

COVID-19 Update

January 14, 2022



Stay Informed Via These Resources:

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

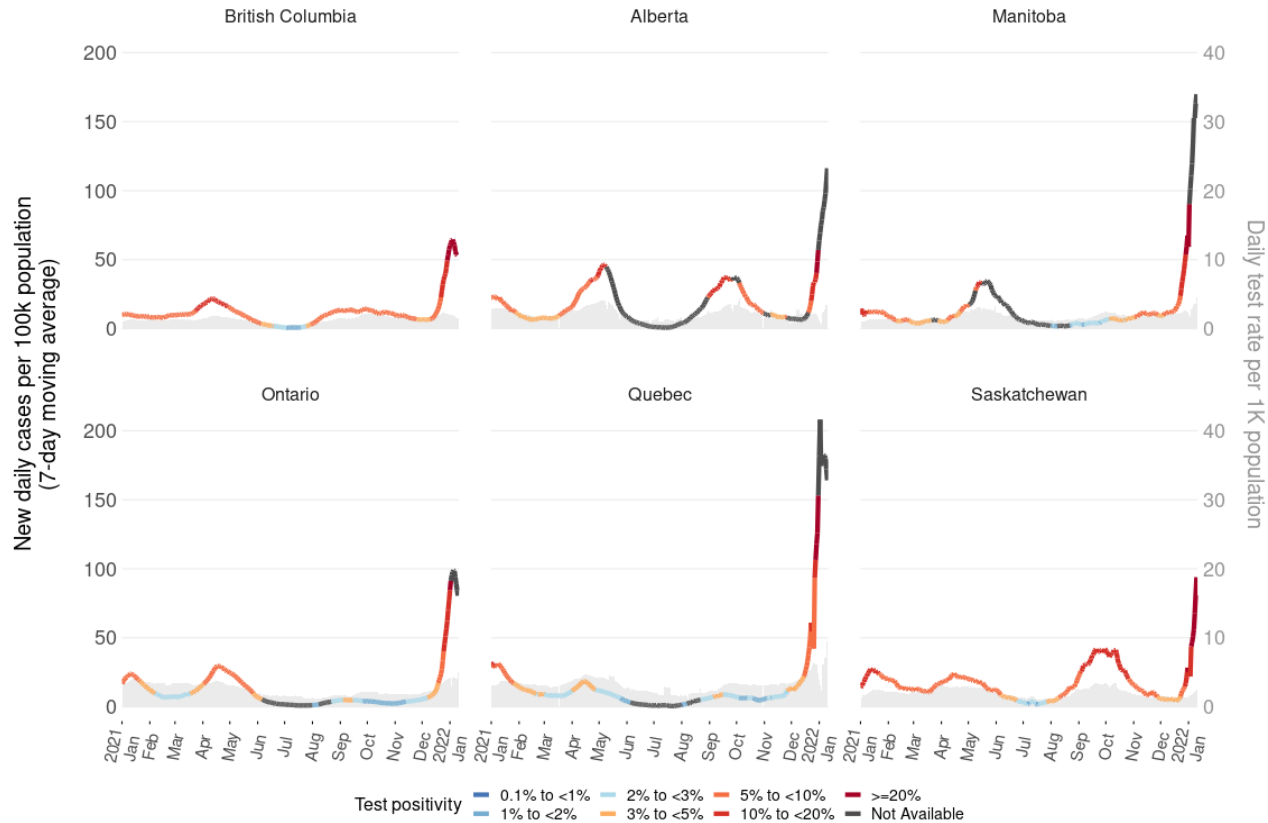
Symptom Self-Assessment:

covid19.thrive.health



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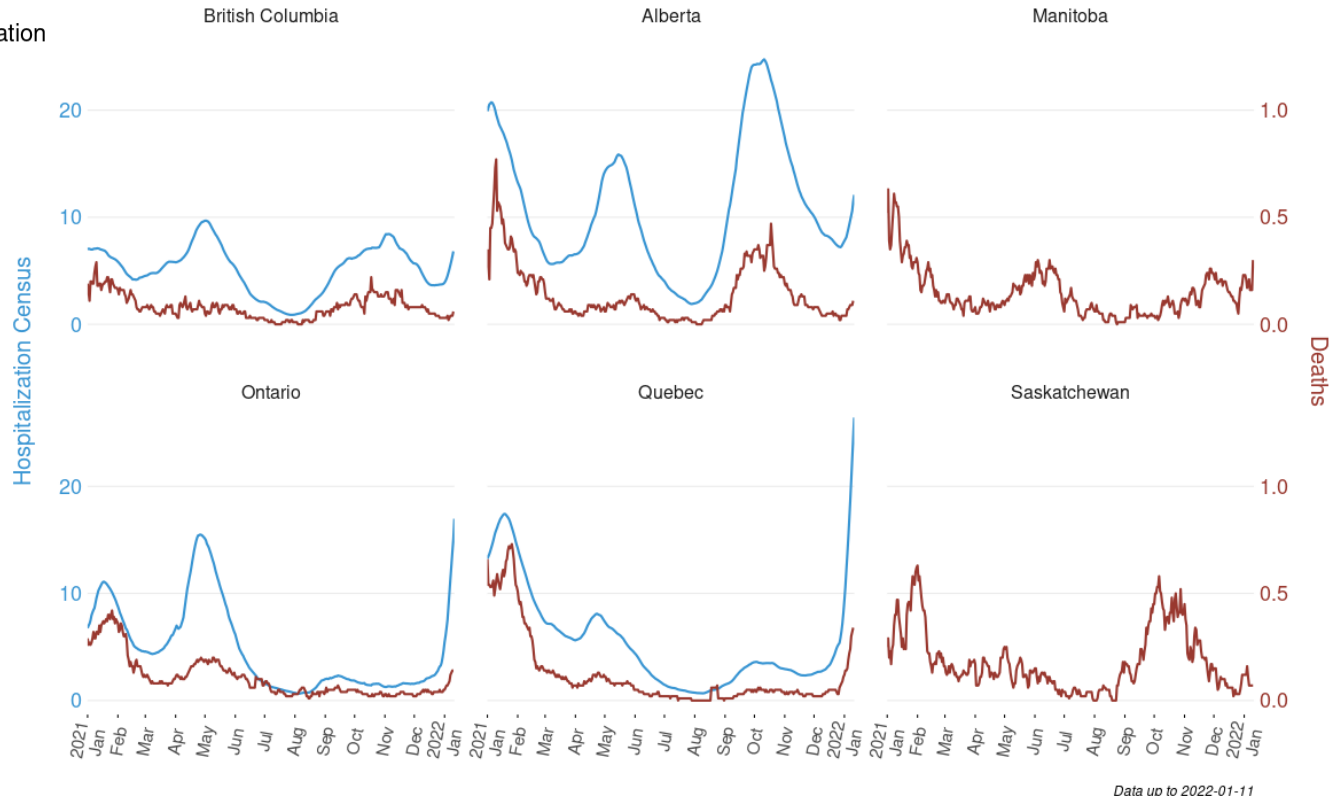
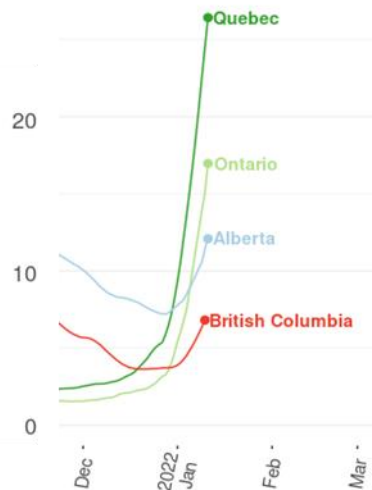
Daily case rates for large Canadian provinces Jan 1, 2021 to Jan 11, 2022



Hospital census and death rates for large Canadian provinces, Jan 1, 2021 to Jan 11, 2022

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

Hospital census



Daily cases, hospitalizations, and deaths, BC Jan 1 2021 to Jan 12, 2022



Past week (7-13 Jan):

17,515 cases



580 hospitalized



32 deaths



To date:

