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 999-9467-0942##







Disclosures

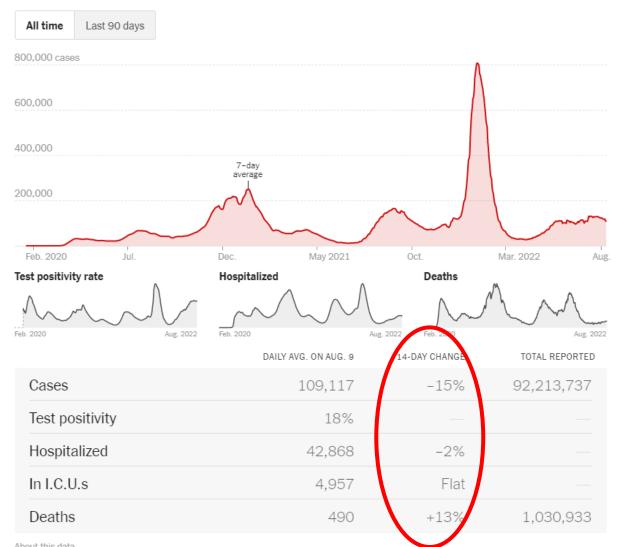
- Aniruddha (Anu) Hazra, MD has received grant funding from Gilead Sciences.
- No one else in a position to control the educational content of this activity has any relevant financial relationships with ineligible companies to disclose.
- All of the relevant financial relationships listed for these individuals have been mitigated.
- What gets said here today may change based on new data and recommendations
 - Knowledge is shared more rapidly through ECHO

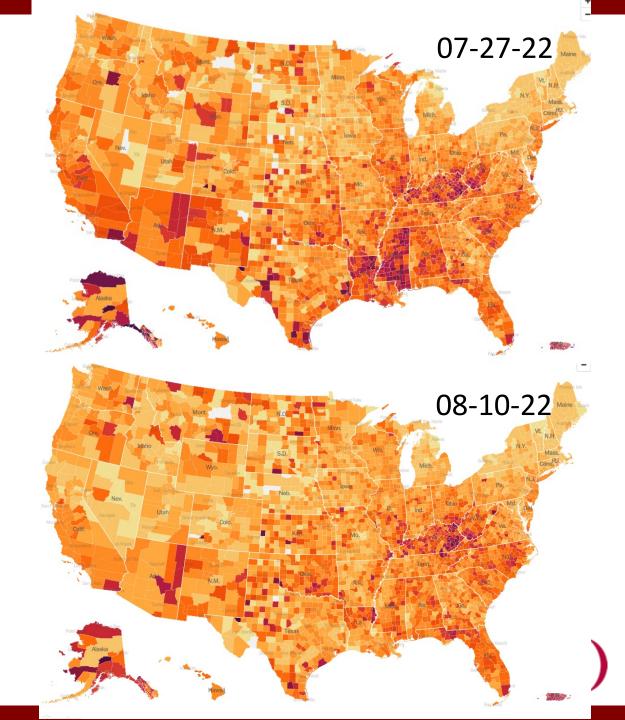




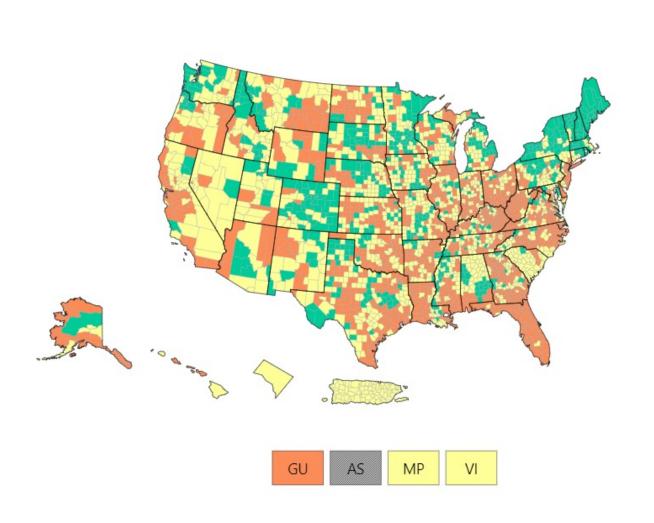
Coronavirus in the U.S.: Latest Map and Case Count

