

BCCDC Data Summary

03 June 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.

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Overall Summary

- **Case rates** are declining or stable in all HAs, and provincially **cases are at the lowest count** since October 2020; **test positivity** is declining, ~6% provincially for publicly funded tests and 5% for all tests.
- **New hospitalizations** are elevated, and decline has slowed over the past week; **hospital/critical care census** is declining or stable across BC; **new deaths** are stable and low.
 - Majority of hospitalizations continue to be among individuals aged >40 years
- The share of **VOCs** among all positive cases in BC is ~85% in epi week 21 (May 23-29). Among screened or sequenced samples provincially based on information for epi week 20, P.1 (~42%) and B.1.1.7 (~54%) remain two dominant VOCs.
 - B.1.617 currently represents ~4% of VOCs
- BC, as of June 2: ~70% of those 12+ have received at least 1 dose.

May 27 to Jun 02: BC COVID-19 Profile



144,667 total cases
1,781 new this week



1,707 total deaths
24 new this week

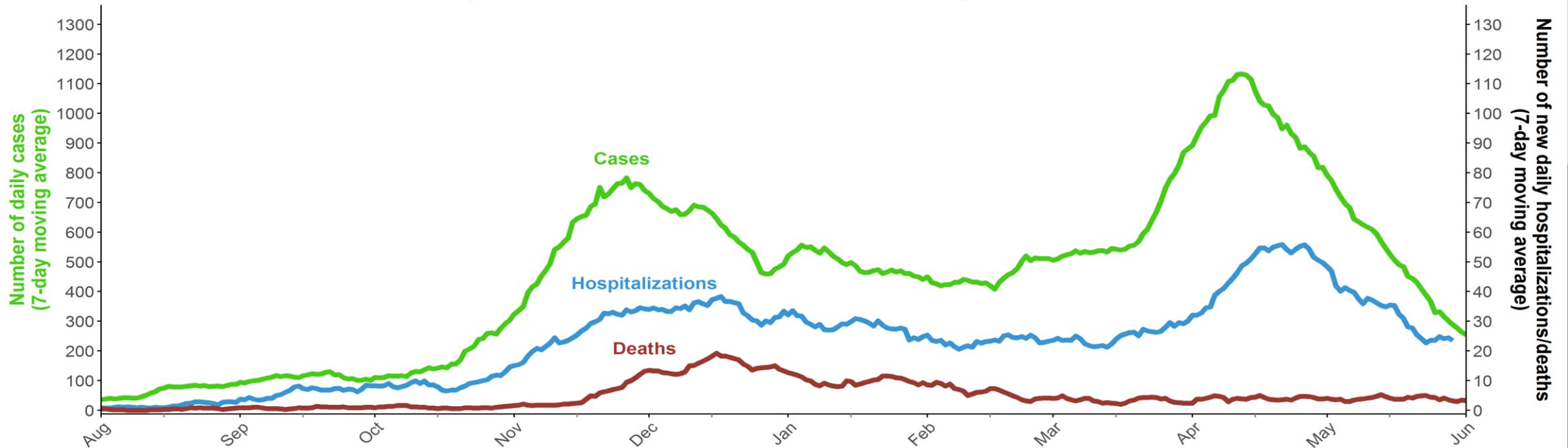


7,726 ever hospitalized
143 new this week



140,238 removed from isolation
2,721 new this week

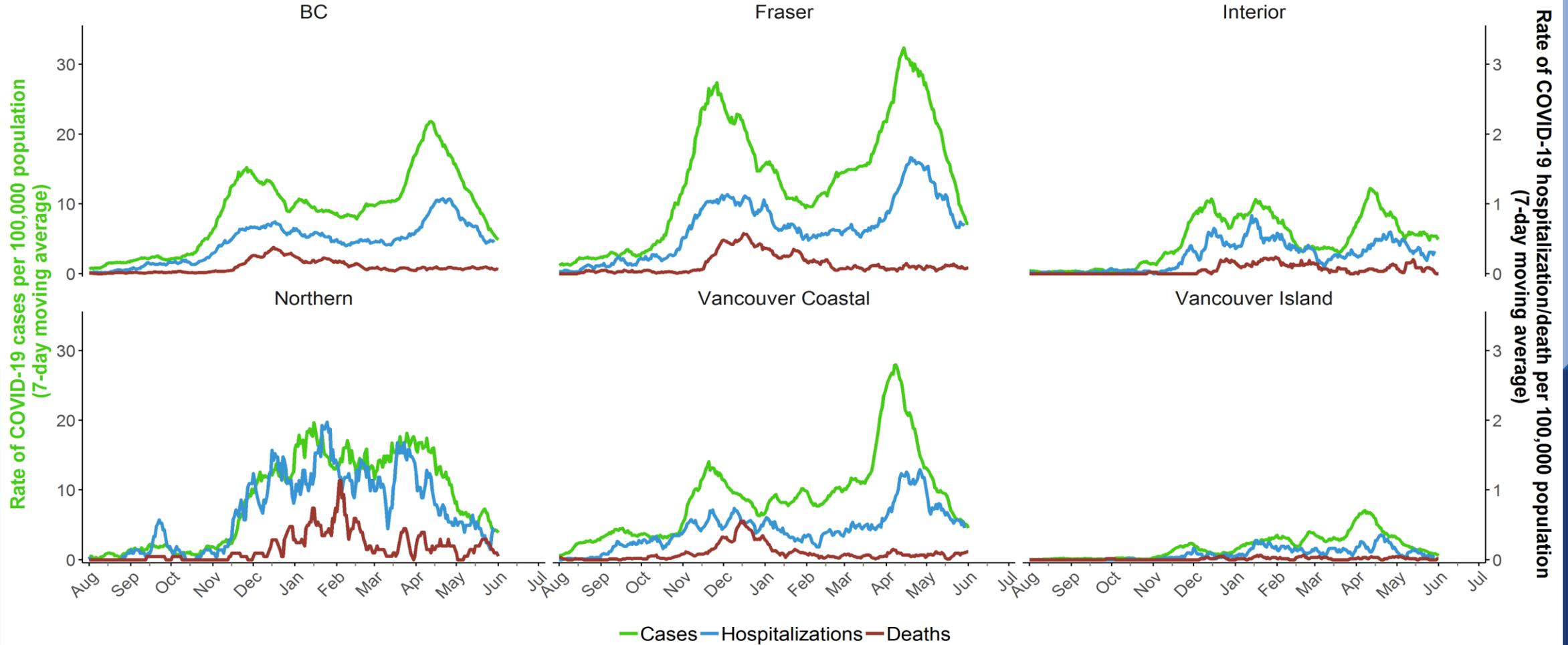
New daily COVID-19 cases, hospitalizations and deaths, Aug 01 2020 - Jun 01 2021



* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jun-02-2021

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

Rate of COVID-19 case, hospitalization and death, Aug 01 2020 - Jun 01 2021



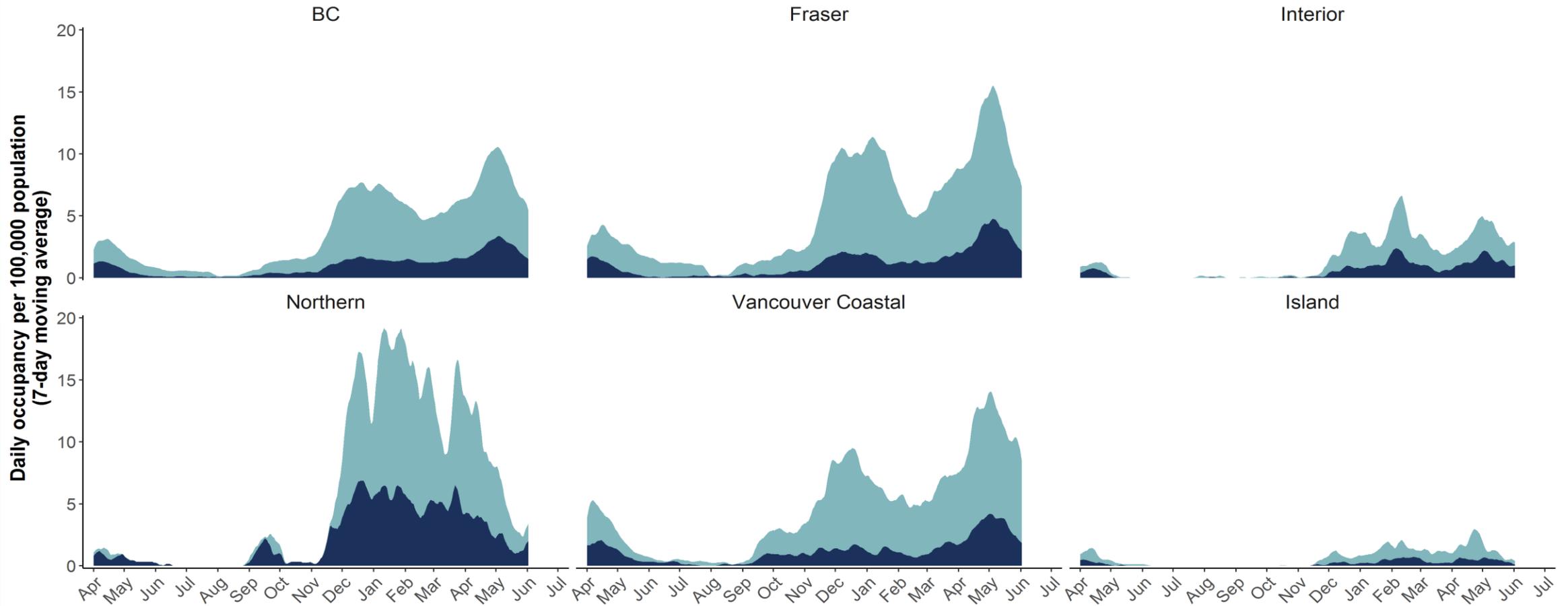
* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jun-02-2021

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 declining or stable in all regions.

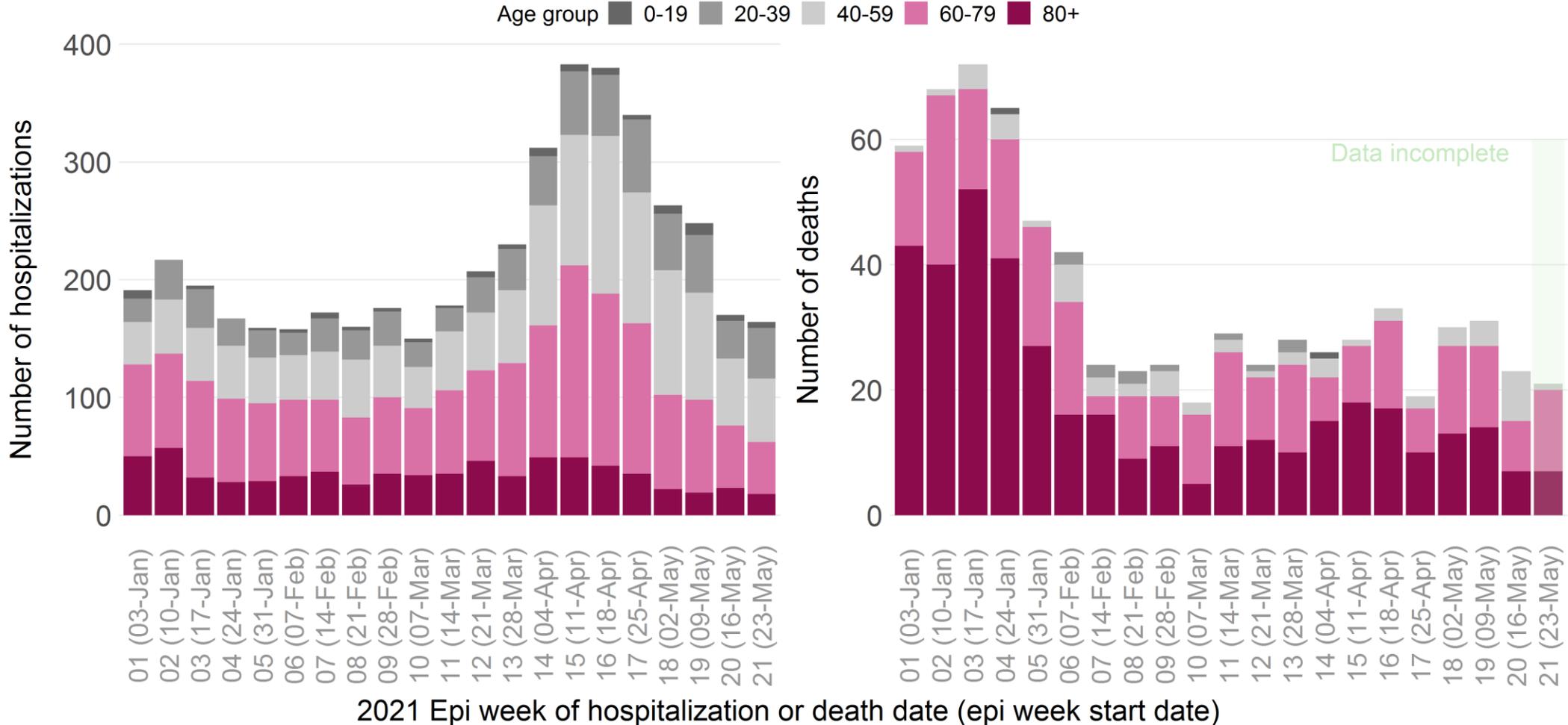
Current COVID-19 hospitalizations, Apr 01 2020 - Jun 01 2021

■ In the hospital but not in critical care ■ In critical care

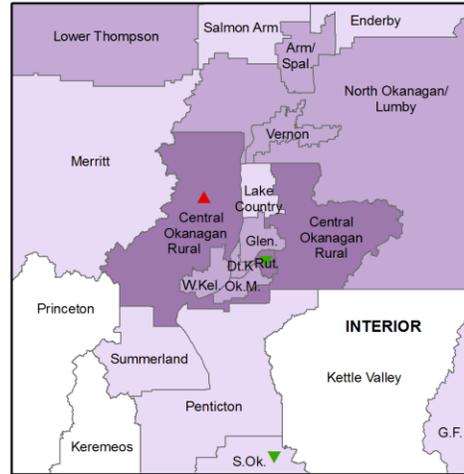


* Data are by census date for hospitalizations
Data source: PHSA Provincial COVID19 Monitoring Solution (PCMS) Jun-02-2021

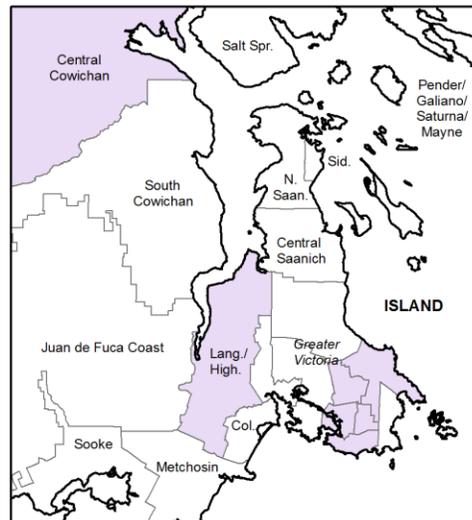
Number of hospitalizations is decreasing. The number of hospitalizations among individuals <40 years is low. Deaths are decreasing and mostly among individuals ≥ 60 years.



