Protecting Chicago:
Phase IV Re-Opening Metrics Update

October 31, 2020

(Data current through 10/28/2020)

CDPH COVID-19 Phase IV starting June 26 2020

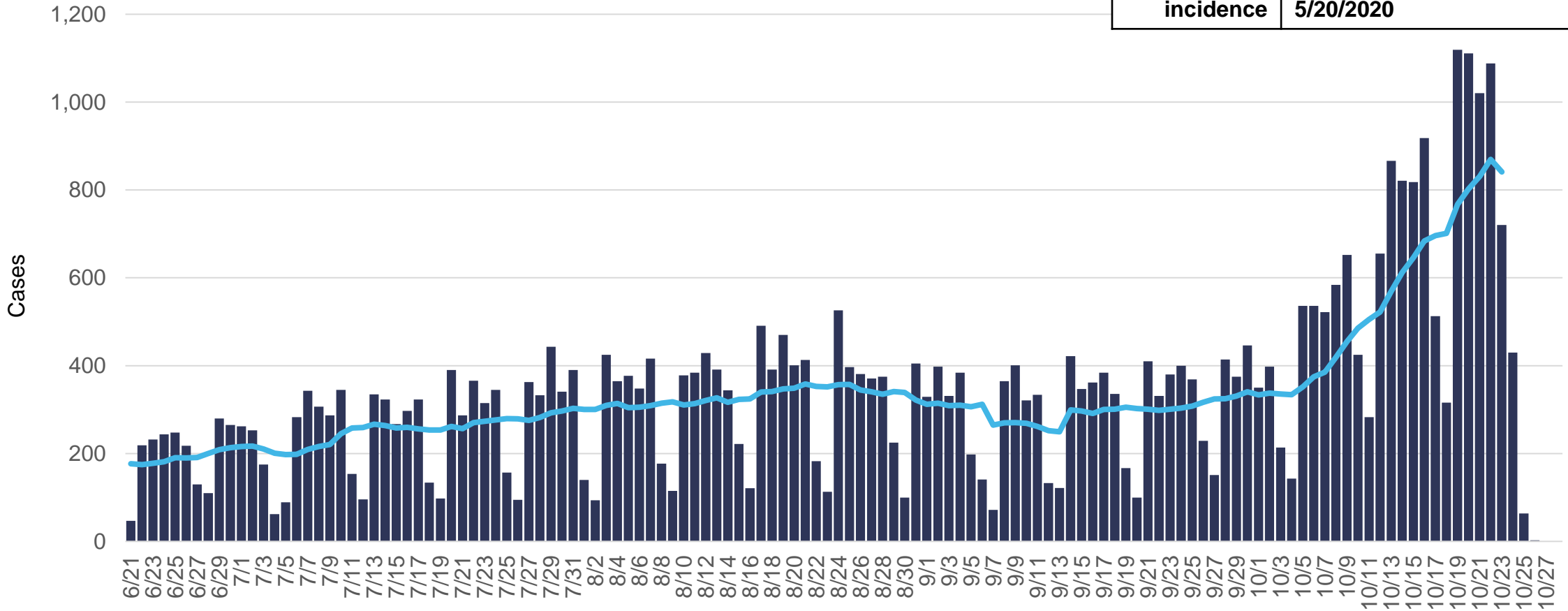|	Stop: May need to delay moving ahead	Caution: Pause and monitor	Go: Cautious progress	Go: Continued progress	Go: Advanced progress
Cases 7-day rolling daily average **Hospitalizations** 7-day rolling daily average **Deaths** 7-day rolling daily average **COVID Emergency department visits** 7-day rolling 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)
Positivity rate 7-day rolling daily average	>10%	5% - 10%	3% - 5% of all daily tests are confirmed positive	<3% of all daily tests are confirmed positive	<=1% of all daily tests are confirmed positive
Hospital system capacity 7-day rolling daily average	>1200 non-ICU beds >500 ICU beds >340 ventilators	>1000 non-ICU beds >200 ICU beds >160 ventilators	<1000 non-ICU beds occupied by COVID patients <200 ICU beds occupied by COVID patients <160 ventilators occupied by COVID patients	<500 non-ICU beds occupied by COVID patients <100 ICU beds occupied by COVID patients <60 ventilators occupied by COVID patients	<250 non-ICU beds occupied by COVID patients <50 ICU beds occupied by COVID patients <40 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	Stable testing >6750 total tests/day	Stable testing >9,000 total tests/day
Response capacity	N/A	N/A	Assign case for investigation within 24h for 50% of cases	Assign case for investigation within 24h for 75% of cases	Assign case for investigation within 24h for 100% of cases

COVID-19 Confirmed Cases

COVID-19 case incidence in Chicago is persistently high and growing rapidly. Cases have been increasing for 28 straight days.
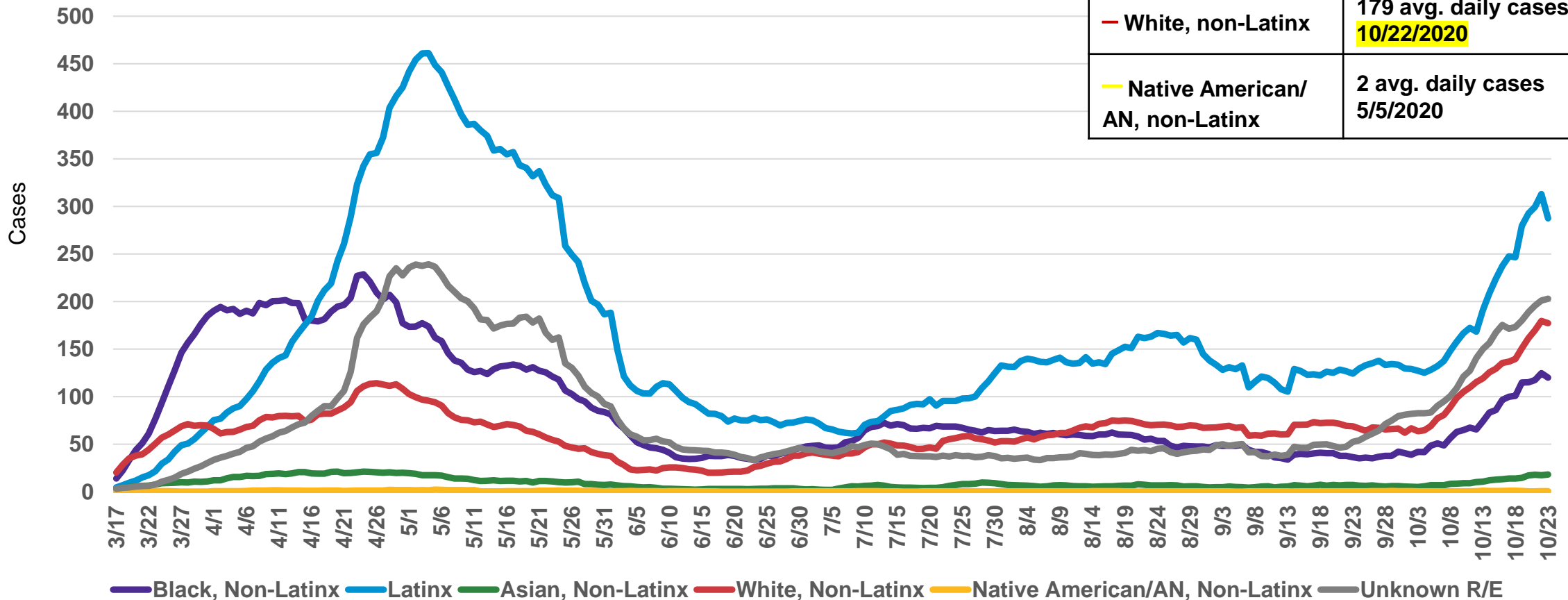
Recent Trend	Increase 10 days (9/24-10/4) 3 C/D Increase 10 days (10/4-10/14) 28 C/D Increase 8 days (10/14-10/22) 22 C/D
14-day Incidence	HIGH (762 avg. daily cases*)
14-day slope	GROWTH +27.6 cases per day
Peak 14-day incidence	998 avg. daily cases 5/20/2020

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

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.

Daily case incidence nearing peak incidence for all race/ethnicities; white non-Latinx case incidence is at its highest ever.
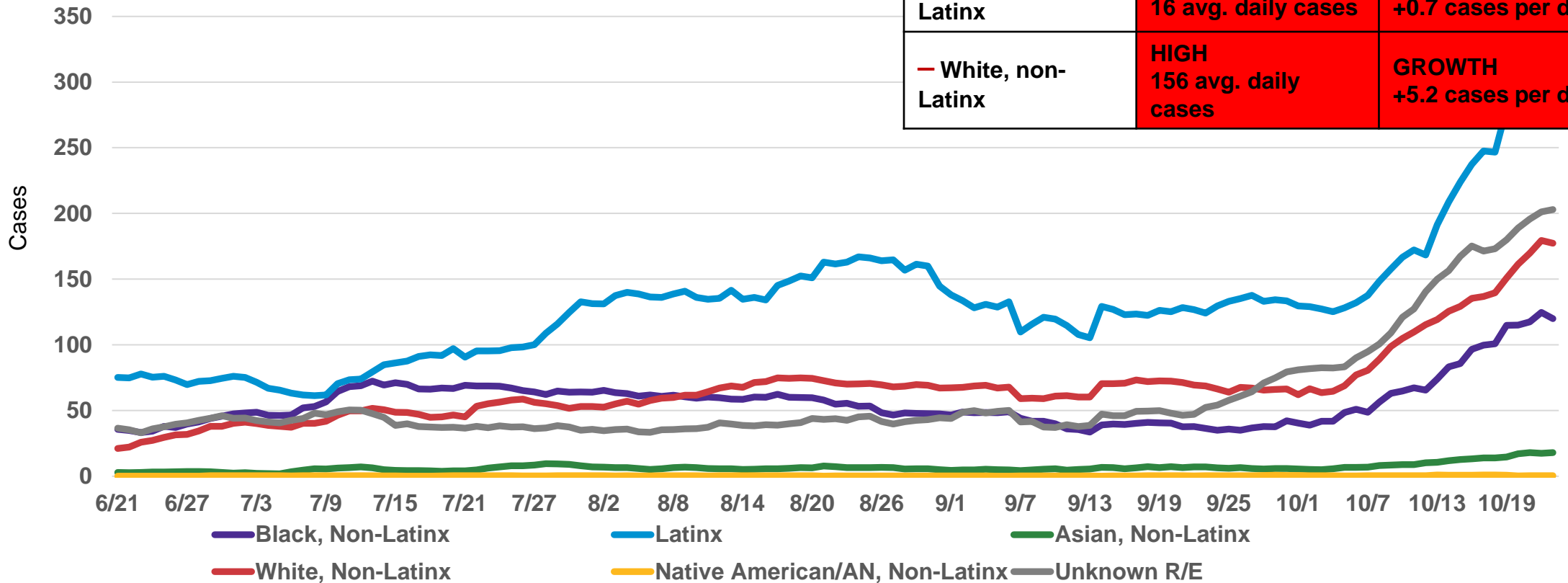
COVID-19 cases among Chicago residents by race/ethnicity, rolling 7-day average, specimen collection date

