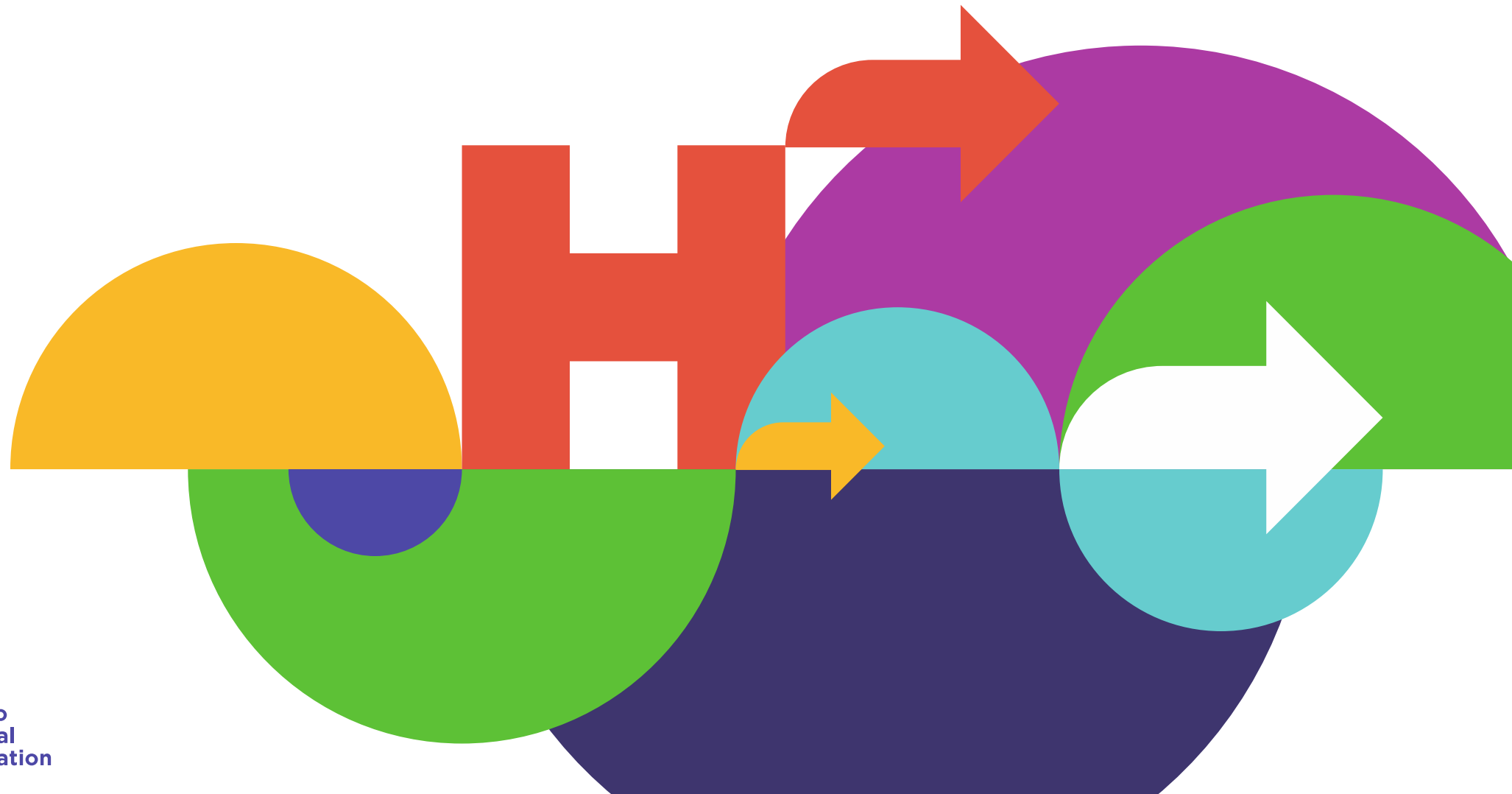


# COVID-19 Hospital Capacity

Wednesday, May 25, 2022



# Hospital Capacity: Critical Care

Data source: Critical Care Information System

All data as of **May 24, 2022**

Total Funded* ICU Bed Capacity				Critical Care Census**				% ICU occupancy		Funded* ICU Bed Capacity Remaining	
<b>2343</b>	<b>(Adult)</b>	1599	Vented	<b>1760</b>	<b>(Adult)</b>	159	CRCI	<b>75.1%</b>	<b>(Adult)</b>	<b>583</b>	<b>(Adult)</b>
		744	Non-Vented			1601	NON-CRCI				
<b>105</b>	<b>(Paediatric)</b>	78	Vented	<b>78</b>	<b>(Paediatric)</b>	0	CRCI	<b>74.3%</b>	<b>(Paediatric)</b>	<b>27</b>	<b>(Paediatric)</b>
		27	Non-Vented			78	NON-CRCI				

7-day average CRCI patients in ICU (Adult)	157	% Pts in ICU who have CRCI		% vented pts who have CRCI	
7-day average New CRCI Admits (Adult)	13	9.0%	(Adult)	45.3%	(Adult)
