

# **Response to COVID-19: May 2021 Update**

Presentation to the Board of Health

May 10, 2021



# **Status of COVID-19 Epidemic in Toronto**

# COVID-19 dashboard showing some signs of improvement

## Case, hospitalization, and outbreak data as of May 5, 2021

Rt calculated May 2 using data as of May 1, 2021, percent positivity as of week ending May 1, 2021

### Virus Spread and Containment

Status: RED - Indicators trending away from goals

New COVID-19 cases, 7 day moving average<sup>1</sup>

963

New Hospitalizations, 7 day moving average<sup>1</sup>

60.7

Active daily COVID-19 outbreaks in institutions<sup>1</sup>

42

Effective Reproductive Number for COVID-19 Cases<sup>2</sup>

$R_t = 0.94$   
(90% CI 0.73 to 1.16)

COVID-19 Laboratory Tests Percent Positivity, previous week average<sup>3</sup>

12.3%

### Health System Capacity

Status: YELLOW - Indicators need attention

ICU bed occupancy rate<sup>4</sup>

81%

ICU-ventilator bed occupancy rate<sup>4</sup>

57%

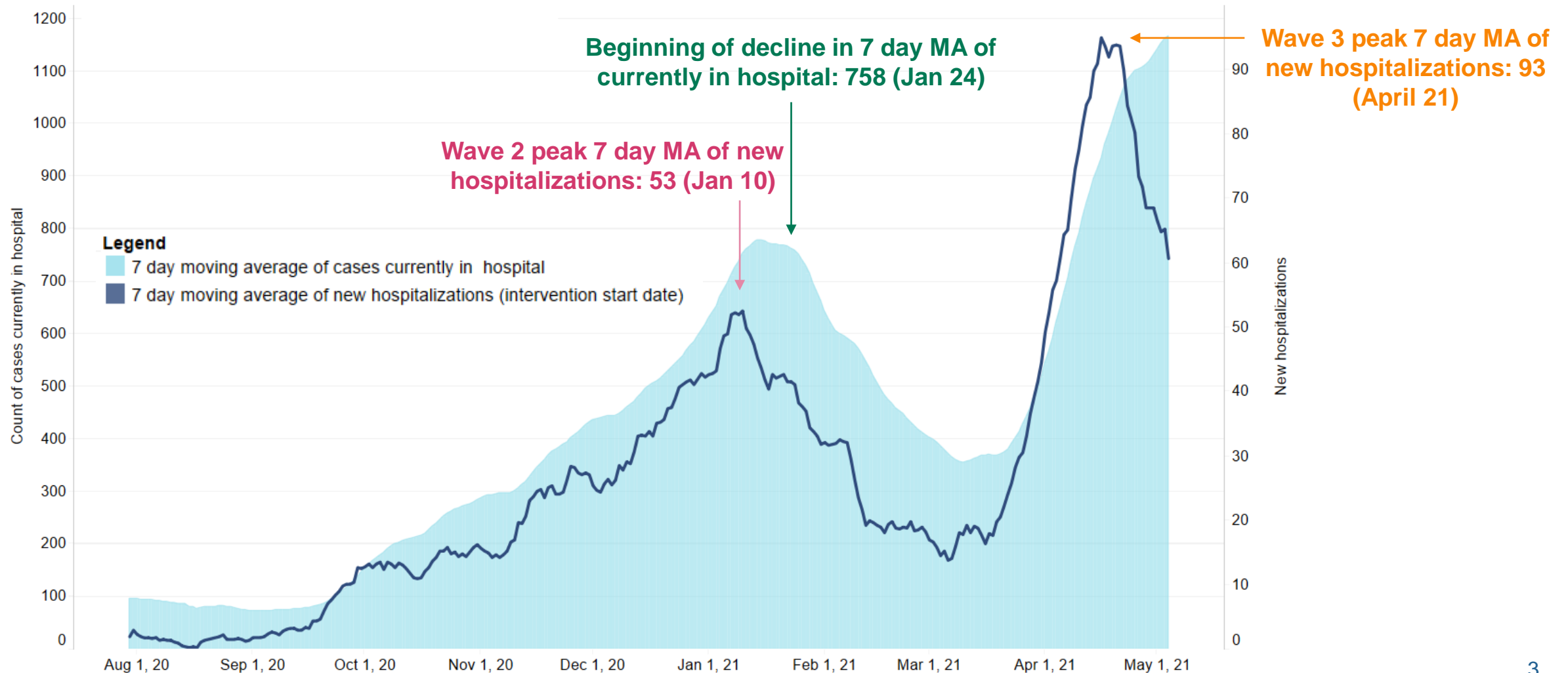
Acute bed occupancy rate<sup>4</sup>

84%

# Number of cases currently in hospital remains high and has not yet peaked

## Cases currently in hospital and count of daily new hospitalizations, 7 day moving average (3 day lag)

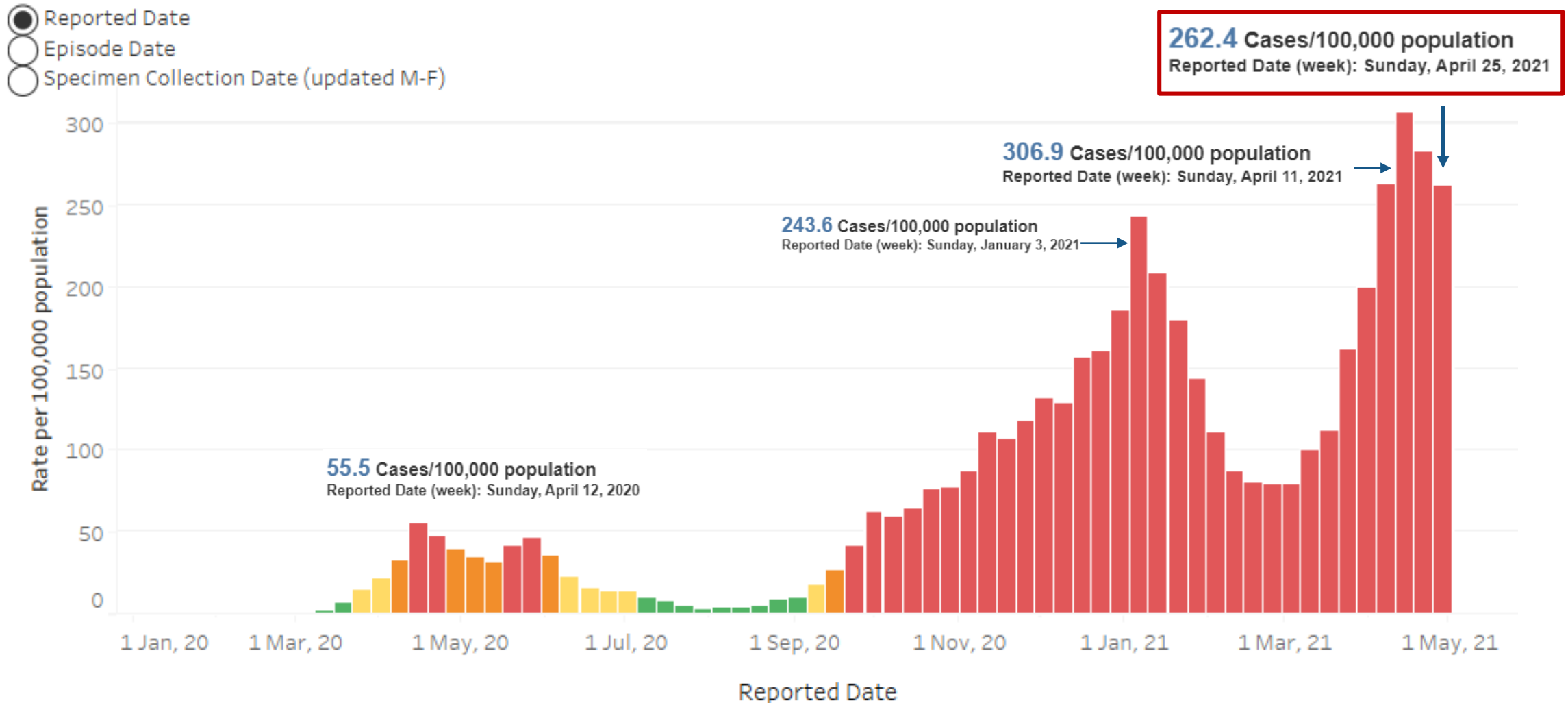
Toronto, August 1, 2020 to May 6, 2021



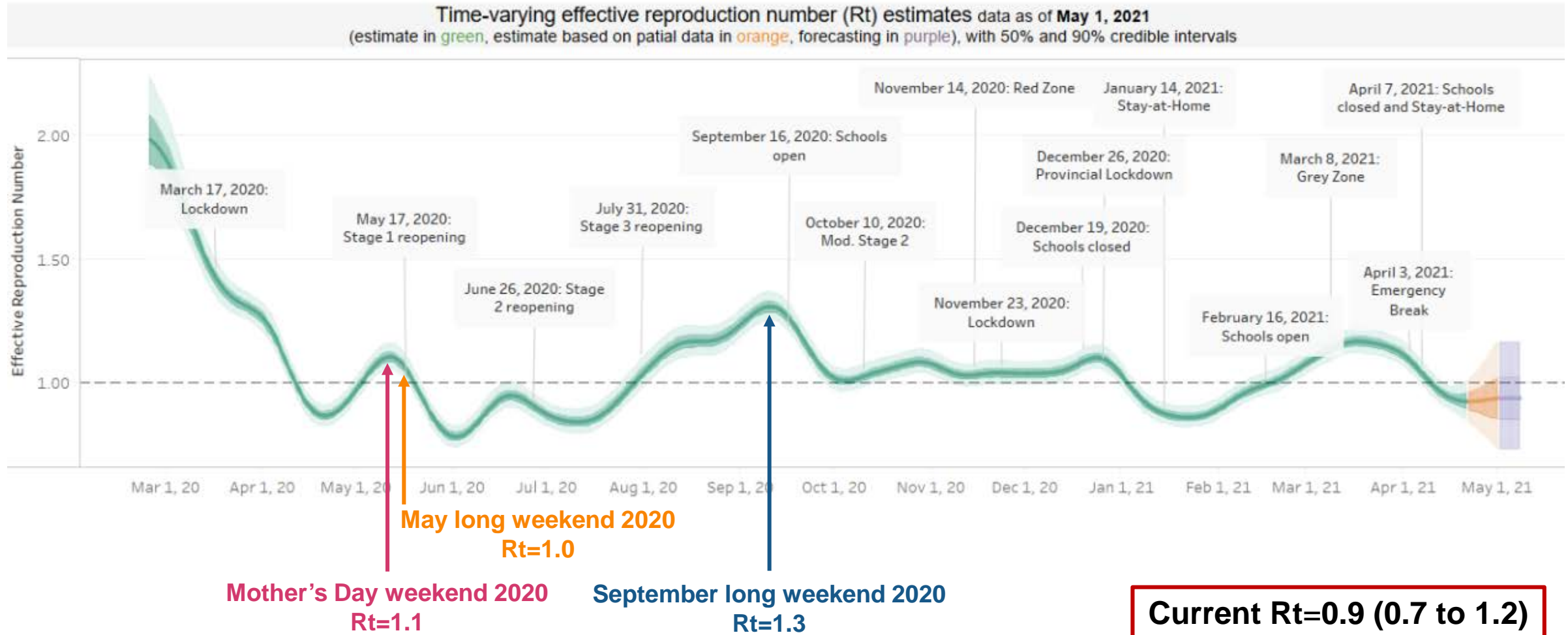
# Toronto case rates continue to decrease, but remain far from safe reopening