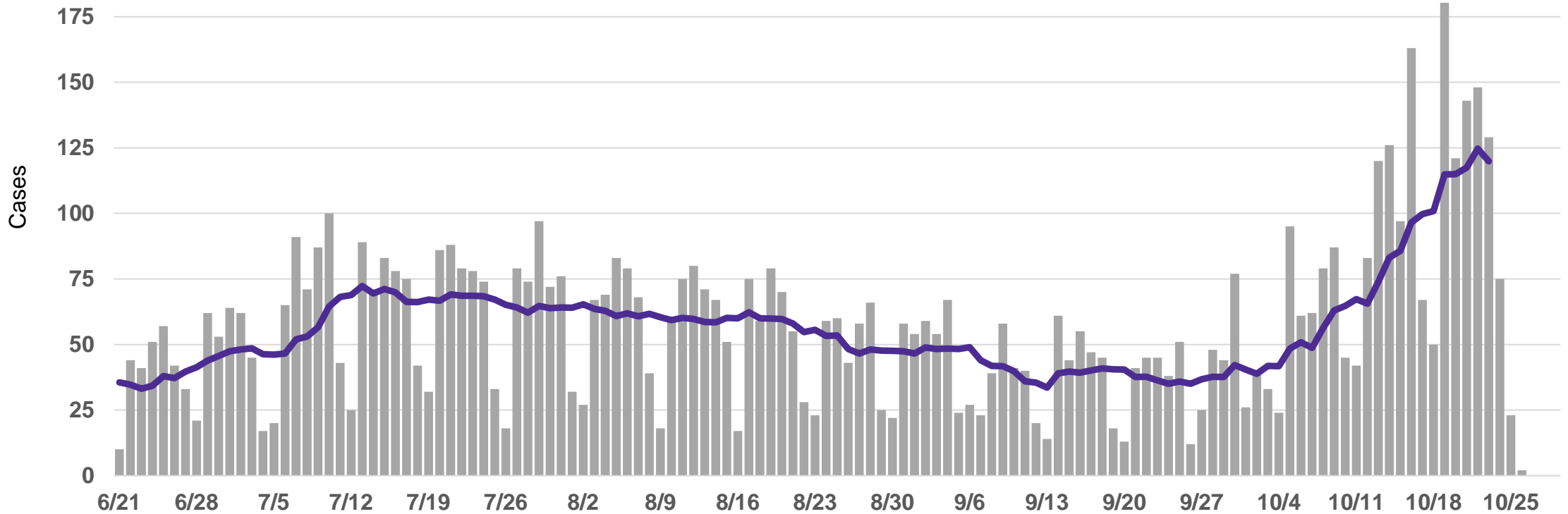| Case Incidence Peak (7-day avg.)	
— Latinx	461 avg. daily cases 5/3/2020
— Black, non-Latinx	229 avg. daily cases 4/24/2020
— Asian, non-Latinx	21 avg. daily cases 4/24/2020
— White, non-Latinx	179 avg. daily cases 10/22/2020
— Native American/ AN, non-Latinx	2 avg. daily cases 5/5/2020

Daily COVID-19 cases with known specimen report date and race/ethnicity information.

COVID-19 case incidence very high and growing rapidly among all race/ethnicities, especially Latinx.

	14-day incidence	14-day slope
— Latinx	HIGH 262 avg. daily cases	GROWTH +8.6 cases per day
— Black, non-Latinx	HIGH 108 avg. daily cases	GROWTH +3.9 cases per day
— Asian, non-Latinx	HIGH 16 avg. daily cases	GROWTH +0.7 cases per day
— White, non-Latinx	HIGH 156 avg. daily cases	GROWTH +5.2 cases per day

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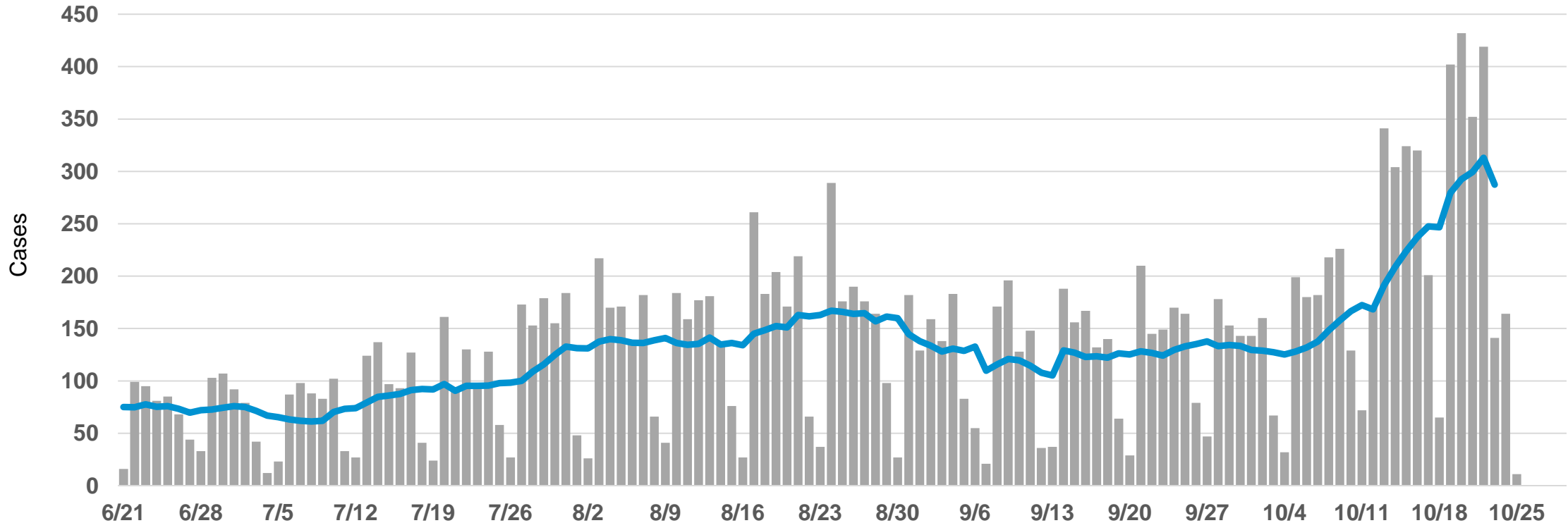

Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence.

6

Black, non-Latinx case incidence is high and growing rapidly. Cases have been increasing or stable for the past 29 days.

Recent Trend	Increase 25 days (9/24-10/19) 3 C/D Stable 4 days (10/19-10/23)
14-day incidence	HIGH (108 avg. daily cases*)
14-day slope	GROWTH +3.9 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
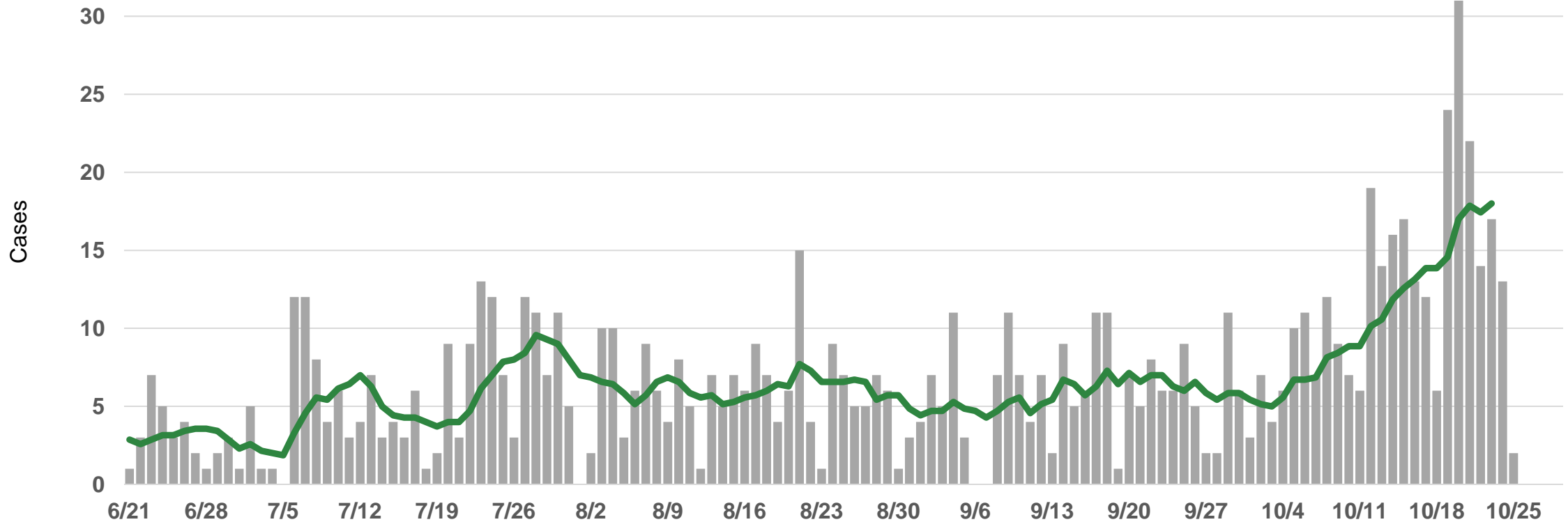

Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates 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 very high and growing. Cases have been increasing rapidly for the past 18 days.

