COVID-19 Hospital Capacity

Friday, June 10, 2022

OHA Ontario Hospital Association
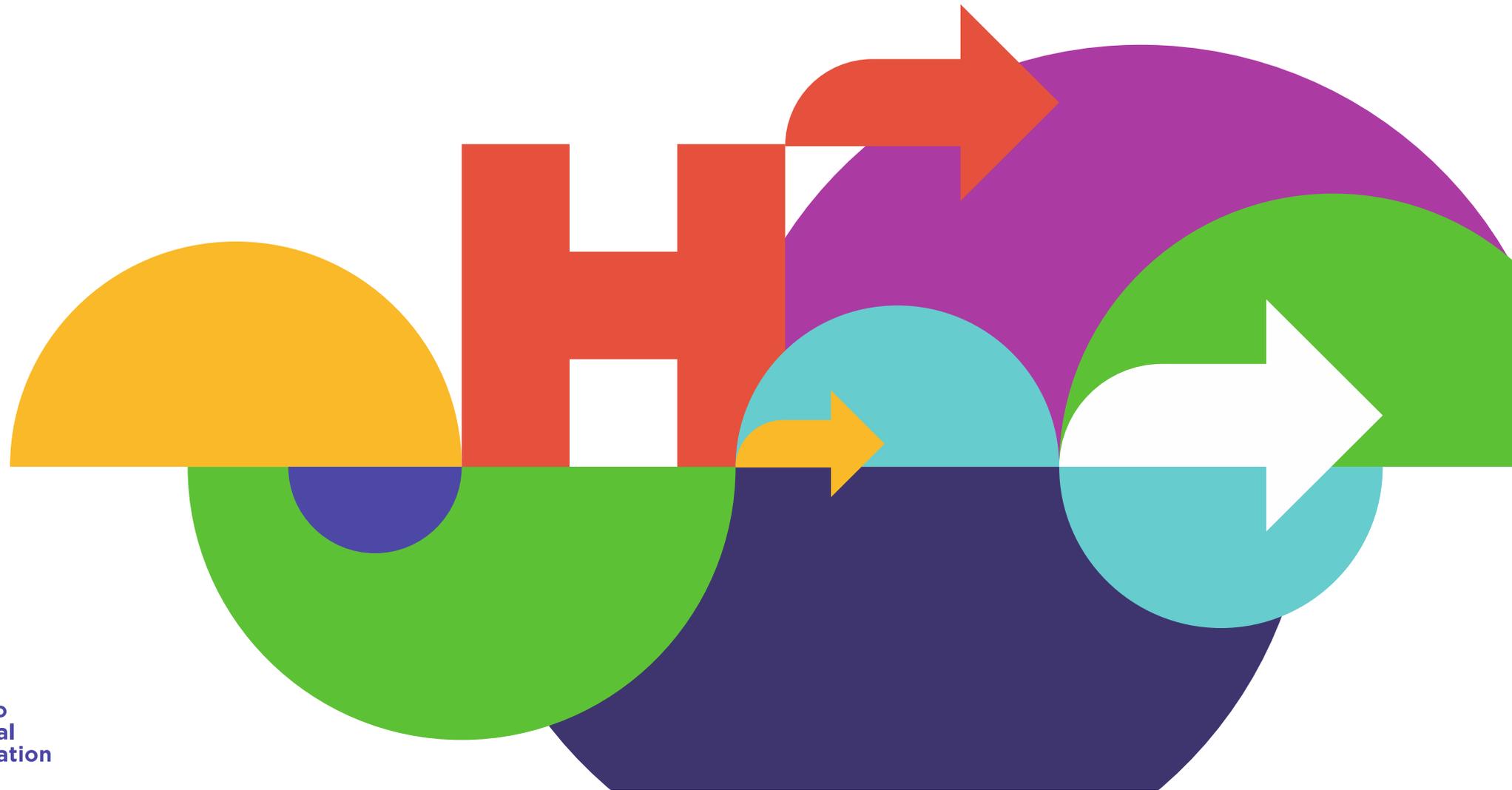
Hospital Capacity: Critical Care

