

# COVID WEBINAR

## Impact of COVID-19 on the Pregnancy and Birthing Journey

Friday, January 14, 2022  
1:00 pm Eastern Time



**NATIONAL  
NURSE-LED CARE  
CONSORTIUM**  
a PHMC affiliate

### Deepika Goyal, PhD, MS, FNP-C

Director of the Family Nurse  
Practitioner Program at San  
José State University



### Emily Miller MD, MPH

Chief of Obstetrics at  
Northwestern Medicine's  
Prentice Women's Hospital





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The National Nurse-Led Care Consortium (NNCC) is a non-profit membership organization that supports nurse-led care and nurses at the front lines of care.

NNCC supports comprehensive, community-based primary care and public health nursing through policy and advocacy, program development and management, technical assistance and support, and direct, nurse-led healthcare services.

Learn more at [NurseLedCare.org](https://NurseLedCare.org)

# Housekeeping Items

## Question & Answer

- Click Q&A and type your questions into the open field.
- The Moderator will either send a typed response or answer your questions live at the end of the presentation.

## Continuing Education Credits

- Please complete the evaluation survey after today's training.
- Certificate will arrive within 3 weeks of completing the survey.

Zoom Participant ID: 42 Meeting ID: 752-948-988

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# COVID Vaccine Project Goals



Q: Can I get the vaccine if I don't have insurance?

A: Yes, Covid-19 vaccines are 100% free in the United States.

- Empower nurses with necessary information to engage care teams and communities about COVID-19 vaccines.
- Provide learning opportunities to share up-to-date guidance, support peer engagement among nursing colleagues, and strengthen the nursing role.
- Amplify the nursing voice by featuring nurse champions through our podcast and other media outlets.

Learn more at [NurseLedCare.org](https://NurseLedCare.org)



# Nurse-Led Forum for Vaccine Confidence

**Our aims** are to create a monthly forum to:

- Explore questions around vaccine hesitancy
- Share strategies for building confidence in COVID-19 vaccines among nurses and communities they serve
- Learn perspectives from the field and promising practices for vaccine communications, partnerships, and decision-making

*This webinar was funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (grant number NU50CK000580). The Centers for Disease Control and Prevention is an agency within the Department of Health and Human Services (HHS). The contents of this resource center do not necessarily represent the policy of CDC or HHS, and should not be considered an endorsement by the Federal Government.*

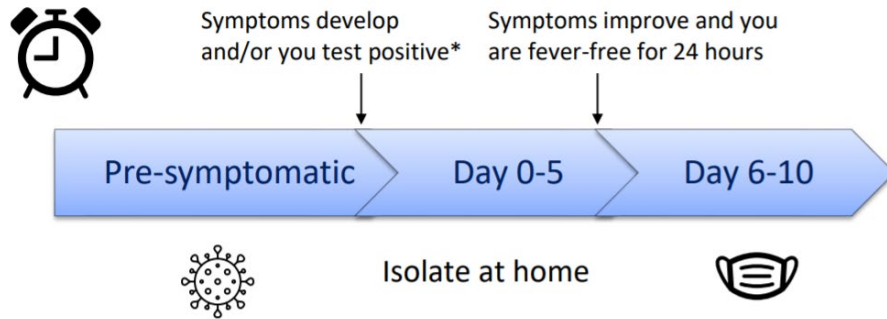


# **COVID-19 UPDATES & RESOURCES**

# **Quarantine and Isolation Guidelines**

# December 27, 2021: CDC Updates and Shortens Recommended Isolation and Quarantine Period for General Population

## What you need to know



CDC updated [COVID-19 isolation and quarantine recommendations](#) with shorter isolation (for asymptomatic and mildly ill people) and quarantine periods of **5 days** to focus on the period when a person is most infectious, followed by continued masking for an additional **5 days**.

With the recommended shorter isolation and quarantine periods, it is critical that people continue to wear [well-fitting masks](#) and take [additional precautions](#) for 5 days after leaving isolation or quarantine.



# CDC Shorter Quarantine and Isolation Periods – Who is the Guidance **NOT** Suitable for?

Who is not suitable for shorter isolation and quarantine periods?

- Children under 2 years old and individuals who cannot wear a mask
- People with moderate to severe illness
- People who are immunocompromised
- People in high-risk congregate settings like homeless shelters and correctional facilities

This guidance applies to the general population in the community setting and does not replace existing [guidance for healthcare personnel](#) in healthcare settings.

# **Boosters and Third Doses**

# January 5, 2022: CDC Expands Booster Shot Eligibility and Strengthens Recommendations for 12-17 Year Olds

## What you need to know

**Boosters:** Individuals who received either the Pfizer-BioNTech or Moderna COVID-19 Vaccines as their primary series are recommended to get a booster after 5 months instead of 6 months.

**This includes adolescents 12-17 years old.**

**Third Dose:** Moderately or severely immunocompromised 5–11 year-olds should receive an additional primary dose of the Pfizer-BioNTech COVID-19 vaccine 28 days after their second shot.

