

# COVID-19: Monthly Update

November 12, 2020



Stay Informed Via These Resources:

[gov.bc.ca/Covid-19](https://gov.bc.ca/Covid-19) | [bccdc.ca](https://bccdc.ca) | 1-888-COVID19

Symptom Self-Assessment:

[covid19.thrive.health](https://covid19.thrive.health)



BRITISH  
COLUMBIA

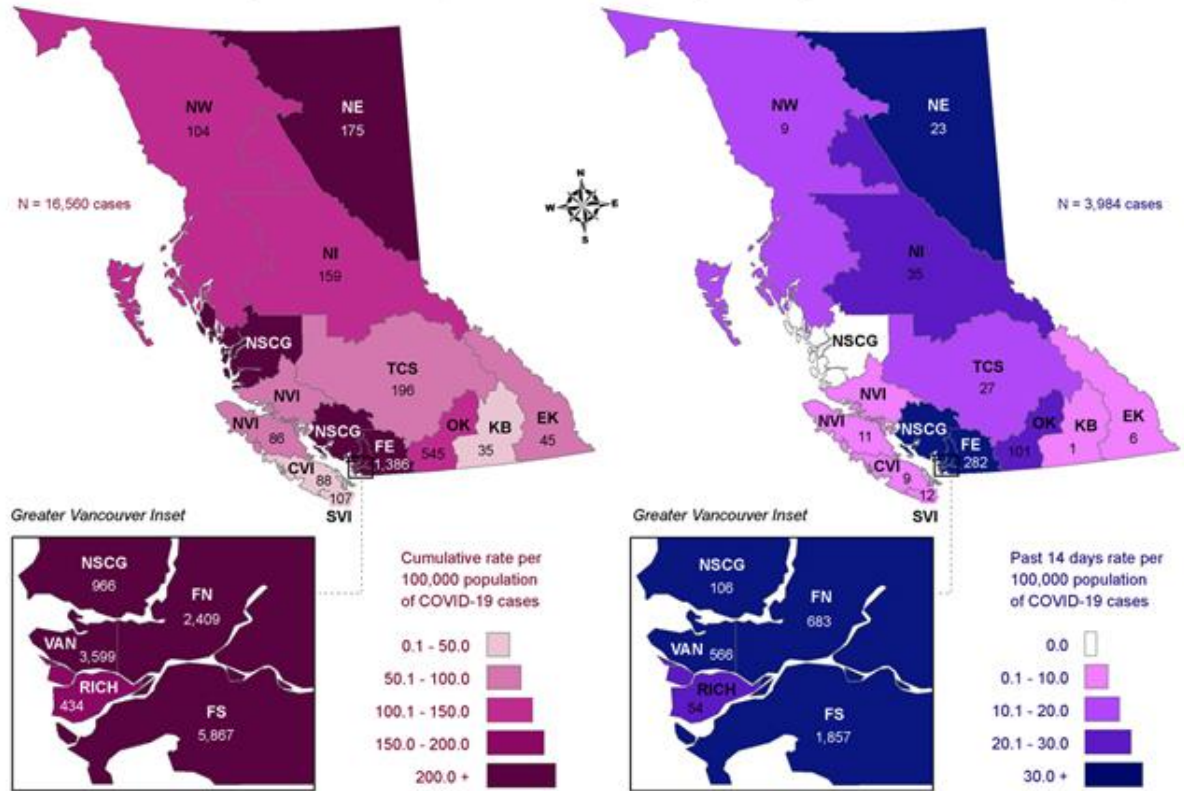
# Epidemiology

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

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

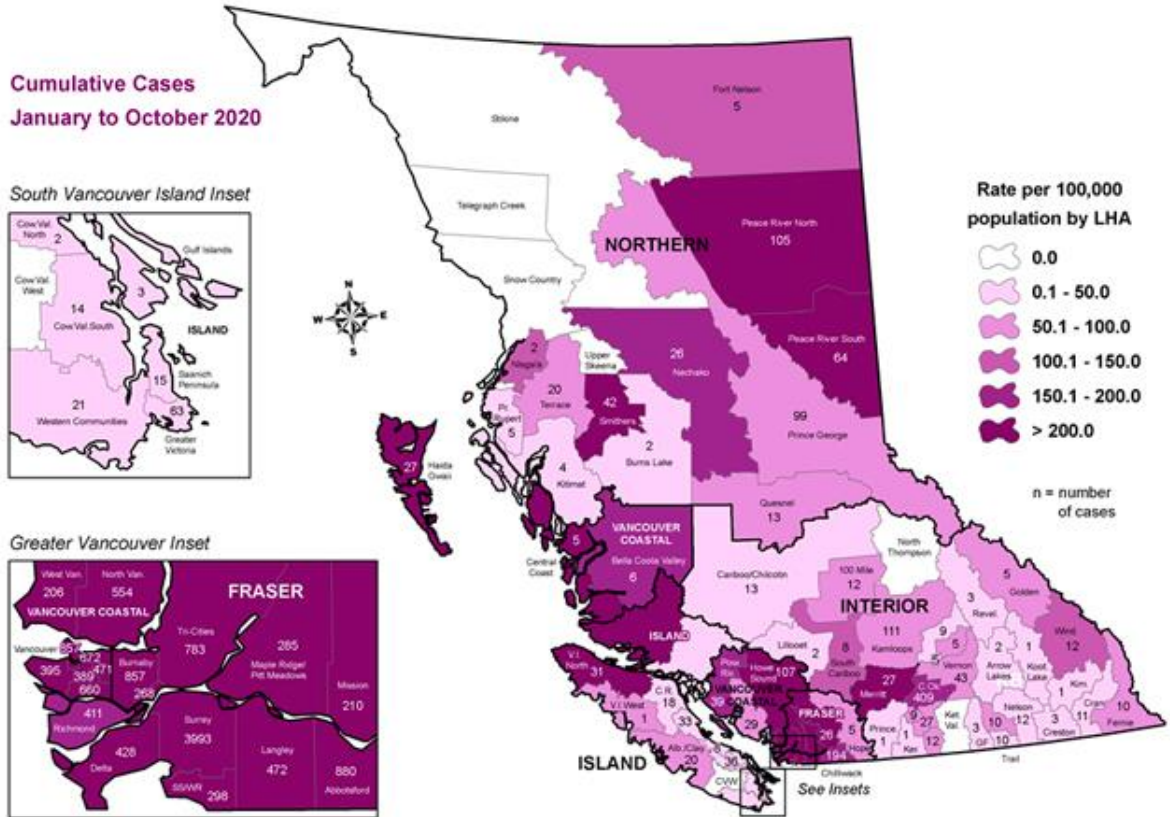
Cumulative total: cases reported Jan 1 to Nov 5, 2020

Past 14 days: cases reported October 23 to November 5, 2020



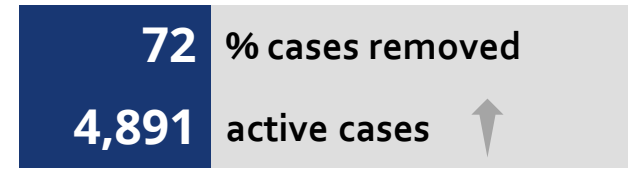
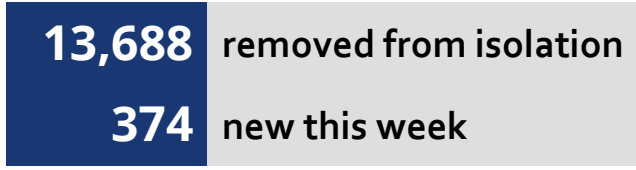
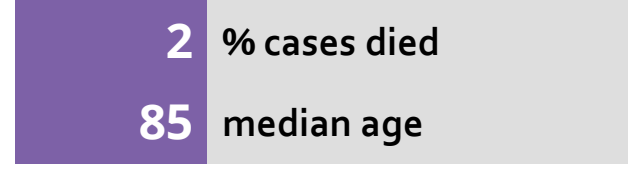
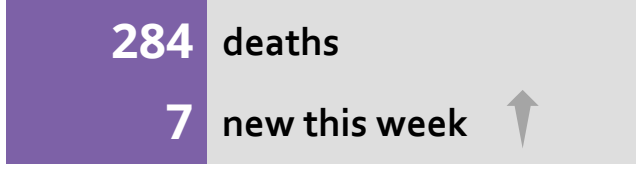
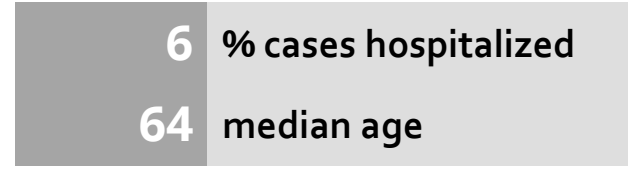
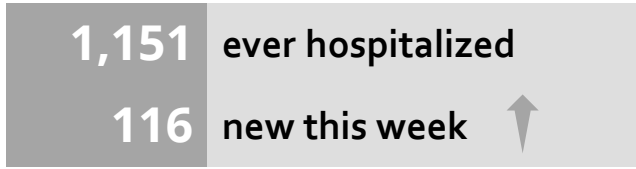
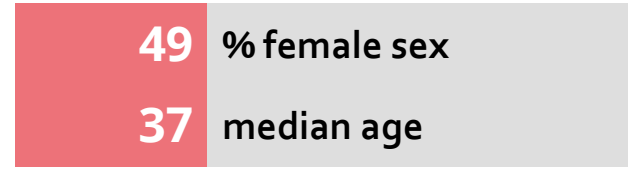
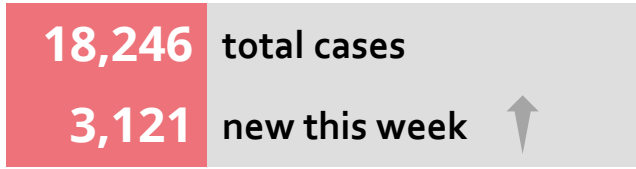
Notes: Cases are mapped by location of residence; cases with unknown residence and from out of province are not mapped. Data source: the 5 regional health authorities of British Columbia; we operate in a live database environment and case information from the health authorities are updated as it becomes available. How to interpret the maps: The map 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 14 days. Health Service Delivery Areas (HSDA) with higher rates 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 November 5, 2020 by SCCDC.

