

GMDA Summer Meeting August 6, 2022



Presenter

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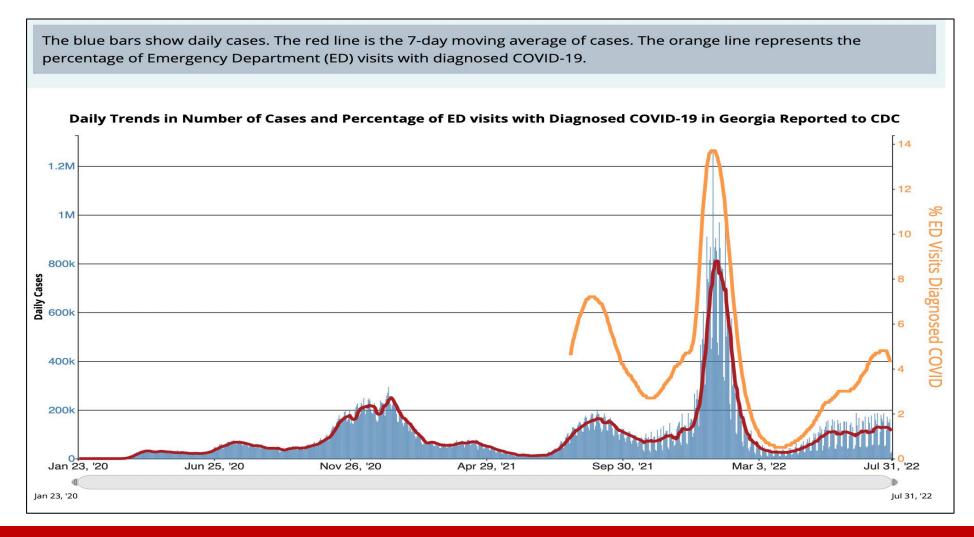


Objectives

- Discuss the latest science pertaining to current existing variants and the level of concern for contagiousness.
- Discuss the current CDC recommendations for the degree of isolation in the general population and infected patients.
- Discuss the currently accepted treatments for COVID and the current recommendations for vaccination.



Current State: COVID-19



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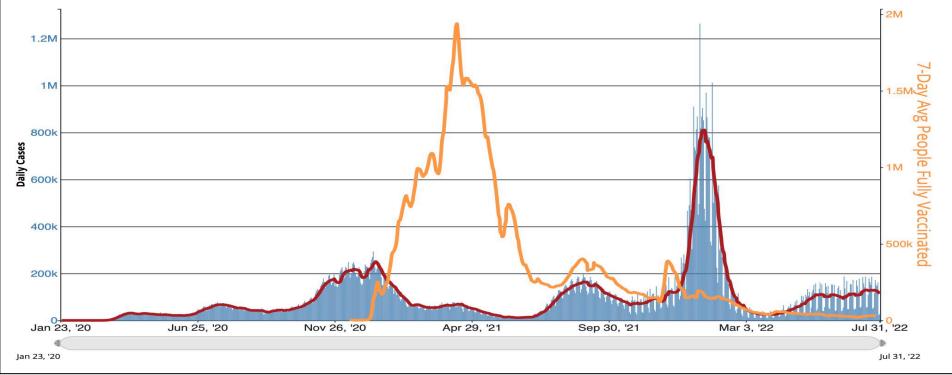
Current State: COVID-19

The blue bars show daily cases. The red line is the 7-day moving average of cases. The orange line represents the 7-day average of the number of inpatients (adult and pediatric) admitted to a hospital with confirmed COVID-19 diagnosis. Daily Trends in Number of Cases and 7-day Average of New Patients Admitted to Hospital with Confirmed COVID-19 in **Georgia Reported to CDC** 1.2N 20k **United States** New Cases: 89,644 Patients 7-day Moving Avg Cases: 89,041 1NNew COVID-19 Hospital Admissions: 6,701 Date: October 12, 2021 15k (7-day moving 800 Daily Cases 10k ; average) 400k 5k 200 Jan 23. '20 Jun 25, '20 Nov 26, '20 Apr 29, '21 Sep 30, '21 Mar 3, '22 Jul 31, '22 Jan 23, '20 Jul 31, '22



