

Update on COVID-19 Projections

Science Advisory and Modelling Consensus Tables

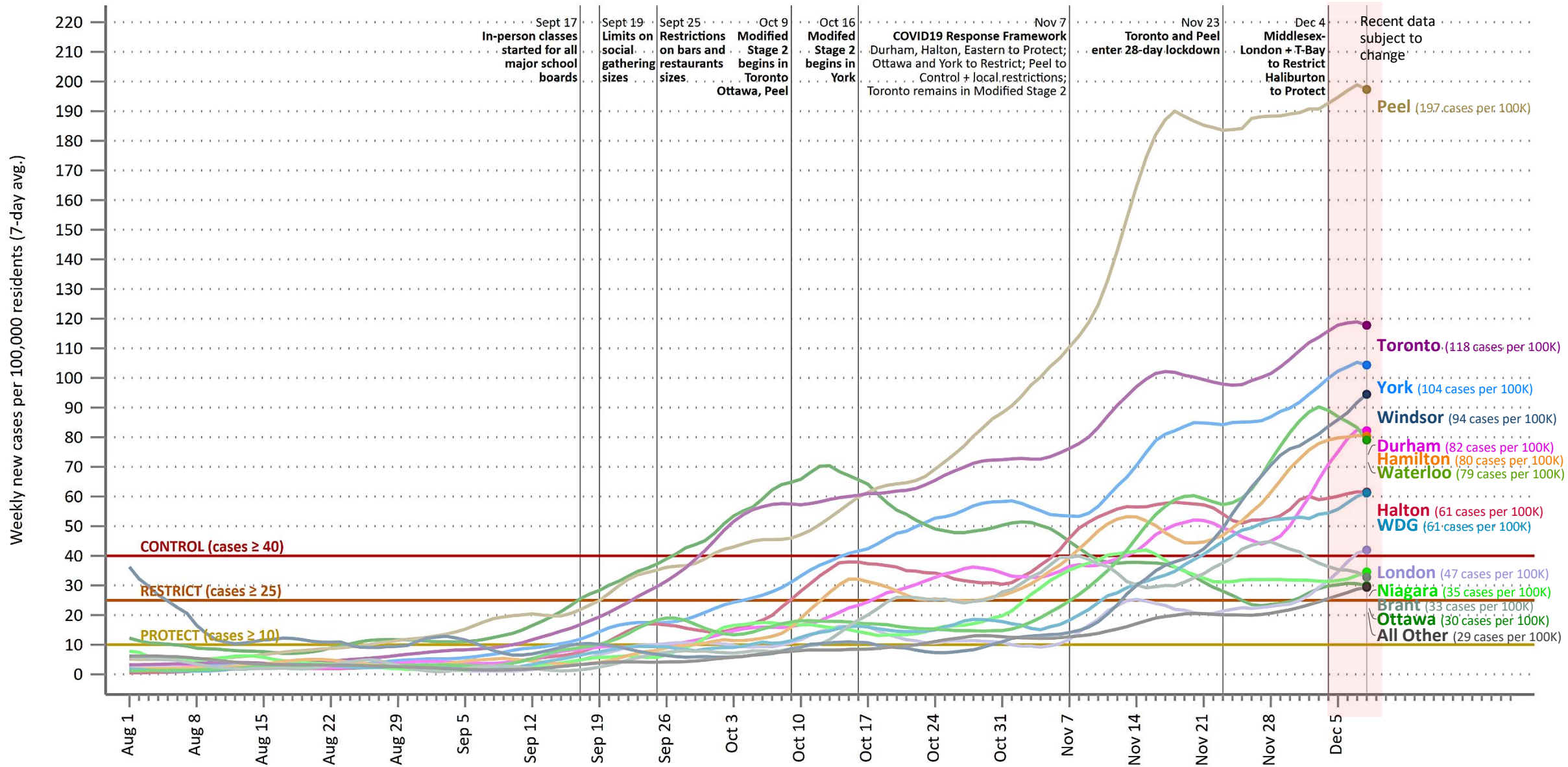
December 10, 2020



Key Findings

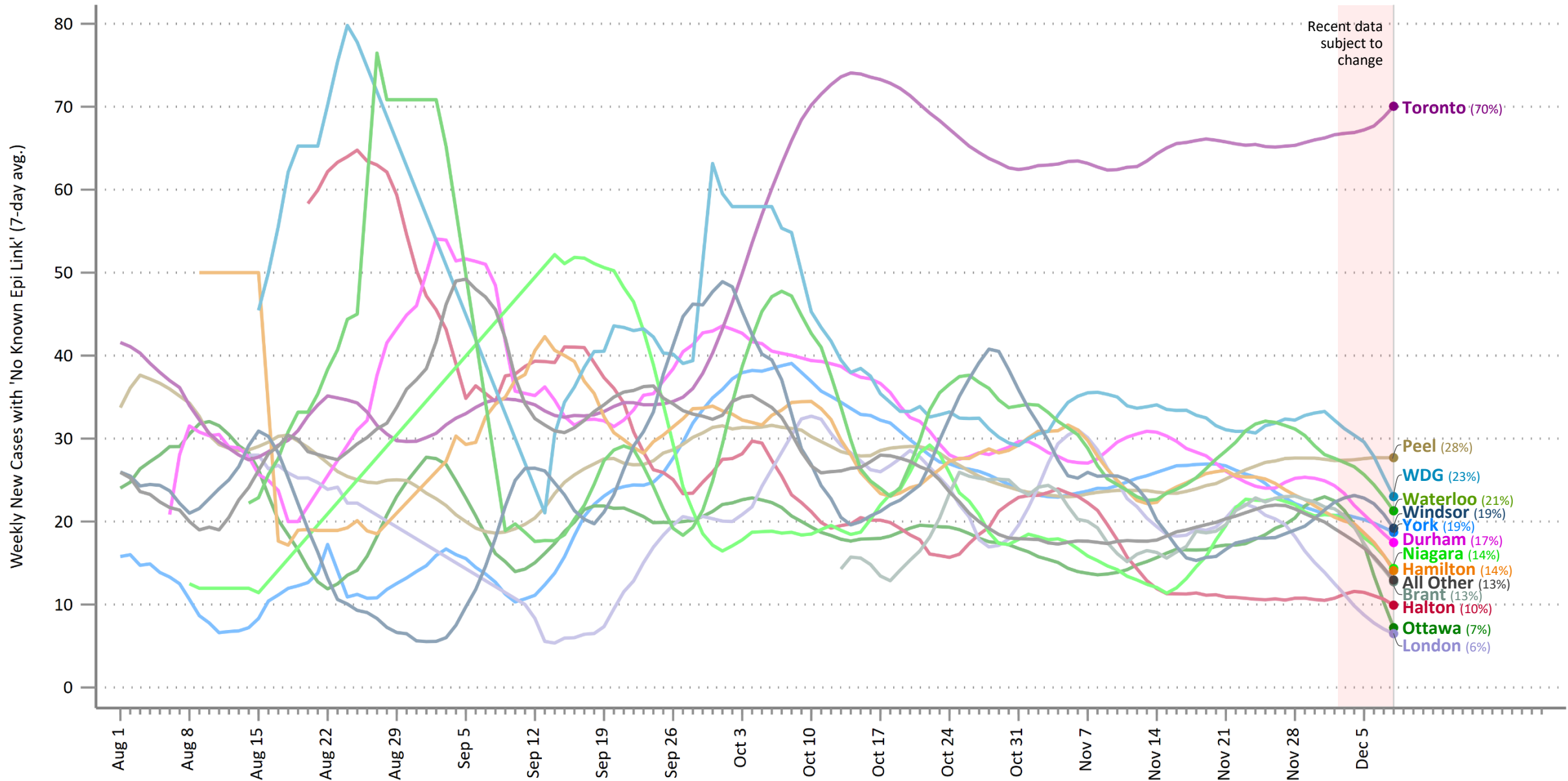
- Cases continue to grow while percent positivity appears to be flattening. The impact of the Pandemic still varies widely across and within public health units.
- Long-term care and overall mortality continue to increase and may exceed 25 deaths per day within a month.
- The reproduction number is fluctuating around 1 which means that we are at a critical juncture where case rates may change quickly.
- ICU occupancy will continue above 200 beds for the next month and may go higher, particularly if public health interventions are relaxed. Access to care deficits will persist.
- For Ontarians with access to suitable housing and employment outside of essential services, case rates have increased at a slower pace.
- Current lockdown has not had nearly as much impact on mobility (and likely contacts) as lockdown did in March. Relaxation of public health interventions with a widening prevention gap will likely lead to even higher case growth.

