

SESLHD POLICY COVER SHEET



NAME OF DOCUMENT	Diphtheria, Tetanus and Pertussis vaccination for Ante/ Postnatal Women
TYPE OF DOCUMENT	Policy
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DATE OF PUBLICATION	March 2022
RISK RATING	Low
LEVEL OF EVIDENCE	<p><i>Munoz F et al. Safety and Immunogenicity of Tetanus, Diphtheria and Acellular Pertussis dTap Immunisation during Pregnancy in Mothers and infants. JAMA May 2014, Vol. 311 No. 17 pp 1760-1769</i></p> <p>National Safety and Quality Health Service Standards:</p> <ul style="list-style-type: none"> 1 - Clinical Governance 2 - Partnering with Consumers 4 - Medication Safety Standard 5 - Comprehensive Care 6 - Communicating for Safety
REVIEW DATE	March 2027
FORMER REFERENCE(S)	<p>SESLHDPD/132</p> <p>SGH/TSH Clinical Business Rule CLIN034</p> <p>Pertussis Diphtheria Tetanus (DTPa) Vaccination for pregnant Women</p> <p>Pertussis (Diphtheria, Tetanus) Vaccination for Pregnant Women RHW Local Operating Procedure</p>
EXECUTIVE SPONSOR or EXECUTIVE CLINICAL SPONSOR	Clinical Stream Director, Women's and Children's Health
AUTHOR	<p>Alison Brown, CMC, Women's and Children's Clinical Stream Alison.Brown3@health.nsw.gov.au</p> <p>Louise Everitt, CMC, Complex Pregnancy Care SGH Louise.Everitt@health.nsw.gov.au</p>
FUNCTIONAL GROUP(S)	Medicine, Pharmaceutical, Women's and Babies
KEY TERMS	Vaccination, Pertussis, Immunity
SUMMARY	Guidance for staff to offer Diphtheria, Tetanus and Pertussis vaccination during pregnancy and following birth.

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**Diphtheria, Tetanus and Pertussis vaccination
for Ante/Postnatal Women****SESLHDPD/279****1 POLICY STATEMENT**

Pertussis (whooping cough) is a highly infectious illness and it can be life threatening in babies. Vaccination of pregnant women with pertussis vaccine given during pregnancy has shown to be effective in preventing pertussis disease in newborn infants via the transfer of maternal antibodies in utero.

The diphtheria, tetanus and acellular pertussis (dTpa) vaccine either Boostrix or Adacel must be offered to all women in their pregnancy. The optimal time for vaccination is from mid second trimester to early third trimester, (between 20 and 32 weeks). However, the vaccine can be given at any time during the third trimester up to delivery. If the vaccine is given within two weeks of birth, newborns may not receive maximum protection against pertussis.

Women identified as being high risk of preterm birth e.g. previous preterm birth, twins, placenta praevia, should receive their pertussis vaccination at 20 weeks or as soon as possible after this time. Women vaccinated prior to 20 weeks gestation do not need repeat vaccination in the same pregnancy.

If the woman has not received the vaccine during her antenatal period, vaccination in the immediate postpartum period is beneficial to the mother and can provide some indirect protection to her newborn.

Unvaccinated persons in close contact are the most likely sources of pertussis in the newborn. Recently vaccinated parents, grandparents and carer's who are in close contact with a newborn can help reduce the pertussis transmission.

2 TARGET AUDIENCE

Registered nurses, midwives and medical staff.

3 RESPONSIBILITIES

Midwives, registered nurses and doctors caring for antenatal and postnatal women in SESLHD will read and comply with this policy.

4 PROCEDURE

a) The woman is to be offered dTpa between 20 and 32 weeks gestation. The vaccination is recommended with each pregnancy to provide maximum protection to every infant; including those pregnancies closely spaced (e.g. < 2 years).

b) If the woman does not have dTpa vaccine during her pregnancy it is recommended she have the vaccination as soon as possible after childbirth and preferably prior to hospital discharge.

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c) Close family and carers in close contact with infants <6 months of age should be vaccinated at least two weeks before contact with the infant if they have not been vaccinated within the last 10 years. If the dTpa is not given in the third trimester, the cocooning method is advised to protect the baby. This involves all who have close contact with the baby (parents, grandparents, carers) to have a recent dTpa vaccine to reduce the potential of pertussis transmission.

d) Lactating women can have the vaccine and women who have received other vaccines recently can also be offered dTpa.

4.1 Contraindications to administration of vaccine

DO NOT give the vaccine if:

- The woman has had a previous anaphylaxis after a previous dose of acellular pertussis vaccine or anaphylaxis following ANY vaccine
- The woman is suffering from acute severe febrile illness (a temperature of 38°C or more). Vaccination should be postponed and administered at a later date.

4.2 Side Effects

- Local reactions are mild and usually clear up within a few days. Minor pain, swelling, itching and redness around the injection site occurring in more than 10% of all recipients
- Adverse events following immunisation are very rare and usually begin within 15 minutes following vaccination. Signs and symptoms can include: respiratory distress, vomiting, diarrhoea, tachycardia, hypotension and loss of consciousness.

Note - Registered Nurses and midwives (registered with the Nursing and Midwifery Board of Australia) having attained a Certificate in Cardio Pulmonary Resuscitation (CPR) within the last 12 months and working in SESLHD are authorised to administer Adrenaline 1:1000 to pregnant women receiving Pertussis Vaccination in the Antenatal Clinics at St George Hospital, Sutherland Hospital and The Royal Hospital for Women.

