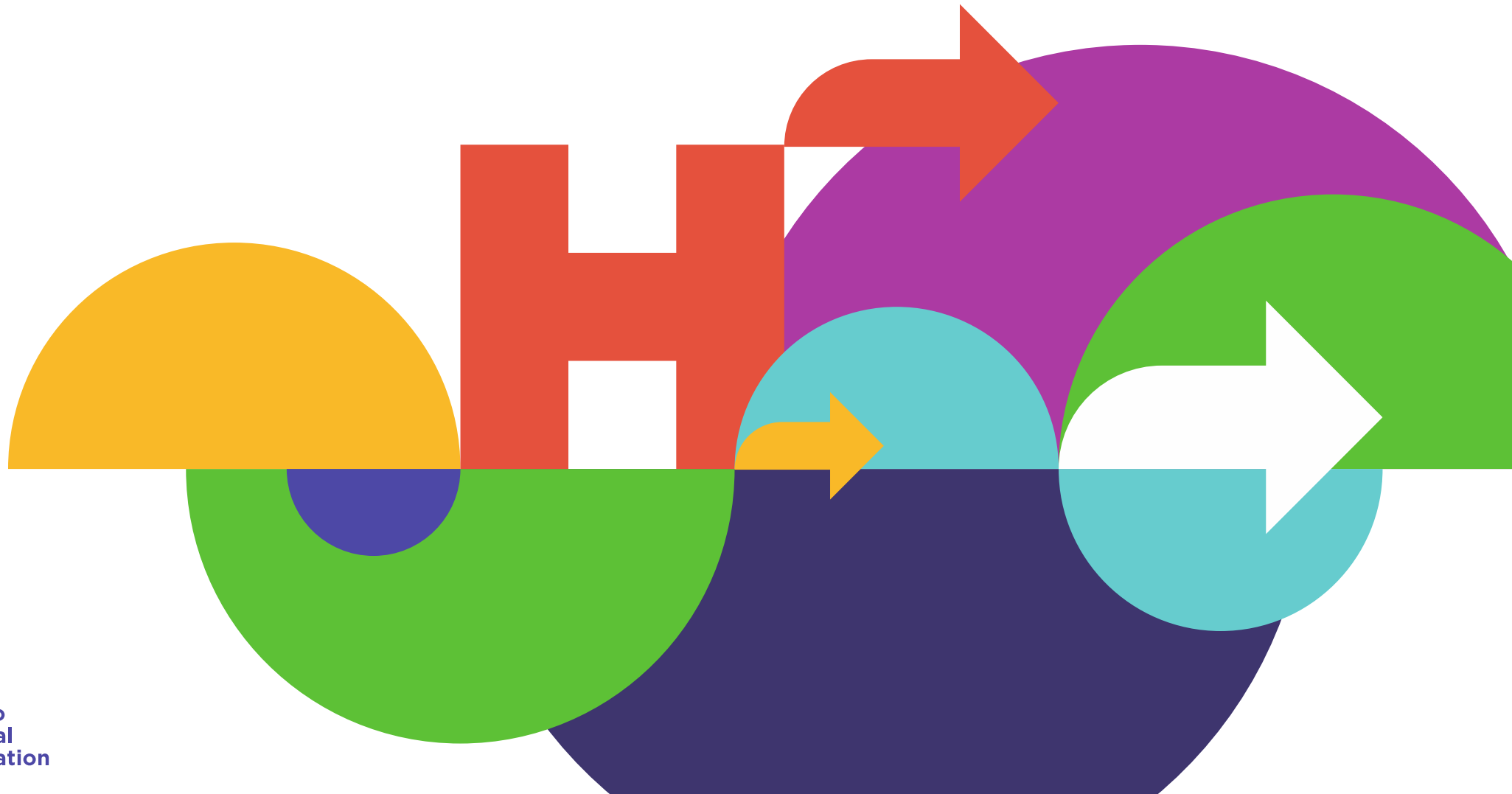


COVID-19 Hospital Capacity

Tuesday, January 25, 2022



Hospital Capacity: Critical Care

Data source: Critical Care Information System
All data as of **January 24, 2022**