Total new cases per 100,000 residents per week across PHUs

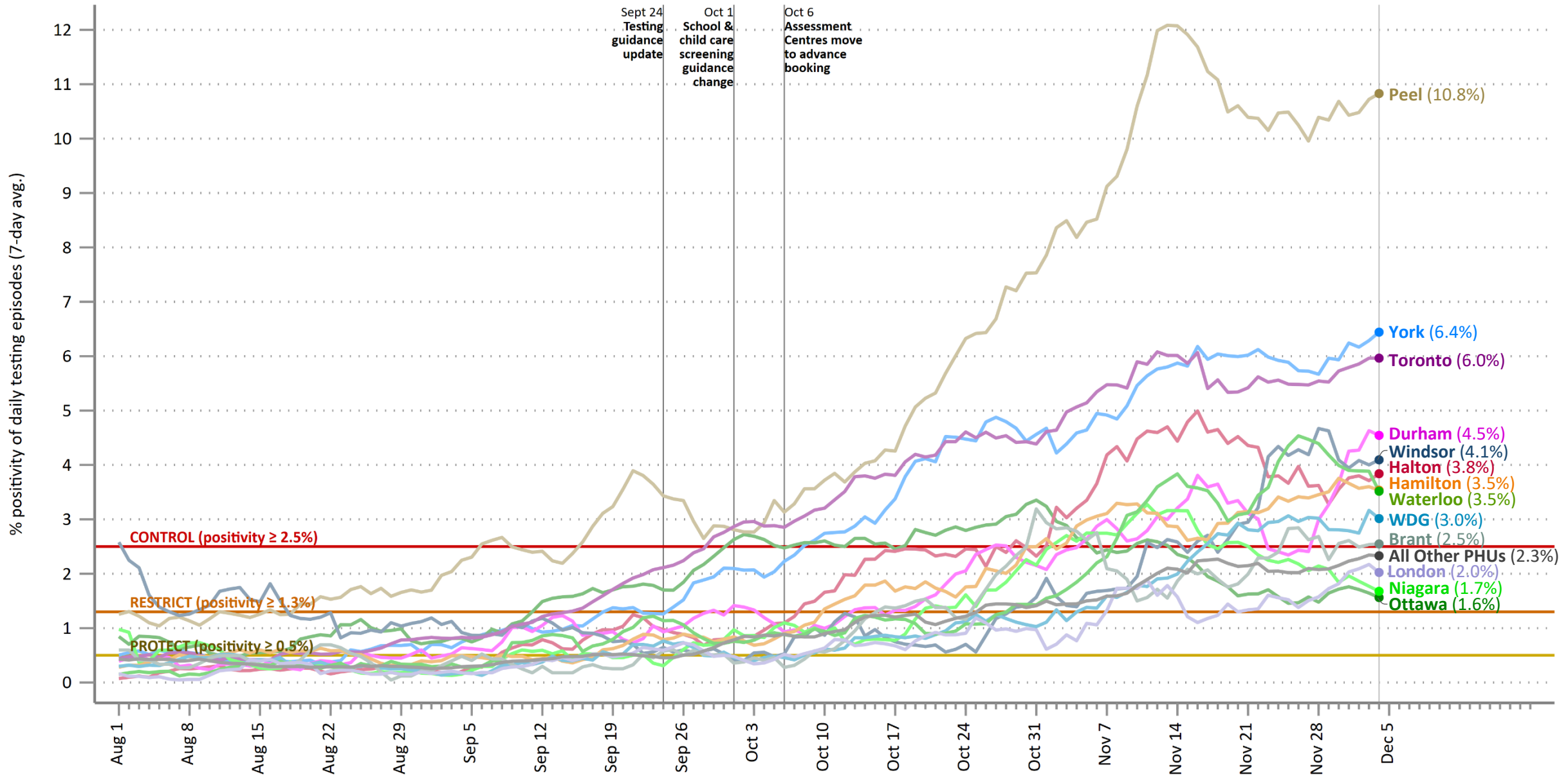


Data Source: Case and Contact Management System (CCM), data up to December 8
 PHUs are Public Health Units

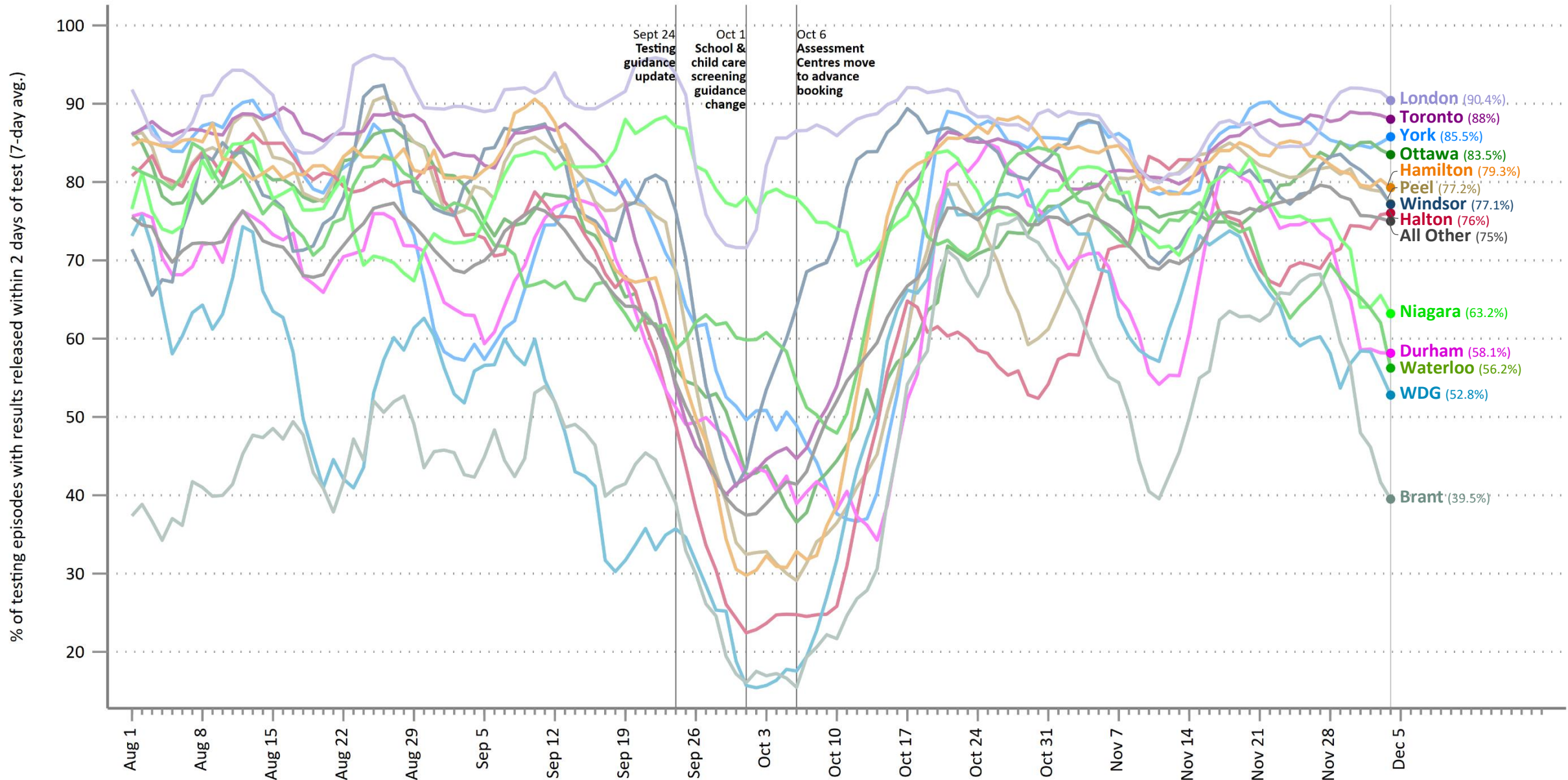
New cases with no epidemiological link across PHUs



