# British Columbia COVID-19 Daily Situation Report, May 22, 2020*

Key Findings

- Most COVID-19 indicators are at a stable low level.
- Most regions, except FHA, have reported very few cases in recent days or weeks (Table 1, Fig 3).
- There have been a number of deaths reported in the last few days; most occurred in FHA cases which were part of health care facility outbreaks (Fig 5, 9).
- Only one new outbreak started in the last week (Fig 9).
- The severity of illness remains highest in older adults and adult males (Fig 7-8).
- The number of cases in hospital and critical care continues to decrease (Fig 10-11).
- The BC epidemic trajectory remains favourable compared to other Canadian provinces and other countries (Fig 12-13).

**Figure 1:** Map of COVID-19 cases reported by health authority, BC, January 1 - May 22, 2020 (**N=2,507**)
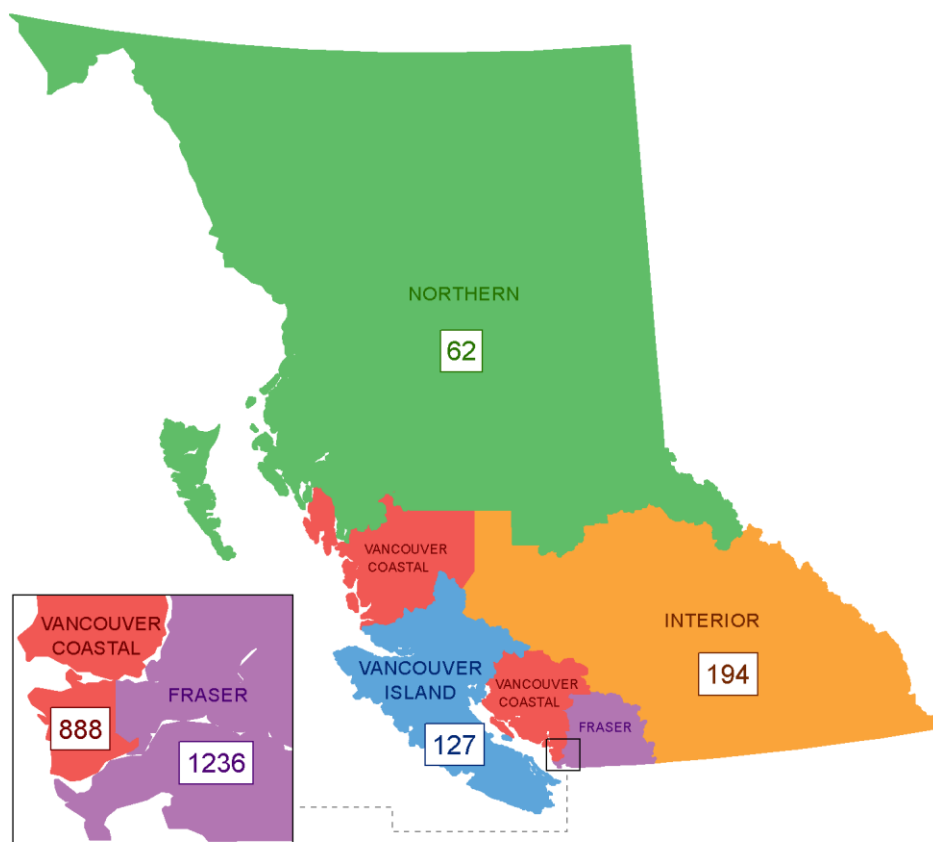
Findings are based on confirmed cases and probable lab cases (case definition found here: http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus) reported from Health Authorities to BCCDC as of 10am, except where otherwise noted. Data represent a subset 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.

Table 1: Epidemiological profile of reported cases by health authority, BC, January 1 - May 22, 2020 (**N=2,507**)

|	Fraser	Interior	Vancouver Island	Northern	Vancouver Coastal	Total N (%)[b]
Total number of cases[a]	1,236	194[i]	127[j]	62	888	2,507
New cases since yesterday[c]	13	2[k]	0[k]	2	1	18
Median age in years, cases[d]	51	48	52	46	56	52 years (range 0-103y)
Female sex, cases	615	90	68	36	489	1,298/2,502 (52%)
Cumulative incidence per 100,000 population[e]	64	24	15	21	72	49
Ever hospitalized[f]	250	29	25	12	172	488 (19%)
Median age in years, ever hospitalized[c]	70	62	72	48	69	69 years (range 0-98y)
Currently hospitalized[f]	20	1	1	1	18	41
Currently in critical care[g]	3	0	0	1	4	8
Total number of deaths[f]	62	2	5	0	86	155 (6%)
New deaths since yesterday[c]	3	0	0	0	0	3
Median age in years, deaths[d]	82	73	85	NA	87	85 years (range 47-103y)
Discontinued isolation[h]	969	185	121	58	709	2,042 (81%)

a. Cases include confirmed and laboratory-probable cases. Provincial COVID-19 case definitions are found here: http://www.bccdc.ca/health-professionals/clinical-resources/case-definitions/covid-19-(novel-coronavirus).
b. Denominator for % derivation is total number of cases (N), except sex for which denominator is as specified for those with known information on sex.
c. "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 HA, 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.
d. Median age is calculated based on those with known information for all, hospitalized, and deceased cases (n=2,502, 488, and 155, respectively).
e. PEOPLE2019-2020 population estimates.
f. Serious outcomes (i.e., hospitalization, death) may be incomplete or out of date (i.e., under-estimates) owing to the timing and process for case status update.
g. Source: PHSA May 22 @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.
h. Self-isolation has been discontinued per the criteria outlined in BC guidelines for public health management of COVID-19.
i. Nine cases were added to yesterday's total due to a data correction.
j. One case was added to yesterday's total due to a data correction.
k. This represents cases newly reported today; due to the data corrections, the new cases do not equal the difference between yesterday's total case count and today's.

