



**GIVE
BLOOD**

Where Does Your Blood Go?

When you donate blood, know that you are giving the gift of life. The simple donation process provides crucial contributions to benefit accident victims, cancer patients, those undergoing surgeries and even children with blood disorders.

According to the American Blood Centers, 40,000 pints of blood are needed each day to fulfill the need of Americans. Since the need is so in demand, it is crucial to donate whenever you are able to – not just in times of disaster.

Before donated blood begins saving lives, it relies on a series of medical professionals to ensure it is safe to share. Check out some of the steps your blood must take before benefiting a patient.

PROCESSING

Once the donation process has been completed, the next stage is called processing. The blood will first be scanned into a database before being separated into red cells, platelets and plasma.

According to the American Society of Hematology, these individual components serve their own unique role in those receiving blood donations:

Red blood cells: High in a protein called hemoglobin, RBCs help carry oxygen from the lungs to the rest of the body, and returns carbon dioxide from the body to the lungs so it can be exhaled.

Platelets: These enhance the blood-clotting process at the site of an injury by sticking to the lining of an injured blood vessel.



Plasma: A liquid component of blood is important for transporting blood cells through the body. It also moves nutrients, waste, antibodies and proteins that help maintain a healthy balance.

After the donated blood is separated, it is then placed in test tubes and sent for testing.

THE TESTING PROCESS

Once specialists at a testing facility receive blood, at least a dozen tests are performed on each unit to ensure it is free of infectious disease and to determine the blood type.

The American Red Cross states this process is typically completed in just 24 hours before results are transferred to a

manufacturing facility. Donors with positive results of disease will be notified.

DISTRIBUTION

Thanks to the selfless donors and hardworking medical teams across the country, blood is available to be shipped to hospitals, 24 hours a day, seven days a week.

Know Your Blood Type

When donating, the medical professionals who test your blood will determine your type before making it available to hospitals. However, certain blood types are more in demand, and you may hold the universal type used to save many lives.

According to the American Red Cross, only seven percent of United States' citizens are Type O. If you are one of the few with this universal blood type, your donations are incredibly important.

It is often used in emergency situations before a patient's type can be determined and in newborn babies.

While Type O is certainly unique, American blood banks rely on all blood types to maintain our national supply.

UNDERSTANDING BLOOD TYPES

While all blood is made up of the same basic-building blocks, it is not alike. There are several different types, and introducing an incompatible blood into a patient's body can trigger serious immune diseases.

According to the American Red Cross, there are four major groups determined by the presence or absence of two antigens — A and B. Here's how different blood groups are compatible with one another:

- Group O can donate red blood cells to anyone. It is the universal donor.
- Group A can donate red blood cells to As and ABs.
- Group B can donate red blood cells to Bs and ABs.
- Group AB can donate to other ABs, but can receive



from all others.

Knowing your blood type is imperative when it comes to donating and receiving.

HOW TO DETERMINE YOUR BLOOD TYPE

Much like your eye color, height and facial features,

your blood type is inherited genetically from your parents. Determining the type of blood that runs in your family can be easily achieved with a simple test.

According to the United States National Library of Medicine, “blood typing” is

the method professionals use to determine your blood type.

After taking a blood sample, experts will mix it with antibodies against type A and B blood to see if the cells stick together. If they join, it means the blood has reacted to one of the antibodies.

BLOOD DONATION

You can still give the gift of life without knowing your blood type. In fact, one of the easiest ways to discover it is by donating. Experts will perform the necessary tests to ensure your blood is getting to those it will help the most.

First-Time Donors

The act of donating blood may be intimidating to those who are afraid of a medical setting.

If a fear of needles or uncertainty of the safety of donating is holding you back, don't let it deter you from doing your part in saving lives.

According to the American Red Cross, the safety of blood donors is taken with incredible care. With each donor, a new, sterile, disposable needle is used, eliminating the fear of contracting an infectious disease.

Typically, the only negative outcome of donating blood is feeling a slight pinch from the needle – it fails in comparison to the sense of pride and accomplishment that comes afterwards.