Current State: COVID-19 Among Vaccinated

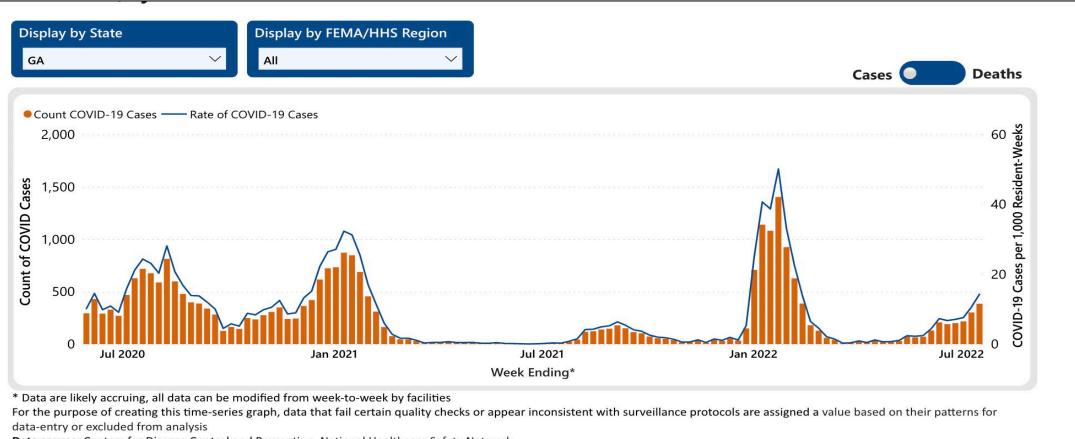
The blue bars show daily cases. The red line is the 7-day moving average of cases. The orange line represents the 7-day moving average of the number of people who were fully vaccinated against COVID-19 by date administered.



Daily Trends in Number of COVID-19 Cases and 7-day Moving Average of the Number of People Fully Vaccinated in Georgia Reported to CDC



Resident Cases of COVID-19



Data source: Centers for Disease Control and Prevention, National Healthcare Safety Network

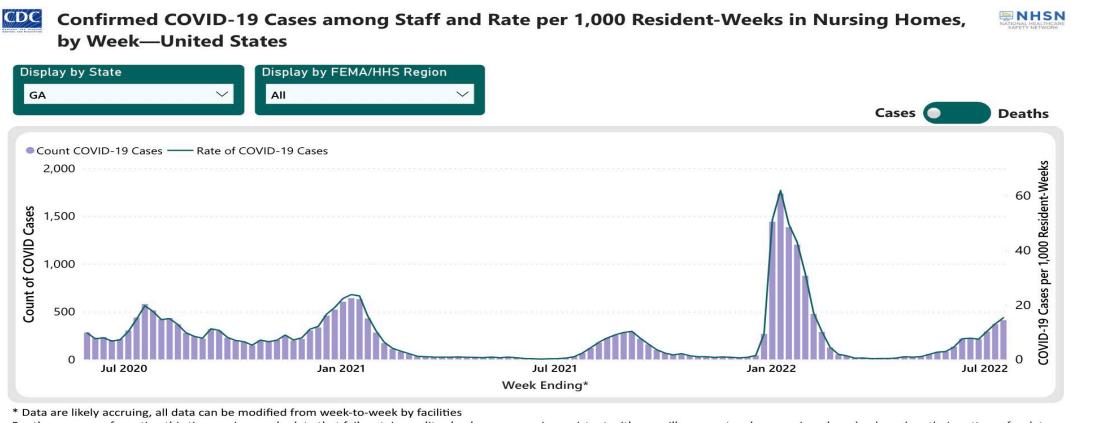
For more information: https://www.cdc.gov/nhsn/ltc/covid19/index.html

Accessibility: [Right click on the graph area to show as table]

Data as of 7/25/2022 5:30 AM



Staff Cases of COVID-19



For the purpose of creating this time-series graph, data that fail certain quality checks or appear inconsistent with surveillance protocols are assigned a value based on their patterns for dataentry or excluded from analysis

Data source: Centers for Disease Control and Prevention, National Healthcare Safety Network

For more information: https://www.cdc.gov/nhsn/ltc/covid19/index.html

Accessibility: [Right click on the graph area to show as table]

