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Rh Incompatibility

What is the Rh factor?

There are four major blood [<https://medlineplus.gov/blood.html>] types: A, B, O, and AB. The types are based on substances found on your blood cells. Your blood type also has a positive or negative sign. This is called Rh factor, which is a protein. If your blood cells have this protein, you are Rh-positive. If you don't, you are Rh-negative.

Rh factor is inherited (passed down through families). Most people are Rh-positive, meaning they have the Rh factor. Rh-negative people don't have it. Being Rh-negative doesn't affect your health, but it can affect the health of your fetus if you are pregnant.

What is Rh incompatibility?

If you are pregnant [<https://medlineplus.gov/pregnancy.html>] and are Rh-negative and your fetus is Rh-positive, it's called Rh incompatibility. Blood from your fetus can cross into your bloodstream, especially during [childbirth](#) [<https://medlineplus.gov/childbirth.html>] . If you're Rh-negative and your baby is Rh-positive, your body will react to the fetus's blood as a foreign substance. It will create antibodies (proteins) that can damage their red blood cells.

These antibodies usually don't cause problems during your first pregnancy. But Rh incompatibility may cause problems in later pregnancies if the fetus is Rh-positive. This is because the antibodies stay in your body once they have formed. During your next pregnancy, the antibodies can cross the placenta (the organ that grows in the uterus to provide oxygen and nutrients to the fetus [<https://medlineplus.gov/fetalhealthanddevelopment.html>]) and attack the red blood cells of the fetus. Rh incompatibility can cause Rh disease, a serious condition that can cause a severe type of [anemia](#) [<https://medlineplus.gov/anemia.html>] .

How is Rh incompatibility diagnosed?

Your health care provider will order blood tests [<https://medlineplus.gov/lab-tests/prenatal-panel/>] during your first trimester of pregnancy. This is often done at your first prenatal visit [<https://medlineplus.gov/prenatalcare.html>] . These tests can check if you have Rh factor and if your body has made antibodies.

How is Rh incompatibility treated?

- **During your pregnancy**, injections of a medicine called Rh immune globulin can keep your body from making Rh antibodies. It helps prevent the problems of Rh incompatibility.
- **After delivery**, if your baby is born Rh-positive, you'll need another injection of the Rh immune globulin. But if you're Rh-negative and your baby is born Rh-negative, you don't need any other treatment.
- **If treatment is needed for the baby**, it may include phototherapy (light therapy) if treatment is needed for jaundice [<https://medlineplus.gov/jaundice.html>] , supplements to help the body make red blood cells, or in severe cases a blood transfusion [<https://medlineplus.gov/bloodtransfusionanddonation.html>] .

Can Rh incompatibility be prevented?

Early prenatal care and treatment help prevent issues with Rh incompatibility.

Learn More

- Fetal-maternal erythrocyte distribution blood test [<https://medlineplus.gov/ency/article/003407.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/003407.htm>]
- Hemolytic disease of the newborn [<https://medlineplus.gov/ency/article/001298.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/001298.htm>]
- Hydrops fetalis [<https://medlineplus.gov/ency/article/007308.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/007308.htm>]
- Hydrops Fetalis/Erythroblastosis Fetalis [<https://childrenswi.org/medical-care/fetal-concerns-center/conditions/infant-complications/hydrops-fetalis-erythroblastosis-fetalis>] (Children's Hospital and Health System, Inc.)
- Red Blood Cell Antibody Screen [<https://medlineplus.gov/lab-tests/red-blood-cell-antibody-screen/>]  (National Library of Medicine)
Also in Spanish [<https://medlineplus.gov/spanish/pruebas-de-laboratorio/prueba-de-anticuerpos-contra-los-globulos-rojos/>]
- Rh Factor Blood Test [<https://www.mayoclinic.org/tests-procedures/rh-factor/about/pac-20394960?p=1>]
(Mayo Foundation for Medical Education and Research)
Also in Spanish [<https://www.mayoclinic.org/es/tests-procedures/rh-factor/about/pac-20394960?p=1>]
- Rh Factor: How It Can Affect Your Pregnancy [<https://www.acog.org/womens-health/faqs/the-rh-factor-how-it-can-affect-your-pregnancy>] (American College of Obstetricians and Gynecologists)
- Rh incompatibility [<https://medlineplus.gov/ency/article/001600.htm>] (Medical Encyclopedia)
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/001600.htm>]
- Rh Incompatibility during Pregnancy [<https://kidshealth.org/en/parents/rh.html>] (Nemours Foundation)
Also in Spanish [<https://kidshealth.org/es/parents/rh.html>]

Clinical Trials

- ClinicalTrials.gov: Erythroblastosis, Fetal [<https://clinicaltrials.gov/search?cond=%22Erythroblastosis,+Fetal%22&aggFilters=status:not%20rec>]  (National Institutes of Health)

Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Comparison of demographic characteristics and haematological parameters in newborns with and... [<https://www.ncbi.nlm.nih.gov/pubmed/40739623>]
- Article: P-Selectin, Vascular Endothelial Cadherin, and Vascular Cell Adhesion Molecule-1 as Novel... [<https://www.ncbi.nlm.nih.gov/pubmed/40331036>]
- Article: Comparison of conventional tube technique with automated gel microcolumn assay for... [<https://www.ncbi.nlm.nih.gov/pubmed/40301701>]
- Rh Incompatibility -- see more articles [[https://pubmed.ncbi.nlm.nih.gov/?term=%22Rh+Isoimmunization%22%5Bmajr%3Anoexp%5D+OR+%22Erythroblastosis%2C+Fetal%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bdat%5D+NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bs%5B%5D+\]](https://pubmed.ncbi.nlm.nih.gov/?term=%22Rh+Isoimmunization%22%5Bmajr%3Anoexp%5D+OR+%22Erythroblastosis%2C+Fetal%22%5Bmajr%3Anoexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND+%22last+1+Year%22+%5Bdat%5D+NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bs%5B%5D+)



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