



COVID-19 vaccination, pregnancy & breastfeeding

Comirnaty mRNA COVID-19 vaccine by Pfizer/BioNTech

Key Information

- Vaccination against COVID-19 is recommended for pregnant people* at any stage of pregnancy
- Comirnaty has been found to be highly effective in preventing serious COVID-19 illness, hospitalisation and death in pregnant women
- As a hapū māmā, you are three times more likely to be hospitalised due to COVID-19 and five times more likely to be admitted into the intensive care unit (ICU), compared to non-pregnant women
- COVID-19 increases the likelihood of complications in pregnancy, such as high blood pressure, pre-eclampsia, diabetes caused by pregnancy and poor fetal growth
- There are no safety concerns regarding the Comirnaty vaccination if you are pregnant, planning to be pregnant, or breastfeeding

COVID-19 disease and pregnancy

During a pregnancy, your body goes through natural changes to accommodate a growing pēpi. As your pēpi grows, your lung capacity decreases, and the amount of blood being pumped around your body increases – this means your heart needs to work harder.

As a result, you are at a higher risk of severe disease and breathing difficulties if infected with a respiratory disease, such as COVID-19 or influenza. Babies are up to seven times more likely to be born early to mothers with COVID-19, and up to five times more likely to require neonatal intensive care when compared to babies born to mothers without the disease.

COVID-19 vaccination and pregnancy

Internationally, millions of people have received the Comirnaty vaccination while pregnant, data shows that Comirnaty vaccine is safe for pregnant women, those planning pregnancy and for breastfeeding māmās.

How effective is the vaccination for pregnant women?

Highly effective. The effectiveness of Comirnaty, when given in pregnancy, is similar to the general population. COVID-19 vaccination is highly protective against severe disease, hospitalisation and death.

Can I receive a COVID-19 vaccination if I'm planning to be pregnant?

Yes. If you are pregnant or are planning a pregnancy, you can make an informed decision to receive Comirnaty at any

What can I expect after vaccination?

Like all medicines, vaccines can cause potential responses related to your immune response, however, most are mild and disappear after a few days. Common Comirnaty responses are:

- A sore arm
- A headache
- Feeling tired
- Feeling feverish

^{*} IMAC acknowledges that not everyone who becomes pregnant identifies as being a woman

Studies show that that there is no difference in the Comirnaty immune response between pregnant and non-pregnant women. Serious responses after vaccination, such as anaphylaxis (five cases per million doses), are very rare. If you feel unwell, rest and drink plenty of water. If you are concerned or these last for more than 2 days, seek medical advice. If you are pregnant, it is recommended that you discuss with your doctor or midwife the best ways to relieve possible discomfort and fever following vaccination.

Can I breastfeed after the COVID-19 vaccination?

Yes, you can breastfeed if you have had the Comirnaty during pregnancy and those who are breastfeeding can receive Comirnaty and booster doses. There are no safety concerns associated with the vaccine for breastfeeding, or for your pēpi. In fact, emerging evidence suggests that vaccination in pregnancy or while breastfeeding provides temporary COVID-19 protection for your pēpi via the whenua/placenta or antibodies in breastmilk.

Can I have a first booster dose or an additional doses?

You can receive a booster Comirnaty vaccination at any stage of pregnancy from six months after your previous dose. If you received your either of the first two doses or a first booster dose during your pregnancy, your an additional dose can be given before or after your delivery, as long as there is a six-month gap after your previous dose. Booster timing can be discussed with your doctor or midwife.

Who shouldn't receive a COVID-19 vaccine?

If you have had an anaphylaxis reaction to any ingredient listed in the vaccine, or have had an anaphylactic response to a previous dose, you should not receive the Comirnaty vaccines.

If you are feeling unwell or have a fever above 38°C, wait until you are feeling better to have the vaccination. Defer vaccination if you have previously experienced myocarditis or pericarditis following vaccination, seek advice from IMAC.

