



# Ask Dr. Arwady

January 24, 2023

# 3 years ago, today...

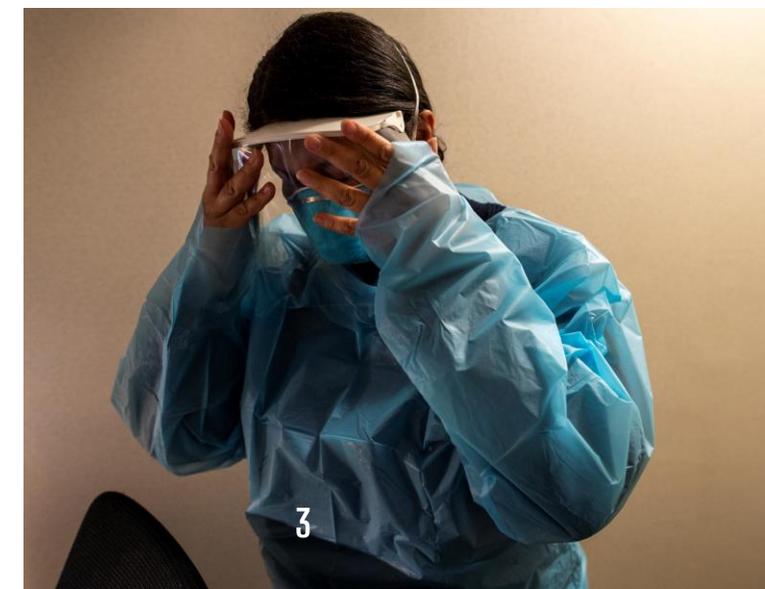
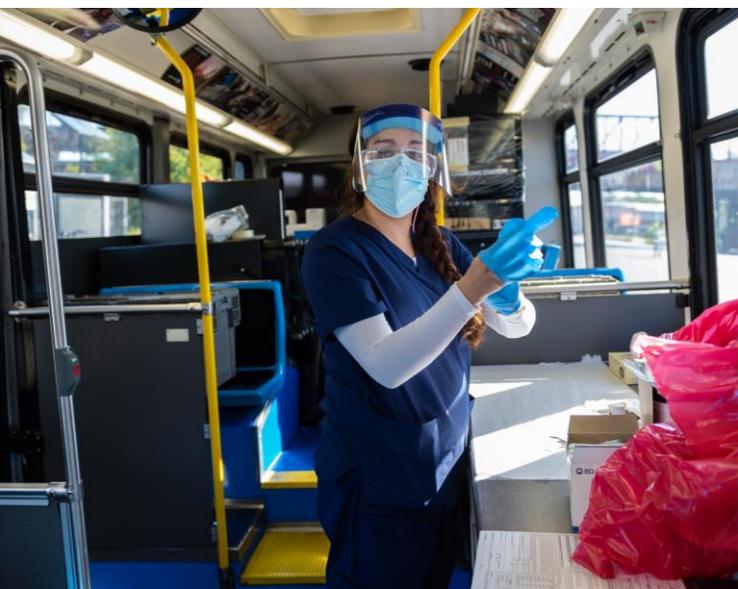


## 1st Case of Coronavirus Confirmed in Chicago

Kristen Thometz | January 24, 2020 12:39 pm

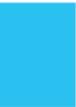


<https://news.wttw.com/2020/01/24/1st-case-coronavirus-confirmed-chicago>



# ★ Anticipated changes to COVID data/website with the 3<sup>rd</sup> anniversary of first lab-confirmed case of COVID-19 in Illinois

- **Main COVID-19 public dashboard will update WEEKLY (on Wed) rather than DAILY**
  - This does not mean we are taking our eye off the ball BUT aligns with national, state patterns
  - CDPH continues to monitor data daily for health system capacity and other emerging trends
    - E.g. public-facing hospital capacity dashboard will continue to update daily
- **Bivalent booster data added to [Vaccine Coverage](#) site, with weekly Wed. updates.**
- **Wastewater testing dataset being added to the [Chicago Data Portal](#)**
  - Local monthly wastewater summary reports posted by 15<sup>th</sup> of each month
  - Also working on accompanying dashboard to replace the currently posted reports
- **Local, Chicago-specific variant and genomic surveillance reports will also be posted by 15<sup>th</sup> of each month (in addition to the weekly regional summaries)**



# Here's why we feel confident making this change

- Through the holiday season *and* more than one year since major COVID surge (emergence of Omicron variant)
- Updated vaccine boosters widely available to help protect against Omicron
- Tests widely available, and we can effectively treat COVID-19
- New ways of monitoring COVID-19 transmission (i.e. monitoring wastewater and tracking genetic mutations)
- COVID-19 death rate in Chicago is much lower than in the early days of the pandemic



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

**Medium**

	<b>New cases per 100,000 population (last 7 days)</b> <i>[Goal is &lt;200]</i>	<b>New admissions per 100,000 population (last 7 days)</b> <i>[Goal is &lt;10]</i>	<b>Percent of staffed inpatient beds occupied by COVID-19 patients (last 7 days)</b> <i>[Goal is &lt;10%]</i>
<b>City of Chicago</b>	94	10.0	4.1%
<b>Cook County</b> (including City of Chicago)	91	11.1	5.1%

