British Columbia COVID-19 Daily Situation Report, June 18, 2020*

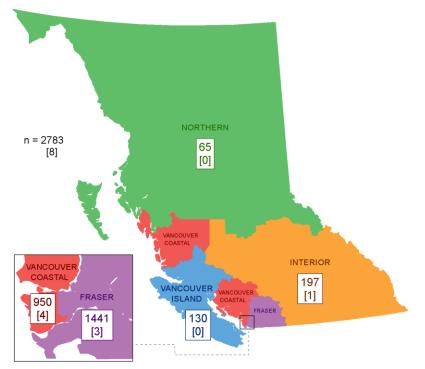
PLEASE NOTE: Frequency of the Situation Report decreased to twice weekly (Mondays and Thursdays) effective June 11, 2020

Key Findings

COVID-19 risk in BC is currently very low.

- The number of new reported cases and hospitalizations remains low (Fig 3, Fig 5).
- No new deaths occurred in the last week (Fig 5).
- Most recent cases continue to be reported from FHA and VCH; cumulative incidence in these two health authorities is approximately the same (<u>Table 1</u>).
- The proportion of people who tested positive remains low (Fig 6).
- The number of reported cases among children remains low; few required hospitalization and none have died (Table 3, Fig 7).
- The highest proportion of hospitalization among cases is observed in the 70-79 year age group, while mortality is the greatest in 80+ year age groups. Males continue to have a remarkably higher proportion of hospitalizations and deaths across all ages (Fig 8).
- Three new outbreaks were declared since the last report, all in care facilities (Fig 9, Table 4).
- The number of cases in hospital and in critical care continues to remain low (Fig 10, Fig 11).
- The BC epidemic trajectory has been favourable compared with other regions (Fig 12, Fig 13).

Figure 1: Map of total and new COVID-19 cases reported since yesterday by health authority, BC, January 1 – June 18, 2020 (**N=2,783**)[^]



^New cases reported since yesterday by health authority are denoted in parentheses.

*Findings are based on lab-confirmed, lab-probable, and epi-linked cases (case definition found here: <u>http://www.bccdc.ca/health-professionals/clinical-</u> 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.

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|----------|---------|--------|----------|--------|
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| | Fraser | Interior | Vancouver Island | Northern | Vancouver Coastal | Total N (%) ^d |
|----------------------------------------------------------|--------|----------|---------------------|----------|----------------------|-----------------------------|
| Total number of cases ^{a,c} | 1,441 | 197 | 130 | 65 | 950 | 2,783 |
| New cases since June 17 ^b | 3 | 1 | 0 | 0 | 4 | 8 |
| Number of lab-confirmed and lab-probable cases | 1,440 | 197 | 127 | 65 | 948 | 2,777 |
| Number of epi-linked probable cases ^c | 1 | 0 | 3 | 0 | 2 | 6 |
| Median age in years, cases ^e | 49 | 48 | 50 | 44 | 55 | 51 years (range 0-103y) |
| Female sex, cases | 720 | 91 | 69 | 38 | 515 | 1,433 (52%) |
| Cumulative incidence per 100,000 population ^f | 75.1 | 24.6 | 15.3 | 21.7 | 76.6 | 54.5 |
| Ever hospitalized ^g | 265 | 30 | 25 | 14 | 175 | 509 (18%) |
| Median age in years, ever hospitalized ^e | 69 | 62 | 72 | 44 | 69 | 69 years (range 0-98y) |
| Currently hospitalized ^g | 5 | 0 | 0 | 0 | 5 | 10 |
| Currently in critical care ⁿ | 1 | 0 | 0 | 0 | 4 | 5 |
| Total number of deaths ^g | 74 | 2 | 5 | 0 | 87 | 168 (6%) |
| New deaths since June 17 ^b | 0 | 0 | 0 | 0 | 0 | 0 |
| Median age in years, deaths ^e | 83 | 73 | 85 | NA | 87 | 85 years (range 47-103y) |
| Discontinued isolation ⁱ | 1,270 | 194 | 125 | 65 | 771 | 2,425 (87%) |

 Table 1: Epidemiological profile of reported cases by health authority, BC, January 1 – June 18, 2020 (N=2,783)

a. Total COVID-19 cases includes lab-confirmed, lab-probable and epi-linked cases. Case definitions can be found at: <u>http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus)</u>.

b. "New" cases and deaths reflect the difference in counts reported to the BCCDC between one day and the next as of 10am. 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 the current day's count and cases reported after 10am would be included in the next day's count; and (2) there may be some delays between cases/deaths being reported to HAs and then reported to BCCDC.

