

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

How safe is the Anti-D injection?

- Because the Anti-D injection is a blood product it could possibly pass on some infections.
- Anti-D products in New Zealand, Australia and North America have a very good history of safety from infection over more than 50 years.
- Important infections such as HIV/AIDS, hepatitis B and hepatitis C have never been spread by the Anti-D injection made by CSL Behring from blood donations given by New Zealand or North American donors.
- Blood donors are assessed with standard checks before each donation. A blood donation is only collected if the donor does not have any identifiable condition that could be passed on by Anti-D injections.
- Every blood donation is tested for the infections: HIV / AIDS, syphilis, hepatitis B and hepatitis C. Blood donations are only used if the tests show no evidence of these infections.
- The process for making the Anti-D injection is able to destroy or remove these and many other viruses.
- There is no evidence that Creutzfeldt Jakob Disease (CJD) or variant CJD has ever been passed on by immunoglobulin products manufactured from human plasma.

Can Anti-D injection cause any adverse effects?

- **Common side effects:** Soreness at the injection site is common. The soreness lasts from a few hours to a day or two.
- **Uncommon side effects:** a mild fever, headache or rash.

Does Anti-D ever fail to work?

- The Anti-D injection is more than 90% effective in protecting a woman from starting to make Anti-D.

Your Doctor or Midwife will be able to discuss these and any related issues with you or obtain information from the NZ Blood Service.

This leaflet provides information to help with informed consent before receiving treatment with Immunoglobulins.

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

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Anti-D Immunoglobulin



Your guide
to blood
transfusion

You have been given this leaflet because your Midwife or Doctor 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 that:

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

This leaflet answers common questions about the Anti-D injection and the Rh factor. 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 between people in eye or hair colour.
- Most people are Rh D positive. Among Europeans, one person in seven is Rh D negative. Among Maori, Pacific Island and Asian people about one person in every forty is Rh D negative.
- If you are Rh D negative and you have a baby that is Rh D positive, you might make Anti-D.
- Anti-D is an antibody that reacts with the Rh blood group factor. If Anti-D reacts with Rh D positive blood cells, it may cause the cells to be destroyed.

How can I avoid making Anti-D?

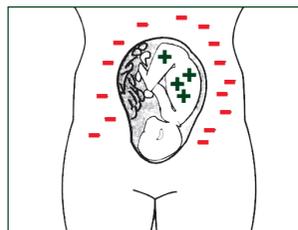
If you receive the Anti-D injection the chance that you will start making Anti-D will be reduced by more than 90%.

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 one chance in 12 (about 8%).

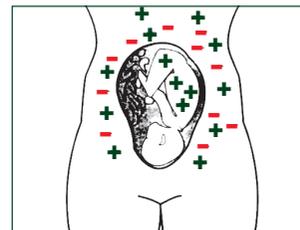
There are no alternative treatments available to stop Anti-D being made.

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.

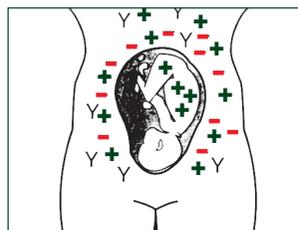
Diagrams showing how Anti-D is produced and effects of Anti-D on a fetus.



Rh D Negative mother with Rh D Positive baby.



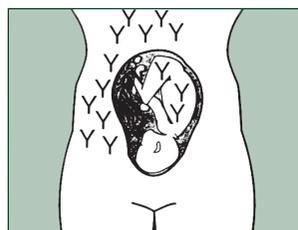
Rh D Positive red blood cells from the baby enter the mother's blood after the birth, or occasionally after a sensitising event in pregnancy.



Antibodies (Y) are made by the mother's immune system to destroy the Rh D positive red blood cells in the mother's blood. The Rh antibodies are produced 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 is given to the mother within 72 hours of the baby's birth. It contains antibodies that help to remove any red blood cells from the baby that entered the mother's blood. 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 this antibody do?

A future baby could become anaemic before birth and need treatment for jaundice (yellow colour in the skin) after birth. Severe jaundice in babies must be prevented as it can cause brain damage.

An affected baby will be born early to minimise the problems of anaemia and jaundice. The problem may vary from mild, to severe and life-threatening for the baby.

If you make 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 injection is offered to Rh D negative women if any of the baby's blood may have mixed with the mother's blood, and the baby is, or may be, Rh D positive. It is offered after:

- giving birth - if the baby is Rh D positive
- vaginal bleeding during pregnancy
- a miscarriage or abortion
- injury to the abdomen, such as a fall or car accident
- special tests: amniocentesis or chorion villus sampling
- It is only offered to those who are not already immunised.

The Anti-D injection must be given within 72 hours of the birth (or other event), or the treatment may not be effective.

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

Anti-D products provided in New Zealand

- **Rh (D) Immunoglobulin** Two products are made by CSL Behring in Melbourne. They are made from either:
 - Donations given by volunteer donors in New Zealand - supplies from this source are limited, or;
 - Plasma collected in the United States.

The donor source is printed on the product label. These products are injected deeply into a muscle.

- **Rhophylac®** is a commercially sourced product made from plasma collected in North America. This product can be injected into a vein. Rhophylac is usually provided if a large quantity of the baby's blood cells are detected in the mother's blood and a larger dose of Anti-D is required. This event is uncommon.