## Epidemic curve of weekly COVID-19 incidence rates by reported date

Toronto, week of January 19, 2020 to April 25, 2021

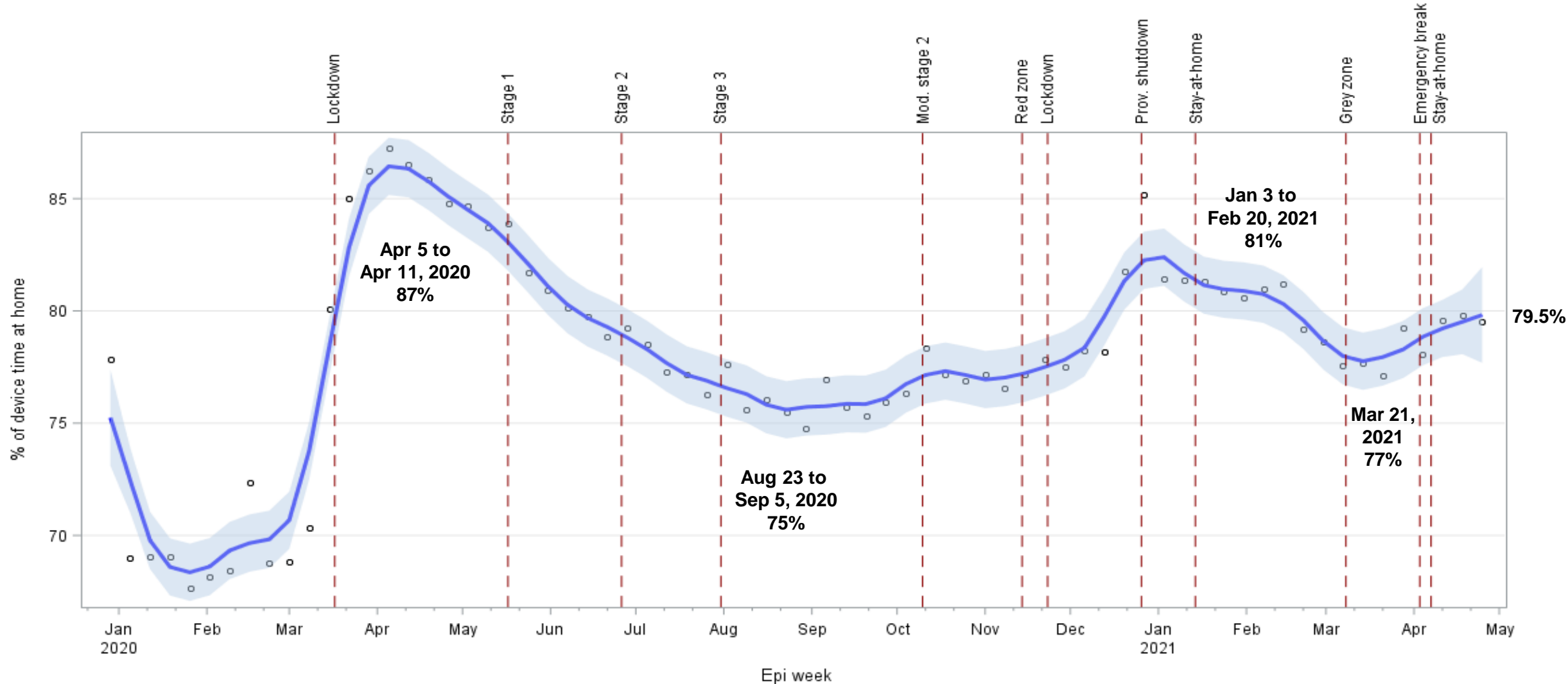


# Rt remains below 1.0 for second week in a row

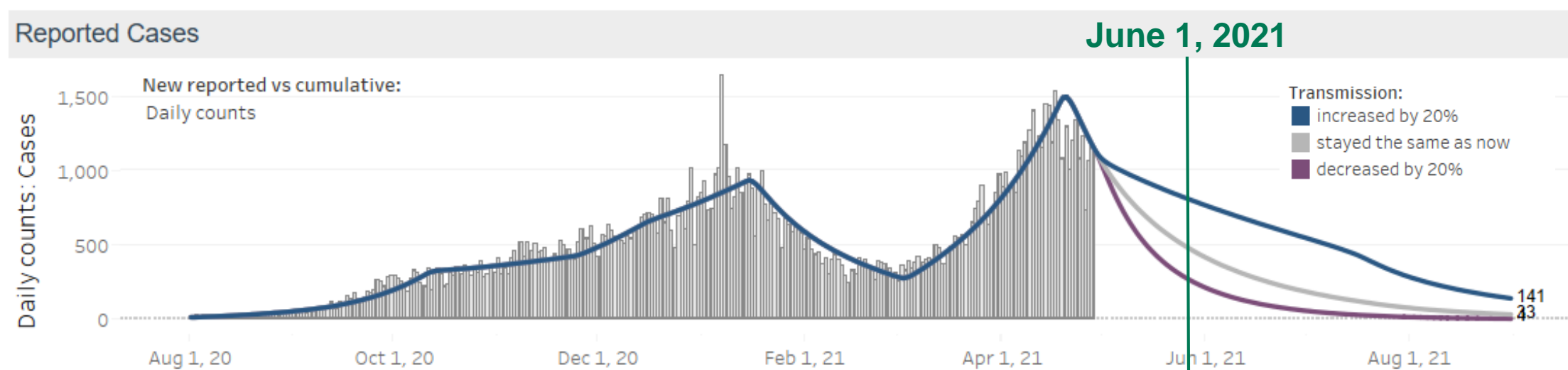


# Stay at home orders increased time at home, which has plateaued