Total Funded* ICU Bed Capacity				Critical Care Census**				% ICU occupancy	Funded* ICU Bed Capacity Remaining
2343	(Adult)	1599	Vented	1889	(Adult)	614	CRCI	80.6% (Adult)	454 (Adult)
		744	Non-Vented			1275	NON-CRCI		
105	(Paediatric)	78	Vented	57	(Paediatric)	9	CRCI	54.3% (Paediatric)	48 (Paediatric)
		27	Non-Vented			48	NON-CRCI		

7-day average CRCI patients in ICU (Adult)	589	% Pts in ICU who have CRCI		% vented pts who have CRCI	
	61	32.5% (Adult)		61.7% (Adult)	
	1	15.8% (Paediatric)		33.3% (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	195	33.1%	84.9%	105	↓	-3
Central	477	162	41.9%	81.1%	90	↓	-9
Toronto	464	89	25.3%	75.9%	112	↓	-3
East	574	132	28.9%	79.4%	118	↓	-19
North	134	36	34.3%	78.4%	29	↑	2

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.

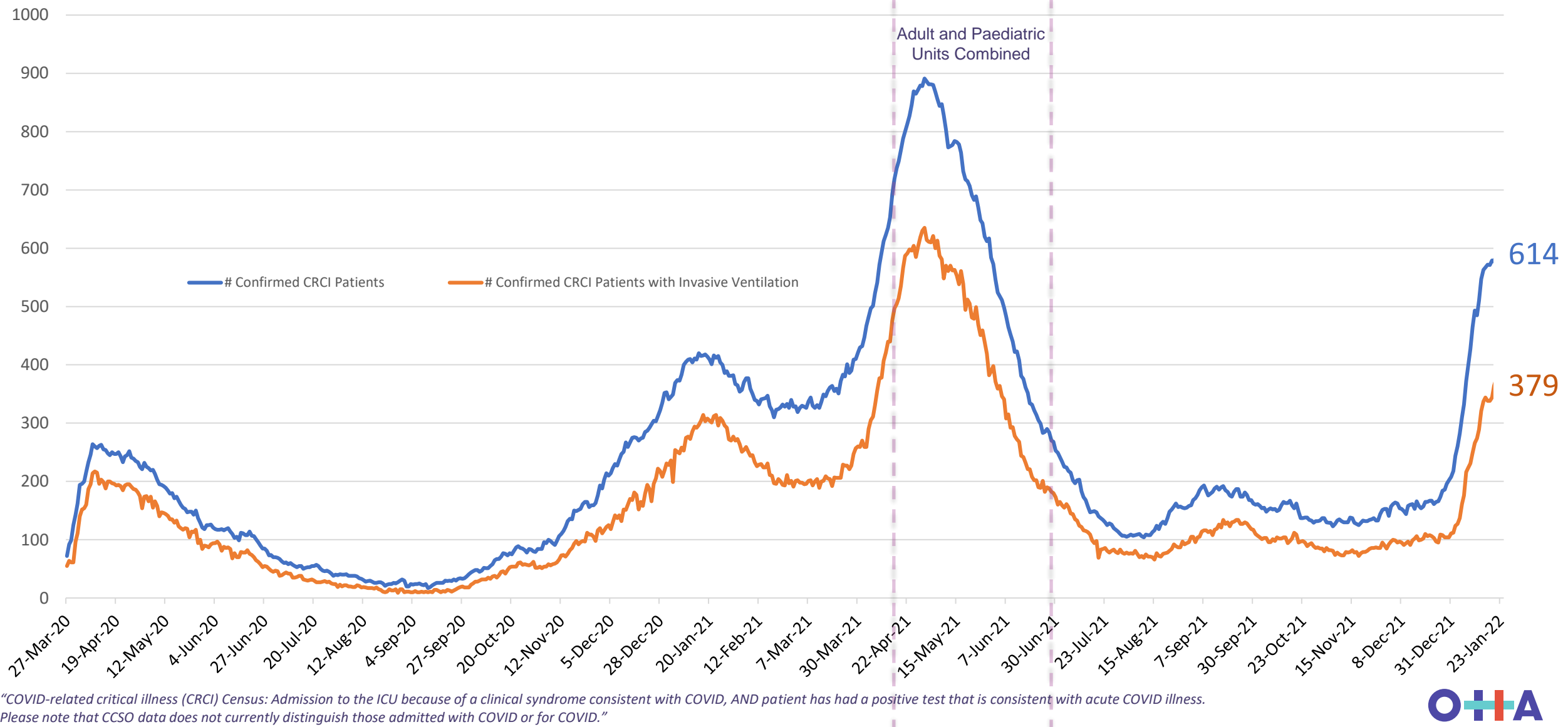
There were **9 paediatric CRCI cases, **3** vented. There were **2** neonatal CRCI cases.



