

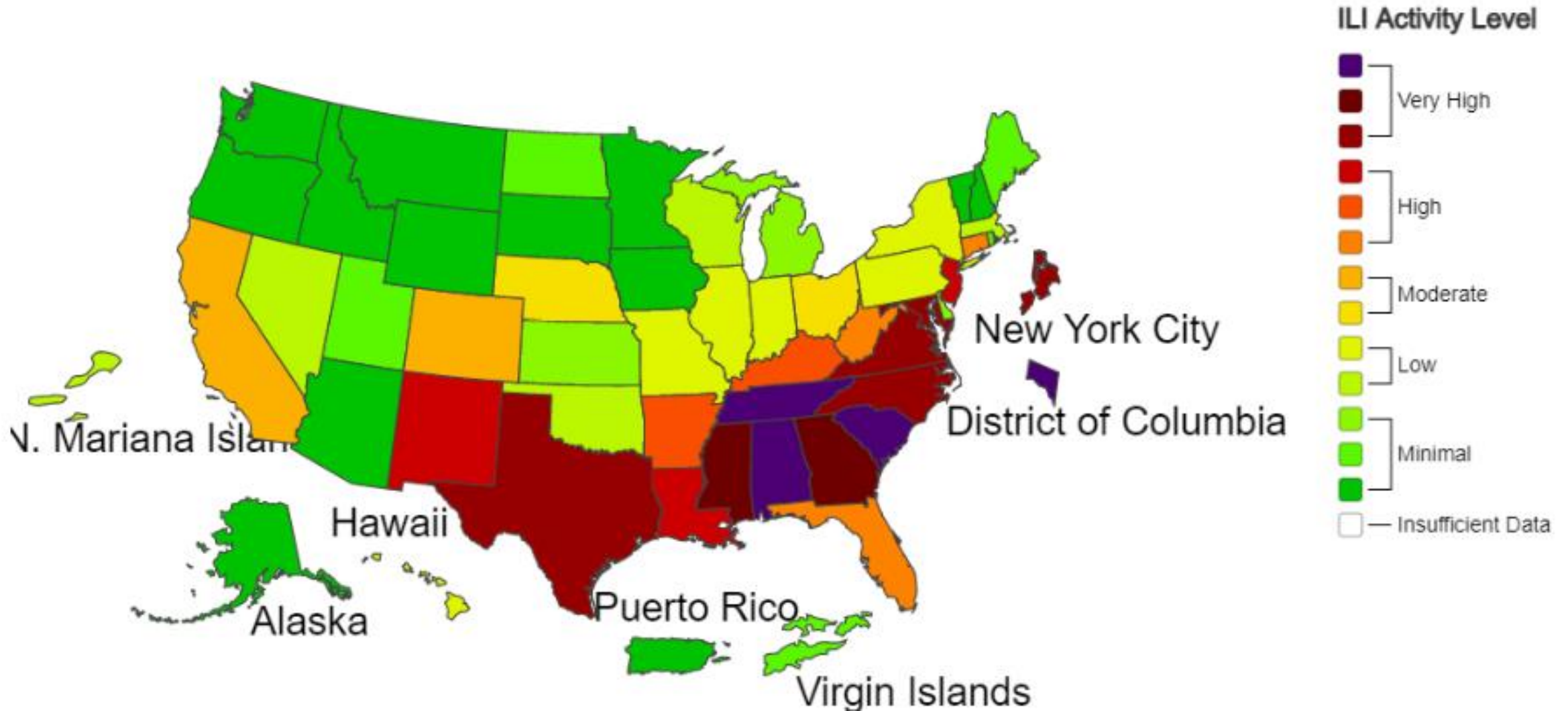


# Ask Dr. Arwady

November 15, 2022

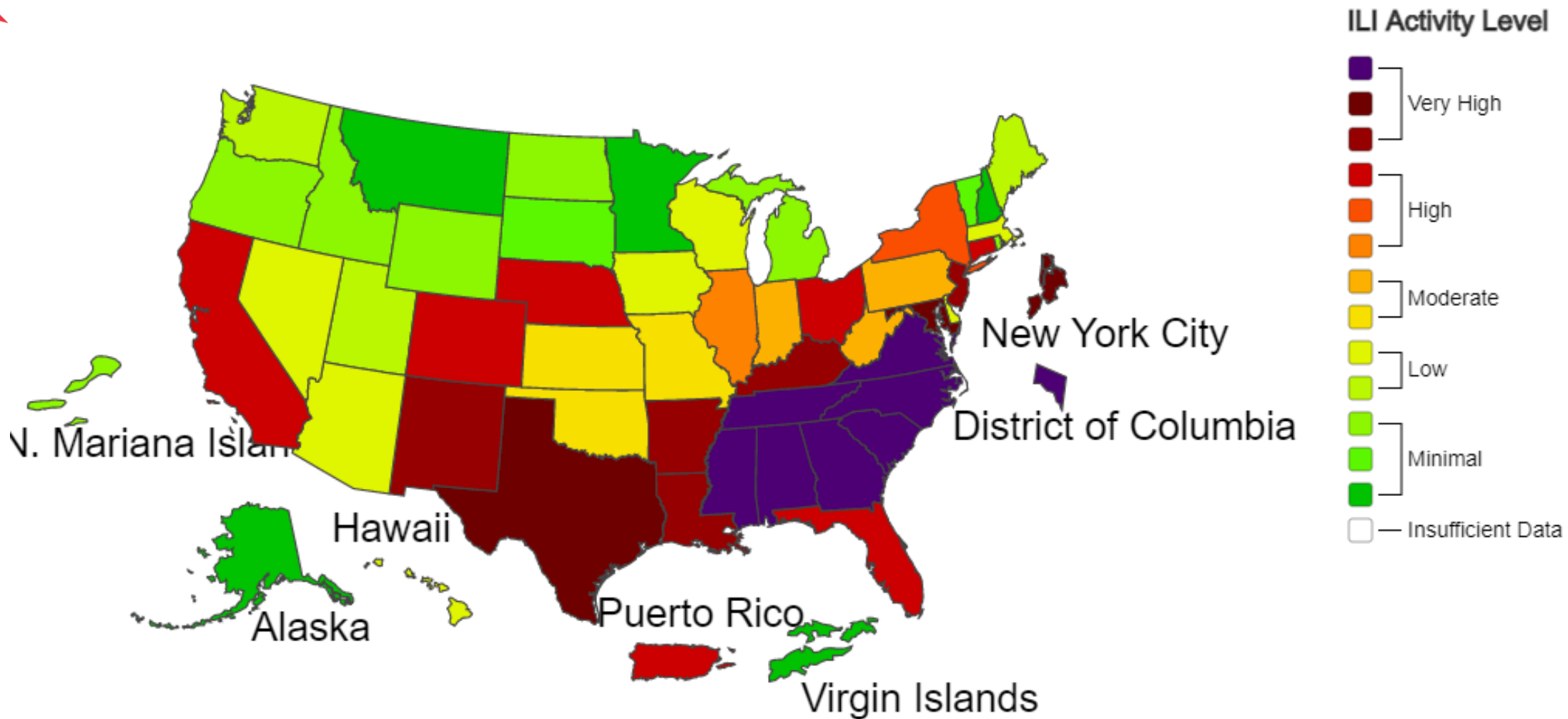
# LAST WEEK

2022-23 Influenza Season Week 43 ending Oct 29, 2022



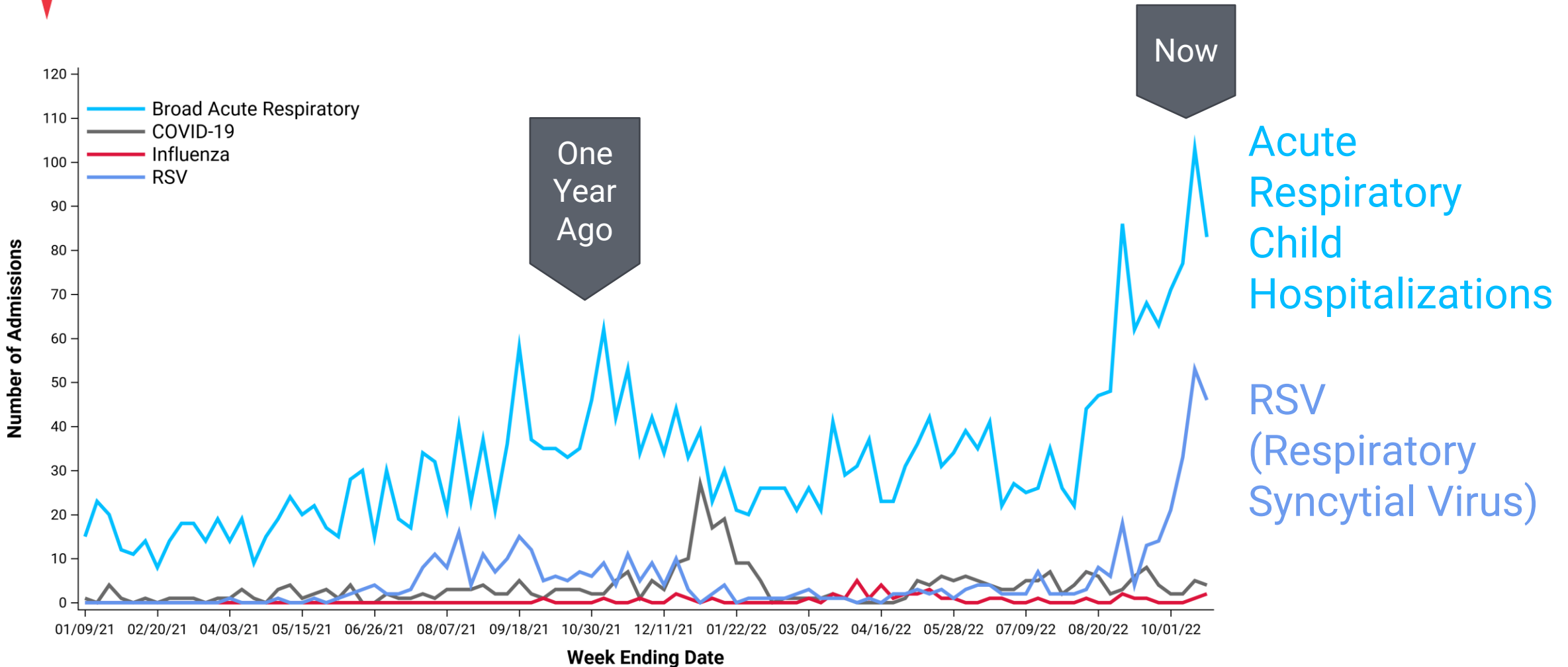
# THIS WEEK

2022-23 Influenza Season Week 44 ending Nov 05, 2022



# AND: Surge in **Child** Respiratory Illnesses and Hospitalizations

Pediatric Admissions at **Chicago Hospitals** due to Acute Respiratory Illnesses: January 2021-present





# Our local risk based on CDC COVID-19 Community Levels is:

## Medium

	New cases per 100,000 population (last 7 days) <i>[Goal is &lt;200]</i>	New admissions per 100,000 population (last 7 days) <i>[Goal is &lt;10]</i>	Percent of staffed inpatient beds occupied by COVID-19 patients (last 7 days) <i>[Goal is &lt;10%]</i>
<b>City of Chicago</b>	107	7.1	3.2%
<b>Cook County</b> (including City of Chicago)	113	10.3	3.6%

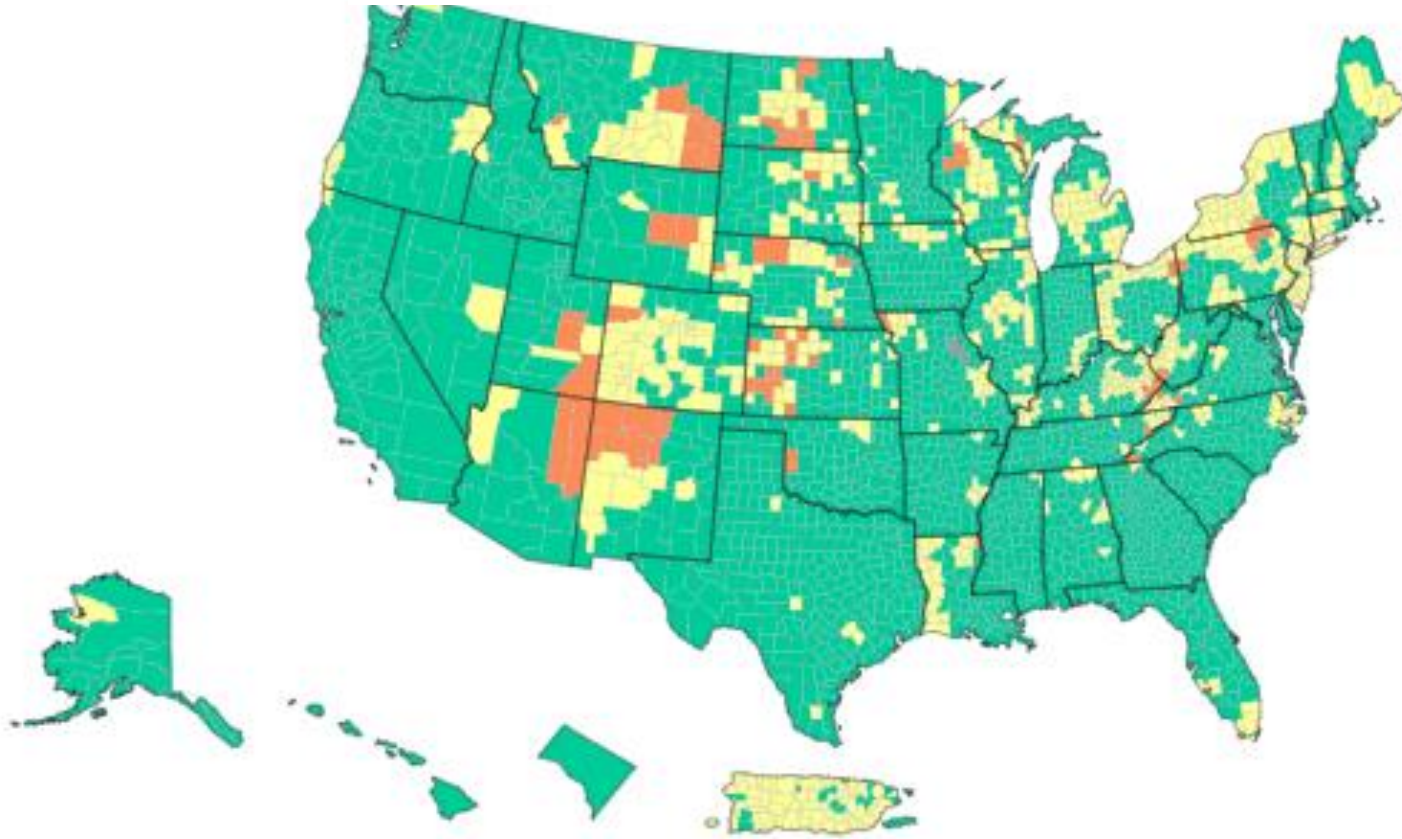
*Chicago metrics are calculated based on Chicago-level data.  
Cook County metrics are calculated by the CDC and posted on the [CDC Community Levels website](https://www.cdc.gov/communitylevels/).  
Data current as of 11/10/2022.*