at just under 80%

Weekly proportion of device-time at home, median for Toronto, between Jan 1, 2020 – May 1, 2021

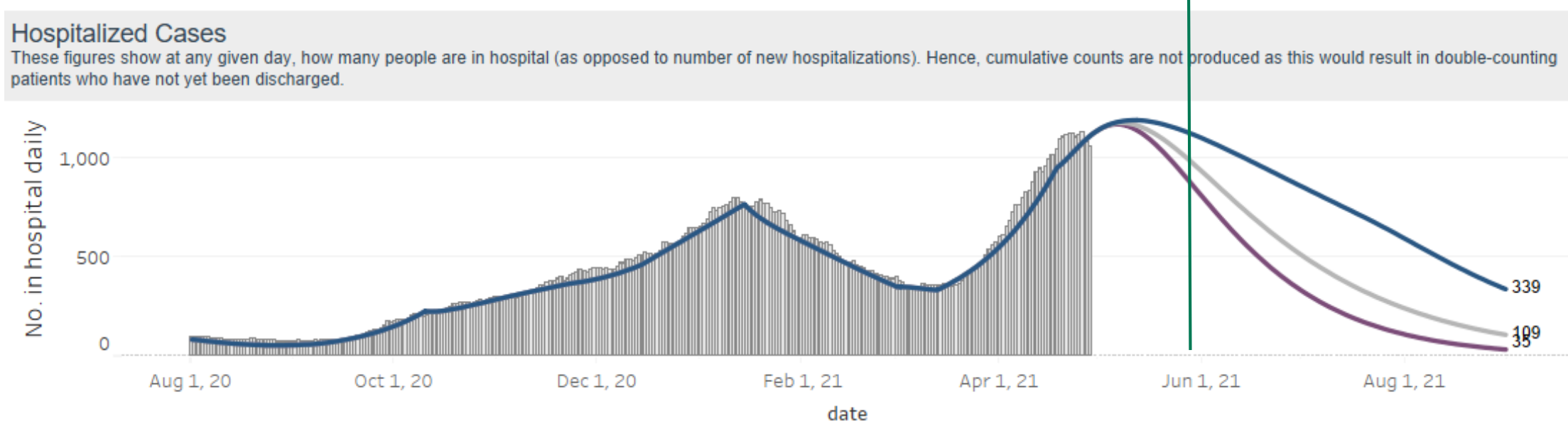


# Emergency brake had a significant impact on projected cases, but pressure on hospital system continues



If transmission  
stays the same  
(grey line) then:

~400 daily  
cases by  
beginning of  
June



~900 cases in  
hospital by  
beginning of  
June (higher  
than peak in  
Wave 2)



# We need to break our pattern of COVID transmission related to long weekends

## Epidemic curve of weekly COVID-19 incidence rates by reported date

Toronto, week of January 19, 2020 to April 25, 2021





# Summary



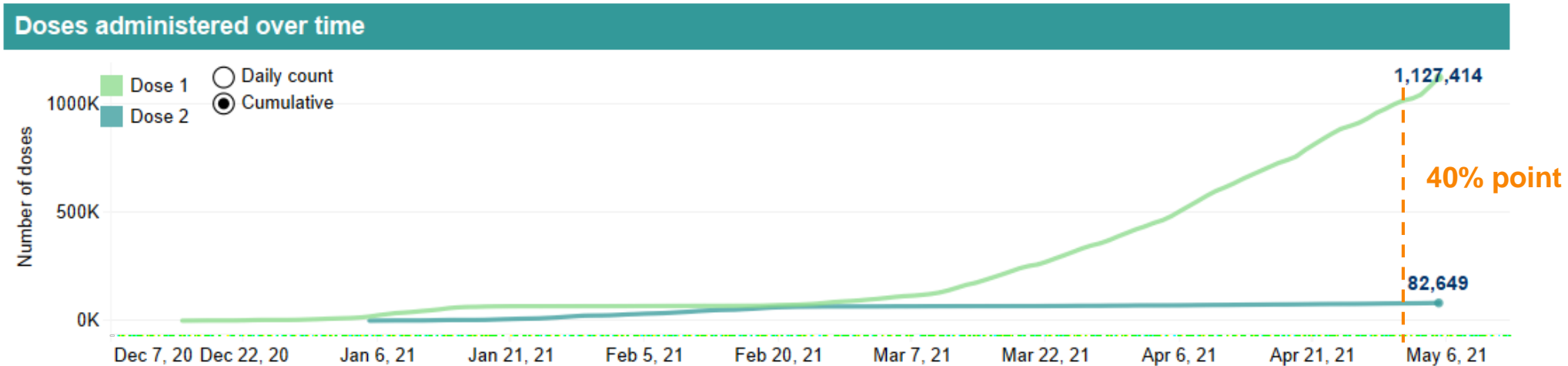
# Team Toronto

Vaccination progress

- Working with healthcare partners, pharmacies and Toronto Public Health to administer all available COVID-19 vaccines.
- To date, **1,445,809** COVID-19 vaccine doses have been administered in Toronto.
- Team Toronto effort is focused on getting as many residents vaccinated as quickly as possible based on an equitable allocation of available supply - expanding mobile vaccination efforts across Toronto to bring vaccine to the neighbourhoods most in need.

# First goal of 40% of adults vaccinated by May 1 achieved; second goal is 65% by May 31

Provincial goal to vaccinate 40% of adult residents was achieved on May 1<sup>st</sup>



At the current rates of vaccination, we are on track to exceed the 65% goal by end of May

Projected coverage:

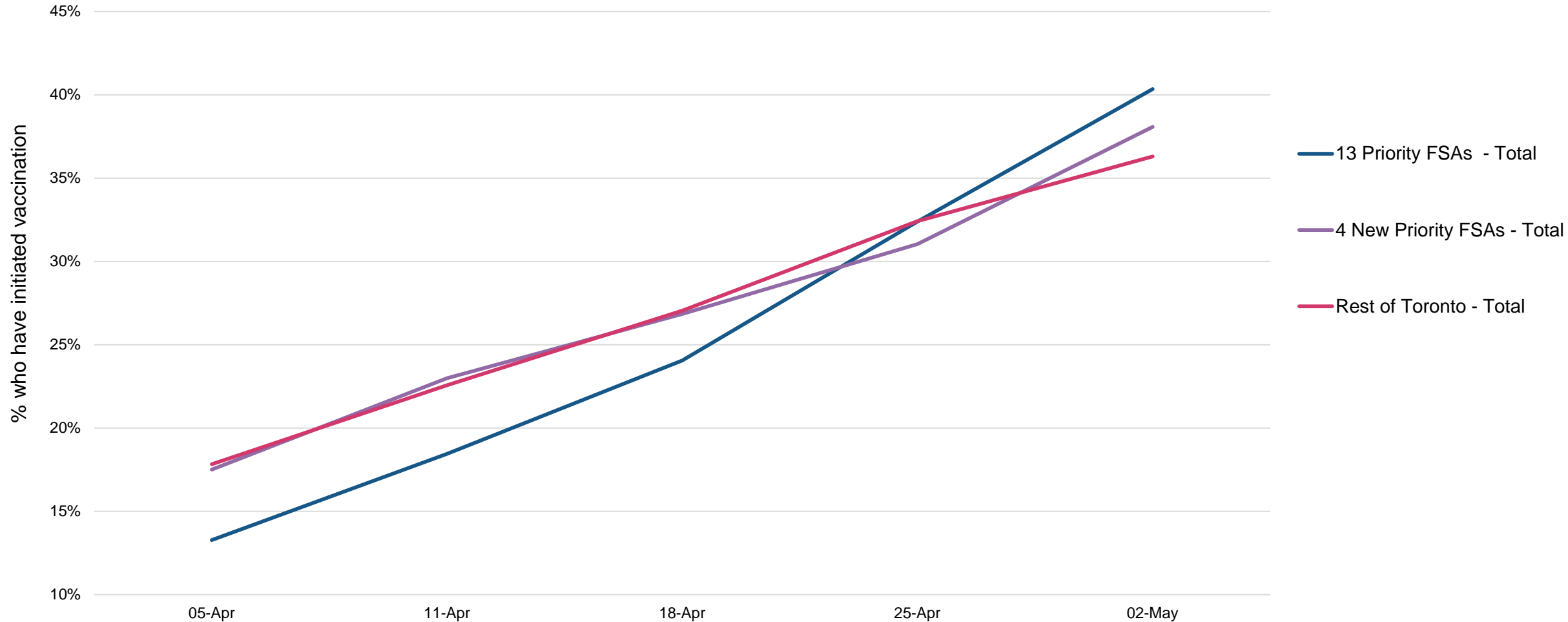
**68%**

**Exceeds coverage  
goal**

Assuming a vaccination rate of 23,220 daily doses administered for the age groups selected over 26 days, there will be a projected coverage of 68% with **at least one dose** and 603,716 doses given in total which **Exceeds coverage goal**.

# Hot spot strategy success - increased vaccination coverage in priority areas

Proportion of people 18+ who have initiated vaccination (at least one dose) (%) comparing the 17 Team Toronto Priority FSAs to Toronto from April 5, 2021 to May 2, 2021



# Vaccine coverage rates still not high among older age groups in highest incidence neighbourhoods

## Vaccine coverage by age group and neighbourhood COVID-19 incidence quantile

December 15, 2020 to current

Neighbourhood quantiles (1=high neighbourhood COVID-19 incidence, 14=low neighbourhood COVID-19 incidence)

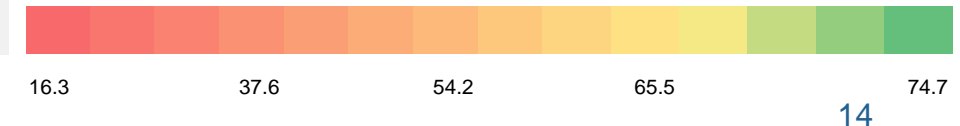
| Age group          | 1           | 2           | 3           | 4           | 5           | 6           | 7           | 8           | 9           | 10          | 11          | 12          | 13          | 14          | Overall (%) |
|--------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| <b>80+</b>         | 60.7        | 57.1        | 56.5        | 53.6        | 51.8        | 60.0        | 55.6        | 56.0        | 58.2        | 53.5        | 59.2        | 60.7        | 60.9        | 65.4        | <b>57.7</b> |
| <b>75-79</b>       | 64.9        | 64.1        | 67.7        | 67.0        | 67.2        | 68.6        | 67.4        | 69.4        | 69.7        | 69.5        | 67.7        | 72.1        | 72.8        | 73.8        | <b>68.7</b> |
| <b>70-74</b>       | 63.2        | 64.5        | 66.3        | 67.3        | 65.5        | 68.6        | 68.3        | 69.9        | 69.7        | 70.8        | 68.8        | 70.8        | 72.2        | 74.7        | <b>68.6</b> |
| <b>65-69</b>       | 61.1        | 62.8        | 62.9        | 65.0        | 63.2        | 63.7        | 65.3        | 66.1        | 65.9        | 67.3        | 66.3        | 67.1        | 67.6        | 74.2        | <b>65.5</b> |
| <b>60-64</b>       | 59.3        | 60.3        | 61.1        | 62.2        | 61.4        | 59.1        | 63.0        | 64.4        | 63.3        | 66.1        | 65.2        | 66.4        | 66.4        | 74.2        | <b>63.4</b> |
| <b>55-59</b>       | 52.9        | 52.1        | 52.0        | 52.6        | 53.0        | 50.6        | 52.3        | 54.2        | 50.3        | 52.9        | 51.7        | 54.8        | 51.1        | 64.9        | <b>53.1</b> |
| <b>50-54</b>       | 47.1        | 48.1        | 46.2        | 45.8        | 46.1        | 44.0        | 44.4        | 47.4        | 41.2        | 42.6        | 39.5        | 44.2        | 38.7        | 50.4        | <b>44.7</b> |
| <b>45-49</b>       | 37.9        | 34.9        | 35.8        | 35.3        | 35.7        | 34.9        | 34.9        | 35.4        | 34.5        | 37.6        | 37.6        | 38.5        | 35.8        | 45.3        | <b>36.7</b> |
| <b>40-44</b>       | 34.7        | 32.3        | 33.3        | 31.4        | 32.2        | 33.3        | 31.8        | 33.8        | 34.8        | 37.1        | 37.7        | 35.6        | 34.1        | 43.5        | <b>34.5</b> |
| <b>16-39</b>       | 28.7        | 23.0        | 26.2        | 22.3        | 21.8        | 21.2        | 17.8        | 18.2        | 16.9        | 18.3        | 17.5        | 18.8        | 16.3        | 17.6        | <b>20.5</b> |
| <b>Overall (%)</b> | <b>42.1</b> | <b>40.5</b> | <b>41.3</b> | <b>39.8</b> | <b>39.1</b> | <b>39.5</b> | <b>38.1</b> | <b>40.2</b> | <b>38.7</b> | <b>39.5</b> | <b>37.6</b> | <b>36.9</b> | <b>36.8</b> | <b>45.8</b> | <b>39.6</b> |

