Ask Dr. Arwady

12/14/2021
More than 800,000 Americans have now died from COVID-19.

1 of every 100 Americans age 65+ has now died from COVID-19.

- Now the third-leading cause of death for this age group, behind heart disease and cancer.

Chicago and Illinois are ahead of the nation in most vaccination statistics, but we continue to lag national numbers for vaccination rates in seniors (65+).

As cases increase, it is critical that any seniors who still have not been vaccinated do so now.
Annual number of deaths due to COVID-19 vs. Influenza/Pneumonia among Chicago residents

Six times more COVID-19 deaths during the previous 12 months compared to the five-year median of influenza/pneumonia deaths

- COVID-19 Deaths *
  - Deaths from 12/4/2020 – 12/3/2021
  - 2,535

- Influenza/Pneumonia Deaths **
  - 2015-2019 5-year median
  - 420

Sources:
As of today, California and Mississippi have been added to the travel advisory. No new states were removed.
Average daily COVID-19 cases per 100,000 population

49 Million Cumulative Cases
791,933 Cumulative Deaths

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

Illinois currently:
56 diagnosed daily cases per 100,000 people

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

Presented by the New York Times 12/9/2021;
Sources: Local governments; The Center for Systems Science and Engineering at Johns Hopkins University
Average daily COVID-19 cases per 100,000 population

National currently: 35 diagnosed daily cases per 100,000 people

Illinois currently: 56 diagnosed daily cases per 100,000 people

Chicago currently: 33 diagnosed daily cases per 100,000 people
Average daily new cases per 100,000 population, Midwest region

Case rates have **tripled** in Illinois since the beginning of November.

Illinois currently 56 per 100,000

Michigan currently 87 per 100,000

Source: CDC COVID Data Tracker
Region 5: IL, IN, MI, MN, OH, WI

It’s all still Delta (For now)

https://covid.cdc.gov/covid-data-tracker/#variant-proportions
Chicago COVID-19 Community Transmission and Risk Matrix

<table>
<thead>
<tr>
<th>VIRUS TRANSMISSION</th>
<th>VERY HIGH TRANSMISSION</th>
<th>HIGH TRANSMISSION</th>
<th>SUBSTANTIAL TRANSMISSION</th>
<th>LOWER TRANSMISSION</th>
<th>LOW TRANSMISSION</th>
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</thead>
<tbody>
<tr>
<td>COVID-19 CASES</td>
<td>800+</td>
<td>400 - 799</td>
<td>200 - 399</td>
<td>20 - 199</td>
<td>&lt;20</td>
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<tr>
<td>DIAGNOSED PER DAY</td>
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<tr>
<td></td>
<td>Current: 903</td>
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<tr>
<td></td>
<td>Stable</td>
<td></td>
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<tr>
<td>COVID-19 TEST POSITIVITY</td>
<td>10%+</td>
<td>6.6 - 9.9%</td>
<td>5.0 - 6.5%</td>
<td>2 - 4.9%</td>
<td>&lt;2%</td>
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<tr>
<td></td>
<td>Current: 4.2%</td>
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<tr>
<td></td>
<td>Increasing</td>
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<tr>
<td>HOSPITAL BEDS (NON-ICU) OCCUPIED BY COVID PATIENTS</td>
<td>1250+</td>
<td>750 - 1249</td>
<td>250 - 749</td>
<td>100 - 249</td>
<td>&lt;100</td>
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<tr>
<td></td>
<td>Current: 441</td>
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<td>Increasing</td>
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<tr>
<td>ICU BEDS OCCUPIED BY COVID PATIENTS</td>
<td>400+</td>
<td>300 - 399</td>
<td>100 - 299</td>
<td>20 - 99</td>
<td>&lt;20</td>
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<td></td>
<td>Current: 135</td>
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<td>Increasing</td>
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Source: Chicago Department of Public Health, data current as of December 14, 2021. These metrics represent general community COVID transmission and should not be applied to individual settings that have mitigation practices in place.
Chicago: Very high case rate continues, after post-Thanksgiving surge in cases and diagnoses

Current average case rate: 903
Chicago: COVID test positivity continues to increase; still adequate testing overall

Current positivity: 4.2%
Distribution of Chicago COVID-19 cases by age group and by race/ethnicity did not change notably after Thanksgiving

(no subgroups disproportionately affected by post-holiday surge)

PERCENT OF CASES IN EACH AGE GROUP

2 weeks before the week of Thanksgiving

2 weeks after the week of Thanksgiving

PERCENT OF CASES IN EACH MAJOR RACE/ETHNICITY GROUP

2 weeks before the week of Thanksgiving

2 weeks after the week of Thanksgiving

Data source: Illinois National Electronic Disease Surveillance System (I-NEDSS), pulled 12/9/2021
COVID CASE rates remain higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.

