

Transfusion

Blood transfusions can be lifesaving. Transfusions are the administration of blood or blood products through a peripheral IV or central venous access device. They are given for many reasons. Donated blood is divided into parts including red cells, platelets and plasma, so it may benefit as many children as possible.

- **Red cells:** Red cells carry oxygen through the body and give us energy. If your child has a low red blood cell count, called anemia, your child may receive a red blood cell transfusion.
- **Platelets:** Platelets help stop bleeding by plugging holes in blood vessels. If your child has a low platelet count, called thrombocytopenia, your child may receive a platelet transfusion.
- **Fresh Frozen Plasma (FFP):** Plasma is the clear liquid portion of blood that also helps stop bleeding.
- **Intravenous Immunoglobulin (IVIG):** IVIG is a part of plasma that contains antibodies that help fight infection.
- **Albumin:** Albumin is a blood protein that may be given to treat low blood pressure or excessive blood protein loss.

Receiving a Transfusion

Red blood cells and platelets must be **typed** to match with your child's blood. You may have to wait several hours for the blood product to be ready.

The amount of blood product your child will receive depends upon his/her weight. A signed consent is necessary prior to receiving a blood product transfusion. The consent is good for one year.

Your child will be closely watched during the transfusion. The nurse or clinic assistant will check the temperature, pulse, respirations, and blood pressure throughout the transfusion. The nurse will also watch for any side effects or reactions. A red blood cell transfusion will require two to four hours to complete; platelets require 30 to 60 minutes to infuse, but may take longer.

Risks of Transfusion

Receiving donated blood is now safer than ever because of improved testing. However, all blood transfusions carry a small risk.

Transfusion Reactions: Common signs of reactions include: fever, chills, muscle aches, nausea, and back pain. Your child may have hives, itching red face, vomiting, dizziness and noisy breathing. The nurse will stop the transfusion if these reactions occur and medication may be given. Your child may then need these medications before each transfusion.

Infectious Risks: All blood is screened for viruses and other infections including those that cause hepatitis, human immunodeficiency virus (HIV), human T-cell

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lymphotropic virus (HTLV) and syphilis. The chance of becoming infected with one of these viruses is extremely small.

Virus	Approximate risk per unit transfused
HIV I	1 in 2,100,000 transfusions
HTLV I	1 in 3,000,000 transfusions
Hepatitis C	1 in 1,900,000 transfusions
Hepatitis B	1 in 200,000 transfusions
West Nile Virus	1 in 1,000,000

Other infectious agents (Chagas, malaria, syphilis) are rarely transmitted by transfusion (less than 1 in a million). Bacterial infection of blood products may uncommonly occur. Albumin has not been shown to have a measurable risk of viral transmission. IVIG has caused hepatitis in the past, but current products are now treated in ways thought to prevent hepatitis.

Talk to your healthcare provider about any concerns you have about blood product transfusions.

Contact Us

For patient care assistance, please call the following phone numbers:

- Jimmy Fund Clinic (617) 632-3270
Business Hours 8 a.m. to 5 p.m., Monday through Friday
- Page Operator (617) 632-3352
Off hours: weekdays after 5 p.m., holidays, and weekends
Page pediatric hematology/oncology fellow on call
- Life Threatening Emergencies dial 911