CDPH
Chicago Department of Public Health

Protecting Chicago: Phase IV Re-Opening Metrics Update

August 15, 2020

(Data current through 8/12/2020)

Key findings for week ending 8/15

- Delays in test result reporting are likely causing artificial decreases in the most recent segment of the ‘recent trend’ for COVID-19 confirmed case trend lines even after 5-day censoring
- Citywide case incidence has increased by a factor of 1.7 in the last 47 days, but is currently in stable state. Latinx case growth is still the largest contributor to recent increases.
- Black, non-Latinx case incidence is persistently high and stable, but very slowly decreasing over the past month
- Latinx case incidence is persistently high. This is the only race/ethnicity group that is currently increasing. A prolonged three week growth streak of +3 cases per day appears to have ended.
- Case incidence among 18-29 year olds is persistently high and stable, continued very slow increases over 3 weeks
- Hospital admissions per case is 2X as high for Black, NLX relative to both Latinx and White, NLX.
- Hospital admissions have increased for the first time since March 2020, driven by increases in Black,NLX hospitalizations.
- % of ILI visits shows recent rapid increases; CLI is decreasing (not sure how useful at the citywide level.
- Percent positivity at 5.0% remains at the threshold for “Caution: Pause and Monitor” of the reopening gating metric.

CDPH COVID-19 Phase IV starting June 26 2020

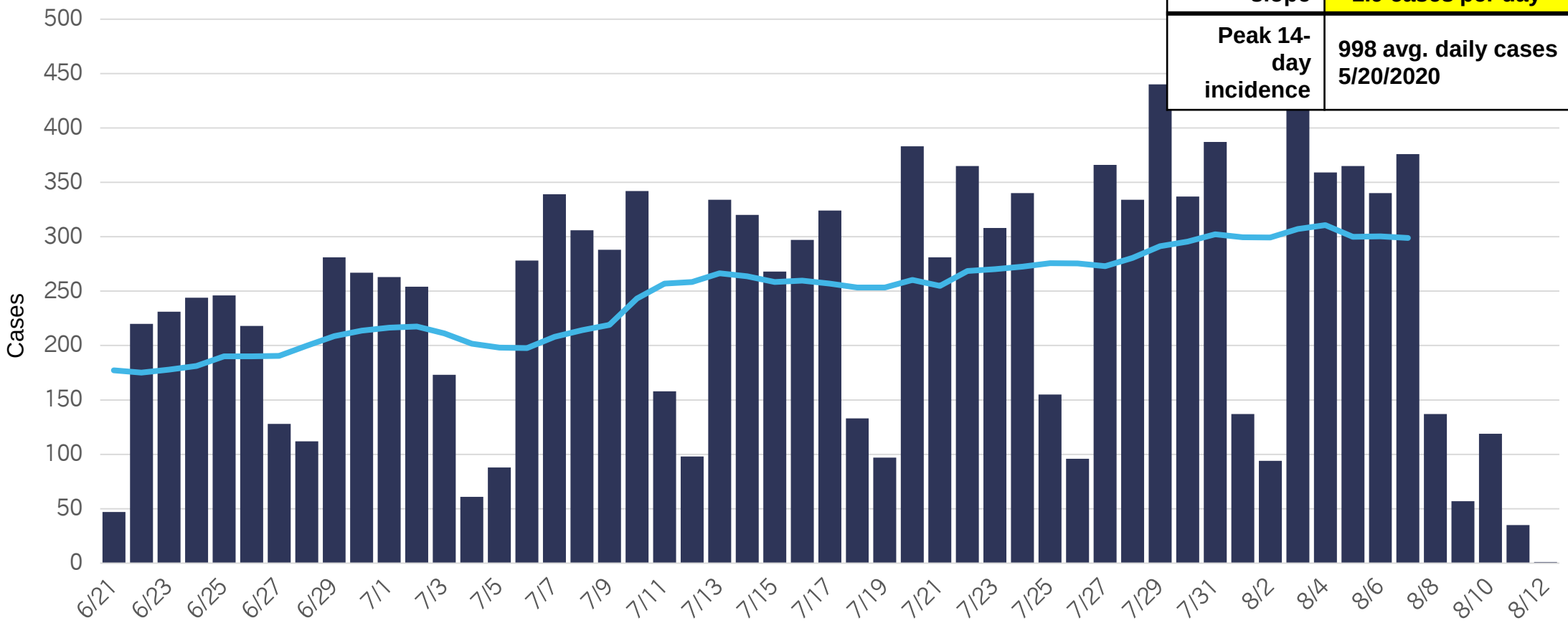
	Stop: May need to delay moving ahead	Caution: Pause and monitor	Go: Cautious progress	Go: Continued progress	Go: Advanced progress
Cases 7-day rolling daily average	Any sustained increase >14 days within the past 28 days	Increase 0-14 days (in most recent 14 -day period)	Stable or decrease 0-13 days (w/o increase in most recent 14-day period)	Stable or decrease 14-28 days	Stable or decrease >28 days and/or sustained <200 new cases per day (~100 cases per 100,000 persons)
Hospitalizations 7-day rolling daily average					
Deaths 7-day rolling daily average					
COVID Emergency department visits 7-day rolling daily average					
Positivity rate 7-day rolling daily average	>10%	5% - 10%	<5%	<5%	<5%
Hospital system capacity 7-day rolling daily average	>1280 non-ICU beds >480 ICU beds >360 ventilators	>1000 non-ICU beds >400 ICU beds >300 ventilators	<1000 non-ICU beds occupied by COVID patients <400 ICU beds occupied by COVID patients <300 ventilators occupied by COVID patients		
Testing capacity 7-day rolling daily average	Unexplained decline in testing <4500 total tests/day	Explained decline in testing <4500 total tests/day	Stable testing >4500 total tests/day		
Response capacity	N/A	N/A	Initiate case investigation within 24h of assignment for 50% of cases 75% of cases 90% of cases		

COVID-19 Confirmed Cases

COVID-19 case incidence in Chicago is persistently high and stable, with a recent 16 day slow increase.

Recent Trend	Increase 2 days (7/9-7/11) 19 C/D Stable 8 days (7/11-7/19) Increase 16 days (7/19-8/4) 4 C/D Stable 3 days (8/4-8/7)
14-day Incidence	HIGH (301 avg. daily cases*)
14-day slope	STABLE +1.9 cases per day
Peak 14-day incidence	998 avg. daily cases 5/20/2020

COVID-19 cases, daily counts and rolling 7-day average, specimen

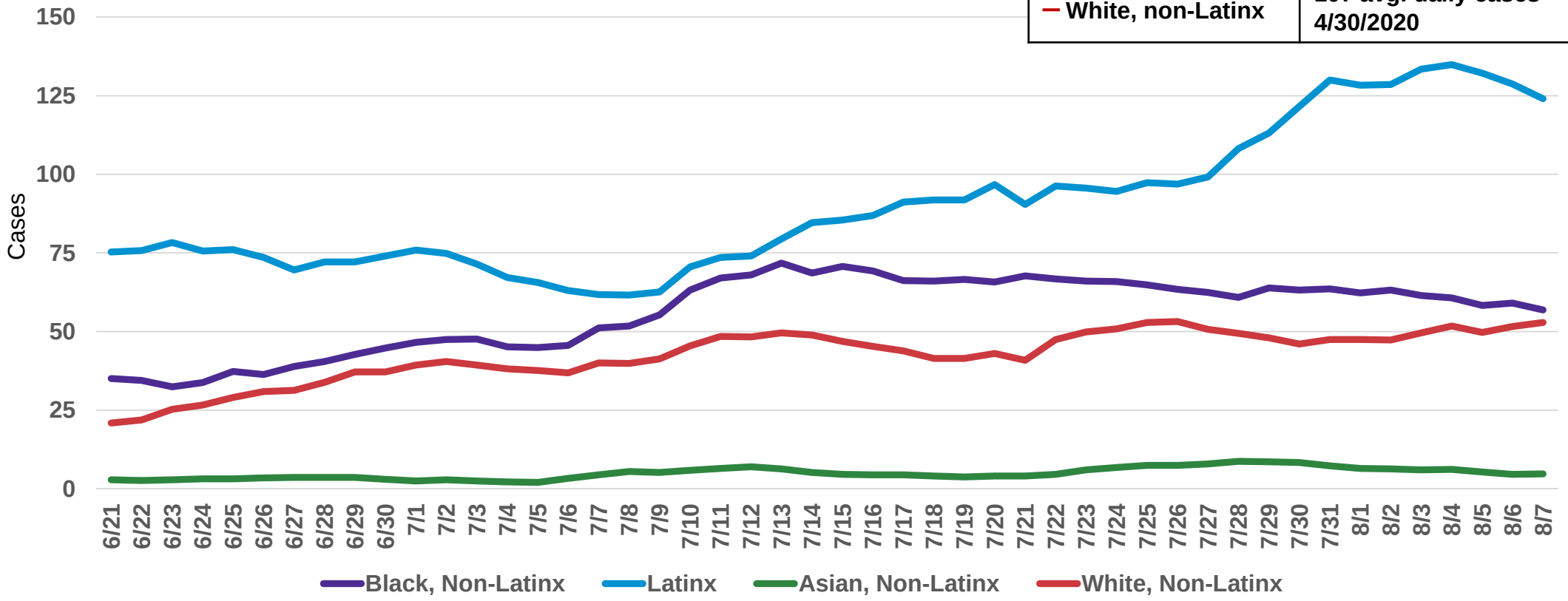


Daily COVID-19 cases with known specimen report date. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as. LOW (1-10); MODERATELY LOW (11-25); MODERATE (11-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category. Daily counts for most recent dates displayed are likely incomplete.

