

The Rh Factor: Can It Affect Your Newborn?

What Is the Rh Factor?

The Rh factor is an inherited protein found on the surface of red blood cells. Most people have this protein and are called Rh-positive. However, some people don't have protein; they are called Rh-negative. Rh-negative pregnant women are at risk of having a baby with a potentially dangerous form of anemia called Rh disease. Fortunately, treatment can usually prevent Rh disease in the newborn. About 85% of Canadians are Rh-positive; the remaining 15% are Rh-negative.

How Does Hemolytic Disease (Rh Disease) of the Newborn Develop?

Hemolytic Disease of the Newborn (Rh disease) develops when a baby's blood is incompatible with its mother's. One blood group system in which this occurs is the Rh system. This happens, for example, when the baby is Rh-positive, but the mother is Rh-negative. It can occur with other blood group (type) differences too.

An Rh-negative mother and an Rh-positive father may have an Rh-positive baby. During pregnancy or delivery, some of the baby's Rh-positive blood may enter the mother's Rh-negative circulation through the placenta. Because red blood cells containing the Rh factor are foreign to the mother's system, her body tries to fight them off by producing antibodies against them. Because the mother develops antibodies, her Rh antibodies can cross the placenta and destroy some of the red blood cells of an Rh-positive fetus. A baby from a first pregnancy may not be affected by these maternal antibodies, however, in a future pregnancy, if the baby is Rh-positive, this antibody could pass from the mother's bloodstream through the placenta to the baby's bloodstream and destroy that baby's red blood cells. The chance of an Rh-positive baby having Hemolytic Disease of the Newborn increases with each successive pregnancy.

Can the Disease Be Prevented?

Hemolytic Disease of the Newborn can be prevented through good medical care. Your medical provider will do bloodwork to determine your Rh status. This is normally done during the first prenatal checkup.

If a pregnant woman is Rh-negative, her doctor will test her blood for Rh antibodies throughout the pregnancy. If she has no Rh antibodies, and the baby's father is (or could be) Rh-positive, she should receive an injection of Rh Immune Globulin when she is at 28 weeks of her pregnancy, and again within 72 hours after delivery. The Rh Immune Globulin prevents the formation of Rh antibodies.

Thanks to advances in treatment, Rh Hemolytic Disease of the Newborn is rare in Canada. For more specific information about Rh Hemolytic Disease of the Newborn, please contact your doctor. For any further questions or concerns please call 519-464-4400 Ext. 5213 or 8440.