



What if I need blood?

Daniel Cirna

Donating blood is giving the gift of life. If you or your loved ones would like to donate blood, please call 1-800-GIVE LIFE to schedule an appointment at the Red Cross Blood Center nearest you.

1-800-GIVE LIFE

www.redcross.org



Understanding Your Blood Transfusion Options

Stock No. 321019
Rev. Feb. 2002

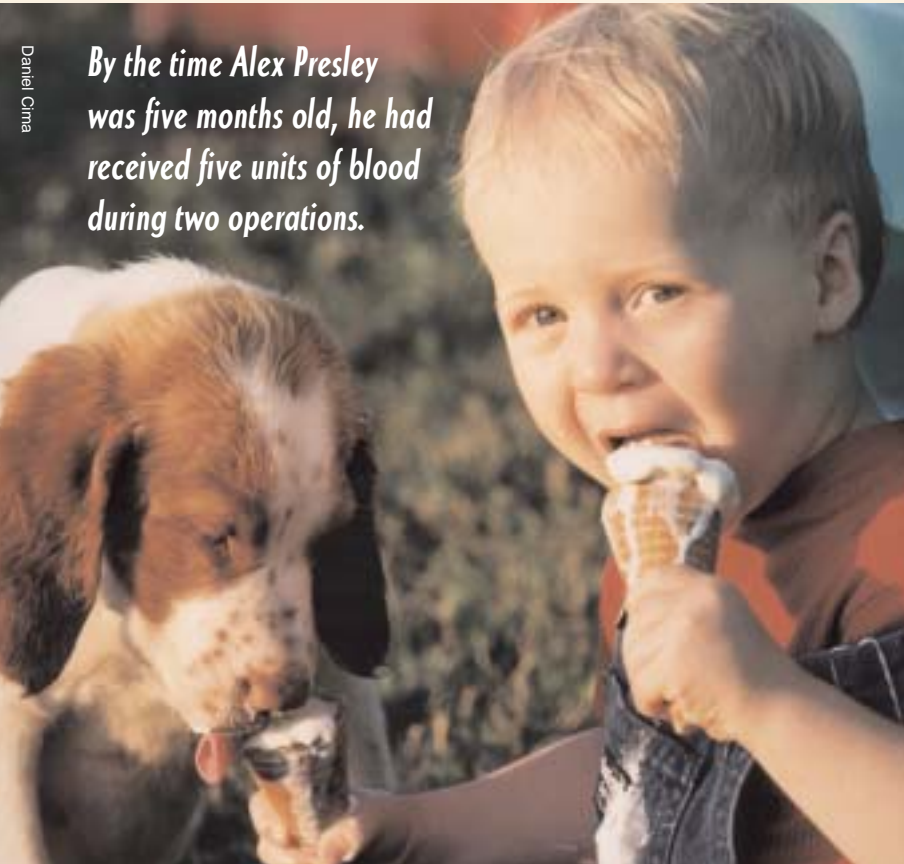
© 2002 by The American National Red Cross



Olivia Curtis wanted to learn more about blood transfusions when her cousin needed blood.

Blood transfusions are a critical part of everyday medical procedures and assist in saving countless lives each year. Most organ transplants, cancer therapies, heart and other surgeries, support for patients with blood disorders, resuscitation of trauma victims, and the care and survival of premature infants would not be possible without blood transfusions. If there is a possibility that you will receive a blood transfusion, it is important that you understand your options in order to make a timely and informed decision.

By the time Alex Presley was five months old, he had received five units of blood during two operations.



This brochure is provided to—

- Explain the options available to you if you or a loved one requires a blood transfusion.
- Help you ask the questions and get the information you need.
- Help you understand the risks and benefits of blood transfusion.
- Help you understand alternatives that may reduce the risks of blood transfusion.

1

Why would my doctor recommend a blood transfusion?

You may require a transfusion to replace blood that is lost during surgery or in an accident.

If you are receiving chemotherapy, your bone marrow may be temporarily unable to make new blood cells.

You may require a transfusion to correct severe anemia that may not be responsive to other treatments.

2

Where does the blood for my transfusion come from?

The American Red Cross collects more than 6 million volunteer blood donations each year, making it the nation's largest single blood supplier. Donors are eligible to give whole blood every 56 days and can donate some blood components, such as platelets, more frequently. People of all ages and backgrounds give blood to help others. Donors must be healthy, 17 years or older, 110 pounds or more and must meet strict requirements set forth by the Food and Drug Administration and the Red Cross.

