



Blood Transfusion Fact Sheet

A blood transfusion is a medical treatment where donated blood or blood products are given to you through a narrow tube placed in a vein in your arm.

If you agree to having a blood or blood product transfusion, you must give written consent on the “Consent to Treatment form”.

You may need a blood transfusion if:

- You have lost a lot of blood from an accident or from getting hurt.
- You have lost a lot of blood from having surgery.
- You do not have enough oxygen in your blood.
- You have bleeding that does not stop.

A blood transfusion can save your life. You can die if you do not have enough blood.

A blood transfusion can lower the chance of you having problems from losing too much blood. The organs in your body such as your heart or brain can be seriously and permanently damaged if they do not get enough oxygen from your blood.

Where does the blood come from?

All blood and blood products come from healthy donors that give blood to the Canadian Blood Services (CBS). A person that wants to give blood must answer questions about their health. New needles and equipment are used to take blood from each person. All blood is tested for infections and viruses, known as infectious diseases. If an infection or virus is found in donated blood, the blood is not used.

Donated blood is grouped into these parts:

Part of the blood	What it does in your body
Red Blood Cells (RBC)	Brings oxygen from your lungs to your tissues and organs.
Platelets	Stops bleeding.
Plasma	The liquid part of your blood that carries all parts that help your blood clot.
Albumin	May be used to replace fluids your body has lost.
IVIG	Replacement immune globulins for people who have immune deficiencies.
Rh immunoglobulin (RhIg)	Lowers the reaction of an Rh negative pregnant woman to Rh positive red cells.
Clotting Factors	Specific parts that help blood clot

What are the risks of having a blood transfusion?

- **Red cell sensitization:** 1 in 13 people may get red blood cell antibodies. This may cause delays in getting the right blood in the future, and some antibodies may affect pregnancies.
- **Allergic reaction:** 1 in 100 people will get a rash, itchy skin, chills, or shortness of breath.
- **Fever:** 1 in 300 people will get a fever. This is usually not serious and is easily treated with over the counter medications such as Tylenol.
- **Fluid overload:** 1 in 100 people may have signs of heart failure. This is caused by having too much fluid in your body and causes severe shortness of breath that is not normal for you.
- **Transfusion Related Acute Lung Injury (TRALI):** 1 in 10,000 have severe shortness of breath caused by the donor's blood. If you already have shortness of breath, this reaction will be worse than your normal shortness of breath.
- **Hemolytic reaction:** 1 in 40,000 people have a reaction where their blood gets rid of the red blood cells of the donor blood. This is very rare and can cause bleeding, kidney failure, or death.
- **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 12.9 million
Death from Bacterial Sepsis	1 in 500,000
Liver Infection	Hepatitis B: 1 in 2 million Hepatitis C: 1 in 27 million
Symptomatic Bacterial Sepsis	1 in 250,000
West Nile Virus	Less than 1 in 1 million

Please tell your nurse right away if you feel sick at any time during your blood transfusion.

Sit or lie down in a comfortable 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.

Source: Callum, J., Pinkerton, PH., Lin, Y., Cope, S., Karkouti, K., Lieberman, L., Pendergrast, J., Robitaille, N., Tlnmouth, AT., Webert, KE. (2022). Bloody easy 5. https://transfusionontario.org/wp-content/uploads/2022/10/BloodyEasy5.1_English_Final_2023_Interactive-June-28.pdf