7-day average New CRCI Admits (Paediatric)	0	0.0%	(Paediatric)	0.0%	(Paediatric)

Region	Adult Funded* beds	Current Adult CRCI census	% Adult pts in ICU who have CRCI	% Adult ICU occupancy	Funded* Adult ICU Bed Capacity Remaining	(+/- change from previous day)	
West	694	50	9.0%	80.0%	139	↓	-20
Central	477	37	11.0%	70.4%	141	↑	5
Toronto	464	14	4.2%	72.2%	129	↓	-19
East	574	44	10.1%	75.6%	140	↓	-23
North	134	14	14.0%	74.6%	34	↓	-5

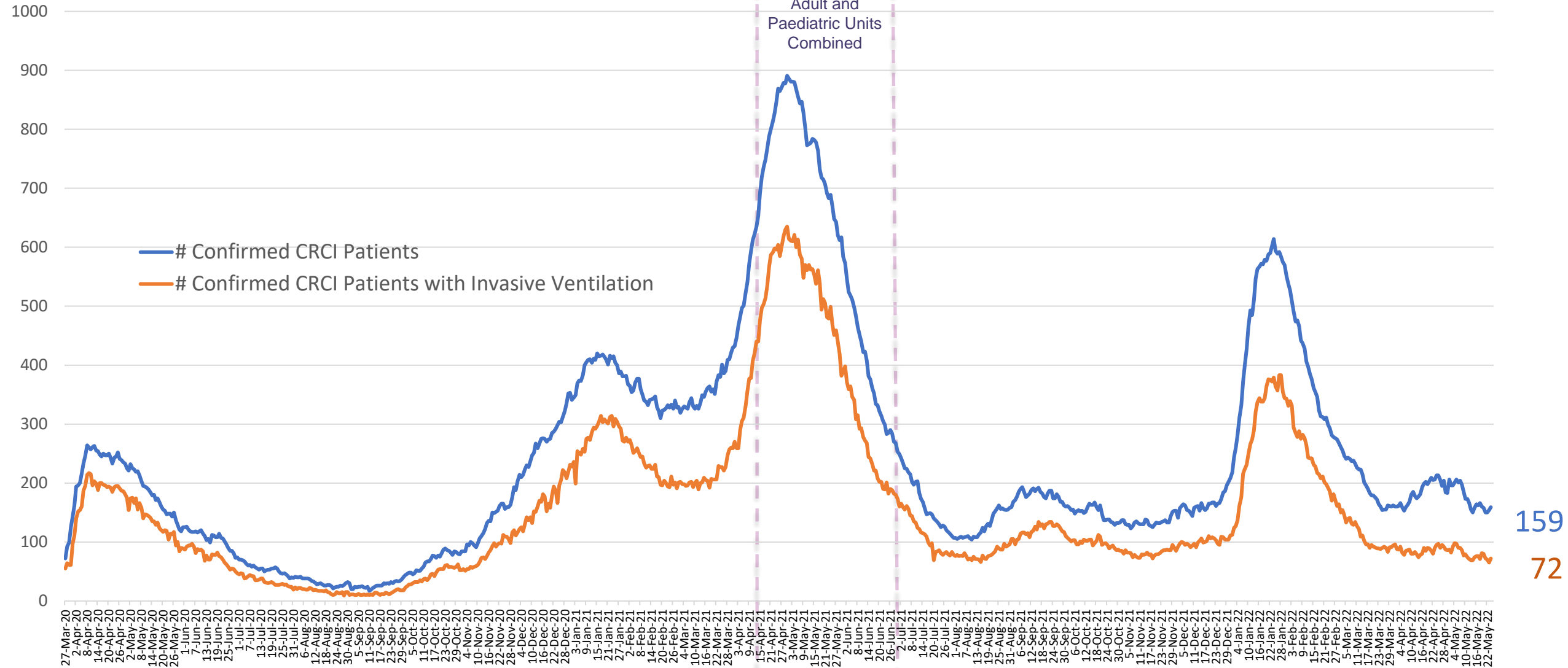
Definition: COVID-19 pts are represented by CRCI (COVID-Related Critical Illness and is defined as: Admission to the ICU because of a clinical syndrome consistent with COVID, AND the patient has had a positive test that is consistent with acute COVID illness). Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID.