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

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

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

f. PEOPLE2019-2020 population estimates.

g. Serious outcome (e.g. hospitalization, death) tallies may be incomplete or out of date (i.e. under-estimates) owing to the timing and processes for case status update.

h. Source: PHSA June 18 @10am. The number of COVID cases in critical care units is reported daily by each Health Authority and includes the number of COVID patients in all critical care beds (e.g., intensive care units; high acuity units; and other surge critical care spaces as they become available and/or required). Work is ongoing to improve the completeness and accuracy of the data reported.

i. Self-isolation has been discontinued per the criteria outlined in the BC guidelines for public health management of COVID-19: (1) resolution of fever without use of fever-reducing medications; AND (2) improvement of symptoms (respiratory, gastrointestinal and systemic); AND (3) either two negative nasopharyngeal swabs collected at least 24 hours apart, or at least 10 days have passed since onset of symptoms. These are the same criteria that had been used in previous reports for "recovered" cases.

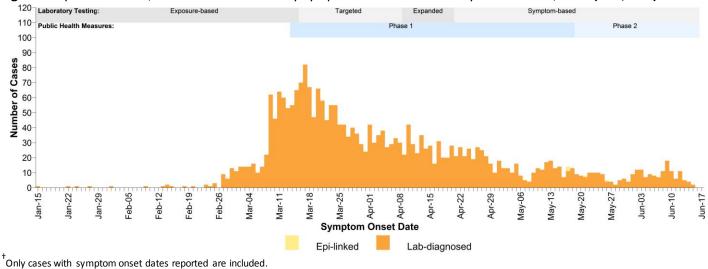
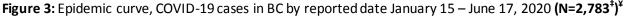
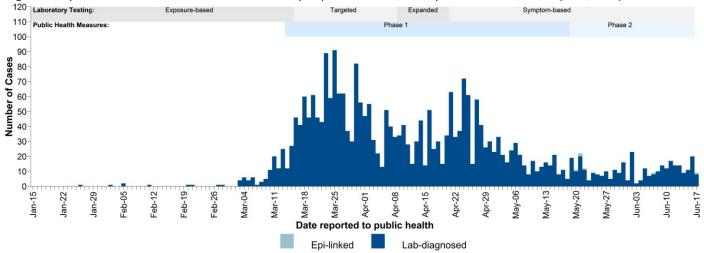


Figure 2: Epidemic curve, COVID-19 cases in BC by symptom onset date January 15 – June 17, 2020 (N=2,595[†])





⁺ 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, symptomatic individuals banned from flights to Canada, 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, officebased worksites, sports, outdoor spaces, and child care.

Please refer to 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.

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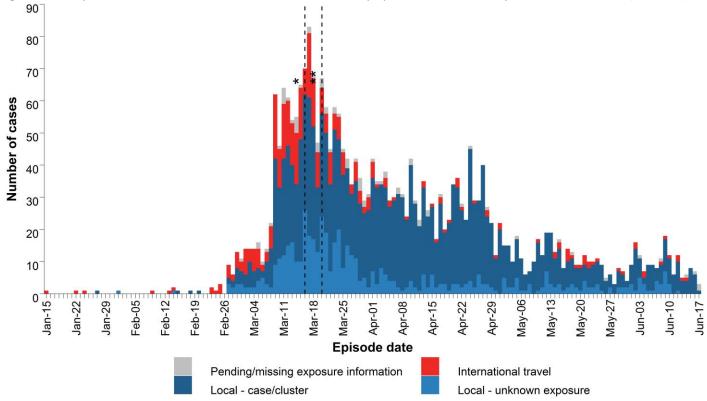
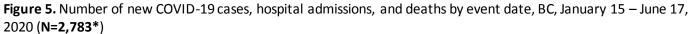


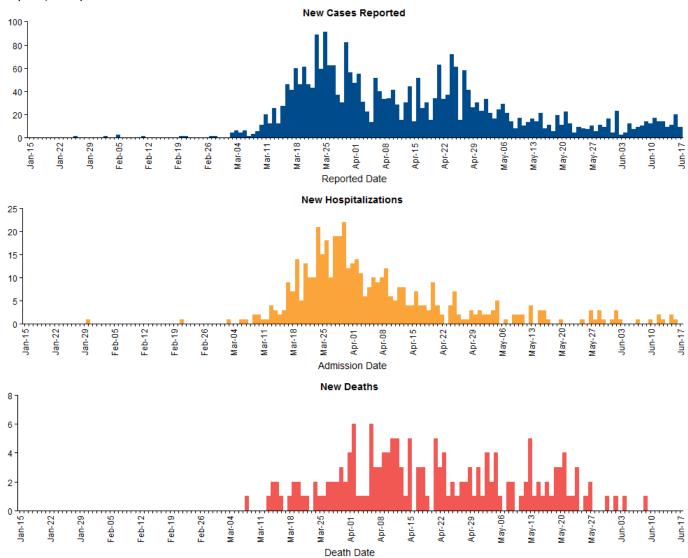
Figure 4: Likely source of infection for COVID-19 cases in BC by episode date[§], January 15 – June 17, 2020 (N=2,783)

