

COVID-19 Pandemic

Second wave crisis



Thank you!

- To Mayor Iveson for this opportunity to address city council.
- To Healthcare Professionals for their heroic work in caring for patients with COVID-19 and all other patients who still need care during the pandemic.
- To Alberta Health Services leadership for their work in contingency and disaster planning.
- To Dr. Deena Hinshaw and her team for their tireless work in monitoring the pandemic, informing the public and providing professional advice to the Government of Alberta.

COVID-19 Alberta Situation Report Dec 5, 2020

Alberta- Dec 5

- New cases 1,836
- Tests (4th) 23435
- Positive tests 7.9% (was 10%)
- Deaths 19
- Hospital 601
- ICU 100
- Total deaths 615

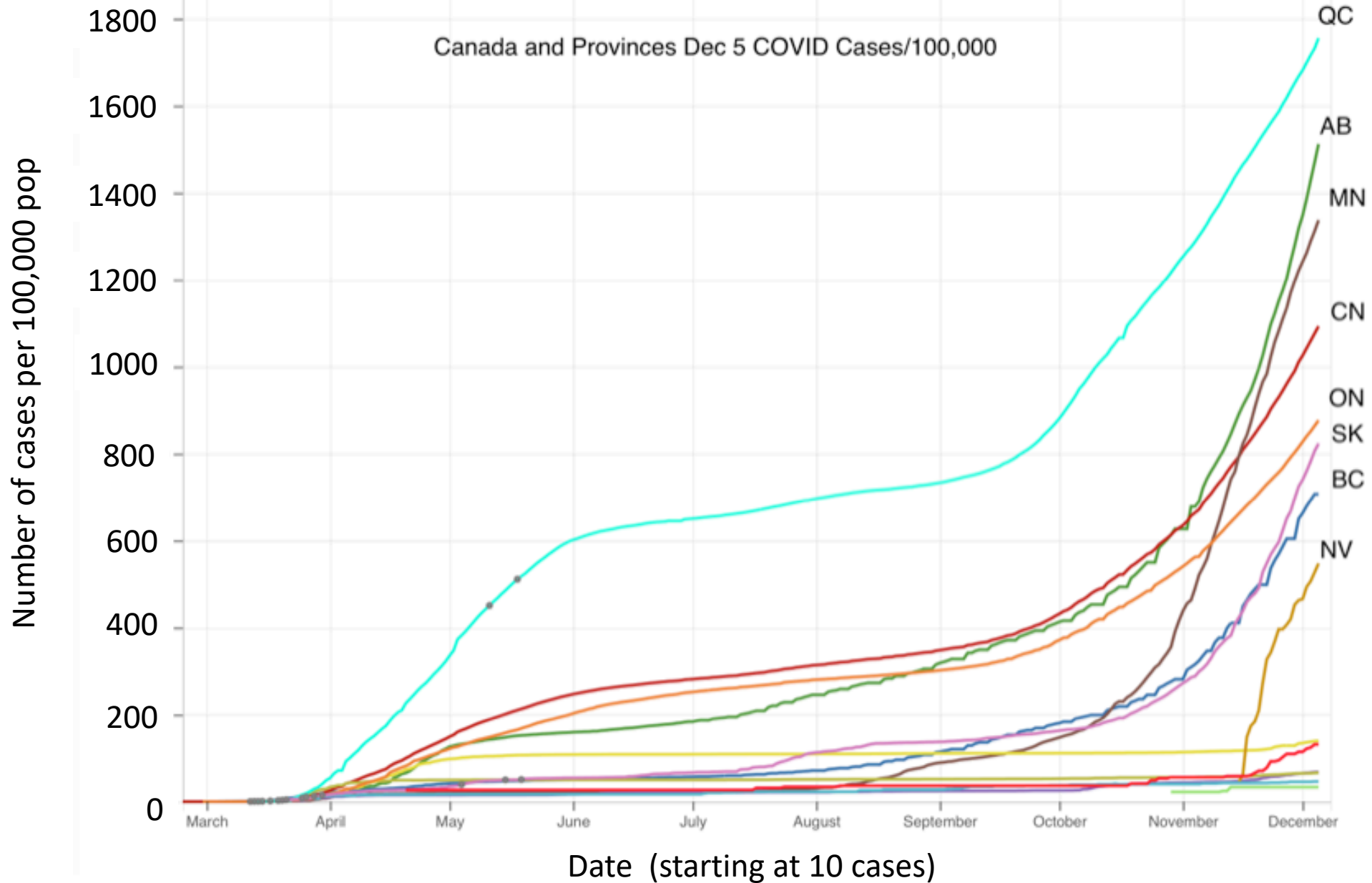
Edmonton – Dec 5 (% AB total)

- New cases 612 (33%)
- Tests 8458 (35%)
- Positive tests
- Deaths 12 (63%)
- Hospital 337 (+37) (56%)
- ICU 59 (59%)
- Total deaths 250 (41%)

COVID-19 Alberta Situation Report Dec 7, 2020

- New cases 1,725
- Active cases 20,067
- Positive tests 8.5%
- In hospital 609
- In ICU 108
- Deaths 16
- Total deaths 631

