

COVID-19: Monthly Update

February 5, 2021



Stay Informed Via These Resources:

gov.bc.ca/Covid-19 | bccdc.ca | 1-888-COVID19

Symptom Self-Assessment:

covid19.thrive.health



**BRITISH
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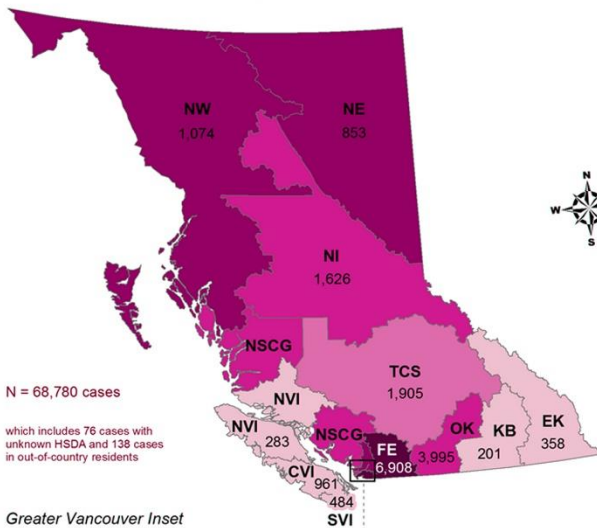
Epidemiology

*How and Where the Virus Has
Affected People in BC*

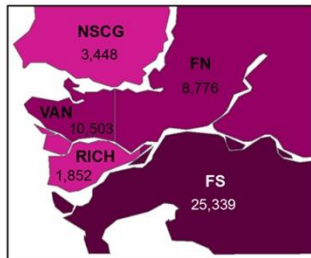
Geographic Distribution of COVID-19 by Health Service Delivery Area of Case Residence

Cumulative total: cases reported Jan 1, 2020 to Jan 30, 2021

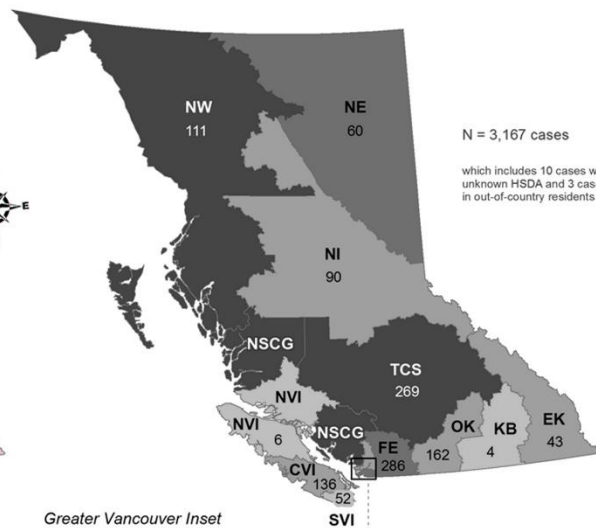
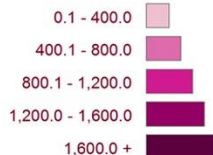
Past 7 days: cases reported January 24 to 30, 2021



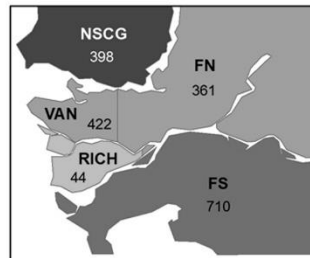
Greater Vancouver Inset



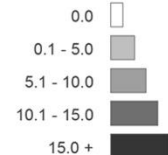
Cumulative rate per 100,000 population of COVID-19 cases



Greater Vancouver Inset



Average daily rate per 100,000 population of COVID-19 cases

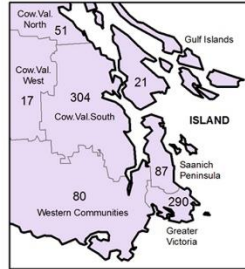


Notes: Cases are mapped by location of residence; cases with unknown residence and from out-of-country are not mapped. Data source: the 5 regional health authorities of British Columbia; we operate in a live database environment and case information from the health authorities are updated as it becomes available. Data may not be directly comparable to published counts from previous maps and reports. How to interpret the maps: The map on the left (blue) illustrates the geographic distribution of all reported cases from January 1, 2020 onwards. The map on the right (brown) illustrates the reported cases during the past 7 days. Health Service Delivery Areas (HSDA) with higher rates per 100,000 population are illustrated in darker colour shading. The number of reported cases appears under each HSDA label. Note that not all COVID-19 infected individuals are tested and reported; the virus may be circulating undetected in the community, including in areas where no cases have been identified by public health. Map created February 3, 2020 by BCCDC for public release.

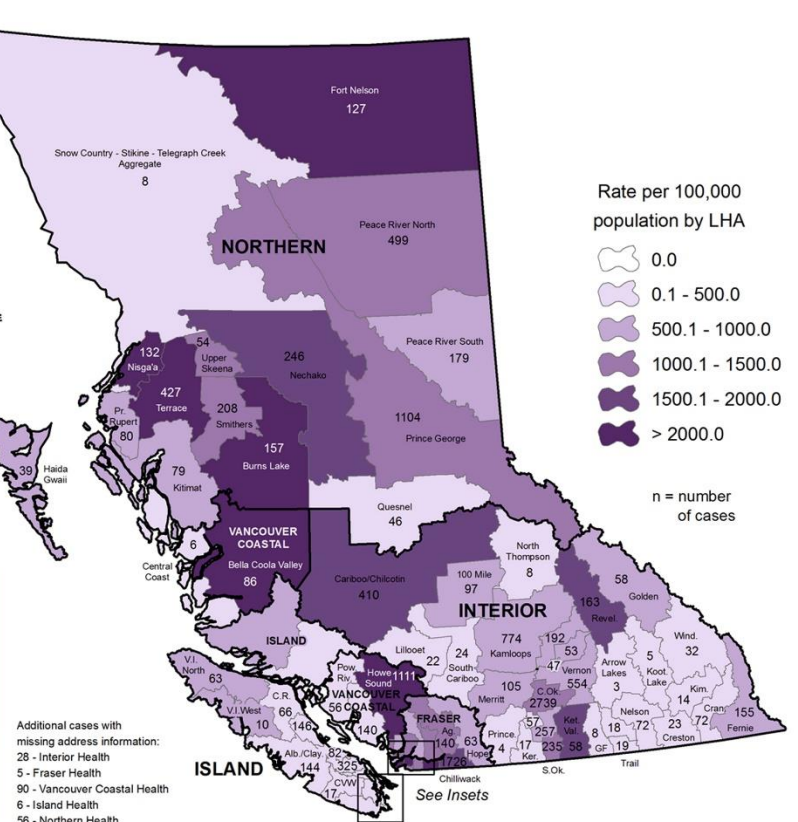
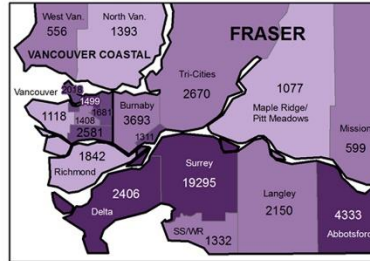
Geographic Distribution of COVID-19 by Local Health Area of Case Residence

Cumulative Cases
January 2020 to January 2021

South Vancouver Island Inset



Greater Vancouver Inset

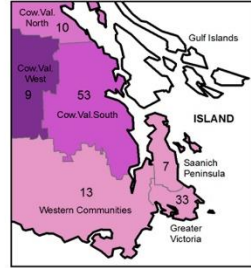


Notes: Cases are mapped by location of residence; cases with unknown residence and from out of province are not mapped. Data source: the 5 regional health authorities of British Columbia; we operate in a live database environment and case information from the health authorities are updated as it becomes available. How to interpret the maps: The map illustrates the geographic distribution of reported cases from January 1, 2020 to January 31, 2021. Local Health Areas (LHA) with higher rates are illustrated in darker colour shading. The number of reported cases appears in each LHA. Note that the number of cases in the LHA may not represent the location of exposure (e.g. people who acquired disease while traveling or working elsewhere), and that not all COVID-19 infected individuals are tested and reported; the virus may be circulating undetected in the community, including in areas where no cases have been identified by public health. Map created February 3, 2021 by BCCDC for public release.

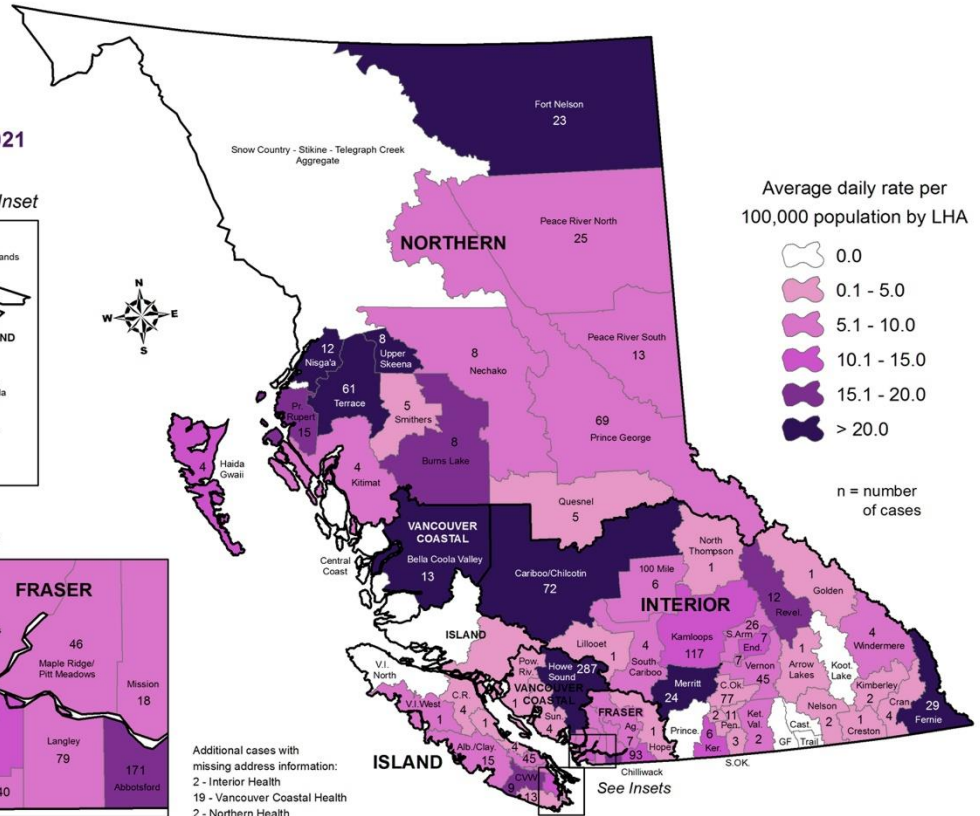
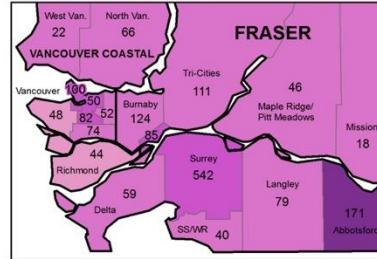
Geographic Distribution of Cumulative COVID-19 by Local Health Area of Case Residence

Epi-Week 4 Cases
January 24 to 30, 2021

South Vancouver Island Inset



Greater Vancouver Inset



Additional cases with missing address information:
2 - Interior Health
19 - Vancouver Coastal Health
2 - Northern Health

Notes: Cases are mapped by location of residence; cases with unknown residence and from out of province are not mapped. Data source: the 5 regional health authorities of British Columbia; we operate in a live database environment and case information from the health authorities are updated as it becomes available. How to interpret the maps: The map illustrates the geographic distribution of reported cases for the most recent epidemiological week (from Sunday to Saturday). Local Health Areas (LHA) with higher rates are illustrated in darker colour shading. The number of reported cases appears in each LHA. Note that the number of cases in the LHA may not represent the location of exposure (e.g. people who acquired disease while traveling or working elsewhere), and that not all COVID-19 infected individuals are tested and reported; the virus may be circulating undetected in the community, including in areas where no cases have been identified by public health. Map created February 3, 2021 by BCCDC for public release.

