

What is the COVID-19 Epidemic in BC Teaching Us?

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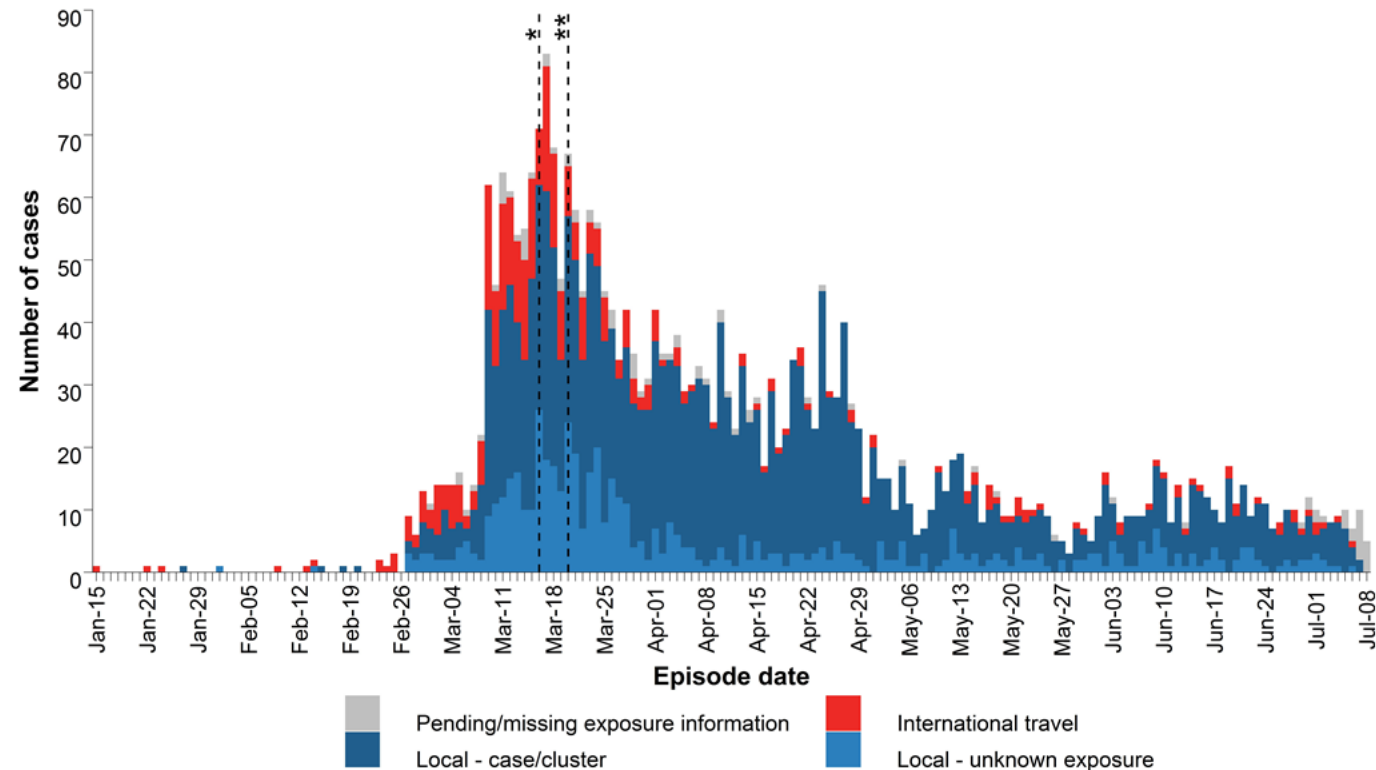
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Overall Epidemiological Picture

- The number of reported cases remains low.
- Most cases are related to local acquisition through a known case or cluster.
- Long term care facility outbreaks account for the majority of COVID deaths.
- BC continues to fare well, even when compared with countries who have had the most success in controlling the epidemic so far; importation from outside BC remains a risk
- Symptom-based testing continues; turnaround times remain below 24 hours suggesting good testing capacity.
- Models suggest that British Columbia remains close to threshold for epidemic control.