Data as of 7/25/2022 5:30 AM



Category

change in

0%

50%

12%

- 4%

- 14%

- 3%

19

0

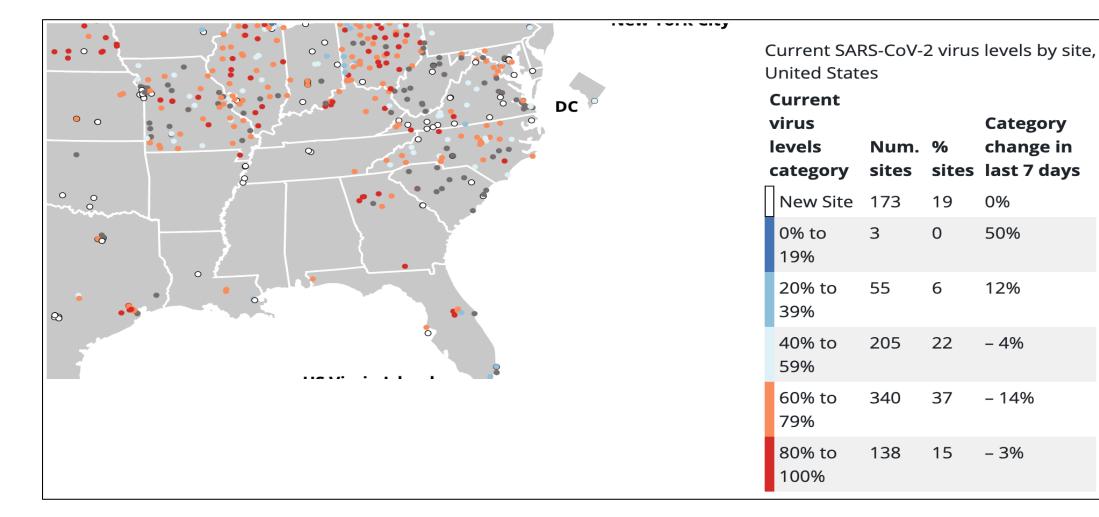
6

22

37

15

Wastewater Surveillance





Current COVID-19 Variant

				Uni	ited	State	s: 4/2	24/20)22 –	7/30/	2022	2				Unite	ed States:	7/24/2022	- 7/30/	2022 NOWCAST	-
														NOW	/CAST						
	100%	_							2	BA.2								US	5A		
	90%					2	BA.2	BA.2	BA.2		<u>~</u> .	BA.2.12.1		BA.4	BA.4	WHO label	Lineage #	US Class	%Total	95%PI	
	80%				BA.2	BA.2					BA.2.12.1	B/	BA.4			Omicron	BA.5	VOC	85.5%	83.8-87.0%	
	0070		BA.2	BA.2	ш					.2.12.1		BA.4					BA.4	VOC	7.7%	7.0-8.5%	
ions	70%	BA.2	B/						BA.2.12.1	BA.	BA.4						BA.4.6	VOC	4.1%	3.2-5.4%	
) Infect	60%							-	BA.2		BA						BA.2.12.1	VOC	2.6%	2.4-2.8%	
Among	500/						<u> </u>	BA.2.12.		BA.4							BA.2	VOC	0.1%	0.1-0.1%	
eages	50%					-	BA.2.12.			B					BA.5		B.1.1.529	VOC	0.0%	0.0-0.0%	
% Viral Lineages Among Infections	40%				5.1	BA.2.12.1	6		BA.4			10	BA.5	BA.5	B∕		BA.1.1	VOC	0.0%	0.0-0.0%	
∧ %	30%			12.1	BA.2.12.1	6	_		BA		BA.5	BA.5	_			Delta	B.1.617.2	VBM	0.0%	0.0-0.0%	
		L.	BA.2.12.1	BA.2.12.				BA.4		BA.5	BA					Other	Other*		0.0%	0.0-0.0%	
	20%	BA.2.12.						4		BA.5								Enumerated lineages are US VOC and lineages circulating above 1%			
	10%						5 BA.4	BA.5								lineages wh	nich are circulat	ing <1% nation	onally duri	resents the aggregation ng all weeks displayed. h are modeled projection	
	0%						BA.									that may dif # AY.1-A	ffer from weight	ted estimates ir sublineage	generate s are aggr	d at later dates egated with B.1.617.2.	
		4/30/22	5/7/22	5/14/22	5/21/22	5/28/22	6/4/22	6/11/22	6/18/22	6/25/22	7/2/22	7/9/22	7/16/22	7/23/22	7/30/22	aggregated also aggreg	with B.1.1.529 pated with B.1.1	. For regiona .529, as they	l data, BA currently	s sublineages) are 1.1 and its sublineages cannot be reliably calle are aggregated with B/	ed in



