

Receiving Blood Transfusions

Blood is made up of fluid called **plasma** that contains **red blood cells**, **white blood cells** and **platelets**. Each part of the blood has a special purpose. A person may be given whole blood or only the parts of the blood needed to treat an illness or injury.

Types of Blood Transfusions

A transfusion is the process of giving whole blood or parts of the blood through an intravenous (IV) catheter tube into a blood vessel. Your doctor will talk to you about the type of transfusion he or she recommends to treat your condition.

- **Red blood cells** – This is the most common part of the blood given. Red blood cells are what give blood its red color. Red blood cells carry oxygen from the lungs to other parts of the body then carbon dioxide back to the lungs. A red blood cell transfusion may be needed if you have lost blood to surgery or injury, or to treat anemia.
- **Plasma** – This is the liquid part of the blood that contains proteins that help blood clot and fight disease. Plasma transports water and nutrients to your body's tissues. It is often given to replace blood that has been lost after bleeding.
- **Platelet** – These cells work with proteins in plasma to help blood clot. Platelet transfusions are given when the platelet count is too low.

The blood used in transfusions most often comes from volunteer donors. The blood is carefully screened for disease to make sure that it is safe.

What to Expect

Preparing for Treatment

If the transfusion is not an emergency, a sample of your blood is taken to match your blood to donor blood and to decrease the chance of an allergic reaction. This sample of your blood is taken to find:

- Your blood type (A, B, AB or O) and whether you are Rh-positive or Rh-negative.
- Compatible donor blood. This is called cross-matching. A small sample of your blood is mixed with a small sample of donor blood to make sure they mix smoothly and are thus a match.

Tell your doctor if you have allergies or have had a reaction to a past blood transfusion.

Signs of an Allergic Reaction

An allergic reaction to a blood transfusion is not common. If a reaction occurs, it can be treated. Most reactions occur while you are receiving blood or soon after. Signs of a reaction include:

- Hives or itchy skin
- A fever
- Chills
- Dizziness
- Chest pain or ache
- Shortness of breath
- Back pain
- Pain at the transfusion site

During the Transfusion

- A small needle is inserted into a blood vessel, most often in your arm or hand, and a small sample of blood is taken and tested to confirm your blood type. You will feel a pinch when the needle is inserted.
- A small plastic tube, called an intravenous (IV) catheter, is left in the blood vessel. You receive blood through this tube. The donor blood, which is in a blood bag hanging from an IV pole, flows out of the bag through tubing into your blood vessel.
- A transfusion can take up to four hours depending on the type of transfusion you are having and how much blood is being given.

- You will be checked often to watch for a reaction or other problem. Your temperature, pulse and blood pressure will be checked. **Tell your nurse right away** if you have any signs of a reaction during your transfusion.
- When the transfusion is complete, the catheter tube is removed and a bandage is placed over the site. You may have some mild bruising or discomfort for a few days at the site. If you are in the hospital, the tube will stay in place.

After You Go Home

Call your doctor right away if you have any signs of a reaction at home after your transfusion. In rare cases, reactions occur days or weeks after a transfusion. **Call your doctor right away** if you have any of these signs:

- Kidney problems, such as dark urine, more or less urine, or back pain
- Nausea and vomiting
- Yellowing of the skin or whites of the eyes
- Fever, cough, runny nose or muscle pain

Talk to your doctor or nurse if you have any questions or concerns.