The number of reported cases remains low though daily rates over the last few days are higher than in late May. The majority of cases are related to local acquisition through a known case or cluster

Figure 4: Likely source of infection for COVID-19 cases in BC by episode date[§], January 15 – July 8, 2020 (N=3,028)



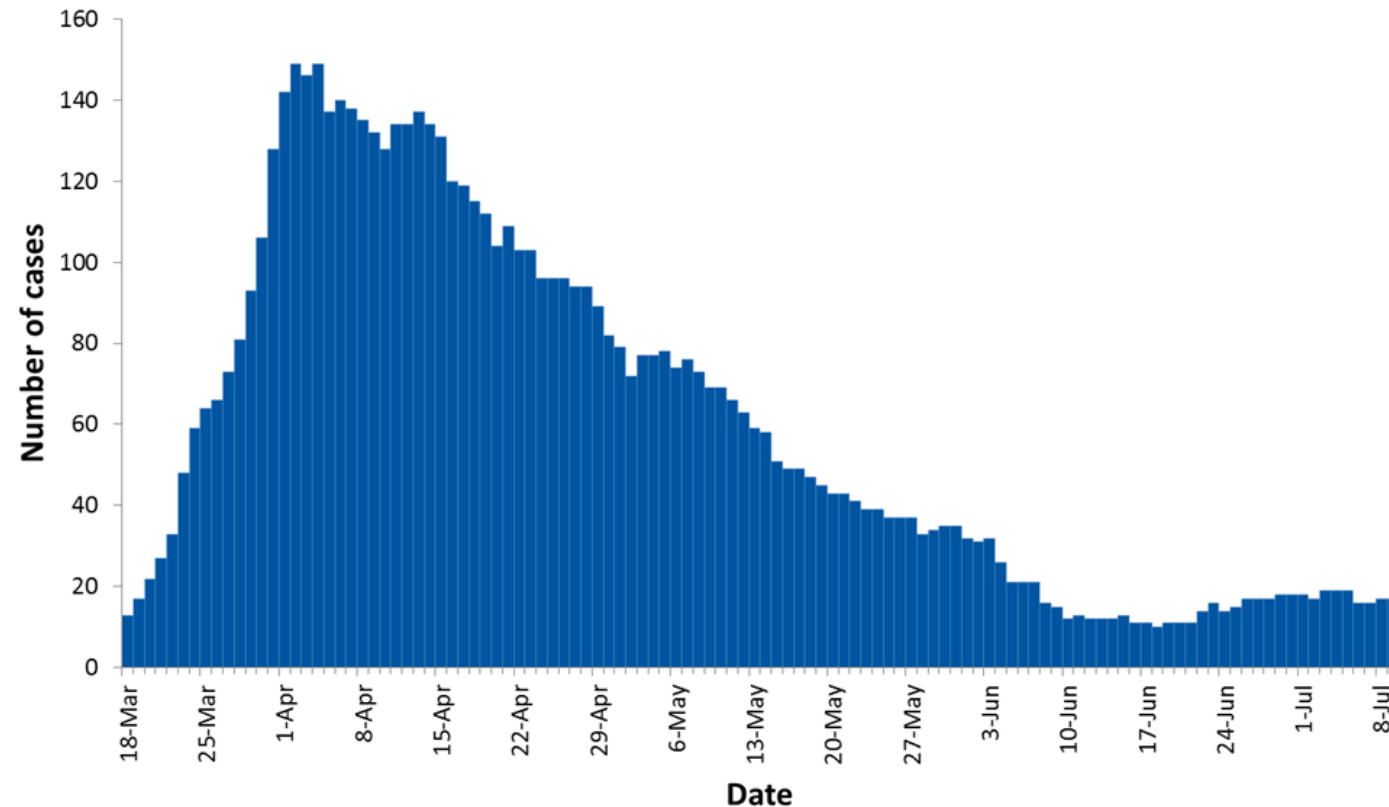
[§] Episode date is based on symptom onset date (n=2,813), if not available then date COVID-19 was reported to health authority (n=215).

* 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.