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



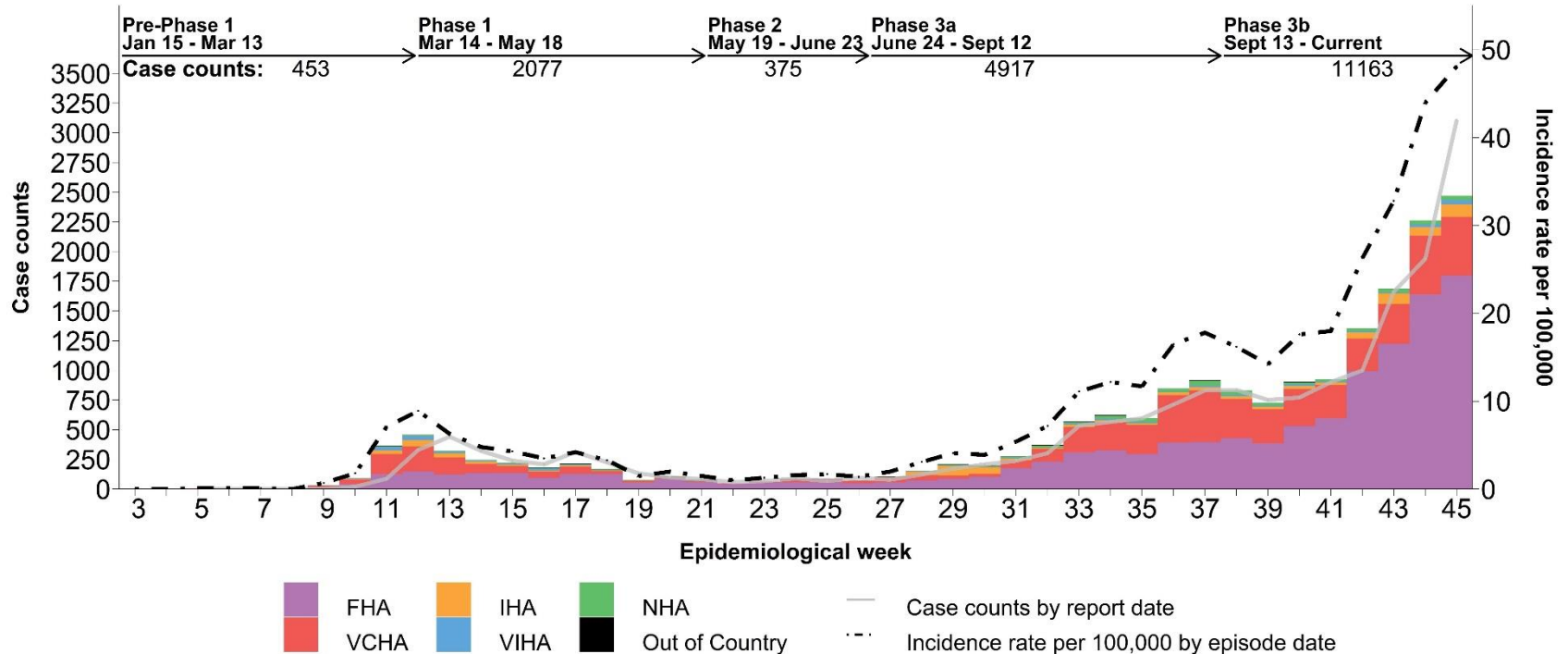
Notes: Cases are mapped by location of residence, cases with unknown residence and from out of province are not mapped. Data source: the 5 regional health authorities of British Columbia; we operate in a live database environment and case information from the health authorities are updated as it becomes available. How to interpret the map: The map illustrates the geographic distribution of reported cases from January 1 to October 31, 2020. 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 November 10, 2020 by BCCDC for public release.

# Weekly Profile of COVID-19 Cases

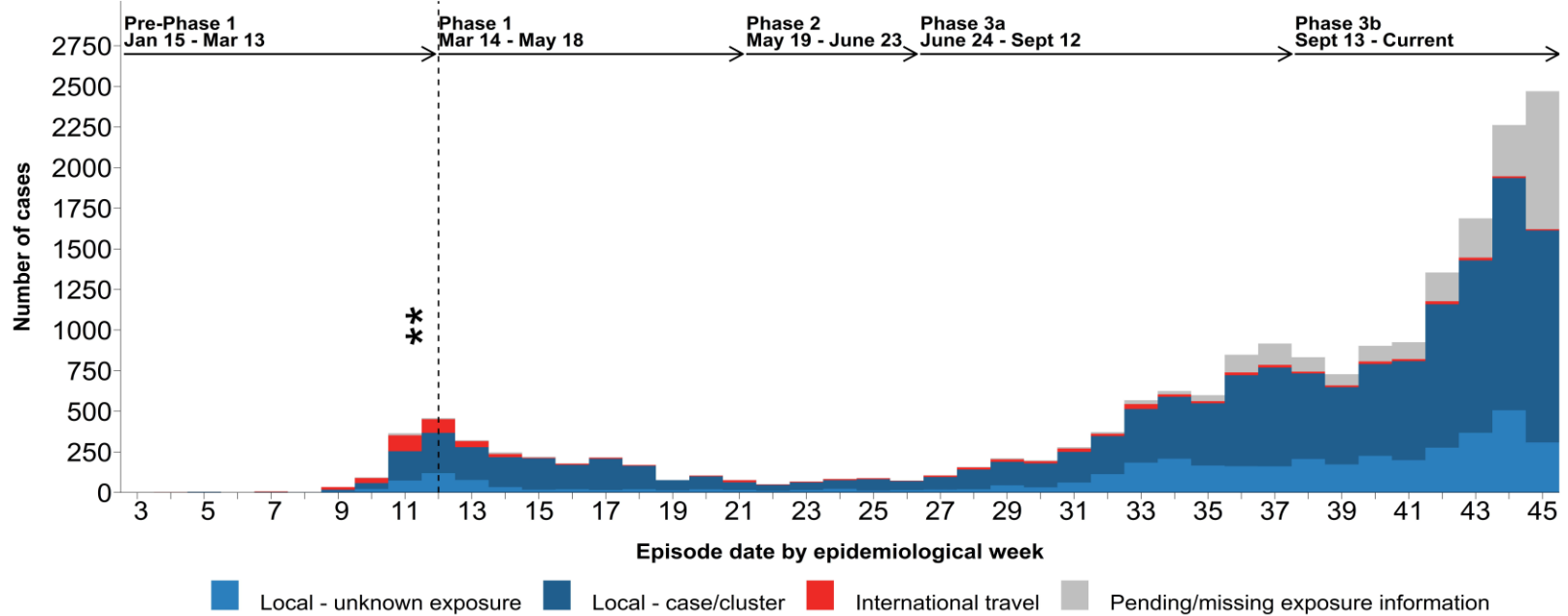


Note: Weekly comparison represents provincial data from November 1 - Nov 7 compared to October 25 - October 31, 2020.

# Epidemic Curve, COVID-19 Cases in BC by Reported Date January 15 – November 7, 2020



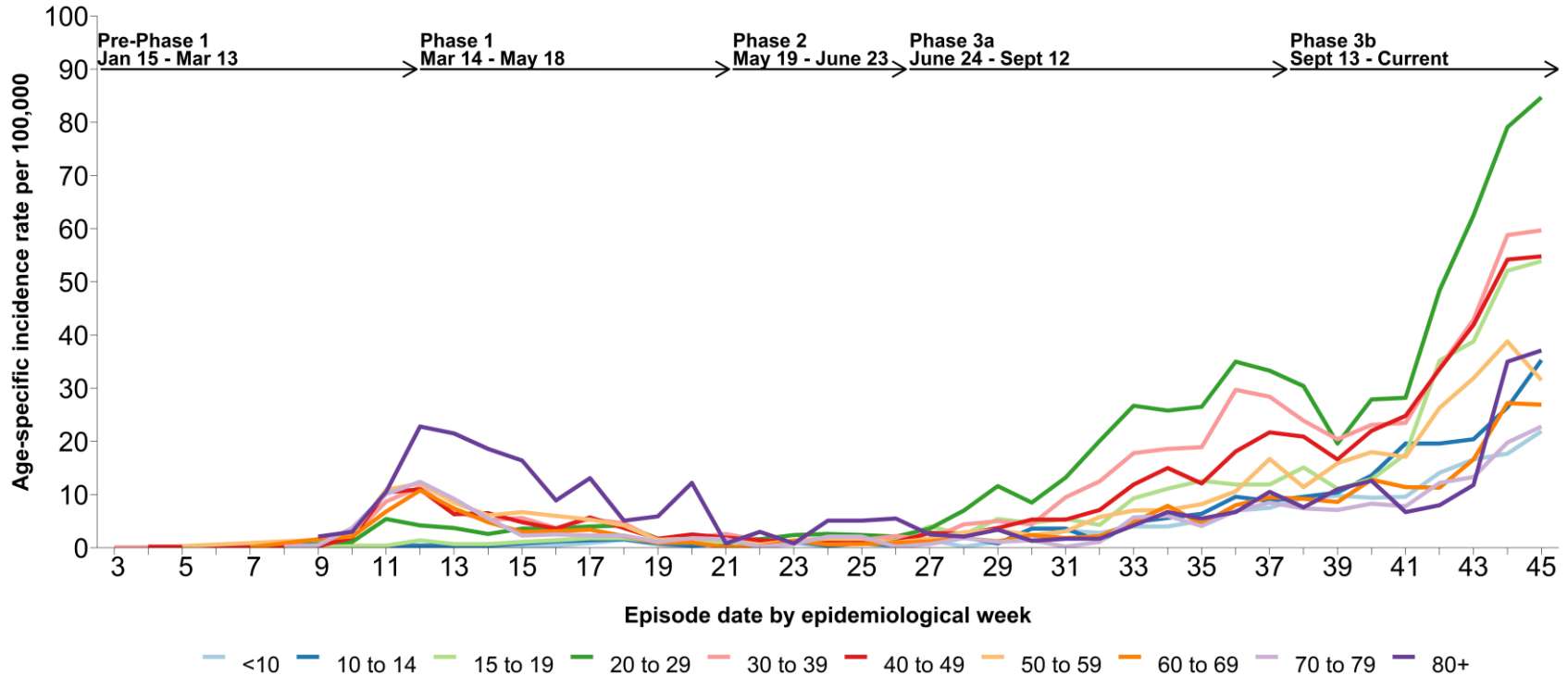
# Likely Source of Infection for Cases by Episode Date, January 15 – November 7, 2020



\* March 16: Entry of foreign nationals banned; symptomatic individuals banned from flights to Canada; international flights restricted to four national airports.