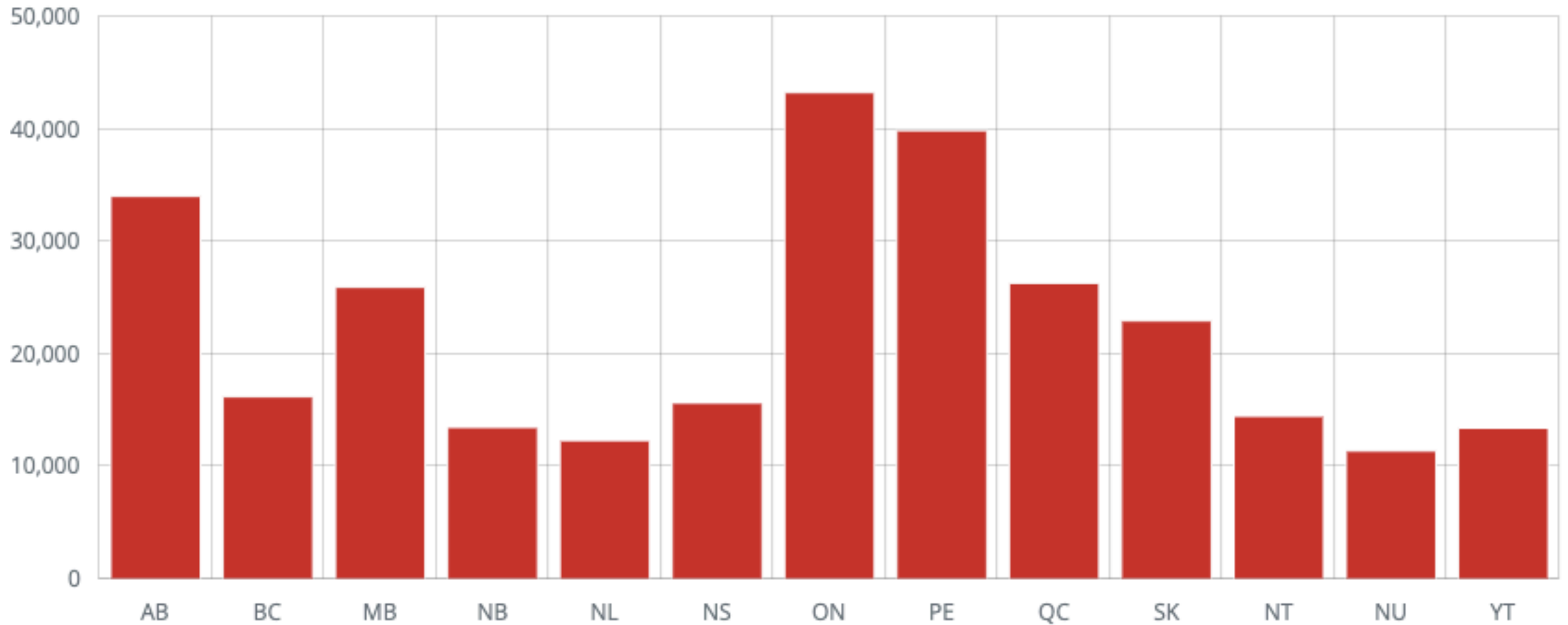
Active cases per day/100,000 population by province



Provincial Metric for Friday, December 04, 2020

PROVINCE	Rt (95% CI)		WEEKLY CASES PER 100,000
Alberta	1.16	(1.14 - 1.18)	251.7
British Columbia	0.99	(0.97 - 1.02)	106.4
Manitoba	0.91	(0.88 - 0.95)	178.6
New Brunswick	0.91	(0.69 - 1.17)	7.0
Newfoundland	0.81	(0.44 - 1.29)	2.5
Nova Scotia	0.90	(0.72 - 1.10)	8.8
Ontario	1.01	(0.99 - 1.03)	83.7
PEI	1.29	(0.35 - 2.83)	1.9
Quebec	1.07	(1.05 - 1.09)	112.7
Saskatchewan	1.05	(1.01 - 1.10)	159.2