Figure 2: Epidemic curve, COVID-19 cases in BC by symptom onset date January 15 - May 21, 2020 **(N=2,332[†])**
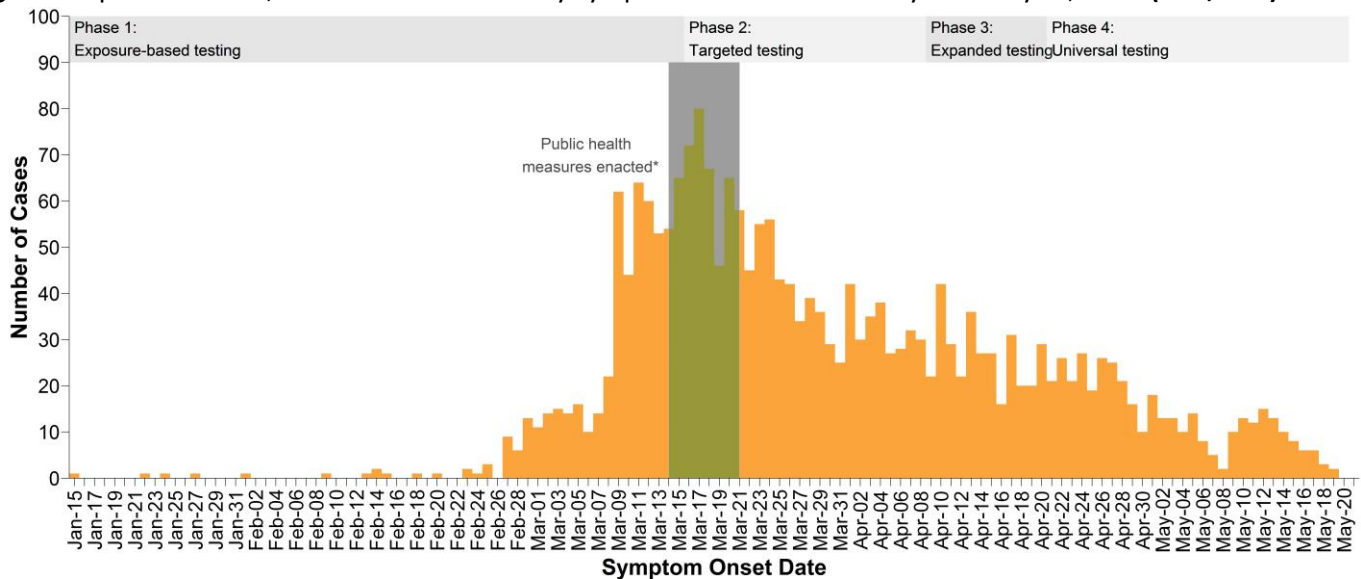
[†]Only cases with symptom onset dates reported are included; cases with symptom onset date on the same day as this report are excluded as only a portion are available at the time the data are extracted.

Figure 3: Epidemic curve, COVID-19 cases in BC by reported date January 15 - May 21, 2020 **(N=2,507[‡])**
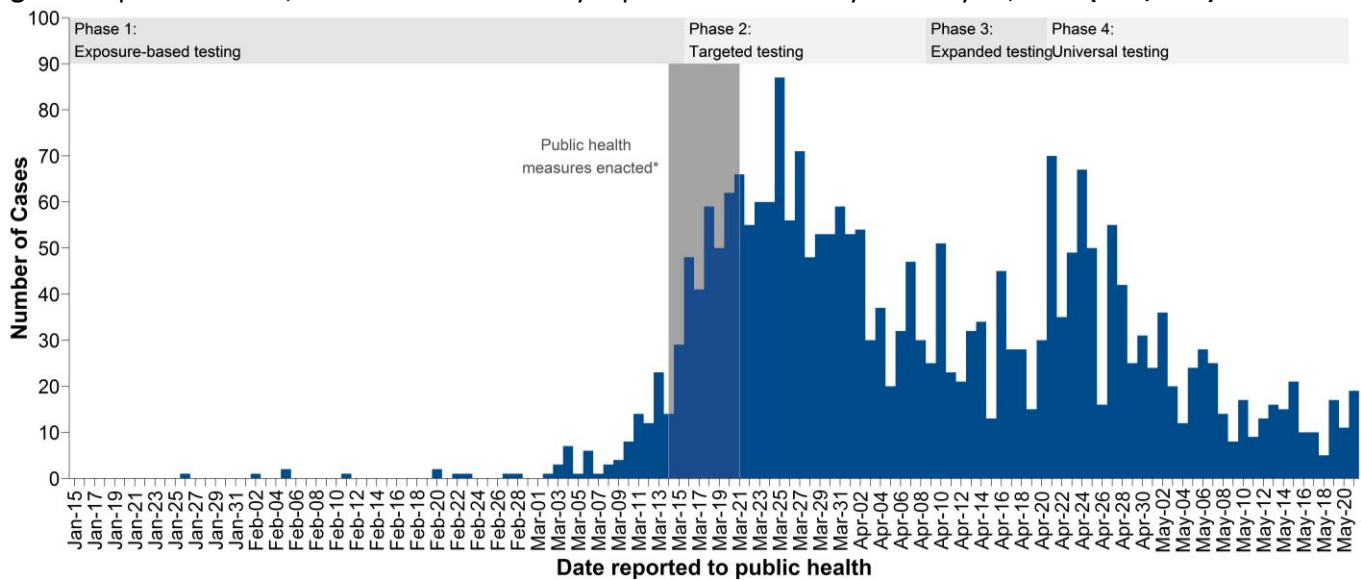

[‡]Cases reported on the same day as this report are excluded as only a portion are available at the time the data are extracted. The number of cases reported by day differs from that in Table 1 in previous reports as this figure reflects the date the case was lab-confirmed and reported to the Health Authority.

