Transfusion of Blood Products

Risks and Benefits of Blood Transfusion
What is a transfusion?
Many different products are made from human blood. If you receive any of these products, it is called a transfusion.
These products are given through a needle inserted into your vein.

Why are transfusions needed?
A transfusion may be needed if:
♦ you lose more than 20% of your blood - this would be more than 4 cups
♦ you are anemic (have low levels of red blood cells) and medicine has not helped
♦ your platelets or clotting factors are low or not working properly

It is important to remember that receiving blood products when they are needed can save your life.

Where does donor blood come from?
Whole blood is collected from volunteer donors, by the Canadian Blood Services. Donated blood is tested and then separated into its different parts. Benefits are carefully weighed against the risks before any blood products are given. If you need a transfusion, you will be given only the part you need. Canada’s blood supply is known as one of the safest in the world.
What can be transfused?

♦ **Red Blood Cells:** Red cells carry the oxygen in your blood to vital organs. At present, there is no proven substitute for red blood cells. A red cell transfusion may be necessary to prevent damage to your organs due to lack of oxygen.

♦ **Platelets:** Platelets are needed to prevent or stop bleeding by forming blood clots at the site of injury. Platelet transfusion may be required for patients who have a low number of platelets or whose platelets do not work properly.

♦ **Plasma:** Plasma is a fluid that contains many substances including the proteins that help blood clot.

♦ **Albumin:** Albumin is a protein from plasma that can be used to replace fluid that has been lost.

♦ **Immunoglobulin Preparations:** Immunoglobulins are proteins that help fight infection.

What are the risks of transfusion?

Your doctor will discuss the risks of blood transfusion with you and your family. As most blood products come from other human beings, there are risks. Some reactions that can occur are:

♦ **Allergic:** These are common, usually mild and easily treated with drugs. Bad allergic reactions are very rare.

♦ **Fever:** A reaction to donor blood products may result in a fever. This may happen during or shortly after the transfusion. The fever may or may not need treatment. The symptoms may consist of feeling cold, chills or a fever. Patients who have had a fever reaction with transfusion in the past should tell their doctor.

♦ **Hemolytic:** This rare reaction happens when the patient's blood destroys the donor red cells. A bad hemolytic reaction can result in kidney failure. Careful blood testing is used to ensure that the correct blood is given to prevent this reaction.
Transmitted Infections: The chance of long term infection (such as Hepatitis), resulting in injury or death is very small. At this time, risks cannot be completely removed by available testing or processing.

What are the risks of not having a transfusion?
The red blood cells carry the oxygen in your blood to vital organs such as the brain or heart. A decrease in oxygen could likely cause damage. Transfusion may be needed to prevent such damage. Based on your condition, your doctors will decide when a transfusion is needed.

What are the alternatives to transfusion?
Alternatives may be available to you depending on your condition. You and your doctor should discuss other options to transfusion, such as drugs that stimulate red cell production, IV fluids to dilute your blood, special equipment that could reduce your chances of needing blood products.

If you are likely to need blood and/or blood products, you will be asked to complete a consent form on each admission to hospital or at the beginning of each course of treatment.

If you choose to refuse blood and/or blood products, you must complete a Refusal to Accept form for each admission and/or each course of treatment.

If you refuse to receive blood and/or blood products at any time, you must carry an Advance Directive or other written instruction advising the Medical Staff. In the absence of written refusal, medical staff will give blood and/or blood products if considered necessary to preserve life or health.

For more information, contact your doctor.