

BCCDC Weekly Data Summary

20 May 2021

Purpose

The weekly surveillance deck is a summary of COVID-19 related indicators that can help inform the pandemic response in British Columbia. This surveillance monitoring constitutes the medical chart for population health assessment that guides the public health community of practice. As such this is a working document that reflects a snapshot in time and may differ from other published reports.

Data Sources

The collection, use and disclosure of case data is subject to the Public Health Act. COVID-19 cases are reported under the Public Health Act to the health authority of residence. Public health case notification, clinical management, contact tracing and follow-up contributes surveillance data for regional and provincial COVID-19 monitoring. Each regional health authority have their own workflows and information systems for capture of relevant data. This data foremost serves the public health and clinical management of the case and their contacts.

Disclaimer

- Data and key messages within these documents are not finalized and considered to be work in progress that is subject to retroactive changes as more data and information become available.
- Accurate interpretation of figures may be difficult with the limited inclusion of data notes and methodology descriptions in this document.

Table of Contents

 Overall Weekly Summary	4
 Surveillance	5
BC Epidemiology.....	5
Vaccinations.....	15
Labs/Genomics.....	21
 BC in Canadian and Global Context.....	31
Modelling.....	34
Additional Resources.....	36

Overall Weekly Summary

- **Case rates** are stable or declining in all HAs; **test positivity** is at 8.5% provincially for publicly funded tests and 6.8% for all tests.
- **New hospitalizations** are elevated, but continuing to decline; **hospital/critical care census** is stable or declining across BC; **new deaths** are stable and low.
 - Majority of hospitalizations are among individuals aged >40 years
 - Number of deaths is small and decreasing.
- The share of **VOCs** among screened cases in BC is ~85% in epi week 19 (May 9-15). Among sequenced samples provincially based on information for epi week 18, P.1 (~41%) and B.1.1.7 (~57%) remain two dominant VOCs.
 - B.1.617 (newly declared by WHO as a VOC) currently represents 2% of VOCs
 - Ongoing monitoring of VOCs and variants of interest
- As of May 19, 58% of **adult** population in BC has received at least one dose of **vaccine**; the **majority of individuals ≥ 55 years have received at least one dose** (86% of those over 70 years and 77% of those 55-69 years).

May 13 to May 19: BC COVID-19 Profile



140,596 total cases
3,373 new this week



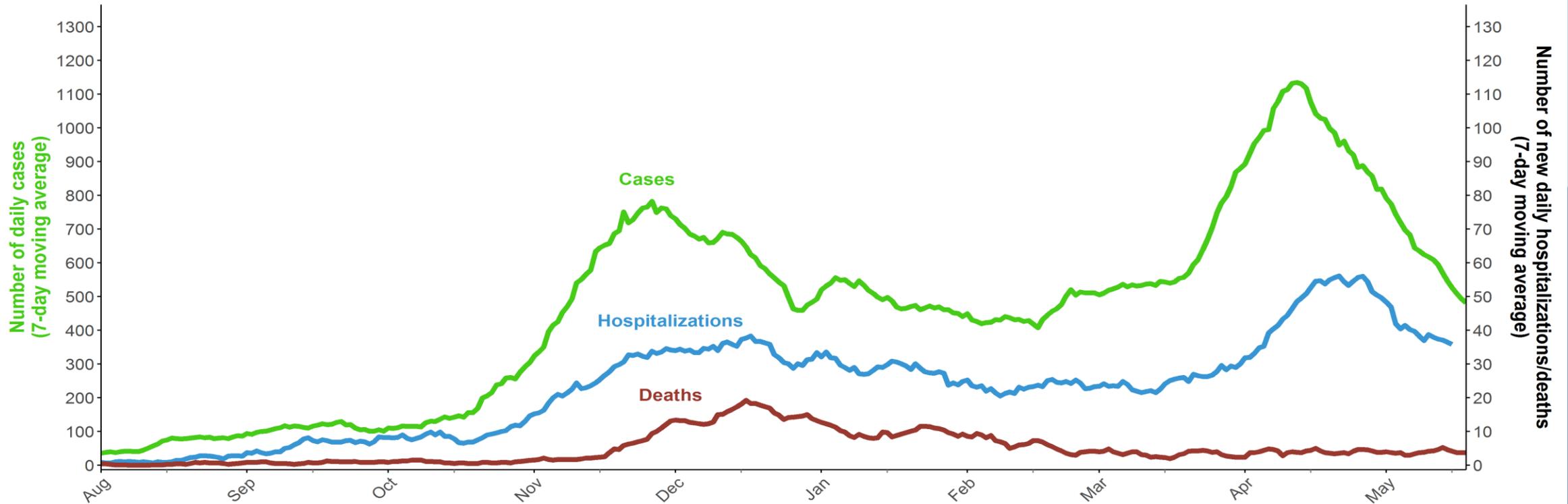
1,658 total deaths
31 new this week



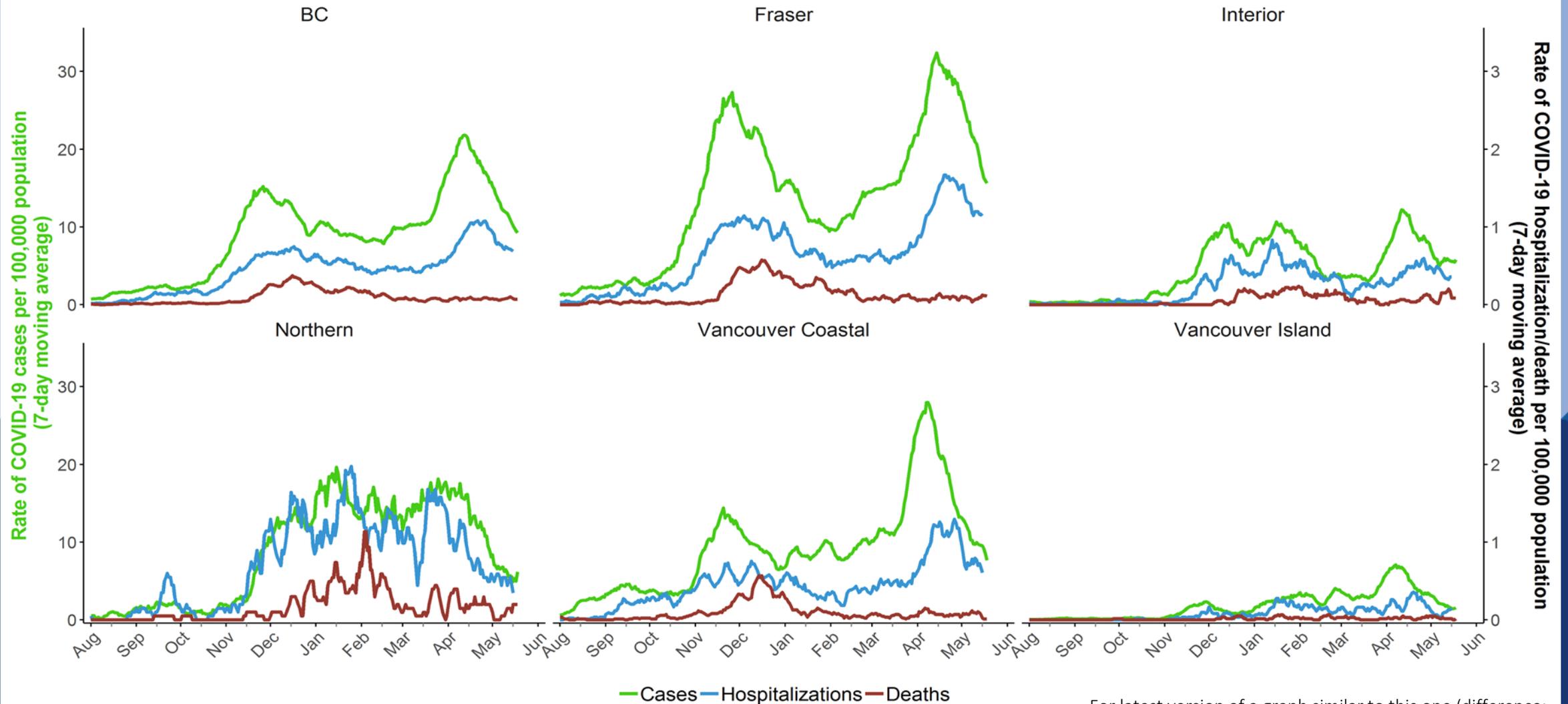
7,427 ever hospitalized
210 new this week



133,985 removed from isolation
4,461 new this week

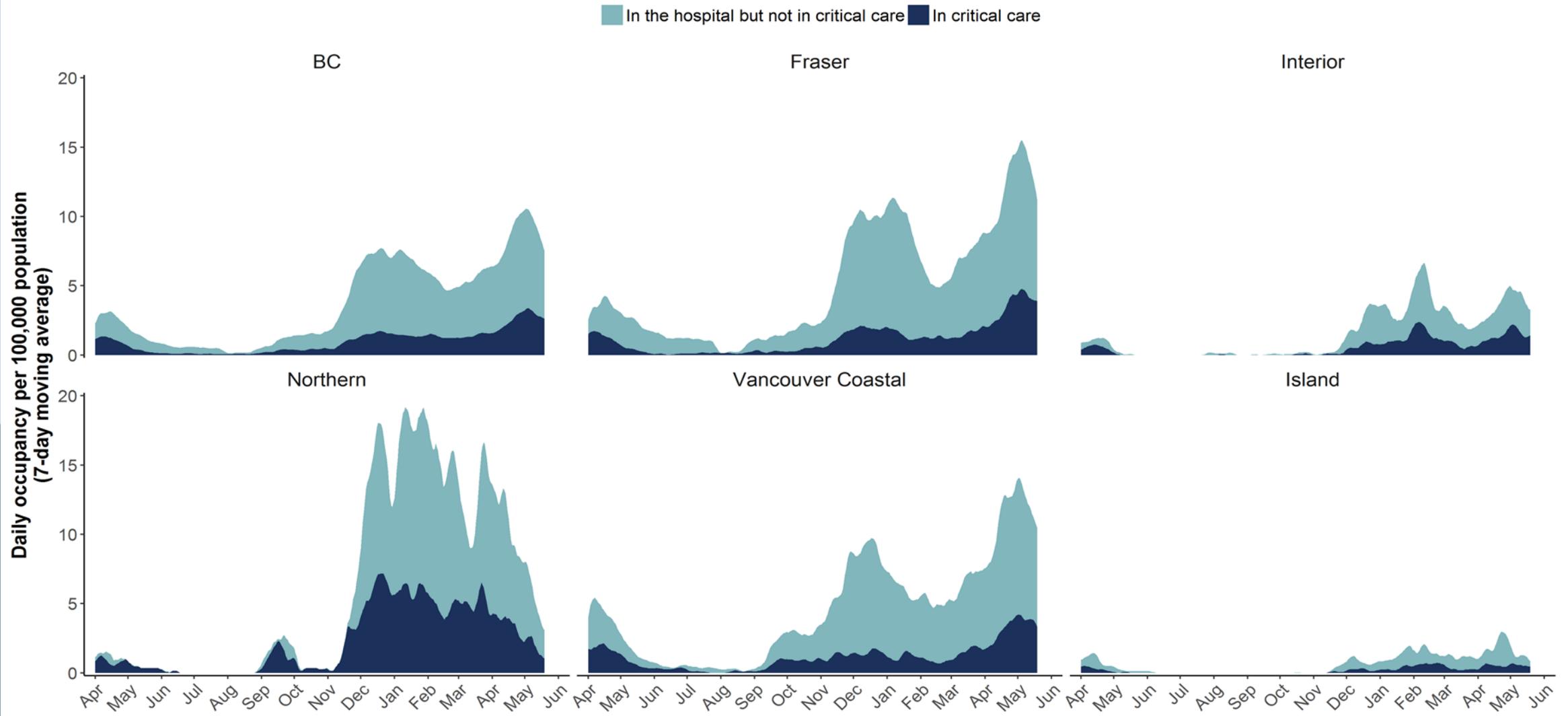


Case rates are declining or stable in all HAs; **new hospitalizations** continue to decline; **new deaths** are stable and low.

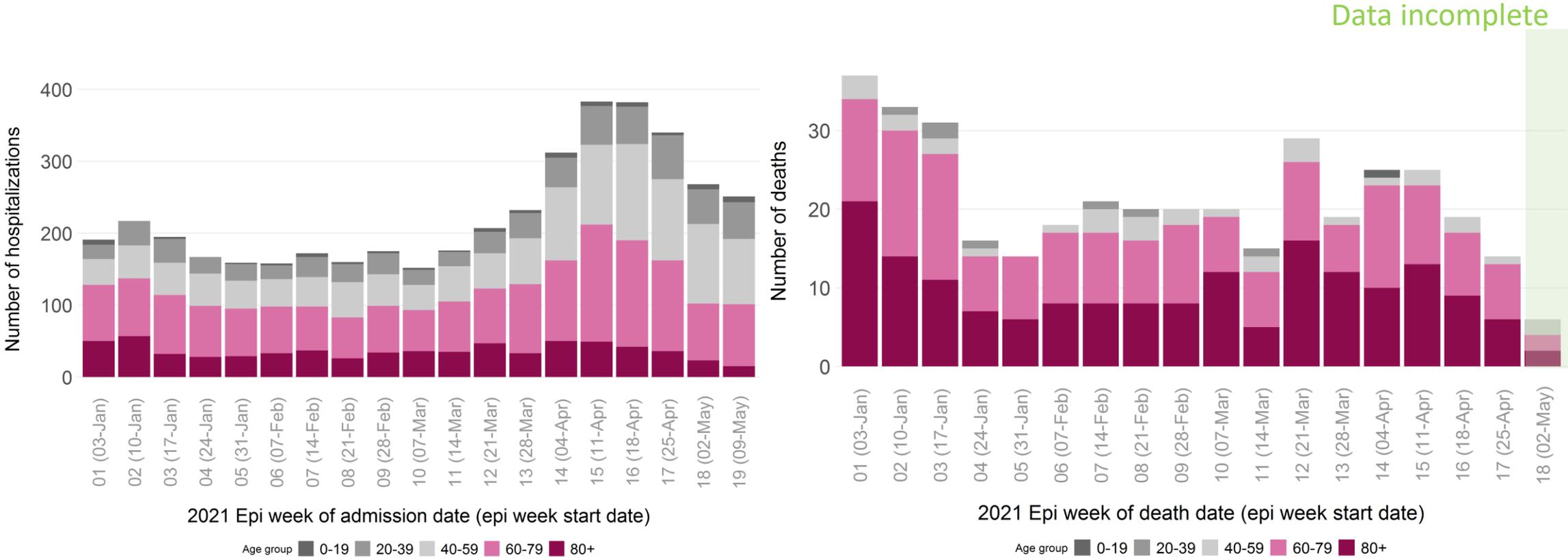


For latest version of a graph similar to this one (difference: hospital census, not new hospitalizations), see the [Epi App](#)

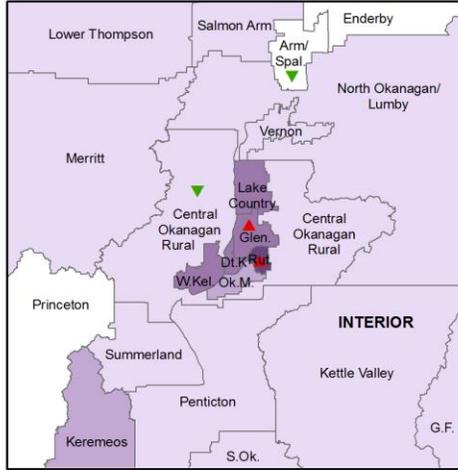
Hospital and critical care census is stable or declining in all regions.



