

# COVID-19 Pandemic: Preventing and Managing the Health Impacts on Kids

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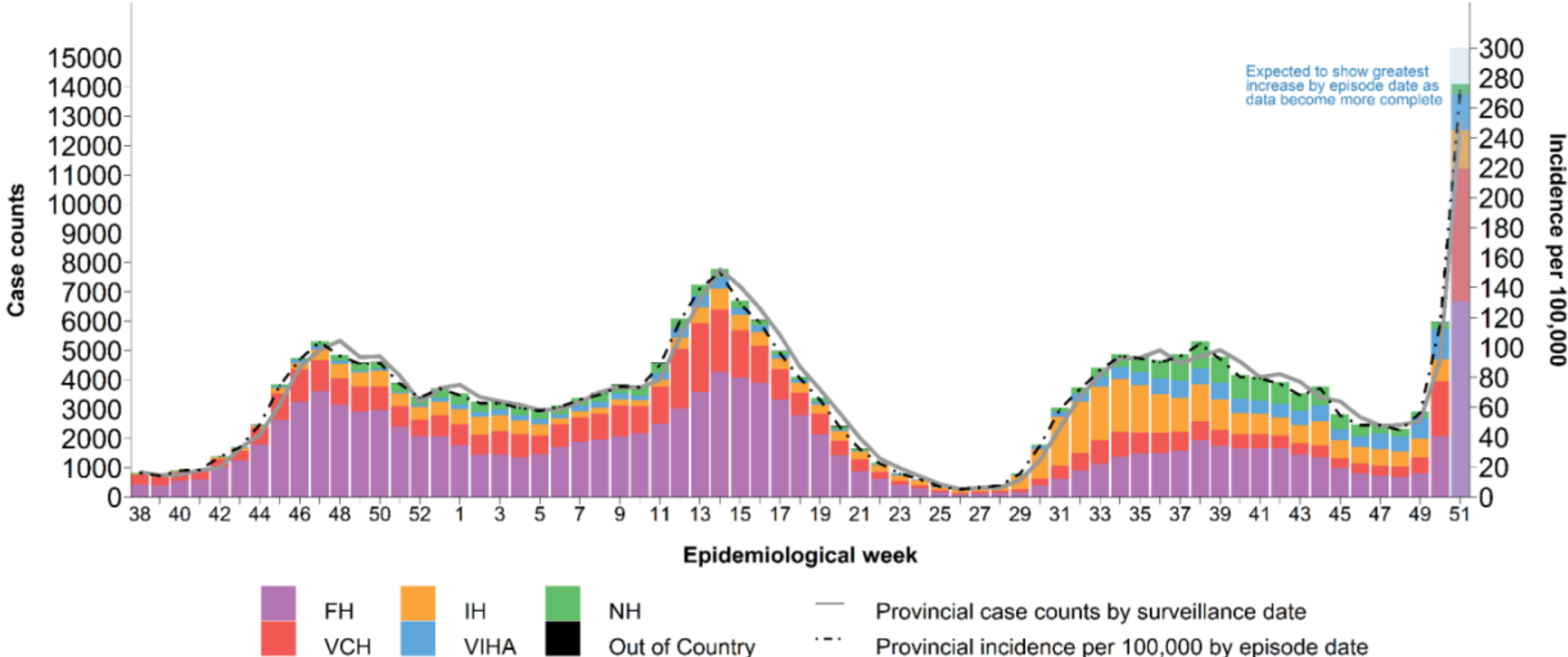
# VCH Land Acknowledgement

I (We) would like to acknowledge that we are conducting our work today on the unceded and traditional territories of the 14 First Nations of Musqueam, Squamish, Tsleil-Waututh, shíshálh, Tla'amin, Wuikinuxv, Nuxalk, Heiltsuk, Kitasoo, Lil'wat, N'Quatqua, Samahquam, Skatin and Xa'xtsa.