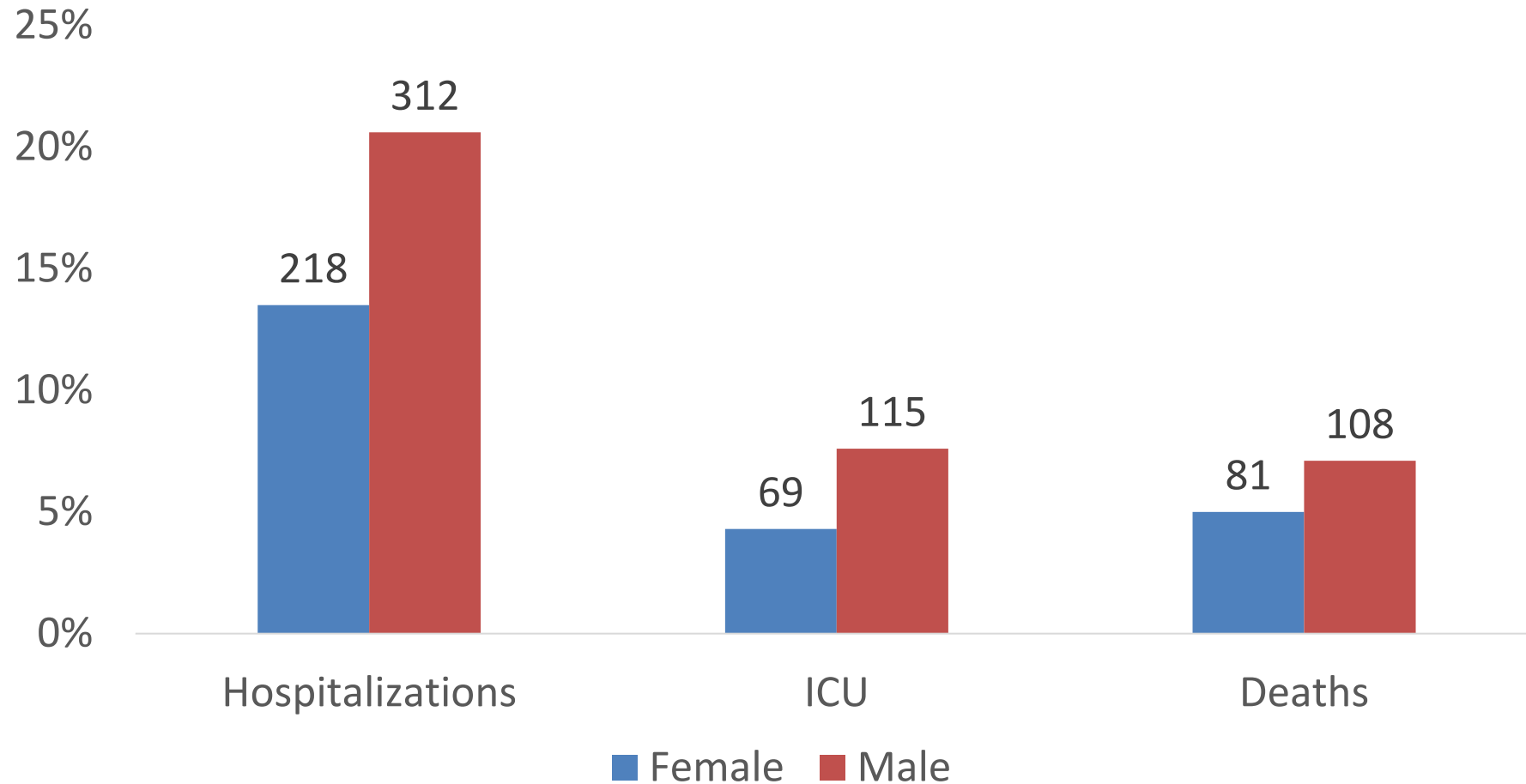
The number of cases in hospital and critical care continues to remain low

Figure 11: Number of COVID-19 cases in hospital by day, BC, March 18 - July 9, 2020

