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COVID-19 Vaccination for Pregnant People to Prevent Serious Illness, Deaths, and Adverse Pregnancy Outcomes from COVID-19

Summary
The Centers for Disease Control and Prevention (CDC) recommends urgent action to increase Coronavirus Disease 2019 (COVID-19) vaccination among people who are pregnant, recently pregnant (including those who are lactating), who are trying to become pregnant now, or who might become pregnant in the future. CDC strongly recommends COVID-19 vaccination either before or during pregnancy because the benefits of vaccination outweigh known or potential risks. As of September 27, 2021, more than 125,000 laboratory-confirmed COVID-19 cases have been reported in pregnant people, including more than 22,000 hospitalized cases and 161 deaths.[1] The highest number of COVID-19-related deaths in pregnant people (n=22) in a single month of the pandemic was reported in August 2021. Data from the COVID-19-Associated Hospitalization Surveillance Network (COVID-NET) in 2021 indicate that approximately 97% of pregnant people hospitalized (either for illness or for labor and delivery) with confirmed SARS-CoV-2 infection were unvaccinated.[2] In addition to the risks of severe illness and death for pregnant and recently pregnant people, there is an increased risk for adverse pregnancy and neonatal outcomes, including preterm birth and admission of their neonate(s) to an intensive care unit (ICU). Other adverse pregnancy outcomes, such as stillbirth, have been reported. Despite the known risks of COVID-19, as of September 18, 2021, 31.0% of pregnant people were fully vaccinated before or during their pregnancy.[3] In addition, there are racial and ethnic disparities in vaccination coverage for pregnant people. Healthcare providers should communicate the risks of COVID-19, the benefits of vaccination, and information on the safety and effectiveness of COVID-19 vaccination in pregnancy. Healthcare providers should strongly recommend that people who are pregnant, recently pregnant (including those who are lactating), who are trying to become pregnant now, or who might become pregnant in the future receive one of the authorized or approved COVID-19 vaccines as soon as possible.

Background
COVID-19 vaccination is recommended for pregnant people. CDC recommends COVID-19 vaccination for all people aged 12 years and older, including people 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.[4] CDC recommendations align with those from professional medical organizations serving people who are pregnant, including the American College of Obstetricians and Gynecologists and the Society for Maternal-Fetal Medicine. Accumulating data provide evidence of both the safety and effectiveness of COVID-19 vaccination in pregnancy. CDC strongly recommends COVID-19 vaccination either before or during pregnancy, because the benefits of vaccination for both pregnant persons and their fetus/infant outweigh known or potential risks. Getting a COVID-19 vaccine can prevent severe illness, death, and pregnancy complications related to COVID-19.

COVID-19 vaccination coverage for pregnant people remains low. Despite recommendations for vaccination, uptake of COVID-19 vaccination by pregnant people has been lower than that of non-pregnant people.[5] In addition, vaccination coverage for pregnant people differs by race and ethnicity, with vaccination coverage being lowest for non-Hispanic Black pregnant people (15.6%) as of September 18, 2021.[3] Although the proportion of fully vaccinated pregnant people has increased to 31.0% (as of

September 18, 2021), the majority of pregnant people remain unprotected against COVID-19, and significant disparities exist in vaccination coverage by race and ethnicity.

Pregnant and recently pregnant people with COVID-19 are at increased risk of severe illness, death, and pregnancy complications. Pregnant and recently pregnant people with COVID-19 are at increased risk for severe illness when compared with non-pregnant people. Severe illness includes illness that requires hospitalization, intensive care unit (ICU) admission, mechanical ventilation, or extracorporeal membrane oxygenation (ECMO), or illness that results in death. Although the absolute risk is low, compared with non-pregnant symptomatic people, symptomatic pregnant people have more than a two-fold increased risk of requiring ICU admission, invasive ventilation, and ECMO, and a 70% increased risk of death.[6] Pregnant people with COVID-19 are also 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 people without COVID-19.[7-10] Neonates born to people with COVID-19 are also at increased risk for admission to the neonatal ICU.[9-11] In addition, although rare, pregnant people with COVID-19 can transmit infection to their neonates; among neonates born to women with COVID-19 during pregnancy, 1–4% of neonates tested were positive by rRT-PCR.[12,13]

