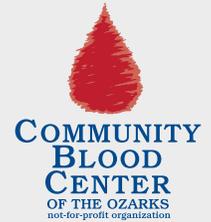




universal donor DIGEST



Celebrating the lifesaving potential of type O negative blood donors

August - September 2014

No monkey business. . . universal donor status is a gift - here's some history

As a blood donor, you know that your type O negative status makes you the universal donor. You represent a relatively rare result of a genetic roll of the cosmic dice that makes you a unique life saver. Let's explain why that is, and what in the world it has to do with monkeys.



Rhesus monkeys were used by Dr. Karl Landsteiner to develop an antiserum that helped to identify negative and positive characteristics in blood.

Dr. Karl Landsteiner, a noted scientist who dedicated his life to the study of hematology, first identified A, B, and O blood types around the turn of the 20th century. Around 1940, antigens on the cells were found to have some unique characteristics of their own. Antigens, by the way, are proteins on the surface of blood cells that can cause a response from the immune system.

In 1940, Landsteiner and Dr. Alexander Wiener used Rhesus monkeys to develop an antiserum to type blood samples. That antiserum, when added to a blood sample, could "agglutinate" or clump cells together. If that clumping occurred, a person was considered Rh positive. If not, that person was identified as being Rh negative. Yes, the term "Rh" comes from the Rhesus monkeys used in the trials.

How did you come by your superior lifesaving ability?

Just like hair and eye color, your **blood type is determined by heredity**. Rh negative status is a recessive trait, meaning that both parents have to pass the negative characteristic to their offspring.

Around six percent of Americans are universal donors. It's a unique combination involving heredity, luck and science that makes you what you are. What do you intend to do with your gift? Here's a suggestion off the top of our head. Save lives by sharing your good fortune. Give blood.



U-Donors are there to help during times of emergency

The first thing Richard Goodman remembers is seeing his bloody face in the rear-view mirror. An early morning head-on collision had pinned Goodman in the driver's seat with injuries that included a ruptured spleen, collapsed lung, broken ankle and six broken ribs. Helicoptered to a Springfield hospital, Goodman received type O negative blood while doctors tried to stabilize him. Doctors told his family that he would not make it through the night.

Goodman did make it, thanks in part to universal donors that were there when he needed them. "Sometimes it takes a dramatic or tragic event to focus a person on what's really important. I'm here today to tell all blood donors that they are important and what they do matters a great deal."



The healthful benefits that come from saving lives

Studies show that giving blood helps the donor in a number of ways

Almost all U-donors know that giving blood provides an essential lifeline to those in need, but a growing body of research demonstrates that it could have health benefits for the donor too.

Some recent studies* indicate that donating blood regularly may reduce the risk of heart attacks and even cancer.

One theory is that the benefits from giving arise from lowering high iron levels. Iron affects how thick and sticky the texture of the blood is. High iron levels causes the blood to be thicker. Raised iron levels also accelerate the oxidation process of cholesterol. This can affect blood consistency and create increased friction as it travels through blood vessels. As this increases wear and tear to the lining of arteries it could then contribute to cardiovascular disease.

Because donating blood removes some of its iron content, it may therefore have a protective benefit if done on a consistent basis by helping thin the blood.

Another benefit of donating is the wealth of information made available to you as a result of the health screening that is included in each donation. That information, including a free cholesterol reading, is available anytime after you [create a donor ID](#) at www.cbco.org.

You can get information on heart rate, blood pressure, hemoglobin levels, and temperature readings from all your past visits to give blood. Taken over time, these results give you a good idea of how healthy you are. If readings change, it may give you an early warning that something may be wrong.

It even burns 650 calories for every pint given, and while we would never recommend donation as a way to lose weight, it sure doesn't hurt!

U-donors know that their gift helps others. Now you know how giving blood may help yourself as well.



Exercise is good for you. Some studies indicate that giving blood may be good for you as well.

Healthy living

Here's some links to more stories about the potential health benefits of blood donation:

- American Journal of Epidemiology
- Science Daily
- Wellness Watchers MD

U-Donors get "Social"

Become a fan of saving lives by partnering with us on social media. Follow us here:

- ◆ [Facebook.com/OzarksBlood](https://www.facebook.com/OzarksBlood)
- ◆ [YouTube.com/OzarksBlood](https://www.youtube.com/OzarksBlood)
- ◆ [Twitter.com/OzarksBlood](https://twitter.com/OzarksBlood)



By the numbers

6 The number of times a U-donor may give blood during a calendar year.

Blood makes up around seven percent of your body's total weight.



the average red cell blood transfusion (measured in pints).

2.7