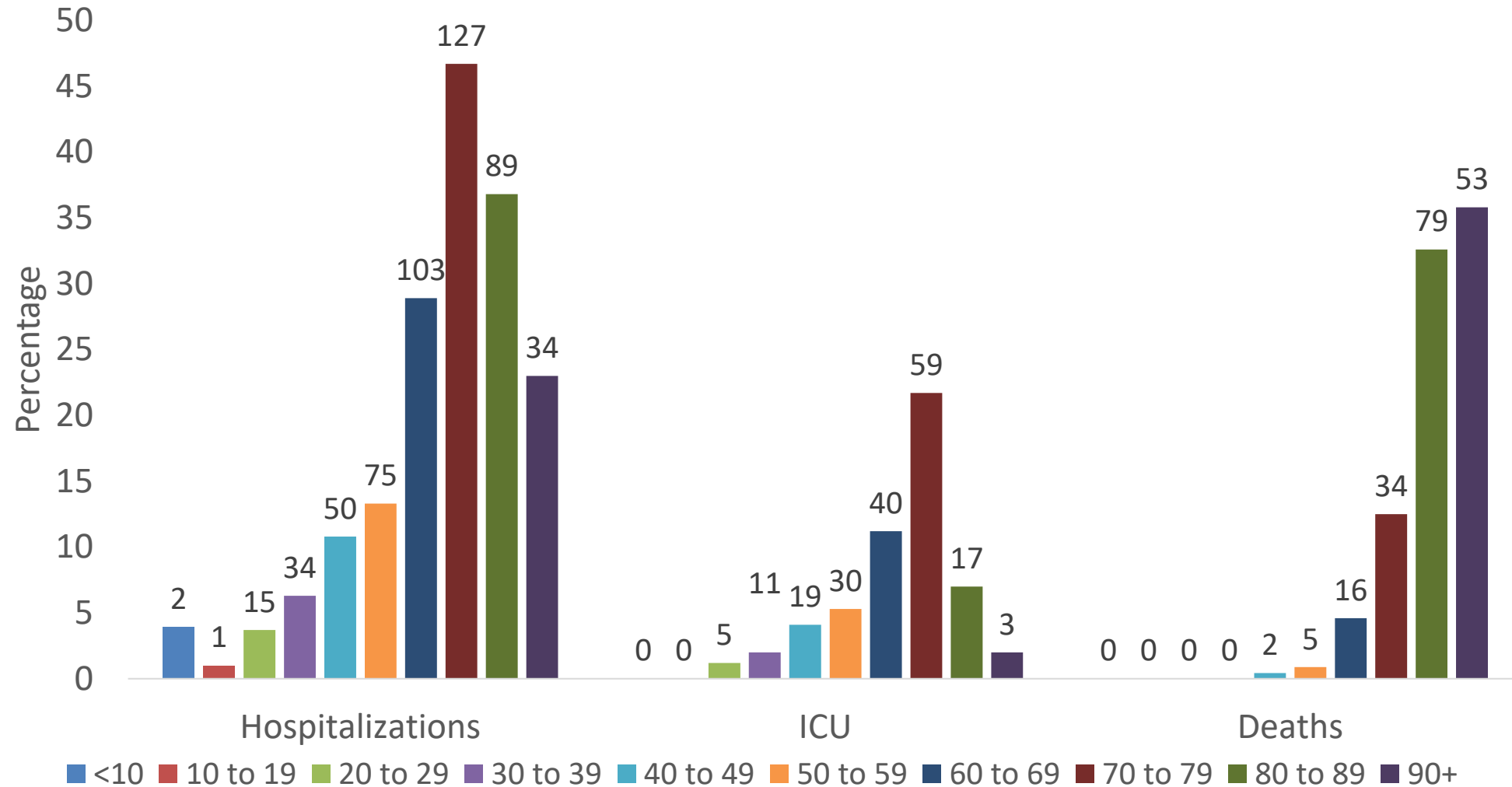


Data available starting March 18. For dates with no data available (April 12; Sundays from May 10 onwards; and Saturdays from June 7 onwards), the previous day's value was used. Hospitalization data may be incomplete or out of date (i.e., under-estimates) owing to the timing and process for case status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

Higher proportion of hospitalizations, ICU admissions and deaths are among men



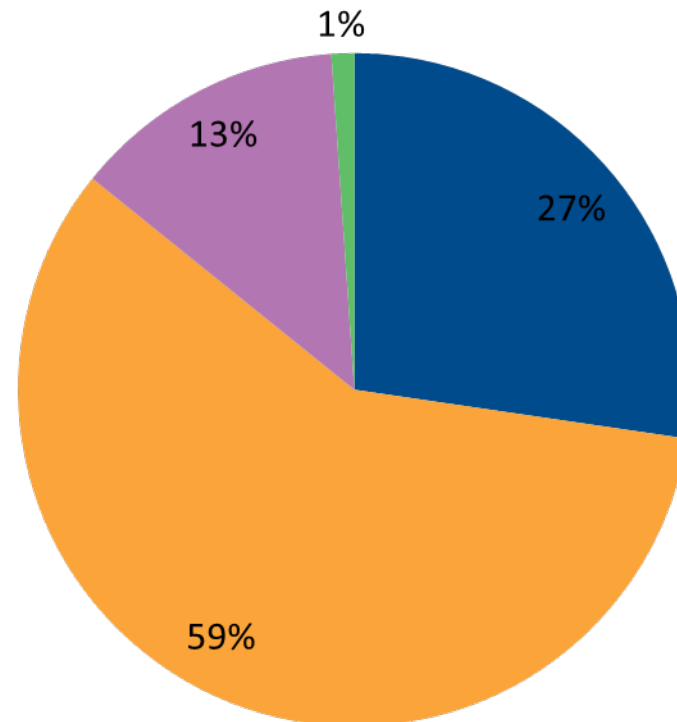
Percentage of COVID-19 hospitalizations, ICU admissions and deaths by age in BC January 1 – July 15, 2020 (N=3,149)