January 27 to February 3, 2021: Profile of COVID-19 Cases by Date Reported to Public Health



68,780 total cases
3,061 new this week



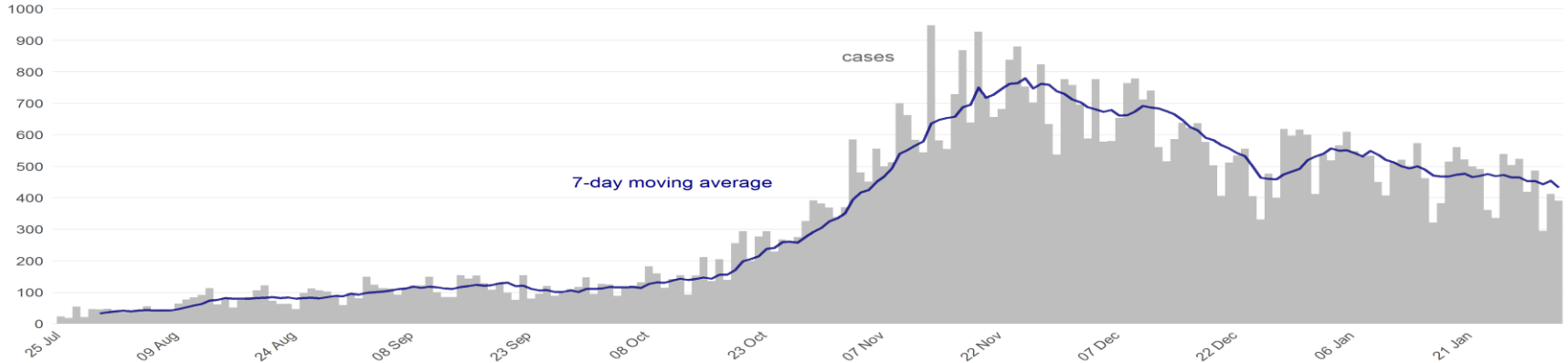
3,850 ever hospitalized
108 new this week



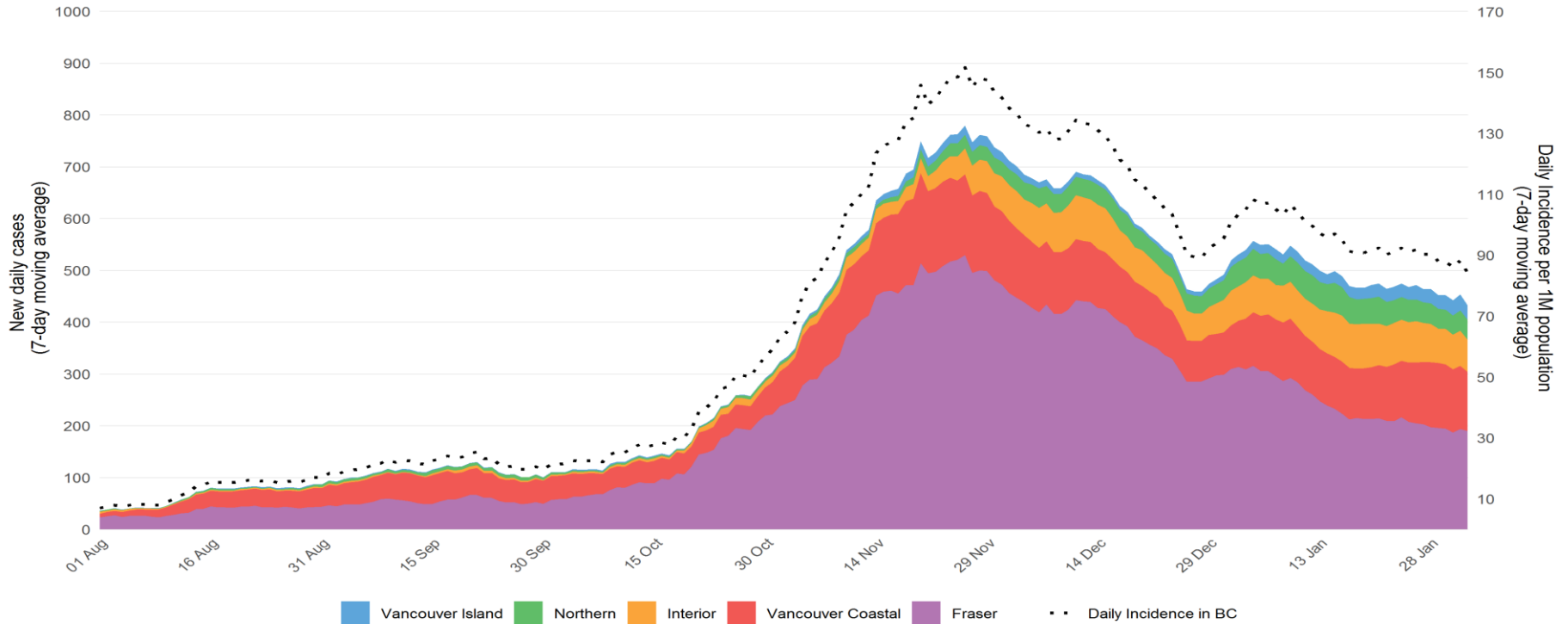
1,234 deaths
62 new this week



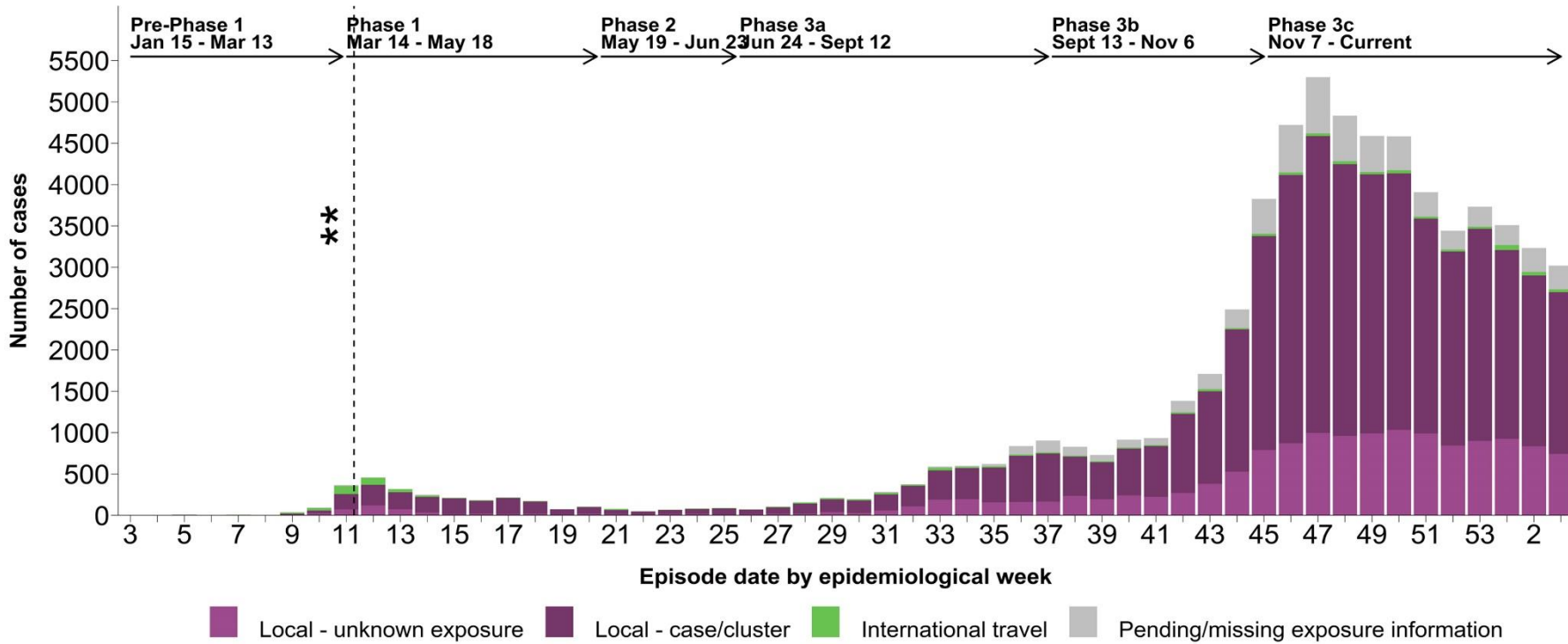
61,643 removed from isolation
2,865 new this week



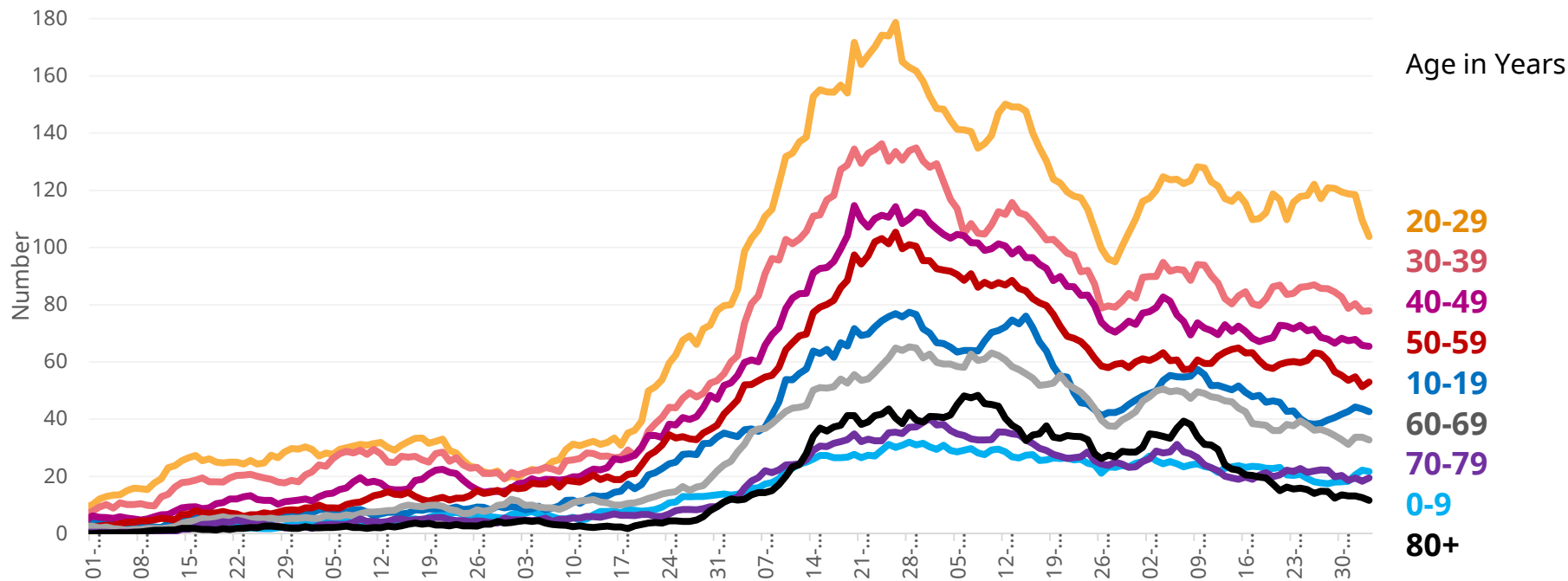
Epidemic Curve, COVID-19 Cases in B.C. by Reported Date August 1, 2020 – February 2, 2021



