Protecting Chicago: Phase IV Re-Opening Metrics Update

November 7, 2020
(Data current through 11/4/2020)
<table>
<thead>
<tr>
<th>CDPH COVID-19 Phase IV starting June 26 2020 INCLUDES NEW THRESHOLDS</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stop: May need to delay moving ahead</strong></td>
</tr>
<tr>
<td><strong>Cases</strong>&lt;br&gt;7-day rolling daily average</td>
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<tr>
<td><strong>Hospitalizations</strong>&lt;br&gt;7-day rolling daily average</td>
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<tr>
<td><strong>Deaths</strong>&lt;br&gt;7-day rolling daily average</td>
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<td><strong>COVID Emergency department visits</strong>&lt;br&gt;7-day rolling daily average</td>
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<tr>
<td><strong>Positivity rate</strong>&lt;br&gt;7-day rolling daily average</td>
</tr>
<tr>
<td><strong>Hospital system capacity</strong>&lt;br&gt;7-day rolling daily average</td>
</tr>
<tr>
<td><strong>Testing capacity</strong>&lt;br&gt;7-day rolling daily average</td>
</tr>
</tbody>
</table>
COVID-19 Confirmed Cases
COVID-19 case incidence in Chicago set new peaks for counts and speed of increase.

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

14-day incidence: HIGH (1151 avg. daily cases*)

14-day slope: GROWTH (+47.3 cases per day)

Peak 14-day incidence: 1151 avg. daily cases 10/30/2020

Recent Trend
- Stable 3 days (10/1-10/4)
- Increase 11 days (10/4-10/15) 29 C/D
- Increase 15 days (10/15-10/30) 47 C/D

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 (26-50); 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 in Chicago set new peaks for counts and speed of increase.

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); 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.

Peak 7-day rolling average: 1151 avg. daily cases 10/30/2020
Daily case incidence is at an all-time high for Latinx, Asian non-Latinx and white non-Latinx Chicagoans.

COVID-19 cases among Chicago residents by race/ethnicity, rolling 7-day average, specimen collection date (3/17/2020-)

Daily COVID-19 cases with known specimen report date and race/ethnicity information.
Black, non-Latinx case incidence is high and growing rapidly. Incidence has been increasing by an average of 5 cases/day for the past 29 days.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Increase 29 days (10/1-10/30) 5 C/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-day incidence</td>
<td>HIGH (156 avg. daily cases*)</td>
</tr>
<tr>
<td>14-day slope</td>
<td>GROWTH +5.6 cases per day</td>
</tr>
<tr>
<td>Peak 14-day incidence</td>
<td>204 avg. daily cases 4/24/2020</td>
</tr>
</tbody>
</table>

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 by an average of 26 cases/day for the past 4 days.

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.

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>14-day incidence</th>
<th>14-day slope</th>
<th>Peak 14-day incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable 5 days (10/1-10/6)</td>
<td>HIGH (396 avg. daily cases*)</td>
<td>GROWTH +16.1 cases per day</td>
<td>429 avg. daily cases 5/6/2020</td>
</tr>
</tbody>
</table>
Asian, non-Latinx case incidence is high and growing. Cases have been increasing by an average of 1 case/day for the past 29 days.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Increase 29 days (10/1-10/30) 1 C/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-day incidence</td>
<td>HIGH (25 avg. daily cases*)</td>
</tr>
<tr>
<td>14-day slope</td>
<td>GROWTH +1 cases per day</td>
</tr>
<tr>
<td>Peak 14-day incidence</td>
<td>25 avg. daily cases 10/30/2020</td>
</tr>
</tbody>
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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 by an average of 7 cases/per day for 26 days.

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

Recent Trend
Stable 3 days (10/1-10/4)
Increase 26 days (10/4-10/30) 7 C/D

14-day incidence
HIGH
(229 avg. daily cases*)

14-day slope
GROWTH
+8.5 cases per day

Peak 14-day incidence
229 avg. daily cases
10/30/2020

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.

COVID-19 cases among Native American/Alaska Native, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Cases at low incidence for &gt;28 days. 118 cumulative cases.</th>
</tr>
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<tbody>
<tr>
<td>14-day incidence</td>
<td>1 avg. daily cases*</td>
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<tr>
<td>14-day slope</td>
<td>+0.0 cases per day</td>
</tr>
<tr>
<td>Peak 14-day incidence</td>
<td>2 avg. daily cases 5/5/2020</td>
</tr>
</tbody>
</table>

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 has doubled over 3 weeks.