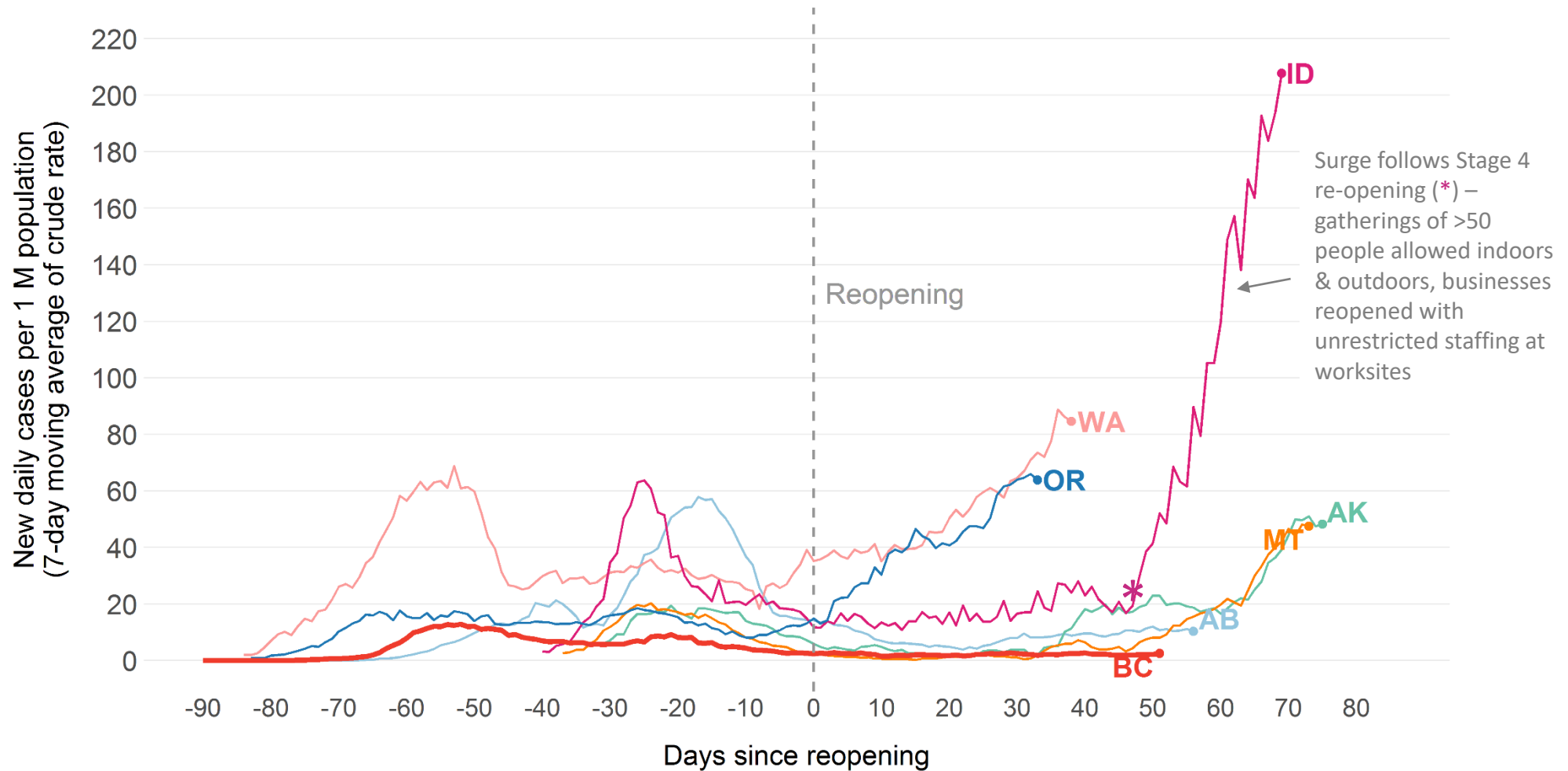
5. Long term care facility outbreaks account for the majority of COVID-19 deaths in BC

