

**Clinical Practice
Guideline
Department**
**Anti-RH (D) Immunoglobulin Antenatal and
Post Natal Administration
Transfusion Safety/ Blood Management**
Target Audience

This guideline is applicable to all Medical and Nursing staff.

Performed by:-

- Registered Midwife.
- Registered Nurse.
- Student midwife – Registered Nurse.
- Bachelor of Midwifery Student midwife - under direct supervision of midwife.

Purpose

Rh (D) negative women are at risk of alloimmunisation resulting in the development of anti-D antibodies that are able to cross the placenta causing haemolysis to such an extent that the foetus/ newborn is at risk of serious morbidity and mortality. The administration of passive anti-D at times of actual and potential foeto-maternal haemorrhage (FMH) and routine prophylaxis has been shown to reduce the rate of alloimmunisation.

Guidelines have been established for the recommended use of anti- D in pregnancy and postpartum, these recommendations are endorsed by RANZCOG, Australian Red Cross Blood Services, National Health and Medical Research Council, and Australasian/New Zealand Blood Transfusions Guidelines. To enable implementation, the following products are available:

All Rhesus negative mothers who do not have Anti-D antibodies present in their serum should receive Anti-D Immunoglobulin within 72 hours following:

- Birth of a live infant who is Rh positive
- Stillbirth
- Abortion

To facilitate the efficient and appropriate administration of Anti-D Antibody, to Rh (D) negative pregnant women.

Issuing Anti-D
Antenatal / postpartum indications (Emergency / Admitted Consumer)

- Human Anti-D Antibody is issued by Frankston Hospital Blood Bank on an individual basis after request by Doctor.
- Kleihauer performed if indicated, further doses issued if necessary, (100IU of Human Anti-D antibody covers 1ml foetal red cells, for example RhD immunoglobulin 625 IU is sufficient to protect against a foetomaternal haemorrhage of 6.0mL of foetal red cells/12mL whole foetal blood).

Routine Prophylaxis for Rh (D) negative women in first pregnancy reaching 28 weeks

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| PROMPT doc no: 122310 Version: 5.0 | | |
| First created: 14/12/2015 | Page 1 of 6 | Last reviewed: 11/01/2021 |
| Version changed: 11/01/2021 | UNCONTROLLED WHEN DOWNLOADED | Next review: 30/06/2021 |

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gestation

At 28 Weeks

- Requisition form.
- Rh status must be confirmed prior to releasing Anti-D at 28 weeks.
- Antibody screen should be ordered by Medical Officer or Midwife.
- Anti D will be provided by the hospital to the consumer who will return to GP/Consultant office for administration.
- Result of antibody screen must be received and read by the doctor or midwife confirming antibody status before immunization is given.
- **Any antibody identified with initial bloods or at 28 weeks antibody screen should have a consultation as soon as convenient. This positivity is not limited to Anti-D.**

34-36 Weeks (see diagram page 5)

- Requisition form.
- Anti-D given to consumer to return to GP/consultant office for administration.
- No antibody screen needed.

Post Natal

- Ensure maternal blood and cord blood is collected for antibodies and Kleihauer after delivery of the baby and documented.
- The request slip must state:
 - Consumer Name and UR Number.
 - Date of Delivery.
 - Time of birth.
 - Sex of child.
 - Medical Officer.
 - Maternal Blood Group.
 - If & when she has had Anti-D during the pregnancy. Recent dose of Anti-D may exclude
 - the need for Kleihauer
- Operating Suite staff are responsible for taking cord blood samples in the case of L.U.S.C.S.
- All results should be documented on the clinical pathways. If the baby's blood is Rh positive,
- Coombs Test negative, and maternal antibodies are negative then the procedure is as follows:
 - Write results in book at Nurse's Station.
 - Phone Medical Officer with results and request an order for Rh D Immunoglobulin 625 I.U. It is recommended that the same consumer form be used throughout.
 - Dorevitch Pathology Frankston Hospital will issue one ampoule of Rh D Immunoglobulin.

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|------------------------------------|------------------------------|---------------------------|
| PROMPT doc no: 122310 Version: 5.0 | | |
| First created: 14/12/2015 | Page 2 of 6 | Last reviewed: 11/01/2021 |
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Guideline
Department**
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- Nursing staff will arrange (via the P.S.A.) the collection of the ampoule from Pathology Blood Bank Fridge.
- Two members of nursing staff must check the Rh D Immunoglobulin before it is given to the consumer.
- After administration the following must be recorded:
 - Babe's blood group, Rh factor and result of Coombs test on the Clinical Pathway.
 - Result of maternal antibody test on the Clinical Pathway.
 - Rh D Immunoglobulin: Time and Date given on requisition form MR/ and signature.
- Enter information on appropriate computer screen.
- If the Kleihauer test indicates a large foeto-maternal haemorrhage, a further dose of Rh D Immunoglobulin may be indicated. This is to be recorded in the blood bank, on the computer and clinical pathway.