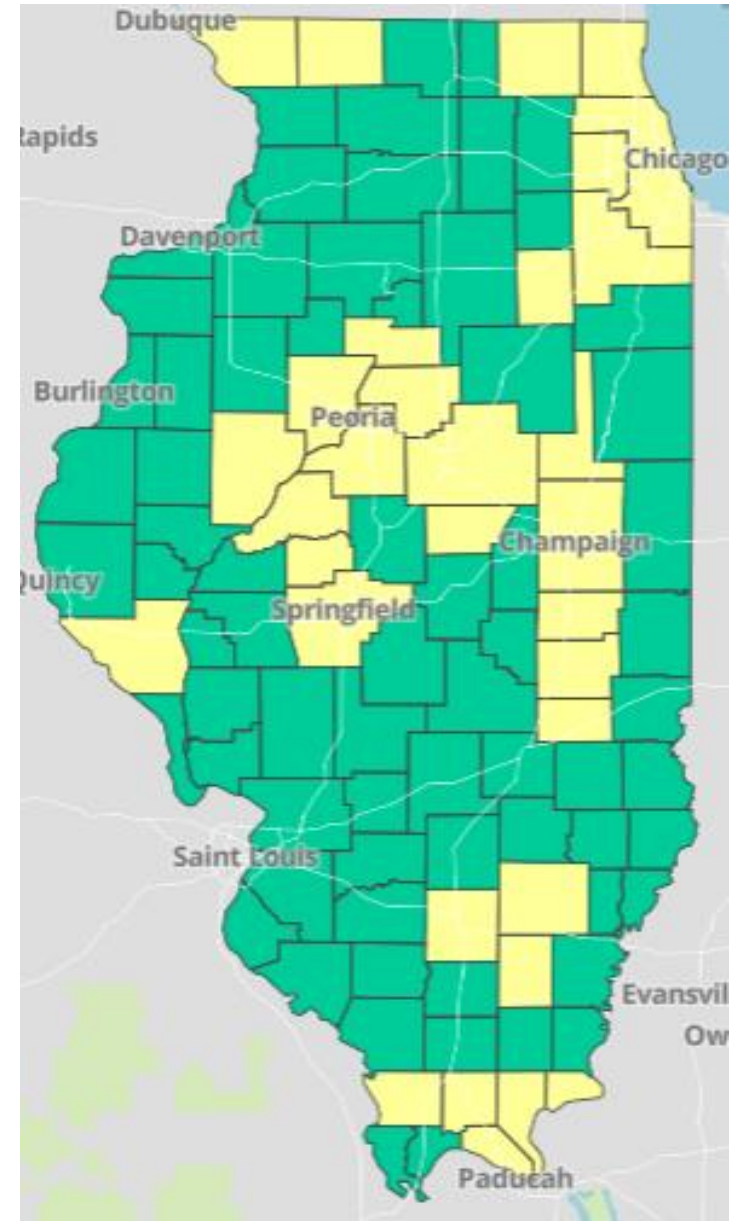
**2.6%** of U.S. Counties reported **High** COVID Community Level and **21%** reported **Medium** Level.