Since the week of Thanksgiving, infections are **THREE TIMES AS LIKELY** in unvaccinated Chicagoans.

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**Notes:**
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-12/4/2021, pulled 12/9/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). 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.
COVID HOSPITALIZATION rates remain higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.

Since the week of Thanksgiving, risk of hospitalization among unvaccinated Chicagoans is **FIVE TIMES** higher.

**Notes:**
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-12/4/2021, pulled 12/9/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). 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.
Breakthrough COVID HOSPITALIZATIONS remain very rare in Chicago but are most common in older Chicagoans, especially those with underlying conditions.

Just since Thanksgiving, unvaccinated older Chicagoans (60y+) have been SEVEN TIMES more likely to be hospitalized with COVID than their vaccinated counterparts. Fully Vaccinated (breakthrough)

Notes:
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of hospital admission 2/28/2021-12/4/2021, pulled 12/9/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). 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.
COVID DEATH rates remain higher among **Unvaccinated** compared to **Fully Vaccinated** Chicagoans.

Since the week of Thanksgiving, risk of death among unvaccinated Chicagoans is **FIVE TIMES** higher.

**Notes:**
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 2/28/2021-12/4/2021, pulled 12/9/2021. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). 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.
Breakthrough COVID DEATHS remain very rare in Chicago but are most common in older Chicagoans with underlying conditions.

Just since Thanksgiving, unvaccinated older Chicagoans (60y+) have been SEVEN TIMES more likely to die from COVID than their vaccinated counterparts.

**Notes:**
Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of death 2/28/2021-12/4/2021, pulled 12/9/2021.
Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry. Fully vaccinated defined as completion of vaccine series at least 14 days prior to a positive test (with no other positive tests in the previous 45 days). Rate for vaccinated calculated as total case deaths divided by cumulative vaccinated at the end of each week, multiplied by 100,000. Rate for unvaccinated calculated as total case deaths divided by total population minus cumulative vaccinated at the end of each week, multiplied by 100,000.
Breakthrough Cases  Increasing but Remain Rare

- 98.5% of fully vaccinated Chicagoans have NOT subsequently tested positive for COVID-19
- 99.97% have NOT subsequently been hospitalized for COVID-19
- 99.99% have NOT subsequently died due to COVID-19

- 24,652 breakthrough cases identified out of 1,682,539 (1.5%) Chicagoans fully vaccinated*
  - Of these, 575 COVID-related hospitalizations with an additional 391 cases under investigation
  - Of these, 147 COVID-19 related deaths

Data reported through 12/08/21

*Completed an FDA authorized vaccine and at least 14 days have passed since the last dose was administered
Omicron: Key judgements based on synthesis of preliminary information (from partners at BlueDot)

- **Omicron will spread quickly (high confidence).** In practice in most current settings, we anticipate rapid spread. Denmark longitudinal sequencing data and mass spread events inform this judgment.

- **We expect more breakthrough and re-infections (high confidence).** We assess vaccines will very likely continue to protect against severe disease, but that increased transmission will impede control efforts. We are tracking Israel and UK data closely and analyzing laboratory study results.

- **On average, moderate case severity (low confidence).** We judge Omicron is unlikely to be more severe than Delta but are skeptical of claims of significantly reduced severity. South African and other hospitalization data will be informative but lagging.
Omicron: Key judgements based on synthesis of preliminary information about Omicron; still collecting information

Anticipated evolution (impressions may change with more data)

In preparation for the upcoming holidays:
- Get vaccinated AND booster doses before the holidays!
- Consider use of rapid tests prior to participating in gatherings/parties
- Maintain or improve other mitigation steps (e.g. masking, ventilation)

Source: BlueDot
BOOSTER DOSES OF PFIZER’S COVID-19 VACCINE ARE NOW RECOMMENDED FOR 16 AND 17 YEAR OLDS AT LEAST SIX MONTHS AFTER INITIAL VACCINE SERIES
Vaccine administration back up to >100,000 doses per week, highest since May

