# I-VAC Adult Learning Collaborative for COVID-19 Vaccination

Please use your first name and health center name when you join the session

Use the **“chat”** feature to let us know if you have a question

Please remember to **mute your microphone** unless speaking

If you can’t connect audio via computer or lose computer audio at anytime, you can call in to session at **(669) 900-6833, Meeting ID 812-8864-4528##**

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# Disclosures

- No one in a position to control the education content of the activity has any relevant financial disclosures with ineligible  companies to disclose
- What gets said here today may change based on new data and recommendations
  - Knowledge is shared more rapidly through ECHO


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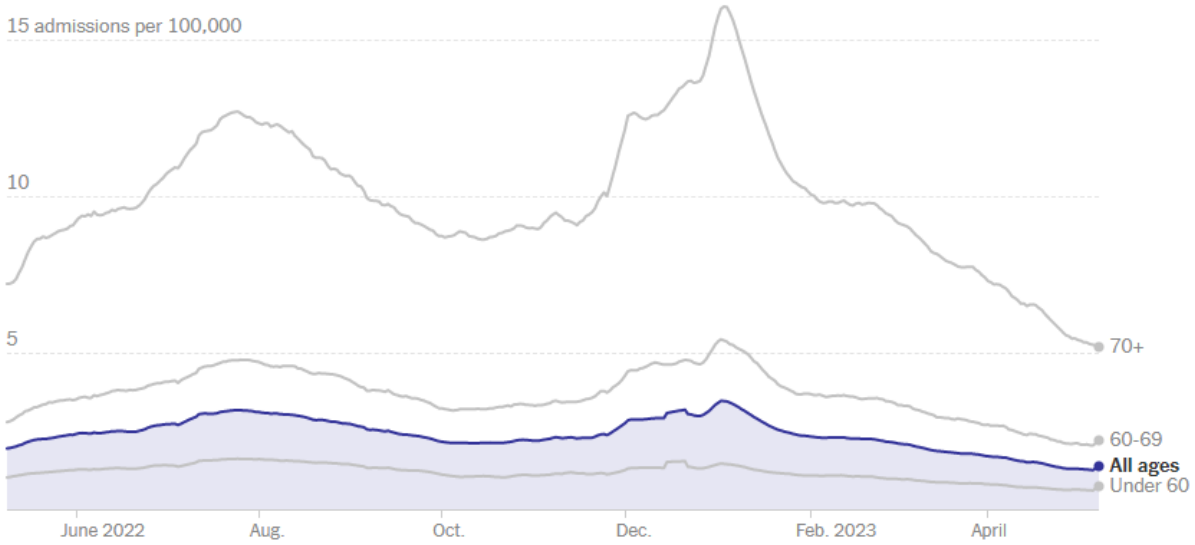
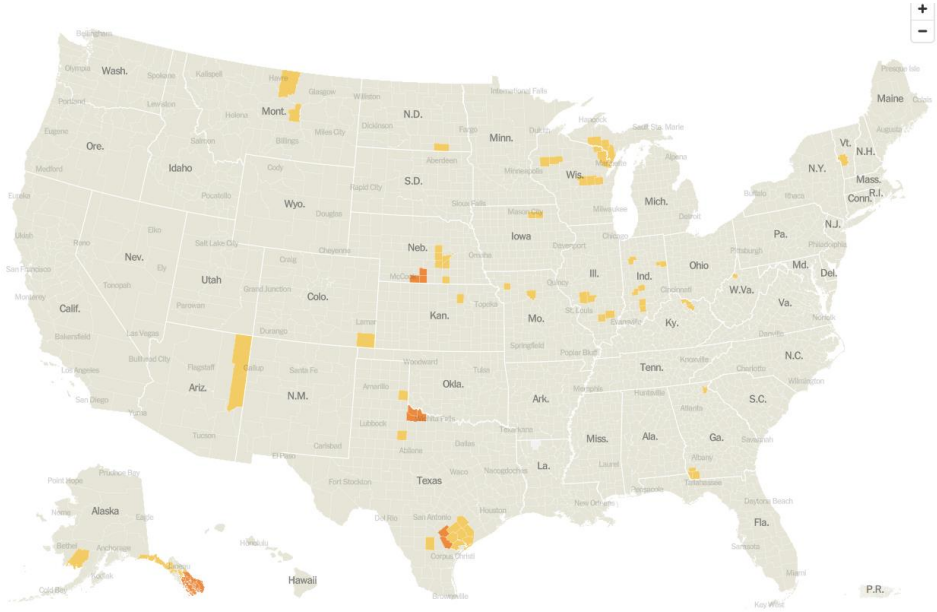
# Track Covid-19 in the U.S.