Low Medium High



GU AS MP VI



# ★ Additional COVID-19 Indicators for Chicago

Chicago COVID-19 Emergency Department encounters

**LOW CONCERN**

Chicago Wastewater Sampling

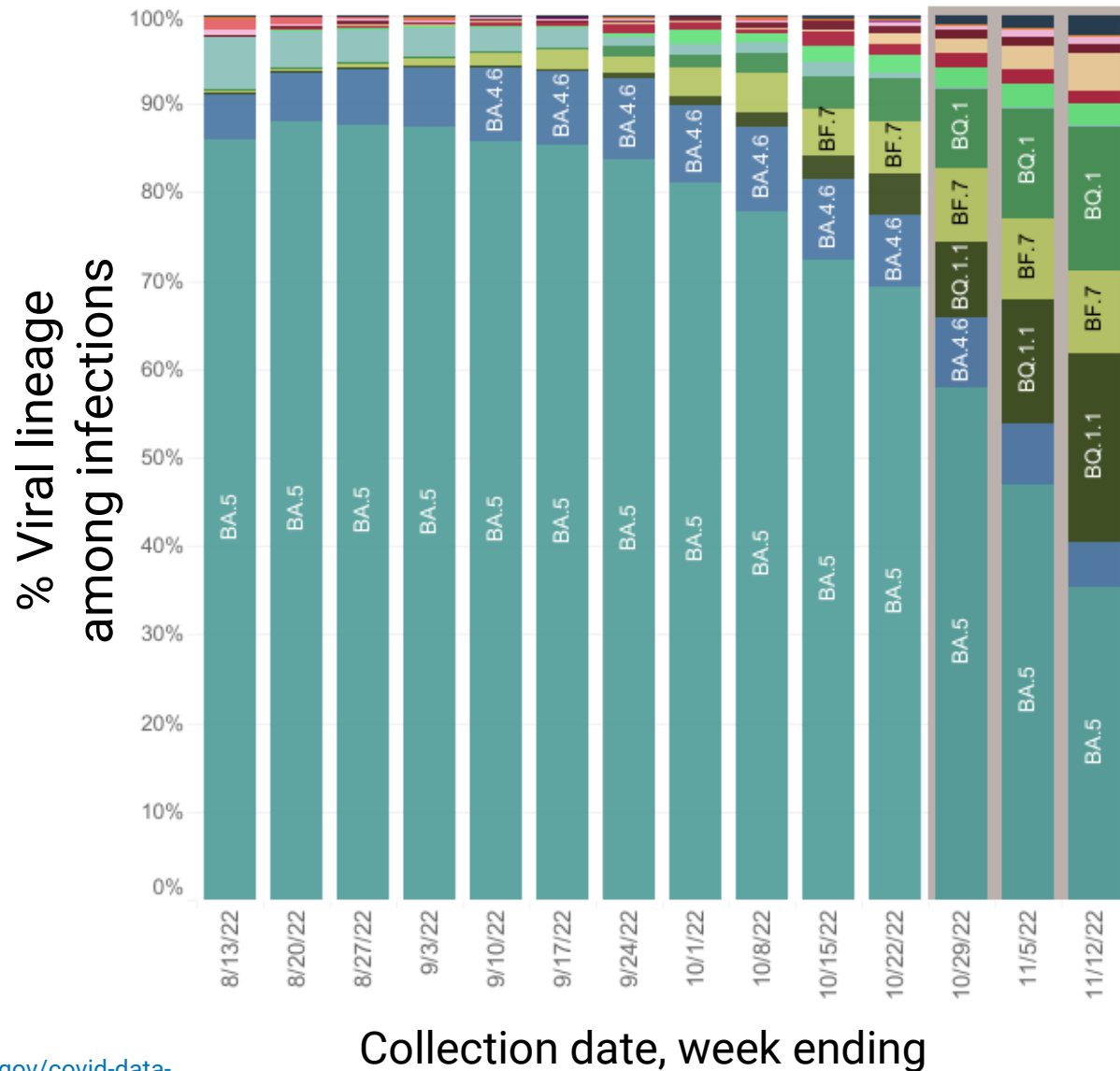
**HIGH CONCERN**

Chicago Variant Risk Assessment

**MEDIUM CONCERN**

# Variant Surveillance, Midwest Region

## Continued evolution of more infectious Omicron subvariants

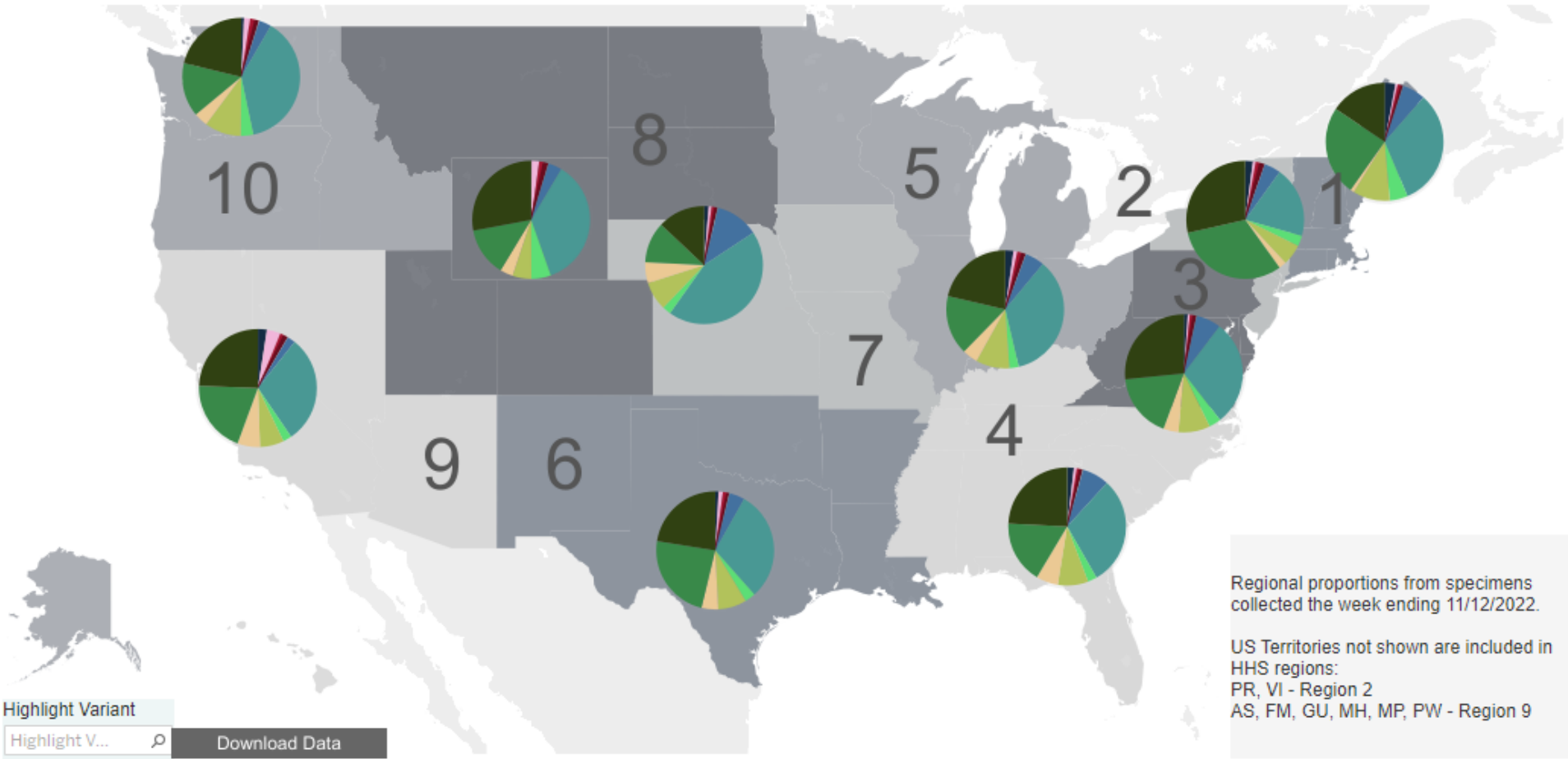


BA.5	35.3%	
BQ.1.1	21.3%	
BQ.1	16.3%	
BF.7	9.2%	
BA.4.6	5.3%	
BN.1	4.2%	
BA.5.2.6	2.6%	
BA.2.75	1.4%	
BA.2	1.0%	
BA.2.75.2	1.0%	
BA.4	0.1%	
BA.1.1	0.0%	
B.1.1.529	0.0%	
BA.2.12.1	0.0%	
B.1.617.2	0.0%	
Other*	2.3%	