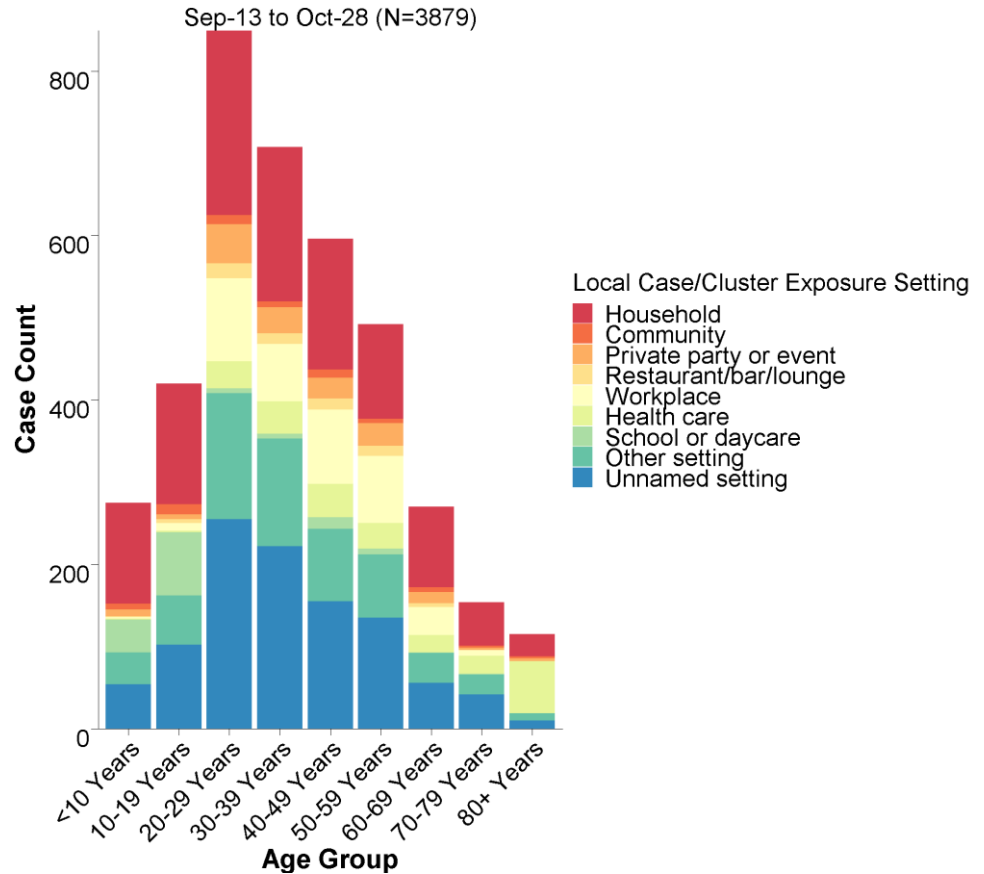
\*\* March 20: US/Canada border closed to non-essential travel.

# Age-Specific Incidence Rates Per 100,000 Population January 15 (Week 3) – November 7, 2020 (Week 45)





# Exposure Settings By Age Group in Phase 3b (September 13 - October 28)

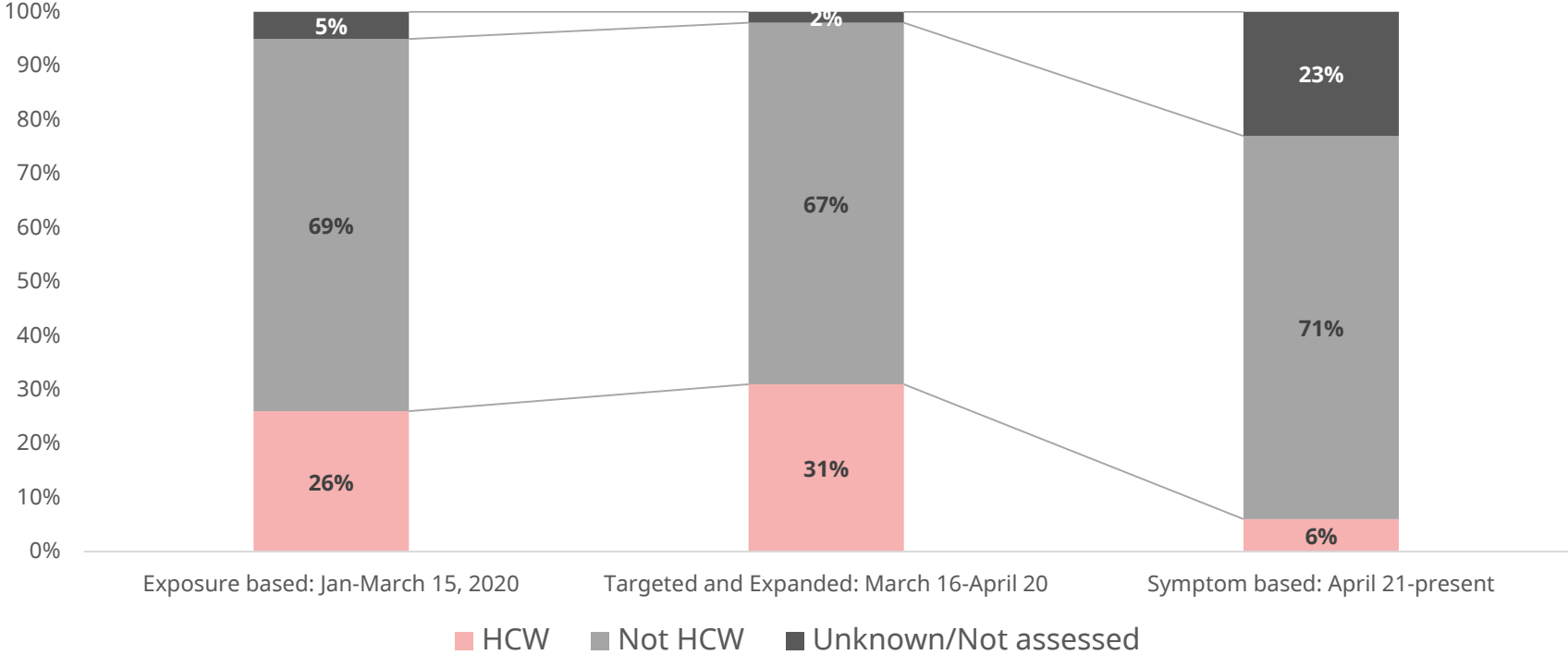


# 1 in 10 Individuals Who Had COVID-19 Identified as Health-Care Workers (HCW)

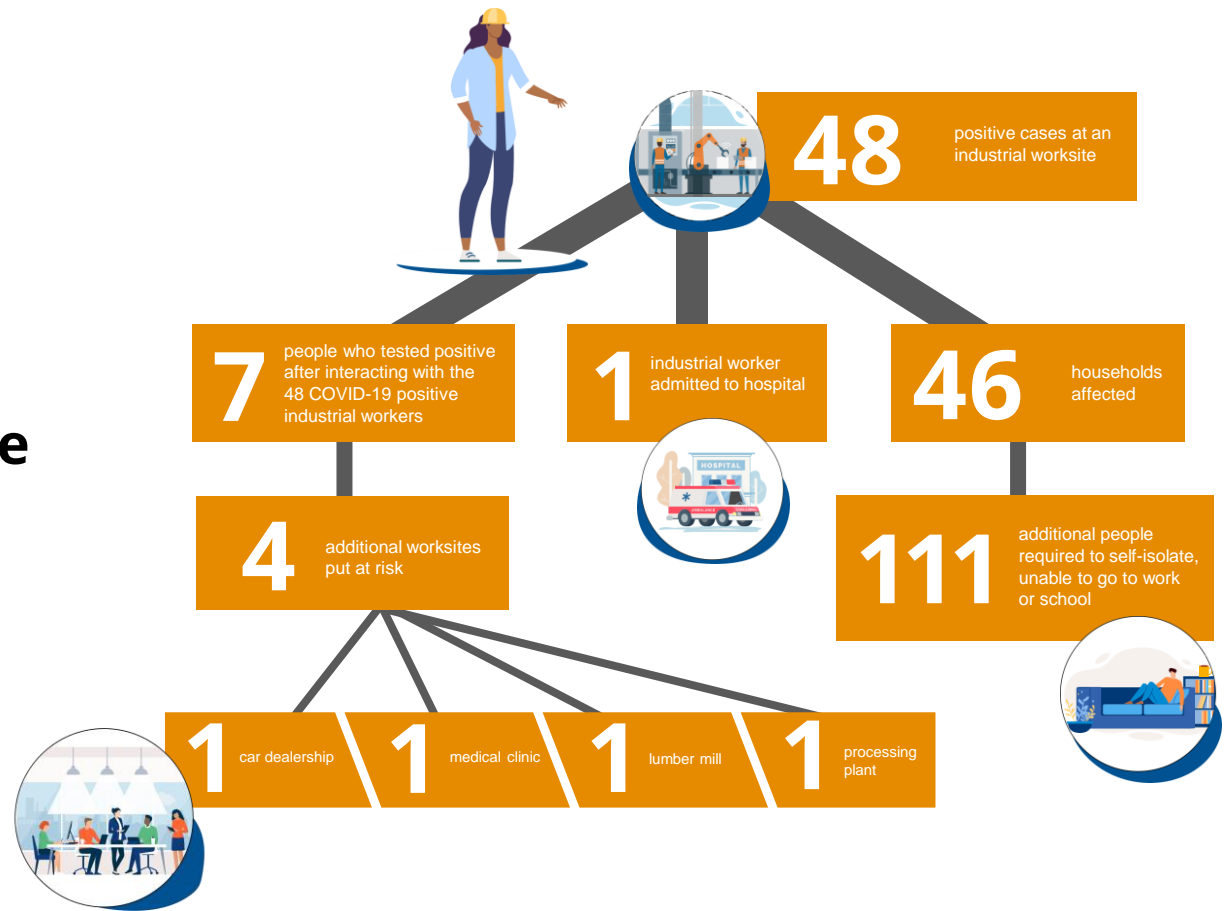
Health-care worker role	Number (n)	Proportion (%)
Nurse	215	18.3
Care aide	201	17.1
Dental professional	83	7.1
Administrative	65	5.5
Licensed practical nurse (LPN)	55	4.7
Physician	50	4.3
Housekeeping	30	2.6
Kitchen staff	23	2
Laboratory technician	17	1.4
Student	17	1.4
Emergency medical personnel	14	1.2
Lab technician	1	0.1
Student (medical, dental, nursing, lab)	1	0.1
Volunteer	1	0.1
Other	308	26.3
Unknown	92	7.8
<b>Total</b>	<b>1173</b>	<b>100</b>

# The Proportion of Health-Care Worker Cases Has Declined Over Time

Proportion of health-care worker cases in BC by testing stage over time.