COVID-19 case incidence is more than double among Latinx compared to other race/ethnicities.

Peak 14-day Incidence	
Latinx	429 avg. daily cases 5/6/2020
Black, non-Latinx	204 avg. daily cases 4/24/2020
Asian, non-Latinx	21 avg. daily cases 4/26/2020
White, non-Latinx	107 avg. daily cases 4/30/2020

COVID-19 cases among Chicago residents by race/ethnicity, rolling 7-day average, specimen collection date

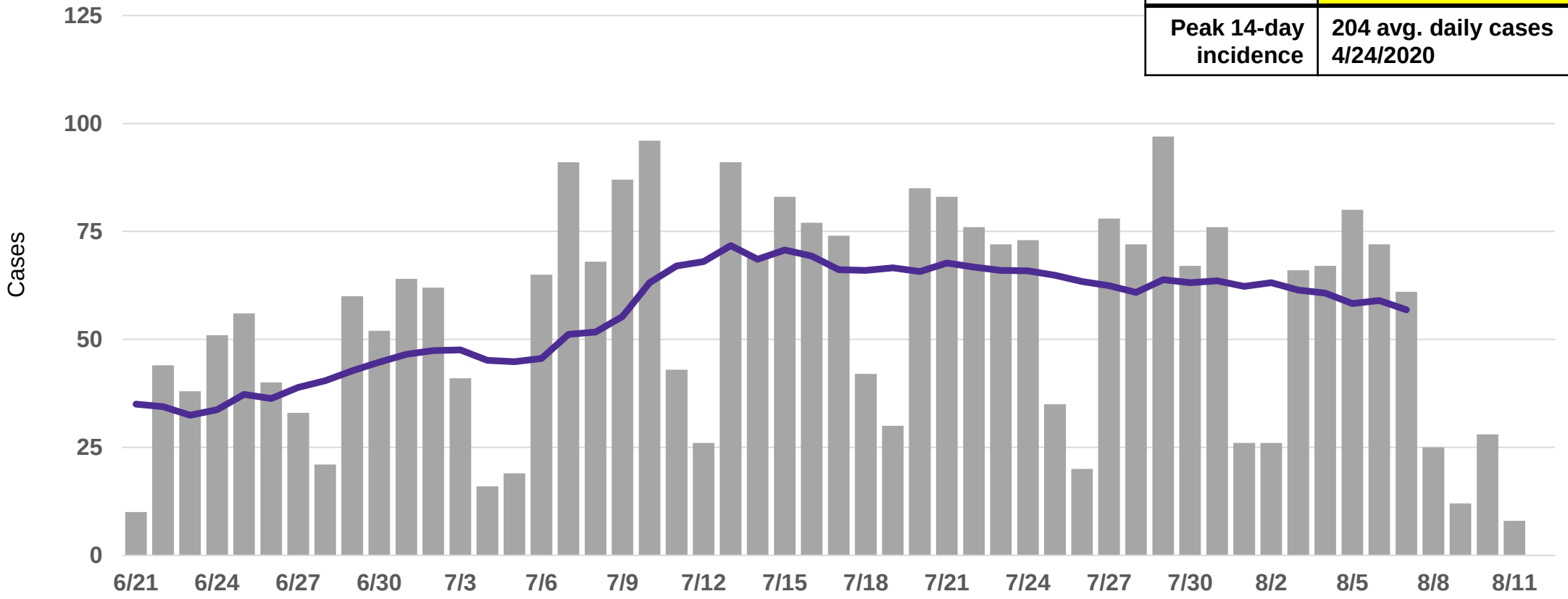


Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence.

Black, non-Latinx case incidence is high and stable, with a recent 26 day slow decrease.

Recent Trend	Increase 3 days (7/9-7/12) 4 C/D Decrease 26 days (7/12-8/7)
14-day incidence	HIGH (60 avg. daily cases*)
14-day slope	STABLE -0.6 cases per day
Peak 14-day incidence	204 avg. daily cases 4/24/2020

COVID-19 cases among Black, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date

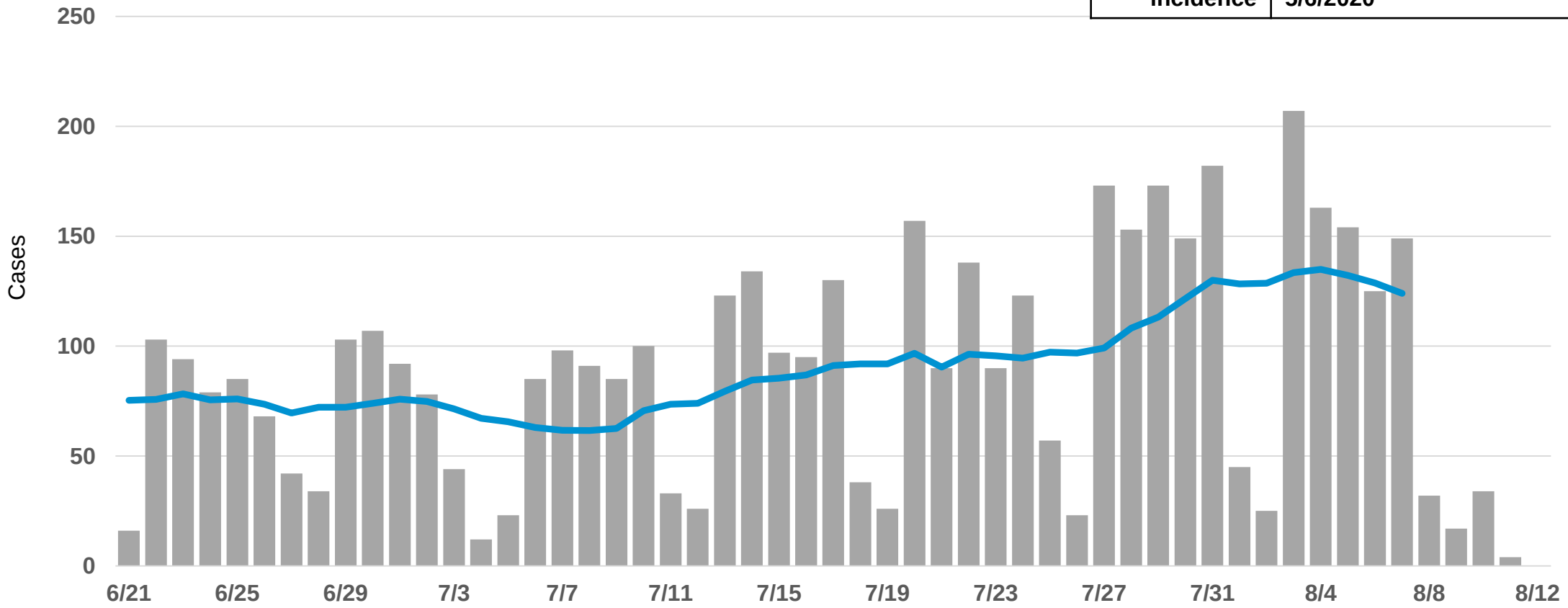


Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates displayed are likely incomplete. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as follows. LOW (1-10); MODERATELY LOW (11-25); MODERATE (26-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category.

Latinx case incidence is high and growing. Cases have been stable for most recent 7 days after a slow 22 day increase.

Recent Trend	Increase 22 days (7/9-7/31) 3 C/D Stable 7 days (7/31-8/7)
14-day incidence	HIGH (127 avg. daily cases*)
14-day slope	GROWTH +1.9 cases per day
Peak 14-day incidence	429 avg. daily cases 5/6/2020

COVID-19 cases among Latinx residents, daily counts and rolling 7-day average, specimen collection date

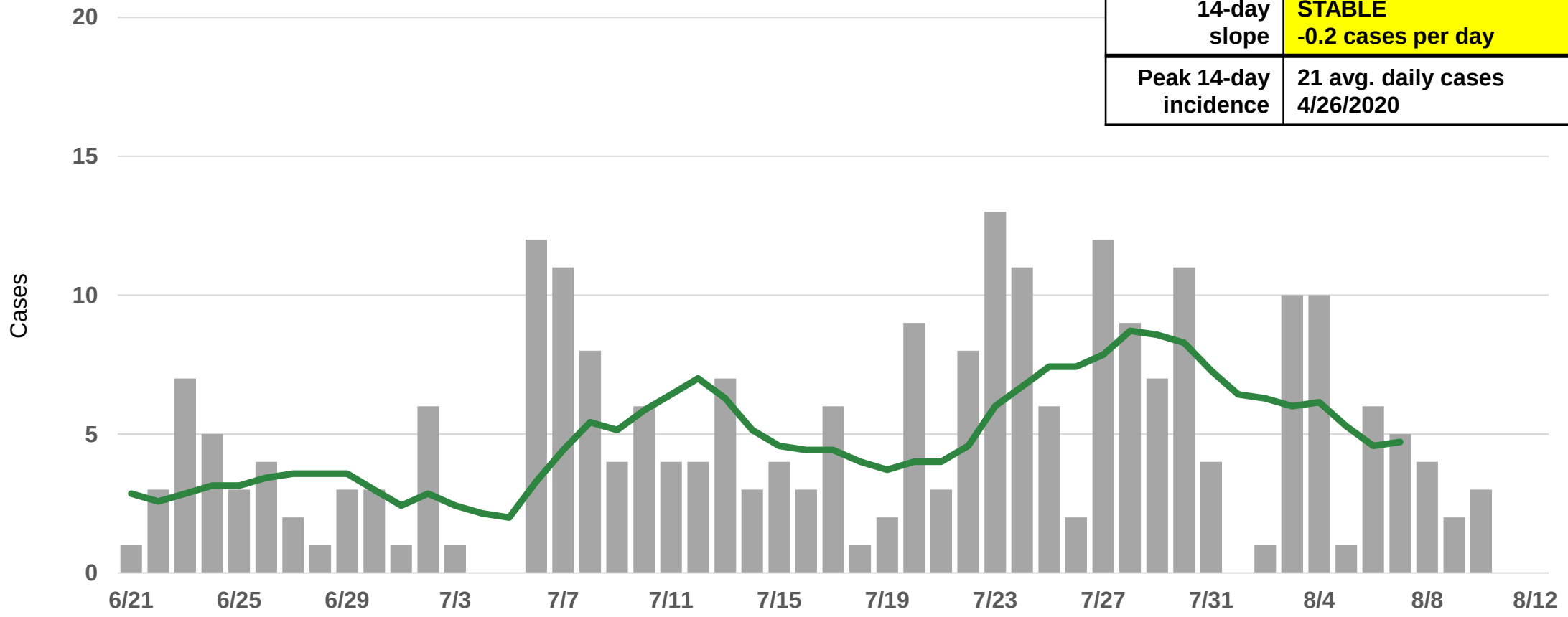


Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates displayed are likely incomplete. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as follows. LOW (1-10); MODERATELY LOW (11-25); MODERATE (26-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category.