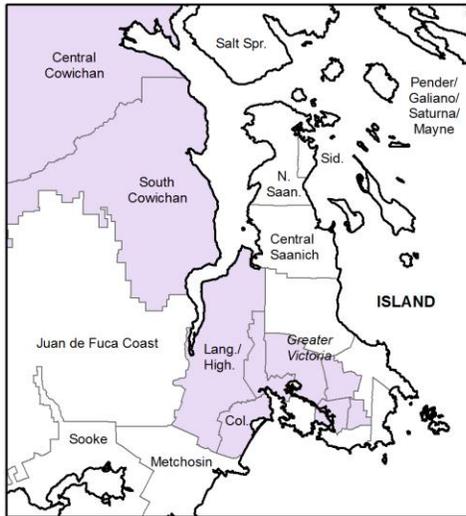
Number of hospitalizations decreasing recently, primarily among individuals ≥ 40 years. The number of hospitalizations among <40 remains relatively low. Deaths are low and decreasing.



Okanagan Inset
(Community Health Service Areas)

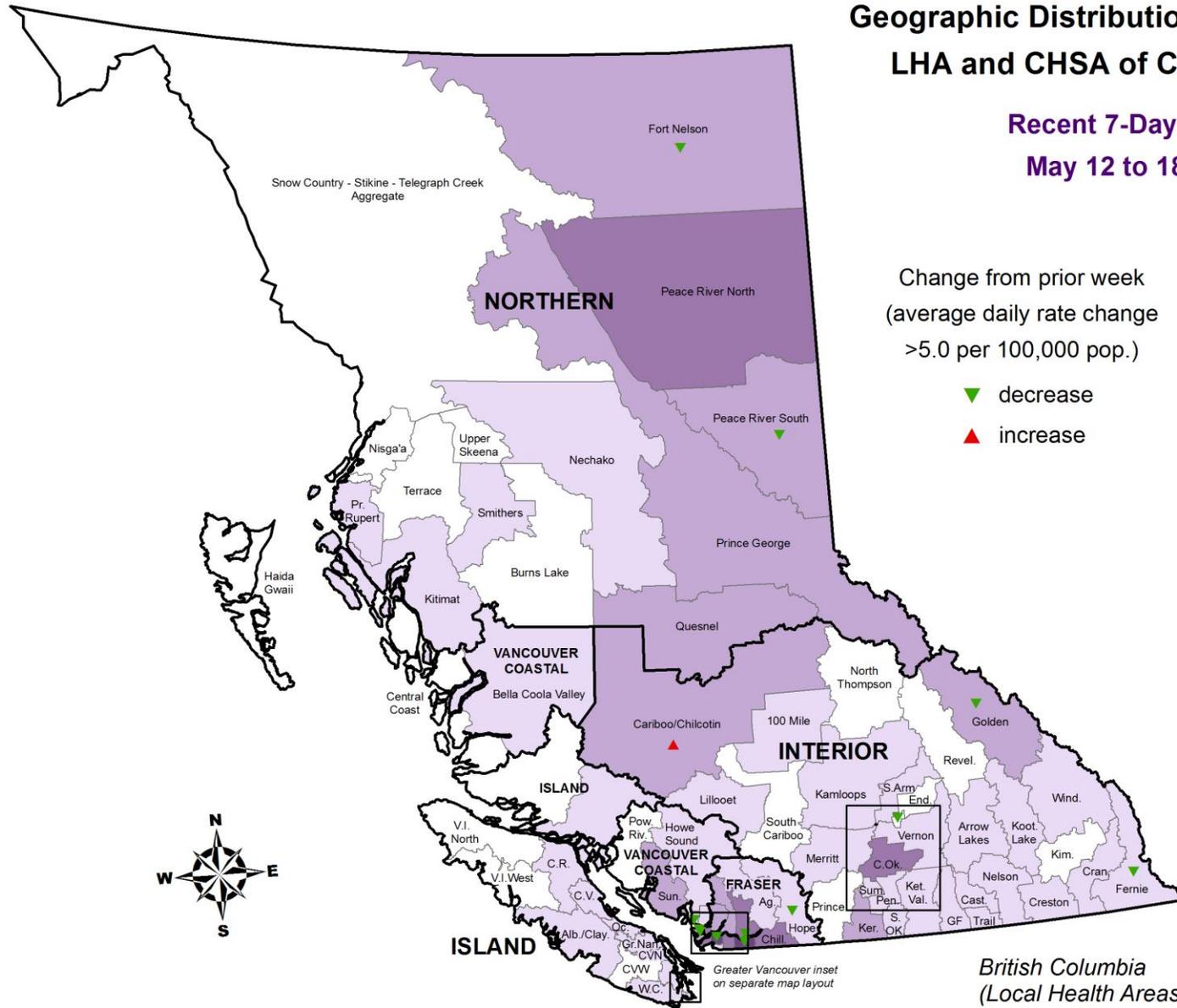


Greater Victoria Inset
(Community Health Service Areas)



Geographic Distribution of COVID-19 by LHA and CHSA of Case Residence

Recent 7-Days Cases
May 12 to 18, 2021



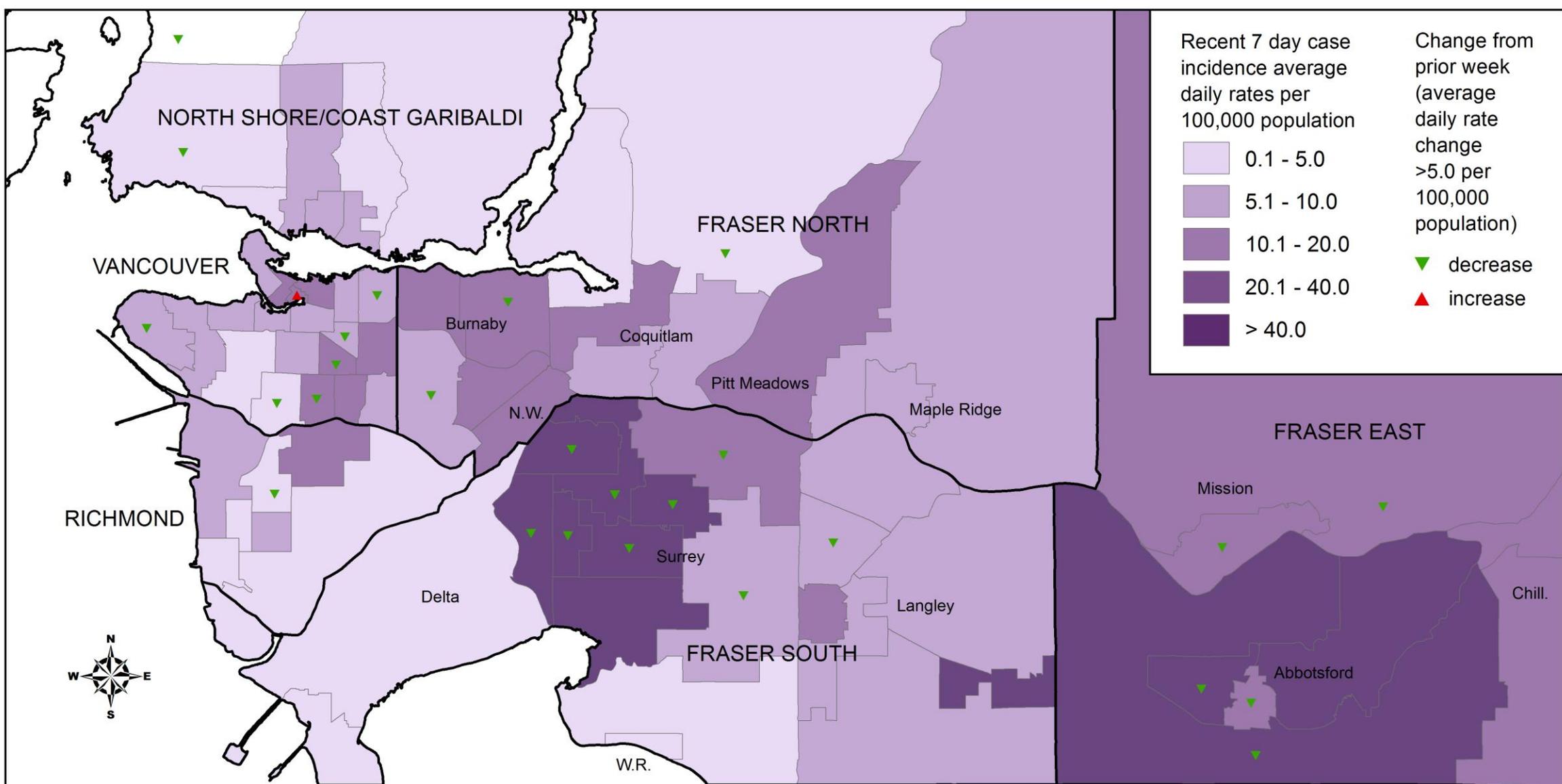
Change from prior week
(average daily rate change
>5.0 per 100,000 pop.)

- ▼ decrease
- ▲ increase

Average daily rate per
100,000 population

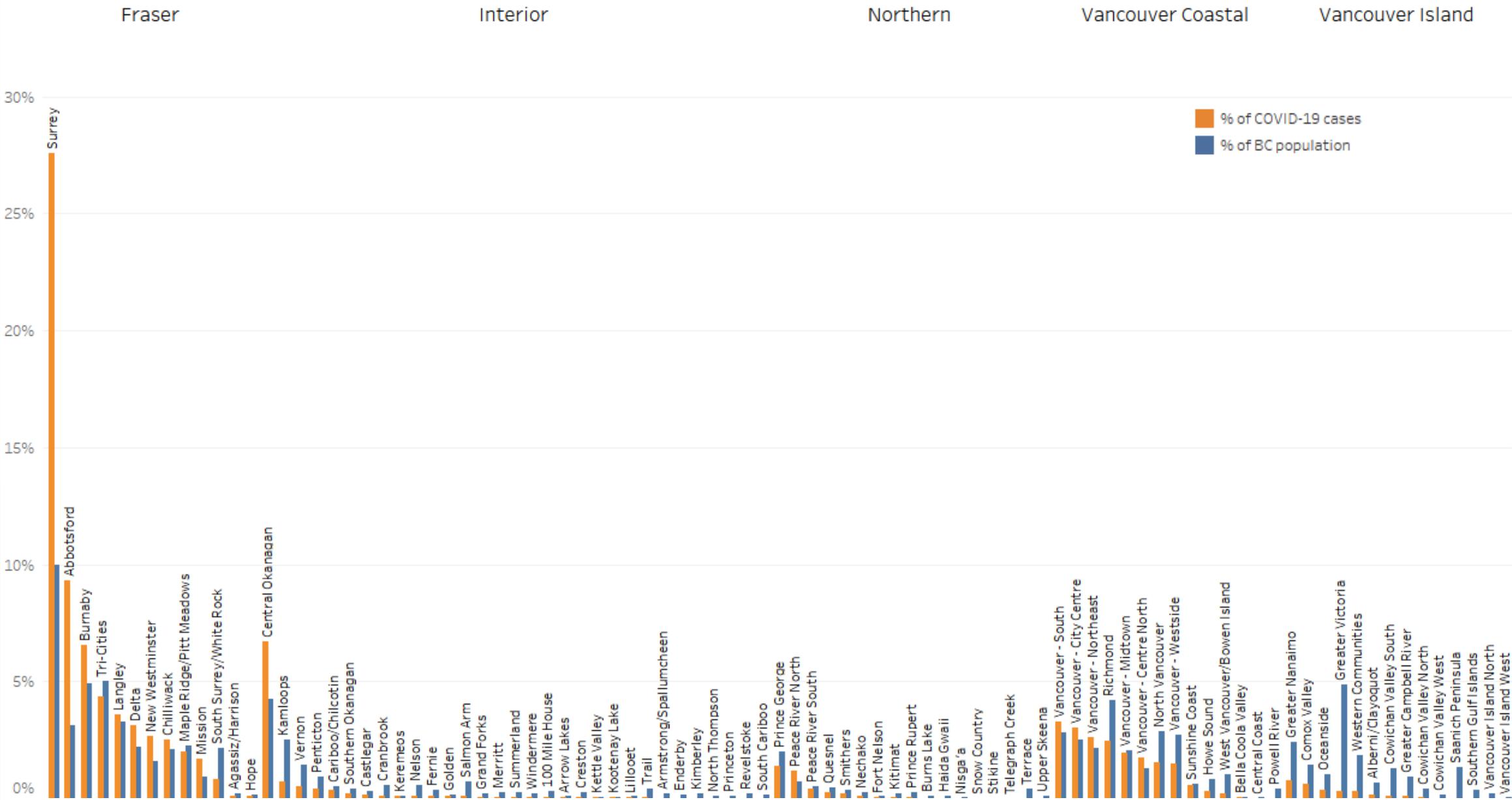
- 0.0
- 0.1 - 5.0
- 5.1 - 10.0
- 10.1 - 20.0
- 20.1 - 40.0
- > 40.0

Data source: Public Health Reporting Data Warehouse (PHRDW) integrated COVID dataset; we operate in a live database environment and case information is updated as it becomes available. Cases are mapped by location of residence; cases with unknown residence and from out of province are not mapped. Data are by date of first positive test, or date reported to public health for epi-linked cases. Population denominator from BC Stats PEOPLE estimates for 2021.

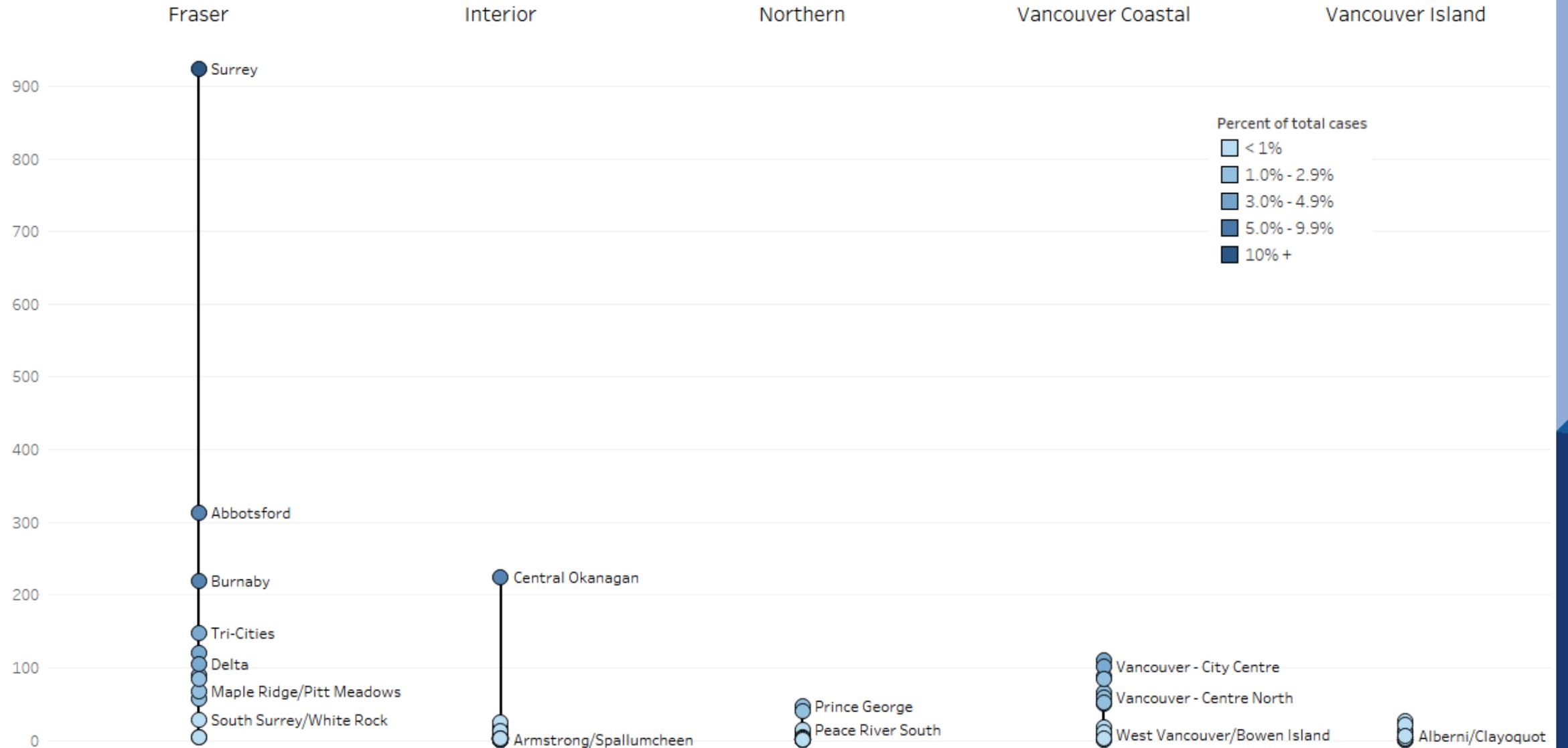


COVID-19 Recent 7-Day Case Incidence Rates by CHSA (May 12 to 18, 2021)