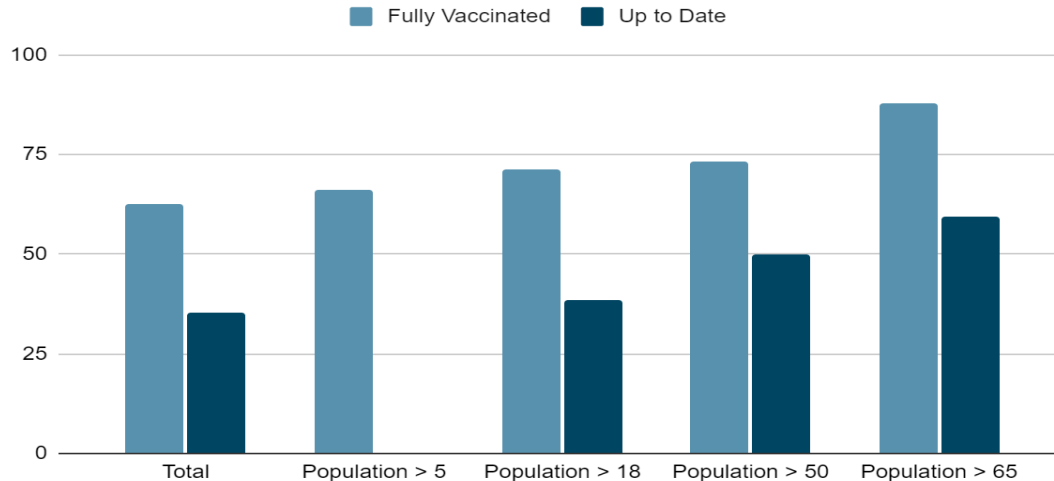
# New CDC Language

# January 5, 2022: Stay Up to Date with Your Vaccines

**“Up to Date” with Vaccinations:** Language standardized with other vaccinations. A person is “up to date” on vaccinations when they have received all eligible additional doses.

**Fully Vaccinated:** 2 doses of mRNA vaccine or 1 dose of J&J vaccine. Individuals considered fully vaccinated upon receiving primary series.

Vaccine Status by Age



# **Morbidity and Mortality Weekly Reports**

# Morbidity and Mortality Weekly Reports

- Receipt of COVID-19 Vaccine During Pregnancy and Preterm or Small-for-Gestational-Age at Birth — Eight Integrated Health Care Organizations, United States, December 15, 2020–July 22, 2021. Link [here](#).
- Characteristics and Clinical Outcomes of Children and Adolescents Aged <18 Years Hospitalized with COVID-19 — Six Hospitals, United States, July–August 2021. Link [here](#).

# COVID-19 VACCINE RESOURCES

- [Rapid COVID-19 State of Vaccine Confidence Insights Report: SARS-CoV-2 Omicron Variant](#) (12/10/21)
- [KFF Winter 2021 Update On Parents' Views Of Vaccines For Kids](#) (12/09/21)
- [KFF Latest Data on COVID-19 Vaccinations by Race/Ethnicity](#) (1/12/22)



# TODAY'S SPEAKER



**Deepika Goyal, PhD, MS, FNP-C**  
Professor  
The Valley Foundation School of Nursing  
San José State University  
San Jose, CA



**Emily Stinnett Miller, MD, MPH**  
Fellow of the American College of Obstetricians and  
Gynecologists Chief of Obstetrics, Northwestern  
Memorial Hospital  
Division of Maternal Fetal Medicine

# Impact of COVID-19 on the Pregnancy & Birthing Journey

Deepika Goyal, PhD, MS, FNP-C  
Professor

The Valley Foundation School of Nursing  
San José State University  
San Jose, CA

[deepika.goyal@sjsu.edu](mailto:deepika.goyal@sjsu.edu)



# Overview

- Perinatal health in response to COVID-19
- Impact of COVID-19:
  - Pregnancy
  - Birth
  - Postpartum Period
- Implications for clinical practice



# Los Angeles Times

SCIENCE

Pregnant women with coronavirus infection can pass it to their babies, study finds



## How pandemic anxiety is affecting pregnant women

[Health](#) Aug 27, 2020 3:49 PM EDT



## Cautious optimism for infants born to mothers with COVID-19: Latest data

*Two studies have been published on newborns born to mothers with COVID-19.*

By [Dr. Chloë E. Nunneley](#)

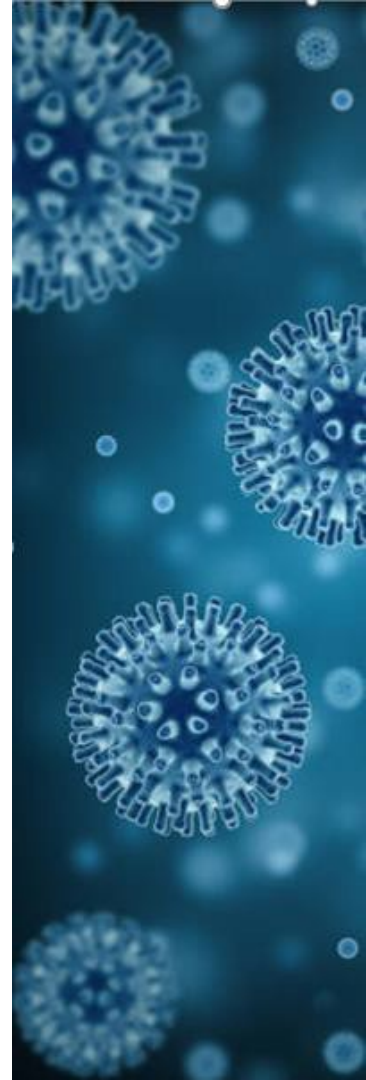
March 17, 2020, 12:18 PM • 7 min read



# The New York Times

## Experts Fear Increase in Postpartum Mood and Anxiety Disorders

New and expecting moms are facing pandemic-related fears on top of social isolation.





# OUR PANDEMIC YEAR—A COVID-19 TIMELINE

On March 11, the WHO declared COVID-19 a pandemic. Here is a look back at a year in disruption.

