COVID-19 Data Update: Chicago

8/12/21
### Chicago COVID-19 Community Transmission Matrix

<table>
<thead>
<tr>
<th>Category</th>
<th>Very High Transmission</th>
<th>High Transmission</th>
<th>Substantial Transmission</th>
<th>Lower Transmission</th>
<th>Low Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>COVID-19 Cases Diagnosed Per Day</strong></td>
<td>800+</td>
<td>400 – 799</td>
<td>200 – 399</td>
<td>20 – 199</td>
<td>≤20</td>
</tr>
<tr>
<td>(Chicago residents - 7-day rolling daily average)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>COVID-19 Test Positivity</strong></td>
<td>10%+</td>
<td>6.6 – 9.9%</td>
<td>5.0 – 6.5%</td>
<td>2 – 4.9%</td>
<td>≤2%</td>
</tr>
<tr>
<td>(Chicago residents - 7-day rolling daily average)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hospital Beds (Non-ICU) Occupied by COVID Patients</strong></td>
<td>1250+</td>
<td>750 – 1249</td>
<td>250 – 749</td>
<td>100 – 249</td>
<td>≤100</td>
</tr>
<tr>
<td>(Chicago hospitals - 7-day rolling daily average)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>ICU Beds Occupied by COVID Patients</strong></td>
<td>400+</td>
<td>300 – 399</td>
<td>100 – 299</td>
<td>20 – 99</td>
<td>≤20</td>
</tr>
<tr>
<td>(Chicago hospitals - 7-day rolling daily average)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Chicago Department of Public Health, data current as of August 11, 2021. These metrics represent general community COVID transmission and should not be applied to individual settings that have mitigation practices in place.
Delta variant already accounts for almost all (est >90%) new COVID cases: nationally, in the Midwest, in Illinois, and in Chicago

HHS Region 5 (Midwest states including Illinois)
COVID-19 case rates per 100,000 population

National currently: 33 diagnosed daily cases per 100,000 people

Chicago currently: 13 COVID-19 diagnosed daily cases per 100,000 people
Diagnosed case rates also affected by testing rates; if people avoid testing until they are ill enough to need medical care, we see very high percent positivity (as in much of the Southeast)

Test Percent Positivity (Average last 7 days)

National currently: 10.2%
Chicago currently: 3.8%
COVID-19 hospitalized patients per 100,000 population

National currently: 20 hospitalized COVID-19 patients per 100,000 people (but highly concentrated in hardest hit areas; nearly all unvaccinated)

Chicago currently: 9 hospitalized COVID-19 patients per 100,000 people (and nearly all unvaccinated)
Individual hospital example from area with high COVID hospitalizations: Houston, TX

- 83 Hospitalized
  - 9 Vaccinated
  - 74 Unvaccinated

- 24 in the ICU
  - 24 Unvaccinated

- 10 on Ventilators
  - 10 Unvaccinated

Total number of COVID patients at Houston Medical Center and Perry Hospital

COVID Hospitalizations
August 10, 2021

Houston Healthcare
In the last month in Chicago: COVID by race/ethnicity

<table>
<thead>
<tr>
<th></th>
<th>Cumulative totals (7/9/2021 - 8/10/2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cases</td>
<td>7,003</td>
</tr>
<tr>
<td>Hospitalizations</td>
<td>372</td>
</tr>
<tr>
<td>Deaths</td>
<td>49</td>
</tr>
</tbody>
</table>

In Chicago: The biggest risk factor for COVID diagnosis, hospitalization, or death, is being unvaccinated.

Cumulative totals by Race-Ethnicity (7/9/2021 - 8/10/2021)

<table>
<thead>
<tr>
<th>Race-Ethnicity</th>
<th>Cases</th>
<th>Hospitalizations</th>
<th>Deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asian-Non-Latinx</td>
<td>197</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Black-Non-Latinx</td>
<td>1,805</td>
<td>207</td>
<td>32</td>
</tr>
<tr>
<td>Latinx</td>
<td>1,173</td>
<td>65</td>
<td>9</td>
</tr>
<tr>
<td>White-Non-Latinx</td>
<td>1,867</td>
<td>66</td>
<td>6</td>
</tr>
<tr>
<td>Other-Non-Latinx</td>
<td>319</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Unknown</td>
<td>1,642</td>
<td>16</td>
<td>0</td>
</tr>
</tbody>
</table>
In Chicago, **unvaccinated** people remain much more likely to be diagnosed with, hospitalized with, or die from COVID-19 than **partially or fully vaccinated** people.