TIPS FOR A POSITIVE EXPERIENCE

While rare, some donors experience a faint or fatigued feeling after giving blood. The ARC recommends halting activities and laying down until the fuzziness goes away. Before a blood donation, remember these important tips from the organization for an enjoyable experience.

- Maintain a healthy iron level in your diet.
- Drink an extra 16 ounces of liquid before and after your donations.
- Ingest a healthy meal before the donation. Be sure to



avoid foods high in fat prior to donating.

While most donors will feel little to no negative symptoms after a donation, be sure to listen to your body's reaction. Especially for first-time donors, the experience can be overwhelming, yet incredibly rewarding.

WHAT TO EXPECT

The process of donating

blood is simple, thanks to the help of the professional staff who will assist you. The Red Cross breaks down the experience to make sure you're prepared:

1. Registration. Make sure to bring your ID. This step requires proof of identification and gives you general information about the donation process.

2. Mini-physical: You will

answer questions regarding your general health as well as receive a medical checkup to make sure your health is up to their standards.

3. Donating: Typically, the process will take eight to 10 minutes. There are multiple staff and volunteers on hand to answer questions or simply help pass the time.

4. Refreshment: A snack or beverage is important after

donating. You will be asked to remain on site for 10 to 15 minutes before continuing with your daily activities.

FEEL THE REWARD

Afterward, be prepared for the satisfied feeling of helping your peers. Hopefully, it will cure your fear of needles and encourage you to keep donating. The national supply relies on generous donors like you.

Getting Kids Involved

While most states require that people be at least 17 years old before donating blood, it's never too early to teach your children the importance of becoming a donor.

Get them involved in the process before the donation age to lessen the fear they experience when they are capable of donating.

A great way to get your children involved is to host your own blood drive. Contact your local blood center to receive help with advertising and sponsorship. Highly trafficked locations like your church, workplace or even school are great places to draw in many donors.

EDUCATE CHILDREN ABOUT DONATION SCHEDULE

While blood is typically in high demand, there are certain restrictions set forth to keep donors safe. Teach the children the schedule recommended by the American Red Cross regarding blood donation.

- Adults over the age of 17 can donate whole blood every 56 days, it's important to allow your body ample time to replenish its own supply.

- Platelet donations are

allowed every seven days, up to 24 times per year.

- People can donate plasma every 28 days.
- Able people can safely donate double-red cells every 112 days.

Each component of blood carries significant benefits to those in need. Donating based on this schedule will help the national blood supply meet its demands.

BLOOD DONATION



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INVOLVEMENT DURING DONATION

When you introduce a young child to the rewarding experience of a blood drive, they can learn lessons about the importance of donating. Talk with the leader of a donation center about your little one becoming a volunteer.

With the support of a blood-drive employee, encourage your child to get to

know donors. They should ask these heroes about their decision to donate and listen to stories of the importance of the process.

Another great way for them to get involved is to participate in passing out beverages or snacks to those who have donated. Inspire to share their gratitude with those who are donating a piece of themselves to save lives.

SETTING AN EXAMPLE

One of the best ways to get children interested in donating blood is for them to watch their parents donate. Bring your children with you when you donate. Take advantage of the opportunity to satisfy their minds about the importance of donating blood and encourage them to become donors themselves when they are old enough.

Reasons For Deferrals

It can be easy to get discouraged after being deferred from giving blood.

However, the reasons are sometimes temporary and can be easily corrected by a lifestyle change. Learn about some of the common reasons donors may be turned away, as reported by the American Red Cross.

LOW HEMOGLOBIN

Before a donation, you will be tested for hemoglobin levels. These important proteins carry oxygen to the red blood cells. If levels are out of the recommended range, you will be deferred from donating blood.

The Solution: If levels were below the normal range, you can correct it by incorporating more iron into your diet. In addition to supplements, eat plenty of lentils, spinach, fish and even dark chocolate to in preparation for your donation.

COLD, FLU OR OTHER SYMPTOMS

For the safety of donors and patients, those who don't feel well should not attempt to donate blood. The American Red Cross discourages blood donations if you have a productive cough or taking antibiotics to treat a sinus, throat or lung infection.