A number of public health measures were enacted during the week shaded in grey. These include: 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. Please refer to footnote in Figure 6 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 - May 21, 2020 **(N=2,507)**
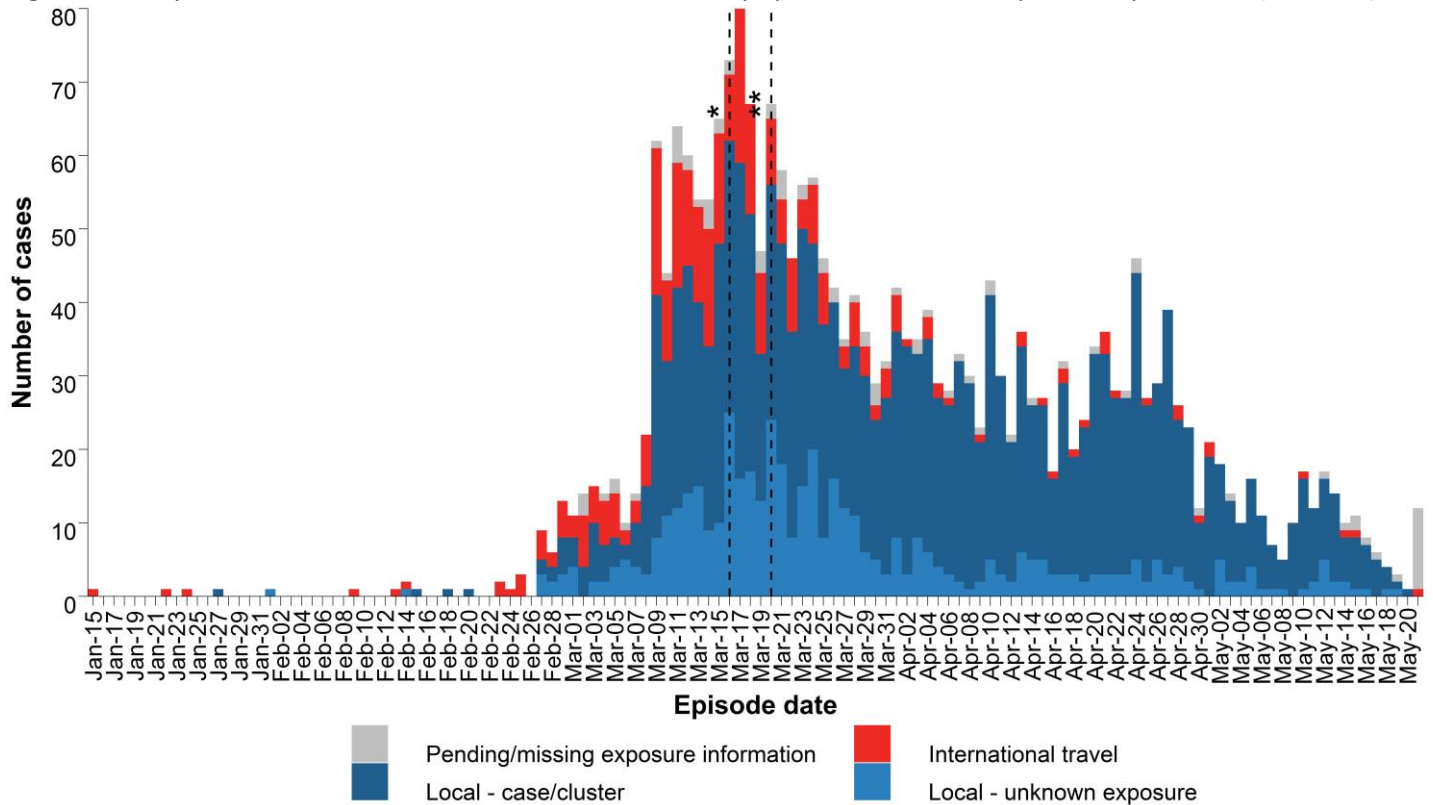
§ Episode date is based on symptom onset date (n=2,332), if not available then date COVID-19 was reported to health authority (n=175).
* March 16: Entry of foreign nationals banned; symptomatic individuals banned from flights to Canada; international flights restricted to four national airports.
** March 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 - May 21, 2020 **(N=2,507)**

International travel n (%)	Local – case/cluster n (%)	Local – unknown source n (%)	Pending/missing info n (%)
321 (13)	1,626 (65)	470 (19)	90 (4)

Figure 5. Number of new COVID-19 cases, hospital admissions, and deaths by event date, BC, January 15 - May 21, 2020 (**N=2,507***)
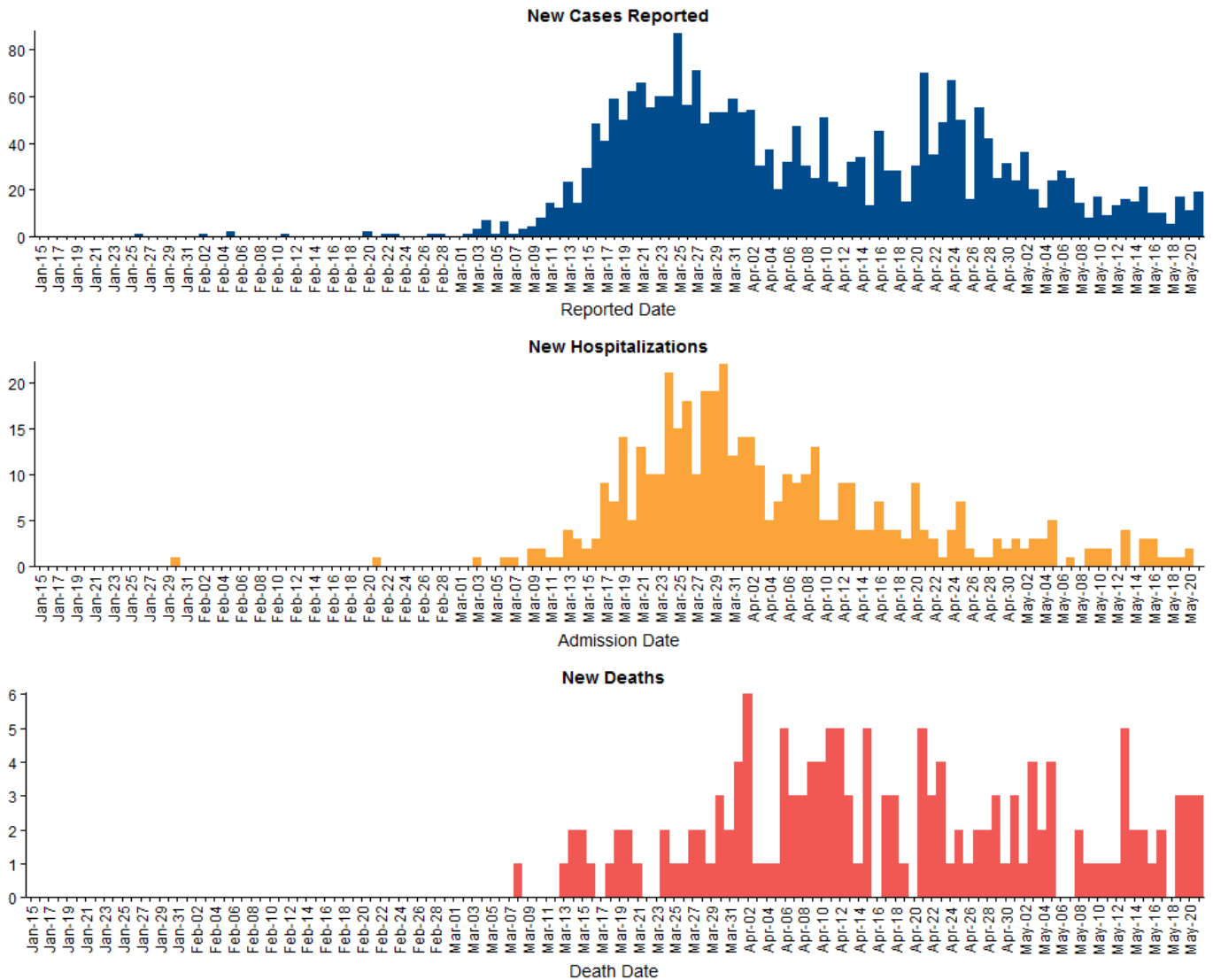