Adult Critical Care Units COVID Related Critical Illness (CRCI) Patients

(Source: Critical Care Services Ontario)

(Data as of **January 24, 2022**)



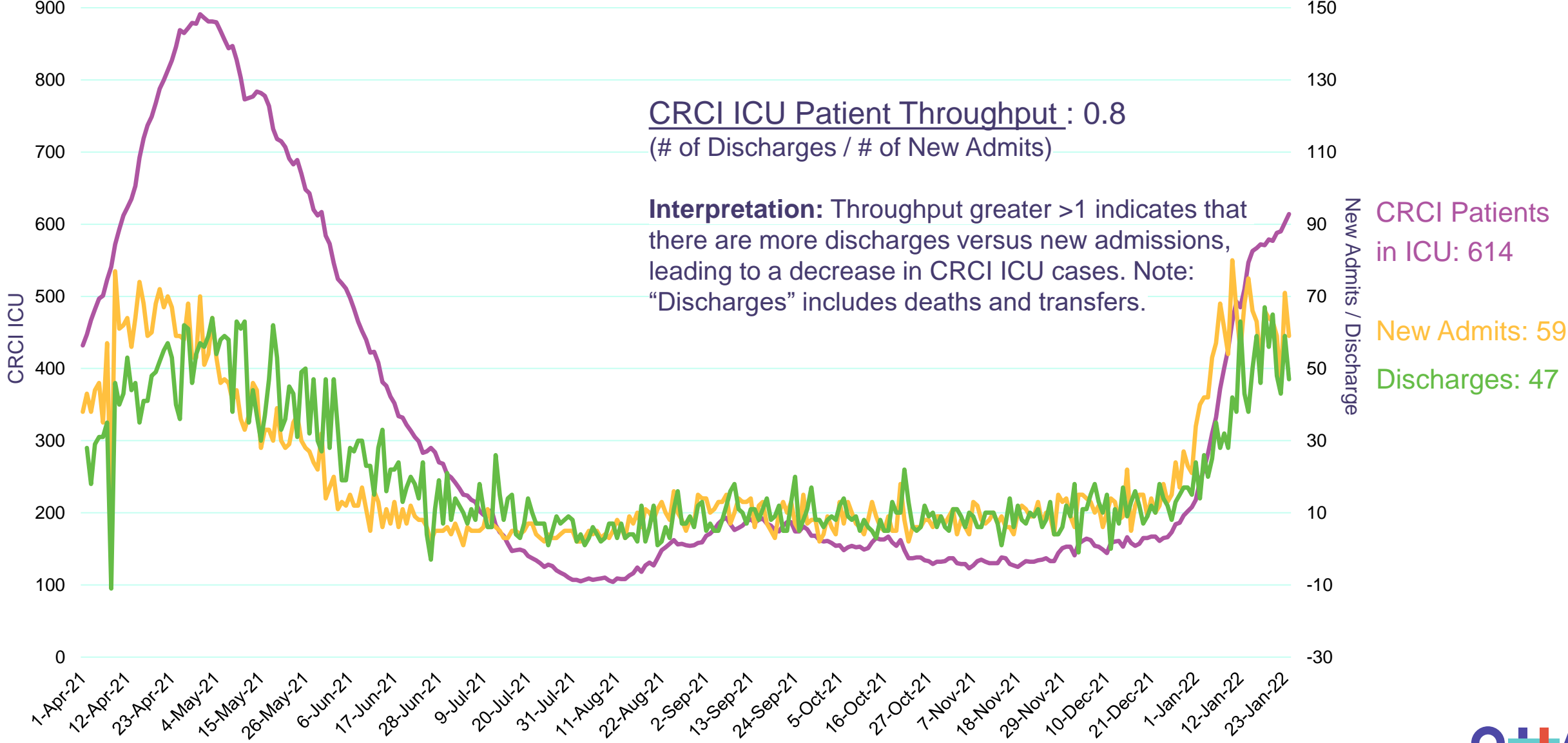
CRCI ICU Patient Throughput

(starting April 2021 onward)