New reported cases





COVID-19 Community Levels of All Counties in US

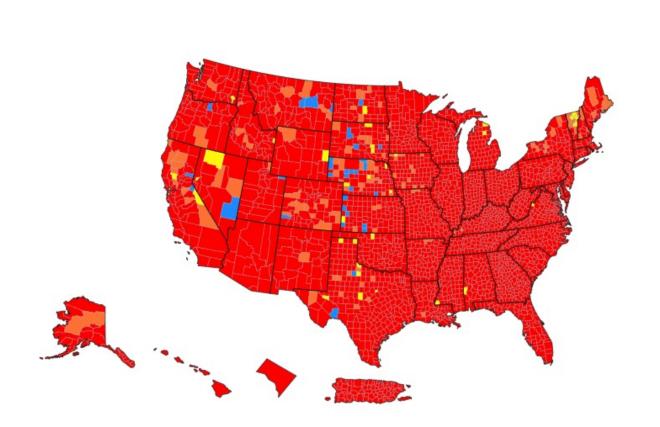


COVID-19 Community Levels in US by County

	Total	Percent	% Change
High	1344	41.7%	- 4.42%
Medium	1254	38.91%	3.49%
Low	625	19.39%	0.94%

How are COVID-19 Community Levels calculated?

Community Transmission of All Counties in US



Community Transmission in US by County

	Total	Percent	% Change
High	3026	93.92%	- 0.16%
Substantial	129	4%	0.4%
Moderate	35	1.09%	- 0.09%
Low	32	0.99%	- 0.16%

How is community transmission calculated?

Data current as of Jul 26, 2022.

I-F at 5:30 p.m., except for City holidays I data are provisional and subject to change

SUMMARY

CASES

CASES BY ZIP

TESTS

VACCINES

VACCINES BY ZIP

(?) Learn how to use this dashboard.

盆 CASES

805 Current daily avg

2.736

Current daily avg

804 (+0%) Prior week

660,687

Cumulative

69.7%

Completed series

29.7

Daily rate per 100,000

W HOSPITALIZATIONS

23 **V**

Current daily avg

26 (-12%) Prior week

44,372 Cumulative

8.0

Daily rate per Current daily avg 100.000

DEATHS

0.29

1.29 (-78%)

