
Type: **Policy**

Name: **Anti-D immunoglobulin administration and Kleihauer testing**

Purpose

A feto-maternal haemorrhage (FMH) with blood group incompatibility between the fetus and the mother may initiate the production of maternal red cell antibodies. These maternal antibodies can cross the placenta and cause haemolytic disease of the fetus and/or newborn (HDFN). Although other blood group antigens may evoke a similar response HDFN most commonly occurs when an Rh (D) negative mother gives birth to an Rh (D) positive infant.

Rh (D) positive fetal cells activate the production of maternal anti-D, which subsequently destroy the red blood cells of the fetus. This can be prevented by the administration of Anti-D immunoglobulin (Ig) before maternal Anti-D is activated.

This policy is to ensure that:

1. Healthcare practitioners are familiar with when they need to take a Kleihauer during both the antenatal and postpartum periods.
2. The correct dose of Anti-D Ig is administered within 72 hours when clinically indicated.

Scope

- All midwives
- All registered nurses
- All access holders
- All WHS obstetricians, registrars, senior house officers
- All laboratory staff
- All blood transfusion staff

Definitions

Anti-D Immunoglobulin (Anti-D Ig)

- Anti-D immunoglobulin (Anti-D Ig) is manufactured from human plasma.
- Anti-D Ig is available in two forms in New Zealand: Rh (D) Immunoglobulin and Rhophylac.
- It is administered to prevent the development of maternal Anti-D Ig in Rh (D) negative women exposed to incompatible fetal red blood cells (RBC) in either the current or a subsequent pregnancy.
- All women who are Rh (D) negative, who have a potentially sensitising antenatal event or who give birth to an Rh (D) positive infant should have Anti-D Ig administered.

Kleihauer

- The purpose of obtaining a Kleihauer is to establish the size of the FMH and to ascertain the dose of Anti-D Ig required to prevent an Rh (D) negative woman forming red cell antibodies.
- After the 20th week of pregnancy the magnitude of the FMH should be assessed to ensure that further doses of Anti-D Ig are given, if required.
- A Kleihauer must be taken within 2 hours of an antenatal sensitising event and/or birth.
- If a woman presents more than 2 hours following a sensitising event a Kleihauer must still be taken.

DAT (Direct Coombes Test)

A test performed to detect any maternal antibodies that may be attached to the infant's RBC.

Indications

Sensitising event

All Rh (D) negative women who have experienced one of the following sensitising events **may** require Anti-D Ig but not all will require a Kleihauer. Use the following table to determine clinical requirements:

Event	<u>Kleihauer testing required</u>	<u>Anti-D Ig required</u>
Labour and birth	Yes	Yes If Rh (D) positive infant
Ectopic pregnancy	No	Yes
Miscarriage (threatened or actual at any gestation)	No	Yes
Termination of pregnancy	No	Yes If Rh (D) positive infant
Antepartum haemorrhage	Yes	Yes
External cephalic version – (either performed successfully or attempted)	Yes	Yes
Suspected placental abruption	Yes*	Yes
Abdominal trauma	Yes*	Yes
Intrauterine fetal death	Yes*	Yes
Uterine pain suspicious of concealed abruption	Yes*	Yes
Chorionic villi sampling	No	Yes
Amniocentesis	No	Yes
Cordocentesis	No	Yes
Fetal reduction	No	Yes
Insertion of fetal shunts	No	Yes
Any invasive antenatal procedure	No	Yes

* All Rh (D) positive and negative women will require a Kleihauer if one of these clinical situations is suspected or present. Anti-D Ig only needs to be administered to the Rh (D) negative women.

Antenatal Prophylaxis

Prophylactic Anti-D Ig is not routinely given during the antenatal period in New Zealand. It is however acknowledged that the New Zealand Blood Service (NZBS) and the Royal Australia New Zealand College of Obstetrics and Gynaecology suggest that all Rh (D) negative women who have not actively formed Anti-D Ig should be offered prophylactic at approximately 28 weeks gestation and again 34 weeks gestation.

For women whose LMC requests it, prophylactic Anti-D Ig 625IU can be administered at both 28 and 34 weeks gestation. See *Procedure section (c)*.

Routine postpartum Anti-D administration is still required if the woman has received antenatal prophylaxis. Birth is considered a major sensitising event making postpartum administration essential to avoid the development of maternal antibodies in subsequent pregnancies.

