

Update on COVID-19 Projections

Science Advisory and Modelling Consensus Tables

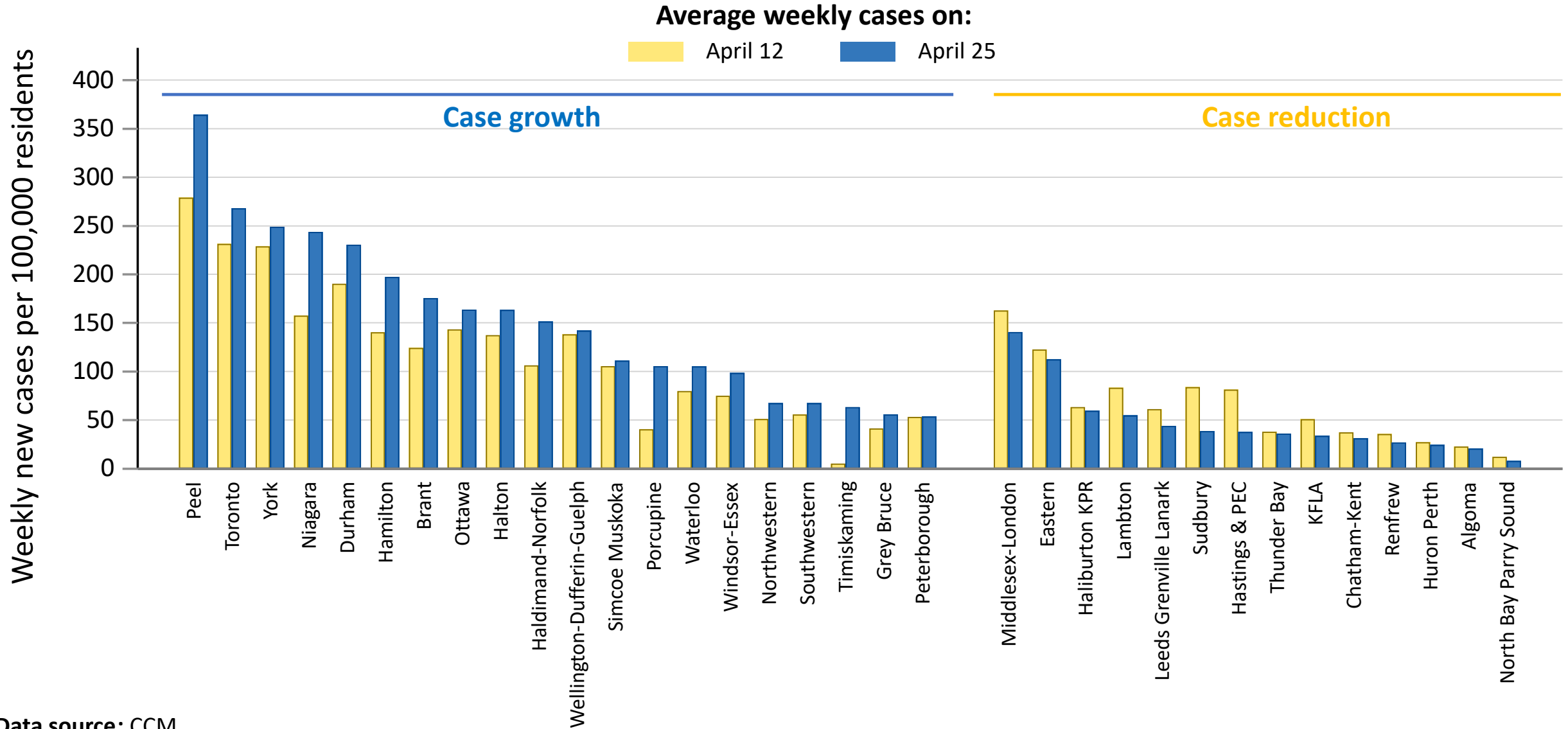
April 29, 2021



Key Findings

- **The efforts of Ontarians are making a difference** – cases are cresting at very high level.
- ICU occupancy is at record highs and continues to climb – our system is under incredible pressure.
- Workplace mobility is too high. **Limiting essential workplaces and keeping sick workers at home, will help control cases.**
- Clearing the surgical backlog will be an enormous challenge.
- Vaccination distribution is more equitable because it is focussing on hotspots. **Continuing this progress is essential.**
- Ontarians can make outdoor activities safer with distancing and masking when close to those outside their household. Indoor activities pose a significant risk.

