

Rhogam for Rhesus Negative (Rh-) Mothers

What is the Rh Factor?

The Rhesus (Rh) factor is a surface antigen found on the surface of red blood cells. Its presence or absence is what determines a person's blood factor (O+, AB-, etc.).

The Rh factor only is a worry during pregnancy if the mother is Rh- and the father of the baby is Rh+. In this situation there is a chance that the fetus that the mother is carrying is Rh+. If the mother is exposed to blood from an Rh+ baby her body will begin to produce antibodies against Rh+ blood through a process called isoimmunization or sensitization. In future pregnancies her body will attempt to destroy a fetus' red blood cells because it sees the Rh+ blood as alien.

How/When Does Isoimmunization Occur?

Usually during a pregnancy blood lines between the mother and baby do not cross and so isoimmunization is not an issue during first pregnancies. The worry usually is once an Rh- mom gives birth to an Rh+ baby it is possible that she will develop anti-Rh antibodies that will affect her next pregnancy if that baby is also Rh+. Exceptions to this are when there are instances such as:

- *Trauma to the abdomen through a motor vehicle accident, domestic abuse, etc.
- *Invasive medical procedures like chorionic villi sampling (CVS), amniocentesis, or external version of a breech baby.
- *Approximately 2% of women will have small placental tears/abruptions during their pregnancy.

Any of these things can potentially cause blood lines between the mother and baby to cross in utero.

Other risk factors include:

- *Rh- moms with a prior history of miscarriage or abortions.
- *Receiving improperly typed blood transfusions.
- *Through her own birth if her mom was Rh+.

How Do I Know If I've Been Sensitized?

Your midwife will request to do a blood titer early in your pregnancy to evaluate if your body has developed anti-Rh antibodies.

Risks of Isoimmunization On A Growing Fetus?

The mother's anti-Rh antibodies will cross into the fetus' bloodstream. These antibodies will destroy the baby's red blood cells. The fetus will become anemic, experience jaundice, heart and brain damage can occur, and the baby may die.

What Is RhoGAM?

Rho (D) Immunoglobulin (RhoGAM) is an injection made from human plasma that has been hypersensitized. It is designed to eliminate maternal sensitization of Rh+ blood.

RhoGAM is given in 2 ways:

1. Prenatally at 28 weeks. This is given in an attempt to avoid the 2% of women who will become sensitized during their pregnancy.
In addition to/or
2. Postpartum within 72 hours after the baby is born because the highest occurrence of blood crossing occurs from the actual birth when the placenta separates if the baby is Rh+ (blood can be typed by taking a sample from the umbilical cord).

Risks of RhoGAM include:

- *Unknown effects to growing fetus.
- *Is a blood byproduct and so it is possible for spread of hepatitis, HIV, etc. although this is a very small possibility.

Decreasing Your Risks of Sensitization

- *Avoiding invasive medical procedures.
- *Maintaining good nutrition for healthy placentation.
- *Vaginal birth with low management of third stage (waiting for cord to stop pulsating before cutting it, no tugging on umbilical cord to facilitate the birth of the placenta, etc.)