§ Episode date is based on symptom onset date (n=2,595), if not available then date COVID-19 was reported to health authority (n=188).
 * 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, January 15 – June 17, 2020 | |
|-------------------------------------------------------------------------------------------------------------------|--|
| (N=2,783) | |

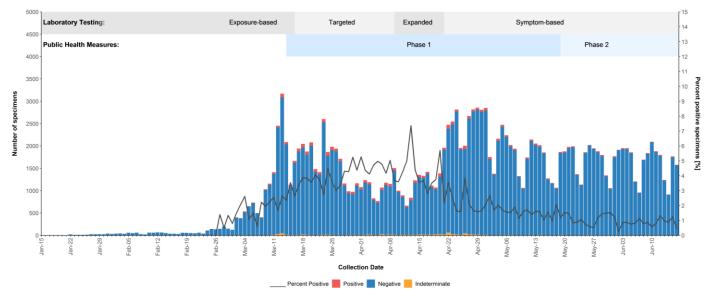
| International travel | Local – case/cluster | Local – unknown source | Pending/missing info |
|----------------------|----------------------|------------------------|----------------------|
| n (%) | n (%) | n (%) | n (%) |
| 350 (13) | 1,827 (66) | 530 (19) | 76 (3) |





* 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. New hospitalizations only include hospitalized cases with valid admission dates.

Figure 6: Number and proportion of SARS-CoV-2 positive respiratory specimens, BC, Jan 15– June 16, 2020 (N=173,413; Positive=2.2%)

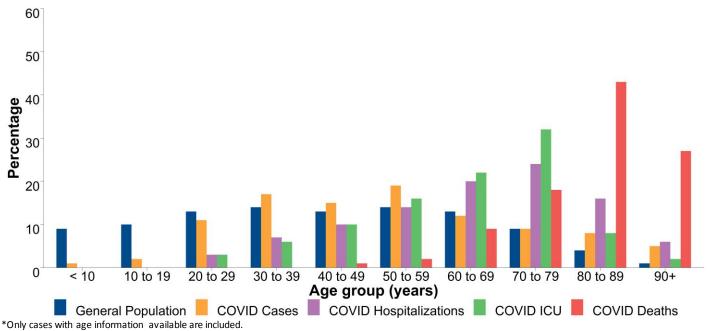


Data source: PLOVER extract on June 18, 2020. Methods and caveats: SARS-CoV-2 specimens are tallied at the specimen level by date the specimen was collected. The proportion positive on a given date may include new positive cases and retested positive cases; this may over-estimate proportionate positivity. Similarly, individuals may be tested repeatedly after becoming negative; this may under-estimate proportionate positivity. Refer to http://www.bccdc.ca/health-info/diseases-conditions/covid-19/testing/phases-of-covid-19-testing-in-bc for description of laboratory testing phases. Note: Please refer to footnotes on http://www.bccdc.ca/health-info/diseases-conditions/covid-19/testing-in-bc for description of laboratory testing phases.

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Figure 7: Percentage distribution of COVID-19 cases, hospitalization, ICU admissions and deaths by age, compared to the general population^{\dagger} of BC, January 1 – June 18, 2020 (**N=2,777***)



+ 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, hospitalization, ICU admissions and deaths by age, compared to the general population of BC, January 1 – June 18, 2020 (**N=2,777***)

