

Rh D negative blood group and pregnancy

This information sheet aims to answer some commonly asked questions about Rh D negative blood group and pregnancy.

Informed consent and woman centred care are integral to health care in Queensland. Decisions about your care are always up to you.

IMPORTANT: This is general information only. Ask your doctor, midwife or nurse about your own situation.

What is the Rh D blood group?

There are more than 50 different blood groups. The most important ones for you to know are the ABO and Rh ones.

If you are Rh D positive this means you carry the Rh D protein (called an antigen) on your red blood cells.

However, if you are Rh D negative it means you don't have this protein (antigen) on your red blood cells.

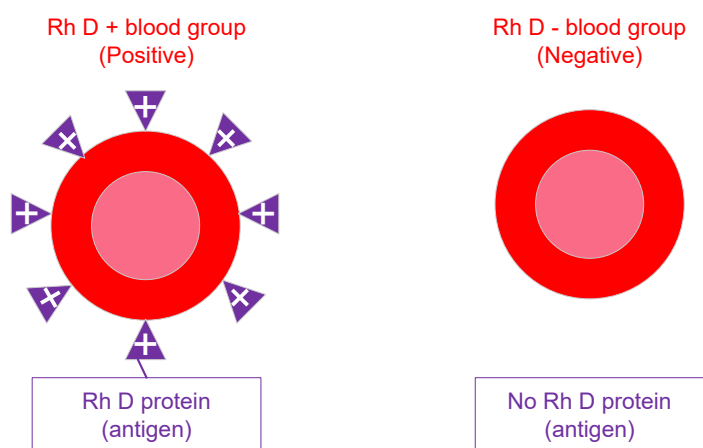


Image showing positive (with Rh D protein) and negative (without Rh D protein) red blood cells

How do you know what your blood group is?

Your blood is tested early in your pregnancy to find out your blood group. Most people have one of four blood groups. A or B or AB or O. You will also be Rh D positive or Rh D negative.

Your blood group is a combination of these two classification systems.

For example, if your blood group is A and your Rh D protein (antigen) is positive, you are A positive. If your blood group is A and you don't have the Rh D protein (antigen), you are A negative.

ABO	Rh D	Blood Group
A	Positive	A positive
A	Negative	A negative
B	Positive	B positive
B	Negative	B negative
O	Positive	O positive
O	Negative	O negative
AB	Positive	AB Positive
AB	Negative	AB negative

How can you tell what your baby's blood group is?

Your baby's blood group can be different to yours. Usually, it is not possible to know your baby's blood group until after they are born.

In some situations, a blood test can be performed during your pregnancy to predict your baby's blood group. This is not a routine blood test in pregnancy.

In Australia, this test is available where there are certain risks for your baby and you. Your healthcare provider will discuss these with you.

If you are Rh D negative, a small amount of your baby's blood is collected from the umbilical cord after they are born. This is sent to the laboratory to find out their blood group.



Why is Rh D negative blood group important in pregnancy?

Your baby's blood cells can enter your body during pregnancy (less common). More commonly this happens during labour or birth (vaginal or caesarean).

If you are Rh D negative and your baby is Rh D positive, and this happens, your body may make antibodies to your baby's blood. These antibodies do not usually cause harm in your current pregnancy.

However, these antibodies stay in your body and can increase with each pregnancy. They can attack the blood cells of any Rh D positive babies that you have in the future.

The antibodies can cause severe anaemia and jaundice, brain damage or even death in future babies.

When can your baby's blood cells mix with yours?

Your baby's blood can get into your body during labour or birth (highest risk). Sometimes bleeding from the baby to you happens during pregnancy. Problems from this are more common in the last three months of pregnancy. The reason can be unknown.

There is also a chance of problems (although it is lower) if:

- a doctor tries to turn a breech baby (coming bottom first) around to be head-first (external cephalic version)
- you experience an injury to your abdomen (e.g. from a car accident)
- you have certain tests during pregnancy (e.g. chorionic villus sampling (CVS) or amniocentesis)
- you experience vaginal bleeding, a miscarriage or termination of pregnancy

These are called sensitising events.

Can you stop antibodies developing?



Injections of Rh D immunoglobulin can prevent your body developing antibodies.

Rh D immunoglobulin is often referred to as anti-D, and is given as an injection into your arm or thigh muscle during pregnancy and also after birth.

When is Rh D immunoglobulin recommended?

Rh D immunoglobulin is recommended for all pregnant women in Australia who are Rh D negative:

- in the 28th and 34th week of your pregnancy
- after giving birth if your baby is Rh D positive

Rh D immunoglobulin is also recommended after a sensitising event. If you have any trauma to your abdomen or vaginal bleeding during pregnancy, discuss this immediately with your healthcare provider. They can offer you the Rh D immunoglobulin injection as soon as possible.

