



Rh-Negative Blood Type and Pregnancy

What is blood type?

Your blood type tells you about markers on the surface of your red blood cells. The red cells in your blood can be A, B, AB, or O. The red blood cells also have a protein that is called Rh on the surface of the cell. Your blood can be Rh positive, which means that you have the Rh protein, or Rh negative, which means that you do not have the Rh protein. The letter of your blood group plus the Rh makes your blood type. You can be O+, O-, A+, A-, B+, B-, AB+, or AB-. A test that tells you your blood type is done at your first prenatal visit and usually when you are admitted to the hospital for labor if you are planning a hospital birth.

Why is my blood type important?

If you ever need a blood transfusion, you should be given blood that is your same blood type. You can become very sick if you are given blood that is a different blood type unless it is O blood, which will not cause harm to people who have other blood types.

I am Rh negative. What does this mean for my pregnancy?

Being Rh negative means that you do not have Rh proteins on your red blood cells. If your baby is Rh positive and you get a small amount of your baby's blood into your circulation (bloodstream) when you are pregnant or when you give birth, your body can make antibodies that hurt and kill red blood cells that are Rh positive.

The most likely time that you would be exposed to your baby's blood is when you give birth. This is why being Rh negative will not harm your baby during your first pregnancy. But in your next pregnancy, the antibodies that you made when you were exposed to Rh-positive blood at your first birth can cross the placenta and attack the Rh-positive red blood cells, if your next baby has Rh-positive blood. This is called Rh sensitization. Rh sensitization can cause fetal anemia (low iron in the blood), miscarriage, stillbirth, or a serious illness in the baby that is called hemolytic disease of the newborn. Fortunately, Rh sensitization is very rare because women who are Rh negative can get a shot that stops their body from making antibodies to Rh-positive blood.

What is RhoGAM?

RhoGAM is a medicine that stops your blood from making antibodies that attack Rh-positive blood cells. RhoGAM is a sterilized solution made from human blood that contains a very small amount of Rh-positive proteins. These proteins keep your immune system from making permanent antibodies to Rh-positive blood. They do not hurt your baby. RhoGAM is given as an injection (shot).

When do I get RhoGAM?

Although the chance of your blood and the baby's blood mixing is highest at the time that you give birth, which rarely happens, it can also happen during the last trimester of your pregnancy, when your placenta is growing and the membranes that separate your blood from your baby's blood are very thin. For this reason, RhoGAM is given at 28 weeks of pregnancy to protect you for the rest of your pregnancy. RhoGAM works for about 13 weeks.

Soon after you give birth, your baby's blood will be tested for Rh. If your baby has Rh-positive blood, you will get another dose of RhoGAM within 72 hours after you give birth. If your baby's blood is Rh negative, you will not need the second RhoGAM shot.

Are there any other times that I might need RhoGAM?

RhoGAM is also given anytime that your blood could come into contact with Rh-positive blood cells, such as:

- Any vaginal bleeding during pregnancy
- Miscarriage or abortion



- Chorionic villi sampling or amniocentesis (tests for birth defects)
- Injury to your abdomen (belly), such as a car accident or fall, during pregnancy
- External version (turning a breech baby so the baby is head first)

If you are Rh negative and any of these things happen to you, you should contact your health care provider right away. You should get a RhoGAM shot within 72 hours of the possible exposure to Rh-positive blood for the shot to work best.

How safe is RhoGAM?

RhoGAM is very safe. It is recommended for all pregnant women with Rh-negative blood type and has been used for about 50 years. Although RhoGAM is made from human blood, only the very small Rh piece is used. There is a very rare chance that you could get an infection such as HIV or hepatitis from RhoGAM, but this is so rare that there are no reports of it happening. There is also a very rare chance that you will have an allergic reaction to the RhoGAM that causes fever and chills or shortness of breath. It is more common to have a small reaction like redness or swelling where the RhoGAM was injected, usually your upper arm or buttocks.

It is important to know that the risk of developing Rh sensitization is much higher than the risk of problems from the RhoGAM shot. Once that happens, all future pregnancies are at risk for the baby being very sick or dying if the baby is Rh positive. Therefore, not taking RhoGAM is much more dangerous than taking RhoGAM.

Are there women who should not get RhoGAM?

If you have hemolytic anemia, or you have had an allergic reaction to a shot of immune globulin, or you already have Rh sensitization, you should not get the RhoGAM shot.

Is there anything else I need to know about RhoGAM?

It is best not to get some vaccines within 3 months of having the RhoGAM shot. This is not usually a problem because the vaccines that do not work well after getting a RhoGAM shot are never given to pregnant women. This is something to think about if you are planning to travel out of the country within 3 months after giving birth to an area where you need a vaccine called a “live-virus” vaccine. If you are in this situation, talk to your health care provider before you are given the RhoGAM shot. Also, if you have any religious or cultural concerns about taking a blood product, you should talk to your health care provider or religious leader about the risks and benefits.

What if I do not choose to get RhoGAM?

About one in 5 women who do not get RhoGAM will get Rh sensitization, which cannot be fixed once it happens. If you do not get RhoGAM during pregnancy, you should get your blood drawn regularly in the last trimester to see if you have become Rh sensitized. If you do become sensitized, tests to see how your baby is handling the problem will be offered. If the baby has a serious problem, you may need to be induced to give birth early.

For More Information

March of Dimes: Rh Disease

<http://www.marchofdimes.com/baby/rh-disease.aspx>

How RhoGAM Works

<http://www.rhogam.com/images/content/Teaching-Chart-Large.jpg>

American Red Cross: Blood Types

<http://www.redcrossblood.org/learn-about-blood/blood-types>

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