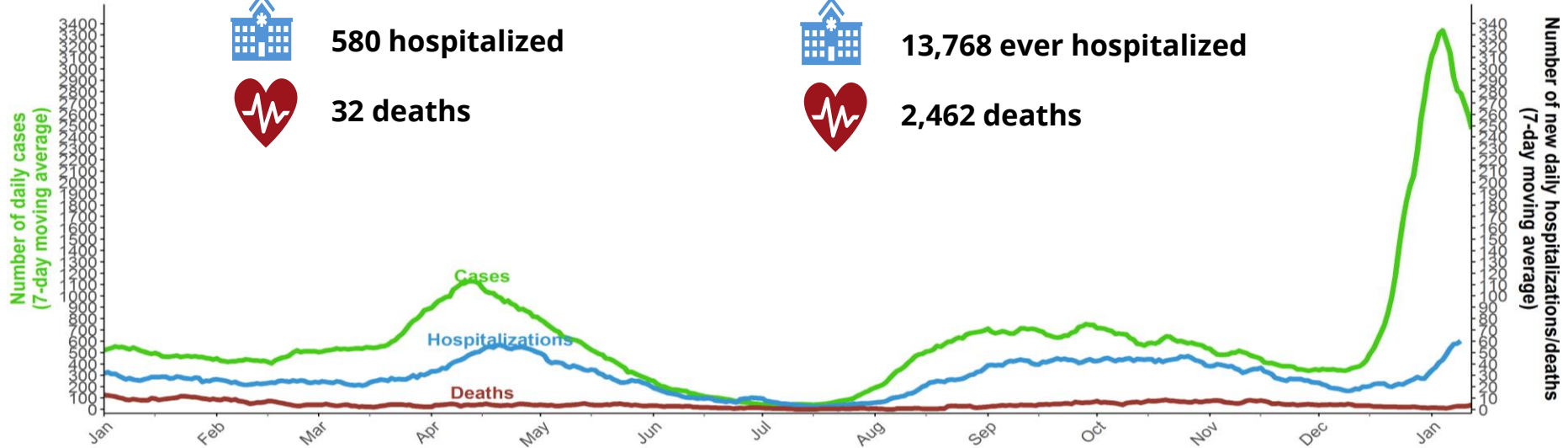
291,246 total cases



13,768 ever hospitalized

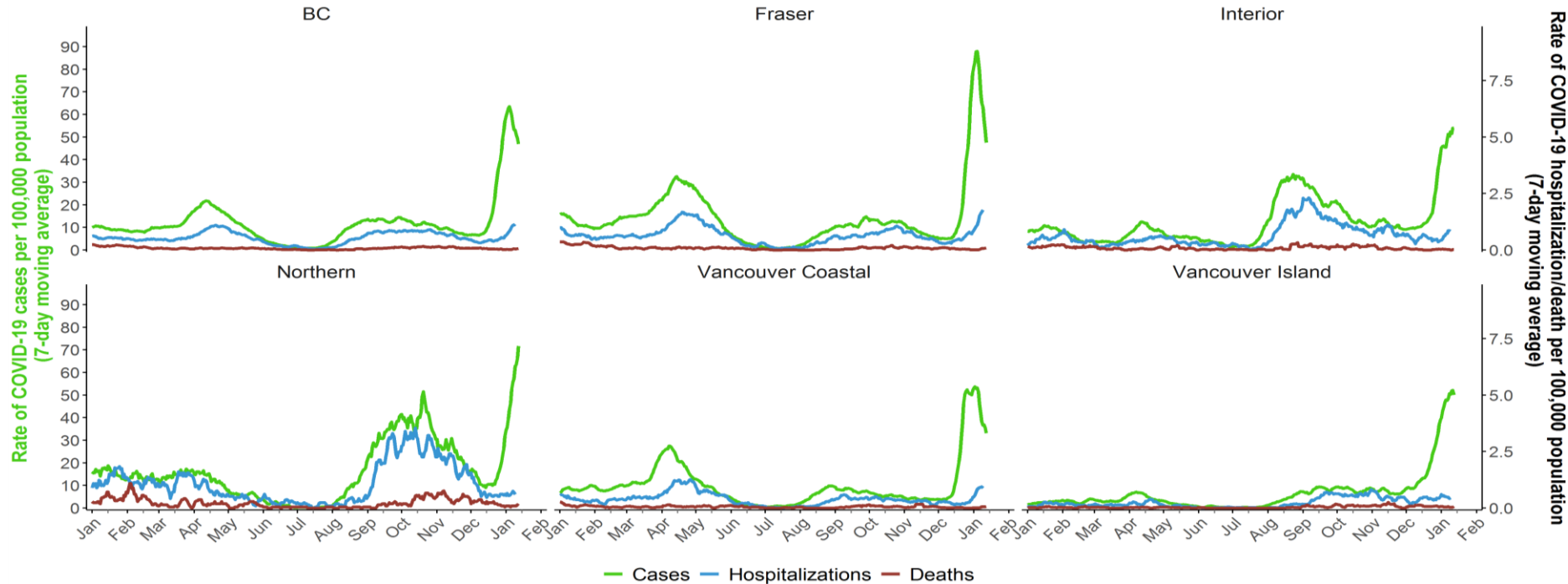


2,462 deaths



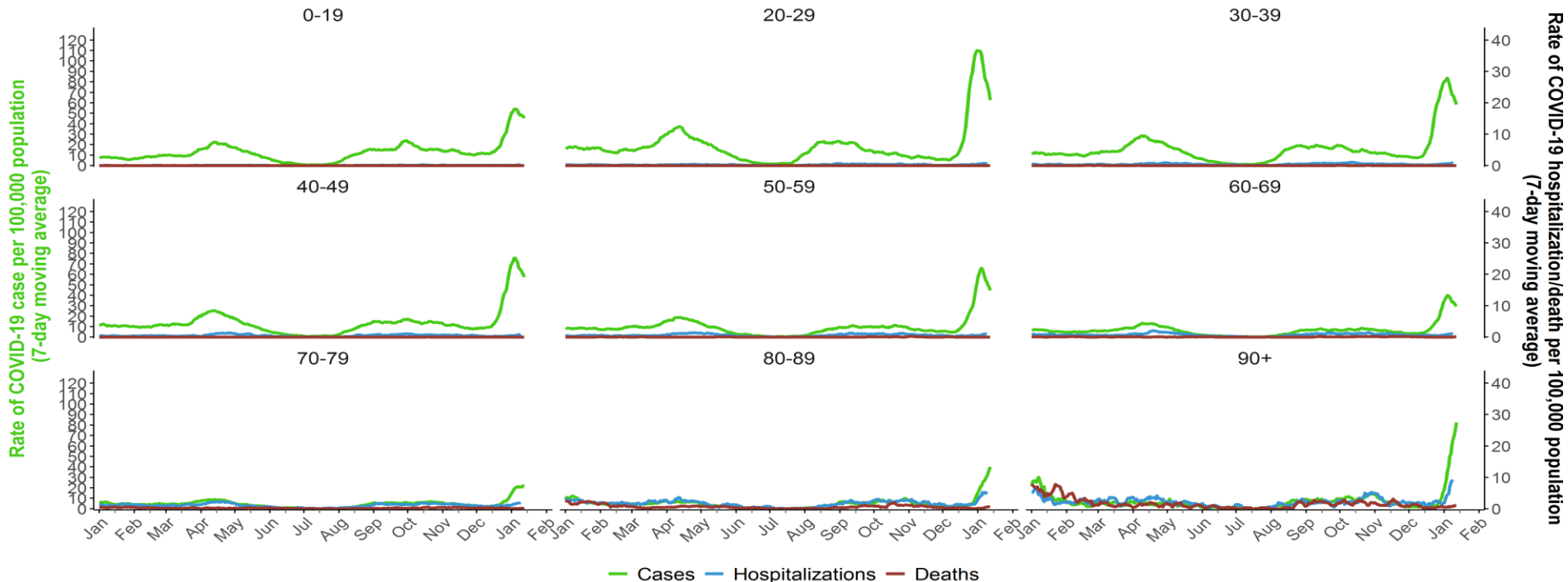
* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jan-13-2022

Daily cases, hospitalizations, and deaths by health authority, 1 Jan 2021 to 11 Jan 2022



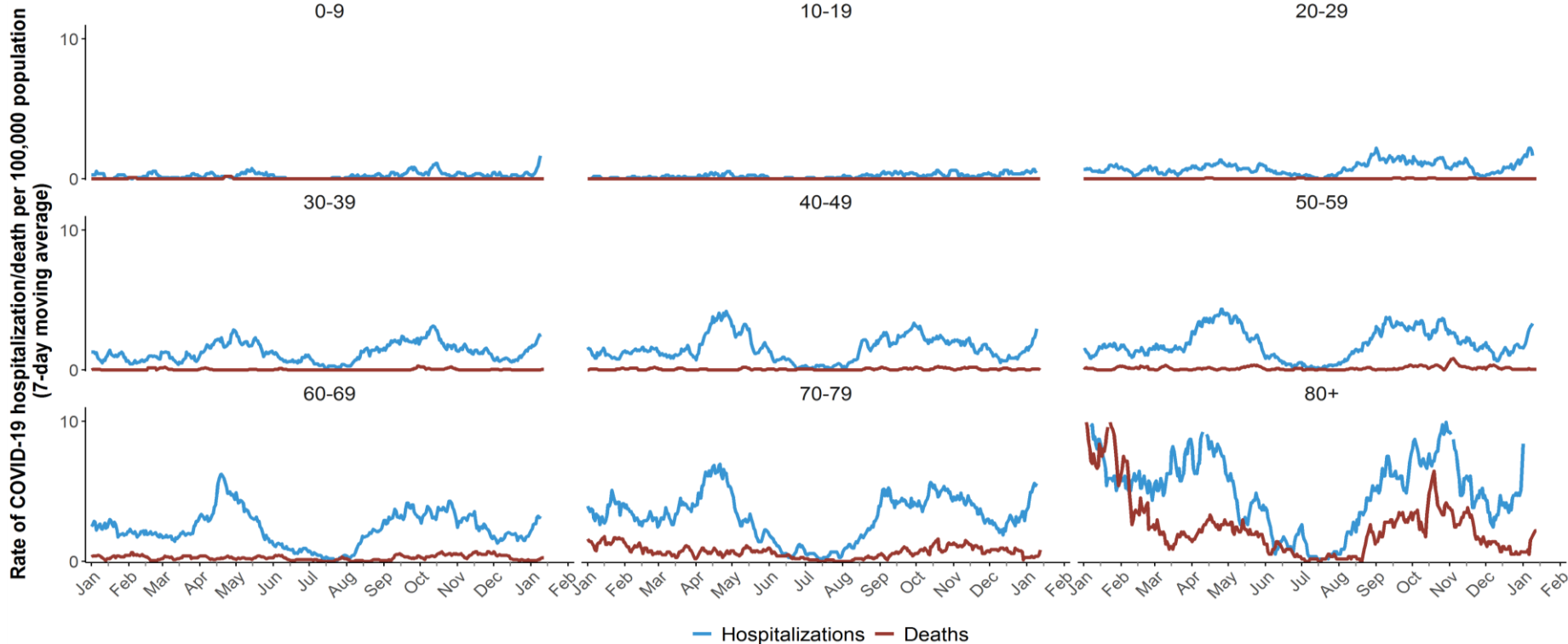
* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jan-13-2022

Rate of COVID-19 cases, hospitalization and deaths by age, BC, Jan 01 2021 - Jan 11, 2022



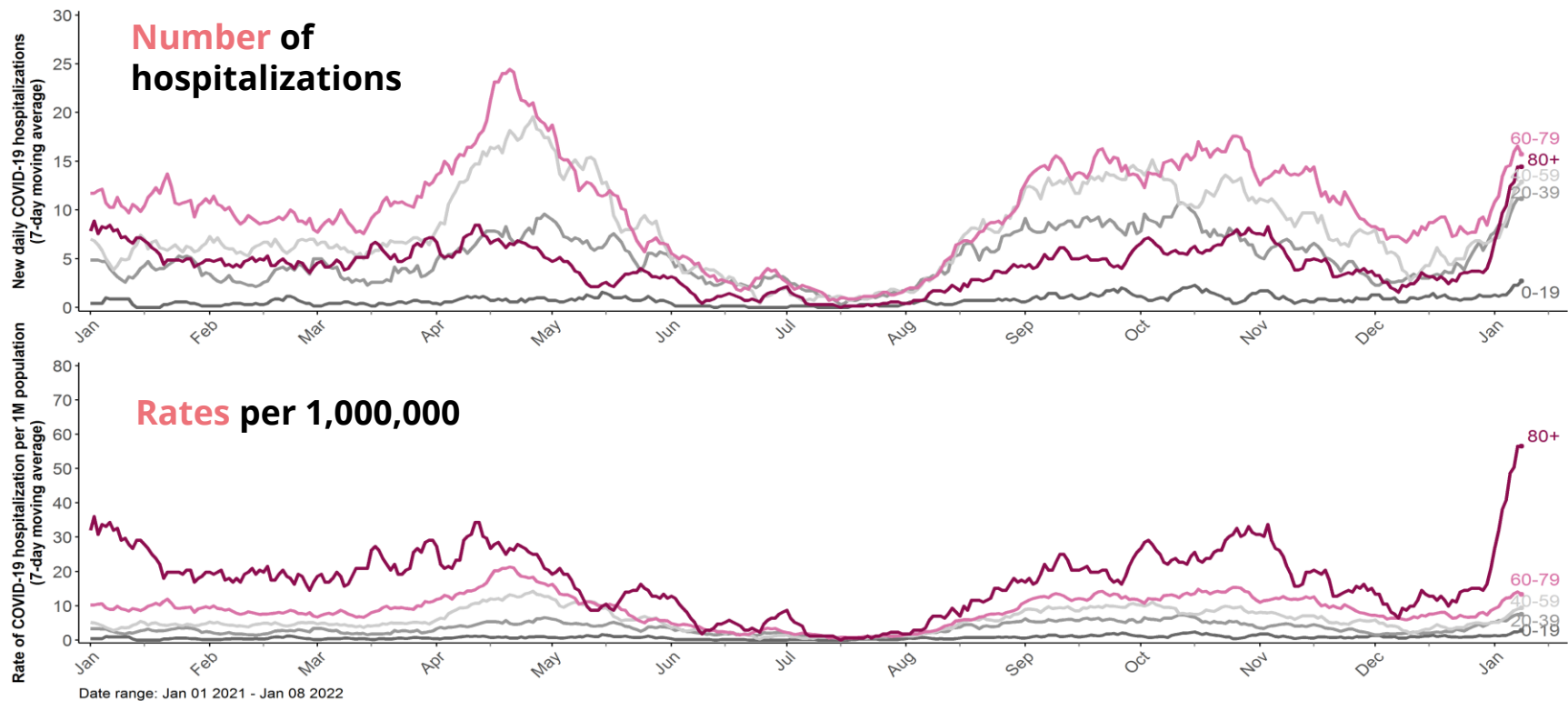
* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jan-13-2022

