

Anyone offered a blood product is told about the product and asked for informed consent for the treatment.

Are there any adverse effects from the Anti-D injection?

- **Common side effects:** soreness at the place where the injection is given is common. The soreness lasts from a few hours to a day or two.
- **Uncommon side effects:** a mild fever or headache.

Does Anti-D ever fail to work?

The Anti-D injection is about 95% effective in protecting a woman from starting to make Anti-D.

How safe is the Anti-D injection?

- There is no evidence that the Anti-D injection used in New Zealand has ever spread any important infections, including HIV/AIDS or hepatitis.
- As the Anti-D injection is a blood product it could possibly pass on some infections.
- Blood donors in New Zealand and North America are always checked for health and lifestyle whenever they give blood. A blood donation is only collected if a donor is in good health and does not have any condition detectable by the standard donor screening process that could be passed on by the Anti-D injection.
- Blood donations are always tested for the infections: HIV/AIDS, hepatitis B and C and syphilis. Blood donations are only used if there is no evidence of these infections.
- The manufacturing process for making the Anti-D injection is able to destroy these and many other viruses.
- There is no evidence that CJD (Creutzfeldt Jakob Disease), or variant CJD has ever been passed on by immunoglobulin products manufactured from human plasma.

If you need more information, please ask your Doctor or Midwife.

Leaflet prepared and provided by the New Zealand Blood Service.
Private Bag 92071, Victoria Street West, Auckland 1142.
71 Great South Road, Epsom, Auckland.
Telephone: 09 523 5733 Fax: 09 523 5754

www.nzblood.co.nz

Anti-D Immunoglobulin



Your guide
to blood
transfusion

Frequently asked questions about Anti-D.

You have been given this leaflet because your Doctor or Midwife considers you may need an injection of Anti-D.

As with all treatment, you have the right to decide whether you want to have the treatment or not.

You will be asked to sign a Consent Form to show:

- the benefits and risks for your treatment, including injection of this blood product, have been explained to you
- you have been able to ask any questions about the treatment
- you agree to receive the treatment

This leaflet answers common questions about the Anti-D injection. It may help you discuss this treatment and any concerns you have.

What is the Rh factor?

- Rh is a blood group on red blood cells of some people. It is also called the Rhesus factor. If you do not have the Rh factor, you are Rh (D) negative.
- Both Rh (D) positive and Rh (D) negative are normal. They are just like differences in eye or hair colour between different people.
- Most people are Rh (D) positive. Among Europeans only one person in seven is Rh (D) negative. Among Maori, Polynesian and Asian people about one person in every forty is Rh (D) negative.
- If you are Rh (D) negative you might make Anti-D if you have a baby that is Rh (D) positive.
- Anti-D is an antibody that reacts with the Rh blood group factor. If it reacts with Rh (D) positive blood cells it may cause the cells to be destroyed.

How can I avoid making Anti-D?

If you receive the Anti-D injection the chance that you will start making Anti-D will be reduced almost to zero.

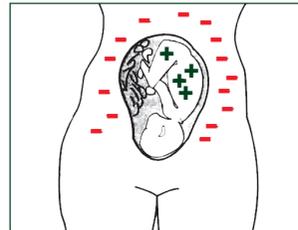
If a woman does not have the Anti-D injection after having an Rh (D) positive baby the chance that she will start to make Anti-D is about 1 chance in 12 (about 8%).

There are no alternative treatments available to stop Anti-D being made.

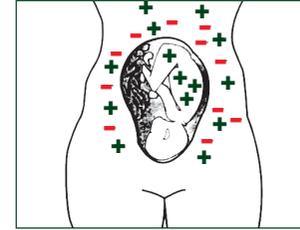
If you start to make Anti-D you will continue to make it for the

rest of your life. The process cannot be stopped. Any babies you have in the future could be affected by your Anti-D.

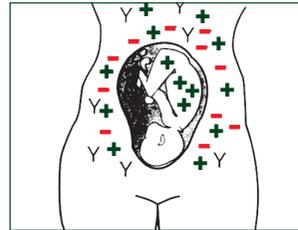
Diagram showing final sequence of events which can lead to HDN.



Rh (D) Negative mother with Rh (D) Positive baby.



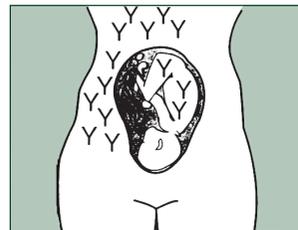
Rh (D) Positive red blood cells from the baby enter the mother's blood stream either after the birth of the baby or through sensitising events.



Antibodies (Y) are produced by the mother's immune system to destroy the Rh (D) Positive red blood cells in the mother's blood. The Rh-anti-bodies remain for many years.



In the next pregnancy with an Rh (D) Positive baby, the mother's antibodies can attack the baby's red blood cells.



The antibody attack can lead to Haemolytic Disease of the Newborn (HDN) in the baby.

The Anti-D injection which is given to the mother within 72 hours of the baby's birth contains antibodies to destroy red blood cells that have transferred from the baby into the mother's blood stream. This injection will prevent most women from starting to make Anti-D.

About 7,000 doses of Anti-D injection have been given to New Zealand women every year since 1968.

If I make Anti-D what will it do?

It could cause any future baby to be anaemic before birth and to need treatment for jaundice (yellow colour in skin) after birth. The problem may vary from being very mild to being severe and life threatening for the baby.

Severe jaundice must be prevented in babies as it can cause brain damage. It is usually necessary for an affected baby to be born early to minimise the problems of anaemia and jaundice.

If you made a lot of Anti-D it will be necessary to give the baby a series of transfusions before birth to prevent life-threatening anaemia.

Who is offered the Anti-D injection?

The Anti-D injection is offered to Rh (D) negative women if there is a chance that the baby's blood has mixed with the mother's blood, and the baby may be Rh (D) positive. It is offered after:

- giving birth - if the baby is Rh (D) positive
- vaginal bleeding during pregnancy
- miscarriage or abortion
- injury to the abdomen either from a fall or car accident
- special tests (amniocentesis or chorion villus sampling) are carried out.

The Anti-D injection must be given within 72 hours of the birth (or other event) where there was a chance for the baby's blood to mix with the mother's blood, or the treatment may not be effective.

Anti-D may also be offered to a woman during a pregnancy to reduce the chance for her accidentally starting to make Anti-D.

Anti-D injection is made from blood donations and contains concentrated antibodies from the blood of donors. Anti-D products available in NZ are:

- **Rh (D) Immunoglobulin** made by CSL Behring in Melbourne from either:
 - Donations given by volunteer donors in New Zealand. Supplies are limited, or;
 - Donations given by paid donors in the United States. The donor source is clearly identified on the product label.
- **WinRHO®** a commercially sourced product made from paid donors in North America.