

Red Cross reaches out to minority blood donors

African-Americans with sickle cell need healthy, but similar, blood



Collection technician Kendra Black prepares the arm of donor Sang Kim, of Brentwood, before he donates blood Friday at the Red Cross in Nashville. / Sanford Myers / The Tennessean



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To Deanna Peaks, blood is an anonymous bag of crimson that hangs nearby when she has a transfusion.

She doesn't know who donated it or from where. As a sickle cell patient, all she knows is how important it is.

"Without the donations, I honestly probably would be dead," says Peaks, 28, of Nashville.

Though anonymous to her, the source of those donations is actually critical to her survival.

Sickle cell affects almost all races, but 90 percent of the disease in the United States occurs in people of African descent, according to the American Red Cross. A single patient with sickle cell disease might need up to 100 pints of blood each year, and the best blood match for a chronically ill patient requiring multiple transfusions throughout her lifetime will likely come from a donor of the same ethnic background.



Blood banked for sickle cell patients is only 1 to 2 percent of the demand, says Moneca Bell, a reference technologist at the Nashville area Red Cross. / Sanford Myers / The Tennessean

Get involved

There are two upcoming 3 Lives blood drives:

7:30 a.m.-12:30 p.m. Wednesday at McGavock High School (3150 McGavock Pike, Nashville)

9 a.m.-2 p.m., April 24 at Remington College Nashville Campus (441 Donelson Pike, Nashville)

The Red Cross Tennessee Valley Region has joined a national effort called Sickle Cell Sabbath to hold blood drives at local churches. Upcoming drives include:

Saturday: 9 a.m.-2 p.m., Mt. Zion Baptist Church (2261 Murfreesboro Pike, Nashville)

April 7: 10 a.m.-2 p.m., Beech Creek Baptist Church (2261 Murfreesboro Pike, Nashville)

May 20: 9:30 a.m.-1:30 p.m., Cathedral of Praise Church (4300 Clarksville Pike, Nashville)

May 27: 8:45 a.m.-12:45 p.m., Fifteenth Avenue Baptist Church (1203 Enoch Jones Blvd., Nashville)

An abnormal type of hemoglobin — a protein inside red blood cells that carries oxygen — causes sickle cell. Hemoglobin S changes the shape of red blood cells, causing them to form crescents or “sickles.” The sickle-shaped cells deliver less oxygen to the body’s tissues. They can also get stuck more easily in small blood vessels, and break into pieces that interrupt healthy blood flow.

There is no cure for sickle cell disease, and therapy for many patients consists of blood transfusions — the most effective of which come from donors of the same ethnic background who can provide blood with unique antigens for battling sickle cell, as well as leukemia and other diseases.

And yet, there is often a shortage of minority donors.

Local organizations are working to remedy that deficit. Last month, the Red Cross Tennessee Valley Region joined a national effort called Sickle Cell Sabbath to hold blood drives at local churches. Remington College’s Nashville campus has been holding blood drives on campus for several years, but in 2011 it joined the 3 Lives campaign, a nationwide effort to increase the number of minority blood donors.

On Wednesday, Nashville’s McGavock High School will join Remington College’s campaign by hosting a blood drive on its high school campus.

“A lot of our disease does focus around having adequate blood, and it is so important, so, so important for people to continue to donate to help us survive,” says Peaks, who was diagnosed with the disease at age 3.

“Because I am just one of many.”

Transfusion is only treatment for sickle cell

Sickle cell disease is the most common genetic blood disease in the country, with more than 70,000 estimated to have the disease in the United States, according to the American Red Cross.

It is not contagious; it is hereditary like hair or eye color and can be acquired only if both parents carry a certain genetic trait and pass it onto their child.

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In the United States, only 5 percent of eligible adults donate blood, according to the Red Cross, and only about 10 percent of those are minority donors.

“I just don't know if there's awareness of the need,” says Moneca Bell, a reference technologist at the Nashville-area chapter of the Red Cross. Bell spends her days analyzing the blood donated locally. At her desk, tubes and centrifuges allow her to evaluate not only the type of blood, but also the specific antigens it contains.

Though a walk-in cooler near her laboratory has floor-to-ceiling bins filled with specially typed blood, the plastic container filled with blood specifically useful for sickle cell patients contains less than a dozen bags. Twenty percent of the population has the type of blood the bank needs, Bell says, but because so few people donate, the stock is only 1 percent to 2 percent of what sickle cell patients need.

“There's not an understanding” among minorities of the lifesaving antigens unique to their blood, Bell says. “They don't know they are the only group able to provide that type of blood.”

Sickle Cell Sabbath brings targeted donations

Raising that awareness was the impetus for the Tennessee Valley Region Red Cross' involvement in Sickle Cell Sabbath. The program began in 1999 as a grass-roots community effort to increase African-American blood donations in the metropolitan St. Louis area. Since that time, it has grown into a national initiative that honors the contributions of Dr. Charles Drew, an African-American physician who pioneered modern blood banking techniques.

Sickle Cell Sabbath blood drives are unique in that they are set up to screen donors as potential matches for patients with the disease. In addition, donors have the opportunity to receive sickle cell trait testing to determine their individual trait status. Typically, faith congregations with a congregation that is at least 30 percent African-American host the drive, and generally the program is implemented between February (Black History Month) and June (the birth month of Dr. Charles Drew).

The Nashville-based Red Cross' first official Sickle Cell Sabbath drive was on Feb. 26 at New Covenant Christian Church. Four more are scheduled to take place before the end of May, including Saturday at Mt. Zion Baptist Church.

Blood donated during these drives is labeled with a specific blue tag that identifies it as part of the sickle cell donor program. It then goes directly to Bell's laboratory.

Medical technology has greatly helped sickle cell patients survive. When Peaks was diagnosed as a child, she was told she wouldn't live past age 21. For four years as a teenager, she had a transfusion once a month. Now 28, the Nashville author continues to carry on. She still lives with a tremendous amount of pain. On her bad days, the only things not hurting are her feet and hands.

In October, she caught a virus because of her weakened immune system. “I woke up in so much pain I couldn't move,” she says. “It was like being almost paralyzed.” Over a two-day weekend, she required three transfusions, each of two units of blood.

With longer life expectancies, there is more demand for transfusions and more demand for

blood. However, when transfusions are given from a donor of the same ethnic background as the patient, there is a better match and patients can go longer between transfusions. As a result, increasing the number of minority donors could eventually decrease the demand, says Tim Ryerson, chief executive officer of the Nashville-area Red Cross.

It's too early to tell how successful the Red Cross' sickle cell program will be. At last year's Remington College 3 Lives drive, approximately 100 people donated, says Brenda Diaz, the school's Allied Health Department chairwoman. "The need for blood is pretty drastic," she says. "And it's such a simple procedure that can save lives. I think it's important to take part in that and bring awareness."

Peaks would love to see increased awareness from all involved.

"We need more of a push by sickle cell patients to say, 'Hey, we need you. We go through a lot,' " Peaks says. "It's not like we discriminate between blood, but it's sad that our race doesn't give and there's a lot of people who can.

"I believe if they know about it, they will do it."