

Head of Immunisation Centre for Disease Control Postal Address: PO Box 40596 Casuarina NT 0810 Tel: 08 8922 8044 Fax:08 8922 8310 Our Ref: DD2015/02478

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Dear Obstetricians, Midwives and Immunisation Providers

RE: Free diphtheria, tetanus, pertussis vaccine now recommended for pregnant women from 28 weeks onwards

We are writing to all immunisation providers to update recommendations to protect infants from pertussis. New evidence has shown that receiving dTpa vaccine in pregnancy from 28 weeks is more effective in reducing the risk of pertussis in young infants than vaccination of the mother post partum¹.

Why administer dTpa vaccine from 28 weeks gestation instead of after delivery?

The reason for this change is that vaccination in pregnancy protects both the mother from pertussis but also provides passive immunity to the infant. These passive antibodies will protect the infant before they can be vaccinated themselves. Studies from the UK showed very high vaccine effectiveness against pertussis in infants aged <3 months whose mothers received dTPa vaccine in pregnancy¹.

In order to maximize the maternal antibody response and passive antibody transfer the best time to administer the dTpa vaccine is between 28 and 32 weeks gestation, but the vaccine can be given at any time during the third trimester up to and immediately after delivery.

What if dTpa vaccine is not given during pregnancy?

If dTpa vaccine is not given during pregnancy, women should receive the vaccine as soon as possible after delivery to protect the mother from pertussis.

Why does it need to be given every pregnancy?

The level of pertussis antibodies decreases over time, so dTpa should be administered during every pregnancy in order to transfer the greatest number of protective antibodies to each infant.

What about fathers and other significant household carers?

Fathers and other significant household carers can receive free dTpa vaccine from the time the expectant mother has reached 28 weeks of pregnancy. This protects these caregivers and further reduces the potential risk of exposure to the newborn.

DEPARTMENT OF **HEALTH**

Adult pertussis, diphtheria, tetanus vaccine safety

Adult dTpa is safe and effective when given from 28 weeks gestation and while breastfeeding. Studies in the UK have shown evidence of the safety of a maternal vaccination program at the population level. Over 20,000 pregnant vaccinated women were included in this study and no evidence of any increased risk of a range of pregnancy-related outcomes, for either the mother or baby, was found ². Common side effects are redness or soreness at the injection site with less frequent effects being headache, fever or tiredness.

How to order vaccine

• Order the vaccine from your hospital pharmacy as you do for all other vaccines on the NT childhood and adult schedule.

Thank you for your assistance in reducing pertussis in infants, new parents and caregivers. For any further questions please phone your local CDC (see numbers below).

This new initiative will protect mothers from pertussis and also their infants who are most vulnerable to pertussis and its complications.

Yours sincerely

Rosing

Dr Rosalind Webby Head of Immunisation Centre for Disease Control Department of Health

Centre for Disease Control phone no.	
Darwin	8922 8044
Alice Springs	8951 7549
East Arnhem	8987 0357
Katherine	8973 9049
Tennant Creek 8962 4259	

References

1Amirthalingam G, Andrews N, Campbell H, et al. Effectiveness of maternal pertussis vaccination in England: an observational study. *The Lancet* 2014: [Epub ahead of print] doi:10.1016/s0140-6736(14)60686-3.
2Donegan K, King B, Bryan P. Safety of pertussis vaccination in pregnant women in UK: observational study. *BMJ* 2014;349:g4219.