Rate of COVID-19 hospitalization and deaths by age, BC, Jan 01 2021 - Jan 11, 2022

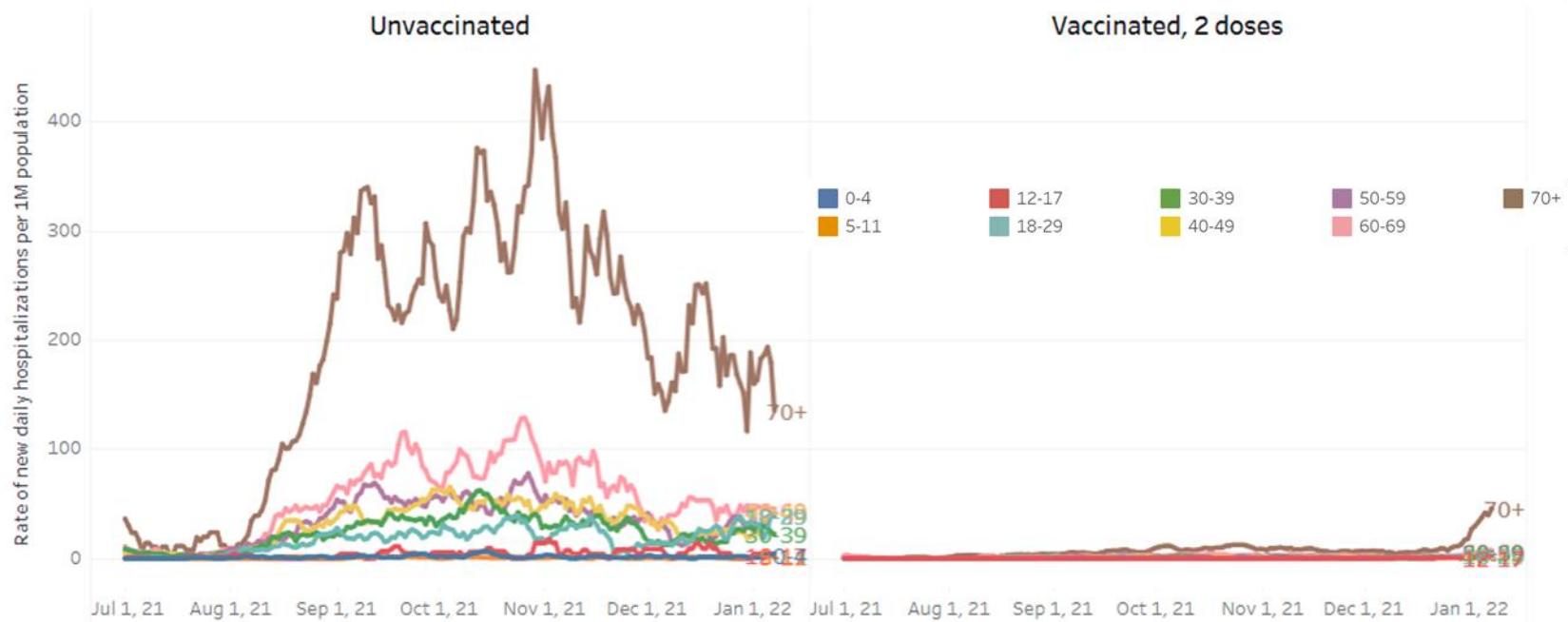


* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jan-13-2022

New daily COVID-19 hospitalization counts and rates per 1,000,000 Jan 1, 2021 to Jan 8, 2022



Hospitalization rates by vaccination status and age group 1 July 2021 to 7 Jan 2022 (data current as of Jan 11)



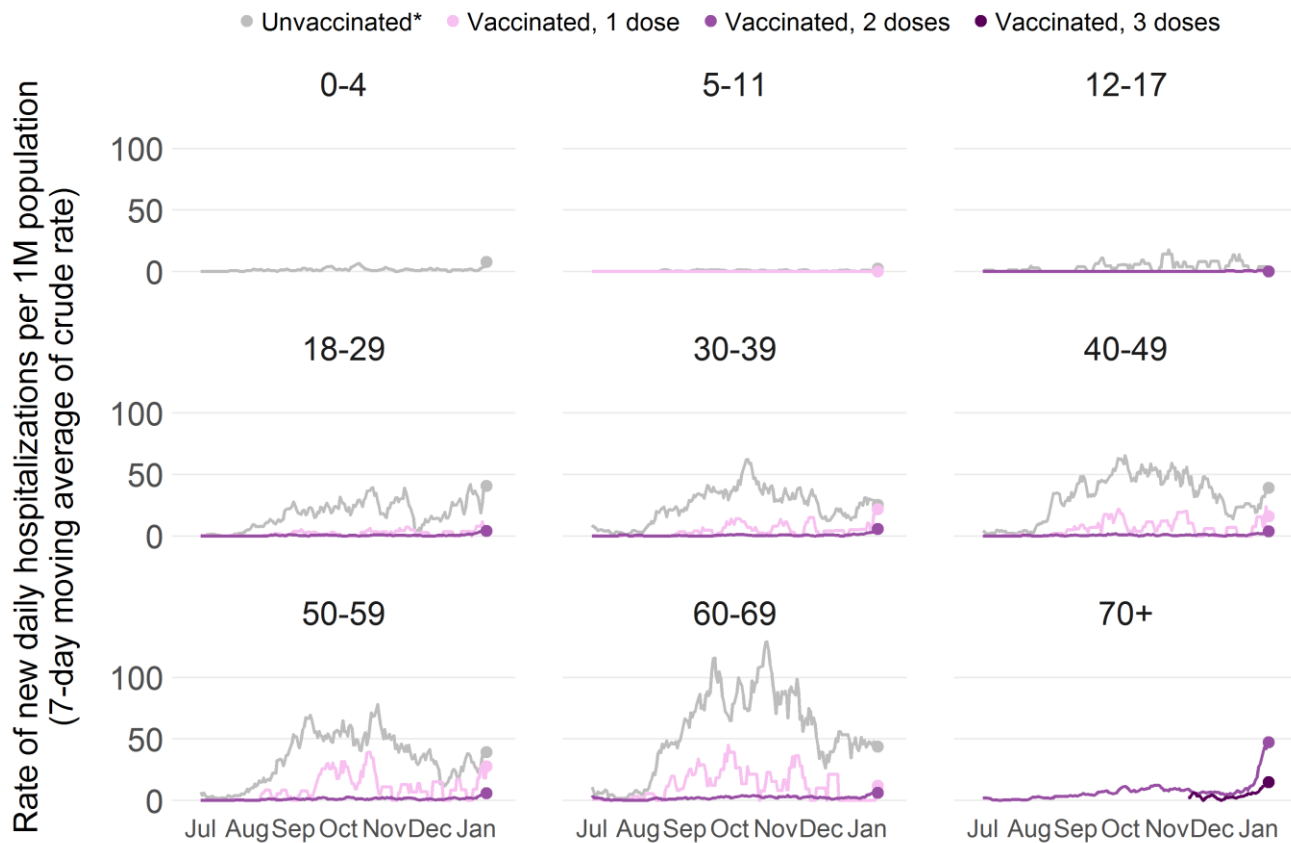
Rate of daily hospitalizations by vaccination status and age, BC

1 July 2021 – 13 Jan 2022

Hospitalization risk is still highest among unvaccinated across all ages

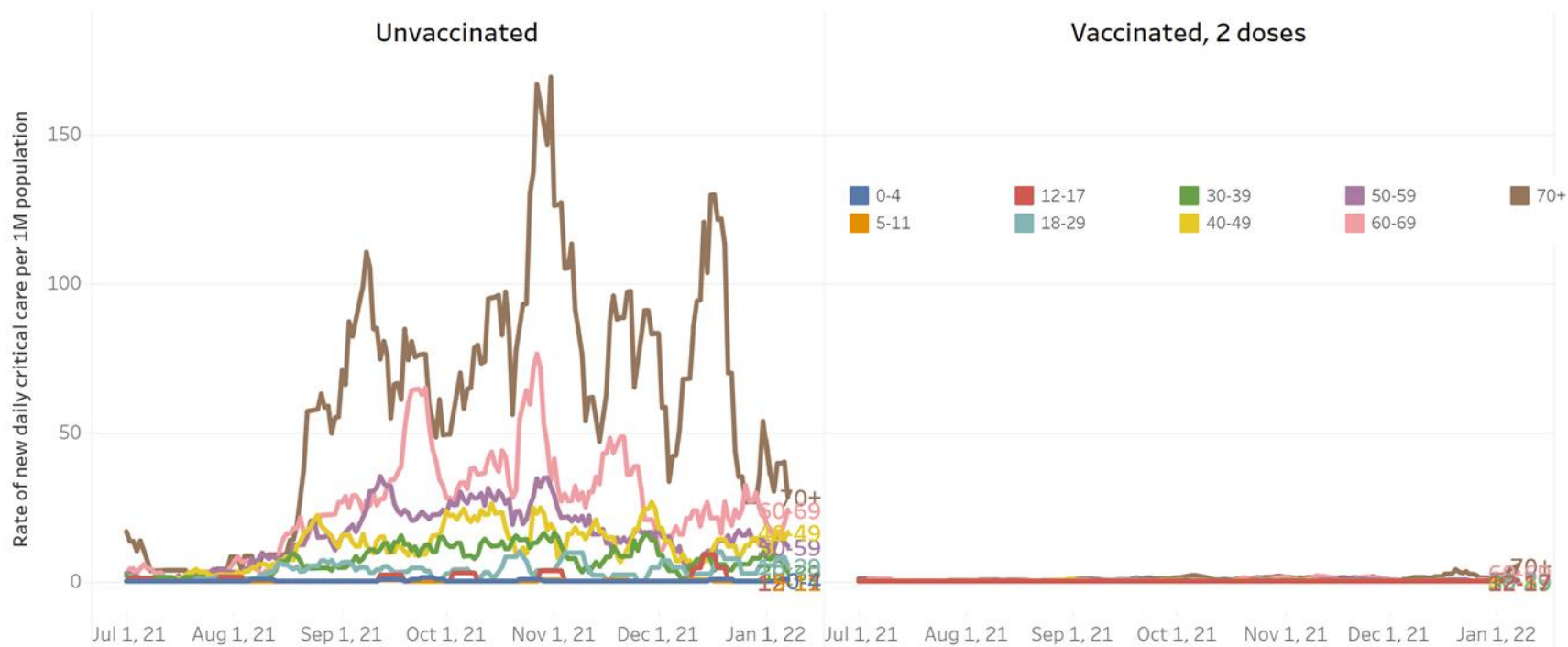
2nd vaccine dose provides good protection against hospitalization