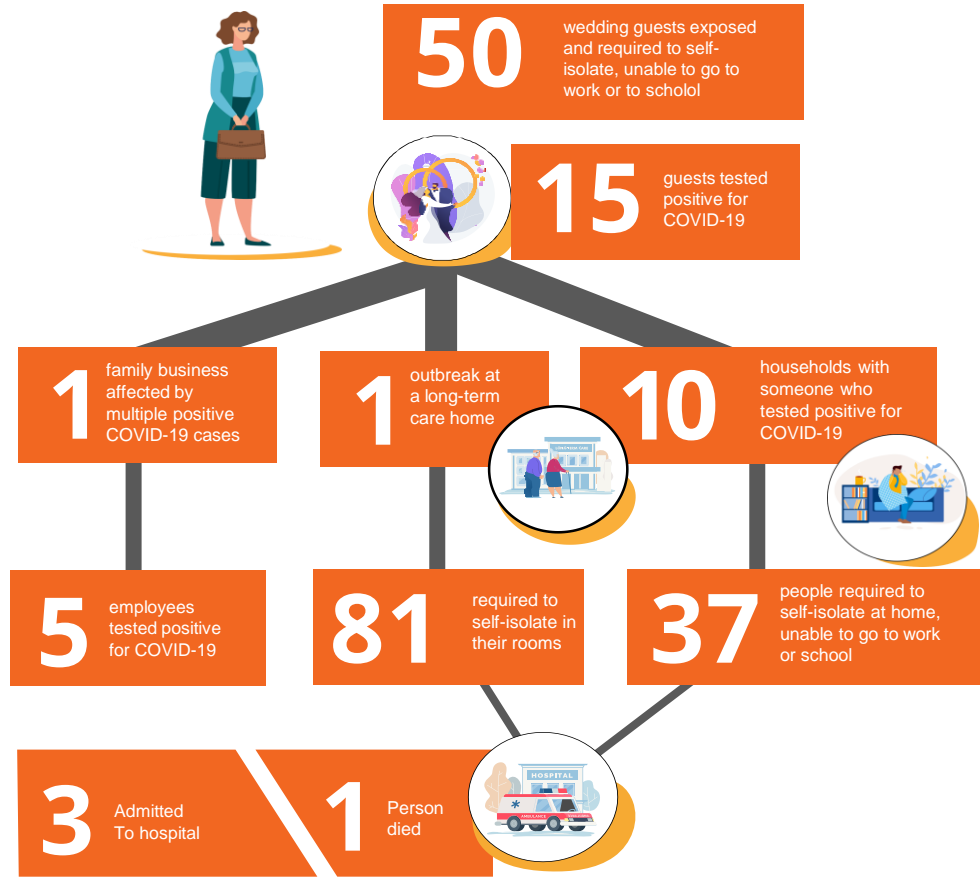


# From Just One COVID-19 Positive Employee...



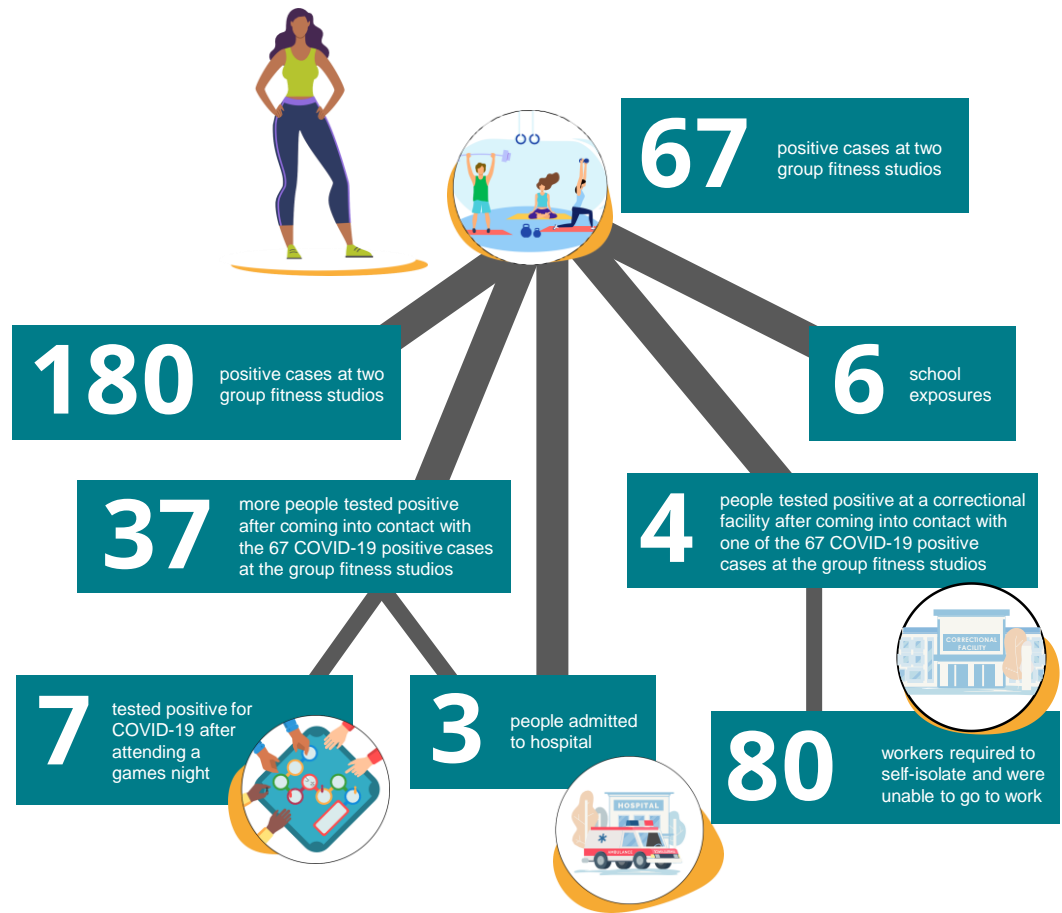
Based on actual case data.

# From Just One COVID-19 Positive Wedding Guest...



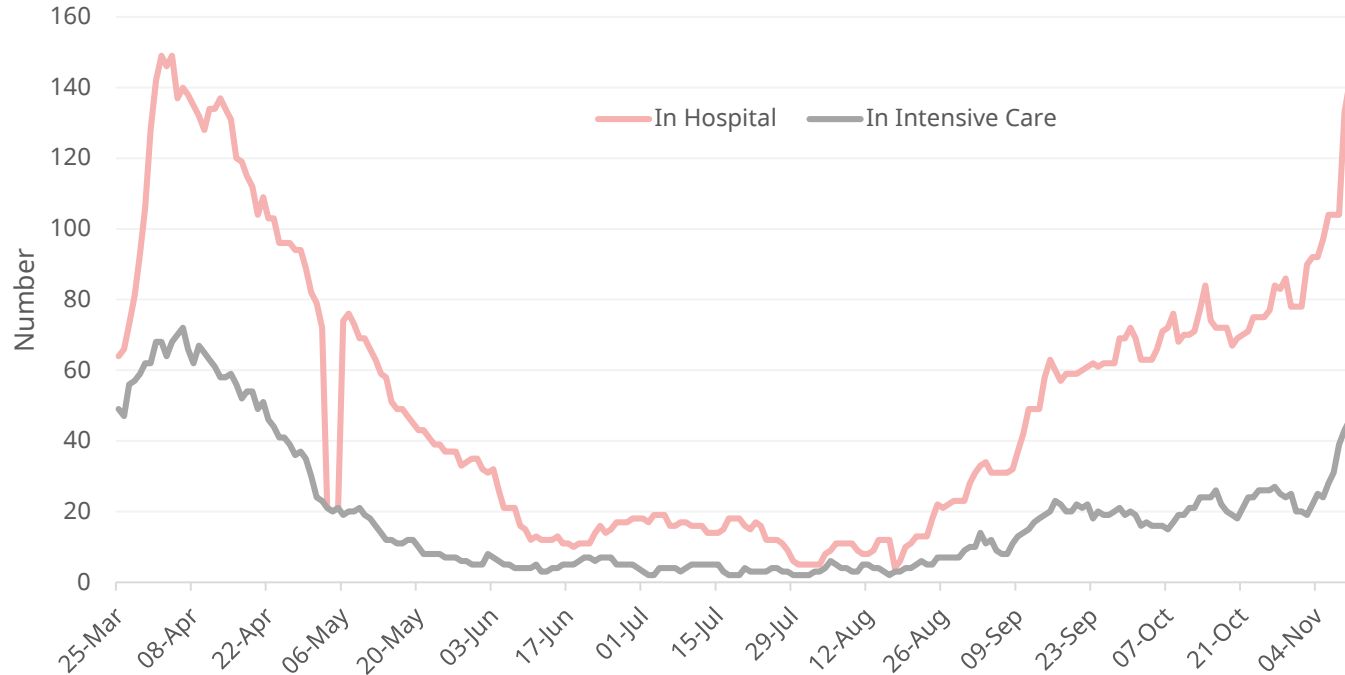
Based on actual case data.

# From Just One COVID-19 Positive Person at a Fitness Class...

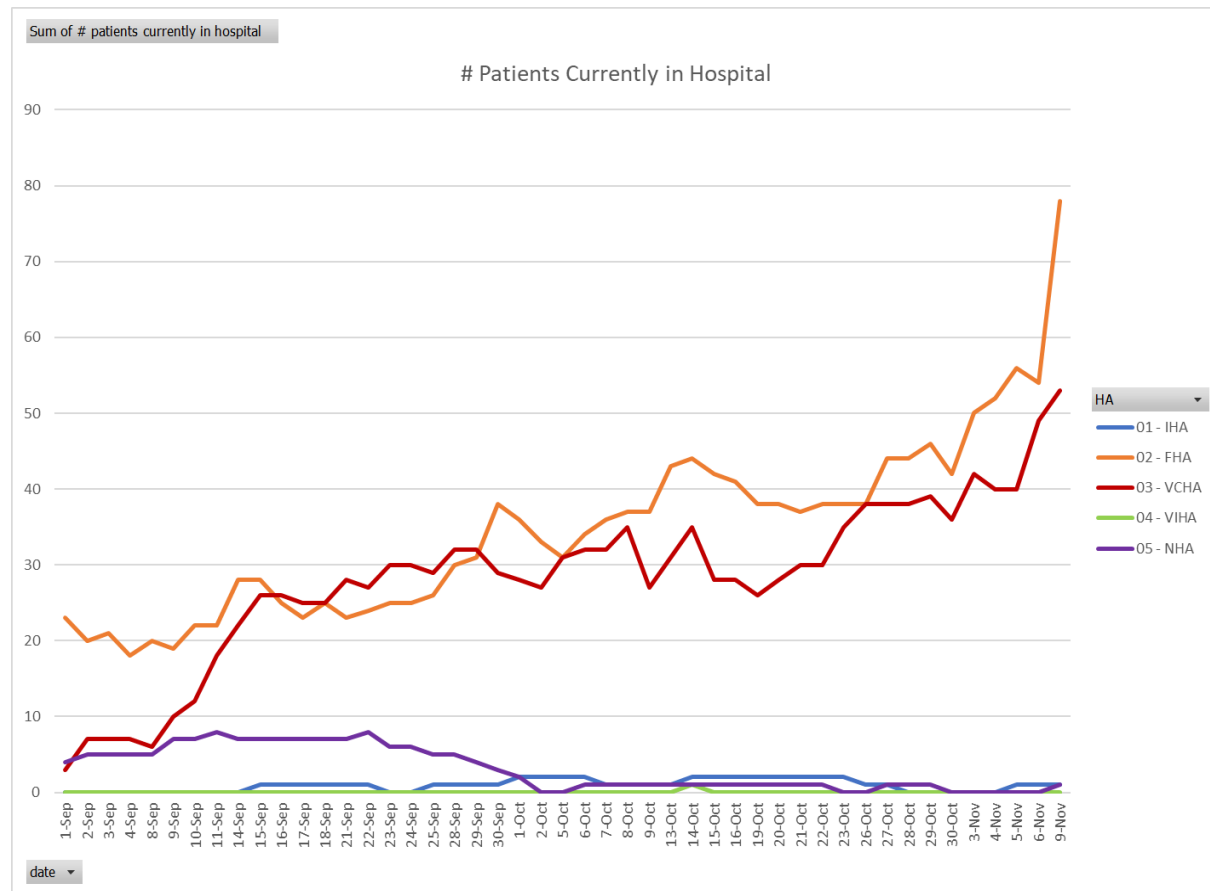


Based on actual case data.

