

Blood

Transfusion for Newborn Babies

Information for parents

What is a blood transfusion?

A blood transfusion is a procedure prescribed by a doctor in which blood is given to your baby. This blood is given by voluntary blood donors. Blood may be transfused whole (without separation into plasma and red cells) but most often it is given as a component or a combination of components is given.

Blood components include:

Red cells: for treating anaemia and bleeding.

Platelets: for bleeding associated with low platelet counts or to prevent bleeding.

Plasma factor VIII and IX and cryoprecipitate: for replacement of clotting factors.

Albumin: for treatment of protein deficiencies and low blood pressure.

Immunoglobins: for treatment of or protection against some infections and certain diseases.

Where does blood come from?

The blood your baby received has been donated by healthy, voluntary donors.

What assures the safety of blood?

Blood donors are required to answer questions with regard to their health before donating blood. These questions are designed to identify people who have infections which may be transmitted by blood.

Blood is collected by a sterile method. Needles and blood bags are not reused. All blood is tested before it is released for use.

What test are done on blood?

Before blood is available for transfusion it is tested for:

Infectious diseases: Syphilis, Hepatitis B & C, HIV/AIDS virus antibodies, and other infections where necessary.

Blood groups: ABO, Rh type and blood group antibodies.

Your baby's blood is checked for antibodies which may react with red cells with which she or he is to be transfused.

What are the risks of transfusion?

Babies very rarely develop any reaction to transfusion. Occasionally older patients develop hives, or a chill and fever associated with transfusion. These reactions are not usually serious. Very rarely other problems can occur such as a transfusion reaction in which red cells are destroyed. In severe transfusion reactions kidney failure can occur – this is extremely rare.

HIV/AIDS

Blood from persons who have been exposed to the HIV/AIDS virus can transmit this infection. However, because of the screening procedures – donor screening and laboratory testing, the risk of contracting HIV/AIDS through blood transfusion is extremely low. Blood screening for HIV/AIDS commenced in 1985. Since that time, despite the transfusion of about 1 million units of blood each year, in Australia and New Zealand, no cases of post transfusion HIV/AIDS have been reported in New Zealand.

Can I or a member of my family donate blood for my baby?

This is not possible. There are several reasons why:

Your blood groups may be incompatible.

Even if your blood groups are compatible there is a much greater chance that your baby might have a severe reaction to blood from a closely related donor. This is called graft-versus-host disease.

We would need to screen your blood for viruses. This can take up to several days and blood is usually needed by the baby fairly urgently.

Hepatitis

Some forms of hepatitis infections can occur following transfusion. These include Hepatitis A (very rare), Hepatitis B and Hepatitis C. Donor screening and testing for Hepatitis B and C has greatly reduced the risk of these diseases.

In New Zealand there have been no diagnosed cases of post transfusion Hepatitis C since testing was commenced in 1992, despite the transfusion of approximately 150,000 units of blood and blood products per year. Hepatitis B infections are similarly rare.

Hepatitis that occurs after transfusions may be very mild and is not always detected. Recovery is usually within a few weeks, although occasionally more serious liver disease can result.

Creutzfeld Jacob Disease (CJD)

No verified cases of CJD have ever been reported due to transfusion of blood or blood products. However, as a precaution the Blood Service actively excludes any person from donating blood who may be at risk for CJD.

Blood transfusion saves lives!

If your baby does not receive a blood transfusion when it is recommended there may be serious medical complications.

Except in emergency, you will be asked to give consent before a blood transfusion is given to your baby.

This leaflet provides a guide only. If you have concerns or want more information about your baby, ask the doctor or nurse providing your baby's care.