
Answers About Rh Immune Globulin

What does it mean to be Rh or D negative?

If you are Rh negative, your red blood cells do not have a marker called Rh factor on them. If you are Rh positive, your blood cells do have this marker. If your blood is exposed to blood with this marker (D positive blood), your immune system will react to the Rh factor by making antibodies to destroy the blood cells carrying it. In Canada, about 85% of people are Rh positive and 15% are Rh negative.

What is Rh sensitization?

If your baby's father or the person who provided you with sperm for this pregnancy is Rh negative, your baby will also have Rh negative blood and there is no possibility of becoming Rh sensitized. But if the baby's father or the person who provided sperm to you is Rh positive, there is a possibility of having an Rh positive baby. If you are Rh negative and your baby is Rh positive you can become sensitized to Rh positive blood. This means that cells in your immune system make antibodies to fight Rh positive blood in the same way they can make antibodies to fight germs. Most of the time your blood and your baby's blood do not mix. But, sometimes your baby's cells can get into your blood stream and cause you to become Rh sensitized. There is about a 12-16% chance of becoming Rh sensitized during pregnancy. It can take as little as 0.01 mL of blood for sensitization to occur. Certain things put you at a higher risk of becoming sensitized, such as:

- Physical trauma (such as a car accident or other injury)
- Invasive genetic testing such as chorionic villus sampling (CVS) or amniocentesis
- Miscarriage
- Abortion
- Turning a breech baby (external cephalic version)
- Placental abruption (bleeding in the uterus)
- Giving birth

What are the risks to my baby if I become Rh sensitized?

Becoming Rh sensitized during your first pregnancy isn't usually a problem for the baby. But, if you get pregnant again with another Rh positive baby, your immune system can start attacking that baby's red blood cells. This can make your baby sick with something called Rh disease or Hemolytic Disease of the Fetus and Newborn. Rh disease can cause anemia, jaundice or, in some cases, very serious problems such as brain damage or even death. If you are at risk, Rh sensitization can almost always be prevented. If you are already Rh sensitized, treatment is available for Rh disease.



How do I know if I am Rh sensitized?

A blood test is the only way to check your blood type and find out if you are Rh sensitized. Your midwife will test your blood during one of your first appointments and then again at 28 weeks. If you are Rh negative you will also be offered a blood test after birth to check for Rh antibodies.

Can Rh sensitization be prevented?

Rh sensitization can be prevented with Rh Immune Globulin (sometimes called WinRho®). Rh Immune Globulin is a human blood product that has been used in Canada since 1968 to prevent Rh disease. It is a shot (injection) that contains Rh antibodies.

When your immune system makes its own antibodies to fight a germ, cells in your immune system ‘remember’ the germ. If you ever come in contact with that germ again, your immune system is ready to fight it. A similar immune response occurs if you are Rh negative and are exposed to Rh positive blood. But, if your midwife gives you shots with Rh antibodies in them, your immune system is “fooled” and it doesn’t make antibodies of its own. The Rh antibodies your midwife gives you won’t stay in your blood forever. So, the next time you have an Rh positive baby, your body won’t recognize the Rh positive blood and won’t attack the baby’s red blood cells. Getting the shot of Rh Immune Globulin is 99.9% effective in preventing Rh sensitization. During every pregnancy your midwife will offer you a shot of Rh Immune Globulin:

- at 28 weeks of pregnancy
- within 72 hours after you give birth if your baby is Rh positive
- following miscarriage, therapeutic abortion, amniocentesis, chorionic villous sampling, and trauma (like a car accident or a bad fall while pregnant)

What are the Risks of Rh Immune Globulin?

Because Rh Immune Globulin is made from human blood, there is always a small risk of being exposed to viruses that the blood donor may have carried. However, in Canada all blood donors are screened for infection and all the Rh Immune Globulin is chemically treated and mechanically filtered to kill and remove viruses.

What are the possible side effects of getting the Rh Immune Globulin shot?

Most people who receive Rh Immune Globulin don’t experience any side effects. Usually your midwife will stay with you for about a half hour after giving you the shot to make sure you don’t experience any immediate problems. Some possible side effects include:

- Pain and swelling where you received the shot
- Slight fever
- Feeling unwell (malaise)



- Headache
- Mild allergic reaction (hives)
- With any blood product, there is a small risk of anaphylaxis (a severe allergic reaction that can make it difficult to breathe)

What happens if I choose not to get Rh Immune Globulin?

Some people are not comfortable receiving any human blood products (such as Rh Immune Globulin or blood transfusions). Or, you may have other concerns about receiving this shot. You are always free to refuse any intervention that your midwife offers to you. It is important to understand that:

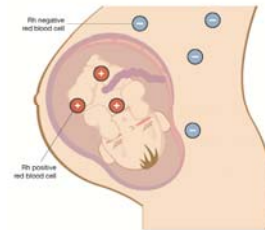
- Without Rh Immune Globulin, there is a 12 to 16% chance that your body will form Rh antibodies. If you become Rh sensitized and become pregnant again, there is a risk that your next baby will become very sick or that the pregnancy will not be able to be carried to term.
- The problems related to Rh disease tend to get worse with each Rh positive pregnancy you have.
- There are no effective alternative treatments to prevent Rh disease. Rh Immune Globulin is the only way to prevent Rh disease in babies.

If you have any questions after reading this handout, talk to your midwife. If it helps, you can write down any questions you may have and bring this sheet with you to your next appointment.

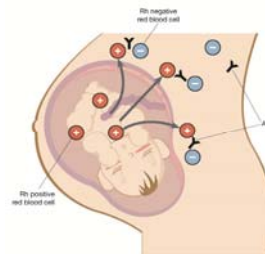


Rh Sensitization

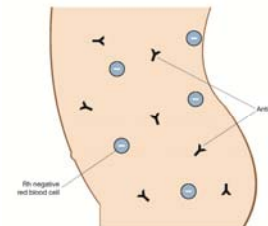
Rh negative (-) woman with Rh positive (+) baby.



Baby's cells enter the woman's blood stream and she may become sensitized. This means the woman's body makes antibodies (Y) to fight the baby's Rh positive (+) red blood cells.



The woman's body will keep a memory of these antibodies (Y) in case Rh positive blood cells enter her bloodstream again in the future.



If the woman becomes pregnant again with an Rh positive (+) baby, her body may make large amounts of antibodies (Y) to attack the baby's blood cells. This can make the baby very sick with a disease called Rh disease or Hemolytic Disease of the Fetus and Newborn.