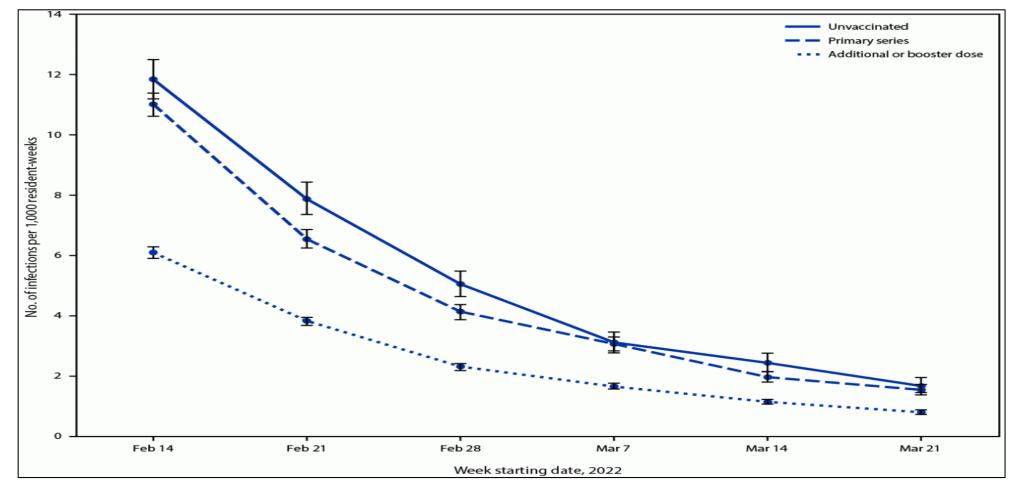
Vaccine Effectiveness: March-June 2022

SARS-CoV-2 infection	3 doses mRNA	69%
Hospitalizations	3 doses mRNA	90%> 86% for Omicron
ED visit	3 doses mRNA	83%
Mechanical ventilation or death	3 doses mRNA	94%

https://covid.cdc.gov/covid-data-tracker/#vaccine-effectiveness



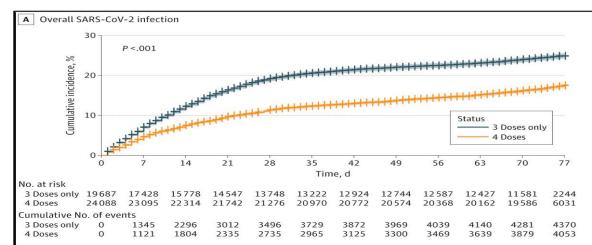
Vaccine Effectiveness in LTC



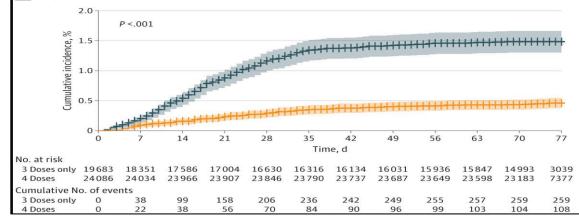
Crude weekly rates of reported confirmed SARS-CoV-2 infection among skilled nursing facility residents, by vaccination status and resident-week — National Healthcare Safety Network, United States, February 14–March 27, 2022 (Prasad N, Derado G, Nanduri SA, et al. MMWR 2022;71:633–637).

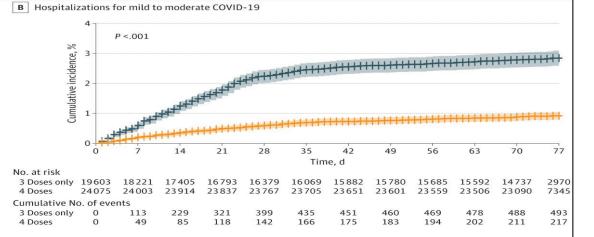


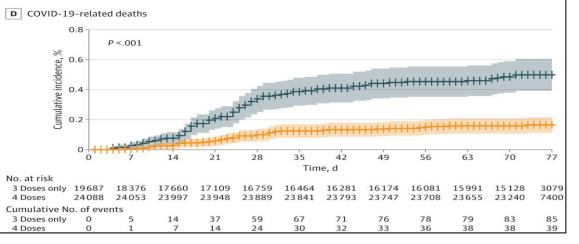
Effect of 3rd vs 4th Dose Against Omicron











https://jamanetwork.com/journals/jamainternalmedicine/fullarticle/2793699



Vaccine Effectiveness Against BA.5

		BA.5	F	BA.2					
	Outcome n (%)	Adjusted OR (95%CI)	Outcome n (%)	Adjusted OR (95%CI)	OR BA.5 /OR .BA.2 (95% CI)				
Hospitalization									
Vaccination status									
Not vaccinated (reference)	9/590 (1.53)	ref	14/631 (2.2)	ref					
Complete primary vaccination	9/2530 (0.36)	0.78 (0.29;2.09)	11/2434 (0.45)	0.38 (0.16;0.89)	2.06 (0.56; 7.55)				
1st booster vaccination	34/9186 (0.37)	0.23 (0.10;0.51)	29/12331 (0.24)	0.07 (0.03; 0.14)	3.36 (1.18; 9.63)				
Death									
Vaccination status									
Not vaccinated (reference)	8/590 (1.36)	ref	3/631 (0.48)	ref					
Complete primary vaccination	4/2530 (0.16)	0.45 (0.12;1.62)	7/2434 (0.29)	1.00 (0.22;4.08)	0.43 (0.07; 2.73)				
1st booster vaccination	15/9186 (0.16)	0.12 (0.04;0.30)	5/12331 (0.04)	0.06 (0.01; 0.24)	1.98 (0.38; 10.36)				