*Only includes hospitalized cases with valid admission dates.

Figure 6: Number and proportion of SARS-CoV-2 positive respiratory specimens, BC, March 1 – May 20, 2020 **(N=127,017; Positive=2.7%)**
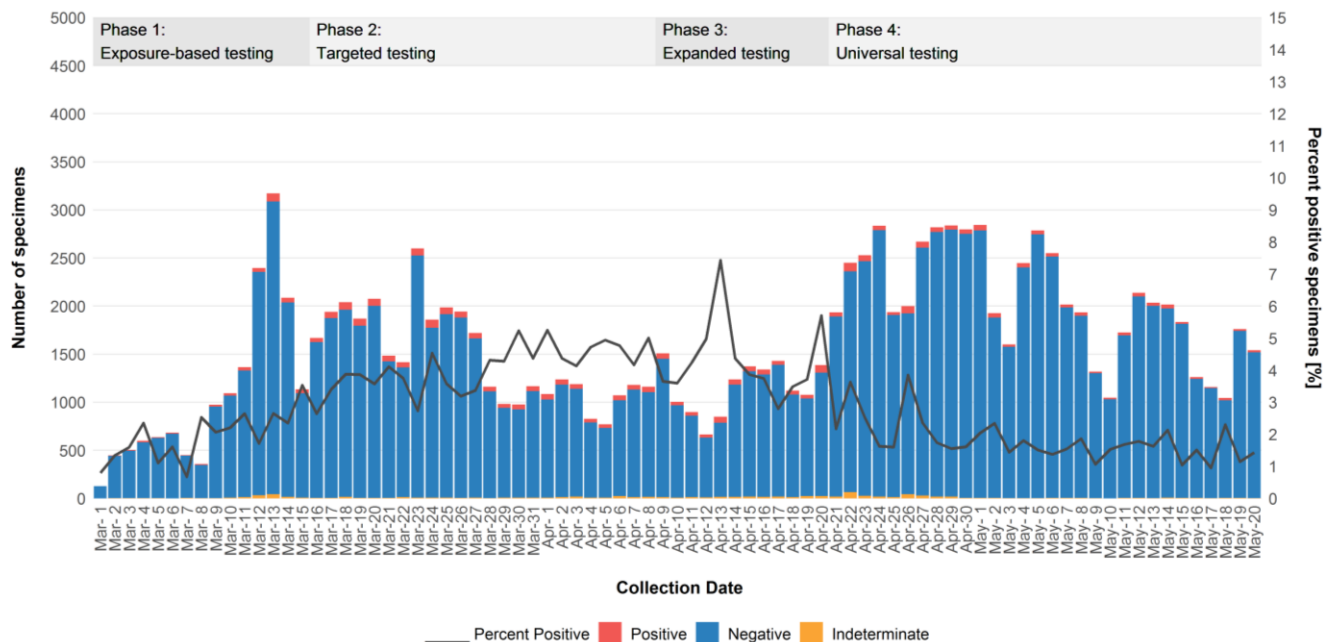
Data source: PLOVER extract on May 22, 2020. Methods and caveats: SARS-CoV-2 specimens are tallied at the specimen level by date the specimen was collected. The proportion positive on a given date may include new positive cases and retested positive cases; this may over-estimate proportionate positivity. Similarly, individuals may be tested repeatedly after becoming negative; this may under-estimate proportionate positivity. **As of March 16, testing guidelines included hospitalized patients, healthcare workers, long term care facility staff and residents, and those part of a cluster or outbreak who experienced respiratory symptoms. ***As of April 9, testing guidelines were expanded to include individuals with fever (>38°C) and cough or shortness of breath, including (a) residents of remote, isolated or Indigenous communities, (b) people living and working in congregate settings such as work-camps, correctional facilities, shelters, group homes, assisted living and seniors' residences, (c) people who are homeless or have unstable housing, (d) essential service providers (e.g. first responders), or (e) returning travellers identified at a point of entry to Canada. In addition, health care providers can order a COVID-19 test for any patient based on their clinical judgment. ****As of Apr 21, the testing guidelines were further expanded to include all individuals with new respiratory or systemic symptoms compatible with COVID-19, however mild. Symptoms may include fever, chills, cough, shortness of breath, sore throat, odynophagia, rhinorrhea, nasal congestion, loss of sense of smell, headache, muscle aches, fatigue, or loss of appetite.