Updated May 8, 2023

## Daily Covid hospital admissions

Avg. on May 8: 4,535
14-day change: +1%




**Primary series vaccination rate**

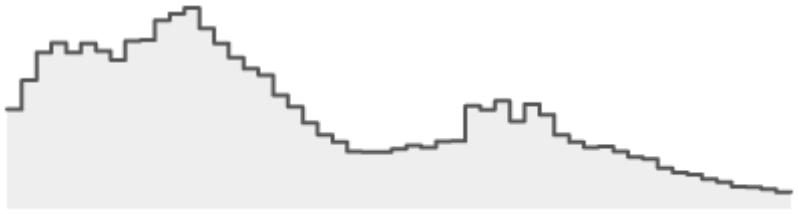
69% Total population
94% Ages 65 and up

**Bivalent booster rate**

17% Total population
43% Ages 65 and up

## Weekly cases

April 27 to May 3: 77,263
14-day change: −22%

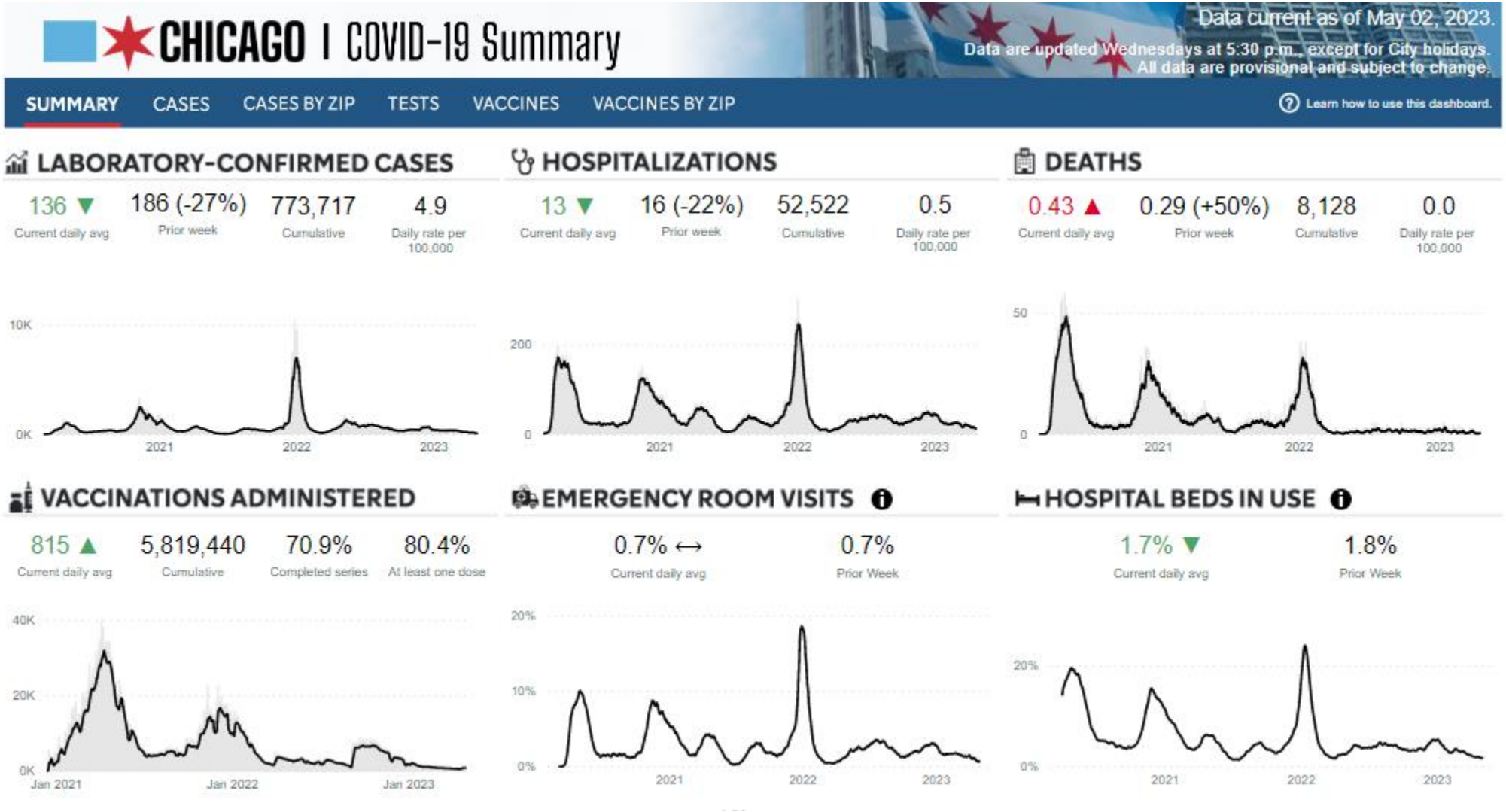



## Test positivity rate

Avg. on May 5: 5.4%
14-day change: +3%


## Weekly deaths

April 27 to May 3: 1,109
14-day change: −11%




Chicago's COVID-19 Risk Level is LOW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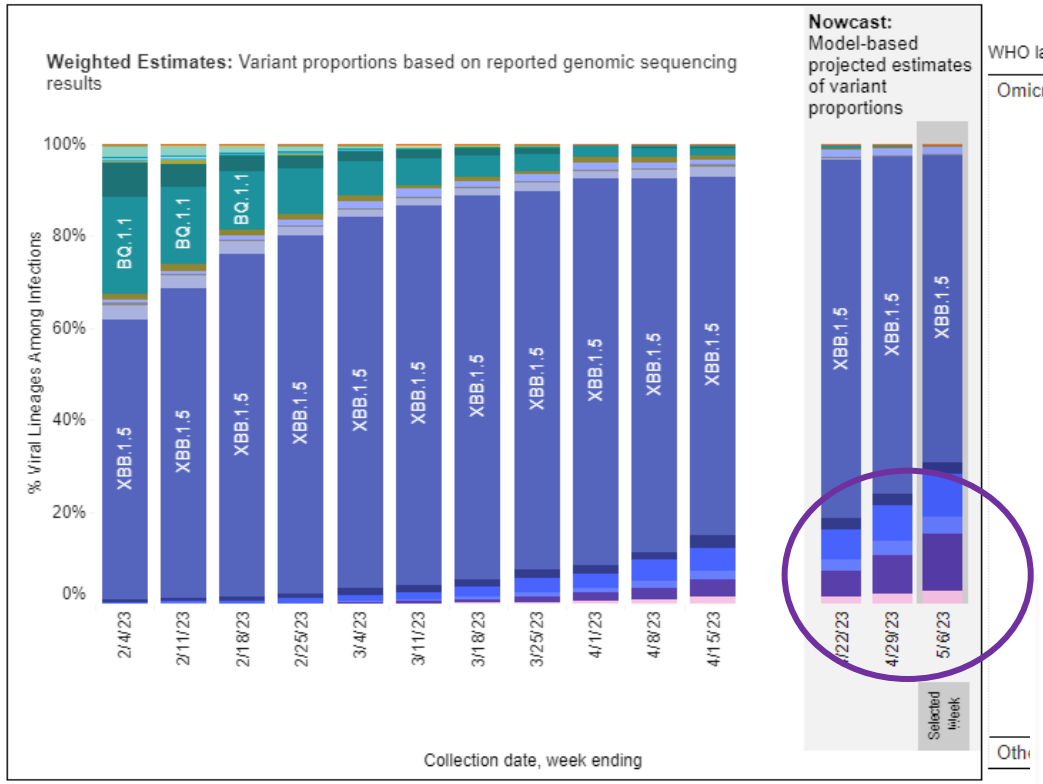
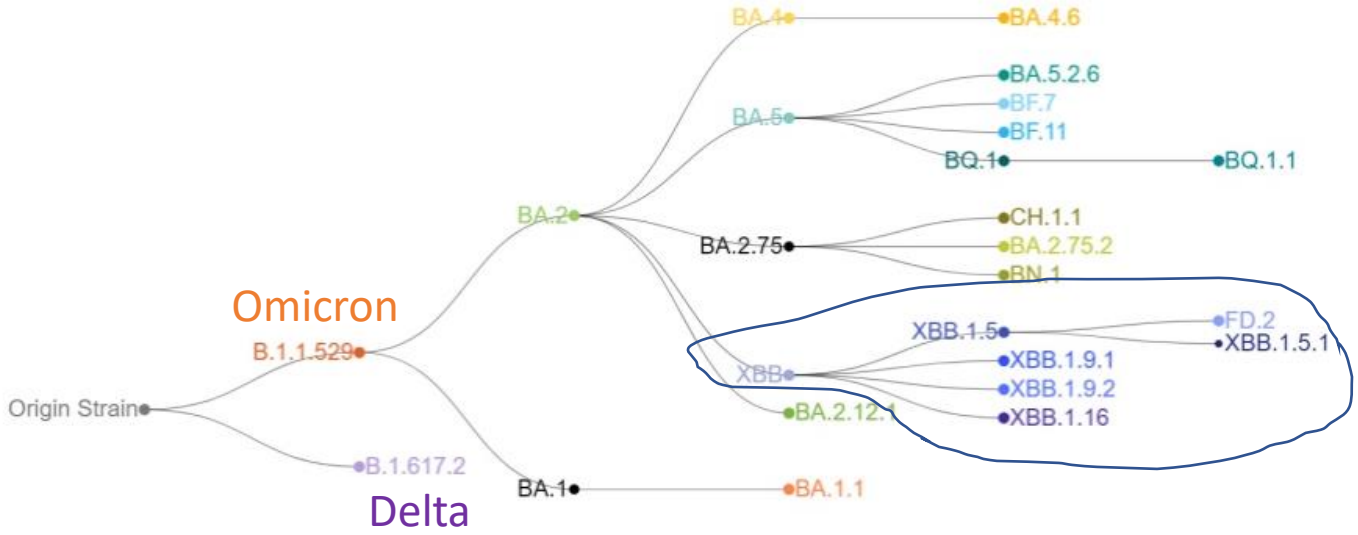



