

Blood Transfusions

What is a blood transfusion?

A blood transfusion is a procedure that gives a patient blood through a peripheral (hand/arm) IV or a central line catheter.

Transfusions are most often given because a patient's blood levels are low, or they have active bleeding. This can be caused by many things such as:

- injury,
- surgery,
- chemotherapy,
- drugs,
- certain diseases/illness.

Blood can be given “whole,” but most often, only certain parts of blood are given to patients based on their need. The most common blood parts are red cells, platelets, plasma, and cryoprecipitate.

- **Red Blood Cells** carry oxygen from the lungs to the tissues of the body. Without enough red blood cells, patients may become anemic and may feel tired and look pale.
- **Platelets** help to clot blood and stop bleeding.
- **Plasma** also plays large role in blood clotting. This may be given if a patient is bleeding, has low levels of clotting factors or a high INR.
- **Cryoprecipitate** is given to control bleeding. This is given to patients who have low blood levels of one or more clotting factors.

What can I expect during the transfusion?

Before the transfusion, your nurse will make sure you have a recent type and screen lab test. This tells us your blood type. If you do not have a recent type and screen on file, your nurse will draw blood and send it to the lab.

Tell your doctor if you have had a

transfusion reaction before. Once the blood arrives, two nurses will double check the blood product at the bedside. This ensure you are getting the right product. Your vital signs (blood pressure, pulse, temperature and respiratory status) will be checked often. Your nurse will stay in the room with you for at least the first 15 minutes as this is the most likely time for a transfusion reaction to occur.

During your transfusion, please tell your nurse right away if you have any of these symptoms:

- bleeding, pain, or new bruising at the IV site,
- severe back pain,
- fever, chills,
- nausea/vomiting,
- rash/hives/itching,
- headache/dizziness,
- chest pain,
- fast heartbeat,
- trouble breathing/wheezing,
- dark or reddish urine,
- yellowing of the skin or eye.

What can I expect after the transfusion?

Your lab levels will be rechecked 1 hour after the transfusion or as the doctor orders. If you have any of the listed symptoms after the transfusion is done, tell your nurse or doctor right away as this may still be a sign of a transfusion reaction.

Risks

Along with our blood supplier, we aim to make our blood products as safe as possible. Blood that is given to patients has been carefully prepared and tested. While most blood products are given without any

problems, it is important to know that problems can happen.

Minor Reactions

During or right after a patient starts to get a blood product, they might notice a rash, hives, itching, fever or chills. These symptoms are seldom serious. Nurses and doctors watch for these signs. If a severe symptom such as trouble breathing, occurs, the doctor and nurse will respond quickly.

Serious Problems

Getting a disease from a blood product is rare; yet, it can happen. The more severe diseases carried through blood are:

- **HIV:** The chance of getting HIV is 1 in 2 million units transfused. This is a disease caused by the Human

Immunodeficiency Virus (HIV). The virus travels through blood and destroys the body's disease fighting system. It can cause illness and death. Since early in 1985, all blood donors have been tested to see if they carry or are infected with HIV. Because of careful screening and testing, the risk of getting HIV from blood transfusions is quite small.

- **Hepatitis B and C** affect the liver. The chance of getting hepatitis after a transfusion is very low. The risk is about 1 per 500,000 units transfused for Hepatitis B and 1 per 2,000,000 units transfused for Hepatitis C. If Hepatitis B does occur, it tends to be mild and patients recover. However, Hepatitis B & C can become chronic.