadian provinces/territories are reported by that province/territory.

b. Epi-linked cases reported on or after May 19, 2020 are included.

c. As of July 9, cases are reported by health authority of residence. When health authority of residence is not available, cases are assigned to the health authority reporting the case. Case definitions/covid-19-novel-coronavirus.pdf.

d. Denominator for % derivation is total number of cases (N), except sex which is calculated based on those with known information on sex.

e. Epi-linked case counts may decrease if cases are tested and meet a different case classification.

f. "New" cases and deaths reflect the difference in counts reported to the BCCDC between the day of the last report and today's report as of 10am (net new). This may not be equal to the number of cases/deaths by date reported to HAs as: (1) cases/deaths reported prior to 10am would be included as new cases/deaths in today's report and cases reported after 10am would be included in the next report's count; (2) there may be some delays between cases/deaths being reported to HAs and then reported to BCCDC; and (3) cases may be attributed to different health authorities or may be excluded from case counts as new information is obtained.

g. Median age is calculated based on those with known information on age.


i. As of July 3, residents of other Canadian provinces/territories are reported by that province/territory.


k. Active cases exclude those who have died, discontinued isolation or been lost to follow up (n=12).
**Figure 2:** Epidemic curve, COVID-19 cases in BC by symptom onset date January 15 – September 2, 2020 \((N=5,273)\)

Only cases with symptom onset dates reported are included.

**Figure 3:** Epidemic curve, COVID-19 cases in BC by reported date January 15 – September 2, 2020 \((N=6,035)\)

The number of cases reported by day differs from that in Table 1 in previous reports as this figure reflects the date the case was lab-confirmed and reported to the Health Authority.

On June 3, a change in the FHA reporting system led to changes in the reported date of some FHA cases and concurrent changes to the epidemic curve by reported date.

**Phase 1 – Public health measures enacted:** March 14: Spring break started for most schools; March 16: Mass gatherings public health order implemented (>50 people), entry of foreign nationals banned, international flights restricted to four national airports; March 17: BC public health emergency declared, traveller self-isolation public health order implemented; March 18: Provincial state of emergency declared, food and drink service restrictions public health order implemented; March 20: US/Canada border closed to non-essential travel; March 21: closure of personal service establishments.

**Phase 2 – Start of reopening:** May 19: Restoration of health services, retail, hair salons, in-person counselling, restaurants, cafes, pubs, museums, libraries, office-based worksites, sports, outdoor spaces, and child care. June 1: Students in K-12 return to school on a gradual and part-time basis.

**Phase 3 – Continued reopening:** June 24: Non-essential travel within BC permitted with reopening of accommodation industry (hotels, motels, RV parks, cabins, etc.), overnight camping in BC parks, motion pictures and television production, and movie theatres. Please refer to [http://www.bccdc.ca/health-info/diseases-conditions/covid-19/testing/phases-of-covid-19-testing-in-bc](http://www.bccdc.ca/health-info/diseases-conditions/covid-19/testing/phases-of-covid-19-testing-in-bc) for laboratory testing criteria changes.

**How to interpret the epidemic curves:** Figure 2 shows the date that a case’s illness started. Figure 3 shows the date the illness was confirmed and reported by the laboratory. There is a delay between the beginning of a person’s illness (symptom onset date) and the date the laboratory confirms and reports the illness (reported date). New cases only have a reported date available and appear on the right of the curve in Figure 3, but their symptom onset would have occurred prior. As information on symptom onset becomes available through public health investigation, cases are expected to appear on earlier dates in Figure 2.
Figure 4: Likely source of infection for COVID-19 cases in BC by episode date, January 15 – September 2, 2020 (N=6,035)

Episode date is based on symptom onset date (n=5,273); if not available then date COVID-19 was reported to health authority (n=762).
* March 16: Entry of foreign nationals banned; symptomatic individuals banned from flights to Canada; international flights restricted to four national airports.
** March 20: US/Canada border closed to non-essential travel.

