

COVID-19 Vaccines in Pregnancy and Breastfeeding

MotherSafe - Royal Hospital for Women

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Information in this leaflet is general in nature and should not take the place of advice from your health care provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect. Information on COVID-19 vaccines is rapidly changing. For the most up to date information please call MotherSafe.

What is COVID-19?

COVID-19 is a respiratory illness caused by a coronavirus (called SARS-CoV-2).¹ This virus is spread by respiratory droplets from our mouths and noses, mostly by close person-to-person contact.¹ When an infected person coughs, talks, breathes or sneezes, the virus can easily spread to others who are close by.¹

Issues for pregnancy

There has been a large increase in our knowledge about COVID-19 and pregnancy.¹ It is expected that the majority of pregnant women infected with COVID-19 will experience mild or moderate symptoms and most of these women are expected to make a full recovery.² However studies of COVID-19 infection have shown that pregnant women are at a significantly increased risk of severe illness and hospital admission (including ICU) compared to non-pregnant people.^{1,2,3} This risk is more so for pregnant women in the third trimester, those with pre-existing medical problems (such as diabetes, high blood pressure) or who are overweight or older than 35 years of age. Also, pregnant women with COVID-19 may be at an increased risk of other poor outcomes related to pregnancy, such as preterm birth, compared to pregnant women without COVID-19.^{1,2,3}

What are COVID-19 vaccines?

COVID-19 vaccines work by switching on your body's defences against the virus that causes COVID-19.¹ The approved vaccines currently available in Australia are Comirnaty (Pfizer) and COVID-19 Vaccine Astra-Zeneca. These vaccines do not contain live virus that could cause COVID-19.³

Comirnaty (Pfizer) vaccine is the preferred vaccine for women who are pregnant, breastfeeding or planning a pregnancy.³ This is because research has shown that Comirnaty (Pfizer) is safe for pregnant and breastfeeding women at any stage of pregnancy. The Astra-Zeneca vaccine has been associated with rare cases of a blood clotting condition which appears to be more common in younger adults, including women of childbearing age.³ However Astra-Zeneca vaccine is not anticipated to increase risks to baby and may be used when planning, to complete a dosing schedule when pregnant or while breastfeeding (see Planning a pregnancy and Breastfeeding sections).

Both vaccines require two doses.³ The Comirnaty (Pfizer) vaccine doses are given between 3 to 6 weeks apart.³ Astra-Zeneca vaccine doses are given with a 4 to 12 weeks separation. If you have just the one dose of vaccine this will only give you limited protection against COVID-19 so it is important that you have both doses.^{1,3}

COVID-19 vaccines help to protect people who are vaccinated from getting sick or severely ill with COVID-19.¹ However, it is still not known how long the vaccines will protect people from the virus or how much they will stop a person from spreading the virus if they have it.¹ So it is important to continue to help protect yourself from infection by wearing a face covering, avoiding close contact with those that are sick, avoiding crowds and washing hands often.¹

Planning a pregnancy

An approved COVID-19 vaccine is recommended for women who are planning pregnancy and does not affect fertility.^{3,4,5} If you are trying to become pregnant, you do not need to avoid pregnancy before or after vaccination.^{3,4} If you become pregnant after your first dose, it is recommended that you have the second dose while pregnant. This may be either the Comirnaty (Pfizer) vaccine or the Astra Zeneca vaccine.⁵ It is important to remember you will only have the best possible protection against COVID-19 after you have two doses of an approved COVID-19 vaccine.³

If you are pregnant

Pregnant women are a priority group for COVID-19 vaccination. The current recommendation for pregnant women is that they should be routinely offered the Comirnaty (Pfizer) vaccine at any stage of pregnancy.³ Vaccination is the best way to reduce the chance of severe illness from COVID-19 in pregnant women.³ It is unknown if there is an optimal time during pregnancy to have a Comirnaty (Pfizer) vaccine, either for the benefit of the mother or to protect her newborn, therefore it is recommended to have a Comirnaty (Pfizer) vaccine as soon as you are offered one.³ To ensure adequate protection, pregnant women are recommended to complete the routine schedule of Comirnaty (Pfizer).³

This recommendation has been changed recently because world-wide information has now been collected and reports have shown that mRNA COVID-19 vaccines, such as Comirnaty (Pfizer) are safe to use in pregnant women.³ There has not yet been as much follow up for Astra-Zeneca vaccine (although it is not anticipated to be harmful to the unborn baby).³ Research has also shown that the antibodies produced by vaccination cross the placenta and may provide some protection to newborn infants.³