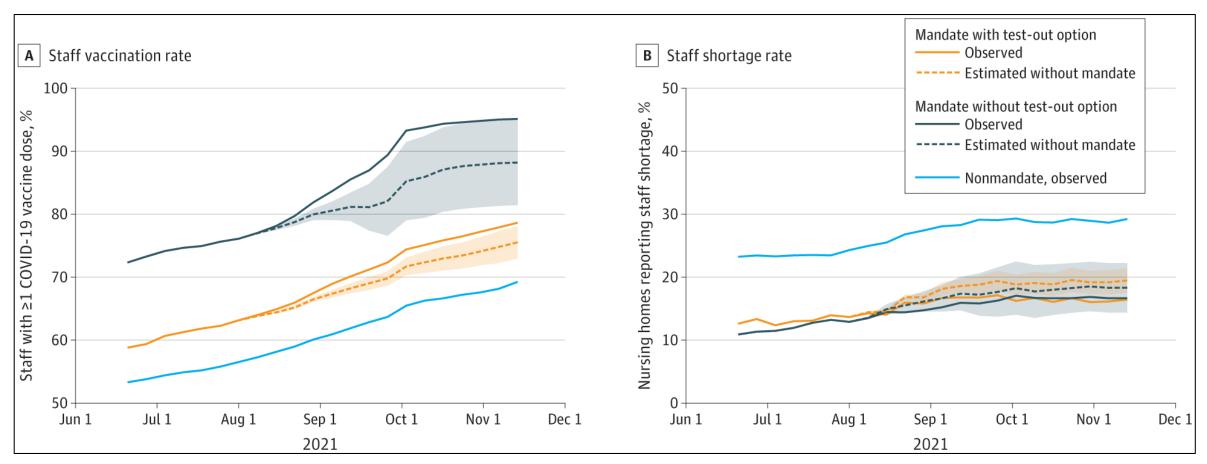
Vaccine Effectiveness on Long COVID

			Odds Ratio		Odds Ratio
Study or Subgroup	log[Odds Ratio]	SE	IV, Random, 95% Cl		IV, Random, 95% Cl
1.1.1 One dose BEFORE infe	ection				
Simon 2021	-1.5141	0.0486	0.22 [0.20, 0.24]	+	
Taquet 2021	-0.0408	0.0386	0.96 [0.89, 1.04]		+
Antonelli 2022	0.0296	0.098	1.03 [0.85, 1.25]		
1.1.2 Two doses BEFORE in	fection				
Taquet 2021	0	0.0262	1.00 [0.95, 1.05]		+
Antonelli 2022	-0.6733	0.2378	0.51 [0.32, 0.81]		
1.1.3 Any dose BEFORE infe	ection				
Al-Aly 2022	-0.1625	0.0183	0.85 [0.82, 0.88]		+
Taquet 2021	0.01	0.0259	1.01 [0.96, 1.06]		+
1.1.4 One dose AFTER infec	tion				
Ayoubkhani 2022	-0.1393	0.0365	0.87 [0.81, 0.93]		+
Simon 2021 (8-12 weeks)	-0.2877	0.028	0.75 [0.71, 0.79]		+
Simon 2021 (4-8 weeks)	-0.6162	0.0292	0.54 [0.51, 0.57]		+
Simon 2021 (0-4 weeks)	-0.9676	0.042	0.38 [0.35, 0.41]		+
Tran 2021	-0.6733	0.2378	0.51 [0.32, 0.81]		
1.1.5 Two doses AFTER infe	ection				
Ayoubkhani 2022	-0.0943	0.0288	0.91 [0.86, 0.96]		+
				0.2	0.5 1 2 5
					Favours vaccine Favours no vaccine

Figure 3. Impact of vaccinations on long COVID forest plot.