*Chicago metrics are calculated based on Chicago-level data.*

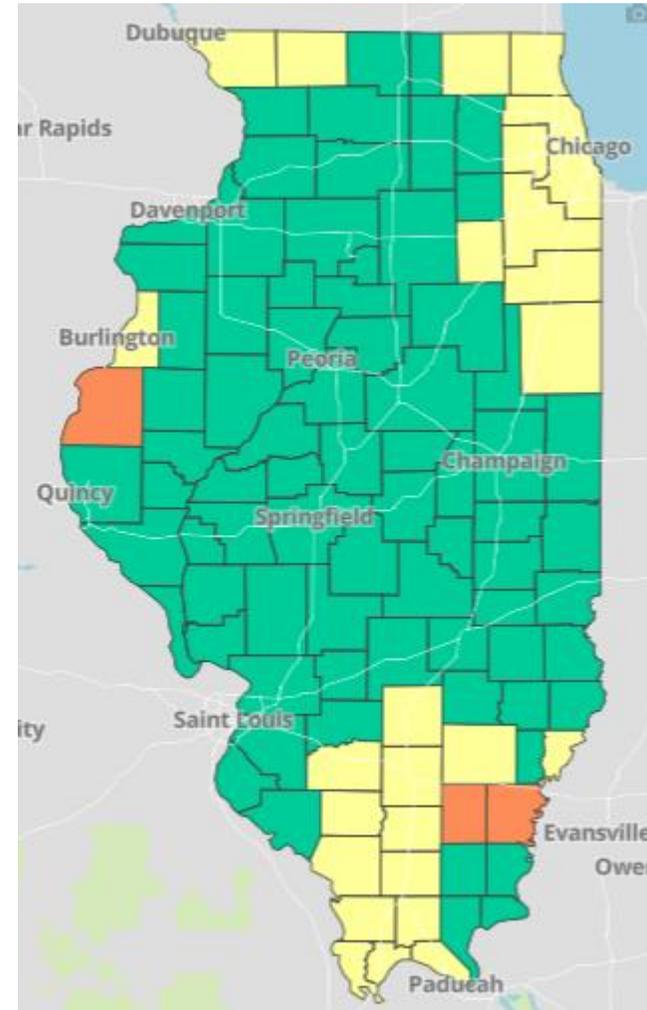
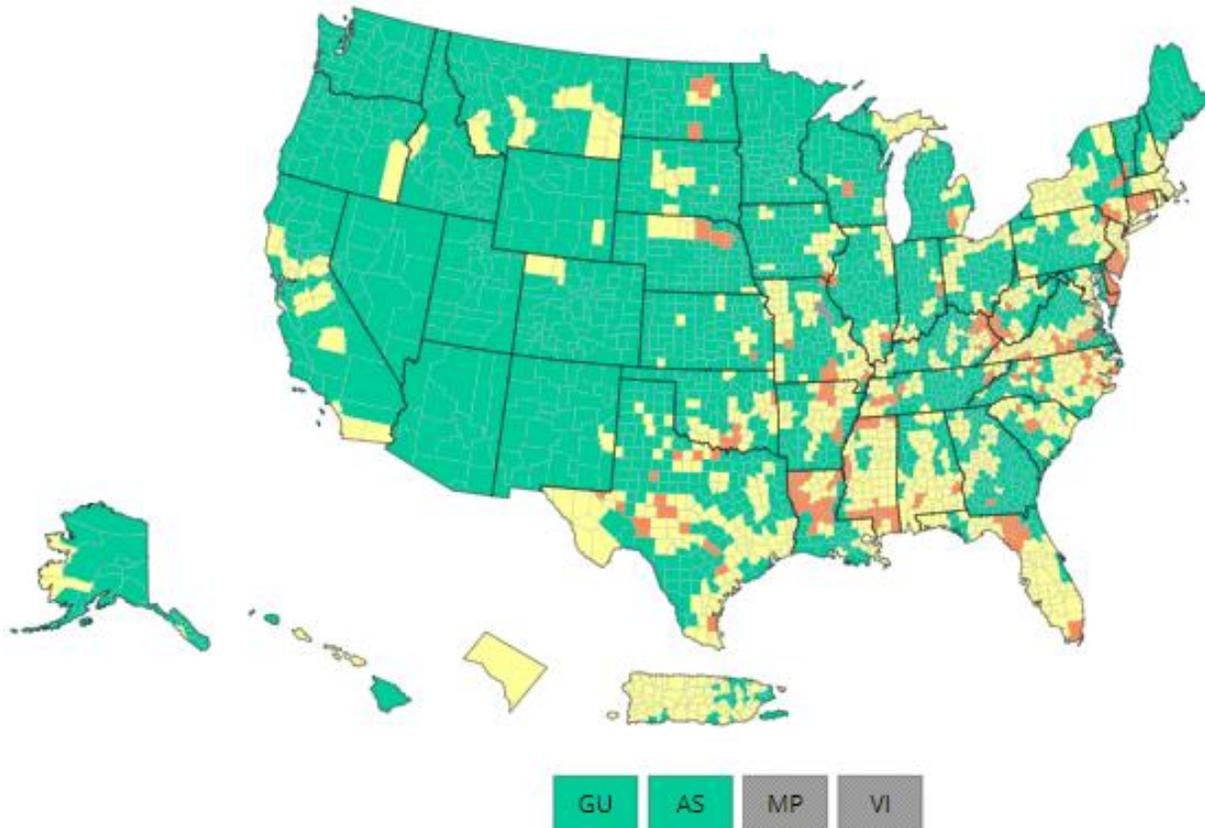
*Cook County metrics are calculated by the CDC and posted on the [CDC Community Levels website](#).*

*Data current as of 1/19/2023.*

Last week, **6% (14% prior week)** of U.S. Counties reported **High** COVID Community Level and **31% (38% prior week)** reported **Medium** Level.