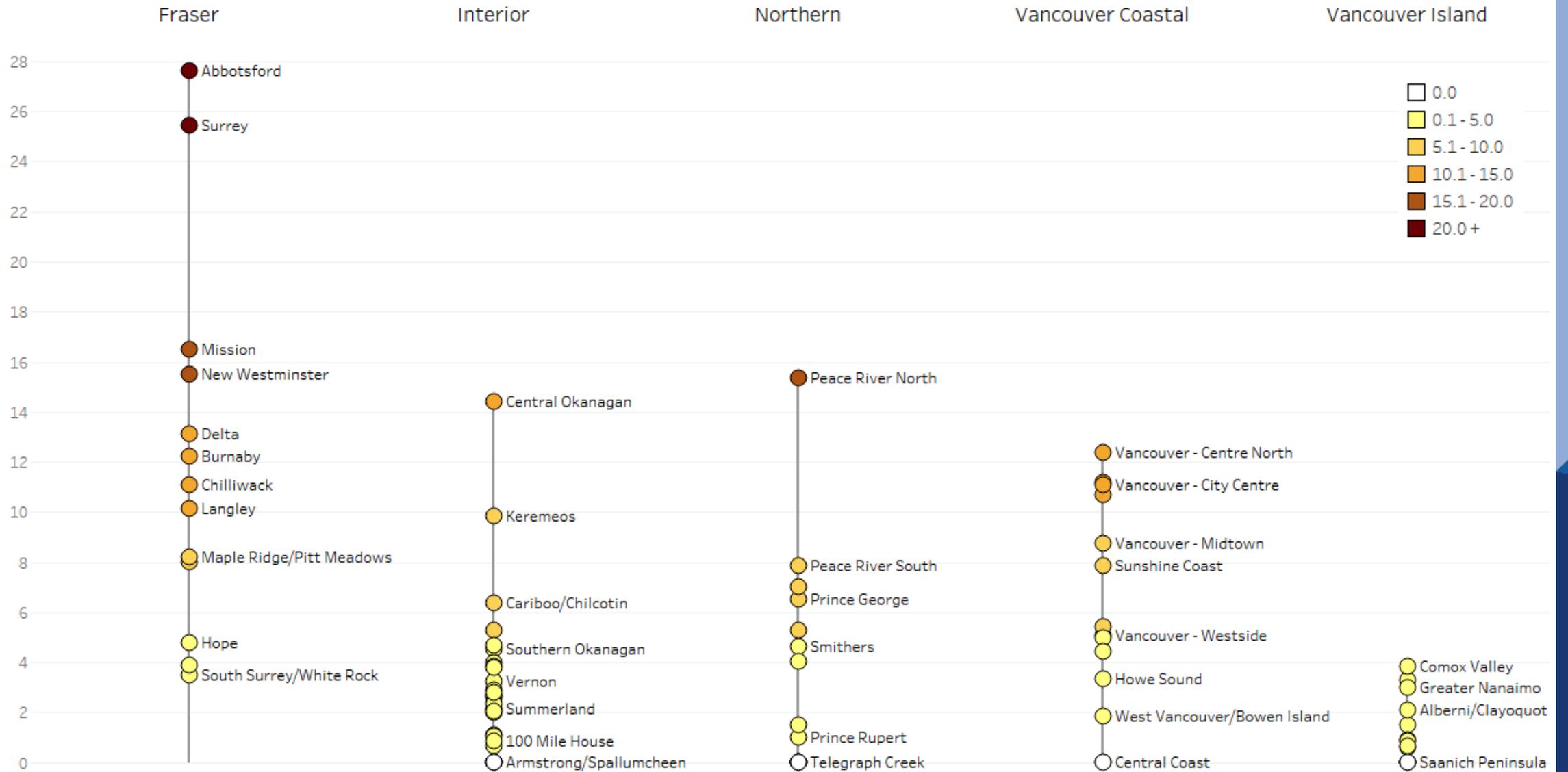
Proportion to total cases & population by local health area, May 12 - May 18, 2021



Total cases by local health area, May 12 - May 18, 2021

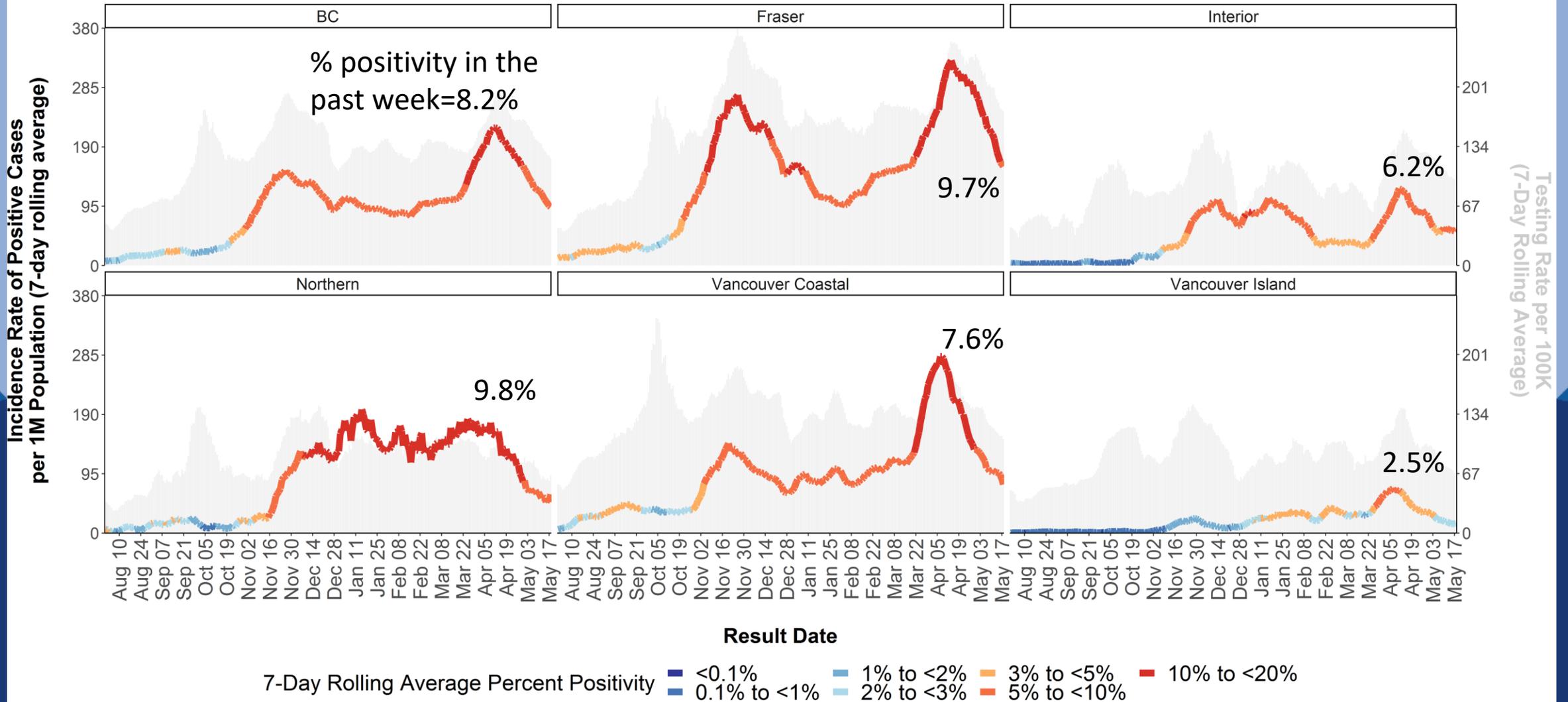


Average daily **rate** of new cases per 100,000 population, by local health area, May 12 - May 18, 2021



Incidence is decreasing or stable in all HAs. Percent positivity is below 10% in all HAs.

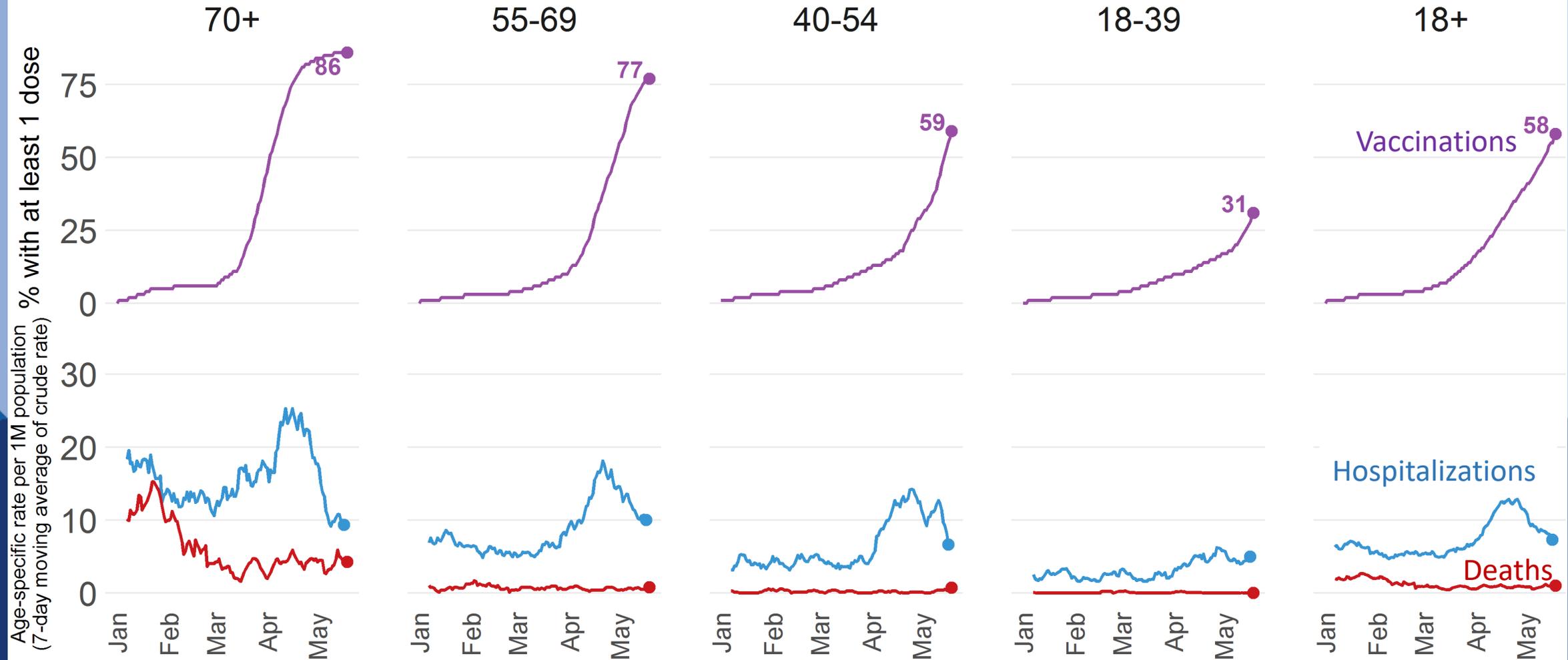
Case incidence rate, test percent positivity, and testing rate (Public Payers Only). Aug 1 2020 - May 18, 2021.



Data source: PLOVER 18-May-2021

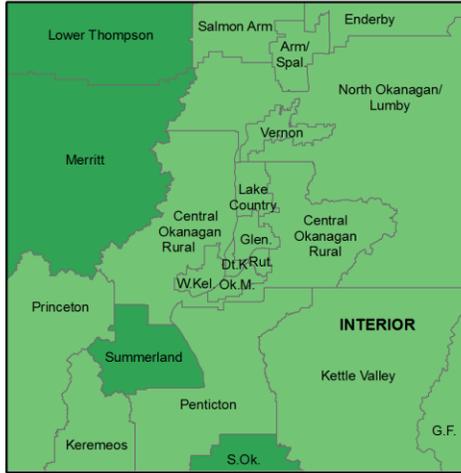
For latest version of a graph similar to this one (difference: all tests, not public tests), see the [Epi App](#)

Vaccination progress in BC by age group as of May 19, 2021



Data extracted on 2021-05-19; hospitalization and death data from BCCDC; vaccination data from PHS DARE

Okanagan Inset
(Community Health Service Areas)



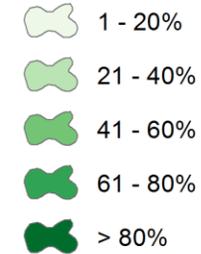
Greater Victoria Inset
(Community Health Service Areas)



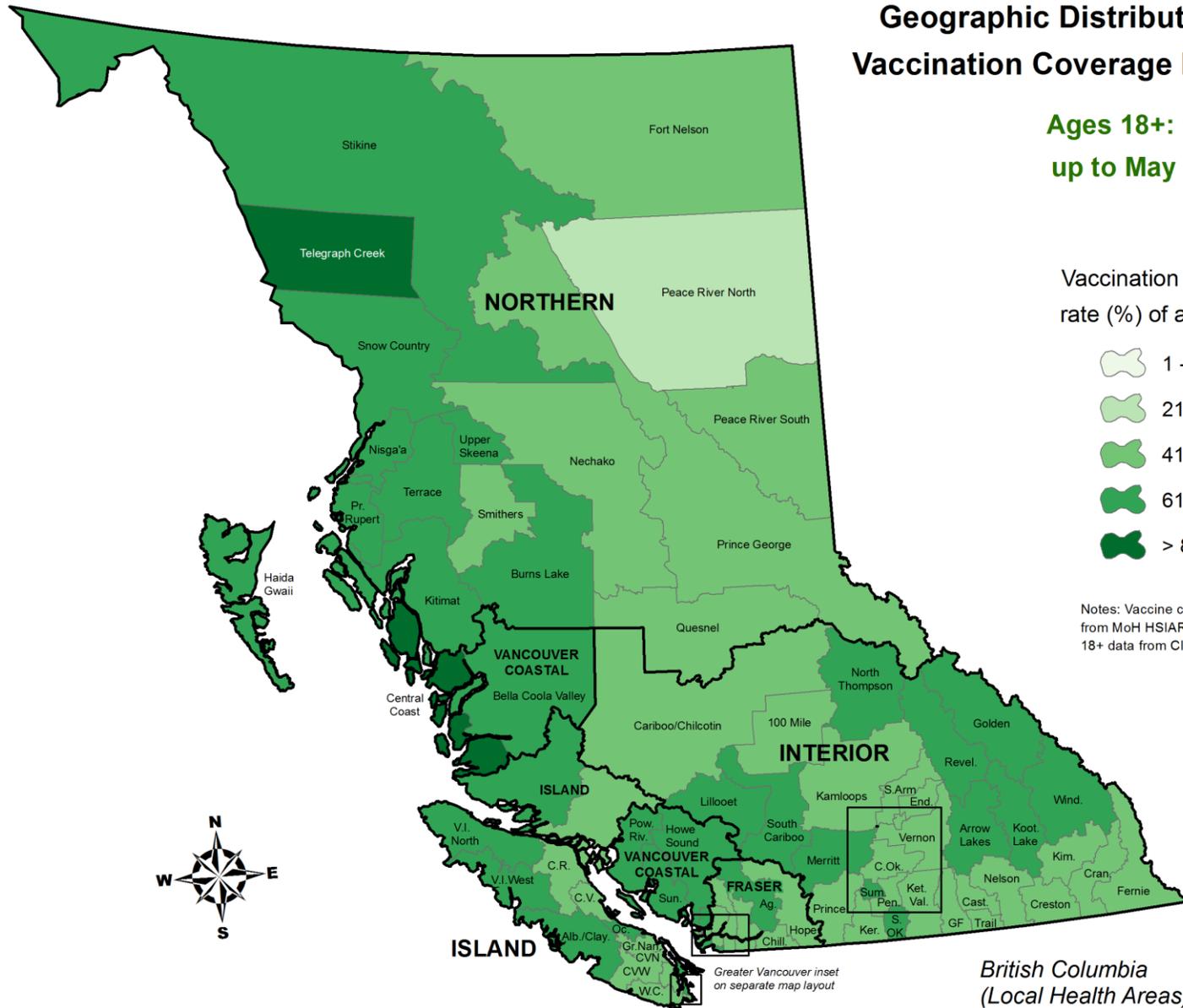
Geographic Distribution of COVID-19 Vaccination Coverage by LHA and CHSA

