Protecting Chicago: Phase IV Re-Opening Metrics Update

January 9th, 2021
(Data current through 1/6/2021)
<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 &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>
<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>Stable or decrease &gt;28 days</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>
<td></td>
</tr>
<tr>
<td><strong>COVID Emergency department visits</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>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>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 is declining. Holiday disruptions muddy interpretation. Now 3X greater than 11 weeks prior.

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 varies over time. Lower testing volume in Spring make comparisons difficult.

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

Peak 7-day rolling average: 2,364 avg. daily cases on 11/11/2020

Surge 2 cumulative cases: 122,560 incident cases from 10/4 through 1/1/21

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.
Surge 2 cumulative case counts by race/ethnicity, since 10/4/2020

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

<table>
<thead>
<tr>
<th>Surge 2 Cumulative Cases (10/4/2020-01/01/2021)</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>NA/AN, non-Latinx</td>
</tr>
<tr>
<td>Unknown</td>
</tr>
<tr>
<td>Cases</td>
</tr>
<tr>
<td>40,319</td>
</tr>
<tr>
<td>17,394</td>
</tr>
<tr>
<td>3,032</td>
</tr>
<tr>
<td>23,445</td>
</tr>
<tr>
<td>141</td>
</tr>
<tr>
<td>32,468</td>
</tr>
</tbody>
</table>

Daily COVID-19 cases with known specimen report date and race/ethnicity information.
COVID-19 case incidence is highest among Latinx Chicagoans. 14-day slopes may not capture recent trend.

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

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

Recent trend | Increase 4 days (12/24-12/28) may be attributable to holiday patterns
---|---
Peak 7-day rolling average | 173 avg. daily admissions 4/12/2020
Cumulative hospital admits by surge | Current surge: 7,190 (10/11-1/1/21)  
First surge: 9,899 (3/14-6/4)

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 on pace to reach 75% of first (Spring) surge.

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

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<tr>
<th>Peak 7-day rolling average</th>
<th>173 avg. daily admissions 4/12/2020</th>
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| Cumulative hospital admits by surge | Current surge: 7,190 (10/11-1/1/21)  
First surge: 9,899 (3/14-6/4) |

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Daily COVID-19 hospital admissions are highest for Black, non-Latinx in the second surge.

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 in the second surge.

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 very high. 1,171 deaths in second surge (half of first surge).

Recent trend: Stable or decreasing 24 days (12/13/20-1/1/21)

Cumulative deaths by surge:
- Current surge: 1,171 (10/25-1/1/21)
- First surge: 2,249 (3/25-6/1/20)

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 on pace to equal half of the deaths in first surge.

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
ED visits for COVID-like illness have been stable or decreasing for 48 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 and testing count have varied greatly over the entire duration of the epidemic.

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

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 in Surge 2 reached 91% of Surge 1 peak occupancy and has been declining since 11/25.

COVID-19 acute/non-ICU beds occupied, daily counts, 7 day average and reopening threshold, daily occupancy census (04/03/2020-01/06/2021)

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.
Non-ICU bed occupancy from COVID-19 remains high but has been declining since 11/25. Now at Go: Cautious Progress

COVID-19 acute non-ICU beds occupied, daily counts, 7 day average and reopening threshold, daily occupancy census (9/15/2020-01/06/2021)

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.
ICU occupancy from COVID-19 in Surge 2 reached 60% of Surge 1 peak occupancy and has been declining since 12/15.

COVID-19 ICU beds occupied, daily counts, 7 day average and progress threshold, daily occupancy census (03/13/2020 - 01/06/2021)

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.

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.
ICU occupancy from COVID-19 remains high but has been declining since 12/15. Now at Caution: Pause and Monitor.

COVID-19 ICU beds occupied, daily counts, 7 day average and progress threshold, daily occupancy census (09/15/2020 - 01/06/2021)

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 in Surge 2 reached 53% of Surge 1 peak utilization and has been declining since 12/13.

COVID-19 ventilators in use, daily counts, 7 day average and reopening threshold, daily utilization census (3/19/2020-01/06/2021)

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 has been declining since 12/13. Now at Go: Cautious Progress

COVID-19 ventilators in use, daily counts, 7 day average and reopening threshold, daily utilization census (9/15/2020-01/06/2021)

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.