Okanagan Inset
(Community Health Service Areas)

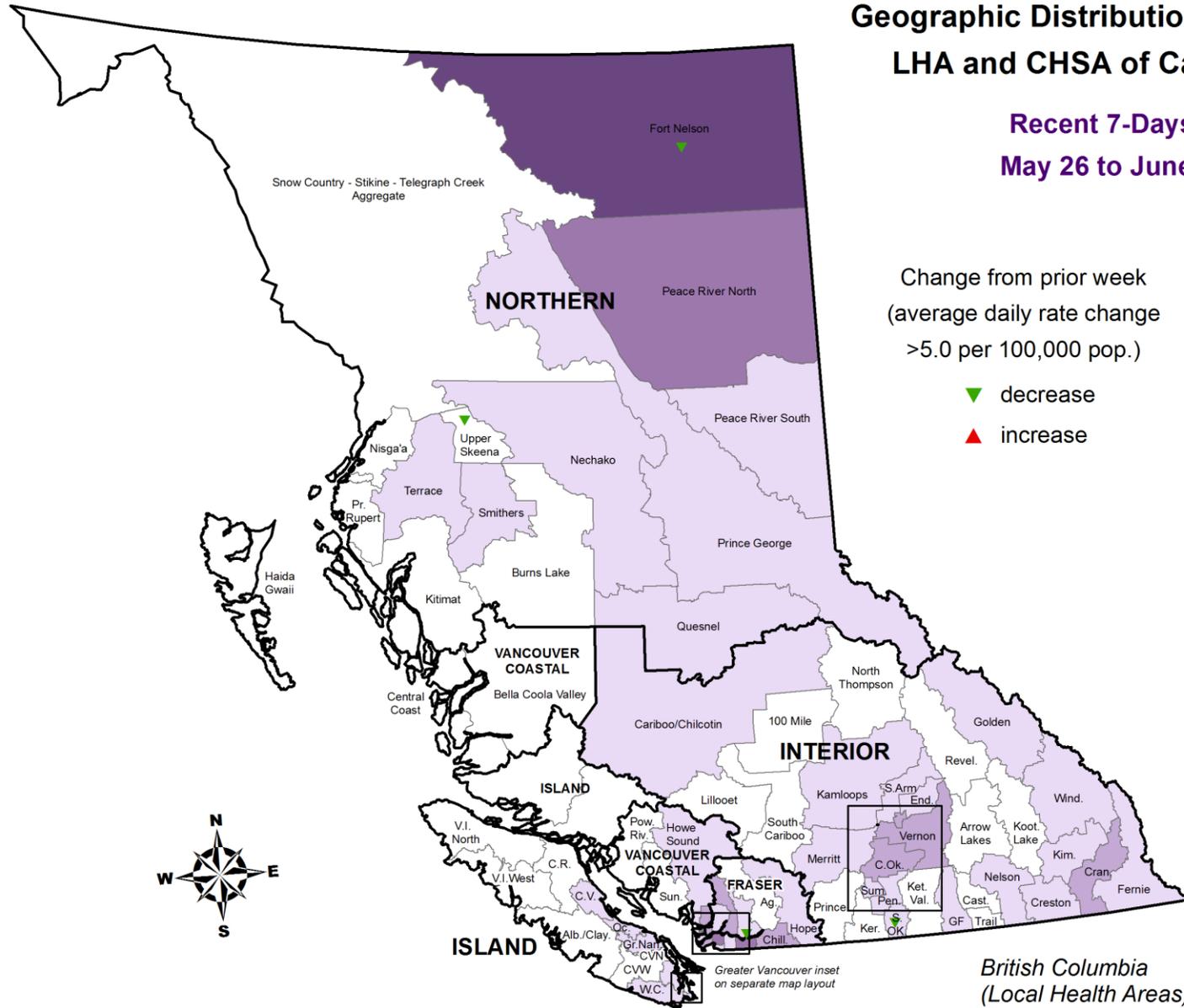


Greater Victoria Inset
(Community Health Service Areas)



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

Recent 7-Days Cases
May 26 to June 1, 2021



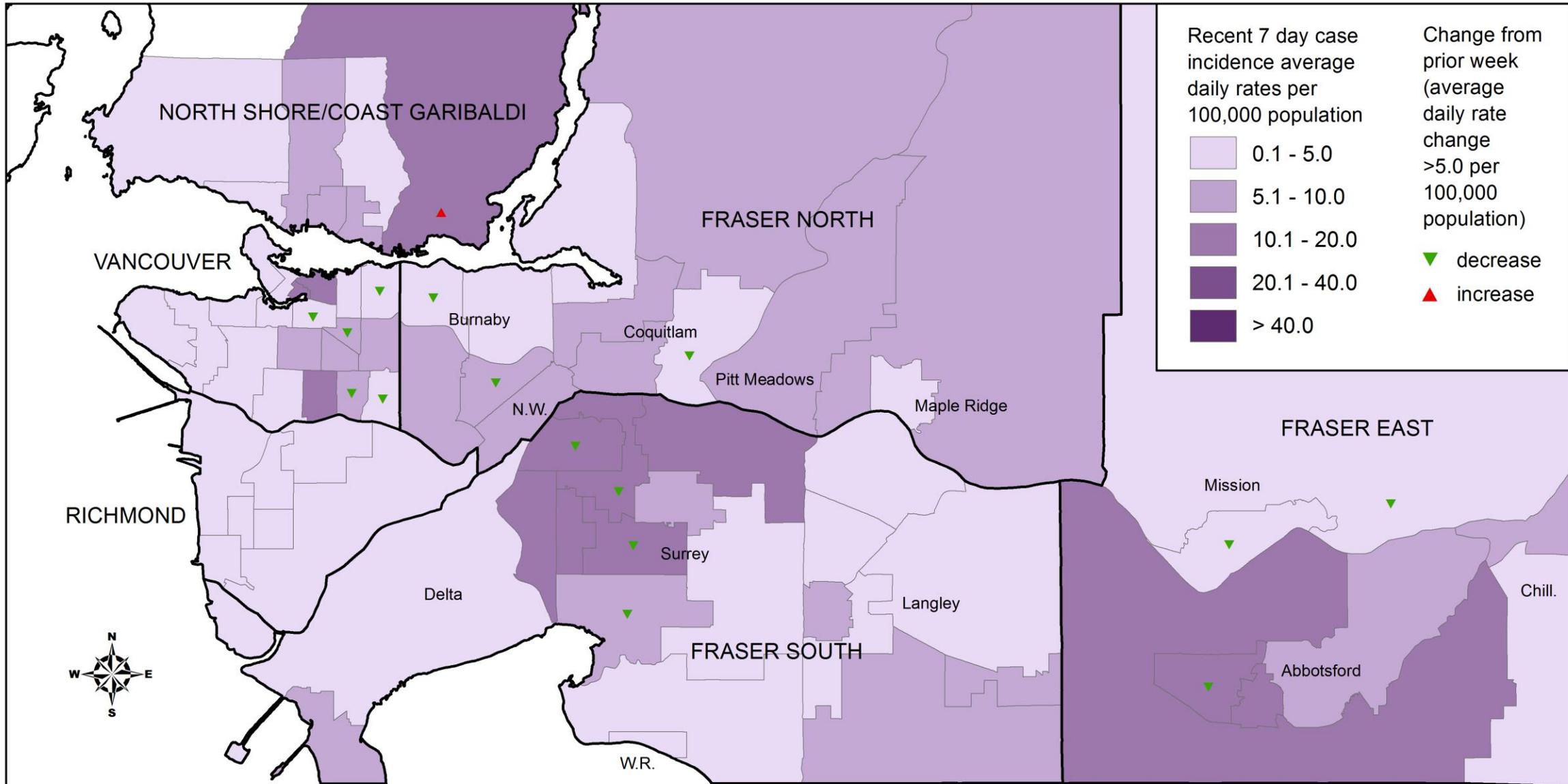
Change from prior week
(average daily rate change
>5.0 per 100,000 pop.)

- ▼ decrease
- ▲ increase

Average daily rate per
100,000 population

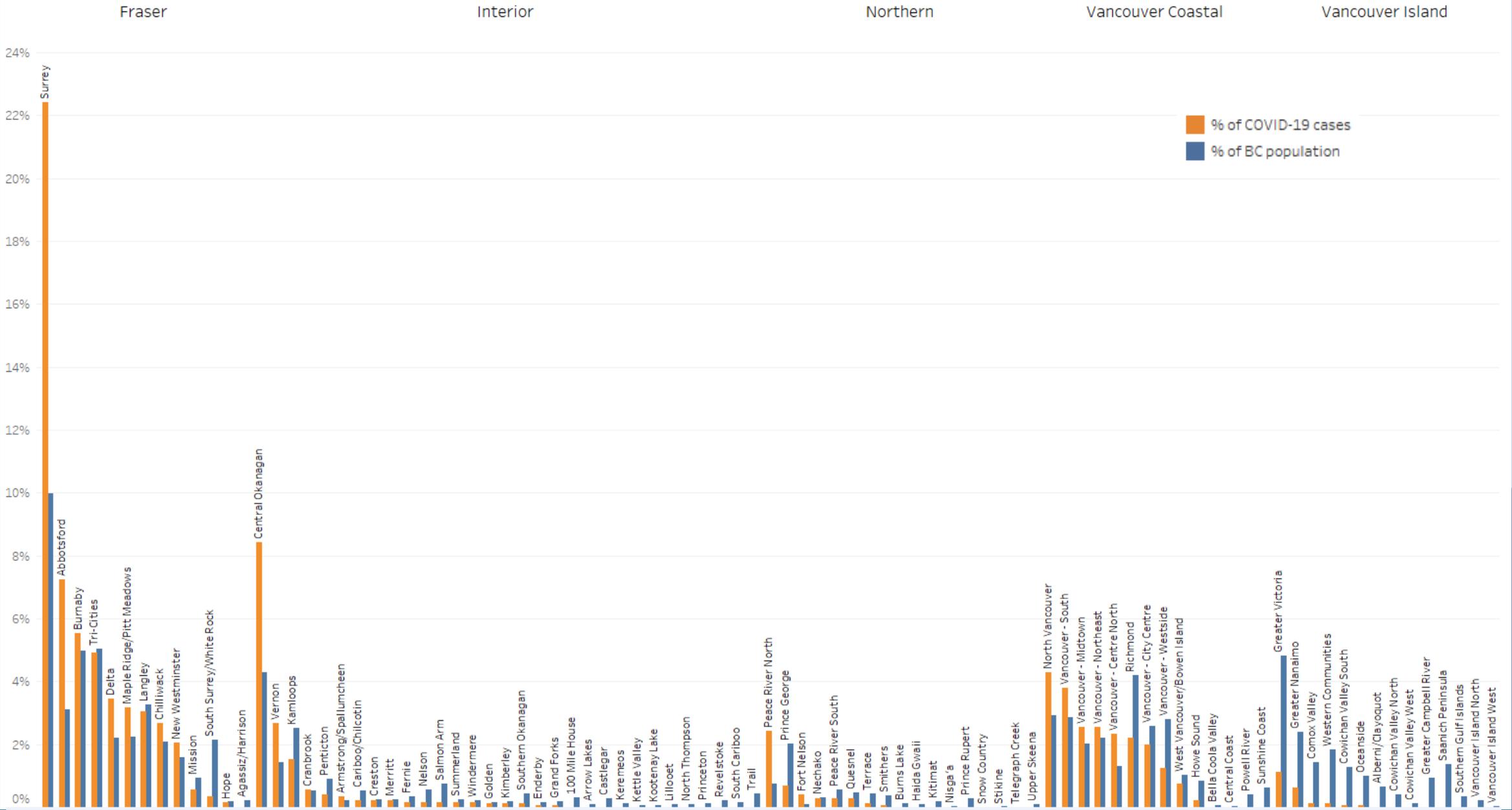
- 0.0
- 0.1 - 5.0
- 5.1 - 10.0
- 10.1 - 20.0
- 20.1 - 40.0
- > 40.0

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.

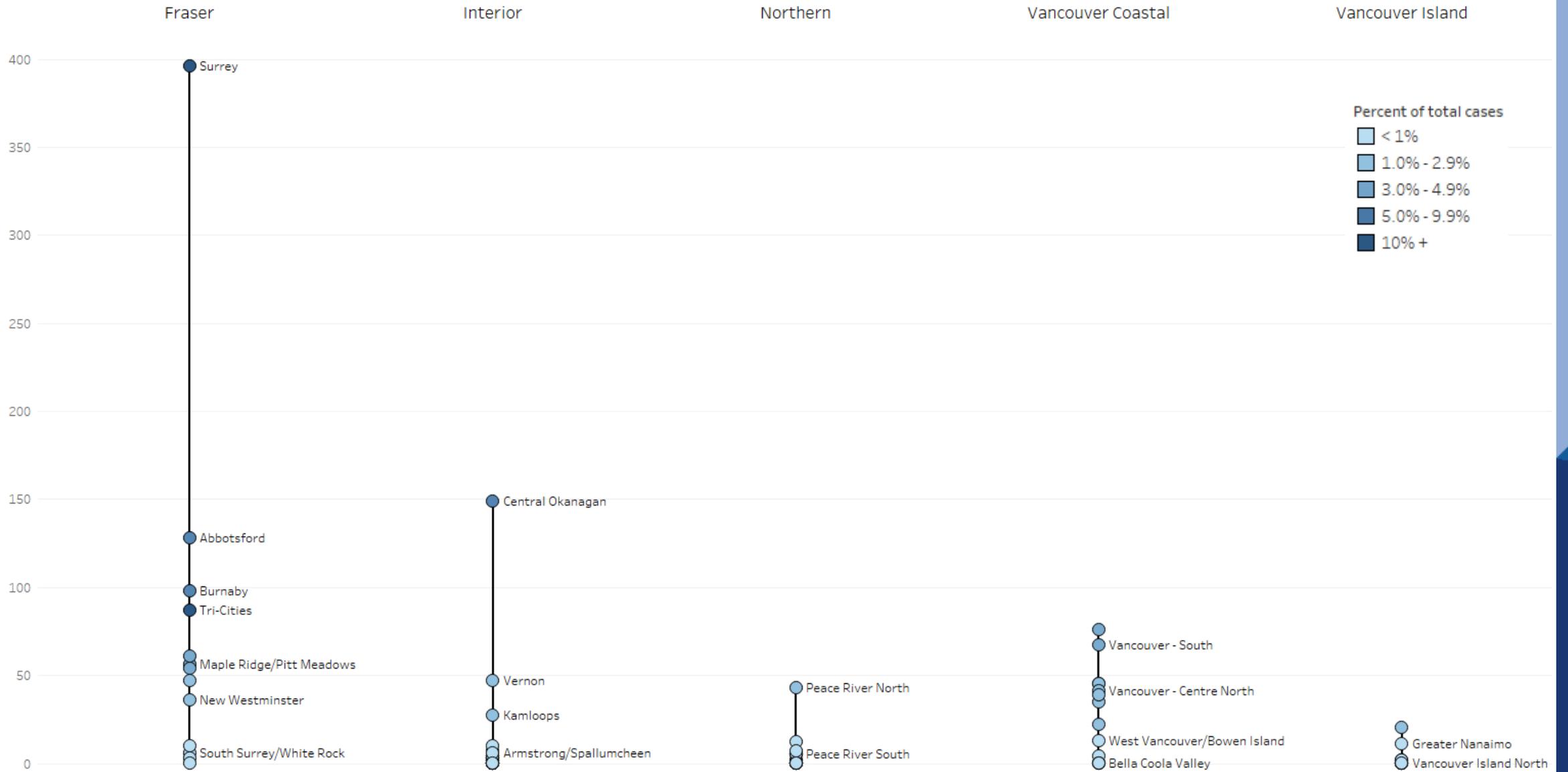


COVID-19 Recent 7-Day Case Incidence Rates by CHSA (May 26 to June 1, 2021)