Rh D immunoglobulin is not needed during pregnancy if:

- you have a threatened miscarriage (vaginal bleeding) before you are 13 weeks pregnant
- you have had a blood test that predicts your baby will be Rh D negative like you

Rh D immunoglobulin is not needed after birth if your baby tests Rh D negative.

Is Rh D immunoglobulin safe?

Rh D immunoglobulin is made from blood donated by Australian blood donors. The donors are screened to reduce the risk of transmitting any diseases.

Rh D has been given for many years around the world and is considered safe for pregnant women and their babies.

Very rarely a woman may be allergic to Rh D immunoglobulin. Reactions that are uncommon but affect some women are:

- pain or irritation at the site of the injection
- nausea
- dizziness
- headache

If you are concerned or have questions about Rh D immunoglobulin, talk to your healthcare provider. They can also give you a consumer medicine information sheet.

How does Rh D immunoglobulin work?

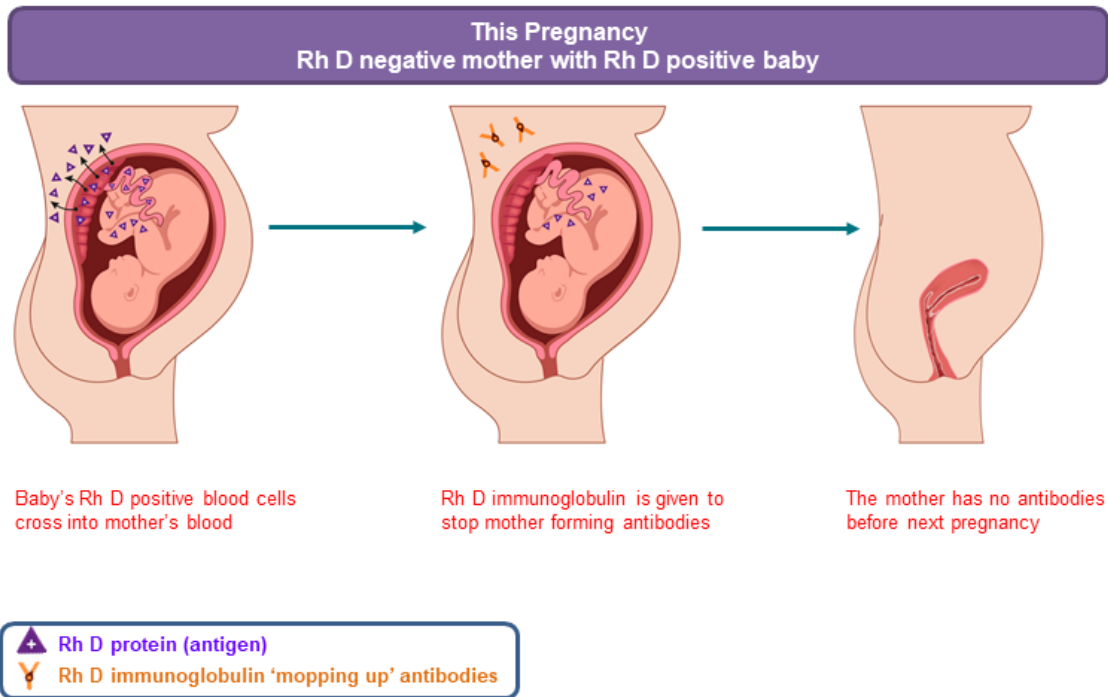


Image showing how Rh D immunoglobulin prevents pregnant Rh D negative woman developing anti-Rh D antibodies

What can happen if you don't have Rh D immunoglobulin injection?

