Ask Dr. Arwady

December 6, 2022

Guests: Stephanie Gretsch, Senior Epidemiologist

Dr. Michelle Funk, Medical Director for Youth Settings
### Our local risk based on CDC COVID-19 Community Levels is: Medium

<table>
<thead>
<tr>
<th></th>
<th>New cases per 100,000 population (last 7 days)</th>
<th>New admissions per 100,000 population (last 7 days)</th>
<th>Percent of staffed inpatient beds occupied by COVID-19 patients (last 7 days)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>City of Chicago</strong></td>
<td>95</td>
<td>8.9</td>
<td>3.4%</td>
</tr>
<tr>
<td><strong>Cook County</strong></td>
<td>117</td>
<td>11.5</td>
<td>4.1%</td>
</tr>
</tbody>
</table>

*Chicago metrics are calculated based on Chicago-level data. Cook County metrics are calculated by the CDC and posted on the CDC Community Levels website. Data current as of 12/1/2022.*

In “Medium” risk, the Chicago Department of Public Health recommends individuals:

- Stay up to date* with COVID-19 vaccines
- Wear a face mask in indoor public settings where vaccine status is not known
- Get tested if you have symptoms
- Follow all isolation and quarantine guidance, including wearing a face mask
- If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions

*Up-to-date means a person has received all recommended COVID-19 vaccines, including any booster dose(s) when eligible.
Additional COVID-19 Indicators for Chicago

Chicago COVID-19 Emergency Department encounters

- LOW CONCERN

Chicago Wastewater Sampling

- HIGH CONCERN

Chicago Variant Risk Assessment

- MEDIUM CONCERN
Last week, 5.7% of U.S. Counties reported High COVID Community Level and 25% reported Medium Level.
Variant Surveillance, Midwest Region
Continued evolution of more infectious Omicron subvariants

Collection date, week ending

BQ.1.1 29.6%
BQ.1 27.6%
BA.5 18.4%
BF.7 8.5%
BN.1 4.1%
XBB 3.4%
BA.4.6 2.6%
BA.5.2.6 2.1%
BF.11 1.4%
BA.2.75 0.9%
BA.2 0.8%
BA.2.75.2 0.6%

If you test positive for COVID-19 and are more likely to get very sick from COVID, treatments are available.

- **Don’t delay**: treatment must be started within days of when you first develop symptoms to be effective.

- **For example**: Paxlovid (nirmatrelvir and ritonavir) is an oral antiviral therapy that was granted **EUA** for the treatment of mild to moderate COVID-19.
  - Individuals **ages 12 and up**, weighing at least 40 kg or 88 lb, with mild to moderate COVID-19, who are at **high risk** of developing severe illness are eligible for this medication.

- Some treatments might have side effects or interact with other medications you are taking. Ask a healthcare provider if medications to treat COVID-19 are right for you.

- If you don’t have a healthcare provider, visit a **Test to Treat location** or contact the City’s **COVID-19 Hotline at 312-746-4835**
THINK YOU’RE UP TO DATE WITH YOUR COVID VACCINES?

IF YOU HAVEN’T BEEN VACCINATED SINCE LABOR DAY...

Previously vaccinated Chicagoans age 5+ are eligible for the new bivalent booster and the best protection against Omicron.

Chicago.gov/boost
Pfizer and BioNTech have asked the FDA to authorize bivalent boosters for children under 5 years.

It’s possible COVID boosters for the youngest Chicagoans could be administered before the New Year!
Higher Updated Booster Coverage among Chicagoans than Nationwide Estimates—but too low everywhere

<table>
<thead>
<tr>
<th>People with an Updated (Bivalent) Booster Dose</th>
<th>Percent of US Population (as of 11/30)</th>
<th>Percent of Chicago Population (as of 11/29)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population ≥ 5 years</td>
<td>12.7%</td>
<td>15.9%</td>
</tr>
<tr>
<td>Population ≥ 12 years</td>
<td>13.8%</td>
<td>16.6%</td>
</tr>
<tr>
<td>Population ≥ 18 years</td>
<td>14.7%</td>
<td>17.4%</td>
</tr>
<tr>
<td>Population ≥ 65 years</td>
<td>32.6%</td>
<td>33.6%</td>
</tr>
</tbody>
</table>

Chicago data reported to I-CARE as of 11/29/2022.
Over 429,000 doses of the updated boosters have been administered to Chicagoans since authorization.

The 7DRA doses administered decreased from ~4,500 last week to ~4,300 this week.