Low Medium High



# ★ Chicago Lab-Based Early Alert COVID-19 Signals

Indicator	Thresholds			Chicago Current Values Week of 1/16
	Low Concern	Medium Concern	High Concern	
SARS-CoV-2 variant risk assessment, Chicago (combines log growth rate and VOC designation)	Stable lineage proportions, no VOC/VOHC	Variant or lineage increasing, no VOC/VOHC	Variant rapidly increasing, or VOC/VOHC	<b>Medium</b> (previous week: <b>Medium</b> )
Average wastewater risk score among sampled sites, Chicago (combines viral concentration and trend)	< 2	2-3	> 3	<b>Medium</b> (previous week: <b>HIGH</b> )

VOC: Variant of Concern. VOHC: Variant of High Consequence.

## Variants/subvariants currently increasing in prevalence locally

**BQ.1.1:** Local doubling time 18 days (low);

Sublineage of BA.5; 3 additional spike mutations, significant immune escape advantage

**XBB:** Local doubling time 20 days (low)

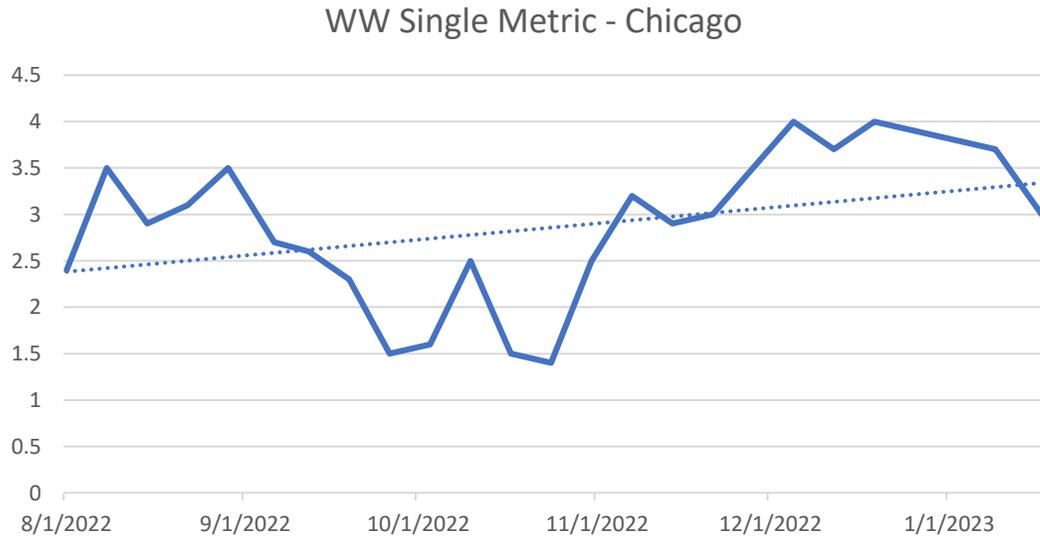
Recombinant of two BA.2 lineages; 6 more spike mutations relative to BA.2, one of the most immune-resistant subvariants circulating

**XBB.1.5:** Doubling time 8 days (med)

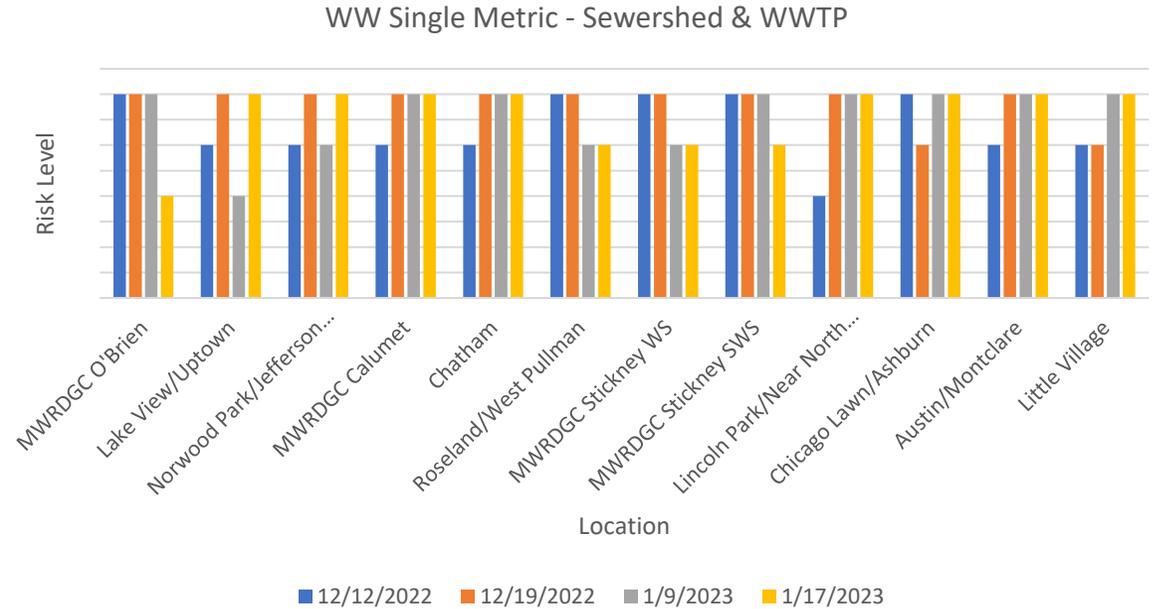
Recombinant of two BA.2 lineages; rapidly emerged in US Northeast, expecting similar rapid growth in Midwest in coming weeks

