



What is a blood transfusion?

You may need a blood transfusion if your blood levels are too low. A Physician or Nurse Practitioner would order it for you. You would get the blood through a needle put into your vein.

Where does the blood come from?

All blood and blood products come from Canadian Blood Services (CBS). Blood is collected by the CBS from healthy volunteers. A person wanting to give blood must answer questions about their health. New needles and equipment are used for each person. All blood is tested for infectious diseases. If an infectious disease is found, the blood is destroyed.

Donated blood is separated into these parts:

Blood part	What it does in your body
Red Blood Cells	Carries oxygen from your lungs to your tissues and organs.
Platelets	Prevents or stops bleeding.
Plasma	Fluid part of your blood that carries many factors that help your blood clot.
Albumin	Protein that may be used to replace fluids your body has lost.
IVIG	Plasma protein replacement for people who have immune deficiencies.
Rh immunoglobulin (Rhlg)	Blood product given by injection to an Rh negative mother to reduce her reaction to Rh positive red cells.
Clotting Factors	Group of proteins that help stop bleeding when you are injured.

You may need a blood transfusion if:

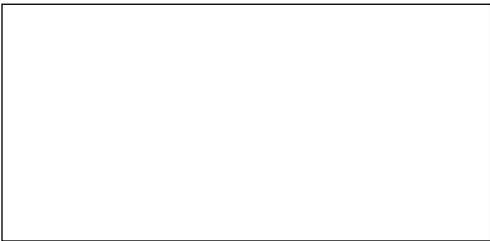
- You have a large amount of blood loss from an accident or injury.
- You have a large amount of blood loss from a surgical operation.
- The oxygen levels in your blood are too low.
- You have ongoing bleeding.

A blood transfusion can save your life. You can die if your blood levels are too low. You may not stop bleeding if your body runs out of platelets and plasma.

A blood transfusion can reduce the problems you could have if you lose a lot of blood. Your body organs (brain and kidneys) can be seriously and permanently damaged if they don't get enough oxygen from your blood.



BLOOD TRANSFUSION FACT SHEET



What are the risks of having a blood transfusion?

- **Red Cell Sensitization:** 1 in 13 may develop red blood cell antibodies. These may cause delays in getting matched blood in the future and some antibodies may affect pregnancies.
- **Allergic Reaction:** 1 in 100 people have a rash, itchy skin, chills or shortness of breath. These signs are usually not serious and are easily treated with medications.
- **Fever:** 1 in 300 may have a mild fever. This is generally not serious and can easily be treated with medications.
- **Fluid overload:** 1 in 100 may have signs of heart failure. It is caused by too much fluid in your body and results in severe shortness of breath that is not normal for you.
- **Hemolytic Reaction:** 1 in 40,000. It is very rare and happens when your blood destroys the red blood cells of the donor's blood. It can cause bleeding, kidney failure, or death.
- **Transfusion Related Acute Lung Injury:** 1 in 10,000. It is caused by the donor's blood and leads to severe shortness of breath that is not normal for you.
- **Infectious Disease:** The risk of an infectious disease being passed on to you through a blood transfusion is very rare. All donated blood is tested but the risks cannot be completely removed.

Your risk of an infectious disease from 1 unit of blood	
AIDS virus	1 in 21 million
Liver Infection	Hepatitis B: 1 in 7.5 million Hepatitis C: 1 in 13 million
West Nile Virus	Less than 1 in 1 million
Symptomatic Bacterial Sepsis	1 in 250,000
Death from Bacterial Sepsis	1 in 500,000

If you do not feel well at any time during your blood transfusion, please tell your nurse immediately.

Sit or lie in a comfortable and restful position during your blood transfusion. You **must** not leave the Patient Care Unit during this time. You may not feel any change after you get your blood transfusion.

For completion only for patients requiring annual re-education:

I have read or have had read to me the Blood Transfusion Fact Sheet. All my questions have been answered.

(Signature of Patient/Substitute Decision Maker)

(Print Name)

(Date)

References Callum, J. (2016). *Bloody easy 4: Blood transfusion, blood alternatives and transfusion reactions*. Clinical guide to transfusion (2016).