Asian, non-Latinx case incidence is moderately high and stable with a recent 9 day decrease

Recent Trend	Increase 3 days (7/9-7/12) 1 C/D Decrease 9 days (7/12-7/21) Increase 8 days (7/21-7/29) 1 C/D Decrease 9 days (7/29-8/7)
14-day incidence	MODERATE (6 avg. daily cases*)
14-day slope	STABLE -0.2 cases per day
Peak 14-day incidence	21 avg. daily cases 4/26/2020

COVID-19 cases among Asian, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date

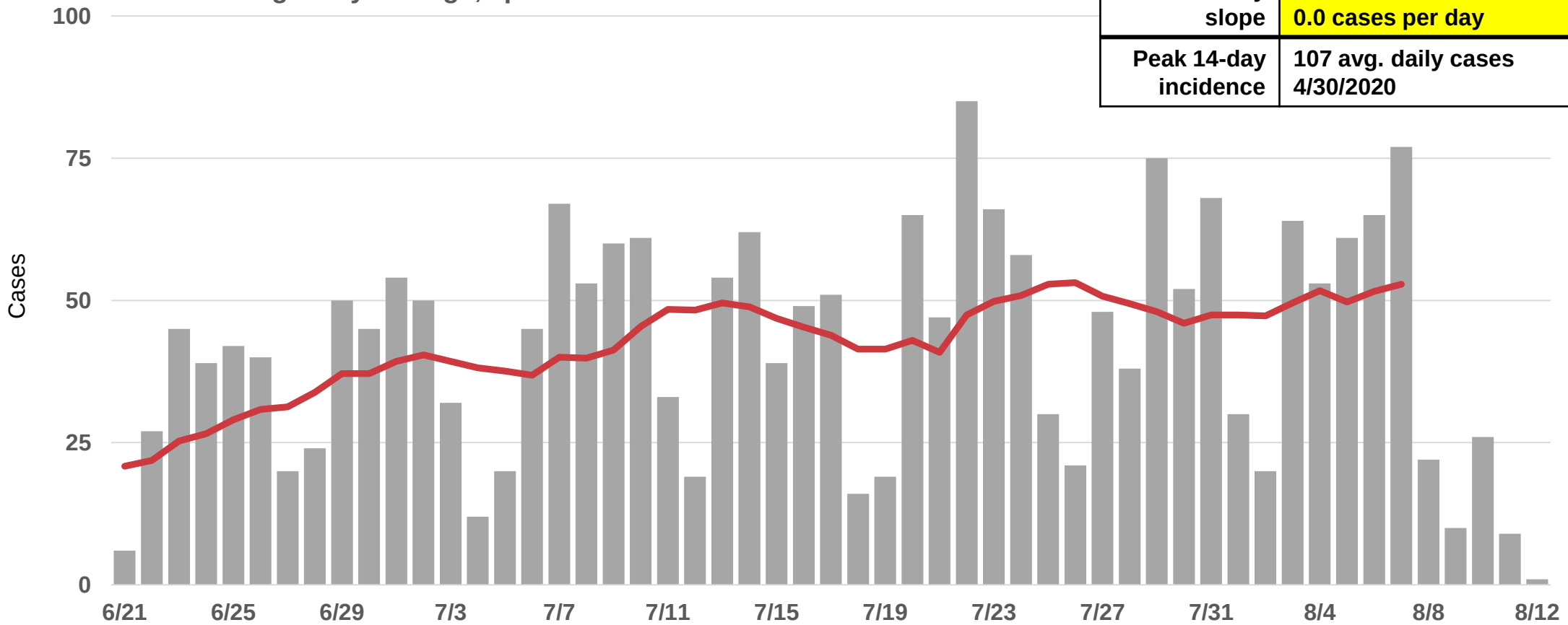


Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates displayed are likely incomplete. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as follows. LOW (1-10); MODERATELY LOW (11-25); MODERATE (26-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category.

White, non-Latinx case incidence is moderately high and stable, with a current 8 day increase.

Recent Trend	Increase 4 days (7/9-7/13) 2 C/D Decrease 6 days (7/13-7/19) Increase 6 days (7/19-7/25) 2 C/D Decrease 5 days (7/25-7/30) Increase 8 days (7/30-8/7) 1 C/D
14-day incidence	MODERATELY HIGH (50 avg. daily cases*)
14-day slope	STABLE 0.0 cases per day
Peak 14-day incidence	107 avg. daily cases 4/30/2020

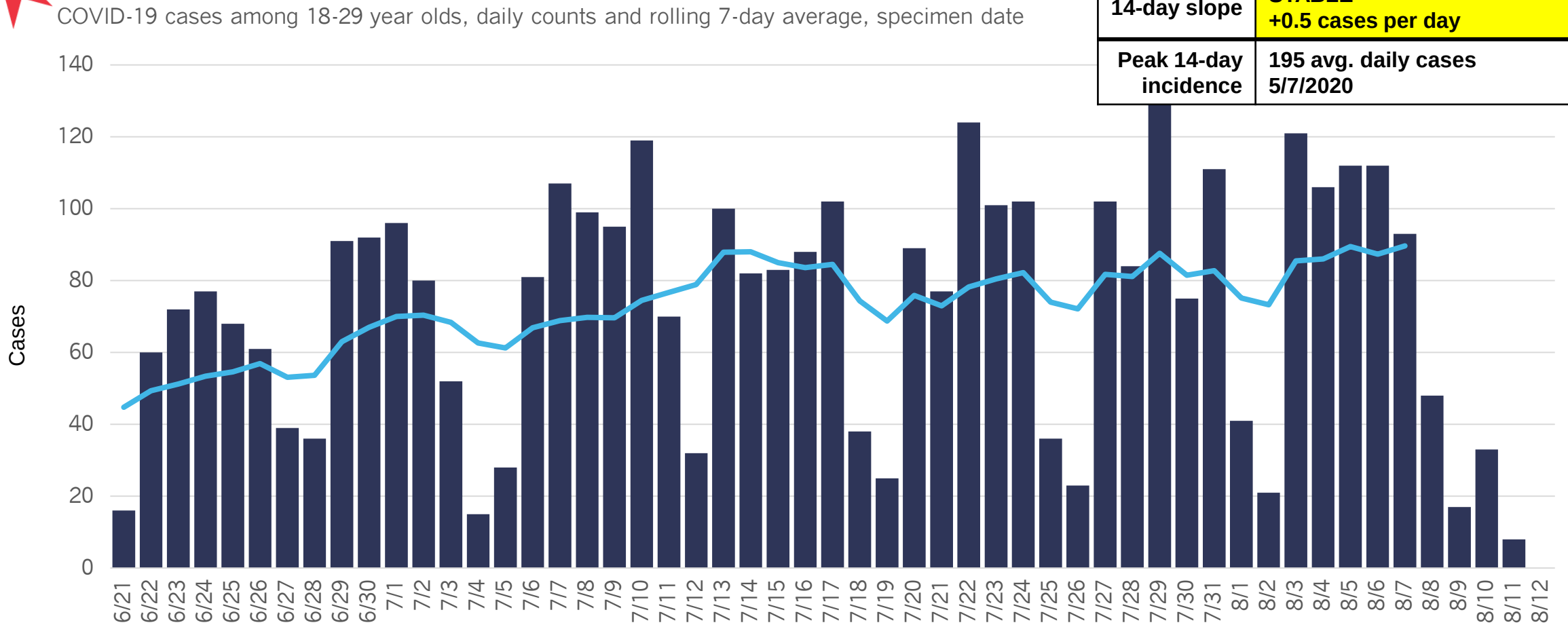
COVID-19 cases among white, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date



Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates displayed are likely incomplete. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as follows. LOW (1-10); MODERATELY LOW (11-25); MODERATE (26-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category.

18-29 year old case incidence is high and stable with recent slow 19 day increase.

