

Blood Transfusion – Benefits, Risks and Options

It is important to tell your physician or nurse if you have had a reaction to blood or blood products in the past.

This guide will help you understand the benefits, risks and ways to decrease the need for a blood transfusion. Transfusions are used to replace blood and blood parts (blood products) that are below a reasonable level for your health. The transfusion can be with one or more of the following blood products: red blood cells (RBCs), platelets, plasma or cryoprecipitate.

- RBCs carry oxygen throughout your body and help remove carbon dioxide.
- Platelets are small cells that help your body form clots to stop bleeding.
- Plasma and cryoprecipitate contain clotting proteins that help control bleeding.

A transfusion may be needed due to surgery, injuries, or certain medical conditions or diseases.

Benefits and risks of blood transfusions

A blood transfusion adds blood components to your body to correct low levels. It can be a lifesaving therapy and prevent complications due to blood loss.

There are risks with every medical procedure, including blood transfusion, but certain safeguards have been put in place to help reduce these risks. The blood used for transfusion comes from a donor. All blood donors must answer questions about their health and lifestyles before giving blood. The donated blood is then carefully tested for infectious diseases. Blood that is not safe is destroyed. But, there is still a very small risk of getting an infectious disease from a blood transfusion such as:

- Human immunodeficiency virus (HIV): 1 in 1.5 million transfusions
- Hepatitis C: 1 in 1.1 million transfusions
- Hepatitis B: 1 in 843,000 to 1 in 1.2 million transfusions

Other risks include:

- Severe allergic reactions
- Breathing problems due to fluid overload or injury to the lungs
- Bacterial infection
- Destruction of RBCs (hemolysis)
- Receiving the wrong blood product (due to human error)
- Shock or death

Treatment options and ways to reduce the need for a transfusion

Our practice focuses on ways to reduce or avoid the need for blood transfusions, when possible. This may lead to fewer infections and better outcomes. It also makes sure that you receive treatment when necessary and that the transfusion is given safely.

Treatment options and how well they work will depend on your situation. Some techniques and medicines can help reduce blood loss, and prevent or control bleeding. Some advanced surgical tools also can be used to reduce bleeding in surgery.

Anemia is a condition in which you have low levels of RBCs. By treating anemia before surgery, you may avoid the need for a blood transfusion. Ask your physician if there are any medications, or herbal or vitamin supplements that should be stopped or started before a procedure or surgery. Your body has a natural ability to adapt to moderately lower levels of RBCs without needing a blood transfusion. You may have fatigue and weakness or no symptoms at all until your body returns to a normal level of RBCs.

In cases where your blood loss is too great, or if you are in a possible life-threatening situation, conservative options may not work quickly enough to help you. In these situations, a transfusion may be the best treatment.

Your physician will explain why a blood transfusion is important and discuss the amount and type of blood product you may need, based on your medical condition. As a patient, you should understand the risks and benefits of treatment so you can make a choice that is best for you.