Data reported to I-CARE as of 11/29/2022.
**Demographics of Chicagoans who received an updated COVID-19 vaccine (N=429,660)**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Count</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5-11 yrs</td>
<td>10499</td>
<td>2.4%</td>
</tr>
<tr>
<td>12-17 yrs</td>
<td>14986</td>
<td>3%</td>
</tr>
<tr>
<td>18-29 yrs</td>
<td>48992</td>
<td>11%</td>
</tr>
<tr>
<td>30-39 yrs</td>
<td>78886</td>
<td>18%</td>
</tr>
<tr>
<td>40-49 yrs</td>
<td>60155</td>
<td>14%</td>
</tr>
<tr>
<td>50-59 yrs</td>
<td>61527</td>
<td>14%</td>
</tr>
<tr>
<td>60-69 yrs</td>
<td>73320</td>
<td>17%</td>
</tr>
<tr>
<td>70-79 yrs</td>
<td>54951</td>
<td>13%</td>
</tr>
<tr>
<td>80+ yrs</td>
<td>26344</td>
<td>6%</td>
</tr>
</tbody>
</table>

**Race-ethnicity**

<table>
<thead>
<tr>
<th>Race-ethnicity</th>
<th>Count</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latinx</td>
<td>70050</td>
<td>16%</td>
</tr>
<tr>
<td>Black, non-Latinx</td>
<td>79938</td>
<td>19%</td>
</tr>
<tr>
<td>White, non-Latinx</td>
<td>225025</td>
<td>52%</td>
</tr>
<tr>
<td>Asian, non-Latinx</td>
<td>36270</td>
<td>8%</td>
</tr>
<tr>
<td>AIAN, non-Latinx</td>
<td>2173</td>
<td>1%</td>
</tr>
<tr>
<td>NHPI, non-Latinx</td>
<td>1001</td>
<td>0%</td>
</tr>
<tr>
<td>Other, non-Latinx</td>
<td>7291</td>
<td>2%</td>
</tr>
<tr>
<td>Unknown</td>
<td>7912</td>
<td>2%</td>
</tr>
</tbody>
</table>

**Sex**

<table>
<thead>
<tr>
<th>Sex</th>
<th>Count</th>
<th>(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>234328</td>
<td>55%</td>
</tr>
<tr>
<td>Male</td>
<td>193044</td>
<td>45%</td>
</tr>
<tr>
<td>Unknown</td>
<td>2288</td>
<td>1%</td>
</tr>
</tbody>
</table>

Data reported to I-CARE as of 11/29/2022.

AIAN = American Indian Alaskan Native
NHPI = Native Hawaiian Pacific Islander
# Overall, 23% (+1%) of Eligible Chicagoans have received an updated, Fall 2022 COVID booster

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>No. of Chicagoans eligible for updated vaccine (est.)*</th>
<th>No. of eligible who received updated vaccine</th>
<th>Percent eligible who have received updated vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latinx</td>
<td>520,544</td>
<td>70,068</td>
<td>13.5%</td>
</tr>
<tr>
<td>Black, non-Latinx</td>
<td>434,966</td>
<td>79,955</td>
<td>18.4%</td>
</tr>
<tr>
<td>White, non-Latinx</td>
<td>646,385</td>
<td>225,053</td>
<td>34.8%</td>
</tr>
<tr>
<td>Asian, non-Latinx</td>
<td>143,910</td>
<td>36,292</td>
<td>25.2%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age Group</th>
<th>No. of Chicagoans eligible for updated vaccine (est.)*</th>
<th>No. of eligible who received updated vaccine</th>
<th>Percent eligible who have received updated vaccine</th>
</tr>
</thead>
<tbody>
<tr>
<td>05-11 yrs</td>
<td>98,518</td>
<td>10,499</td>
<td>10.7%</td>
</tr>
<tr>
<td>12-17 yrs</td>
<td>127,426</td>
<td>14,986</td>
<td>11.8%</td>
</tr>
<tr>
<td>18-29 yrs</td>
<td>355,603</td>
<td>48,992</td>
<td>13.8%</td>
</tr>
<tr>
<td>30-39 yrs</td>
<td>354,143</td>
<td>78,886</td>
<td>22.3%</td>
</tr>
<tr>
<td>40-49 yrs</td>
<td>276,703</td>
<td>60,155</td>
<td>21.7%</td>
</tr>
<tr>
<td>50-59 yrs</td>
<td>254,925</td>
<td>61,527</td>
<td>24.1%</td>
</tr>
<tr>
<td>60-69 yrs</td>
<td>216,215</td>
<td>73,320</td>
<td>33.9%</td>
</tr>
<tr>
<td>70-79 yrs</td>
<td>127,142</td>
<td>54,951</td>
<td>43.2%</td>
</tr>
<tr>
<td>80+ yrs</td>
<td>66,525</td>
<td>26,344</td>
<td>39.6%</td>
</tr>
</tbody>
</table>

Data reported to I-CARE through 11/29/2022. Number eligible includes Chicagoans aged 12 years or older who completed a primary series or received a monovalent booster dose at least 2 months prior to 11/26/2022.
GET YOUR UPDATED
COVID BOOSTER &
FLU SHOT AT HOME

In-home vaccination is available to all Chicago households at no cost. Up to 10 people can be vaccinated, so invite your family, friends, or neighbors to get vaccinated together.