# Variant proportions in the U.S.

United States: 11/6/2022 – 11/12/2022 NOWCAST

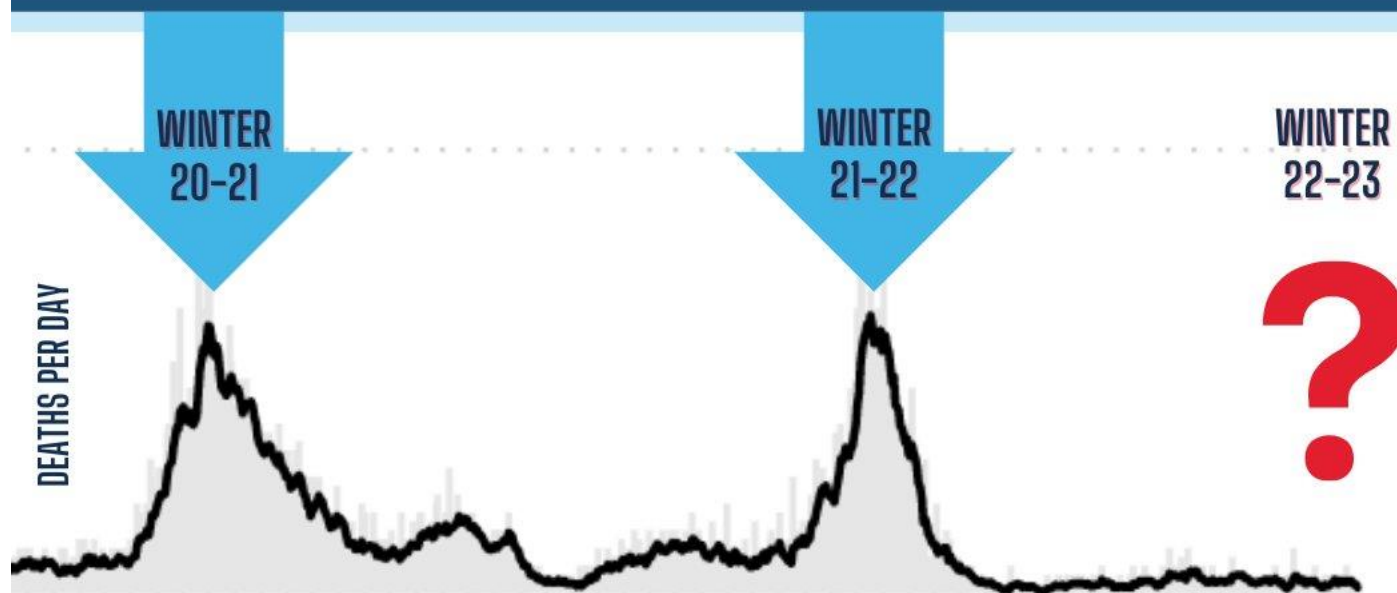


Lineages called using pangolin v4.1.3, pangolin-data v1.15.1 and usher v0.5.4.

Updated November 11, 2022

# COVID-19 DEATHS IN CHICAGO RESIDENTS

→ What will Winter 22-23 bring?



The updated COVID-19 vaccine is our best protection against the variant strains circulating right now and severe outcomes from COVID. Let's get ahead of the winter months and get your bivalent booster now!

Find your vaccine at [chicago.gov/covidvax](https://chicago.gov/covidvax)

# Recent Chicago COVID-19 Deaths Compared to Peak (May 2020)



## Deaths from Latest 6 Weeks Compared to Peak

## LTC Deaths for Latest 6 Weeks Compared to Peak

Peak MMWR, 2020-18 & 19

651

Peak MMWR, 2020-18 & 19

340

2022-Week 38 & 39

17

2022-Week 38 & 39

2

2022-Week 40 & 41

14

2022-Week 40 & 41

2

2022-Week 42 & 43

12

2022-Week 42 & 43

0

# Demographic Characteristics of Recent Versus Historic Chicago COVID-19 Deaths



Demographic	Last 6 Weeks (n = 43)	All Deaths (n = 7920)
<b>Age at Death (Median, Range)</b>	82, 48 to 98	73, 0 to 105
<b>Age Group</b>		
0-17	0 (0%)	12 (0.2%)
18-29	0 (0%)	66 (0.8%)
30-39	0 (0%)	193 (2.4%)
40-49	2 (4.7%)	455 (5.7%)
50-59	3 (7%)	923 (11.7%)
60-69	3 (7%)	1704 (21.5%)
70-79	13 (30.2%)	1962 (24.8%)
80+	22 (51.2%)	2605 (32.9%)
<b>Race/Ethnicity</b>		
Latinx	10 (23.3%)	2337 (29.5%)
Black, Non-Latinx	9 (20.9%)	3318 (41.9%)
White, Non-Latinx	20 (46.5%)	1847 (23.3%)
Asian, Non-Latinx	4 (9.3%)	338 (4.3%)
Other	0 (0%)	62 (0.8%)
Unknown	0 (0%)	14 (0.2%)

Demographic	Last 6 Weeks (n = 34)	All Deaths (n = 7898)
<b>Gender</b>		
Female	20 (46.5%)	3371 (42.6%)
Male	23 (53.5%)	4549 (57.4%)
<b>Region</b>		
Central	1 (2.3%)	133 (1.7%)
Far South	6 (14%)	1159 (14.6%)
North	10 (23.3%)	1281 (16.2%)
Northwest	14 (32.6%)	1682 (21.2%)
South	2 (4.7%)	867 (10.9%)
Southwest	4 (9.3%)	1476 (18.6%)
West	6 (14%)	1303 (16.5%)
Unknown	0 (0%)	19 (0.2%)

\*\*Age has been trending older for a few months now

# Clinical and Exposure Characteristics of Chicago COVID-19-Related Deaths

Clinical Characteristic	Last 6 Weeks (n = 43)	All Deaths (n = 7920)
<b>Days Between First Positive Specimen Collection and Death* (Median, Range)</b>	15, 1 to 305	13, -337 to 326
<b>Hospitalized Prior to Death</b>	35 (81.4%)	6277 (79.3%)
<b>Comorbidity Condition Status†</b>		
None known	0 (0%)	588 (7.4%)
One to Two	9 (20.9%)	4139 (52.3%)
Three or More	1 (2.3%)	2800 (35.4%)
Unknown	33 (76.7%)	393 (5%)
<b>Comorbid Conditions‡</b>		
Diabetes	6 (60%)	3300 (43.8%)
Cardiovascular Disease	0 (0%)	2472 (32.8%)
Hypertension	7 (70%)	5241 (69.6%)
Respiratory Disease	0 (0%)	1556 (20.7%)
Asthma	0 (0%)	347 (4.6%)
Renal Disease	2 (20%)	1468 (19.5%)
Obesity	0 (0%)	1102 (14.6%)
Neurological Disease	0 (0%)	95 (1.3%)
Immunity-Related Disease	3 (30%)	192 (2.6%)
Ethanol-Dependency	0 (0%)	139 (1.8%)
Cancer	0 (0%)	448 (6%)

\*A negative value indicates the decedent was first-tested post-mortem.

†Multiple cases reported more than one comorbid condition. Some observations were missing, which are classified as "unknown" Percentages of comorbidities are based on known responses ("Yes/No").