Recent Trend	Stable 11 days (9/24-10/5) Increase 18 days (10/5-10/23) 9 C/D
14-day incidence	HIGH (262 avg. daily cases*)
14-day slope	GROWTH +8.6 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
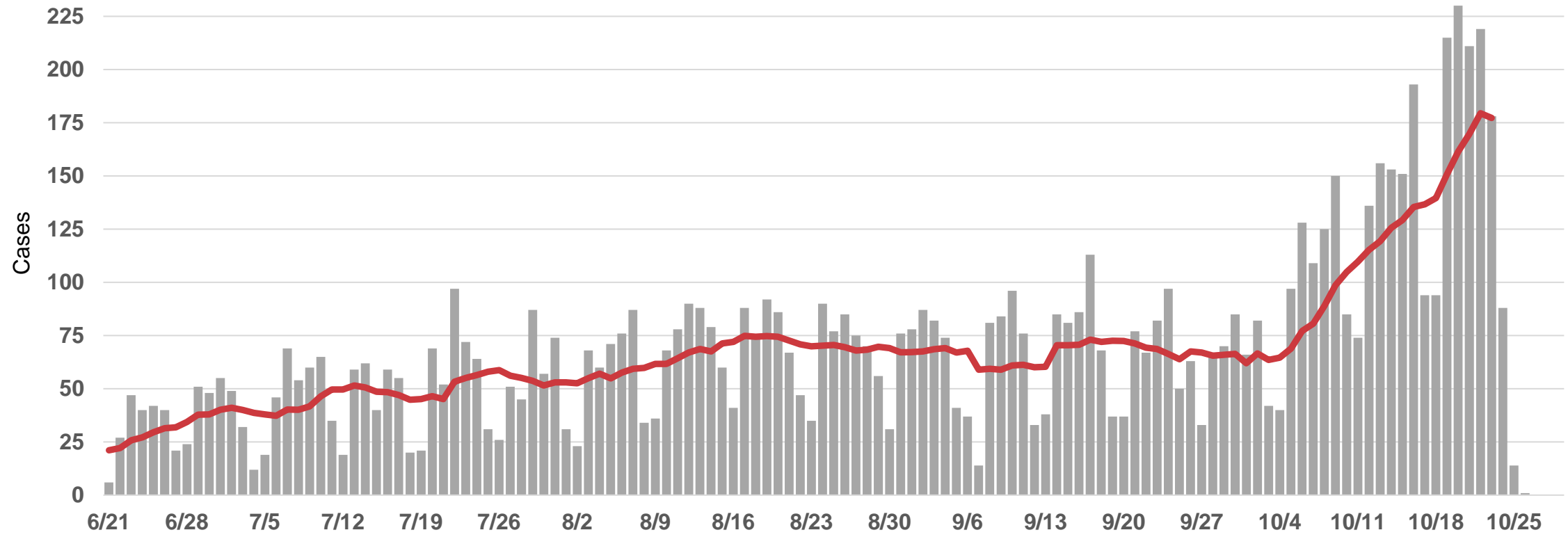

Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates 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 high and growing. Cases have been increasing for the past 21 days.

Recent Trend	Decrease 8 days (9/24-10/2) Increase 21 days (10/2-10/23) 1 C/D
14-day incidence	HIGH (16 avg. daily cases*)
14-day slope	GROWTH +0.7 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
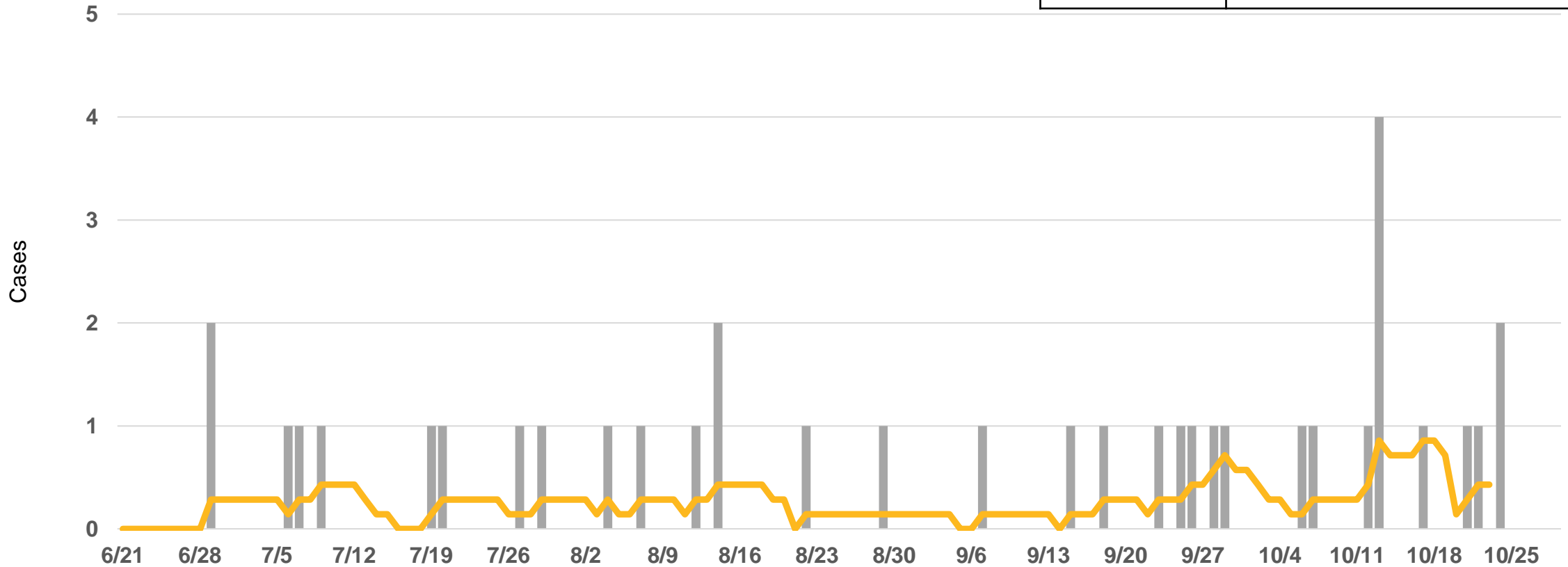

Daily COVID-19 cases with known specimen report date and race/ethnicity information. Approximately 30% of cases used to calculate 14-day incidence are missing race/ethnicity information, therefore the reported 14-day incidence represents an undercount of true incidence. Daily counts for most recent dates 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 high and growing rapidly. Cases have been increasing for 19 days.

Recent Trend	Stable 10 days (9/24-10/4) Increase 19 days (10/4-10/23) 9 C/D
14-day incidence	HIGH (156 avg. daily cases*)
14-day slope	GROWTH +5.2 cases per day
Peak 14-day incidence	156 avg. daily cases 10/23/2020

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.

Native American/Alaska Native, non-Latinx case incidence is low and stable.

Recent Trend	Cases at low incidence for >28 days. 108 cumulative cases.
14-day incidence	0.6 avg. daily cases*
14-day slope	+0.0 cases per day
Peak 14-day incidence	2 avg. daily cases 5/5/2020

COVID-19 cases among Native American/Alaska Native, 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. Due to the citywide population size of 8,086, gating ranks are not applied here.
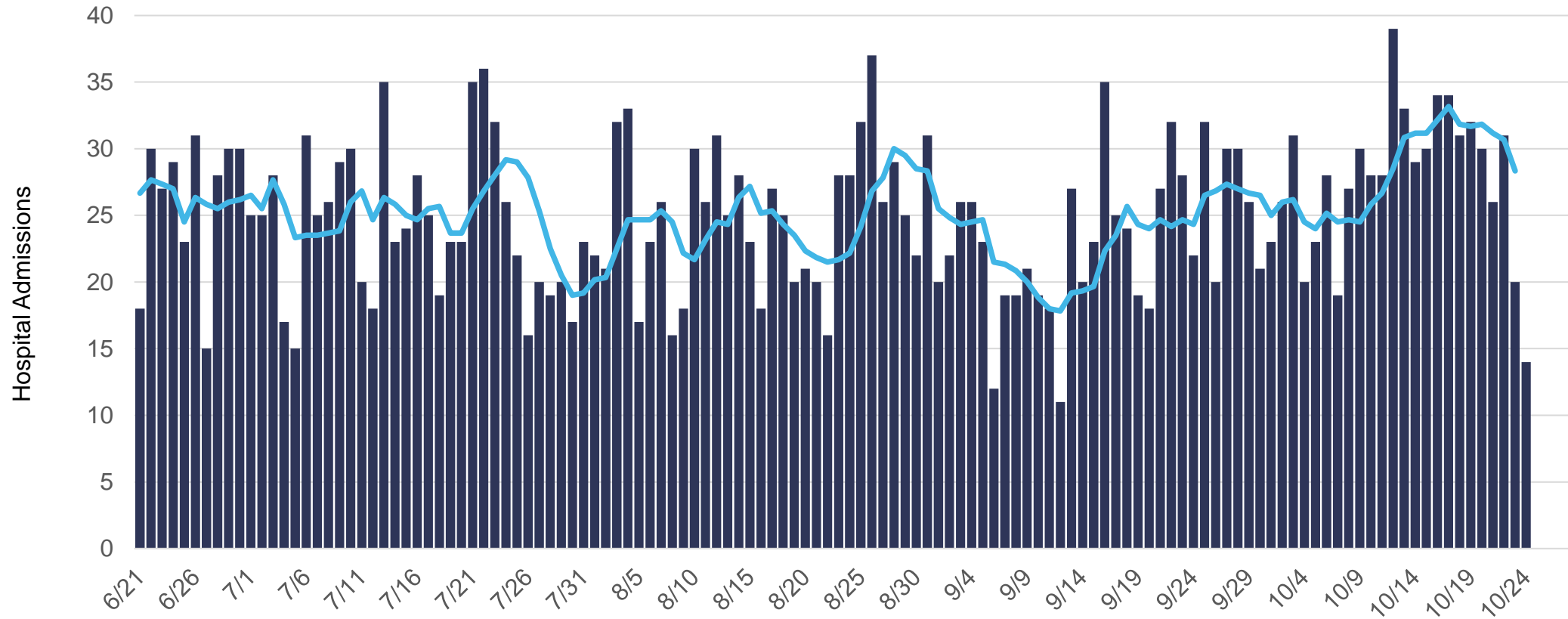
COVID-19 Severe Outcomes

Daily COVID-19 hospital admission.