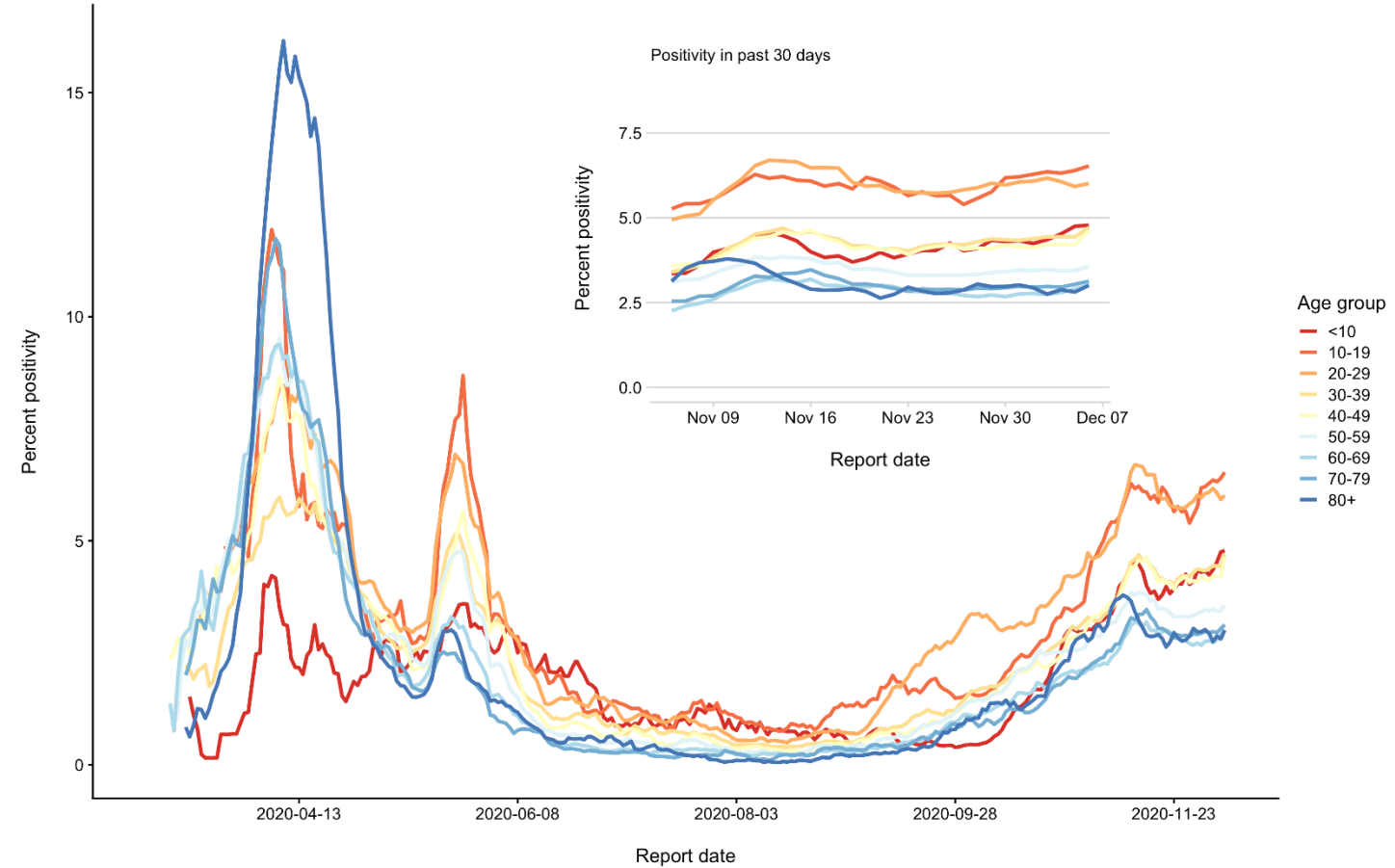
COVID-19 testing % positivity across PHUs