Likely Source of COVID-19 Infection by Episode Date, BC January 15, 2020 (Week 3) – January 23, 2021 (Week 3)

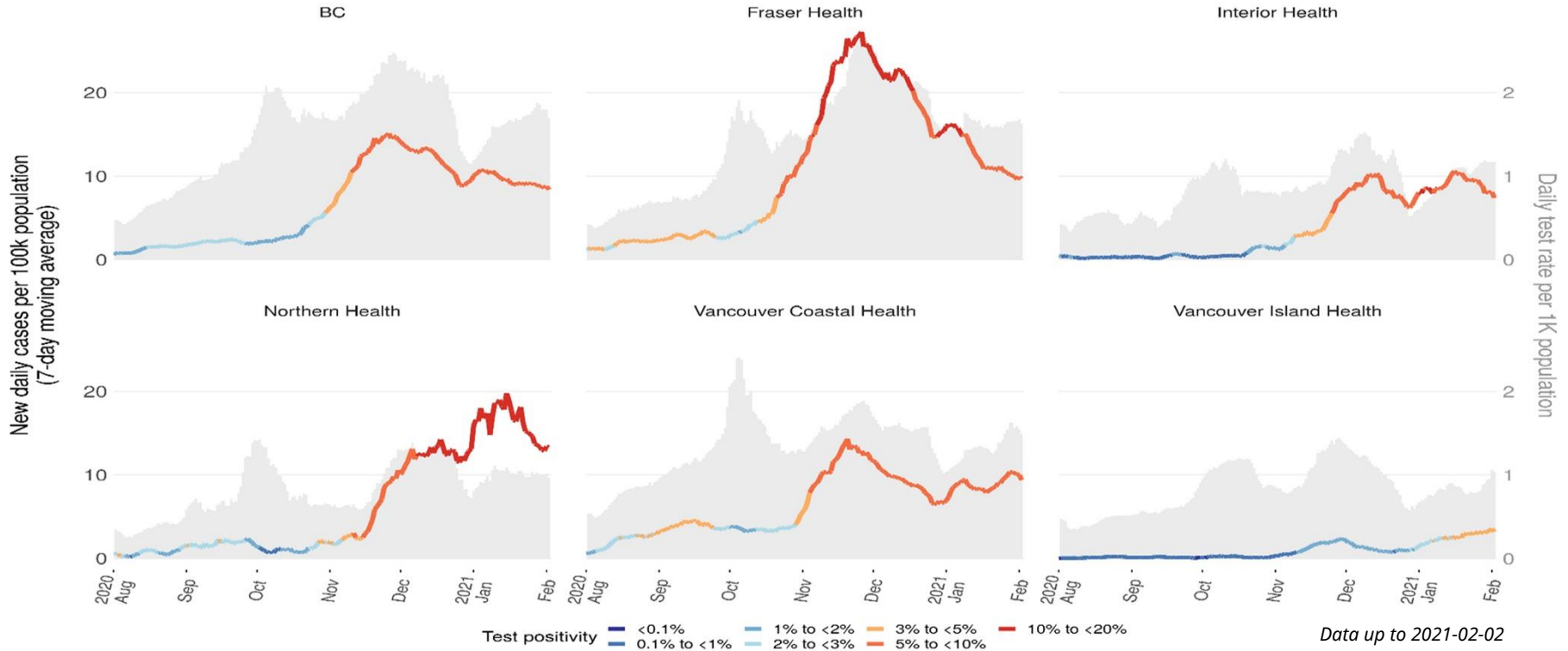


Daily Case Count by Age August 1, 2020 to February 3, 2021 (7-day Moving Average)*



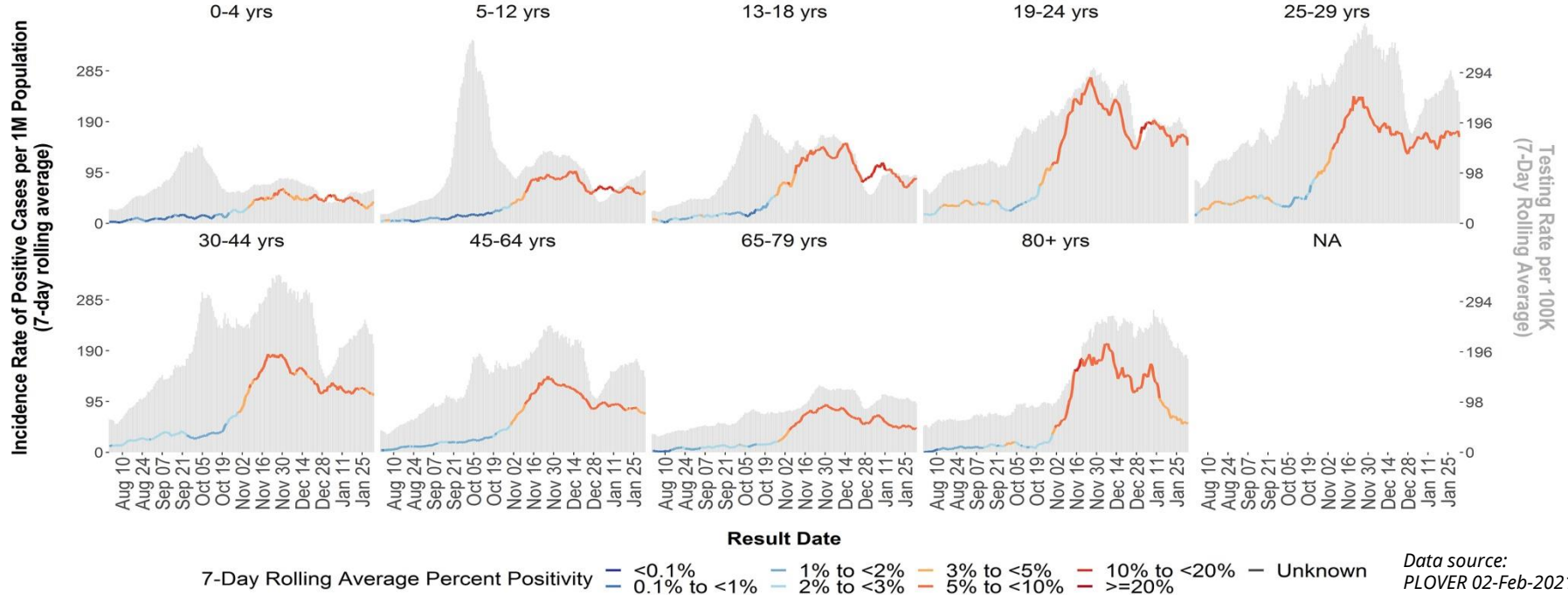
*Cases by reporting date

Daily Case Rate, Testing Rate and Percent Positivity by Health Authority August 1, 2020 to February 2, 2021

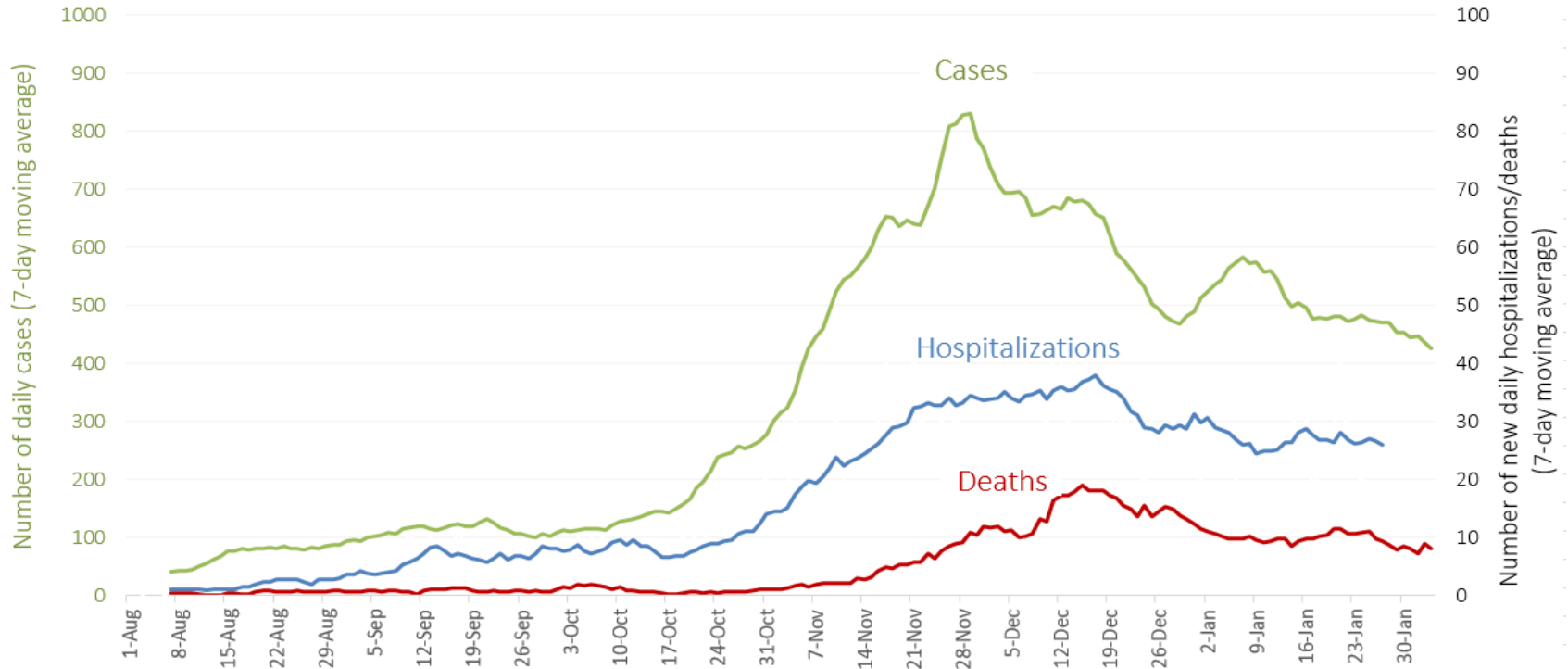


Daily Case Rate, Test Percent Positivity and Testing Rate by Age (August 1, 2020 to February 2, 2021)

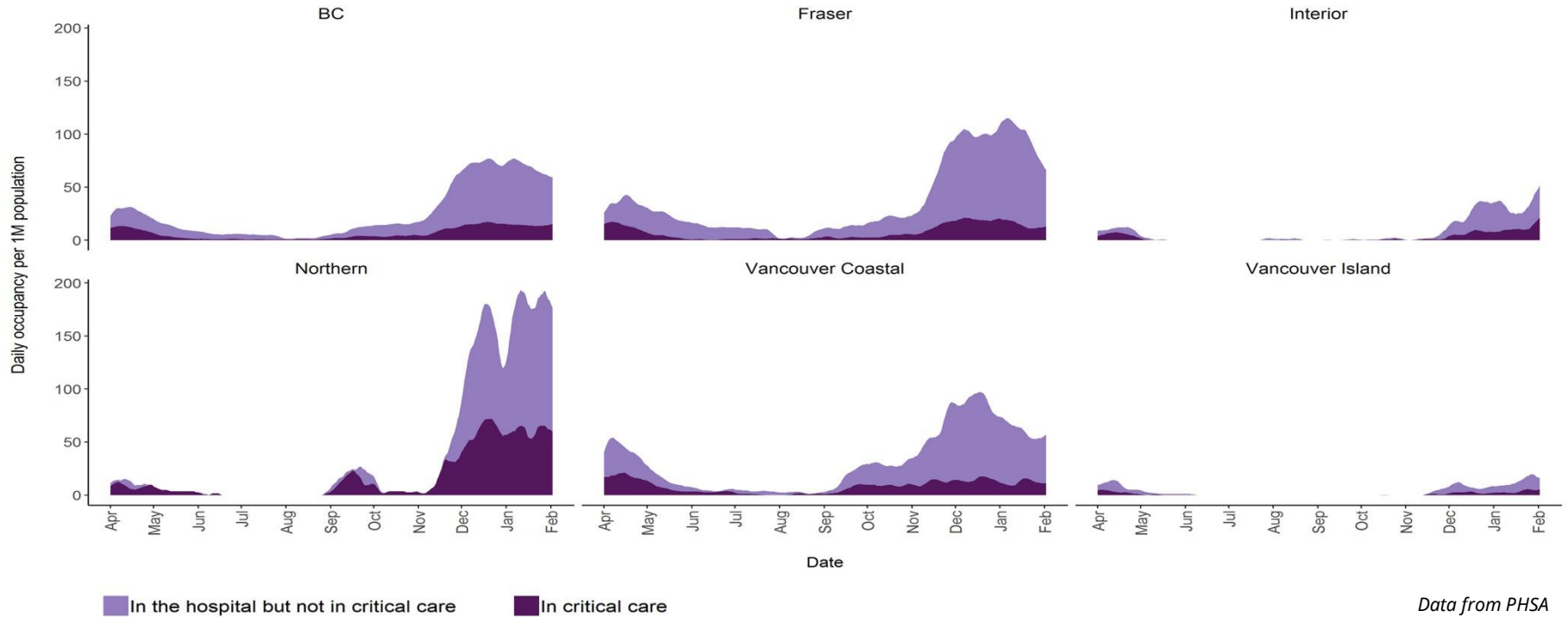
Case incidence rate, test percent positivity, and testing rate by age (All Payers). Aug 1 2020 - Feb 2, 2021.



