

# 2019 SEASONAL INFLUENZA VACCINES FOR PREGNANT WOMEN

## Clinical advice for vaccination providers

Seasonal influenza vaccines are available through the National Immunisation Program (NIP) for women in each pregnancy.



## INFLUENZA in pregnancy and newborns

- Antenatal influenza vaccination is recommended to protect both pregnant women and their babies from influenza and its complications.
- Influenza vaccine can be safely given at any stage during pregnancy. Whilst it is best given before the influenza season, it can be given at any time during the season and it will still provide some protection to the mother and protection to the baby for the first few months of life.
- A consistent recommendation from a healthcare professional plays an important role in improving vaccination uptake.

### Available vaccines

In 2019, the following quadrivalent influenza vaccines (QIVs) are available for free through the NIP for pregnant women of any age:

- Afluria Quad® (Seqirus)
- Fluarix Tetra® (GlaxoSmithKline)
- FluQuadri® (Sanofi)

### Benefits of vaccination in pregnancy

- Pregnant women are at increased risk of morbidity and mortality from influenza compared with non-pregnant women and are recognised as a priority group for influenza vaccination.
- Babies born to mothers who contract influenza during pregnancy are at higher risk of preterm birth and low birth weight.
- Babies aged less than 6 months are more likely to be hospitalised with influenza than any other age group.
- Vaccination of pregnant women provides protection against influenza for newborn babies by transfer of maternal antibodies across the placenta.
- High levels of maternal antibodies give temporary protection to the baby for the first few months of life.
- Vaccination during pregnancy is estimated to reduce the risk of influenza in babies aged less than 6 months by about half.

### Vaccination timing

- Influenza vaccine is recommended as a single dose at any time (as early as practicable) during each pregnancy.
- It is best given prior to the onset of the influenza season (from April), however can be given at any time during the year. The influenza season usually occurs from June to September in most parts of Australia.
- For women who received an influenza vaccine late in the 2018 influenza season, revaccinate if the 2019 influenza vaccine becomes available before the end of pregnancy.
- Women who are in their first trimester in the first quarter of 2019 may wish to wait until the 2019 influenza vaccine becomes available, rather than receiving the 2018 influenza vaccine.
- The influenza vaccine can be given at the same time as the pertussis vaccine during pregnancy between 20 and 32 weeks.

### Vaccination safety

- All QIVs currently used in Australia are inactivated vaccines and are safe for use in pregnant women.<sup>1</sup>
- Many large studies have shown no evidence of an increased risk of adverse pregnancy outcomes (such as stillbirth, low birth weight, pre-eclampsia, congenital abnormality, or preterm birth) related to influenza vaccination during pregnancy.
- Expected adverse events, like injection site reactions and fever, do not occur more frequently in pregnant women than in non-pregnant women.



### RECENT UPDATES TO PRODUCT INFORMATION

Vaccines Afluria Quad® and FluQuadri® have now been categorised as **Category A** for pregnancy based on a review of the evidence.

### Further information

- The digital Australian Immunisation Handbook at [www.immunisationhandbook.health.gov.au](http://www.immunisationhandbook.health.gov.au)
- Department of Health immunisation website at [www.health.gov.au/immunisation](http://www.health.gov.au/immunisation)
- National Centre for Immunisation Research and Surveillance at [www.ncirs.org.au](http://www.ncirs.org.au)

All information in this publication is correct as at March 2019.

<sup>1</sup> FluMist® is licensed in Australia but is not recommended in pregnancy.

# PERTUSSIS CONTAINING (dTpa) VACCINES FOR PREGNANT WOMEN

## Clinical advice for immunisation providers



## WHOOPING COUGH in young babies

- Antenatal pertussis vaccination is recommended and funded through the National Immunisation Program primarily to protect babies from pertussis and its complications.
- Pertussis-containing vaccine should be given as a single dose between 20 and 32 weeks during each pregnancy.
- A consistent recommendation from a healthcare professional plays an important role in improving vaccination uptake.

### Available vaccines

The following vaccines (given as diphtheria-tetanus-acellular pertussis, dTpa) are available for free through the NIP for pregnant women:

- Adacel® (Sanofi-Aventis)
- Boostrix® (GlaxoSmithKline)

### Benefits of vaccination in pregnancy

- Pertussis infection can cause serious complications including pneumonia, brain damage and death in young babies.
- Pertussis vaccination in pregnancy primarily aims to provide protection for the baby against pertussis—this occurs by transfer of maternal antibodies across the placenta.
- High levels of maternal antibodies give temporary protection to the baby during the early months of life until they complete their vaccinations at 2 months (can be given from 6 weeks), 4 months, and 6 months of age, in accordance with the NIP childhood schedule.
- Vaccination during pregnancy has been shown to reduce pertussis disease in babies aged less than 3 months by 91% and is much more effective than vaccinating those who come into contact with the baby.

### Vaccination timing

- Pertussis-containing vaccine is recommended as a single dose between 20 and 32 weeks in each pregnancy, including pregnancies that are closely spaced to provide maximal protection to each infant.
- The vaccine shouldn't be delayed until too close to birth because:
  - Maternal pertussis antibodies do not peak until approximately 2 weeks after vaccination.
  - Some women may give birth before they reach full-term.
- If the vaccine has not been given by 32 weeks of gestation, it should still be given at any time up to delivery.
- Antenatal administration is recommended, but if this does not occur, postnatal vaccination may still provide direct protection to the mother and some degree of indirect protection to the infant.

### Vaccination safety

- Vaccination with pertussis vaccine during pregnancy is safe for both the mother and her baby.
- Many large studies have shown no evidence of an increased risk of adverse pregnancy outcomes (such as stillbirth, low birth weight, pre-eclampsia, congenital abnormality, or preterm birth) related to pertussis vaccination during pregnancy.
- Expected adverse events, like injection site reactions and fever, do not occur more frequently in pregnant women than in non-pregnant women.
  - Approximately 6% of women vaccinated with pertussis vaccine experience mild injection site reactions. Fever is rare and occurs in less than 1% of vaccinated women.
- The pertussis vaccine can be given at the same time as the influenza vaccine during pregnancy.

### Further information

- The digital Australian Immunisation Handbook at [www.immunisationhandbook.health.gov.au](http://www.immunisationhandbook.health.gov.au)
- Department of Health immunisation website at [www.health.gov.au/immunisation](http://www.health.gov.au/immunisation)
- National Centre for Immunisation Research and Surveillance at [www.ncirs.org.au](http://www.ncirs.org.au)

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### State and territory health department contact numbers:

ACT	02 6205 2300	SA	1300 232 272
NSW	1300 066 055	TAS	1800 671 738
NT	08 8922 8044	VIC	1300 882 008
WA	08 9321 1312	QLD	Contact your local Public Health Unit



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