Percent of COVID test results returned within 2 days across PHUs



Weekly % positivity by age group

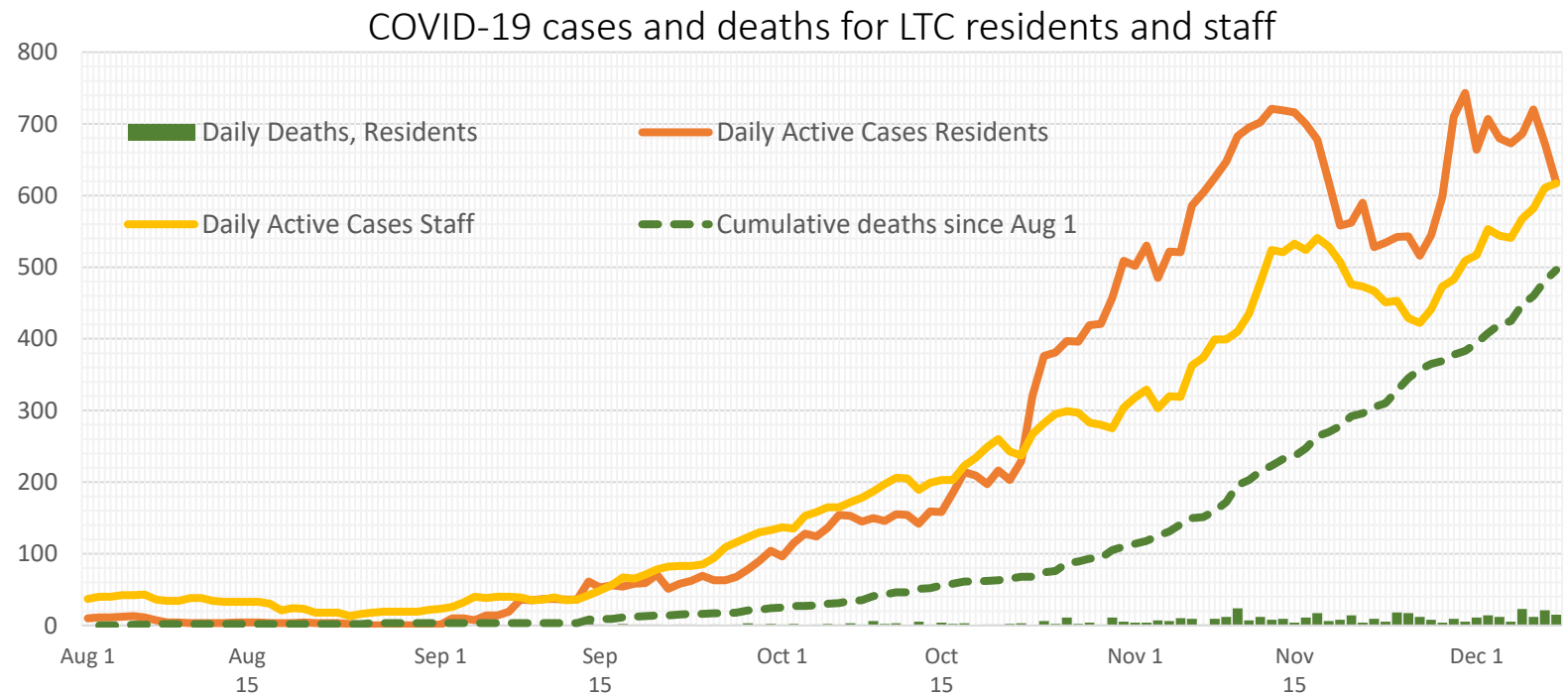


Cases in LTC flattening, while deaths remain high (102 deaths in the past 7 days)

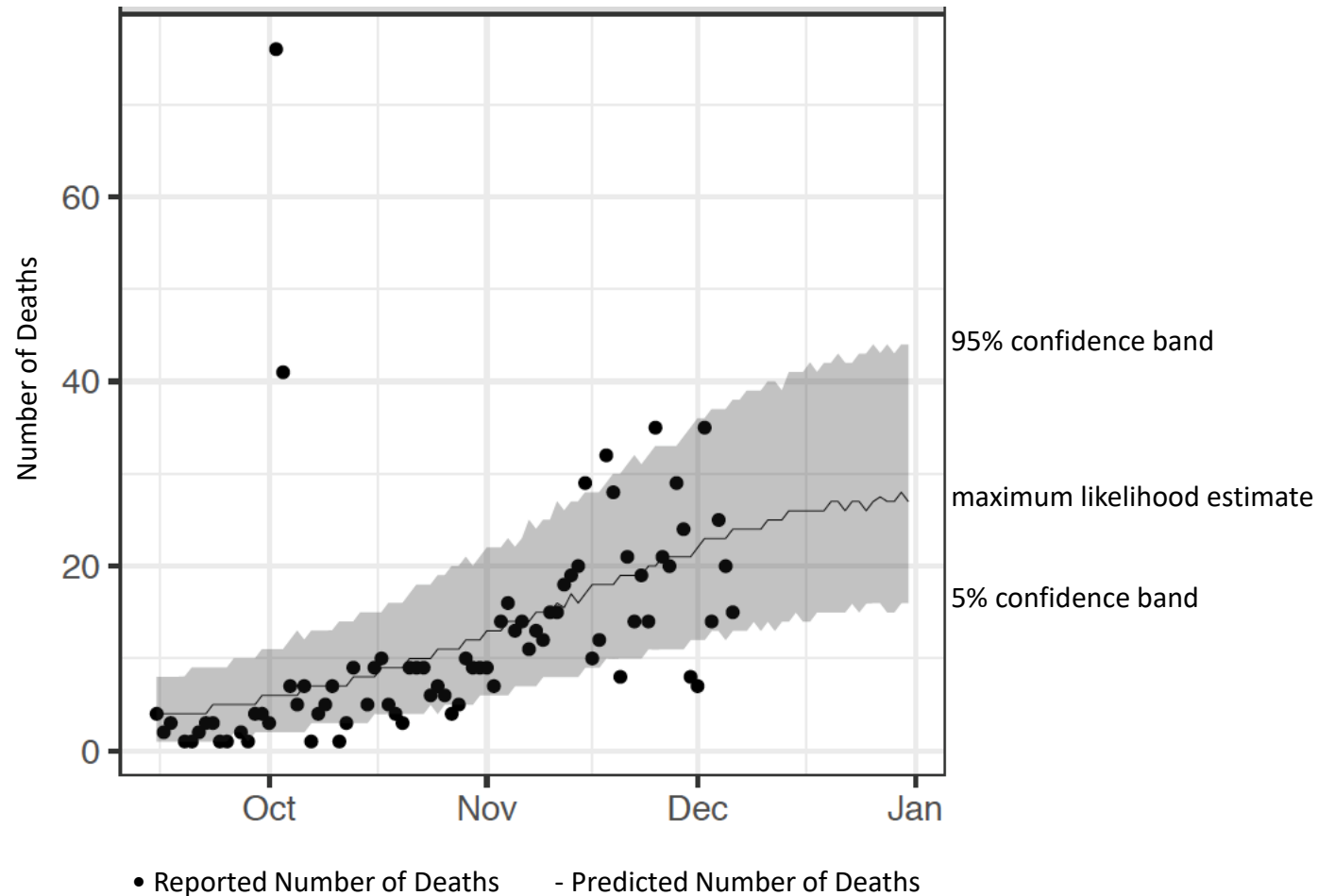
LTC Home cases and outbreaks

Current status (Dec 8)

- **115 homes currently in outbreak, with 1194 confirmed cases currently in these homes**
- **There have been 496 resident deaths since Aug 1st (493 since Sept 1st) 102 of which have been in the past 7 days**
- **37 of the 115 homes in outbreak are based on 1 staff case**