\*Staffing pressures may reduce funded bed capacity. Please see view the [OHA resource page](#) for more details.

\*\*There were 0 paediatric CRCI cases, 0 vented. There was 1 neonatal CRCI case, 0 vented.



# Adult Critical Care Units COVID Related Critical Illness (CRCI) Patients (Source: Critical Care Services Ontario) (Data as of **May 24, 2022**)



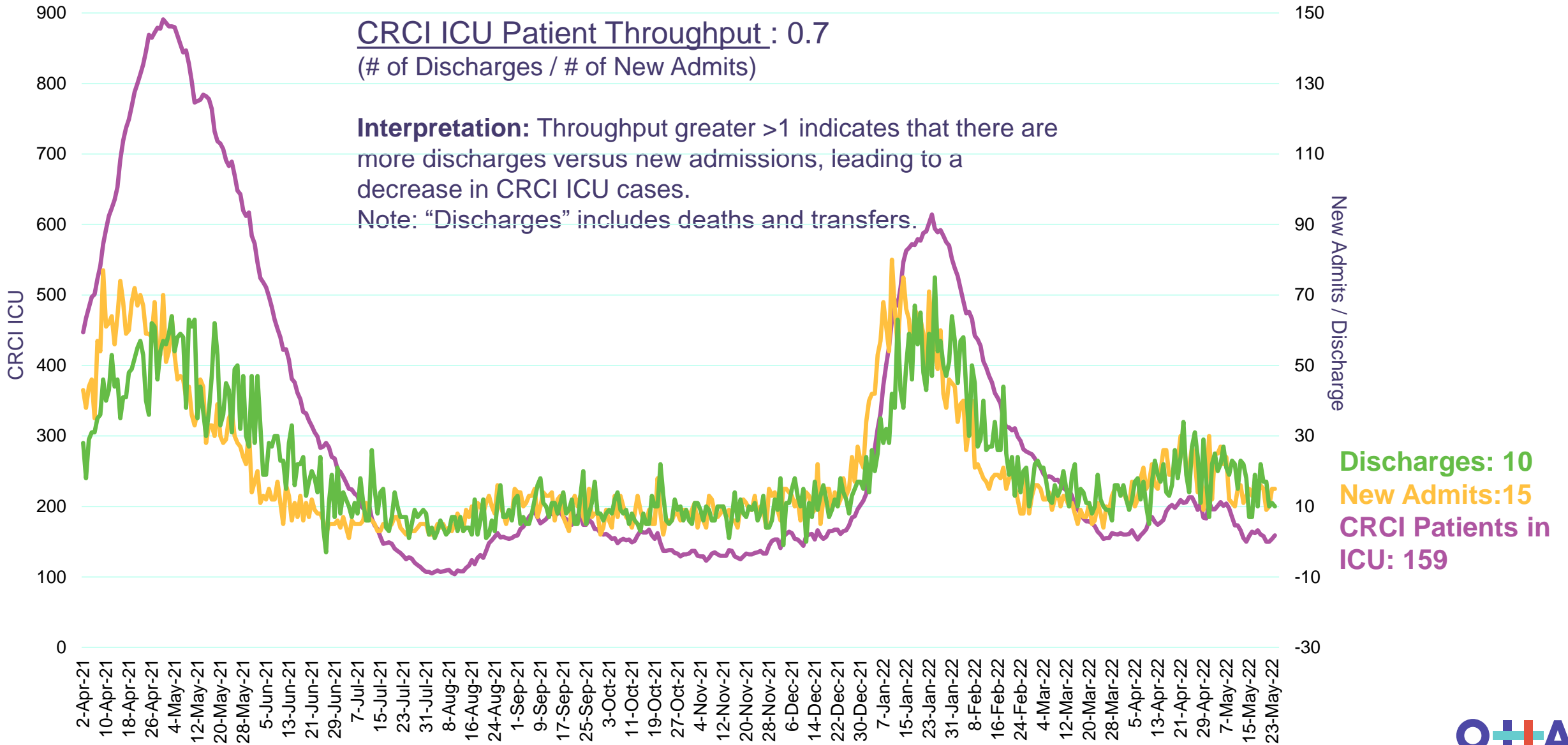
159  
72

\*COVID-related critical illness (CRCI) Census: Admission to the ICU because of a clinical syndrome consistent with COVID, AND patient has had a positive test that is consistent with acute COVID illness.  
Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID.