# COVID-19 Hospitalizations and Intensive Care Admissions in BC March 25 - November 10, 2020

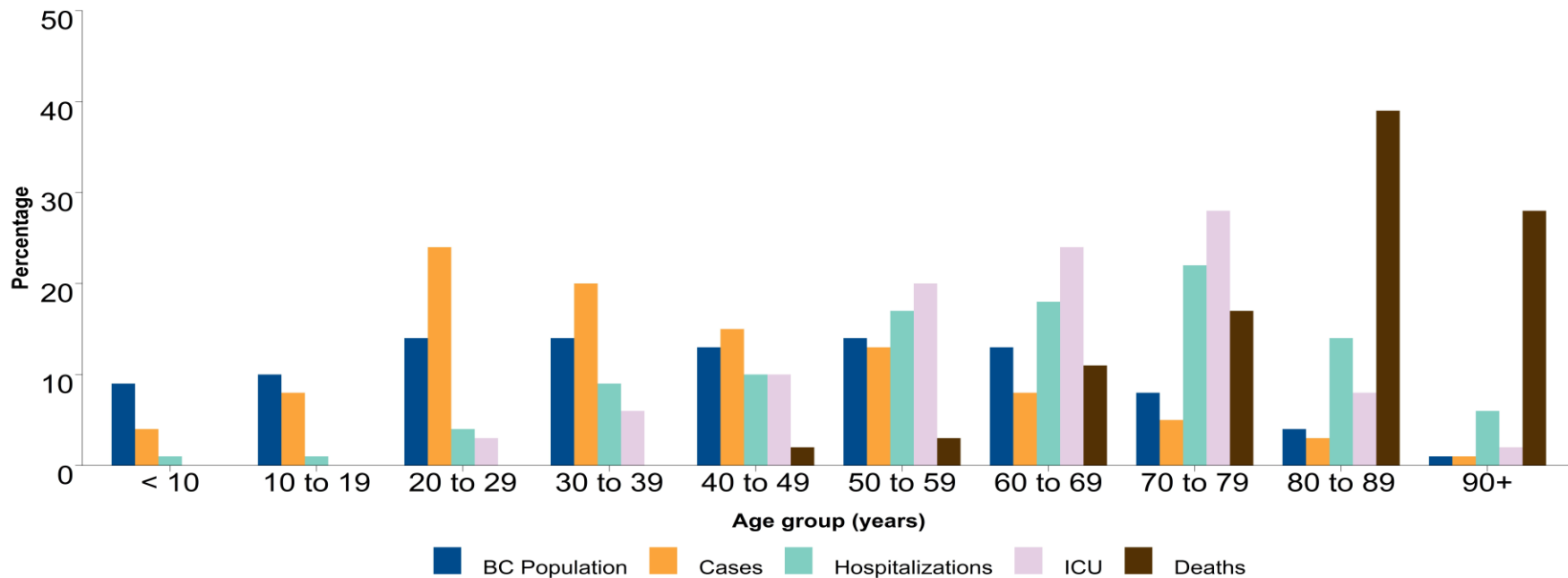


# Hospitalizations by Health Authority





# Percentage Distribution of COVID-19 Cases, Hospitalizations, ICU Admissions and Deaths by Age, Compared to BC Population



# School Update

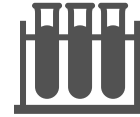
*COVID-19 Testing and Cases  
Among School-aged Children*

# Most School-aged Children (5-18 Years) With Symptoms Do Not Have COVID-19



## COVID cases and schools

1. 500,000+ students and educators are back to school
2. Some students, educators and staff have tested COVID +
3. Like earlier in the pandemic, school-aged children still <10% of cases



## COVID testing in children and youth

1. Testing rates have increased:



From August  
To October

2. 6.4 in 10 tests now spit and gargle



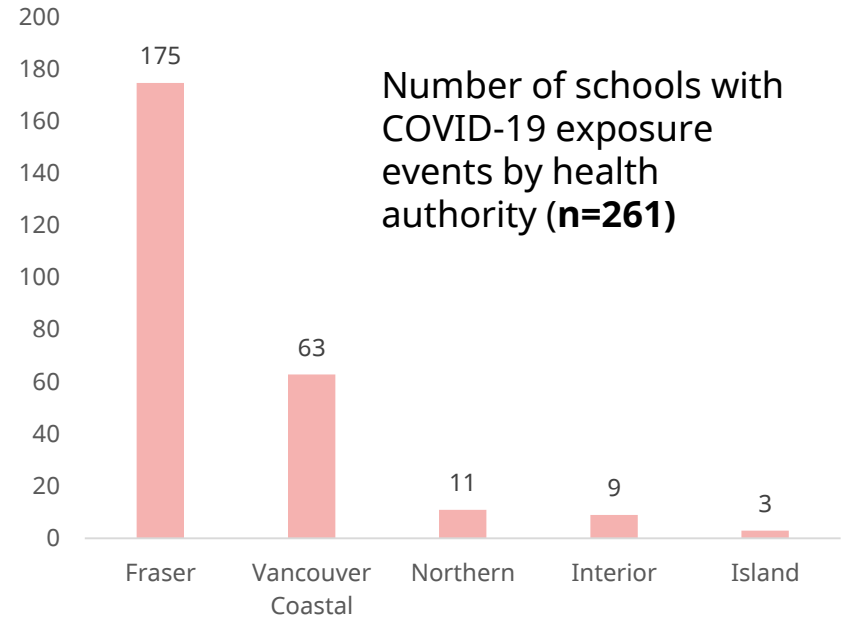
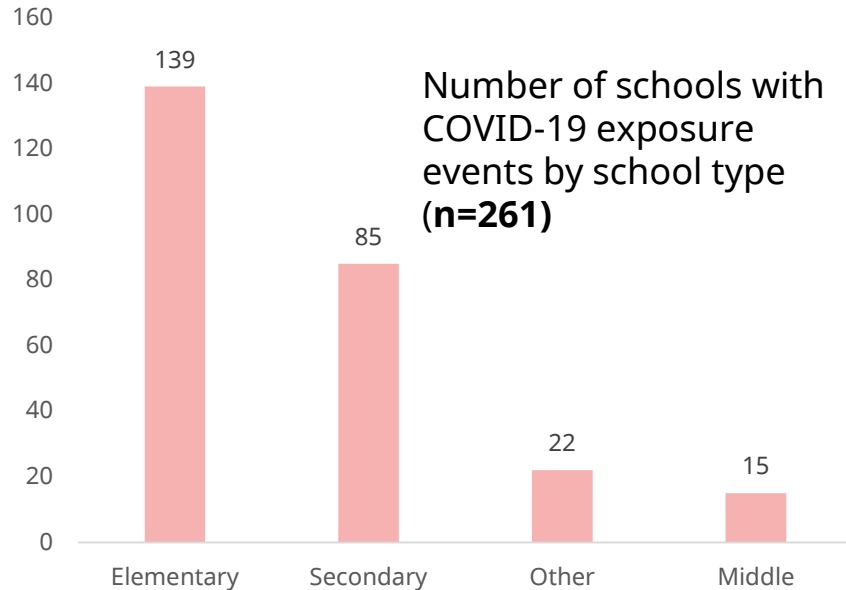
3. Only 17 in 1000 tests are COVID +

17

983

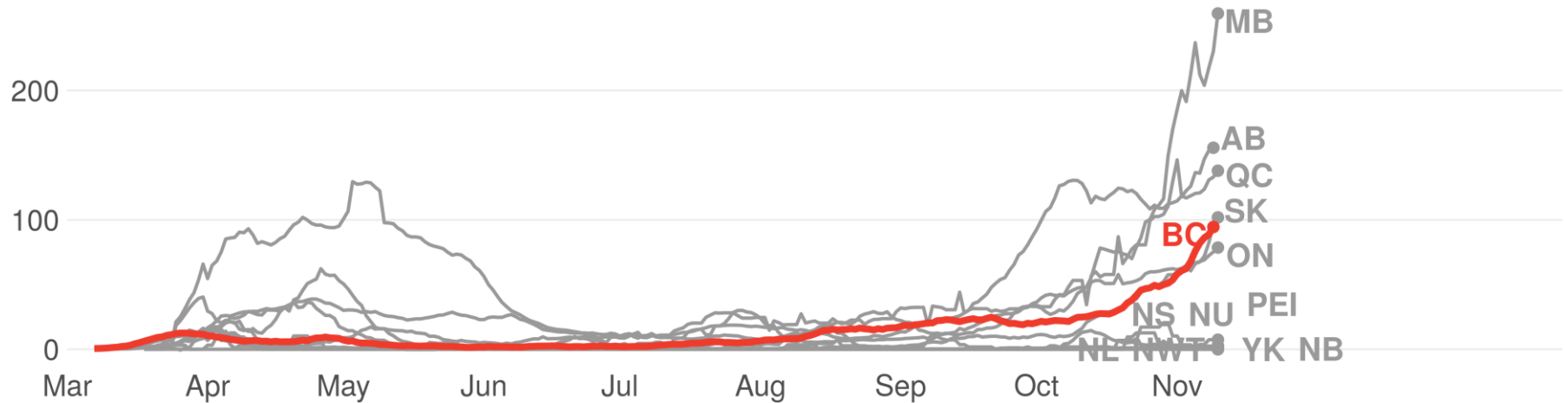
# COVID-19 Exposures in a School Setting

As of Nov. 5, there have been 261 school exposures in BC's 1,942 schools. More than three quarter of BC schools are elementary schools. That means around 9 in 10 schools have not had a school exposure. The exposures represent both students and adults in the school community.