Contraindications

The following are contraindications to administering Anti-D Ig:

- The infant is known to be Rh (D) negative.
- An Rh (D) negative woman who has previously formed her own Anti-D Ig. (A notable exception however is when the preformed anti-D is due to the antenatal administration of Anti-D Ig – i.e. ‘passive’ anti-D).
- An Rh (D) positive woman.
- A woman with a previous history of an anaphylactic reaction to an immunoglobulin.
- A woman with a previous history of a severe systemic reaction to an immunoglobulin.
- The woman declines Anti-D Ig after full consultation. This may include Jehovah’s Witnesses as Anti-D Ig is extracted from donor blood.

Risks and precautions

Clinicians using the Kleihauer test should be aware of the tests limitations.

- The Kleihauer is less reliable during the 1st and 2nd trimester of pregnancy as an increased level of fetal haemoglobin is already present in the maternal RBC
- Although the Kleihauer can detect a FMH of 0.1ml or less, false positive and false negative results and problems with specificity do exist
- A negative Kleihauer result does not rule out the possibility of a FMH and therefore does not remove the need for Anti-D Ig
- The results of a clotted, leaking or haemolysed Kleihauer specimen may produce a false negative result where by underestimating the size of the FMH.
- The woman’s body weight may affect the interpretation of the test result. Where body weight exceeds 100kg, an additional dose may be appropriate

Discussion

- The widespread adoption of postpartum immunoprophylaxis with a single dose of Anti-D Ig has dramatically reduced the incidence of Rh (D) immunisation and HDFN. However despite this postnatal decline the incidence of immunisation which occurs during pregnancy remains at 1-2%.
- Small bleeds of less than 1ml of fetal RBC occur in 96% of all pregnancies and a large bleed of approximately 30mls blood will occur in 0.3% of all pregnancies. Although situations are recognised where it is more likely that a large FMH may occur, occult bleeds do occur without significant signs or symptoms in either the woman or the fetus. 1ml of fetal red cells is roughly equivalent to 2ml of whole blood.
 - The minimum volume of fetal Rh (D) positive red cells that could immunise an Rh (D) negative woman is between 0.10 - 0.25mls.

Procedure

Procedure by gestation

Note: *Anti-D Ig available in two doses - refer Appendix 1 for required dose size.*

a) An antenatal sensitising event that occurs before 20 weeks

This includes women who have experienced a termination of pregnancy and/or miscarriage.

- All pregnant women should have a current ABO and Rh (D) result in their hospital records. The lead maternity carer (LMC) must ensure that these results are available.
- The woman should be made aware of the benefits, risks and side effects of Anti-D Ig administration.
- Ensure that the woman has been provided with a copy of the NZBS pamphlet 'Anti-D Immunoglobulin – Your Guide to Blood Transfusion'.
- Provide the woman with an opportunity to have any questions that she may have answered.
- A registered midwife or medical practitioner must ensure that the 'request for use of blood products' form is completed and signed by the woman prior to the administration of Anti-D Ig.
- Anti-D Ig given within the previous three months **must be** documented within the 'request for blood bank tests and blood components or products' form.

b) An antenatal sensitising event that occurs after 20 weeks

- After 20 weeks gestation a Kleihauer must be taken within two hours of the sensitising event occurring
- Women who present after two hours of the sensitising event should have a Kleihauer taken and be given 625 IU of Anti-D Ig. An additional dose will be recommended if the test shows > 6ml of fetal red cells.
- Document any Anti-D Ig given in the previous three months on the laboratory form.

- The results of the Kleihauer must be checked to determine what dose of Anti-D Ig is required (Appendix 1).
- Rhophylac is given in consultation with Transfusion Medicine Specialist if higher doses of Anti-D Ig are required.
- A negative Kleihauer result does not remove the need for Anti-D Ig
- For Anti-D Ig administration follow all of the steps in the section 'a) *antenatal sensitising event that occurs before 20 weeks*'

c) Antenatal prophylactic Anti-D Ig for inpatients 28 weeks and 34 weeks gestation

Routinely offered by some LMCs and for high risk inpatients in Wellington Regional Hospital. For more information see section Prophylactic Anti-D Ig.