# CRCI ICU Patient Throughput (starting April 2021 onward)

## (Data as of **May 24, 2022**)

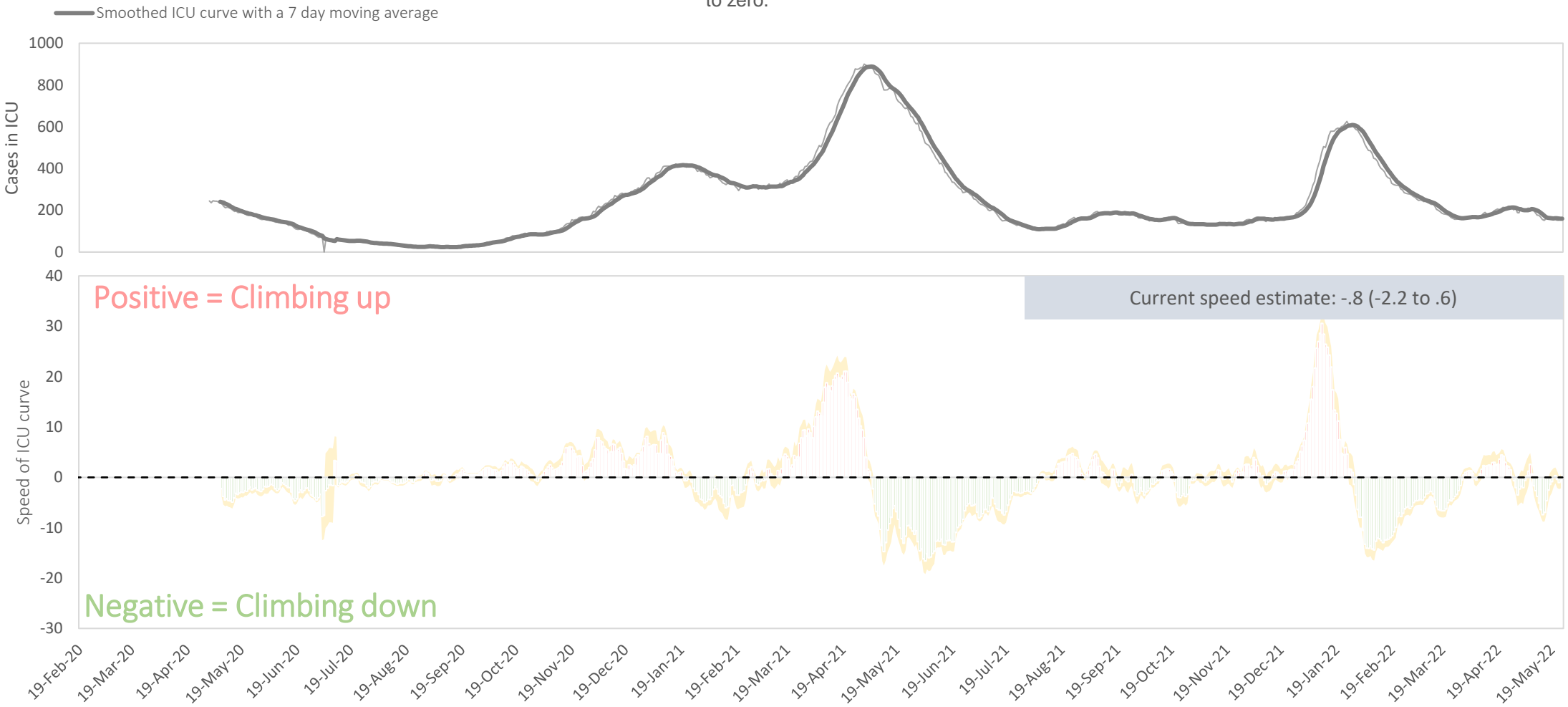


Technical Note: Patient Throughput based on [Ontario Health - CCO methodology](#)



# COVID-19 ICU curve and speed of ICU curve: as of **May 25, 2022** in Ontario

The speed of COVID-19 spread is measured as the slope of the ICU curve. When the **speed > 0**, then the trend of cases in ICU is