Total Funded* ICU Bed Capacity			Critical Care Census**			% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	**(Adult)**	1599 Vented / 744 Non-Vented	**1697**	**(Adult)**	108 CRCI / 1589 NON-CRCI	**72.4%** (Adult)	646 (Adult)
105	**(Paediatric)**	78 Vented / 27 Non-Vented	**81**	**(Paediatric)**	2 CRCI / 79 NON-CRCI	**77.1%** (Paediatric)	24 (Paediatric)

		% Pts in ICU who have CRCI		% vented pts who have CRCI	
7-day average CRCI patients in ICU (Adult)	111				
7-day average New CRCI Admits (Adult)	8	6.4%	(Adult)	46.3%	(Adult)
7-day average New CRCI Admits (Paediatric)	0	2.5%	(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	33	6.4%	73.9%	181	↓	-5
Central	477	26	7.4%	73.6%	126	↓	-3
Toronto	464	13	4.1%	67.7%	150	↓	-4
East	574	26	6.1%	74.0%	149	↓	-6
North	134	10	10.6%	70.1%	40	↑	4

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 **2 paediatric CRCI cases, **1** vented. There were **no** neonatal CRCI cases.

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Adult Critical Care Units COVID Related Critical Illness (CRCI) Patients
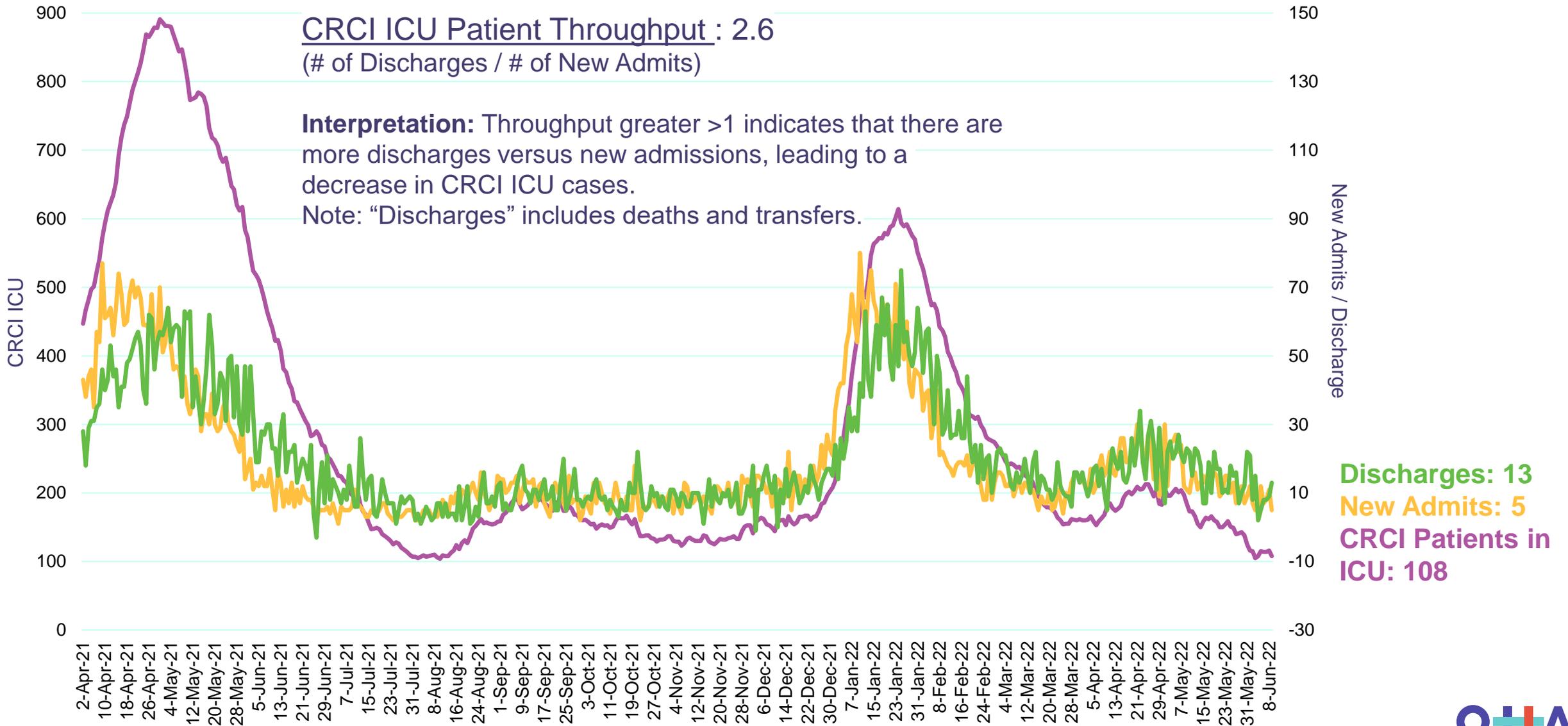**(Source: Critical Care Services Ontario)**
(Data as of June 9, 2022)
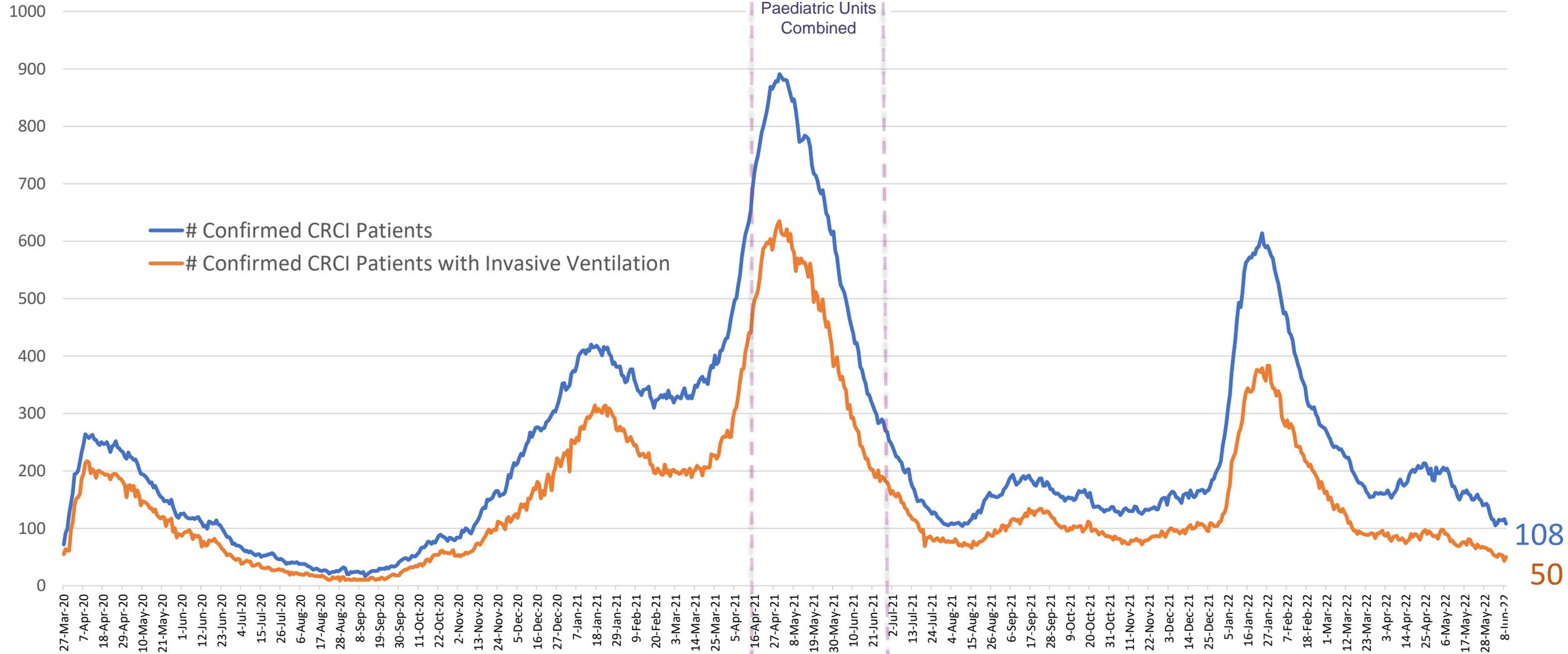
COVID-related critical illness (CRCI) Census: Admission to the ICU because of a clinical syndrome consistent with COVID, AND patient has had a positive test that is consistent with acute COVID illness.
Please note that CCSO data does not currently distinguish those admitted with COVID or for COVID.