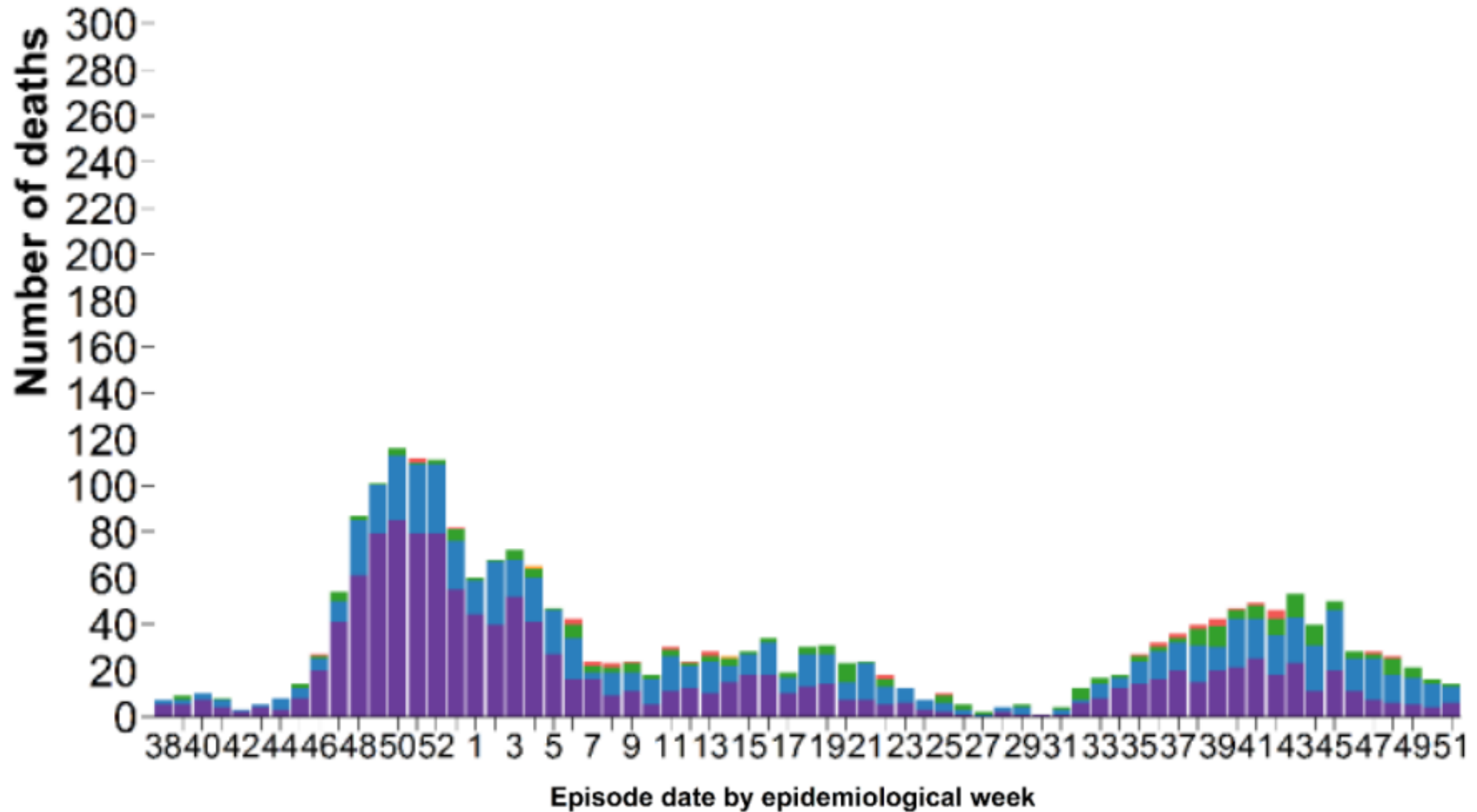


# Epidemiology update

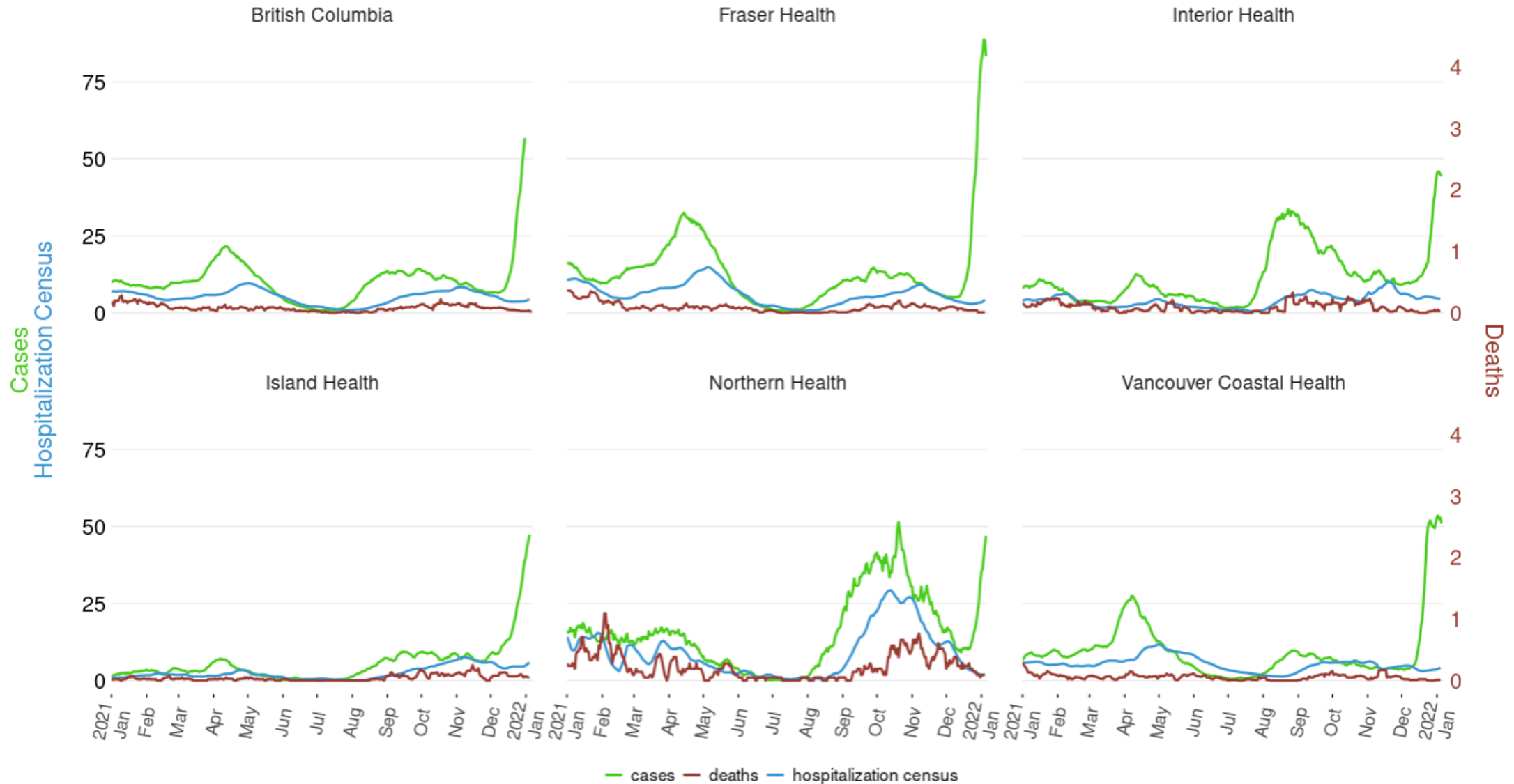
**Figure 1. Episode-based epidemic curve (bars), surveillance date (line) and Health Authority (HA), BC Sept 13, 2020 (week 38) – Dec 25, 2021 (week 51) (N= 236,694)**



