

COVID-19 Maternal Immunization

Developed by the COVAX Maternal Immunization Working Group

As the COVID-19 pandemic continues to evolve globally, more evidence is emerging that suggests strong benefits of maternal immunization against COVID-19. Country experiences with COVID-19 and pregnancy vary significantly, but some are beginning to recommend COVID-19 vaccination for pregnant and lactating women.

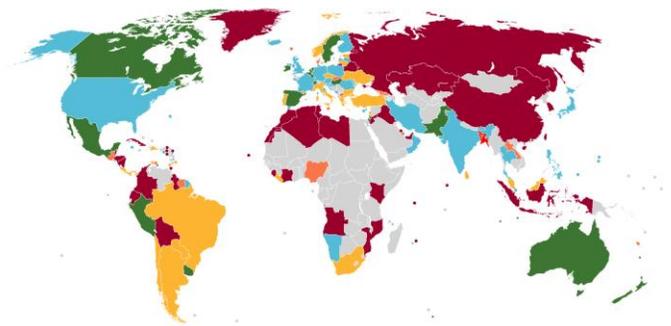
Major Recent Studies on COVID-19 Vaccination in Pregnant Women

Click on each study to view the full text

Vaccine Efficacy

- COVID-19 mRNA vaccines generated humoral immunity in pregnant and lactating women, with immunogenicity and reactogenicity similar to that observed in non-pregnant women.
- SARS-CoV-2 IgG antibodies detectable in cord blood after maternal vaccination with a single dose of the Moderna COVID-19 vaccine.
- Timing of vaccination for pregnant women should be considered in developing maternal immunization strategies, as maternal antibody product has been observed just 5 days after administration of the first dose of mRNA-base COVID-19 vaccines.
- There is limited evidence to date on the extent of SARS-CoV-2 vertical transmission and its timing. However, the World Health Organization's recent scientific brief *Definition and categorization of the timing of mother-to-child transmission of SARS-CoV-2* aims to standardize definitions to allow comparisons of safety and efficacy data across studies.
- The National Institutes of Health (NIH) have begun a new observational study to measure the development and durability of antibodies against SARS-CoV-2 in people vaccinated during pregnancy or the first two postpartum months, following participants and their infants through the first year after delivery.

Maternal Immunization Policies



As of July 19, 2021



- Recommended for some or all
- Permitted
- Permitted with qualifications
- Not recommended, but with exceptions
- Not recommended

The COVID-19 Maternal Immunization Tracker (COMIT) provides a global snapshot of public health policies that shape access to COVID-19 vaccines for pregnant and lactating women.

As of July 19th, 2021, there are 20 countries that have an explicit recommendation that some or all pregnant women should receive vaccination. COVID-19 vaccination for pregnant women remains not recommended in most countries globally.

COVID-19 in Pregnancy

- The INTERCOVID Multinational Cohort Study of 18 countries around the world has found that COVID-19 in pregnancy is associated with substantial increases in severe maternal morbidity and mortality – including preeclampsia, severe infections, and preterm birth – in addition to neonatal complications.

Vaccine Safety

- Preliminary findings from the US V-safe COVID-19 vaccine surveillance system find no evidence that mRNA COVID-19 vaccines pose serious risks during pregnancy.

Current Recommendations As of July 19, 2021



WHO recommends that the vaccines assessed by WHO Strategic Advisory Group of Experts on Immunization can be offered to breastfeeding women, and to pregnant women on the basis of a benefit vs. risk assessment.



FDA guidance for the Pfizer, Moderna, and Janssen vaccines with emergency use authorization directs pregnant or breastfeeding individuals to discuss their options with their healthcare provider, but offers no specific contraindications to vaccination other than anaphylaxis/allergic reactions.



CDC guidance indicates pregnant or breastfeeding women can receive a COVID-19 vaccine, and that a conversation with a healthcare provider may help but is not required for vaccination.



ACOG clinical guidance recommends that pregnant individuals have access to the COVID-19 vaccines with emergency use authorization in the United States (Pfizer, Moderna, and Janssen), and that vaccines should be offered to lactating individuals similarly to non-lactating individuals.



RCOG guidance recommends COVID-19 vaccines in pregnancy, with notes that a conversation with a healthcare provider may help but is not required for vaccination, and that it is preferable for pregnant women in the UK to be offered the Pfizer-BioNTech or Moderna mRNA vaccines, where available.

Country Experiences



Israel recommends COVID-19 vaccine for pregnant women

[Guidance statement from Israel's Ministry of Health](#)

Following the deaths of pregnant women and their fetuses in early 2021, Israel started recommending the Pfizer and BioNTech COVID-19 vaccine for pregnant and breastfeeding women in February 2021. Multiple factors are associated with the country's success in vaccinating pregnant women, including its small size, relatively young population, centralized national government system, strong logistics capacity, and rapid mobilization of special government funding.



Brazil suspends use of AstraZeneca vaccine in pregnant women after death

[Guidance statement from Brazil's regulator ANVISA](#)

On May 11, Brazil suspended its national COVID-19 vaccination of pregnant and lactating women following the death of a 35-year-old woman who was 23 weeks pregnant and died from a hemorrhagic stroke, possibly related to vaccination. Following investigation, regulator ANVISA recommended vaccination of pregnant and lactating women with comorbidities should continue but exclude viral vector vaccines. Several states have now resumed vaccination with available Sinovac/Butantan and Pfizer/Wyeth vaccines.



United Kingdom expands vaccination of pregnant women

[Guidance statement from Public Health England](#)

As part of the broader rollout of the COVID-19 vaccine, all pregnant women will be offered the Pfizer or Moderna vaccine. The focus now is to encourage uptake by providing accurate, up-to-date information to counter misinformation spreading on social media.

Related News

In mid-June, **Novavax** released positive phase III trial results for its COVID-19 vaccine candidate, showing that it was more than 90% effective, including against a variety of concerning variants.

Novavax has partnered with the Serum Institute of India and already made dose commitments to COVAX, indicating that its vaccine may play a key role in controlling COVID-19 spread in LMICs.

As a protein subunit vaccine, the Novavax candidate is more similar to other vaccines that have been used for maternal immunization previously (e.g., tetanus, pertussis), and may offer a key opportunity to help advance COVID-19 vaccination of pregnant and lactating women globally.

Resources

Click on the logo of each organization to learn more.



Royal College of
Obstetricians &
Gynaecologists

Guidance on COVID-19 vaccine, pregnancy, and breastfeeding

Latest advice is that COVID-19 vaccines should be offered to pregnant women at the same time as the rest of the population, based on their age and clinical risk group.



CDC V-Safe Safety Monitoring

As of July 6, 2021, more than 130 thousand v-safe participants have indicated they were pregnant at the time they received COVID-19 vaccination, and 5,103 have enrolled in the v-safe COVID-19 Vaccine Pregnancy Registry.



COVID-19 Vaccine Clinical Trials Tracker

As of July 5, 2021, of 312 clinical trials for COVID-19 vaccines (ongoing and recruiting), only 4 studies include pregnant women.