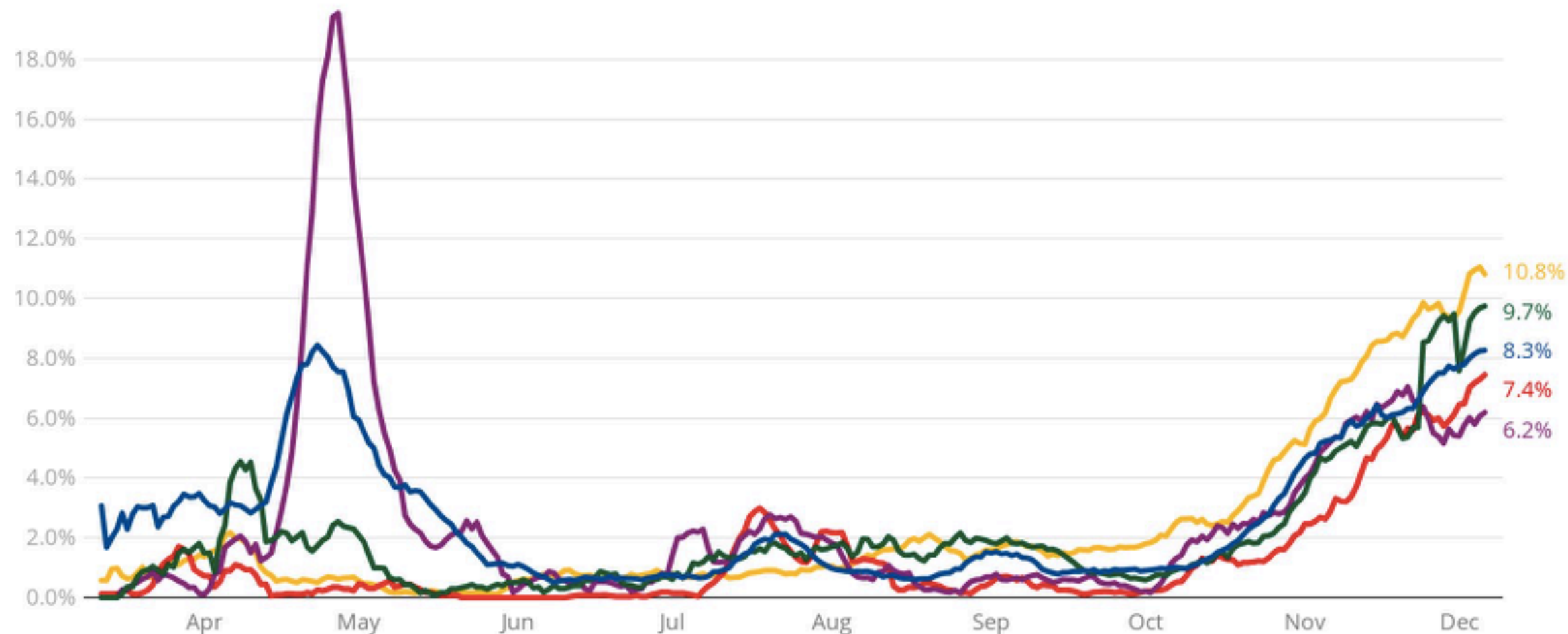
COVID-19 Tests per capita by province



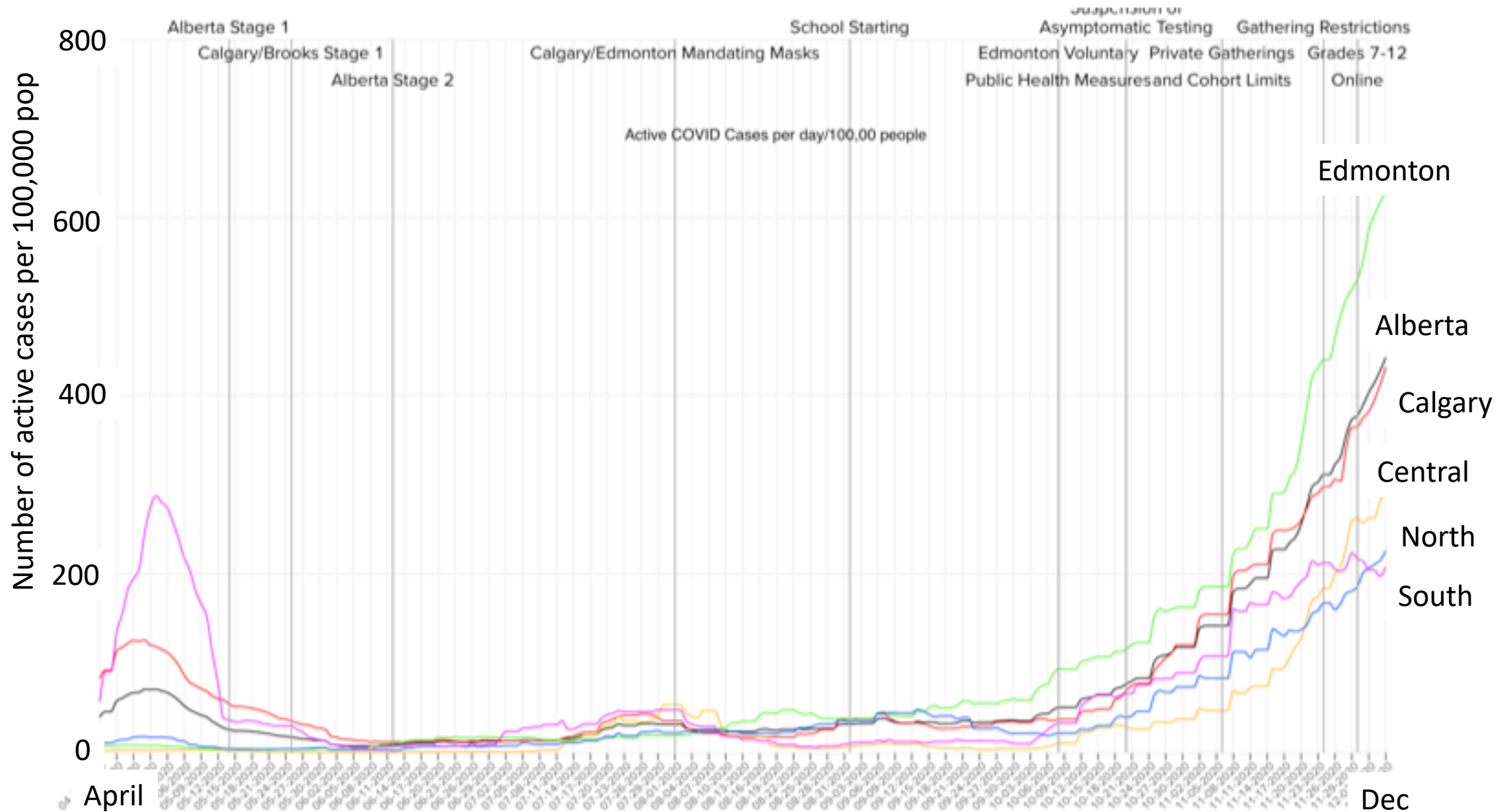
COVID-19 test positivity by health zone in Alberta

Each line shows the percentage of COVID-19 tests that came back positive, as a 7-day average, in each zone.