# SARS-CoV-2 wastewater metric

## Wastewater Metric for All of Chicago

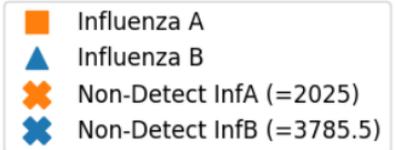
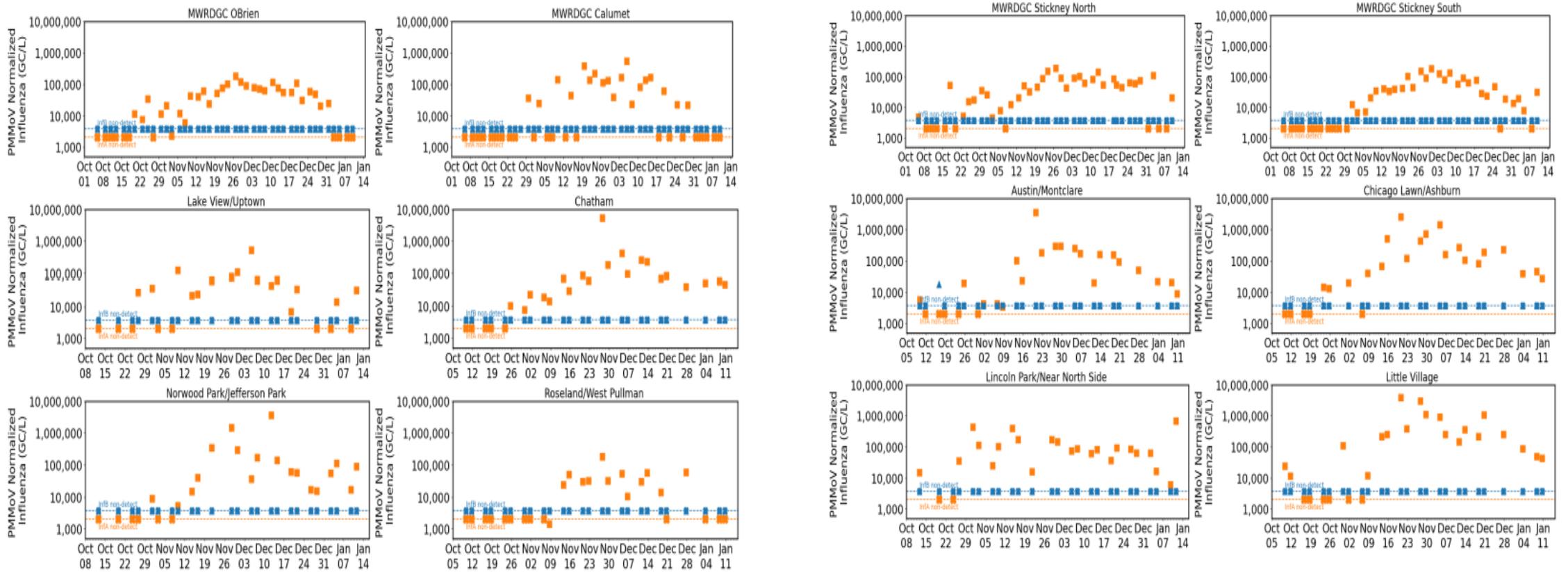