# Outbreak Association and Vaccination Status of COVID-19 Related Deaths

Characteristic	Last 6 Weeks (n = 43)	All Deaths (n = 7920)
<b>Outbreak Association</b>		
Not Associated with Outbreak	39 (90.7%)	6242 (78.8%)
Long Term Care Facility	4 (9.3%)	1578 (19.9%)
Other Outbreaks	0 (0%)	100 (1.3%)
<b>Vaccination Status*</b>		
Complete Series	30 (69.8%)	861 (10.9%)
Incomplete Series	5 (11.6%)	205 (2.6%)
Not Vaccinated	8 (18.6%)	6854 (86.5%)

## For Deaths Among LTC Outbreak-Associated Cases:

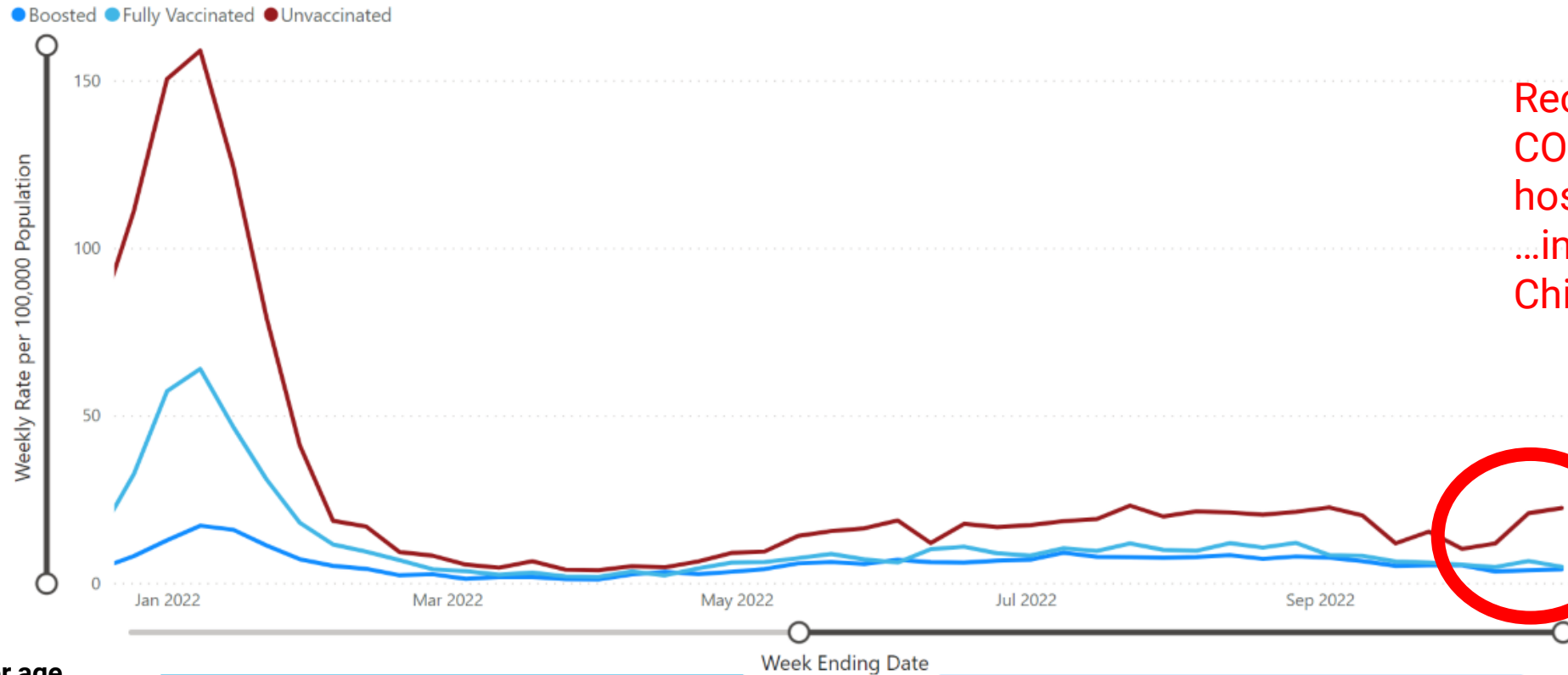
Characteristic	Last 6 Weeks (n = 4)	All Deaths (n = 1578)
<b>Vaccination Status*</b>		
Complete Series	4 (100%)	121 (7.7%)
Incomplete Series	0 (0%)	41 (2.6%)
Not Vaccinated	0 (0%)	1416 (89.7%)

\*Completed series (2 doses of Pfizer/Moderna or 1 dose of Janssen) is not indicative of full protection against infection from SARS-CoV-2. Individuals are considered to have immunity against COVID-19 ≥14 days after completed vaccination series. Some of these deaths are classified as breakthrough deaths.

†A vaccine breakthrough infection is defined as the detection of SARS-CoV-2 RNA or antigen in a respiratory specimen collected from a person ≥14 days after they have completed all recommended doses of a U.S. Food and Drug Administration (FDA)-authorized COVID-19 vaccine. Positive cases post-vaccination with a prior-positive within 45 days are excluded.



# Since the Omicron variant became dominant in Chicago: Hospitalization rates were **2.7X higher** in those **unvaccinated** compared to **boosted**



Recent increase in COVID hospitalizations ...in unvaccinated Chicagoans

\*Rates are adjusted for age

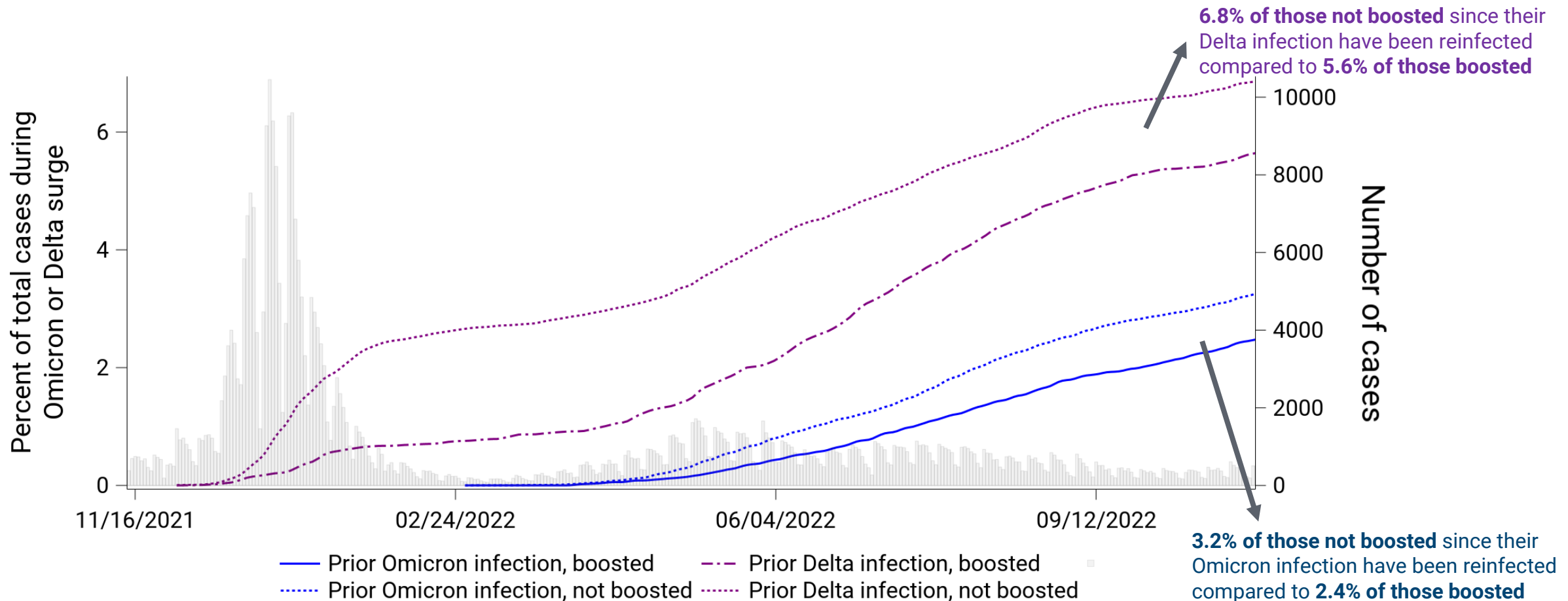
Since the Omicron variant became dominant in Chicago, unvaccinated people had a **2.2X** higher risk of being hospitalized with COVID-19 compared to fully vaccinated people