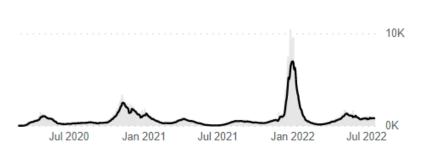
Prior week

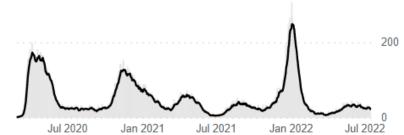
7.766

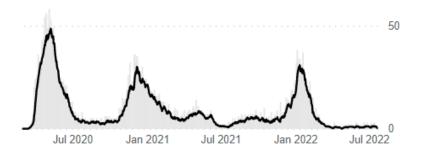
0.0

Cumulative

Daily rate per 100,000







***** VACCINATIONS ADMINISTERED

5.064.983

Cumulative

77.7%

At least one dose

EMERGENCY ROOM VISITS

3.2% ↔

Current daily avg



3.2%

Prior Week

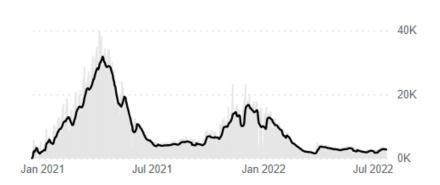
HOSPITAL BEDS IN USE 1

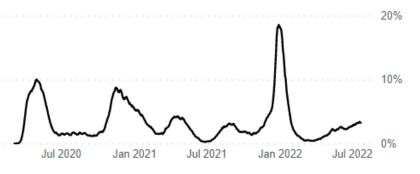
4.5%

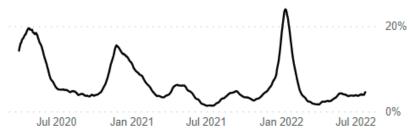
3.9%

Current daily avg

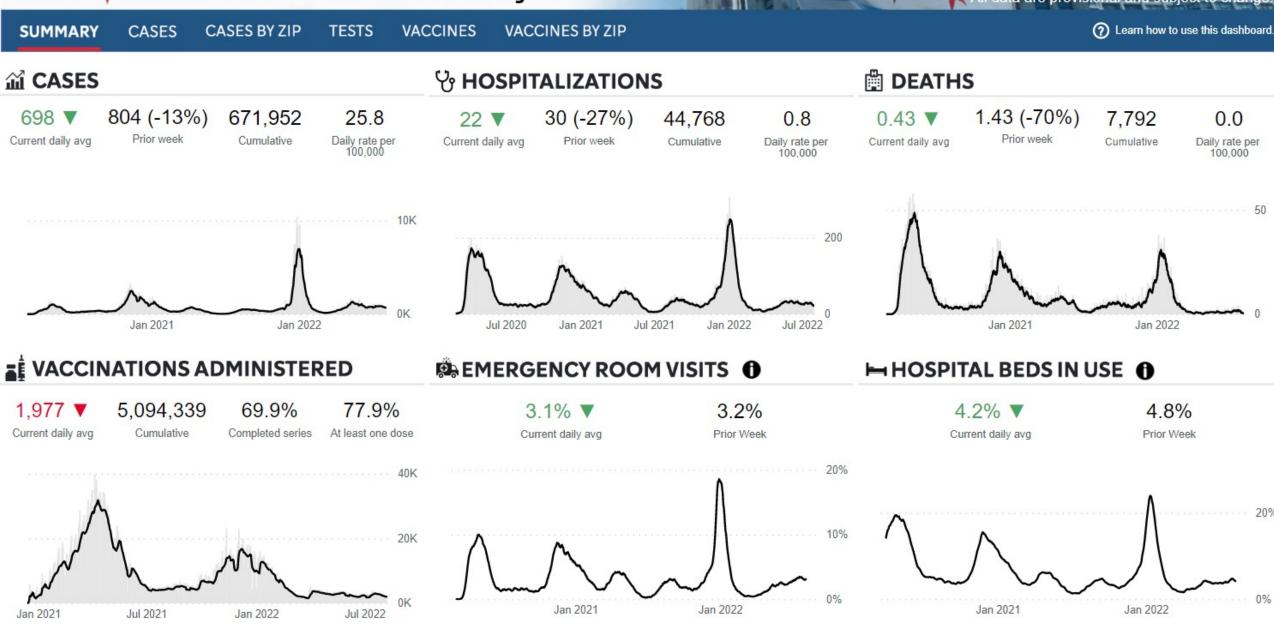
Prior Week







CHICAGO I COVID-19 Summary



slalom

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

High

	New cases per 100,000 population (last 7 days) [Goal is <200]	New admissions per 100,000 population (last 7 days) [Goal is <10]	Percent of staffed inpatient beds occupied by COVID-19 patients (last 7 days) [Goal is <10%]
City of Chicago 200		4.8	4.7%
Cook County (including City of Chicago)	244	12.5	4.6%

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.

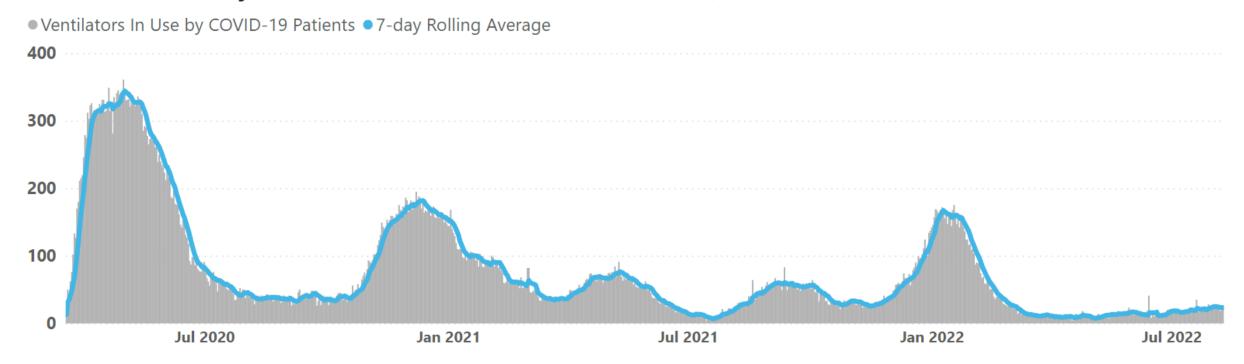
Data current as of 8/5/2022.

Ventilators In Use by COVID -19 Patients and Ventilators Available (8/9/2022)