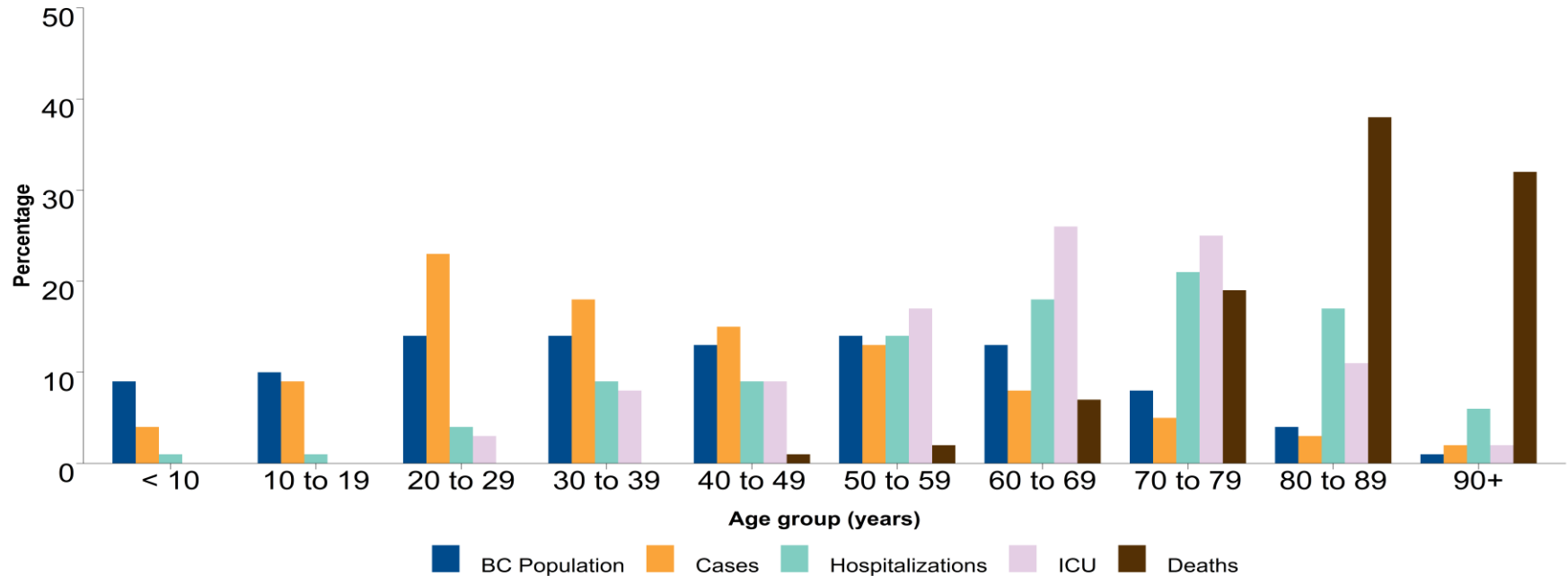
Daily Cases, Hospitalizations, and Deaths by Reporting Date August 1, 2020 to February 3, 2021



Hospital and Critical Care Census March 1, 2020 to February 2, 2021



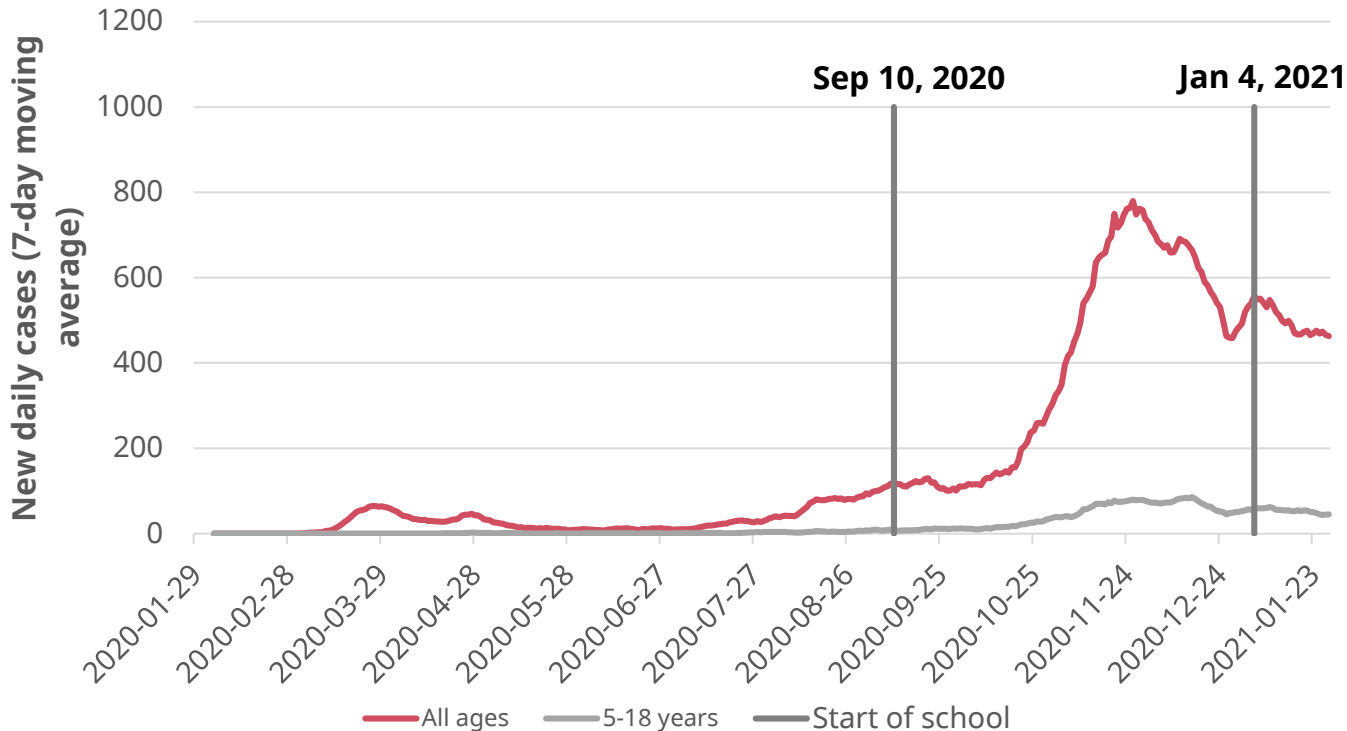
Percentage Distribution of COVID-19 Cases, Hospitalizations, ICU Admissions and Deaths by Age, British Columbia, January 15, 2020 – January 23, 2021



COVID-19 Virus Has a Relatively Low Infection Rate Among School-Aged Children (5 to 18 Years) in BC, From September 7, 2020 to January 31, 2021

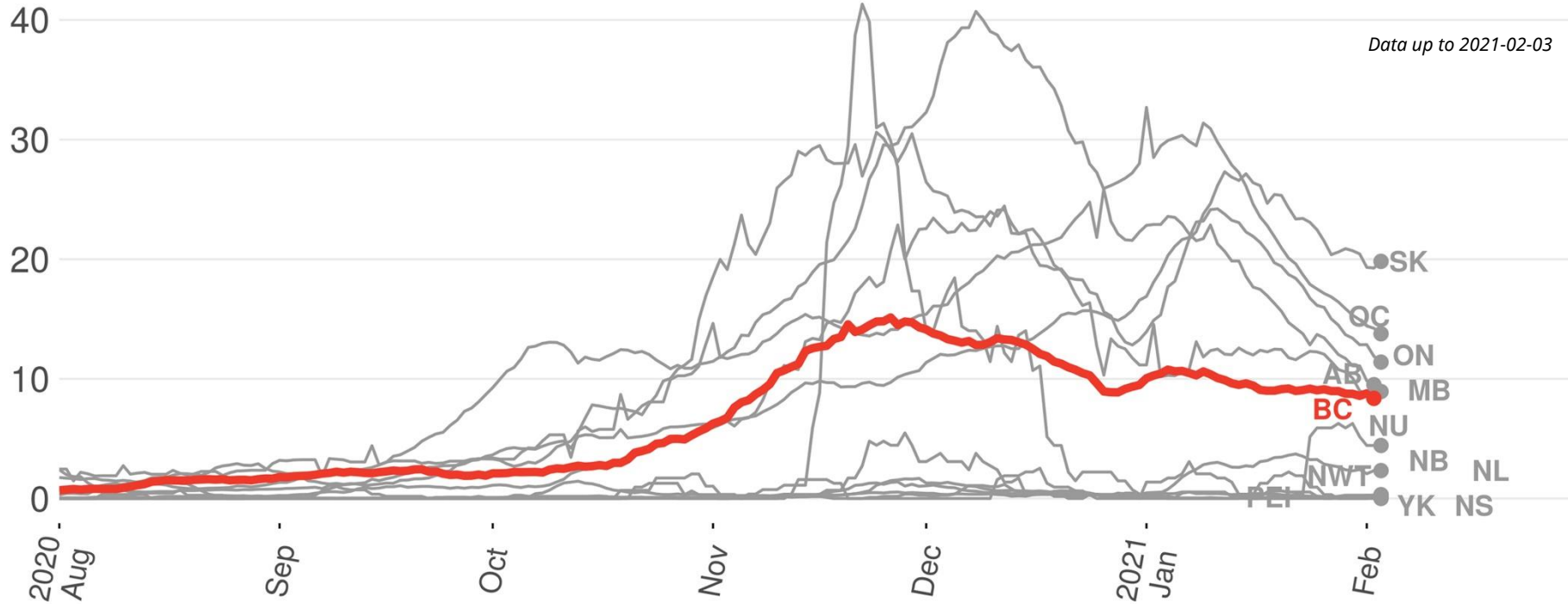
Age Groups	Number of Cases	Percent of Cases	Percent of Population
0 - 4 Years	1115	1.8	4.4
5 - 12 Years	2932	4.8	7.7
13 - 18 Years	3607	5.9	6.2
19+ Years	53625	87.5	81.8

Start of School Does Not Result in Significant Increases in Community Transmission of COVID-19 in BC