Since the Omicron variant became dominant in Chicago, unvaccinated people had a **2.7X** higher risk of being hospitalized with COVID-19 compared to people who were boosted

**Sources:**

Includes cases among Chicago residents reported into the Illinois Electronic Disease Surveillance System (I-NEDSS) with date of specimen collection 12/12/2021-10/8/2022, pulled 11/1/2022. Vaccination status obtained from the Illinois Comprehensive Automated Immunization Registry (I-CARE) registry.

# Chicago data: Booster decreases likelihood of reinfection for both prior Delta infection and prior Omicron infection



\*Omicron surge refers to 12/15/2021 to 2/15/2021

\*Delta surge refers to 9/1/2021 to 11/1/2021

# Low Everywhere, But Higher Updated Booster Coverage among Chicagoans than Nationwide Estimates



People with an Updated (Bivalent) Booster Dose<sup>#</sup>

Percent of US Population

Percent of Chicago Population

Population ≥ 5 Years of Age

8.4%

13.0%

Population ≥ 12 Years of Age

9.2%

13.6%

Population ≥ 18 Years of Age

9.9%

14.4%

Population ≥ 65 Years of Age

23%

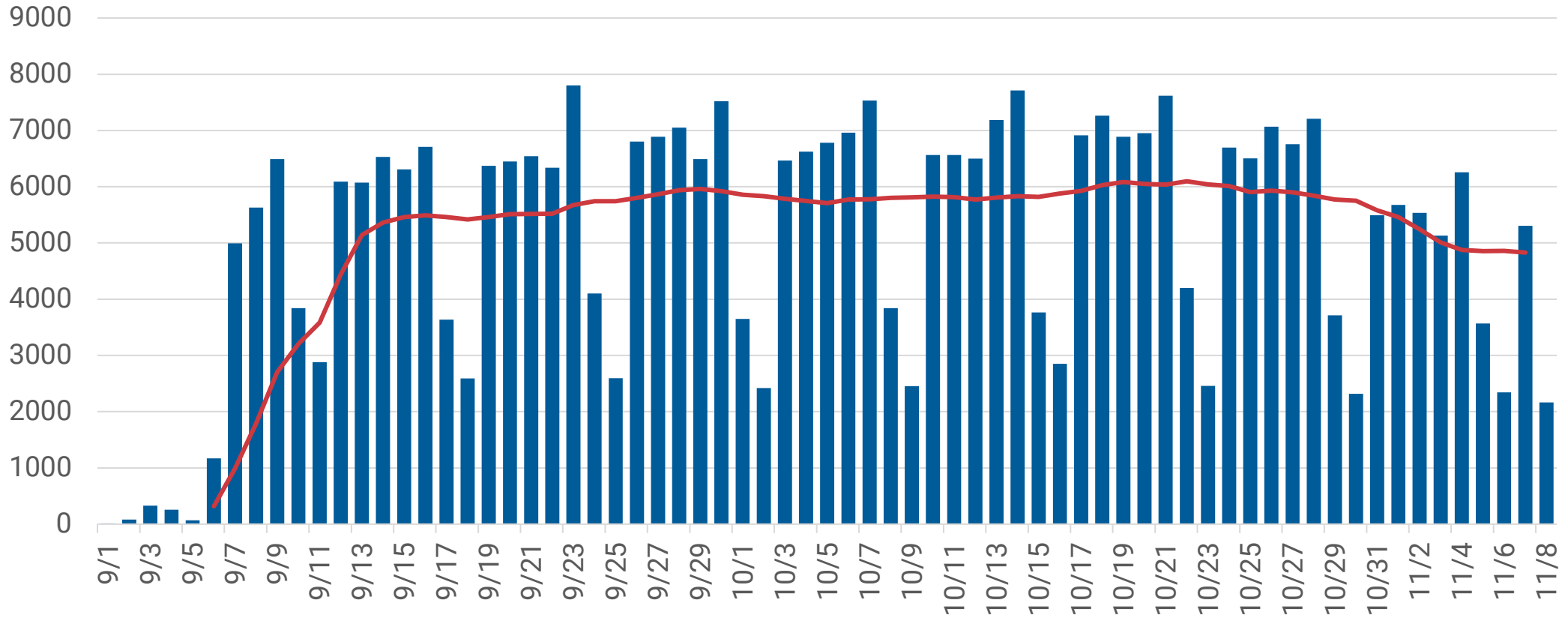
27.7%

In every ZIP code in Chicago, <25% of those 5+ have had an updated Fall 2022 vaccine. Lowest ZIP (60636), just 5% of those 5+ have had an updated vaccine.



# Over **350,000** doses of the Fall 2022 COVID-19 bivalent boosters have been administered to Chicagoans since authorization (up from 317,000 last week).