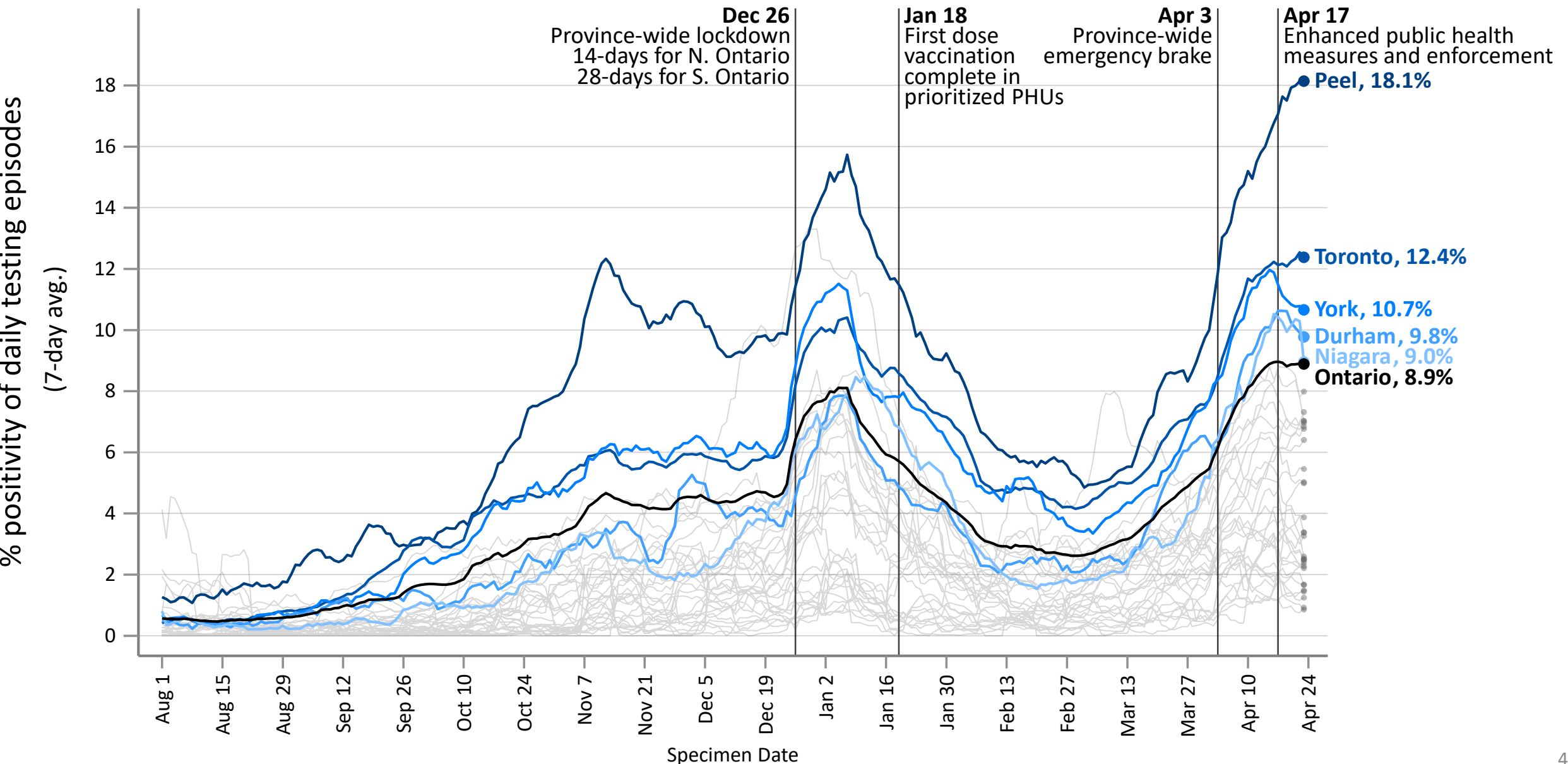
Cases are flattening but pockets of growth remain in hotspots



Data source: CCM

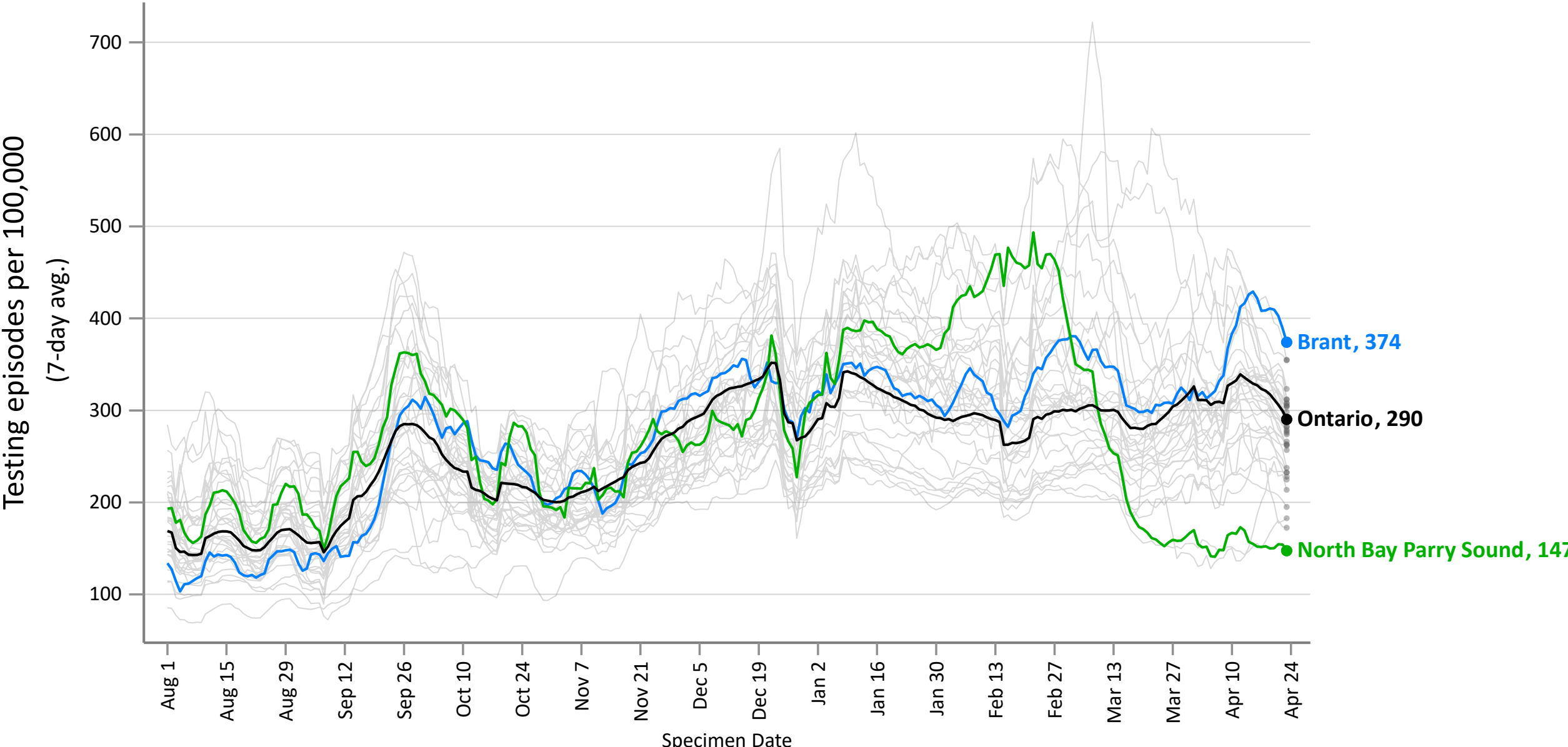
Data note: Data for the most recent day have been censored to account for reporting delays