CRCI ICU Patient Throughput (starting April 2021 onward) (Data as of June 9, 2022)

CRCI ICU Patient Throughput : 2.6
(# of Discharges / # of New Admits)

Interpretation: Throughput greater >1 indicates that there are more discharges versus new admissions, leading to a decrease in CRCI ICU cases.
Note: "Discharges" includes deaths and transfers.

Discharges: 13
New Admits: 5
CRCI Patients in ICU: 108

Technical Note: Patient Throughput based on Ontario Health - CCO methodology

COVID-19 ICU curve and speed of ICU curve: as of **June 9, 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.
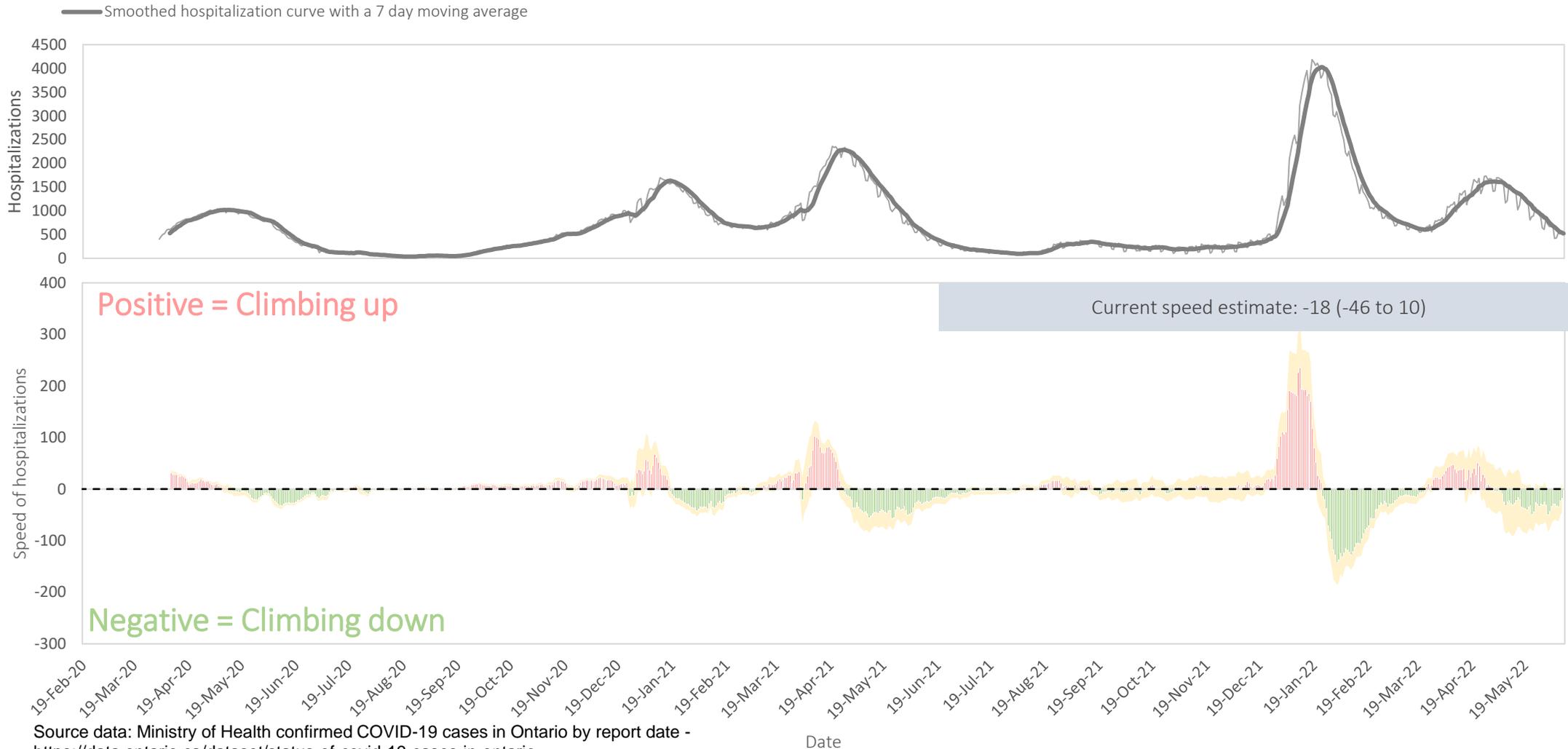
— Smoothed ICU curve with a 7 day moving average

