

You and Your Baby - Important Information for Rh (D) Negative Women

Your baby's blood type is jointly inherited from you and your baby's father. For this reason, you and your baby may have different blood types. This is normal and usually not a problem. However, in some cases, these differences can be very important. This brochure describes one important blood type difference that may occur between a mother and baby which may cause harm to the baby.

What is the Rh factor?

The Rh factor is the name given to a blood group protein, Rh (D), which is attached to red blood cells. Some people have this protein in their red blood cells and others do not.

On average, of every 100 people:

- 85 will have the Rh factor, their blood type is called 'Rh (D) positive'
- 15 will not have the Rh factor, their blood type is call 'Rh (D) negative'

When a mother's blood type is Rh (D) negative and the baby is Rh (D) positive, serious complications can occur with current and future babies. Rh (D) immunoglobulin, a special antibody injection, can avoid this potential harm. Rh (D) immunoglobulin injection is also commonly referred to as anti-D.

How can the Rh factor affect your baby?

During pregnancy and labour, a small amount of you baby's red blood cells can cross the placenta into your bloodstream. If your blood type is Rh (D) negative, and your baby's blood type is Rh (D) positive, your immune system can react by producing antibodies to your baby's red blood cells.

Antibodies are an important component of the body's natural defence system. In this situation, antibodies may cross the placenta to the baby and destroy the baby's red blood cells. If these antibodies develop, they will not normally affect the first Rh (D) positive baby. The immune system, however, has a good memory, and can rapidly produce high levels of the antibodies if there is contact with Rh (D) positive blood in a future pregnancy.

This may lead to serious complications such as severe anaemia, brain damage and even death of the baby in some cases. This condition is known has Haemolytic Disease of the Newborn (HDN). Due to the potential serious effect of HDN, prevention of the problem is the key.



Integrity



Excellence



Community



Working Together



Learning Culture

Prevention of Haemolytic Disease of the Newborn (HDN) following birth

The most likely time that the baby's blood will cross the placenta into the mother's bloodstream is during labour and birth. To reduce the chance of the mother forming antibodies to the baby's red blood cells, an injection of Rh (D) immunoglobulin is given to all Rh (D) negative women (who do not already have the antibodies) who have given birth to an Rh (D) positive baby.

This Rh (D) immunoglobulin injection contains antibodies to destroy the red blood cells that may have passed from the baby into the mother's bloodstream during the baby's birth. The Rh (D) immunoglobulin injection is given before the mother's immune system has the chance to make its own antibodies against the baby's Rh (D) positive blood, which could then cause harm to a future baby.

Prevention of Haemolytic Disease of the Newborn (HDN) during pregnancy

During pregnancy, there are times when there is an increased risk of the baby's blood crossing the placenta into the mother's bloodstream.

To further reduce the chance of Haemolytic Disease of the Newborn (HDN) caused by Rh (D) antibodies, it has been recommended that for all of their pregnancies, all Rh (D) negative women should receive Rh (D) immunoglobulin injections at 28 and 34 weeks gestation (antenatal prophylaxis) as well as after the birth of an Rh (D) positive baby.

Research shows that this does not harm the baby and will reduce the chance of Haemolytic Disease of the Newborn (HDN).

Where does the Rh (D) immunoglobulin come from?

Injections of Rh (D) immunoglobulin are made from the plasma (liquid part of blood) of carefully selected voluntary Australian blood donors.

Giving your consent

Everyone has the right to decide whether or not to have any treatment. Before giving consent, it is important to understand why you need the treatment and also its risks and benefits for you. If you have further questions after reading this brochure, please ask your doctor or midwife.



EGHS would like to thank our consumers for reviewing this information.



Integrity



Excellence



Community



Working Together



Learning Culture