Test positivity rates are still high across Ontario



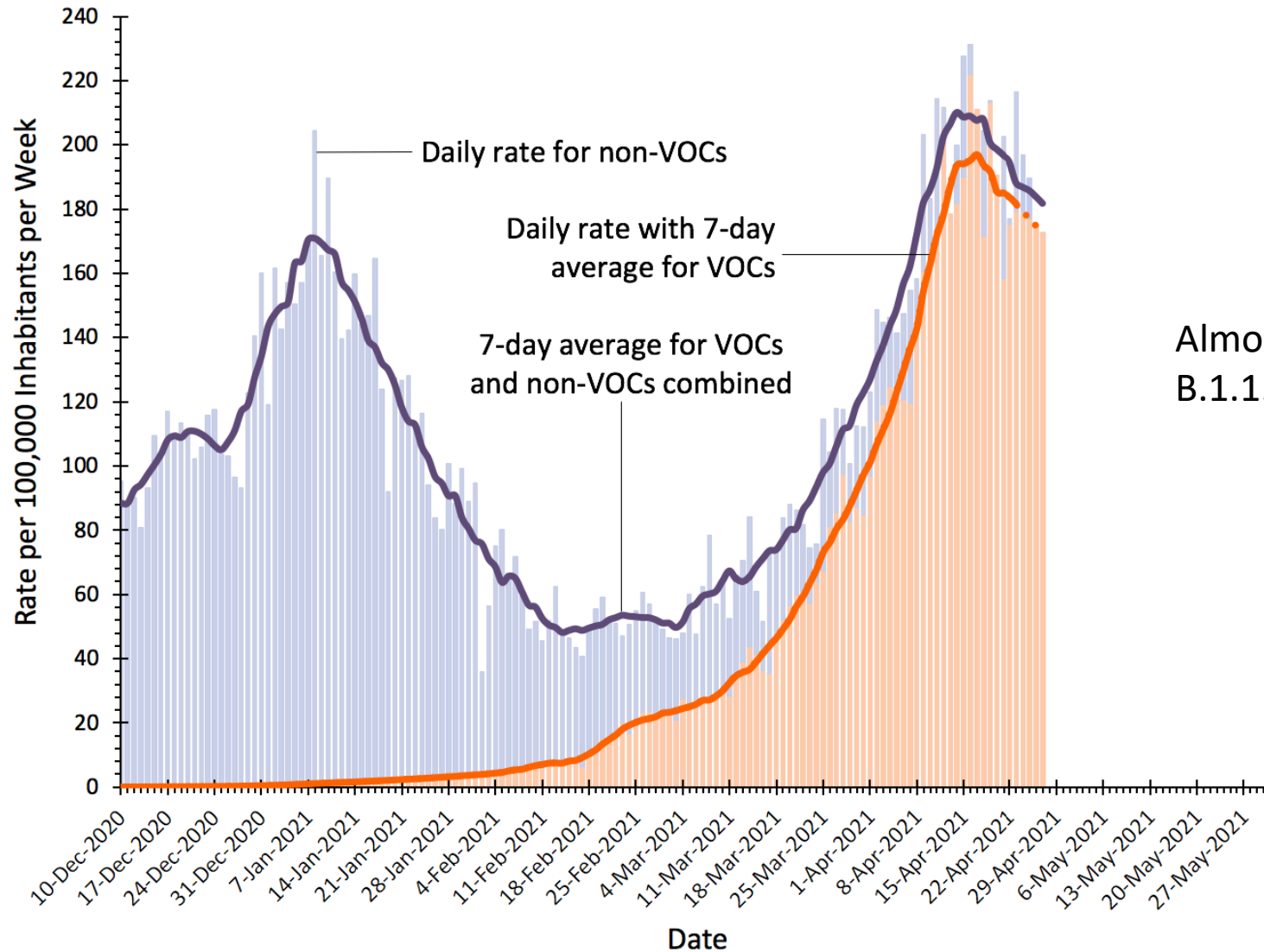
Data source: Ontario Laboratory Information System (OLIS), data up to April 23

Ontario testing rates are flat



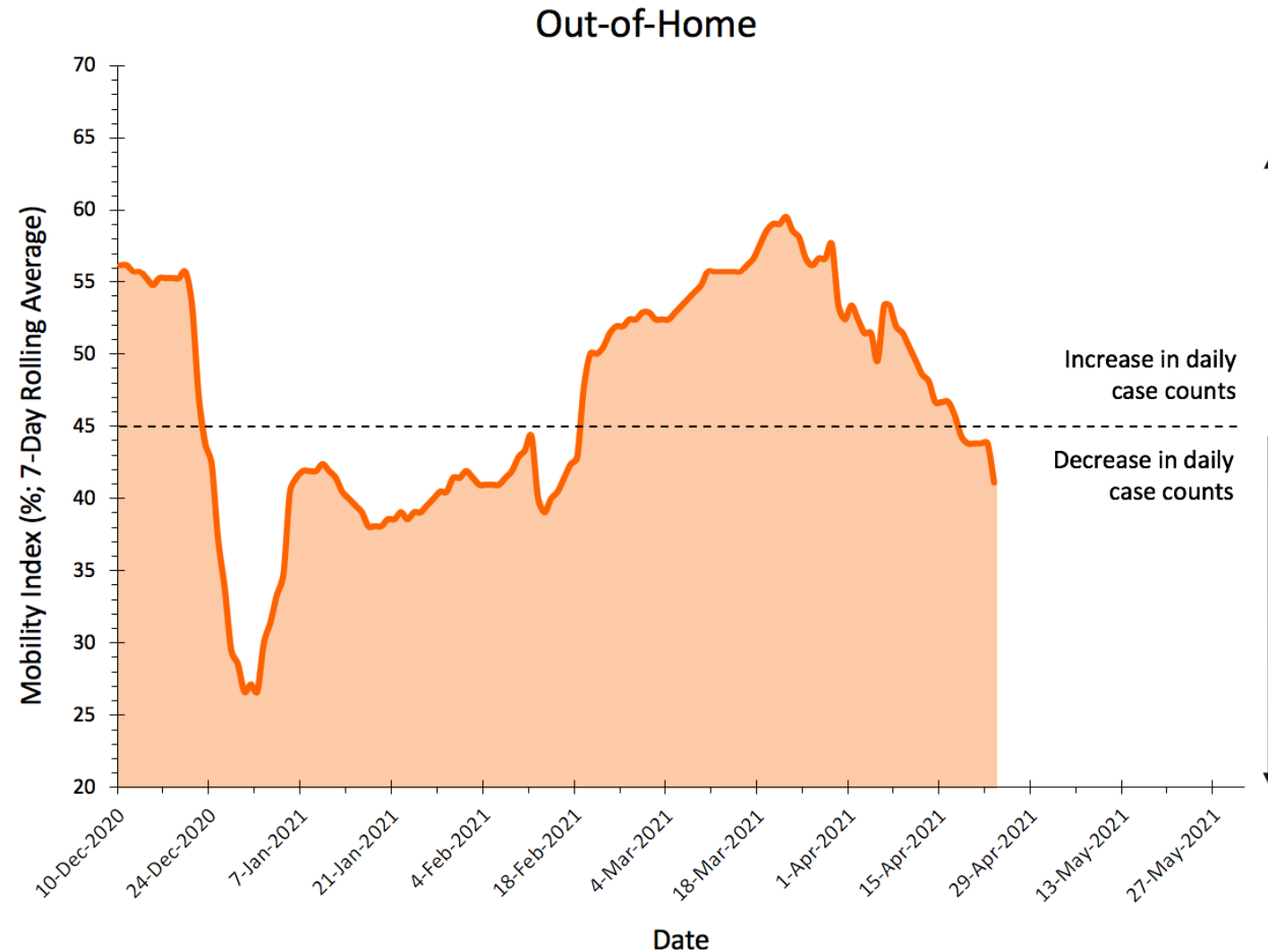
Data source: Ontario Laboratory Information System (OLIS), data up to April 23