## A MYSTERIOUS NEW ILLNESS

Images appear of Wuhan in lockdown, where officials attempt to contain a mysterious virus. Soon after, new cases of and deaths related to (what's later named) COVID-19 surge in Europe.

## THE WORLD SHUTS DOWN

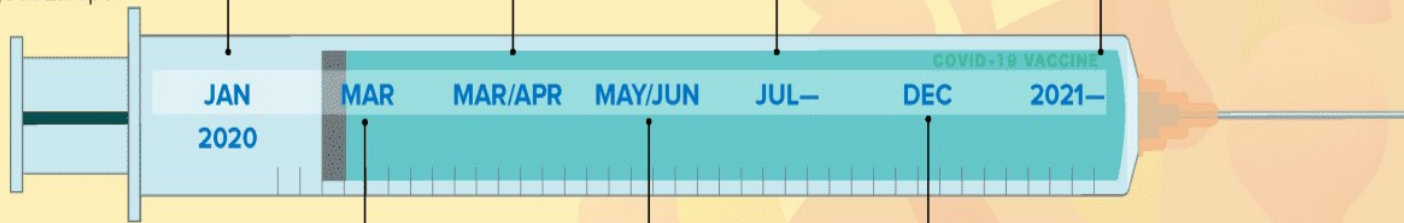
Countries seal borders; sports teams cancel seasons; schools close and employees go home. People start wearing masks and “social distancing.”

## UPTICK IN MENTAL HEALTH ISSUES

People struggle as continued unemployment and/or working from home without childcare/school takes its toll. U.S. break records for daily cases/deaths.

## LIGHT AT THE END OF THE TUNNEL?

2021 begins with a race to vaccinate. Cases and deaths begin to fall. But the variants are still a threat, vaccine rollout is uneven, and we are still wearing masks.



## THE VIRUS SPREADS, CASES MULTIPLY

The Grand Princess cruise ship, docked outside of San Fran, has passengers with COVID-19; Bay Area is first in the U.S. to announce shelter-in-place orders; hospitals become overwhelmed as cases grow; there is a nationwide shortage of PPE.

## FLATTENING THE CURVE—FOR A WHILE

After “flattening the curve,” cases begin to skyrocket again as states “reopen” in different phases. Researchers continue to race to identify treatments and make vaccines.

## NEW HOPE, NEW MUTATIONS

The FDA authorizes two vaccines. Major variants begin to circulate, some of which might impact the effectiveness of vaccines.

# COVID-19 – Perinatal Health

- March 2020
  - Lockdown, social distancing
  - Virtual healthcare delivery
  - Partners/family excluded
- Dec 2020
  - COVID vaccines
- January 2022
  - COVID variants
  - Vaccination fear & uncertainty.....continues
  - When will things be “normal” again?

# COVID-19 Impact

- Virtual healthcare
- Pregnancy journey
- Birth during COVID
- Postpartum journey
- Clinical implications
- What to do next.....



# Virtual Healthcare

- 416 pregnant people
- Satisfied with virtual healthcare
- Less satisfaction later into the pandemic
- 90% would prefer in-person care in non-pandemic times





# Pregnancy Journey

*“I feel disconnected from my husband because he can’t join me at prenatal visits.”*

*“The pregnancy feels less "real" for him and it creates a lot of anxiety and sadness not having him there for our first.”*

# Pregnancy Journey

*“He's unable to experience the ultrasounds with me as first-time parents. “*

*“This is the only time we'll be able to experience this joy together and this experience has been stripped from us.”*

# Pregnancy Journey

*“The fun stuff went away; my baby shower was cancelled. I still can’t look at other people’s Facebook posts about baby showers, I’m still quite upset at what happened, it felt very isolating.”*

# Loss of Social Support

*“Not being able to have my mom come see me because of travel and social distancing concerns.”*

*“Many of these people won't see me visibly pregnant at all.”*

# Birth During COVID

*“Nurses and physicians all wore masks and PPE. It was very somber and a little unreal. It felt so impersonal. I felt like the staff was not as welcoming and basically wanted to push us out the door because of COVID”*



# Birth During COVID

*“My husband was there for the birth but once it was over he left and was not allowed back. With our other children at home to care for, he was only able to stay that day and picked me and the baby up 4 days later”*



# Postpartum Journey

*“No one to bring meals [during initial COVID shutdown] and most of my friends were afraid to even drop off food”*

*“There were no support groups available virtual or in person and no psychiatrist available within 70 miles. I resumed the SSRIs [antidepressants] I took with my previous pregnancy’s postpartum depression.”*

# Postpartum Journey

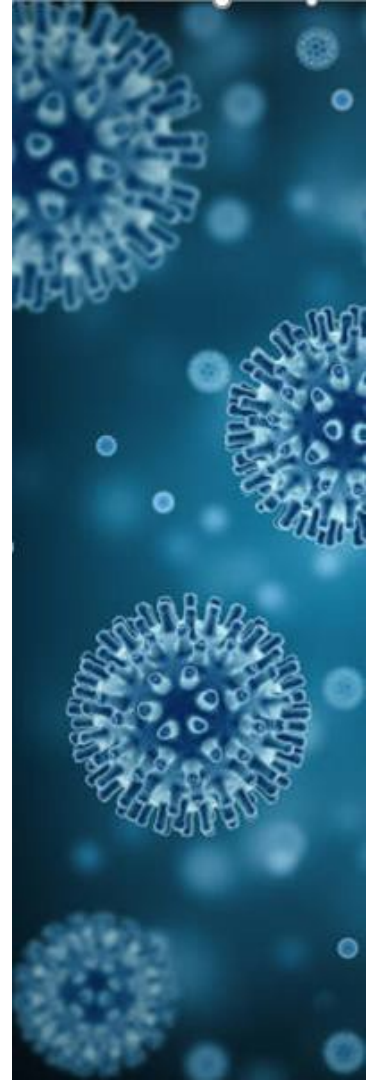
*“I was unable to breastfeed and couldn’t see a lactation consultant because of the virus. Therefore breastfeeding was unsuccessful, and I have to exclusively pump.”*