Proportion of COVID-19 Deaths by Setting in BC, 2020 (n=183)

■ Non-Outbreak ■ Long Term Care Facility ■ Acute Care Facility ■ Other Outbreaks

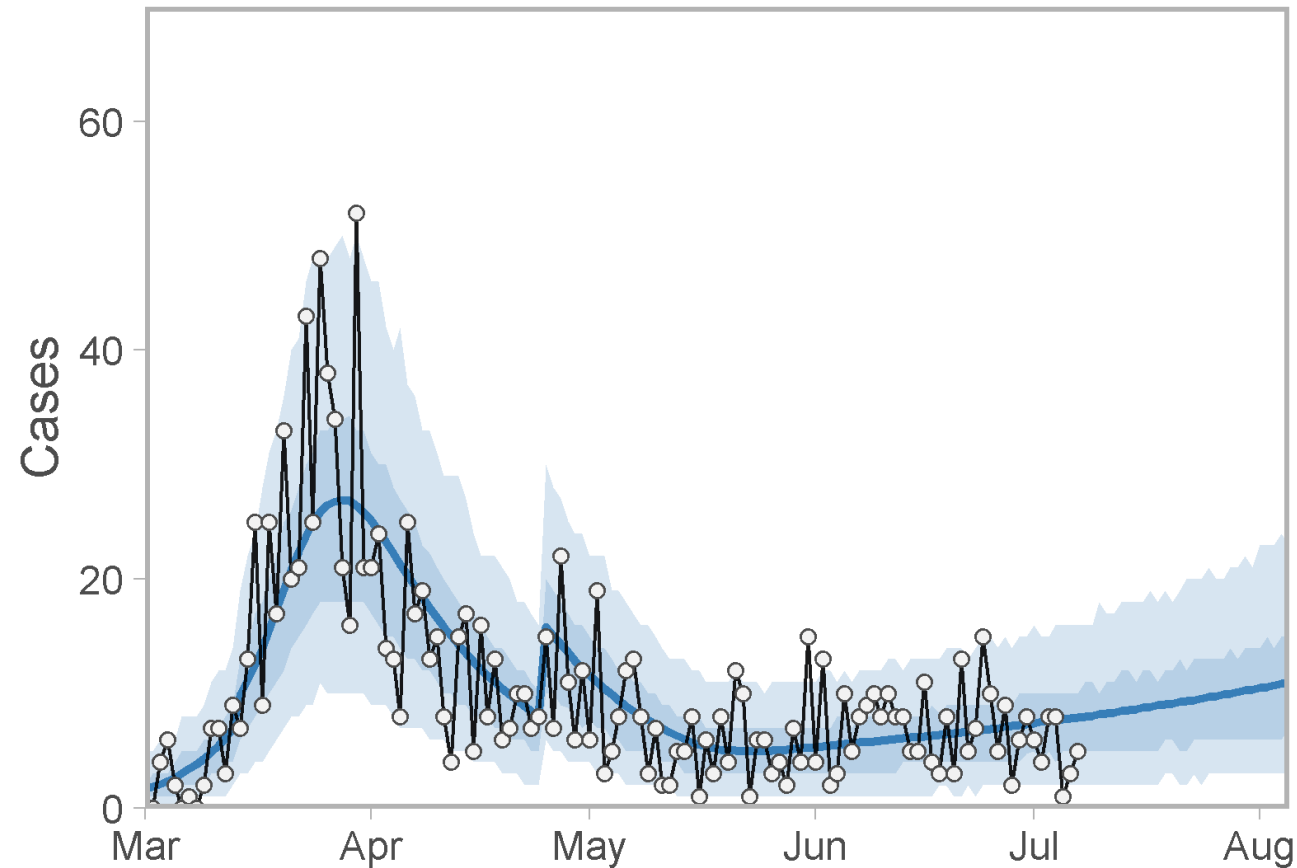


BC continues to fare well compared with neighbouring jurisdictions but importation from outside BC remains a risk