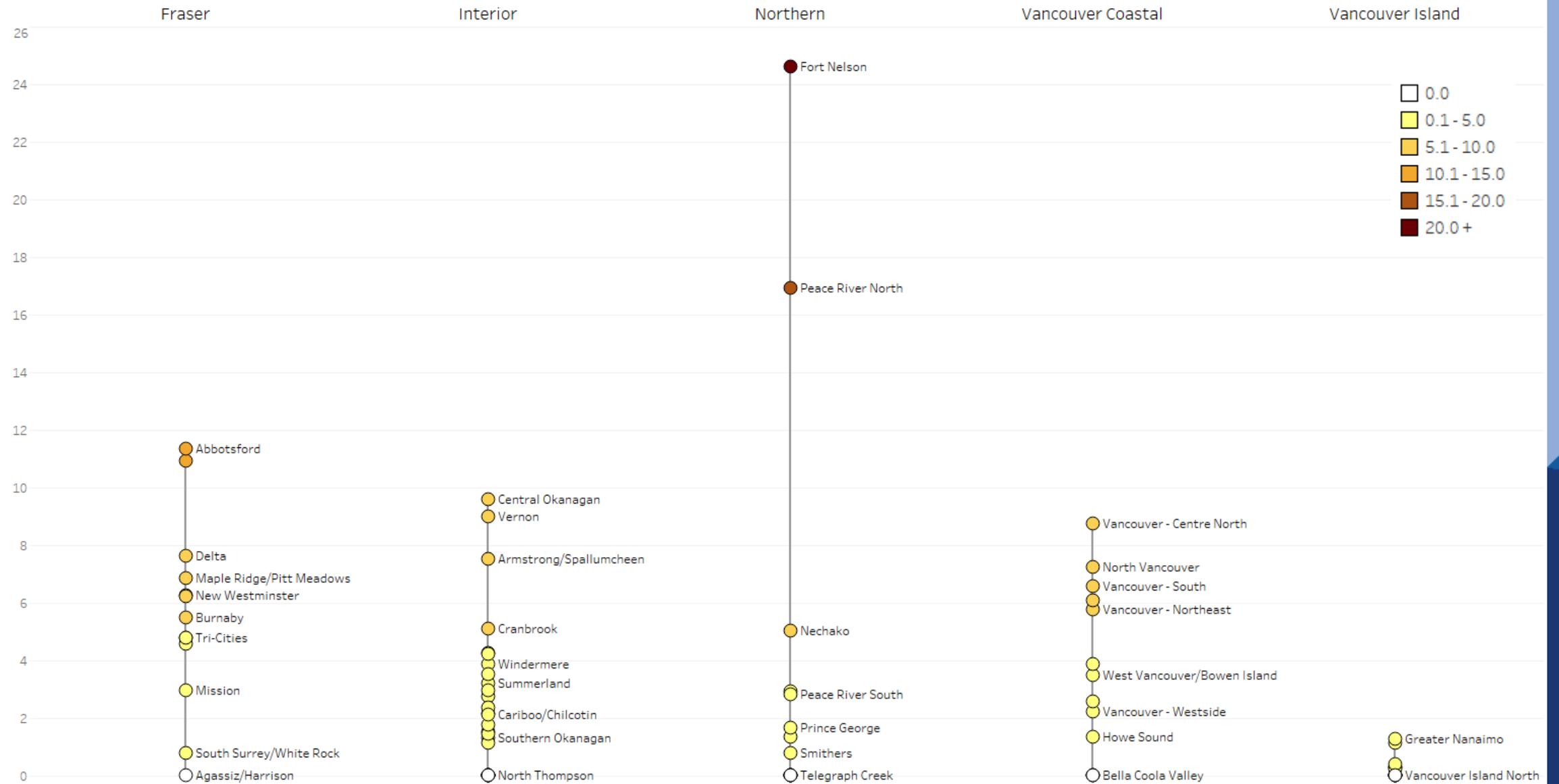
Proportion to total cases & population by local health area, May 26 - Jun 01, 2021



Total cases by local health area, May 26 - Jun 01, 2021

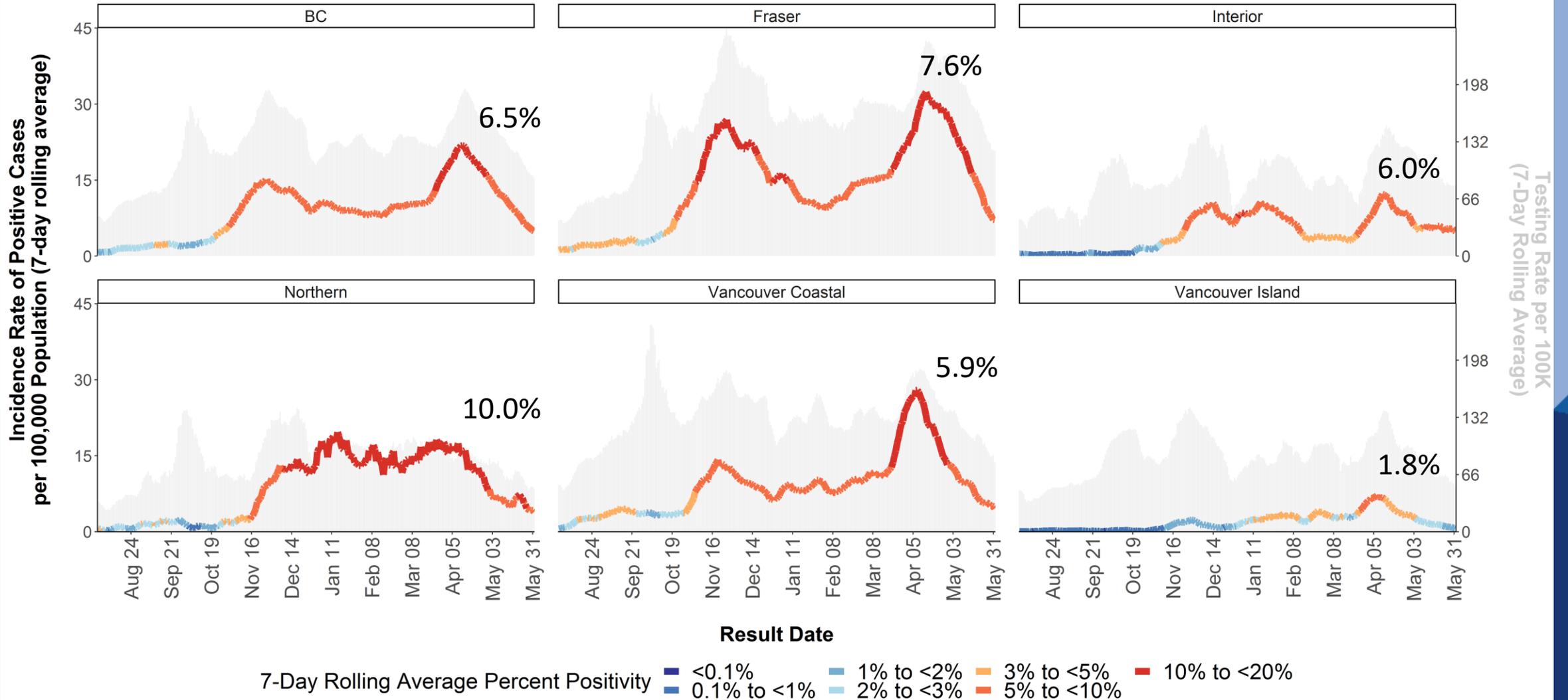


Average daily **rate** of new cases per 100,000 population, by local health area, May 26 - Jun 01, 2021



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

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

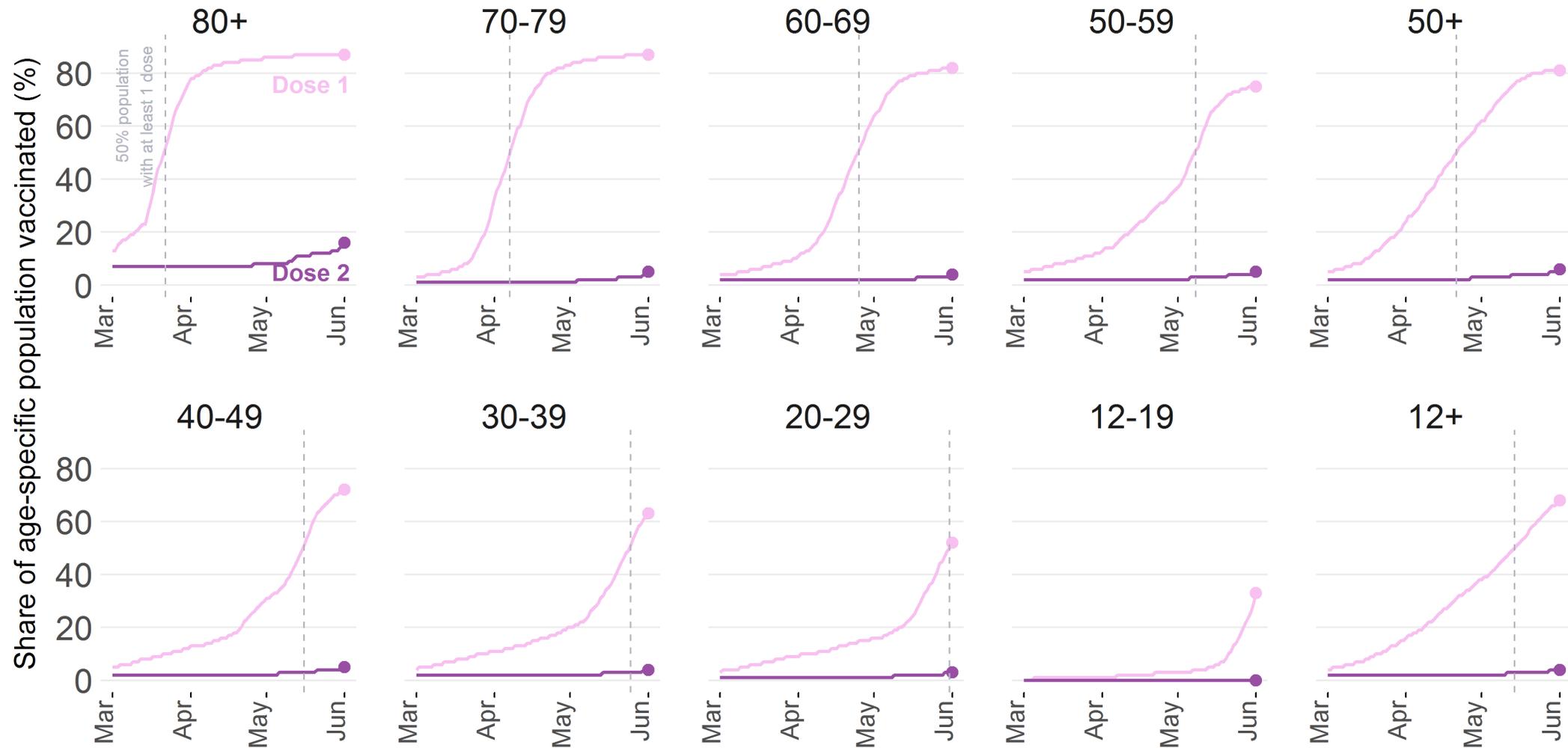


Data source: PLOVER 01-Jun-2021

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

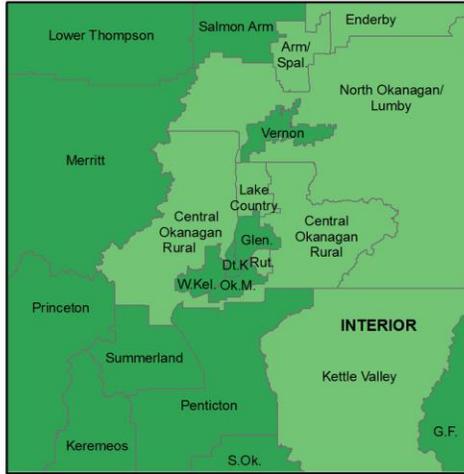


BC, as of June 2: ~70% of those 12+ have received at least 1 dose



Data updated 2021-06-02
Data Source: Provincial Immunization Registry, PHSA

Okanagan Inset
(Community Health Service Areas)



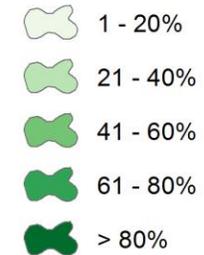
Greater Victoria Inset
(Community Health Service Areas)



