Update on COVID-19 Projections

Science Advisory and Modelling Consensus Tables
November 26, 2020
Key Findings

• Key indicators of the Pandemic are flattening in some regions but the impact of the Pandemic still varies widely across regions.

• Long-Term Care Home resident mortality continues to increase.

• ICU occupancy continues to increase and will hit 200 beds in December under any scenario.

• It is difficult to determine whether we are seeing a turnaround in case growth. Unlikely to see changes in ICU use until two weeks following decline in cases.

• Access to care continues below 2019 levels adding to the access to care deficit.

• Some communities face a much higher burden from the Pandemic because of long-standing structural factors that lead to higher exposure to COVID-19. One-size-fits-all public health interventions are unlikely to have the same impact in some communities.
Recent data may be incomplete.

Data Source: Case and Contact Management System (CCM), extracted November 24.
New cases with no epidemiological Link across PHUs

Recent data may be incomplete

Data Source: Case and Contact Management System (CCM), extracted November 24
COVID-19 testing % positivity across PHUs

Data Source: Ontario Laboratory Information System (OLIS), extracted via MOH SAS VA November 24
Percent of tests processed within 2 days across PHUs

Data Source: Ontario Laboratory Information System (OLIS), extracted via MOH SAS VA November 24
# Weekly % positivity by age group

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**Data Source:** Ontario Laboratory Information System (OLIS), MOH – extracted from SAS VA Nov 24.

Note: Includes all data submitted to OLIS up to Nov 23, 2020. The last six days are considered interim data (week 46) and subject to change.

Weekly % positivity = total number of positive tests within the week (based on reported date)/COVID tests within the week.
Cases in LTC flattening while cumulative mortality has increased (64 deaths in the past 7 days).

LTC Home cases and outbreaks

Current status (Nov 24)

104 Long term care (LTC) homes currently in outbreak, 964 active confirmed cases in these homes

542 resident, 453 staff active cases in total

2,173 cumulative resident deaths, 8 cumulative staff deaths

34 of the 104 homes in outbreak are based on 1 staff case

There have been 328 resident deaths since Aug 1st, 64 of which have been in the past 7 days

Data Source: Ministry of Long Term Care Tracker. Data are self-reported by the long-term care homes to the Ministry of Long Term Care. Daily case and death figures may not immediately match the numbers posted by the local public health units (i.e. iPHIS database) due to lags in reporting time.
A number of jurisdictions struggle to control case numbers following public health interventions.
COVID-19 Hospitalizations continue to rise


63.2% increase in hospitalizations over most recent 4 weeks
Projections: ICU Occupancy > 200 beds under all scenarios
Access to care continues well below 2019 volumes
The impact of the COVID-19 epidemic in Ontario is not evenly distributed.
Household density and occupation places individuals and relations most at risk of COVID-19

• ↑ Odds for COVID-19 if residing in neighbourhoods with
  • Higher household density/size
  • Higher proportion of essential service workers (measured by proxies for occupation)

• Steeper ↑ in COVID-19 cases in neighbourhoods with lowest % of suitable housing

https://www.medrxiv.org/content/10.1101/2020.11.09.20223792v1
One-size-fits-all approaches lead to prevention gaps

**Prevention gap** = conditions that lead to disproportionate risks of acquisition and/or onward transmission → increase $R$, sustain transmission & “micro-epidemics”
Key Findings

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- It is difficult to determine whether we are seeing a turnaround in case growth. Unlikely to see changes in ICU use until two weeks following decline in cases.
- Access to care continues below 2019 levels adding to the access to care deficit.
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