Data extracted from JHU CSSE Github repository on 2020-07-09

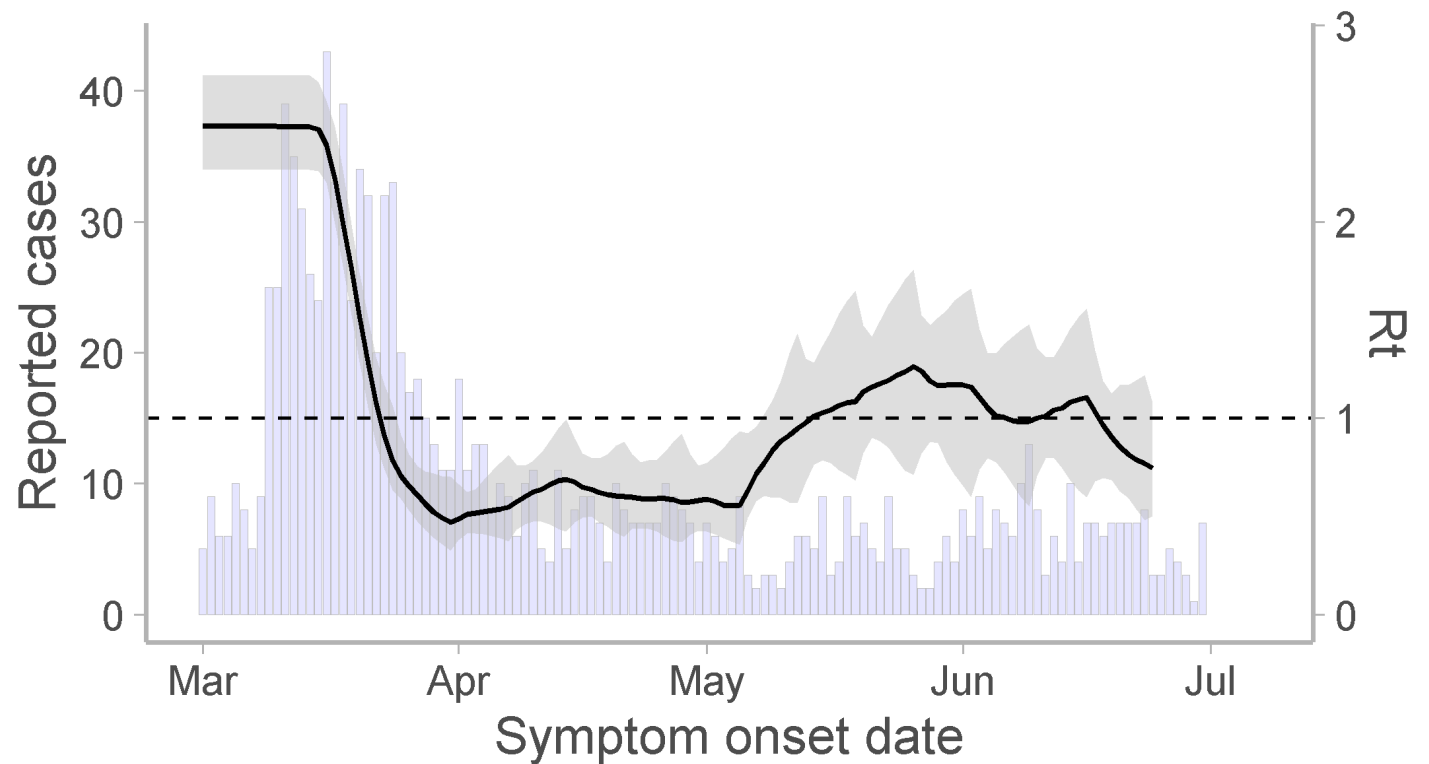
1. Given the small numbers of reported cases at this time, case projections into the summer have large uncertainty



Solid blue line: mean; shaded bands: 50% and 90% credible intervals; Open circles: reported cases
Cases used for model fitting exclude those attributed to outbreak clusters

2. BC remains close to the threshold for epidemic control

The number of reported cases in BC remains low and R_t is less reliable at low case counts



Solid black line: median R_t ; grey band: 95% credible intervals;
Purple bars: reported cases, excluding those attributed to outbreak clusters;
The most recent case counts and R_t values are not shown due to data lags from transmission to case reporting