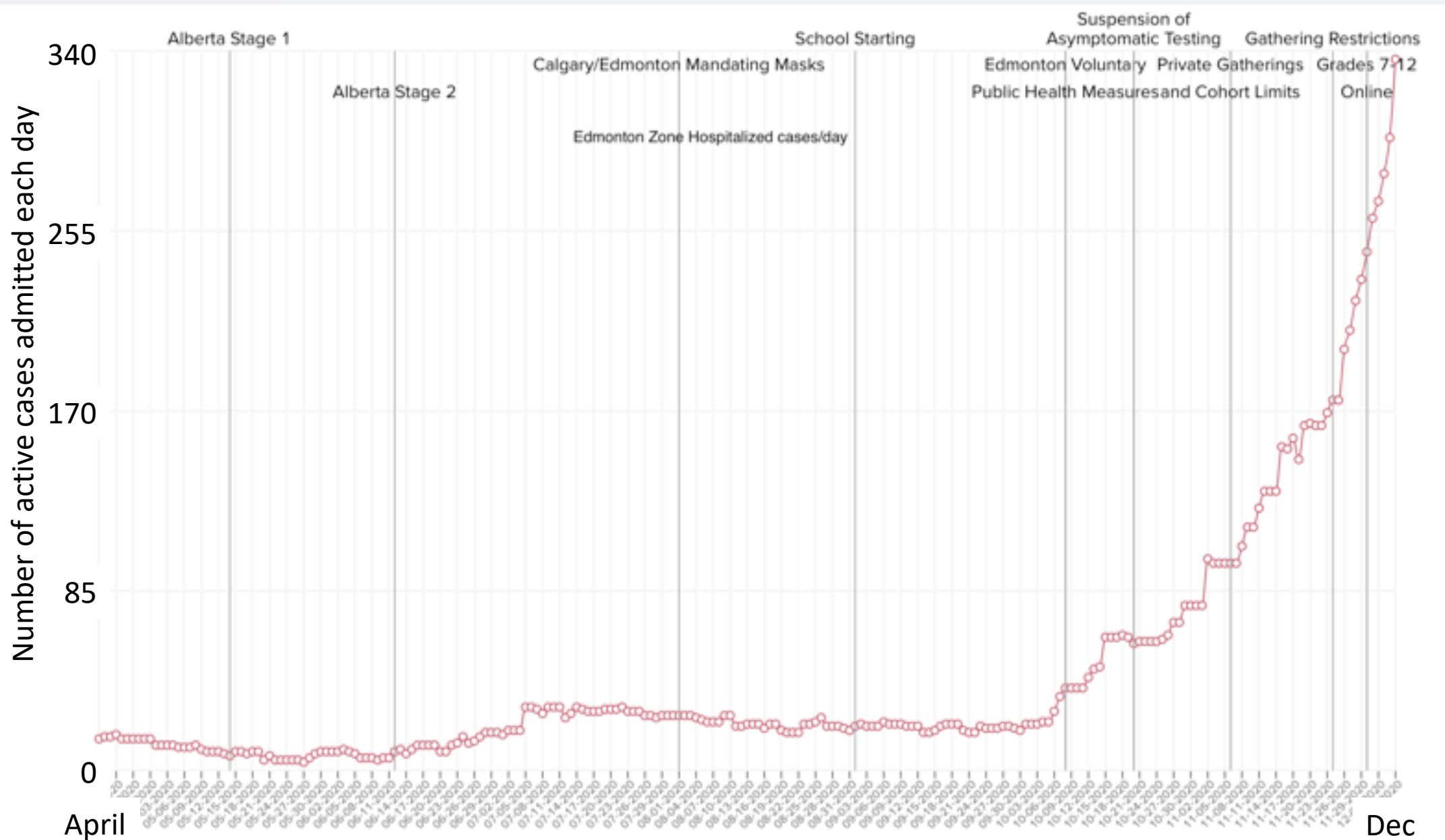
— South — Calgary — Central — Edmonton — North



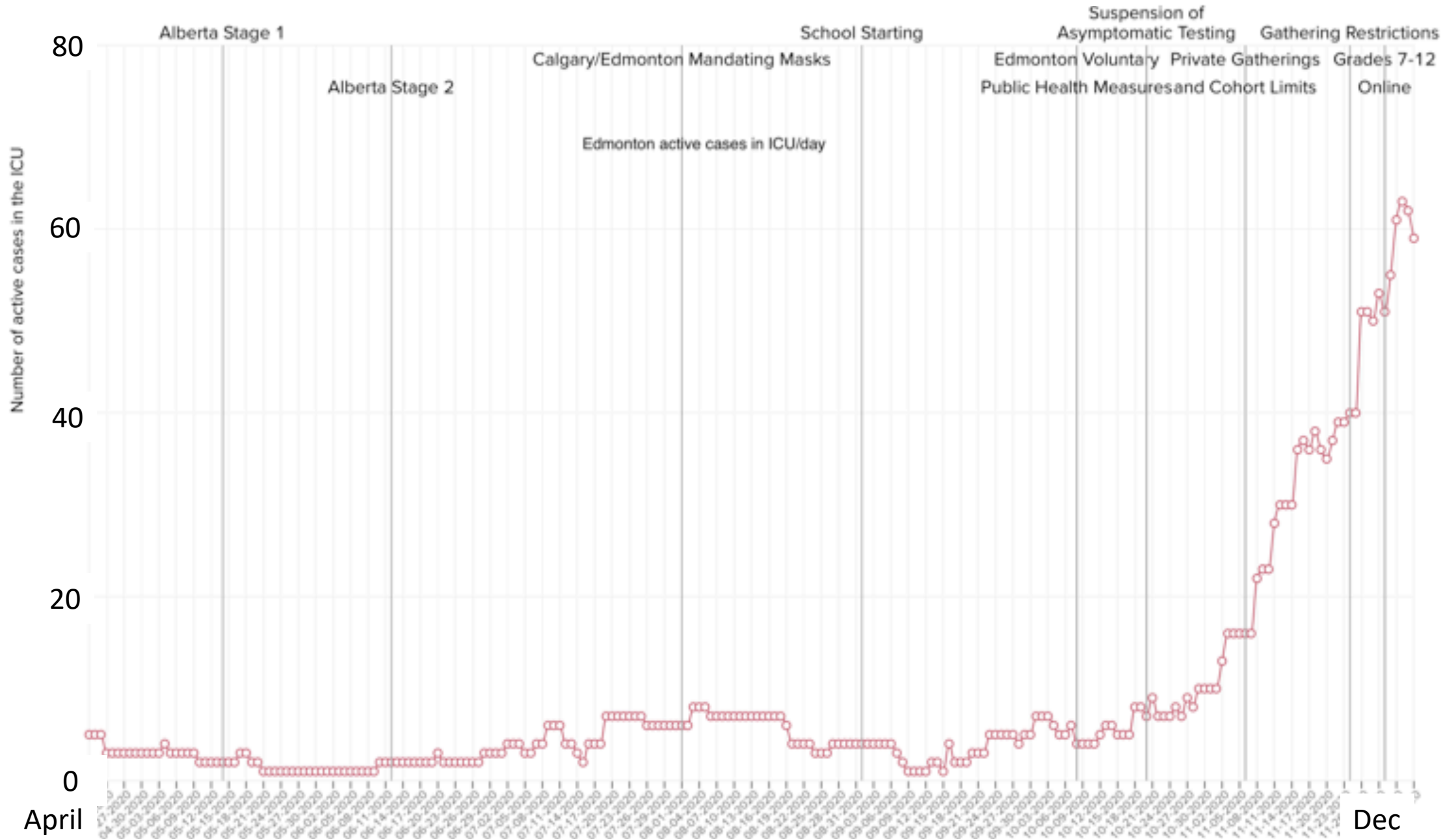
Active COVID-19 Cases per day per 100,000 people