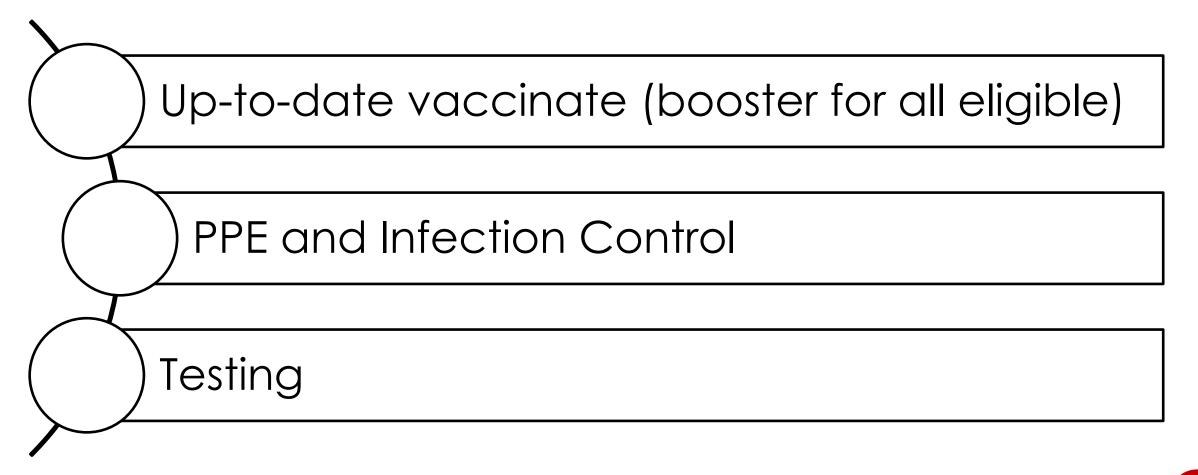
Effect of Vaccine Mandates on Staffing Shortages



https://jamanetwork.com/journals/jama-health-forum/fullarticle/2794727



The Three Pillars



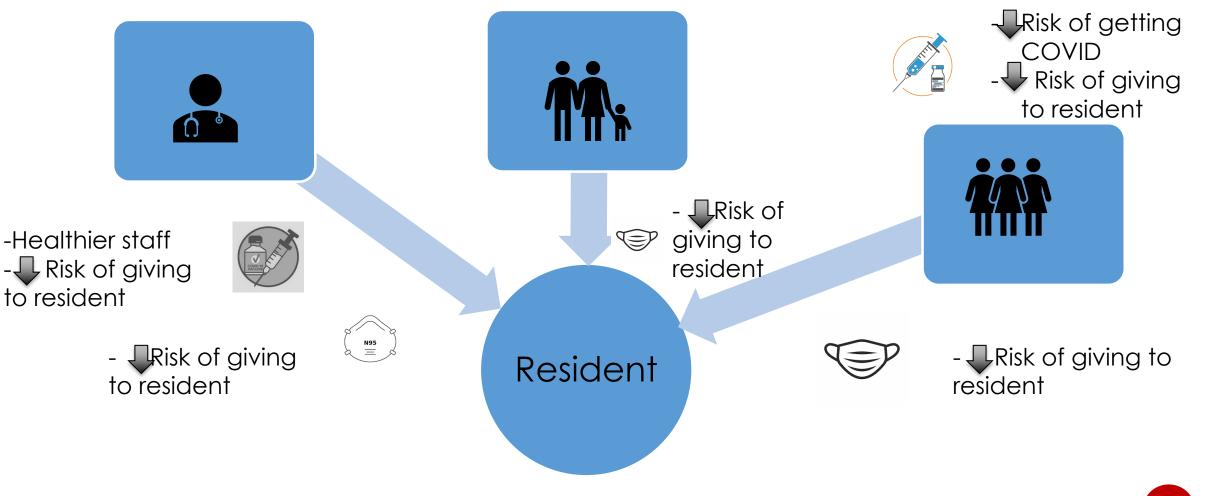


Checklist

- Up-to-date vaccine
 - Residents
 - Staff
- PPE and Infection control:
 - Staff
 - Residents
 - Visitors
- Test early
 - Cohort



Preventing Spread





Therapeutic Considerations

PATIENT DISPOSITION

Does Not Require Hospitalization or Supplemental Oxygen

PANEL'S RECOMMENDATIONS

All patients should be offered symptomatic management (AIII).