*“I could not go directly to the lactation nurses because of COVID, all that was available was video chats. It was almost like we were left to decode everything on our own!”*



# Clinical Implications

- Complexities of navigating pregnancy and birth during a pandemic
- Short and long term mental health implications
- Advocate for safe inclusion of family members
- Provide evidence based information e.g. CDC, ACOG



# Future Research

- Intentional recruitment-retention of diverse childbearing people
- Long-term perinatal and infant outcomes
- COVID Vaccine





San José State  
UNIVERSITY



BRIGHAM AND  
WOMEN'S HOSPITAL



- Deepika Goyal, PhD, FNP-C
- Meekyung Han, PhD
  
- Cindy H. Liu, Ph.D
- Leena Mittal, MD
- Carmina Erdei, MD
- Liana De La Rosa
  
- Huynh-Nhu (Mimi) Le, PhD
- Talia Schwartz
  
- Cheryl Beck, DNSc, CNM, FAAN
  
- Susan Ayers, PhD
- Rebecca Webb, PhD





[Deepika.goyal@sisu.edu](mailto:Deepika.goyal@sisu.edu)

References available upon request

# COVID-19 Vaccines in Pregnancy

Emily S Miller, MD MPH

Fellow of the American College of Obstetricians and Gynecologists

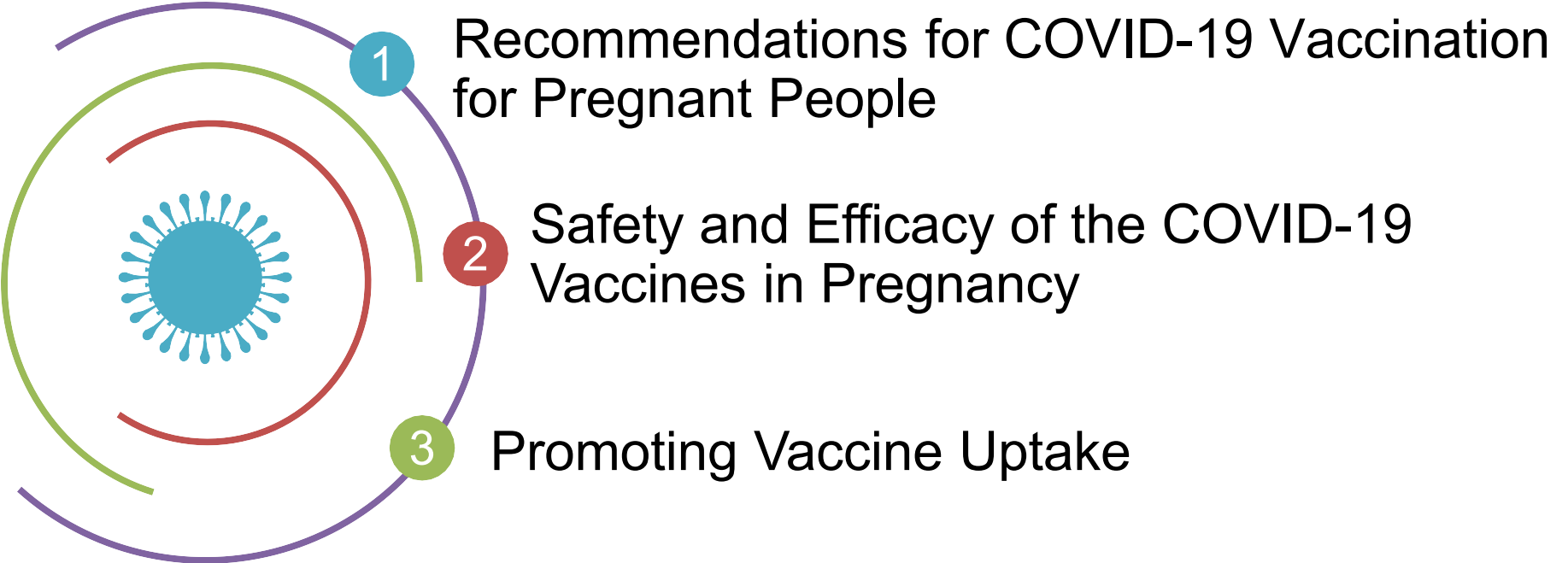
Chief of Obstetrics, Northwestern Memorial Hospital