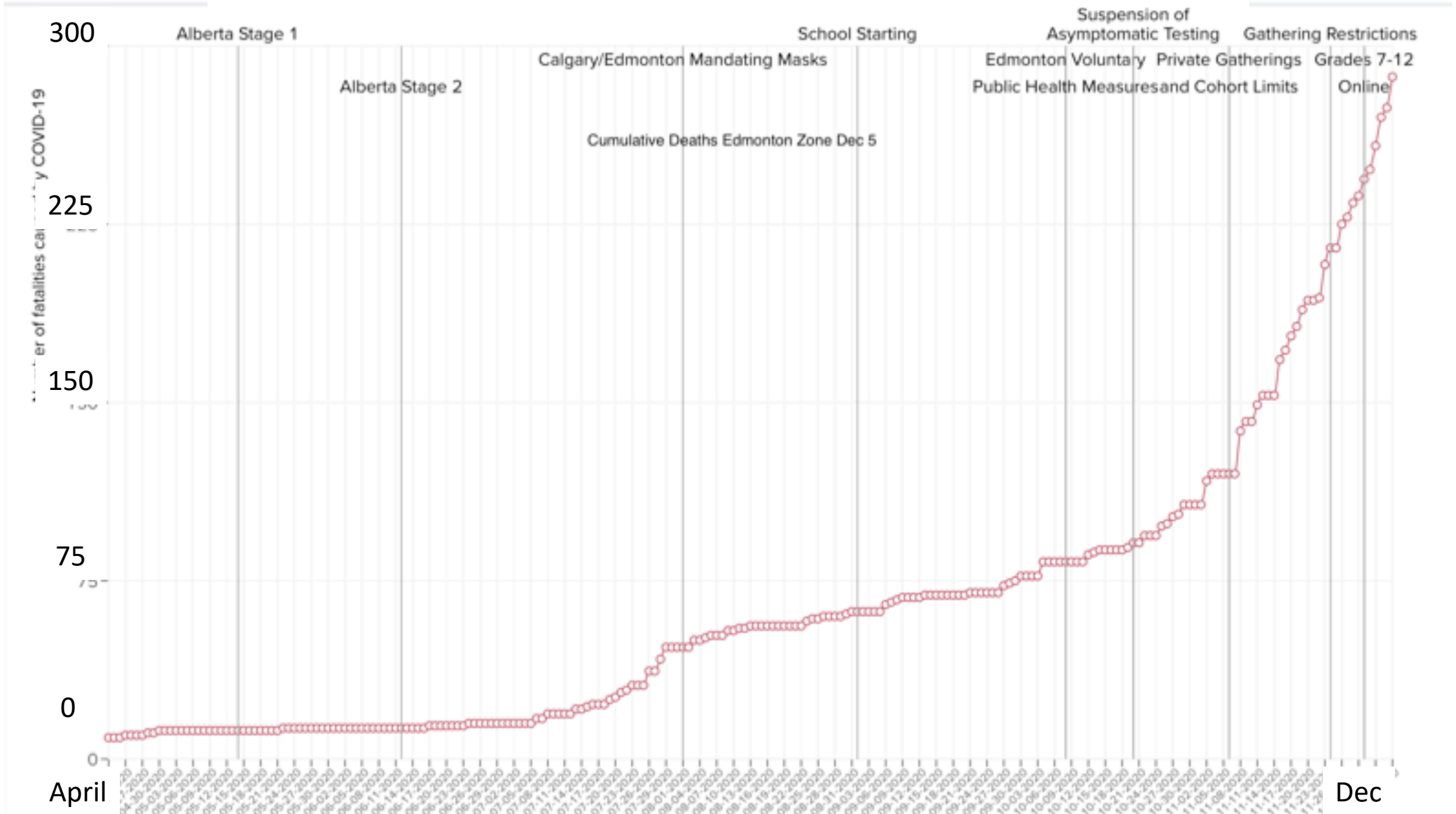
COVID-19 Hospitalized cases/day: Edmonton Zone



