

Giving
Blood



Why Donate Blood?

Not all superheroes are found on the pages of comic books. Simply donating blood saves more lives than any caped crusader ever did.

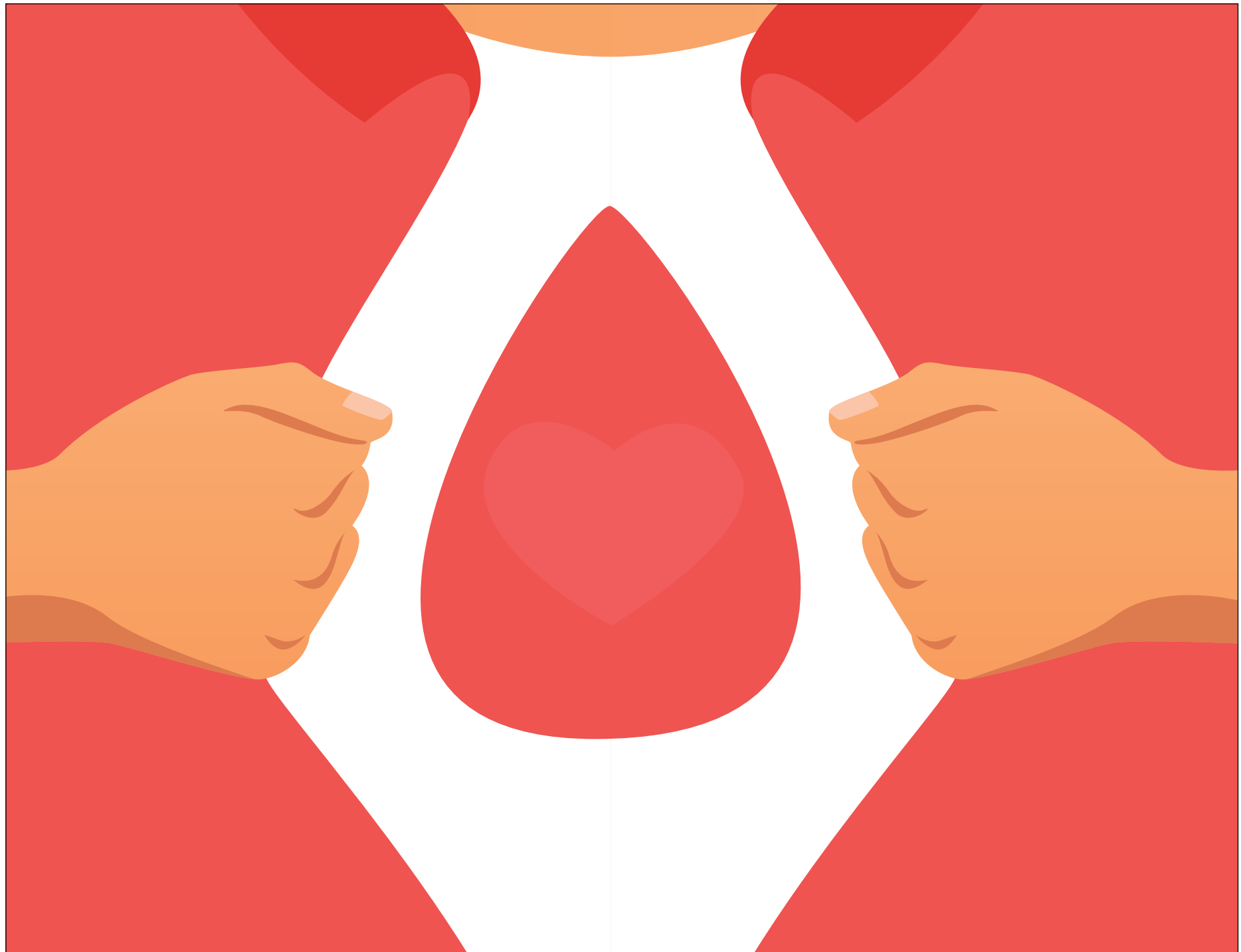
In fact, the American Red Cross estimates that just one donation can save up to three people who are in need of emergency transfusions. Here's more on how you can take part in this everyday life-saving act.