What do we know now that we didn't a few months ago

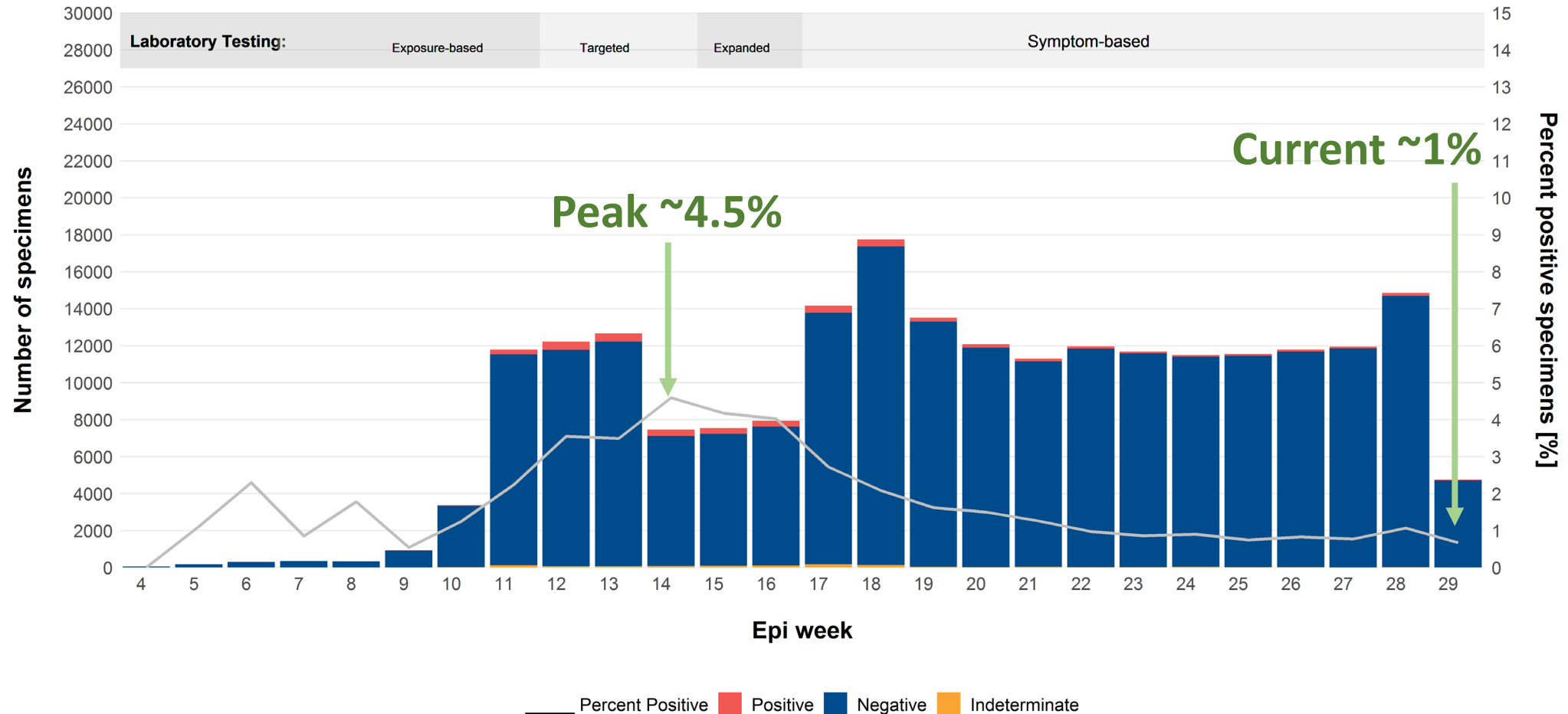
- COVID-19 is a respiratory infection that is most commonly transmitted via **close, prolonged contact** with a person who is infectious with COVID-19
- 8/10 people get mild, self-limited illness
- Those at higher risk of severe disease are older people (especially in the 7th and 8th decades of life) and those with underlying medical conditions
- Children are less likely to be infected and less likely to transmit COVID-19

Known effective control measures

- Wide-spread, low threshold testing
- Early isolation of those infected with COVID-19
- Early identification and quarantine of high proportion of contacts
- Protection of those most vulnerable
- Frequent hand hygiene
- Avoiding close prolonged contact with large numbers of people
- In areas with high levels of community transmission there may be additional benefit from
 - Non-surgical masks in public
 - General “physical distancing measures”

PCR testing – Positivity rate remains low and TAT 24 hr

Proportion of specimens testing positive* in British Columbia
Jan 20 - Jul 14, 2020 (N = 223,871; Positive = 1.9%)



Serological testing

- Sensitivity is improved at >14 days post-symptoms onset
- Main intended use for population-based studies
- No evidence for routine clinical use
- Any clinical diagnostic testing by consultation only
- Currently little evidence on longevity of humoral response or protection from re-infection