

Rh Factor and What It Means

What is the Rh Factor?

There are four different blood types (ie. A, B, AB and O). There is also an antigen called the Rhesus (Rh) Factor which is found on your red blood cells. If it is present, this means you are Rh positive. If it is not, you are Rh negative. When your blood type is reported you will also see a - or a + sign, this is your Rh factor (eg. O- or O+). Approximately 5-15% of people are Rh negative. Being Rh negative does not affect your general health but can have implications in pregnancy.

What does my Rh Factor mean in pregnancy?

In pregnancy, there is an incompatibility if you are Rh negative, and your baby is Rh positive. A baby's Rh status is inherited. If you are Rh negative and the person providing the sperm is Rh positive, the baby has at least a 50% chance of being Rh positive. If the baby's red blood cells cross into your bloodstream, your immune system will produce antibodies to fight these foreign cells.

What situations pose a risk?

There is an increased chance of the baby's red blood cells crossing into your blood stream in certain situations such as ectopic pregnancy, miscarriage, bleeding in pregnancy, induced abortion, amniocentesis, manually turning of a baby who is not head down, trauma to the abdomen during pregnancy, or even a normal delivery. Of note, the formation of antibodies may also occur if you ever had a blood transfusion that was not a match for your Rh factor.

What are the implications for my baby?

Once these antibodies are made, you are always Rh sensitized. The antibodies can cross through the placenta and attack the red blood cells of a baby. This can cause serious health complications for the baby in the pregnancy where the antibodies are made, or even in future pregnancies where the baby is Rh positive. The baby may have complications such as anemia, jaundice, enlarged organs, fluid buildup/swelling of the body, heart failure, brain damage, and even death.

What can be done if I am Rh negative and at risk for forming antibodies?

If you are Rh negative and are in a situation where there is an increased chance of the baby's red blood cells crossing into your blood stream, you are likely eligible for a dose of Rh Immunoglobulin (RhIG). You will also routinely receive it at approximately 28 weeks of pregnancy and within 72 hours after the birth of an Rh positive baby. RhIG administration significantly reduces the risk of complications for the baby.



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What are the risks of Rh Immunoglobulin (RhIG)?

RhIG is a blood product and has been used in Canada since 1968 with very few serious effects reported.

RhIG can cause:

- Pain at the injection site
- Increase in blood pressure
- Fever/chills/flushing
- Feeling weak or tired
- Flu-like muscle or joint pains
- Nausea/vomiting
- Headache
- An allergic reaction (such as hives)

What do I do if I am Pregnant and Bleeding?

If you are <10 weeks pregnant and bleeding, please contact your ARC Care Team for direction. If you are Rh negative, ARC will arrange for you to be seen in a local hospital for possible Rh Immunoglobulin administration.

Adapted from: ACOG: Rh Factor: How it can Affect Pregnancy