Recent Trend	*Pending resolution of data issues*
Peak 7-day rolling average	**173 avg. daily admissions** 4/12/2020

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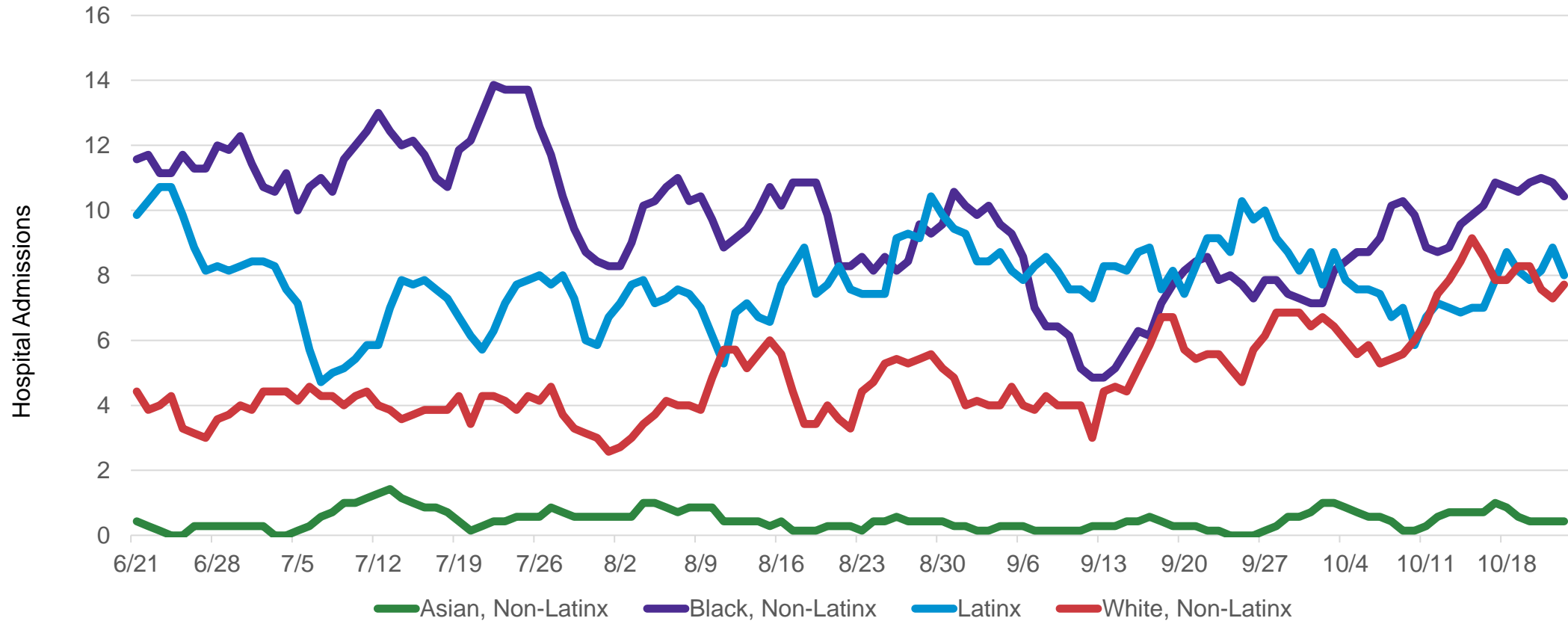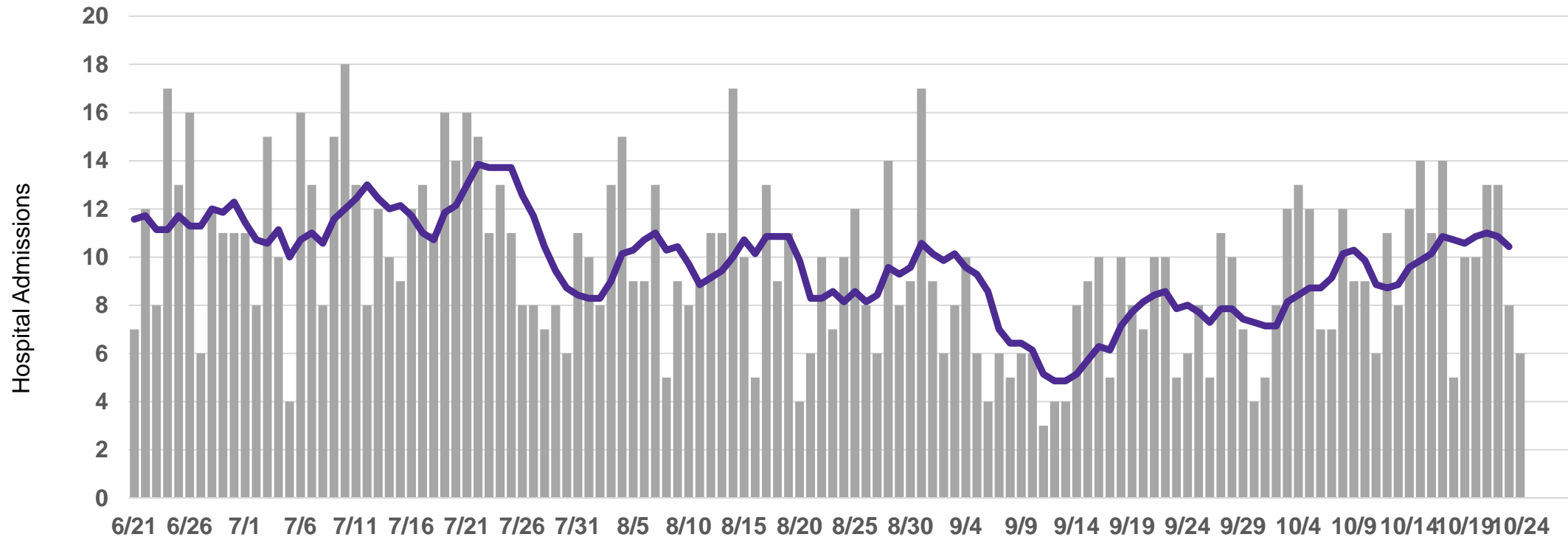rolling 7-day average, first known hospital admit date

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.

Daily COVID-19 hospital admissions by race/ethnicity.

COVID-19 Hospital admissions, by Race/Ethnicity,
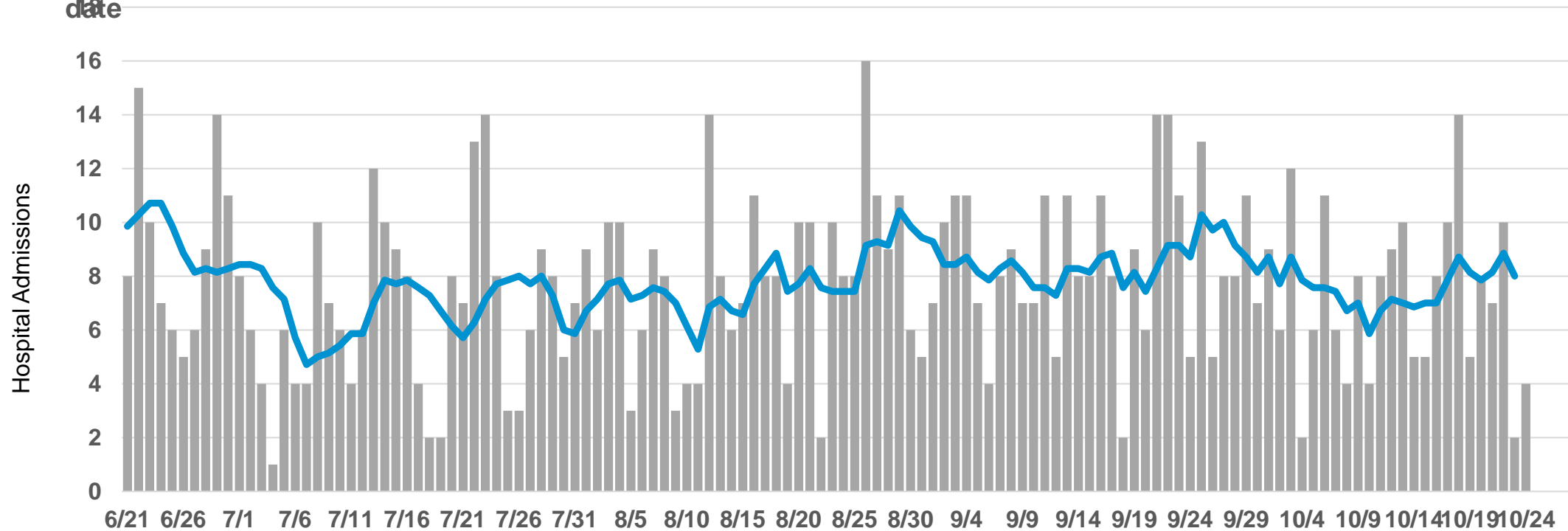rolling 7-day average, first known hospital admit date

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 admission.

