Protecting Chicago: Phase IV Re-Opening Metrics Update

January 30th, 2021
(Data current through 1/27/2021)
<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 (consecutive) 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><strong>Hospitalizations</strong></td>
<td>&gt;1200 non-ICU beds 250 ICU beds 300 ventilators</td>
<td>&gt;1000 non-ICU beds &gt;150 ICU beds &gt;150 ventilators</td>
<td>&lt;1000 non-ICU beds occupied by COVID patients &lt;150 ICU beds occupied by COVID patients &lt;150 ventilators occupied by COVID patients</td>
<td>&lt;500 non-ICU beds occupied by COVID patients &lt;75 ICU beds occupied by COVID patients &lt;75 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;50 ventilators occupied by COVID patients</td>
</tr>
<tr>
<td><strong>Deaths</strong></td>
<td>Unexplained decline in testing &lt;4500 total tests/day</td>
<td>Explained decline in testing &gt;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>COVID Emergency department visits</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>
<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;1200 non-ICU beds &gt;250 ICU beds &gt;300 ventilators</td>
<td>&gt;1000 non-ICU beds &gt;150 ICU beds &gt;150 ventilators</td>
<td>&lt;1000 non-ICU beds occupied by COVID patients &lt;150 ICU beds occupied by COVID patients &lt;150 ventilators occupied by COVID patients</td>
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<td>&lt;250 non-ICU beds occupied by COVID patients &lt;50 ICU beds occupied by COVID patients &lt;50 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 &gt;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>
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</table>
COVID-19 Confirmed Cases
COVID-19 case incidence is 2X greater than late September and declining for last 14 days.

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 highest among Latinx Chicagoans. Incidence is declining among all race/ethnicity groups.

COVID-19 cases among Chicago residents by race/ethnicity, rolling 7-day average, specimen collection date (9/15/2021 - 1/22/2021)

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.
COVID-19 Severe Outcomes
Daily COVID-19 hospital admissions are declining in recent weeks.

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

Recent trend: Stable or declining 26 days (12/20/20-1/15/21) may be influenced by holiday patterns

Peak 7-day rolling average: 173 avg. daily admissions (4/12/2020)

Cumulative hospital admits by surge:
- Current surge: 8,313 (10/10/20-1/15/21)
- First surge: 10,338 (3/14/20-6/18/20)

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 are highest for Black, non-Latinx and flattening.

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.
COVID-19 deaths are >10 per day. 1,496 deaths in second surge.

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

Recent trend
Decreasing 19 days (12/22/20-1/10/21)
Stable 4 days (1/10/21-1/14/21)
Decreasing 8 days (1/14/21-1/22/21)

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.
Daily COVID-19 deaths by are highest for Latinx despite younger age structure of population.

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

Daily COVID-19 deaths reported for Chicago residents with known death date. Data source: INEDSS. A five day lag is imposed to reduce inaccuracy created by reporting delays.
Emergency Department Visits
ED visits for COVID-like illness have been stable or decreasing for 73 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 and Number Needed to Test
Test positivity has dropped to 6.9% with consistent testing levels.

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 has been declining since 11/25. Rate of decline may be slowing.

COVID-19 acute non-ICU beds occupied, daily counts and 7 day average, daily occupancy census (9/15/2020-01/27/2021)

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.

<table>
<thead>
<tr>
<th>Peak 7-day rolling average</th>
<th>1211 avg. occupied non-ICU beds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Availability</td>
<td>23%</td>
</tr>
<tr>
<td></td>
<td>01/27/2021</td>
</tr>
</tbody>
</table>
ICU occupancy from COVID-19 has been declining since 12/15.

COVID-19 ICU beds occupied, daily counts and 7 day average, daily occupancy census (09/15/2020 - 01/27/2021)

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 has been declining since 12/13, though may be plateauing.

COVID-19 ventilators in use, daily counts and 7 day average, daily utilization census (9/15/2020-01/27/2021)

<table>
<thead>
<tr>
<th>Peak 7-day rolling average</th>
<th>344 avg. ventilators in use 5/2/2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current Availability</td>
<td>69%</td>
</tr>
<tr>
<td></td>
<td>01/27/2021</td>
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</tbody>
</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.
Case Investigation
Approximately 40% of cases are successfully interviewed within 24h

Number and percent of CDPH cases* successfully interviewed within 24h by a case investigator, by week

*CDPH began prioritizing case investigation for cases from CDPH testing facilities on 12/07/2020. Prior to that date, all eligible cases were treated with equal priority. Data are provisional and may change.