Daily Case Rates Across Canada

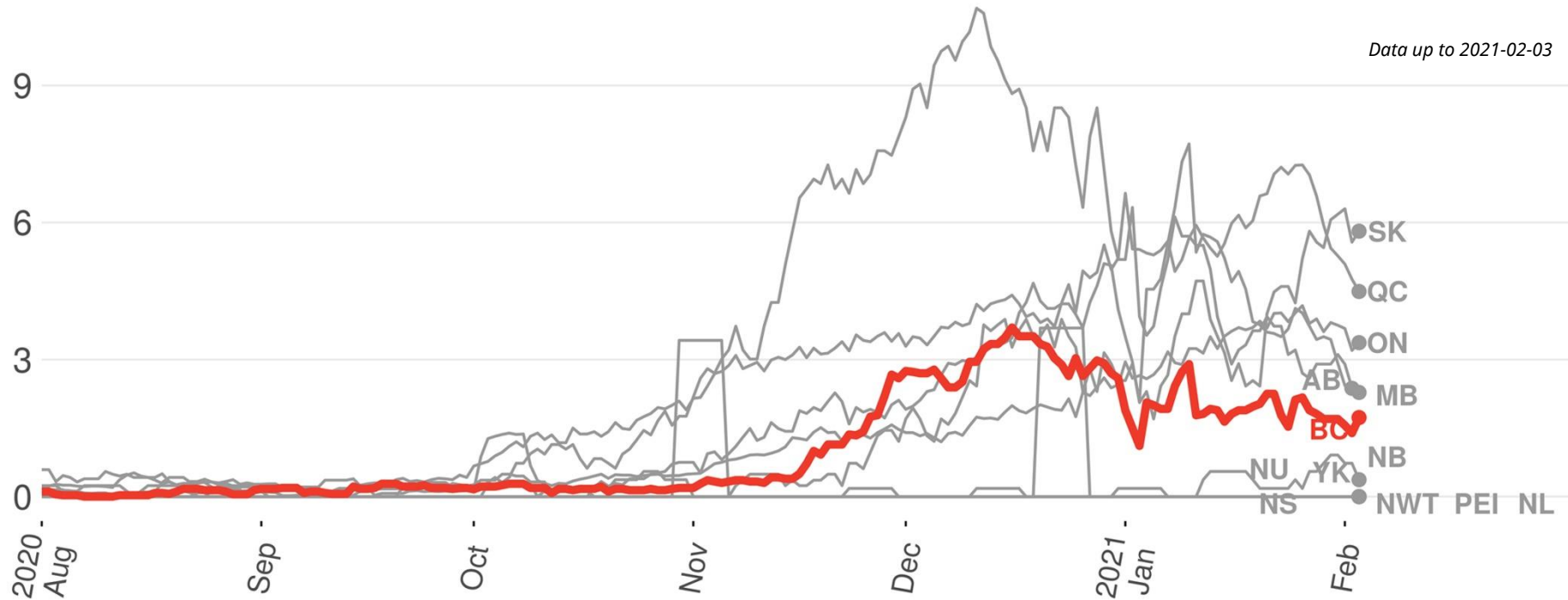
New daily **cases** per 100K population (7-day moving average)



Data up to 2021-02-03

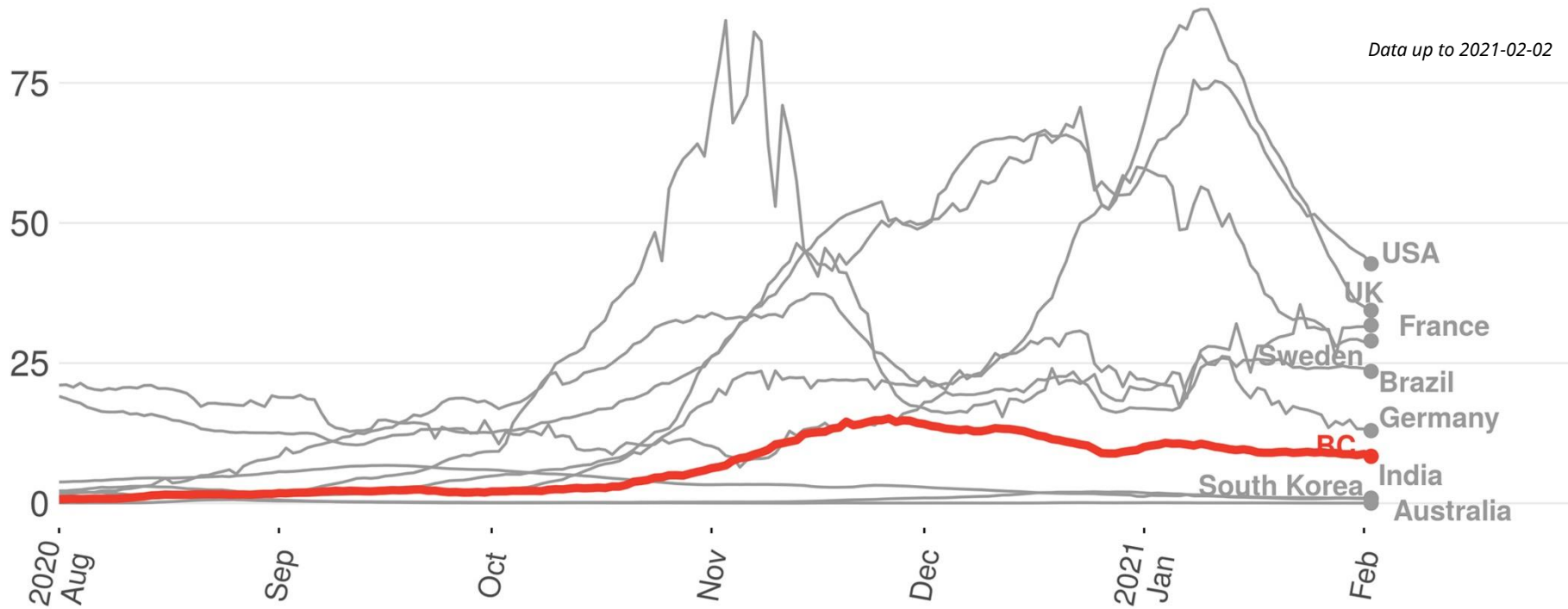
Daily Death Rates Across Canada

New daily **deaths** per 1M population (7-day moving average)



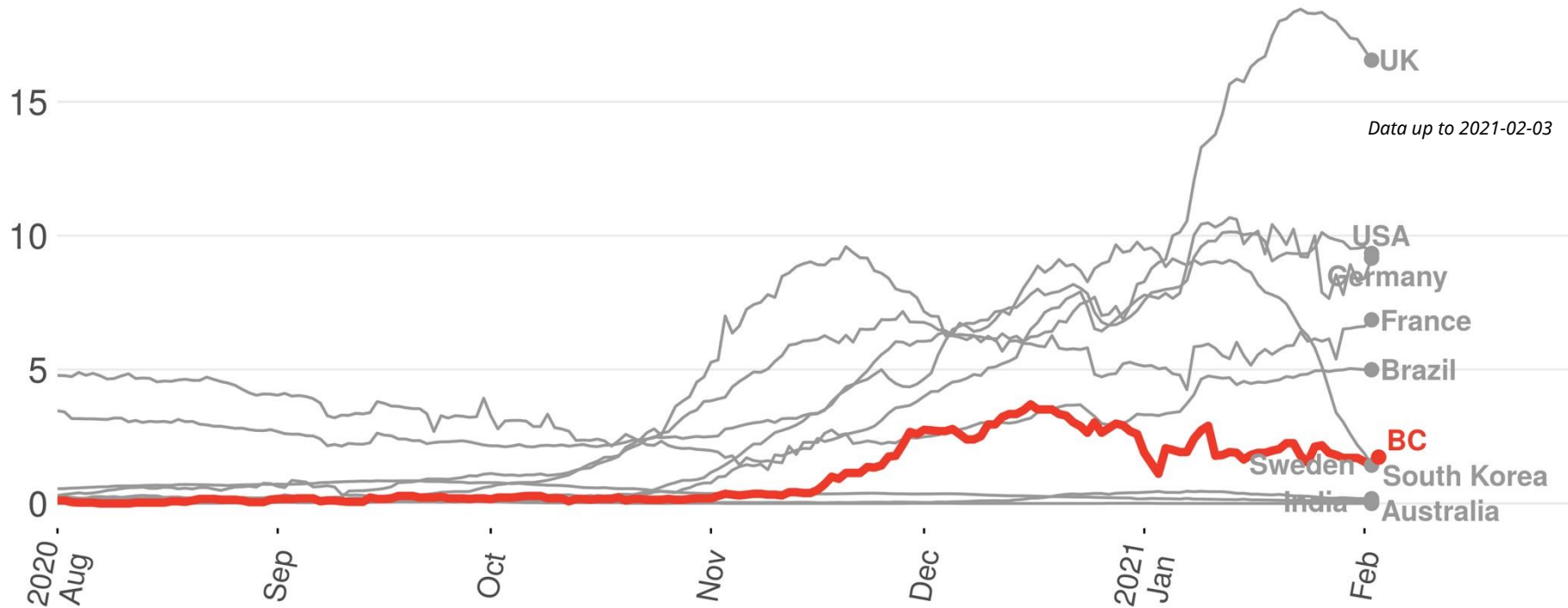
Daily Case Rates - International

New daily **cases** per 100K population (7-day moving average)



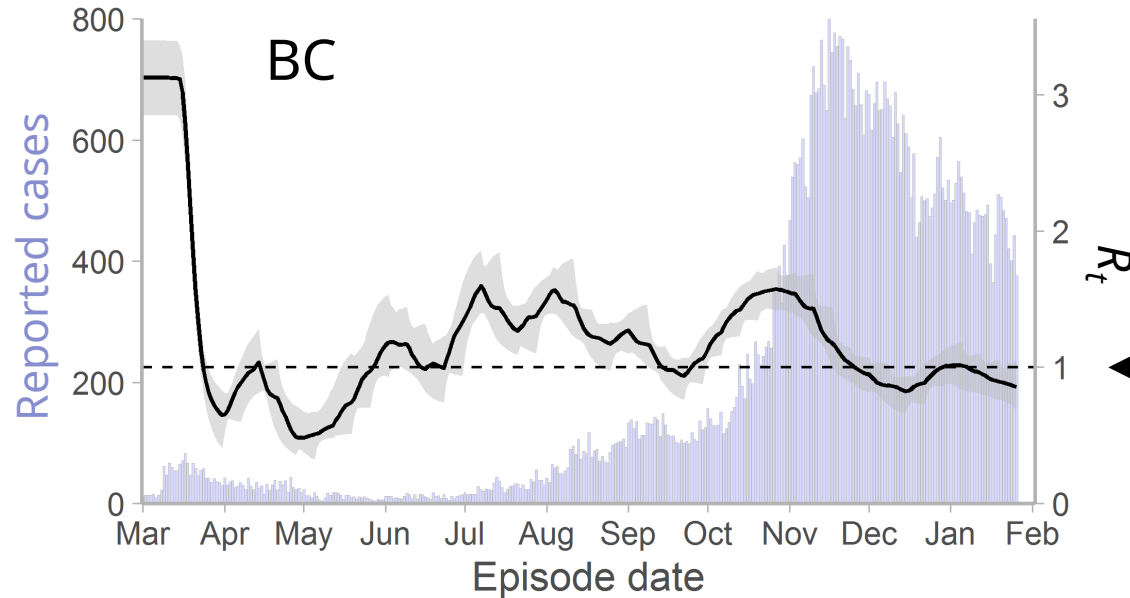
Daily Death Rates - International

New daily **deaths** per 1M population (7-day moving average)



Dynamic Compartmental Modeling: Recent Trends

Provincially, our model-based estimate of R_t (average daily number of new infections generated per case) continues to hover near 1.