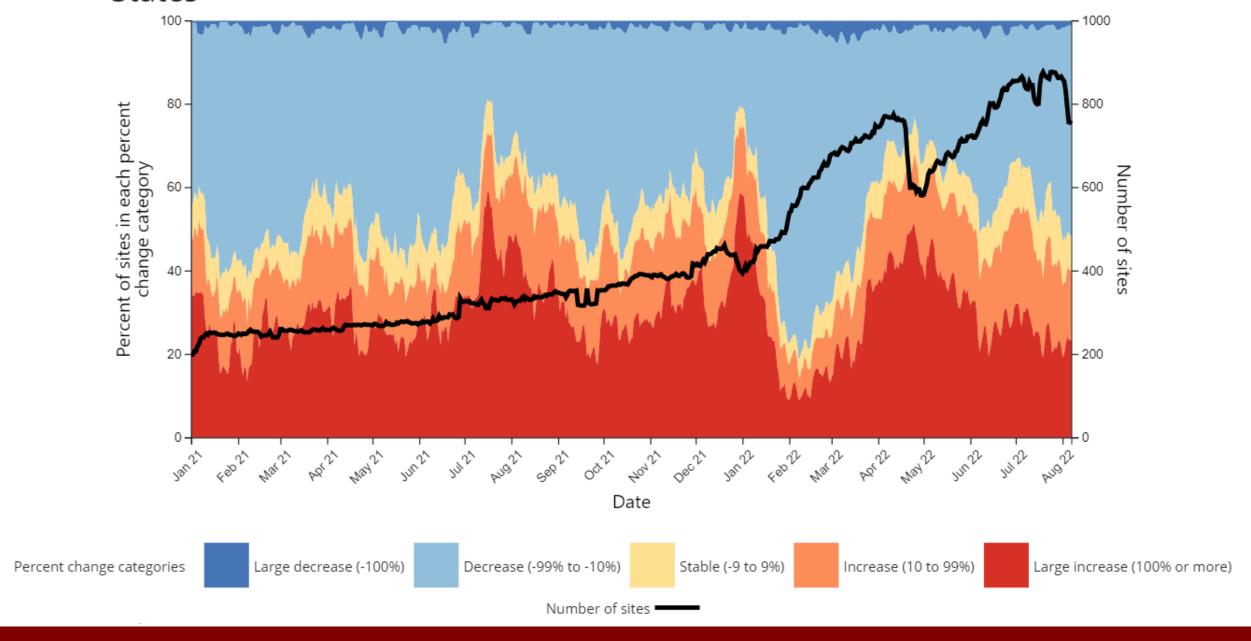
25
Ventilators In Use by COVID-19 Patients

70%% Ventilators Available

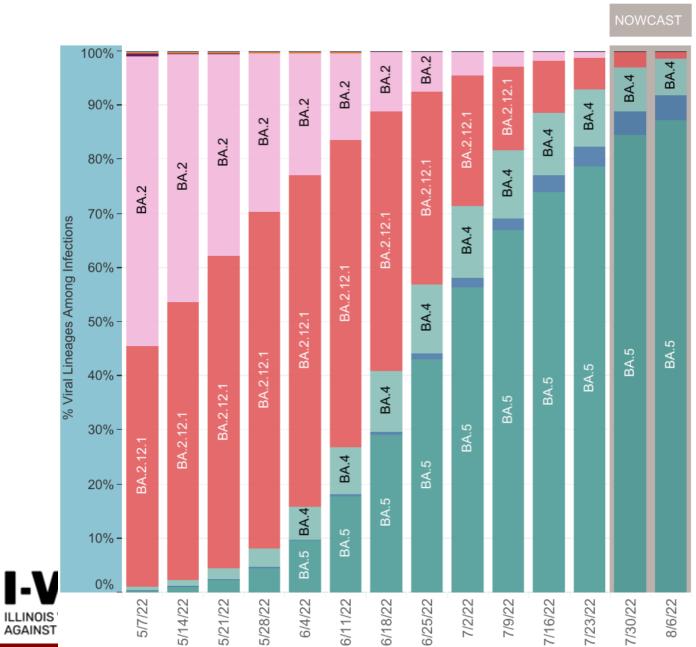
Ventilators In Use by COVID-19 Patients (3/19/2020 - 8/9/2022)



Percent of sites in each percent change category over time, United States



United States: 7/31/2022 - 8/6/2022 NOWCAST



USA

WHO label	Lineage #	US Class	%Total	95%PI	
Omicron	BA.5	VOC	87.1%	85.8-88.3%	
	BA.4	VOC	6.6%	6.1-7.2%	
	BA.4.6	VOC	4.8%	3.9-5.8%	
	BA.2.12.1	VOC	1.5%	1.4-1.6%	
	BA.2	VOC	0.1%	0.1-0.1%	
	B.1.1.529	VOC	0.0%	0.0-0.0%	
	BA.1.1	VOC	0.0%	0.0-0.0%	
Delta	B.1.617.2	VBM	0.0%	0.0-0.0%	
Other	Other*		0.0%	0.0-0.0%	
					·