**Figure 8. Weekly COVID-19 deaths by age groups, BC, Sept 13, 2020 (week 38) – Dec 25, 2021 (week 51)**



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



Data up to 2022-01-06

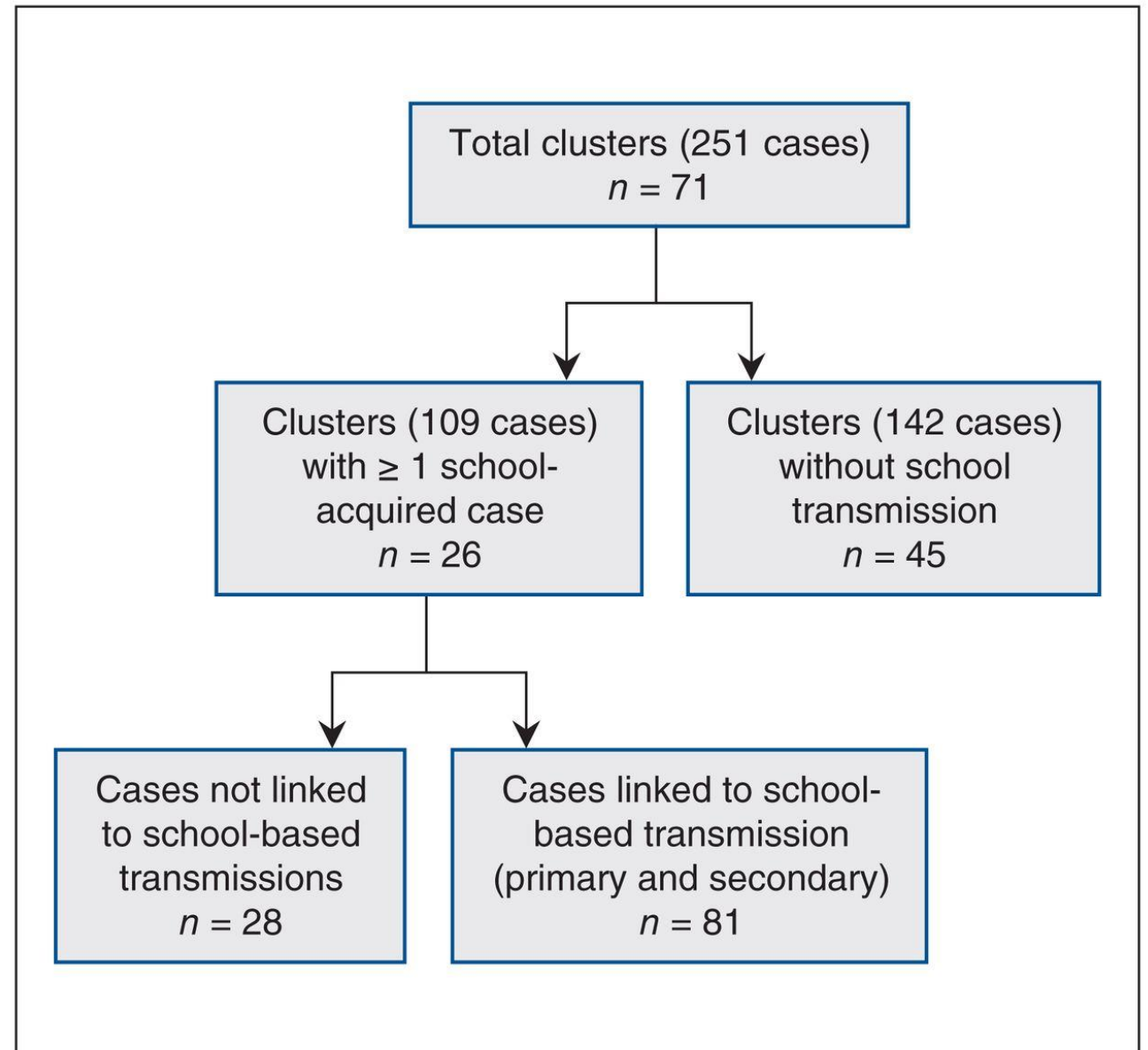
# COVID-19 and schools

### Figure 3:

Flow diagram showing characteristics of school cluster transmission.

**SARS-CoV-2 transmission in kindergarten to grade 12 schools in the Vancouver Coastal Health region: a descriptive epidemiologic study**