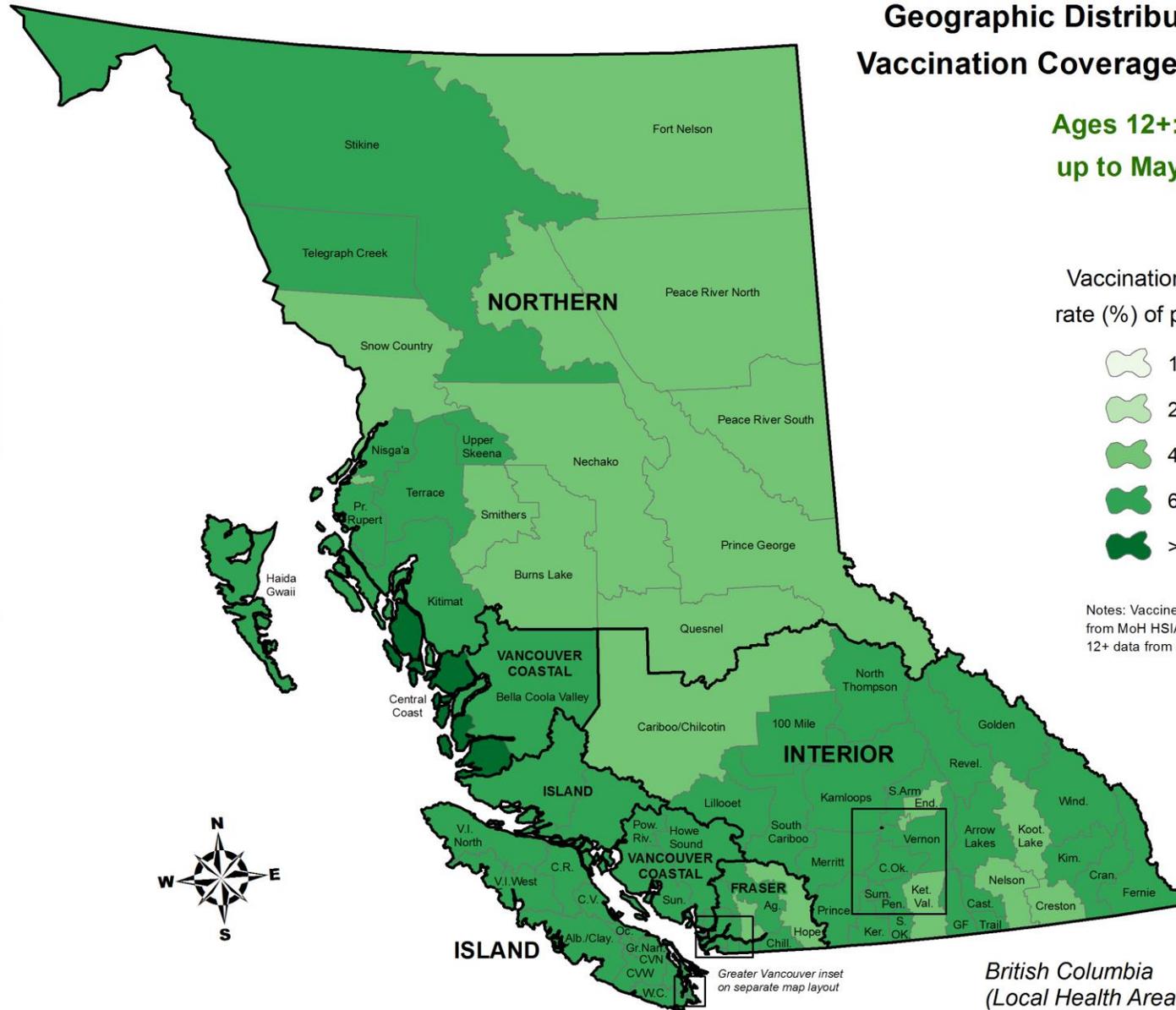
Geographic Distribution of COVID-19 Vaccination Coverage by LHA and CHSA

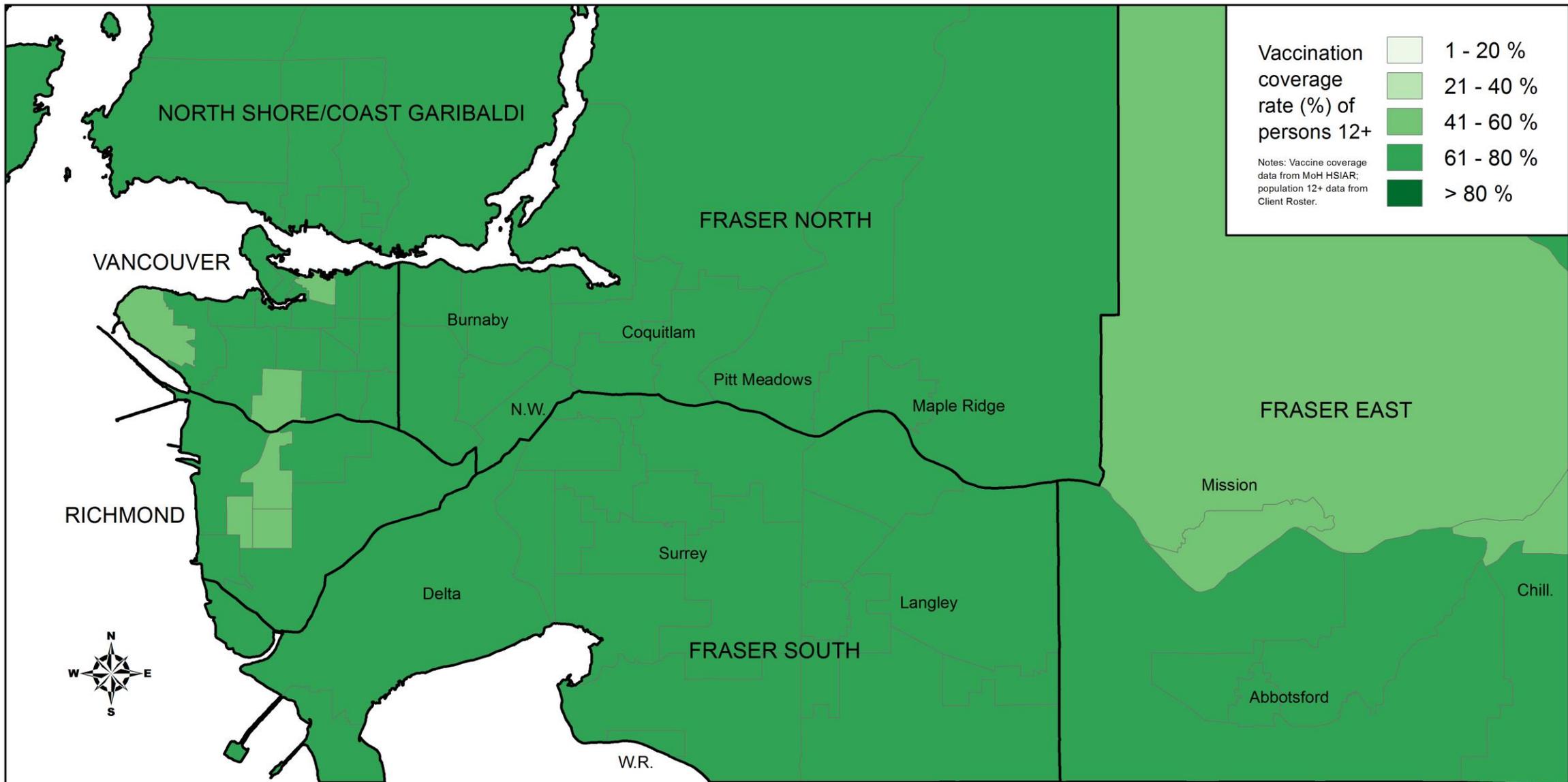
**Ages 12+: 1st Dose
up to May 31, 2021**

Vaccination coverage
rate (%) of persons 12+



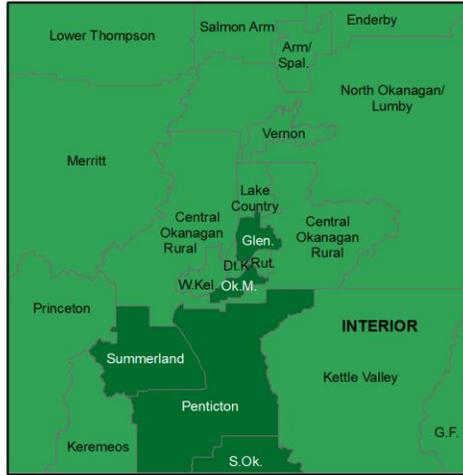
Notes: Vaccine coverage data
from MoH HSIAR; population
12+ data from Client Roster.





COVID-19 Vaccination Coverage by CHSA: Ages 12+ 1st Dose (up to May 31, 2021)

Okanagan Inset
(Community Health Service Areas)



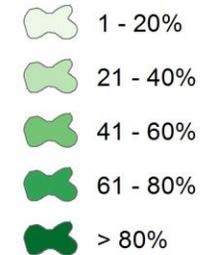
Greater Victoria Inset
(Community Health Service Areas)



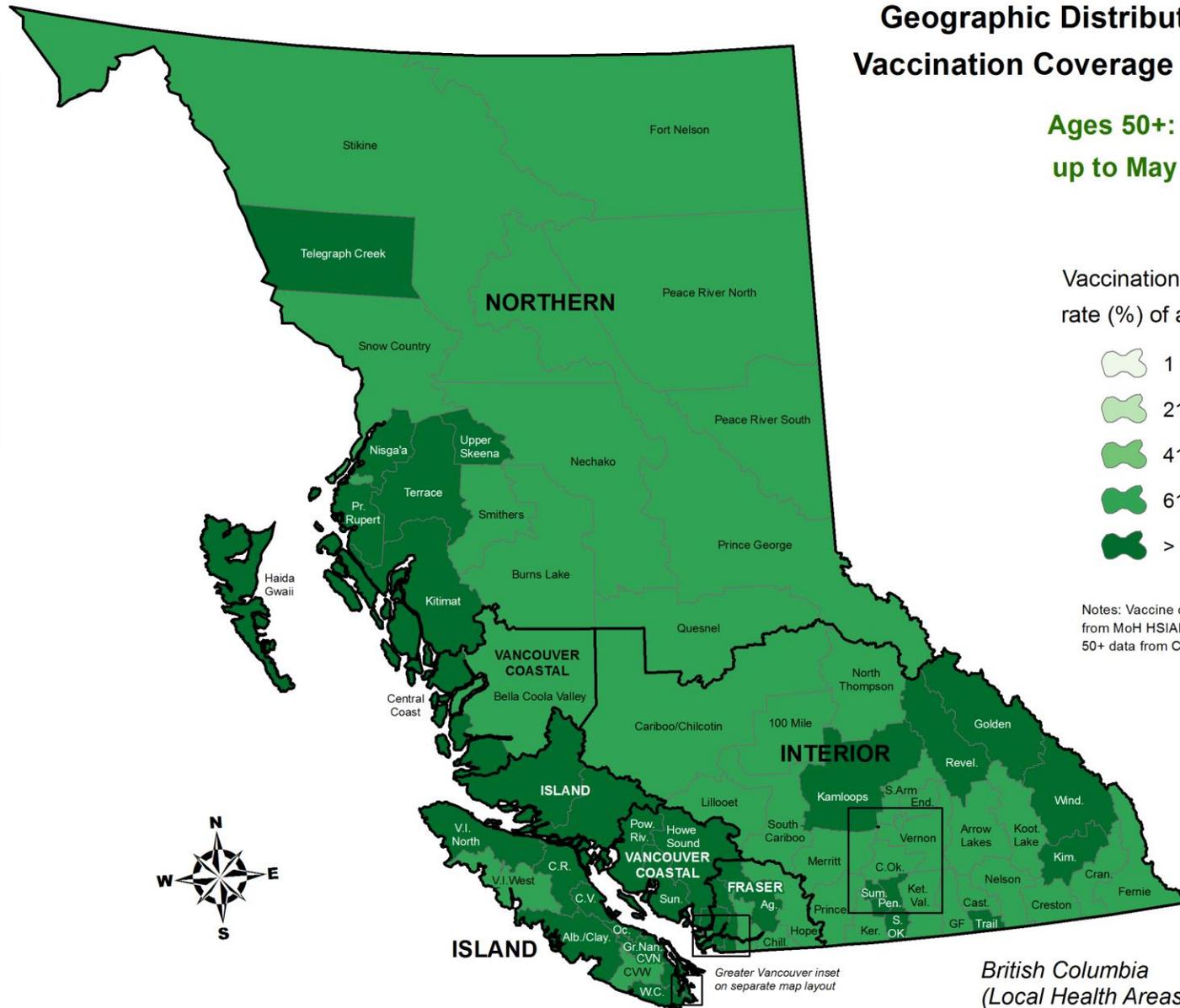
Geographic Distribution of COVID-19 Vaccination Coverage by LHA and CHSA

**Ages 50+: 1st Dose
up to May 31, 2021**

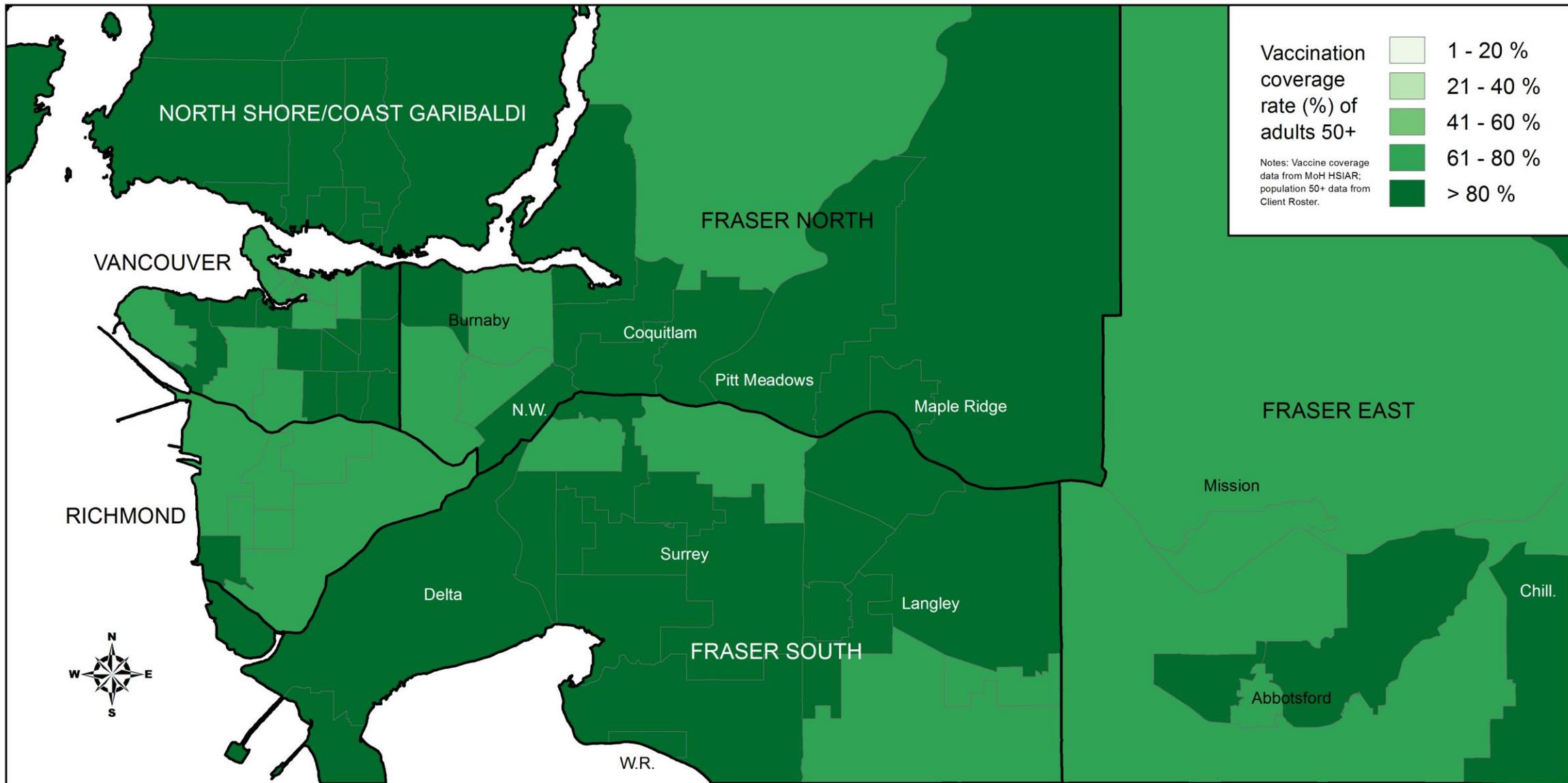
Vaccination coverage
rate (%) of adults 50+