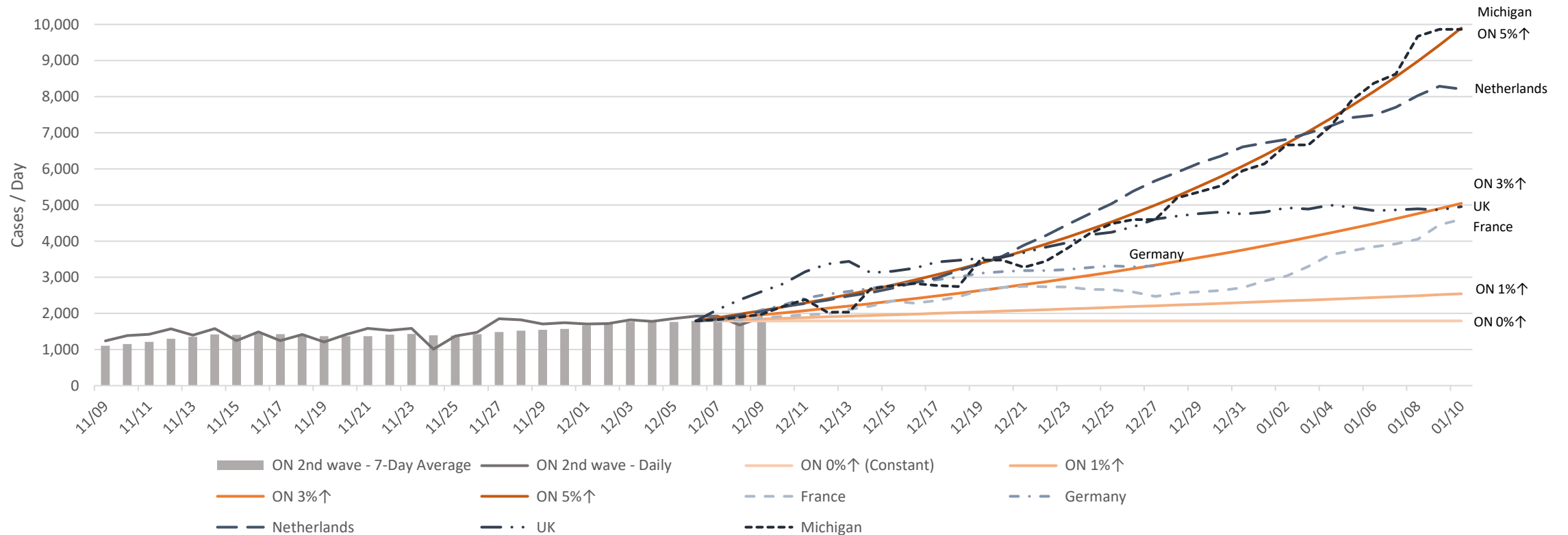


Daily mortality is increasing and based on forecasting will continue to increase



Ontario is following case growth of peer countries

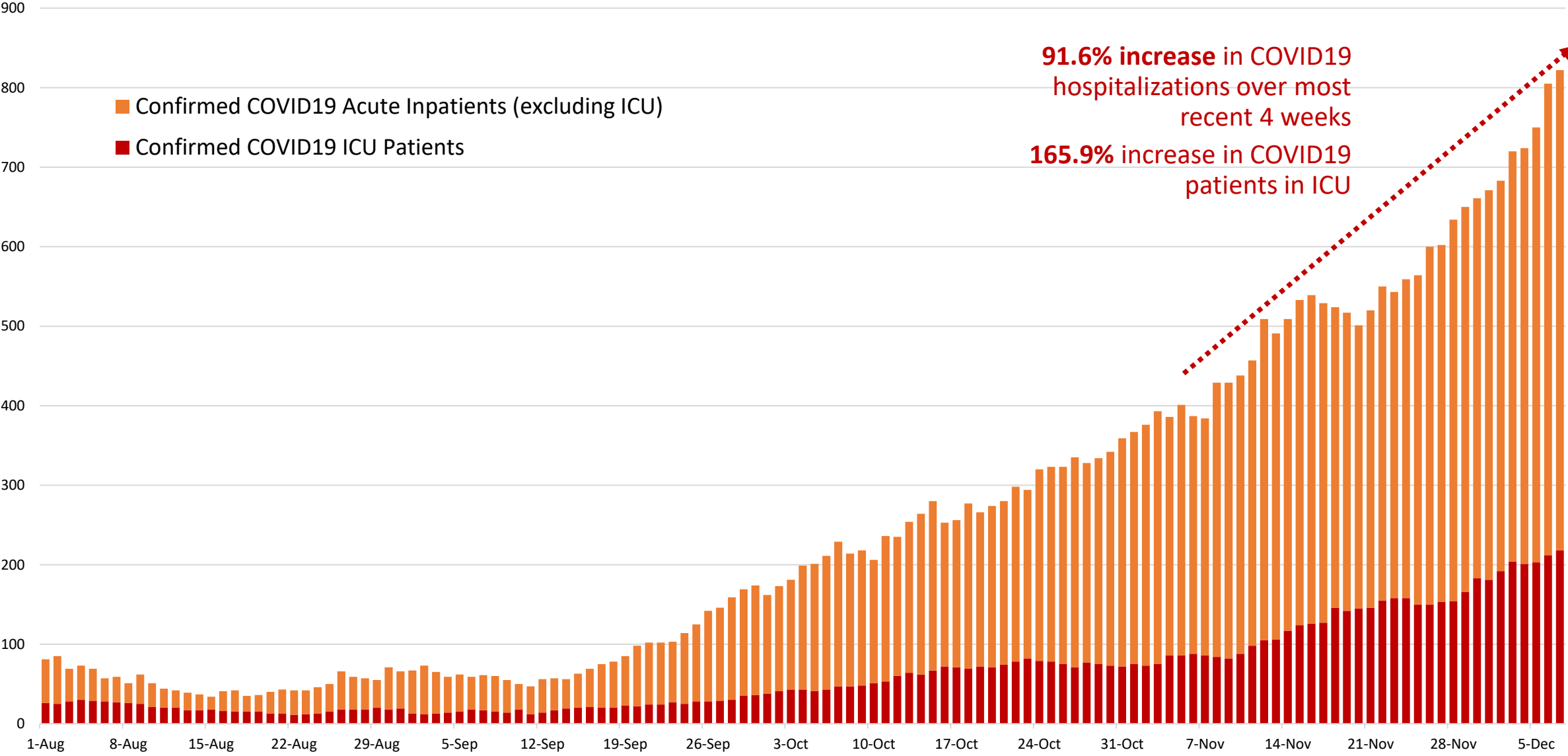
Projected Ontario cases at 0, 1, 3 and 5% increases per day mapped to progression in peer countries starting at 12/100,000 cases/day



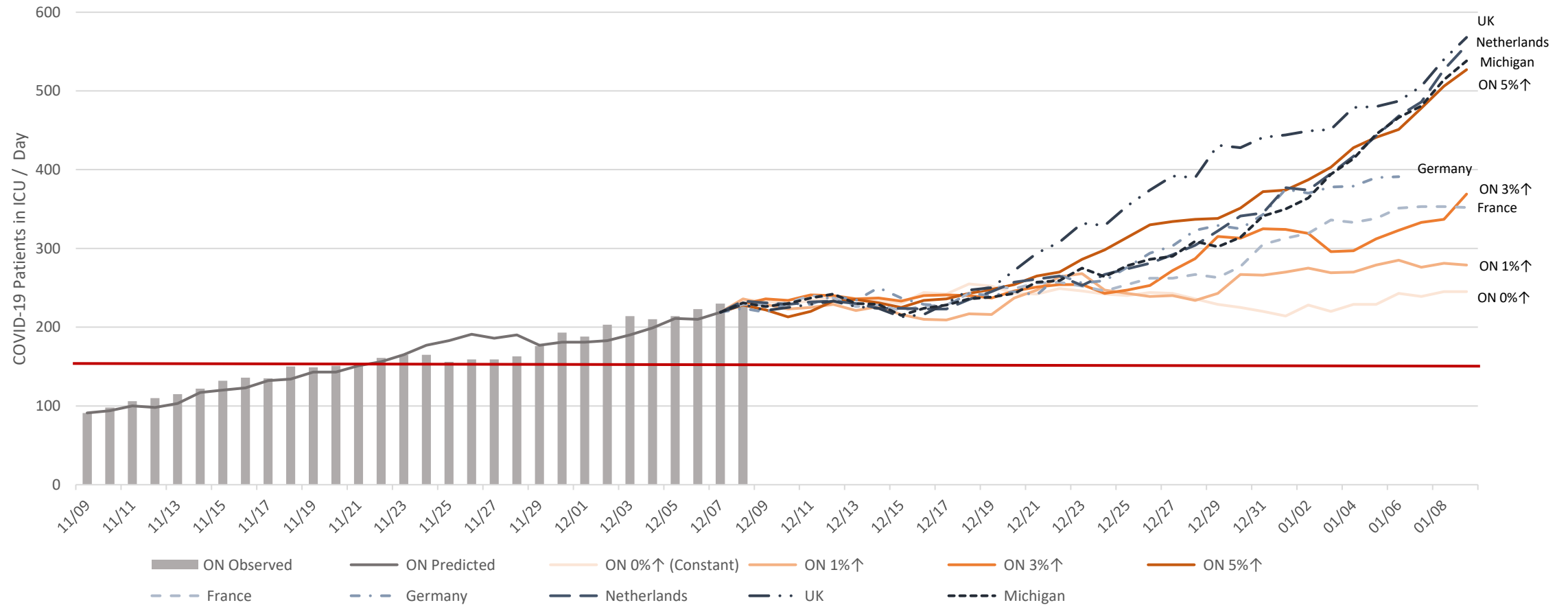
Note: Ontario reached 12/100,000 cases between 1.5 and 3 months after these countries