Cases in ICU

Positive = Climbing up

Current speed estimate: -.6 (-1.9 to .8)

Speed of ICU curve

Negative = Climbing down

Date

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 June 9, 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.


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

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.

Metric is <0   Metric is >0   Metric =0
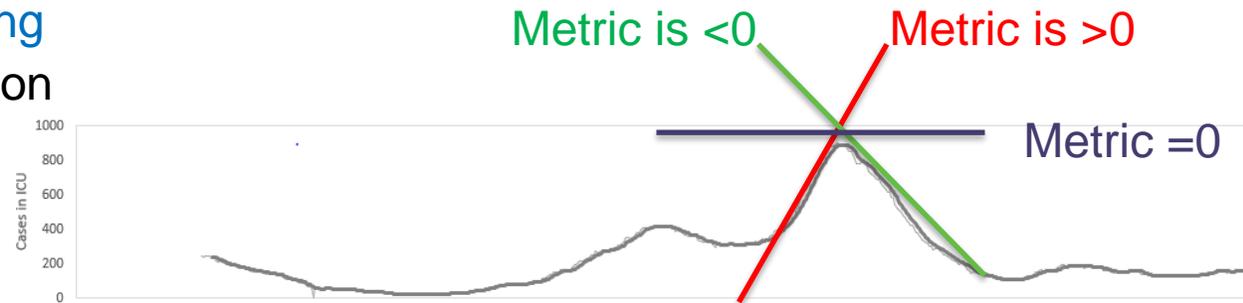
- The speed of COVID-19 spread is measured as the slope of the hospitalization/ICU curve.

- 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 **June 8, 2022**)