**Ages 18+: 1st Dose
up to May 17, 2021**

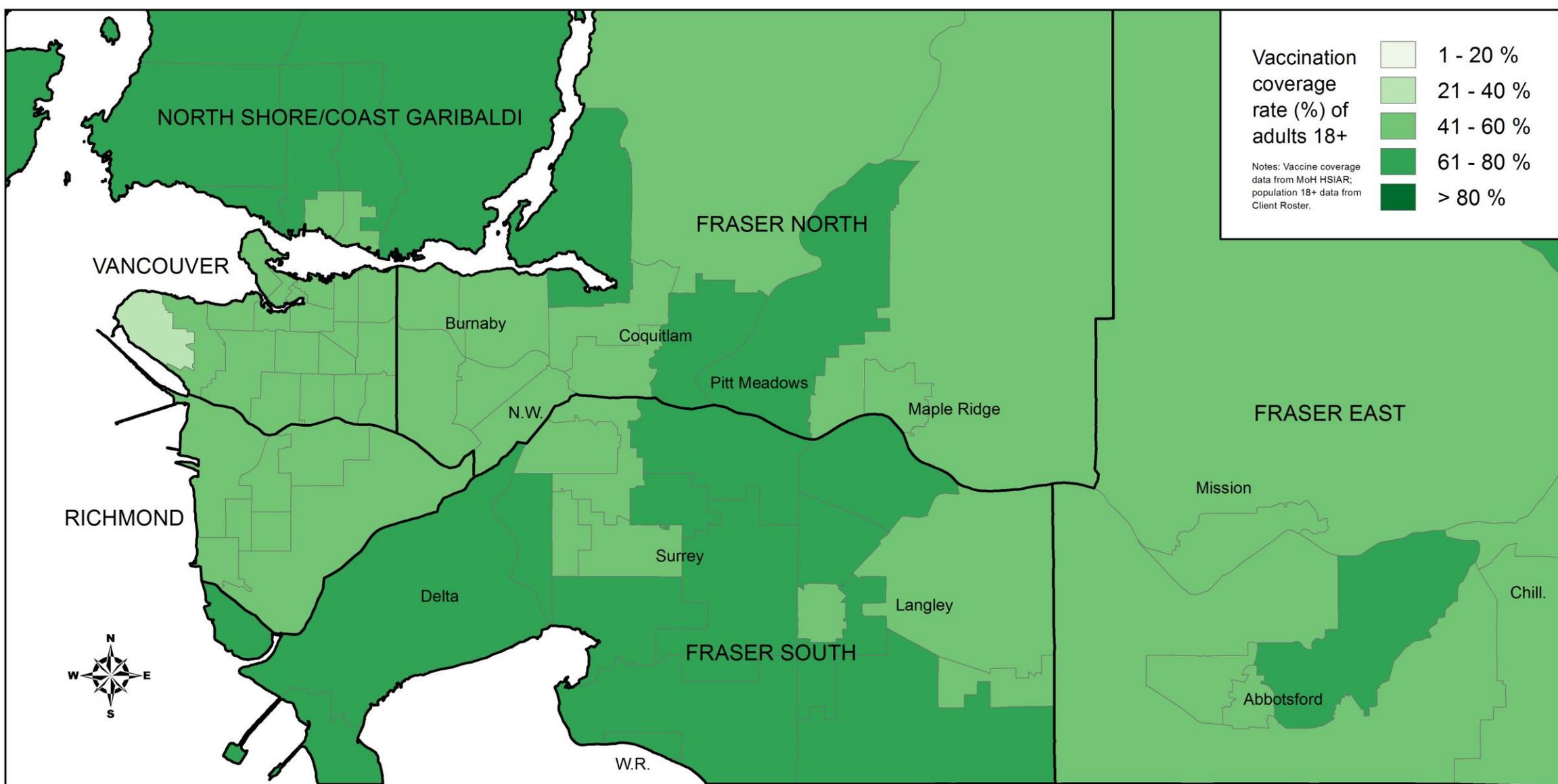
Vaccination coverage
rate (%) of adults 18+



Notes: Vaccine coverage data
from MoH HSIAR; population
18+ data from Client Roster.

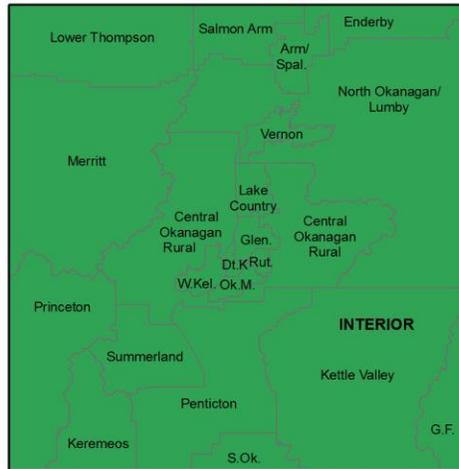


British Columbia
(Local Health Areas)



COVID-19 Vaccination Coverage by CHSA: Ages 18+ 1st Dose (up to May 17, 2021)

Okanagan Inset
(Community Health Service Areas)



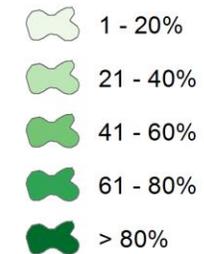
Greater Victoria Inset
(Community Health Service Areas)



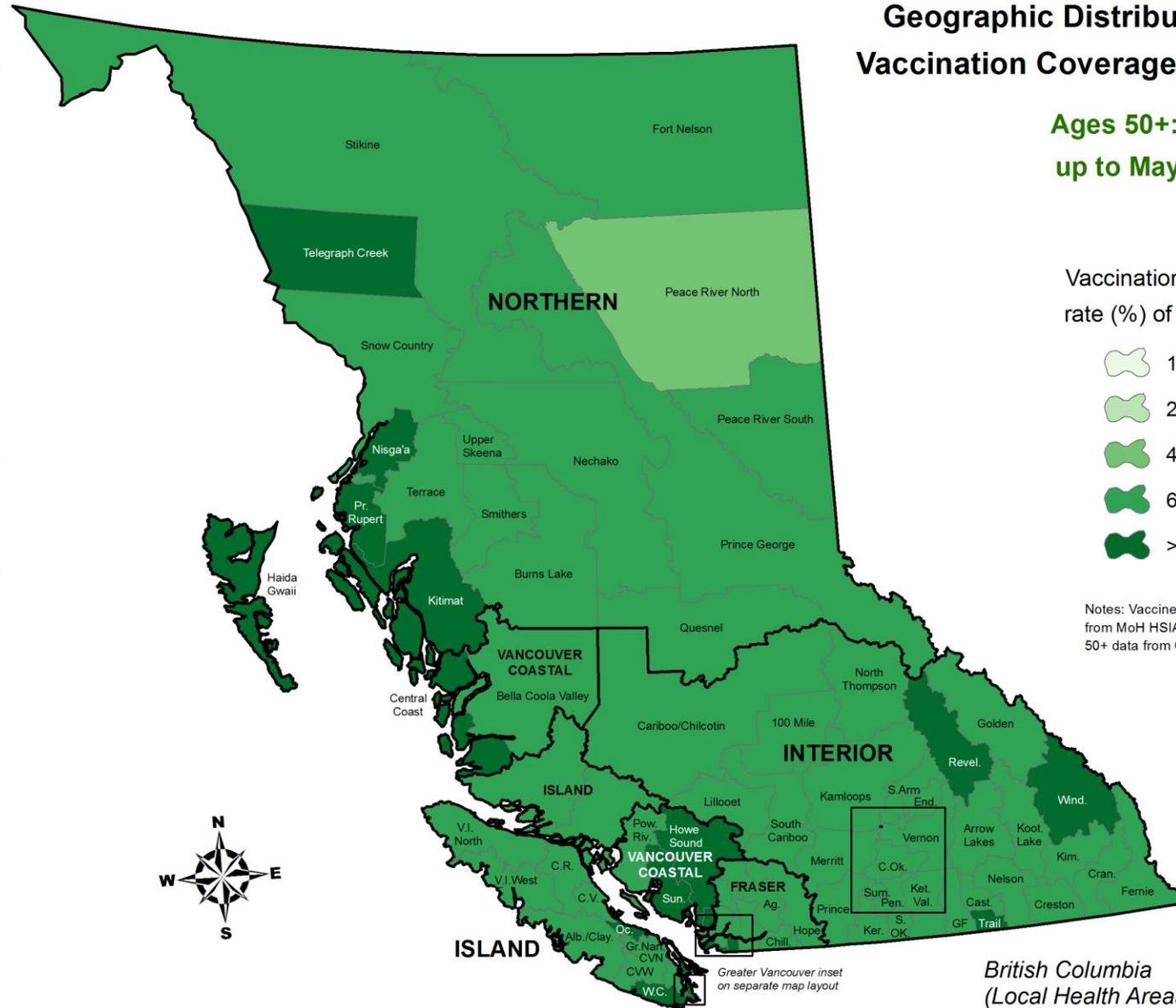
Geographic Distribution of COVID-19 Vaccination Coverage by LHA and CHSA

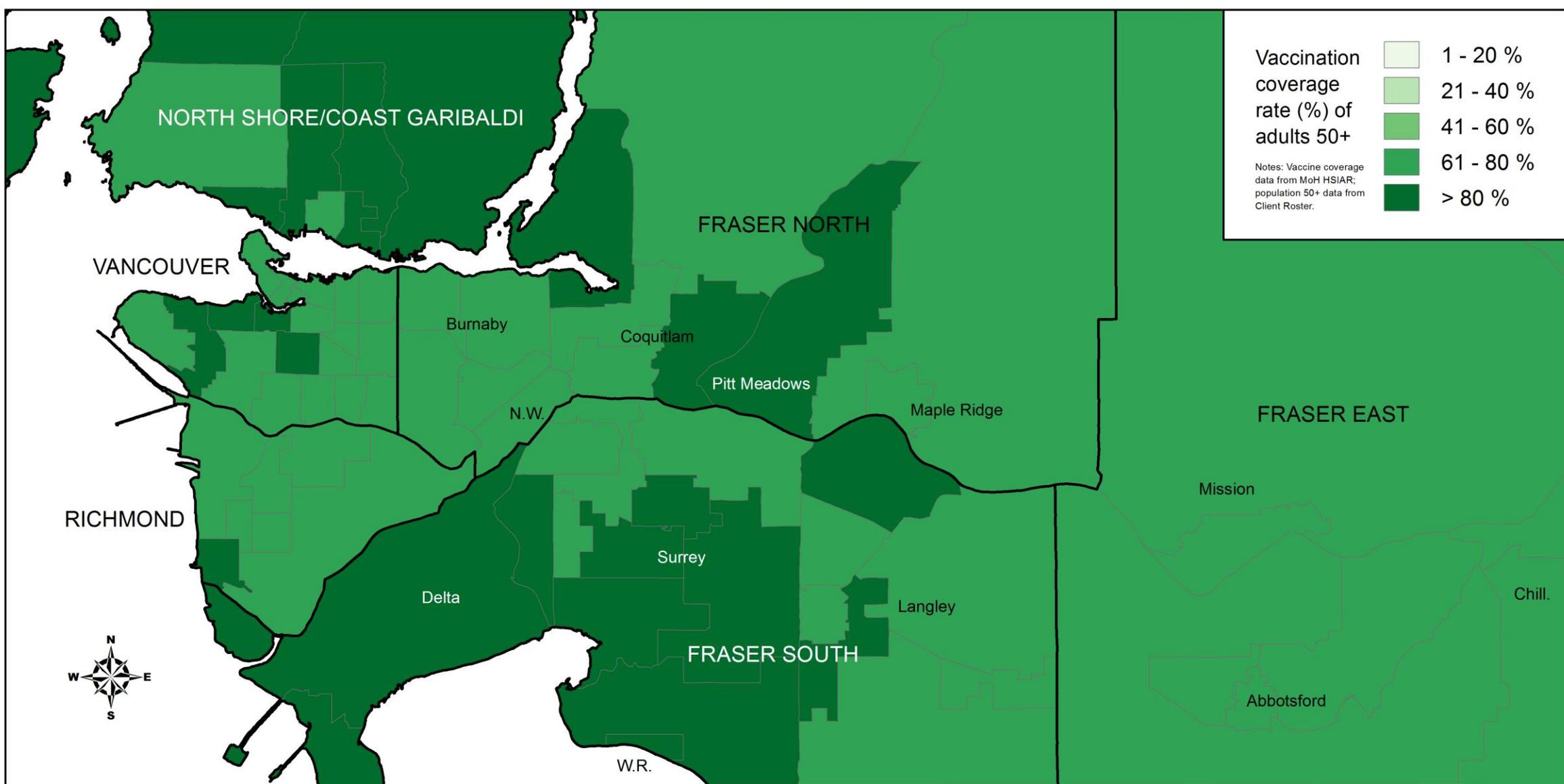
**Ages 50+: 1st Dose
up to May 17, 2021**

Vaccination coverage
rate (%) of adults 50+



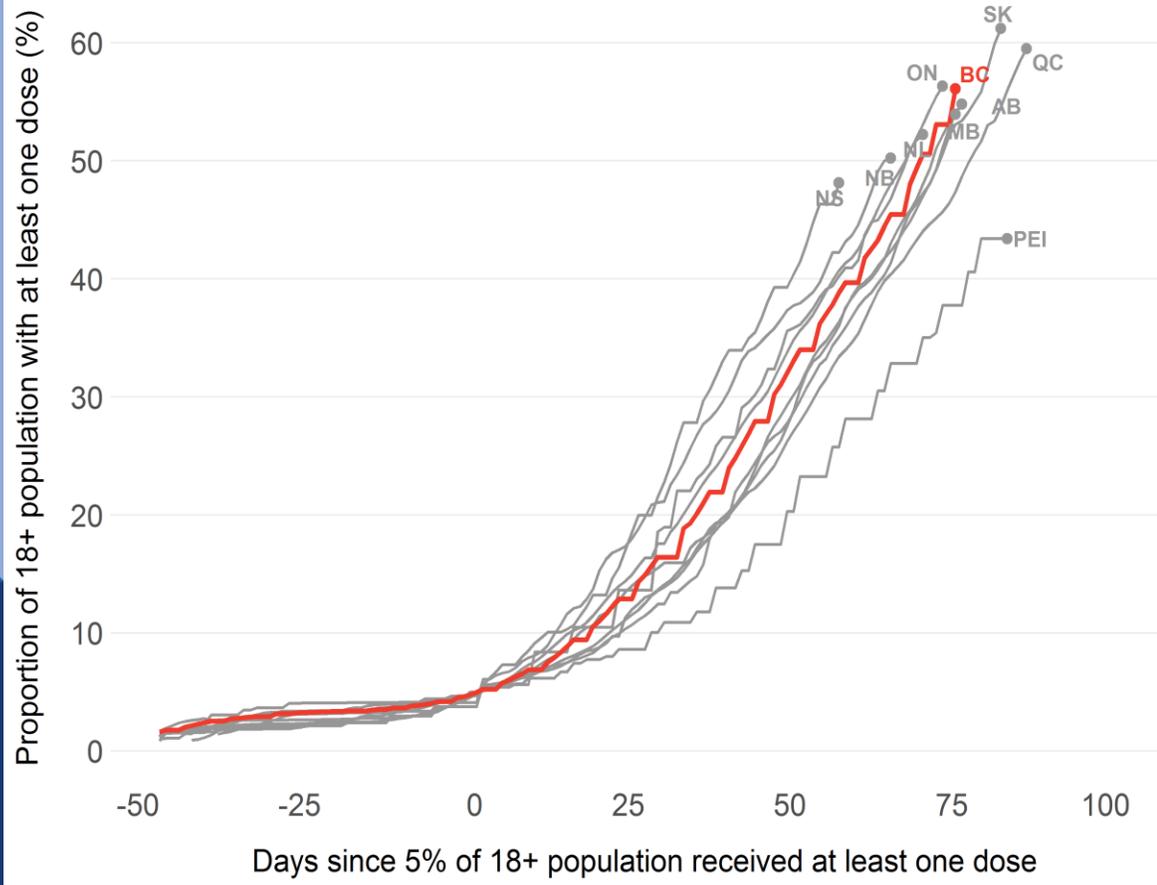
Notes: Vaccine coverage data from MoH HSIAR; population 50+ data from Client Roster.