INSIDE THE NUMBERS

Blood donations are accepted up to five times per year. If you were to begin donating at age 17, and continue giving every three months or so, the Red Cross projects that you could end up saving more than 1,000 lives. Some types of blood are more needed than others. There are occasional shortages — and just 7% of Americans have O-negative blood, the so-called universal type that can be used in a transfusion by anyone. Among regular Red Cross donors, only 50% regularly return.

AN URGENT NEED

The American Red Cross is experiencing the worst blood shortage in more than a decade. Blood is needed daily in hospitals across the nation as patients have surgery or other medical procedures. And you'll occasionally hear



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appeals from blood banks based on local mass-casualty events like a train derailment or natural disaster. Sometimes, there just happens to be a shortage of a particular type. In these cases, your donation is just as critically important as the work of first responders and medical personnel. You

become part of their life-saving efforts. In any case, everyday donors are doing something very important: Helping their friends and neighbors in their time of need.

OVERCOMING FEAR

A common reason given for not donating is uncertainty

about the process; another is fear of needles. Your personal doctor can tell you if you are healthy enough to give blood. Otherwise, there is simply a slight pinch when they draw your blood, and then the process is quickly completed. You will be donating less than a pint, and the Red Cross says

your body can regenerate that amount within 24 hours.

GET INVOLVED

Keep an eye out for area blood drives, or make an appointment with the American Red Cross to give at www.redcrossblood.org or call (800) RED CROSS (733-2767).

Step-by-Step Donation Guide

Whether you've never donated blood, or simply haven't in a long time, the process can seem a little daunting.

Here's a handy guide to help smooth the way.

BEFORE YOU GO

Wear a short-sleeved shirt or something with sleeves that can easily be rolled up. Bring a list of all medications, both prescribed and anything you've purchased over the counter. You'll typically need two forms of identification. Drink plenty of water the day you donate and afterward, too.

