

BLOOD TRANSFUSIONS: WHAT YOU NEED TO KNOW

Your doctor has ordered a blood transfusion for you. This patient education page will answer some of your questions about receiving blood. If you have other questions or concerns, ask your doctor or nurse. They will be glad to talk with you.

Why do people need a blood transfusion?

People may need a blood transfusion for many reasons. Some reasons include:

- Replace blood that the body has lost.
- Restore the blood's ability to carry oxygen.
- Help control bleeding.
- Help control blood pressure.

What are blood products?

Blood is made up of different parts. When the various parts of the blood are separated, the results of the process are called blood products. Many blood products are available for transfusion. Most often, people receive red cells, platelets (PLATE-lets), plasma (PLAZ-muh), or cryoprecipitate (CRY-oh-pree-SIP-ih-tate). Several other blood products are used in special cases.

What do these blood products do?

Each type of blood product has a special job to do. Red cells are one of the blood products most often used. Red cells have the vital job of carrying oxygen throughout the body. If you do not have enough red cells, your organs may not work properly. Plasma, platelets, and cryoprecipitate each work in their own way to help stop bleeding.

How does my doctor know what to give me?

To decide what blood products you need, your doctor looks at the results of your lab tests, as well as all your medical needs. After your doctor decides you need a blood product, you may have more tests to match your blood type to the blood product.

Where do blood products come from?

Blood products come mainly from blood donated by healthy volunteers. Donor sites and community blood drives collect units of whole blood from donors. Donors undergo careful screening. Each unit of whole blood is processed, and various types of blood products are removed for use. Each unit of whole blood provides three or more different blood products.

How do you know that the blood is safe to use?

Each donor is screened carefully before any blood is collected. Once collected, each unit of whole blood is tested to be sure it is safe to use. At least 10 different tests are done on donated blood before it is approved for use.

Can anything be done to reduce my need for a blood transfusion in surgery?

A number of strategies can be used in the operating room to reduce surgical blood loss. Your doctor may use one or more of these strategies during your surgery.

• Minimally Invasive Surgery

Surgeries such as laparoscopic surgery and robotic surgery are now performed using smaller incisions. These surgical approaches may result in less blood loss than surgeries that are performed using a larger incision.

- **Medications, Adhesives, and Tools**

Medications that help to decrease bleeding are used in certain surgeries. Surgical tools, such as electrocautery and argon beam coagulation, may be used to help reduce or stop certain types of surgical bleeding.

- **Blood Cell Salvage and Reinfusion**

Blood cell salvage involves the collection of your own blood during surgery. Your blood is concentrated, washed, filtered, and returned to your body. On average, this means that 60 percent of your blood cells can be returned to your body. In some surgeries, blood cell salvage may occur completely in the operating and recovery room areas. In other cases, cleaning and returning your blood may continue after surgery or occur mostly in the postoperative period.

Currently, all UPMC facilities offer intraoperative cell recovery programs and are accredited by AABB® in Perioperative Autologous Blood Collection and Administration Standards.

Should I donate my own blood in advance of a surgery?

In most cases, this is not an effective strategy for decreasing blood transfusions and therefore is not recommended.

Can my family or friends give blood for me to use?

In certain cases, you can receive blood from someone you know. This is called directed donation. To use directed donation, the donated blood must be collected and stored before a definite or possible need. The donated blood is screened and tested to make sure that it's compatible and safe for you. In emergency cases and with certain diseases and surgeries, directed donation is not possible.

How much does a blood product cost?

Will my insurance pay for it?

The blood product itself does not cost you anything. There are charges for testing, processing, handling, and storing blood products. Matching a blood product to your blood type or to your need may carry a fee. Most insurance plans cover these services. Check with your insurance company on exactly what and how much your plan covers.

How long can blood products be stored?

Most blood products cannot be stored for long periods of time. Some products, like platelets, can be stored for only five days. Red blood cells can be stored for up to 42 days in a refrigerator.

During certain times of the year, like summer and holidays, blood demand is often high and donations are often low. The volunteer blood supply must be constantly renewed by blood donors.

Are there risks with a blood transfusion?

The transfusion of blood products is generally regarded as a safe procedure with important benefits. Some patients receiving blood products may occasionally develop allergic reactions, fevers, chills, or other rare complications. These risks will be explained during the informed consent process for blood product transfusion. If you notice any of these symptoms during your transfusion or within 24 hours after receiving blood, please call your doctor immediately or go to the nearest Emergency Department.

Contact the coordinators at the Center for Bloodless Medicine and Surgery at UPMC, at **1-877-674-7111**, or visit **www.BloodlessCenter.com**.