Protecting Chicago: Phase IV Re-Opening Metrics Update

September 12, 2020
(Data current through 9/9/2020)
<table>
<thead>
<tr>
<th>Metric</th>
<th>Stop: May need to delay moving ahead</th>
<th>Caution: Pause and monitor</th>
<th>Go: Cautious progress</th>
<th>Go: Continued progress</th>
<th>Go: Advanced progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>Any sustained increase &gt;14 days within the past 28 days</td>
<td>Increase 0-14 days (in most recent 14-day period)</td>
<td>Stable or decrease 0-13 days (w/o increase in most recent 14-day period)</td>
<td>Stable or decrease 14-28 days and/or sustained &lt;200 new cases per day (~100 cases per 100,000 persons)</td>
<td></td>
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<tr>
<td>Hospitalizations</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Deaths</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID Emergency department visits</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Positivity rate</td>
<td>&gt;10%</td>
<td>5% - 10%</td>
<td>&lt;5% of all daily tests are confirmed positive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital system capacity</td>
<td>&gt;1280 non-ICU beds &gt;480 ICU beds &gt;360 ventilators</td>
<td>&gt;1000 non-ICU beds &gt;400 ICU beds &gt;300 ventilators</td>
<td>&lt;1000 non-ICU beds occupied by COVID patients &lt;400 ICU beds occupied by COVID patients &lt;300 ventilators occupied by COVID patients</td>
<td></td>
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</tr>
<tr>
<td>Testing capacity</td>
<td>Unexplained decline in testing &lt;4500 total tests/day</td>
<td>Explained decline in testing &lt;4500 total tests/day</td>
<td>Stable testing &gt;4500 total tests/day</td>
<td>Assign case for investigation within 24h for 50% of cases 75% of cases 90% of cases</td>
<td></td>
</tr>
<tr>
<td>Response capacity</td>
<td>N/A</td>
<td>N/A</td>
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</tr>
</tbody>
</table>
COVID-19 Confirmed Cases
COVID-19 case incidence in Chicago is persistently high and declining, and now decreasing for 11 days.

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

Reporting delays may be contributing to apparent declines in incident cases starting on 8/24.

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 is very high but declining fastest among Latinx compared to other race/ethnicities.

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

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Peak 14-day Incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latinx</td>
<td>429 avg. daily cases</td>
</tr>
<tr>
<td></td>
<td>5/6/2020</td>
</tr>
<tr>
<td>Black, non-Latinx</td>
<td>204 avg. daily cases</td>
</tr>
<tr>
<td></td>
<td>4/24/2020</td>
</tr>
<tr>
<td>Asian, non-Latinx</td>
<td>21 avg. daily cases</td>
</tr>
<tr>
<td></td>
<td>4/26/2020</td>
</tr>
<tr>
<td>White, non-Latinx</td>
<td>107 avg. daily cases</td>
</tr>
<tr>
<td></td>
<td>4/30/2020</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.

Reporting delays may be contributing to apparent declines in incident cases starting on 8/24.
Black, non-Latinx case incidence is moderately high and declining. Cases have been stable or decreasing for >28 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>Decrease 8 days (8/6-8/14)</th>
<th>Stable 3 days (8/14-8/17)</th>
<th>Decrease 18 days (8/17-9/4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-day incidence</td>
<td>MODERATELY HIGH (44 avg. daily cases*)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-day slope</td>
<td>DECLINE -0.9 cases per day</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak 14-day incidence</td>
<td>204 avg. daily cases 4/24/2020</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reporting delays may be contributing to apparent declines in incident cases starting on 8/24.

