Protecting Chicago: Phase IV Re-Opening Metrics Update

October 24, 2020
(Data current through 10/21/2020)
<table>
<thead>
<tr>
<th></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><strong>Cases</strong></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</td>
<td>Stable or decrease &gt;28 days and/or sustained &lt;200 new cases per day (~100 cases per 100,000 persons)</td>
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<tr>
<td><strong>Hospitalizations</strong></td>
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<tr>
<td><strong>Deaths</strong></td>
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<tr>
<td><strong>COVID Emergency department visits</strong></td>
<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Positivity rate</strong></td>
<td>&gt;10%</td>
<td>5%-10%</td>
<td>3%-5% of all daily tests are confirmed positive</td>
<td>&lt;3% of all daily tests are confirmed positive</td>
<td>&lt;=1% of all daily tests are confirmed positive</td>
</tr>
<tr>
<td><strong>Hospital system capacity</strong></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>&lt;500 non-ICU beds occupied by COVID patients &lt;200 ICU beds occupied by COVID patients &lt;150 ventilators occupied by COVID patients</td>
<td>&lt;250 non-ICU beds occupied by COVID patients &lt;100 ICU beds occupied by COVID patients &lt;75 ventilators occupied by COVID patients</td>
</tr>
<tr>
<td><strong>Testing capacity</strong></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>Stable testing &gt;6750 total tests/day</td>
<td>Stable testing &gt;9,000 total tests/day</td>
</tr>
<tr>
<td><strong>Response capacity</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>Assign case for investigation within 24h for 50% of cases</td>
<td>Assign case for investigation within 24h for 75% of cases</td>
<td>Assign case for investigation within 24h for 100% of cases</td>
</tr>
</tbody>
</table>
COVID-19 Confirmed Cases
COVID-19 case incidence in Chicago is persistently high and growing rapidly. Cases have been increasing or stable for 29 days.

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

<table>
<thead>
<tr>
<th>Recent Trend</th>
<th>Stable 6 days (9/17-9/23) Increase 7 days (9/23-9/30) 6 C/D Stable 4 days (9/30-10/4) Increase 12 days (10/4-10/16) 29 C/D</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-day Incidence</td>
<td>HIGH (567 avg. daily cases*)</td>
</tr>
<tr>
<td>14-day slope</td>
<td>GROWTH +24.5 cases per day</td>
</tr>
<tr>
<td>Peak 14-day incidence</td>
<td>998 avg. daily cases 5/20/2020</td>
</tr>
</tbody>
</table>

**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.*
Daily case incidence is currently approximately half of peak incidence for most 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

<table>
<thead>
<tr>
<th>Case Incidence Peak (7-day avg.)</th>
<th>Latinx</th>
<th>461 avg. daily cases 5/3/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black, non-Latinx</td>
<td>229 avg. daily cases 4/24/2020</td>
<td></td>
</tr>
<tr>
<td>Asian, non-Latinx</td>
<td>21 avg. daily cases 4/24/2020</td>
<td></td>
</tr>
<tr>
<td>White, non-Latinx</td>
<td>136 avg. daily cases 10/16/2020</td>
<td></td>
</tr>
<tr>
<td>Native American/AN, non-Latinx</td>
<td>2 avg. daily cases 5/5/2020</td>
<td></td>
</tr>
</tbody>
</table>

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.

COVID-19 cases among Chicago residents by race/ethnicity, rolling 7-day average, specimen collection date.
Black, non-Latinx case incidence is high and growing rapidly. Cases have been increasing for 22 days.

COVID-19 cases among Black, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date
Latinx case incidence is very high and growing. Cases have been increasing rapidly for the past 12 days.

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 growing. Cases have been increasing for the past 14 days.

COVID-19 cases among Asian, non-Latinx residents, daily counts and rolling 7-day average, specimen collection date
White, non-Latinx case incidence is high and growing rapidly. Cases have been increasing for 12 days.

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. 105 cumulative cases.</th>
</tr>
</thead>
<tbody>
<tr>
<td>14-day incidence</td>
<td>0.6 avg. daily cases*</td>
</tr>
<tr>
<td>14-day slope</td>
<td>+0.1 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 admissions have been at low incidence for >28 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.
Daily COVID-19 hospital admissions have been at low incidence for >28 days.

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 admissions have been at low incidence 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</th>
<th>Trend</th>
<th>At or below 6 avg. daily admissions for 30 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>97 avg. daily admissions 4/6/2020</td>
<td></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.
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

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

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

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 at 2 to 4 deaths per day.

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 been stable or decreasing for 23 days.

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.

Recent Trend

Increase 6 days (9/19-9/25)
Stable 17 days (9/25-10/12)
Decrease 4 days (10/12/-10/16)
Stable 2 days (10/16-10/18)
ED visits for COVID-like illness has been decreasing 10 days after increasing for 19 days.

Recent Trend
Increase 19 days (9/19-10/8)
Decrease 10 days (10/8-10/18)

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 6.7%. 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).
Hospital System Capacity
Non-ICU bed occupancy from COVID-19 increased 45% in past month; currently at Go: Continued Progress.

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

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 34% in past 3 weeks; 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

Go: Cautious Progress Threshold = Below 100
Go: Continued Progress Threshold = Below 75
Go: Advanced Progress Threshold = Below 50

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 steady at Go: Advanced Progress threshold.

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

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 123 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. 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.