Recent Trend	Increase 5 days (7/9-7/14) 4 C/D Decrease 5 days (7/14-7/19) Increase 19 days (7/19-8/7) 1 C/D
14-day Incidence	HIGH (91 avg. daily cases*)
14-day slope	STABLE +0.5 cases per day
Peak 14-day incidence	195 avg. daily cases 5/7/2020

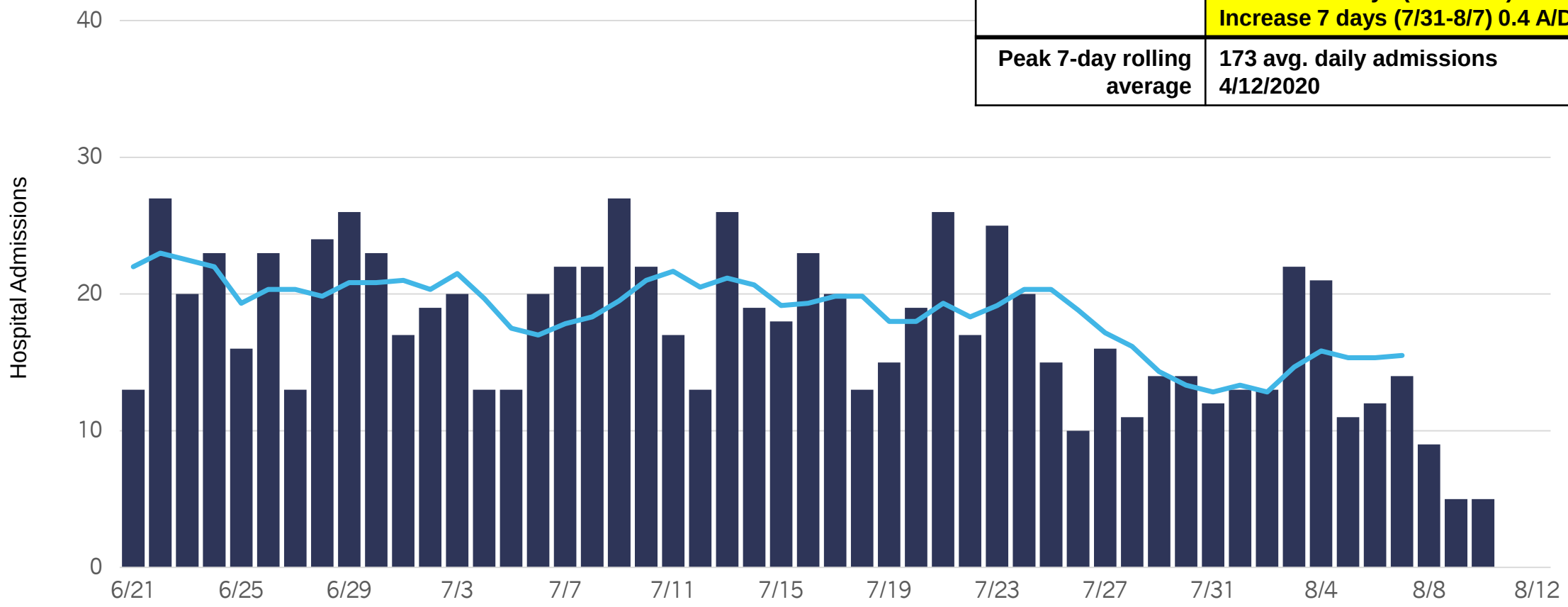


Daily COVID-19 cases with known specimen report date and race/ethnicity information. Daily counts for most recent dates displayed are likely incomplete. *14-day incidence is calculated by summing all new cases in the most recent 14-day period and dividing by 14 days to find an average daily count. Incidence gating rank is determined using 14-day cumulative incidence/100,000 population. The gating rank categories are defined as follows. LOW (1-10); MODERATELY LOW (11-25); MODERATE (26-50); MODERATELY HIGH (51-99); HIGH (100+) and presented as corresponding daily counts color-coded to gating category.

COVID-19 Severe Outcomes

Daily COVID-19 hospital admissions have been increasing slowly for 7 days.

Recent Trend	**Decrease 13 days (7/9-7/22) Stable 3 days (7/22-7/25) Decrease 6 days (7/25-7/31) Increase 7 days (7/31-8/7) 0.4 A/D**
Peak 7-day rolling average	**173 avg. daily admissions 4/12/2020**

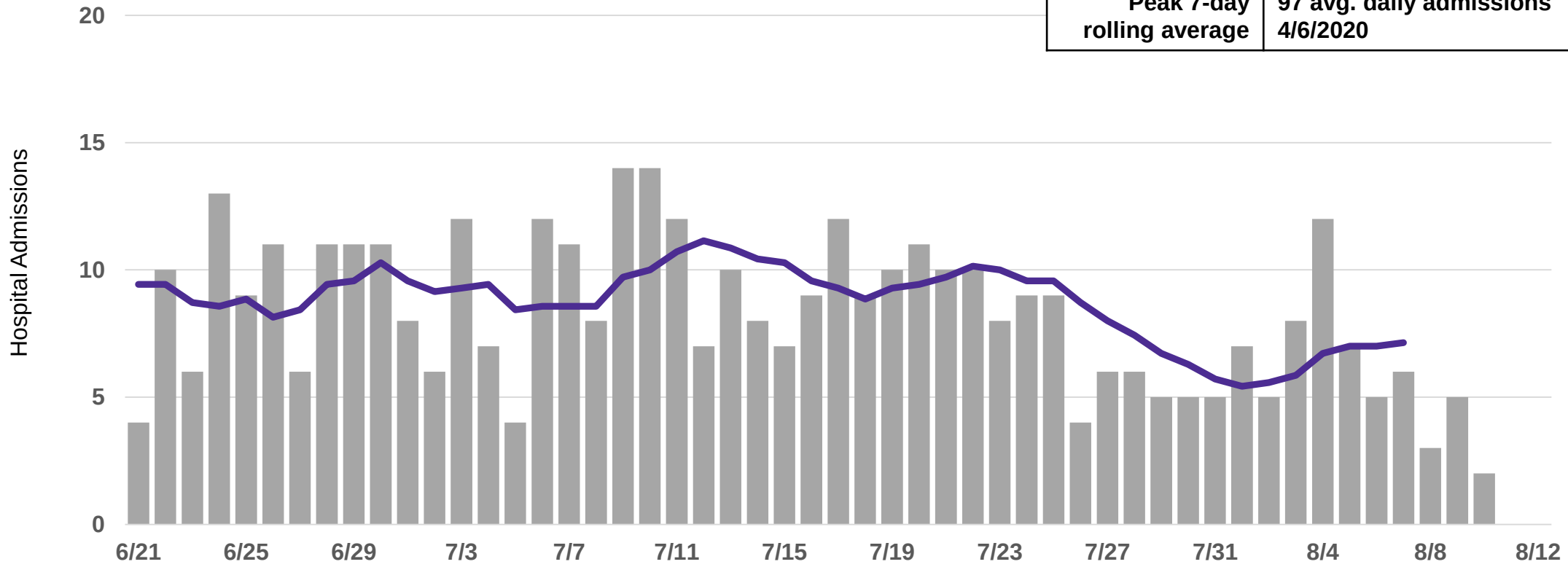


Hospitalizations are reported to CDPH by hospitals into I-NEDSS and ESSENCE and self-reported by patients via an online survey. Daily counts for most recent dates displayed are likely incomplete. Cases who are not indicated to have been hospitalized across any of the three data sources are assumed to not have been hospitalized. Six records with hospital admit dates from January and February 2020 are excluded from this chart. Peak daily admissions based on rolling 7-day average.

Black, non-Latinx hospital admissions have been increasing slowly for 6 days

Recent Trend	Decrease 9 days (7/9-7/18) Stable 7 days (7/18-7/25) Decrease 7 days (7/25-8/1) Increase 6 days (8/1-8/7) 0.3 A/D
Peak 7-day rolling average	97 avg. daily admissions 4/6/2020

COVID-19 hospital admissions among Black, non-Latinx residents, daily counts and rolling 7-day average, first known hospital admit date



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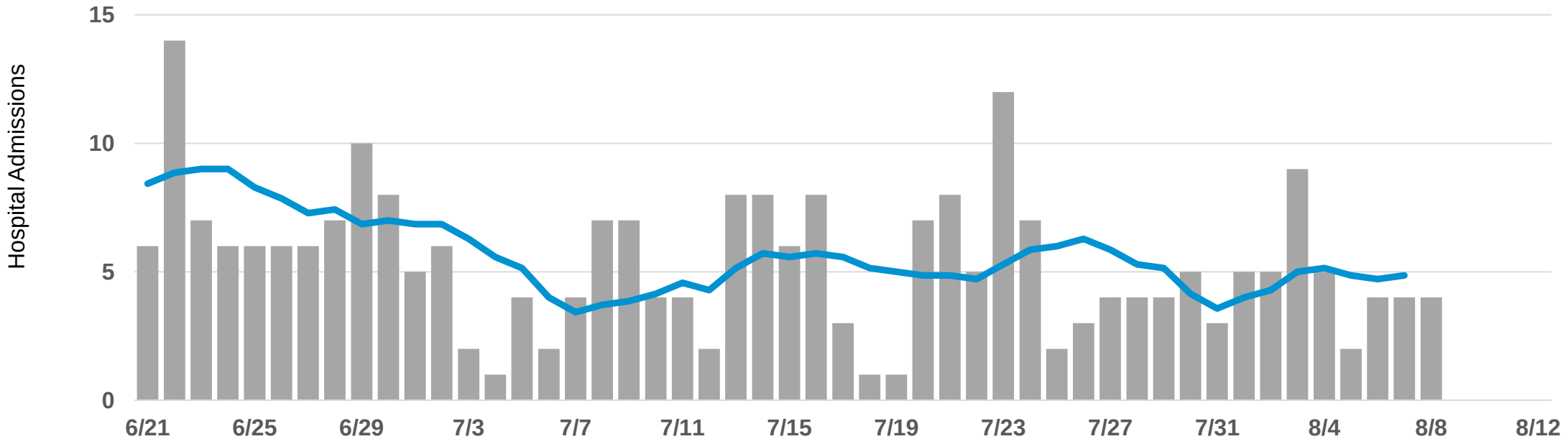
Latinx hospital admissions at low incidence for >28 days.