Variants, which transmit faster, are responsible for more than 90% of cases.

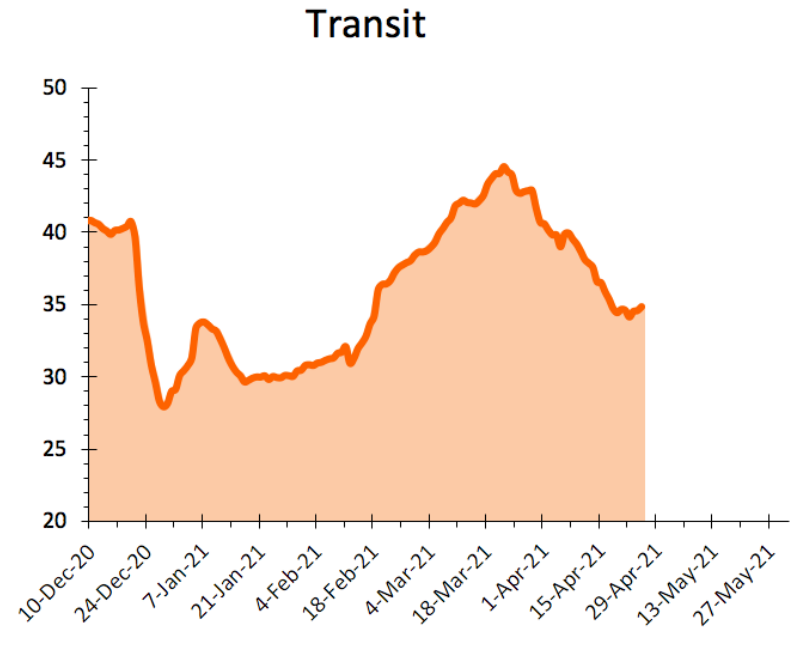
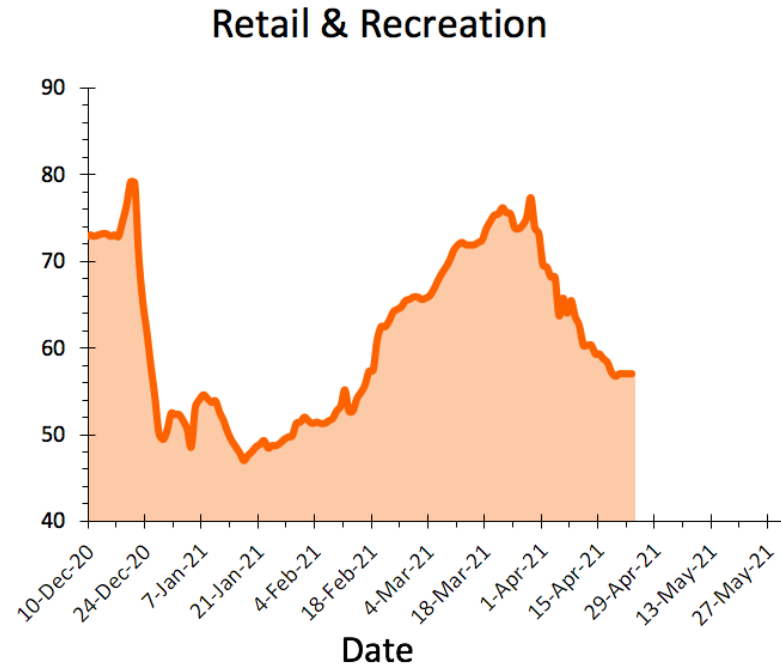
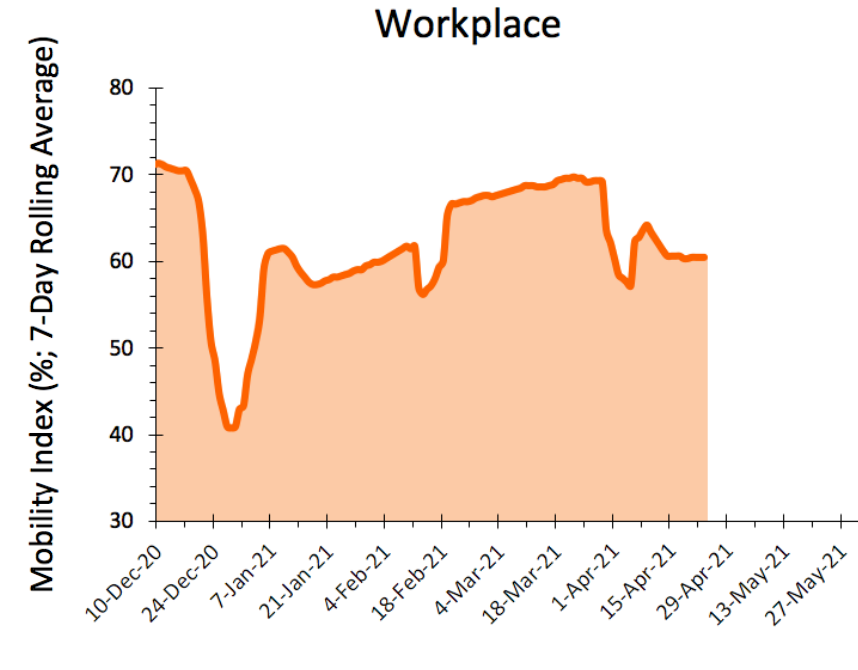


Almost all Variants are B.1.1.7.

