

Immunisation against whooping cough during pregnancy



FactSheet For Parents and Caregivers

About whooping cough

Whooping cough (also known as pertussis), is a highly infectious bacterial infection spread by coughing and sneezing. It causes severe bouts of coughing, which may be accompanied by vomiting and a whooping sound. Whooping cough can last up to three months and is sometimes referred to as the '100 day cough.' The symptoms are more obvious in children, as adults and infants are less like to 'whoop'.¹

Whooping cough in infants can lead to pneumonia, brain damage, convulsions and death. The risk of brain damage ranges from about 1 in 100 to 1 in 1000. The disease is most infectious during the first couple of weeks, when symptoms are like a normal cold. Whooping cough continues to be infectious three to four weeks after the cough starts.

New Zealand is currently experiencing an epidemic of whooping cough with more than 6,700 cases reported since the outbreak began in August 2011.²

Because of the current epidemic, you are more likely to get whooping cough. If you get whooping cough while you are pregnant or after your baby is born, there is a high chance you will pass it onto your baby. Therefore, you should consider having the vaccine to reduce your risk of getting whooping cough. It is also thought that you may pass on some temporary immunity from whooping cough to your baby.

About the vaccine

Boostrix® is used for booster vaccination of adolescents and adults to protect against diphtheria, tetanus and pertussis (whooping cough).

Currently, women between 28-38 weeks of pregnancy are eligible for a free Boostrix® vaccine.

You should have this current booster even if you had a childhood whooping cough vaccination, or one earlier than 5 years ago.

For best protection of the newborn the booster immunisation should be given by the end of the 36th week of pregnancy (ideally between 31-33 weeks):⁴

- This allows time for the woman's immune system to produce protection against whooping cough, reducing the risk she will have the disease when the baby is actually delivered and for the subsequent year when the baby's risk of complications from whooping cough is highest.

- Circulating protection against whooping cough can also pass through the placenta to the baby possibly providing some protection against the disease for a short period of time

All other people in your household, as well as other close family members (such as grandparents) should have a whooping cough vaccination, as they could be at risk of passing it onto your baby. The vaccine is not subsidised for adults, but it is free for children as part of the normal childhood vaccination programme. Your baby should still have their normal course of vaccinations, starting at 6 weeks.

Is this vaccine safe to have in pregnancy?

The pertussis vaccine (Tdap) is a subunit vaccine. Subunit vaccines are not live and are considered safe in pregnancy. "Live" vaccines are not recommended in pregnancy.

Points to note:

- Tetanus toxoid, which is a component of this vaccine, has been given safely for many years in pregnant women.
- There is only limited published information on the use of the whooping cough part of the pertussis vaccine in pregnancy. This information has shown no increase in any adverse effects that occurs during pregnancy. The United States Advisory Committee on Immunisation Practices (ACIP) looked carefully at this data in June 2011, and has recommended that pregnant women should be vaccinated during a whooping cough outbreak.³
- The vaccine contains fragments of the bacteria that cause pertussis disease. This stimulates the immune system to make antibodies against pertussis, but cannot cause the disease. The Tdap vaccine has a reduced amount of immune activating components compared to the childhood vaccine DTaP.
- To read more about the safety of the vaccine, see the information sheet "Pertussis Vaccine for Pregnant and Postpartum Women", from healthinfo.org.nz (search for "pertussis").

FactSheet For Parents and Caregivers

Side effects

- The most common reported side effects are redness and discomfort at the vaccination site and on rare occasions, fever.
- For all vaccines, similar to most medications, an extremely rare allergic reaction called 'anaphylaxis' can occur. Anaphylaxis after immunisation occurs about 1 - 3 times after every one million vaccine doses. All vaccinators will have training and equipment to deal with this situation in the unlikely event of it occurring. No other serious responses to the vaccine have been identified.
- The vaccine should not be given to anyone with severe allergy (anaphylaxis) to a previous dose of this vaccine, a previous dose of diphtheria, tetanus, or pertussis vaccine, or a component of the vaccine.

How effective is the vaccine?

The vaccine provides protection against pertussis for 84 - 88% of those who receive it.

Call your general practice team for an appointment to have the vaccination. Let them know you are coming in for the pertussis booster vaccine, as they may need to order it, which can take 1 - 2 days.

Vaccines are prescription medicines. Talk to your doctor or nurse about the benefits or any risks.

References

1. Munoz FM. Pertussis in infants, children, and adolescents: diagnosis, treatment, and prevention. *Seminars In Pediatric Infectious Diseases*. 2006;17(1):14-9.
2. Ministry of health website, '<http://www.health.govt.nz/yourhealth-topics/diseases-and-illnesses/whooping-cough>' accessed 10/1/2012
3. Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccine (Tdap) in Pregnant Women and Persons Who Have or Anticipate Having Close Contact with an Infant Aged <12 Months --- Advisory Committee on Immunization Practices (ACIP), 2011
4. Gall SA, Myers J, Pichichero M. Maternal immunization with tetanus-diphtheria-pertussis vaccine: effect on maternal and neonatal serum antibody levels. *Am J Obstet Gynecol* 2011;204:334.e1--5.