speeding up. When the **speed < 0**, then trend of cases in ICU is slowing down. When **speed = 0**, then the cases in ICU have plateaued. The goal is to drive cases in ICU down to zero.



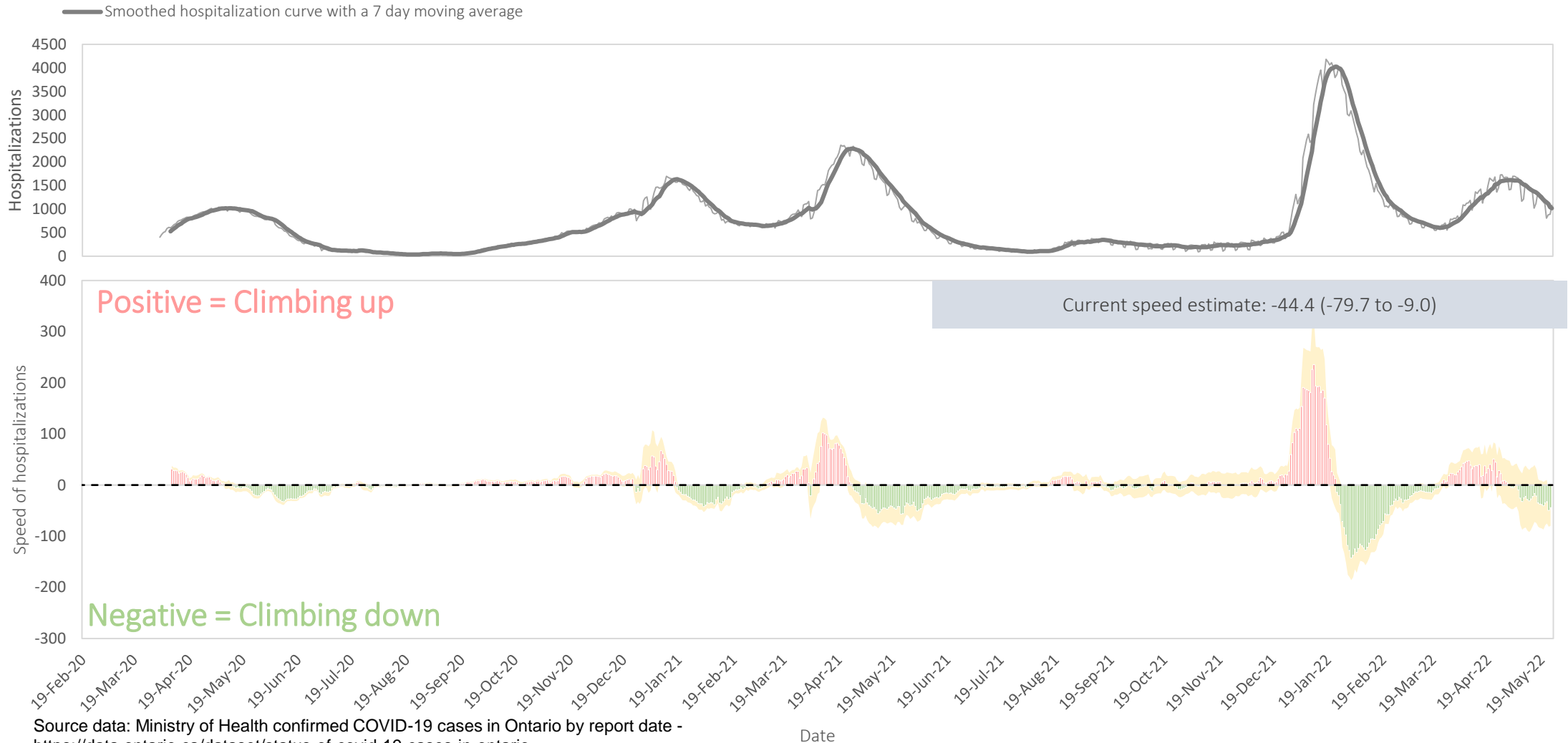
Source data: Ministry of Health confirmed COVID-19 cases in Ontario by report date - <https://data.ontario.ca/dataset/status-of-covid-19-cases-in-ontario>  
 Collaboration with Jonathan Wang @wanghoaneng