(Data as of **January 24, 2022**)

Data source: Critical Care Information System

4

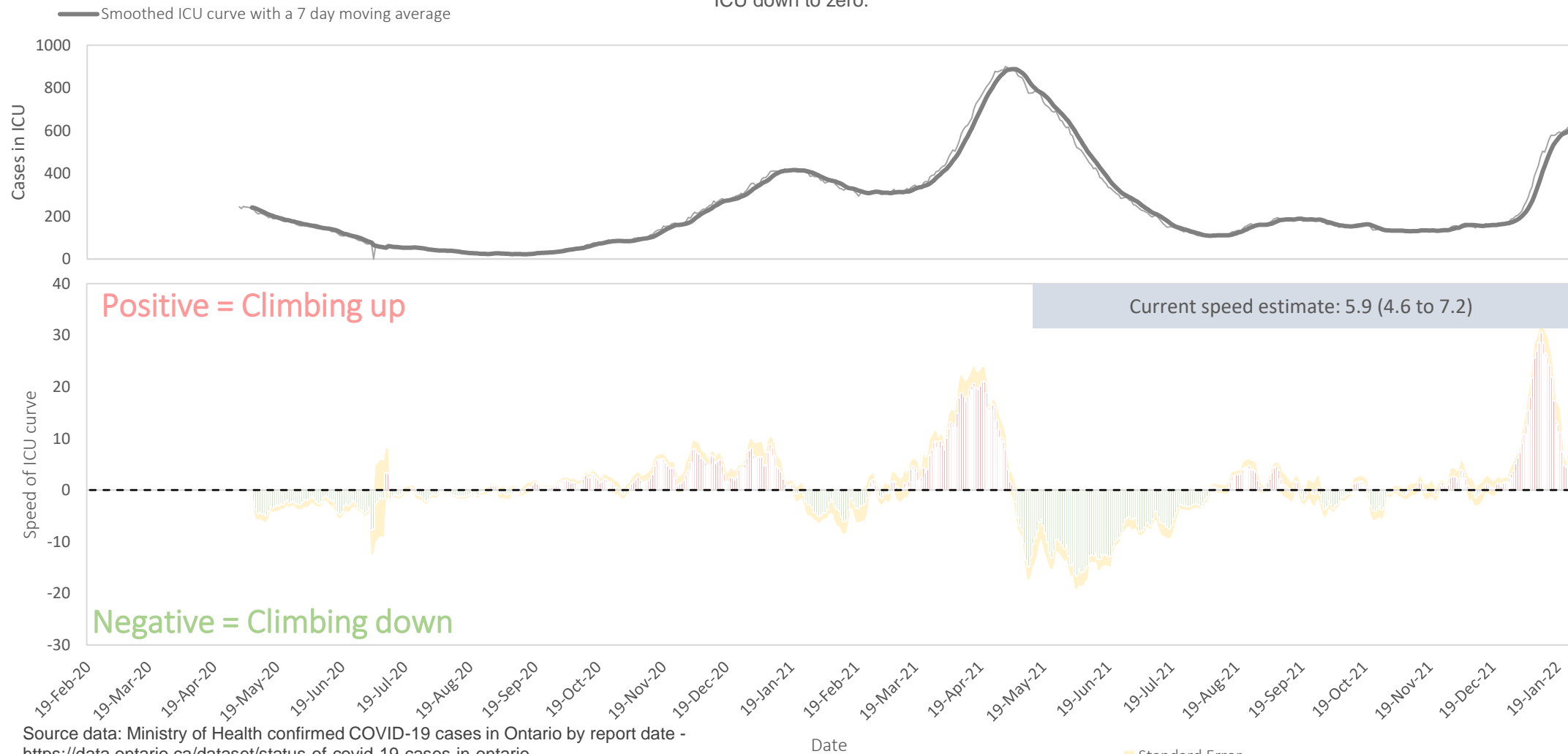


Technical Note: Patient Throughput based on [Ontario Health - CCO methodology](#)