TO REGISTER FOR AN APPOINTMENT CALL 312.746.4835 OR VISIT OR CHICAGO.GOV/ATHOME
EVENYONE 6 MONTHS AND UP IS ELIGIBLE FOR THE AT-HOME PROGRAM

In-home appointments are available four days a week, Saturday through Tuesday, 8:00 am – 6:30 pm.

VACCINES AVAILABLE

• Primary series Moderna (age 6 months through 5 years) and Pfizer (age 6 months and older).

• New Pfizer bivalent boosters (age 5 years and older).

• Flu shots are available as long as one person receives the COVID-19 vaccine.

TO REGISTER FOR AN APPOINTMENT
CALL 312.746.4835 OR VISIT OR CHICAGO.GOV/ATHOME
Saturday, December 10 • 9am-2pm

Olive Harvey College • 10001 S. Woodlawn Ave.
Register at: rebrand.ly.Olive-Harvey

The new COVID-19 bivalent booster will be available!

Types of vaccines: Flu, COVID-19 primary series from Pfizer and Moderna starting 6 months+, and Pfizer bivalent boosters from 5 years+

WALK-INS WELCOME!
Need a vaccine or a booster? Have questions?

visit

CHI.GOV/COVIDVAX

or call

312-746-4835
Unusual to see such early and significant flu activity. Here’s what the same data looked like in 2016–2021.

Influenza hospitalizations nationwide right now are higher than they’ve been in the past decade.

Source: cdc.gov. Comparison: yourlocalepidemiologist.substack.com
Nationwide: Last week, for the first time in the pandemic, influenza hospitalizations overtook COVID hospitalizations.
National Influenza Vaccination Week is December 5–9, 2022
National Influenza Vaccination Week is December 5–9, 2022

• National Influenza Vaccination Week (NIVW) is an annual observance in December to remind everyone 6 months and older that there’s still time to get vaccinated against flu.

• Vaccination is particularly important for people who are at higher risk of developing serious flu complications, including young children.

• Millions of children get sick with flu every year, and thousands will be hospitalized as a result.
### Surveillance Indicators for Acute Respiratory Illness

<table>
<thead>
<tr>
<th>Indicator</th>
<th>What is being measured?</th>
<th>Who is reporting?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outpatient visits (ILINet)</td>
<td>The percent of outpatient visits due to influenza-like illness</td>
<td>Federally qualified health center with multiple locations throughout Chicago submits aggregate weekly data</td>
</tr>
<tr>
<td>Emergency department visits</td>
<td>The percent of emergency department visits due to influenza-like illness and other diagnoses</td>
<td>All acute care hospitals report near-real time data to IDPH</td>
</tr>
<tr>
<td>Laboratory tests for respiratory viruses</td>
<td>The number and percent of specimens positive for influenza</td>
<td>Five hospital labs and two commercial labs submit aggregate weekly testing data</td>
</tr>
</tbody>
</table>
What is Influenza Like Illness (ILI)?

- Fever AND cough OR sore throat
- Syndromic surveillance approach used to monitor different healthcare visits for respiratory illnesses based on symptoms not laboratory-confirmed illness
- ILI will capture respiratory illness visits due to diseases that present with similar symptoms, including flu, COVID-19, and RSV
Outpatient Illness Surveillance

Assess trends in outpatient visits due to respiratory illness

Percent of outpatient visits due to ILI reported by ILINet facilities in Chicago

Percentage of Outpatient Visits for Respiratory Illness Reported By The U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet), Weekly National Summary, 2022-2023* and Selected Previous Seasons

This system monitors visits for ILI (fever and cough or sore throat), not laboratory confirmed influenza and may capture patient visits due to other respiratory pathogens that cause similar symptoms.

ILI Activity by Geography

National data: based on outpatient visits due to ILI

Chicago data: based on ED visits due to ILI

Emergency Department Illness Surveillance

Assess trends in emergency department visits due to respiratory illness

- Influenza like illness (ILI)
- COVID like illness (CLI)
- RSV

Data reported through 11/26/2022
Emergency Department Illness Surveillance
Assess trends in hospital admissions via the emergency department

Hospital admissions among children <18 years-old at Chicago hospitals due to acute respiratory viruses

Data reported through 11/26/2022. Assigned syndromes or diseases are based on chief complaint terms and diagnosis codes. Broad acute respiratory is a syndrome to identify visits with diagnostic codes associated with a broad range of acute respiratory illnesses. This includes codes associated with specific respiratory infections (e.g. influenza, RSV, or coronavirus), as well as codes associated with general respiratory illness such as cough or pneumonia.
Laboratory-Based Surveillance: Assess trends in test positivity

Data reported through 11/26/2022
Laboratory-Based Surveillance: Monitor co-circulating viruses

Shaded regions are the typical seasonal periods for flu

Data reported through 11/26/2022
Laboratory-Based Surveillance: Determine additional details about what types of viruses are circulating.