COVID-19 hospital admissions among Latinx residents, daily counts and rolling 7-day average, first known hospital admit date

Recent Trend	At or below 6 avg. daily admissions for 30 days
Peak 7-day rolling average	57 avg. daily admissions 4/28/2020



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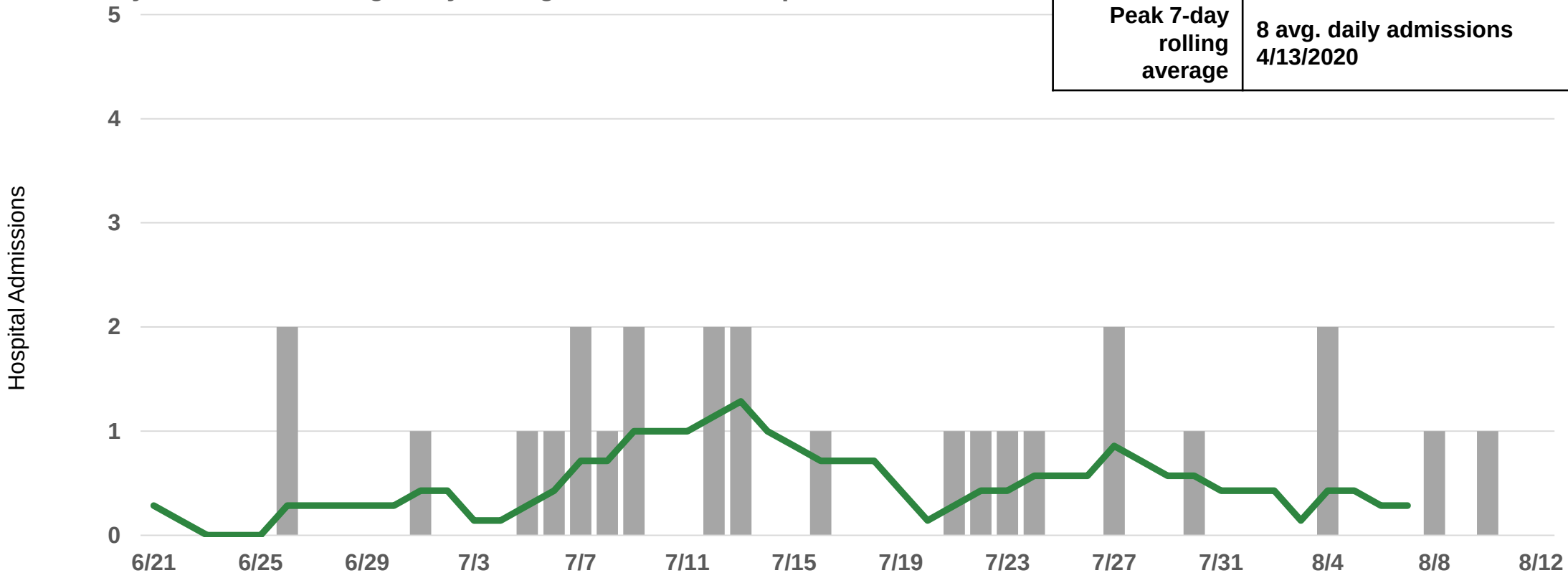
Asian non-Latinx hospital admissions at near-zero incidence for >28 days.

COVID-19 hospital admissions among Asian, non-Latinx residents, daily counts and rolling 7-day average, first known hospital admit date

Recent Trend	At or below 1 avg. daily admissions for 30 days
Peak 7-day rolling average	8 avg. daily admissions 4/13/2020



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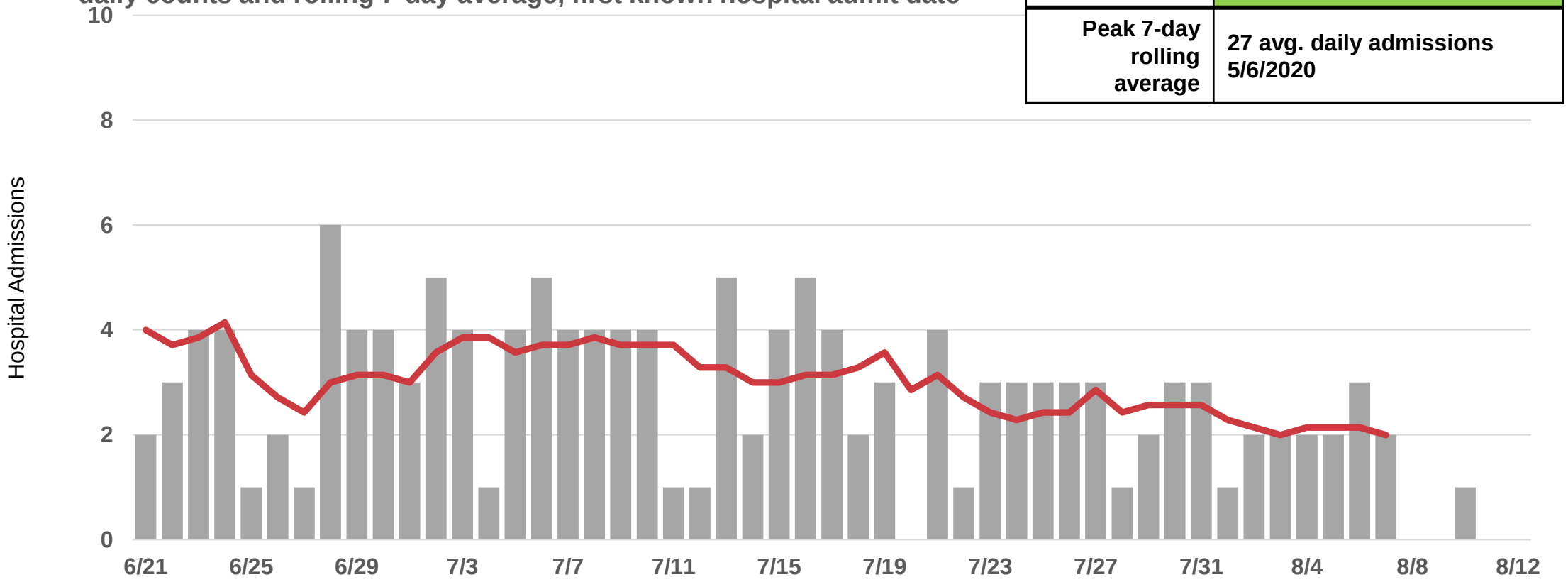
White, non-Latinx hospital admissions at low incidence for >28 days.

COVID-19 hospital admissions among white, non-Latinx residents, daily counts and rolling 7-day average, first known hospital admit date

Recent Trend	Below 5 avg. daily admissions for 30 days
Peak 7-day rolling average	27 avg. daily admissions 5/6/2020



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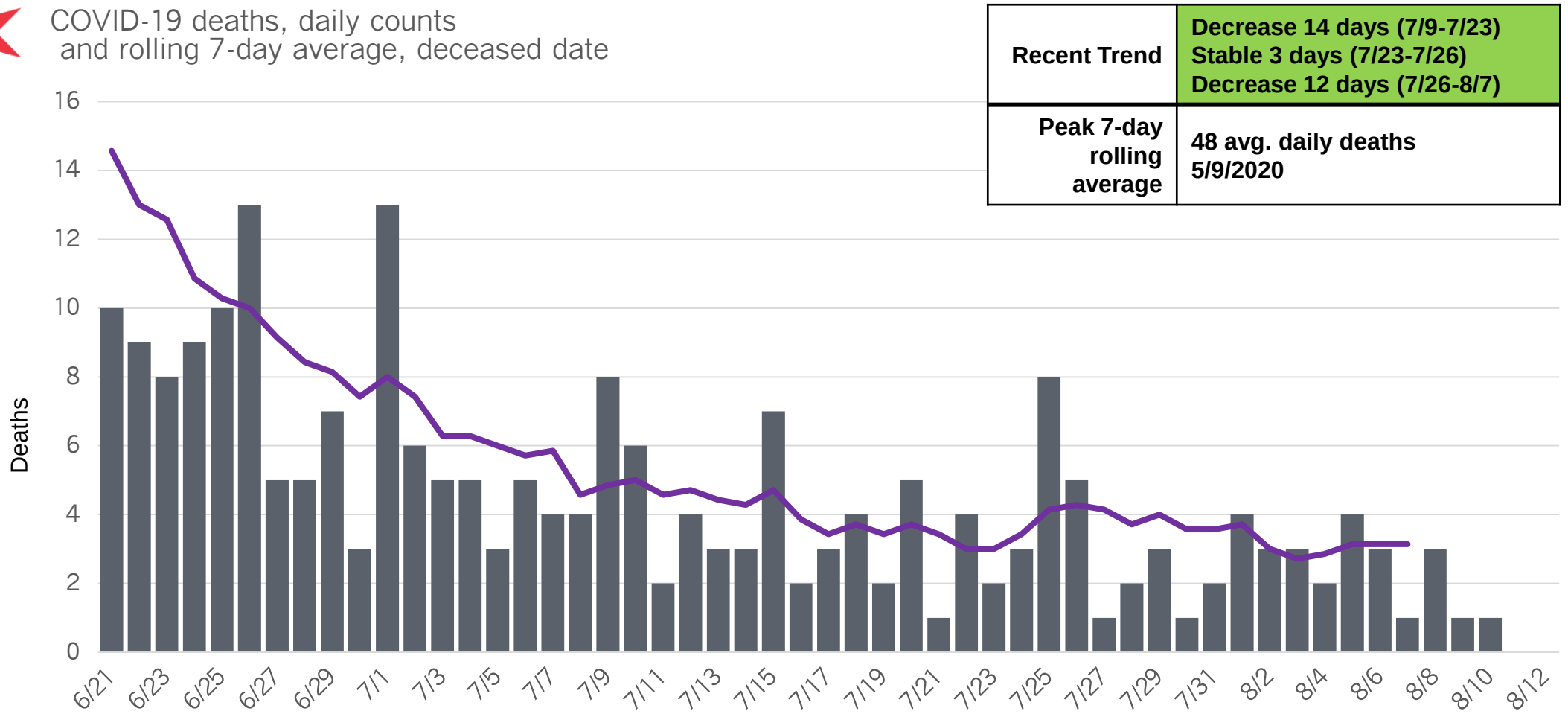
COVID-19 deaths are decreasing or stable for >28 days with decreasing trend for most recent 12 days.