Ontarians are respecting the stay-at-home order and are doing their part to help control case growth.



Workplace mobility remains too high. Reducing workplace mobility is key.



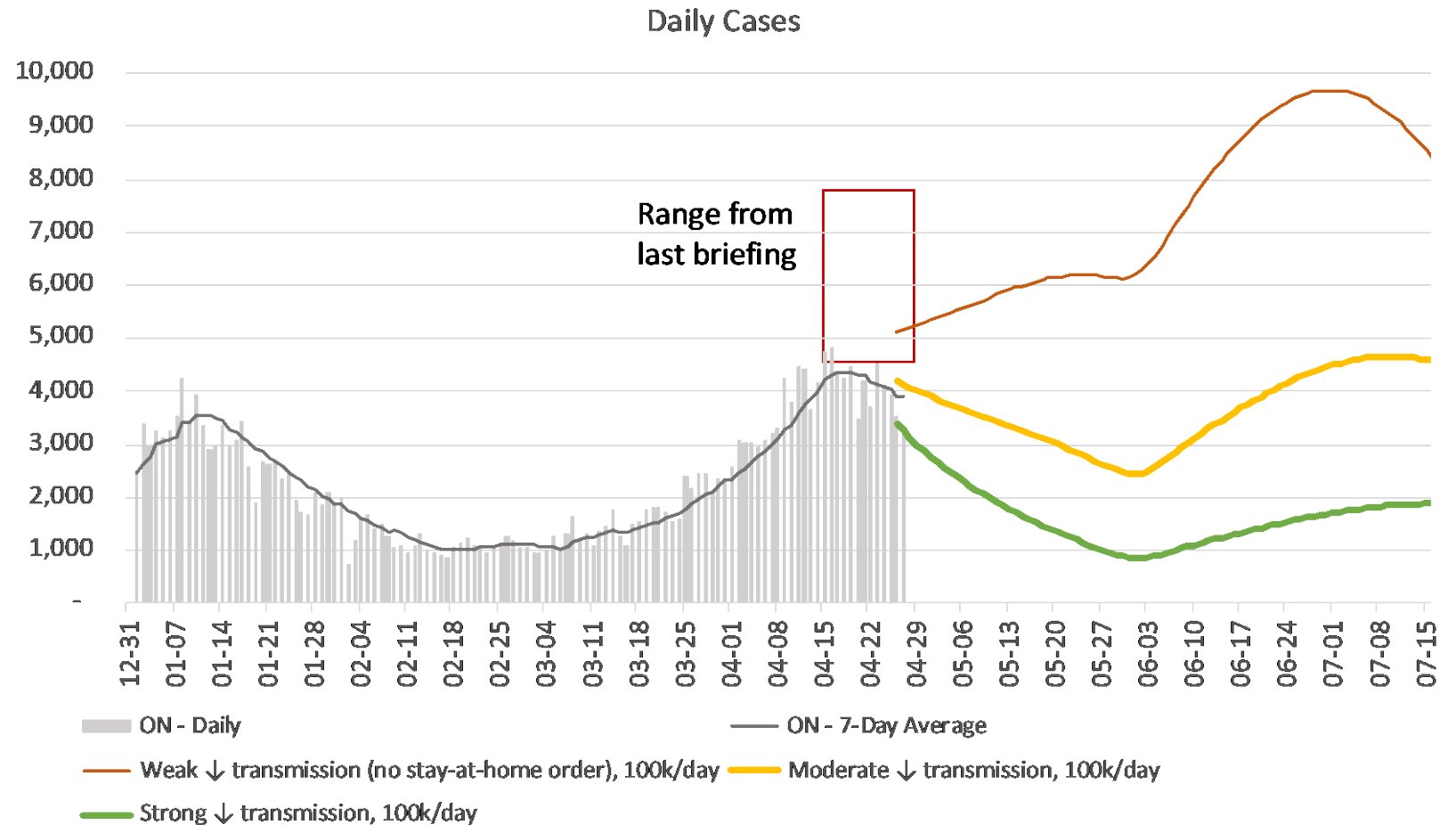
Cases are decreasing earlier and faster than projected but will only reach February levels under the best case

Figure summarizes predictions across 5 models.

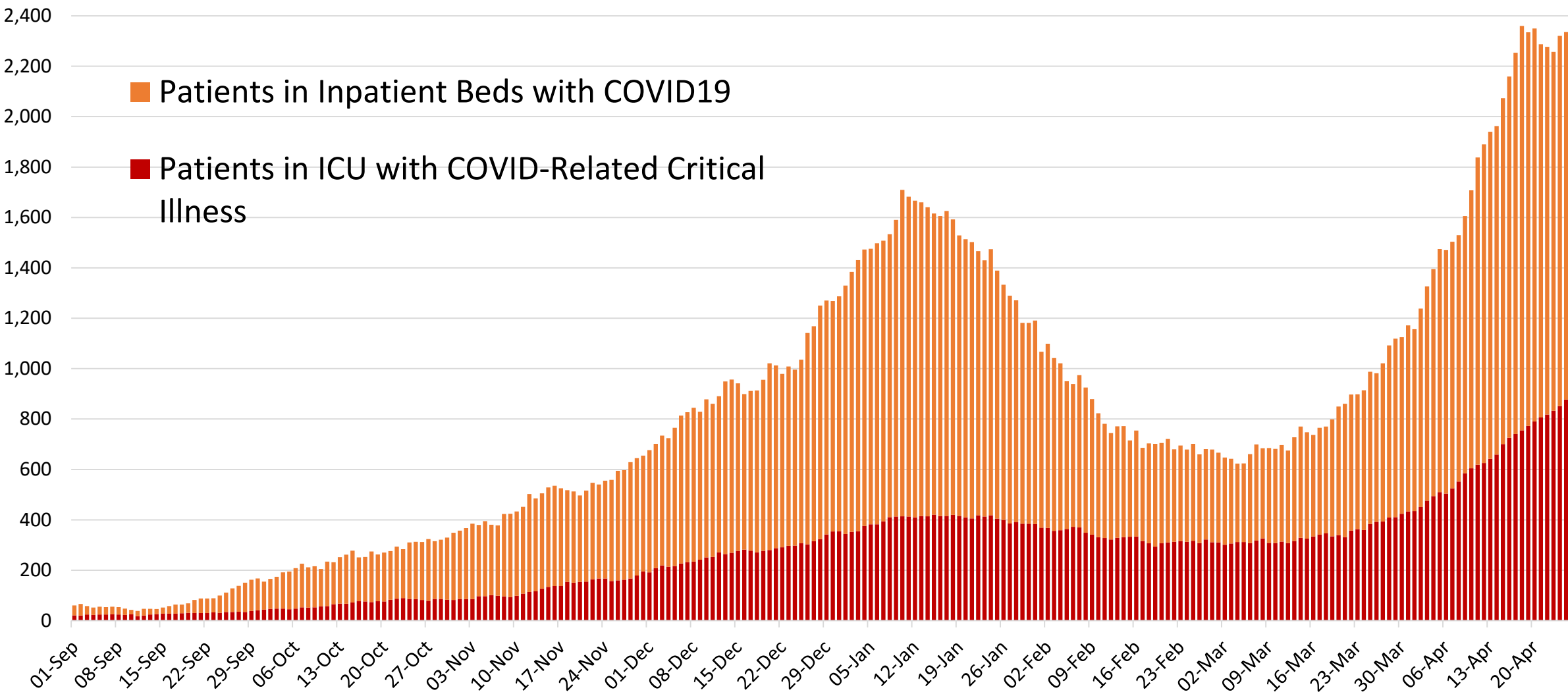
- Stay-at-home order 6 weeks starting Apr 8
- Vaccinating 100,000/day