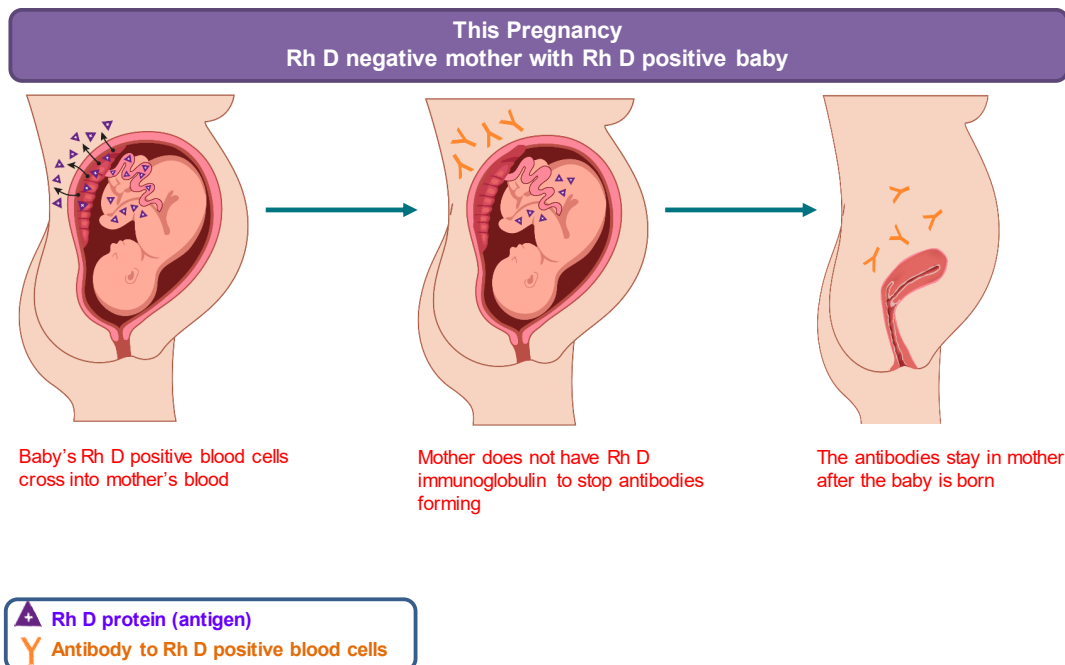


Image showing how Rh D negative woman who does not have Rh D immunoglobulin develops anti-Rh D antibodies

What can then happen in your next pregnancy if you don't have Rh D immunoglobulin injection?

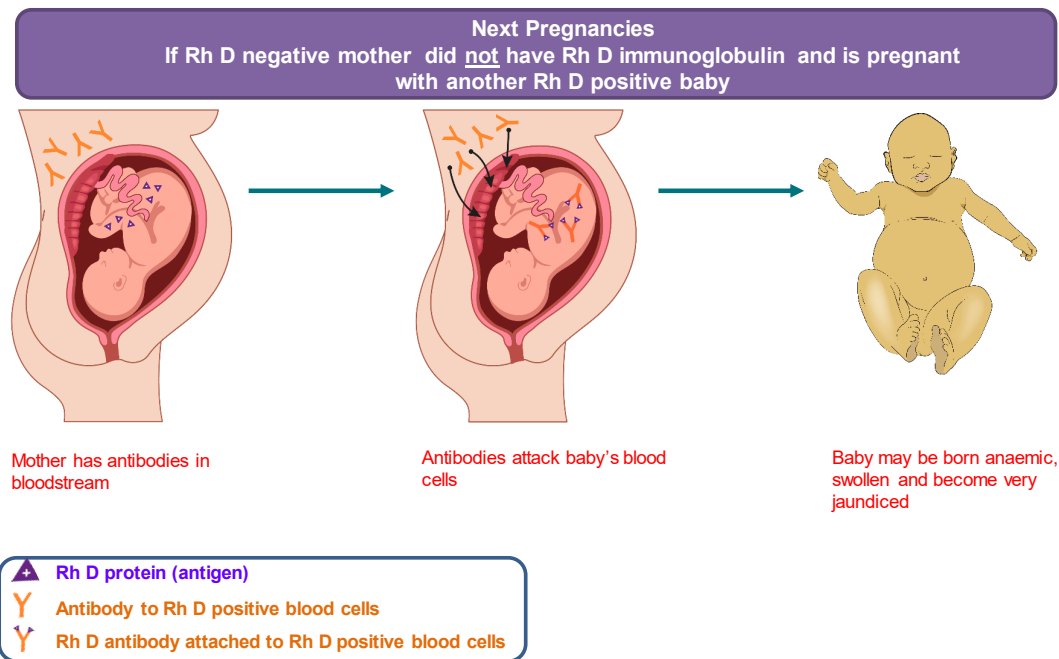


Image showing how pregnant Rh D negative woman may develop anti-Rh D antibodies that affect her baby

Support & Information

Queensland Clinical Guidelines Parent information www.health.qld.gov.au/qcg

13HEALTH (13 432584) telephone support providing health information, referral and services www.qld.gov.au/health/contacts/advice/13health

Pregnancy, Birth & Baby Helpline (1800 882 436) free, confidential, professional counselling and information relating to conception, pregnancy, birthing and postnatal care. www.health.gov.au/pregnancyhelpline

MumSpace website resources supporting mental and emotional wellbeing during and beyond pregnancy www.mumspace.com.au

Lifeline (13 11 14) telephone crisis support service www.lifeline.org.au

Women's Health Queensland Wide (1800 017 676) offers health promotion, information and education service for women and health professionals throughout Queensland. www.womhealth.org.au

Inform my care website comparing information about public and private hospitals in Queensland www.informmycare.qld.gov.au