Figure 7: Percentage distribution of COVID-19 cases, hospitalization, ICU admissions and deaths by age, compared to the general population[†] of BC, January 1 – May 22, 2020 (**N=2,502***)
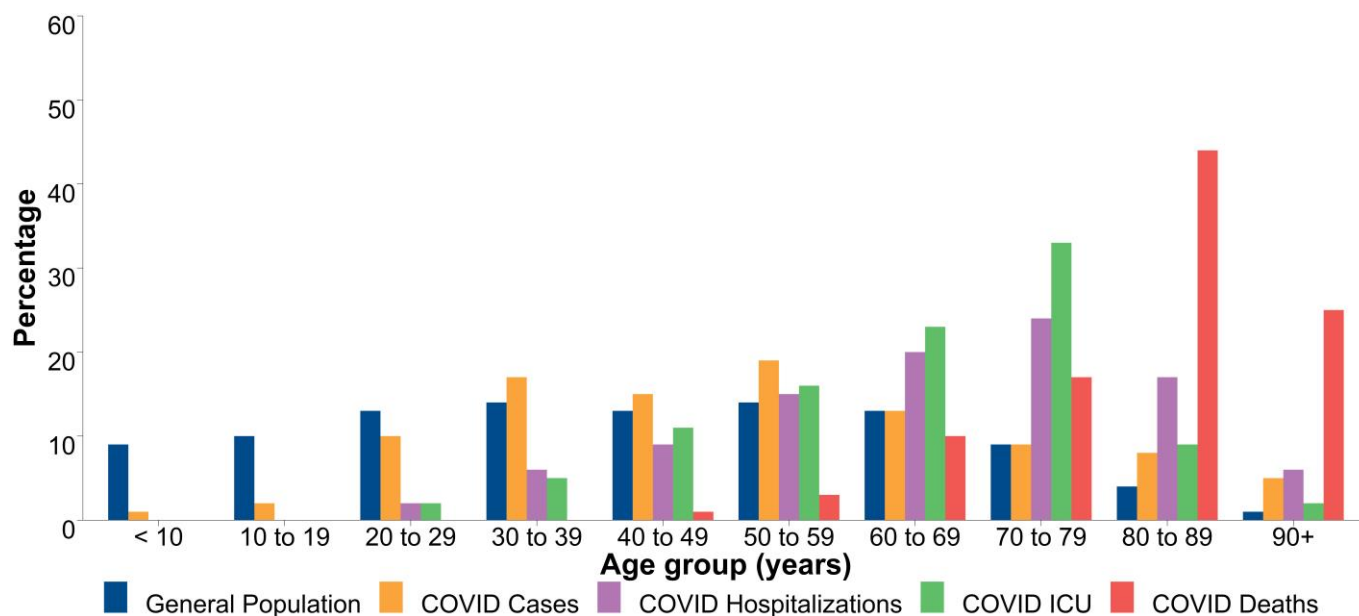
*Includes 2,502 cases, 488 hospitalizations, 171 ICU admissions, and 155 deceased with age information available.
† PEOPLE2019-2020 population estimates
Note: COVID hospitalizations have been reported in the <10y and 10-19y age groups but represent <1% of hospitalizations and are therefore not visible.

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 – May 22, 2020 (**N=2,502***)

Age groups	COVID cases n (%)	Cases ever hospitalized n (%)	Cases ever in ICU n (%)	COVID deaths n (%)	General population+ n (%)
<10 Years	26 (1)	2 (<1)	0 (0)	0 (0)	468,280 (9)
10-19 Years	47 (2)	1 (<1)	0 (0)	0 (0)	507,197 (10)
20-29 Years	247 (10)	9 (2)	4 (2)	0 (0)	684,681 (13)
30-39 Years	427 (17)	31 (6)	8 (5)	0 (0)	730,523 (14)
40-49 Years	381 (15)	46 (9)	18 (11)	2 (1)	647,790 (13)
50-59 Years	482 (19)	71 (15)	28 (16)	4 (3)	721,355 (14)
60-69 Years	322 (13)	98 (20)	39 (23)	15 (10)	675,632 (13)
70-79 Years	237 (9)	118 (24)	56 (33)	27 (17)	436,179 (9)
80-89 Years	211 (8)	81 (17)	15 (9)	68 (44)	188,010 (4)
90+ Years	122 (5)	31 (6)	3 (2)	39 (25)	50,876 (1)
Total	**2,502**	**488**	**171**	**155**	**5,110,523**

