

Blood Transfusion Information

Blood transfusions are an important part of healthcare. Each person is unique and your circumstances are discussed with your authorized healthcare provider.

Blood contains red blood cells, white blood cells and platelets suspended in a liquid called plasma. Red blood cells contain “hemoglobin” which carries oxygen to all tissues of the body. White blood cells fight infection.

Platelets are involved in the prevention of bleeding. Plasma is necessary for blood clotting.

Donated blood is separated into components including red blood cells, platelets and plasma after the white blood cells have been removed. These may be given to a person separately or together. The procedure of giving blood to a person through a vein is called a blood transfusion.

Canadian Blood Services

About every minute someone in Canada needs blood. In most provinces, Canadian Blood Services is responsible for blood collection and testing. Canadian blood donors give their blood free of charge. If you or someone in your family would like to donate blood, please call Canadian Blood Services at 1-888-2Donate (1-888-236-6283).

Reasons for Transfusion

Generally, a blood transfusion is given to replace a part of the blood that is low due to bleeding, illness or medical treatment, such as chemotherapy. Red blood cells are given to correct anemia (low hemoglobin level). Platelets or plasma are given to prevent or stop bleeding.

If You Need a Blood Transfusion

If your authorized healthcare provider recommends a blood transfusion, you are asked to give consent. It is very important that you understand what you are agreeing to. If you have any questions, concerns or need clarification, ask your authorized healthcare practitioner.

The laboratory staff draw a blood sample and carefully select and prepare the blood product that your authorized practitioner requested. Tests are done to ensure the transfusion matches your blood.

During a Blood Transfusion

A needle is inserted into a vein in your hand (or arm) and connected to a sterile plastic tubing which is attached to the blood product. During the transfusion, your temperature and pulse are checked and you are carefully watched by your nurse. The transfusion may take from 30 minutes to several hours depending on the blood product you are receiving.

Risks of Blood Transfusion

Receiving blood and blood products in Canada is very safe. Problems with transfusion complications are rare.

All blood is fully tested and there is a very small chance that the donor may have been infected. Risks of infection in Canada are*:

HIV	1 in 21 million
Hepatitis C	1 in 13 million
Hepatitis B	1 in 7.5 million
West Nile Virus	< 1 in 1 million

The risk of experiencing a serious adverse event is very low. More often, you may have complications such as fever, chills or hives. Risks of complications in Canada are*:

Fever from red cell transfusion	1 in 300
Hives	1 in 100
Heart failure	1 in 100

Most people do not react to a blood product. If you do, call your healthcare provider right away. Each person is unique and your healthcare provider helps you decide whether the risks of not being transfused are greater than the risk of a transfusion.

Alternatives to a Blood Transfusion

If you require surgery, your healthcare providers work together to make sure you are as healthy as possible. The healthier you are going into surgery, the less likely it is that you need a blood transfusion.

There are several options available for you to consider, however, they may not be suitable for you. Your authorized healthcare provider discusses these with you before your transfusion.

Speak to your authorized healthcare provider to understand why you need a blood transfusion and the risks involved.

Record questions below to help you remember what you want to ask.

Canada's blood supply is one of the safest in the world!

***Reference**

Callum, JL, et al. Bloody Easy 4. Toronto: Ontario Regional Blood Coordinating Network; 2016 p. 44