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

<table>
<thead>
<tr>
<th>Category</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 7-day rolling daily average</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Hospitalizations 7-day rolling daily average</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>
</tr>
<tr>
<td>Deaths 7-day rolling daily average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COVID Emergency department visits 7-day rolling daily average</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>Hospital system capacity 7-day rolling daily average</td>
<td>&gt;1200 non-ICU beds &gt;500 ICU beds &gt;340 ventilators</td>
<td>&gt;1000 non-ICU beds &gt;200 ICU beds &gt;160 ventilators</td>
<td>&lt;1000 non-ICU beds occupied by COVID patients &lt;200 ICU beds occupied by COVID patients &lt;160 ventilators occupied by COVID patients</td>
<td>&lt;500 non-ICU beds occupied by COVID patients &lt;100 ICU beds occupied by COVID patients &lt;60 ventilators occupied by COVID patients</td>
<td>&lt;250 non-ICU beds occupied by COVID patients &lt;50 ICU beds occupied by COVID patients &lt;40 ventilators occupied by COVID patients</td>
</tr>
<tr>
<td>Testing capacity 7-day rolling daily average</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>Response capacity</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 for 28 straight days.

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 (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 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

<table>
<thead>
<tr>
<th>Case Incidence Peak (7-day avg.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latinx</td>
</tr>
<tr>
<td>Black, non-Latinx</td>
</tr>
<tr>
<td>Asian, non-Latinx</td>
</tr>
<tr>
<td>White, non-Latinx</td>
</tr>
<tr>
<td>Native American/AN, non-Latinx</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

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 growing rapidly. Cases have been increasing or stable 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>14-day incidence</th>
<th>14-day slope</th>
<th>Peak 14-day incidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase 25 days (9/24-10/19) 3 C/D</td>
<td>HIGH (108 avg. daily cases*)</td>
<td>GROWTH +3.9 cases per day</td>
<td>204 avg. daily cases 4/24/2020</td>
</tr>
<tr>
<td>Stable 4 days (10/19-10/23)</td>
<td></td>
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</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 rapidly for the past 18 days.

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

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

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.

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.

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.

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. 108 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>+0.0 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

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**

| 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**
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.

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>Pending resolution of data issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>97 avg. daily admissions 4/6/2020</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.
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.

Recent Trend Pending resolution of data issues
Peak 7-day rolling average 57 avg. daily admissions 4/28/2020
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>Pending resolution of data issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak 7-day rolling average</td>
<td>8 avg. daily admissions 4/13/2020</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.
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.

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

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.

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.
Test Positivity and Number Needed to Test
Test positivity is 8.1%. Testing is near 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.
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

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

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 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

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

Ventilators occupied by COVID-19 patients

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.

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.