*The 7DRA doses administered decreased from ~5,300 last week to ~4,800 this week*





# Demographics of Chicagoans who received an updated COVID-19 vaccine (N=350,543)

Age Group	Count	(%)
5-11 yrs	5804	1.7%
12-17 yrs	11089	3%
18-29 yrs	38703	11%
30-39 yrs	65636	19%
40-49 yrs	49373	14%
50-59 yrs	49931	14%
60-69 yrs	60782	17%
70-79 yrs	46768	13%
80+ yrs	22457	6%

Race-ethnicity	Count	(%)
Latinx	53075	15%
Black, non-Latinx	63273	18%
White, non-Latinx	189737	55%
Asian, non-Latinx	29344	8%
AIAN, non-Latinx	1839	1%
NHPI, non-Latinx	792	0%
Other, non-Latinx	5722	2%
Unknown	6761	2%

Sex	Count	(%)
Female	191464	55%
Male	157002	45%
Unknown	2077	1%

# Overall, 19% (+2%) of **Eligible** Chicagoans (those who completed a primary series) have received an updated, Fall 2022 COVID booster

**No. of Chicagoans eligible for updated vaccine (est.)\***      **No. of eligible who received updated vaccine**      **Percent eligible who have received updated vaccine**

## Race/Ethnicity

Latinx	518,348	53,084	10.2%
Black, non-Latinx	433,519	63,275	14.6%
White, non-Latinx	645,044	189,747	29.4%
Asian, non-Latinx	143,357	29,353	20.5%

## Age Group

05-11 yrs	96,676	5,804	6.0%
12-17 yrs	127,196	11,089	8.7%
18-29 yrs	355,622	38,703	10.9%
30-39 yrs	353,952	65,636	18.5%
40-49 yrs	276,406	49,373	17.9%
50-59 yrs	254,933	49,931	19.6%
60-69 yrs	215,813	60,782	28.2%
70-79 yrs	126,743	46,768	36.9%
80+ yrs	66,208	22,457	33.9%





# 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.



# EVERYONE 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.





**REGISTRATION ENCOURAGED ★ WALK-INS WELCOME**  
All clinics are Saturdays from 9am-2pm



**THIS SATURDAY** →

<b>LOCATION:</b>	<b>DATE:</b>	<b>REGISTER AT:</b>
Malcolm X	November 5	<a href="https://rebrand.ly/MalcolmXCollege">rebrand.ly/MalcolmXCollege</a>
Truman	November 12	<a href="https://rebrand.ly/TrumanCollege">rebrand.ly/TrumanCollege</a>
<b>Kennedy-King</b>	<b>November 19</b>	<a href="https://rebrand.ly/KennedyKing">rebrand.ly/KennedyKing</a>
Wright	December 3	<a href="https://rebrand.ly/WrightCollege">rebrand.ly/WrightCollege</a>
Olive-Harvey	December 10	<a href="https://rebrand.ly/Olive-Harvey">rebrand.ly/Olive-Harvey</a>
Daley	December 17	<a href="https://rebrand.ly/DaleyCollege">rebrand.ly/DaleyCollege</a>

**The new COVID-19 bivalent booster is available!**

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





# THINK YOU'RE UP TO DATE WITH YOUR COVID VACCINES?

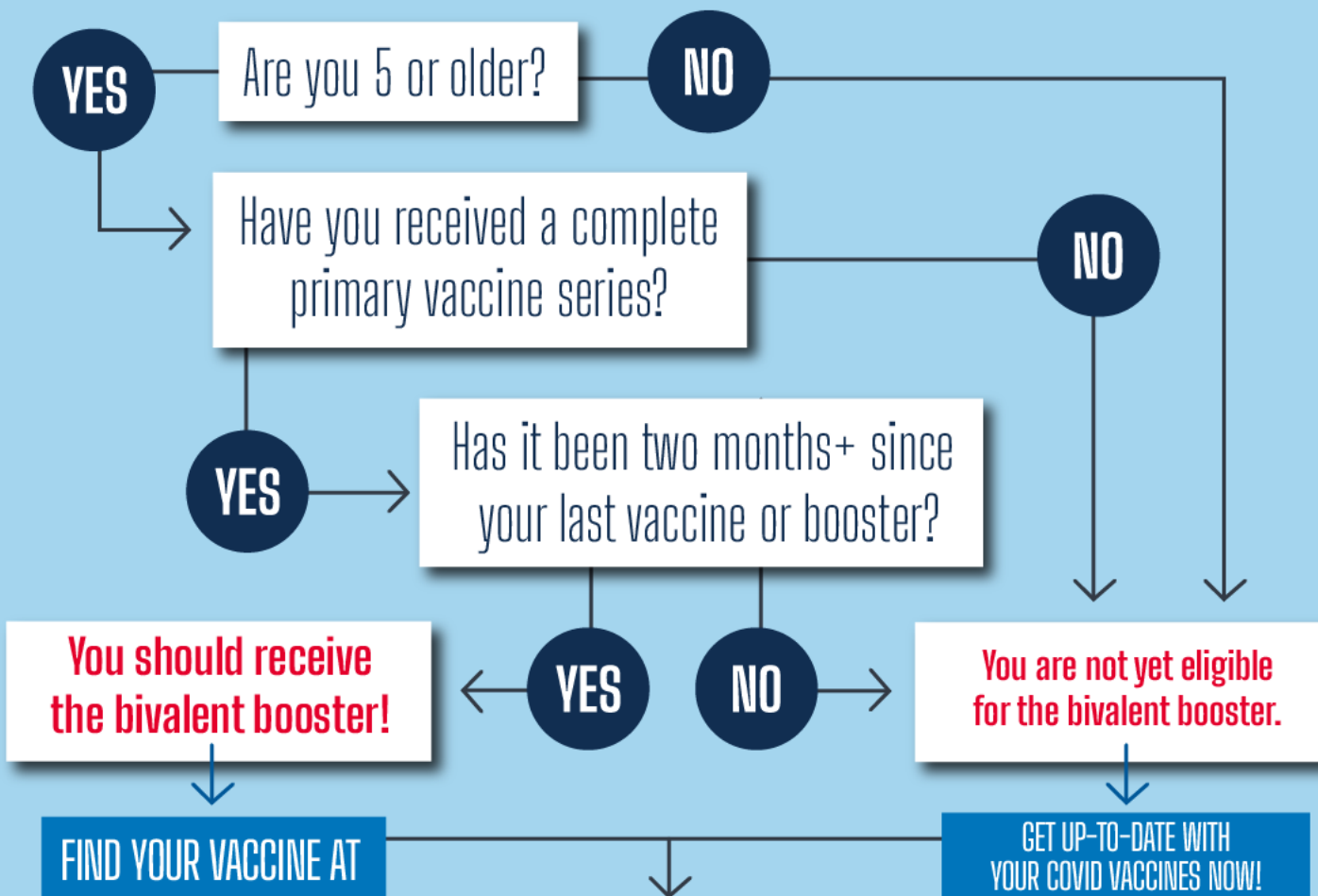
IF YOU HAVEN'T  
BEEN VACCINATED  
SINCE LABOR DAY...



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



# DO I NEED TO GET A COVID BIVALENT BOOSTER THIS FALL?



[chicago.gov/covidvax](https://chicago.gov/covidvax)



**STAY UP TO DATE:**

# **New COVID-19 Boosters Are Here!**

**Updated vaccine protects  
against Omicron variants.**

**Now available to  
Chicagoans 5 and up.**

**Visit [cps.edu/vaccinations](https://cps.edu/vaccinations)**







Need a vaccine or a booster?  
Have questions?

visit

**CHI.GOV/COVIDVAX**

or call

**312-746-4835**



STILL FREE FOR ALL!

- Pharmacy
- Doctor's Office
- Pop-Up Clinic
- Standing Clinic
- AT HOME!!!