## Wastewater Metric for Each Sample Location





# Influenza A & B wastewater data

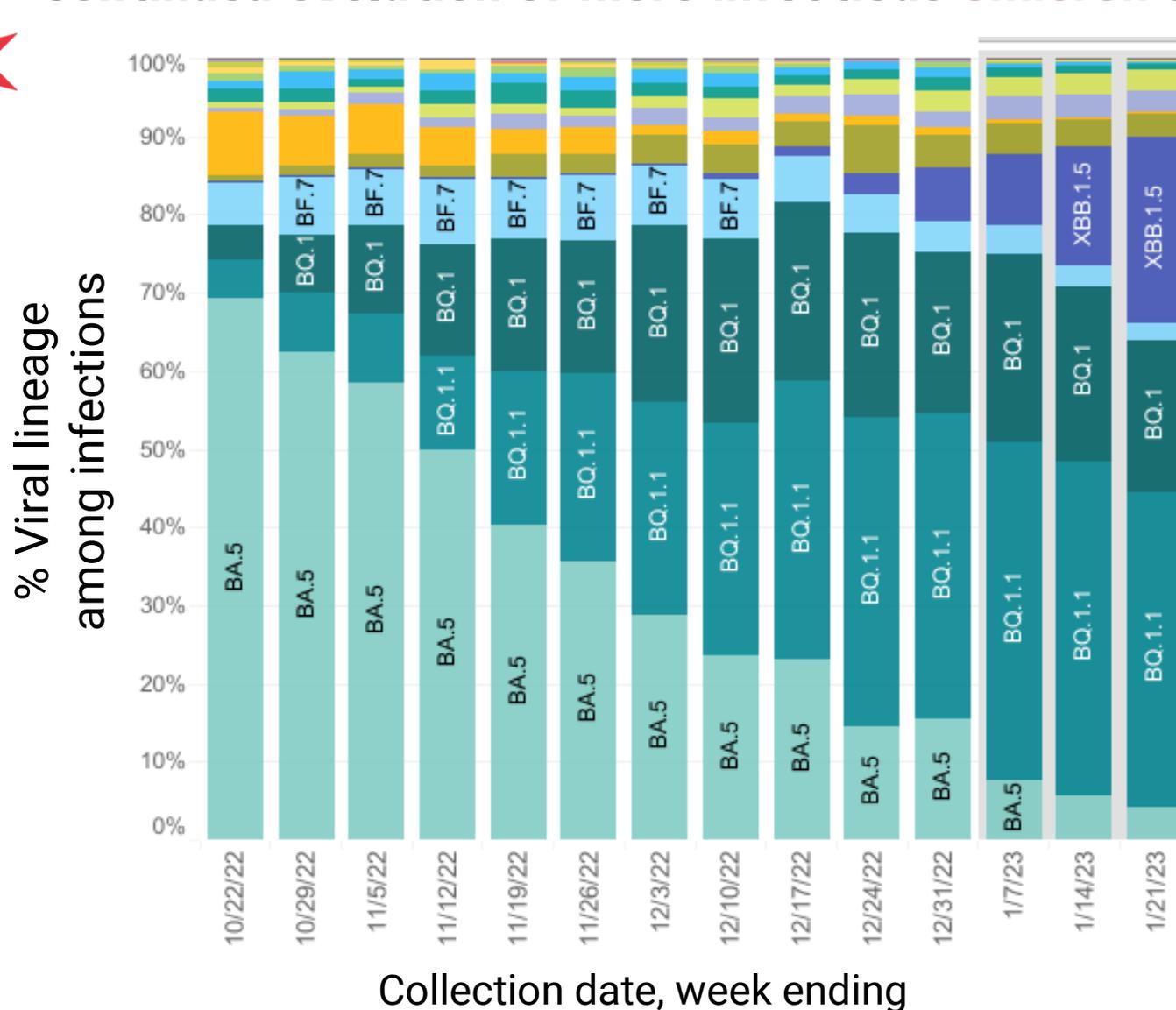


Influenza A&B concentrations in gene copies per liter (gc/L) are normalized to PMMoV and displayed as a time-series. Non-detects mean no detectable virus was found in the sample

# Variant Surveillance, Midwest Region

## Continued evolution of more infectious **Omicron** subvariants

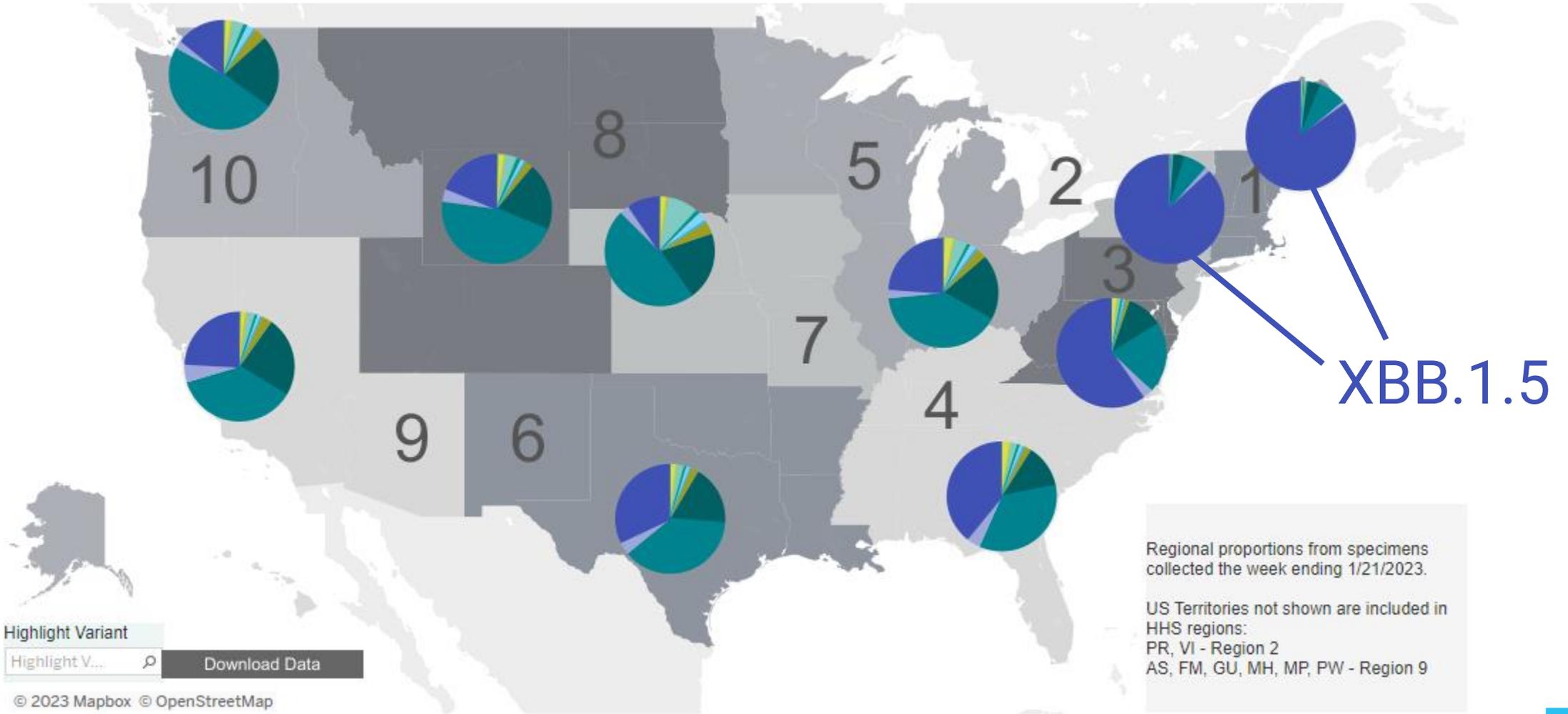
XBB is a recombinant (fusion) of 2 different BA.2 variants



BQ.1.1	40.3%	
<b>XBB.1.5</b>	<b>23.8%</b>	
BQ.1	19.5%	
BA.5	4.2%	
BN.1	3.1%	
BA.2.75	2.8%	
XBB	2.8%	
BF.7	2.1%	
BA.5.2.6	0.7%	
BF.11	0.4%	
BA.2	0.2%	
BA.4.6	0.1%	
BA.2.75.2	0.1%	

# Variant Surveillance, United States

United States: 1/15/2023 – 1/21/2023 NOWCAST



Highlight Variant

Highlight V...