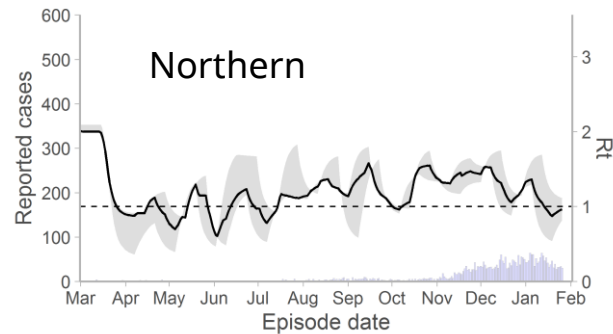
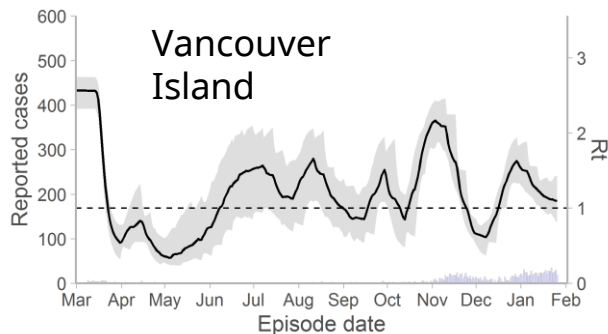
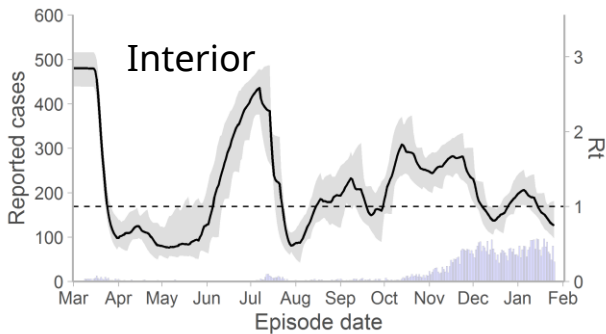
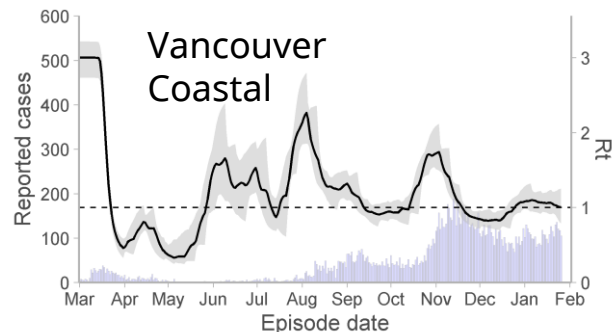
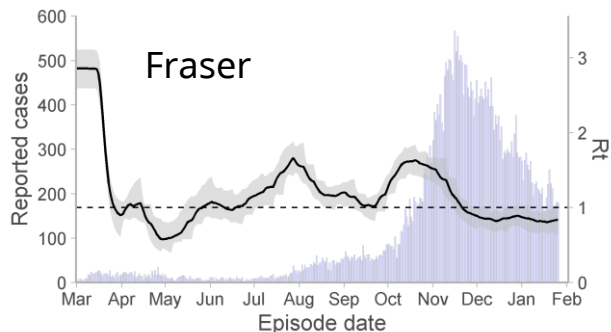
Whenever R_t is > 1 , there is a risk that the number of new cases could grow rapidly.

Solid black line: median R_t based on data up to Feb 2, 2021; Grey band: 5%-95% credible interval; Purple bars: all reported cases. Due to a lag from symptom onset to reporting, the most recent cases are not shown.

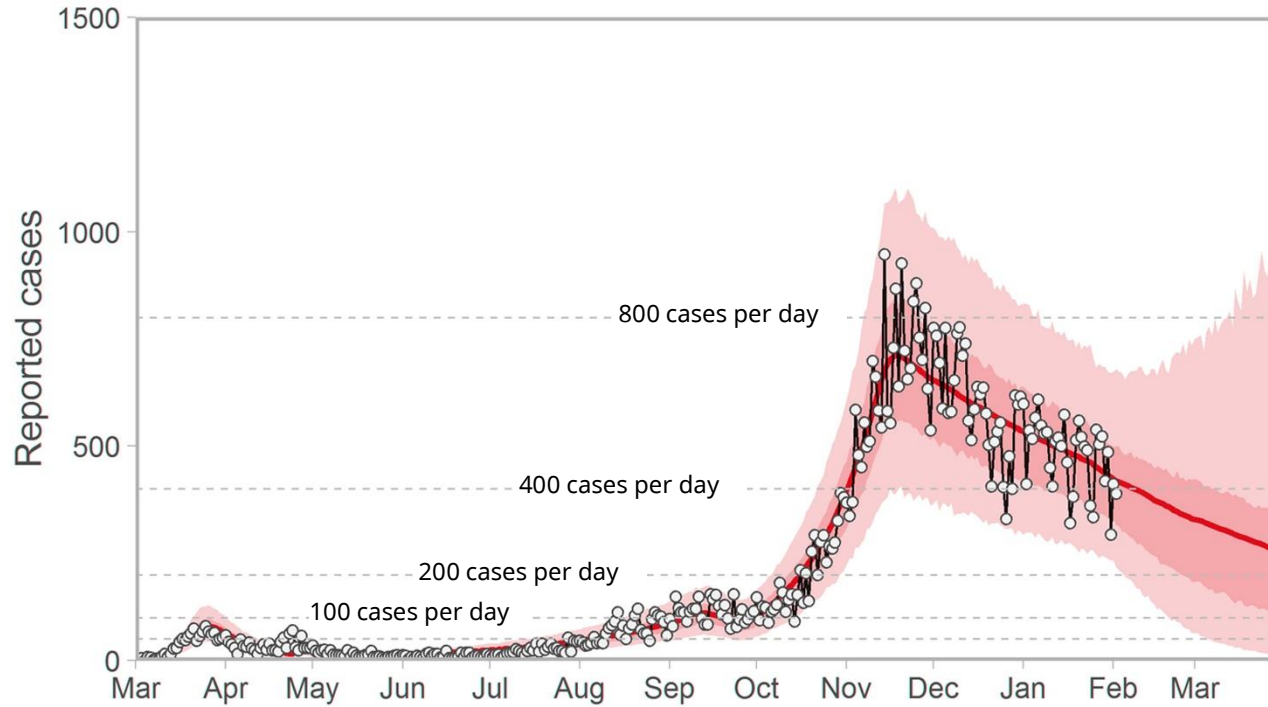
Dynamic Compartmental Modeling: Recent Trends

Our model shows that R_t is relatively stable or declining in all Regional Health Authorities, but remains close to 1.

Solid black line: median R_t based on data up to Feb 2, 2021; Grey band: 5%-95% credible interval; Purple bars: all reported cases. Due to a lag from symptom onset to reporting, the most recent cases are not shown.



Dynamic Compartmental Modeling: Recent Trends

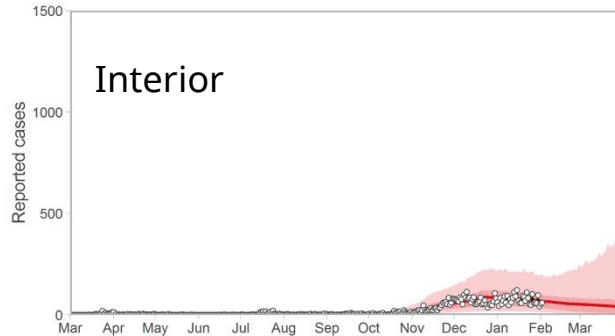
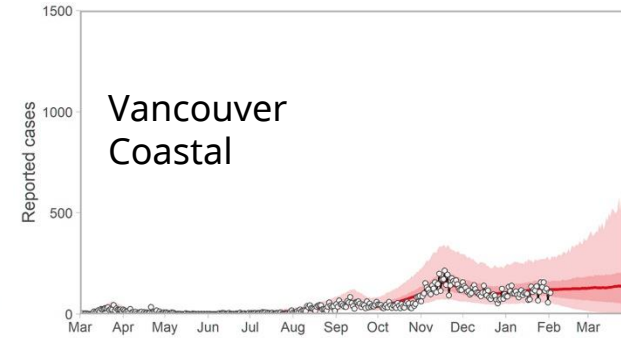
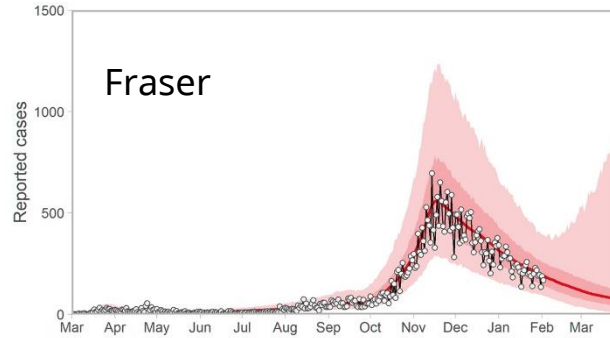


Solid blue line: median model fit; shaded bands: 50% and 90% credible intervals; Open circles: all reported cases, excluding reportable outbreaks, March 1, 2020 – Feb 2, 2021.

Dynamic Compartmental Modeling: Recent Trends

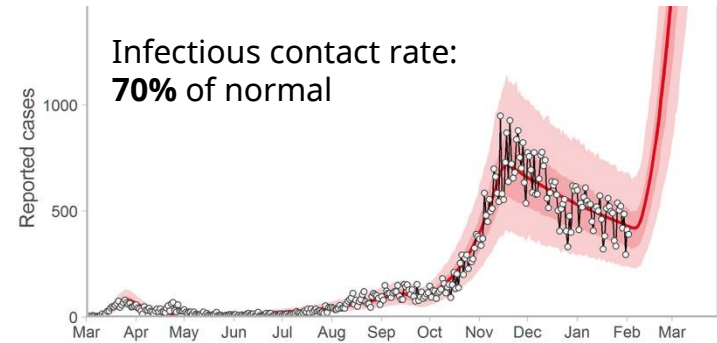
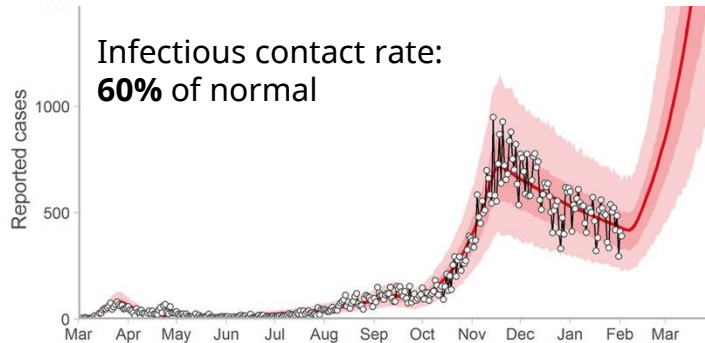
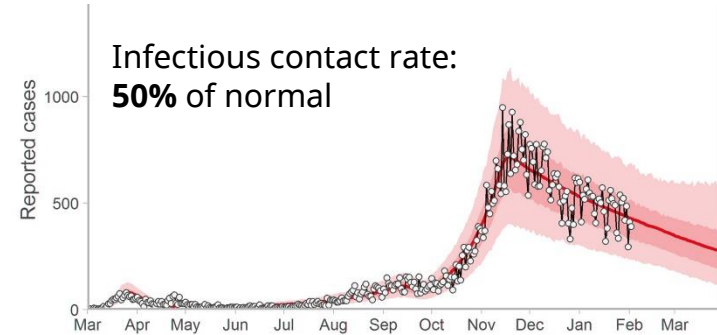
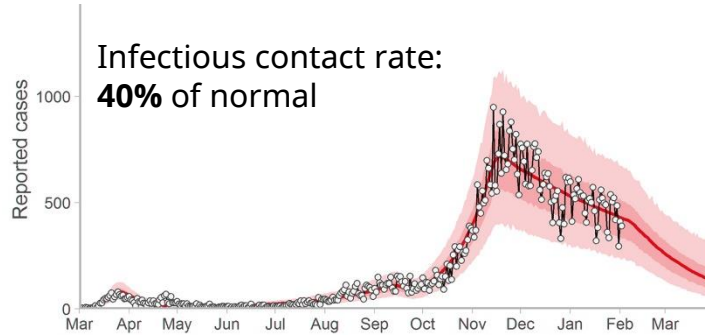
Our model outputs describe stable or declining trends in all Regional Health Authorities.