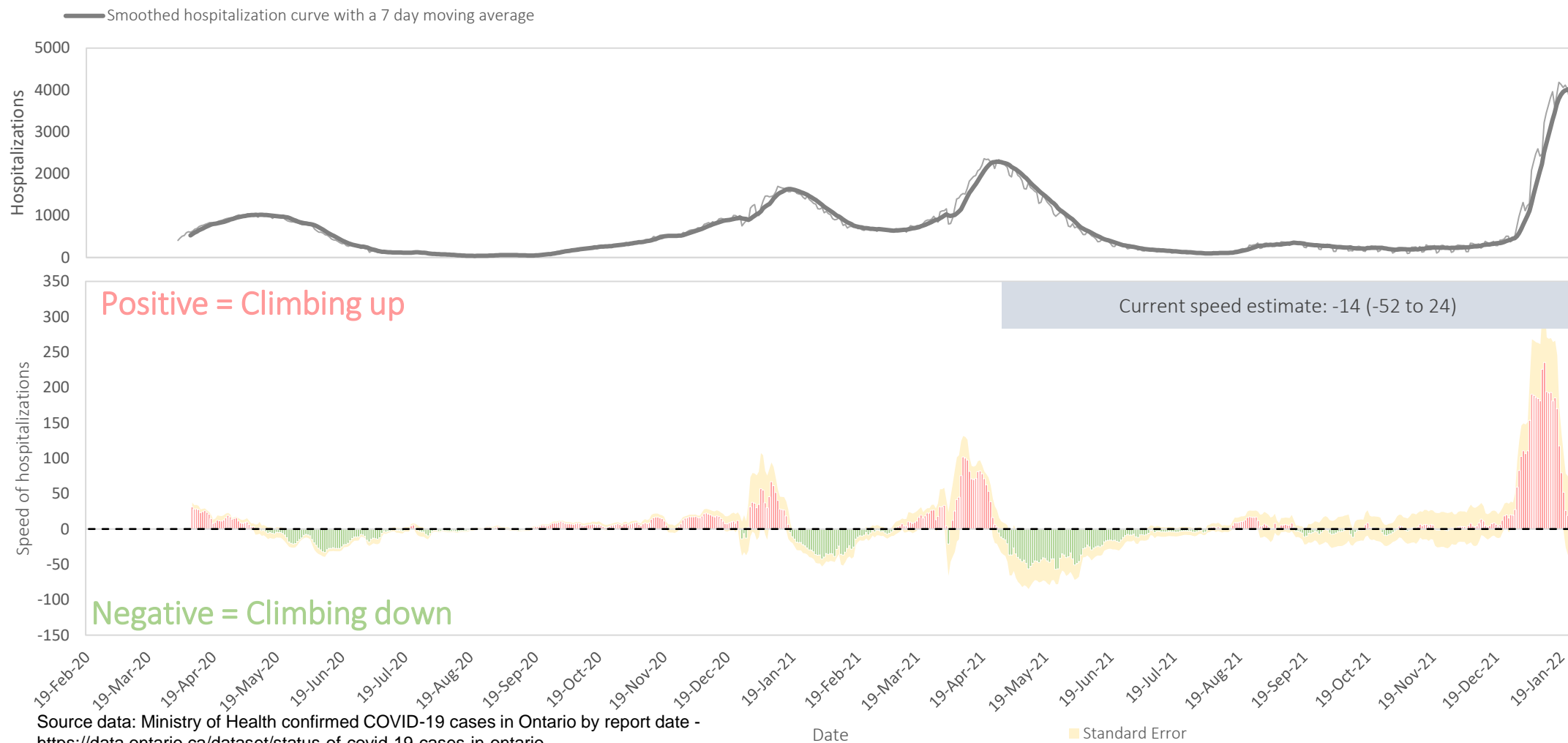
COVID-19 ICU curve and speed of ICU curve: as of **January 24, 2022** in Ontario

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.