- Blood should be taken for red cell antibody screening prior to the administration of Rh (D) immunoglobulin, in order to detect those who have already become immunised and formed Rh (D) antibodies. At 34 weeks gestation, the red cell antibody screen may be omitted if prophylaxis was given at 28 weeks gestation.
- For Rh (D) immunoglobulin administration follow all of the steps in the section 'a) *antenatal sensitising event that occurs before 20 weeks*'

d) Postnatal care after 20 weeks

The most common time for Rh (D) positive fetal cells to enter the maternal circulation is at birth. Without the administration of Anti-D Ig, an Rh (D) negative woman who gives birth to an Rh (D) positive infant has a 7.2% risk of developing Rh (D) antibodies within six months of the birth, and a significantly higher risk (15%) of sensitisation in a subsequent pregnancy. Therefore, all Rh (D) negative women who have given birth to an Rh (D) positive infant or if the infant's Rh (D) status was not determined will require a Kleihauer and Anti-D Ig.

- A Kleihauer must be taken within two hours of the birth.
- The LMC has a duty to ensure that both the cord blood and Kleihauer specimen are taken, that the laboratory request forms are completed correctly and that both specimens are received at the laboratory. In addition to this the LMC must ensure that the results are followed up and that appropriate action is taken.
- If the woman is discharged home before her infant's blood group and Kleihauer result is known it is the responsibility of the LMC to contact NZBS Wellington Hospital Blood Bank by phone extension 6961 or fax extension 5982 (24/7 service) or access results on MAP. If the woman is transferred to secondary care and remains in hospital this role will be undertaken by the hospital-based midwife.
- Once the infant's blood group is known the results of the Kleihauer are checked in order to determine what dose of Anti-D Ig is required (Appendix 1). A negative Kleihauer result does not remove the need for Anti-D Ig.

- Postpartum prophylaxis with Anti-D Ig must occur within 72 hours of birth, **even if the woman has had recent antenatal Anti-D Ig. Additional doses are based on Kleihauer results.**

Requesting and administering Anti-D immunoglobulin

- Complete a 'request for blood bank tests and blood components or products' form specifying the dose of Anti-D Ig that you require. An A109 'blood transfusion record' must also be completed. Both forms are sent to Wellington Hospital Blood Bank.
- When reconstituting Rh (D) Immunoglobulin follow the manufacturer's instructions carefully. Rhophylac 1500 IU is presented in a pre-filled 2ml syringe.
- Anti-D Ig must only ever be administered to the woman it was issued for.
- Document in the woman's notes and on the national medication record that Rh (D) immunoglobulin/Rhophylac has been administered. Record procedure in PIMs.
- Record the batch number in the woman's notes
- Attach the compatibility identification label to the A109 Blood transfusion record form
- Administer the Anti-D intramuscularly (IM).
- When an IM injection is contraindicated e.g. (severe thrombocytopenia) then Rhophylac may be given intravenously (IV) or intramuscularly (IM). However, the CSL Anti-D Ig must never be given IV as there is the potential for anaphylaxis
- If for any reason the Anti-D Ig is not used it should be returned to Blood Bank within 30 minutes

Equipment

The following equipment can be used for both Kleihauer and cord blood specimen collection:

- Ethylene Diamine Tetra Acetic acid (EDTA) vacutainer – purple top (for both Kleihauer and cord blood collection)
- C&C DHB laboratory request form

For Anti-D Ig administration:

- Request for use of blood products consent form
- Request for blood bank tests and blood components or products form
- National Medication Chart
- A109 – Blood component and product transfusion record
- Anti-D Ig vial (s)
- Needle – 20 gauge
- Syringe – 3ml

Documentation

Documentation relating to maternal and infant blood groups, antibody status and Anti-D Ig administration should be made in the following locations:

- Maternity booking form
- Multidisciplinary maternity care plan
 - Current pregnancy tests
 - Postnatal daily care plan
- PIMs electronic record
- National Medication Chart
- Request for use of blood products consent form
- A109 – Blood component / blood and product transfusion record
- Well child book - first week assessment (babies blood group)

Laboratory processing of specimens

1. Cord blood collection

- Cord blood must be collected from the infants of all Rh (D) negative women and sent to Blood Bank in order to determine the infant's blood group
- Clearly written or labelled on the EDTA vacutainer must be the infant's details documenting:
 - Baby of ...[Maternal first name and surname]
 - NHI number
 - Sex
 - Date of birth
 - The date and time the specimen was collected
 - Signature of the phlebotomist
- The specimen must also be labelled as **cord blood**
- Sticky labels will be accepted on the laboratory request form.
- The laboratory request forms must be completed accurately and must include details of the maternal ABO and Rh (D) group
- The contact details of the LMC responsible for follow up must also be clearly documented on the laboratory request form

