

# Rhesus (Rh) Negative Blood and Pregnancy

## Background

There are four main blood groups or types (A, B, AB and O).

Eighty five per cent of our population have an additional blood group factor called Rh D. They are Rhesus (Rh) positive. The remaining 15 per cent lack the factor and are therefore Rh negative.

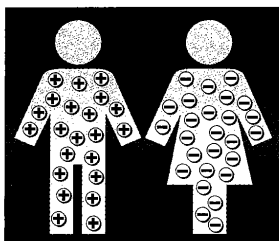
Pregnant women who are Rhesus negative may need to have Rh D immunoglobulin (commonly called Anti-D) injections to safeguard their babies. This brochure gives you information about Rh D and the need for Anti-D injections.

## About your blood type

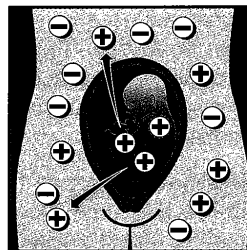
Like all blood groups the Rh D is inherited. On its own the Rh D does not cause health problems but when a mother is Rh negative and her fetus is Rh positive, there can be health risks for that fetus and the fetus of any future pregnancies.

## What happens?

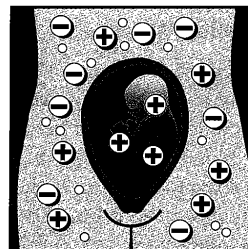
1 If an Rh negative woman becomes pregnant to an Rh positive man, their baby may be Rh positive or Rh negative.



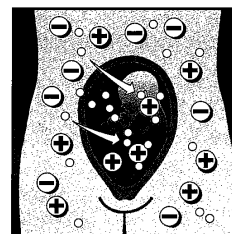
2 There is a risk that some of the baby's blood cells may enter the mother's bloodstream during the pregnancy or birth.



3 If the baby is Rh positive there is a risk that the mother will develop antibodies to the baby's Rh positive cells in her blood if left untreated.



4 If a mother develops antibodies, the antibodies will cross the placenta and may destroy the baby's red blood cells in this or future pregnancies.



5 Untreated babies may be anaemic, be at risk of brain damage or even die before birth. Doctors call all of these problems "haemolytic disease of the newborn".

## What can be done?

Fortunately an injection of Anti-D can be given to an Rh negative mother, which helps stop her immune system making antibodies to the baby's Rh positive cells. Since Anti-D has been available, it is uncommon for babies to have haemolytic disease of the newborn.

## When do you need to have an Anti-D injection?

If you are Rh negative and have not formed antibodies you will be offered an Anti-D injection at 28 weeks and at 34 weeks of pregnancy. It is too late to give the Anti-D if you have already formed antibodies.

You will also be offered an Anti-D injection if you have:

- Any vaginal bleeding during your pregnancy
- A miscarriage
- An abortion or terminate your pregnancy
- A medical procedure such as chorionic villous sampling (CVS), amniocentesis or external cephalic version (ECV)

In some cases a blood sample may be taken prior to receiving Anti-D to see whether you have already formed antibodies.

A sample of your baby's cord blood will be taken at birth and if your baby is Rh positive

you will also receive an Anti-D injection shortly after giving birth.

### **Before you are given Anti-D**

Tell your doctor if you have:

- Been told you have IgA deficiency
- Any blood disorder or bleeding problems
- Had a vaccination in the past two weeks
- Allergies to any medicines

### **How is the Anti-D given?**

Anti-D is given as an injection, usually into the muscle in your arm or leg. For some people with bleeding problems, the injection may need to be given under the skin (subcutaneously).

The injection will be given by a doctor or a midwife.

### **Possible side effects**

You may feel tender or stiff where the injection was given. Occasionally a mild temperature, drowsiness or a rash may occur but these are very rare and are easily treated.

### **Effects on your baby**

There is no evidence that being given an Anti-D injection while you are pregnant will harm your baby.

### **Breastfeeding after you have been given an Anti-D injection**

You can breastfeed after you have been given an Anti-D injection. Anti-D will not affect your baby.

### **What is Anti-D made from?**

Anti-D is made from blood plasma (the fluid part of the blood) donated by volunteer donors. No product made from human blood plasma can be guaranteed 100 per cent free of infectious diseases.

To reduce the chance of infectious diseases being transmitted by Anti-D injections, every blood donation used to make Anti-D is tested for blood diseases like hepatitis and HIV. To ensure the safety of the blood there are also strict controls on blood donors. The process of manufacturing Anti-D further reduces the risk of transmitting infectious diseases.

If you have any concerns about being given this injection, please talk to your doctor or midwife.