



COVID-19 and COVID-19 Vaccines During Pregnancy, Lactation, and Infancy

**We will begin the webinar shortly.
Please make sure you are muted.
Please use the Chat feature for questions.**

Moderator:

Tabitha Jones-McKnight, DO, MPH, FACOP, FAAP

Ohio Department of Health (ODH) Assistant Medical Director

Panelists:

Amy Burkett, MD

OB Hospitalist, Cleveland Clinic Akron General
Ohio Chapter, American College of Obstetricians &
Gynecologists (ACOG)

David Dhanraj, MD, MBA, CPE

Chair and Associate Professor, Wright State University
Department of Obstetrics & Gynecology
Ohio Perinatal Quality Collaborative (OPQC)

COVID-19 and Pregnancy

- On Sept. 29, 2021, the Centers for Disease Control and Prevention (CDC) released a health advisory, COVID-19 Vaccination for Pregnant People to Prevent Serious Illness, Deaths, and Adverse Pregnancy Outcomes from COVID-19, via the CDC Health Alert Network.

COVID-19 Vaccination Recommendations

- CDC recommends COVID-19 vaccination for those aged 12 years and older.
 - Including those who are pregnant, recently pregnant (including those who are lactating), who are trying to get pregnant now, or who might become pregnant in the future.
- CDC recommendations align with those from professional medical organizations serving those who are pregnant, including the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine.

COVID-19 Vaccination Coverage

- COVID-19 vaccination coverage for pregnant women remains low.
 - 33.8% of pregnant women are fully vaccinated (CDC, Oct. 9, 2021).
 - Uptake of COVID-19 vaccination by pregnant women has been lower than that of non-pregnant women.

COVID-19 Vaccination Coverage

- Vaccination coverage for pregnant women differs by race and ethnicity.
- Vaccination coverage being lowest for non-Hispanic Black pregnant women (18.2%, CDC, Oct. 9, 2021).

What Can Local Maternal and Child Health Program Staff Do?

- Arm yourself with the facts.
- Share the facts with the program participants you work with.
- Share the facts with other stakeholder agencies you work with.
- Work collaboratively with local partners to promote COVID-19 vaccinations, especially among populations with low vaccine uptake.

Vaccine Questions & Concerns

The COVID-19 vaccine has not been around very long. How can long term impact be known yet?

- Vaccine is relatively new, but the technology behind the vaccine has been around for decades – encouraged that so many people wanted to be a part of the vaccine studies.
- Vaccine side effects nearly always occur within a few weeks.
- Historically, there are very few, if any, long-term negative effects of modern vaccines.
- Hundreds of millions of people have received COVID-19 vaccines with very few negative side effects.

Vaccine Questions & Concerns

The impact of COVID-19 vaccine has not been studied on pregnant women – there is a lack of studies specifically on pregnancy or lactation.

- Evidence about the safety and effectiveness of COVID-19 vaccine during pregnancy is growing.
- Data suggests the benefits of the COVID-19 vaccine during pregnancy outweigh any known/potential risks.
- COVID-19 vaccines do not cause infection in pregnant women or infants.
- Early data suggests receiving an mRNA* vaccine during pregnancy reduces the risk for COVID-19 infection.
- When a pregnant woman receives a COVID-19 vaccine, it builds antibodies that may protect the baby.
- The CDC v-safe pregnancy registry will continue studies – more than 166,000 people who have registered were pregnant at the time they received the COVID-19 vaccine.

Vaccine Questions & Concerns

The COVID-19 vaccine impacts fertility, prevents ovulation, “attacks the womb.”

- A *New England Journal of Medicine* study indicated vaccination status had no impact on miscarriage, still birth, or congenital anomalies.
- Conversely, we have seen an increased risk of miscarriage or stillbirth if a pregnant woman becomes ill with COVID-19.
- COVID-19 vaccination does not impact male or female fertility or fertility treatment outcomes.

Vaccine Questions & Concerns

Getting COVID-19 and having natural immunity is better than getting the COVID-19 vaccine.

- Pregnant women with COVID-19 are at increased risk for preterm birth and some data suggest an increased risk for other adverse pregnancy complications and outcomes, such as preeclampsia, coagulopathy, and stillbirth, compared with pregnant women without COVID-19.
- Neonates born to women with COVID-19 are also at increased risk for admission to the neonatal ICU.
- In addition, although rare, pregnant women with COVID-19 can transmit infection to their neonates.