COVID-19 hospitalizations curve and speed of hospitalizations: as of **January 24, 2022** in Ontario

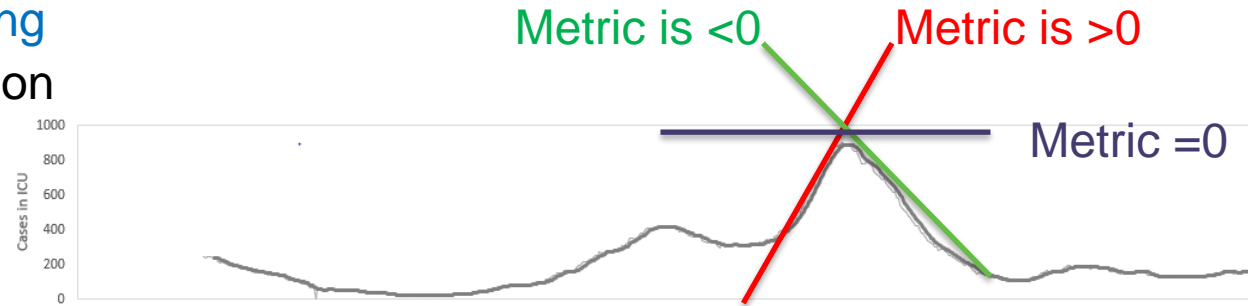
The speed of COVID-19 spread is measured as the slope of the hospitalization curve. When the **speed** > 0 , then the trend of hospitalizations is speeding up. When the **speed** < 0 , then trend of hospitalizations is slowing down. When **speed** $= 0$, then the hospitalizations have plateaued. The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

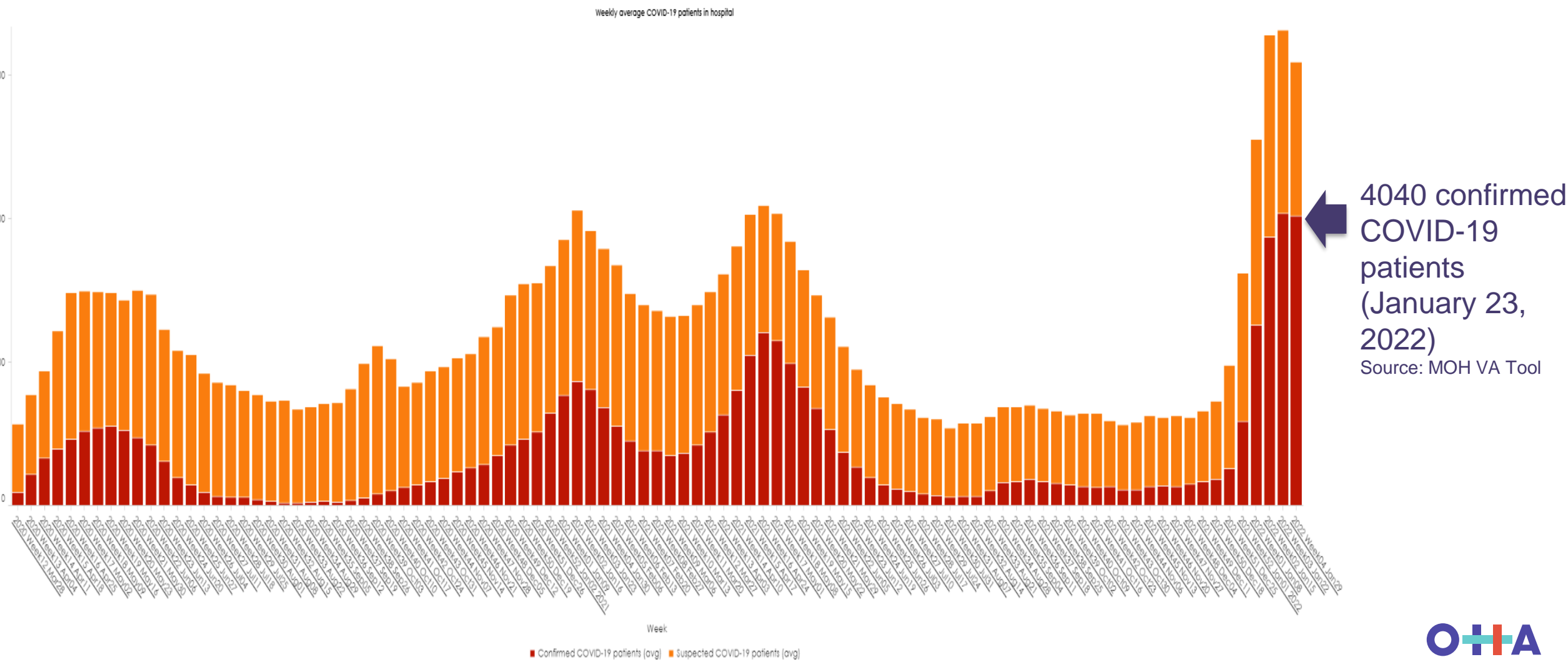
- The “speed signal” metric, developed by [Jonathan Wang](#) - [Twitter: @wanghoaneng in 2020](#), is a simple calculation method with intuitive explanatory power for rates and spread.
- The speed signal can be considered as the number of hospitalization or ICU cases per day that can be expected if the 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.