Influenza type/subtypes detected during the 2022-23 season:

- **Influenza A**
  - Subtype: (H1N1)pdm09
    - # Positive: 13
    - % Positive: 0.7
  - Subtyping not performed: 320
    - % Positive: 16.4

- **Influenza B**
  - Total positive: 1,619
    - % Positive: 82.9

- **Influenza A**
  - Subtype: H3N2
    - # Positive: 1,952
    - % Positive: 99.9
  - Total positive: 9,241
    - % Positive: 99.8

<table>
<thead>
<tr>
<th>Type / Subtype</th>
<th>Week Ending November 26, 2022</th>
<th>Since October 2, 2022</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td># Positive</td>
<td>% Positive</td>
</tr>
<tr>
<td><strong>Influenza A</strong></td>
<td>1,952</td>
<td>99.9</td>
</tr>
<tr>
<td>(H1N1)pdm09</td>
<td>13</td>
<td>0.7</td>
</tr>
<tr>
<td>H3N2</td>
<td>320</td>
<td>16.4</td>
</tr>
<tr>
<td>Subtyping not performed</td>
<td>1,619</td>
<td>82.9</td>
</tr>
<tr>
<td><strong>Influenza B</strong></td>
<td>2</td>
<td>0.1</td>
</tr>
<tr>
<td><strong>Total Positive</strong></td>
<td>1,954</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Additional Disease-Specific Indicators for Flu or COVID-19

Measure the burden of severe illness caused by influenza and COVID-19 and describe risk factors for severe disease
- Influenza-associated ICU hospitalizations
- HHS Protect hospital surveillance
  - Number of new influenza and COVID-19 admissions at Chicago hospital
- Pediatric influenza-associated deaths
- IDPH Vital records
  - Deaths due to pneumonia/influenza/COVID-19 occurring in Chicago

Provide guidance for management of outbreaks in high-risk settings
- Long-term care facility influenza and COVID-19 outbreaks
- National Healthcare Safety Network long-term care facility module
  - Number of residents/staff with influenza and COVID-19
How Can We Predict How Well a Vaccine Might Work?

- **Person Being Vaccinated**
  - Previous history of vaccination
  - Age
  - Immune status

- **Virus**
  - Influenza virus proteins are constantly changing
  - Vaccines work best when there is a good “match” between flu vaccine and circulating viruses

Southern hemisphere 2022 trends- suggest a good match
Child Flu Coverage: Seasonal Comparisons through November 19


- NIS data indicate 2022-23 influenza vaccination coverage is similar to what it was this time last year and the 2020-21 season, but lower than what it was in the 2019-20 season.
Cumulative Influenza Doses Administered in I-CARE through October

- Nearly 17,000 additional influenza vaccine doses have been administered to Chicagoans compared to the number of doses administered to Chicagoans at this time last season.
- Vaccines have been administered by 2,631 providers this season compared to 2,236 last season.

Data source: I-CARE
Cumulative Influenza Doses Administered to Children Under 18 Years in I-CARE through October

- Continue to see fewer flu shots being administered to children under 18 this season compared to the same time period in the 2021-22 season
- Nearly 11,000 fewer flu doses have been administered to this age group this season compared to last season

Data source: I-CARE
Approximately 3,000 fewer influenza vaccine doses have been administered to children under 5 years this season compared to the same time period last year.

Despite starting the season slightly stronger compared to last year, at week 40 the number of doses administered in the 2022-23 season dropped below what it was in the 2021-22 season and has since remained lower.

*MMWR Week 30 is the last week of July/ first week of August
*MMWR Weeks 31-35 cover the month of August/ first week of September
*MMWR Weeks 36-39 cover the month of September
*MMWR Weeks 40-43 cover the month of October

Data source: I-CARE
Ensure eligible children are vaccinated against the flu and COVID-19

What can you do to help protect children from these viruses and minimize the burden on schools and the healthcare system?
REMEMBER RESPIRATORY HYGIENE

Teach your children to thoroughly wash their hands often.

Cover your mouth using a tissue or your bent arm when coughing or sneezing—not your hands.
Clean and disinfect high touch surfaces.

If you have symptoms and you need to leave home, WEAR A MASK.

IF YOU FEEL SICK, STAY HOME