Predictions informed by modeling from McMasterU, COVID-19 ModCollab, PHO; recent growth in new daily cases; reported cases in peer jurisdictions
 Data (Observed Cases): covid-19.ontario.ca; <https://ourworldindata.org>; covidtracking.com

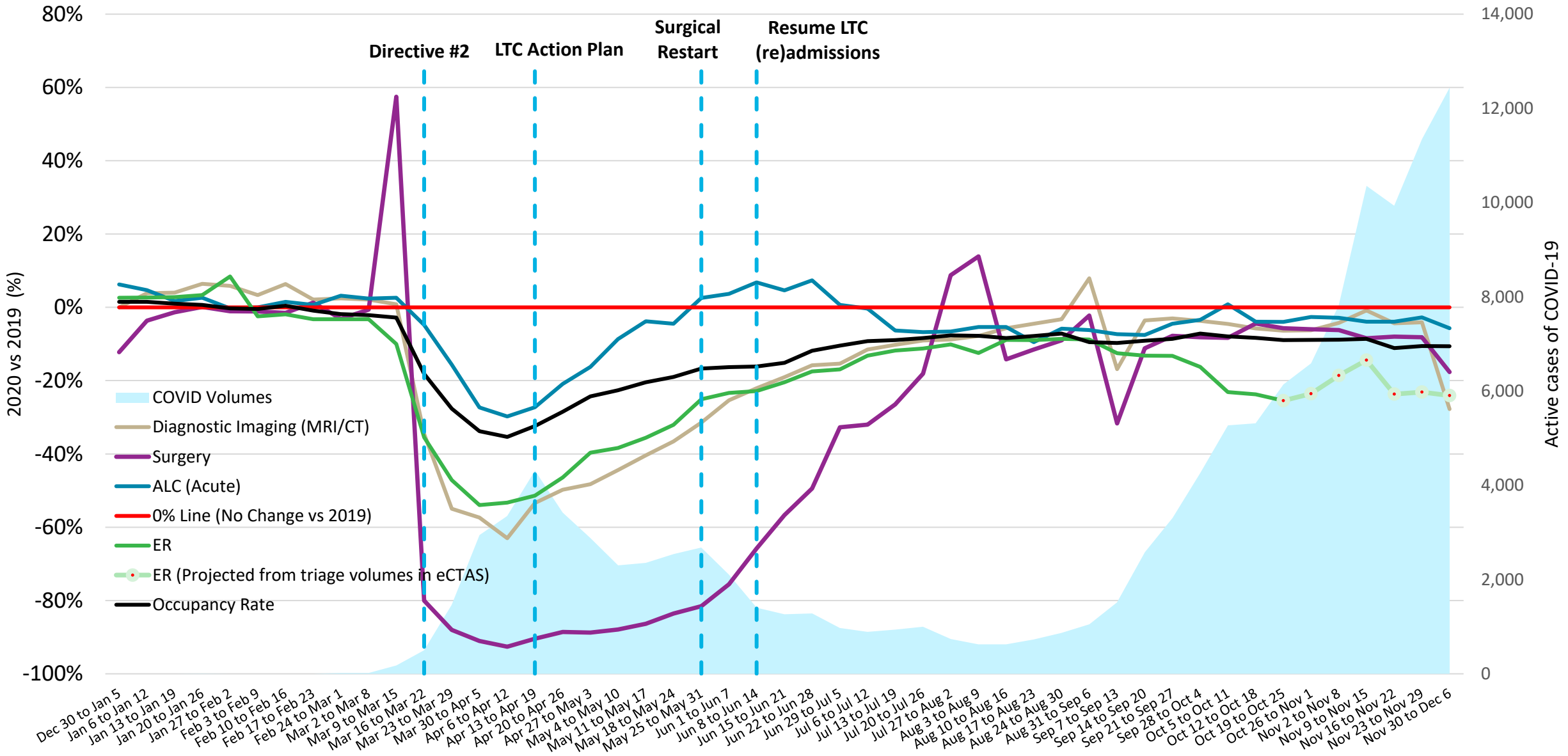
COVID-19 hospitalizations and ICU admissions continue to rise



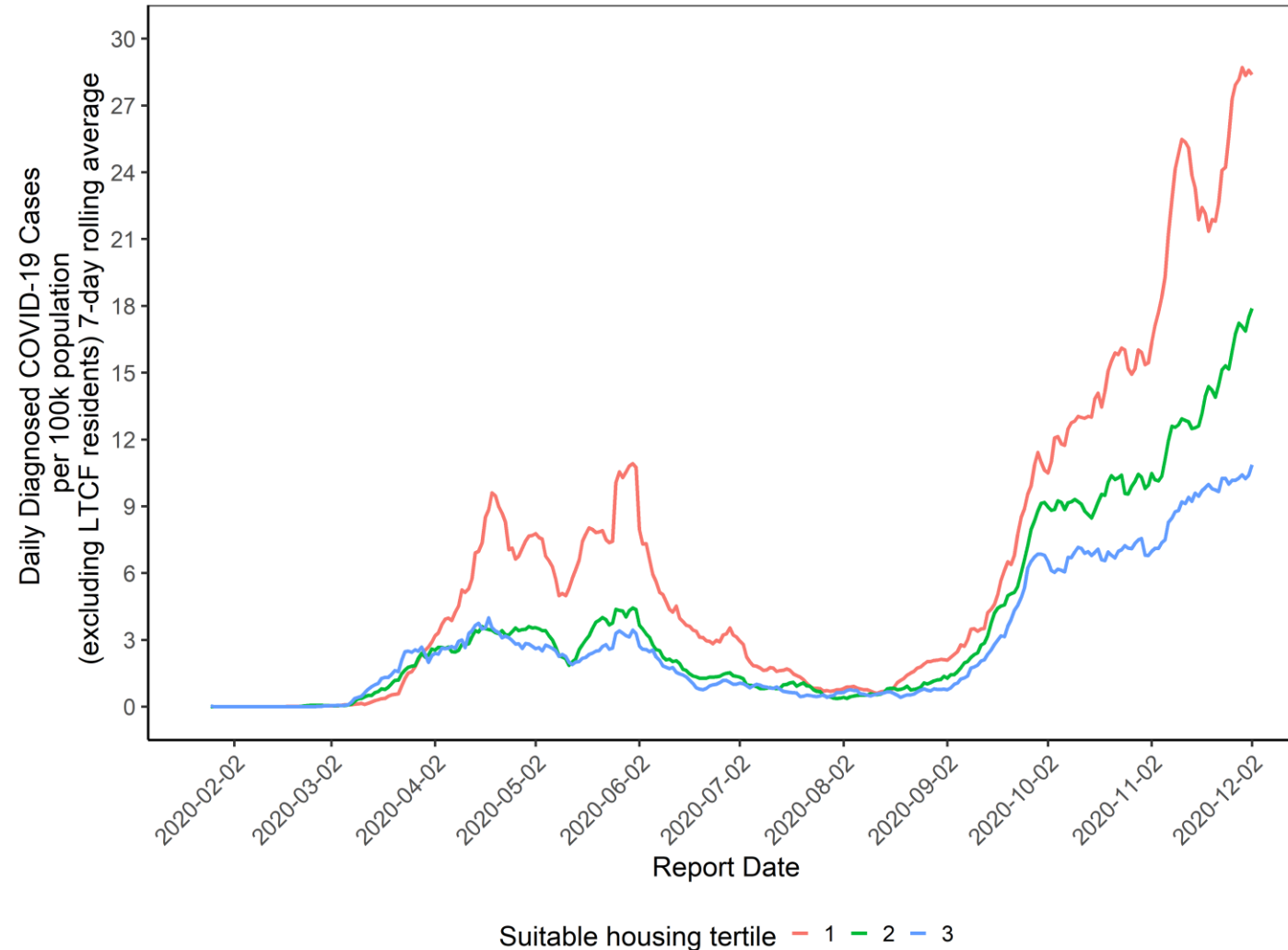
Projections: ICU Occupancy > 200 beds under all scenarios for at least a month