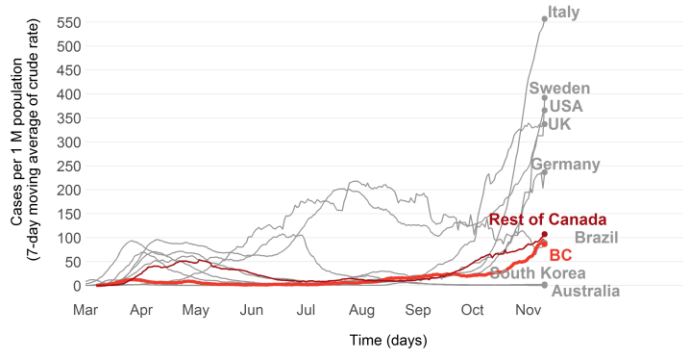
# Daily Case Rates Across Canada

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

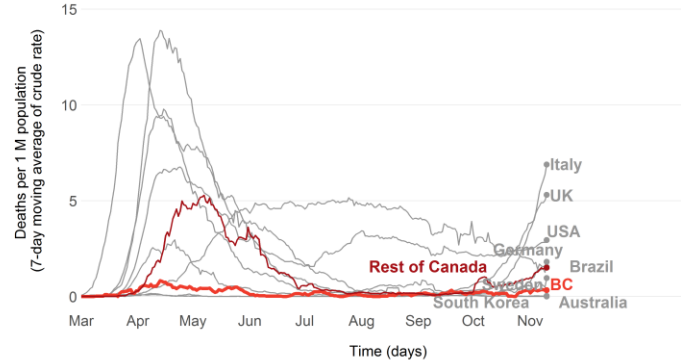


# International Cases

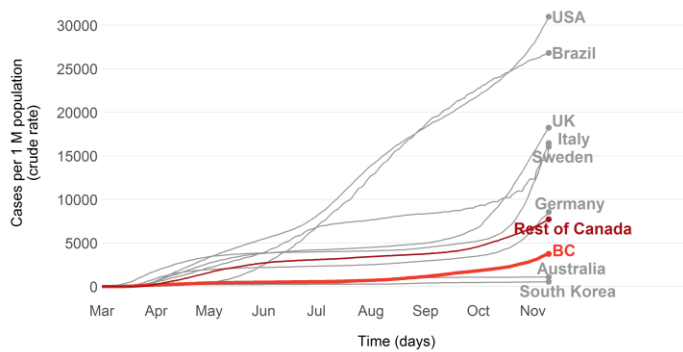
New daily case rates



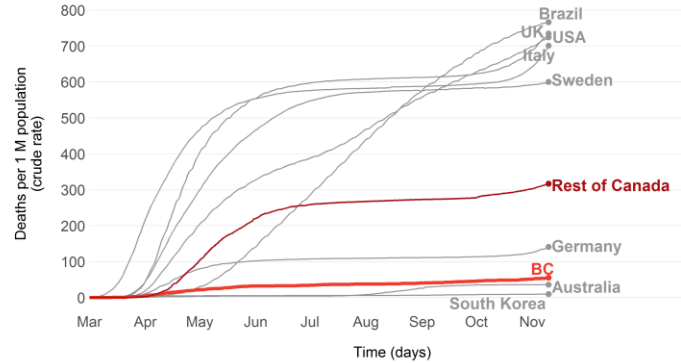
New daily death rates



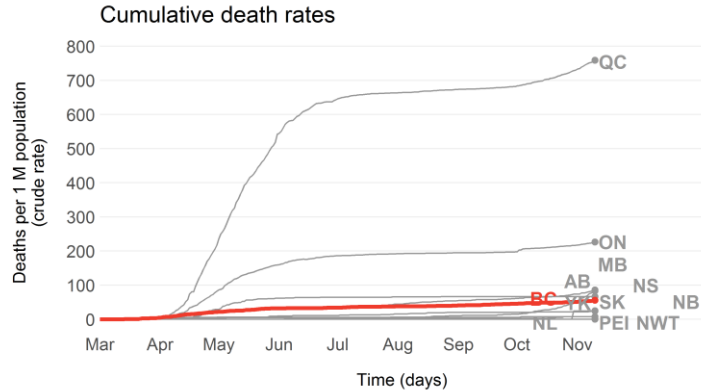
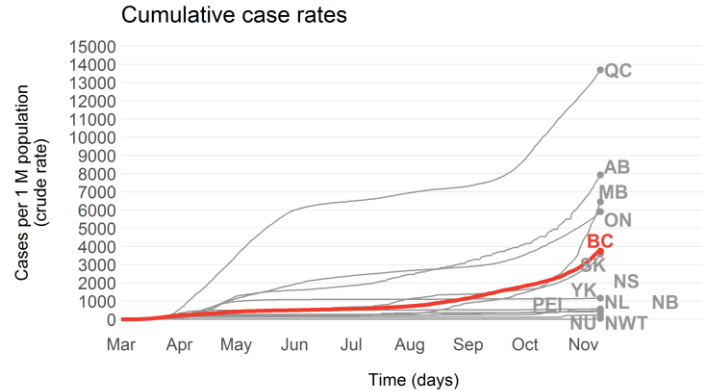
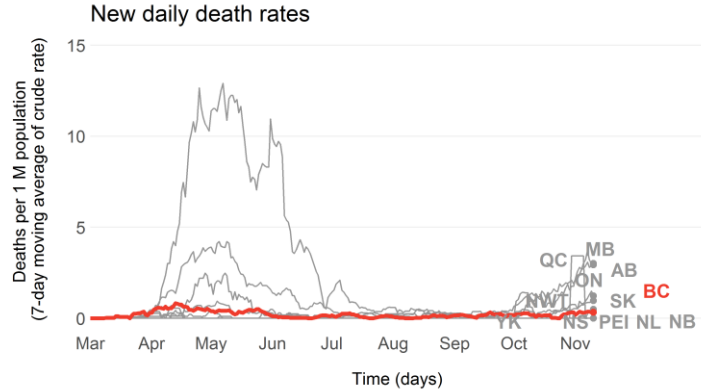
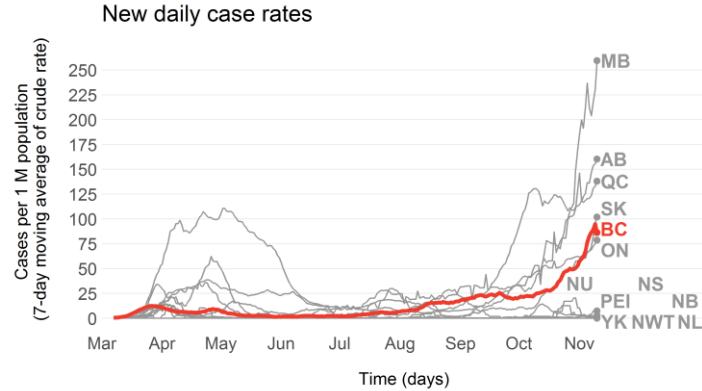
Cumulative case rates



Cumulative death rates



# Cases and Deaths in Canada



# Weekly Summary of COVID-19 Lab Testing

917,030

total specimens tested

64,439

new this epi week

↑ 7% from last week

20,963

total positive specimens

3,476

new positive this epi week

5.4% positivity  
↑ 42% from last week

26 hr

mean turnaround time (TAT)

24 [19-31]

Median [Q1 – Q3] TAT

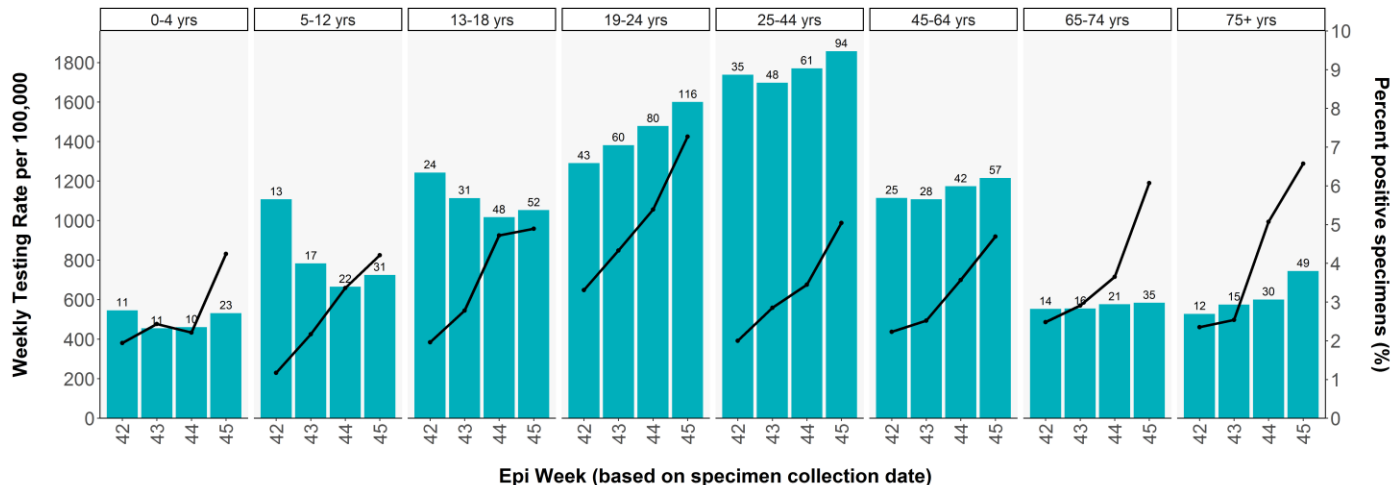
↑ 1% TAT from last week

Data source: PLOVER extract at 10:30am on Nov 12, 2020. Integrated Lab Data extract at 10:30am on Nov 12, 2020. Epi week 45 (Nov 1-7)



# Proportion of SARS-CoV-2 Positive\* Respiratory Specimens and Testing Rate by Age Group And Epi Week in BC

Proportion of SARS-CoV-2 positive\* respiratory specimens, incidence rate\*\*, and testing rate by age group and epi week in BC



\_\_\_\_\_ Percent positive specimens

\*Non-resulted specimens are excluded. Specimens collected from individuals with unknown age are excluded.

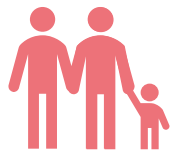
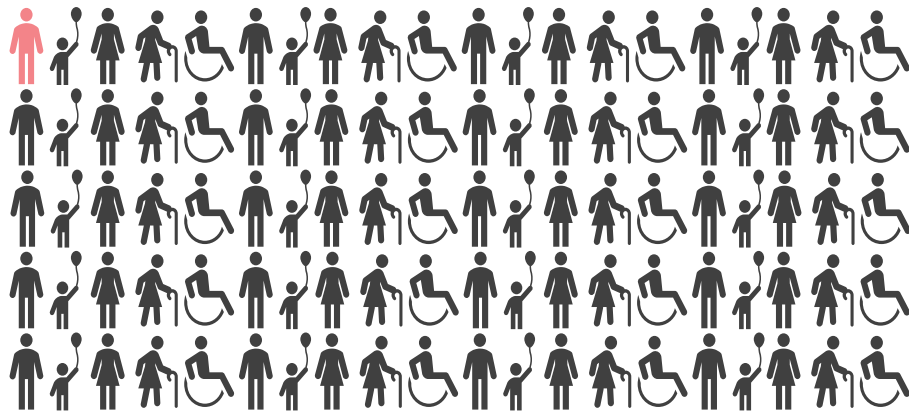
\*\*Numbers on top of histogram bars are the incidence rate per 100,000.