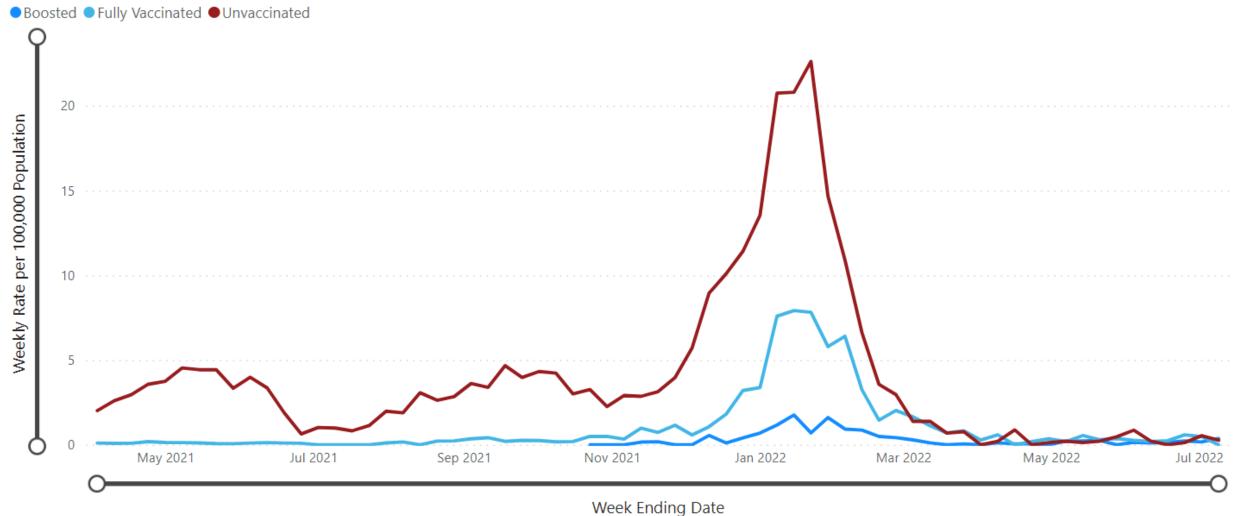
^{*} Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

[#] AY.1-AY.133 and their sublineages are aggregated with B.1.617.2. BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. For regional data, BA.1.1 and its sublineages are also aggregated with B.1.1.529, as they currently cannot be reliably called in each region. Except BA.2.12.1, BA.2 sublineages are aggregated with BA.2. Except BA.4.6,



^{**} These data include Nowcast estimates, which are modeled projections that may differ from weighted estimates generated at later dates

Weekly Rate of COVID-19 Deaths by Vaccination Status



Since the Omicron variant became dominant in Chicago, unvaccinated people had a

2.6X

higher risk of dying from COVID-19 compared to fully vaccinated people

Since the Omicron variant became dominant in Chicago, unvaccinated people had a

higher risk of dying from COVID-19 compared to people who were boosted

COVID-19 Common Dosing Errors, Management and Prevention





General Best Practice Guidelines for Immunization

Clear Orders

Right Patient

Right Vaccine and Diluent

Right Dose

Right Site

Right Route

Right Needle Size

Right Documentation

https://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/downloads/general-recs.pdf





Right Vaccine, Dose and Diluent

- Check vaccine and diluent
 - Do not mix vaccine vials of the same or different vaccines together
 - Use only diluent supplied with vaccine (Peds Pfizer only)
 - Do not mix COVID-19 Vaccines from different vials
 - If you do not have enough for a full dose you need to waste
 - Adjust in ICARE
- Label each vaccine after drawing up
- Do you have the correct vaccine for patient age?
 - Ask the <u>patient their age</u> not birthdate!
- Check again just before giving to patient





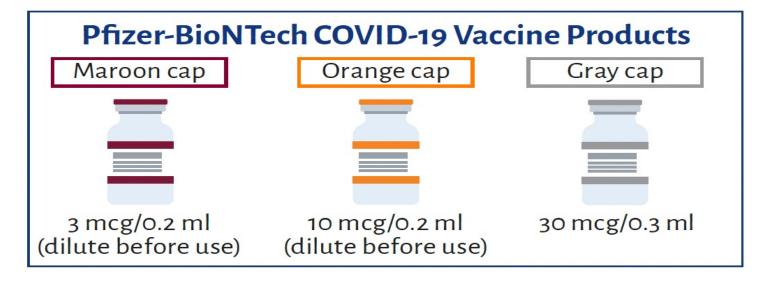
COVID-19 vaccine products currently approved or authorized in the United States