*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 gender and age group, BC, January 1 - May 22, 2020 **(N=2,502*)**
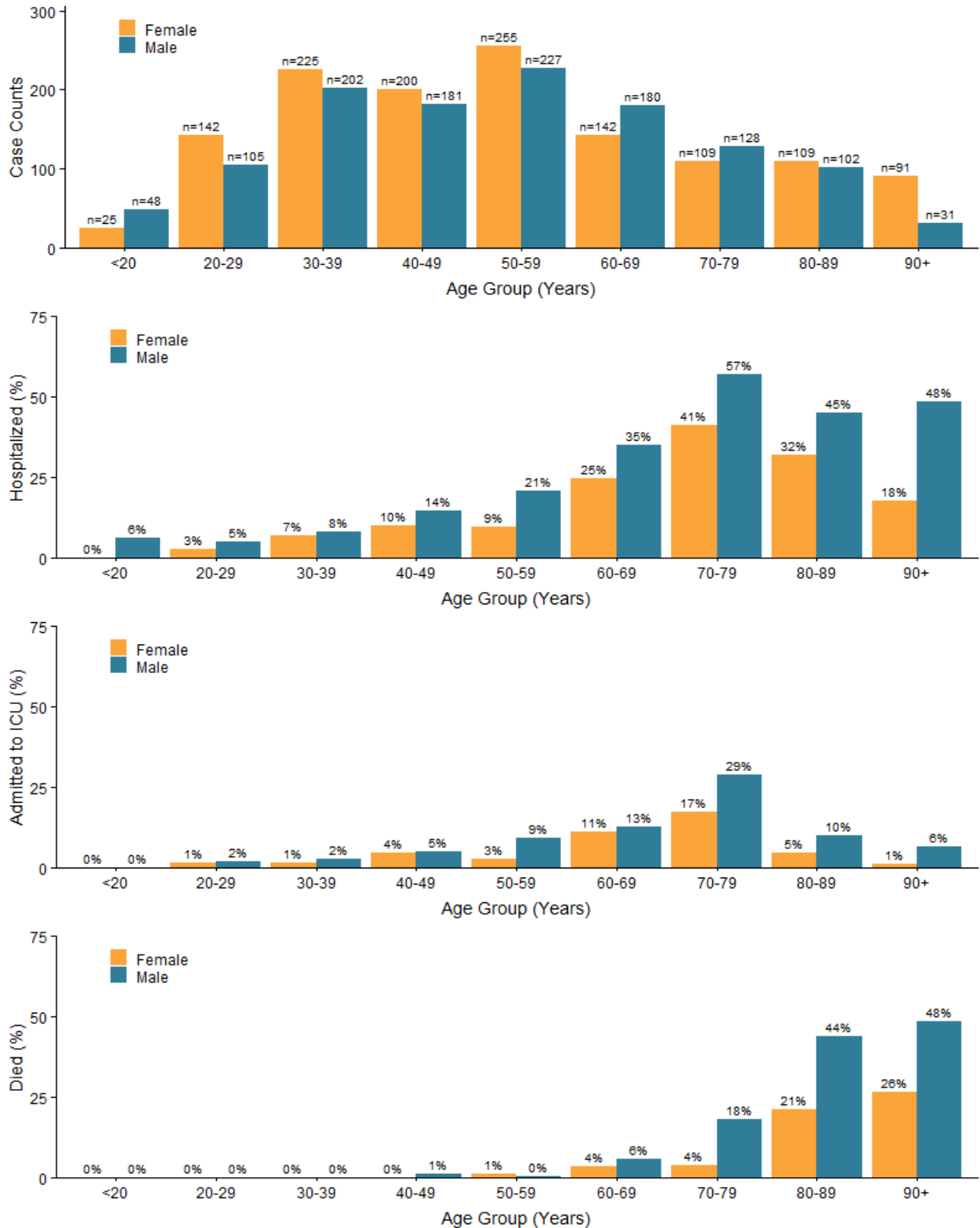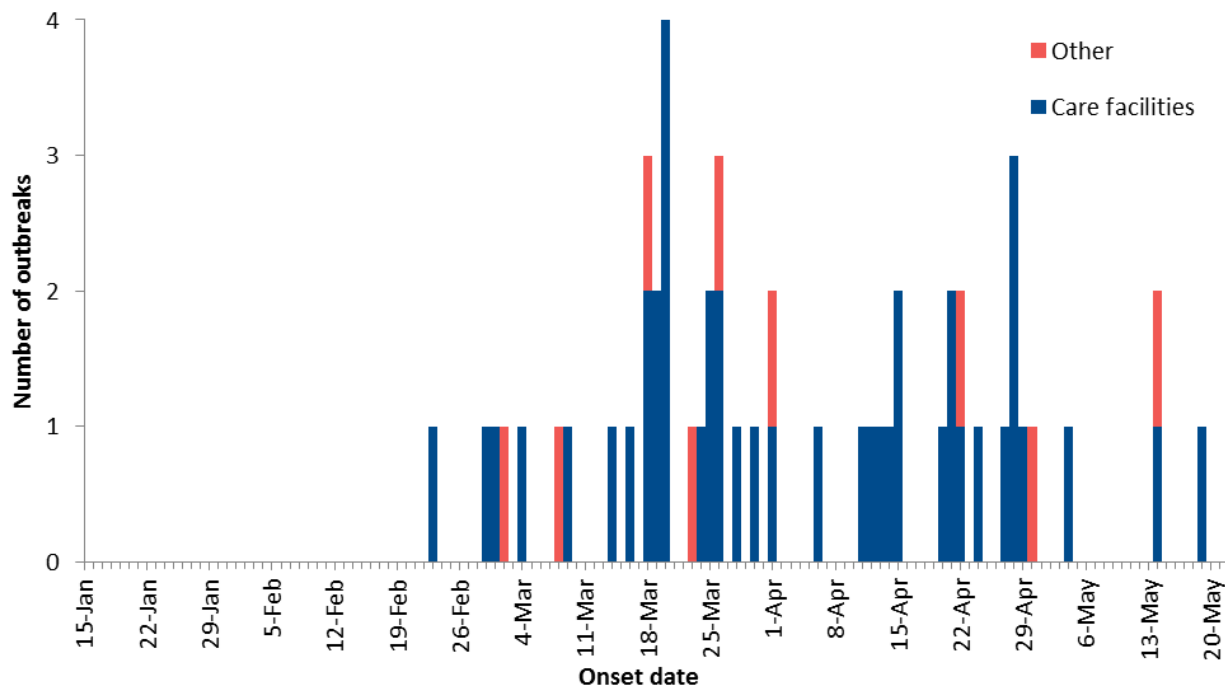

* Includes cases with gender and age information available.
Note: Proportions calculated using the total number of cases in each gender and age group (displayed in top figure) as the denominator.

Figure 9: COVID-19 outbreaks* by earliest date**, BC, January 15 - May 22, 2020 **(N=52)**

* Care facility (acute/longterm 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).
** Earliest date is date of onset of earliest case in the outbreak (or reported date of earliest case when onset is unavailable) or date outbreak was declared.

Table 4: Outbreak and case counts of reported COVID-19 reported outbreaks*, BC, January 15 - May 22, 2020 (**N=52**)

	Care facility	Other settings	Total
Outbreaks			
Total outbreaks	**43**	**9**	**52**
New since last report	0	0	0
Active outbreaks	16	5	21
Outbreaks declared over	27	4	31
Outbreak cases			
Total cases	**539**	**384**[**]	**923**
Residents/patients	330	122	452
Staff/other	209	262[**]	471
Total deaths	**104**	**2**	**106**
Residents/patients	104	1	105
Staff/other	0	1	1

* Care facility (acute/longterm 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).
** Ten cases were added to yesterday's total for due to a data correction for one outbreak.