Recent Trend	*Pending resolution of data issues*
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
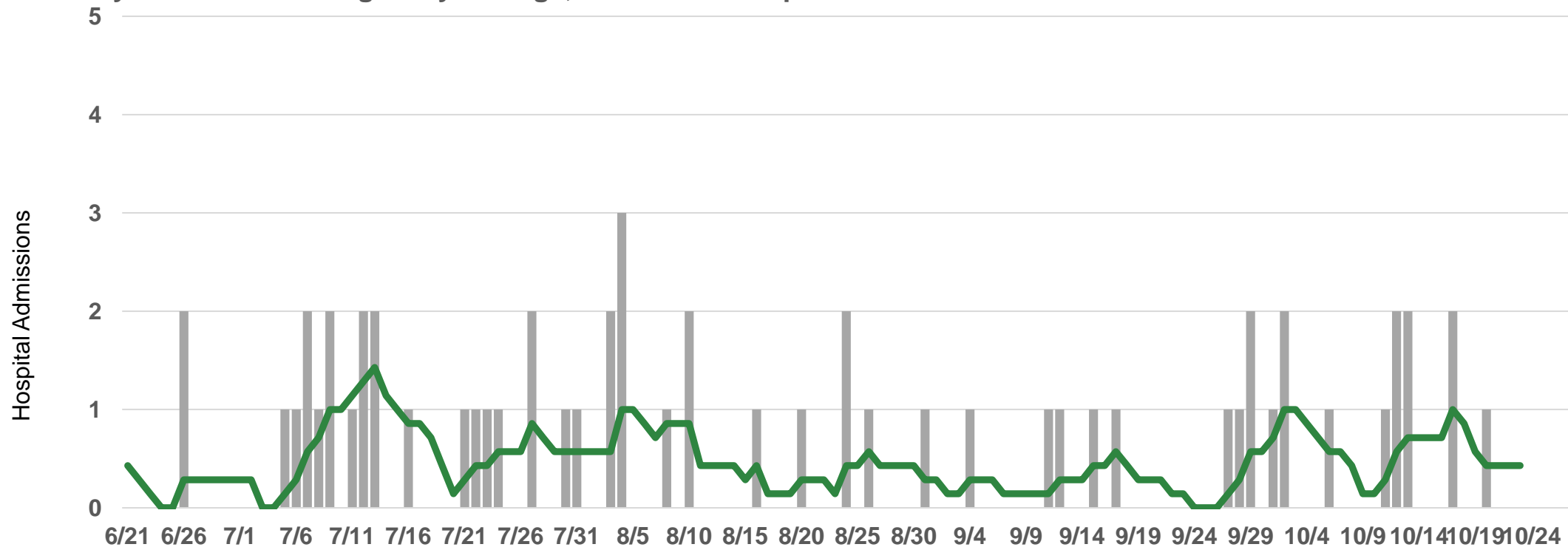

Hospitalizations are reported to CDPH by hospitals into I-NEDSS and ESSENCE and self-reported by patients via an online survey. Daily counts for most recent dates displayed are likely incomplete. Cases who are not indicated to have been hospitalized across any of the three data sources are assumed to 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.

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Latinx hospital admissions.

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

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.

16

Asian non-Latinx hospital admissions.

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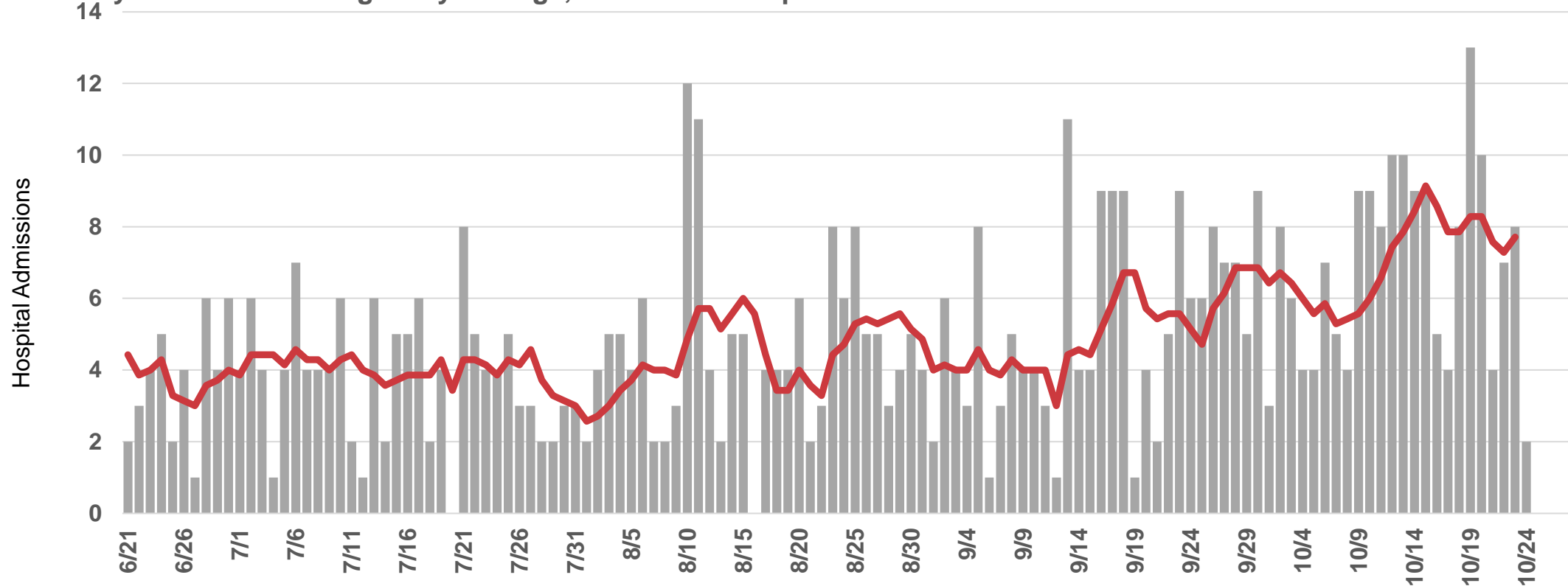

Hospitalizations are reported to CDPH by hospitals into I-NEDSS and ESSENCE and self-reported by patients via an online survey. Daily counts for most recent dates displayed are likely incomplete. Cases who are not indicated to have been hospitalized across any of the three data sources are assumed to 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.

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

Recent Trend	*Pending resolution of data issues*
Peak 7-day rolling average	27 avg. daily admissions 5/6/2020

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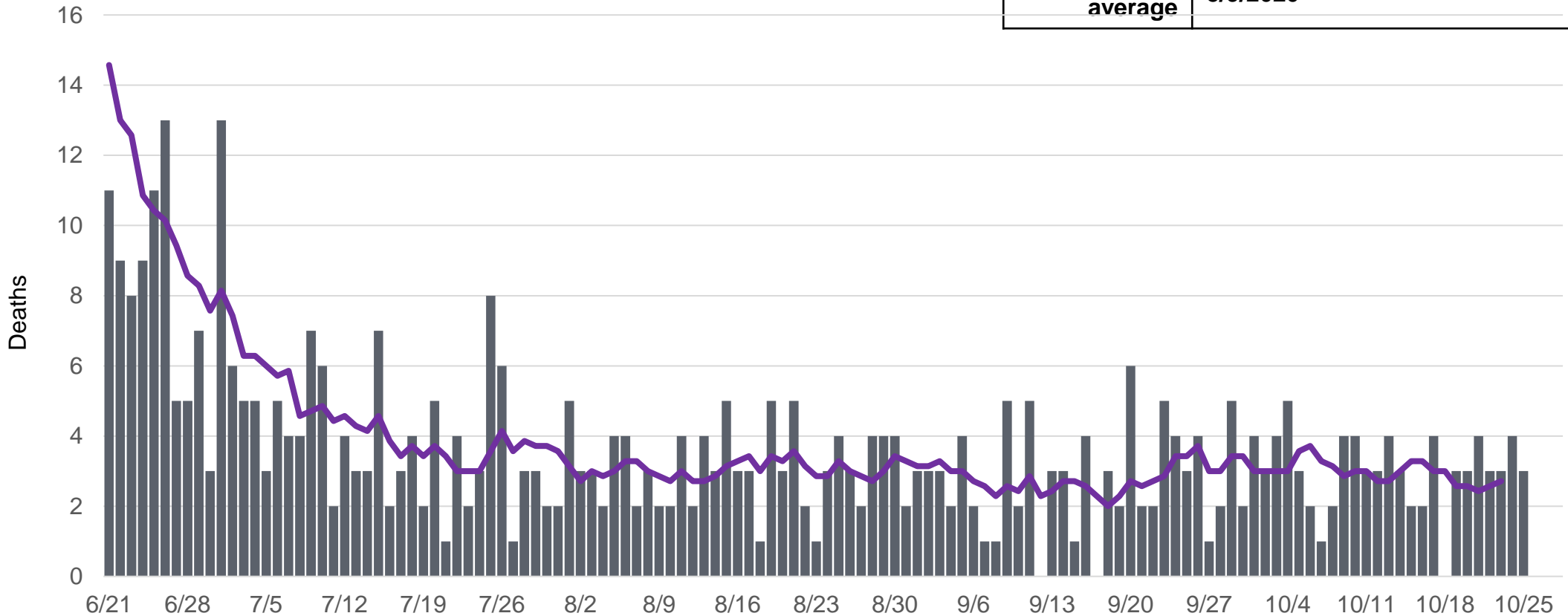

Hospitalizations are reported to CDPH by hospitals into I-NEDSS and ESSENCE and self-reported by patients via an online survey. Daily counts for most recent dates displayed are likely incomplete. Cases who are not indicated to have been hospitalized across any of the three data sources are assumed to 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.

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COVID-19 deaths are stable at 2 to 4 deaths per day.