- 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

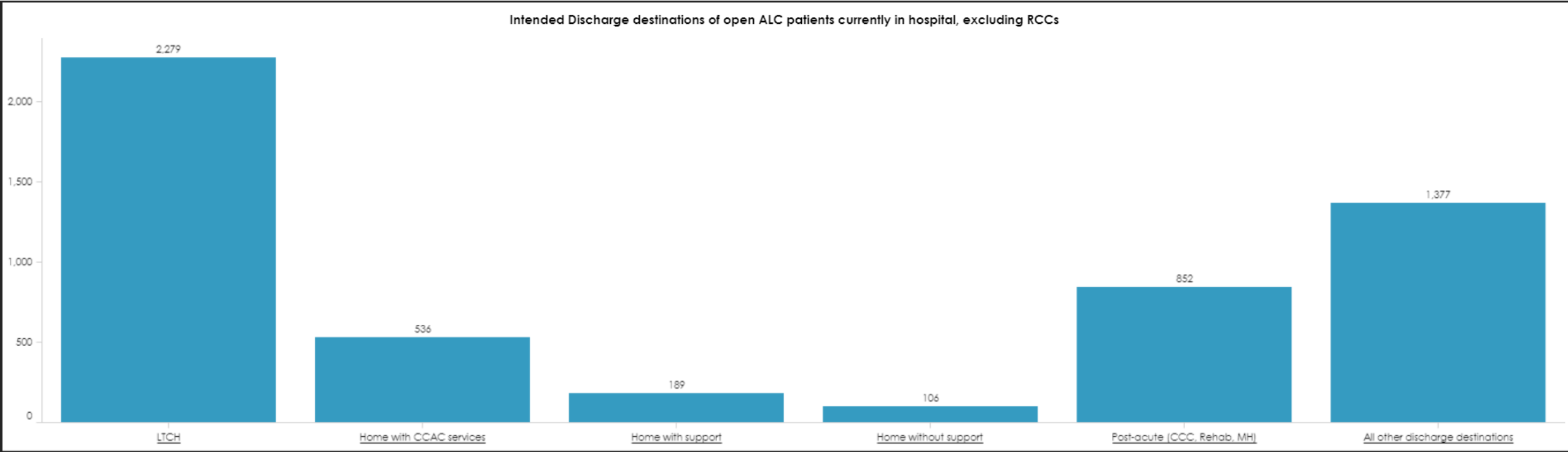
(Data as of **January 23, 2022**)



Hospital Occupancy (Data as of January 23, 2022)

All Beds (Total) 92.0% +/- from previous day 0.0 2,741 Available beds	Acute 95.0% +/- from previous day -0.0 1,077 Available beds	Post-acute 86.4% +/- from previous day 0.0 1,648 Available beds	5,339 ALC Open Cases Excludes RCCs	10.0% % waiting for homecare	42.7% % waiting for LTC
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As of January 23, there were **378** ALC patients in RCC beds, where 1 out of 2 intended to be discharged to LTCH.

