



COVID-19 vaccination advice for pregnant women

Fact sheet by Division of Obstetrics and Gynaecology, KK Women's and Children's Hospital (Updated on 8 December 2021)

What are the benefits of the vaccination?

- ✓ COVID-19 may be more dangerous in pregnancy
- ✓ Vaccination is effective in reducing the risk of getting COVID-19
- ✓ A fully vaccinated pregnant woman who contracts COVID-19 is more likely to have no or mild symptoms only
- ✓ Vaccinated women are less likely to need emergency or early delivery for complications from COVID-19
- ✓ Vaccinated women can transfer COVID-19 antibodies to their babies via the placenta or breast milk



What are the risks of the vaccination?

Side-effects from the vaccine are common. These do not affect pregnancy, but may include:

- Sore arm
- Fatigue
- Muscle pain
- Fever, chills
- Headache
- Joint pain

Will having a COVID-19 vaccination affect my baby?

- There is no evidence that COVID-19 vaccination causes miscarriages or birth defects. A 2021 study¹ has shown no increase in birth defects or disorders among babies born to mothers vaccinated against COVID-19, compared to babies born before the pandemic.
- Data from the United States, where more than 170,000 pregnant women have had a COVID-19 vaccine (using Pfizer BioNTech or Moderna vaccines), has not raised any safety concerns².
- In the United Kingdom, more than 100,000 pregnant women have also received a COVID-19 vaccine with no adverse effects recorded.

Does it matter what stage of pregnancy I am in?

The vaccine is considered to be safe and effective at any stage of pregnancy. Those who may be feeling sick in their first trimester due to nausea or vomiting, may consider checking with their doctor before taking the vaccination.



What is known about COVID-19 in pregnancy?

- Being pregnant increases the risk of developing severe complications and hospitalisation if infected with COVID-19. The risk of preterm birth is doubled if the woman is symptomatic and the baby may require neonatal intensive care.
- While over half the pregnant women who have COVID-19 will not have symptoms or have mild disease, pregnant women over the age of 35 who are overweight with body mass index (BMI) of over 30 and who have pre-existing comorbidities such as diabetes and high blood pressure are more likely to develop severe disease. The disease is also more severe if the woman is infected in the third trimester of pregnancy.
- In Singapore, United Kingdom and United States, the majority of the pregnant women infected with COVID-19 and admitted to hospital, are not vaccinated. Worldwide, an increasing number of pregnant women are being infected with COVID-19 and dying from it.
- COVID-19-related complications during pregnancy can pose risks to a newborn, such as prematurity, low birth weight, fetal distress and stillbirth.



Do pregnant women need a COVID-19 booster vaccine?

COVID-19 antibodies from vaccinated mothers can be transferred to babies via the placenta or breast milk. Hence, fully vaccinated pregnant women are recommended to have the booster dose, to boost or maintain antibody levels.

What are the recommendations?

As Singapore moves towards COVID-resilience and the virus becomes endemic in many countries, it is strongly recommended that all pregnant women and women intending to conceive, receive the COVID-19 vaccination to reduce the risk of severe disease.

What should I do to help me decide?

Consider your risk of catching and becoming seriously unwell from COVID-19. Make sure you know as much as you can about the vaccine and the risks of COVID-19 in pregnancy. Discuss with your doctor on the risks and benefits based on your individual situation.

For more information, visit: www.kkh.com.sg/covid19vaccination

References:

1. Shimabukuro TT, Kim SY, Myers TR, Moro PL, Oduyebo T, Panagiotakopoulos L, Marquez PL, Olson CK, Liu R, Chang KT, Ellington SR, Burkel VK, Smoots AN, Green CJ, Licata C, Zhang BC, Alimchandani M, Mba-Jonas A, Martin SW, Gee JM, Meaney-Delman DM; CDC v-safe COVID-19 Pregnancy Registry Team. Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons. *N Engl J Med*. 2021 Jun 17;384(24):2273-2282. doi: 10.1056/NEJMoa2104983. Epub 2021 Apr 21. PMID: 33882218; PMCID: PMC8117969.
2. Centers for Disease Control and Prevention 'V-safe Pregnancy Registry' <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafepregnancyregistry.html> Accessed 22 October 2021.



Top questions by pregnant women and women planning to conceive



1. What data is available about COVID-19 vaccine safety in pregnant women?

Current evidence shows that COVID-19 vaccination is safe and protects the mother and baby. Data from the United States, where more than 170,000 pregnant women have had a COVID-19 vaccine (using Pfizer BioNTech or Moderna vaccines), has not raised any safety concerns². In the United Kingdom, more than 100,000 pregnant women have also received a COVID-19 vaccine with no adverse effects recorded.

Conversely, unvaccinated pregnant women who are infected with COVID-19 are at a higher risk of serious complications requiring hospitalisation and emergency / early delivery. The risk of preterm birth is doubled if the woman is symptomatic and the baby may require neonatal intensive care.



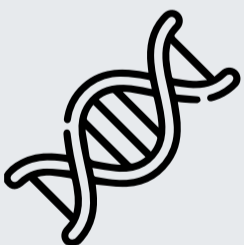
2. Will the vaccine harm my baby?

COVID-19 vaccines do not contain live coronavirus and cannot cause COVID-19 infection. The vaccines do not contain any ingredients that are known to be harmful to pregnant women or their babies. The vaccines have been shown to generate antibodies in pregnant women with passive transfer to the baby antenatally or before birth.



3. Will the vaccine increase my risk of miscarriage?

There is no evidence that COVID-19 vaccination causes miscarriages or birth defects. A 2021 study¹ has shown no increase in birth defects or disorders among babies born to mothers vaccinated against COVID-19, compared to babies born before the pandemic.



4. Will the vaccine change my or my baby's DNA?

No, vaccines do not alter the recipient or their baby's DNA.



5. Will the vaccine harm me?

COVID-19 vaccines are safe for pregnant women and their babies. Common side-effects which do not affect pregnancy can include sore arm, fatigue, muscle pain, fever, chills, headache and joint pain.