**Weekly Case Rate by Vaccination Status**

**Weekly Hospitalization Rate by Vaccination Status**

**Weekly Death Rate by Vaccination Status**

**Notes:** Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 1/1/2021-7/24/2021, pulled 7/27/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry; Vaccinated defined as having had at least one dose prior to a positive test. Rate for vaccinated calculated as total cases divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total cases divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.
New daily COVID-19 diagnoses, Chicago residents, full pandemic

Lots of attention on breakthrough infections but as of August 10, 99.7% of vaccinated Chicagoans have not been diagnosed with COVID-19 since being vaccinated.

Current average 364 cases/day
Recent Chicago COVID Cases by Age

Daily case rates* by Age

- Citywide
- 0-17
- 18-29
- 30-39
- 40-49
- 50-59
- 60-69
- 70-79
- 80+

Chi.gov/coviddash
Chicago: Weekly COVID Case Rate per 100,000 by Race/Ethnicity

Notes:
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 1/1/2021-7/24/2021, pulled 7/27/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Vaccinated defined as having had at least one dose prior to a positive test. Rate for vaccinated calculated as total cases divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total cases divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.
New daily COVID hospitalizations, Chicago residents, full pandemic

Since January 2021: **97%** of COVID hospitalizations in Chicago residents have been in people **not** fully vaccinated.

**Breakthroughs:** **99.99%** of vaccinated Chicagoans have **not** been hospitalized.

Current average 22 hospitalizations/day
COVID-19 hospital admissions, Chicago residents, by age group, June 1-present

COVID-19 Hospital admits, on Admission Date, by Age Group, rolling 7-day average, from 6/1/2021

0-17y
18-49y
50-64y
65+y

0-17
18-49
50-64
65+
Chicago: Weekly COVID Hospitalization Rate per 100,000 by Age Category

Notes:
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 1/1/2021-8/7/2021, pulled 8/11/2021.
Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Vaccinated defined as having had at least one dose prior to a positive test. Rate for vaccinated calculated as total cases known to have died divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total cases known to have died divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.
Chicago: Weekly COVID Hospitalization Rate per 100,000 by Race/Ethnicity

Unvaccinated

Vaccinated (at least one dose)

Fully Vaccinated (breakthrough)

Notes:
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 1/1/2021-8/7/2021, pulled 8/11/2021.
Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry; Vaccinated defined as having had at least one dose prior to a positive test.
Rate for vaccinated calculated as total hospitalized cases divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total hospitalized cases divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.

Highest hospitalization rates among unvaccinated Black Chicagoans
Since January 2021: **97%** of COVID deaths in Chicago residents have been in people **not** fully vaccinated.

**Breakthroughs:** **99.998%** of vaccinated Chicagoans have **not** died of COVID.
Chicago: Weekly COVID Death Rate per 100,000 by Age Category

Unvaccinated

Vaccinated
(at least one dose)

Fully Vaccinated
(breakthrough)

Notes:
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 1/1/2021-8/7/2021, pulled 8/11/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Vaccinated defined as having had at least one dose prior to a positive test. Rate for vaccinated calculated as total cases known to have died divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total cases known to have died divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.

Highest death rate among unvaccinated 60y+ Chicagoans
Percent of Chicago residents vaccinated by age group

At least one dose (% vaccinated as of 08/10/2021)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>12-17</th>
<th>18-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80+</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>52.2%</td>
<td>59.4%</td>
<td>67.4%</td>
<td>73.3%</td>
<td>80.4%</td>
<td>78.1%</td>
<td>73.1%</td>
<td>64.7%</td>
</tr>
</tbody>
</table>

Completed vaccine series (% vaccinated as of 08/10/2021)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>12-17</th>
<th>18-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
<th>70-79</th>
<th>80+</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>41.1%</td>
<td>53.1%</td>
<td>62.1%</td>
<td>67.5%</td>
<td>74.4%</td>
<td>72.8%</td>
<td>68.3%</td>
<td>60.0%</td>
</tr>
</tbody>
</table>
Percent of Chicago residents vaccinated by race/ethnicity (all ages).

Large majority of doses each week to Latinx and Black Chicagoans all summer.

At least one dose (% vaccinated as of 08/10/2021)

- Asian Non-Latinx: 65.7%
- Black Non-Latinx: 42.1%
- Latinx: 50.7%
- White Non-Latinx: 63.0%

Completed vaccine series (% vaccinated as of 08/10/2021)

- Asian Non-Latinx: 61.3%
- Black Non-Latinx: 37.1%
- Latinx: 45.6%
- White Non-Latinx: 59.5%
Chicago: Slight increase in vaccination rates over past few weeks after long decline; 63% of doses given in pharmacies last week

Current 7-day average:
4000 vaccinations per day
Approx 29,000 per week

Data reported through 8/4/21. Doses administered by Chicago providers.
Lollapalooza follow-up

• Now 14 days post-first day of Lolla and follow-up ongoing

• Chicago’s case investigators continue to reach out to interview every Chicago resident diagnosed with COVID-19 to document exposures and conduct contact tracing; also match to vaccination records. (And other public health departments do this across the U.S.)