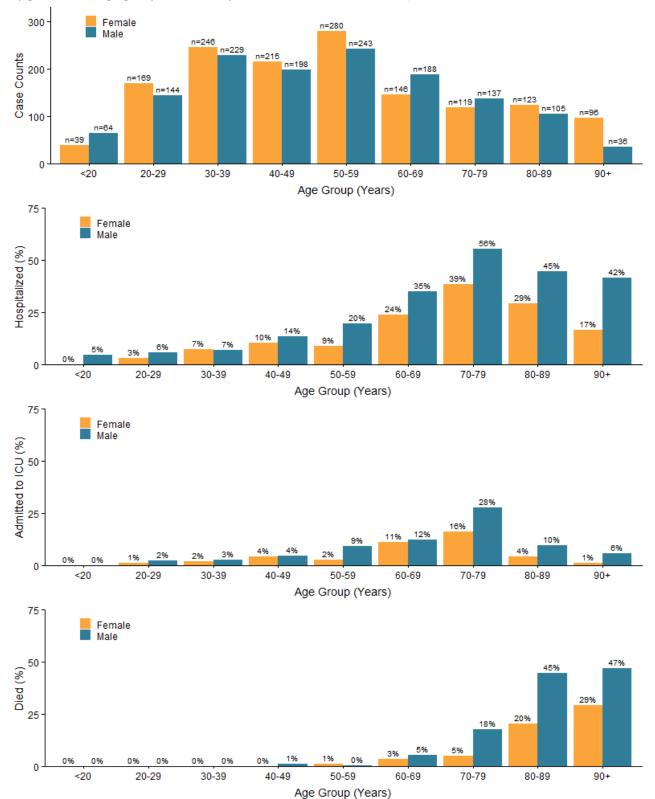
| Age groups | COVID cases n (%) | Cases ever hospitalized n (%) | Cases ever in ICU n (%) | COVID deaths n (%) | General population+ n (%) |
|-------------|----------------------|-------------------------------------|-------------------------------|--------------------------|---------------------------------|
| <10 Years | 39 (1) | 2 (<1) | 0 (0) | 0 (0) | 468,280 (9) |
| 10-19 Years | 64 (2) | 1 (<1) | 0 (0) | 0 (0) | 507,197 (10) |
| 20-29 Years | 313 (11) | 13 (3) | 5 (3) | 0 (0) | 684,681 (13) |
| 30-39 Years | 475 (17) | 34 (7) | 11 (6) | 0 (0) | 730,523 (14) |
| 40-49 Years | 413 (15) | 49 (10) | 18 (10) | 2 (1) | 647,790 (13) |
| 50-59 Years | 523 (19) | 73 (14) | 29 (16) | 4 (2) | 721,355 (14) |
| 60-69 Years | 334 (12) | 101 (20) | 39 (22) | 15 (9) | 675,632 (13) |
| 70-79 Years | 256 (9) | 122 (24) | 57 [§] (32) | 30 (18) | 436,179 (9) |
| 80-89 Years | 228 (8) | 83 (16) | 15 (8) | 72 (43) | 188,010 (4) |
| 90+ Years | 132 (5) | 31 (6) | 3 (2) | 45 (27) | 50,876 (1) |
| Total | 2,777 | 509 | 177 [§] | 168 | 5,110,523 |

* Only cases with age information available are included.

+ PEOPLE2019-2020 population estimates

[§] Decrease of one from last report due to data correction.

Figure 8: Counts of COVID-19 cases and proportions ever hospitalized, ever admitted to ICU, and with outcome of death by gender and age group, BC, January 1 – June 18, 2020 (N=2,777*)



* Includes cases with gender and age information available.

Note: Proportions calculated using the total number of cases in each gender and age group (displayed in top figure) as the denominator.

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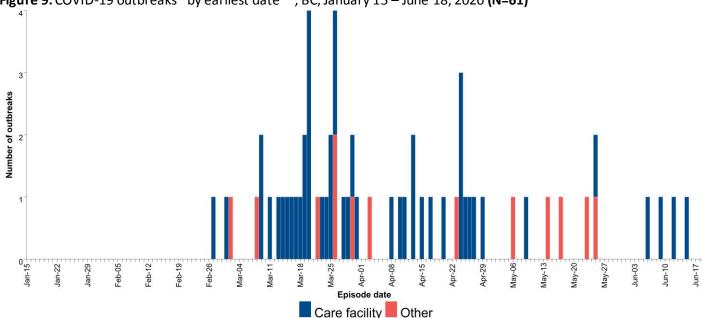


Figure 9: COVID-19 outbreaks* by earliest date**, BC, January 15 – June 18, 2020 (N=61)

* 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.

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|------------------------------------------------|---------------------------------------|---------------------------------------------------|
| Table 4: Outbreak and case counts of re | ported COVID-19 reported outbreaks* | *, BC, January 15 – June 18, 2020 (N=61) |

| | Care facility | Other settings | Total |
|----------------------------------|---------------|----------------|-------|
| · | Outbreaks | | |
| Totaloutbreaks | 48 | 13 | 61 |
| New since last report on June 15 | 3 | 0 | 3 |
| Active outbreaks | 7 | 3 | 10 |
| Outbreaks declared over | 41 | 10 | 51 |
| | Outbreak cas | ses | |
| Total cases | 588 | 394 | 982 |
| Residents/patients | 365 | 122 | 487 |
| Staff/other | 223 | 272 | 495 |
| Totaldeaths | 116 | 2 | 118 |
| Residents/patients | 116 | 1 | 117 |
| Staff/other | 0 | 1 | 1 |

* 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).
 * Decrease of one since last report due to a data correction.