2. Cord blood results

- Results will be telephoned through to the ward if the infant is Rh (D) positive or if the infant has a positive DAT result.
- Results are available through the hospital computer (Laboratory, Blood Bank), and where requested hard copies can be forwarded to the location documented on the requesting laboratory form

- Urgent cord blood results can be obtained directly from NZBS Wellington Hospital Blood Bank on extension 6961, or fax number 5982

If the mother is Rh (D) negative and the infant is Rh (D) negative:

- No further action is required
- Document these results in both the woman and her infant's notes (including PIMs), and within the Well Child Book (infant blood group)

3. Maternal Kleihauer specimens

Laboratory processing of Kleihauer specimens: From 0800-1700hrs Monday to Friday Kleihauer specimens are tested first thing in the morning and then as they arrive during the day. A batch is also tested on Sunday morning, to ensure that the 72 hour timeframe can be met. On 4 day holidays such as Easter, Christmas and New Year, Kleihauer specimens are tested twice, spaced over the holiday.

- The Kleihauer specimen must be gently inverted 6 to 8 times after collection to prevent the sample clotting. It must never be shaken
- The Kleihauer must be placed in a separate specimen bag from the cord blood
- The Kleihauer request form and sample are sent to Haematology.
- Where Anti-D immunoglobulin has been given within the previous three months document on the laboratory form.

LMC's requesting Anti-D Ig for women who are not inpatients at the DHB

- If the woman is an outpatient the request and administration process for Anti-D Ig is the responsibility of the LMC or prescribing doctor. A collection time should be arranged prior to arrival at NZBS Blood Centre.
- LMC's in the community can obtain Anti-D Ig on prescription from NZBS Blood Centre during business hours 0800-1700hrs Monday to Friday phone/fax (04) 380 2250. Usually the laboratory is contacted so they can prepare the product (dispense/label).
- The woman can collect the Anti-D Ig with her prescription from the NZBS in Newtown during business hours 0800-1700hrs Monday to Friday, and takes it back to her LMC (or GP if pre-arranged) to be administered. Anti-D cannot be collected by the woman's partner or other relative. There is no charge to the woman.
- After hours NZBS can issue Anti-D Ig on a blood product request form, but the LMC must collect the immunoglobulin

References

Australian and New Zealand Society of Blood Transfusion Inc. (2016). *Guidelines for laboratory assessment of fetomaternal haemorrhage. 2nd edition.* Australian and New Zealand Society of Blood Transfusion Inc.

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Enkin, M., Keirse, M., Neilson, J., Crowther, C., Duley, L., Hodnett, E & Hofmeyr, J. (2000). Rhesus iso-immunization. *A guide to effective care in pregnancy and childbirth, 3rd edition*. Oxford, UK: Oxford University press. www.maternitywise.org/prof/.

NZ Blood bank New Zealand Blood Service. (2016). [Transfusion Medicine Handbook. New Zealand Blood Service.](#)

RANZCOG guideline Guidelines for the use of RH (D) Immunoglobulin (Anti-D) in Obstetrics (November 2015)

The Royal Australian & New Zealand College of Obstetricians and Gynaecologists. (2015). Guidelines for the use of Rh D immunoglobulin (Anti D) in obstetrics in Australia. (2016). *Transfusion Medicine Handbook*. New Zealand Blood Service.

The Royal Australian & New Zealand College of Obstetricians and Gynaecologists. (2003). Guidelines for the use of Rh D immunoglobulin (Anti D) in obstetrics in Australia. www.ranzcoq.edu.au.

Associated documents

Hospital Policy, Procedures and Guidelines:

- [Blood component and blood product transfusion](#)
- [Informed consent \(adults and children\)](#)
- [Ectopic pregnancy – Management of](#)
- [Molar pregnancy – management of](#)
- [Medical \(non-surgical\) management of a miscarriage < 13 weeks gestation](#)
- [Antenatal diagnostic screening and testing for aneuploidy](#)
- [Local anaesthesia TOP Second trimester termination of pregnancy using mifepristone and Misoprostol](#)
- [Second Trimester TOP for MFM patients](#)
- [External cephalic version](#)
- [Intrauterine fetal death \(IUFD\) / stillbirth](#)

[Cord blood serology and Kleihauer collection](#)

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Appendices

Appendix 1: Interpretation of the Kleihauer result and the dose of Anti-D Ig required

Appendix 2: Obtaining Anti-D immunoglobulin at Kenepuru hospital and maternity unit.