The Solution: Simply wait until you feel better. The National Institutes of Health



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recommends waiting until symptoms have been alleviated for at least 48 hours before you give blood. If you have trouble overcoming your illness, be sure to seek the help of your medical professional.

TEMPORARY DEFERRAL

There are several reasons you'll be asked to not donate

blood temporarily. Some reasons can include being under the age of 17, weighing less than 110 pounds or recently spending time in a location where diseases are rampant.

The Solution: The best way to overcome a temporary deferral is to seek council of the blood-drive registration professional. They can give

guidance on what you can do to achieve an approval and explain why they aren't able to take your donation. Sometimes, it can be as easy as changing your diet.

PERMANENT DEFERRAL

Certain medical conditions may prevent you from being able to donate blood, but there

are still many things you can do to spread awareness.

The Solution: Support the cause. Encourage family and friends to donate in your name, host a blood drive or even volunteer your time at an event. Just because you can't donate on your own, you can easily become an advocate for the cause.

Making Transfusion Possible

Blood donations assist in the nearly 5 million transfusions Americans receive each year. According to the National Heart, Lung and Blood Institute, lives of victims who experience car crashes, disasters and even those with anemia or facing surgeries, are saved by your donations.

Understanding the significance that donating blood has on the lives of millions of your peers, can help motivate you to visit your local center.

Learn about the people you'll be helping and how transfusions are achieved.

WHO NEEDS TRANSFUSIONS?

The National Institutes of Health states that many people who experience a blood loss during an operation will require a transfusion. There are also many illnesses that rely on your donations, according to the NIH.

- A severe infection or liver disease that stops your body from making blood or certain components.

- Illnesses that cause anemia like, kidney disease or cancer. Sometimes, treatments used to battle these diseases even cause anemia.

- A bleeding disorder like hemophilia or thrombocytopenia.

HOW IT'S DONE

Before a scheduled transfusion, blood tests are performed to ensure a patient will benefit from the treatment. First, a professional will measure the levels of individual components in one's blood.

Once it is deemed that a transfusion is necessary, more



tests are needed to find the correct blood component to be most effective in a patient.

According to the American Cancer Society, a blood transfusion is given through tubing connected to a needle or tube in a vein. The amount and specific part of the blood used

will depend on each patient's needs.

Most transfusions are administered in hospitals or inpatient clinics. When red-blood cells are being transfused, the overall process should take at least four hours. Other components like

plasma and platelets tend to move much faster.

YOUR DONATION MATTERS

The American Red Cross reports that nearly 21 million blood components are transfused each in the United

States. When you chose to donate, you are helping to stock shelves of your local hospitals and clinics.

Do your part in supplying your local and national blood supply. You can possibly save the life of a loved one or neighbor in a dire time of need.

By the Numbers

The national blood supply is crucial to rescuing Americans who find themselves in an unexpected disaster, and those who rely on it for treating an illness.

Becoming a donor allows you to give the gift of life.

Along with a sense of pride that comes with donating, you'll be proud to know that you made a difference in someone's precious life.

If you're still on the fence about becoming a blood donor, take a look at these statistics from the American Red Cross:

- A single car-accident victim can require as many as 100 pints of blood.
- Someone in the United States needs blood every two seconds.
- A single donation may help more than one patient.
- With a process called apheresis, donors can give either whole blood or specific components only.
- Each year, about 6.8 million people in America donate blood.
- Blood is not available as a synthetic, the national supply relies 100 percent on donors.
- Most transfusions require at least three pints of blood.
- Each day, about 36,000 units of red blood cells are required in the United States.
- During emergency situations, the blood used to save lives is readily available on a hospital's shelf before the event occurs.
- The American Cancer Society estimates that more than 1.69 million people will be diagnosed with cancer in 2017. Most will heavily rely on blood donations.
- Donating blood is safe and conducted with a sterile process.
- Approximately 38 percent of the United States population is eligible to donate blood at any given time, yet less than 10 percent actually do.