Solid blue line: median model fit; shaded bands: 50% and 90% credible intervals; Open circles: all reported cases, March 1, 2020 – Feb 2, 2021. Cases are shown by reporting date.



Dynamic Compartmental Modeling: Scenarios

Our modeling scenarios are consistent with an average infectious contact rate of 50% of normal.



Solid blue line: median model fit; shaded bands: 50% and 90% credible intervals; Open circles: all reported cases, March 1 – Feb 2, 2021. Cases are shown by reporting date.

Vaccine Doses Received, Administered to Date (February 4, 2021)

Total Doses
Received to Date
(Up to Feb 3)

Total
156,250

Pfizer Vaccine
115,050

Moderna Vaccine
41,200

Total Doses
Administered to Date
(Up to Feb 3)

Total
145,567

Pfizer Vaccine
107,000

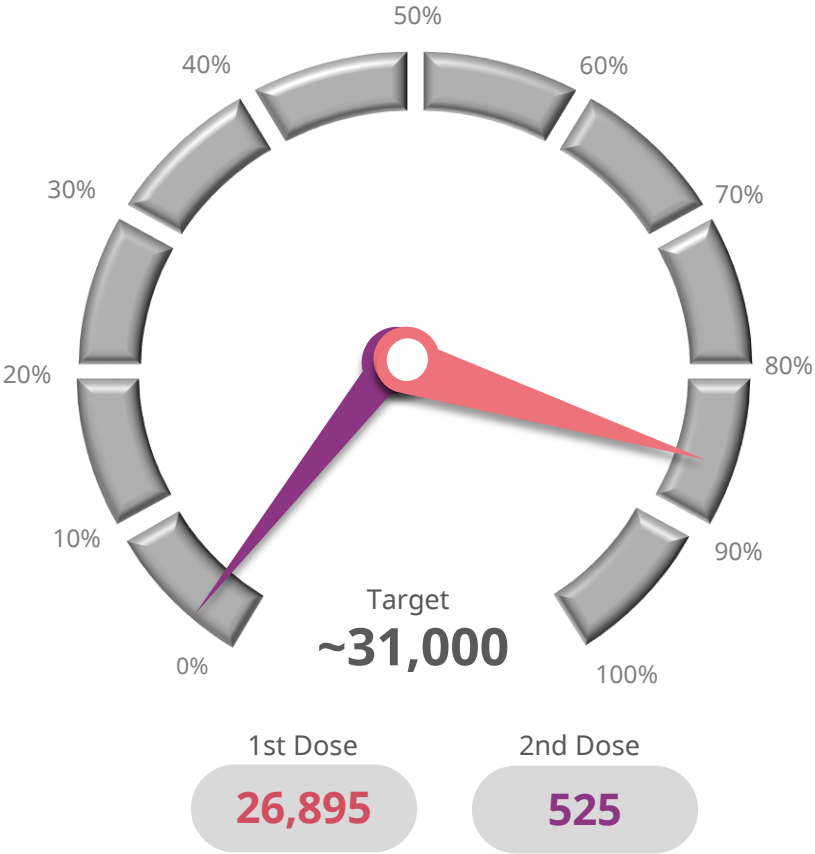
Moderna Vaccine
38,567

Long-Term Care Residents

19%
of vaccines administered to long-term care residents.

1st Dose
87%

2nd Dose
2%



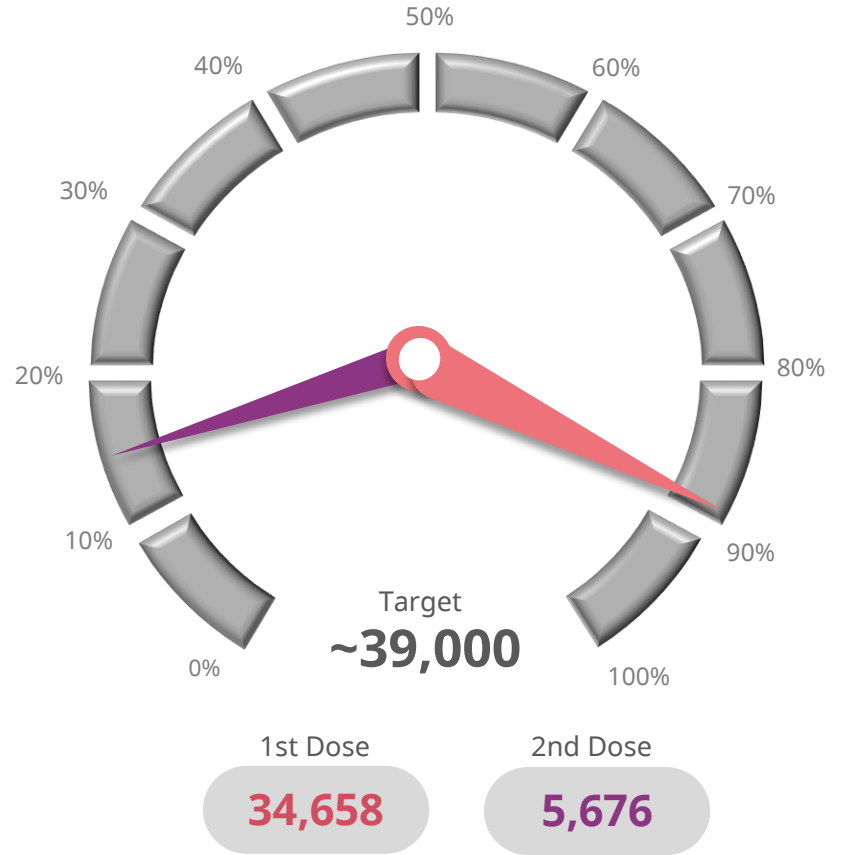
Long-Term Care Staff

28%

of vaccines administered to long-term care staff.

1st Dose
89%

2nd Dose
15%

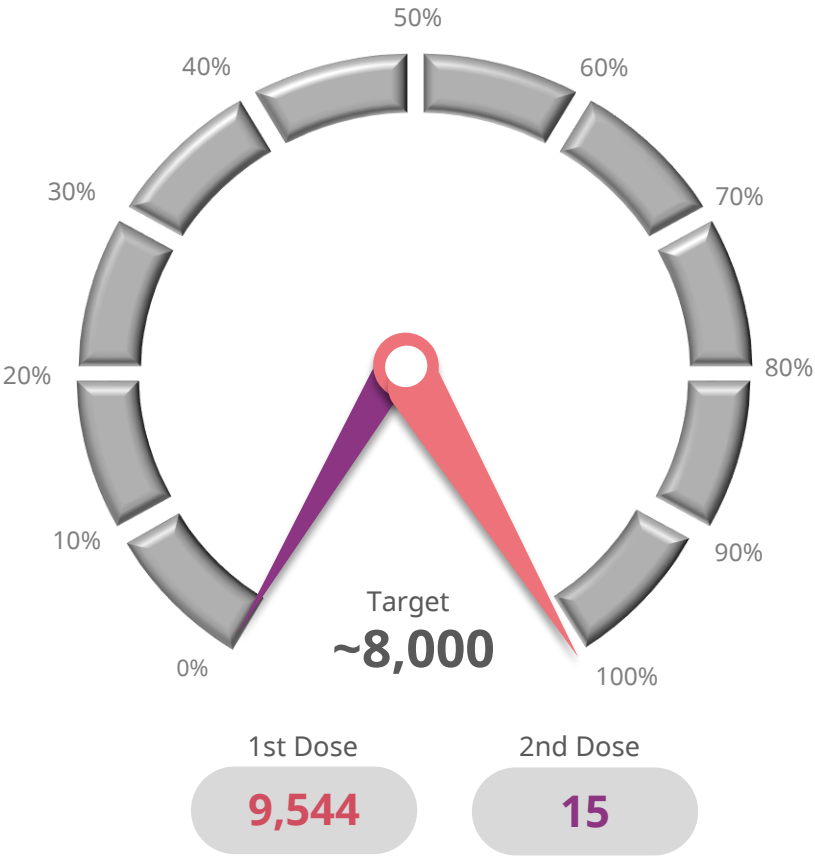


Assisted Living Residents

7%
of vaccines administered to assisted living residents.

1st Dose
119%

2nd Dose
0%

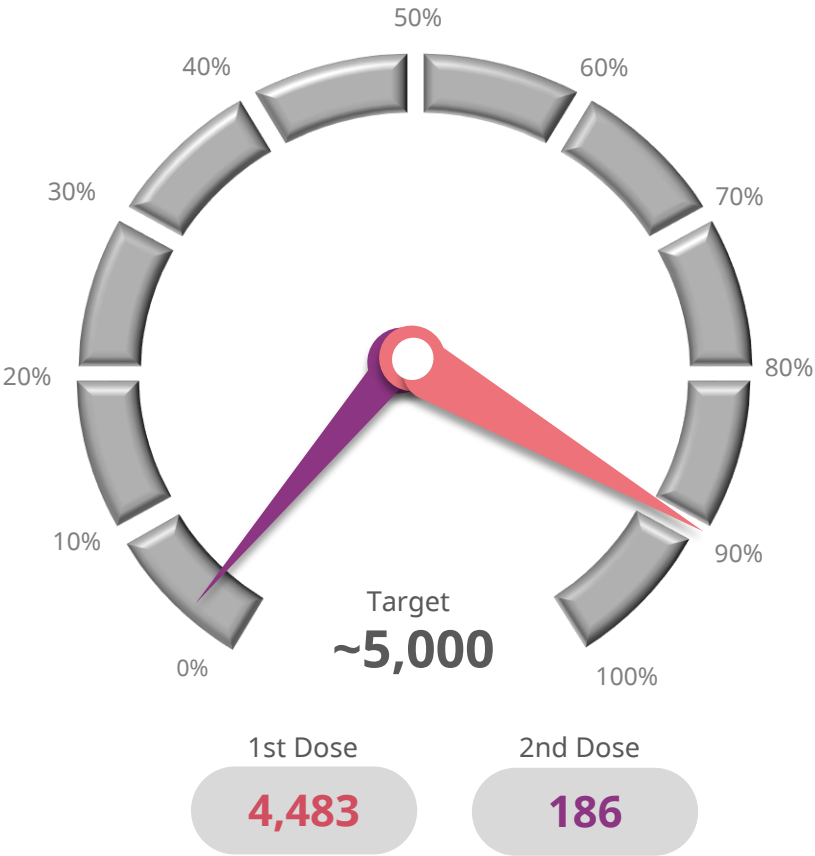


Assisted Living Staff

3%
of vaccines administered to assisted living staff.

1st Dose
90%

2nd Dose
4%



No Safety Signals Have Been Identified With Either COVID-19 Vaccine in British Columbia

Over **145,000 Doses** of Vaccine Have Been Administered in British Columbia

AEFI

From December 20, 2020 to February 4, 2021 there have been **205** adverse events following immunization (AEFI) reports.

There have been **14 AEFI reports for every 10,000 doses administered.**

55 are classified as serious.
For example, a severe allergic reaction called anaphylaxis.

