What are the risks of receiving a transfusion?

Transfusions are generally considered a very safe treatment. However, there are some risks which are grouped as either infectious or non-infectious risks.

Infectious risks include the risk of transmitting a viral or bacterial infection. For each unit of blood component transfused, the infectious risks are estimated to be:
- 1 in 900,000 for HIV
- 1 in 63,000 for Hepatitis B (liver infection)
- 1 in 103,000 for Hepatitis C
- 1 in 1,000 for bacterial contamination of platelets
- 1 in 500,000 to 1 in 1 million for all other infections

Non-infectious risks include such risks as breakdown of red blood cells (1 in 12,000 units transfused).

It is important to remember that the risks of becoming ill due to a transfusion are very small. However, like many medical treatments, blood can never be completely risk-free. You must decide in discussion with your doctor if the risks associated with having a blood transfusion are higher than the risk of not receiving the blood components which you require.

What are the alternatives to receiving donated blood?

If time permits, certain types of anaemia (low red blood cell conditions) may be corrected by medication, such as iron therapy or Vitamin B12 or other medications that stimulate red cell production by the body.

Can I refuse a transfusion?

In an emergency, your doctor will decide whether you require a transfusion and what type of blood product to use. If your transfusion is not an emergency, then you may wish to discuss this procedure with your doctor.

A competent person is entitled to refuse or stop treatment. If you do not want a transfusion because of religious beliefs or any other reason, you must inform your doctor. However, there are risks associated with refusal. Ask your doctor to discuss these risks with you.

For more information:

Riverview Health Centre
One Morley Avenue
Winnipeg, Manitoba R3L 2P4
www.riverviewhealthcentre.com
At Riverview Health Centre, there are times when a doctor may order a blood transfusion for a client. The purpose of this brochure is to provide patients and their families with general information about blood and blood transfusions. If you have any other questions or concerns, please contact your doctor.

What is normally present in blood?

Blood contains red and white blood cells and platelets which float in a liquid called plasma. Red blood cells contain haemoglobin and carry oxygen to all the parts of the body. White blood cells fight infection, while platelets prevent bleeding. Plasma contains a variety of important substances, some of which also help prevent bleeding.

Blood Transfusions: What You Should Know

What is a transfusion?

Blood from a donor can be separated into components, such as red blood cells, platelets, plasma and substances in plasma, such as albumin and clotting factors. A transfusion occurs when you receive a particular blood component through a tube which is often hooked up to a vein in your arm.

Where does the blood used for transfusions come from?

Blood is collected from healthy volunteer donors. Each time blood is donated, it is tested for certain infections, including syphilis, Hepatitis B, Hepatitis C, HIV-1 and HIV-2 (Human Immunodeficiency Virus, which causes AIDS) and HTLV-1 (Human T-cell Lymphotrophic Virus, type 1). Blood is not used in transfusions if there are any concerns that it may transmit disease.

Why are transfusions necessary?

Transfusions are necessary to replace certain blood components which are at low levels in your blood. Since blood is necessary to provide oxygen to your body, fight infection and control bleeding, it is important that you have an adequate level of the different blood components in your blood. Your doctor can explain what specific blood components you require and why.

What happens during a transfusion?

During a transfusion, you will be watched closely by your nurse. Your nurse will monitor your temperature, blood pressure and pulse. The transfusion may take from minutes to several hours, depending on what blood component you are receiving. Some patients have mild reactions to a transfusion, such as fever and itching (1 in 100 to 1 in 500 transfusions). These reactions can be treated so the transfusion can continue. Rarely, more serious reactions can occur and the transfusion may have to be stopped. Most patients do not have a serious reaction to a transfusion.