COVID-19 vaccine side effects

Common side effects reported following COVID-19 vaccination include soreness at the injection site, headache, muscle pain, fever, chills and tiredness.³ If you experience these symptoms, you can take paracetamol.³ It is not suggested that you need to take paracetamol before having a COVID-19 vaccine.³

COVID-19 vaccine timing in relation to other vaccines

An interval of at least seven days between a dose of a COVID-19 vaccine and any other vaccine is suggested.³ This applies to both doses of the COVID-19 vaccine.³ This may affect the timing of the two vaccines usually recommended during pregnancy:

- Influenza vaccine which may be given at any time during pregnancy
- Whooping cough vaccine which is usually given between 20 and 32 weeks of pregnancy³

However, this time interval may be shortened (including same day administration) in special circumstances, such as a tetanus prone wound or outbreak of influenza or COVID-19.³ You can talk to your immunisation provider about making a schedule for each vaccine dose.³

Breastfeeding

There is no evidence that women who are breastfeeding while sick with COVID-19 have an increased risk of severe illness compared to women who are not breastfeeding.^{1,3} The virus that causes COVID-19 is unlikely to pass through breastmilk and the benefits of breastfeeding are greater than the risk of passing COVID-19 through the breastmilk.² Women who are breastfeeding while sick with COVID-19 can help prevent the virus passing the virus to their babies by washing their hands frequently and wearing a mask while breastfeeding.²

If you are breastfeeding, vaccination with an approved COVID-19 vaccine is recommended; you do not need to stop breastfeeding before or after vaccination.^{4,5,6} There is no evidence that any COVID-19 vaccine is harmful to the breastfed baby, nor are there any expected concerns about their safety specific to breastfeeding women or their babies.^{1,3} This is because they contain no live virus and the ingredients of the COVID-19 vaccine are not expected to pass into the breast milk. If they did, they would be quickly destroyed in the baby's gut. Therefore it is extremely unlikely to have any effect on your baby.³ In addition, research has shown that antibodies made by a mother's body after having COVID-19 vaccine pass to the breastfed infant via breastmilk.^{3,5} Therefore both Comirnaty (Pfizer) and Astra Zeneca vaccine may be given while breastfeeding and are recommended due to the benefits of preventing COVID infection in settings of community risk.⁶

References

1. Centers for Disease Control and Prevention. 2020. Coronavirus (COVID-19). Available at URL: <https://www.cdc.gov/coronavirus/2019-nCoV/index.html> Accessed August 18 2021
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3. Australian Government Department of Health. COVID-19 vaccination decision guide for women who are pregnant, breastfeeding or planning pregnancy. 17 June 2021; Version 4.1. Available from: <https://www.health.gov.au/resources/publications/covid-19-vaccination-shared-decision-making-guide-for-women-who-are-pregnant-breastfeeding-or-planning-pregnancy> Accessed August 18 2021
4. Australian Government Department of Health. About the Astra-Zeneca COVID-19 vaccine. Last updated: 14 July 2021. Available from: <https://www.health.gov.au/initiatives-and-programs/covid-19-vaccines/learn-about-covid-19-vaccines/about-the-astrazeneca-covid-19-vaccine> Accessed August 17 2021
5. The Royal Australian and New Zealand College of Obstetricians and Gynaecologists ((RANZCOG). Q&A: Coronavirus disease (COVID-10) vaccination and breastfeeding. 7 April 2021 Available from: https://ranzcoq.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/News/Q-A-COVID-19-vaccination-and-breastfeeding.pdf Accessed August 17 2021
6. Lactmed: Drug and Lactation Database. COVID_19 Vaccines. National Library of Medicine, Maryland. Available at <https://access.sesi.health.nsw.gov.au/Citrix/CitrixStoreExtWeb/clients/HTML5Client/src/SessionWindow.html?launchid=1629241424982> Accessed August 18 2021

Other resources

- OTIS. COVID-19 Vaccines. Organization of Teratology Information Specialists. Available at <https://mothertobaby.org/fact-sheets/covid-19/>
- The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. Vaccination in Pregnant and Breastfeeding Women. Available at <https://ranzcoq.edu.au/statements-guidelines/covid-19-statement/covid-19-vaccination-information>



NSW Medications in Pregnancy & Breastfeeding Service

For more information call MotherSafe: NSW Medications in Pregnancy and Breastfeeding Service on 9382 6539 (Sydney Metropolitan Area) or 1800 647 848 (Non-Metropolitan Area) Monday –Friday 9am-5pm (excluding public holidays)