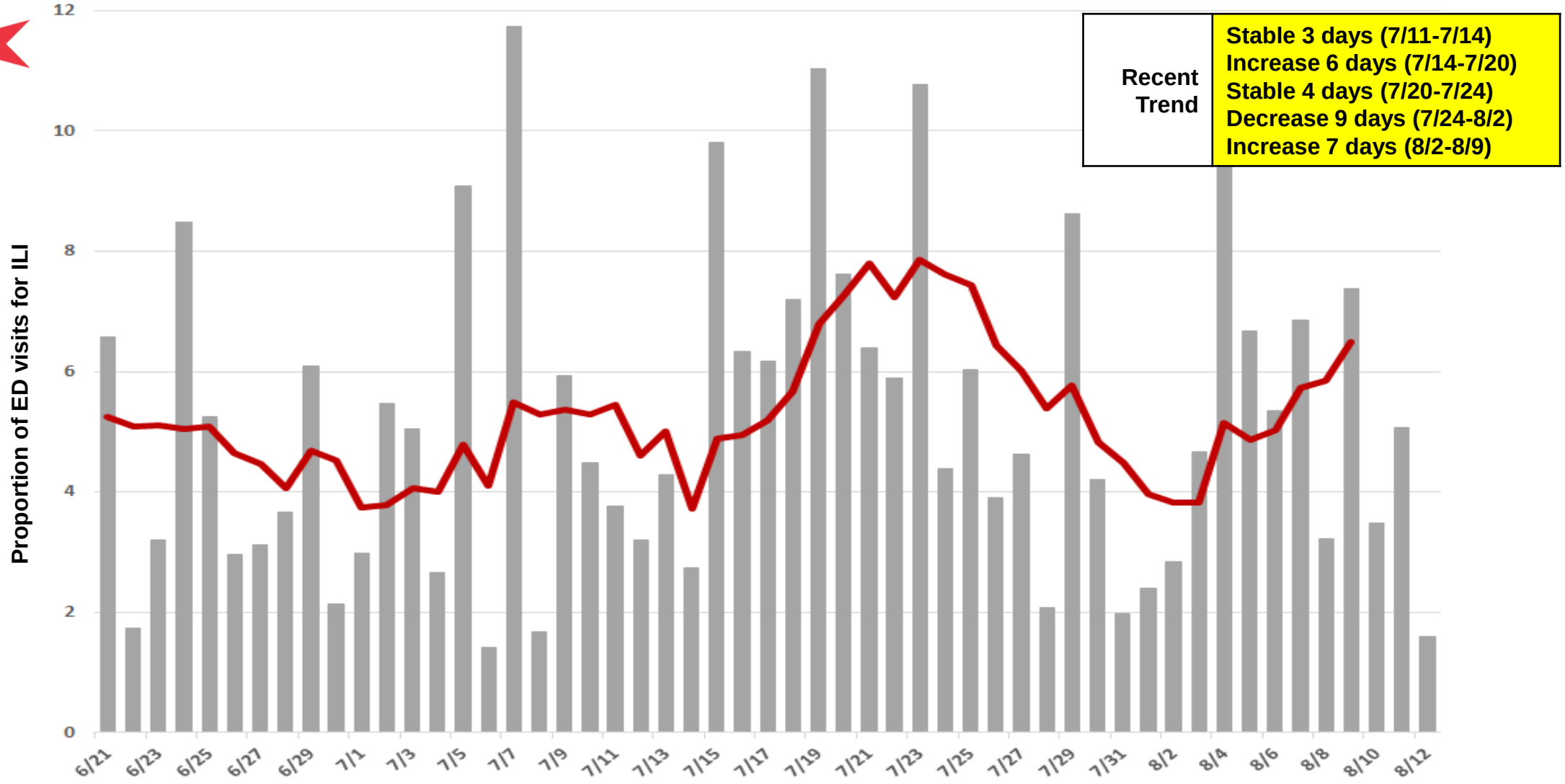


Recent Trend	**Decrease 14 days (7/9-7/23) Stable 3 days (7/23-7/26) Decrease 12 days (7/26-8/7)**
Peak 7-day rolling average	**48 avg. daily deaths 5/9/2020**

Daily COVID-19 deaths reported for Chicago residents with known death date. Data source: INEDSS. Daily counts for most recent dates displayed are likely incomplete.

Emergency Department Visits

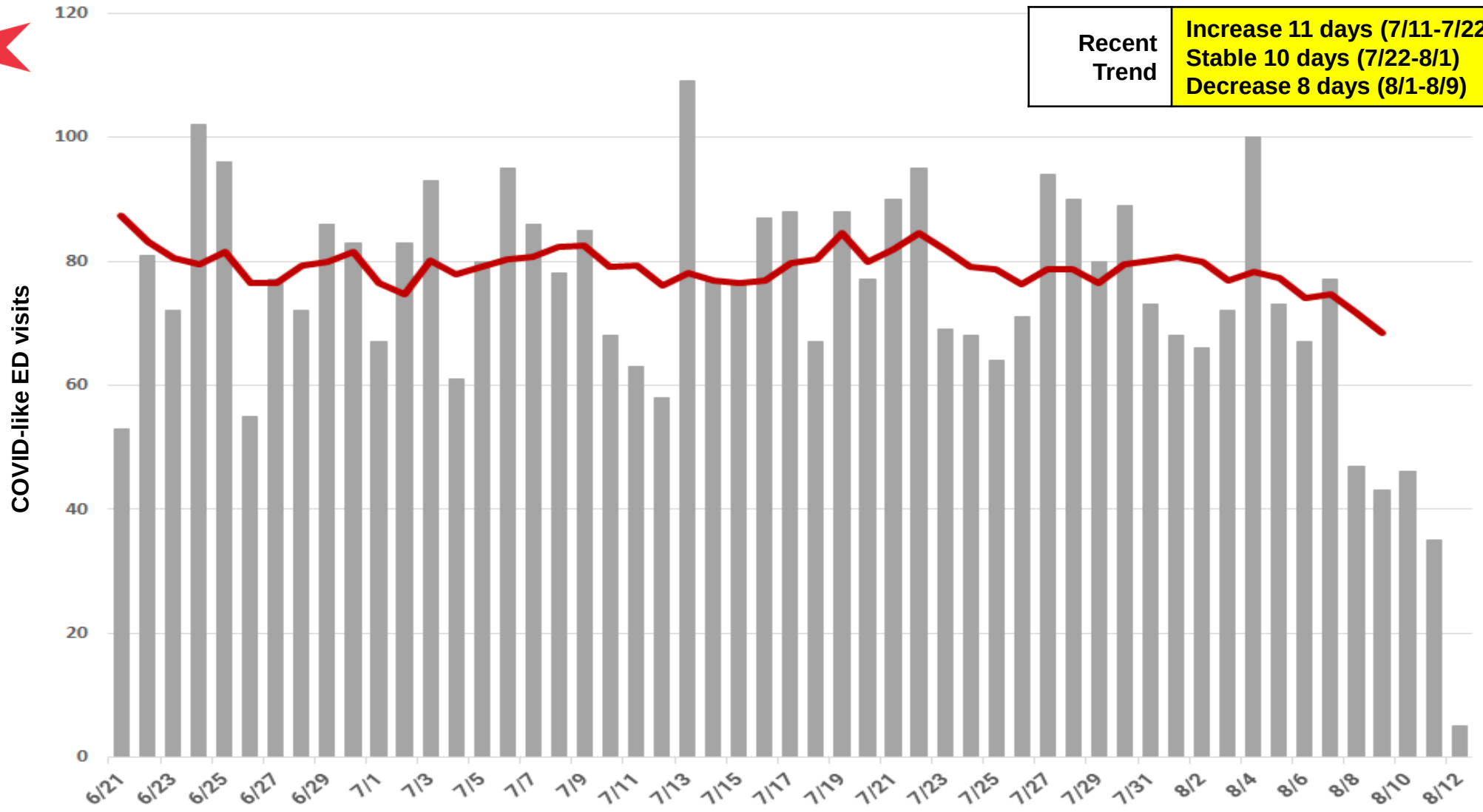
Proportion of ED visits for influenza-like illnesses has been increasing for 7 days after a recent decrease in late-July



ILI: Influenza-like illness. Percentage of all emergency department visits reported with influenza-like illness symptoms among Chicago residents.
Data Source: Illinois Hospital Emergency Departments reporting to CDPH through the National Syndromic Surveillance Project.