**Vaccine coverage is highest among those 60 to 79 in the neighbourhoods with the lowest COVID-19 incidence rates.**

**Vaccine coverage (%)\***

\*Age-specific population by neighbourhood quantile

COVID-19 episode dates: Dec 15, 2020 to Apr 23, 2021  
COVID-19 vaccination data: Dec 15, 2020 to May 5, 2021



# Younger groups showed largest changes in vaccine coverage, especially in high incidence neighbourhoods

## Change in vaccine coverage by age group and neighbourhood COVID-19 incidence quantile

April 28 to May 5, 2021

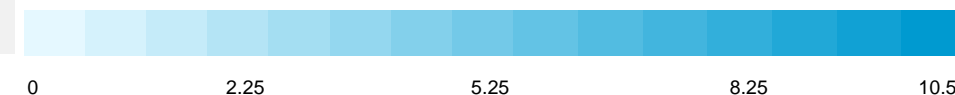
Neighbourhood quantiles (1=high neighbourhood COVID-19 incidence, 14=low neighbourhood COVID-19 incidence)

| Age group   | 1    | 2    | 3    | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  | 12  | 13  | 14  | Overall (%) |
|-------------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------------|
| 80+         | 1.4  | 1.4  | 1.3  | 0.7 | 1.1 | 1.1 | 1.1 | 0.8 | 0.7 | 0.5 | 1.0 | 0.7 | 0.6 | 0.5 | 1.0         |
| 75-79       | 2.2  | 2.5  | 1.9  | 1.3 | 2.2 | 1.7 | 1.4 | 1.3 | 0.9 | 1.1 | 0.9 | 0.7 | 0.7 | 0.5 | 1.4         |
| 70-74       | 3.3  | 3.2  | 2.5  | 2.0 | 2.4 | 1.9 | 1.8 | 1.7 | 1.4 | 1.4 | 1.5 | 0.8 | 0.7 | 0.6 | 1.8         |
| 65-69       | 4.4  | 3.9  | 4.1  | 3.6 | 3.5 | 3.4 | 3.2 | 2.9 | 2.5 | 2.3 | 2.1 | 1.5 | 1.6 | 0.9 | 2.9         |
| 60-64       | 5.3  | 4.4  | 4.2  | 3.7 | 3.5 | 3.3 | 3.3 | 3.2 | 2.8 | 2.3 | 2.0 | 1.6 | 1.8 | 0.9 | 3.1         |
| 55-59       | 8.2  | 7.3  | 8.7  | 7.7 | 7.5 | 7.0 | 7.0 | 6.9 | 5.9 | 5.8 | 5.7 | 4.6 | 5.1 | 3.5 | 6.6         |
| 50-54       | 8.9  | 8.4  | 9.4  | 7.7 | 9.3 | 8.0 | 6.9 | 6.6 | 6.1 | 6.2 | 5.9 | 5.3 | 5.0 | 5.2 | 7.2         |
| 45-49       | 10.0 | 10.5 | 10.1 | 9.3 | 8.9 | 9.3 | 8.6 | 8.0 | 7.0 | 7.5 | 6.7 | 7.0 | 5.3 | 5.9 | 8.2         |
| 40-44       | 9.7  | 10.3 | 9.4  | 8.2 | 8.1 | 7.7 | 6.3 | 6.2 | 5.8 | 7.1 | 5.8 | 6.0 | 5.1 | 5.8 | 7.2         |
| 16-39       | 8.9  | 9.6  | 10.3 | 8.5 | 7.6 | 7.5 | 6.2 | 6.0 | 5.0 | 6.6 | 5.3 | 7.0 | 4.0 | 4.8 | 7.0         |
| Overall (%) | 7.6  | 7.5  | 8.0  | 6.7 | 6.5 | 6.2 | 5.4 | 5.1 | 4.4 | 5.2 | 4.6 | 5.3 | 3.6 | 3.6 | 5.8         |