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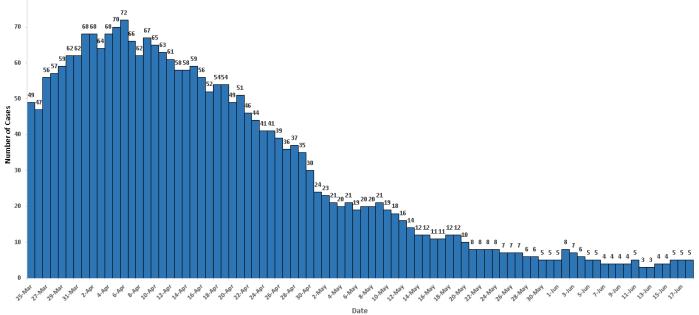


Figure 10: Total positive COVID-19 cases in critical care by day, BC, March 25 - June 18, 2020

Data source: PHSA June 18. Note: critical care data may change over time due to small adjustments and improvements in data quality.

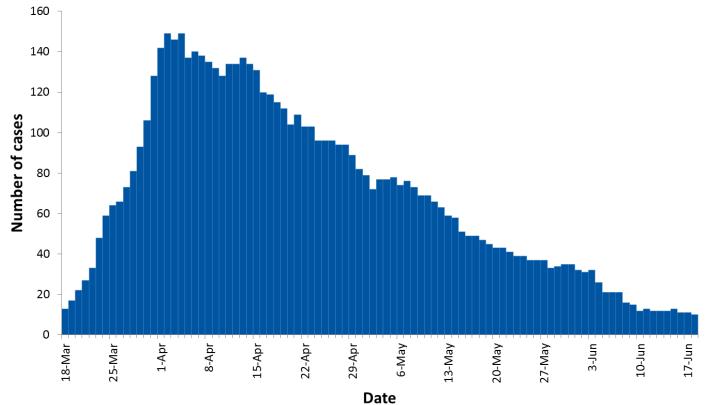


Figure 11: Number of COVID-19 cases in hospital by day, BC, March 18 - June 18, 2020

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

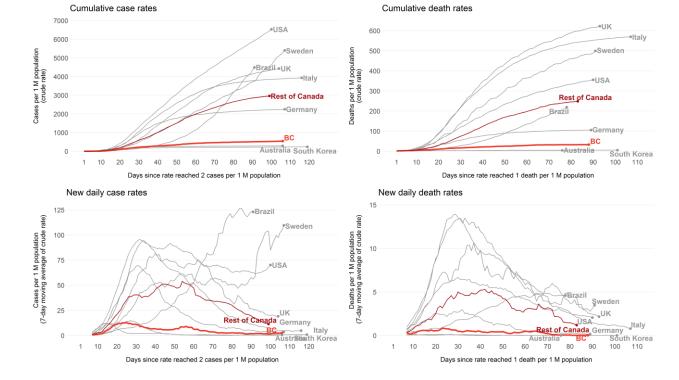
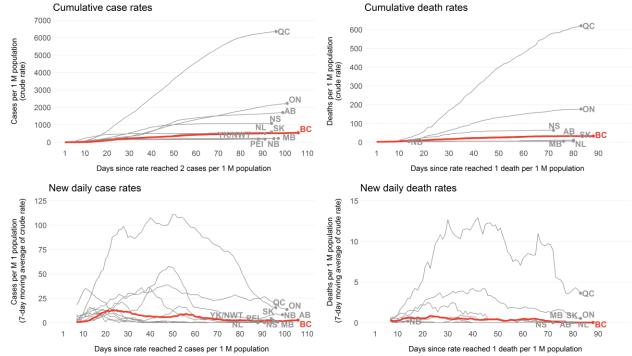


Figure 12: Cumulative diagnosed and new daily COVID-19 case and death rates by select countries vs BC and Canada

Figure 13: Cumulative diagnosed and new daily COVID-19 case and death rates in Canada



Data sources for international and national epidemiological comparison (all extracted June 17, 2020): JHU CSSE for global cases and deaths, and Canadian provincial deaths outside of BC s: https://github.com/CSSEGISandData/COVID-19 JHU CSSE for For Canadian provincial cases: Provincial data sources BC cases and deaths: BCCDC

Global population denominator from the United Nations