Register

- A register of Anti-D administered must be kept for traceability purposes.
- A copy of this register should be faxed to Frankston Pathology monthly.

PROBLEMS / QUESTIONS:

If any problems arise please contact the Frankston Hospital Blood Bank

- Phone: 9784 7535.
- Fax: 9781 2884.

INDICATIONS AND CONTRAINDICATIONS

- See diagram on page 5.

CLINICAL CONSIDERATIONS

- Human Anti-D Antibody is stored in a monitored fridge in Frankston Hospital Blood Bank.
- Human Anti-D antibody is only available after appropriate requisition and pre-injection clinical data has been obtained.
- A woman who is Rh-negative must still be given Anti-D at times other than stated in procedure, if there is a potential sensitising event e.g. cvs, amniocentesis, cordocentesis, severe abdominal trauma, antepartum haemorrhage.
- Any antibody detected requires a consultation with the doctor.
- Whenever a pregnant woman who is Rh negative is having her blood group & Rh antibodies checked, the request slip must state:
 - The gestation of the pregnancy.
 - If she has Anti-D during the pregnancy & when.
 - If she is to be given prophylactic Anti-D.
 - It is recommended that the same consumer form be used throughout the gestation.

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|------------------------------------|------------------------------|---------------------------|
| PROMPT doc no: 122310 Version: 5.0 | | |
| First created: 14/12/2015 | Page 3 of 6 | Last reviewed: 11/01/2021 |
| Version changed: 11/01/2021 | UNCONTROLLED WHEN DOWNLOADED | Next review: 30/06/2021 |

**Clinical Practice
Guideline
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**Anti-RH (D) Immunoglobulin Antenatal and
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- A register of recipients of Anti-D/WinRho must be maintained for traceability purposes.
- A copy of this register should be faxed to Frankston Blood Bank monthly.

ADMINISTRATION

Informed consent must be obtained before administering the Anti D and documented on the consent and administration form for Anti-D immunoglobulin

Anti-D is an intramuscular injection that must be administered in accordance with the Nursing Clinical Practice Guideline – Injections

2 accredited members of staff must check the Anti-D

Anti-D is frequently administered in the outpatient setting, it is important to ask the patient to state their name, address and UR number to ensure the correct identification of the patient. Where Anti-D is administered as an inpatient staff must ask the patient to state their name and date of birth, check this against the patient's wristband along with the patients UR number, there must be no discrepancies between the identification details on the prescription, the verbal check, and the wristband, if there are discrepancies these must be rectified prior to the administration of the Anti-D immunoglobulin.

COMPLICATIONS

- If a mother refuses Ant-D as preventive treatment because of religious or personal reasons a refusal must be signed on the Anti-D immunoglobulin consumer consent, order & administration form MR/553120.

Key Aligned Documents

- Hand Hygiene and Aseptic Technique
- Medical Treatment Decisions & Consent
- Patient Identification & Procedure Matching
- Traceability of Transfused Blood and Blood Products

References

- 1) [1] NHMRC (1999). Summary of guideline recommendations for the use of Rh D immunoglobulin (Anti-D) in obstetrics. <http://www.nhmrc.gov.au/publications/pdf/wh27b.pdf>
- 2) [2] NHMRC (2003). Guidelines on the prophylactic use of Rh D immunoglobulin (anti-D) in obstetrics. <http://www7.health.gov.au/nhmrc/publications/synopses/wh33.htm>
- 3) [3] RANZCOG (2004). Guidelines for the use of Rh D immunoglobulin

Evaluation

Effectiveness of this guideline will be monitored and evaluated through:

- VHIMS incident reporting
- Blood Management Committee
- Audits will be conducted on a yearly basis in conjunction with Blood Bank

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|------------------------------------|------------------------------|---------------------------|
| PROMPT doc no: 122310 Version: 5.0 | | |
| First created: 14/12/2015 | Page 4 of 6 | Last reviewed: 11/01/2021 |
| Version changed: 11/01/2021 | UNCONTROLLED WHEN DOWNLOADED | Next review: 30/06/2021 |