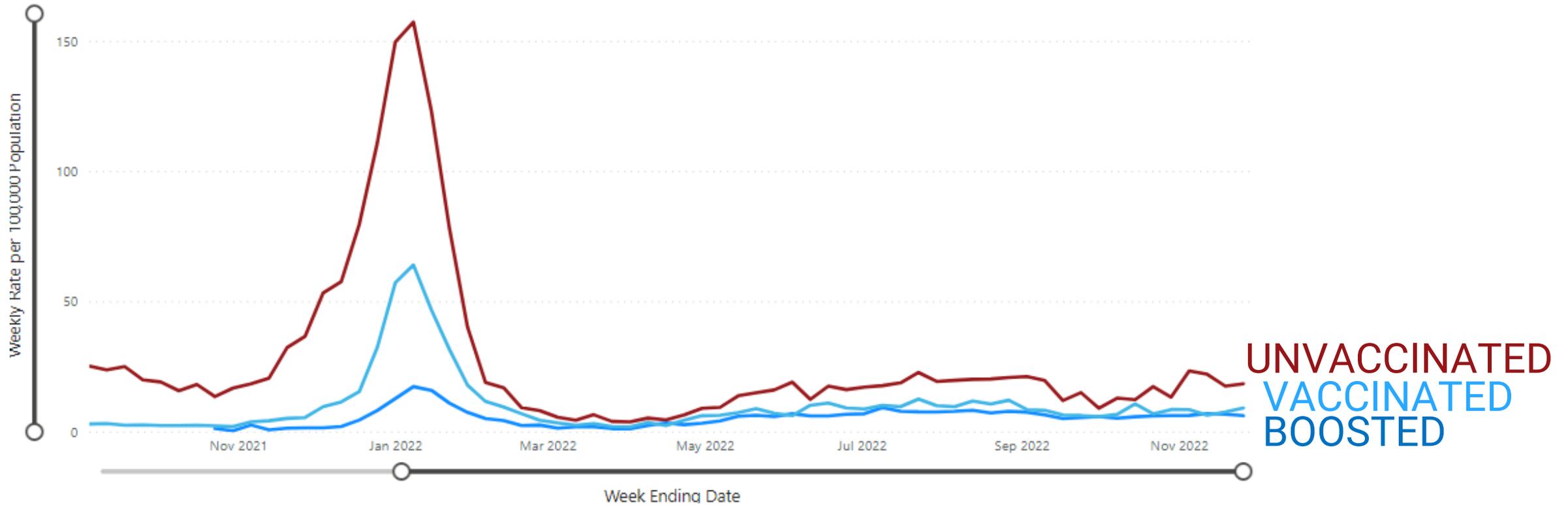
Download Data

© 2023 Mapbox © OpenStreetMap

Lineages called using pangolin v4.1.3, pangolin-data v1.17 and usher v0.5.4.

Updated January 20, 2023

★ Since the Omicron variant became dominant in Chicago: **Unvaccinated** Chicagoans have been **almost three times** as likely to be hospitalized with COVID-19 than **Up-to-Date (Vaccinated and Boosted)** Chicagoans





# Higher Updated Booster Coverage among Chicagoans than Nationwide Estimates. Over 540,000 doses have been administered to Chicagoans since authorization.

People with an Updated (Bivalent) Booster Dose	Percent of US Population	Percent of Chicago Population
Population ≥ 5 years	16.2%	20.0%
Population ≥ 12 years	17.5%	20.6%
Population ≥ 18 years	18.5%	21.6%
Population ≥ 65 years	39.6%	39.6%

National data as of 1/19/2023.  
Chicago data reported to I-CARE as of 1/17/2023.

# Overall, **28% (+1%)** of *Eligible* Chicagoans 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	One Month Ago (12/14/22)
<b>Race/Ethnicity</b>				
Latinx	552,595	105,182	19.0%	15.8%
Black, non-Latinx	427,018	102,477	24.5%	20.7%
White, non-Latinx	612,424	252,317	41.7%	37.8%
Asian, non-Latinx	142,843	45,219	32.4%	27.6%
<b>Age Group</b>				
05-11 yrs	99,707	15,715	15.8%	
12-17 yrs	127,424	19,859	15.6%	
18-29 yrs	356,183	62,513	17.6%	
30-39 yrs	354,624	94,448	26.6%	
40-49 yrs	276,978	73,184	26.4%	
50-59 yrs	254,834	77,071	30.2%	
60-69 yrs	216,888	89,549	41.3%	
70-79 yrs	128,089	64,971	50.7%	
80+ yrs	67,127	31,248	46.6%	

Data reported to I-CARE through 1/18/2023. Number eligible includes Chicagoans aged 5 years or older who completed a primary series or received a monovalent booster dose at least 2 months prior to 1/7/2023.



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

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



Previously vaccinated Chicagoans age 6months+ are eligible for the bivalent booster and the best protection against Omicron.



# 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.



# VAX & PAX lovid



If you're at high risk for severe illness, vaccines are your best protection against COVID-19. But if you do test positive, **TREATMENTS ARE AVAILABLE.**

**PAXLOVID**, for example, is an oral antiviral therapy for the treatment of mild to moderate COVID-19.



Individuals ages 12 and up who are at high risk of developing severe illness, are eligible.

**Ask a healthcare provider if medications to treat COVID-19 are right for you.**

# How to get your FREE at-home COVID-19 tests

-  VISIT  
[COVIDtests.gov](https://COVIDtests.gov)
-  Review and place your order
-  Enter contact and shipping info

Or you can call  
1-800-232-0233



# TAKE ACTION IF YOU TEST POSITIVE FOR COVID-19

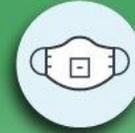


## DAY 1-5

### Stay home:

- Everyone - *regardless of vaccination status* - should stay home and away from others (isolate).