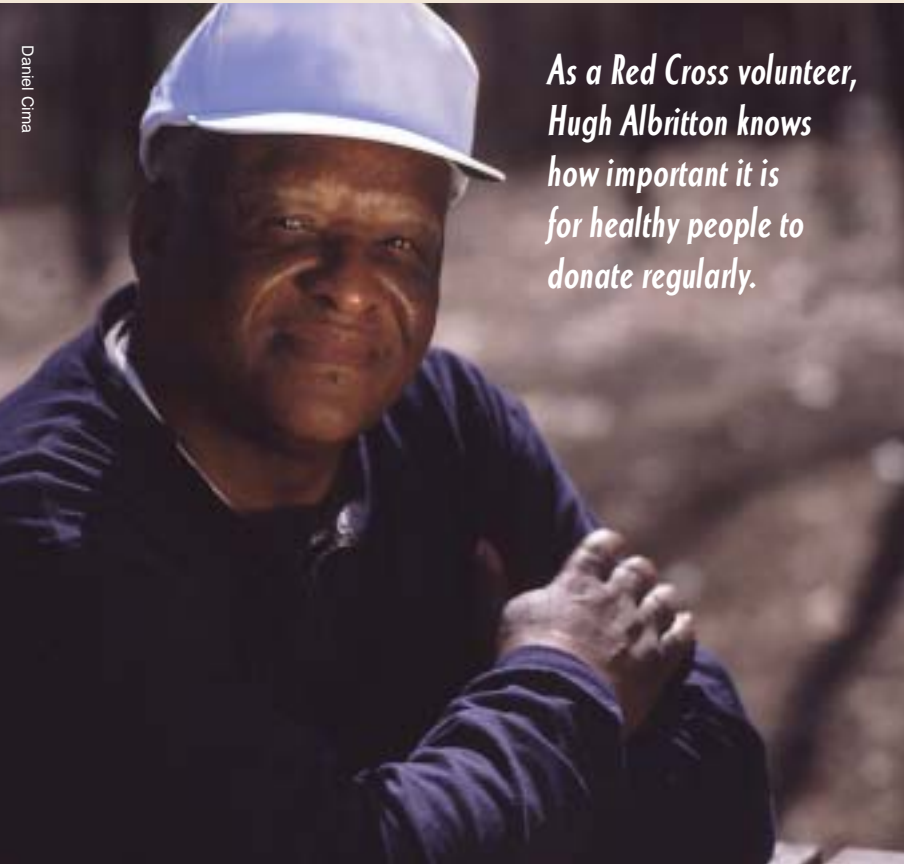
3

Is it safe to get a blood transfusion?

Many patients and their families are concerned about the risk of contracting a disease (e.g., hepatitis, AIDS, bacterial infection) through a transfusion. In fact, while blood transfusions are not risk free, the blood supply is safer than ever. Red Cross volunteer blood donors are carefully screened for risk factors that would disqualify them from donating blood. In addition, every donation goes through extensive testing for various infectious disease markers, including HIV and hepatitis. Donations that test positive are not used for patient transfusions.

The risk of contracting HIV, hepatitis or bacterial infection from a blood transfusion is extremely low. When a transfusion is needed, the benefits of receiving blood outweigh the risk of contracting an infectious disease. If your doctor recommends a transfusion, ask about the benefits and risks.

Each year approximately 8 million volunteer donors give about 14 million blood donations. That's more than 38,000 donations a day.



As a Red Cross volunteer, Hugh Albritton knows how important it is for healthy people to donate regularly.

4

Are blood substitutes available?

Fluids that carry oxygen are being developed and may soon be available in the United States. These “artificial blood” fluids may be able to replace red blood cell transfusions in some, but not all, cases. But they cannot replace platelet or plasma transfusions in any case. Transfusions of human blood will continue to be used.

New medical techniques and drugs can sometimes significantly reduce or eliminate the need for blood transfusion. For example, most surgeries today require far less blood than just a few years ago. In another example, patients on kidney dialysis who previously needed monthly blood transfusions, now can take a drug that is intended to increase red blood cell production.

The Red Cross actively follows blood substitute research and works closely with other organizations that develop new transfusion alternatives.

5

If blood donations are from volunteers, why is there a charge when I receive a transfusion?

After a unit of blood is donated, it must be tested and processed into components prior to being released to your hospital for transfusion. As many as 12 different tests are performed for various infectious diseases on each unit of blood donated. A blood processing fee, passed on to the hospital, covers the cost of all the handling from the moment blood is drawn from the donor until the time it is sent to the hospital. The hospital may charge additional fees, such as a cross-match fee and an administration fee, to cover the cost of actually giving the transfusion. However, there is no charge for the blood itself.