- Standard Error
- Positive smoothed speed with a 7 day moving average
- Negative smoothed speed with a 7 day moving average



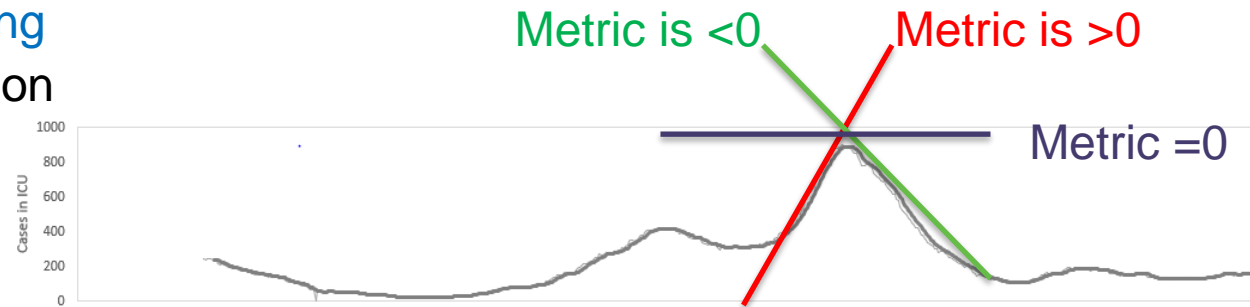
# COVID-19 hospitalizations curve and speed of hospitalizations: as of **May 25, 2022** in Ontario

The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed > 0**, then the trend of hospitalizations is speeding up. When the **speed < 0**, then trend of hospitalizations is slowing down. When **speed = 0**, then the hospitalizations have plateaued. The goal is to drive hospitalizations down to zero.