Appendix 3: Obtaining Anti-D immunoglobulin at Paraparaumu maternity unit.

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Appendix 1 Interpretation of the Kleihauer result and the dose of Anti-D Ig required

Dose of Anti-D Ig required and interpretation of the Kleihauer result

- Once the Kleihauer has been analysed one of the following results will be recorded:
 - a. No fetal cells seen
 - b. FMH < 6 mls of fetal red cells
 - c. FMH > 6 mls of fetal red cells
- If a or b are reported then 625 IU of Anti-D Ig is required.
- Whereas 'c' indicates that a significant FMH has occurred. This result is always accompanied by a comment and a recommended dose of Anti-D Ig.

Brands and doses of Anti-D Ig available within New Zealand:

- Rh (D) Immunoglobulin 250 IU (NZBS/CSL)
- Rh (D) Immunoglobulin 625 IU (NZBS/CSL)
- Rhophylac 300mcg (1500iu) (CSL Behring).

For any sensitising event which occurs prior to 12 weeks gestation and the fetus is a singleton, 250 IU Rh (D) immunoglobulin may be prescribed, requested and administered. If this is a multiple pregnancy 625 IU Rh (D) Immunoglobulin may be required.

For any sensitising event which occurs after 12 weeks gestation the standard dose of Rh (D) Immunoglobulin is 625 IU. This is the usual dose administered unless the Kleihauer (for pregnancies greater than 20 weeks gestation) indicates that a significant FMH has occurred (> 6 ml fetal red cells).

The timing of Anti-D Ig administration:

- Anti-D Ig prophylaxis should be given as soon as possible and always within 72 hours of an antenatal sensitising event or following birth.
- If for some reason Anti-D Ig was not administered within 72 hours a dose that is administered within 10 days should be given as it may afford the woman some protection.

The most suitable administration sites for Anti-D Ig:

Rh (D) immunoglobulin (NZBS) / Rhophylac should be administered IM into either the:

- Deltoid muscle of the upper arm
- Antero-lateral aspect of the upper thigh.

Administration of other than the standard dose of Anti-D Ig:

- On occasion a woman who experiences a significant FMH may require a larger dose of Anti-D Ig than is normally required.
- When more than 2 ampoules of Anti-D appear to be indicated, consultation with a Transfusion Medicine Specialist is recommended.
- In this instance staff are advised that:
 - Rhophylac may be administered as a slow intravenous push but Rh (D) Immunoglobulin (NZBS/CSL) must never be administered intravenously
 - The dose of Anti-D Ig administered, the route, date, and time of administration must all be documented in the woman's notes
 - Women who have a significant FMH will require follow-up testing. Therefore a repeat Kleihauer should be obtained 48 hours post Anti-D Ig administration in order to ascertain whether a further dose of Anti-D Ig is required
 - The name of the person responsible for obtaining the repeat Kleihauer and following up the result should also be documented in the woman's notes.

Repeated sensitising antenatal events and further doses of Anti-D Ig:

When a dose of Anti-D Ig has been administered:

- Within the last 2 weeks:
 - A further dose of Anti-D Ig should only be offered if the pregnancy is greater than 20 weeks gestation and the size of the FMH is likely to be greater than 12 ml of blood (i.e. 6 ml fetal red cells)
 - A Kleihauer must be performed to measure the size of the FMH.
- More than 2 weeks ago:
 - A further dose of Anti-D Ig should be offered.

The management and reporting of adverse reactions:

- For advice on the management of a woman experiencing a suspected reaction, see the reverse of the NZBS form 'notification and investigation of adverse transfusion reaction'.
- This form must be completed in the event of all moderate or serious reactions.

Appendix 2 Obtaining Anti-D immunoglobulin at Kenepuru hospital and maternity unit

Kenepuru Laboratory currently holds a stock of four 625IU vials of RhD Immunoglobulin. This stock is available for administration to women in the Porirua area as well as inpatients in Kenepuru Hospital.