Data reported through 12/8/21. Doses administered by Chicago providers. As of 8/31/21, valid third doses given since 8/13/21 are included in total dose counts.
Chicagoans who received a booster dose of COVID-19 vaccine (n=439,515)

Data as of 12/8/2021. The count of people who received a booster dose includes anyone who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021. This includes people who received booster doses and people who received additional doses.
### Percent of fully vaccinated population* that received a booster dose

<table>
<thead>
<tr>
<th></th>
<th>United States</th>
<th>Chicago</th>
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</thead>
<tbody>
<tr>
<td>Population ≥ 18 years</td>
<td>26.9%</td>
<td>28.7%</td>
</tr>
<tr>
<td>Population ≥ 50 years</td>
<td>38.0%</td>
<td>39.7%</td>
</tr>
<tr>
<td>Population ≥ 65 years</td>
<td>49.1%</td>
<td>51.5%</td>
</tr>
</tbody>
</table>

*Not all may be due to receive a booster dose

Booster uptake among those due for a booster dose highest among oldest Chicagoans; largest increase among 30-59 year-old Chicagoans last week

Data as of 12/8/2021. The population due for a booster is determined by the length of time from last dose and type of vaccine received for the primary series. The count of people who received a booster dose includes anyone who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021 as reported in I-CARE. This includes people who received booster doses and people who received additional doses.
Booster uptake lowest among adult Latinx Chicagoans who are due for a booster dose

Data as of 12/8/2021. The population due for a booster is determined by the length of time from last dose and type of vaccine received for the primary series. The count of people who received a booster dose includes anyone 18 years and older who is fully vaccinated and has received another dose of COVID-19 vaccine since August 13, 2021 as reported in I-CARE. This includes people who received booster doses and people who received additional doses.
In recent weeks (11/7-12/4), safety was the most frequently-specified reason for not vaccinating across race/ethnicity groups.

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>Reasons for not vaccinating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latinx (n=576)</td>
<td>6% Access, 22% Safety</td>
</tr>
<tr>
<td>Black, non-Latinx (n=850)</td>
<td>5% Access, 26% Safety</td>
</tr>
<tr>
<td>White, non-Latinx (n=287)</td>
<td>7% Access, 1% Safety</td>
</tr>
<tr>
<td>Asian, non-Latinx (n=14)</td>
<td>7% Access, 29% Safety</td>
</tr>
<tr>
<td>Other, non-Latinx (n=23)</td>
<td>4% Access, 26% Safety</td>
</tr>
<tr>
<td>All (n=1,973)</td>
<td>1% Access, 21% Safety</td>
</tr>
</tbody>
</table>

Interviewees of unknown race/ethnicity: 11% of unvaccinated (n=223), included in 'All' column only.
Unvaccinated interviewees ages 65+ cite provider advice or concerns about other medical conditions

Chicago case/contact interviews

Reasons for not vaccinating:
- Access: Cost, transportation, identification or appointment issues
- Too young
- Doesn’t feel vaccine is necessary for them
- Religious objections
- Medical condition or provider advice
- Safety
- Refused unspecified or unknown
- Already had COVID-19
- Other mistrust, skepticism or anxiety
- Busy or have not made time
- Undecided, might get vaccinated
- Plans to, is now interested or scheduled

Interviewees of unknown age: <1% of cases, 12% of contacts. Status was not verified using I-CARE or other vaccination record.
GET VAXXED AT HOME & GET UP TO $100*

- Anyone age 5+ can get a vaccine at home
- Pfizer (5-11 and 12+) or J&J (18+)
- Up to 10 people can get vaccinated at the same time
- Booster doses available
- Appointments: Monday-Sunday, 8:00 am to 6:30 pm

One $50 gift card for each Pfizer dose, two $50 gift cards for single J&J dose. Booster doses do not qualify.

To schedule your appointment:
CALL 312.746.4835
OR VISIT chicago.gov/athome
Get Covered Illinois! **Enroll by December 15th**
to have your coverage start on January 1, 2022

- Open Enrollment goes through January 15, 2022 – however if you enroll after December 15, coverage will not start until February 1
- Sign up for a free visit with a patient navigator to help you understand how to pick a plan!
  - Widget.GetCoveredAmerica.org

*Insurance is not required for COVID-19 vaccination*
Need a vaccine or a booster? Have questions?

visit CHI.GOV/COVIDVAX

or call 312-746-4835

CDPH