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

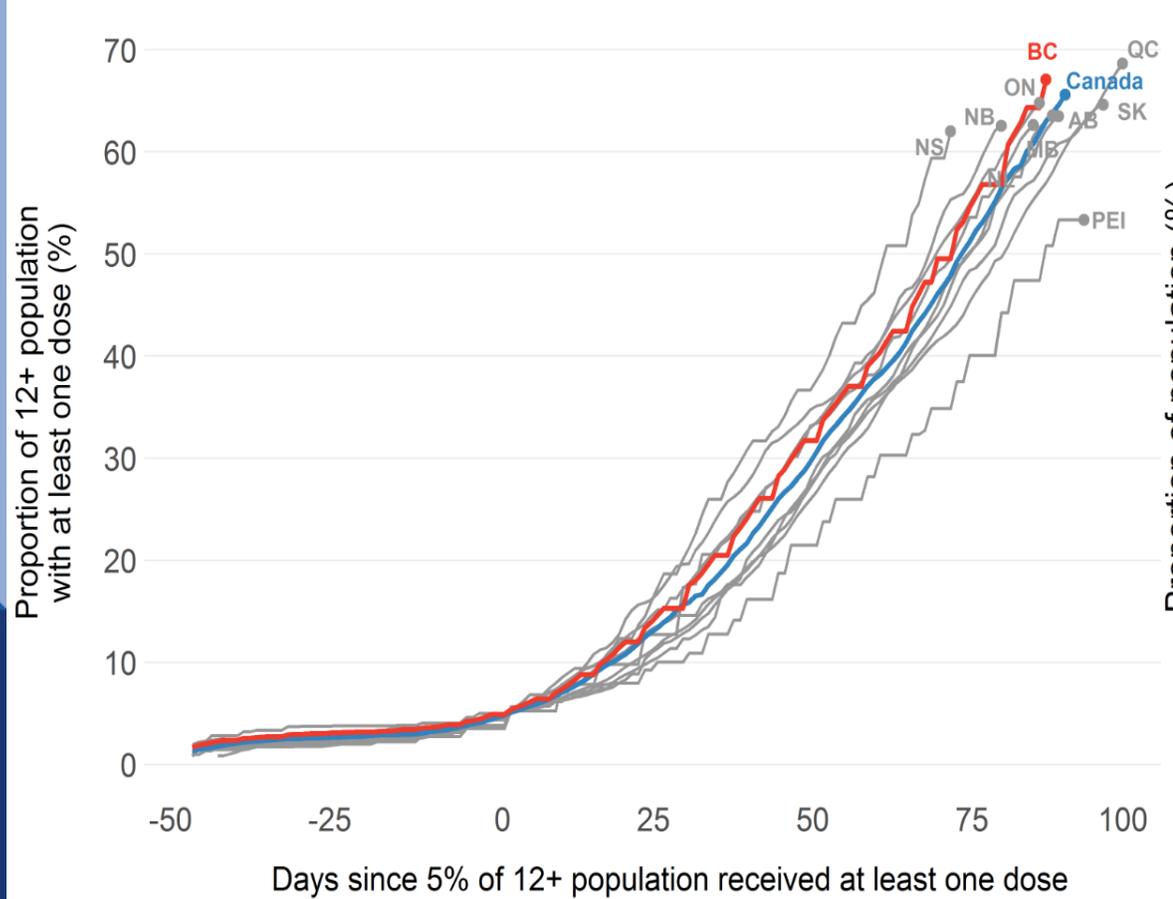


British Columbia
(Local Health Areas)



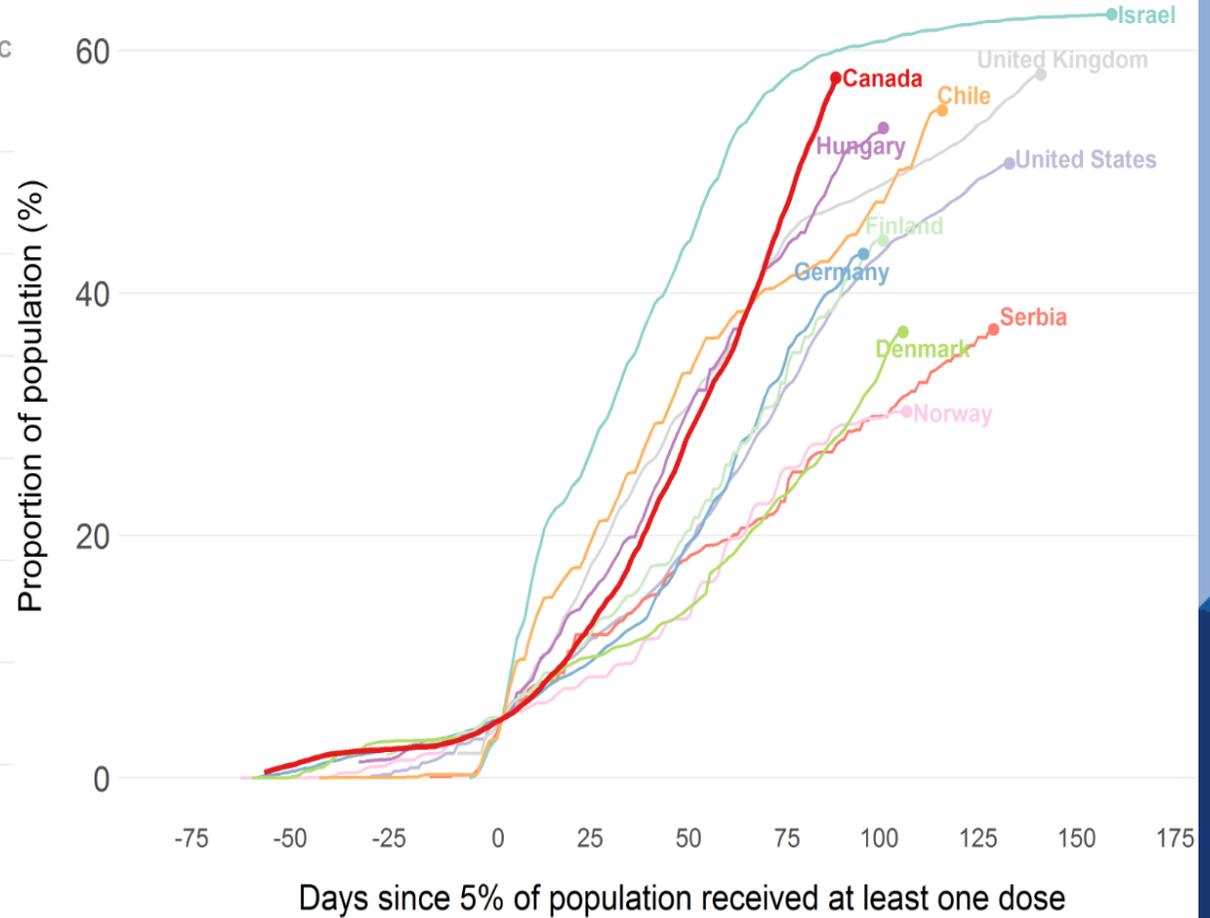
COVID-19 Vaccination Coverage by CHSA: Ages 50+ 1st Dose (up to May 31, 2021)

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.



Data from COVID-19 Canada Open Data Working Group and extracted 2021-06-01
Population denominator from Statistics Canada table 17-10-0005-01; 12-14 year old age group estimated

Data source: [Open Data](#)
Visualization: BCCDC



Data from Our World in Data and extracted on 2021-06-01

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

Lab - Key Messages

1. **Percent positivity** among publicly funded tests is 6% and among all tests, it is 5%.
 - Testing rates decreased 15% this week (~42,000 total tests May 23 to 29)
2. There are regional differences in percent positivity, which range from 1.8% in VIHA to 10% in NH.
3. Incidence continues to decline in all age groups; percent positivity is <10% in all age groups.
4. The provincial weekly median **turnaround time** (time from specimen collection to lab result) is 12 hours, indicating good testing capacity; only 1 in 4 tests took ≥ 21 hours to result.
5. The share of **VOCs** among all positive cases in BC is ~85% in epi week 21 (May 23-29).
6. Among screened or sequenced samples provincially based on information for epi week 20, P.1 (~42%) and B.1.1.7 (~54%) remain two dominant VOCs.
 - B.1.617 currently represents ~4% of VOCs

Weekly Summary of ALL lab tests performed

2,747,041	total specimens tested
42,066	new this epi week
151,902	total positive specimens
2,108	new positive this epi week
14 hr	mean turnaround time (TAT)
12 [8-21]	Median [Q1 – Q3] TAT

↓ **15%** relative to last week

5.0% positivity
↓ **0.9%** absolute change from last week

↓ **8%** TAT relative to last week

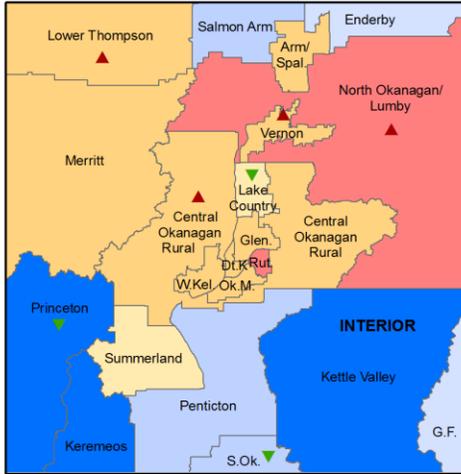
Weekly Summary of Lab tests paid Publicly

2,263,258	total specimens tested
34,132	new this epi week
150,536	total positive specimens
2,103	new positive this epi week

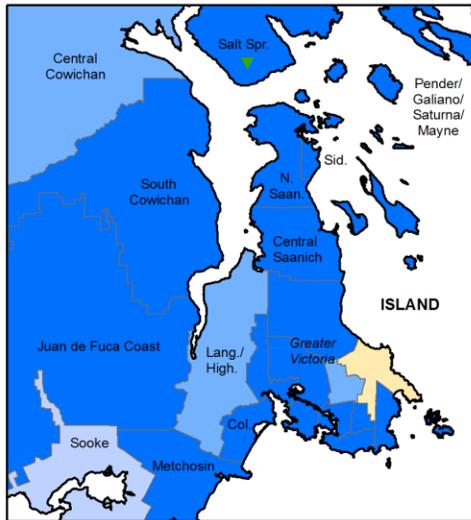
↓ **17%** relative to last week

6.2% positivity
↓ **0.9%** absolute change from last week

Okanagan Inset
(Community Health Service Areas)

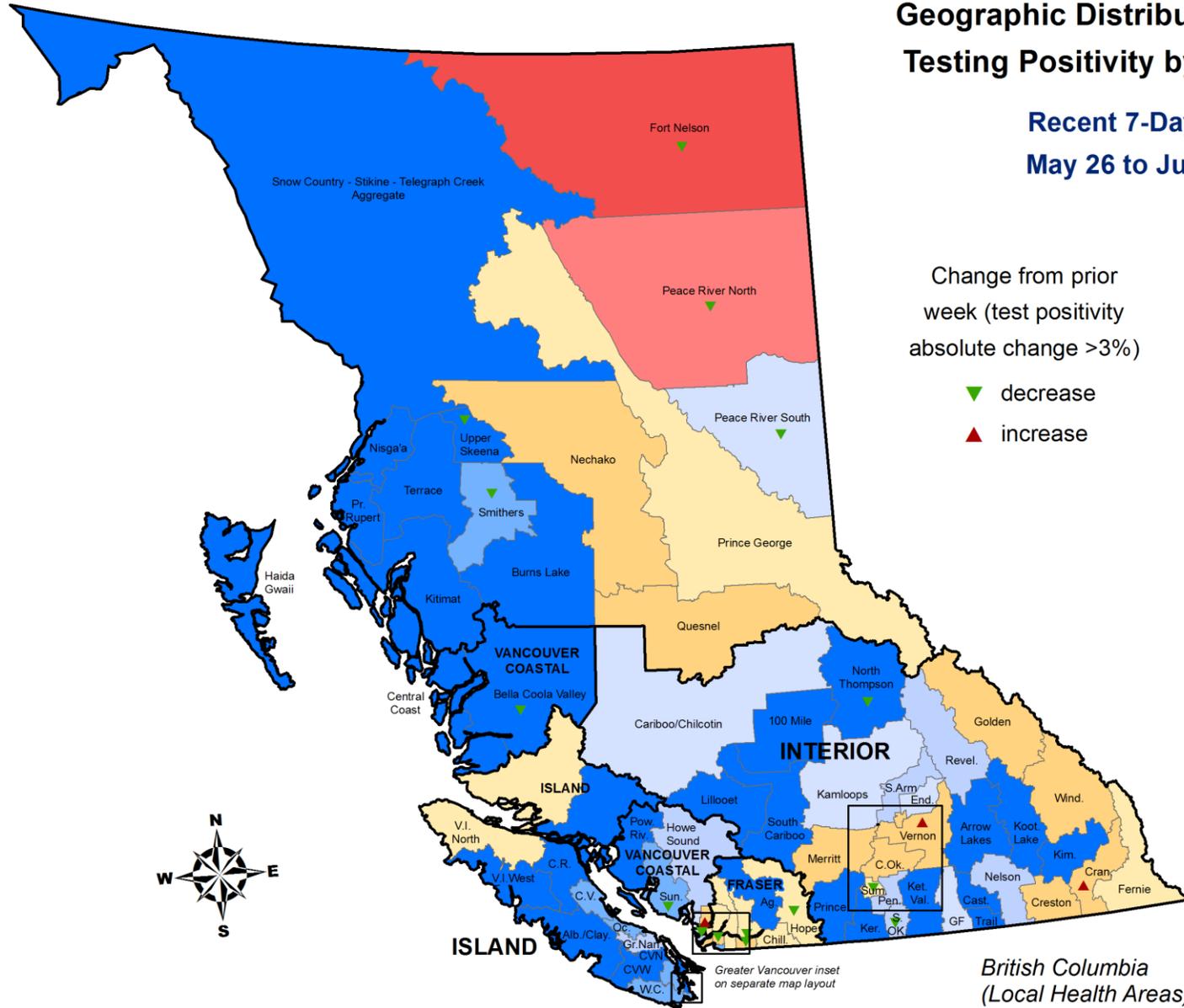


Greater Victoria Inset
(Community Health Service Areas)



