COVID-19 Vaccination in Pregnancy

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The Society for Maternal-Fetal Medicine (SMFM)

Vaccination against COVID-19 remains the most effective strategy to protect against disease-related critical illness, hospitalization, and adverse perinatal outcomes. However, bivalent vaccines have demonstrated waning immunity due to the emergence of new SARS-CoV-2 variants.

The updated Pfizer-BioNTech and Moderna monovalent XBB.1.5 COVID-19 2023-2024 vaccines were recently approved and authorized for emergency use by the United States Food and Drug Administration, based on data demonstrating more robust immune response against current circulating strains with similar safety compared with previously available mRNA vaccines. The Centers for Disease Control and Prevention (CDC) currently recommend that all individuals aged 6 months and older receive one dose of updated vaccine, regardless of previous immunization status, at least two months from the last dose of any COVID-19 vaccine. Unvaccinated individuals aged 5 years and older are recommended to receive a single dose of either the Pfizer-BioNTech or Moderna updated vaccine.

SMFM endorses the current recommendations and emphasizes that all pregnant, recently pregnant, or lactating people should receive an updated vaccine to mitigate the increased risk of adverse maternal, fetal, and obstetric outcomes of COVID-19 disease.

Patients should be counseled that the updated vaccines are expected to provide improved protection against COVID-19 from the currently circulating variants and that individuals who receive an updated vaccine may experience similar side effects (such as local injection site pain, headache, and malaise) as those reported by individuals who previously received mRNA COVID-19 vaccines. Fever was reported in 6% of updated vaccine recipients (previously reported range: 4-8%). Although pregnancy-specific data are unavailable for the updated vaccine, ongoing surveillance and reporting continuously demonstrate the safety and efficacy of mRNA vaccines in pregnancy.

Additionally, the updated vaccine should be administered based on patient eligibility and irrespective of pregnancy trimester. TDaP, seasonal influenza, and the updated vaccine may be co-administered safely in different limbs. The CDC provides further information on the timing of eligibility for the updated vaccine.

SMFM continues to recommend that all unvaccinated individuals who are considering pregnancy, pregnant, recently pregnant, or lactating receive vaccination against COVID-19 with an updated vaccine.

Please visit the CDC COVID-19 vaccination webpage for details on vaccine recommendations.