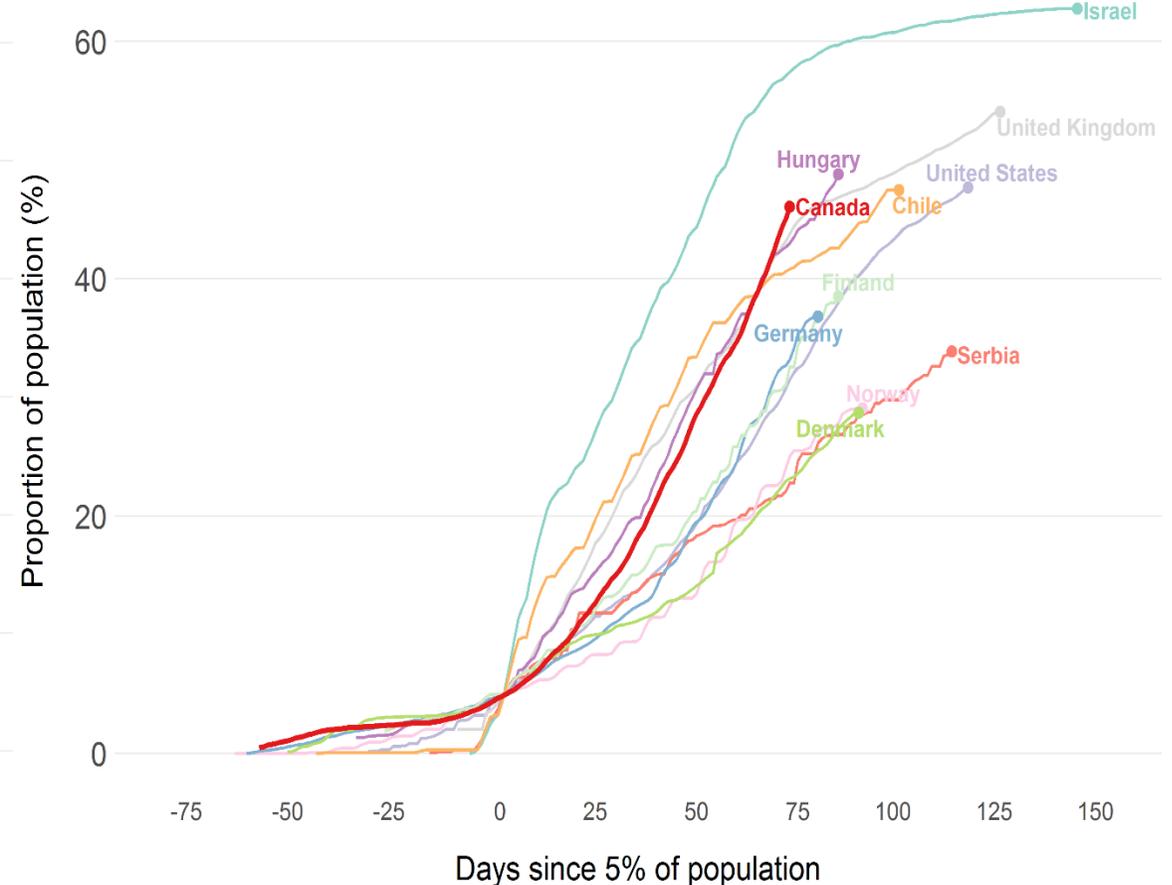
COVID-19 Vaccination Coverage by CHSA: Ages 50+ 1st Dose (up to May 17, 2021)

Nationally, BC's vaccination rate is very close to Canadian average; internationally, Canada is one of the countries with the highest proportion of the population with at least one dose.



Adults only

Data source: [COVID-19 Tracker Canada](#)
Visualization: BCCDC



Everyone
(adults only not available for international data)

Data source: [Our World in Data](#)
Visualization: BCCDC

Lab - Key Messages

1. **Percent positivity** among publicly funded tests is 8.5% and among all tests, it is 6.8%.
 - Testing rates decreased 12% this week (~56,000 total tests May 9 to 15)
2. There are regional differences in percent positivity, which range from 2.5% in VIHA to 9.8% in NH.
3. Incidence continues to decline in all age groups. Percent positivity is >10% in individuals aged 13 to 24 years.
4. The provincial weekly median **turnaround time** (time from specimen collection to lab result) is 13 hours, indicating good testing capacity; only 1 in 4 tests took ≥ 20 hours to result.
5. Among SARS-COV-2 screened samples, the proportion that were **presumptive VOCs** for the past epi week was ~85%.
6. **VOCs** have been detected in all regions of the province.
 - Among sequenced samples provincially based on information for epi week 18, P.1 and B.1.1.7 remain two dominant VOCs, accounting for roughly 41% and 57% of VOCs respectively.

Weekly Summary of ALL lab tests performed

2,657,118	total specimens tested
55,623	new this epi week
146,928	total positive specimens
3,806	new positive this epi week
14 hr	mean turnaround time (TAT)
13 [9-20]	Median [Q ₁ – Q ₃] TAT

↓ **12%** relative to last week

6.8% positivity
↓ **0.5%** absolute change from last week

↓ **10%** TAT relative to last week

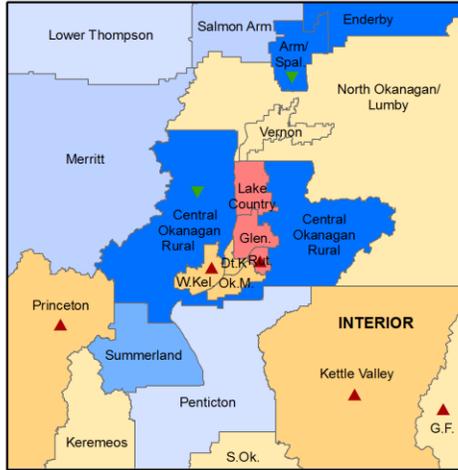
Weekly Summary of Lab tests paid Publicly

2,189,759	total specimens tested
44,709	new this epi week
145,584	total positive specimens
3,800	new positive this epi week

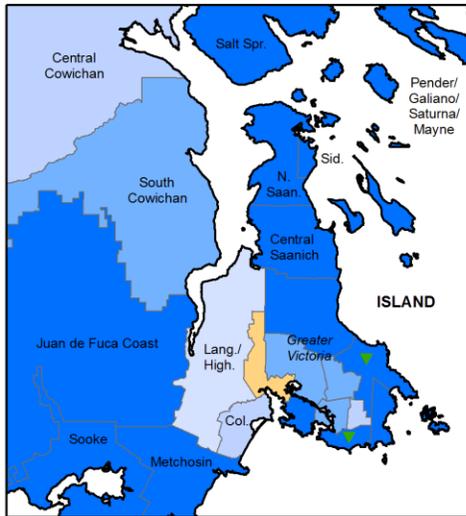
↓ **13%** relative to last week

8.5% positivity
↓ **0.5%** absolute change from last week²²

Okanagan Inset
(Community Health Service Areas)

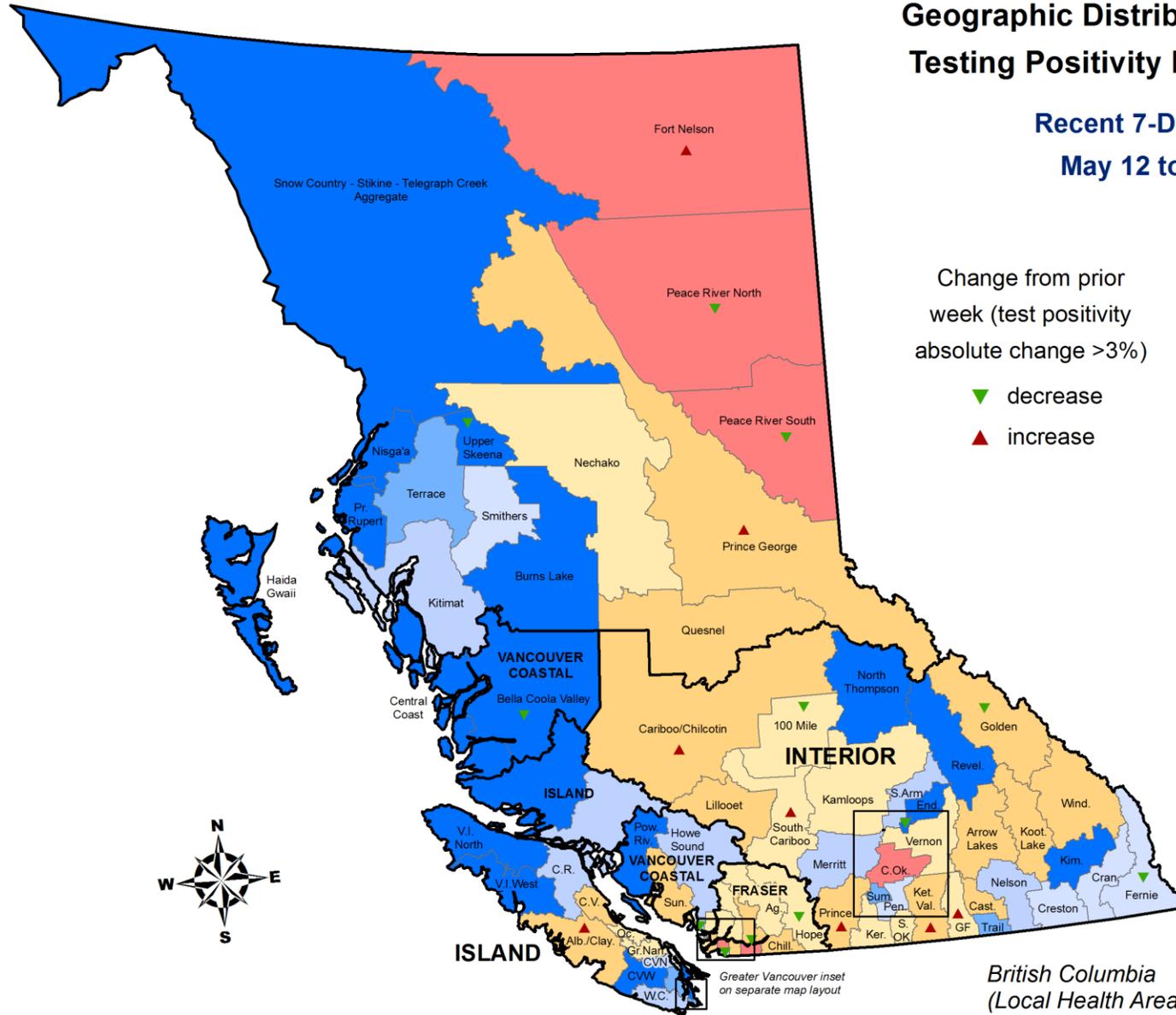


Greater Victoria Inset
(Community Health Service Areas)



Geographic Distribution of COVID-19 Testing Positivity by LHA and CHSA

Recent 7-Days Testing
May 12 to 18, 2021



Change from prior week (test positivity absolute change >3%)

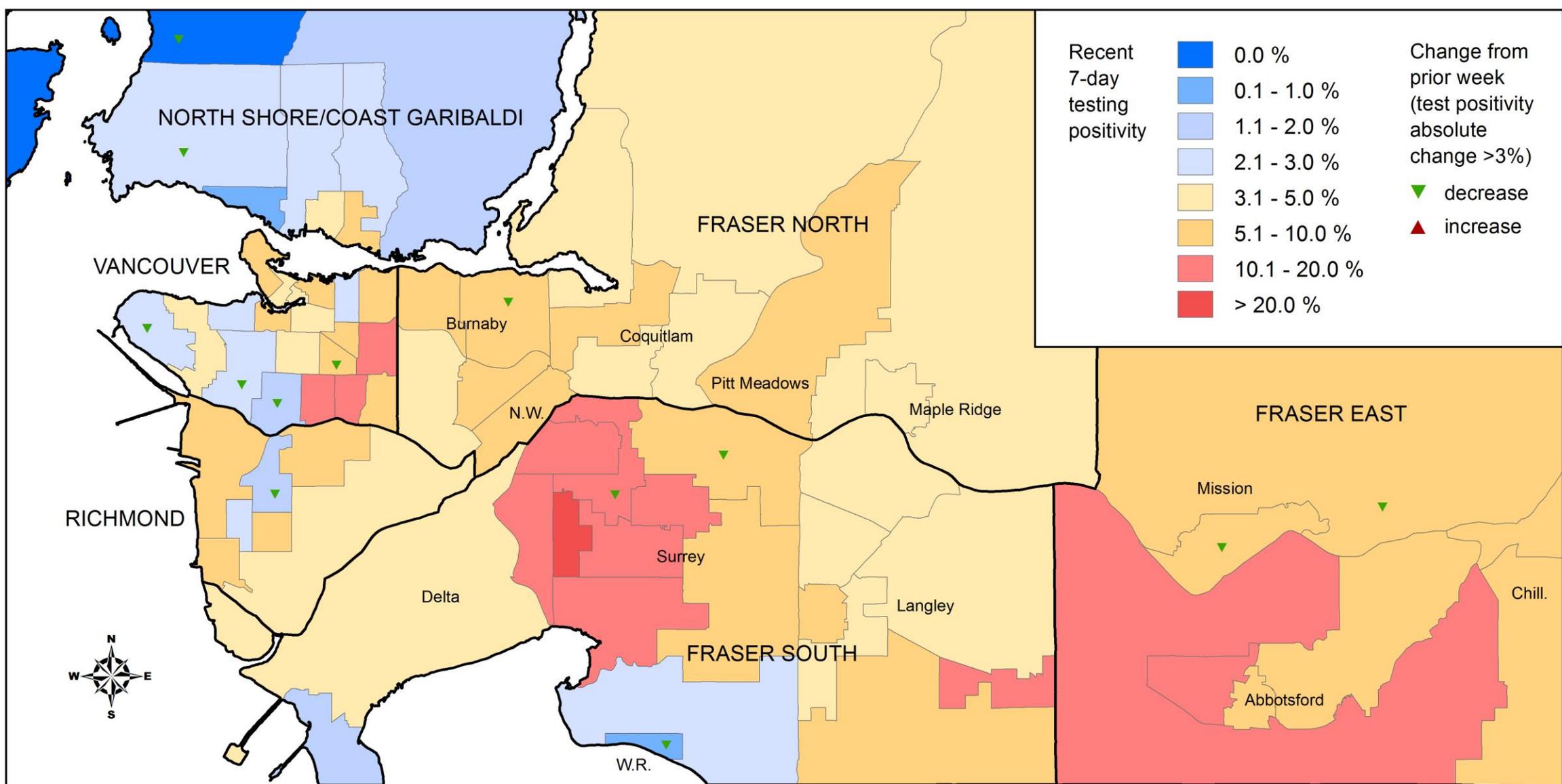
- ▼ decrease
- ▲ increase

Test positivity rate

- 0.0 %
- 0.1 - 1.0 %
- 1.1 - 2.0 %
- 2.1 - 3.0 %
- 3.1 - 5.0 %
- 5.1 - 10.0 %
- 10.1 - 20.0 %
- > 20.0 %

Data source: BCCDC Public Health Laboratory PLOVER system (all tests performed). Data are by testing result date, and location of client's residence or if missing, physician's address.