Division of Maternal Fetal Medicine

Northwestern

# Disclosures

Site PI for Pfizer Phase 2/3 COVID-19 Vaccine in Pregnant People



# Current Recommendations



Pregnant individuals should receive the  
COVID vaccine series



# Current Recommendations

- Clinical preference for mRNA-based vaccines

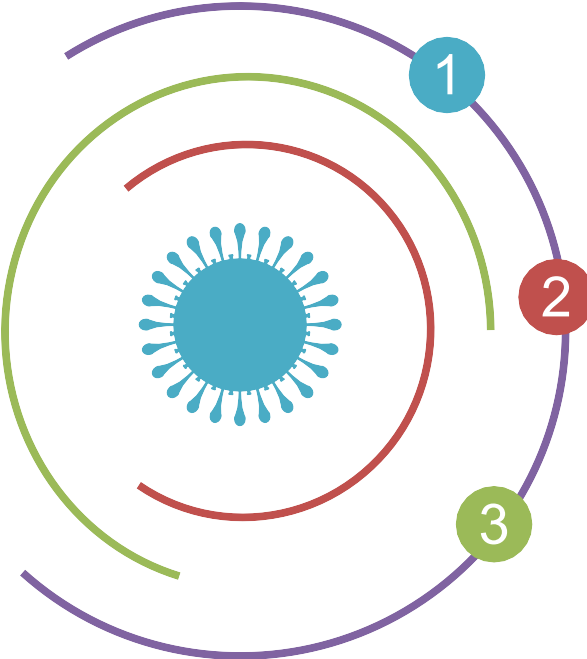


A diagram consisting of three large, overlapping circles arranged horizontally. The leftmost circle is blue and contains the word 'Safety'. The middle circle is green and contains the word 'Efficacy'. The rightmost circle is orange and contains the word 'Supply'. All text is in white.

Safety

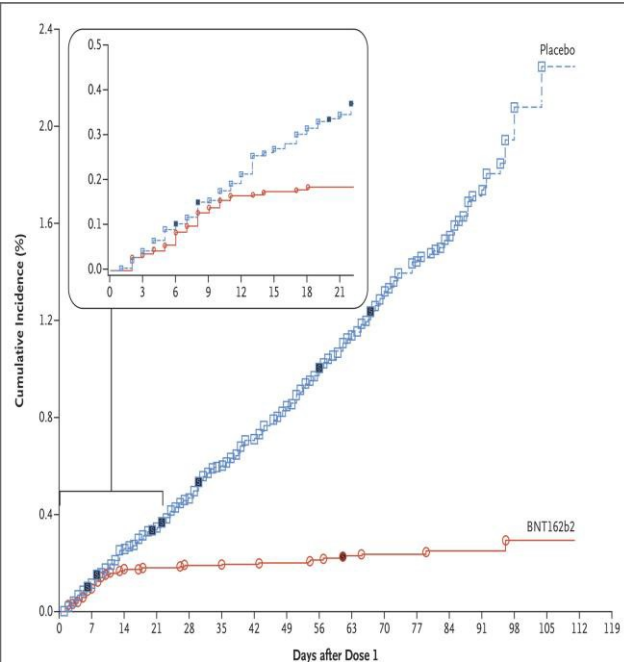
Efficacy

Supply



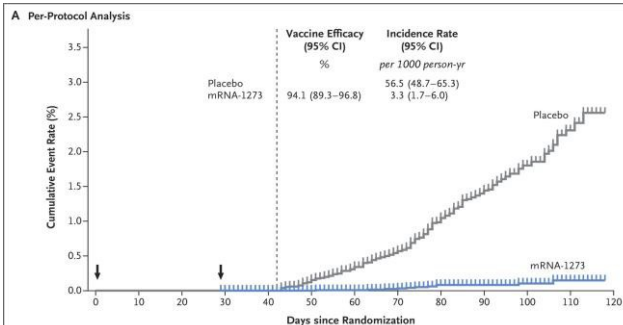
# Safety and Efficacy of the COVID-19 Vaccines in Pregnancy

# Pfizer

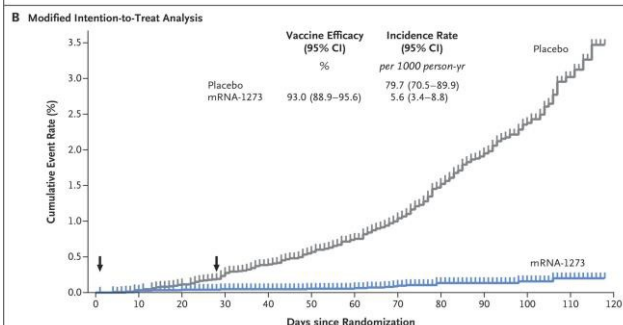


Efficacy End-Point Subgroup	BNT162b2, 30 µg (N=21,669)	Placebo (N=21,686)	VE (95% CI)
	No. of participants Survellance time person-yr (no. at risk)	No. of participants Survellance time person-yr (no. at risk)	percent
Covid-19 occurrence			
After dose 1	50 4.015 (21,314)	275 3.982 (21,258)	82.0 (75.6–86.9)
After dose 1 to before dose 2	39 29.5 (29.5–68.4)	82 68.4 (68.4–107.3)	52.4 (29.5–68.4)
Dose 2 to 7 days after dose 2	2 90.5 (61.0–98.9)	21 98.9 (98.9–107.3)	90.5 (61.0–98.9)
≥7 Days after dose 2	9 94.8 (89.8–97.6)	172 107.3 (107.3–126.2)	94.8 (89.8–97.6)

# Moderna



No. at Risk	14,073	14,073	14,073	14,072	13,416	12,992	12,361	11,147	9474	6563	3971	1172	0
Placebo	14,134	14,134	14,134	14,133	13,483	13,073	12,508	11,315	9684	6721	4094	1209	0
mRNA-1273													