• Supplemental questionnaire for any cases reporting Lollapalooza attendance

• Nationwide request for case reports from any other health department (using standard, secure public health communications channel), supplemental interviews ongoing

• Followed emergency department data at Chicago’s hospitals
  • Monitoring for any Lollapalooza tags during the event and for two weeks after
  • Following COVID-like illness patterns (syndromic surveillance)

• Followed Chicago’s overall epidemiologic data; further investigation as necessary

• Any person diagnosed with COVID-19 on or after attending Lollapalooza is included in the analysis; these cases may or may not have resulted from transmission at Lolla itself
Preliminary Lollapalooza findings

- No unexpected findings at this point; no evidence at this point of “super-spreader” event or of substantial impact to Chicago’s COVID-19 epidemiology
- Estimates: 385,000 attended Lolla; 90%+ vaccinated (used 88% vaccinated as conservative estimate for calculations):
  - 0.04% (4 in 10,000) or n=127 vaccinated attendees have reported testing positive
  - 0.16% (16 in 10,000) or n=76 unvaccinated attendees have reported testing positive
- As of 8/11, no hospitalizations or deaths have been reported*
Geography of cases

• Cases identified with attendance at Lolla and symptom onset (or if asymptomatic, test date) on or after attendance
  • 58 Chicago residents
  • 138 non-Chicago Illinois residents
  • 7 out of state residents (MN, GA, VA, NY)
The majority of positive attendees were:

- Non-Chicago residents: 71%
- Under 30 years old: 79%
- White, non-Latinx: 62%
- Symptomatic: 82%
Chicago cases (n=58)

- 22% (13/58) reported attending Lolla on or after the day their symptoms began
  - Important reminder not to ignore symptoms, regardless of vaccination status. Stay home and test.
- 17% (10/58) specified other potential exposure locations, including bars & out-of-state travel
  - Interviews for non-Chicago residents ongoing
Number of Interviewed COVID-19 Cases Reporting Lollapalooza Attendance by Symptom Onset or Test Date, Whichever is Earlier (n=203)
Survey of attendees: Getting vaxxed for Lolla

• Younger attendees were more likely to say attending Lollapalooza was an incentive for them to be vaccinated

• Did the requirement that attendees show proof of vaccination or a negative test make you feel safer at Lollapalooza?
  • Yes – 76%
  • No – 11%
  • Didn’t Matter – 13%
Looking ahead

• COVID risk can not be eliminated. We want to stay open as a city, but being open also means being careful—getting vaccinated, getting tested if you have any COVID symptoms, and, for now, wearing a mask in indoor public places.

• Please get vaccinated, if you haven’t had the chance yet. Vaccinating all age-eligible Chicago residents remains the most important strategy to get Chicago past COVID. We are continuing our Protect Chicago Music Series, offering free tickets to concerts exclusively for vaccinated Chicagoans.

• Wear your mask indoors right now, regardless of your vaccination status. This is not forever but is important while any of our local epidemiologic measures are in substantial or high risk, and we get through the Delta surge.

• Do not ignore any potential symptoms of COVID or assume you have a summer cold. Stay home and get a COVID test, regardless of your vaccination status.

• We continue to recommend that large events be held outdoors, particularly while any of our local epidemiologic measures are in substantial or high risk.

• We continue to recommend that all festival and large event organizers require all attendees to be fully vaccinated against COVID-19 or have a negative COVID-19 test on a specimen collected no more than 72 hours prior to attending.
  • Some event organizers have partnered with commercial clinical testing providers to provide COVID-19 testing at their event; data are still emerging, but initial interim results from a small number of events suggests a minority of people (<2%) attending these events tested positive for SARS-CoV-2.
CDPH Vaccine Ambassadors Promoting Vaccine Pride at Market Days
Pfizer and Johnson & Johnson offered

ANY CHICAGOAN 12+ IS ELIGIBLE FOR AT HOME VACCINATION
- Up to 10 people can be vaccinated at a time.
- Your choice of Pfizer (12+) or Johnson & Johnson (18+) vaccines.
- No ID or insurance required.

CALL 312.746.4835 TO SCHEDULE AN APPOINTMENT