USA

| WHO label | Lineage # | US Class | %Total | 95%PI |
|---|---|---|---|---|
| Omicron | XBB.1.5 | VOC | 66.9% | 63.1-70.5% |
| | XBB.1.16 | VOC | 12.5% | 9.5-16.1% |
| | XBB.1.9.1 | VOC | 9.4% | 7.9-11.2% |
| | XBB.1.9.2 | VOC | 3.7% | 2.9-4.8% |
| | XBB.2.3 | VOC | 2.7% | 1.6-4.4% |
| | XBB.1.5.1 | VOC | 2.4% | 2.0-3.0% |
| | FD.2 | VOC | 1.6% | 0.7-3.4% |
| | BQ.1.1 | VOC | 0.3% | 0.2-0.5% |
| | CH.1.1 | VOC | 0.2% | 0.2-0.4% |
| | XBB | VOC | 0.2% | 0.1-0.3% |
| | BQ.1 | VOC | 0.0% | 0.0-0.1% |
| | BN.1 | VOC | 0.0% | 0.0-0.0% |
| | BA.5 | VOC | 0.0% | 0.0-0.0% |
| | BA.1.1 | VOC | 0.0% | 0.0-0.1% |
| | BA.2 | VOC | 0.0% | 0.0-0.0% |
| | BA.2.75 | VOC | 0.0% | 0.0-0.0% |

Rise of “Arcturus”

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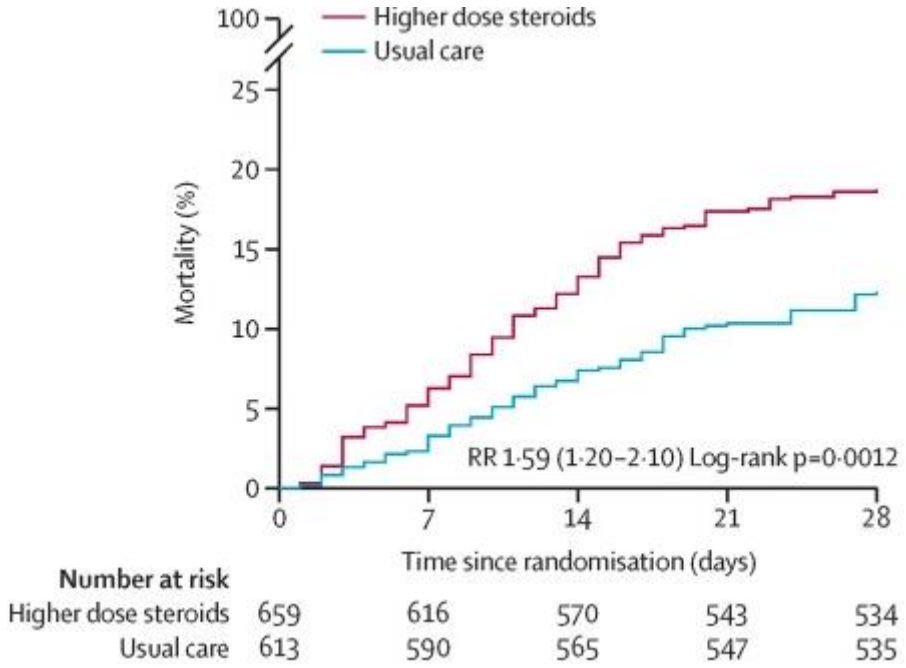
# More is not better…