Boosters are important for older individuals



*Unvaccinated includes cases who have received 1 dose but not yet protected (episode date <21 days after 1st dose administration date); These represent 4% of hospitalized unvaccinated cases since 1 July 2021.
Data extracted from health authority case line list and up to 08 Jan 2022

New daily **critical care** rate per 1 M population in BC by age, 1 July 2021 to 7 Jan 2022 (data current as of Jan 11)



COVID-19 Health Outcomes by vaccination status, BC

11 Dec 2021 to 10 Jan 2022

Data include Vaccinations as of 12/27/2021, Cases from 12/14/2021 - 1/10/2022, Hospitalizations, Critical care & Deaths from 12/11/2021 - 1/7/2022

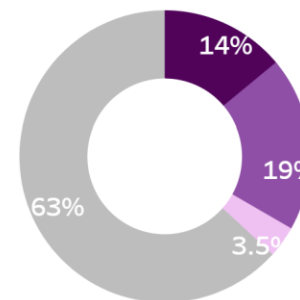
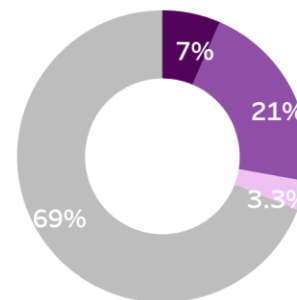
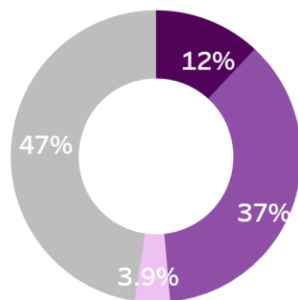
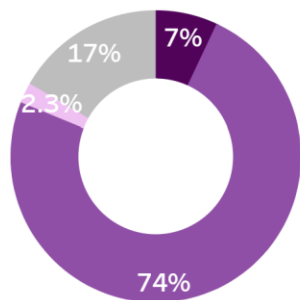
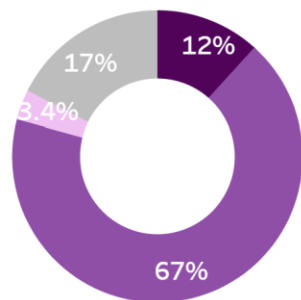
Vaccinations (all BC; n=5.2M)

Cases (n=62,341)

Hospitalizations (n=889)

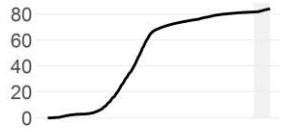
Critical care (n=212)

Deaths (n=57)



■ Vaccinated, 3 doses ■ Vaccinated, 2 doses ■ Vaccinated, 1 dose ■ Unvaccinated

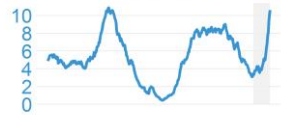
Trend in % total population vaccinated with at least 1 dose



Trend in daily cases per 1M



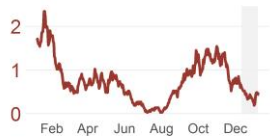
Trend in daily hospitalizations per 1M



Trend in daily critical care per 1M



Trend in daily deaths per 1M



Vaccinations (all BC; n=5.2M)



Cases (n=62,341)



Hospitalizations (n=889)



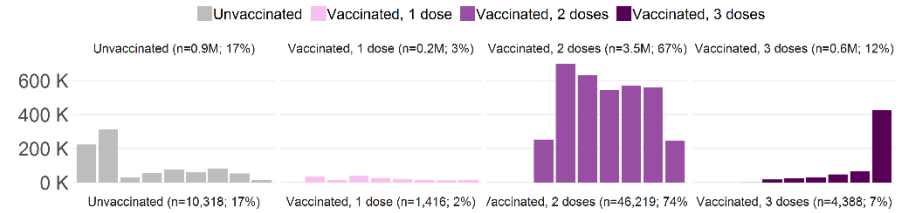
Critical care (n=212)



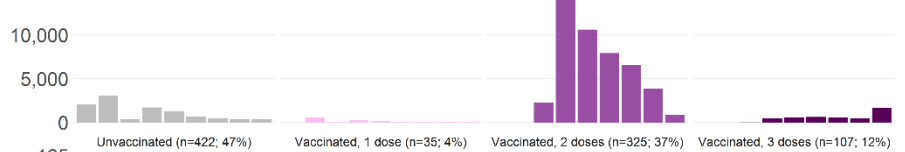
Deaths (n=57)