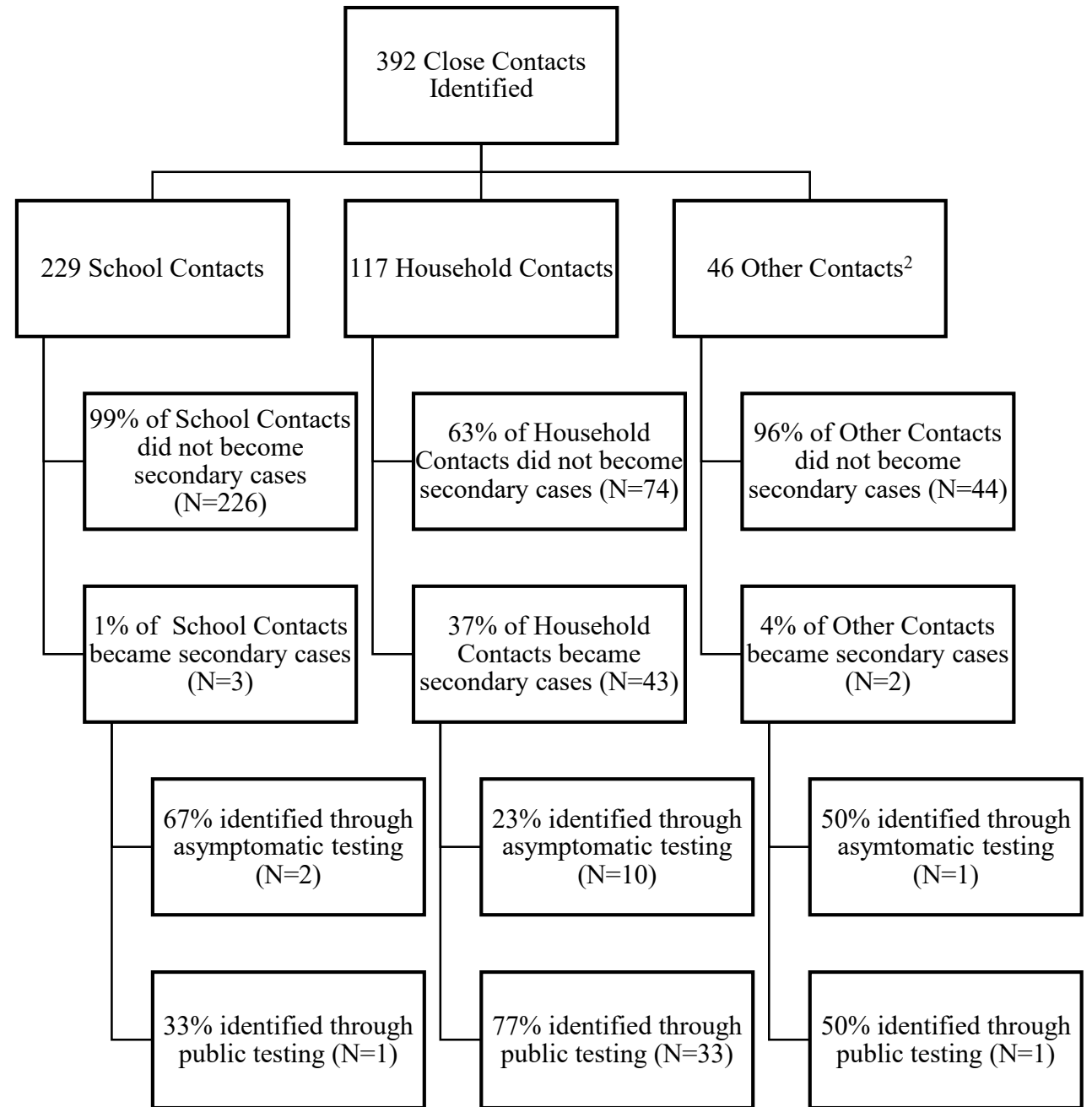
Diana Bark, Nalin Dhillon, Martin St-Jean,  
Brooke Kinniburgh, Geoff McKee, Alexandra Choi  
Jul 2021, 9 (3) E810-E817; DOI: 10.9778/cmajo.20210106





# Figure 1:

## Flow diagram of close contacts who became cases and who did not by contact type



**Symptomatic and asymptomatic transmission of SARS-CoV-2 in K-12 schools, British Columbia, April to June 2021**

Alex Choi, Louise C. Mâsse, Samantha Bardwell, Yanjie Zhao, Yang Xin Zi Xu, Ani Markarian, Daniel Coombs, Allison Watts, Adrienne Macdonald, Nalin Dhillon, Michael Irvine, Collette O'Reilly, Pascal M. Lavoie, David Goldfarb

medRxiv 2021.11.15.21266284; doi: <https://doi.org/10.1101/2021.11.15.21266284>

<sup>2</sup> Other contacts are comprised of: 48% social (N=22), 7% extracurricular (N=3), 35% mixed school and social (N=16), and 10% unidentified (N=5).