REGISTRATION

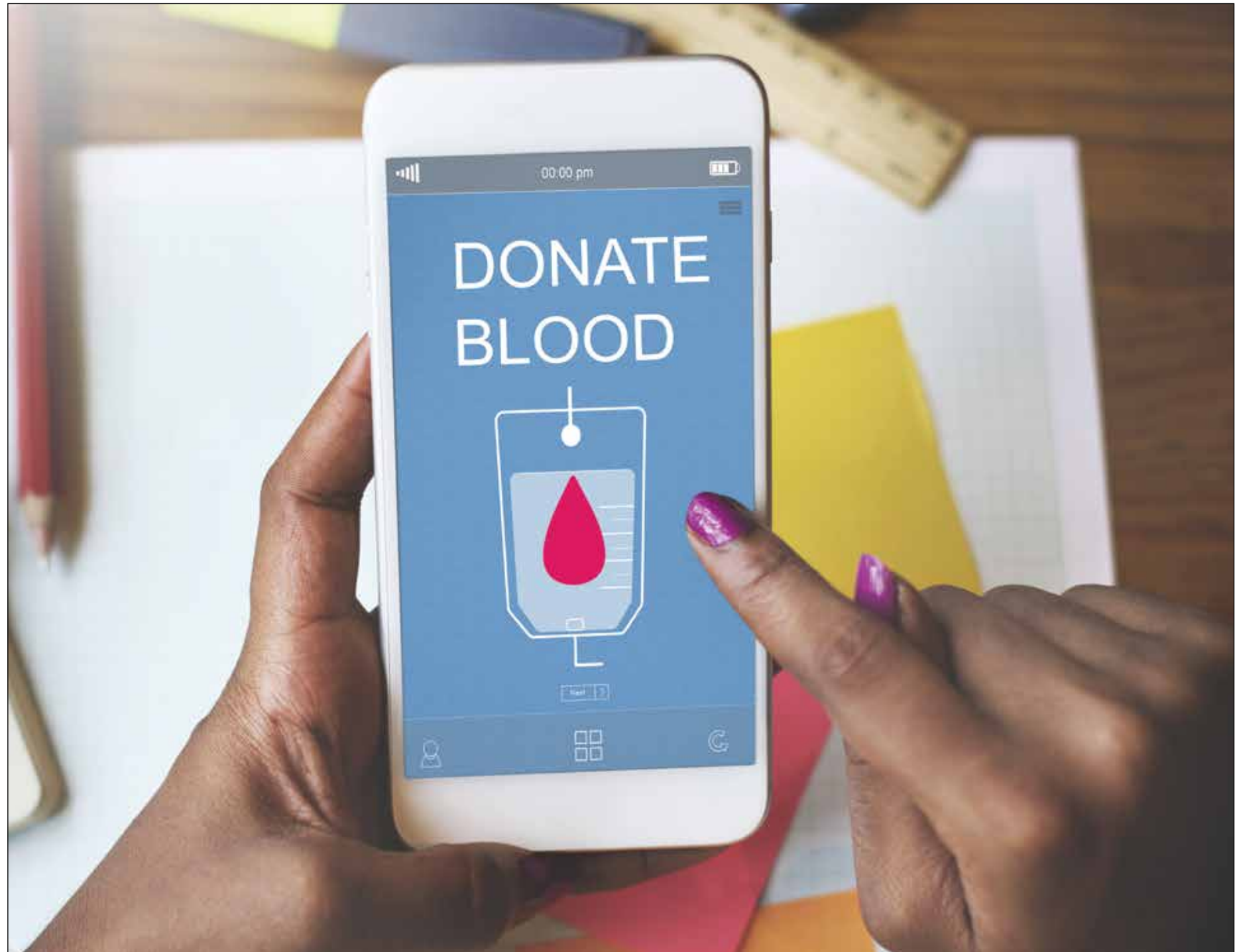
You'll be asked to register upon arrival, as a staff member or volunteer goes over basic eligibility requirements and takes down your information. They'll check your ID, and pass along material with information on donating blood.

SCREENING

A quick medical exam will follow, as they check your pulse, blood pressure, temperature and hemoglobin level. You'll be asked for a brief medical history, and about any recent travel. All of your answers will remain confidential.

DONATION

Let staff know if you prefer one arm or another, or even a



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vein that has been successfully used to draw blood in the past. They will prepare and disinfect a small area on your arm, then a new sterilized needle will be inserted into a vein. Most donors say they feel little pain beyond a pinch. Some prefer to look away as the donation unfolds. It typically takes 7 to

10 minutes to collect a pint of your blood. Being a favorite book or headphones to enjoy, or strike up a conversation with another donor. Plasma donations take much longer, up to two hours.

AFTERWARD

You won't go away empty

handed. Once staff removes the needle, your arm will be bandaged and then you'll be offered a small snack and something to drink. You can return to most normal daily activity in 10 to 15 minutes. Keep the bandage on for several hours; clean the area around it with soap and

water. Avoid vigorous exercise heavy lifting for the rest of that day. Should your needle site begins to bleed, apply pressure and raise your arm until it stops. If you plan to begin giving blood frequently, take multivitamins with iron to make sure you're ready for the next donation.

How You're Helping

Ever wondered what happens to blood after it's donated?

The life-saving process begins as soon as you leave the donation site.

Here's how everything unfolds.

THE JOURNEY BEGINS

Once your donation is collected, it's taken to a medical laboratory for testing and processing. Every donation is checked for infectious disease, and then the components of the blood are separated. If a unit of blood tests positive for disease, it's discarded and the individual donor is immediately notified. All donations that are cleared for transfusion are cataloged and shelved. Donations are then spun in centrifuges to separate the blood into separate transfusable components.