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 declining. Cases have been decreasing for 6 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.
Asian, non-Latinx case incidence is moderate and declining. Cases have been decreasing for 13 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>14-day incidence</th>
<th>14-day slope</th>
<th>Peak 14-day incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stable 3 days (8/6-8/9)</td>
<td>MODERATE (5 avg. daily cases*)</td>
<td>DECLINE -0.2 cases per day</td>
<td>21 avg. daily cases 4/26/2020</td>
</tr>
<tr>
<td>Decrease 5 days (8/9-8/14)</td>
<td>Increase 8 days (8/14-8/22) 0.3 C/D</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Decrease 13 days (8/22-9/4)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Reporting delays may be contributing to apparent declines in incident cases starting on 8/24.

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 declining. Cases stable or decreasing for 17 days.

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

- **Increase 12 days (8/6-8/18)**: 1.2 C/D
- **Decrease 9 days (8/18-8/27)**
- **Stable 3 days (8/27-8/30)**
- **Decrease 5 days (8/30-9/4)**

**14-day incidence**
- MODERATELY HIGH (60 avg. daily cases*)

**14-day slope**
- DECLINE -1.3 cases per day

**Peak 14-day incidence**
- 107 avg. daily cases
- 4/30/2020

**Recent Trend**

- Increase 12 days (8/6-8/18) 1.2 C/D
- Decrease 9 days (8/18-8/27)
- Stable 3 days (8/27-8/30)
- Decrease 5 days (8/30-9/4)

**14-day incidence**
- MODERATELY HIGH (60 avg. daily cases*)

**14-day slope**
- DECLINE -1.3 cases per day

**Peak 14-day incidence**
- 107 avg. daily cases
- 4/30/2020

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.

Reporting delays may be contributing to apparent declines in incident cases starting on 8/24.
COVID-19 Severe Outcomes
Daily COVID-19 hospital admissions have been stable or decreasing for 7 days.

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.

Recent Trend
- Decrease 4 days (8/6-8/10)
- Stable 5 days (8/10-8/15)
- Decrease 7 days (8/15-8/22)
- Increase 6 days (8/22-8/28) 0.8 A/D
- Stable 3 days (8/28-8/31)
- Decrease 4 days (8/31-9/4)

Peak 7-day rolling average
- 173 avg. daily admissions
- 4/12/2020
Black, non-Latinx hospital admissions have been stable or decreasing for >28 days.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Stable 24 days (8/6-8/30)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Decrease 5 days (8/30-9/4)</td>
<td></td>
</tr>
<tr>
<td>Peak 7-day rolling average</td>
<td>97 avg. daily admissions</td>
</tr>
<tr>
<td>4/6/2020</td>
<td></td>
</tr>
</tbody>
</table>

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 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

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 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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>At or below 1 avg. daily admissions for 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>8 avg. daily admissions 4/13/2020</td>
</tr>
</tbody>
</table>

Hospital Admissions

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

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.
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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Below 5 avg. daily admissions for 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>27 avg. daily admissions 5/6/2020</td>
</tr>
</tbody>
</table>

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 are stable for >28 days with stable trend for most recent 29 days.

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Stable 29 days (7/30-8/28)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>48 avg. daily deaths 5/9/2020</td>
</tr>
</tbody>
</table>

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 9 days.

Recent Trend
- Increase 17 days (8/8-8/25)
- Stable 3 days (8/25-8/28)
- Increase 9 days (8/28-9/6)

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 stable for 7 days after recent decrease for 7 days.

Recent Trend
- Stable 5 days (8/8-8/13)
- Increase 5 days (8/13-8/18)
- Decrease 5 days (8/18-8/23)
- Increase 7 days (8/23-8/30)
- Decrease 7 days (8/30-9/6)

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 Rate
Test positivity is 5.0%. Rate has held steady since 7/31 despite increased 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.

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

Goal is below 1000

Non-ICU beds occupied by COVID-19 patients

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.

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

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 81 straight days.

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

Goal is 4,500 or more 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.
Case Investigation Response Capacity
The percentage of cases assigned for case investigation within 24 hours has met or nearly met the target since the week of July 25.

Number of cases assigned for case investigation within 24 hrs, of all cases assigned for case investigation (C/B), by