British Columbia
(Local Health Areas)

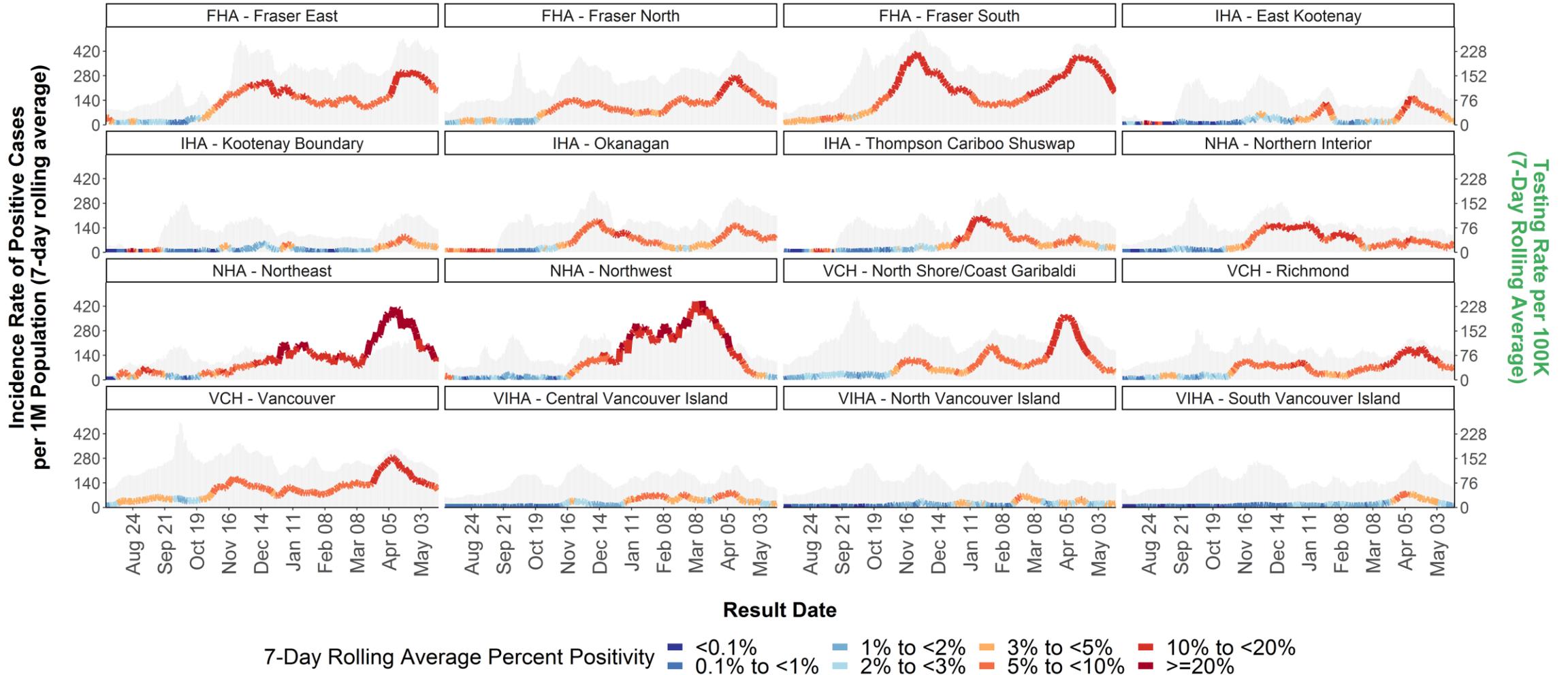


COVID-19 Recent 7-Day Test Positivity by CHSA (May 12 to 18, 2021)

Includes all tests

Incidence remains elevated, but is stable or decreasing across regions; positivity is >10% in health service delivery areas in FH and NH

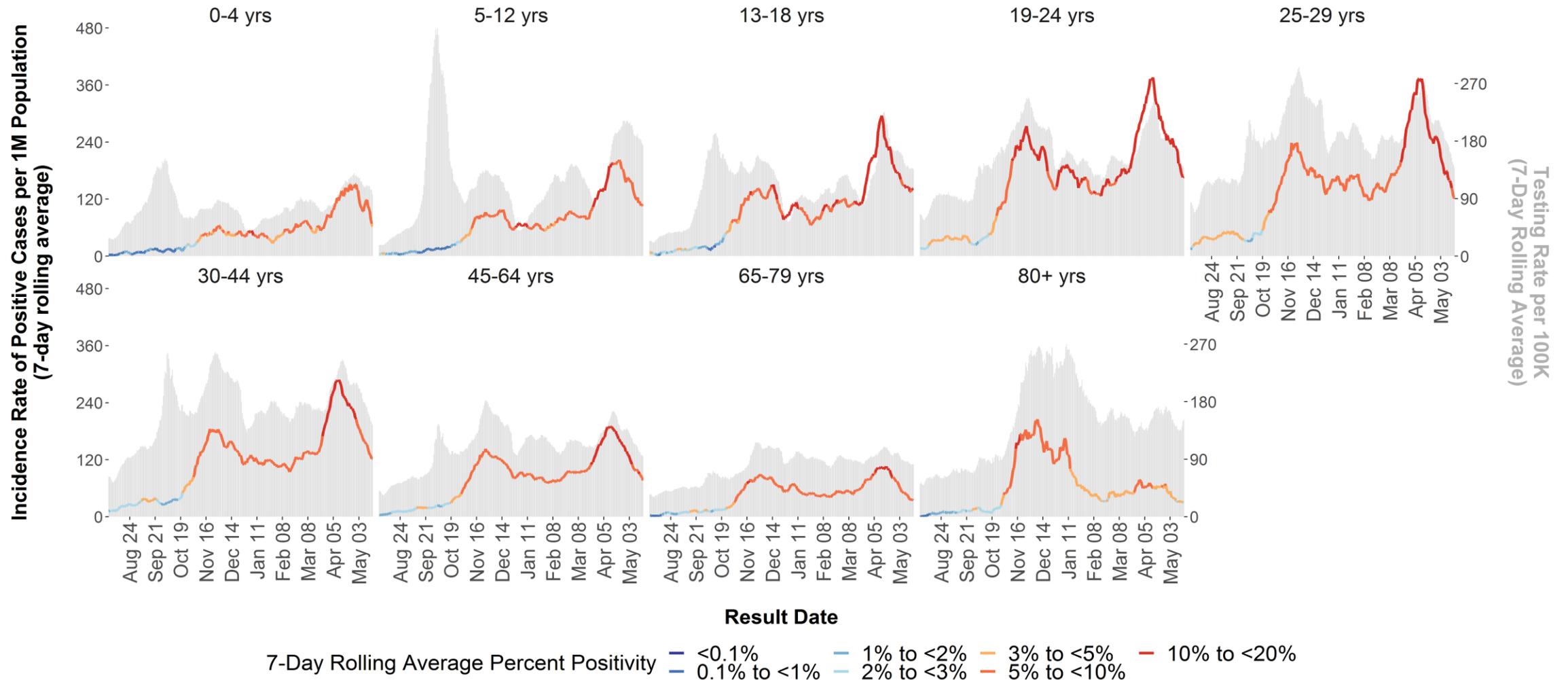
Case incidence rate, test percent positivity, and testing rate by HSDA (Public Payers Only).
Aug 1 2020 - May 18, 2021.



Data source: PLOVER 18-May-2021

Incidence continues to decline in all age groups. Percent positivity is >10% in individuals aged 13 to 24 years.

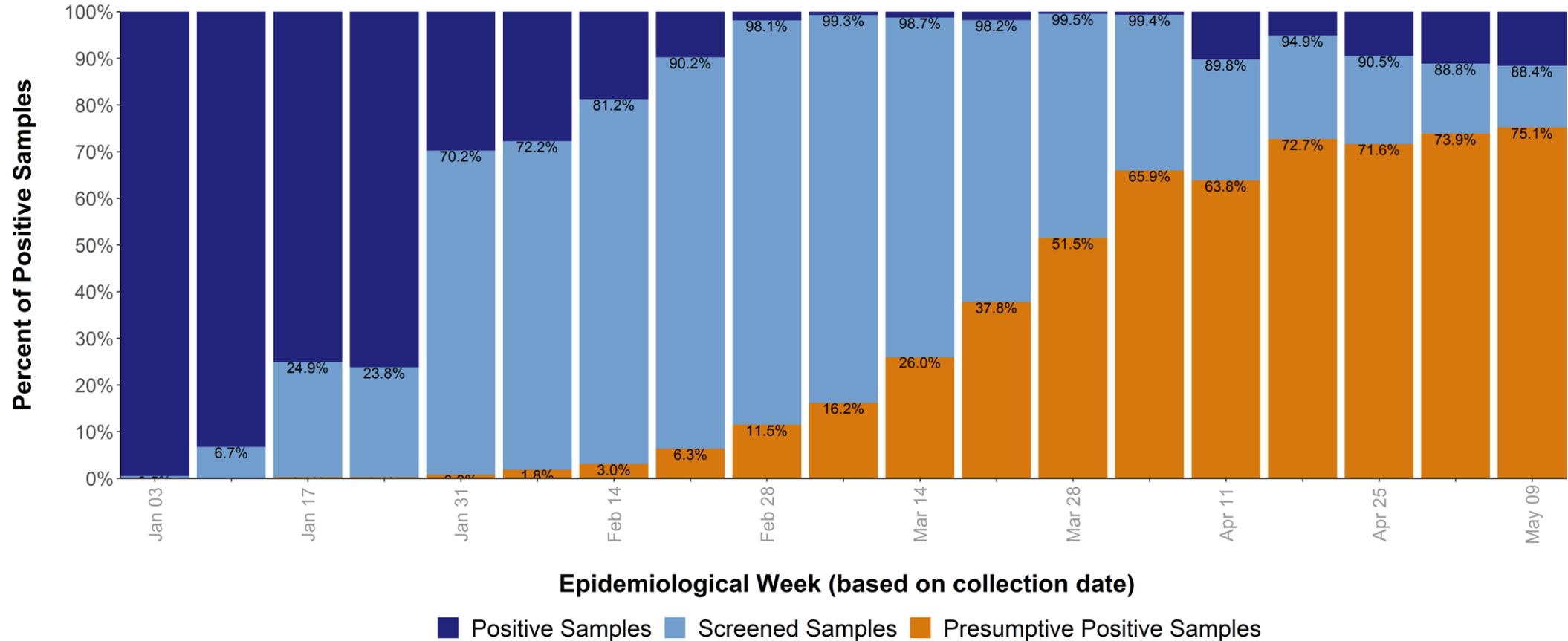
Case incidence rate, test percent positivity, and testing rate by age (Public Payers Only). Aug 1 2020 - May 18, 2021.



Data source: PLOVER 18-May-2021

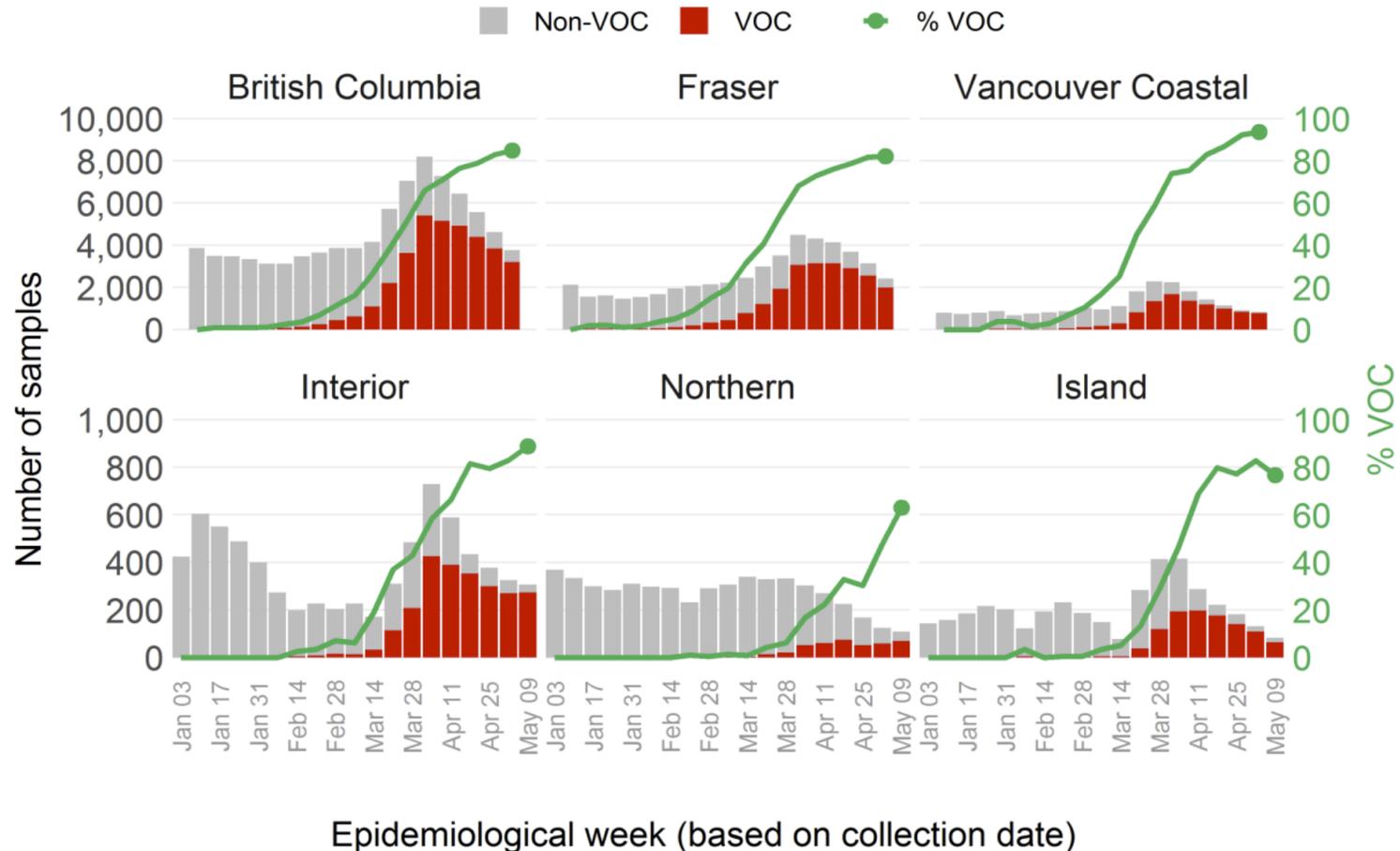
The proportion of screened samples remains high >85%

Presumptive VoC, Screening and overall testing proportions, Jan 3, 2021 - May 15, 2021