For patients who are at high risk of progressing to severe COVID-19,^a use 1 of the following treatment options:

Preferred Therapies

Listed in order of preference:

- Ritonavir-boosted nirmatrelvir (Paxlovid)^{b,c} (Alla)
- Remdesivir^{c,d} (Blla)

Alternative Therapies

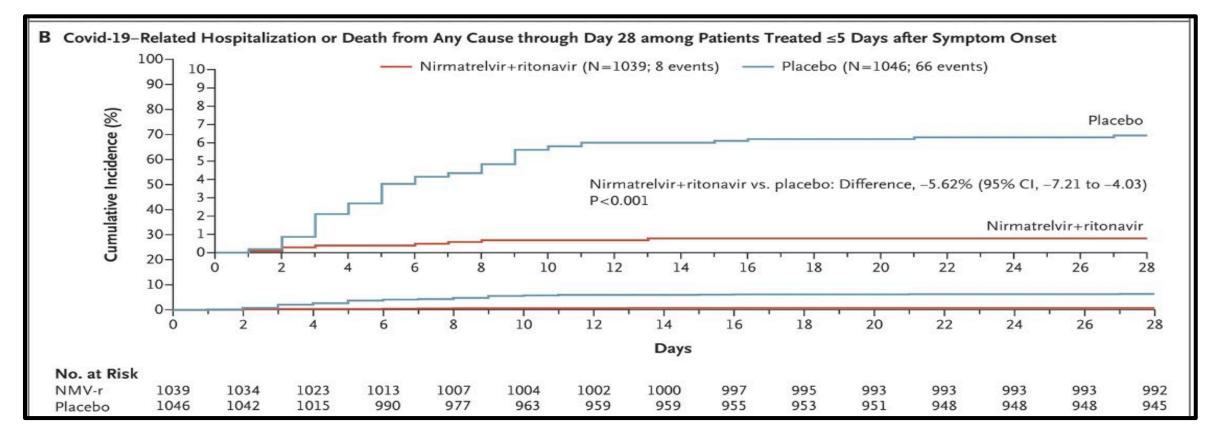
For use <u>ONLY</u> when neither of the preferred therapies are available, feasible to use, or clinically appropriate. Listed in alphabetical order:

- Bebtelovimab^e (CIII)
- Molnupiravir^{c,f} (CIIa)

The Panel recommends against the use of dexamethasone⁹ or other systemic corticosteroids in the absence of another indication (AIII).