References

- 1. Villar J, Ariff S, Gunier RB, Thiruvengadam R, Rauch S, Kholin A, et al. Maternal and Neonatal Morbidity and Mortality Among Pregnant Women With and Without COVID-19 Infection: The INTERCOVID Multinational Cohort Study. JAMA Pediatr. 2021.
- 2. Magnus MC, Oakley L, Gjessing HK, Stephansson O, Engjom HM, Macsali F, et al. Pregnancy and risk of COVID-19: a Norwegian registry-linkage study. BJOG: an international journal of obstetrics and gynaecology. 2021 (preprint).
- 3. Sun H. Approximation and evaluation of the spontaneous abortion rate with COVID-19 vaccination in pregnancy. American journal of obstetrics & gynecology MFM. 2021:100510.
- 4. Jamieson DJ, Theiler RN, Rasmussen SA. Emerging infections and pregnancy. Emerg Infect Dis. 2006;12(11):1638-43.
- 5. Branch DW. Physiologic adaptations of pregnancy. Am J Reprod Immunol. 1992;28(3-4):120-2.
- 6. Robinson DP, Klein SL. Pregnancy and pregnancy-associated hormones alter immune responses and disease pathogenesis. Horm Behav. 2012;62(3):263-71.
- 7. Allotey J, Stallings E, Bonet M, Yap M, Chatterjee S, Kew T, et al. Clinical manifestations, risk factors, and maternal and perinatal outcomes of coronavirus disease 2019 in pregnancy: living systematic review and meta-analysis. BMJ. 2020;370:m3320.
- 8. Watanabe A, Yasuhara J, Iwagami M, et al. Peripartum Outcomes Associated With COVID-19 Vaccination During Pregnancy: A Systematic Review and Meta-analysis. JAMA Pediatr. 2022. doi: 10.1001/jamapediatrics.2022.3456
- 9. Dagan N, Barda N, Biron-Shental T, Makov-Assif M, Key C, Kohane IS, et al. Effectiveness of the BNT162b2 mRNA COVID-19 vaccine in pregnancy. Nature medicine. 2021;27(10):1693-5.
- 10. Bleicher I, Kadour-Peero E, Sagi-Dain L, Sagi S. Early exploration of COVID-19 vaccination safety and effectiveness during pregnancy: interim descriptive data from a prospective observational study. Vaccine. 2021;39(44):6535-8.
- 11. Vousden N, Ramakrishnan R, Bunch K, Morris E, Simpson N, Gale C, et al. Impact of SARS-CoV-2 variant on the severity of maternal infection and perinatal outcomes: Data from the UK Obstetric Surveillance System national cohort. medRxiv. 2021 (preprint):2021.07.22.21261000.
- 12. Shimabukuro TT, Kim SY, Myers TR, Moro PL, Oduyebo T, Panagiotakopoulos L, et al. Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons. N Engl J Med. 2021;384(24):2273-82.
- 13. Shimabukuro TT, Cole M, Su JR. Reports of Anaphylaxis After Receipt of mRNA COVID-19 Vaccines in the US-December 14, 2020-January 18, 2021. JAMA. 2021.
- 14. Golan Y, Prahl M, Cassidy AG, Gay C, Wu AHB, Jigmeddagva U, et al. COVID-19 mRNA Vaccination in Lactation: Assessment of adverse effects and transfer of anti-SARS-CoV2 antibodies from mother to child. medRxiv. 2021.
- 15. Perl SH, Uzan-Yulzari A, Klainer H, Asiskovich L, Youngster M, Rinott E, et al. SARS-CoV-2-Specific Antibodies in Breast Milk After COVID-19 Vaccination of Breastfeeding Women. JAMA. 2021.
- 16. Villar J, Soto Conti CP, Gunier RB, et al. Pregnancy outcomes and vaccine effectiveness during the period of omicron as the variant of concern, INTERCOVID-2022: a multinational, observational study. Lancet. 2023;401(10375):447-57. doi: 10.1016/S0140-6736(22)02467-9
- 17. Nevo L, Cahen-Peretz A, Vorontsov O, et al. Boosting maternal and neonatal humoral immunity following SARS-CoV-2 infection using a single mRNA vaccine dose. Am J Obstet Gynecol. 2022. doi: https://doi.org/10.1016/j.ajog.2022.04.010

Call 0800 IMMUNE (466 863) for clinical advice