Inpatient at Kenepuru

- The Kenepuru Hospital laboratory is open Monday – Friday 8.30am - 4.30pm.
 - The Security Orderlies will collect the completed 'request for blood components or products form (specifying amount needed) and the completed A109 'blood transfusion record'
 - Weekend: Notify the Duty Manager that Anti-D is required. The Security Orderlies will collect the completed 'request for blood components or products' form (specifying amount needed) and the completed A109 'blood transfusion record'.
- Anti-D Immunoglobulin can only be collected immediately before it is to be administered – it must not be stored in any other location. For inpatients:
 - The top half of the '*Issue label*' must be attached to their A109 – *Blood component and product transfusion record* form to remain in their notes
 - The bottom half of the '*Issue label*' is to be filled in and attached to the completed '*Request for Replacement of Blood Product Transfused from Stock*' form
 - This form must be returned to Blood Bank (fax number on the form) in order to accurately identify who received the product and complete the audit trail.

Obtaining Outpatient Anti-D Ig at Kenepuru

- See section 5 'LMC's requesting Anti-D for women who are not inpatients of the DHB' LMC's requesting Anti-D' section of this policy.
- If the woman is an outpatient (and the request is from an LMC) it is the LMC's responsibility to arrange collection from the Kenepuru Hospital laboratory.
- The LMC or student midwife can collect the Anti-D Ig themselves. This needs to be organised with the Kenepuru Duty Manager who can access the Anti-D Ig from the Laboratory.
- For those women who will receive Anti-D Ig in the community:
 - Anti-D Ig can be collected from the Kenepuru Laboratory, and must only be collected immediately before it is to be administered – it must not be stored in any other location.
 - The top half of the '*Issue label*' is to go in the woman's clinical record or the LMC held clinical notes. The procedure can also be documented on MAP and on PIMS (as an antenatal assessment procedure).
 - Blood Bank requires the completed '*Request for Replacement of Blood Product Transfused from Stock*' form with the bottom half of the '*Issue label*' filled out and attached

- A prescription for the Immunoglobulin (incl. dose) is also required.
- Completed form and prescription must be sent to Blood Bank (fax number should be written on the form) in order to accurately identify who received the product, and complete the audit trail.

Appendix 3 Obtaining Anti-D immunoglobulin at Paraparaumu maternity unit

Paraparaumu maternity unit is currently accessing Anti-D Ig (625 IU) from Kenepuru Hospital laboratory until the designated fridge has been validated by NZBS. *Please refer to 'Obtaining Anti-D at Kenepuru (Appendix 1) in addition to below.*

Inpatient at Paraparaumu maternity unit

From Monday to Friday all Kleihauer specimens will be collected by a courier from Wellington SCL and forwarded into Wellington Regional Hospital for processing.

The latest time that specimens will be collected by the courier during the week is 4.30pm. Wellington SCL Logistics Dispatch would need to be notified via 04 381 5900 (option 3) prior to 4:15 to arrange a pickup.

On Saturday mornings Kleihauer and cord blood specimens will be collected just once (before 12:15 p.m.). This would have to be arranged with Wellington SCL before 12 Noon to ensure pickup.

From Saturday afternoon until Monday morning all specimens must be sent via courier to Wellington Regional Hospital (the laboratory requires the Kleihauer specimen as soon as possible once it has been taken).

During 4 day holidays

On 4 day holidays such as Easter, Christmas and New Year, Kleihauer samples are processed twice, spaced over the holiday period. All specimens must be sent via courier to Wellington Regional Hospital (the laboratory requires the Kleihauer specimen as soon as possible once it has been taken).

Obtaining Anti-D Ig at Paraparaumu maternity unit

- Paraparaumu maternity unit will access vials of Anti-D Ig (625 IU) from Kenepuru Hospital laboratory until the designated fridge has been validated by NZBS.
- Monday – Friday 8.30am - 4.30pm any requests for Anti-D Ig will be transported via the hospital shuttle from Kenepuru Hospital.
- At weekends the request for Anti-D Ig should be postponed until Monday morning providing that the 72 hour window for administration will not be breached.
- The only time an 'out of hours' request may be made is at Easter, Christmas and New Year when many services are closed for longer than 72 hours. This is subject to there not being a hospital shuttle from Kenepuru Hospital. If the woman is an inpatient at Paraparaumu maternity unit a taxi may be used to collect the Anti-D Ig from Kenepuru Hospital.