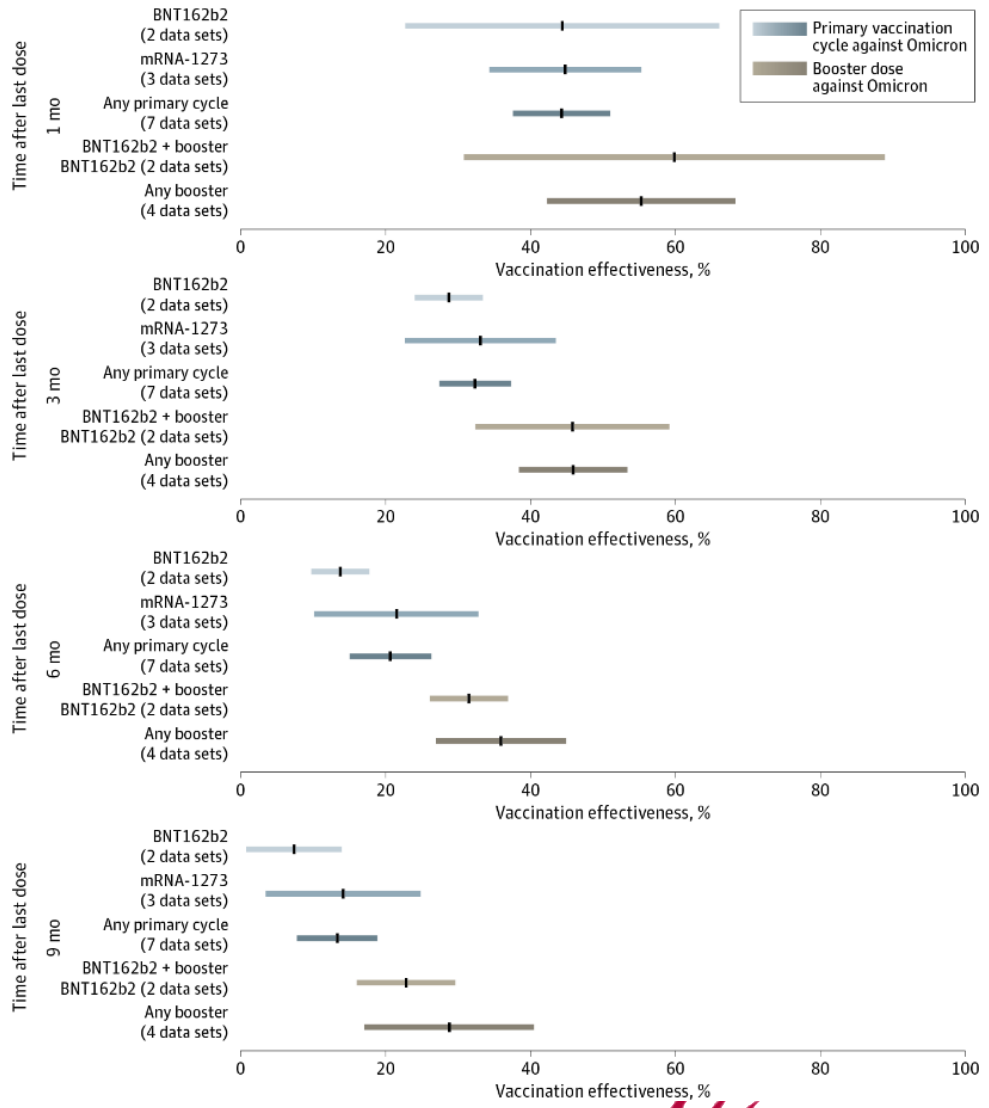
- Low-dose corticosteroids have been shown to reduce mortality for patients with COVID-19 requiring oxygen or ventilatory support (non-invasive mechanical ventilation, invasive mechanical ventilation, or extracorporeal membrane oxygenation)
- Patients hospitalized for COVID-19 with clinical hypoxia who required either no oxygen or simple oxygen only, higher dose corticosteroids significantly increased the risk of death compared with usual care, which included low-dose corticosteroids.
- The RECOVERY trial continues to assess the effects of higher dose corticosteroids in patients hospitalized with COVID-19 who require non-invasive ventilation, invasive mechanical ventilation, or extracorporeal membrane oxygenation.




https://doi.org/10.1016/S0140-6736(23)00510-X

# Recent research on vaccine effectiveness

- Estimates of the rate of waning of vaccine effectiveness (VE) against COVID-19 are key to assess population levels of protection and future needs for booster doses to face the resurgence of epidemic waves.
- Meta-analysis of 40 studies with data
- Pooled estimates of VE of a primary vaccination cycle against laboratory-confirmed Omicron infection and symptomatic disease were both lower than 20% at 6 months from last dose administration. Booster doses restored VE to levels comparable to those acquired soon after the administration of the primary cycle. However, 9 months after booster administration, VE against Omicron was lower than 30% against laboratory-confirmed infection and symptomatic disease. The half-life of VE against symptomatic infection was estimated to be 87 days (95% CI, 67-129 days) for Omicron compared with 316 days (95% CI, 240-470 days) for Delta.
- Similar waning rates of VE were found for different age segments of the population.
- Findings suggest that the effectiveness of COVID-19 vaccines against laboratory-confirmed Omicron or Delta infection and symptomatic disease rapidly wanes over time after the primary vaccination cycle and booster dose.
- Suggests a strategy of regular boosters in at risk individuals