**Clinical Practice
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Department**

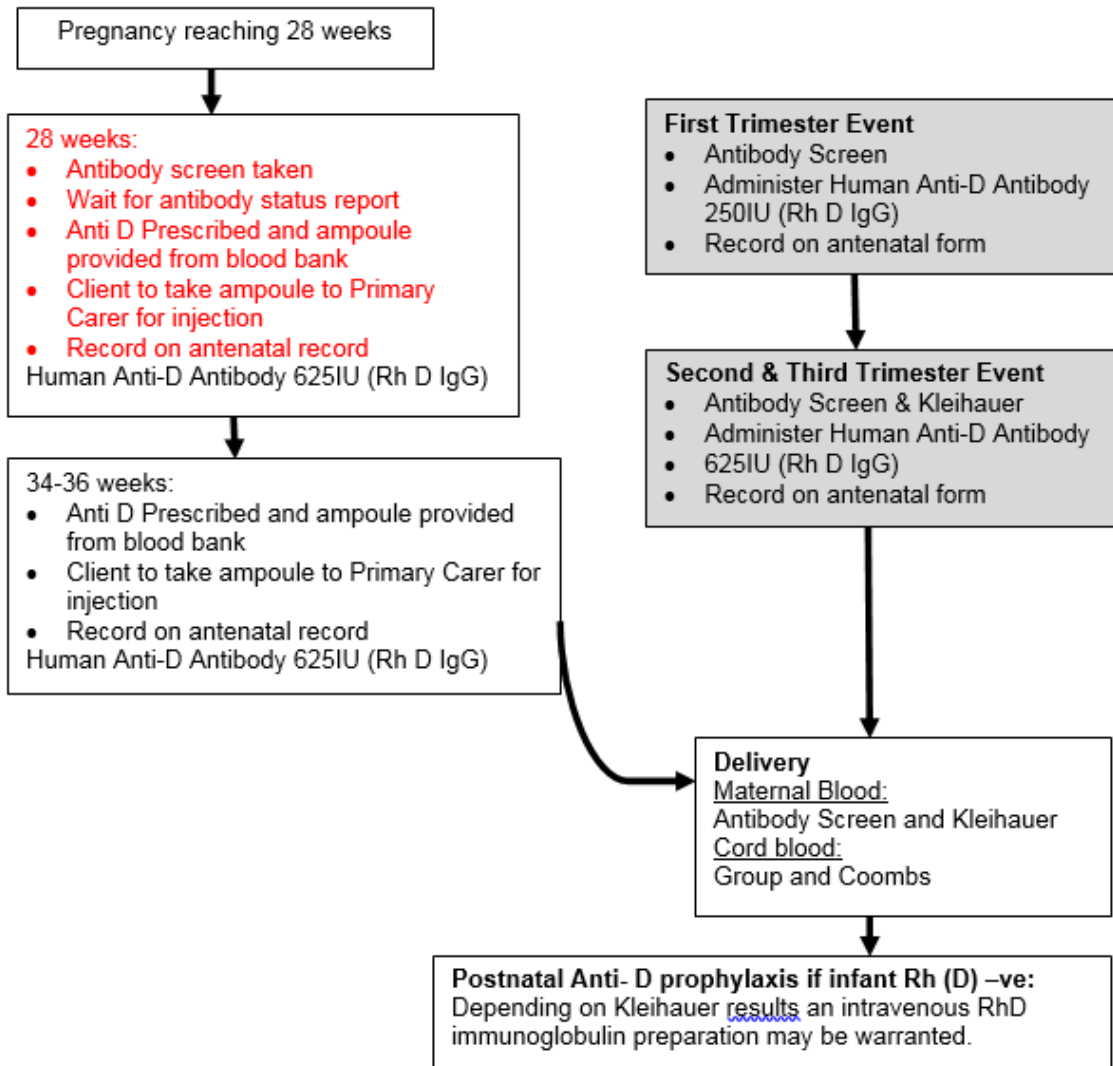
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| Document management | Position |
|--|---|
| Executive Sponsor: | Executive Director Medical Services |
| Document Owner: | Transfusion CNC/Women's Health Unit |
| Document Author | Transfusion CNC/Women's Health Unit |
| Approved by: | Blood Management Committee |
| Date created/revised in archived system: | 1985, 1989, 1992, 1993, 1995, 05/1999, 03/2003, 05/2004, 07/2006, 06/2010, 06/2014, 08/2019 |

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| PROMPT doc no: 122310 Version: 5.0 | | |
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NOTE: Everyone has the right to decide whether or not to accept treatment. Before giving consent, it is important for mothers to understand why they are being offered treatment and to understand its risks & benefits to them and their baby. We strongly recommend that Rh(D) negative mothers have the preventive injection and so protect their next baby from the risk of severe anaemia, brain damage or death caused by Haemolytic Disease of the Newborn. If mother refuses because of religious or personal reasons, the consequences of refusal must be fully discussed and understood by the consumer.

A Refusal of anti (D) must be signed on the Anti-d immunoglobulin consumer consent, order & administration form MR/553120.