Data source: PLOVER 09-Nov-2020

# By September, COVID-19 Sero-Prevalence Still Low in BC, at About 1%

About **1 in 100** residents tested antibody positive in September

After June re-opening, BC successfully controlled community transmission this summer



**2000 anonymized residual samples from Lower Mainland residents of all ages were tested for antibodies in September**

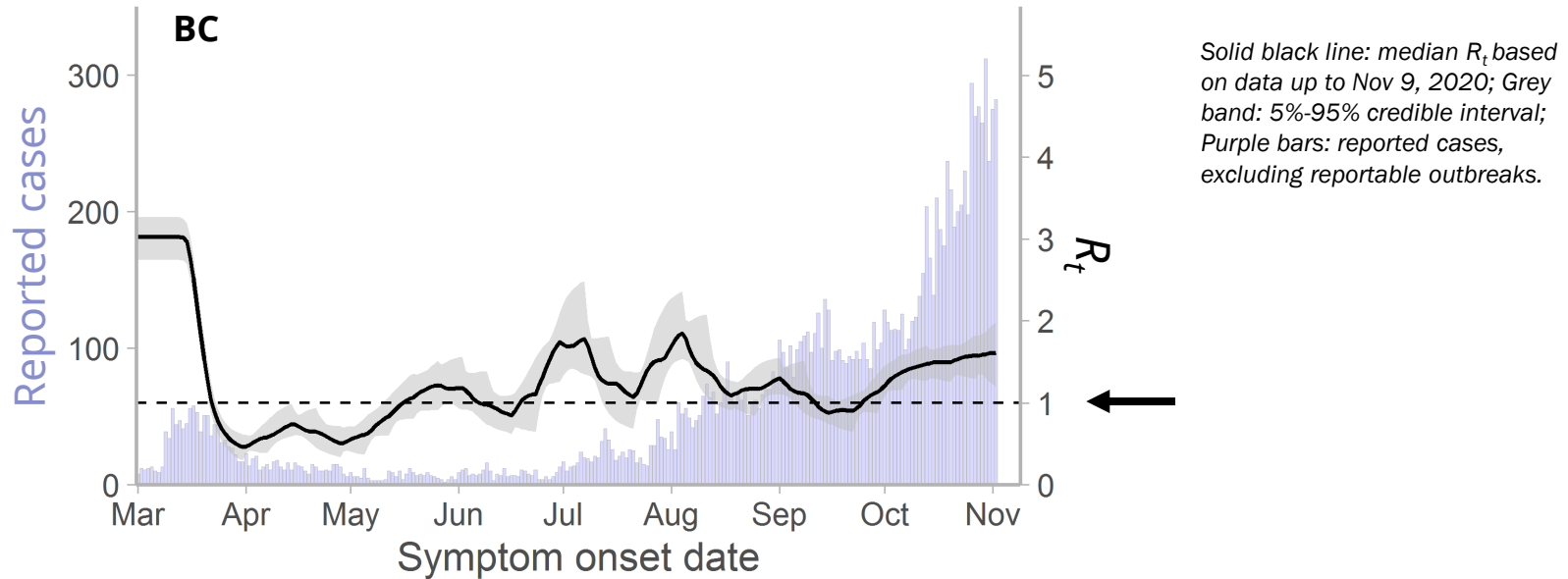


**19 of 2000 (1%) overall tested positive**  
**8 of 400 (2%) aged 20-39 years positive**

*Antibody screening study led by Drs. Danuta Skowronski and Mel Krajden of the BC Centre for Disease Control (BCCDC) and BCCDC Public Health Laboratory (PHL), in partnership with LifeLabs. Funded by the Michael Smith Foundation for Health Research and the Public Health Agency of Canada (PHAC). Views expressed herein do not necessarily represent the views of PHAC.*

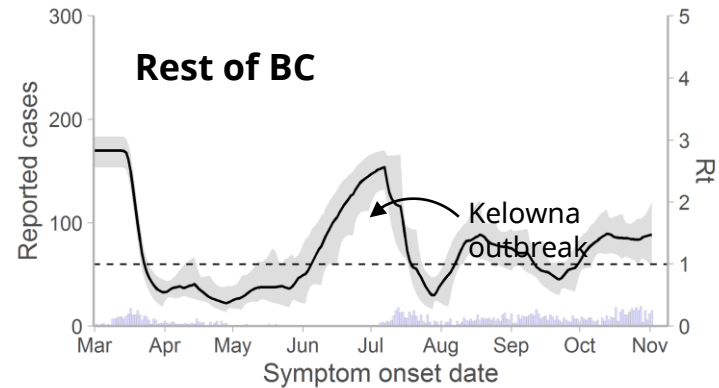
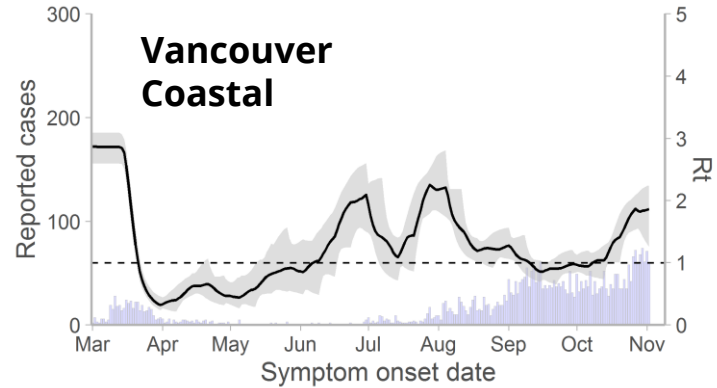
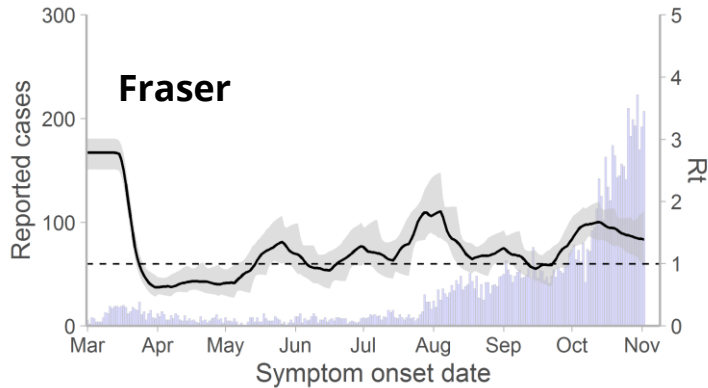
# Dynamic Compartmental Modelling: Recent Trends

Provincially, our model-based estimate of  $R_t$  (average daily number of new infections generated per case) remains above 1.



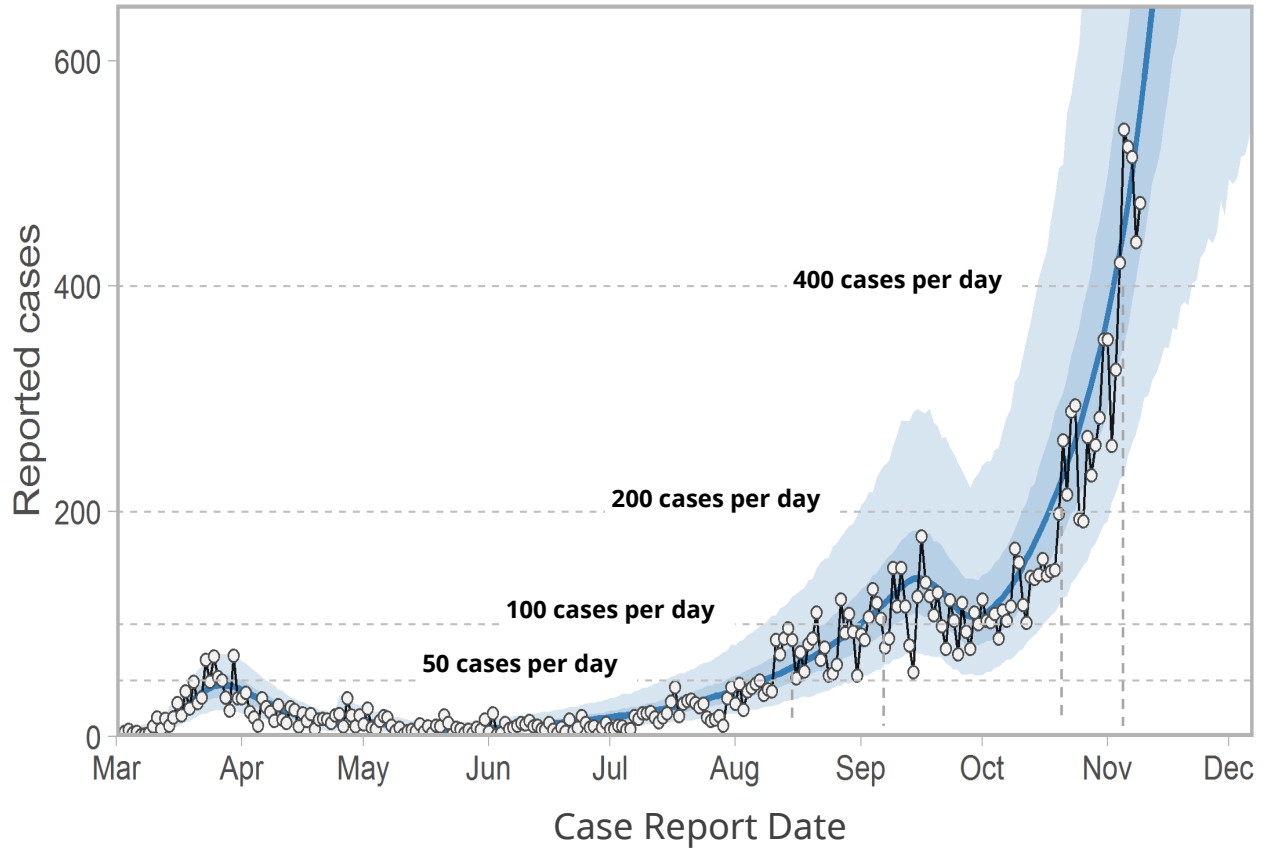
# Dynamic Compartmental Modelling: Recent Trends

Our model suggests that  $R_t$  is now close to or above 1 in several regions of BC.



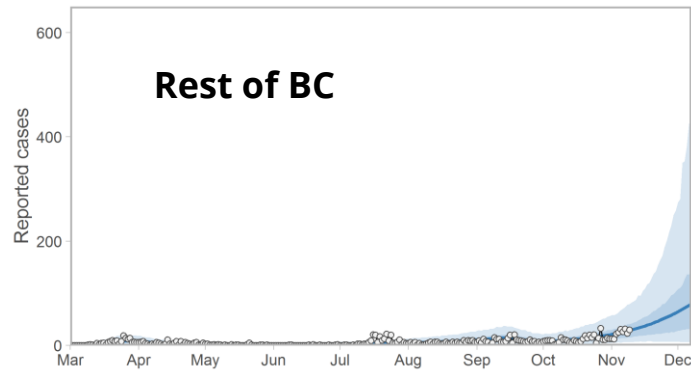
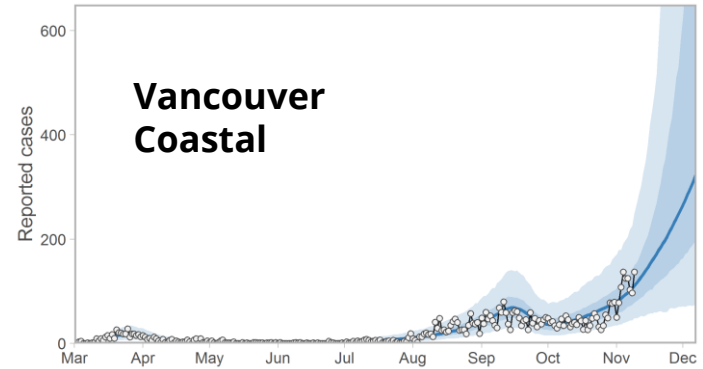
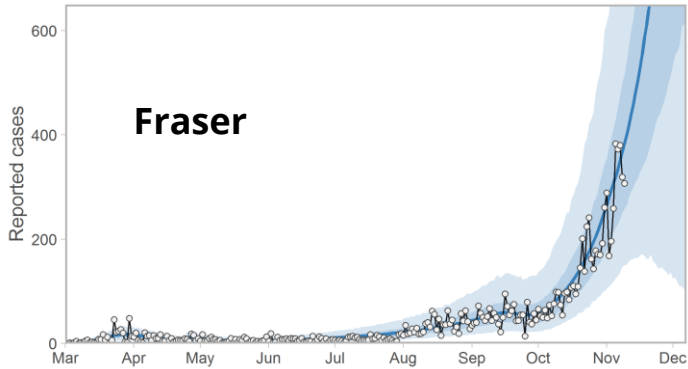
# Dynamic Compartmental Modelling: Recent Trends

Current estimated  
doubling time:  
**13 days**



*Solid blue line: median model fit; shaded bands: 50% and 90% credible intervals; Open circles: all reported cases, excluding reportable outbreaks, March 1 - Nov 9, 2020.*

# Dynamic Compartmental Modelling: Recent Trends



# Health Human Resources

# Health Human Resources – Contact Tracing

- Significant progress made to hire contact tracers across the province, in particular in the Lower Mainland. This week alone an additional **56 roles** were filled.
- To date, **636** individuals have been hired – more than the 500 initially announced in August, and 608 announced in September.
- In addition, government has recently approved increases to several health authorities, bringing the total number to be hired to over 800.
- Contact tracers can be deployed to regions most in need.