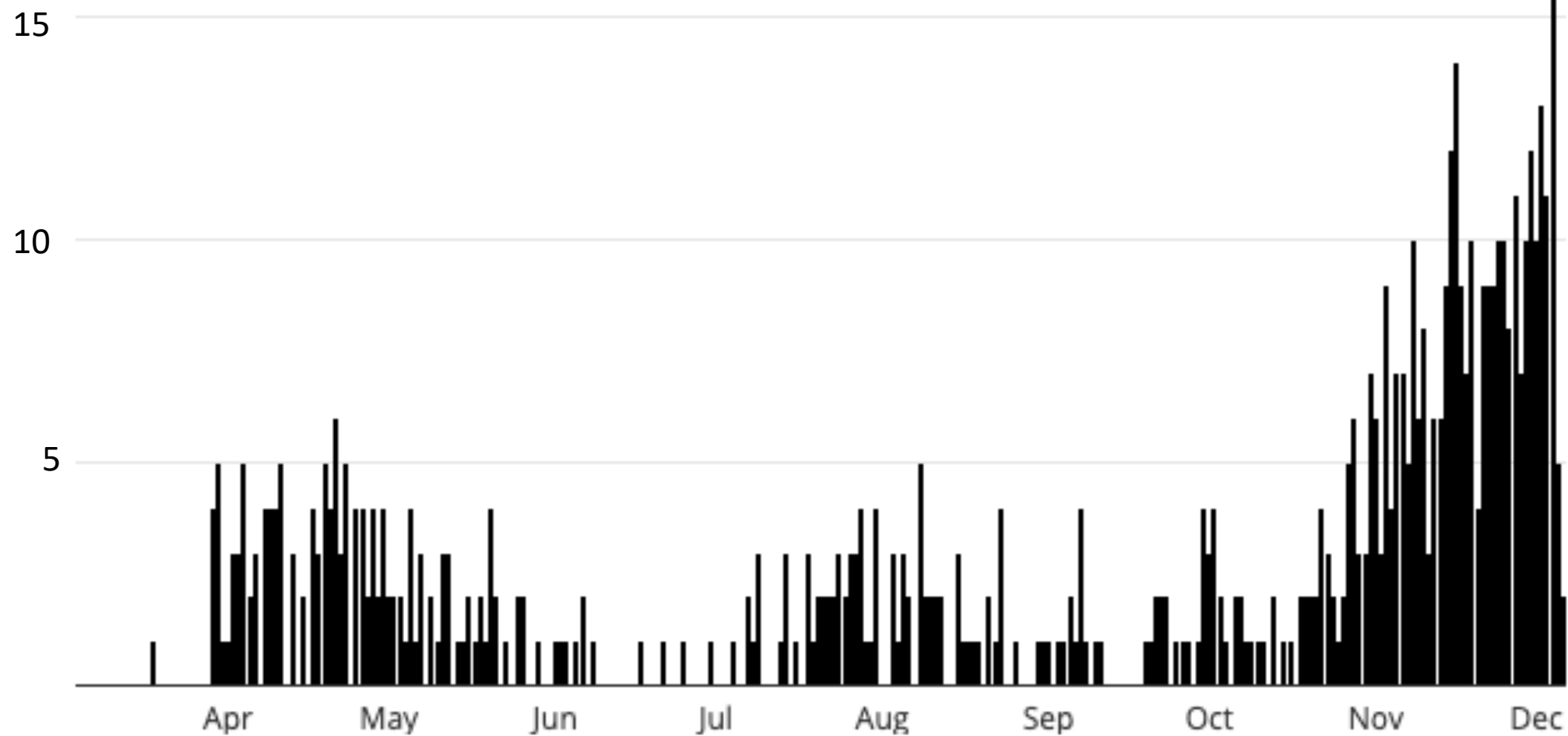
ICU Admissions: Edmonton Zone



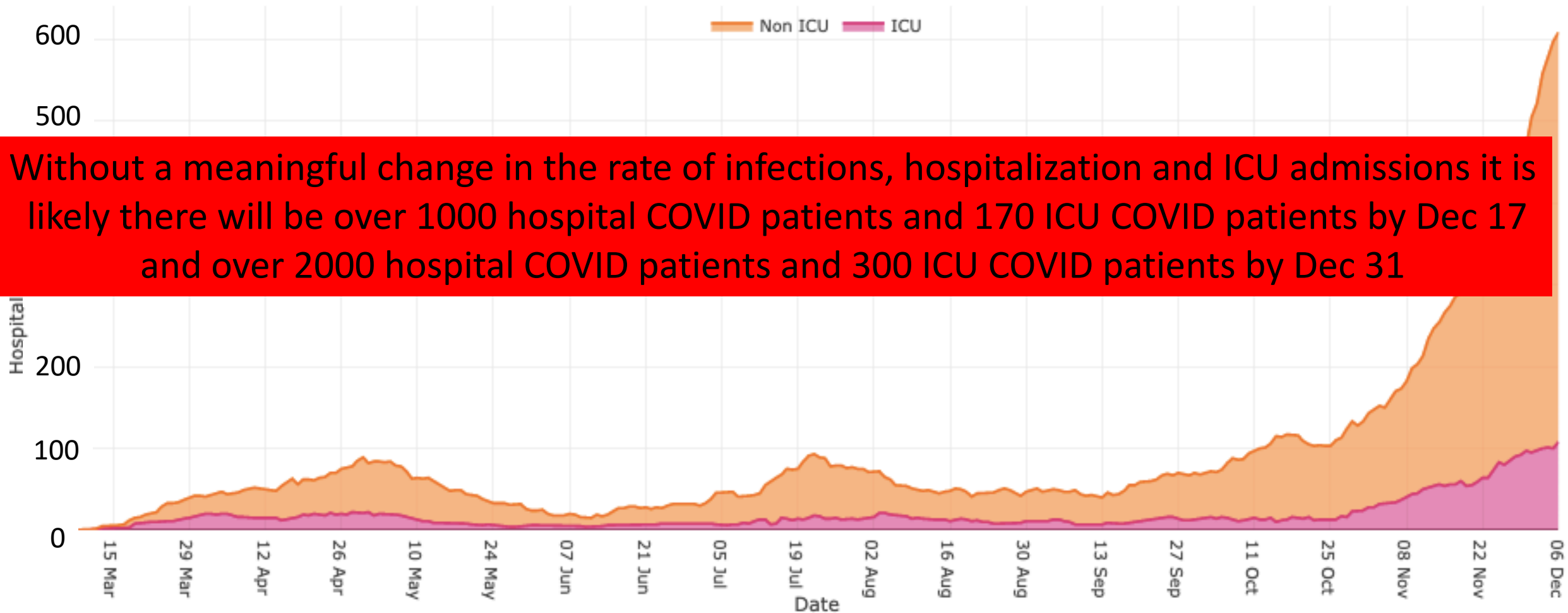
COVID 19 Cumulative Deaths: Edmonton Zone