The highest change in vaccine coverage (from April 28<sup>th</sup> to May 5<sup>th</sup>) occurred in the 18 to 39, 40 to 44, 45 to 49 and 50 to 54 age groups in neighbourhoods with the highest COVID-19 incidence rate.

**Legend: Change from previous week (percentage points)**

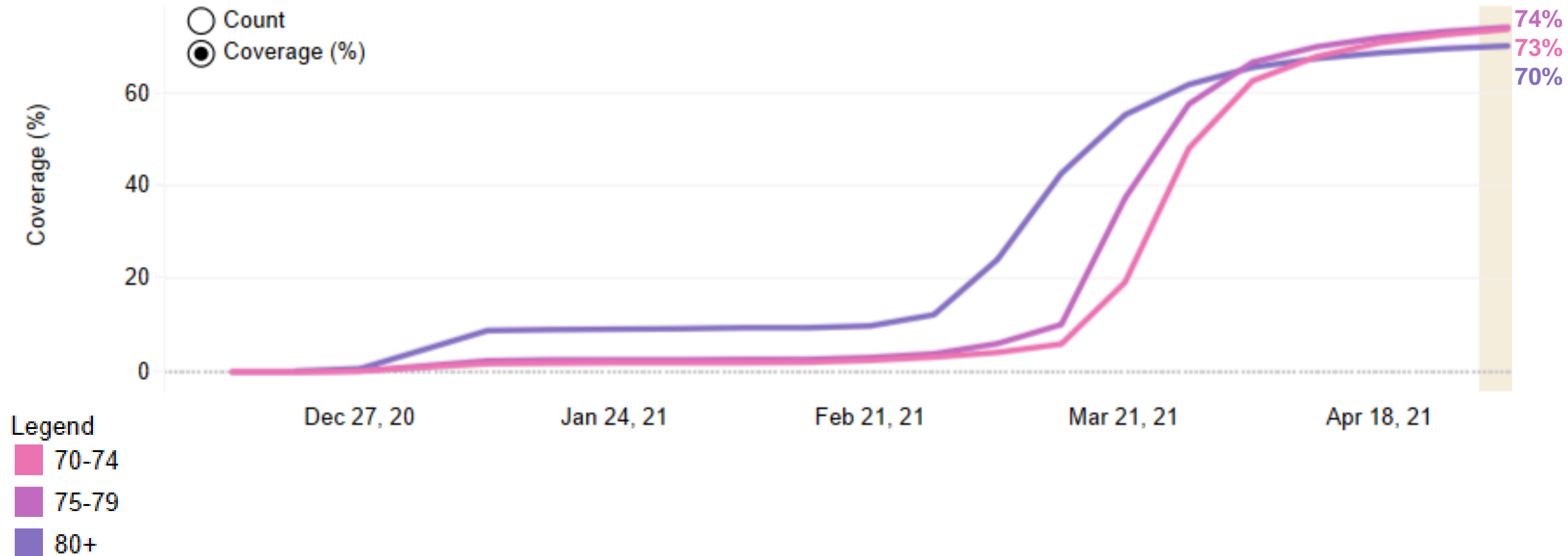
COVID-19 episode dates: Dec 15, 2020 to Apr 23, 2021  
COVID-19 vaccination data: Dec 15, 2020 to May 5, 2021





# Vaccine rates in seniors have plateaued

Number of people who have initiated vaccination by age group - Time trend



- 18+ and living in 53 provincial hot spot postal codes are eligible for vaccination at City of Toronto and other COVID-19 vaccination clinics.
  - Community mobile or pop-up clinics serving a subset of 17 hot spot postal codes are also vaccinating 18+
- 50+ and older, individuals with high-risk health conditions and essential workers unable to work from home listed in the Province's Group One are able to book appointments for City-run clinics.
- Toronto residents 18+ can book vaccination appointments at participating pharmacies.

# Progress with vaccination still requires vigilance

Confirmed symptomatic post-vaccination cases of COVID-19 by number of days between dose administration and symptom onset: Ontario, December 14, 2020 to April 17, 2021