Pfizer-BioNTech							
Ago indication	Wa astronated assessed as	Label border color	Dilection nearly d	Primary series		Booster doses	
Age indication	Vaccine vial cap color	Label border color	Dilution required	Dose	Injection volume	Dose	Injection volume
6 months-4 years	Maroon	Maroon	Yes	3 μg	0.2 mL	NA	NA
5–11 years	Orange	Orange	Yes	10 μg	0.2 mL	10 μg	0.2 mL
12 years and older	Purple	Purple	Yes	30 μg	0.3 mL	30 µg	0.3 mL
12 years and older	Gray	Gray	No	30 μg	0.3 mL	30 µg	0.3 mL
Moderna							
A in direction	Vaccina vial con colon	Labal bandan salan	Dilution nonvined	Primary	/ series	Booster doses	
Age indication	Vaccine vial cap color	Label border color	Dilution required	Dose	Injection volume	Dose	Injection volume
6 months-5 years	Dark blue	Magenta	No	25 μg	0.25 mL	NA	NA
6-11 years	Dark blue	Purple	No	50 μg	0.5 mL	NA	NA
12–17 years	Red	Light blue	No	100 µg	0.5 mL	NA	NA
18 years and older	Red	Light blue	No	100 µg	0.5 mL	50 μg	0.25 mL
18 years and older	Dark blue	Purple	No	NA	NA	50 μg	0.5 mL
Janssen							
Age indication	Vaccine vial cap color	Label border color	Dilution required	Primary series		Booster doses	
Age mulcation	vaccine viai cap color	Label bolder color	Dilution required	Dose	Injection volume	Dose	Injection volume
18 years and older	Blue	No Color	No	5×10 ¹⁰ viral particles	0.5 mL	5×10¹⁰ viral particles	0.5 mL
Novavax							
Age indication	Vaccine vial cap color	Label border color	Dilution required	Primary series		Booster doses	
Age maleadon	vaccine viai cap color	Edwer Border Color		Dose	Injection volume	Dose	Injection volume
18 years and older	Royal blue	No Color	No	5 μg rS and 50 μg of Matrix-M™ adjuvant	0.5 mL	N/A	N/A





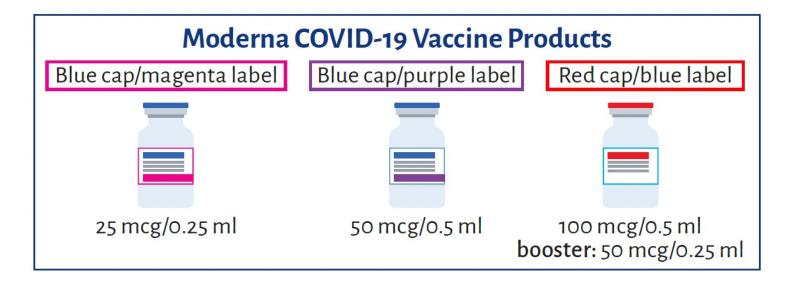
Pfizer Vaccine mcg/mL Dose and Diluent Chart



Age Indications and Formulation	6 months through 4 years (Primary Series)*	5 years through 11 years (Primary Series and Booster)	12 years and older (Primary Series and Booster)
Vial Cap Color	Color Maroon Orange		Gray
Preparation	Dilute Before Use	Dilute Before Use	Do Not Dilute
Amount of Diluent Needed per Vial ^a	2.2 mL	1.3 mL	DO NOT DITUTE
Dose Volume/Dose 0.2 mL/3 mc		0.2 mL/10 mcg	0.3 mL/30 mcg



Moderna Dosage Chart mcg/mL Dose

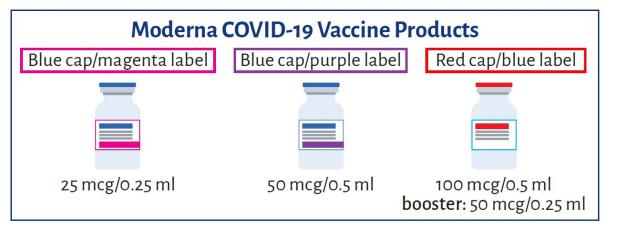


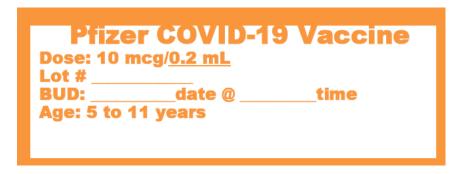
Age Indications and Formulation	6 months through 5 years (Primary Series)	6 years through 11 years (Primary Series) 18 years and older (Booster Dose)		er (Primary Series)* der (Booster Dose)
Vial Cap Color	Dark blue	Dark blue	Red (5.5 mL)	Red (7.5 mL)
Vial Label Border Color	Magenta	Purple	Light Blue	Light Blue
Preparation	Do Not Dilute	Do Not Dilute	Do N	ot Dilute
Dose Volume/Dose	0.25 mL/25 mcg	0.5 mL/50 mcg) mcg primary) mcg booster