**Table 2:**

## Characteristics of contact events between primary cases and school contacts

	School contacts who became secondary cases N = 3	School contacts who did not become secondary cases N = 226
<b>Details of contact</b>		
Close proximity	100% (3/3)	67.70% (153/226)
Interacting	100% (3/3)	80.53% (182/226)
Touching	33.33% (1/3)	16.37% (37/226)
Secretions	0% (0/3)	1.77% (4/226)
Any exercise or physical activity with case	66.67% (2/3)	27.88% (63/226)
<b>Duration of close contact</b>		
Less than 15 minutes	0% (0/3)	1.87% (4/214)
15 minutes to 1 hour	0% (0/3)	14.02% (30/214)
1-2 hours	33.33% (1/3)	18.69% (40/214)
2-4 hours	0% (0/3)	13.55% (29/214)
Over 4 hours	66.67% (2/3)	34.11% (73/214)
Unknown*	0% (0/3)	23.4% (50/214)

\* Where no response was indicated, “unknown” was used.

## Table 2: Reported COVID-19 exposures and PCR outcomes among school staff

### **SARS-CoV-2 seroprevalence among Vancouver public school staff in British Columbia, Canada**

David M. Goldfarb, Louise C. Mâsse, Allison  
W. Watts, Sarah M. Hutchison, Lauren  
Muttucomaroe, Else S. Bosman, Vilte  
E. Barakauskas, Alexandra Choi, Michael  
A. Irvine, Frederic Reicherz, Daniel Coombs,  
Collette O'Reilly, Sadaf Sediqi, Hamid  
R. Razzaghian, Manish Sadarangani, Sheila  
F. O'Brien, Pascal M. Lavoie