FOUR COMPONENTS

Blood breaks down into plasma, platelets, red blood cells and cryoprecipitate. So, your individual donation can actually help more than one person, depending on their particular medical need. Red blood cells carry oxygen from your lungs to body tissue, then carry carbon dioxide back. Plasma, which is filled with proteins, vitamins and hormones, helps regulate

body temperature and maintain our blood pressure. Platelets and cryoprecipitate are both involved with clotting, which prevents bleeding. In the next phase, white cells are removed from platelets and red blood cells to reduce reactions from those who receive a transfusion. Each component is then packaged

into standardized units, so doctors know how much they're giving patients.

UNIVERSAL DONORS

Some donations are given priority, including those with Type O-negative blood, since they're known as universal donors. People of any blood type can receive a transfusion

of Type O-negative blood, but just 7% of those in the U.S. have this blood type. Demand is always high, and supplies very low. Blood banks and the American Red Cross are also always on the lookout for Type AB plasma donors, as these donations can be transfused into patients with any blood type.

A MATTER OF DAYS

The Red Cross makes shipments of blood available to hospitals seven days a week, 24 hours a day. Here's why: Blood must go from one arm to another in a period of days, or a maximum of just over a month's time. The shelf life of donated blood is only about 42 days from when it is collected.



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Donating Can Help You, Too

Giving blood is a selfless act that automatically sparks good feelings, since you can be assured you saving the lives of others.

There are other positive health impacts, however. Here's a look at how donating can help you too.

IRON LEVELS

Removing excess iron is the primary benefit of regularly donating blood, according to the American Red Cross. This mineral is needed for development and growth, as your body uses iron to create the hemoglobin protein in red blood cells that carries oxygen throughout our bodies. It's also used in the creation of the myoglobin protein that provides our muscles with oxygen. Some hormones need iron, as well. But those with too much might see iron build up in the liver, heart or pancreas. Life-threatening conditions may follow, including heart problems, liver disease and diabetes. Iron reduction has been associated with smaller cancer risks and mortality rates, according to the Journal of the National Cancer Institute. Doctors have also linked excess iron with high blood pressure, especially among men who do not give blood.

REGULAR SCREENINGS

Another benefit to regularly giving blood comes in the form of required pre-donation health

screenings. You essentially get a regular checkup with every visit to a blood bank, since staffers take readings on your blood pressure, cholesterol, and other vitals before drawing blood. That information plays a significant role in identifying heart disease, the leading cause of death in the U.S. Mini-physicals like these can also catch some illnesses in their initial stages, and the blood is tested for a range of infections like HIV, syphilis, hepatitis and West Nile virus. The American Journal of Epidemiology has reported that blood donors are nearly 90% less likely to have a heart attack, and almost 35% less likely to have a cardiovascular event of any kind.

WOMEN'S HEALTH

Pre-menopausal women regularly pass iron through menstruation, and that naturally lowers their risk for a heart attack. After menopause, however, that risk goes back up — and donating blood can help level the playing field once more. Iron is removed through the donation process, and giving also helps improve blood flow. That puts less pressure on your blood vessels, leading to fewer blockages in the arterial system and better heart health.



What Type Are You?

Everyone has a specific type of blood, even if they don't know it. Your type is inherited from your family, much like eye and hair color or your height.

Finding out your type is critically important, because not all blood is interchangeable — and the difference can be a matter of life and death. Your blood can't be given to any patient unless you are Type O-negative. Here's a deeper look at blood types.

UNDERSTANDING BLOOD TYPES

All blood is made of up of the same basic components, including red blood cells and platelets, but it's not all interchangeable. There are four major blood groups, determined by the presence or the absence of A and B antigens. A transfusion of incompatible blood can trigger very serious immune responses. Antibodies will attack and destroy the foreign red cells.

WHICH ARE COMPATIBLE?

Those in Group O can donate red blood cells to any patient. They are known as universal donors. But a person with Type O blood can only receive a donation from someone else who is Type O. Type A blood only has the A antigen in its red blood cells, and B antibodies in its plasma. Type B has the B antigen in the red cells, and the A antibody in its plasma. Type

AB has both antigens in its red blood cells, but not A or B antibodies in the plasma. Type O doesn't have A or B antigens in its red cells, but both A and B antibodies in its plasma. Finally, the Rh factor distinguishes whether blood is positive or negative, based on its presence. Rh negative blood can be given to those who are either Rh positive or negative. Type AB blood donors do not make antibodies against Type A or B cells, so their plasma can be given to anyone with Type A, B, AB, or O blood.