**People at high risk for severe illness:**  
Talk to your doctor about treatment



## DAY 6-10

### Wear a mask:

- If you take 2 antigen tests 48 hours apart and both are negative, you may remove your mask sooner
- Avoid people at high risk of getting very sick

## DAY 6 OR LATER

### End isolation:

- If you never had symptoms OR symptoms are improving and are fever-free for 24 hours.





# New CDPH program at nursing homes: TREAT COVID-19

- The **Rapid Response Evaluation And Treatment of COVID-19** for **long term care residents**, funding by CDC.
- Available Services
  - On-site or telehealth consultation and drug interaction review with a licensed medical provider
  - Medication courier service
  - On-site IV administration of remdesivir
  - Decrease intra-facility transmission of current outbreak through point-of-care COVID-19 testing and vaccination administration.
  - **NO COST TO FACILITY OR RESIDENTS**



If you or your loved one live in a **nursing home** within the city of Chicago and recently tested positive for COVID-19, reach out to our local TREAT COVID-19 program at **(708)-600-4233** or **Chicago-COVID19@CIMPAN.com**.



THE COMBO YOU  
**DON'T  
WANT**



**GET BOTH  
VACCINES.**

[CHI.GOV/FLU](http://CHI.GOV/FLU)

**Saturday, January 28 - 9am-2pm**

**Wilbur Wright College - 4300 N. Narragansett Ave.**

**Register at: [rebrand.ly/WilburWright](https://rebrand.ly/WilburWright)**

**The new COVID-19 bivalent  
booster will be available!**

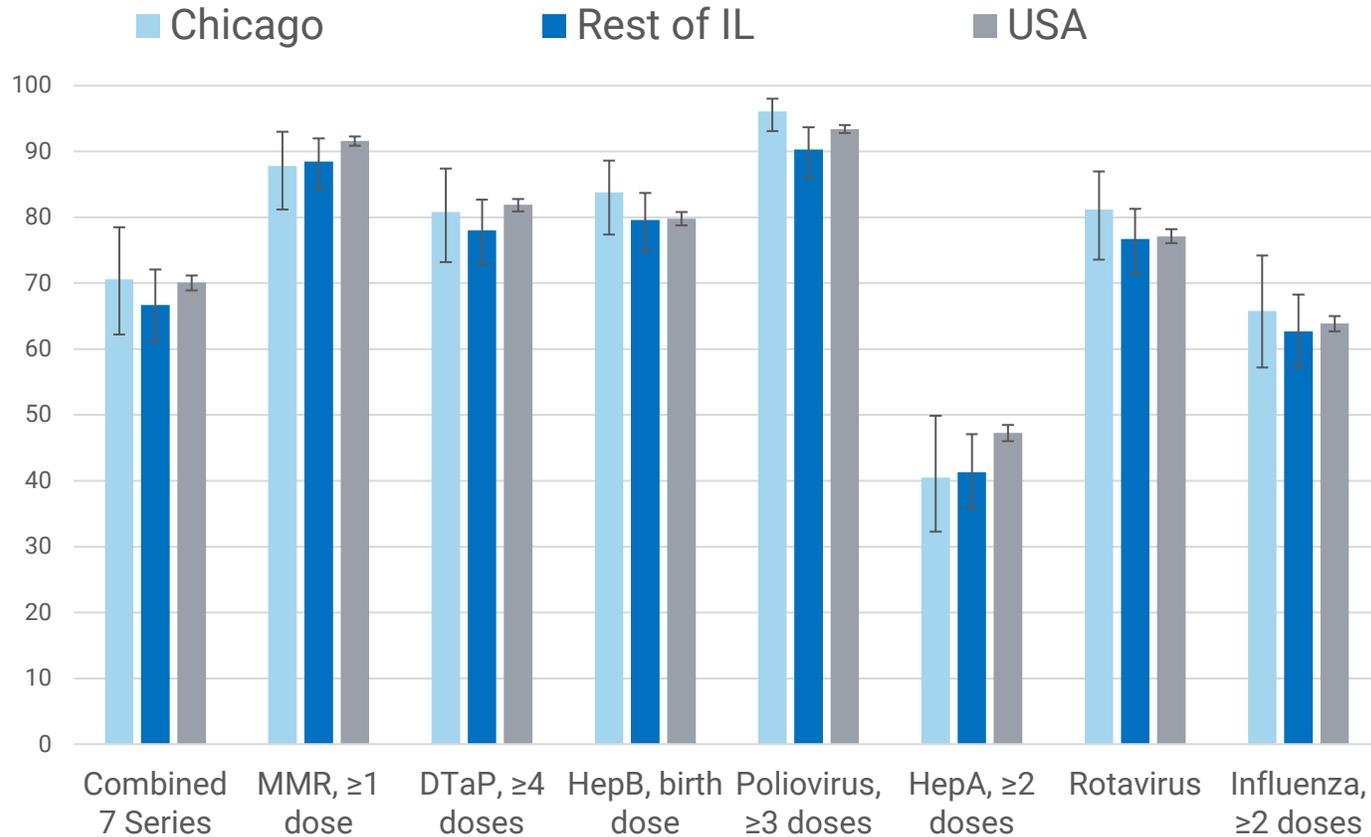
**Types of vaccines:** Flu, Moderna primary series and bivalent boosters (6 months through 5 years), Pfizer primary series and bivalent boosters (6 months and older).



**WALK-INS WELCOME!**



# Beyond COVID: Vaccination Coverage of Selected Vaccines at Age 24 Months Among Children Born in 2018 and 2019



- Chicago’s coverage estimates outpace most national and IL estimates
  - However, wide confidence intervals, so actual coverage level may vary
  - Lower bounds of some confidence intervals place some vaccines below 80% coverage
- Particularly low estimates for Influenza and Hepatitis A vaccines (2+ doses)

Source: [MMWR Volume 72, Issue 2](#). Reported January 13, 2023.

