New Zealand College of Midwives
TE KĀRETI O NGA KAIWHAKAWHANAU KI AOTEAROA

# Consensus Statement: **Anti-D prophylaxis administration during pregnancy and early postpartum**

**The New Zealand College of Midwives recognises the importance of anti-D prophylaxis in reducing alloimmunisation in rhesus negative wāhine/women. The provision of anti-D prophylaxis following birth reduces the risk of haemolytic disease for the subsequent newborn. The provision of anti-D prophylaxis during pregnancy may reduce the incidence further but more high quality evidence is required to confirm this.**

**District Health Board (DHB) maternity services need to ensure clear pathways are developed and resources provided to support practitioners when policies/guidelines recommend and identify requirements for routine antenatal anti-D prophylaxis.**

## Rationale:

- During pregnancy, a Rhesus negative (Rh-negative) wahine/woman may develop antibodies when her fetus is Rhesus positive (Rh-positive).
- The production of anti-D antibodies occurs in response to the presence of fetal red blood cells in the maternal circulation; this maternal immune response towards the fetal Rhesus antigen is known as 'sensitisation' or alloimmunisation[2,3].
- It is not always possible to identify when a wahine experiences a potential sensitising episode during pregnancy
- Alloimmunisation against Rhesus Dh red cell antigen causes severe haemolytic disease in the pēpi/baby.
- Administration of anti-D immunoglobulin at approximately 28 and 34 weeks during pregnancy to Rh(D) negative wāhine who have not actively formed their own anti-D results in a reduction of sensitisation from about 1% to 0.3%[3].
- There is observational evidence but no high level evidence to support the use of routine antenatal anti-D prophylaxis (RAADP)[4,5].
- Not all Rh-negative wāhine will carry a Rh-positive fetus and therefore routine antenatal prophylaxis will mean that a percentage of wāhine will be given anti-D immunoglobulin when it was not required[7].
- Fetal RHD genotyping using maternal blood could identify those wāhine who do not need this product during pregnancy but this is not currently available for all women in Aotearoa New Zealand.
- DHBs are developing policies to reflect guidelines that recommend the routine administration of anti-D prophylaxis during pregnancy which will have an effect on workload and resourcing of midwives.
- Midwives are not resourced to provide antenatal anti-D prophylaxis in the community.

**Practice Guidance:**

- A midwife can prescribe and administer anti-D immunoglobulin.
- If anti-D immunoglobulin is prescribed and/or administered by a midwife it is the midwife's professional responsibility to uphold wāhine rights to informed decision making and consent[1].
- As anti-D Immunoglobulin is a blood product, there is the potential for transmission of blood borne diseases although the risk of this happening is very low[2].
- In Aotearoa blood donations are routinely screened for the infections: HIV, syphilis, hepatitis B and hepatitis C[2].
- There is no evidence that the anti-D Immunoglobulin injection used in Aotearoa has ever spread infections including HIV/AIDS or hepatitis[2,5].
- Anti-D immunoglobulin should be offered and administered within 72 hours of any potentially sensitising event[3].
- Consent processes and documentation requirements must be completed.
- Many antenatal sensitising events will require obstetric assessment and it is important that the wāhine blood group is known to care providers.
- An allergic reaction may occur after injection of blood products, including anti-D Immunoglobulin, though this is rare (less than once each year in Aotearoa)[4,5,6].
- NZ Blood provides guidance on the use of anti-D immunoglobulin during pregnancy and the postpartum period including indications for use and dosage[3]. https://www.nzblood.co.nz/assets/Transfusion-Medicine/PDFs/111G130.pdf

**References:**


1 .New Zealand College of Midwives, 2016. Consensus Statement; Informed Consent and Decision Making. New Zealand College of Midwives; Christchurch

2. New Zealand Blood Service, 2013. Use of Rh-D immunoglobulin during pregnancy and the postpartum period 111G13003 https://www.nzblood.co.nz/assets/Transfusion-Medicine/PDFs/111G130.pdf

3. Use of Rh D immunoglobulin (Anti D immunoglobulin) during pregnancy and the post partum period. National 111G13006 7/12/2020

4. NZ Blood 2020. Routine Antenatal Anti-D prophylaxis. For pregnant women who are Rh(D) negative

5. Your guide to blood transfusion anti D immunoglobulin Sept 2020 https://www.nzblood.co.nz/assets/Transfusion-Medicine/PDFs/111I004.pdf

6. Medsafe 2018 https://www.medsafe.govt.nz/profs/Datasheet/r/RhDimmunoglobulinVFinj.pdf

7. Kent, Julie & Farrell, Anne-Maree & Soothill, Peter. (2014). Routine administration of Anti-D: The ethical case for offering pregnant women fetal RHD genotyping and a review of policy and practice. BMC pregnancy and childbirth. 14. 87. 10.1186/1471-2393-14-87.


***Ratification:***

*This statement was ratified at the New Zealand College of Midwives SGM on 7/7/21*

The purpose of New Zealand College of Midwives Consensus Statements is to provide women, midwives and the maternity services with the profession's position on any given situation. The guidelines are designed to educate and support best practice.
All position statements are regularly reviewed and updated in line with evidence-based practice.