FIGURING OUT YOUR TYPE

Determining your blood type is an imperative in a health-care emergency; it's also something you'll need to know before giving. A simple test provides all of the answers. Medical professionals take a blood sample, then mix it with antibodies against Type A and B, watching to see if the cells adhere. Type A blood has anti-B antibodies, while those with type B have anti-A antibodies. (Type O contains both antibodies.) If the cells stick together, that means your blood has reacted to one of the antibodies — and they can then match your type.



What if You Get Turned Down?

On rare occasions, potential donors may be turned away — but the issue is usually temporary.

Here's a look at why some people aren't allowed to give blood.

LOW HEMOGLOBIN

Part of the battery of tests given to everyone before they donate is a check on hemoglobin levels. These critical proteins carry oxygen to our red blood cells. If your levels are below the recommended range, blood banks will ask that you incorporate more iron in your diet then return to give later. There are supplements to help with iron deficiency. You can also try eating more foods rich in iron, including fish, lentils, spinach and dark chocolate.

COLD AND FLU

The American Red Cross discourages anyone from donating blood if they have a persistent cough, or are on an antibiotic regimen for throat, sinus or lung infections. Attempting to give blood when you don't feel well also puts the health of other donors at risk. Simply return once you're feeling better. The recommended waiting period is at least 48 hours after symptoms have abated, according to the National Institutes of Health. If you're still feeling bad after more than a few days, consult your personal physician.