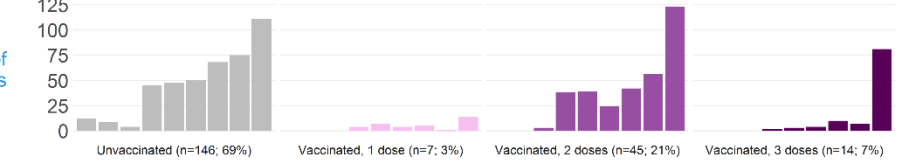
Number of people



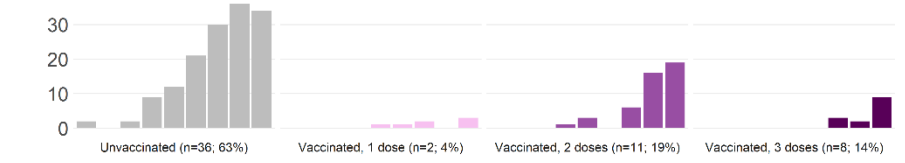
Number of cases



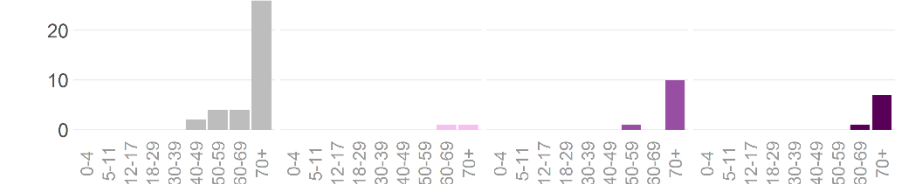
Number of hospitalizations



Number of Critical care

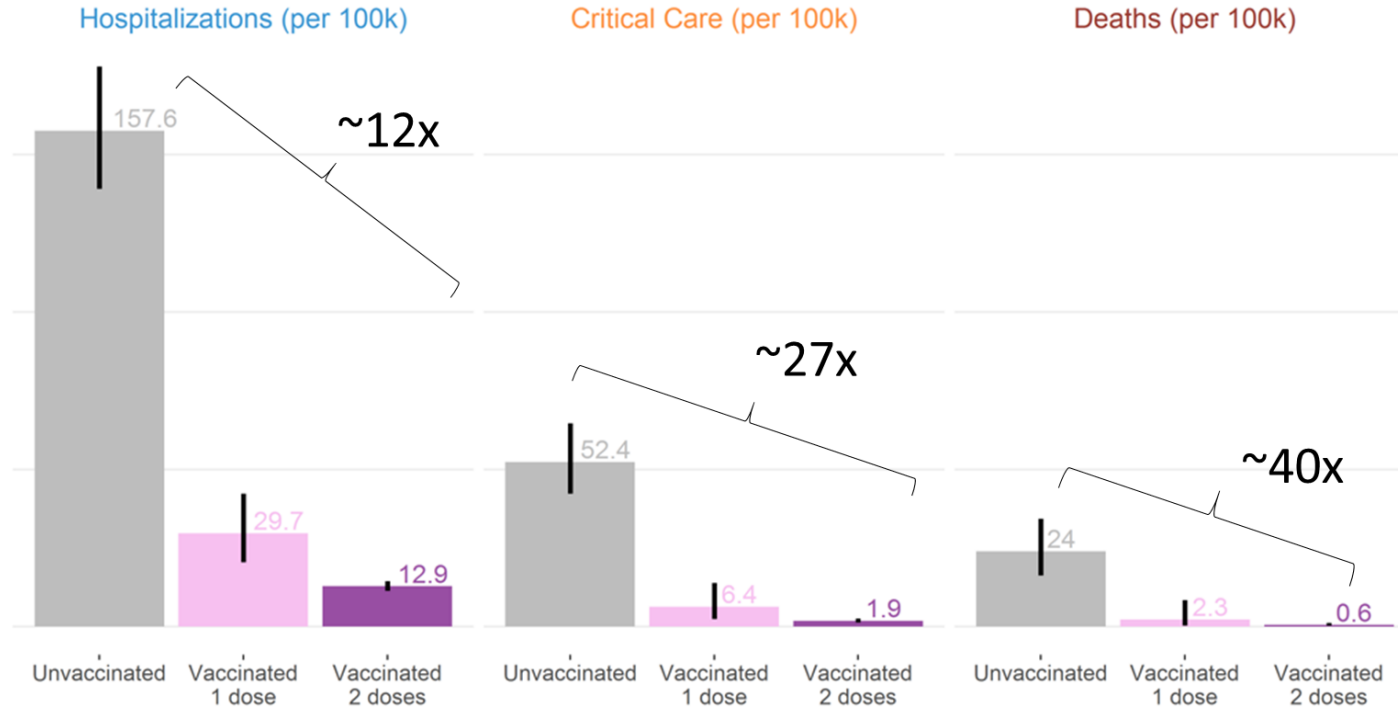


Number of deaths

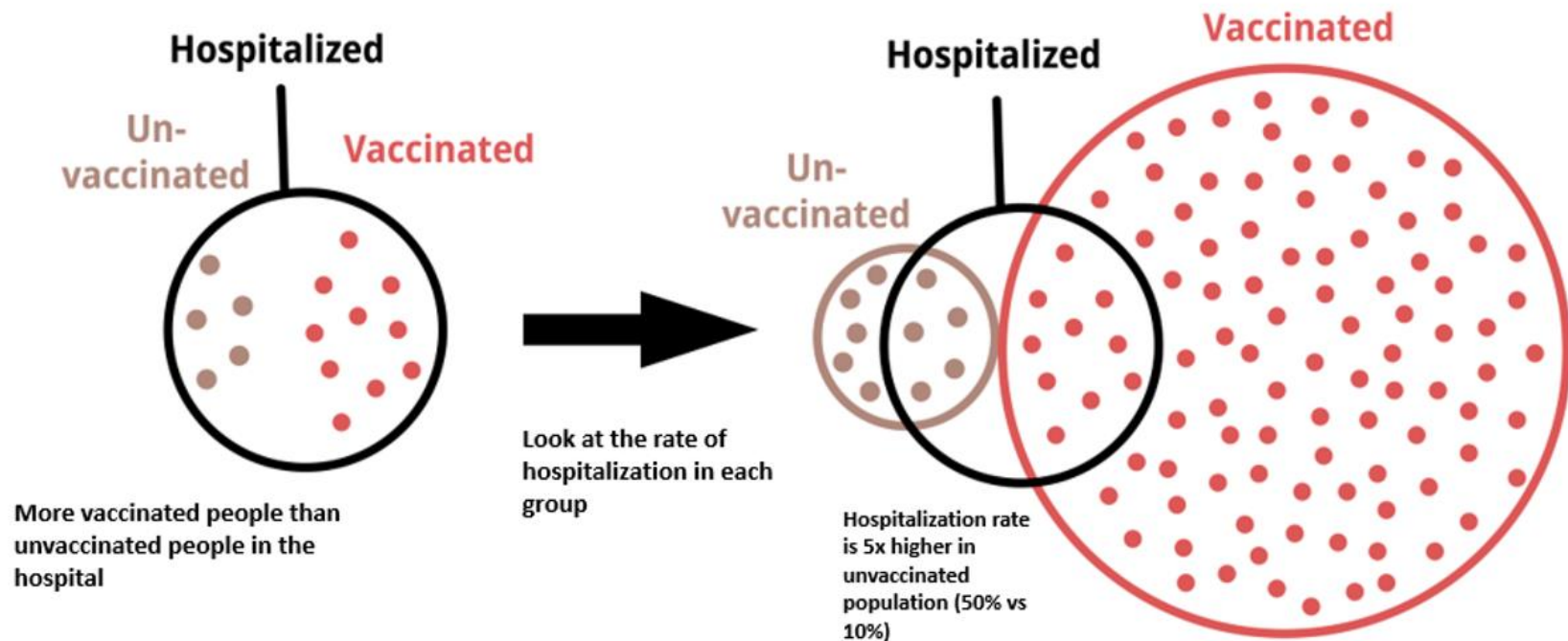


Data include cases from Dec 14-Jan 10, hospitalizations, critical care admissions and deaths from Dec 11-Jan 07, and vaccination statistics on Dec 27, 2021

Age-standardized case, hospitalization and critical care rate, BC 11 Dec 2021 to 7 Jan 2022



Unvaccinated people are at increased risk of hospitalization



Source: Mark Rummy <https://twitter.com/MarcRummy/status/1464178903224889345>

Jan 06 to Jan 12: Pediatric COVID-19 Profile



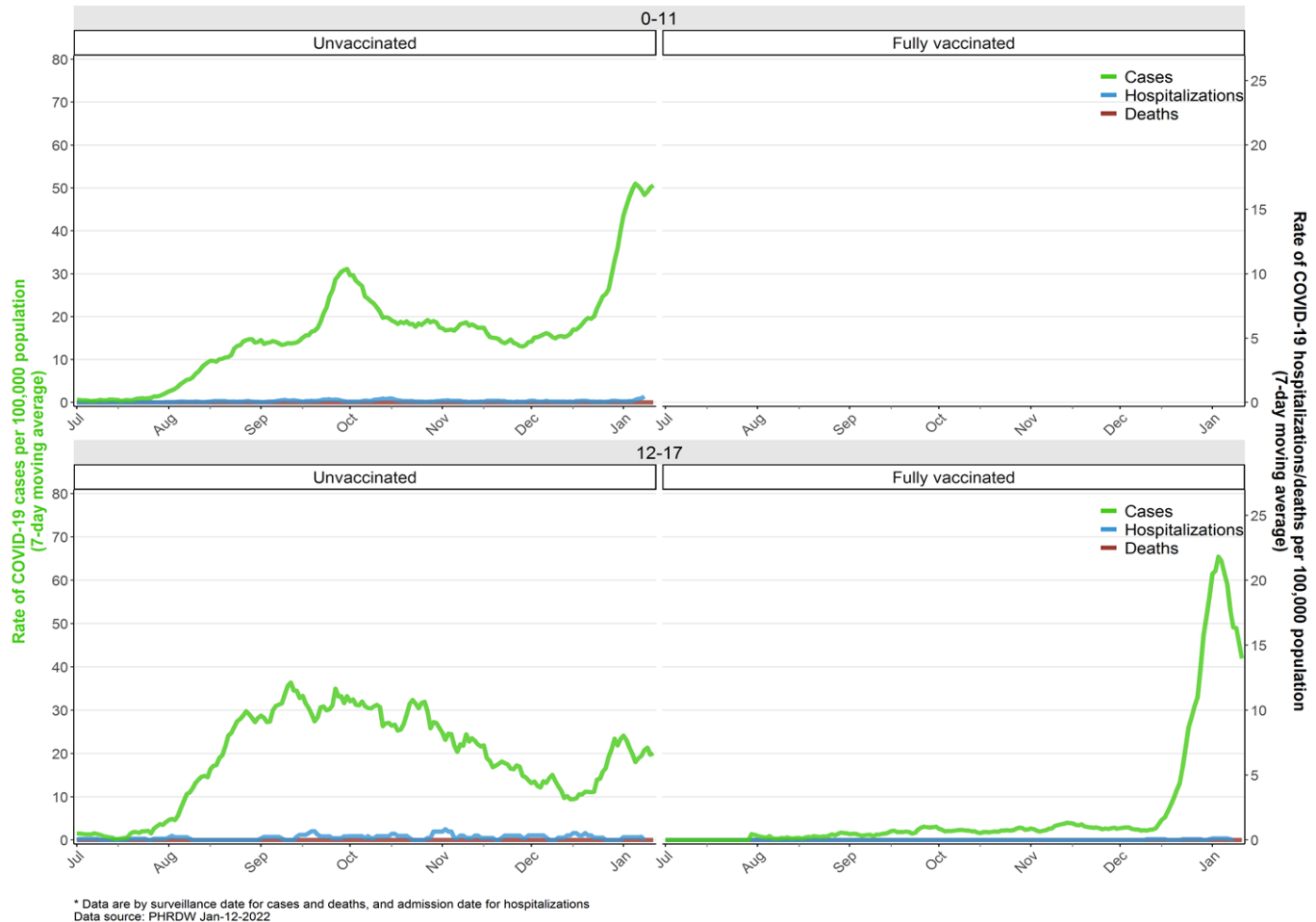
Age group: 0-4		Age group: 0-4		Age group: 0-4		Age group: 0-4	
8,504	total cases	152	ever hospitalized	14	ever in critical care	2	total deaths
1,026	new this week	9	new this week	0	new this week	0	new this week
Age group: 5-11		Age group: 5-11		Age group: 5-11		Age group: 5-11	
21,240	total cases	72	ever hospitalized	6	ever in critical care	0	total deaths
1,033	new this week	2	new this week	0	new this week	0	new this week
Age group: 12-17		Age group: 12-17		Age group: 12-17		Age group: 12-17	
16,068	total cases	71	ever hospitalized	12	ever in critical care	0	total deaths
723	new this week	2	new this week	0	new this week	0	new this week

* New hospitalizations and critical care census numbers are as of Jan 11 2022

* New cases and new deaths are net new between Line lists of Jan 05 2022 and Jan 12 2022

Pediatric daily cases, hospitalizations, and deaths, BC

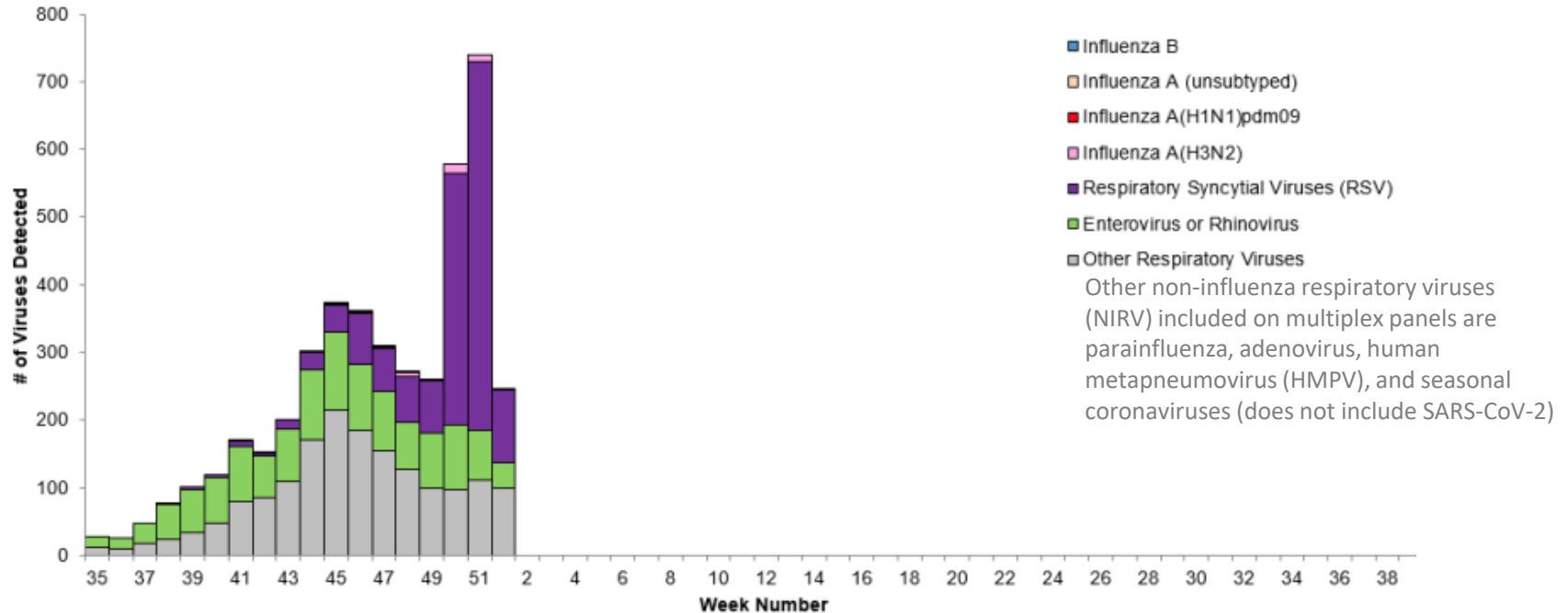
Jan 1 2021 to Jan 12, 2022



* Data are by surveillance date for cases and deaths, and admission date for hospitalizations
Data source: PHRDW Jan-12-2022