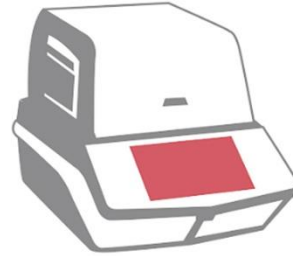
Some reported events happen after vaccination but are likely **not caused by the vaccine.**

Variant Detection Strategy in BC



Sequencing

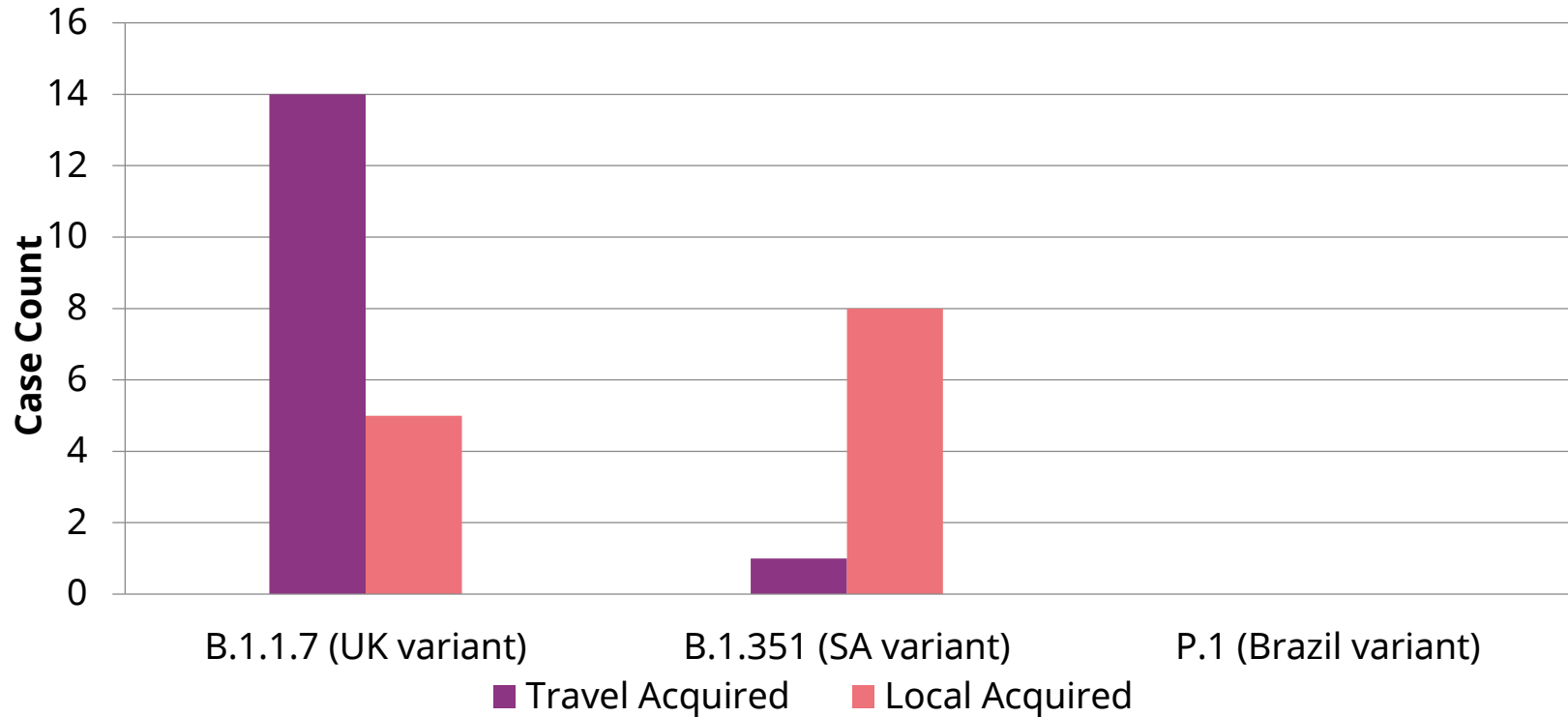
- Whole genome sequencing is the best way to confirm variants of concern (VOC)
- BC generates 750 genomes per week



Screening

- Screening for key mutations; need to confirm positives with sequencing
- BC can screen 1000s of samples per week

Since December 1, BC Has Sequenced ~4,500 Cases; Variants of Concern Have Been Detected in 28 Cases



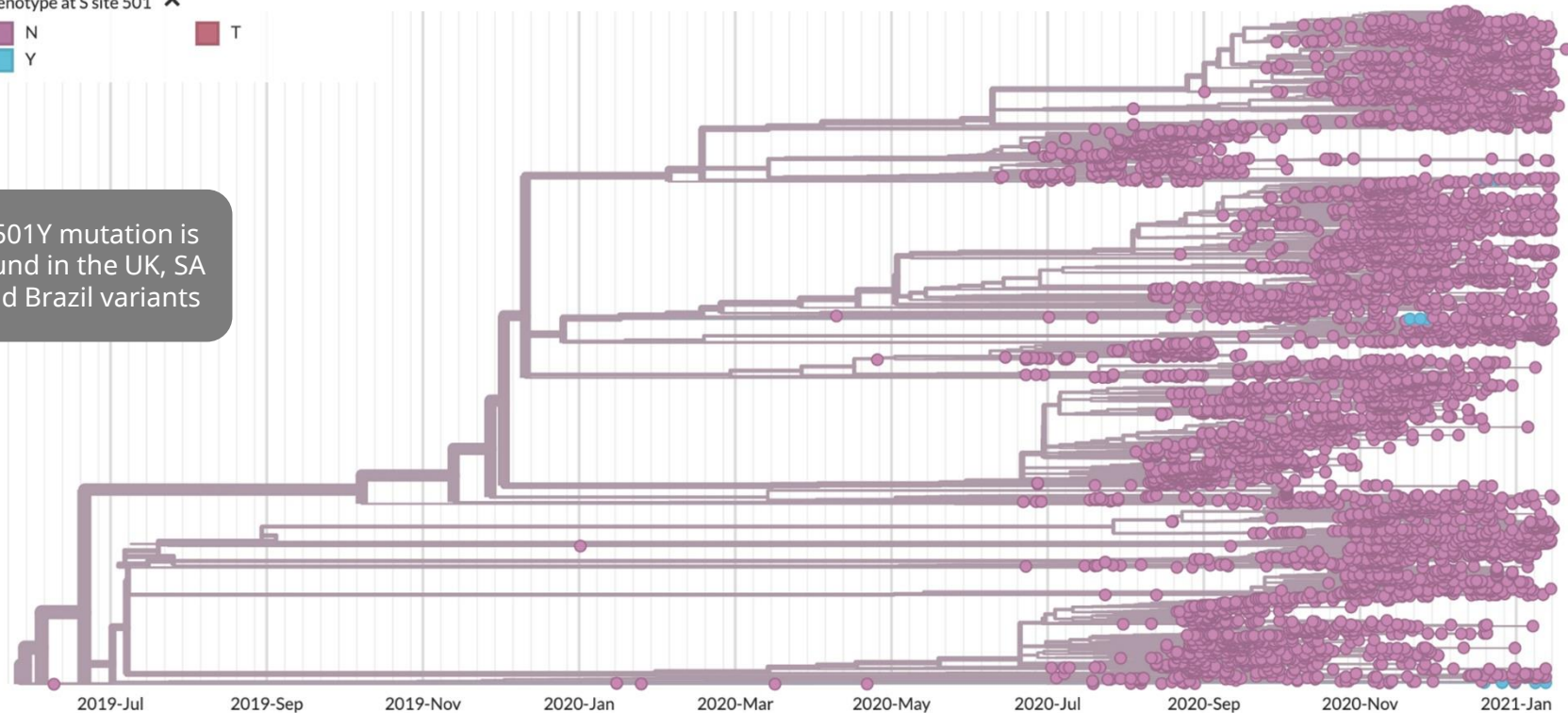
Variants of Concern Are Still Rare in BC (*Shown in Blue*)

Phylogeny

Genotype at S site 501 ^



N501Y mutation is found in the UK, SA and Brazil variants

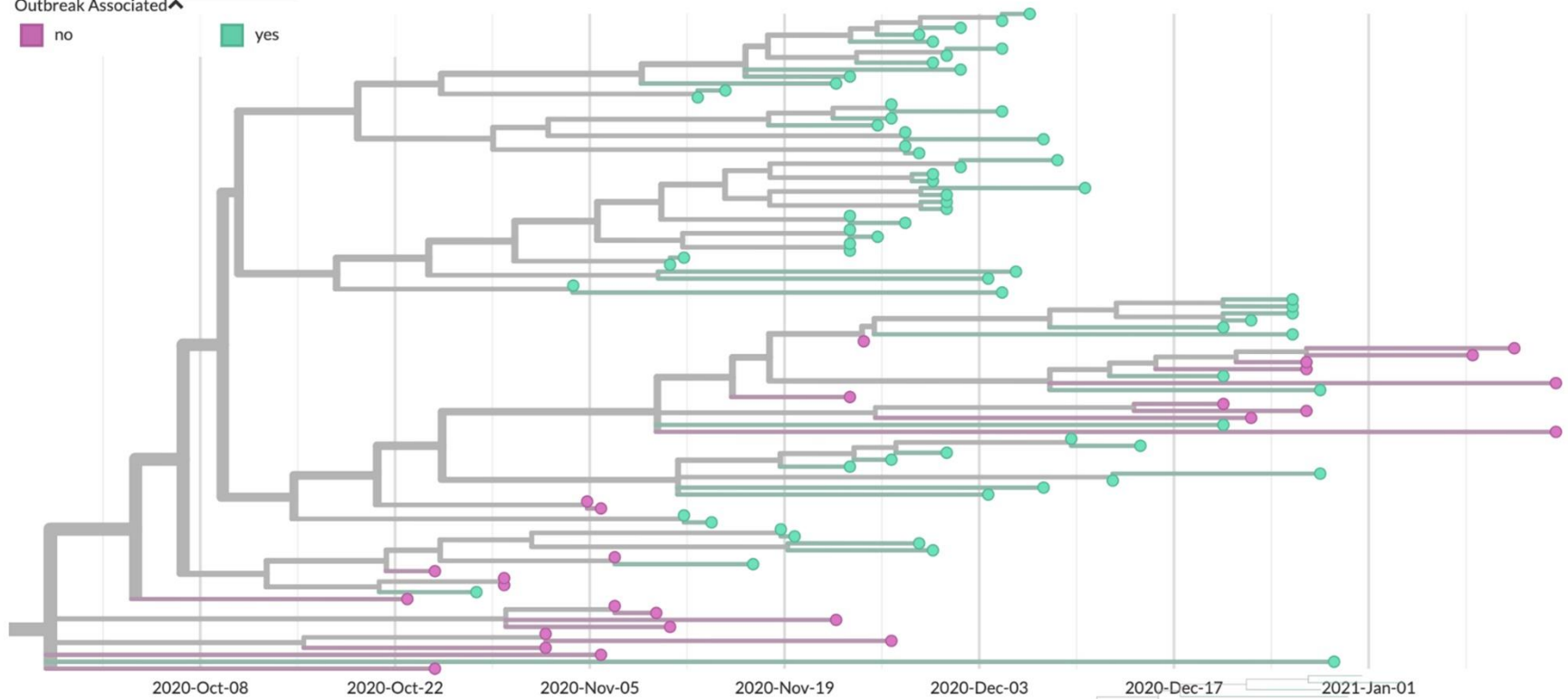


Genomics is a Key Tool in Responding to Outbreaks in BC

Phylogeny

Outbreak Associated^

no yes



COVID-19: Monthly Update

February 5, 2021



Stay Informed Via These Resources:

gov.bc.ca/Covid-19 | bccdc.ca | 1-888-COVID19

Symptom Self-Assessment:

covid19.thrive.health



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