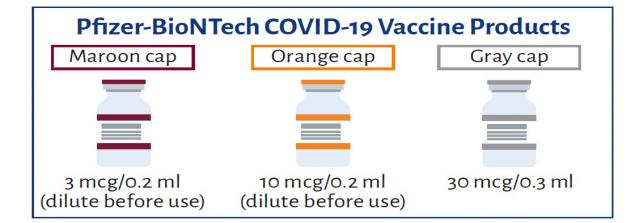


Drawing Up Vaccines

- NO vaccine mixing
- Labeling system













Emergency Use Authorization (EUA)

- Allowance of access to critical medicines and medical products during a public health emergency.
 - An EUA is different from the Food and Drug Administration's (FDA's) authorization/approval versus licensure
- Criteria for an EUA Issuance:
 - Consent Form is not required at the federal level
 - Vaccine Information Sheet (VIS) will not be provided
 - EUA Fact Sheet will be provided







Adverse Reactions and Contraindications

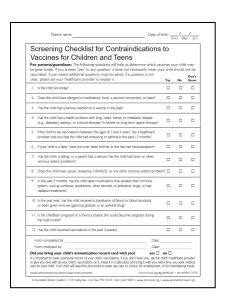






Adverse Reactions

- Sometimes there are "side effects" that happen after a vaccine is given
- Types and examples of most common adverse reactions
 - Local (swelling at injection site)
 - Systemic (fever)
 - Allergic (anaphylaxis)
- Unsure whether a child has experienced an adverse reaction?
 - Check with the doctor or nurse
 - Use and review screening form
 - Screening for contraindications before administering vaccines can help prevent adverse reactions



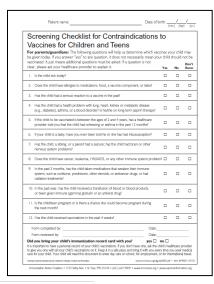






Know Possible Side-effects

- Unsure whether a child has experienced an adverse reaction?
 - Use and review screening form
 - Screening for contraindications before administering vaccines can help prevent adverse reactions
- Types and examples of most common adverse reactions
 - Local (swelling at injection site)
 - Systemic (fever)
 - Allergic (anaphylaxis)









Allergic Reactions or Syncope rare, but be prepared

- Prevent syncope (teens, young adults)
 - Sit or lie down for immunization
 - Wait 15-20 minutes after immunization
- Allergic reactions
 - Have a written plan, practice drill
 - Keep CPR certification current
 - Know where epinephrine and equipment to maintain airway are kept
 - Call for MD or NP and call 911
- Document patient chart, VAERS, registry







COVID-19: Administrative Errors and Deviations







Vaccines	Туре	Administration error/deviation	Interim recommendation	
	Site/route	 Incorrect site (i.e., site other than the deltoid muscle [preferred site] or anterolateral thigh [alternate site]) 	Do not repeat dose.* Inform the recipient of the potential for local and systemic adverse events.	
	Incorrect route	• Incorrect route (e.g., subcutaneous)	• Do not repeat dose.* Inform the recipient of the potential for local and systemic adverse events.	
	Age	Unauthorized age group	 If received dose at age less than 16 years, do not give any additional dose at this time.[∞] If age 16 to 17 years and a vaccine other than Pfizer-BioNTech was inadvertently administered: If Moderna vaccine administered as the first dose, may administer Moderna vaccine as the second dose (as off-label use because Moderna vaccine is not authorized in this age group). If Janssen vaccine administered, do not repeat dose with Pfizer-BioNTech vaccine. 	
All currently authorized		Higher-than-authorized dose volume administered Do not repeat dose.*†		
vaccines (Pfizer-BioNTech Moderna, and Janssen COVID-19 vaccines)	Dosage	Lower-than-authorized dose volume administered (e.g., leaked out, equipment failure, recipient pulled away)	 If more than half of the dose was administered, do not repeat dose.* If less than half of the dose was administered or the proportion of the dose cannot be estimated, administer the authorized dose immediately (no minimum interval) in the opposite arm.# 	
Inactive ingredients	Storage and	Dose administered after improper storage and handling (e.g., temperature excursion, provides information supporting that	Contact the manufacturer for guidance. If the manufacturer provides information supporting that the dose should be repeated, the repeated dose may be given immediately (no minimum interval) in the opposite arm.	
• Dose administered past the expiration/beyond-use date	Contact the manufacturer for guidance. If the manufacturer provides information supporting that the dose should be repeated, the repeated dose may be given immediately (no minimum interval) in the opposite arm.			
		Dose administered within 14 days before or after another (i.e., non-COVID-19) vaccine	Do not repeat COVID-19 vaccine* or other vaccine(s) doses. This deviation from CDC guidance does not require VAERS reporting.	
	Coadministration	 Dose administered within 90 days of monoclonal antibodies or convalescent plasma for COVID-19 treatment 	 Do not repeat COVID-19 vaccine dose. If person has already received one mRNA COVID-19 vaccine dose, defer administration of second dose for 90 days following receipt of antibody therapy. This deviation from CDC guidance does not require VAERS reporting. 	