# Interpretation of the “Speed Signal” Graphs

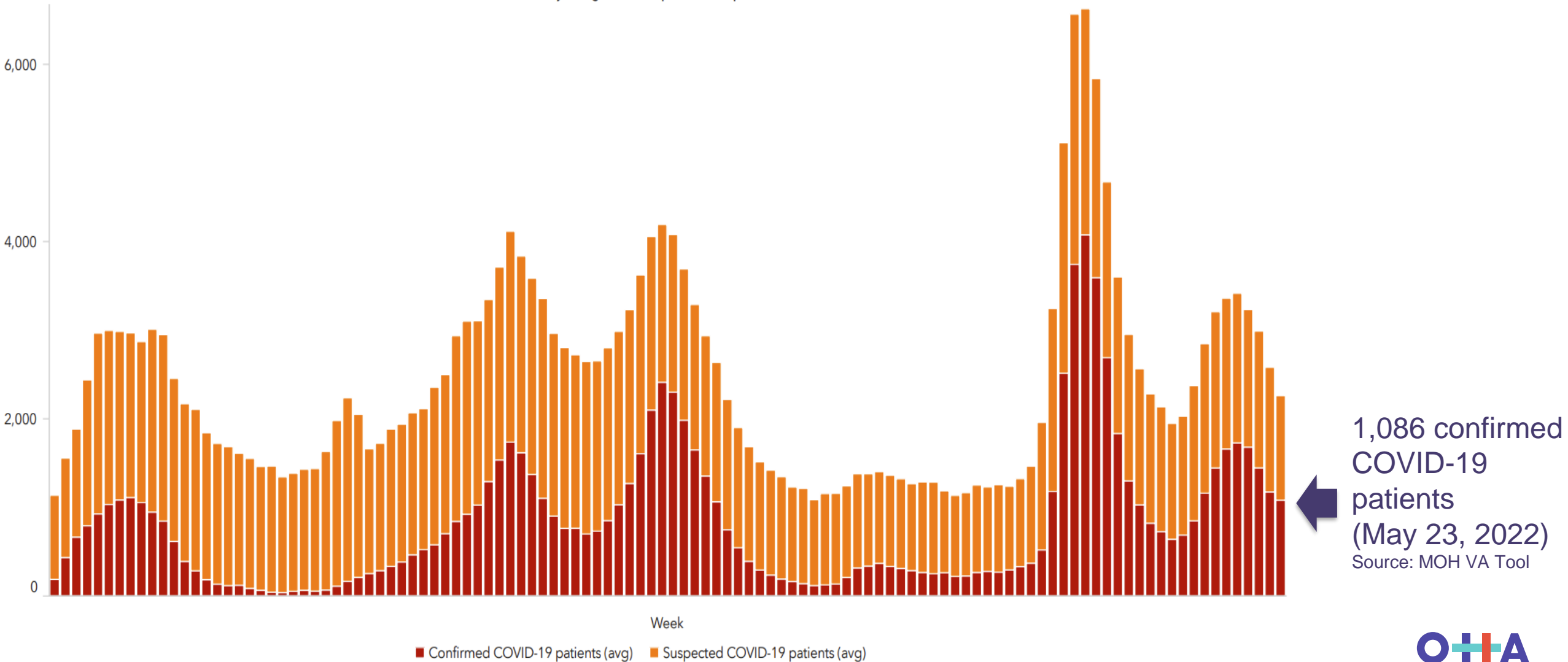
- The “speed signal” metric, developed by [Jonathan Wang - Twitter: @wanghoaneng in 2020](#), is a simple calculation method with intuitive explanatory power for rates and spread.
- The speed signal can be considered as the number of hospitalization or ICU cases per day that can be expected if the current 7-day trend continues.
- The directionality (positive or negative) of the metric provides insight into the rate of increase of cases per day.
- This metric only provides information on the slope of the hospitalization/ICU curve and should be read in conjunction with the hospitalization or ICU case curve (i.e., zero slope does not mean there are no more daily cases, just that the rate of change in cases per day is zero over a 7-day period).
- The red bars in the graph show rates increasing and the green bars show rates decreasing.



- The speed of COVID-19 spread is measured as the slope of the hospitalization/ICU curve.
- When the **speed metric is > 0**, then the trend of hospitalizations/ICU cases is speeding up.
- When the **speed metric < 0**, then the trend of hospitalizations/ICU cases is slowing down.
- When **speed = 0**, then the hospitalizations/ICU cases have plateaued.
- The goal is to drive COVID-19 hospitalizations and ICU cases down to zero.

# Weekly average COVID-19 patients in hospital (Data as of May 23, 2022)

Weekly average COVID-19 patients in hospital





# Hospital Occupancy (Data as of **May 23, 2022**)

Source: MOH VA Tool  
Data extracted on May 25, 2022 9