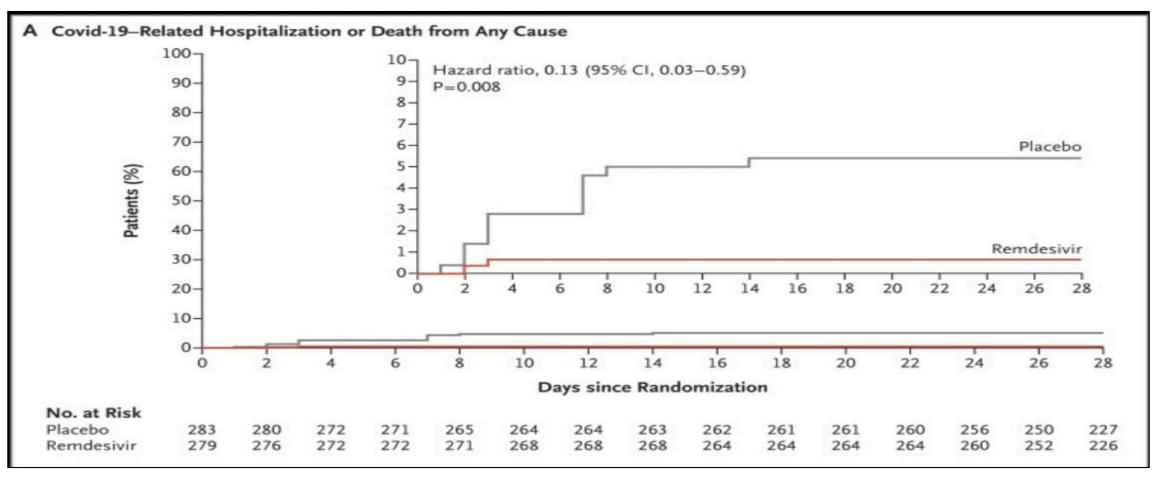


Paxlovid: EPIC HR Trial





Remdesivir: PINETREE Trial



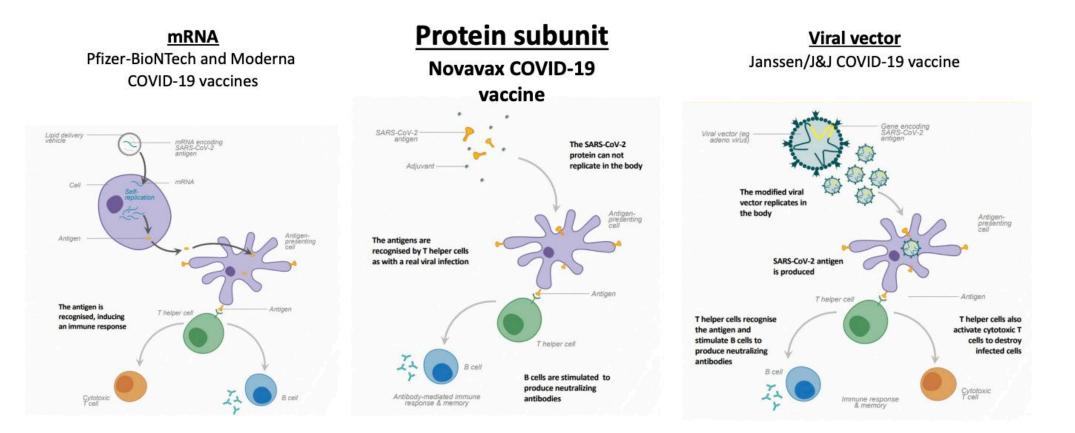


Novavax: EUA on July 13, 2022

- Number of Shots: Two doses in the primary series, given three to eight weeks apart.
- People who are moderately or severely immunocompromised should also receive two doses, given three weeks apart (a third primary dose is not currently authorized).
- **Booster Shot:** Novavax COVID-19 vaccine is not authorized for use as a booster dose.



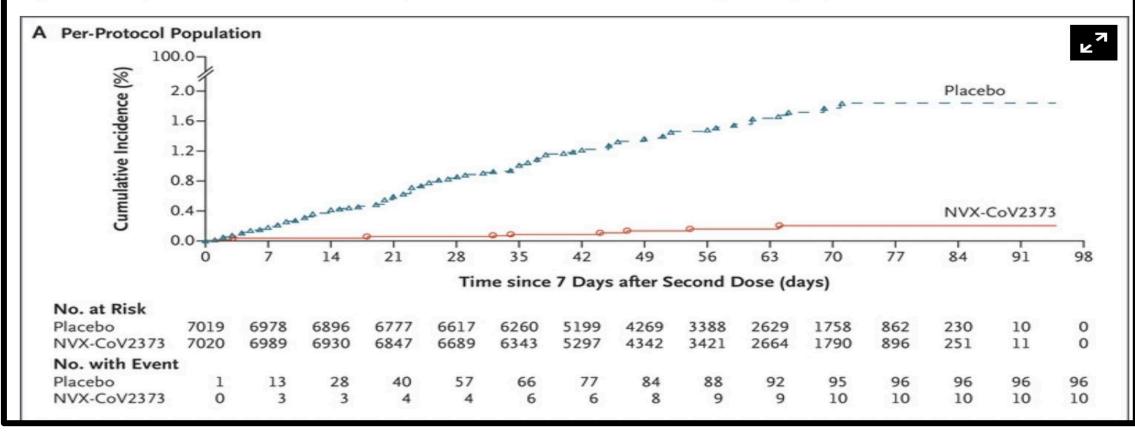
Mechanism of action of authorized COVID-19 vaccines





Novavax: Efficacy

Figure 3. Kaplan–Meier Plots of Efficacy of the NVX-CoV2373 Vaccine against Symptomatic Covid-19.





Novavax: Efficacy – Subgroup Analysis

Subgroup	Placebo	NVX-CoV2373		Vac	cine Effi	cacy (95	5% CI)	
	no. of ever	nts/no. at risk				%		
Per-protocol population	96/7019	10/7020						89.7 (80.2 to 94.6)
Intention-to-treat population	141/7570	42/7569					+ -	70.4 (58.3 to 79.1)
Age								
18 to <65 yr	87/5062	9/5067						89.8 (79.7 to 95.5)
≥65 to 84 yr	9/1957	1/1953					•	- 88.9 (20.2 to 99.7)
Race								
White	85/6635	8/6625					⊢	90.7 (80.8 to 96.1)
Other	8/297	2/302					•	75.7 (-21.6 to 97.5
Variant								
Non-B.1.1.7	28/7020	1/7020					F	₩ 96.4 (73.8 to 99.5)
B.1.1.7	58/7020	8/7020					—	86.3 (71.3 to 93.5)
Coexisting illness								1
Yes	33/3143	3/3117					++	90.9 (70.4 to 97.2)
No	63/3876	7/3903	 1	 				89.1 (76.2 to 95.0)







Questions?



Making Health Care Better





This material was prepared by Alliant Health Solutions, under contract with the Georgia Department of Public Health as made possible through the American Rescue Plan Act of 2021.

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