Recent Trend	At or below 4 avg. daily deaths for >30 days
Peak 7-day rolling average	48 avg. daily deaths 5/9/2020

COVID-19 deaths, daily counts
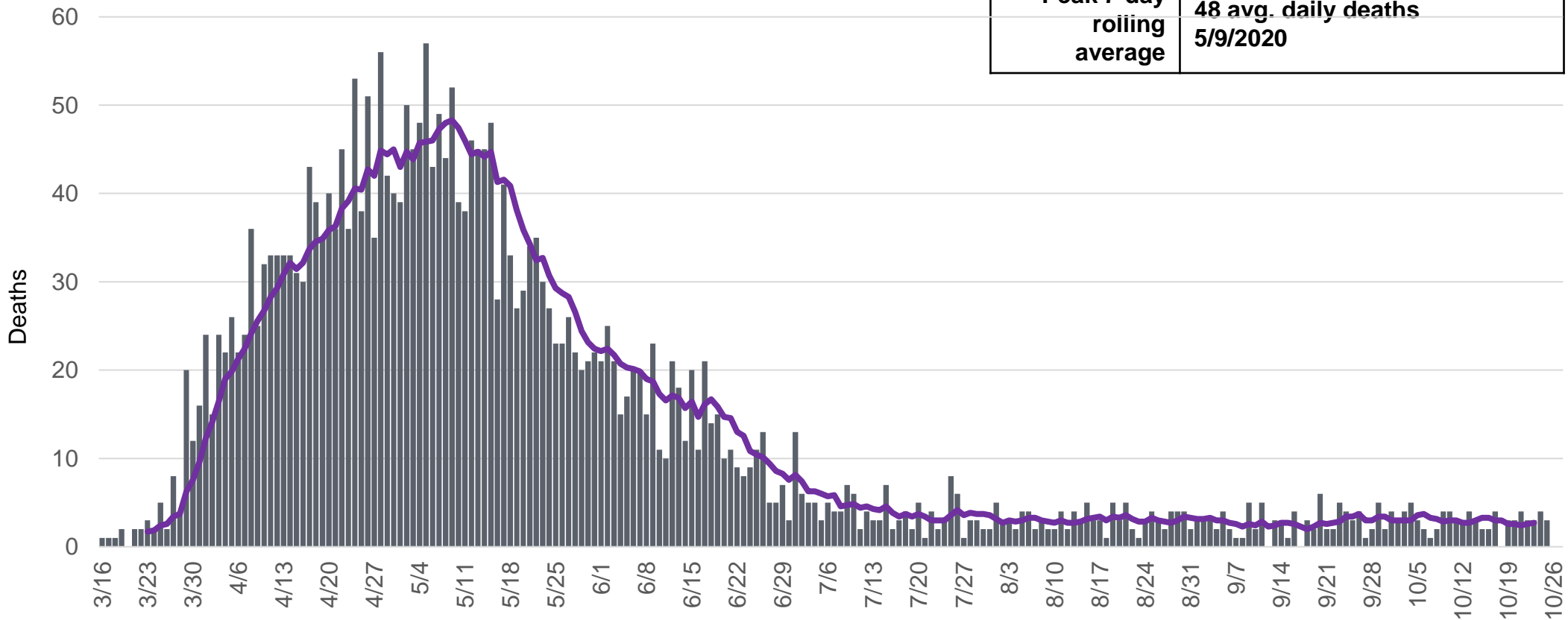and rolling 7-day average, deceased date

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.

19

COVID-19 deaths are 10X fewer now when compared to the peak in May.

COVID-19 deaths, daily counts
and rolling 7-day average, deceased date

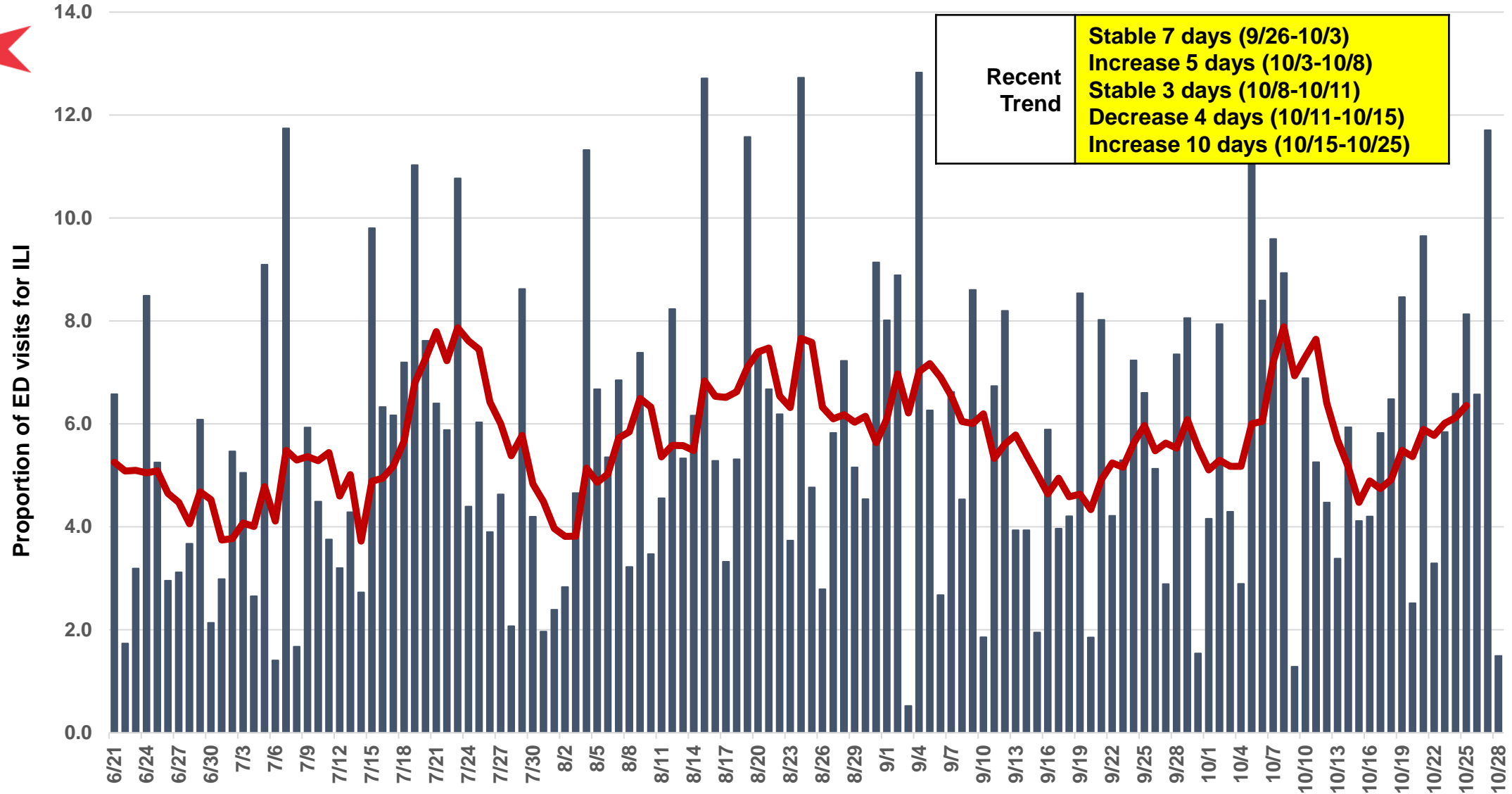| Recent Trend	At or below 4 avg. daily deaths for >30 days
Peak 7-day rolling average	48 avg. daily deaths 5/9/2020

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.
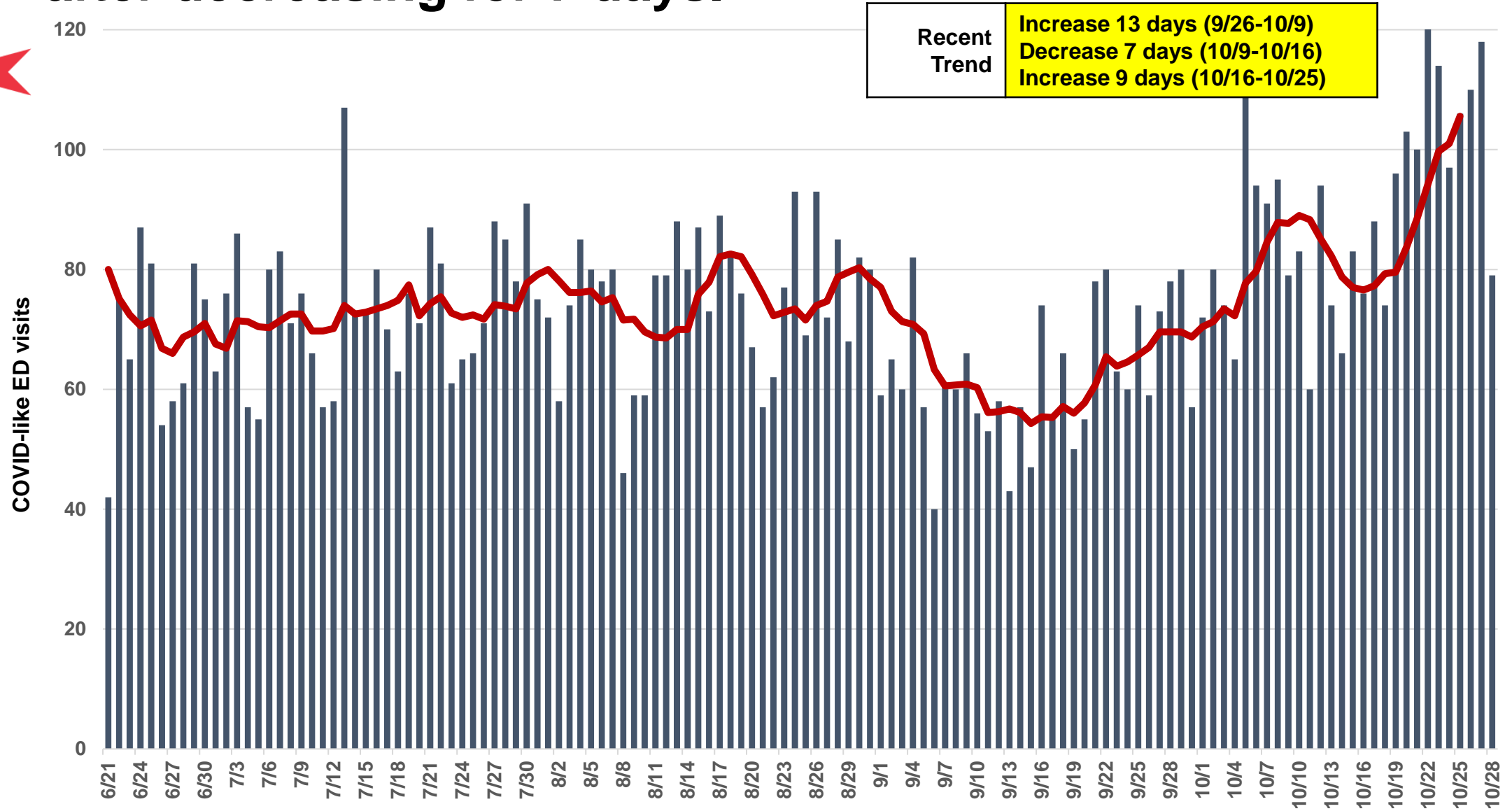
Emergency Department Visits