Figure 10: Total positive COVID-19 cases in critical care by day, BC, March 25 - May 22, 2020
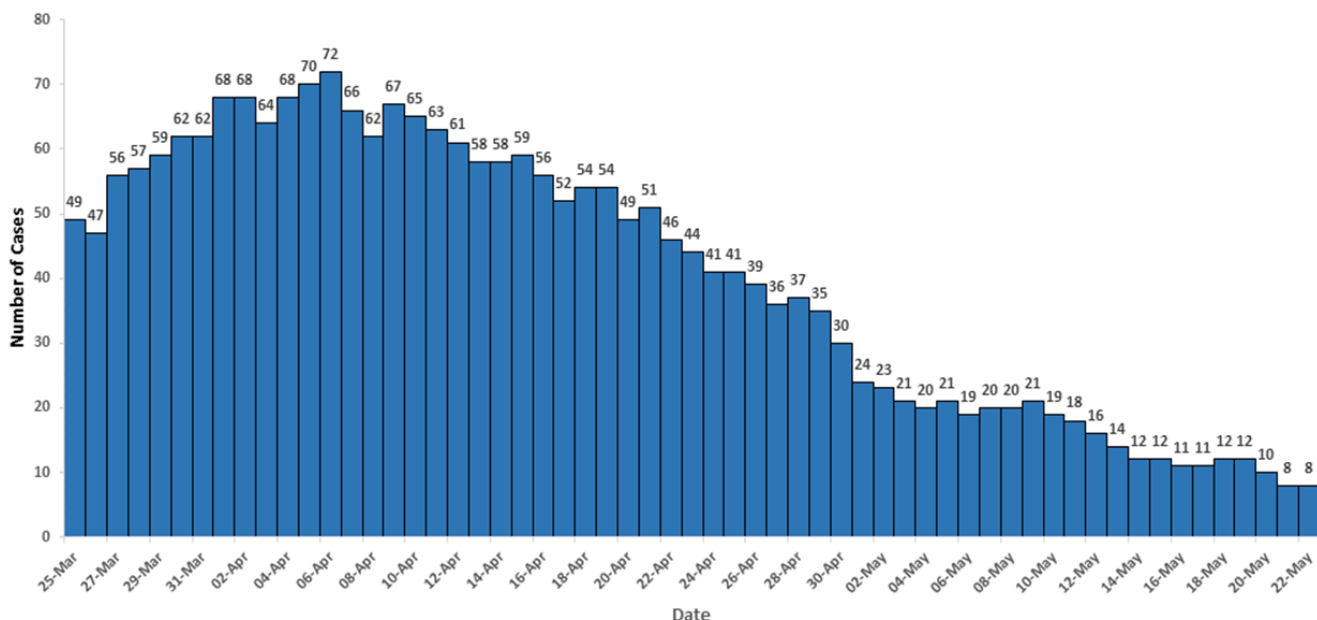
Data source: PHSA May 22. Note: critical care data may change over time due to small adjustments and improvements in data quality.

Figure 11: Number of COVID-19 cases in hospital by day, BC, March 18 - May 22, 2020
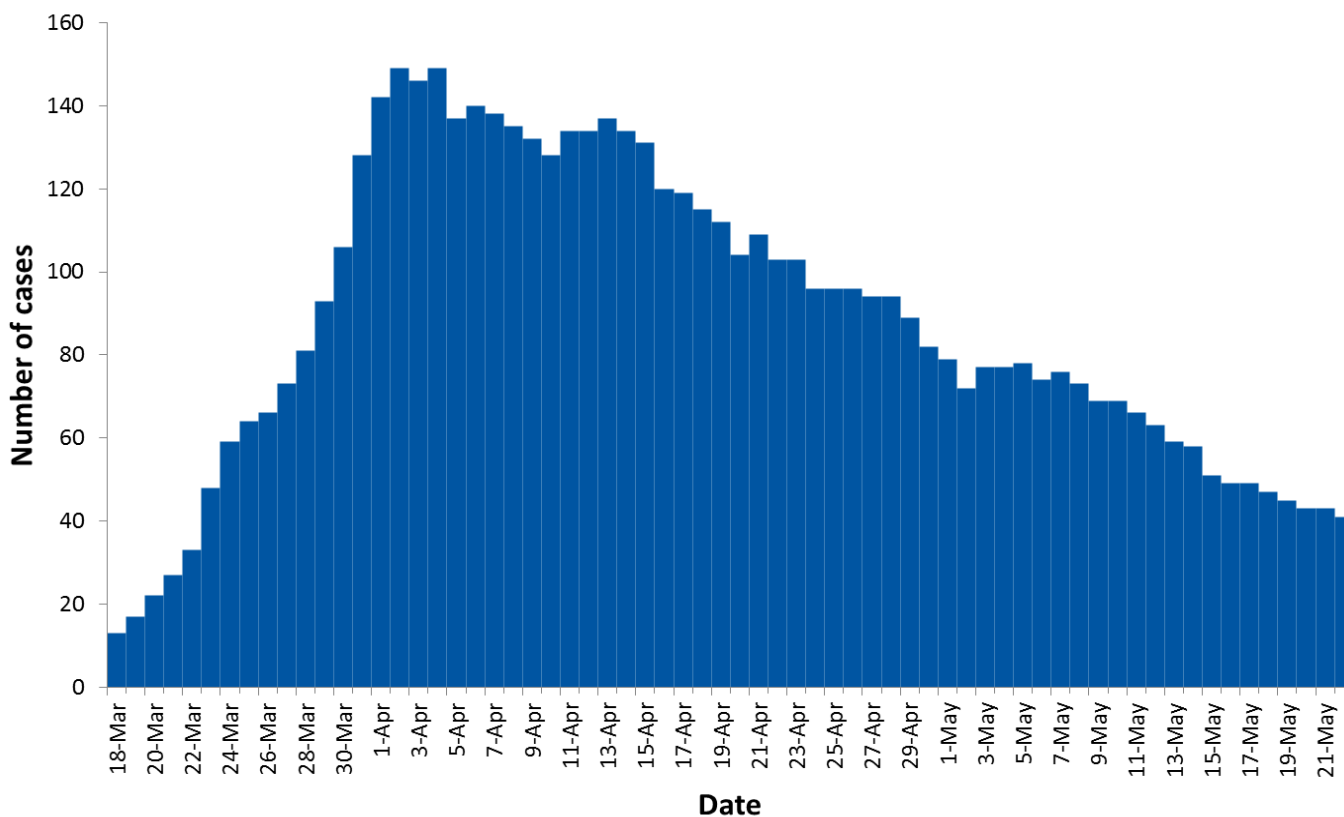
Data available starting March 18. For dates with no data available (April 12 and Sundays from May 10 onwards), the previous day's value was used.
Note: Hospitalization data may be incomplete or out of date (i.e., under-estimates) owing to the timing and process for case status update. Four hospitalizations were added starting on May 3 due to data corrections. This does not reflect new admissions on that day but rather admissions occurring prior and up to this time.