JAMA Netw Open. 2023;6(5):e2310650. doi:10.1001/jamanetworkopen.2023.10650

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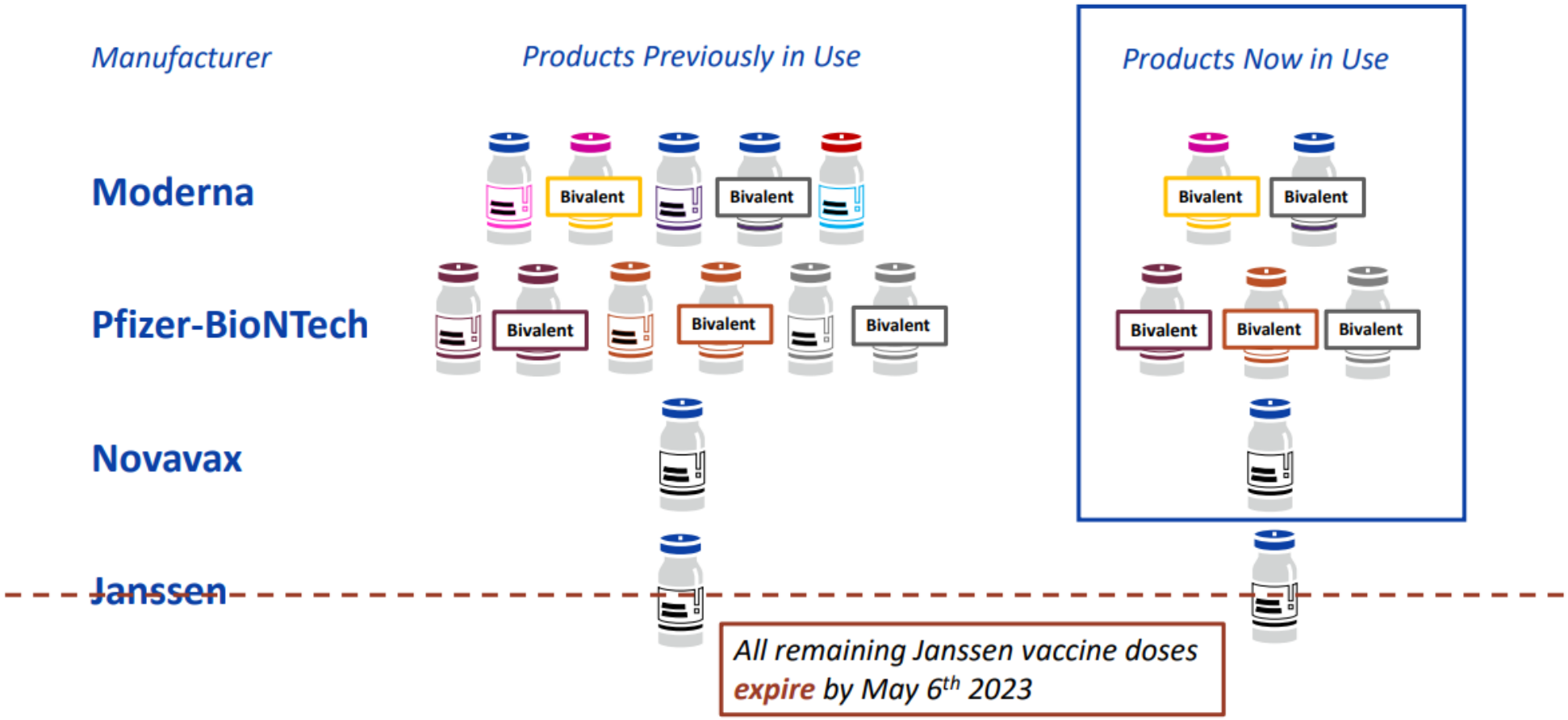
# Products in Use




https://www.cdc.gov/vaccines/acip/meetings/downloads/slides-2023-04-19/07-COVID-Twentyman-508.pdf

# Monovalent mRNA Vaccines

- No longer authorized.
- Should be **immediately removed from inventory.**
- **All monovalent Moderna and Pfizer-BioNTech mRNA vaccines** should be disposed of in medical waste containers.
  - Medical waste disposal requirements may vary by jurisdiction.



https://www.hhs.gov/about/news/2023/02/09/fact-sheet-covid-19-public-health-emergency-transition-roadmap.html

# AGES 12 YEARS AND OLDER

## UNVACCINATED

dose/injection volume

**Moderna Bivalent:**
(**Do NOT** dilute before use)
**Dark Blue Cap** (gray label)

**Pfizer Bivalent:**
(**Do NOT** dilute before use)
Gray Cap

Moderna **BIVALENT** 50 µg/0.5 mL — Up-to-date

OR

Pfizer **BIVALENT** 30 µg/0.3 mL — Up-to-date

## PREVIOUSLY VACCINATED

dose/injection volume

**Previously Received COVID-19 Vaccines**

**Moderna Bivalent:**
(**Do NOT** dilute before use)
**Dark Blue Cap** (gray label)

**Pfizer Bivalent:**
(**Do NOT** dilute before use)
Gray Cap

**1+ DOSES** Monovalent Moderna or Pfizer → In at least 8 weeks → Moderna **BIVALENT** 50 µg/0.5 mL

**OR**

In at least 8 weeks → Pfizer **BIVALENT** 30 µg/0.3 mL — Up-to-date

Moderna or Pfizer **BIVALENT** — Up-to-date

## ADDITIONAL DOSES

dose/injection volume

**Previously Received COVID-19 Vaccines**

**Moderna Bivalent:**
(**Do NOT** dilute before use)
**Dark Blue Cap** (gray label)

**Pfizer Bivalent:**
(**Do NOT** dilute before use)
Gray Cap

### 65 YEARS AND OLDER

People ages 65 years and older have the option to receive 1 additional bivalent mRNA vaccine dose at least 4 months after the first dose of a bivalent mRNA vaccine.

Moderna or Pfizer **BIVALENT** → In at least 4 months → Moderna **BIVALENT** 50 µg/0.5 mL

**OR**

In at least 4 months → Pfizer **BIVALENT** 30 µg/0.3 mL — Up-to-date

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# AGES 12 YEARS AND OLDER

- At the time of initial vaccination, people ages 6 months and older are recommended to receive 3 bivalent mRNA doses
- Option to receive 1 additional dose of Moderna COVID-19 Vaccine (0.5 mL/50 ug; dark blue cap and label with a gray border) or Pfizer-BioNTech COVID-19 Vaccine (0.3 mL/30 ug; gray cap and label with a gray border) at least 2 months following the last recommended bivalent COVID-19 vaccine dose.
- Further additional dose(s) may be administered, informed by the clinical judgement of a healthcare provider and personal preference and circumstances. Any further additional doses should be administered at least 2 months after the last COVID-19 vaccine dose.