ED visits for COVID-like illness are stable and decreasing for 18 days after a recent increase

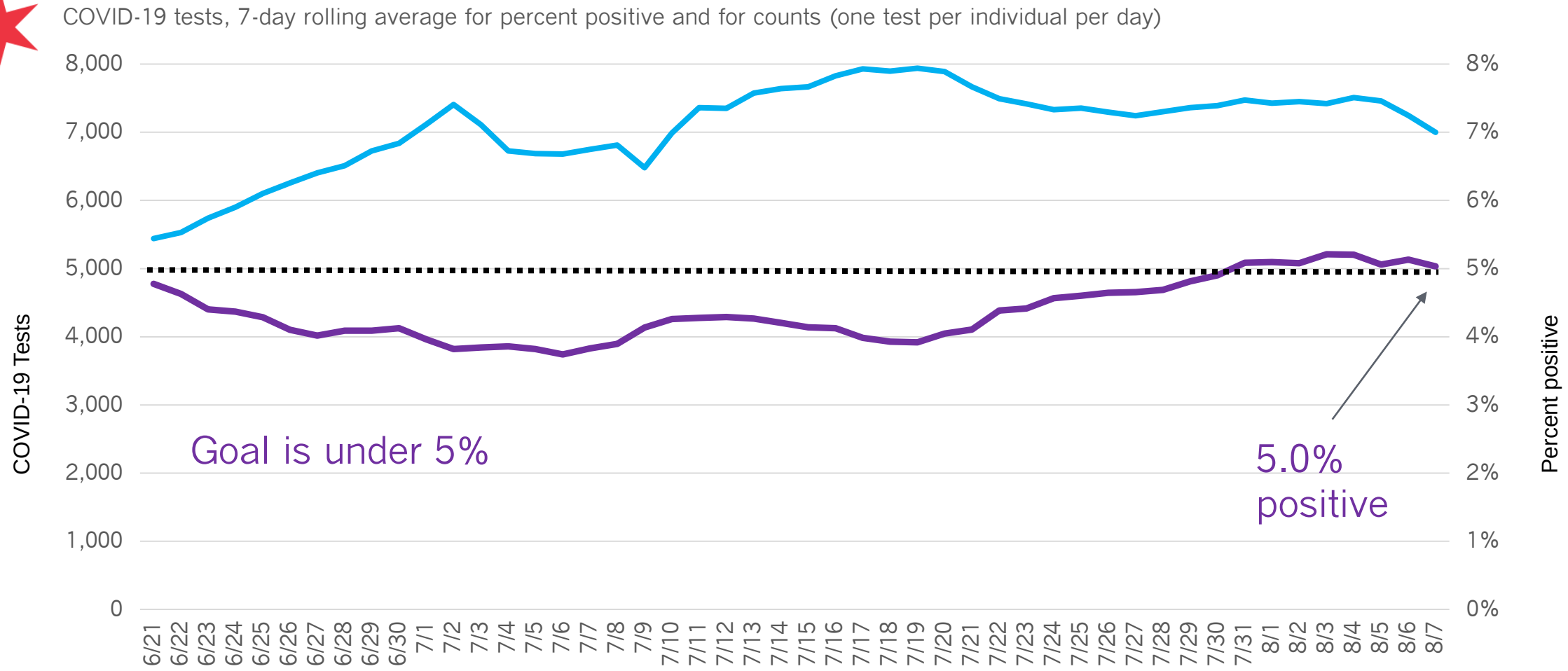
Recent Trend	Increase 11 days (7/11-7/22) Stable 10 days (7/22-8/1) Decrease 8 days (8/1-8/9)



Percentage of all emergency department visits reported with COVID-like symptoms among Chicago residents.
Data Source: Illinois Hospital Emergency Departments reporting to CDPH through the National Syndromic Surveillance Project.

Test Positivity

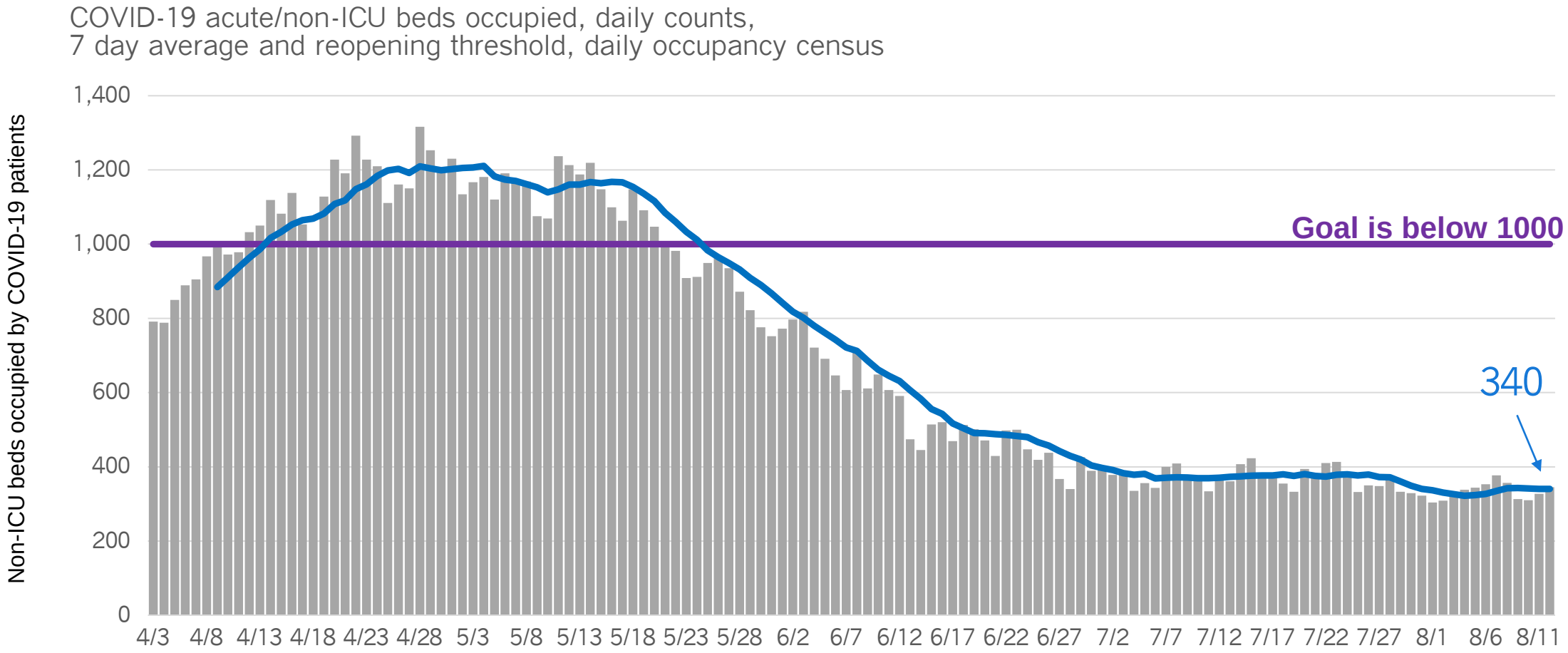
Test positivity is 5.0% with consistently widespread testing.



As of 7/30/2020, test positivity is being reported rather than percent positivity. Test positivity is the number of positive tests divided by all tests performed in contrast to percent positivity which is the number of individuals tested positive divided by the total number of individuals tested (Source: INEDSS). For positivity rates among demographic subgroups and zip codes CDPH will continue reporting by individuals tested.

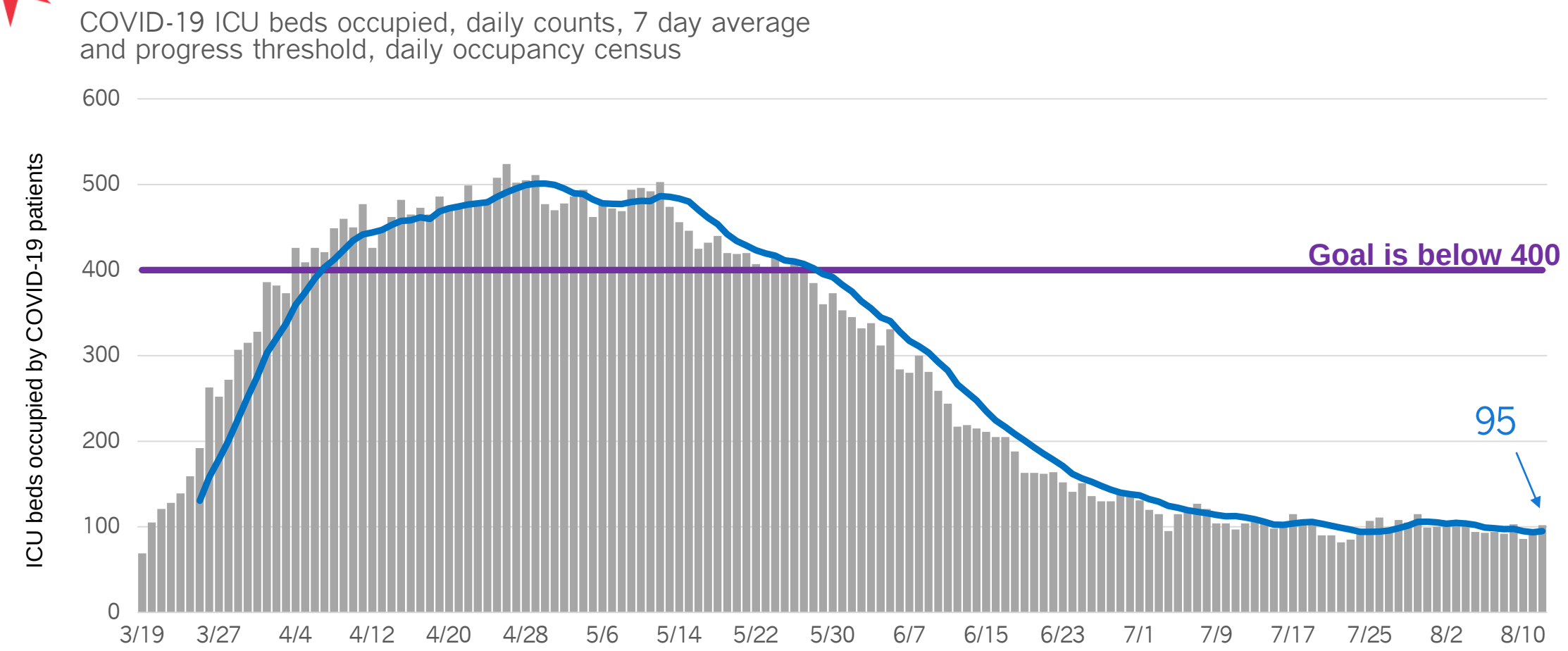
Hospital System Capacity

Non-ICU bed occupancy adequate: <1,000 non-ICU beds occupied by patients with COVID-19.