Influenza and non-influenza respiratory virus detections among specimens submitted to BCCDC and Island Health Laboratories, 2021-22

Other viruses are still circulating

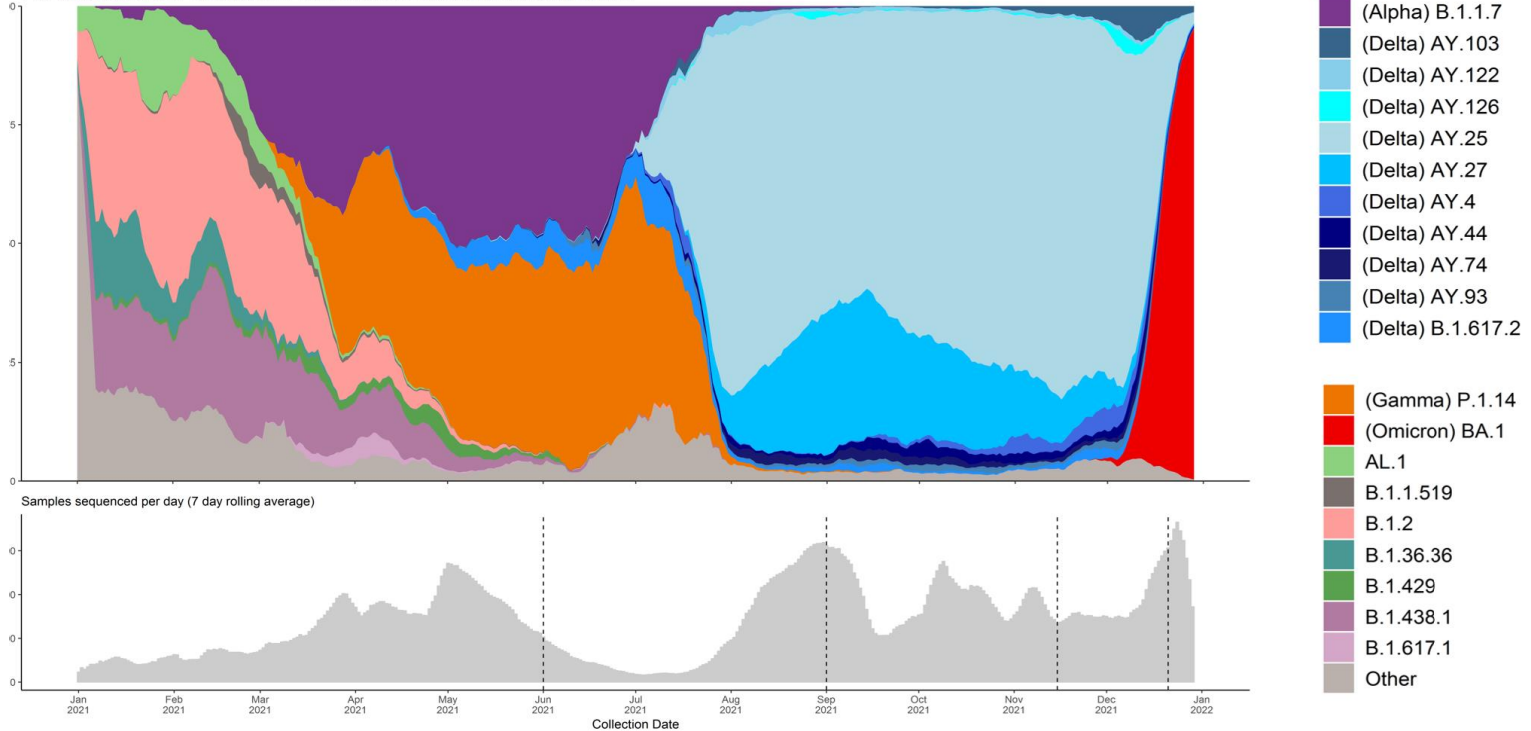


SARS-COV2 Samples that have been genome sequenced

7-day rolling frequency since 1 Jan 2021at. Top 20 lineages only, remainder classified as other.

SARS-CoV2 samples genome sequenced by BCCDC

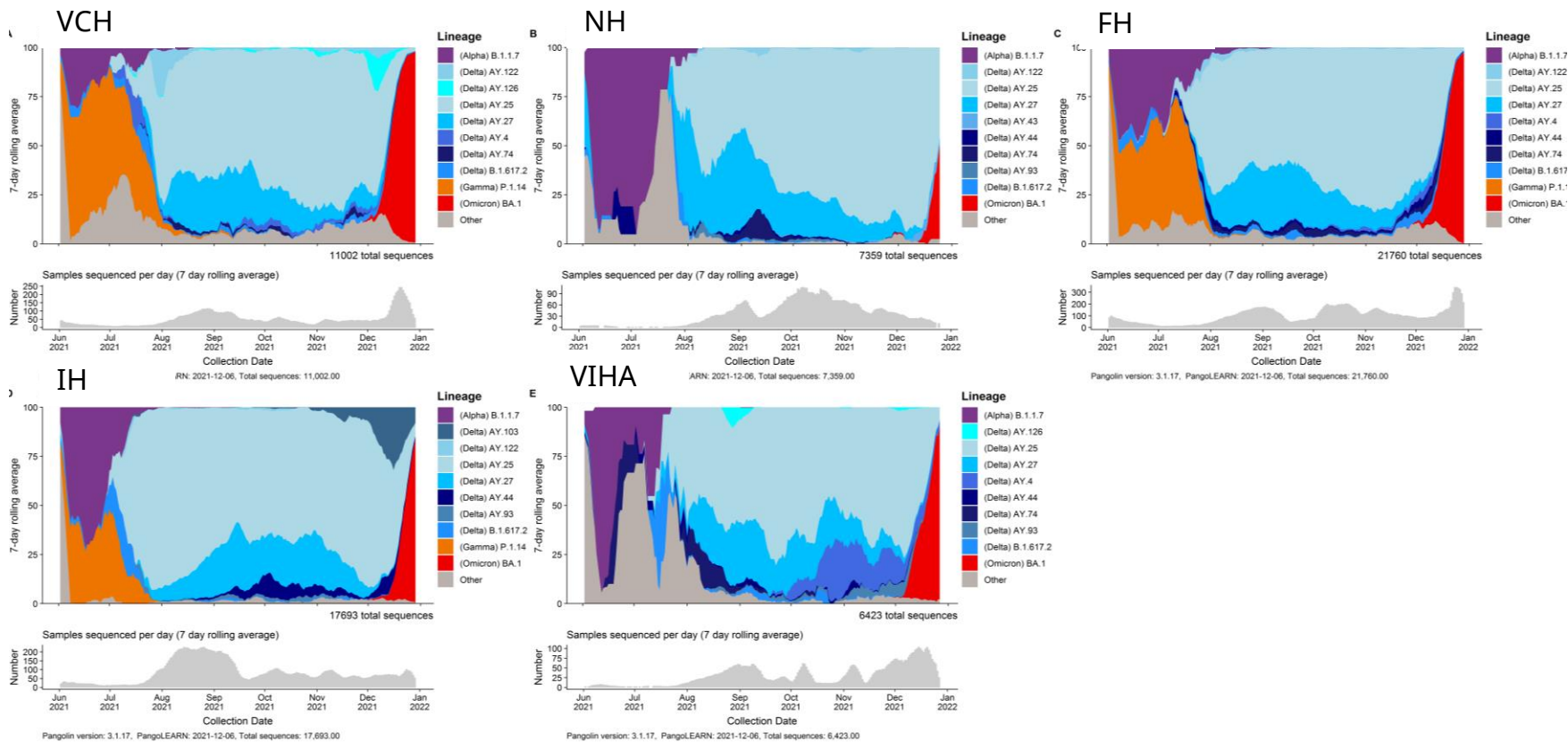
7-day rolling frequency since 1st January 2021. Top 20 lineages only shown, remainder classified as 'Other'



Pangolin version: 3.1.17, PangoleARN: 2021-12-06, Total sequences: 103,678.00

SARS-COV2 Samples that have been genome sequenced by Health Authority

7-day rolling frequency since January 1, 2021. Top 20 lineages only shown, remainder classified as other.

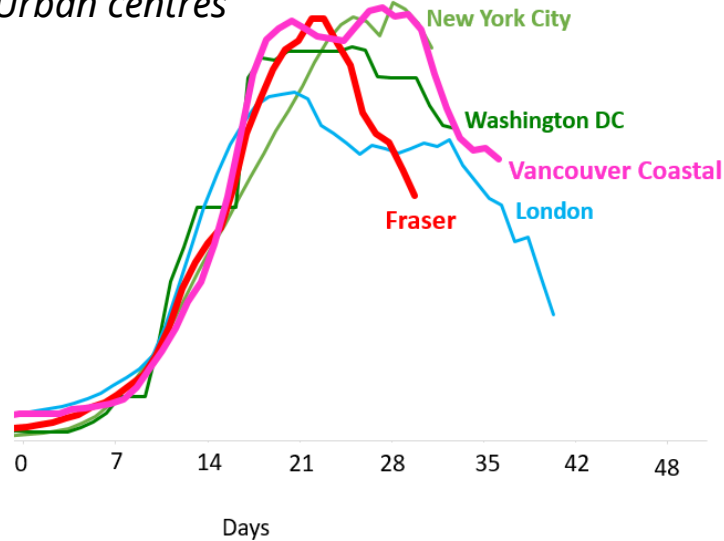


BC's case trajectory so far is consistent with that observed in other jurisdictions where Omicron has become the dominant variant

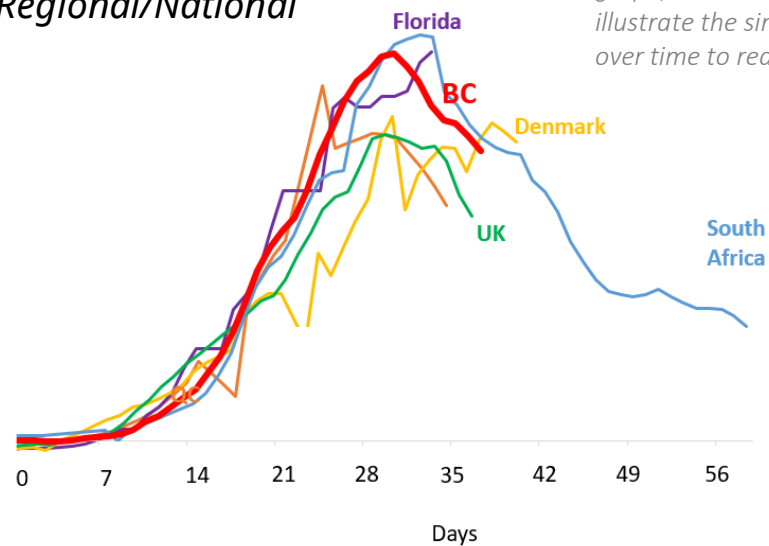
Infections likely to have peaked in BC Lower Mainland