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 well below peak in early April

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.

| Peak 7-day rolling average | 173 avg. daily admissions 4/12/2020 |
Daily COVID-19 hospital admissions by race/ethnicity. Hospitalizations are rising for every group.

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 are rising.

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.
Latinx hospital admissions are rising.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Admissions doubled since 10/13</th>
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<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>57 avg. daily admissions 4/28/2020</td>
</tr>
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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.
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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Near-zero admissions</th>
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<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>8 avg. daily admissions 4/13/2020</td>
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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 are rising.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Admissions doubled since 10/5</th>
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<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>27 avg. daily admissions 5/6/2020</td>
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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.
COVID-19 deaths have risen above 4 per day.

Recent Trend

<table>
<thead>
<tr>
<th></th>
<th>Avg Daily deaths increased from 3 to 4 since 10/21</th>
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<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>48 avg. daily deaths 5/9/2020</td>
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</tbody>
</table>

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.
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

| 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 18 days after decreasing for 5 days.

**Recent Trend**
- Increase 6 days (10/4-10/10)
- Decrease 5 days (10/10-10/15)
- Increase 18 days (10/15-11/2)

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 14 days after being stable for 4 days.

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 **10.9%**. Testing is at an all-time high.

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.
Test positivity and testing count have varied greatly over the entire duration of the epidemic.

Test positivity is the number of positive tests divided by all tests performed (Source: INEDSS).

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

Goal is under 5%

10.9% positive

14,088 tests

0.0% 2.5% 5.0% 7.5% 10.0% 12.5% 15.0% 17.5% 20.0% 22.5% 25.0% 27.5% 30.0% 32.5% 35.0% 37.5%


Test positive

COVID-19 Tests

Test positivity is the number of positive tests divided by all tests performed (Source: INEDSS).
Hospital System Capacity
Non-ICU bed occupancy from COVID-19 is 48% of peak occupancy and increasing; now at **Go: Cautious Progress.**

COVID-19 acute/non-ICU beds occupied, daily counts, 7 day average and reopening threshold, daily occupancy census (04/03/2020-11/04/2020)

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.

**Go: Cautious Progress**
Threshold = Below 1000

**Go: Continued Progress**
Threshold = Below 500

**Go: Advanced Progress**
Threshold = Below 250
Non-ICU bed occupancy from COVID-19 is increasing at an average of net 15 non-ICU admissions per day; Go: Cautious Progress.

COVID-19 acute/non-ICU beds occupied, daily counts, 7 day average and reopening threshold, daily occupancy census (9/15/2020-11/4/2020)

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 is 35% of peak occupancy and increasing; now at Caution: Pause and Monitor

COVID-19 ICU beds occupied, daily counts, 7 day average and progress threshold, daily occupancy census (03/19/2020 - 11/04/2020)

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.

Caution: Pause and Monitor = Below 250
Go: Cautious Progress Threshold = Below 150
Go: Continued Progress Threshold = Below 75
ICU occupancy from COVID-19 is increasing at an average rate of net 5 ICU admissions per day; Caution: Pause and Monitor

COVID-19 ICU beds occupied, daily counts, 7 day average and progress threshold, daily occupancy census (09/15/2020 - 11/04/2020)

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 utilization from COVID-19 is 23% of peak occupancy and increasing; now at **Go: Cautious Progress**.

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.

COVID-19 ventilators in use, daily counts, 7 day average and reopening threshold, daily utilization census (3/19/2020-11/4/2020)

<table>
<thead>
<tr>
<th>Peak 7-day rolling average</th>
<th>344 avg. ventilators in use 5/2/2020</th>
</tr>
</thead>
</table>

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.
Ventilator utilization from COVID-19 is increasing at an average rate of net 3 per day; **Go: Cautious Progress.**

COVID-19 ventilators in use, daily counts, 7 day average and reopening threshold, daily utilization census (9/15/2020-11/4/2020)

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 9,000 tests per day for 29 straight days. Now at all time high.

All COVID-19 tests performed on Chicago residents per day as reported by electronic lab reporting from IDPH. 9000 tests per day represents the capacity to test 5% of Chicago residents per month. Daily counts for most recent dates displayed are likely incomplete.