Proportion of ED visits for influenza-like illnesses has increasing for 10 days after decreasing for 4 days.

Recent Trend

Stable 7 days (9/26-10/3)
Increase 5 days (10/3-10/8)
Stable 3 days (10/8-10/11)
Decrease 4 days (10/11-10/15)
Increase 10 days (10/15-10/25)

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 has been increasing 9 days after decreasing for 7 days.

Recent Trend	Increase 13 days (9/26-10/9)
	Decrease 7 days (10/9-10/16)
	Increase 9 days (10/16-10/25)

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.
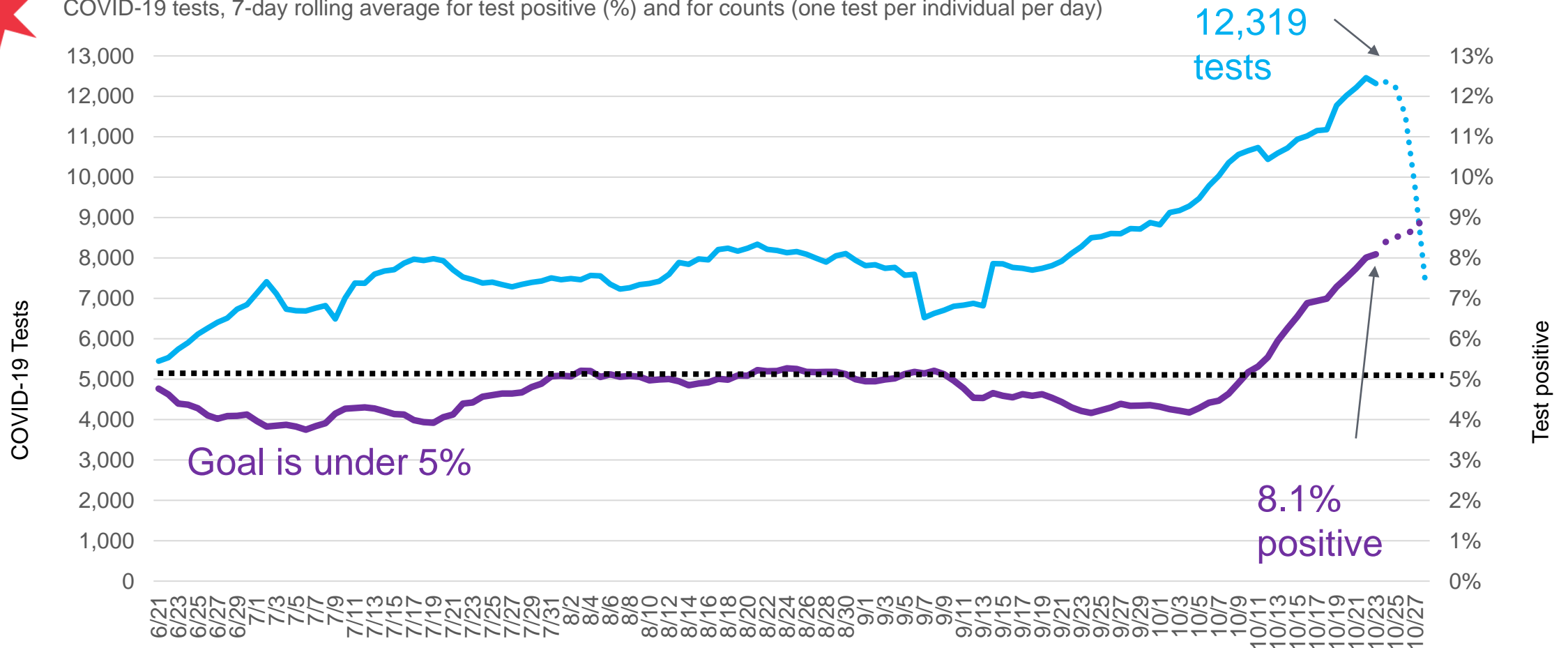
23

Test Positivity and Number Needed to Test

Test positivity is 8.1%. Testing is near an all-time high.

COVID-19 tests, 7-day rolling average for test positive (%) and for counts (one test per individual per day)

12,319 tests

8.1% positive

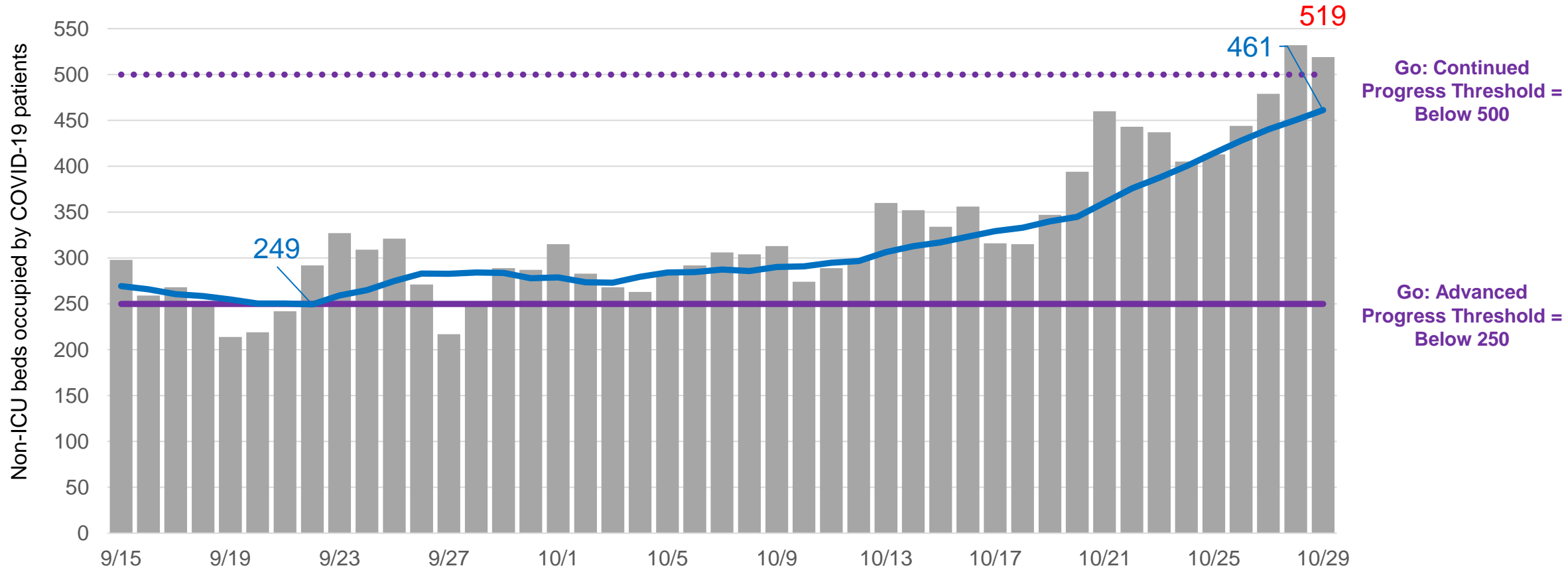Goal is under 5%

COVID-19 Tests

Test positive

Hospital System Capacity

Non-ICU bed occupancy from COVID-19 increased 85% since lowest point on 9/22; currently at Go: Continued Progress.