Data source: PLOVER 19-May-2021

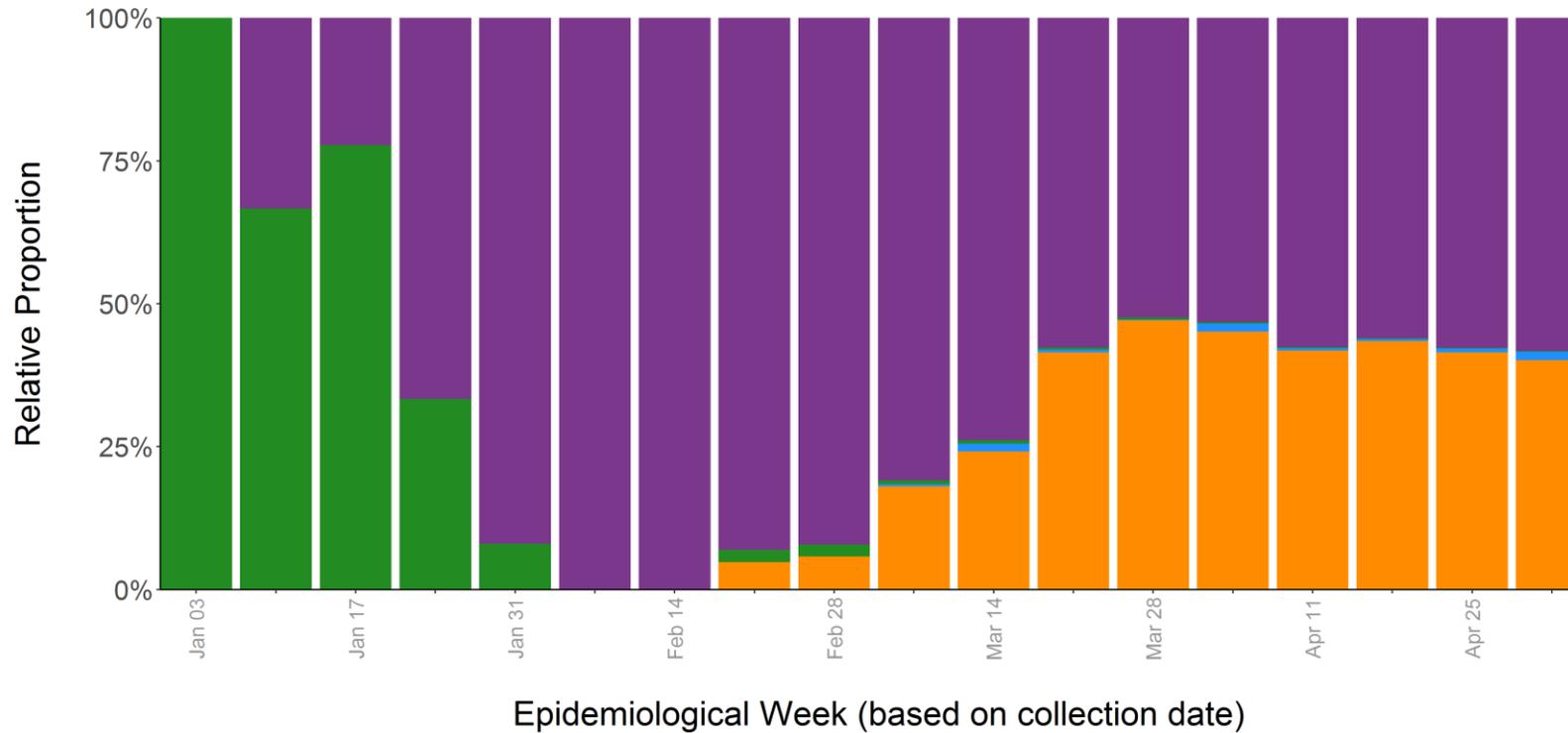
Of all COVID-19 positive test samples in epi week 19 (May 09 - May 15) in BC, ~85% were presumptive VOCs. Note that in Northern Health the proportion was lower, ~63%.



Data from the PLOVER system at the BCCDC Public Health Lab.

Among sequenced samples provincially based on information for epi week 18, P.1 (~41%) and B.1.1.7 (~57%) remain two dominant VOCs

Relative Proportion of VoCs in BC Detected through Quasi-Random Sample Selection by Epiweek of Collection Date

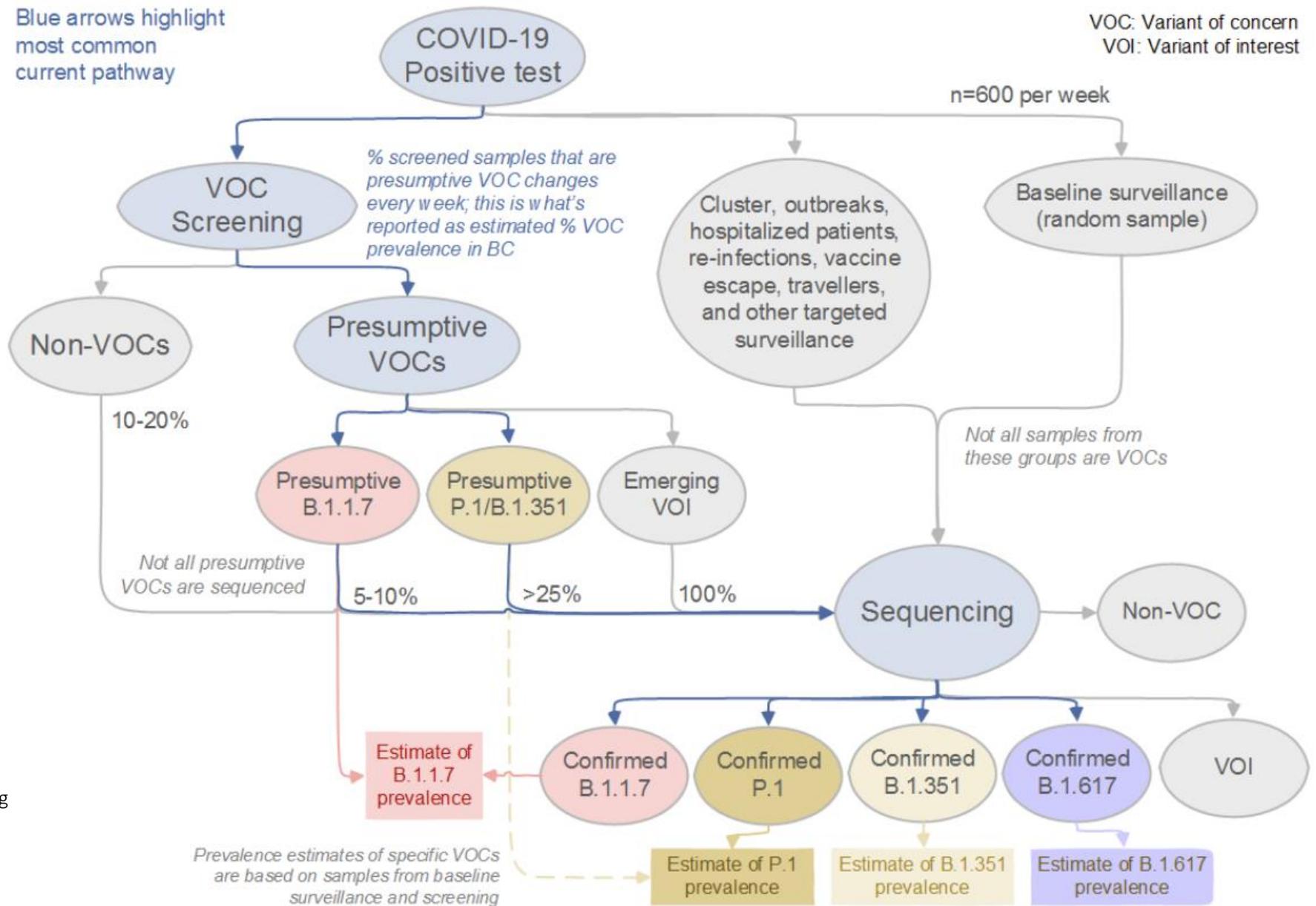


■ B.1.1.7
 ■ B.1.351
 ■ B.1.617
 ■ P.1

* the B.1.1.7 VoC lineage is captured either by qPCR SNP screen or WGS for randomly selected samples; all other circulating VoCs are WGS confirmed and exclude samples sequenced for cluster and/outbreak investigation. In week 12, we used a qPCR SNP that is comprised of a dual N501Y and E484K assay

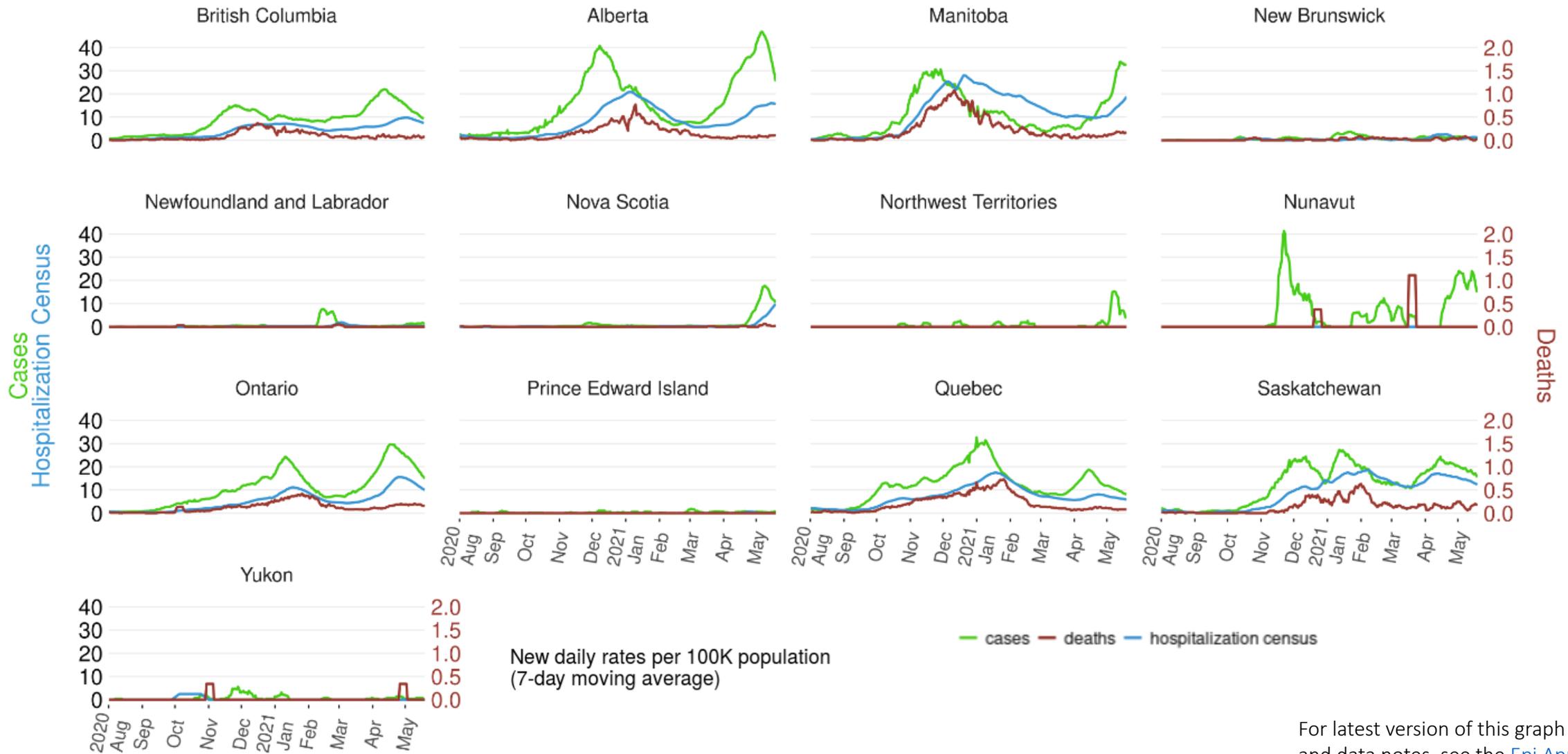
Weeks 13 onward include specimens from qPCR SNP screening that resulted as presumptive positive for B.1.1.7 and P.1.

Overview of the screening and sequencing process applied to positive COVID-19 tests in BC, May 2021



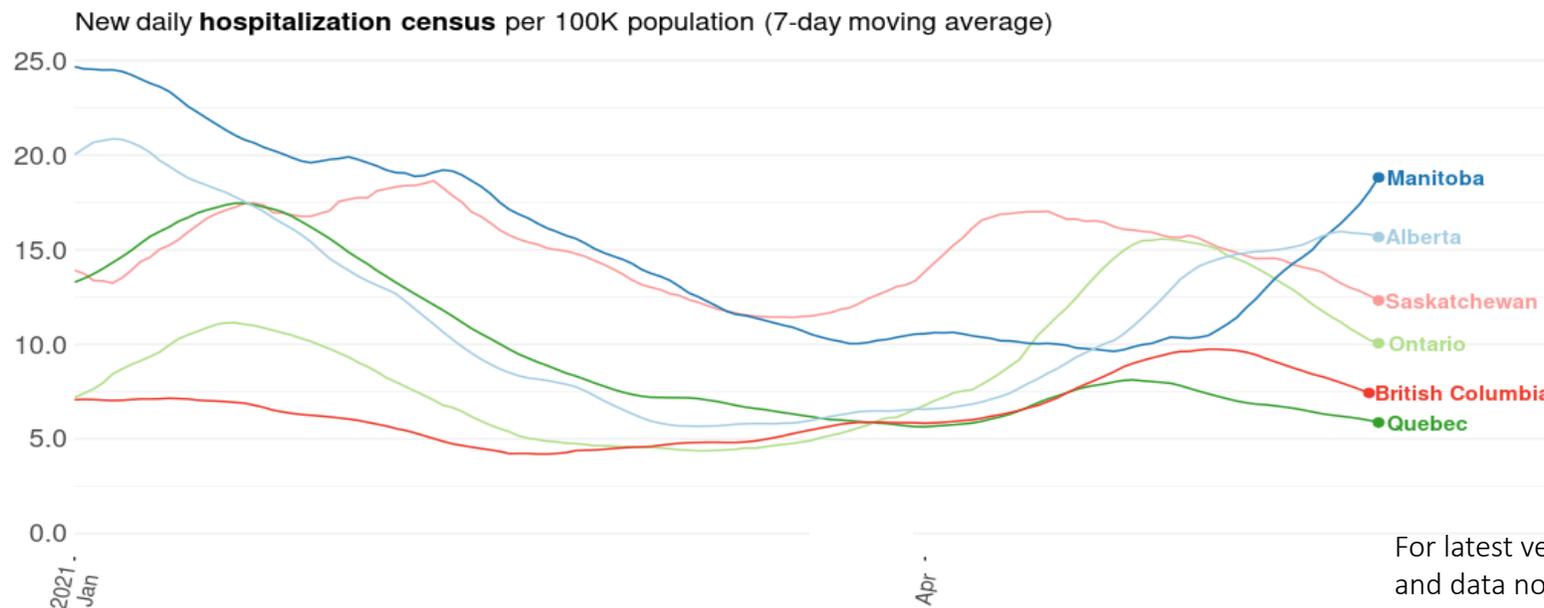
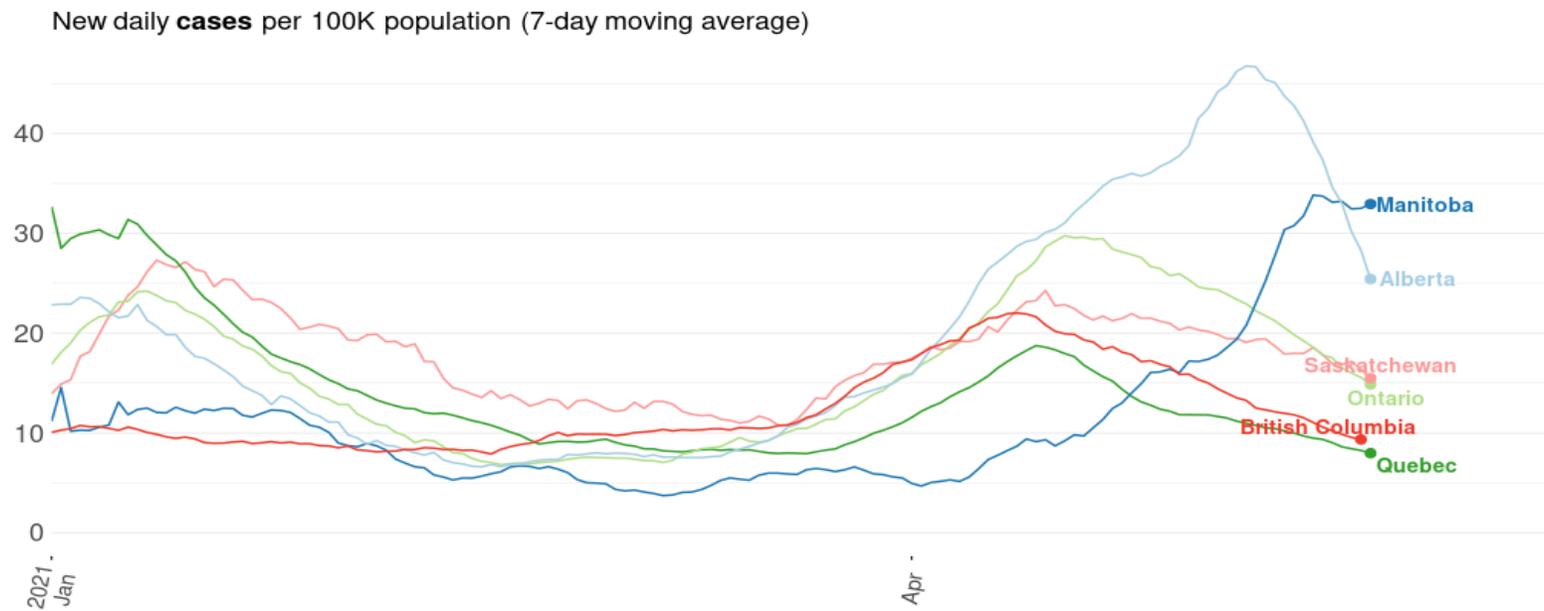
Please note the differences in turnaround time for screening and sequencing: screening results usually come back within 1-2 days, while sequencing results come back after approximately one week, but it could also take longer if there are lab backlogs.