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

Recent 7-Days Testing
May 26 to June 1, 2021



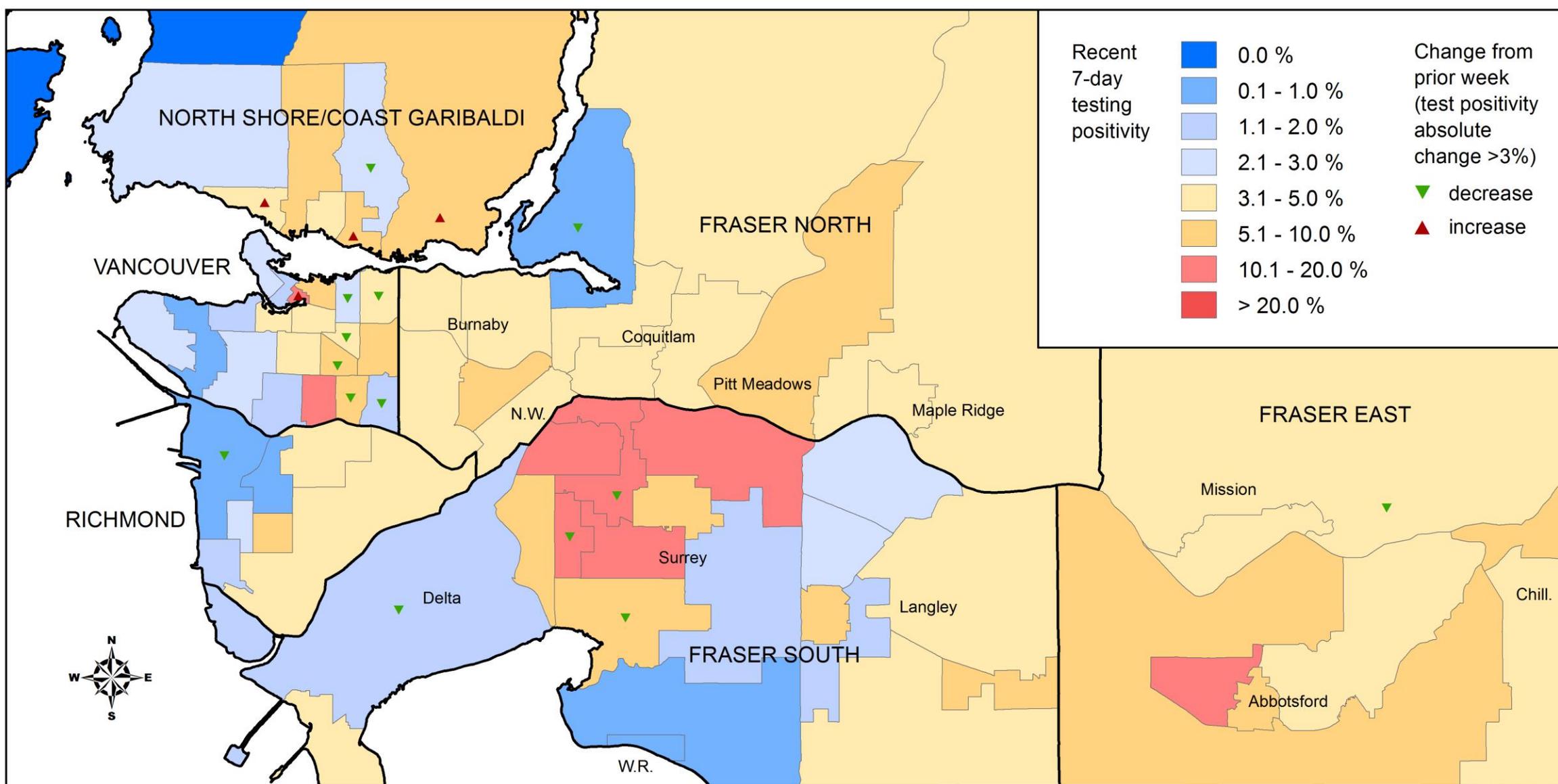
Change from prior week (test positivity absolute change >3%)

- ▼ 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.

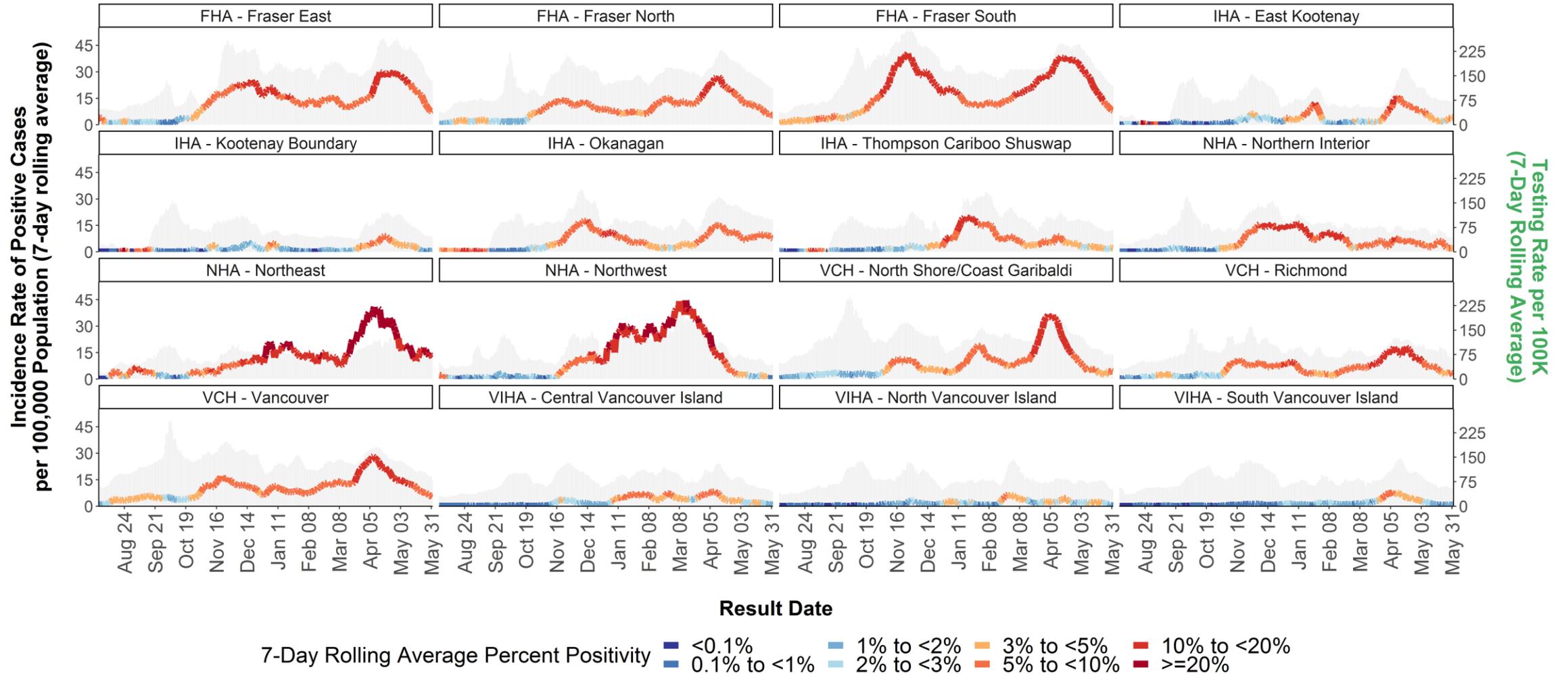


COVID-19 Recent 7-Day Test Positivity by CHSA (May 26 to June 1, 2021)

Includes all tests

Incidence is stable or decreasing across regions; positivity is >10% in Northeast HSDA.

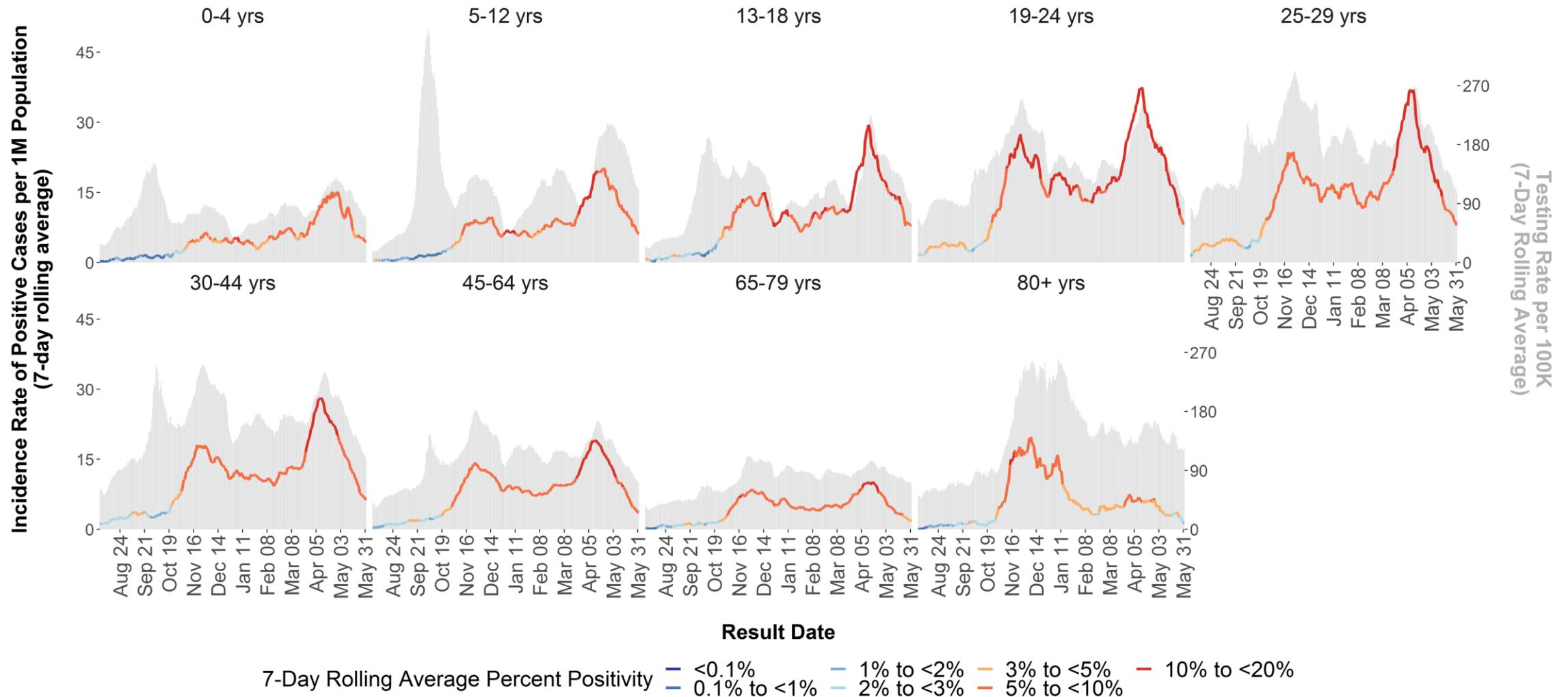
Case incidence rate, test percent positivity, and testing rate by HSDA (Public Payers Only).
Aug 1 2020 - Jun 1, 2021.



Data source: PLOVER 01-Jun-2021

Incidence continues to decline in all age groups; percent positivity is <10% in all age groups.

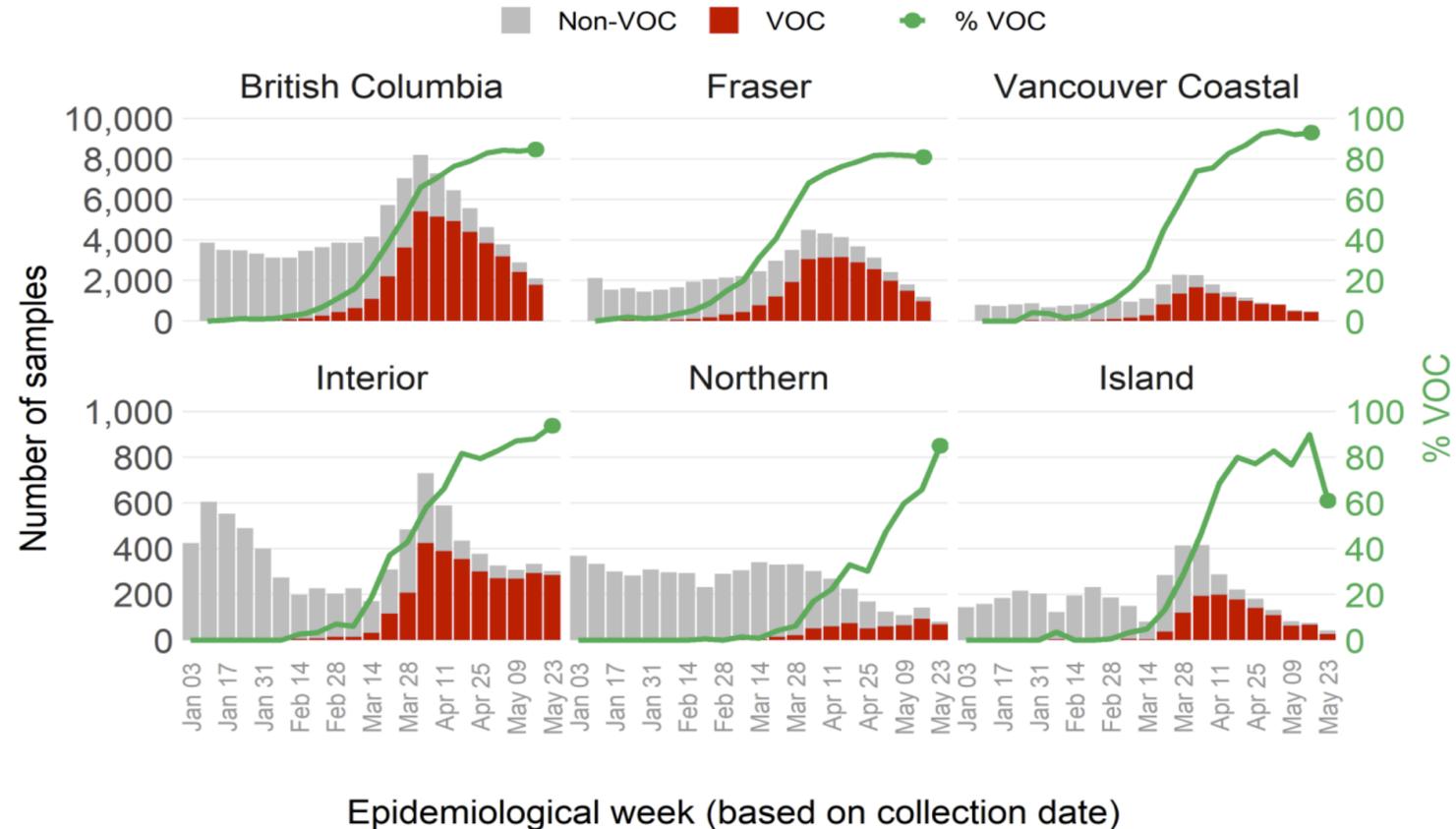
Case incidence rate, test percent positivity, and testing rate by age (Public Payers Only). Aug 1 2020 - Jun 1, 2021.



