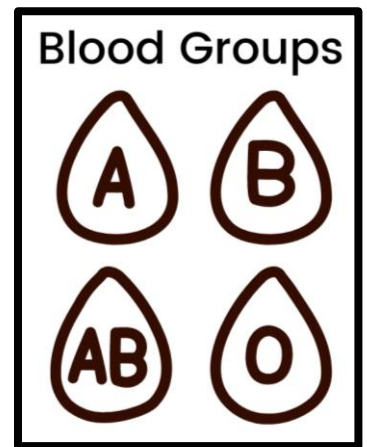


Blood Type & Pregnancy: The Rh Factor

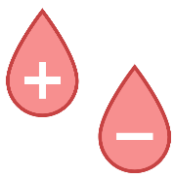
What is a blood type? Everyone has a blood type. It is passed down to us by our parents. Blood types are neither bad nor good, but some types are more common than others.

Our blood type is represented by 1 to 2 letters (A, B, AB, O), followed by a positive (+) or negative (-) symbol. Examples include B+ (B positive), O- (O negative), etc.

If someone has a positive blood type, that means that their blood has a protein called the RhD (also known as the Rh Factor). People who are negative (-) do *not* have the RhD protein in their blood. Most people have a positive (+) blood type.



Why does blood type matter in pregnancy? If someone with a negative blood type (no RhD protein) is pregnant, and the fetus they are carrying has a positive blood type (has the RhD protein), the pregnant person can have a reaction called **Rh sensitization**.



Rh sensitization typically happens as a result of birth, abortion, miscarriage, or ectopic pregnancy, but it can happen at other times. Other causes of the exposure that leads to Rh sensitization include bleeding during pregnancy, trauma to the abdomen during pregnancy, or prenatal genetic testing.

Rh sensitization results in the pregnant person developing *antibodies* to the RhD protein. These antibodies attack the RhD protein as if it were a harmful substance which can lead to problems with future pregnancies such as pregnancy loss and death. Problems typically do not occur in the pregnancy that caused the Rh sensitization.

Preventing Rh sensitization is possible with a simple treatment that is given to people who have a negative blood type that prevents the production of Rh antibodies, which reduces the risk of Rh sensitization from occurring. The treatment is an injection (shot) given during or at the end of pregnancy. This is called Rho(D) Immunoglobulin.

Rho(D) Immunoglobulin (aka RhoGAM) is a safe, effective way to prevent future pregnancy complications for someone with a negative blood type. It is made from human blood products.

- Side effects: injection site swelling, redness, or mild pain as well as a slight elevation in temperature
- Risks: allergic reaction (hives, tightness of chest, wheezing, low blood pressure, anaphylaxis), and transmission of bloodborne infection/illness.
- Alternatives: there is no equivalent preventative treatment against Rh sensitization.
- Additional Information: let your provider know if you have a history of allergic reaction to human immunoglobulin or if you are IgA deficient.
- Based on current medical evidence, experts including the American College of Obstetricians and Gynecologists, the National Abortion Federation and the Society of Family Planning no longer recommend Rho(D) Immunoglobulin to prevent Rh sensitization for people ending pregnancies less than 12 weeks from last menstrual period (LMP).

Rho(D) immunoglobulin Treatment at Hope Clinic

For patients estimated to be 12 weeks from LMP or above, Hope Clinic strongly recommends this treatment to protect from future pregnancy complications. **All patients who are Rh negative with pregnancies measuring 12 weeks or more who are having a procedure at Hope Clinic are offered Rho(D) Immunoglobulin treatment as part of their care.**

In some cases, Hope Clinic will recommend Rho(D) Immunoglobulin for reasons other than length of pregnancy. You will be informed if this applies to you.

At Hope Clinic, Rh typing (testing for the presence of the RhD protein) and Rho(D) immunoglobulin are not routinely offered to patients measuring less than 12 weeks at the time of their visit, unless otherwise indicated. Rh typing may be available upon request, in addition to Rho(D) immunoglobulin treatment as appropriate.

Sources:

- Rho(D) Immune Globulin (Human) RhoGAM and MICRhoGAM OrthoClinical Diagnostics “Directions for use”
 - National Abortion Federation Clinical Policy Guidelines 2024 “Laboratory Practice” p12
 - Society of Family Planning committee consensus on Rh testing in early pregnancy, published 7/20/2022
 - American College of Obstetricians & Gynecologists. Rh D Immune Globulin Administration After Abortion or Pregnancy Loss at Less Than 12 Weeks of Gestation. Clinical Practice Update December 2024.
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