Across Canada, cases are stabilizing in MB and NU and declining or low everywhere else. Hospital census increasing in AB, MB, and NS and declining or stable everywhere else. Deaths rates are stable.



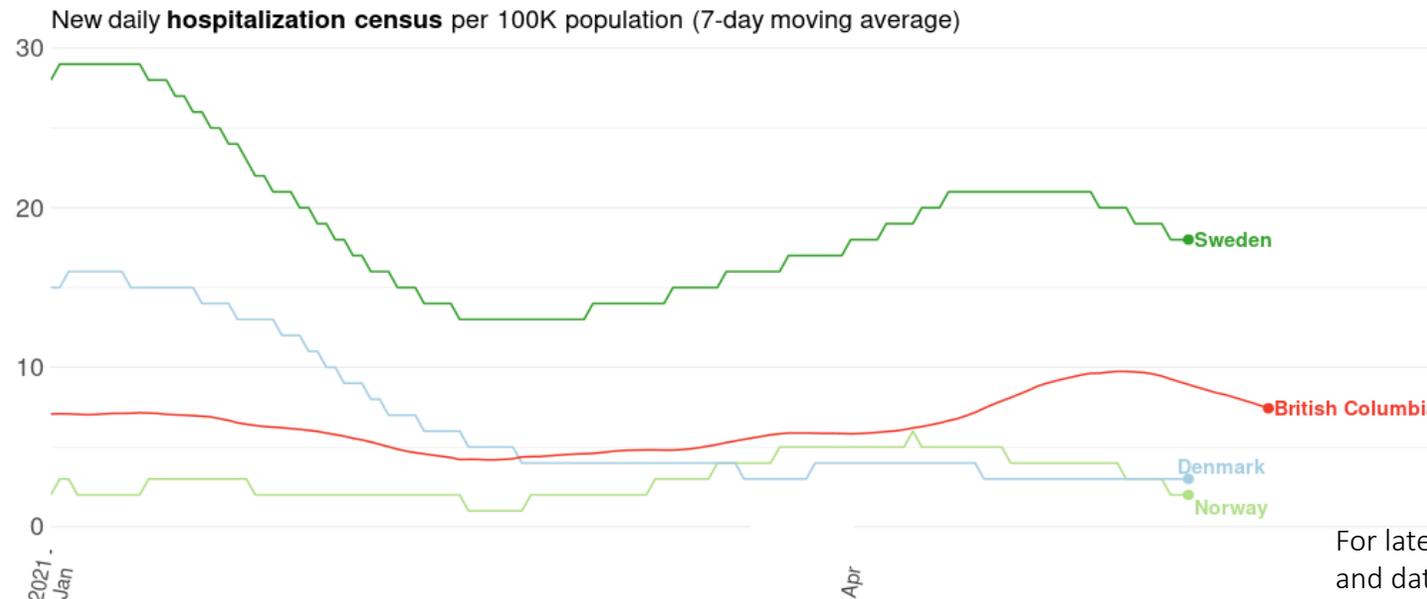
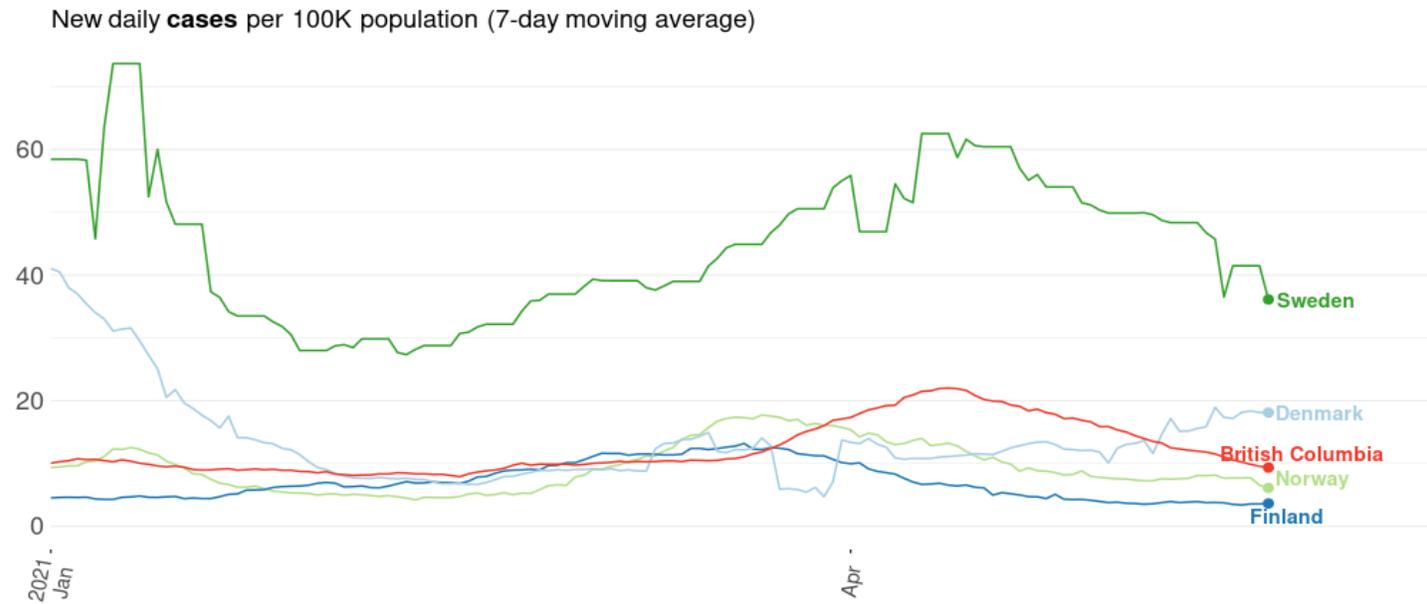
For latest version of this graph and data notes, see the [Epi App](#)

Compared with other large provinces, BC currently has the 2nd lowest case rate and hospitalization census



For latest version of this graph and data notes, see the [Epi App](#)

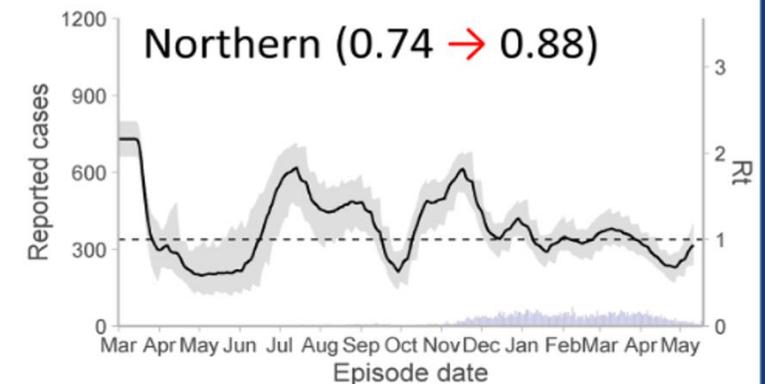
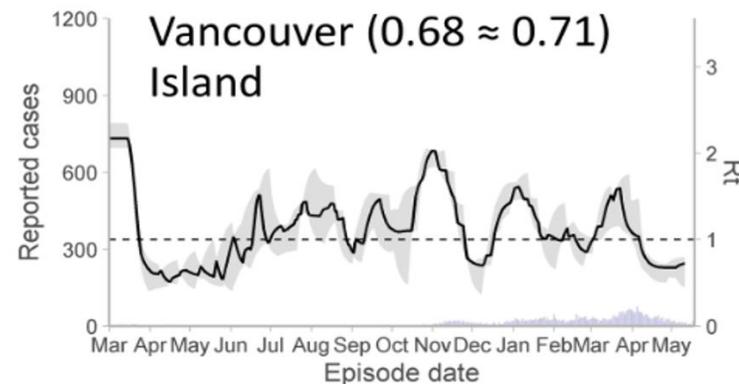
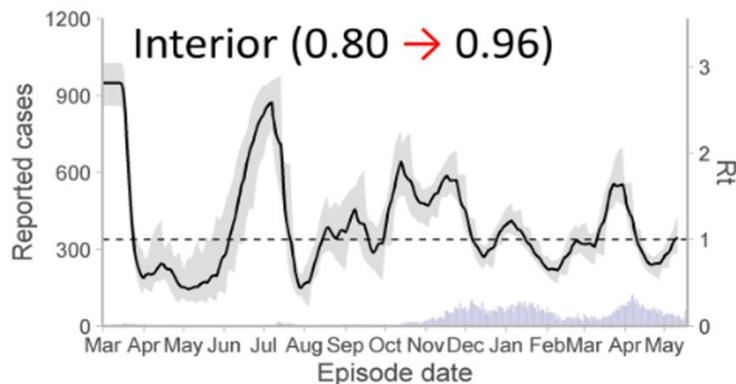
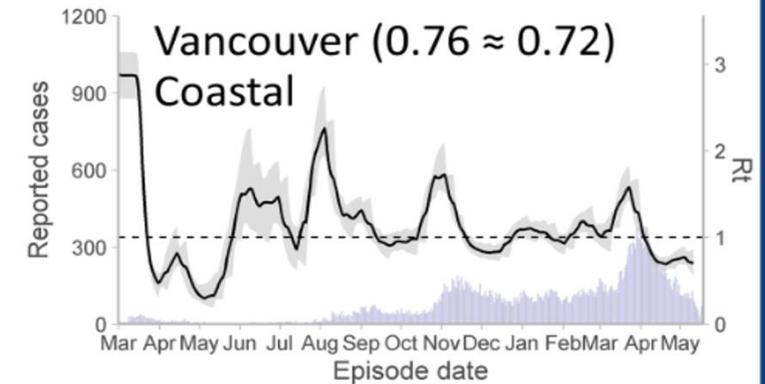
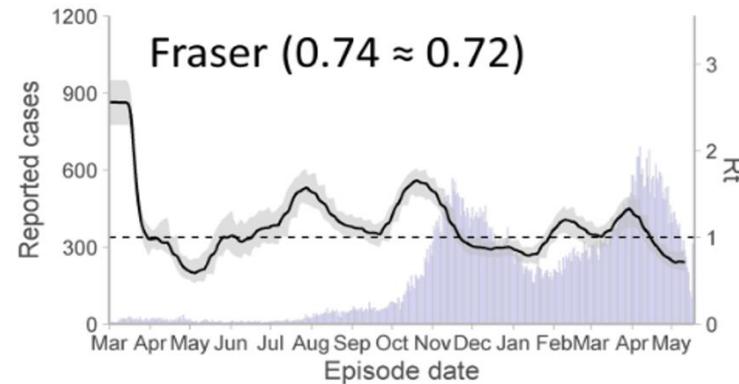
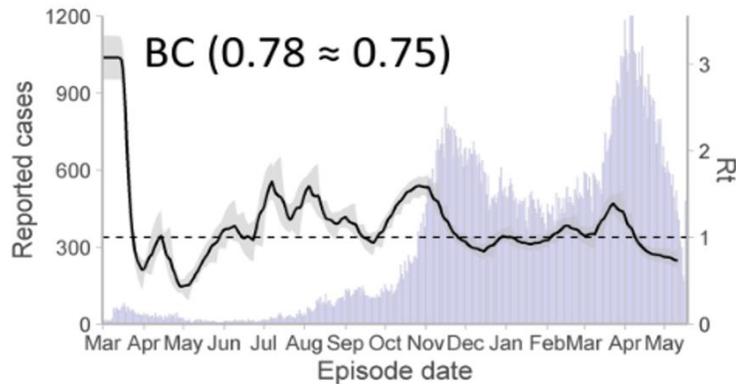
BC's case rate and hospitalization census is similar to what is observed in the Nordic countries



For latest version of this graph and data notes, see the [Epi App](#)

Dynamic compartmental modeling: recent trends

Our model shows that R_t remains at or below 1 in all regions in BC.



Solid black line: median R_t , modeled using all reported cases up to May 18, 2021; Grey band: 5%-95% credible interval; Purple bars: all reported cases. Due to lag from symptom onset to reporting, most recent case counts and R_t are not shown. Recent trend shown comparing 7 day average R_t from (last week \rightarrow this week). Data source: BCCDC HA linelist.

Model notes and assumptions

- **R_t modelling:** a dynamic compartmental model was fit to COVID-19 data for BC using a Bayesian framework (Anderson et al. 2020. PLoS Comp. Biol. 16(12): e1008274). Results are presented as provincial and regional time-varying estimates of average daily transmission rate (R_t).
 - the model does not consider importation of cases, hence all transmission is assumed to arise from local cases
 - the model does not distinguish cases arising from variants of concern (VoCs) versus 'wild-type' COVID-19, hence model estimates represent average rates of transmission

Additional Resources

- ***NEW*** BCCDC COVID-19 Surveillance Dashboard showing maps, vertical plots, and trends by LHA can be found [here](#)
- More BC COVID-19 data, including the latest Situation Report, maps, and BC COVID-19 public dashboard, can be found [here](#)
- For more information on variants of concern and whole genome sequencing, the latest report is posted [here](#)
- To put BC provincial, Health Authority, and HSDA trajectories into national and international context, see [BCCDC COVID-19 Epidemiology app](#)
- [COVID SPEAK 2020 Round 1 Survey results](#)
- Slides for previous public and modelling briefings by Dr. Bonnie Henry can be found [here](#)
- PHAC's COVID-19 Epidemiology update can be found [here](#)