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https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interim-considerations-us.html#immunocompromised

| COVID-19 vaccination history | Bivalent vaccine | Number of bivalent doses indicated* | Dosage (mL/ug) | Vaccine vial cap and label colors | Interval between doses |
|---|---|---|---|---|---|
| Unvaccinated | Moderna† *or* Pfizer BioNTech‡ | 3 | 0.5 mL/50 ug | Blue cap; gray label border | Dose 1 and Dose 2: 4 weeks<br>Dose 2 and Dose 3: At least 4 weeks |
| | | 3 | 0.3 mL/30 ug | Gray | Dose 1 and Dose 2: 3 weeks<br>Dose 2 and dose 3: At least 4 weeks |
| 1 dose monovalent Moderna | Moderna† | 2 | 0.5 mL/50 ug | Blue cap; gray label border | Dose 1: 4 weeks after monovalent dose<br>Dose 1 and Dose 2: At least 4 weeks |
| 2 doses monovalent Moderna | Moderna† | 1 | 0.5 mL/50 ug | Blue cap; gray label border | At least 4 weeks after last monovalent dose |
| 3 doses monovalent Moderna | Moderna *or* Pfizer-BioNTech | 1 | 0.5 mL/50 ug | Blue cap; gray label border | At least 8 weeks after last monovalent dose |
| | | 1 | 0.3 mL/30 ug | Gray | At least 8 weeks after last monovalent dose |
| 3 doses monovalent Moderna and 1 dose bivalent mRNA | — | See footnote | — | — | — |
| 1 dose monovalent Pfizer-BioNTech | Pfizer-BioNTech‡ | 2 | 0.3 mL/30 ug | Gray | Dose 1: 3 weeks after monovalent dose<br>Dose 1 and Dose 2: At least 4 weeks |
| 2 doses monovalent Pfizer | Pfizer-BioNTech‡ | 1 | 0.3 mL/30 ug | Gray | At least 4 weeks after last monovalent dose |
| 3 doses monovalent Pfizer-BioNTech | Moderna *or* Pfizer-BioNTech | 1 | 0.5 mL/50 ug | Blue cap; gray label border | At least 8 weeks after last monovalent dose |
| | | 1 | 0.3 mL/30 ug | Gray | At least 8 weeks after last monovalent dose |
| 3 doses monovalent Pfizer-BioNTech and 1 dose bivalent mRNA | — | See footnote | — | — | — |

# End of international emergency

Edward Linn, MD

# Statement on the fifteenth meeting of the IHR (2005) Emergency Committee on the COVID-19 pandemic

**The WHO Director-General concurs with the advice offered by the Committee regarding the ongoing COVID-19 pandemic. He determines that COVID-19 is now an established and ongoing health issue which no longer constitutes a public health emergency of international concern (PHEIC).**

https://www.who.int/news/item/05-05-2023-statement-on-the-fifteenth-meeting-of-the-international-health-regulations-(2005)-emergency-committee-regarding-the-coronavirus-disease-(covid-19)-pandemic

# What does this mean……

**The WHO Emergency Committee believes three things:**

1. *COVID-19 is not unusual and unexpected.*
2. *Cross-border transmission can't (and won't) be stopped.*
3. *COVID-19 does not require a coordinated international response.*

**Essentially the end of the PHEIC means:**

- The end of **mobilizing** international coordination;
- The end of **streamlining** international funding;
- The end of **accelerating** the advancement of the development of vaccines, therapeutics and diagnostics under emergency use authorization.

# What this does not mean…

- ***This doesn't mean the end of a pandemic.*** Declaring a PHEIC is not the same thing as declaring the end of a pandemic. "Pandemic" is rhetoric that governments use as a communication tool—it indicates the widespread occurrence of an infectious disease across the globe at a particular time. In theory, the end of a PHEIC comes far before the end of a pandemic.
- ***This doesn't mean that COVID-19 is gone.*** SARS-CoV-2 is currently mutating 2 times faster than the flu. We will get future waves, but hopefully these will be "wavelets" given the population-level immunity from vaccines and infections. And wavelets will happen several times a year. The probability of a variant of concern is still ~20% in the next 1.5 years. If one emerges, it will likely cause a tsunami. (We saw something similar happen after the 1918 flu emergency ended.) And we cannot ignore the fact that COVID-19 is a leading cause of death in many countries. This will likely remain for years.
- ***This doesn't mean that we can go back to pre-pandemic times***. This does not mean that the US does not have serious underlying problems that need to be addressed. It's beyond time to confront the threats to our individual and collective health so we are not in a constant state of emergency. We cannot keep living in a perpetual cycle of panic and neglect.