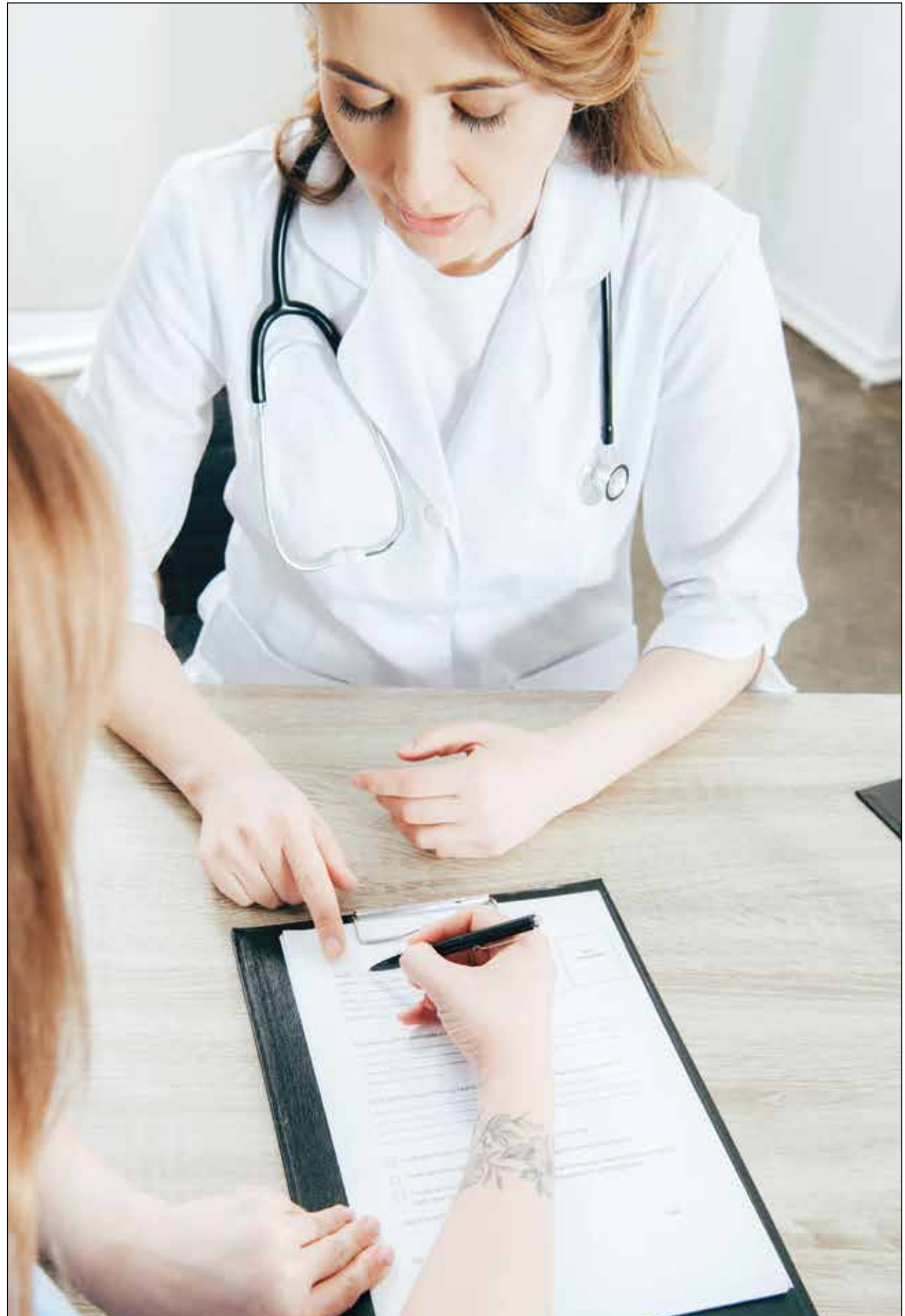
TEMPORARY DEFERRALS

Beyond obvious illness and iron-level issues, temporary deferrals are also given for those who are under 17, weigh less than 110 pounds, or have spent time in a country where specific diseases are prevalent. You may also be temporarily denied if you are on certain antibiotics or other medications. Some states require a waiting period after getting a tattoo. Women are asked to donate at least six weeks after giving birth. Blood-drive registration staffers can tell you more about what's required to give.

PERMANENT REFUSALS

Unfortunately, some medical issues may prevent you from ever giving blood. Those with HIV/AIDS, Von Willebrand disease, Hepatitis B or C, hemophilia, sickle cell disease or hereditary hemochromatosis aren't eligible to donate. Still, there are things you can do to help in this very important effort. Support blood-donation drives by spreading awareness, hosting your own fundraiser, encouraging friends and family to give in your name, or volunteering at the local blood bank. Advocates can make a huge difference, too.

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Getting Children Involved

The age limit for donating blood is usually 17 years old, but the importance of donating blood can be taught to children long before then.