DTaP = diphtheria, tetanus toxoids, and acellular pertussis vaccine; HepA = hepatitis A vaccine; HepB = hepatitis B vaccine; Hib = Haemophilus influenzae type b conjugate vaccine; MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine. The combined 7-vaccine series (4:3:1:3\*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, the full series of Hib (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of VAR, and ≥4 doses of PCV



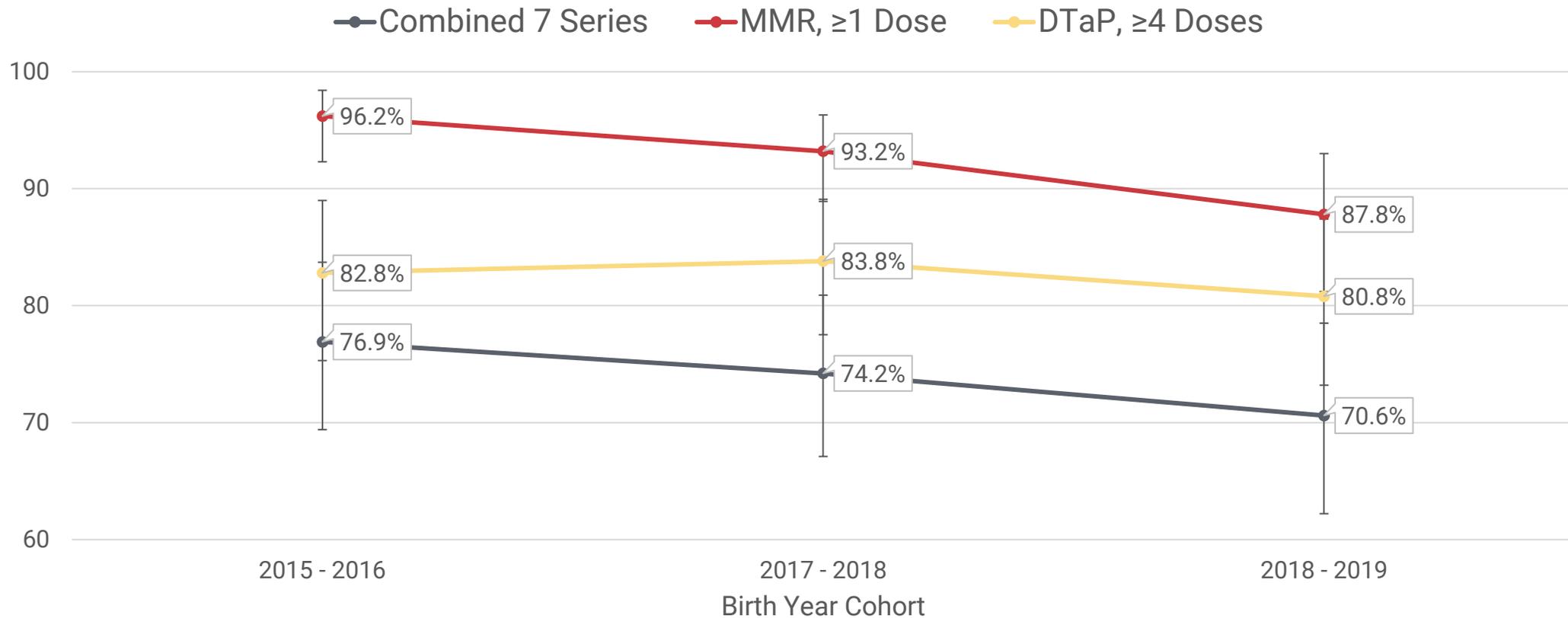
# Chicago Vaccination Coverage at 24 Months for Selected Vaccines Among Children Born in 2018 and 2019

Vaccine	%	95% CI
Combined 7 Series	70.6	62.2 – 78.5
MMR, ≥1 Dose	87.8	81.2 – 93.0
DTaP, ≥4 Doses	80.8	73.2 – 87.4
Hep B, Birth Dose	83.8	77.4 – 88.6
<b>Poliovirus, ≥3 Doses</b>	<b>96.1</b>	93.1 – 98.0
Hep A, ≥2 Doses	40.5	32.3 – 49.9
Rotavirus	81.2	73.6 – 87.0
Influenza, ≥2 Doses	65.8	57.2 – 68.3

Source: [MMWR Volume 72, Issue 2](#). Reported January 13, 2023. (N=266)

DTaP = diphtheria, tetanus toxoids, and acellular pertussis vaccine; HepA = hepatitis A vaccine; HepB = hepatitis B vaccine; Hib = Haemophilus influenzae type b conjugate vaccine; MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine. The combined 7-vaccine series (4:3:1:3\*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, the full series of Hib (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of VAR, and ≥4 doses of PCV

# Decreases in Vaccination Coverage of Selected Vaccines at 24 Months by Birth Year Cohort (nationwide)



Sources: [MMWR Volume 72, Issue 2](#). Reported January 13, 2023. [ChildVaxView](#) Updated February 11, 2022.

DTaP = diphtheria, tetanus toxoids, and acellular pertussis vaccine; HepA = hepatitis A vaccine; HepB = hepatitis B vaccine; Hib = Haemophilus influenzae type b conjugate vaccine; MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine. The combined 7-vaccine series (4:3:1:3\*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, the full series of Hib (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of VAR, and ≥4 doses of PCV. **Hep B, Hib, Varicella, and PCV not included due to missing data on one or more birth year cohorts.**



Need a vaccine or a booster?  
Have questions?

visit

**CHI.GOV/COVIDVAX**

or call

**312-746-4835**