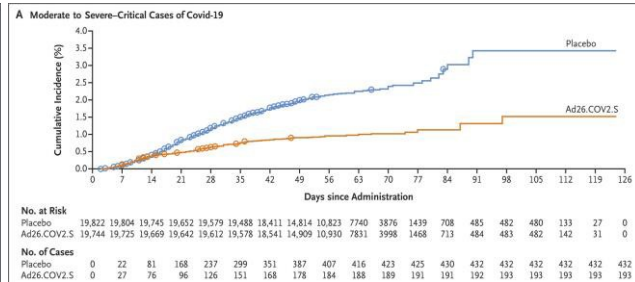


No. at Risk	14,598	14,590	14,567	14,515	13,806	13,352	12,694	11,450	9736	6729	4067	1200	0
Placebo	14,550	14,543	14,532	14,504	13,825	12,791	11,573	9911	6873	4179	1238	0	
mRNA-1273													

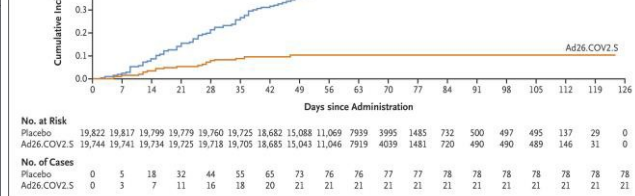
  

Covid-19 Onset	Placebo (N=14,598)	mRNA-1273 (N=14,550)
Randomization to 14 days after dose 1	11	5
14 Days after dose 1 to dose 2	35	2
Dose 2 to 14 days after dose 2	19	0
Starting 14 days after dose 2	204	12
Total (any time after randomization)	269	19

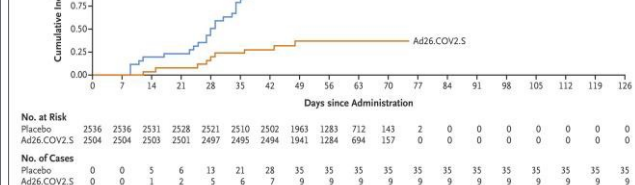
# J&J



No. at Risk	19,822	19,804	19,745	19,652	19,579	19,488	18,411	14,814	10,823	7740	3876	1439	708	485	482	480	133	27	0
Placebo	19,744	19,725	19,669	19,642	19,612	19,578	18,541	14,909	10,930	7831	3998	1468	713	484	483	482	142	31	0
Ad26.COV2.S																			



No. at Risk	19,822	19,817	19,799	19,779	19,760	19,725	18,682	15,088	11,069	7939	3995	1485	732	500	497	495	137	29	0
Placebo	19,744	19,741	19,734	19,725	19,718	19,705	18,685	15,043	11,046	7919	4039	1481	720	490	489	489	146	31	0
Ad26.COV2.S																			



No. at Risk	2536	2536	2531	2528	2521	2510	2502	1963	1283	712	143	2	0	0	0	0	0	0	0
Placebo	2504	2504	2503	2501	2497	2495	2494	1941	1284	694	157	0	0	0	0	0	0	0	0
Ad26.COV2.S																			

No. of Cases	0	0	5	6	13	21	28	35	35	35	35	35	35	35	35	35	35	35	35
Placebo	0	0	1	2	5	6	7	9	9	9	9	9	9	9	9	9	9	9	9
Ad26.COV2.S																			

# Initial Unknowns

- Safety
  - Pregnancy-specific risks
- Efficacy in pregnancy vs non-pregnancy

# Initial Recommendations of Professional Societies

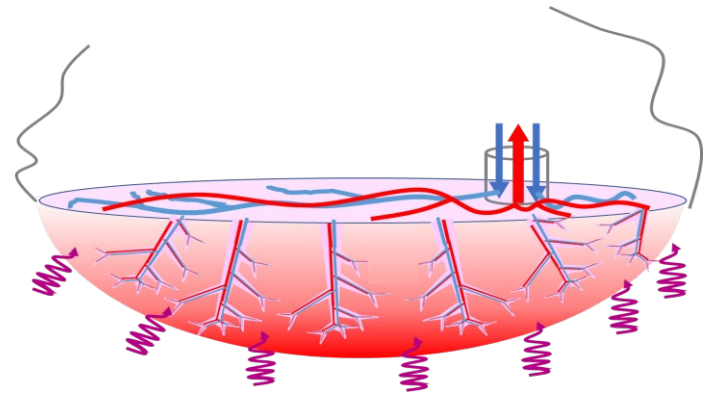
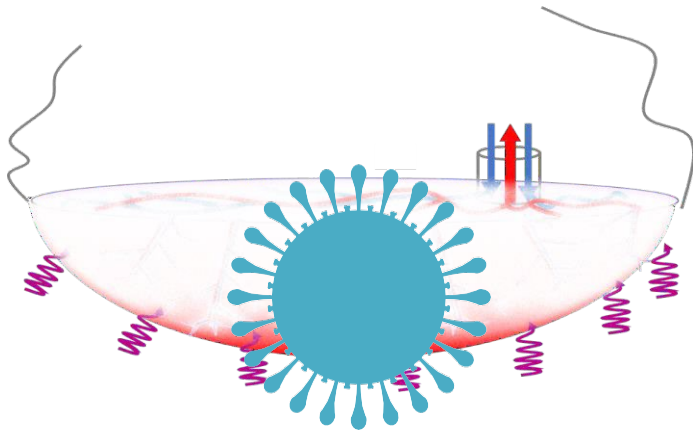


Strongly recommends that pregnant individuals have access to COVID vaccines

- Each person should discuss with their health care professional about their individualized choice



Recommends that the COVID vaccine should not be withheld from pregnant individuals



SARS-CoV-2 negative  
Matched by: gestational age  
route of delivery  
date of delivery