Your blood transfusion options:

- Use blood from volunteer donors.
- Donate blood for your own use.
- Use blood donated by family or friends that is your blood type.
- Ask your doctor about alternatives to transfusion.

12.4 million
About 12.4 million red blood cells and whole blood units, 9 million platelet units and 3.3 million plasma units are transfused annually.



The Hartnett sisters discussed how blood is used to treat breast cancer when Erin was diagnosed several years ago.

6

What are the risks associated with blood transfusion in addition to the risk of infectious disease?

Occasionally, reactions to blood transfusions do occur. However, in most cases, the reactions are mild, usually fever or chills. Many transfusion reactions are caused by the donor's white blood cells (leukocytes) transfused along with the red cells or platelets. These leukocytes may cause fever, may carry certain viruses and may suppress the immune systems of patients, increasing their risk of infections after surgery. Clinical trials suggest filtering red blood cells and platelets to reduce the number of white blood cells prior to storage (prestorage leukocyte reduction) reduces complications.

7

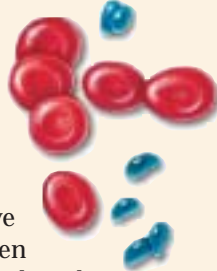
Can I donate my own blood for transfusion?

Using your own blood, called autologous donation, is a transfusion option for patients who are having surgery. You can donate one or more units of your own blood up to six weeks before your surgery. Most surgical procedures do not require transfusion, so autologous donations are not necessary. Many autologous units are never used and are discarded. Ask your physician if this option is appropriate for your surgical procedure.

Another method used to replace lost blood during surgery is intraoperative autologous transfusion (IAT). This procedure allows the doctors in the operating room to recover blood lost during surgery and immediately return it to you.

BLOOD AND BLOOD COMPONENTS

Most blood collected for transfusions is separated into its components—the red blood cells, platelets and plasma. Your medical situation will determine which blood component you may need.



Red Blood Cells: Red blood cells are the cells that give your blood its red color. Red blood cells carry oxygen from the lungs to your body's tissue and take carbon dioxide back to your lungs to be exhaled.

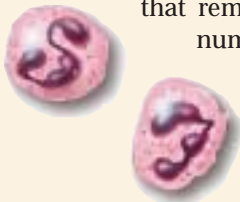
Platelets: Platelets are small, colorless cell fragments in your blood whose main function is to interact with clotting proteins to stop or prevent bleeding. An average of six to eight units of platelets from whole blood donations (or one unit from an automated platelet donation) is needed to make up a single transfusion for an adult.

Plasma: Plasma is the liquid portion of your blood, which is made up of proteins, including clotting proteins, minerals and water.

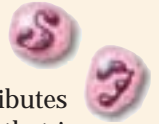
LEUKOCYTE-REDUCED BLOOD TRANSFUSIONS

Your own white blood cells or “leukocytes” ward off infectious agents and help to maintain immune function in your body. However, when leukocytes are present in donated blood, they serve no purpose, but are transfused along with the red blood cells, platelets or plasma. Leukocytes may carry viruses, cause immune suppression and release toxic substances. Studies have shown that removing leukocytes from donated blood may have a number of benefits for patients.

The American Red Cross believes that the removal of contaminating leukocytes from blood components should be universally implemented as a means to further increase the safety of the blood supply and improve patient outcomes.



Virtually all of the blood distributed by the American Red Cross is leukocyte-reduced.



Should you require plasma, the American Red Cross distributes leuko-reduced fresh frozen plasma and a form of plasma that is chemically treated. The chemical detergent treatment inactivates some viruses, such as the human immunodeficiency virus (HIV), hepatitis B virus (HBV), and hepatitis C virus (HCV) that might be present, and the treated plasma is sterile-filtered to reduce the risk of bacterial and parasitic infection.

Removal of leukocytes from blood transfusions cannot be used to prevent one type of serious transfusion complication, called transfusion graft versus host disease. For this problem, other special treatment (irradiation) of the blood is typically required.

Now that you've learned about blood transfusion options:

- You should discuss any questions you may have with your physician. Your doctor can determine with you which option is best and make the necessary arrangements.
- By understanding your blood transfusion options—and knowing that the most appropriate option has been chosen—you can be assured that you will benefit from this “gift of life.”
- For further information about blood transfusions or blood services, please call the Red Cross Blood Center nearest to you.

To find the Red Cross chapter closest to you, check the chapter locator on our Website, www.redcross.org.