Best case assumptions:

- Effective sick pay
- Short list of essential workplaces
- Lower mobility
- Continued focus on vaccinating high risk communities

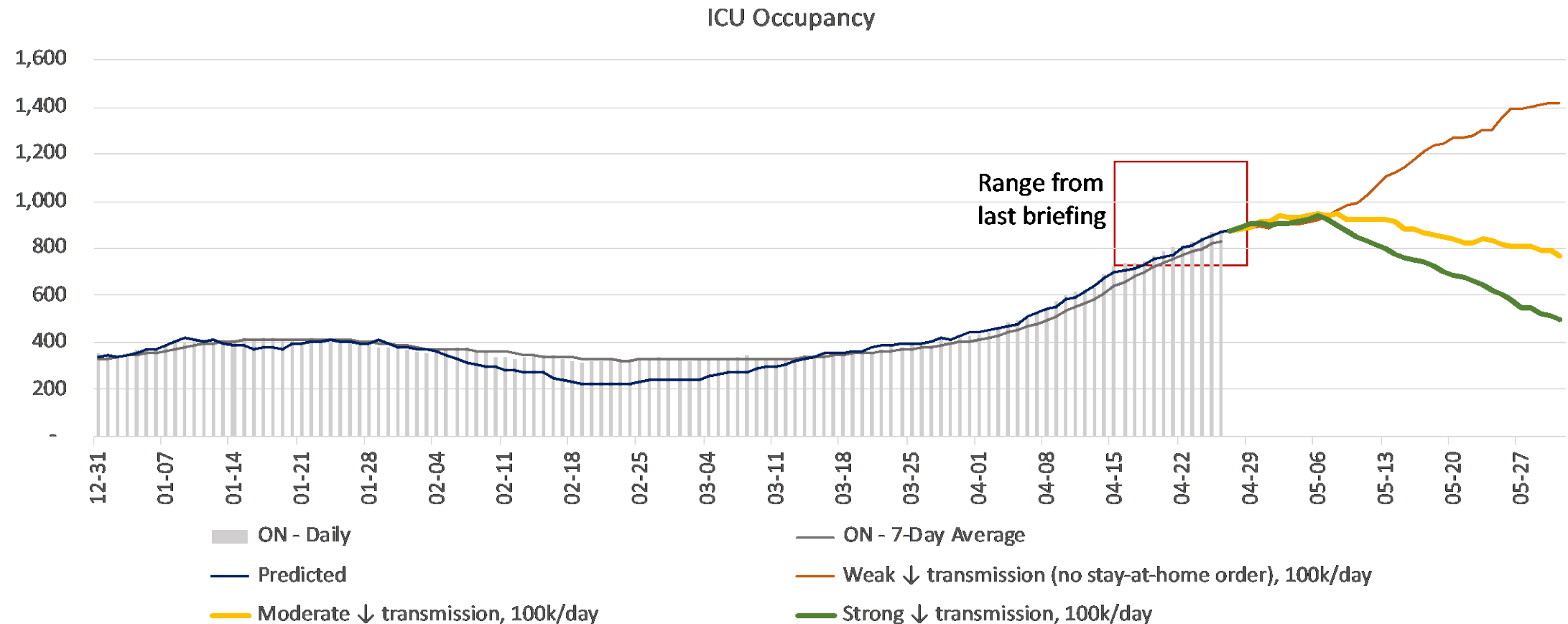


Hospitalizations are flattening but ICU occupancy will continue to rise

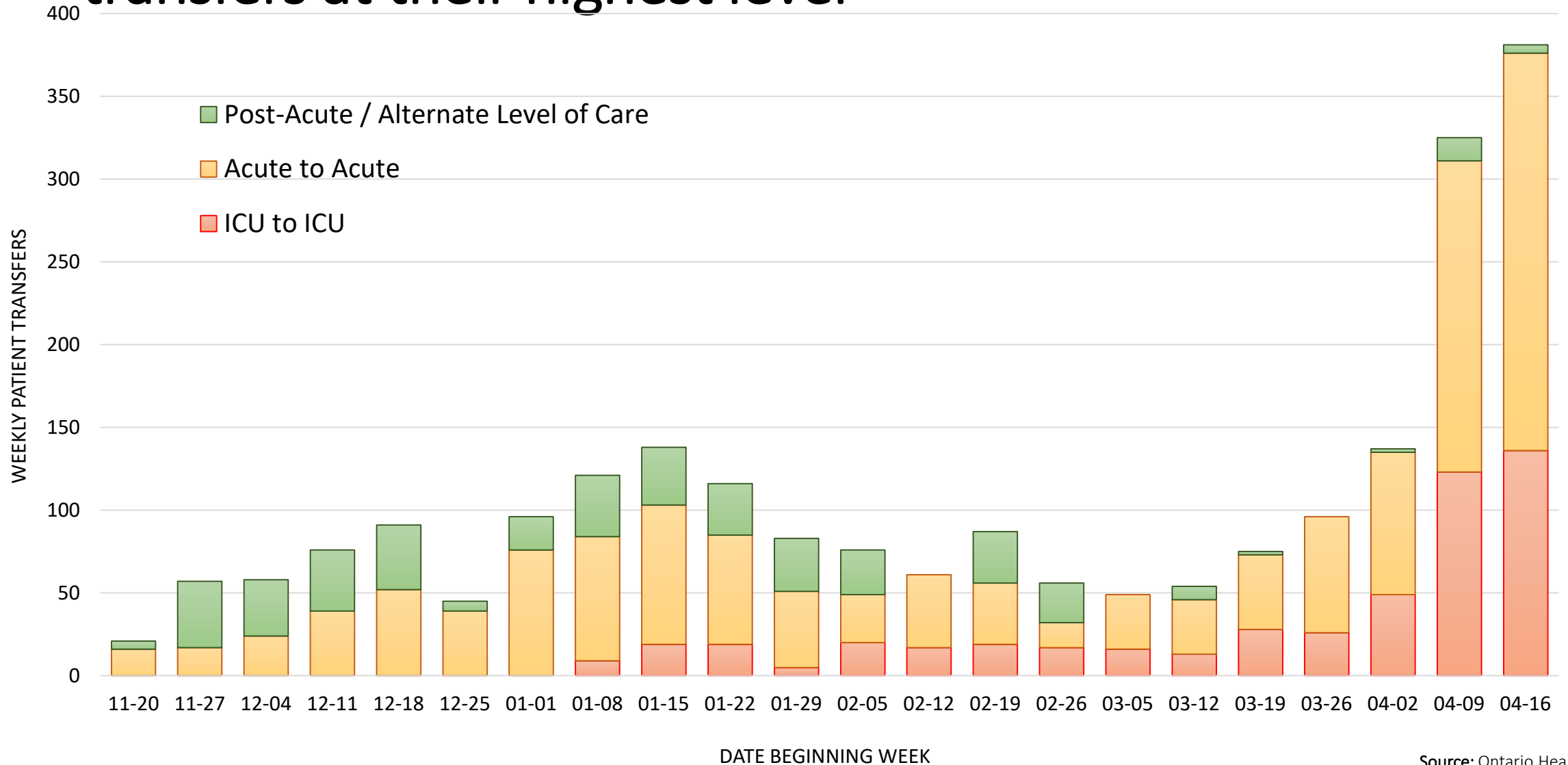