COVID-19 acute/non-ICU beds occupied, daily counts,
7 day average and reopening threshold, daily occupancy census

Peak 7-day rolling average	1211 avg. occupied non-ICU beds 5/4/2020

519

461

249

Go: Continued Progress Threshold = Below 500

Go: Advanced Progress Threshold = Below 250

Non-ICU beds occupied by COVID-19 patients

9/15   9/19   9/23   9/27   10/1   10/5   10/9   10/13   10/17   10/21   10/25   10/29
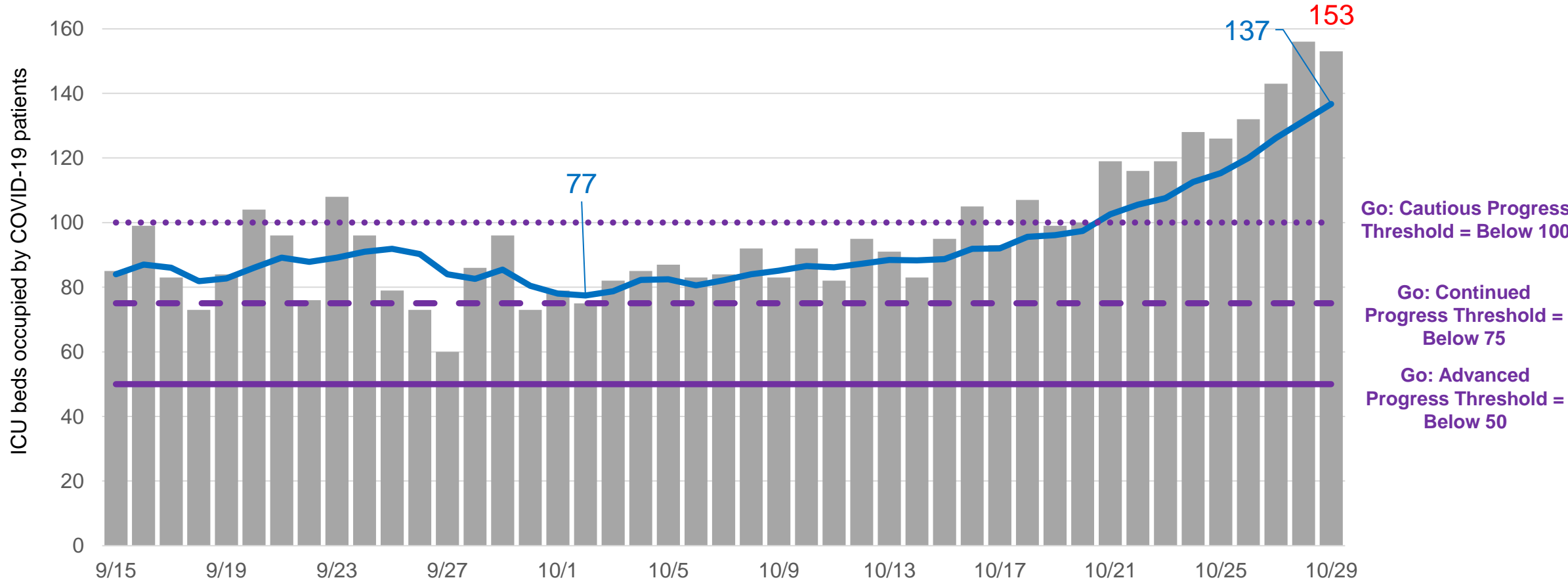
Includes all Chicago hospitals. Hospitals report daily to CDPH via EMResource, beginning April 3 (acute non-ICU occupancy). Acute non-ICU bed counts include burn, emergency department, med/surg, other, pediatrics and psychiatry beds in Chicago hospitals. Includes Chicago and non-Chicago residents. Includes confirmed and suspected COVID-19 cases.

ICU occupancy from COVID-19 increased 78% since lowest point on 10/2; surpassing Go: Cautious Progress threshold.

COVID-19 ICU beds occupied, daily counts, 7 day average and progress threshold, daily occupancy census

Peak 7-day rolling average	501 avg. occupied ICU beds 4/30/2020

ICU beds occupied by COVID-19 patients

153
137
77

Go: Cautious Progress Threshold = Below 100

Go: Continued Progress Threshold = Below 75

Go: Advanced Progress Threshold = Below 50

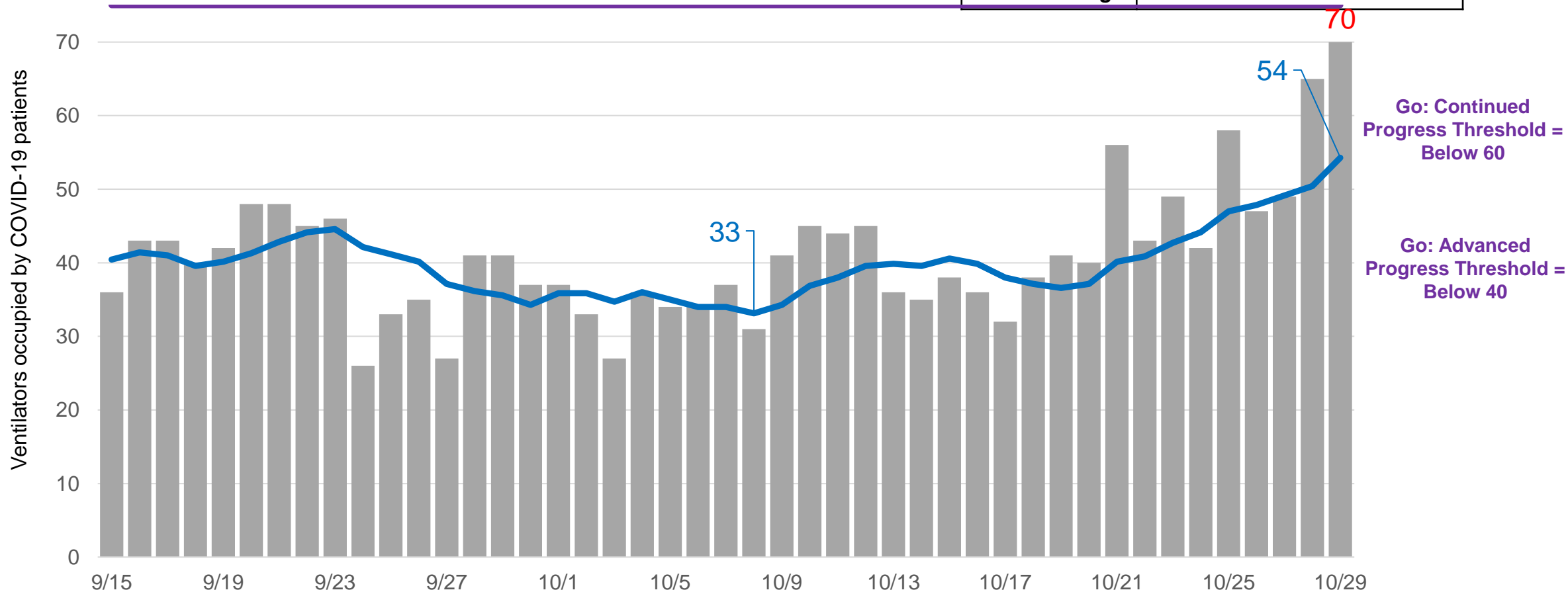Dates: 9/15, 9/19, 9/23, 9/27, 10/1, 10/5, 10/9, 10/13, 10/17, 10/21, 10/25, 10/29

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.

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Ventilator utilization from COVID-19 increased 64% since lowest point on 10/8; surpassing Go: Advanced Progress threshold.

COVID-19 ventilators in use, daily counts, 7 day average and reopening threshold, daily utilization census

Peak 7-day rolling average	344 avg. ventilators in use 5/2/2020

Go: Continued Progress Threshold = Below 60

Go: Advanced Progress Threshold = Below 40

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.
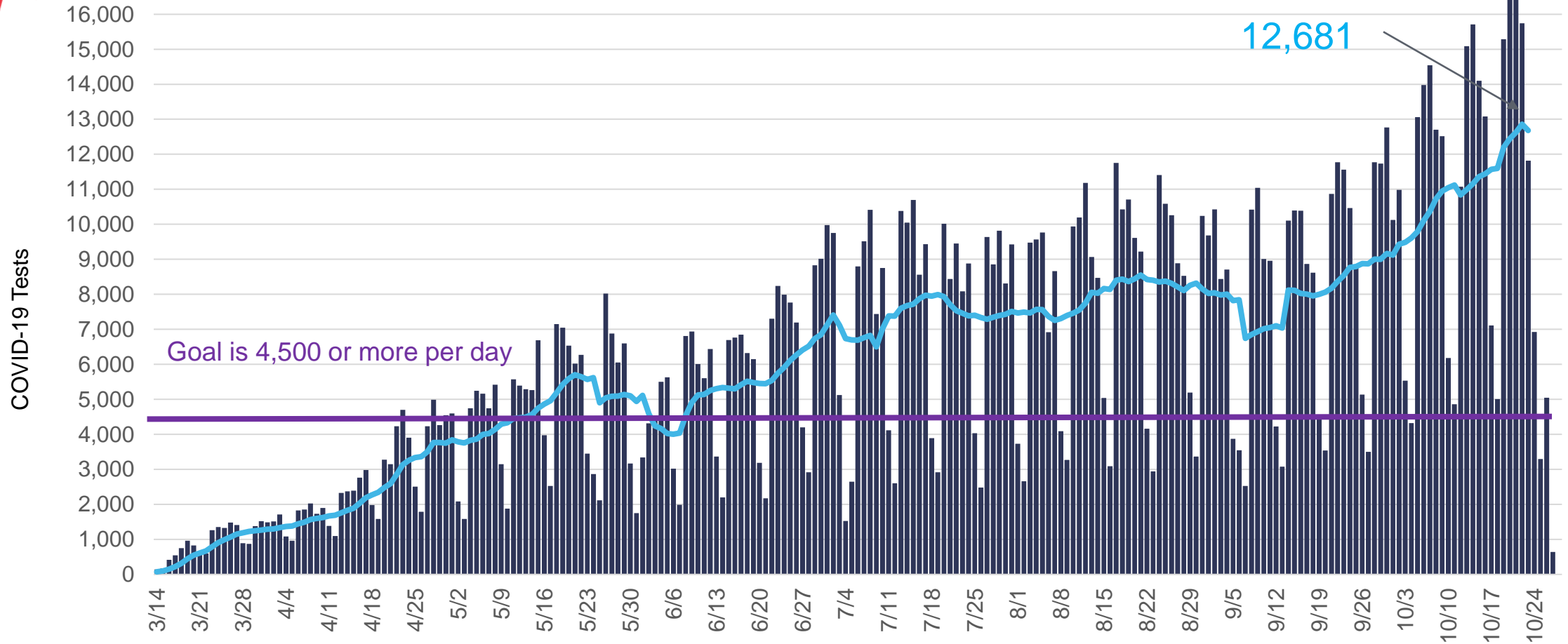
Diagnostic Testing Capacity

COVID-19 testing above 4,500 tests per day for 130 straight days. Now at all time high.

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

12,681

Goal is 4,500 or more per day

COVID-19 Tests

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.

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