# End of PHE in USA: Impact on surveillance data

The PHE ending means that data flow, from county → nation, is no longer *required*. But this doesn't mean that everything is disappearing:

1. Health departments may still update locally;
2. Some health departments are still willing to report data to CDC, even if not required;
3. The CDC has sentinel surveillance programs— a set of locations chosen for intensive surveillance. This will allow us to see *trends* but not *counts*.

# What to expect?

***No change:***

1. **Wastewater** and **genomic surveillance**, which will allow us to track variants and transmission.
2. **Emergency room data,** which is one of the best early indicators of state-level transmission.

***Little change:***

1. **Hospitalization** data will remain through April 2024, but frequency of reporting will change. This will help us track severe disease.
2. **Death data** will remain, but the data source is changing.

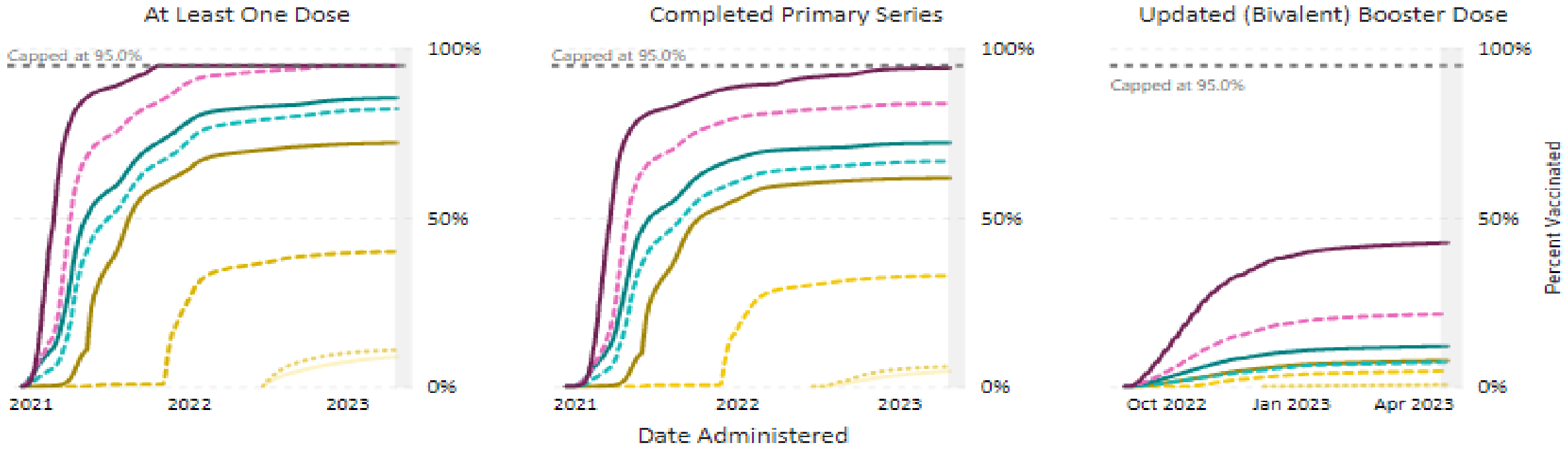
***Greater change:***

4. **Test positivity rates** —one of our earliest metrics of transmission—will no longer be national, state, or county-wide. Negative tests no longer have to be reported. However, some pharmacies will still report.
5. **Cases** will be dropped. This makes sense given at-home antigen tests.
6. **Vaccination coverage** will be spotty. The frequency of updates will also change.

# Percent of People Receiving COVID-19 Vaccine by Age and Date Administered, United States

December 14, 2020 – April 26, 2023

| | <2 yrs | 2-4 yrs | 5-11 yrs | 12-17 yrs | 18-24 yrs | 25-49 yrs | 50-64 yrs | +65 yrs |
|---|---|---|---|---|---|---|---|---|
| At Least One Dose | 8.8% | 10.8% | 40.0% | 72.2% | 82.3% | 85.5% | 95.0% | 95.0% |
| Completed Primary Series | 4.6% | 6.0% | 32.9% | 61.8% | 66.8% | 72.2% | 83.8% | 94.3% |
| Updated (Bivalent) Booster Dose | 0.6% | 0.6% | 4.7% | 7.7% | 7.3% | 12.0% | 21.5% | 42.6% |

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CDC COVID Data Tracker. https://covid.cdc.gov/covid-data-tracker/#vaccination-demographics-trends

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# What do we recommend to our patients?

1. Be up to date with COVID-19 vaccinations

2. The CDC transmission levels data is going away. Moving forward the CDC recommends using hospitalization data to guide behavior.

Alternate suggestion:

Use local wastewater trends to guide recommendations. If rate of detection is trending upwards consider mitigation strategies including masking.

# Claim CME credits

You can claim CME credits for all IVAC Adult Learning Collaborative sessions between January -May 2023 together. Attendance will be sent out next week.

# IVAC sessions will return in Fall 2023

For any questions, email us at

pgower@bsd.uchicago.edu

*Funding for this project was made possible by the Office of Disease Control, through the Illinois Department of Public Health.*

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