Access to care continues well below 2019 volumes

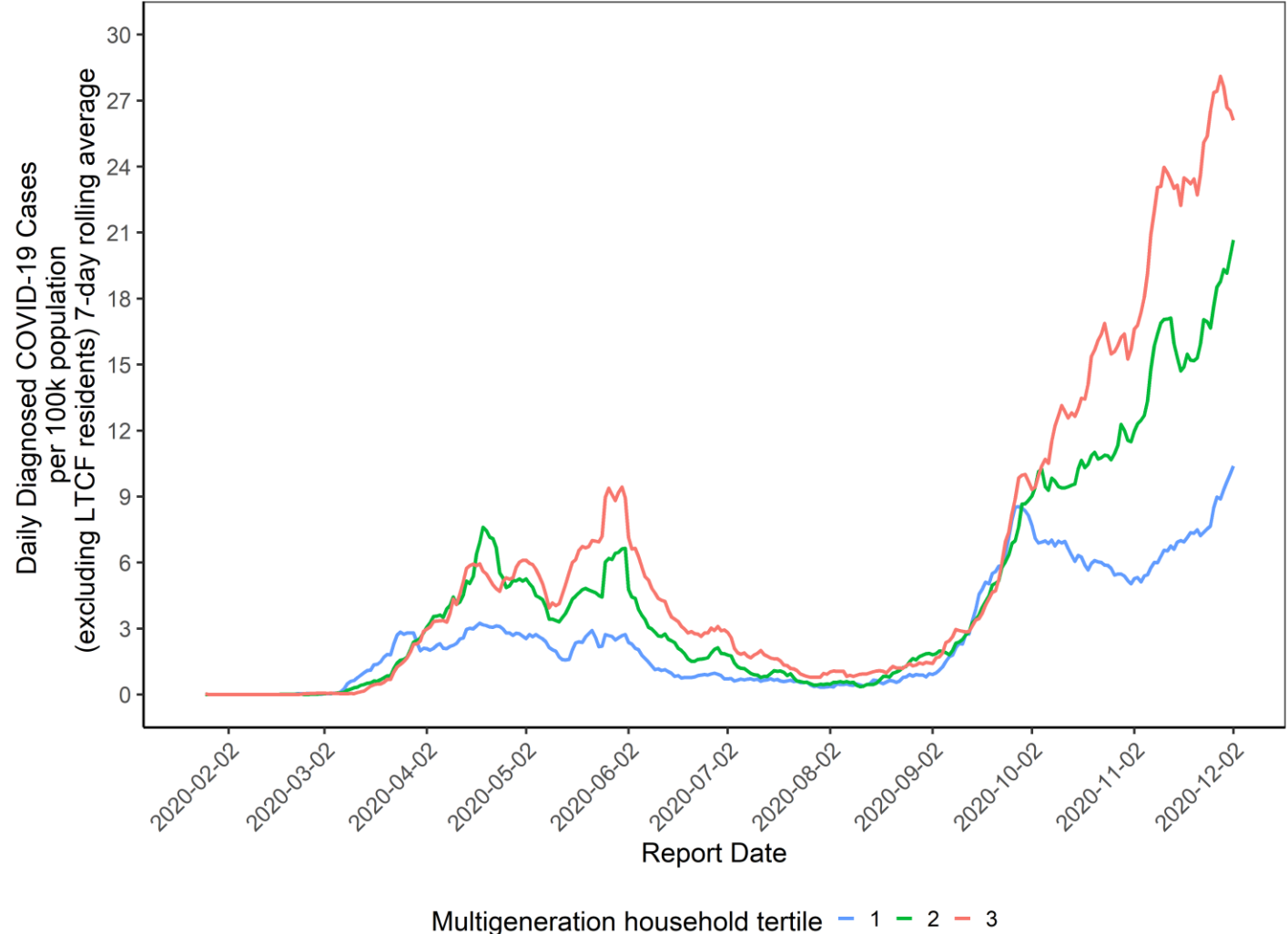


Communities with access to suitable housing have lower case growth but all rates are increasing



City of Toronto, excluding LTCH residents, up to Dec 2, 2020 : 7-day rolling average

