

Influenza Vaccine in Pregnancy and Breastfeeding

Updated June 2024

Information in this leaflet is general in nature and should not take the place of advice from your healthcare provider. With every pregnancy there is a 3 to 5% risk of having a baby with a birth defect or developmental problem. Breastmilk provides optimum nutrition for babies and conveys many additional health benefits to mother and baby.

Influenza (the flu)

Influenza is a viral infection of the respiratory tract commonly known as “the flu” and can be caused by a number of different viruses. Common symptoms of influenza include fever, headache, runny nose, muscle aches, sore throat, cough and feeling generally unwell. The common cold tends to be milder and without the associated fever and muscle aches. Influenza usually occurs during the winter months and is highly contagious. Risk factors for more severe disease include obesity, pregnancy, medical conditions such as asthma and diabetes, and being of Aboriginal or Torres Strait Islander descent.¹

What happens if you get influenza when you are pregnant?

Pregnant women who develop any type of influenza are at greater risk of developing serious complications such as pneumonia. These complications can put both mother and baby at risk.² The H1N1 influenza (“swine flu”) pandemic of 2009 showed that pregnant women were more susceptible to severe complications of the influenza virus than the general population. Some women with influenza miscarried or went into premature labour while some had to undergo early emergency caesarean sections. A greater than expected number of pregnant women with influenza required admission to intensive care and were more likely to die than non-pregnant women.²

If you have suspected influenza at any stage of pregnancy, oseltamivir (Tamiflu) is recommended to reduce severity and the risk of complications. It should preferably be taken within 48 hours of symptoms. Studies in pregnancy have suggested that oseltamivir is safe and beneficial. Paracetamol is also recommended to treat fever and it is important to drink fluids such as water or juice to avoid dehydration.³

Vaccination for influenza

During the COVID-19 pandemic, there was less influenza virus circulating in Australia and lower levels of people receiving the influenza vaccine compared with previous years. Since 2022 with borders reopening, there have been more cases of influenza. The influenza vaccines released in Australia in March 2024 were produced in response to the strains of influenza virus predicted to be present in Australia this winter. These vaccines are different to the influenza vaccines manufactured in 2023 and previous years. All influenza vaccines available in 2024 have 4 strains: 2 influenza A strains and 2 influenza B strains. The vaccines do not contain any live virus: you cannot get influenza from the vaccine. In Australia, as well as the egg based vaccines previously available, a cell based vaccine is now also available^{4,5}

Is it safe for pregnant women to receive the seasonal influenza vaccine?

Yes. Pregnant women are considered a high priority group, and it is recommended that all women who will be pregnant or planning to be pregnant during the flu season receive the vaccine as early as possible. The vaccine can safely be given before pregnancy or **at any stage of pregnancy**, including the first trimester. If a woman has received the previous year’s influenza vaccine early in her pregnancy, she may receive the new seasonal vaccine later in the same pregnancy. If a woman has received the vaccine before

pregnancy, she should receive the vaccine again while pregnant to protect her unborn baby.^{4,6}

Administration with other vaccines

If the timing is suitable, influenza vaccine may be given at the same time as the pertussis vaccine which is also recommended in pregnancy.^{4,6} Check with your doctor to work out a vaccination timing plan.

Influenza vaccine can also safely be given at the same time as any COVID-19 vaccine, RSV vaccine or any other vaccines that are indicated in pregnancy.⁴

How long will the influenza vaccine last?

The currently available influenza vaccine confers protection for the whole season, but best protection is within the first 3-4 months.^{4,6}

Will the baby be protected if the mother is immunised?

Yes. Research has shown that after pregnant women are given the influenza vaccine, their antibodies pass across the placenta. Babies are then born with antibodies, which help protect them from the influenza virus for up to 6 months after birth, before babies are able to be vaccinated themselves.^{4,5}

Who should be vaccinated?

Under the National Immunisation Program, the seasonal influenza vaccine is available free of charge to groups regarded as high priority for vaccination. This includes **all pregnant women**. It is advisable that all parents and carers of infants also have the influenza vaccine to reduce the risk of passing the infection to young babies, as influenza vaccination is not available for children until 6 months of age.^{4,5} Adults and children with egg allergy, including anaphylaxis, can be safely vaccinated with influenza vaccine, although this should be discussed with their doctor or immunisation provider.⁵

Vaccination of breastfeeding mothers

The vaccine is safe to be given to a breastfeeding mother. Getting the influenza vaccine reduces the risk of influenza transmission at home and therefore provides protection before baby can be vaccinated.⁷

Where do I get the seasonal influenza vaccine?

Vaccination is available from a range of locations, including General Practitioner offices, vaccination clinics, hospitals and pharmacies. The seasonal influenza vaccine is free for all pregnant women, although there may be a consultation fee from the doctor or immunisation service provider. Many workplaces also offer the influenza vaccine to their staff free of charge.

References

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2. Mosby LG, Rasmussen SA, Jamieson DJ. 2009 pandemic influenza A (H1N1) in pregnancy: a systematic review of the literature. *Am J Obstet Gynecol*. 2011 Jul; 205(1):10-8
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4. Australian Government Department of Health and Aged Care. Australian Technical Advisory Group on Immunisation (ATAGI) Clinical Advice, Canberra, March 2024. Statement on the administration of seasonal influenza vaccines in 2024. Available at [ATAGI - STATEMENT ON THE ADMINISTRATION OF SEASONAL INFLUENZA VACCINES IN 2024 \(health.gov.au\)](https://www.health.gov.au/ATAGI-STATEMENT-ON-THE-ADMINISTRATION-OF-SEASONAL-INFLUENZA-VACCINES-IN-2024) Accessed May 2024
5. NSW Government Health. Frequently asked questions about influenza vaccination for health professionals. Updated February 2024. Available at <https://www.health.nsw.gov.au/immunisation/Pages/seasonal-flu-vaccination-faqs.aspx>. Accessed May 2024.
6. National Centre for Immunisation Research and Surveillance Australia (NCIRS). Influenza vaccination. Frequently asked questions (FAQs). Available at [Influenza vaccines - frequently asked questions \(FAQs\) | NCIRS](https://www.ncirs.gov.au/influenza-vaccines-frequently-asked-questions-faqs) Accessed May 2024.
7. Drugs and Lactation Database LactMed. Influenza vaccines. Available at <https://www.ncbi.nlm.nih.gov/books/NBK500990/> Updated July 2023. Accessed May 2024

Other resources

Sharing Knowledge about Immunisation (SKAI) with National Centre for Immunisation Research and Surveillance Australia (NCIRS). Pregnancy and newborn vaccinations. Influenza. Available at [Influenza | Sharing Knowledge About Immunisation | SKAI](https://www.ncirs.gov.au/influenza-sharing-knowledge-about-immunisation-skai) Accessed May 2024

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