Alberta COVID-19 Deaths by date



COVID-19 Hospitalizations and ICU Cases Mar-Dec 2020



Consequences of continued increase in new cases

- Hospitals and continuing care centres overwhelmed
 - Healthcare professionals already working at maximum capacity
 - Need for help staffing continuing care centres
 - Cancellation of booked surgical cases
 - Non-COVID patients still needing care
 - Hospital staff already exhausted, sick, in isolation or quarantine
 - Challenge to maintain quality of care
 - Increased risk of COVID transmission in overcrowded spaces.
 - “Field” hospitals in U of A Butterdome & Saville Centre
- ICUs overwhelmed
 - Surge into new ICU beds without ICU trained professionals
 - Challenge to maintain quality of care
 - Inability to provide life support to everyone presenting in distress
 - Rapidly increasing mortality rate
 - Triage of limited resources to provide care to those most likely to benefit



Ontario
Health

Clinical Triage Protocol for Major Surge in COVID Pandemic

March 28, 2020

PA man begs Facebook friends to help find ICU bed for COVID- 19-stricken mom

By Paula Froelich

New York Post

December 5, 2020 | 7:28pm | Updated

The Extraordinary Decisions Facing Italian Doctors

There are now simply too many patients for each one of them to receive adequate care.

MARCH 11, 2020 The Atlantic

Evidence – effective measures against COVID-19

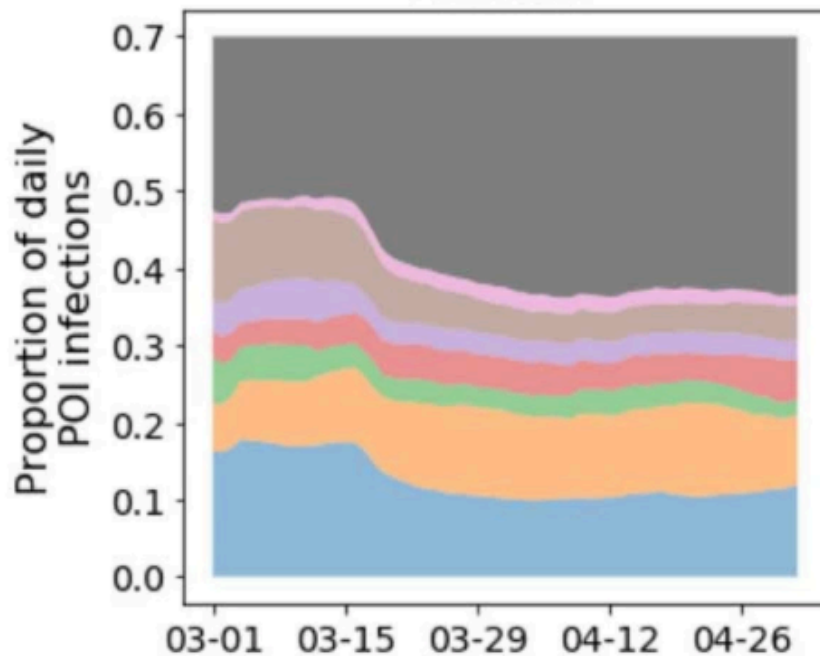
- Public health restrictions (lockdown) can drop the transmission quickly and effectively - but come at a societal cost
 - Harms: lost worker, shut businesses, reduced economic activity ,
 - delayed healthcare for chronic conditions, reduced use of acute health care, social-emotional toll
- Delays in effective measures can result in a worse, longer peak
- Unclear whether the recent surge is following the same pattern (private gathering spread, some workplaces), as before
 - loss of contact tracing

Recent research suggest any indoor places that people gather should be considered

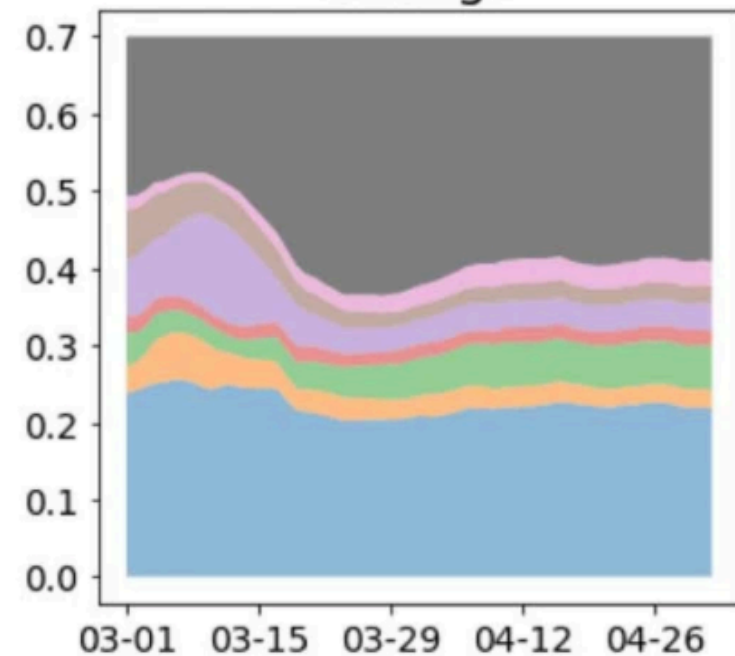
- Mobile phone data based mobility networks accurately predicted real case patterns
 - “minority of ‘superspreader’ points of interest account for a large majority of the infections, and that restricting the maximum occupancy at each point of interest is more effective than uniformly reducing mobility.”
- Superspreader points of interest account a majority of infections:
 - Grocery stores, Fitness Centres, Cafes, Physician offices, Religious Organizations, Hotels and Motels, Full service restaurants accounted of the points of interest