medRxiv 2021.06.16.21258861; doi: <https://doi.org/10.1101/2021.06.16.21258861>

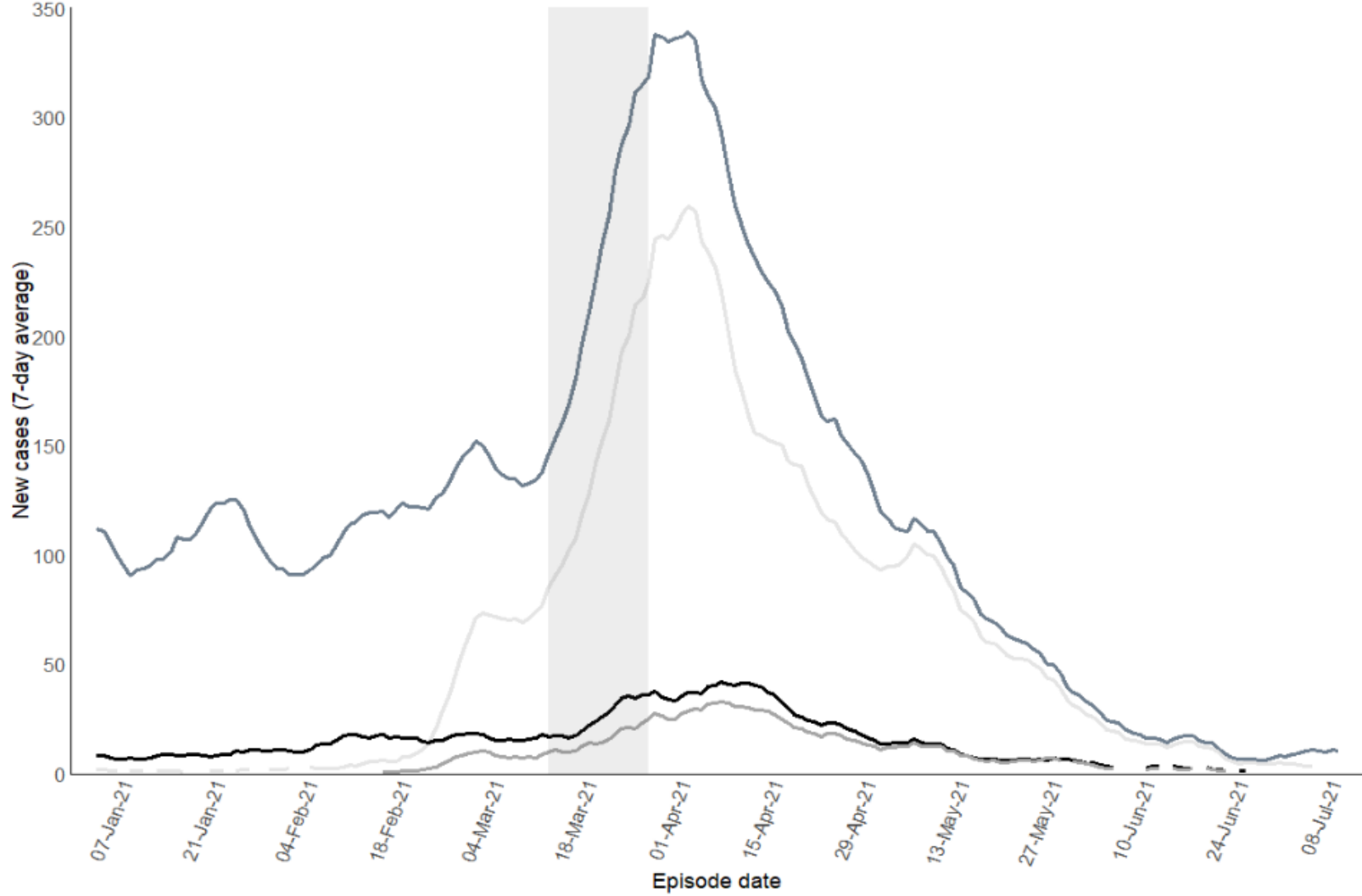
Variable	n <sup>#</sup>	Completed CITF questionnaire (n=1689)
COVID-19-like symptoms*, n (%)	1688	664 (39.3%)
Number tested for COVID-19 (PCR), n (%)	1688	760 (45.0%)
At least one positive COVID-19 viral test		24 (1.4%)
More than one positive COVID-19 viral test		1 (0.01%)
All negative COVID-19 viral test		715 (42.4%)
Did not know/could not remember test result		21 (1.2%)
Hospitalized for COVID-19, n (%)	1683	3 (0.2%)
Type of occupation for essential worker living in household, n (%)	1671	619 (37.0%)
Agriculture & food production		7 (0.4%)
Community services (sewage & water treatment, waste disposal)		10 (0.6%)
Construction, maintenance, skilled trades		77 (4.6%)
Consumer products (hardware, safety, vehicle, sales, garden centres)		9 (0.5%)
Financial services (banking, real estate, insurance)		19 (1.1%)
Food (grocery, convenience, liquor, restaurant)		67 (4.0%)
Health care		99 (5.9%)
Social services, education, research		244 (14.6%)
Manufacturing, resources, energy, utilities		21 (1.3%)
Services (pharmacy, gas station, delivery, funeral, vet, etc.)		13 (0.8%)
Sports (professional)		0
Supply chain & transportation		19 (1.1%)
Telecommunications & IT (including the media)		16 (1.0%)
Other		84 (5.0%)
COVID-19 case among other household members, % Yes, n (%) <sup>δ</sup>	1688	51 (3.0%)
Reported close contact with a COVID-19 case outside household (within 2 meters and for >2 minutes), n (%)	1686	363 (21.5%)
Another school staff member / work colleague		133 (7.9%)
Student in classroom setting		145 (8.6%)
Family (non-household member)		46 (2.7%)
Friend		84 (5.0%)
Unknown		26 (1.5%)
Completed serology testing, n (%)	1689	1556 (92.1%)

<sup>#</sup>N with data available.

\*Any of the following: cough, fever, shortness of breath, sore muscles, headache, sore throat, diarrhea, decrease sense of smell [specify period]. "Did you have any of the following symptoms between January 2020 and present?"

<sup>δ</sup>"Has anyone in your household (not counting yourself) ever tested positive for COVID-19? ([Yes], [Not applicable, I live alone], [No one has been tested], [No, they tested negative], [Not sure, waiting for the result])".

**Figure 2. 7-day average of new SARS-CoV-2 cases among VCH residents, reported between January 1 and July 13, 2021**



# Thank you!

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# Supplementary slides