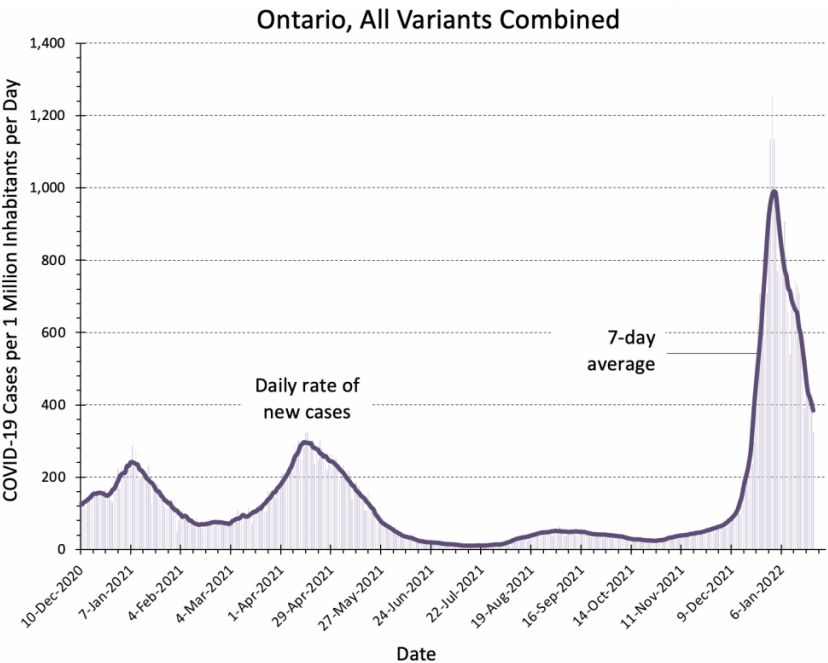


Highlights: COVID-19 Science Table Ontario Dashboard

Key Indicators for Ontario

Effective Reproduction Number R(t) Based on COVID-19 Cases	~*
Estimated Number of COVID-19 Cases per Day, on 24-Jan-2022	5,666
Change per Week	-3,085
Estimated Percentage Caused by Omicron	99.6%
Standardized Wastewater Signal, on 19-Jan-2022	1.09
Change per Week	-0.29
Halving Time (Days)	20.6
Test Positivity	17.6%
Change per Week	-4.7%
COVID-19 Hospital Occupancy, on 24-Jan-2022	4,050
Change per week	+79
Doubling Time (Days)	101.1
COVID-19 ICU Occupancy, on 24-Jan-2022	615
Change per Week	+37
Doubling Time (Days)	53.6
Estimated Number of COVID-19 Deaths per Day, on 21-Jan-2022	54
Change per Week	+18
COVID-19 Cases per 1 Million per Day, on 24-Jan-2022	384.5
Among Unvaccinated People	664.4
Among People Vaccinated with at Least 2 Doses	328.7
Reduction Associated with at Least 2 Vaccine Doses	-50.5%
COVID-19 Hospital Occupancy per 1 Million, on 24-Jan-2022	274.9
Among Unvaccinated People	1,115.2
Among People Vaccinated with at Least 2 Doses	202.6
Reduction Associated with at Least 2 Vaccine Doses	-81.8%
COVID-19 ICU Occupancy per 1 Million, on 24-Jan-2022	41.7
Among Unvaccinated People	281.7
Among People Vaccinated with at Least 2 Doses	23.0
Reduction Associated with at Least 2 Vaccine Doses	-91.8%
COVID-19 Vaccination in Ontario, on 23-Jan-2022	
Number of People Vaccinated With at Least 1 Dose	12,418,541
Change per Week	+53,952
Percent of People Aged 5+ Vaccinated With at Least 1 Dose	88.6%
Change per Week	+0.4%
Number of People Vaccinated With at Least 2 Doses	11,618,510
Change per Week	+70,139
Percent of People Aged 5+ Vaccinated With at Least 2 Doses	82.9%
Change per Week	+0.5%
Number of People Vaccinated With 3 Doses	6,041,636
Change per Week	+452,500
Percent of People Aged 18+ Vaccinated With 3 Doses	50.5%
Change per Week	+3.2%

Estimated Rate of COVID-19 Cases per 1 Million Inhabitants per Day in Ontario



Current COVID-19 Risk in Ontario by Vaccination Status