Data Sources: MOH COVID Inpatient Census and Critical Care Information System

ICU occupancy continues to rise. It will remain above the level necessary to restart surgeries for some time.

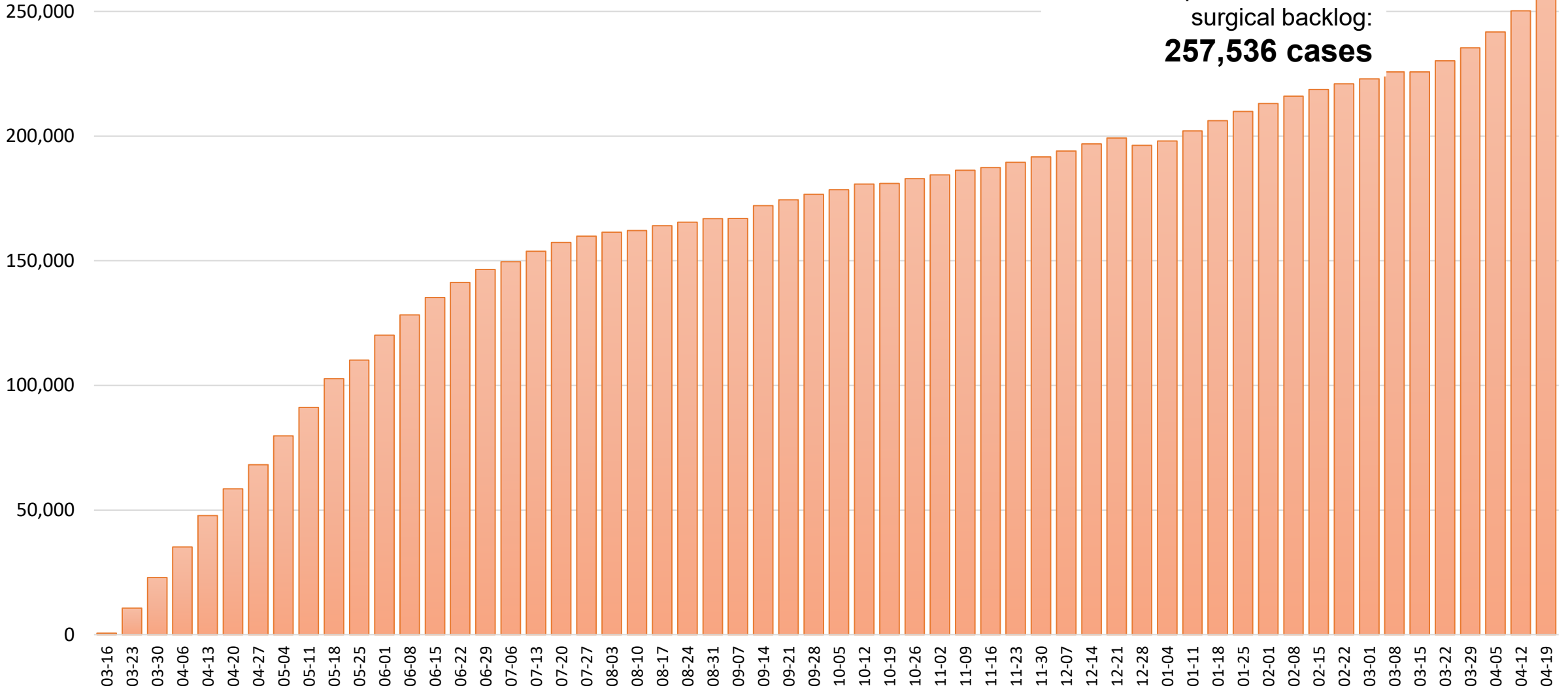


Hospitals in hotspots are over capacity with patient transfers at their highest level