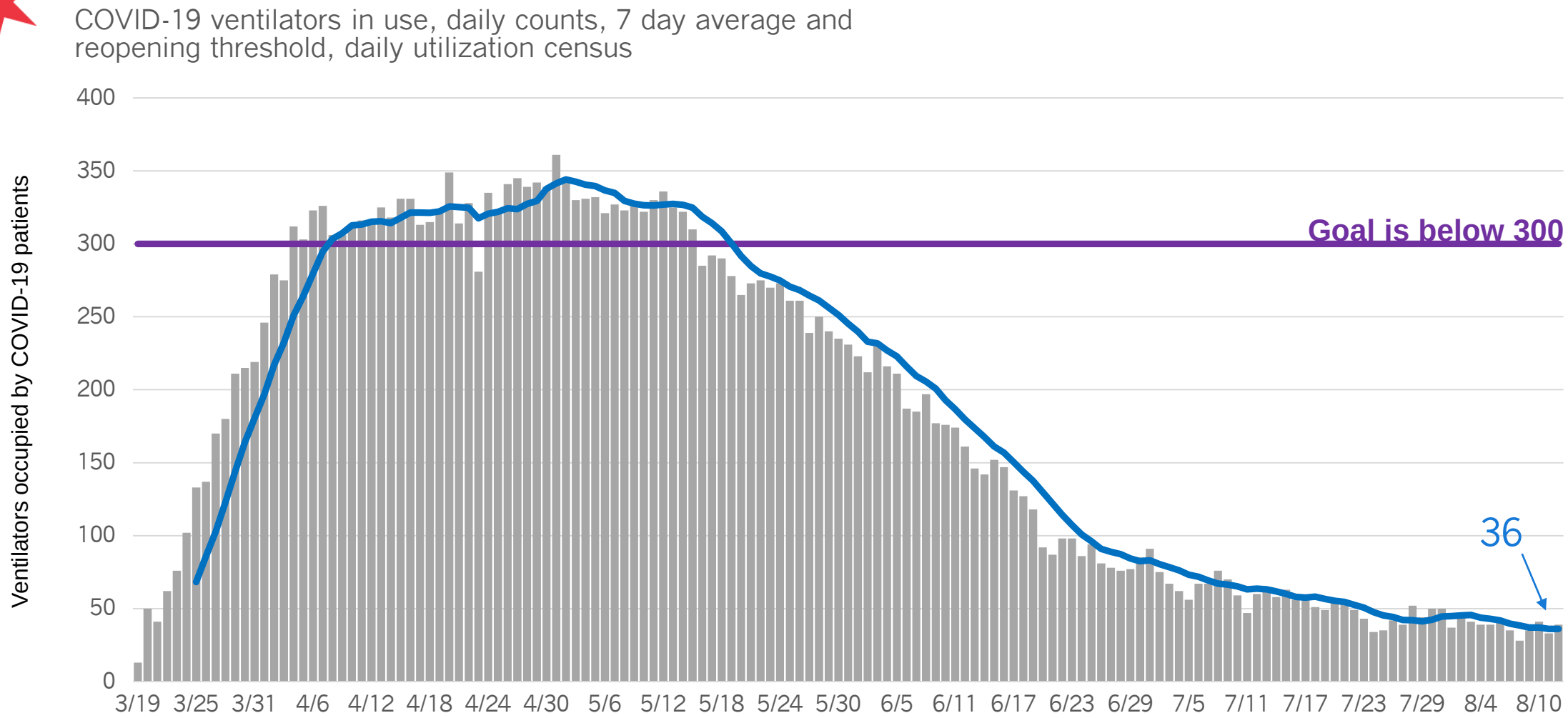
Includes all Chicago hospitals. Hospitals report daily to CDPH via EMResource, beginning April 3 (acute non-ICU occupancy). Acute non-ICU bed counts include burn, emergency department, med/surg, other, pediatrics and psychiatry beds in Chicago hospitals. Includes Chicago and non-Chicago residents. Includes confirmed and suspected COVID-19 cases.

ICU capacity adequate: <400 ICU beds occupied by patients with COVID-19.



Includes all Chicago hospitals. Hospitals report daily to CDPH via EMResource, beginning March 19. ICU bed count includes all adult and pediatric ICU beds in Chicago hospitals. Includes Chicago and non-Chicago residents. Includes confirmed and suspected COVID-19 cases. Beginning 4/24/2020, the definition of ICU status changed as requested by HHS.

Ventilator capacity adequate: <300 patients with COVID-19 on ventilators.

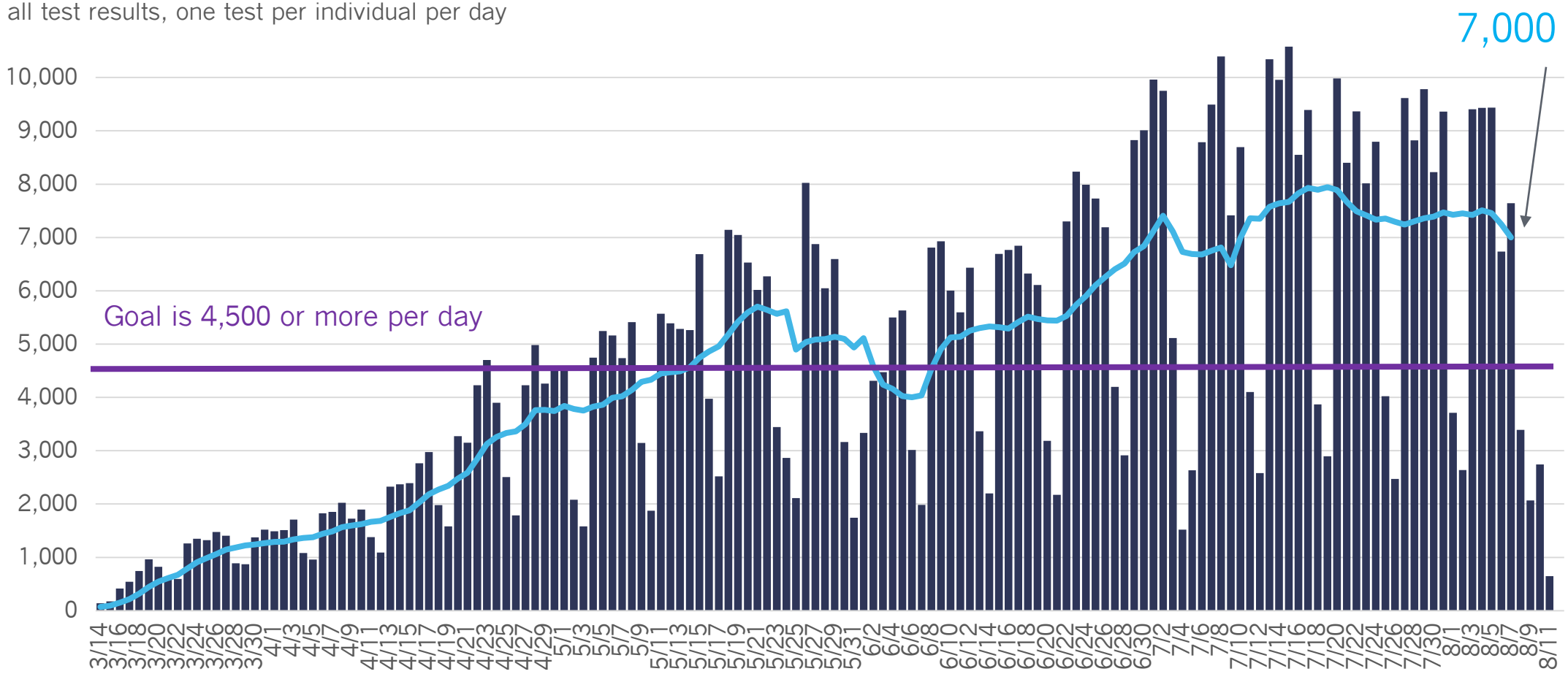


Includes all Chicago hospitals. Hospitals report daily to CDPH via EMResource, beginning March 19. Includes Chicago and non-Chicago residents. Includes confirmed and suspected COVID-19 cases. Beginning 4/24/2020, ventilator counts include all full-functioning mechanical ventilators, BiPAP, anesthesia machines and portable/transport ventilators.

Diagnostic Testing Capacity

COVID-19 testing above 4,500 tests per day for 53 straight days.

COVID-19 tests, daily count and 7-day moving average,
all test results, one test per individual per day



All COVID-19 tests performed on Chicago residents per day as reported by electronic lab reporting from IDPH. 4,500 tests per day represents the capacity to test 5% of Chicago residents per month. Daily counts for most recent dates displayed are likely incomplete.