Data source: PLOVER 01-Jun-2021

Of all COVID-19 positive test samples in epi week 21 (May 23 - May 29) in BC, ~85% were presumptive VOCs. Note that in Island Health the proportion was lower, ~61%.

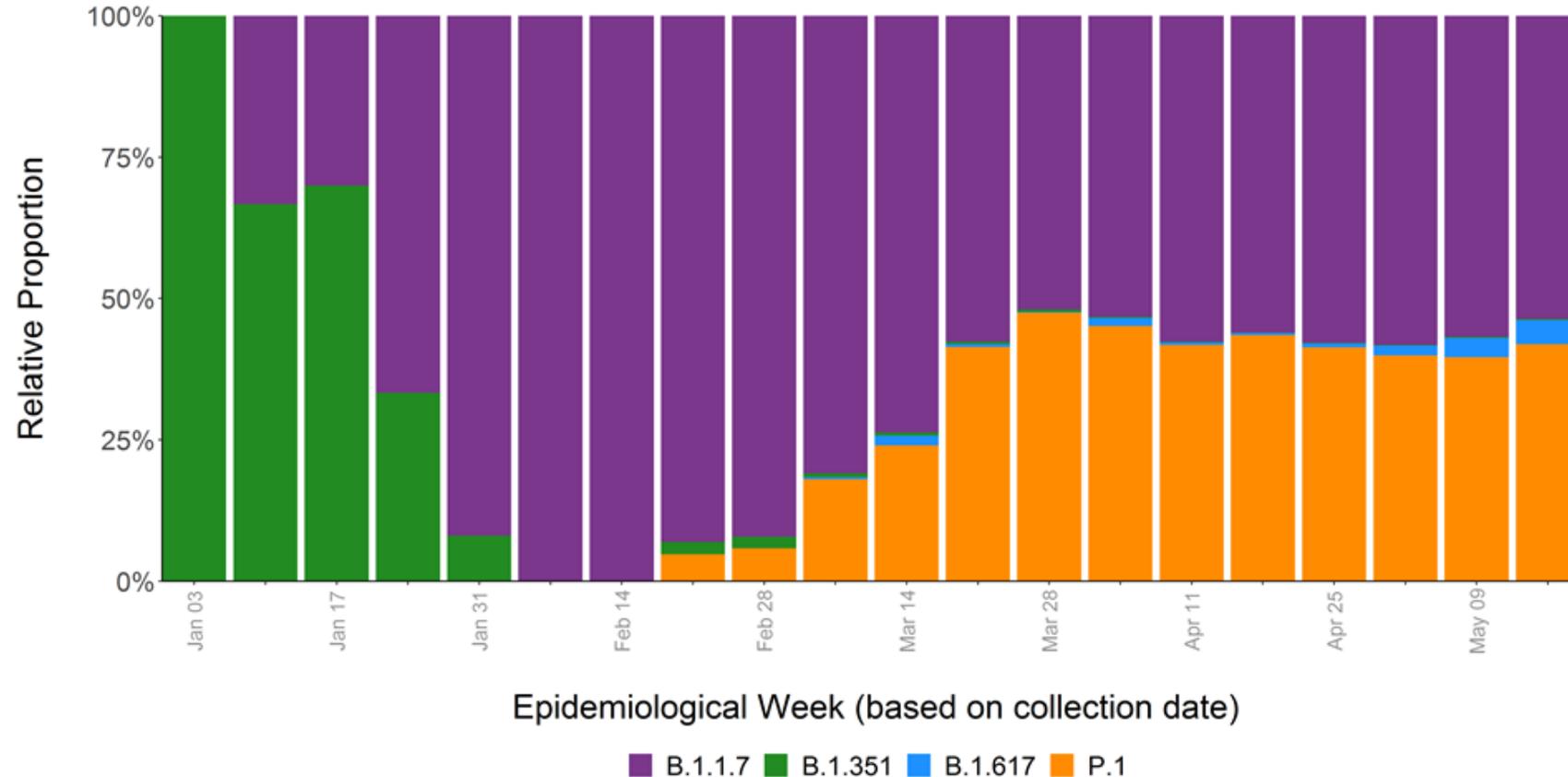
Prevalence of Presumptive VOC, by epi week in BC and Health Authorities Jan 3 – May 23, 2021



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

Among sequenced samples provincially based on information for epi week 20, P.1 (~42%) and B.1.1.7 (~54%) remain two dominant VOCs. B.1.617 (newly declared by WHO as a VOC) currently represents ~4% of VOCs

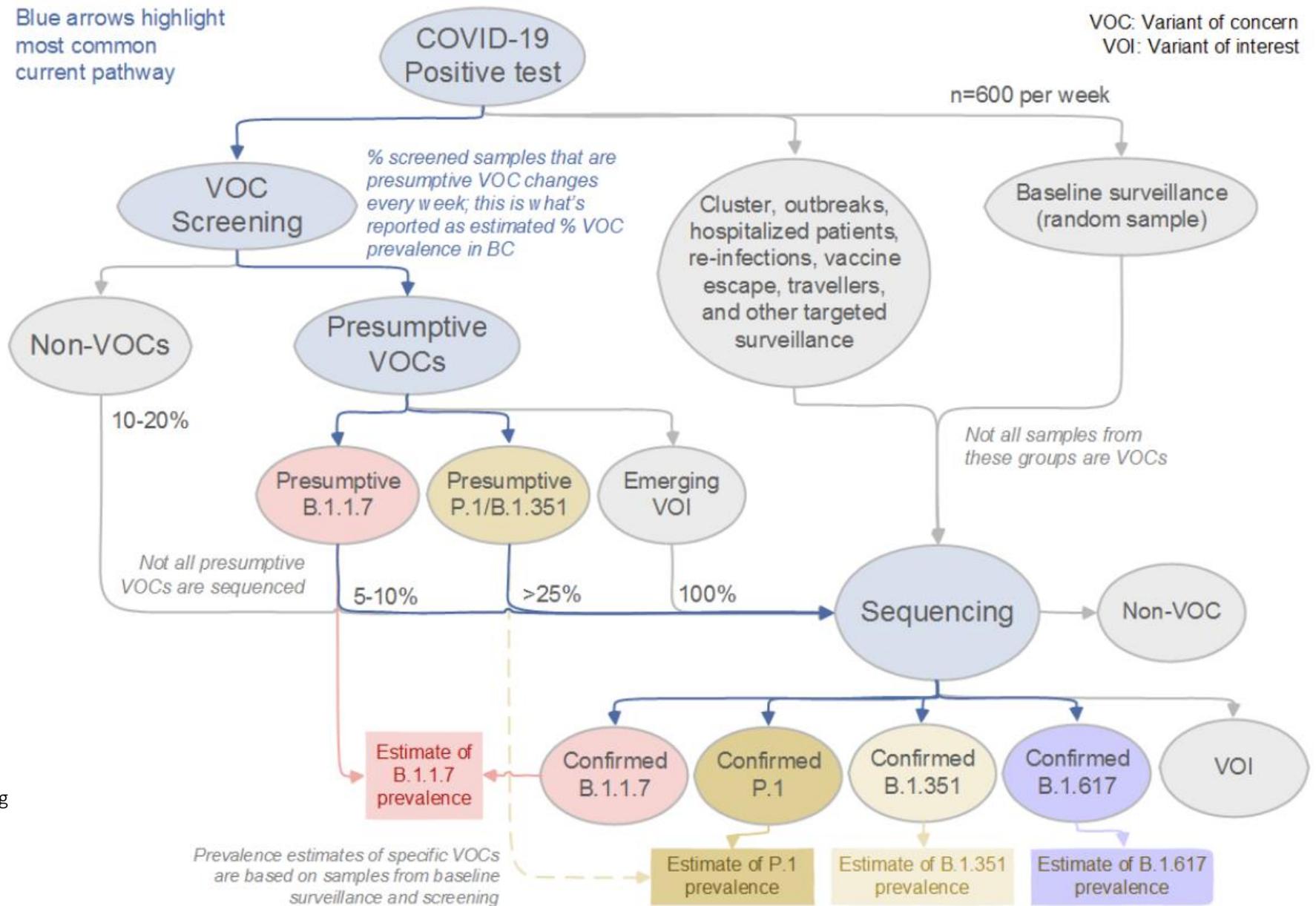
Relative Proportion of VoCs in BC Detected through Quasi-Random Sample Selection by Epiweek of Collection Date



* 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

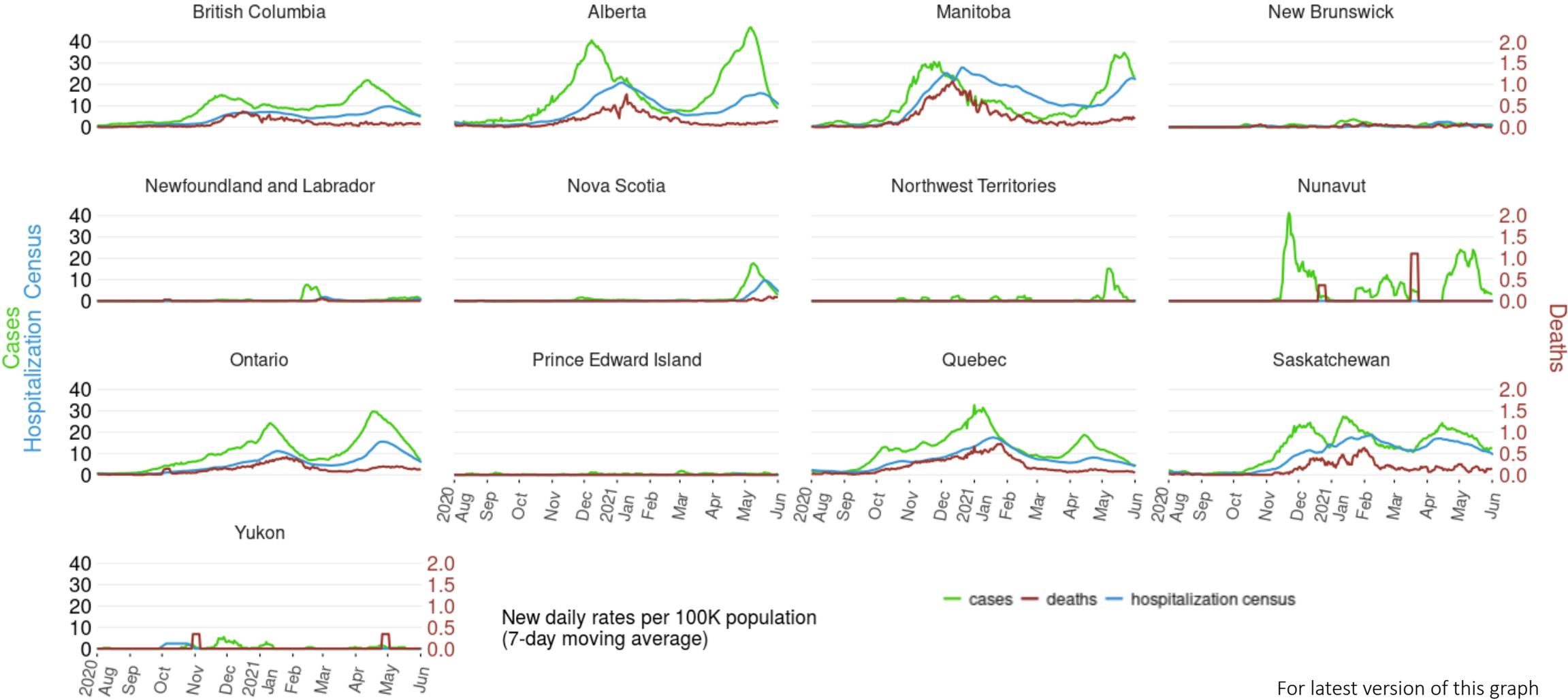
Weeks 13 onward include specimens from qPCR SNP screening that resulted as presumptive positive for B.1.1.7 and P.1.