Vaccine Questions & Concerns

I'm young and healthy – the COVID-19 vaccine has more serious side effects, such as blood clots, than getting the virus.

- Pregnant and recently pregnant women with COVID-19 are at increased risk for severe illness when compared with non-pregnant people.
- Although the absolute risk is low, compared with non-pregnant symptomatic women, symptomatic pregnant women have more than a **two-fold increased risk** of requiring ICU admission, invasive ventilation, and ECMO, and a **70% increased risk of death**.
- **The risk of blood clots is rare, occurring at a rate of seven per 1 million vaccinated women between 18 and 49 years old.**
- **Pregnancy in general, and hormonal contraceptives, increase the risk of blood clots more than the COVID-19 vaccine.**

Vaccine Questions & Concerns

Addressing vaccine hesitancy by African Americans who have historic distrust of government mandated health policies.

- COVID-19 vaccines are being promoted for everyone, not just specific populations.
- Efforts were made by each COVID-19 vaccine manufacturer to include diverse populations, including African Americans in the late-stage clinical trials. The COVID vaccine trials have included more diversity than some trials have historically been.

Vaccine Questions & Concerns

If I breastfeed after getting the COVID-19 vaccine, will I shed virus to my baby?

- COVID-19 vaccines cannot cause infection in anyone, including the mother or the baby.
- The COVID-19 vaccines are effective at preventing COVID-19 infection in women who are breastfeeding.
- Recent data shows that breastfeeding women who received mRNA COVID-19 vaccines have antibodies in their breastmilk, which could help protect their babies.

Vaccine Questions & Concerns

Why is the vaccine being promoted with incentives?

- Widespread immunization is the best strategy to curb the COVID-19 pandemic.
- Incentives have been used historically as a tool for promoting population health recommendations, e.g., time off work for flu shot, donating blood, incentives for getting annual well visit or blood pressure or cholesterol screenings, free smoking cessation or weight loss programs at work.

NEW: Vaccine Questions & Concerns

When vaccinated breastmilk is frozen, how long are the antibodies stable?

- The science around COVID-19 and the vaccine continues to evolve. Because COVID-19 is such a new coronavirus, we have not had the opportunity to study it for these specific properties for as long as for other viruses. The timeline around research for this specific topic is unknown at this time.
- ODH will continue to monitor research about COVID-19 and will share information when it becomes available.

NEW: Vaccine Questions & Concerns

Do we know for how long COVID antibodies are detected among infants/children of vaccinated mothers after they have weaned from breastfeeding?

- Much like the previous question, the science is evolving.
- There have been some pertinent research studies that are ongoing.
- “Recent reports have shown that breastfeeding people who have received mRNA COVID-19 vaccines have antibodies in their breastmilk, which could help protect their babies. More data are needed to determine what protection these antibodies may provide to the baby.

NEW: Continued: Do we know for how long COVID antibodies are detected among infants/children of vaccinated mothers after they have weaned from breastfeeding?

CDC also lists several articles which can be reviewed for additional information:

- Gray KJ, Bordt EA, Atyeo C, et al. Coronavirus disease 2019 vaccine response in pregnant and lactating women: a cohort study. *Am J Obstet Gynecol*. Published online March 25, 2021. DOI:<https://doi.org/10.1016/j.ajog.2021.03.023>
- Perl SH, Uzan-Yulzari A, Klainer H, et al. SARS-CoV-2–Specific Antibodies in Breast Milk After COVID-19 Vaccination of Breastfeeding Women. 2021;325(19):2013–2014. doi:10.1001/jama.2021.5782
- Kelly JC, Carter EB, Raghuraman N, et al. Anti–severe acute respiratory syndrome coronavirus 2 antibodies induced in breast milk after Pfizer-BioNTech/BNT162b2 vaccination. *Am J Obstet Gynecol*. 2021;225(1):101-103. <https://doi.org/10.1016/j.ajog.2021.03.031>
- Jakuszko K, Kościelska-Kasprzak K, Żabińska M, et al. Immune Response to Vaccination against COVID-19 in Breastfeeding Health Workers. *Vaccines*. 2021; 9(6):663. <https://doi.org/10.3390/vaccines9060663>

Thank you!

**Address Questions
From the Chat**

Accessing the Recorded Webinar and Resources

Webinar and resources will be available on the Bureau of Maternal, Child and Family Health webpage at:
<https://odh.ohio.gov/wps/portal/gov/odh/about-us/offices-bureaus-and-departments/bmch/welcome-to>