			*
mRNA vaccines	Intervals	 Second dose administered fewer than 17 days (Pfizer-BioNTech) or fewer than 24 days (Moderna) after the first dose (i.e., administered earlier than the 4-day grace period) 	• Do not repeat dose.
(Pfizer-BioNTech and Moderna)	Pfizer-BioNTech • Second dose administered more than	Second dose administered more than 42 days after the first dose	 Do not repeat dose. This deviation from CDC guidance does not require VAERS reporting.
	Mixed series	Incorrect mRNA COVID-19 vaccine product administered for second dose in 2-dose series	• Do not repeat dose.§
		ONLY diluent administered (i.e., sterile 0.9% sodium chloride)	 Inform the recipient that no vaccine was administered. Administer the authorized dose immediately (no minimum interval) in the opposite arm.#
		No diluent, resulting in higher than authorized dose (i.e., 0.3 ml of undiluted vaccine administered)	 Do not repeat dose*† Inform the recipient of the potential for local and systemic adverse events.
Pfizer-BioNTech only	Diluent	Incorrect diluent type (e.g., sterile water, bacteriostatic 0.9% NS)	 Contact the manufacturer for guidance. If the manufacturer provides information supporting that the dose should be repeated, the repeated dose may be given immediately (no minimum interval) in the opposite arm.
	contents w volume oth	Incorrect diluent volume (i.e., the vial contents were diluted with a diluent volume other than 1.8 ml, but a 0.3 ml dose was still administered)	 For doses administered with diluent volume less than 1.8 ml, inform the recipient of the potential for local and systemic adverse events.*† For doses administered with diluent volume greater than 1.8 ml, do not repeat dose. * (Note: Dilution with a volume up to 4.0 ml [which exceeds vial capacity] results in more-than-half of the authorized dose administered.)







COVID-19 Vaccine

Administration Errors and Deviations



A vaccine administration error is any preventable event that may cause or lead to inappropriate use of vaccine or patient harm. This table provides resources for preventing and reporting COVID-19 vaccine administration errors, as well as actions to take after an error has occurred. For completeness, it includes additional scenarios that deviate from CDC recommendations for vaccine intervals but are not considered administration errors.

For all vaccine administration errors:

- Inform the recipient of the vaccine administration error.
- Consult with the state immunization program_and/or immunization information system (IIS) to determine how the dose should be entered into the IIS, both as an administered dose and to account for inventory.
- Follow the revaccination guidance below, using an ageappropriate COVID-19 vaccine and formulation. Continue with the recommended schedule of subsequent dose(s) unless otherwise noted.
 - o For doses recommended to be repeated, consider delaying the repeat dose for 8 weeks after the invalid dose based on

- the potential for increased reactogenicity and the rare risk of myocarditis from mRNA COVID-19 vaccines, particularly among males 12-39 years of age.
- The recommendations apply to all FDA-approved or FDA-authorized COVID-19 vaccines and all doses unless otherwise stated.
- Providers are required to report all COVID-19 vaccine administration errors—even those not associated with an adverse event—to VAERS.
- Determine how the error occurred and implement strategies to prevent it from happening again.



(((ECHO)))

VACCINE ADVERSE EVENT REPORTING SYSTEM (VAERS): providers

- Is a national vaccine safety surveillance program used to detect possible safety issues with vaccines?
- Submit all vaccine administration errors and adverse events to VAERS (link is external).
- Educate patients on VAERS and how to access the system.
- Familiarize yourself with the specific EUA reporting requirements including:
 - Vaccine administration errors whether associated with an adverse event or not
 - Serious adverse events; irrespective of attribution to vaccination
 - Cases of Multisystem Inflammatory Syndrome (MIS) in adults
 - Cases of COVID-19 that result in hospitalization or death





Questions?







Next Session: Wednesday, August 24th

For any questions, email us at kshwest@peds.bsd.uchicago.edu