Weekly average COVID-19 patients in hospital
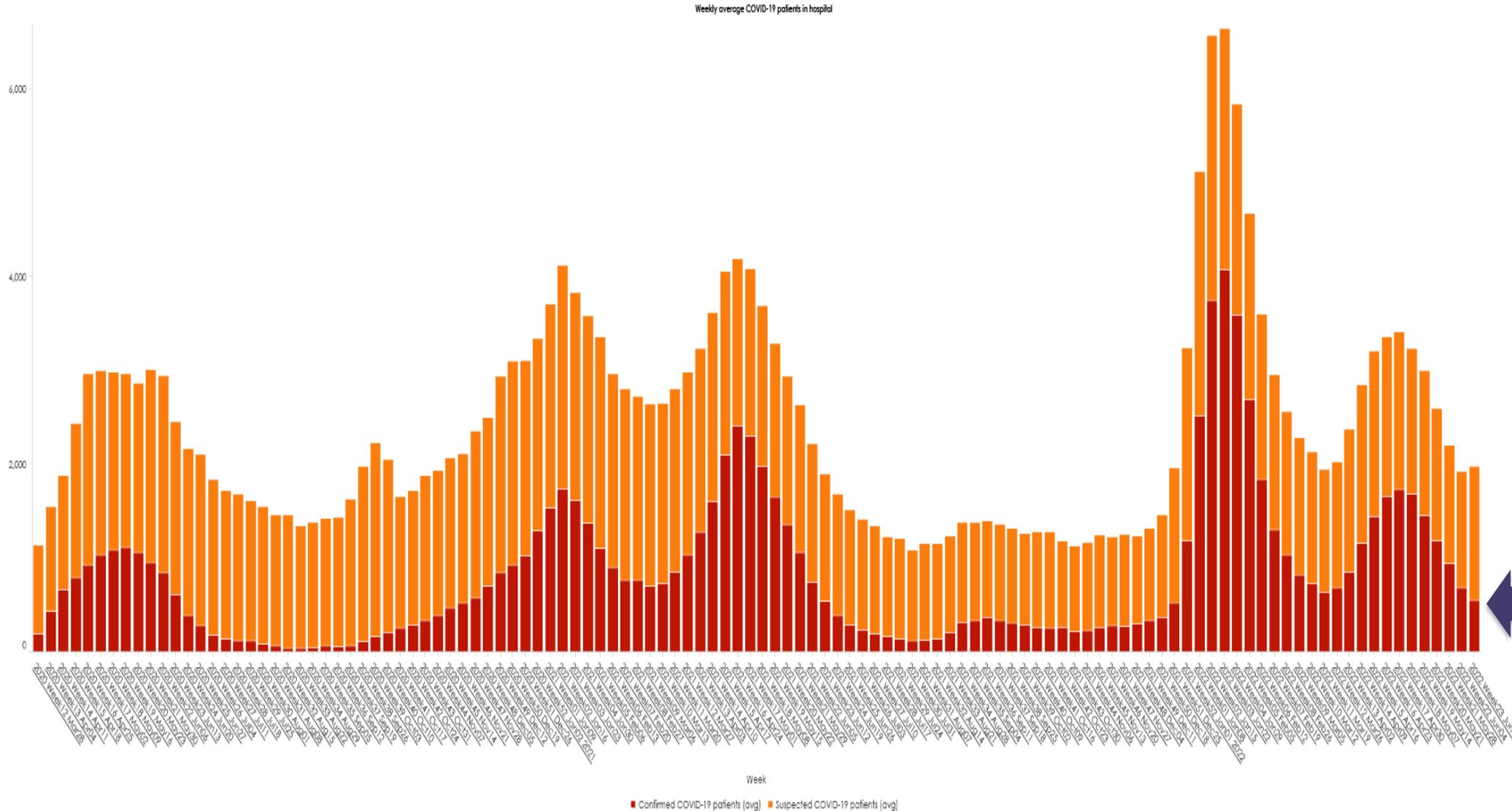
539 confirmed
COVID-19
patients
(June 8, 2022)
Source: MOH VA Tool

Hospital Occupancy (Data as of June 8, 2022)

All Beds (Total)	Acute	Post-acute	5,267 ALC Open Cases Excludes RCCs	9.6% % waiting for homecare	40.8% % waiting for LTC
93.6% +/- from previous day 0.3	96.6% +/- from previous day -0.0	88.2% +/- from previous day 0.9			
2,191 Availiable beds	**732** Availiable beds	**1,412** Availiable beds			

As of June 8, there were **394** ALC patients in RCC beds, where over 2 out of 5 intended to be discharged to LTCH.

Intended Discharge destinations of open ALC patients currently in hospital, excluding RCCs