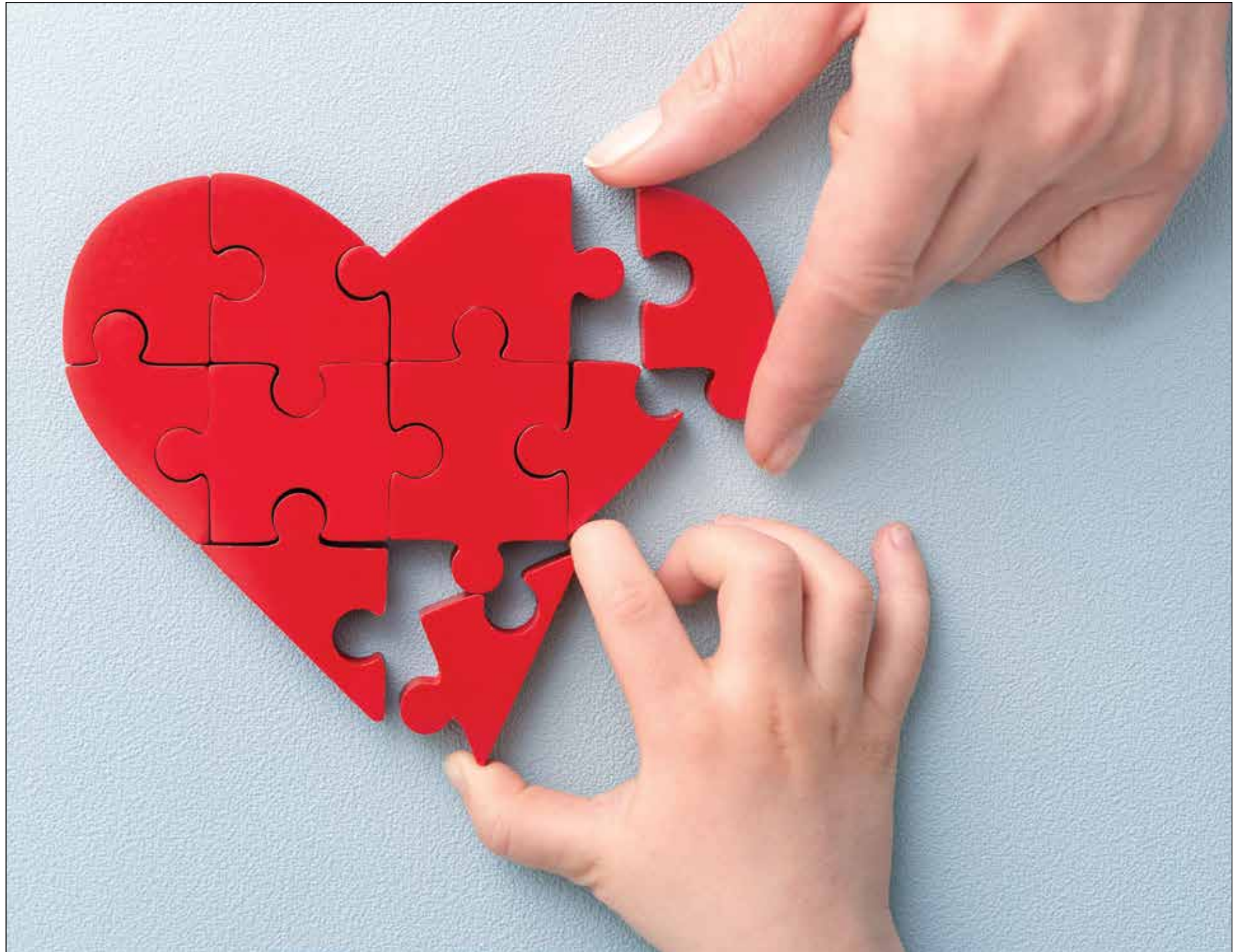
Here's how to engage our youngest future donors:

EARLY AWARENESS

Acquainting kids with blood donation needs and processes helps lessen any fear they may experience once they're old enough to participate. Consider playing host to your own blood drive, at church, in your workplace or at their school. Take them with you to volunteer at the local blood bank. Encouraging them to donate their time for this worthy cause will open up new doors of understanding about how critical giving is to the health of our nation.

INFORMATION IS POWER

Given the best and most complete information about donating blood, they'll be empowered to do the most as young adults. Teach your children about the American Red Cross' recommended donation schedule: Every 56 days for those over 17, since the body needs to time replenish its blood supply. Platelet donations are allowed once a week, and up to 24 times a year. Plasma donations can be made roughly once a month.



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Discuss how every one of these blood components has the power to save someone's life.

OTHER DONATIONS

Giving blood isn't the only way to take part. Kids can help in a myriad of ways at blood drives or at blood

banks, whether that's by passing out drinks and food for those who've just donated or helping to distribute fliers that raise awareness.

Surrounded by hard-working volunteers and the generous people who donate, they're learning about the huge effort that goes into regularly refill-

ing our blood supply. They'll also be listening and learning stories about why people get involved, and what inspires them to give.

A LIVING EXAMPLE

Take your children with you when you donate blood. It's one of the easiest ways to get

them interested in giving, and it also demystifies the process. They'll see that donating isn't as scary as they might have guessed — and that, yes, there are snacks at the end. You'll be a living example to them of how we all can work together for the health and safety of one another.