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
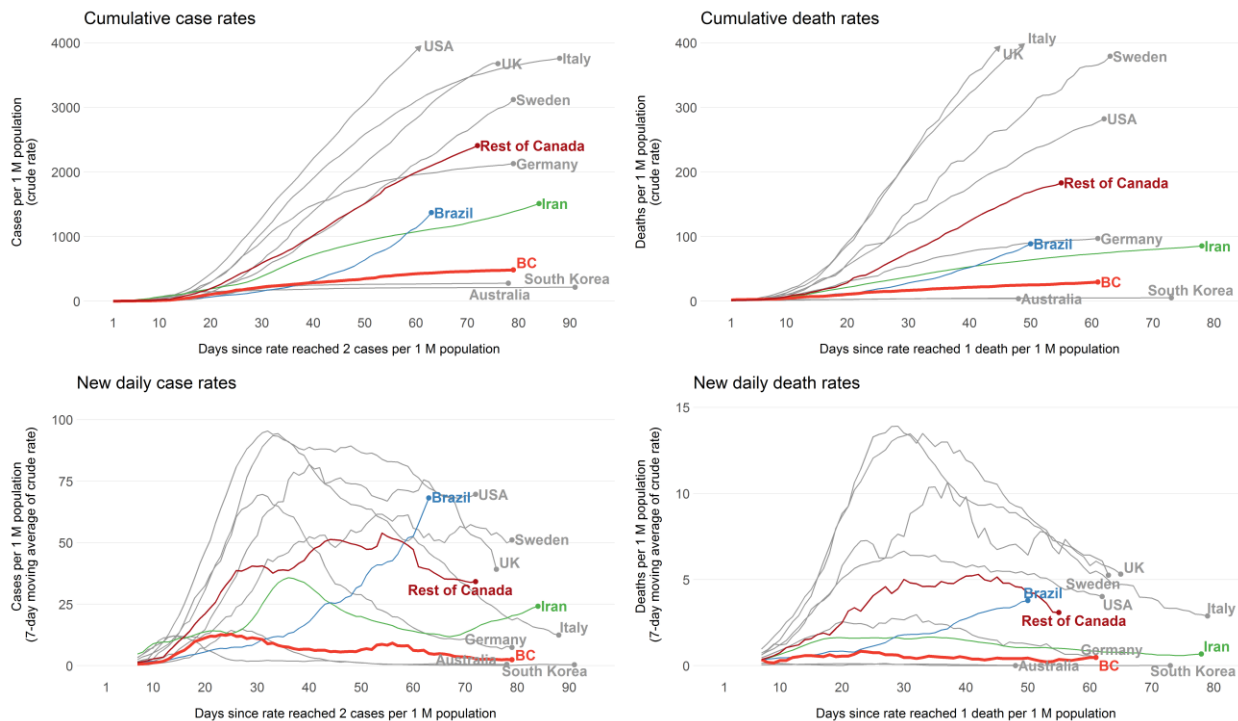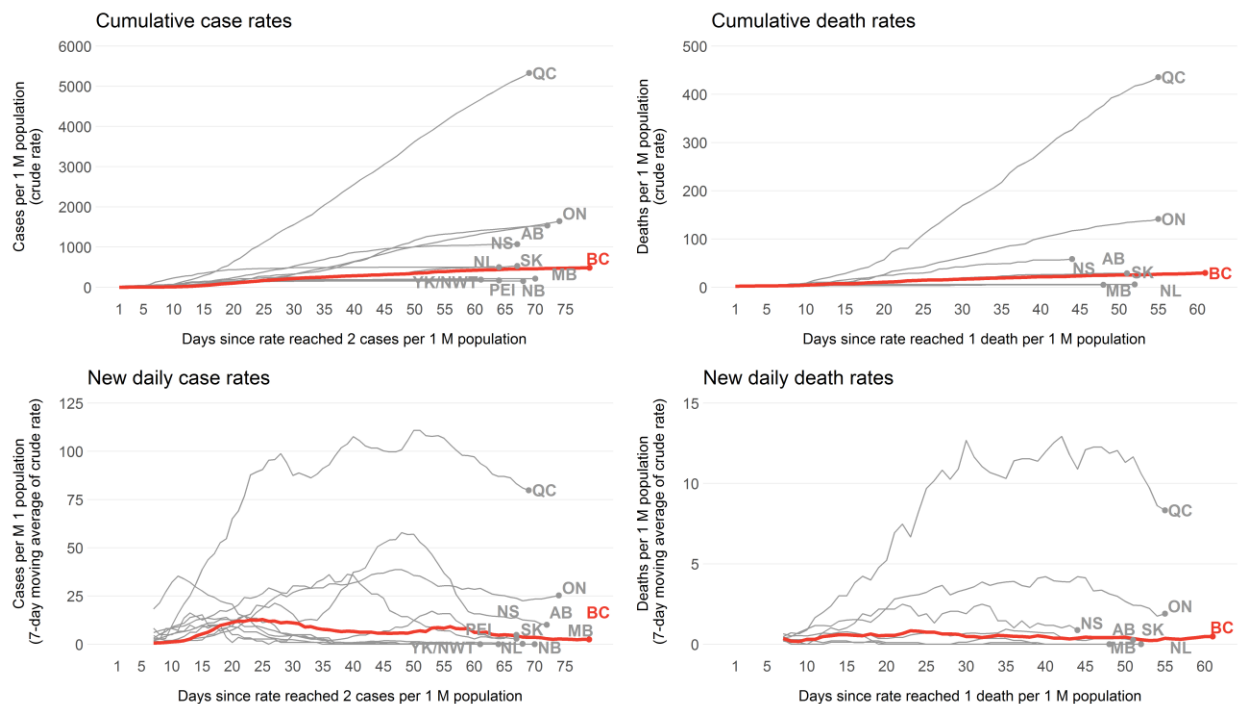

Figure 13: Cumulative diagnosed and new daily COVID-19 case and death rates in Canada

Data sources for international and national epidemiological comparison (all extracted May 21, 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

Version: May 22, 2020