	Vaccine	Controls	OR	95% CI
	N=84	N=116		
Decidual arteriopathy	10%	12%	0.75	0.3-1.9
Fetal vascular malperfusion	6%	7%	0.85	0.3-2.7
Low-grade chronic villitis	12%	8%	1.60	0.6-4.2
High-grade chronic villitis	5%	14%	0.31	0.1-1.0
Chronic histiocytic intervillitis	0%	1.7%	0.01	0.001-0.01



# v-safe<sup>SM</sup>

after vaccination  
health checker

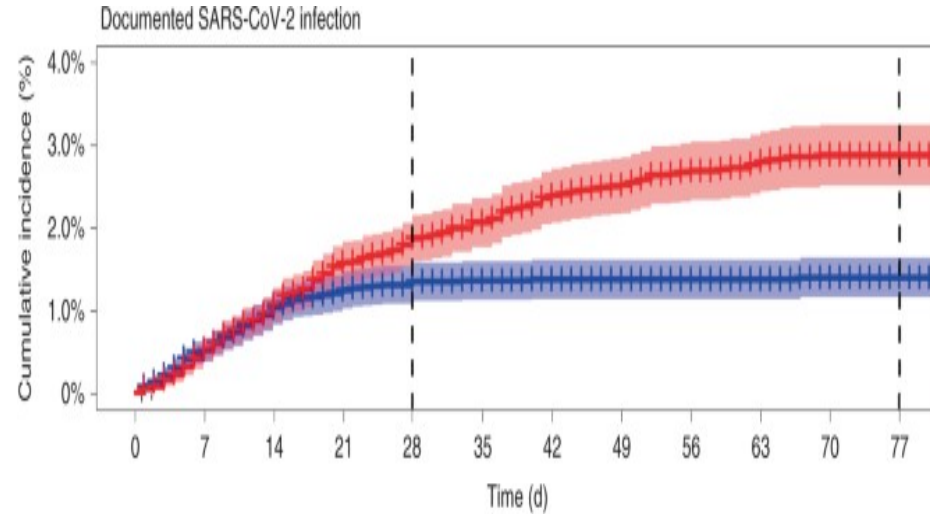
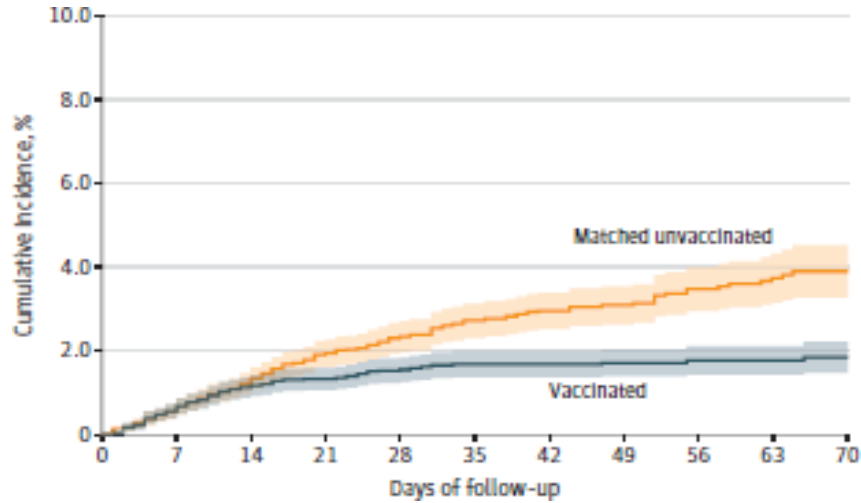


**Table 4. Pregnancy Loss and Neonatal Outcomes in Published Studies and V-safe Pregnancy Registry Participants.**

Participant-Reported Outcome	Published Incidence*	V-safe Pregnancy Registry†
	%	no./total no. (%)
Pregnancy loss among participants with a completed pregnancy		
Spontaneous abortion: <20 wk <sup>15-17</sup>	10–26	104/827 (12.6)‡
Stillbirth: ≥ 20 wk <sup>18-20</sup>	<1	1/725 (0.1)§
Neonatal outcome among live-born infants		
Preterm birth: <37 wk <sup>21,22</sup>	8–15	60/636 (9.4)¶
Small size for gestational age <sup>23,24</sup>	3.5	23/724 (3.2)
Congenital anomalies <sup>25**</sup>	3	16/724 (2.2)
Neonatal death <sup>26††</sup>	<1	0/724

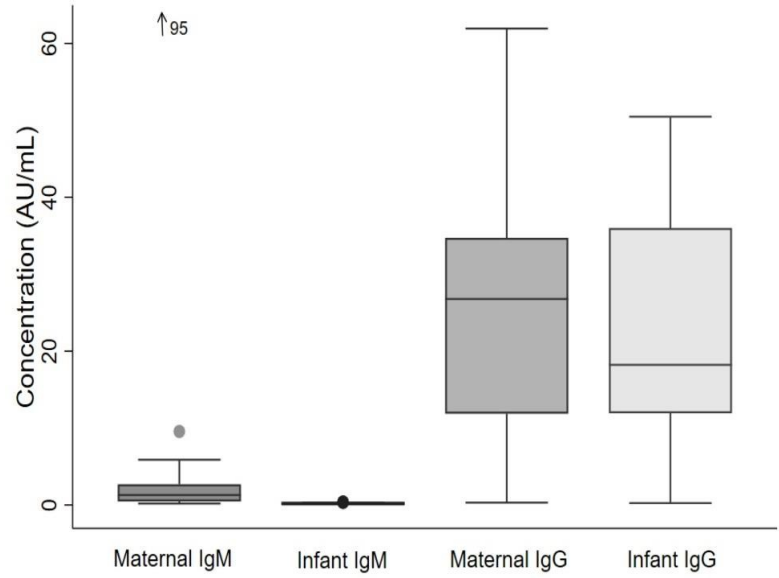



# Effectiveness of COVID-19 Vaccine in Pregnancy



- N=27 women (28 infants)
- 22 (74%) received 2 doses prior to delivery
- 25/28 infants had SARS-CoV-2 IgG at time of delivery