Omicron wave case trends over time

Urban centres



Regional/National



NB: case rates, and the values on the y axis if it was there, are different across jurisdictions – for the purposes of this graph, the curves are scaled together to illustrate the similarity in growth rates over time to reach the peak in cases

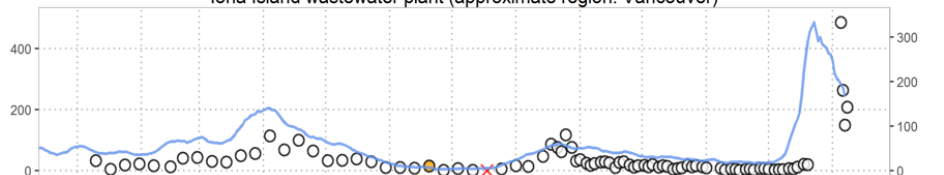
Data up to Jan 12, 2022

SARS-CoV-2 concentrations in wastewater peaked in first week of January 2022 and correlate with COVID-19 case counts across FHA and VCH

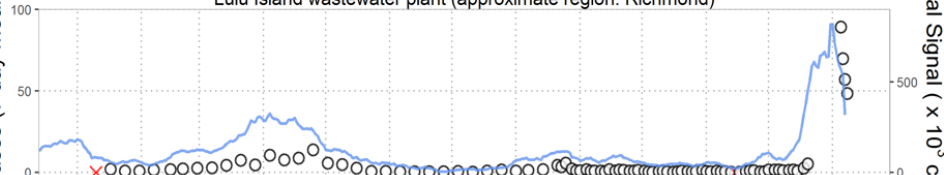
Vancouver Coastal Health region

Fraser Health region

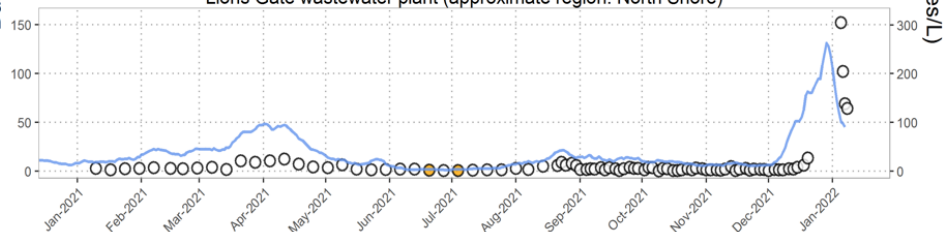
Iona Island wastewater plant (approximate region: Vancouver)



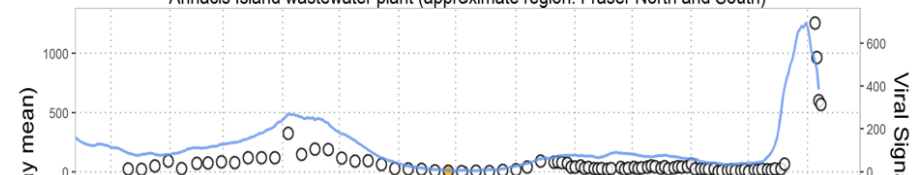
Lulu Island wastewater plant (approximate region: Richmond)



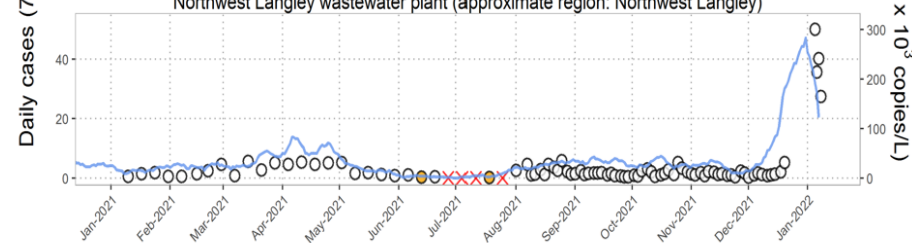
Lions Gate wastewater plant (approximate region: North Shore)



Annacis Island wastewater plant (approximate region: Fraser North and South)



Northwest Langley wastewater plant (approximate region: Northwest Langley)



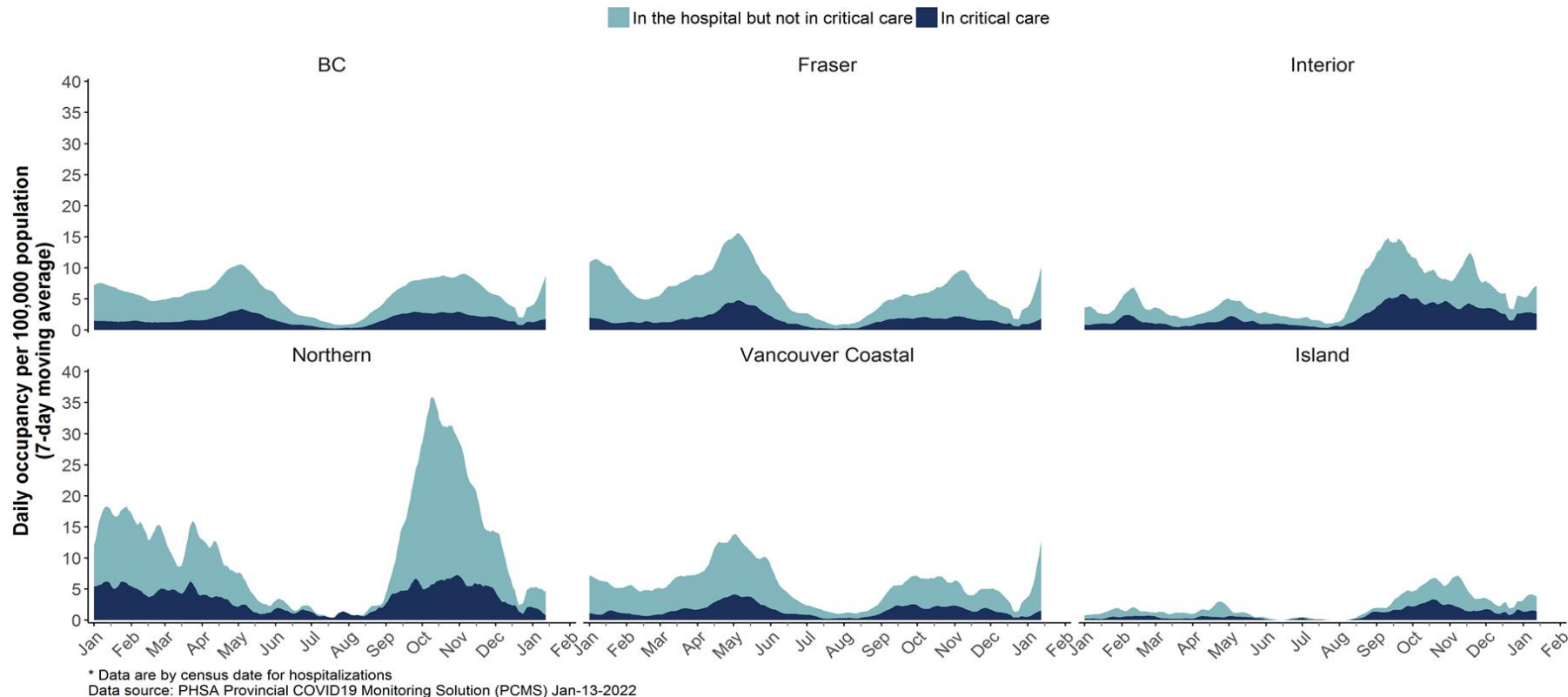
— Cases by Onset

○ Pos. viral signal

● Weak Pos. viral signal

✗ Neg. viral signal

Current COVID-19 hospital occupancy by health authority of hospitalization, Jan 01 2021 - Jan 11 2022



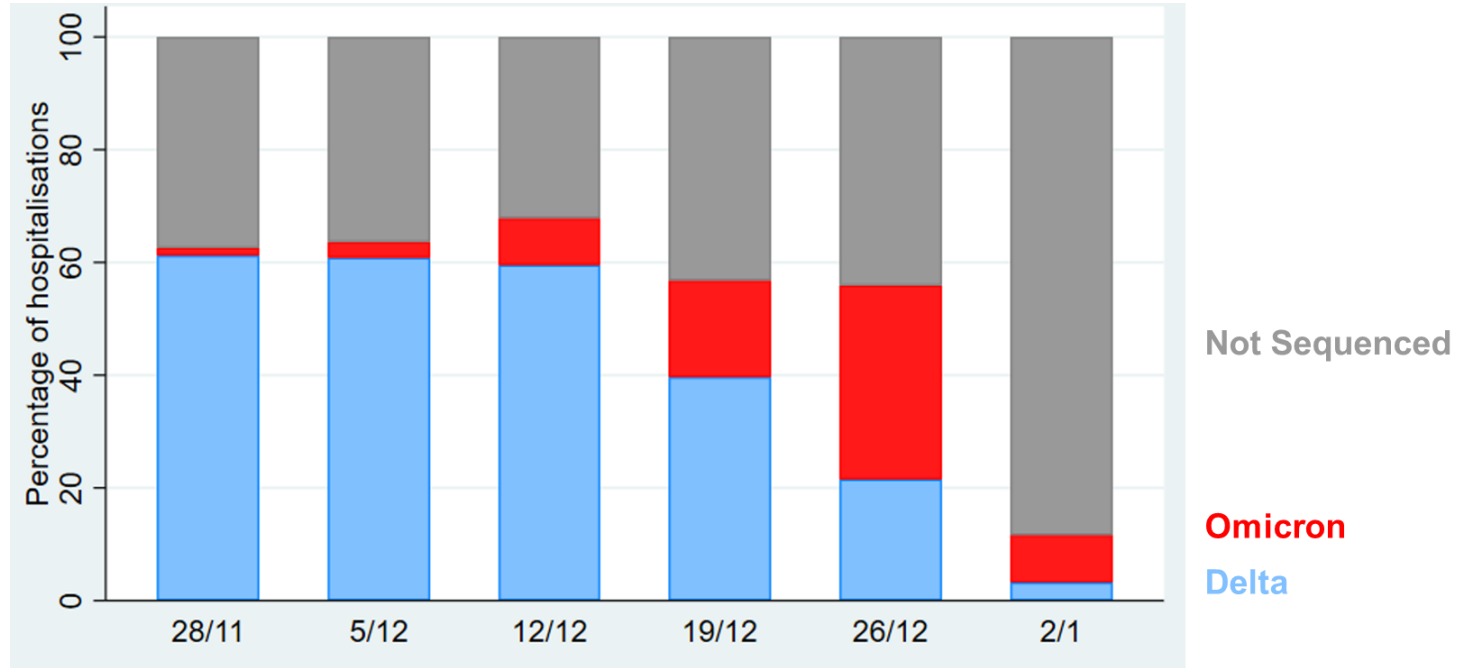
Urban Emergency Department COVID-related Visits and Admissions, VCH-PHC, 7 Jan 2021 – 11 Jan 2022