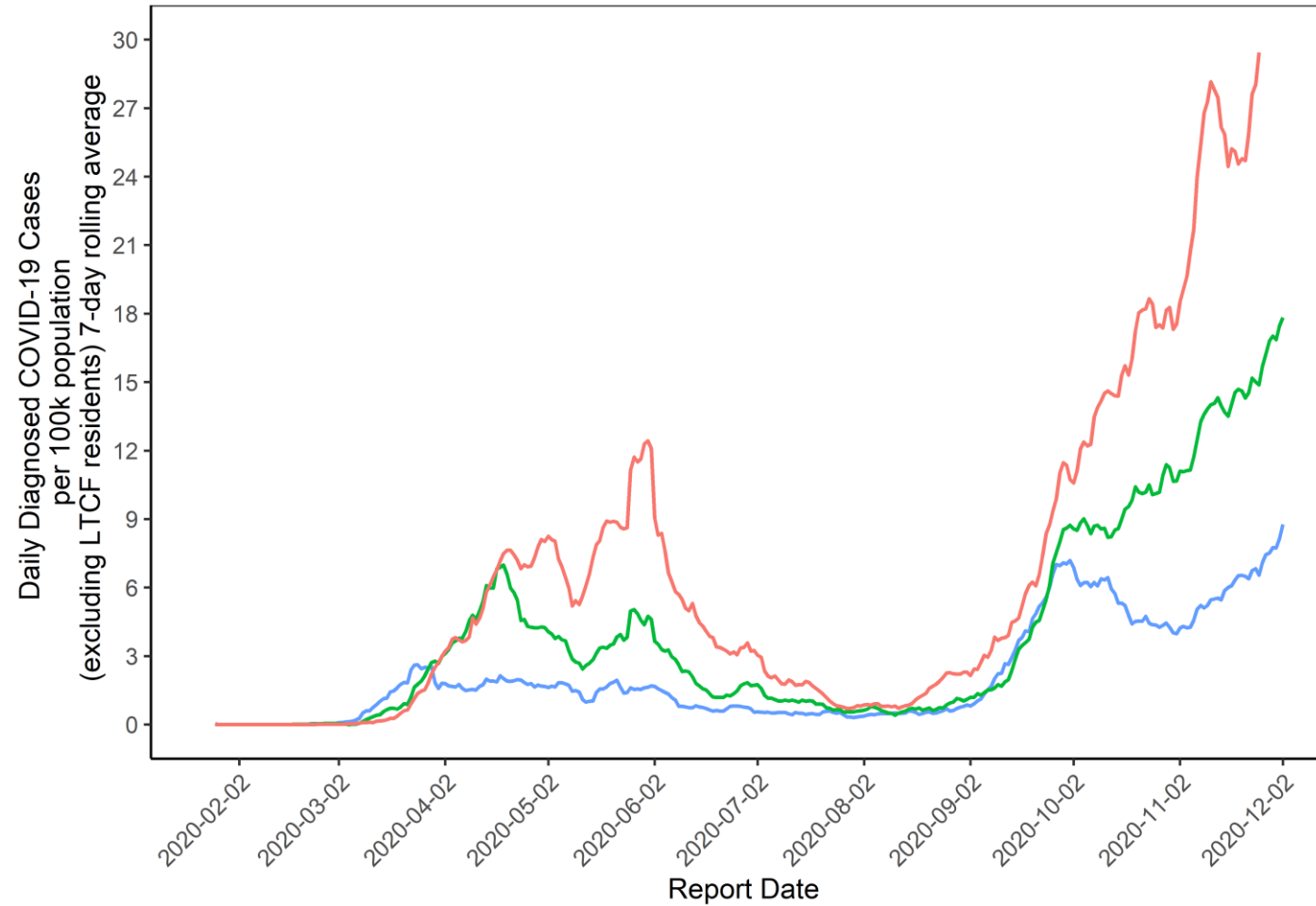
Communities with more multi-generational housing have higher case growth but all rates are increasing



City of Toronto, excluding LTCH residents, up to Dec 2, 2020 : 7-day rolling average

University of Toronto, St. Michael's Hospital, and ICES. Data: iPHIS and StatsCan

Communities with more non-health care essential work have higher case growth but all rates are increasing

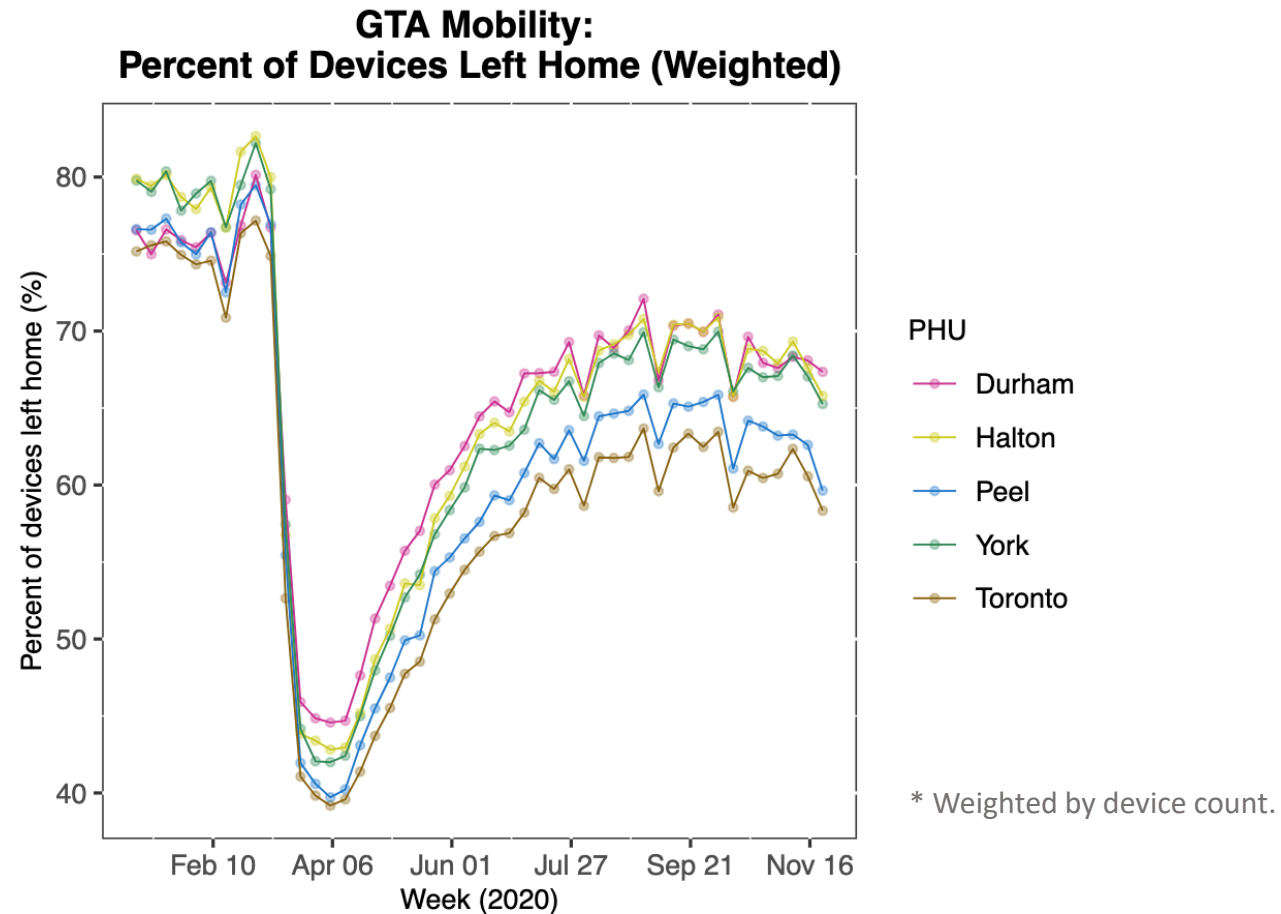


Employed in sales/trades/manufacturing/agriculture tertile — 1 — 2 — 3

City of Toronto, excluding LTCF residents, up to Dec 2, 2020 : 7-day rolling average

University of Toronto, St. Michael's Hospital, and ICES.
Data: iPHIS and StatsCan

Current restrictions have had less effect on mobility than in the Spring



Key Findings

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- Long-term care and overall mortality continue to increase and may exceed 25 deaths per day within a month.
- The reproduction number is fluctuating around 1 which means that we are at a critical juncture where case rates (and other impacts) may change quickly.
- ICU occupancy will continue above 200 beds for the next month and may go higher, particularly if public health interventions are relaxed. Access to care deficits will persist.
- For Ontarians with access to suitable housing and employment outside of essential services, case rates have increased at a slower pace.
- Current lockdown has not had nearly as much impact on mobility (and likely contacts) as lockdown did in March. Relaxation of public health interventions with a widening prevention gap will likely lead to even higher case growth.