Maternal and infant SARS-CoV-2 antibody levels





Protect pregnant  
people and their  
newborns **FROM**  
vaccination

Protect pregnant  
people and their  
newborns **THROUGH**  
vaccination



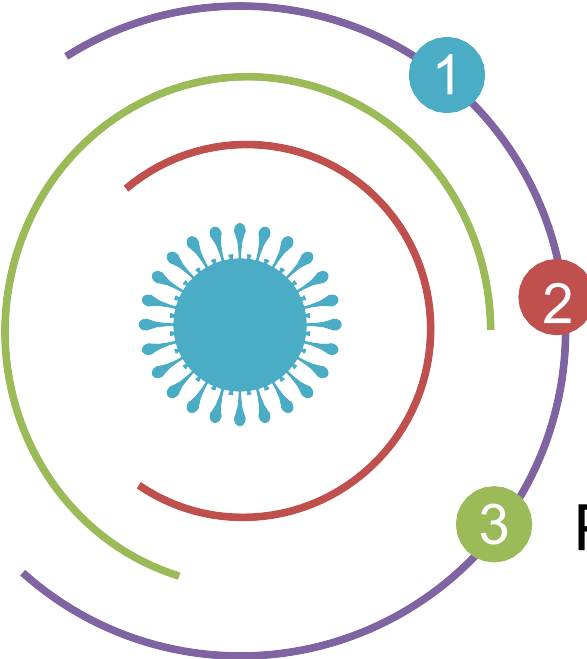
## **WARNING: Insufficient Medical Research Can Be Hazardous To Your Health**

Too many Americans are suffering and dying needlessly because, as a nation, we don't invest enough in medical research.

That's why former Surgeon General C. Everett Koop is joining RESEARCH!AMERICA, an alliance for discoveries in health, in making this simple request:

Take action! Let your voice be heard in support of medical research as the nation's No. 1 national priority.

CALL 1-800-366-CURE for information on how to deliver your WARNING.



# Promoting Vaccine Uptake

N=230,544 pregnant people vaccinated  
(as of January 1, 2022)

# Evidence Based Strategies to Promote Vaccine Uptake



**Clinician  
Recommendation**



**EHR Alerts  
Flags in Chart**



**Patient  
Reminders**



**Vaccine  
Availability**

# Learning Together

- What strategies have you found helpful in increasing COVID vaccine confidence and uptake?
  - Place your thoughts in the chat





**Funding:**

Friends of Prentice  
Stanley Manne Research Institute  
R01HD105499 (ESM)

# Questions

Northwestern

# Q&A





# Nurses make change happen.

Be a part of history.

This toolkit was created to give nurses the tools to do their part in the national vaccine effort. It is designed to help you decrease vaccine hesitancy and increase vaccination rates in your community.

**[nurseledcare.org/toolkit](https://nurseledcare.org/toolkit)**

# Advancing Health Equity Learning Collaborative

4-part series begins Jan. 27<sup>th</sup> >> Register [Here](#)

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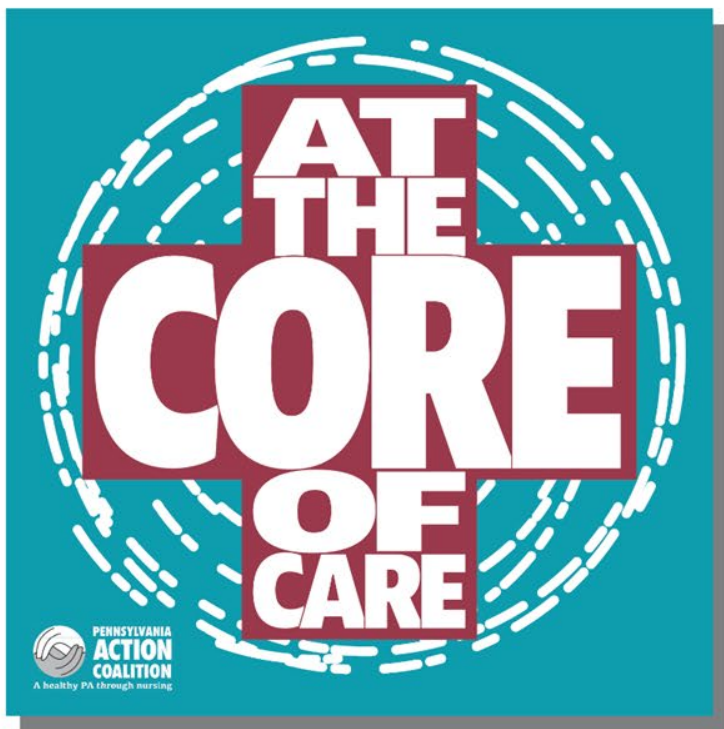


**Angela Richard-Eaglin, DNP,  
MSN, FNP-BC, CNE, FAANP**



**Sharon Cobb, PhD, MSN,  
MPH, RN, PHN**





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