



The term *Rh* is short for *Rhesus blood group system*. The Rh blood type contains parts called *antigens* – including the *D antigen*. If the D antigen is present, a person is considered to be Rh positive. If the D antigen is absent, the person is said to be Rh negative. About 85% of Canadians have an Rh positive blood type, while the remaining 15% are Rh negative.

What is hemolytic disease of the fetus?

Hemolytic disease of the fetus develops when the fetus's blood is incompatible with the woman's. This can happen when the fetus's blood is Rh positive, but the woman's is Rh negative. It can also occur when there are differences with other types of blood groups.

An Rh negative woman and an Rh positive man can produce an Rh positive fetus. During pregnancy or delivery, some of the fetus's Rh positive blood may enter the woman's Rh negative system. The woman's blood will then form an antibody as a response to this "foreign" blood.

A fetus from a first pregnancy is not likely to be affected by these antibodies. However, in a future pregnancy, if the new fetus is Rh positive, the antibody that was previously formed in the woman's system can pass from her bloodstream and destroy the new fetus's red blood cells. The chances of hemolytic disease of the fetus increase with each of the woman's successive pregnancies.

Depending on the amount of antibody in the woman's blood, the fetus may develop anemia, jaundice or heart failure; it could also develop to term with a massively swollen body or be stillborn.

Can the disease be prevented?

Hemolytic disease of the fetus can be prevented through good medical care. Any woman who is pregnant should ask her healthcare provider about blood tests to determine her Rh blood type. This is normally done during the first visit to your health care provider when pregnant.

If a pregnant woman is Rh negative, and has decided to continue her pregnancy, her healthcare provider will test her blood for Rh antibodies throughout the pregnancy. If she has no Rh antibodies, and the man involved in the pregnancy is (or could be) Rh positive, she should receive an injection of Rh Immune Globulin – also called *WinRho* – when she is at 28 weeks of her pregnancy, and again within 72 hours after delivery.

If this woman has already produced antibodies, her healthcare provider will need to pay close medical attention to determine if any interventions will be required during the pregnancy. Interventions could include a blood transfusion for the fetus, either before or after delivery.

If a pregnant woman is Rh negative and has chosen to terminate her pregnancy, she will be given Rh Immune Globulin at the time of her abortion procedure.

Since the Rh Immune Globulin prevents the formation of Rh antibodies, it is important for *any* pregnant woman who experiences bleeding – regardless of which choice she makes with her pregnancy – to be assessed by her health care provider quickly to determine whether she needs treatment.

If you have any further questions on the Rh Factor, please speak to your healthcare provider or call Health Links at 788-8200.

Disclaimer: WHC provides health information for your learning only. It should not be used to replace a visit with a health care provider.

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This information was adapted from the Canadian Blood Services pamphlet “The Rh Factor” © 2004.