

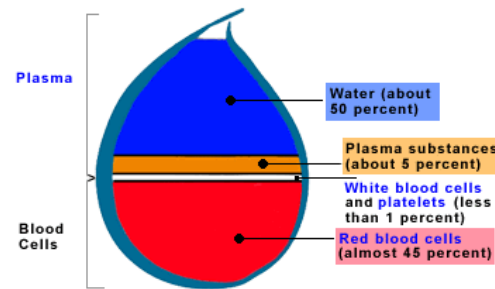
Blood Transfusions: What Patients Need to Know

T E G H

Above all, we care

FACTS ABOUT BLOOD

What is in blood?



Blood is a mixture of cells and liquid - each component performs certain tasks.

Red blood cells carry oxygen to the body's tissues and remove carbon dioxide. These cells make up about 45% of blood.

White blood cells are the immune system's main defense against infection. They make up less than 1% of blood.

Platelets are cell fragments that clot which helps to prevent and control bleeding. Platelets make up 5% of blood.

Plasma is a straw-coloured liquid that is 90% water. It is vital to life. It provides the transportation system for blood cells. Without plasma, the cells would not be able to do their work. Plasma carries germ-fighting antibodies and makes up about 55 % of blood.

On average an adult person carries about five litres of blood. A donated unit of blood is about half a litre.

WHAT IS A BLOOD TRANSFUSION?

Blood transfusion is the process of transferring blood or any of its parts into the bloodstream of a person who has lost blood because of illness, an accident or surgery. Blood and blood products in Canada are donated by healthy individuals.

HOW IS BLOOD FOR TRANSFUSION OBTAINED?

The donation of blood is strictly regulated by Canadian Blood Services. Before blood or blood products are delivered to the hospital each donation is screened to make sure it is free from disease and safe to give to another person.. 1.2 million units of blood are supplied to Canadian hospitals every year. Canada is known to have one of the safest blood supplies in the world. However, there does remain a small risk of disease transmission despite all testing.

WHY ARE TRANSFUSIONS NECESSARY?

Every three seconds someone needs blood. Blood transfusions can be life-saving to someone who has had an accident or injury. Blood transfusions are also used to treat cancer patients and patients undergoing surgery or patients with other medical conditions.

WHAT ARE THE RISKS OF HAVING A BLOOD TRANSFUSION?

The risks of having a blood transfusion must be balanced with the expected benefits of receiving the transfusion. The science of blood transfusion has advanced but there remain risks to the procedure. They include the following: *Fever*, which can be caused by a reaction between the recipient's immune system and immune cells in the donor blood.

Allergic reactions, like hives or itching sometimes happen because of a reaction between the recipient's immune system and proteins in the donated blood. These are usually mild but can be severe enough to force doctors to stop the transfusion.

Hemolytic reaction, or the destruction of red blood cells, occurs when the donated blood and the patient's blood is not a match. This can be life-threatening. It's also extremely rare as health-care professionals go to great lengths to make sure that blood types are compatible before the transfusion.

WHAT ARE THE BENEFITS OF HAVING A BLOOD TRANSFUSION?

If you lose too much blood or have too few red blood cells, vital organs such as the brain and heart cannot get the oxygen to work properly. If the blood loss is severe these organs can be permanently damaged or you may not survive.

WHAT TO LOOK FOR WHEN RECEIVING A BLOOD TRANSFUSION

During and after a blood transfusion, you will be carefully observed for any signs of a reaction. Let your Doctor or Nurse know right away if you have any of the following – **fever; chills; headache or backache; rash, hives and itchy skin; nausea and vomiting; difficulty breathing; blood in your urine or dark urine.**

OTHER OPTIONS TO BLOOD TRANSFUSIONS FOR SURGERY PATIENTS

A hemoglobin (red cell) blood test to tell whether your body can withstand blood loss and avoid blood transfusions will be done.

Check with your doctor about stopping medications that can cause bleeding such as Aspirin, Advil, Coumadin and Plavix.

Consider **autologous (au-tol-o-gus)** donation - collecting your own blood before surgery to receive during your surgery. This significantly reduces the risk of a reaction or disease transmission. You can donate blood for up to six weeks before your surgery if your hemoglobin level is good.

The use of a cell saver to collect your blood during surgery and give it back to you during surgery can be used, depending on the type of surgery. To find out more about this option, ask to speak with the Blood Conservation Coordinator, **Esther Cabrera 416-469-6580 ext.2768** before surgery.

EPO/EPREX is a drug that can be used in

some patients to increase hemoglobin in the blood.

OPTIONS FOR NON-SURGERY PATIENTS

Make sure to visit your family doctor to stay healthy and check for any conditions that might cause changes in your blood. Most conditions can be treated.

Your doctor or pharmacist can review with you the use of drugs that may increase bleeding.

Discuss the use of iron supplements or an iron rich diet with your doctor..

EPO/EPREX to increase hemoglobin can be used in some patients under certain conditions.

For more information about blood transfusions, please visit www.transfusionontario.org/public-en/for-patients/overview.

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