Recommendations

CDC recommends urgent action to help protect pregnant people and their fetuses/infants. CDC recommends urgent action to accelerate primary vaccination for people 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. Efforts should specifically address populations with lower vaccination coverage and use approaches to reduce racial and ethnic disparities. CDC recommends ensuring tailored, culturally responsive, and linguistically appropriate communication of vaccination benefits. In addition, pregnant people should continue to follow all recommended prevention measures and should seek care immediately for any symptoms of COVID-19. Healthcare providers should have a low threshold for increased monitoring during pregnancy due to the risk of severe illness.

Recommendations for Public Health Jurisdictions
- Continue and increase efforts to reach and partner with communities to encourage and offer vaccination to people 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.
- Leverage resources to promote vaccine equity: COVID-19 Vaccine Equity for Racial and Ethnic Minority Groups.
  - Include focused efforts to increase vaccination coverage in pregnancy among people from racial and ethnic minority groups.
- Encourage healthcare providers to offer and recommend COVID-19 vaccination to their patients and community members 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.
- Work with community partners and employers to make vaccination easily accessible for unvaccinated populations, 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.
- Continue to implement additional prevention strategies where SARS-CoV-2 transmission is high and vaccination coverage is low, including in groups at increased risk, such as pregnant people.
- Continue to monitor community transmission and vaccination coverage levels and focus vaccine efforts on populations with low coverage.
- Disseminate and communicate information to key partners about vaccination coverage, risks posed by the highly transmissible Delta variant, and local transmission levels. Partner and share messaging with programs serving pregnant and recently pregnant people.

- Communicate accurate information about COVID-19 vaccines, respond to gaps in information, and confront misinformation with evidence-based messaging from credible sources. For example, there is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.

Recommendations for Healthcare Providers
- Ensure all clinical staff are aware of the recommendation for vaccination of people before and during pregnancy and the serious risks of COVID-19 to pregnant and recently pregnant people and their fetuses/infants.
- Increase outreach efforts to encourage, recommend, and offer vaccination to people 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. A strong recommendation from a healthcare provider is a critical factor in COVID-19 vaccine acceptance and can make a meaningful difference to protect the health of pregnant and recently pregnant people and their fetuses/infants from COVID-19.
- For healthcare providers who see patients 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:
  - Review patients' COVID-19 vaccination status at each pre- and post-natal visit and discuss COVID-19 vaccination with those who are unvaccinated.
  - Reach out to your patients with messages encouraging and recommending the critical need for vaccination.
  - Remind patients that vaccination is recommended even for those with prior COVID-19 infections. Studies have shown that vaccination provides increased protection in people who have recovered from COVID-19.
  - Support efforts to ensure people receiving the first dose of an mRNA COVID-19 vaccine (i.e., Pfizer-BioNTech, Moderna) return for their second dose to complete the series as close as possible to the recommended interval.
    - Consider a booster dose in eligible pregnant persons.[4]
  - Communicate accurate information about COVID-19 vaccines and confront misinformation with evidence-based messaging from credible sources. For example, there is currently no evidence that any vaccines, including COVID-19 vaccines, cause fertility problems in women or men.
- Become a COVID-19 vaccine provider and vaccinate patients during their visit. More information can be found at How to Enroll as a COVID-19 Vaccination Provider.

For More Information
- Interim Clinical Considerations for Use of COVID-19 Vaccines Currently Approved or Authorized in the United States
- COVID-19 Vaccines While Pregnant or Breastfeeding
- COVID-19 Vaccines for People Who Would Like to Have a Baby
- COVID-19 among Pregnant and Recently Pregnant People
- COVID Data Tracker
  - Vaccination Among Pregnant People
  - Data on COVID-19 during Pregnancy: Severity of Maternal Illness
- Toolkit for Pregnant People and New Parents
- Building Confidence in COVID-19 Vaccines

References

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