Data courtesy of Dr. Eric Grafstein, Regional Head of Emergency Medicine, VCH-PHC; Visualization: BCCDC

Hospital admissions by week of admission and variant, BC

28 Nov 2021 – 8 Jan 2022



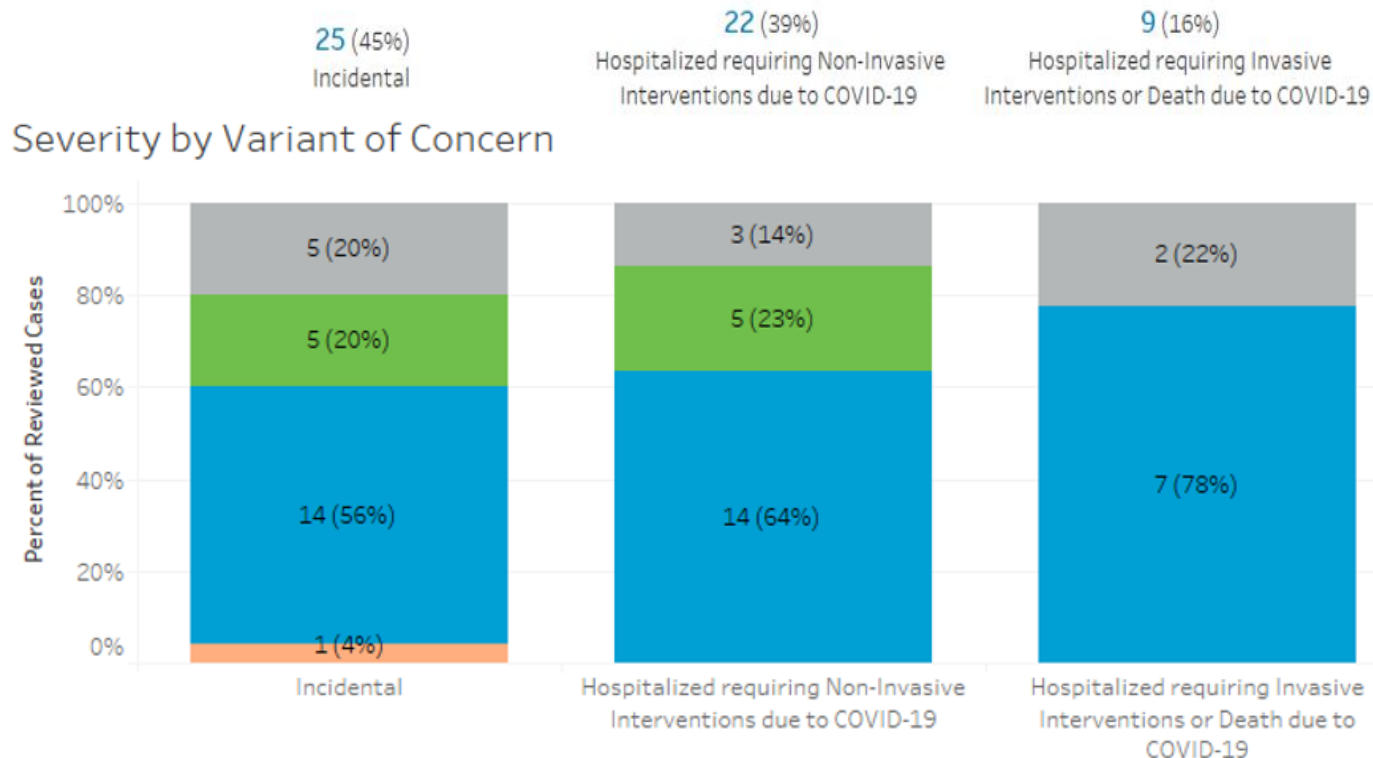
Characteristics of hospitalized cases, BC, 28 Nov 2021 – 7 Jan 2022*

	Delta (N=417)	Omicron (N=179)	Unknown (last 7 days only; N=358)
Median age (Q1, Q2)	62 (49,73)	64 (37,79)	61 (39,79)
80+ years	52 (13%)	47 (26%)	83 (23%)
Median length of stay (Q1, Q2)	6 (2,10)	3 (2,5)	Not applicable – some people still in hospital
Critical Care	164 (39%)	22 (12%)	47 (13%)
Death	28 (6.7%)	3 (1.7%)	1 (2.8%)
Unvaccinated	284 (68%)	35 (20%)	129 (36%)
Lower Mainland resident	165 (40%)	152 (85%)	269 (75%)

Hospitalizations among December COVID-19 cases, VCH: approximately 1 in 2 are incidental; still mostly Delta

56 hospitalizations
(among 7,989 cases):

■ Not Screened/Sequenced
■ Omicron
■ Delta
■ Other Lineage



Acknowledgements: Dr. Jae Ford,
Dr. Alex Choi, and the VCH Public
Health Surveillance Unit

Hospitalization data

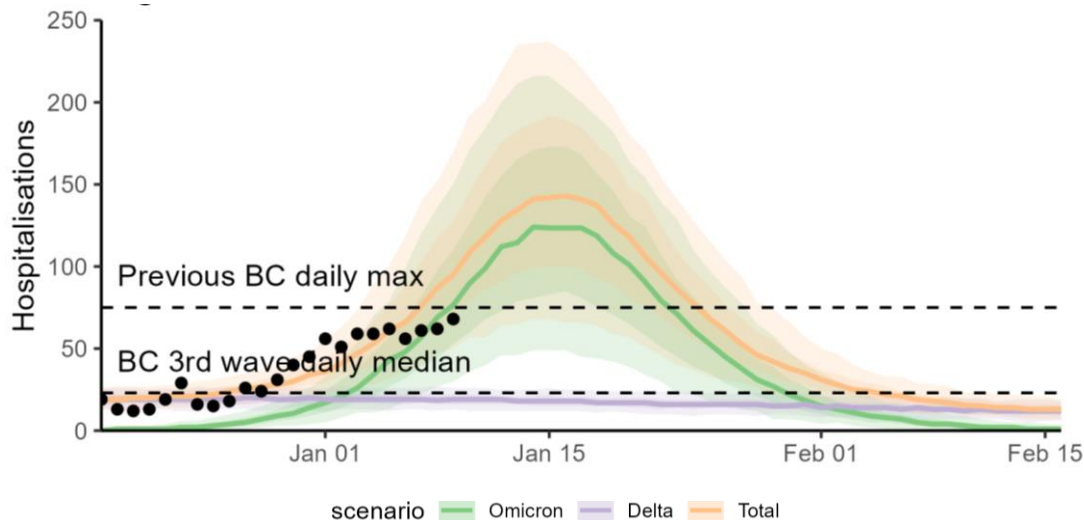
B.C.'s census hospitalization reporting includes the following cases:

- **1. COVID-19 related admissions:** patients admitted because of COVID-19 illness of because COVID-19 is contributing to their need for hospitalization (e.g. underlying illness, or inability to isolate due to personal circumstances)
- **2. Incidental COVID-19 cases:** patients who test positive for COVID-19 but are admitted for reasons unrelated to COVID-19 (e.g. screening test prior to surgery, admission screen)
- **3. Hospital associated COVID-19 cases:** patient acquired COVID-19 while in hospital for other reasons (e.g. outbreak case)

Weekly reporting of COVID-19 severity based on epidemiological data to be included in the weekly BCCDC surveillance report – includes these cases, combined

Omicron scenario 1: higher transmission

As we are still gathering data on emergence of Omicron variant, there are a large number of unknowns on its impact on cases and hospitalizations. We assume 70,000 booster doses are provided daily for 30 days from the start of the projection period. Transmission was estimated in the Dec 14th – 23rd period.

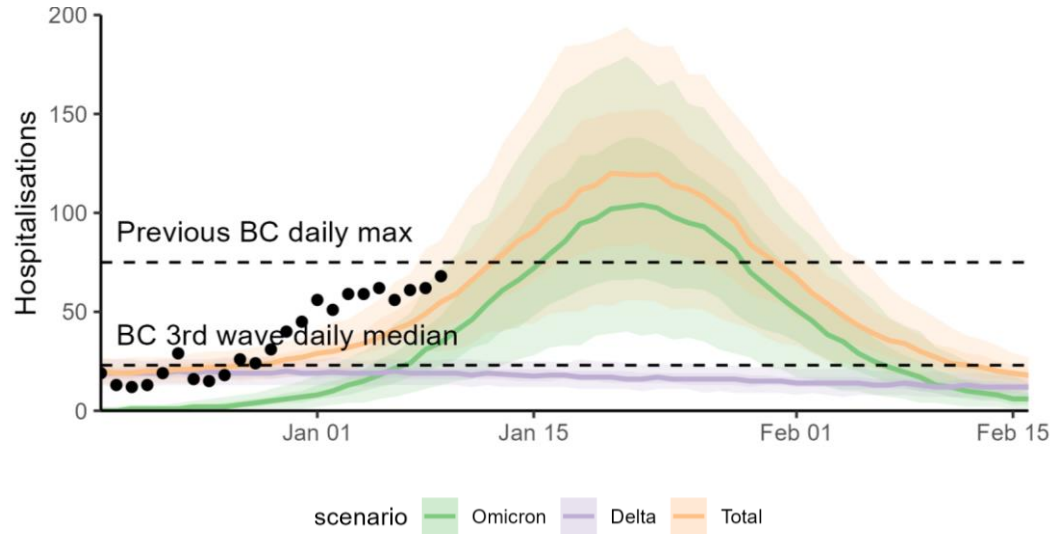


Shading indicates uncertainty due to effectiveness of vaccination, showing 90% and 50% confidence intervals.

Note: These scenarios are for illustrative purposes and liable to change rapidly as more information are collected

Omicron scenario 2: lower transmission

As we are still gathering data on emergence of Omicron variant, there are a large number of unknowns on its impact on cases and hospitalizations. We assume 70,000 booster doses are provided daily for 30 days from the start of the projection period. There is a further assumption that transmission is 20% lower than was estimated in the Dec 14th – 23rd period.



Shading indicates uncertainty due to effectiveness of vaccination, showing 90% and 50% confidence intervals.

Note: These scenarios are for illustrative purposes and liable to change rapidly as more information are collected

PHO orders for higher-risk settings

Public health considers:

Virus factors: transmissibility, how much virus is circulating

Who, and what they are doing: masked/unmasked, seated/exercising, vocalizing/quiet, personal risk, vaccination status

Setting: indoors/outdoors, size of room, crowded/uncrowded, ventilated/unventilated.

Previous experience: prior outbreaks, transmission chains

Current restrictions impact:

Gyms and fitness centres

Organized and personal indoor gatherings/events

Bars and nightclubs

Limits in restaurants (table sizes, space, barriers, no mixing)

COVID-19 safety plans for all businesses

COVID-19 Update

January 14, 2022



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

Symptom Self-Assessment:

covid19.thrive.health



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