Why should I get vaccinated against pertussis during my pregnancy?

Pertussis (whooping cough) causes severe coughing spells, which can last for months and cause difficulty breathing, vomiting, and disturb sleep.

- Pertussis can also lead to weight loss, incontinence and rib fractures. Up to two in 100 adolescents and five in 100 adults with pertussis are hospitalised or have complications, which could include pneumonia or death.
- Although pertussis can be serious in adults, it is most severe for babies who are too young to receive the vaccine themselves.
- Pertussis infection can be especially severe in infants under 12 months of age, causing breathing problems, pneumonia, and sometimes death.

Pertussis is caused by bacteria and is spread from person to person through secretions from coughing or sneezing. Pertussis vaccine reduces your risk of catching whooping cough and passing it to your newborn baby. Parents are a common source of whooping cough infection for children under 12 months old.

Pregnant women should get a dose of pertussis vaccine during the second or third trimester of every pregnancy (ideally between 20 and 32 weeks), to protect the newborn from pertussis. It is recommended that you receive this vaccine during every pregnancy because your antibody levels may decrease over time and not stay high enough to offer enough protection for future pregnancies.

The optimal time for pertussis vaccination in pregnancy is between mid-second trimester and early third trimester (between 20 and 32 weeks gestation). This is because:

- your body develops the highest amount of antibodies after about two weeks after vaccination
- these maternal antibodies transfer to protect the baby at 30 weeks gestation onwards
- levels of pertussis antibodies that are likely to be protective are detected in infants born to mothers vaccinated in the second and third trimesters.

Babies born to mothers who have had a pertussis vaccine in pregnancy have higher levels of antibodies against the disease than babies whose mothers were not vaccinated. This is because the antibodies made by the mother in response to the vaccine are passed to her baby across the placenta soon after vaccination and until delivery. The mother’s antibodies passed during pregnancy can help protect the newborn during the first months of life when they are most vulnerable to severe pertussis infection and still too young to be vaccinated themselves.

Which vaccine will be used and when can I have it?

In Australia, the pertussis vaccine includes other components. The tetanus, diphtheria, and pertussis vaccine (dTpa) is given during pregnancy to help protect mothers and newborn babies against pertussis.

Tetanus (lockjaw) is rare in Australia today. It can lead to tightening of muscles in the head and neck so you can’t open your mouth, swallow, or sometimes even breathe. Tetanus kills about one out of 50 people who are infected even after receiving the best medical care.

Diphtheria is also rare in Australia today. It can cause a thick coating to form in the back of the throat. It can lead to breathing problems, heart failure, paralysis, and death.

Can everyone get the vaccine?

There are some people who should not get the vaccine. Tell the person who is giving you the vaccine if you aren’t feeling well on the day the vaccination is scheduled or if you have ever had:

- a life-threatening allergic reaction after a dose of any tetanus, diphtheria, and pertussis vaccine, OR if you have a severe allergy to any part of this vaccine.
- any severe allergies
- coma or long repeated seizures within seven days after a childhood dose of dTpa or a previous dose of dTpa
- seizures or another nervous system problem
severe pain or swelling after any vaccine containing diphtheria, tetanus or pertussis
- a condition called Guillain Barré Syndrome (GBS).

**Are there any side effects from pertussis vaccination?**

With any medicine, including vaccines, there is a chance of side effects. These are usually mild and go away on their own. Serious reactions are possible but are rare. As with any medicine, there is a very remote chance of a vaccine causing a serious injury or death. Most people who get dTpa vaccine do not have any problems with it.

The most common side effects of the dTpa vaccine do not affect daily activities and get better on their own in a few days. These include mild redness, swelling, pain, and tenderness where the injection is given (about one person in 10).

Other side effects include body-ache, fatigue, or mild fever. Headache, nausea, vomiting, diarrhoea, stomach ache, and arm swelling have also been reported.

Your doctor or the person giving you the vaccine can give you more information on the vaccine brands used.

**Is this vaccine safe for me and my baby?**

Large studies from the US and UK into pertussis vaccination during pregnancy have found no evidence of serious reactions. In addition, since 2012, WA Health has followed up over 9,000 women who were vaccinated during pregnancy, and there were no serious reactions reported.

It is safe to have both influenza and pertussis vaccines at the same time during your pregnancy.

The safety of vaccines is always being monitored.

For more information, visit:
- Australian Department of Health: campaigns.health.gov.au/immunisationfacts/are-vaccines-safe

**Problems that could happen after any vaccine**

People sometimes faint after a medical procedure, including vaccination. Tell your vaccine provider if you feel dizzy, or have vision changes or ringing in the ears.

Some people get severe pain in the shoulder and have difficulty moving the arm where the vaccine was given. This happens very rarely.

**What if there is a serious reaction? What should I look for?**

Vaccines, like any medication, can cause a severe allergic reaction. Such reactions from a vaccine are very rare, estimated at fewer than one in a million doses, and usually occur within a few minutes to a few hours after the vaccination.

Look for anything that concerns you, such as signs of a severe allergic reaction, very high fever, or unusual behaviour.

Signs of a severe allergic reaction can include hives, swelling of the face and throat, difficulty breathing, a fast heartbeat, dizziness, and weakness. These would usually start a few minutes to a few hours after the vaccination.

**What should I do?**

Please call your GP if you have a reaction you think is serious or unexpected. Healthdirect is also available on 1800 022 222. For any severe reaction, call an ambulance or go to your closest emergency department.

Significant and unexpected reactions should be reported to Western Australian Vaccine Safety Surveillance (WAVSS):
- Online portal at: www.aefican.org.au/Home/Info/WAE
- E-mail: WestAustralian.VaccineSafetySurveillance@health.wa.gov.au
- Phone: (08) 6456 0208