Health Authority	Hired to Date	In interview/ offer stage
Fraser Health	237	86
Interior Health	24	15
Northern Health	22	0
Vancouver Coastal Health	181	71
Vancouver Island Health	47	0
Provincial Health Services Authority	125	0
Total	636	172



# Health Human Resources Supporting Seniors

Visitation and Infection Prevention Control: 2000 FTEs

- Funding has been provided to operators and recruitment is ongoing
- As of Nov. 9, approximately **826 FTEs** have been hired across all health authorities

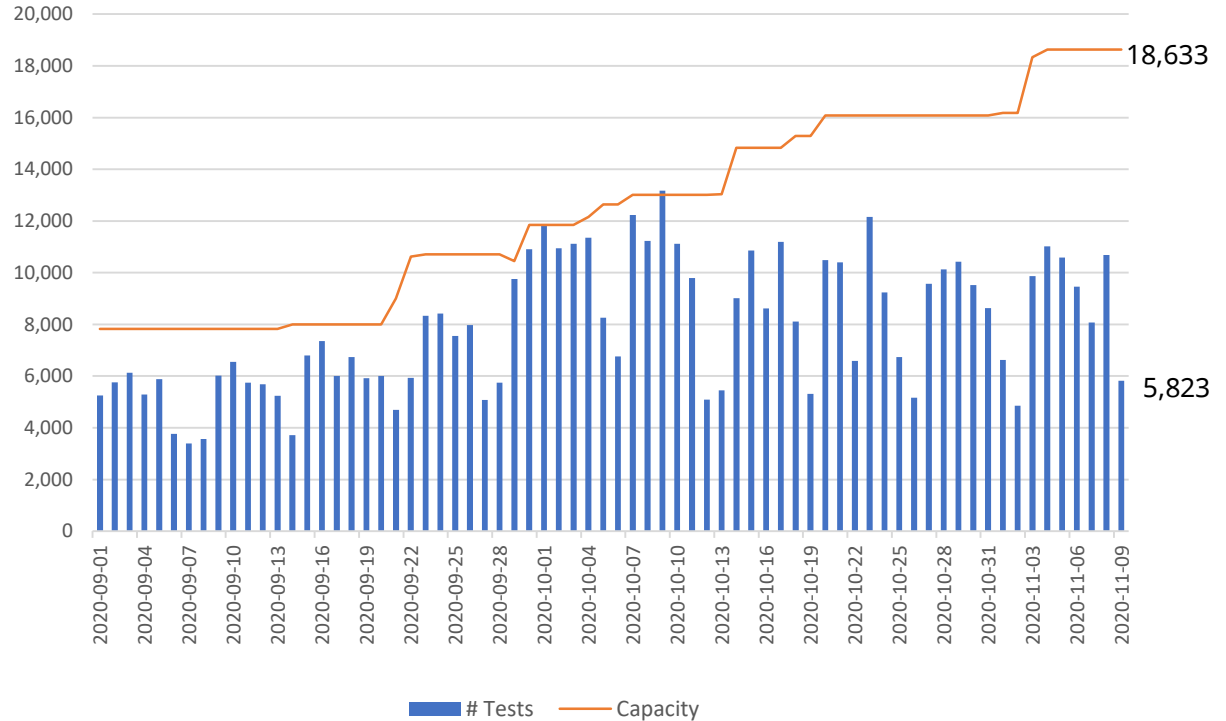
Health Career Access Program (HCAP):

- **8,949** participants have expressed interest in the program and nearly **5,000** have undergone a preliminary interview/screening process.
- **So far, 360 sites out of 564** have expressed interest in becoming HCAP employers. Regional allocation plans are now being finalized. Ministry officials continue to work with remaining operators to support their participation in HCAP.
- **101 health-care support worker positions** have already been allocated across BC through early adopter cohorts. Training is being done in collaboration with 5 post-secondary institutions: Selkirk College, College of New Caledonia, Langara College, Vancouver Community College and North Island College.

# Lab Services Capacity

# Province Testing and Capacity

Testing capacity has steadily increased and can easily accommodate an increase in testing if required.



# Hospital Capacity

# Hospital Occupancy Rates as of Nov.9, 2020

HA	Current Occupancy Rate (Base Beds)	Vacant Base Beds	Base Beds	Surge Occupancy Rate	Vacant Surge Beds	Surge Beds	Grand Total Occupancy Rate (Base+Surge)	Grand Total Vacant Beds (Base+Surge)	Grand Total Beds (Base+Surge)
FHA	93.4%	89	1339	0.0%	431	431	70.6%	520	1770
IHA	93.5%	77	1192	0.0%	278	278	75.9%	355	1470
NHA	93.0%	25	359	0.0%	133	133	67.9%	158	492
PHSA	67.3%	52	159	0.0%	50	50	51.2%	102	209
VCH	98.1%	32	1654	0.0%	843	843	65.0%	875	2497
VIHA	90.9%	116	1277	0.0%	59	59	86.9%	175	1336

# Critical Care

Includes ICU,HAU, CSICU, CCU, PICU

Excludes NICU

HA	Current Occupancy Rate (Base Beds)	Surge Occupancy Rate	Vacant Surge Beds	Surge Beds	Grand Total Occupancy Rate (Base+Surge)	Grand Total Vacant Beds (Base+Surge)	Grand Total Beds (Base+Surge)
<input type="checkbox"/> FHA	80.1%	0.0%	115	115	43.4%	142	251
<input type="checkbox"/> IHA	82.1%	0.0%	23	23	64.5%	38	107
<input type="checkbox"/> NHA	68.3%	0.0%	23	23	43.8%	36	64
<input type="checkbox"/> PHSA	58.3%	0.0%	16	16	25.0%	21	28
<input type="checkbox"/> VCH	88.4%	0.0%	82	82	55.5%	98	220
<input type="checkbox"/> VIHA	58.8%	0.0%	0	0	58.8%	40	97
<b>Grand Total</b>	<b>77.2%</b>	<b>0.0%</b>	<b>259</b>	<b>259</b>	<b>51.1%</b>	<b>375</b>	<b>767</b>

# Surgical Renewal Commitment

# Surgical Update

- On May 7, health authorities began calling all patients waiting for surgery to confirm that they were ready, willing, and able to proceed with their surgery in a COVID-19 environment.
- To date **107,789** patients have been contacted about their surgery with five of six health authorities having completed calls to all patients on the waitlist prior to May 7. Island Health expects to complete this work in the coming weeks.
- Health authorities resumed non-urgent surgeries on May 18 and have completed a combined total of **159,634** surgeries as of **Nov. 8, 2020**, of which **124,078** were urgent and non-urgent scheduled surgeries, and **35,556** were unscheduled or emergency surgeries.

Health Authority	Surgeries Completed Since May 18
Fraser Health	43,794
Interior Health	29,204
Northern Health	9,277
Vancouver Coastal Health	37,573
Vancouver Island Health	33,312
Provincial Health Services Authority	6,474



# Weekly Surgical Updates

<b>All HA Completed Cases:</b>			
<b>Week Inclusive of:</b>	<b>Scheduled</b>	<b>Unscheduled</b>	<b>Total</b>
March 16-March 22	2,178	1,312	3,490
March 23-March 29	1,157	1,096	2,253
March 30-April 5	1,142	1,036	2,178
April 6-April 12	972	1,105	2,077
April 13 - April 19	991	1,238	2,229
April 20-April 26	1,277	1,268	2,545
April 27-May 3	1,432	1,300	2,732
May 4-May 10	1,508	1,301	2,809
May 11-May 17	1,766	1,457	3,223
May 18-May 24	2,603	1,382	3,985
May 25-May 31	4,004	1,380	5,384
June 1-June 7	4,780	1,430	6,210
June 8-June 14	5,154	1,385	6,539
June 15-June 21	5,312	1,364	6,676
June 22-June 28	5,577	1,432	7,009
June 29-July 5	4,060	1,437	5,497
July 6-July 12	5,178	1,435	6,613
July 13 - July 19	5,279	1,577	6,856
July 20-July 26	5,207	1,475	6,682
July 27-August 2	4,455	1,503	5,958
August 3-August 9	3,570	1,416	4,986
August 10-August 16	4,907	1,529	6,436
August 17-August 23	4,912	1,546	6,458
August 24-August 30	4,949	1,472	6,421
August 31-Sept 6	4,790	1,412	6,202
Sept 7-Sept 13	4,452	1,423	5,875
Sept 14-Sept 20	5,648	1,387	7,035
Sept 21-Sept 27	5,800	1,445	7,245
Sept 28-Oct 4	5,660	1,486	7,146
Oct 5-Oct 11	5,674	1,432	7,106
Oct 12-Oct 18	4,587	1,348	5,935
Oct 19-Oct 25	5,856	1,367	7,223
Oct 26-Nov 1	5,853	1,326	7,179
Nov 2-Nov 8	5,811	1,167	6,978
<b>Cumulative total inclusive of March 16-May 17 (wrap up)</b>	<b>12,423</b>	<b>11,113</b>	<b>23,536</b>
<b>Cumulative total inclusive of May 18-November 8</b>	<b>124,078</b>	<b>35,556</b>	<b>159,634</b>

# Influenza Vaccine Update

**BC has ordered 1,970,000 doses of influenza vaccine so far and is in the process of purchasing 271,600 additional doses.**

This will provide a total of 2,241,600 doses of influenza vaccine, a 47% increase over last year.

HA	Total Doses Distributed as of Nov 1, 2020	Total Doses Distributed as of Nov 1, 2020
FHA	326,400	612,045
IHA	165,340	318,040
NHA	46,330	75,425
VCHA	332,840	529,100
VIHA	193,410	316,520
<b>Total</b>	<b>1,064,320</b>	<b>1,851,130</b>

# COVID-19: Monthly Update

November 12, 2020



Stay Informed Via These Resources:

[gov.bc.ca/Covid-19](https://gov.bc.ca/Covid-19) | [bccdc.ca](https://bccdc.ca) | 1-888-COVID19

Symptom Self-Assessment:

[covid19.thrive.health](https://covid19.thrive.health)



BRITISH  
COLUMBIA