Table 2: Number and proportion of likely source of infection for COVID-19 cases in BC by phase of epidemic, January 15 – September 2, 2020 (N=6,035)

<table>
<thead>
<tr>
<th>Phase of epidemic</th>
<th>International travel n (%)</th>
<th>Local – case/cluster n (%)</th>
<th>Local – unknown source n (%)</th>
<th>Pending/missing info n (%)</th>
<th>Total N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jan 15 – Mar 13 (Pre-Phase 1)</td>
<td>139 (31.0)</td>
<td>203 (45.2)</td>
<td>90 (20.0)</td>
<td>17 (3.8)</td>
<td>449 (100)</td>
</tr>
<tr>
<td>Mar 14 – May 18 (Phase 1)</td>
<td>189 (9.1)</td>
<td>1,495 (72.0)</td>
<td>336 (16.2)</td>
<td>55 (2.7)</td>
<td>2,075 (100)</td>
</tr>
<tr>
<td>May 19 – yesterday (Phase 2 &amp; 3)</td>
<td>165 (4.7)</td>
<td>2,047 (58.3)</td>
<td>731 (20.8)</td>
<td>568 (16.2)</td>
<td>3,511 (100)</td>
</tr>
<tr>
<td>Total</td>
<td>493 (8.2)</td>
<td>3,745 (62.1)</td>
<td>1,157 (19.2)</td>
<td>640 (10.6)</td>
<td>6,035 (100)</td>
</tr>
</tbody>
</table>
Figure 5. Number of COVID-19 cases, hospital admissions, and deaths by event date, BC, January 15 – September 2, 2020 (N=6,035*)

* On June 3, a change in the FHA reporting system led to changes in the reported date of some FHA cases and concurrent changes to the epidemic curve by reported date. Excludes hospitalizations with unknown admission dates or admission dates which precede symptom onset and/or discharge date.
Figure 6: Number and proportion of SARS-CoV-2 positive respiratory specimens, BC, Jan 15–Sept 1, 2020 (N=380,193; Positive=1.9%)
Figure 7: Percentage distribution of COVID-19 cases, hospitalizations, ICU admissions and deaths by age, compared to the general population† of BC, January 1 – September 3, 2020 (N=5,980*)

![Graph showing percentage distribution by age group]

*Only cases with age information available are included.
† PEOPLE2019-2020 population estimates
Note: COVID hospitalizations have been reported in the <10y and 10-19y age groups but represent <1% of hospitalizations and are therefore not visible.

Table 3: Number and percentage distribution of COVID-19 cases, hospitalizations, ICU admissions and deaths by age, compared to the general population of BC, January 1 – September 3, 2020 (N=5,980*)

<table>
<thead>
<tr>
<th>Age group</th>
<th>COVID cases n (%)</th>
<th>Cases ever hospitalized n (%)</th>
<th>Cases ever in ICU n (%)</th>
<th>COVID deaths n (%)</th>
<th>General population† n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10 Years</td>
<td>157 (3)</td>
<td>3 (&lt;1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>468,280 (9)</td>
</tr>
<tr>
<td>10-19 Years</td>
<td>306 (5)</td>
<td>2 (&lt;1)</td>
<td>0 (0)</td>
<td>0 (0)</td>
<td>507,197 (10)</td>
</tr>
<tr>
<td>20-29 Years</td>
<td>1,332 (22)</td>
<td>20 (3)</td>
<td>7 (3)</td>
<td>0 (0)</td>
<td>684,681 (13)</td>
</tr>
<tr>
<td>30-39 Years</td>
<td>1,191 (20)</td>
<td>42 (7)</td>
<td>12 (6)</td>
<td>0 (0)</td>
<td>730,523 (14)</td>
</tr>
<tr>
<td>40-49 Years</td>
<td>833 (14)</td>
<td>54 (9)</td>
<td>20 (9)</td>
<td>3 (1)</td>
<td>647,790 (13)</td>
</tr>
<tr>
<td>50-59 Years</td>
<td>833 (14)</td>
<td>88 (14)</td>
<td>34 (16)</td>
<td>5 (2)</td>
<td>721,355 (14)</td>
</tr>
<tr>
<td>60-69 Years</td>
<td>526 (9)</td>
<td>121 (20)</td>
<td>50 (24)</td>
<td>19 (9)</td>
<td>675,632 (13)</td>
</tr>
<tr>
<td>70-79 Years</td>
<td>351 (6)</td>
<td>147 (24)</td>
<td>66 (31)</td>
<td>38 (18)</td>
<td>436,179 (9)</td>
</tr>
<tr>
<td>80-89 Years</td>
<td>286 (5)</td>
<td>96 (16)</td>
<td>18 (9)</td>
<td>85 (40)</td>
<td>188,010 (4)</td>
</tr>
<tr>
<td>90+ Years</td>
<td>165 (3)</td>
<td>40 (7)</td>
<td>4 (2)</td>
<td>60 (29)</td>
<td>50,876 (1)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,980</strong></td>
<td><strong>613</strong></td>
<td><strong>211</strong></td>
<td><strong>210</strong></td>
<td><strong>5,110,523</strong></td>
</tr>
</tbody>
</table>