The current surgical backlog presents an enormous challenge

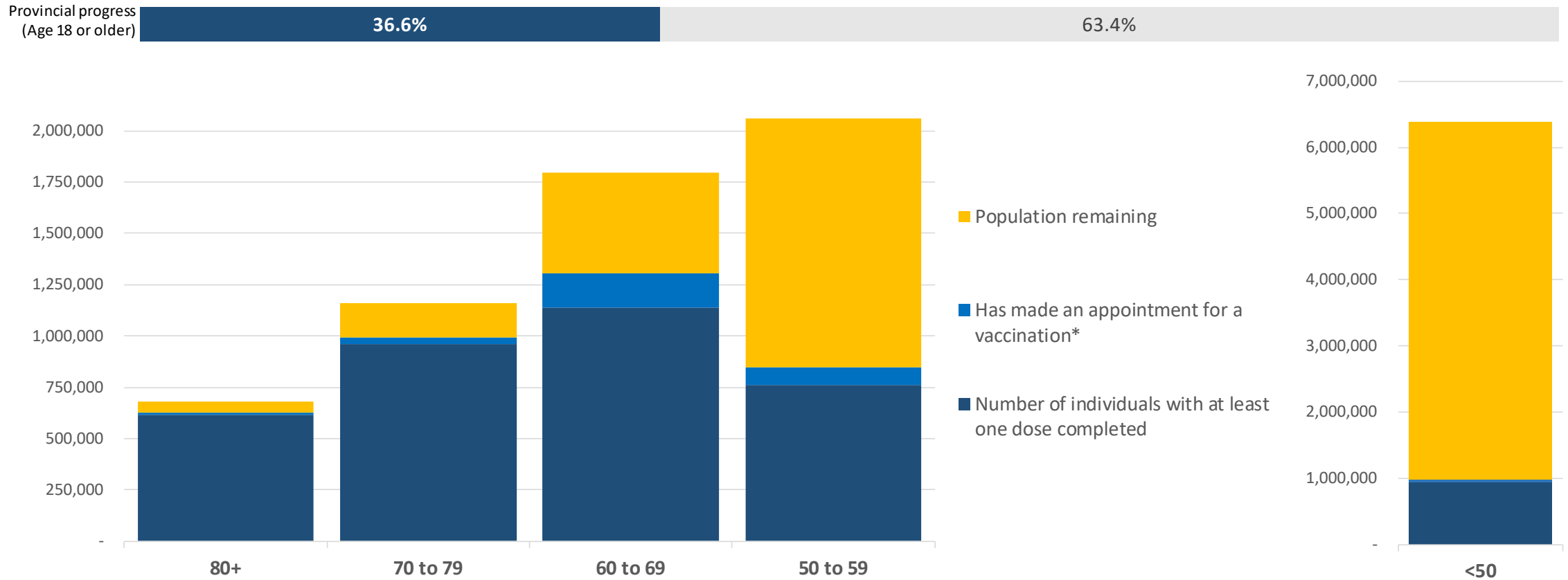
Cumulative pandemic-related surgical backlog:
257,536 cases



Data Source: Wait Times Information System. Backlog estimated based on comparison of 2020/21 with 2019/20 surgical volumes

First dose vaccine coverage continues to expand

More than 4.5m doses administered



* Note that this is just *Pending Appointments*. Anyone that has made an appointment and received a vaccine will be counted under “Individuals with at least one dose”. Data for Appointments reflect 20 PHUs that are captured through the provincial booking system. Appointments made through other systems (e.g., local PHU booking systems, pharmacies, primary care) are not included. Age is based on year of birth. Age <50 includes those age 18-49. Figure for age <50 is shown separately because of the difference in scale of the overall population size.

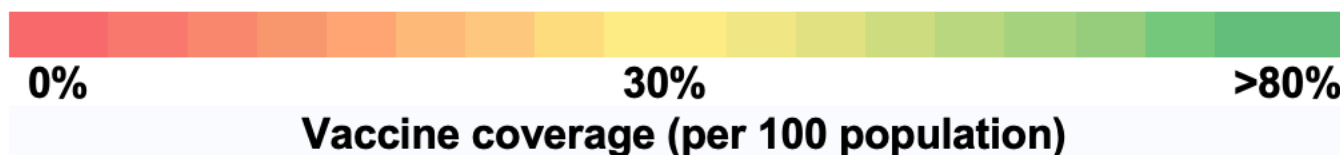
Data Sources

MOF 2020 Population Projections
 COVAX analytical file, extracted, 8:00 pm Apr 26 2021, CPAD, MOH
 COVAX Skedulo, extracted 6:00pm Apr 26 2021

Vaccination by neighbourhood risk is improving and remains key to controlling case growth

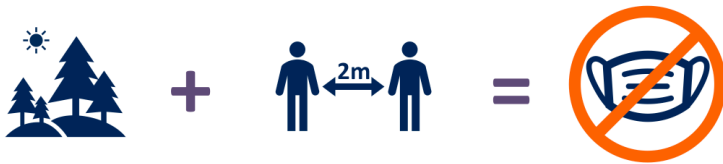
Figure excludes long-term care vaccination – at least 1 dose as of April 26, 2021

Age group	Neighbourhood Risk [‡]										Overall
	1 = high incidence of COVID-19 infections					10 = low incidence of COVID-19 infections					
	1	2	3	4	5	6	7	8	9	10	
80+	69%	72%	75%	78%	79%	81%	82%	83%	85%	85%	79%
75-79	70%	73%	76%	78%	80%	81%	82%	82%	83%	80%	79%
70-74	68%	72%	74%	75%	77%	77%	78%	79%	78%	71%	75%
65-69	64%	67%	67%	64%	65%	65%	68%	66%	61%	48%	63%
60-64	61%	64%	62%	58%	59%	58%	62%	56%	54%	48%	58%
55-59	49%	50%	46%	43%	41%	42%	43%	41%	39%	35%	43%
50-54	44%	45%	36%	32%	27%	27%	26%	25%	23%	22%	31%
45-49	23%	30%	22%	22%	23%	23%	23%	23%	21%	21%	23%
40-44	19%	24%	20%	21%	22%	23%	22%	21%	20%	19%	21%
16-39	11%	12%	10%	11%	11%	11%	11%	11%	12%	13%	11%
Overall (16+)	32%	37%	33%	34%	33%	34%	35%	35%	36%	35%	34%



Outdoor settings are considerably safer than indoor settings if precautions are taken against new variants

Outdoors + Distance = No Masks Needed



Example: *Walking in a park with your own household*

Outdoors + No Distance = Masks Needed



Example: *Kids playing on a playground*

Adapted from: Marr L, Virginia Tech 2021

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For table membership and profiles, please visit the [About](#) and [Partners](#) pages on the Science Advisory Table website.