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



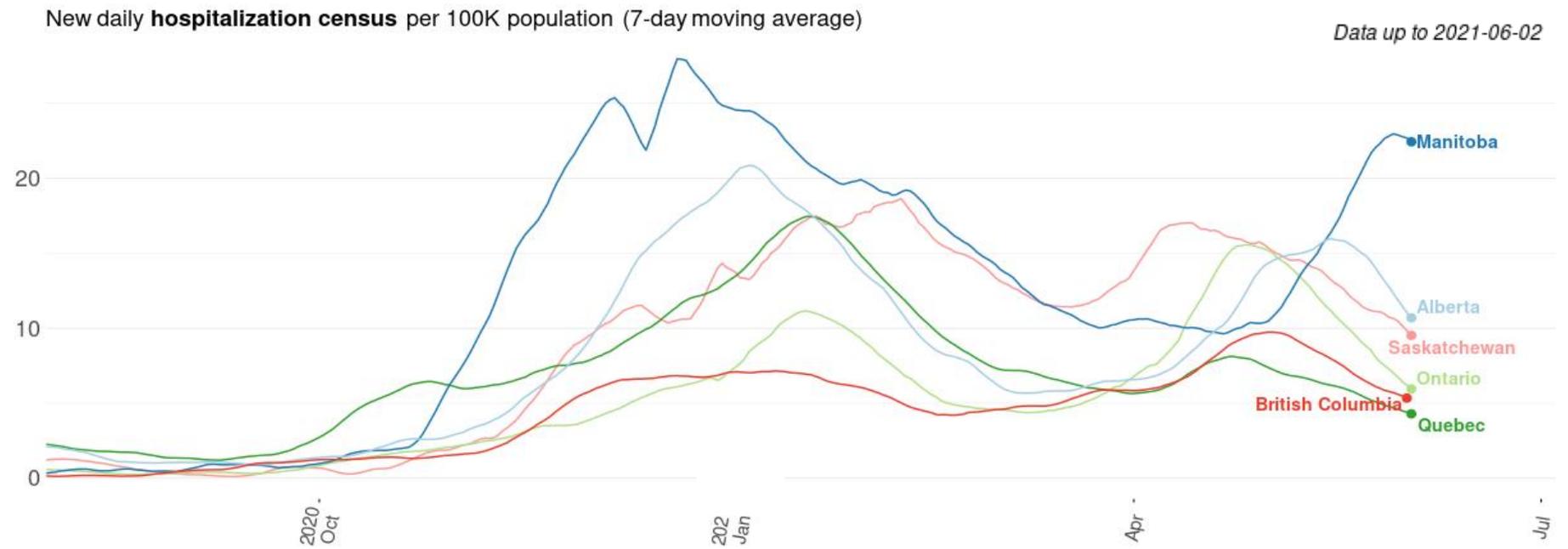
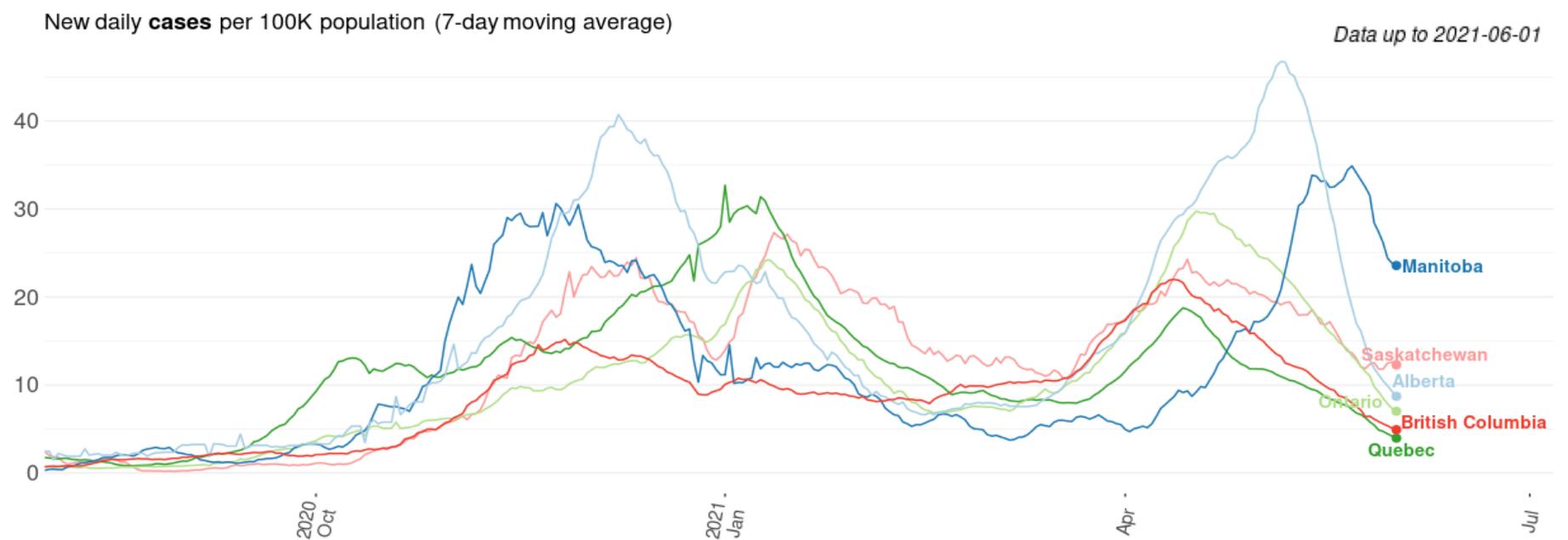
Please note the differences in turnaround time for screening and sequencing: screening results usually come back within 1-2 days, while sequencing results come back after approximately one week, but it could also take longer if there are lab backlogs.

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



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

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

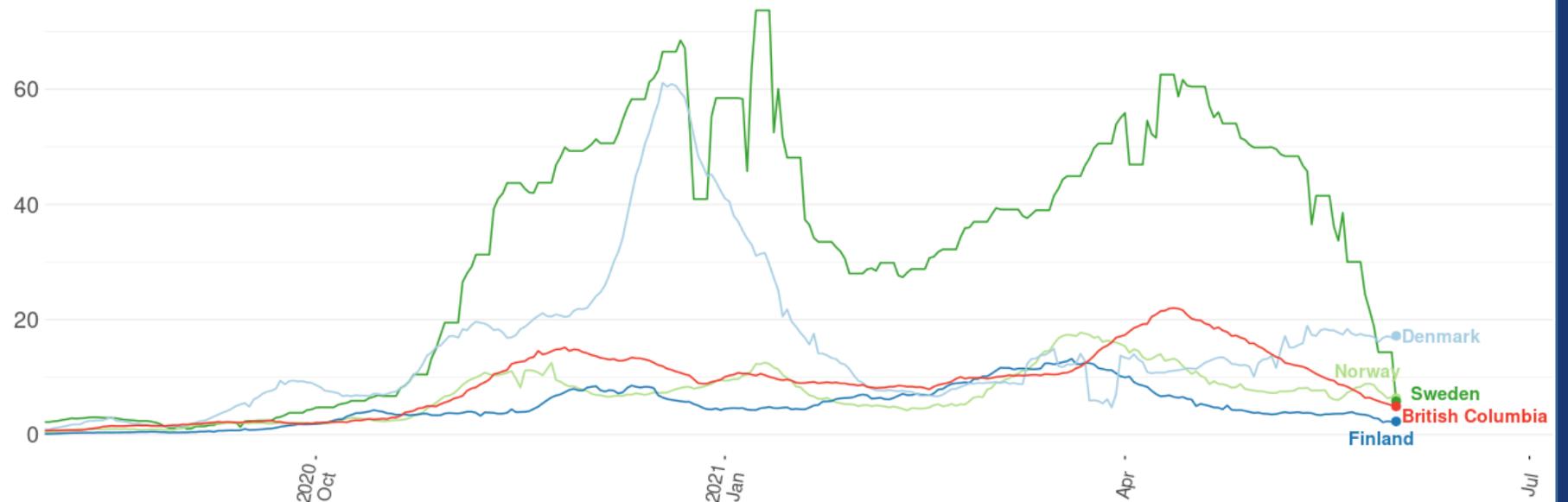


For latest version of this graph and data notes, see the [Epi App](#)

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

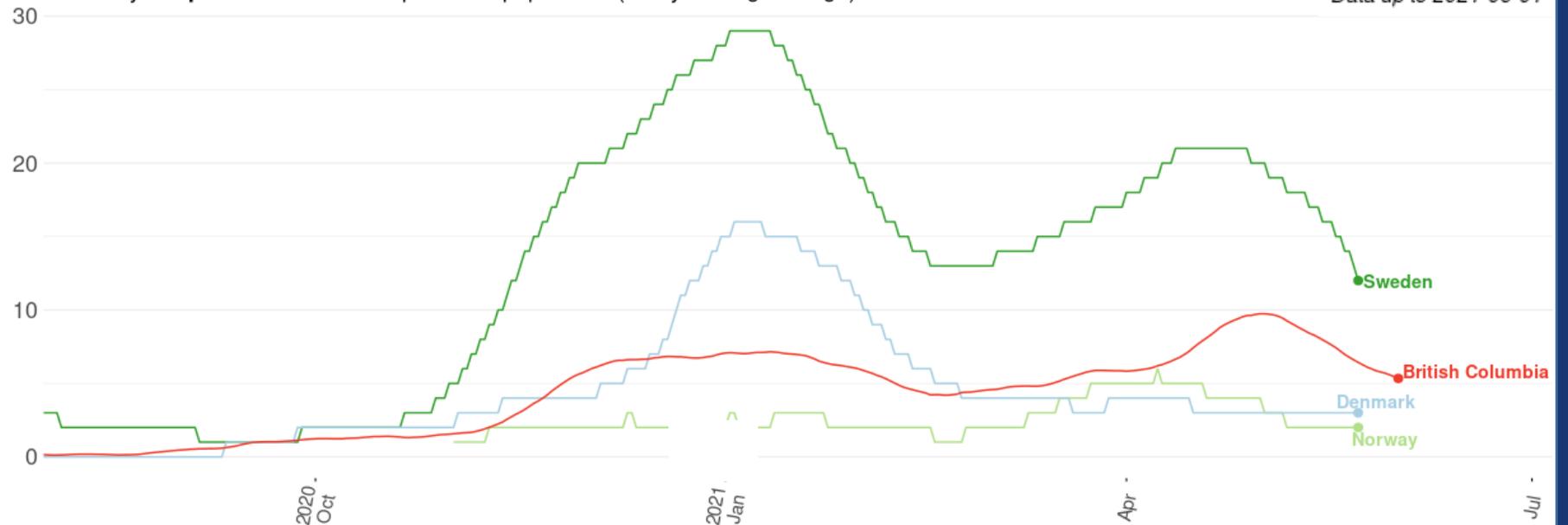
New daily **cases** per 100K population (7-day moving average)

Data up to 2021-06-01



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

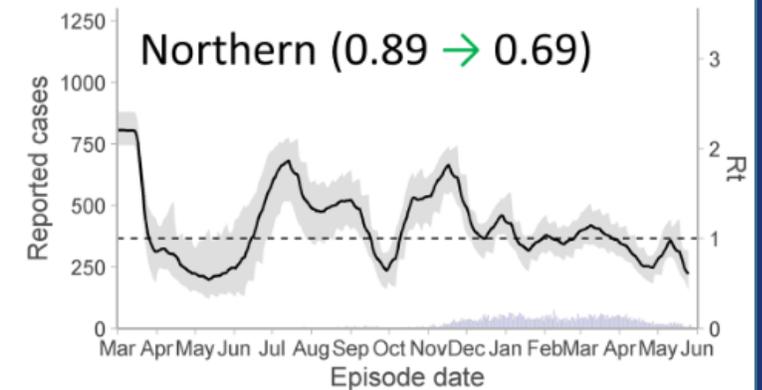
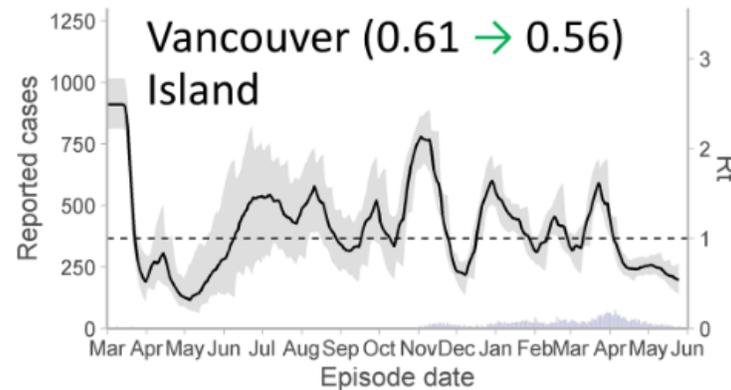
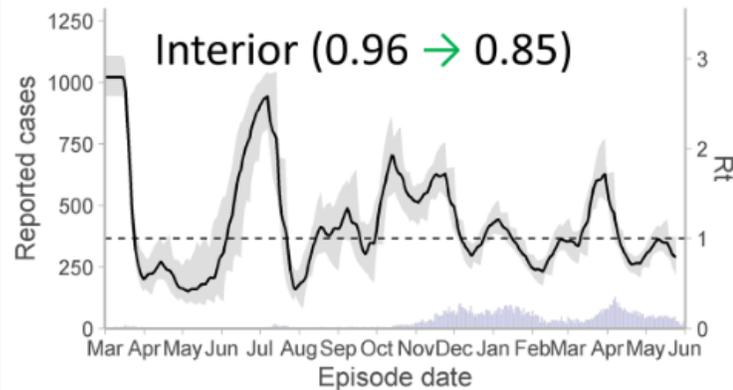
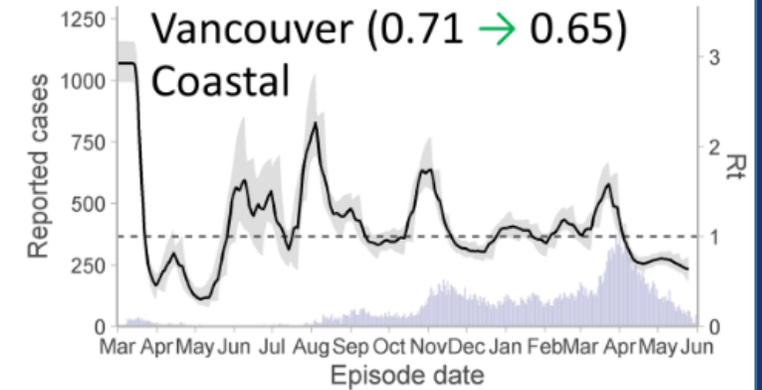
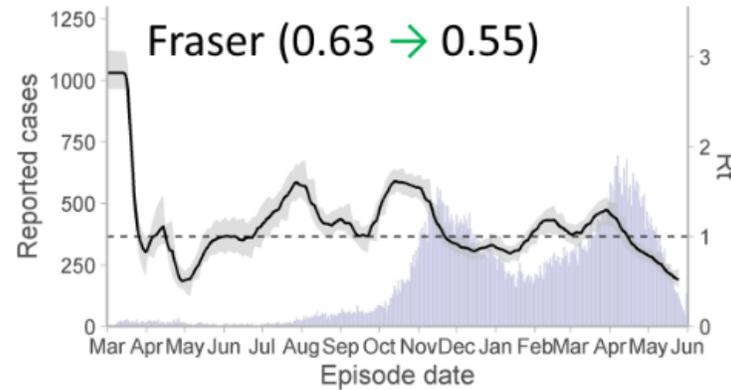
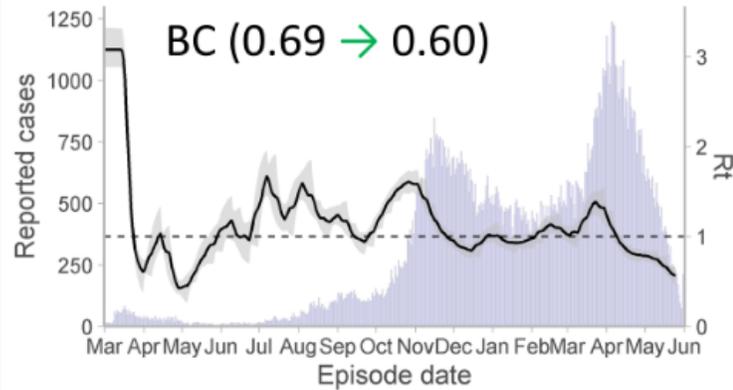
Data up to 2021-06-01



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 below 1 and is trending downward in all regions in BC.



Solid black line: median R_t , modeled using all reported cases up to June 1, 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 → 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

- BCCDC COVID-19 Surveillance Dashboard showing maps, vertical plots, and trends at local health authority level 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](#)