* Only cases with age information available are included.
† PEOPLE2019-2020 population estimates
**Figure 8:** Counts of COVID-19 cases and proportions ever hospitalized, ever admitted to ICU, and with outcome of death by sex and age group, BC, January 1 – September 3, 2020 (*N=5,977*)

*Includes cases with sex and age information available.*

Note: Proportions calculated using the total number of cases in each sex and age group (displayed in top figure) as the denominator.
**Figure 9:** Counts of COVID-19 cases by ten year age groups and epidemiological week of report, BC, week of January 26 – week of August 23, 2020 (*N*=5,660*)

*Only cases with age information available are included.*
Figure 10: COVID-19 outbreaks* by earliest date**, BC, January 15 – September 3, 2020 (N=84)

* Care facility (acute/long term care/independent living) outbreaks have at least one lab-confirmed COVID-19 staff or resident. Other outbreaks have two or more lab-confirmed COVID-19 cases diagnosed within a 14-day period in closed or common settings (e.g. penitentiary, shared living or work setting).
** Based on the earliest date available for the first case in the outbreak (symptom onset date or, if not available, reported date). Earliest dates are subject to change as data are updated.

Table 4: Outbreak and case counts of reported COVID-19 outbreaks*, BC, January 15 – September 3, 2020 (N=84)

<table>
<thead>
<tr>
<th></th>
<th>Care facility</th>
<th>Other settings</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Outbreaks</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total outbreaks</td>
<td>66</td>
<td>18</td>
<td>84</td>
</tr>
<tr>
<td>New since last week</td>
<td>4</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td>Active outbreaks</td>
<td>11</td>
<td>3</td>
<td>14</td>
</tr>
<tr>
<td>Outbreaks declared over</td>
<td>55</td>
<td>15</td>
<td>70</td>
</tr>
<tr>
<td><strong>Outbreak cases</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total cases</td>
<td>730</td>
<td>506</td>
<td>1,236</td>
</tr>
<tr>
<td>Residents/patients</td>
<td>443</td>
<td>122</td>
<td>565</td>
</tr>
<tr>
<td>Staff/other</td>
<td>287</td>
<td>384</td>
<td>671</td>
</tr>
<tr>
<td><strong>Total deaths</strong></td>
<td>153</td>
<td>2</td>
<td>155</td>
</tr>
<tr>
<td>Residents/patients</td>
<td>153</td>
<td>1</td>
<td>154</td>
</tr>
<tr>
<td>Staff/other</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

* Care facility (acute/long term care/independent living) outbreaks have at least one lab-confirmed COVID-19 staff or resident. Other outbreaks have two or more lab-confirmed COVID-19 cases diagnosed within a 14-day period in closed or common settings (e.g. penitentiary, shared living or work setting).
** Cases include lab-confirmed, lab-probable and epi-linked cases. Case definitions can be found at: [http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-novel-coronavirus](http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-novel-coronavirus).
Figure 11: Total COVID-19 cases in critical care by day, BC, March 25 – September 3, 2020

Data source: PHSA September 3, 2020. Note: critical care data may change over time due to small adjustments and improvements in data quality.

Figure 12: Number of COVID-19 cases in hospital by day, BC, March 18 – September 3, 2020

Data available starting March 18. For dates with no data available (April 12; Sundays from May 10 onwards; and Saturdays from June 7 onwards), the previous day’s value was used. Hospitalization data may be incomplete or out of date (i.e., under-estimates) owing to the timing and process for case status update.
International and National Epidemiological Comparisons

**Figure 13:** Daily new and cumulative diagnosed COVID-19 case and death rates by select countries vs BC and Canada

**Figure 14:** Daily new and cumulative diagnosed COVID-19 case and death rates in Canada

Data sources for international and national epidemiological comparison (all extracted September 3, 2020):
JHU CSSE for global cases and deaths, and Canadian provincial deaths outside of BC: [https://github.com/CSSEGISandData/COVID-19](https://github.com/CSSEGISandData/COVID-19)
For Canadian provincial cases: Provincial data sources
BC cases and deaths: BCCDC
Global population denominator from the United Nations