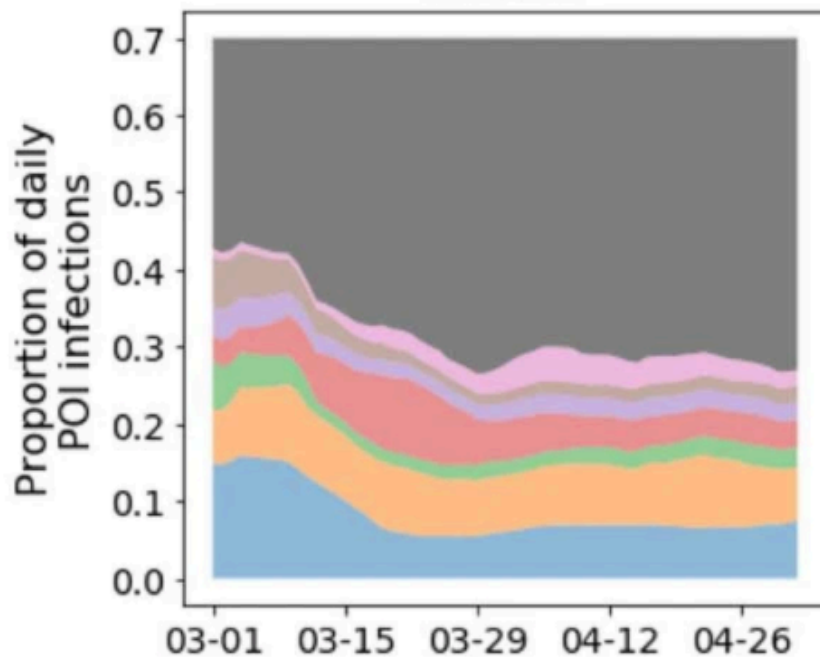
Atlanta



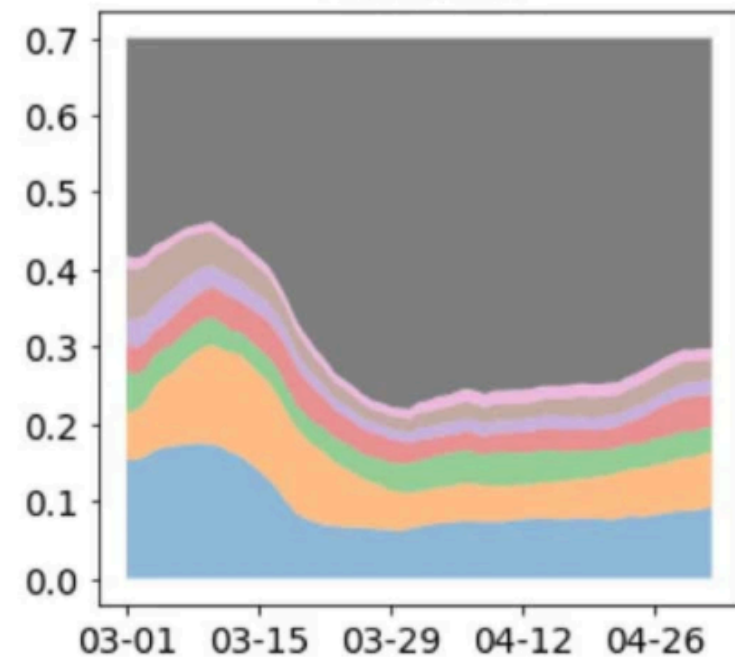
Chicago



Dallas



Houston



Increased burden on system due to COVID “Long Haulers”

COVID-19 symptoms persist for months in 20% of cases.

- Common long term symptoms
 - Fatigue
 - Shortness of breath
 - Cough
 - Joint pain
 - Chest pain
- Other reported long-term symptoms include:
 - Difficulty with thinking and concentration (sometimes referred to as “brain fog”)
 - Depression
 - Muscle pain
 - Headache
 - Intermittent fever
 - Cardiac arrhythmias (also known as heart palpitations)

WCB Alberta has accepted 2,164 claims already in 2020

Why have current measures not been effective enough?

- Most evidence supports swift and early action
- Contact tracing now overwhelmed, so isolation and quarantine is weakened
- Lack of public compliance – related to many factors
 - Less public attention
 - If something is open may be perceived to be safe
 - Mixed messaging and lack of enforcement
 - Misinformation spreading about seriousness of COVID-19, testing reliability

How can we “bend the curve”?

- Minimize close indoor contacts
- Lockdown venues known to contribute to transmission until curve bent - R value 0.8 or less and new cases under 300/day
 - Casinos
 - Bars
 - In-restaurant dining
 - Gyms and sports centres
 - Faith assemblies
 - Strict enforcement of limited numbers and masking in indoor spaces in stores and shopping malls
 - Office work from home

Thank you for your attention and assistance!

We are all in this together.

We bent the curve once, we can do it again.