4.3 Administration

- Explain rationale behind vaccination and give women, information about Pertussis and vaccination and breastfeeding, including factsheet ['Protect your newborn from whooping cough'](#).
 - Discuss with the woman the reason for the pertussis vaccination including possible common side effects of minor pain, swelling, itching around injection site and potential adverse events and how common they are
 - Where practical vaccinate early in the antenatal visit, this will allow time to observe for any adverse events following immunisation
 - Gain verbal consent for the vaccination and check identity
 - Perform hand hygiene prior to administration

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- Shake the vaccine thoroughly prior to administration and visually inspect for particulate matter. If particles remain, the vaccine should not be administered and be discarded
- Provided the skin is visibly clean there is no need to wipe it with an alcohol wipe. If the skin needs to be cleaned, alcohol and other disinfectant agents must dry before vaccination. This is to prevent inactivation of live vaccines and irritation at the injection site.
- Confer with woman which arm she prefers and administer 0.5 mL Diphtheria, Tetanus and Pertussis vaccination (Boostrix or Adacel) IMI into deltoid region of non-dominant arm:
 - Prescription is documented on the National Inpatient Medication Chart (NIMC); eMeds, by a medical officer
 - dTpa can be administered as part of a standing order, it is the administering midwife’s responsibility to ensure the NIMC is completed by a medical officer within 24 hours See Appendix
- Observe for severe/immediate side effects
 - Can present within hours of vaccination but usually occurs within 15 minutes of vaccination
 - If this occurs, make a CERS call, either rapid response or code blue.
- Severe side effects should be reported to the Public Health Unit for investigation and reporting to NSW Health – on 1300 066 055 or 9382 8333 (Randwick office)
- The vaccine should be refrigerated and stored between +2 to +8⁰ Celsius. It must be stored out of public and patient access, preferably in a locked room.

5 DOCUMENTATION

Record medication brand name, dose, batch number, route, vaccination site, date, name, signature of vaccinator and counter checking clinician in:

- Antenatal Card, eMaternity, electronic medical record and discharge letter
- Medication Chart / eMEDs by administering vaccinator and counter checking clinician
- The record of administration must be checked and countersigned by a medical officer within 24 hours of initial administration

6 REFERENCES

- Australian Technical Advisory Group on Immunisation (ATAGI). Australian Government Department of Health, Canberra, 2018,
- Munoz F et al. Safety and Immunogenicity of Tetanus, Diphtheria and Acellular Pertussis Tdap Immunisation during Pregnancy in Mothers and Infants. JAMA May 2014, Vol. 311 No. 17 pp 1760-1769.
- [NSW Health Policy Directive PD2017_013 - Infection Prevention and Control Policy](#)
- [NSW Health Policy Directive PD2020_050 - Authorised Nurse Immunisers](#)
- [NSW Health Antenatal Pertussis Vaccination Programme Guidelines, 2019](#)
- [NSW Health Medication Handling in NSW Public Hospitals PD2013_043](#)

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- NSW Health Pertussis (Whooping cough) Fact Sheets:
 - <http://www.health.nsw.gov.au/immunisation/pages/wc-newborns.aspx>
 - <http://www.health.nsw.gov.au/immunisation/Pages/whoopingcough-FAQ.aspx>
- [RANZCOG Pertussis Immunisation in Pregnancy, 2019](#)

7 REVISION & APPROVAL HISTORY

Date	Revision No.	Author and Approval
April 2010	0	Christine Catling – Paull Dee Sinclair CMC Clinical Maternity Risk Management
27 July 2011	0	Approved by SESLHD Clinical and Quality Council
July 2014	1, 2, 3 & 4	Dee Sinclair CMC Clinical Maternity Risk Management Margaret Evans CNC IP & C RHW
August 2014	5	Revision endorsed by Leisa Rathborne, Executive Sponsor
August 2018	6	Alison Brown CMC W & C Clinical Stream Margaret Evans CNC IP & C RHW
April 2020	7	Alison Brown, A/CMC WCCS, Louise Everitt CMC Complex Pregnancy Care SGH, Faith Robinson CME SGH, Chantelle Smith; Pharmacist RHW.
May 2020	7	Major review endorsed by Executive Sponsor. RHW, SGH and TSH local policies combined into policy. Draft for comment period.
June 2020	7	Processed by Executive Services prior to submission to Quality Use of Medicines Committee and Clinical and Quality Council.
September 2020	7	Approved at July Quality Use of Medicines Committee. Approved at August Clinical and Quality Council. Published by Executive Services.
December 2021	8	Minor review by Alison Brown, A/CMC WCCS, Louise Everitt CMC Complex Pregnancy Care SGH, Faith Robinson CME SGH. Links to Adrenalin Standing Order removed. To be tabled at Quality Use of Medicines Committee (QUMC).
February 2022	9	QUMC recommended further review and amendment. Update made by A.Brown CMC WCCS. Approved by Executive Sponsor. To be retabled at QUMC.
March 2022	9	Approved at Quality Use of Medicines Committee.

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8 APPENDICES

Standing Orders:

1. St George Hospital /The Sutherland Hospital

- [Boostrix® \(DTPA\) Maternal - Standing Order For The Administration Of Dtpa \(Boostrix®\) Maternal In Maternity Services](#)

2. Royal Hospital for Women

- [Pertussis, diphtheria and tetanus vaccine in antenatal and postnatal services](#)