

Sickle Cell Trait Screening

When will donors be notified of their test results? And how can donors access test results?

Red Cross donors can expect to receive the results of their sickle cell trait screening within one to two weeks through our Red Cross Blood Donor App or on our donor portal at RedCrossBlood.org.

Why does the Red Cross ask donors to select their race at the time of donation?

The Red Cross asks blood and platelet donors to select their race and ethnicity at the time of donation to help meet the unique transfusion needs of a diverse patient population. By identifying a donor's race and ethnicity, it helps the Red Cross better and more efficiently locate rare blood types to best meet the needs of all patients of all backgrounds. Certain blood characteristics are inherited, making them more likely to be found within certain donor groups. These matched blood products provide a more compatible unit for transfusion to patients in need.

What does a "inconsistent" result mean?

An inconsistent result means that the Red Cross is not able to confirm a positive or negative screening result. In some cases, this is because the Red Cross immunohematology reference laboratory may have previously tested their donation for sickle cell trait at the request of a hospital to fulfill a specific product need. In these cases, the donor may have received a previous result of negative or positive. While the Red Cross will work to resolve many inconsistent results, a portion will remain inconsistent.

What does it mean to carry the sickle cell trait?

It is estimated that about 1 in 13 Black or African American babies in the U.S. is born with sickle cell trait, which means they have inherited the sickle cell gene from one of their parents. Carrying the sickle cell trait does not mean that an individual has sickle cell disease. Individuals who only carry the sickle cell trait are eligible to donate platelets and plasma.

How does this screening differ from a sickle cell trait diagnostic test?

Sickle cell trait screening is not a diagnostic test. This screening is performed on a blood sample given during the standard donation process to look for the presence of an abnormal type of hemoglobin, called hemoglobin S or sickled hemoglobin, a key indicator of sickle cell trait. This means it is likely the individual inherited one sickle cell gene and one normal gene from their parents. If an individual receives a positive result, they should consult their medical provider to discuss their test results and pursue additional confirmatory diagnostic testing.

Why is the Red Cross only screening donations from African American donors for sickle cell trait?

The Red Cross is testing blood donations from multiracial and Black or African American donors because the sickle cell trait is most commonly carried among those of African descent. In fact, 8-10% of African Americans have sickle cell trait.

How is the Red Cross able to fund sickle cell screening if it is not charging donors?

The Red Cross is working to rally the support of generous financial donors to help fund this program. We are also looking into other possible funding sources.

Why is it beneficial for Black individuals to know if they have the sickle cell trait?

Many individuals with sickle cell trait are unaware of their status. Sickle cell trait is inherited and means that an individual received one sickle cell gene and one normal gene from their parents. While, carrying the trait does not mean that an individual has sickle cell disease, health experts recommend that individuals with sickle cell trait be aware of their status and consult their medical provider on what it means for them. In general, many individuals who carry the sickle cell trait have no medical problems related to sickle cell trait.

How accurate are the sickle cell test screenings the Red Cross is using?

The sickle cell trait screenings the Red Cross is using are highly accurate and effective at detecting the presence of an abnormal type of hemoglobin a key indicator of sickle cell trait. However, these screening are not perfect. As with all tests and screening, false results, or a screening result that incorrectly states the presence of abnormal hemoglobin, can occur. This is why those who receive a positive result are encouraged to consult their medical provider for confirmatory testing and discuss what their results mean for them.

How long will the Red Cross be screening blood donations for the sickle cell trait?

The Red Cross plans to screen blood, platelet and plasma donations from 250,000 self-identified multiracial and Black or African American blood donors through its Sickle Cell Initiative.

Will there be a donor charge for this screening?

No. Like other blood donation screenings, sickle cell trait screening is part of the blood donation testing process which occurs at no charge to the donor.

Why is the Red Cross expanding it's testing to include sickle cell trait screening on all donations from self-identified multiracial and Black or African American donors.

We understand that for many donors, having greater insight into their health during this pandemic is important to them – as such the Red Cross has expanded its testing to include sickle cell trait screening on all donations from self-identified multiracial and Black or African American donors. In addition, this screening helps the Red Cross identify compatible blood types to help sickle cell patients more quickly.

What if someone is not eligible to give blood, can they still receive a sickle cell trait screening?

Donors will need to have a successful donation to receive sickle cell trait screening results. Per standard donation procedure, only successful donations are sent to our laboratory for

screening

What does it mean to have a negative sickle cell screening result?

A negative result indicates that screening did not detect sickled hemoglobin or hemoglobin S – a key indicator of sickle cell trait. This means that the individual is likely not a sickle cell trait carrier. It is important to note, that the Red Cross is not screening for other abnormal hemoglobin cells that can also cause sickling – such as hemoglobin C.

Will sickle cell trait screening change the donation process for presenting donors?

No. The Red Cross blood donation process at our blood drives and donation centers will not change. Blood, platelet and plasma donations will be screened using samples obtained at the time of donation and sent to a testing laboratory where the samples will also undergo routine screening and infectious disease testing.

Can individuals that only carry the sickle cell trait donate?

Individuals who only carry the sickle cell trait are eligible and encouraged to donate platelets or plasma to help those in need of lifesaving blood, including cancer patients and burn victims.

Recent research has shown that sickle cell trait-positive whole blood and Power Red donations do not adequately pass a quality control step due to a filter limitation during processing. As a result, after Aug. 7 donors who test positive for sickle cell trait – and current donors whose donations do not adequately pass the red blood cell filter process – are restricted from giving a whole blood or Power Red donations. It's important to note that this is an industrywide filter limitation and not a donor issue.

Is this screening a new testing initiative for the Red Cross?

No. Red Cross immunohematology-reference laboratories (IRL) have historically tested select donations for sickle cell trait at the request of a hospital partner actively looking to fulfill a specific blood product need. For a limited time, we are also expanding our screening to include all blood, platelet and plasma donations from self-identified multiracial and Black or African American donors to allow us to identify compatible blood donations even faster to help patients in need of a blood transfusion.

Donations from Black individuals who do not carry the sickle cell trait are often the most compatible blood products for sickle cell patients. However, 51% of African Americans have type O (positive or negative) blood, in comparison to approximately 45% of white individuals. Type O blood is most often in critical supply as it is most often needed by hospitals. Black donors play a vital role in helping meet the needs of all patients including – individuals who experience complicated childbirths, people fighting cancer, and accident victims being raced to emergency rooms.

Do donors need to have a successful donation to receive a sickle cell trait screening result?

Yes. Donors will need to have a successful donation to receive sickle cell trait screening results. Per standard donation procedure, only successful donations are sent to our laboratory for testing.

What if I don't have the app or have internet access? How can I get my test results?

The Red Cross encourages donors to access their screening results through our Red Cross Blood Donor App or on our donor portal at RedCrossBlood.org. This will provide the most expedient access to test results. If a donor has questions or issues with the Blood Donor App or portal functionality, please contact 855-210-1278. If a donor does not have internet service and therefore cannot use the two recommended channels, they may call the Red Cross Donor and Client Support Center 14 days after donation at 1-866-236-3276 to obtain their results.

What test is the Red Cross using to screen donations for the sickle cell trait?

The Red Cross is using the Pacific Hemostasis® SickleScreen® Sickling Hemoglobin Screening Kit and the Streck Sickledex® Solubility Testing Kit. This test is used to detect abnormal sickling hemoglobin cells or hemoglobin S.

We recognize there are other abnormal hemoglobin cells that can cause sickling. However, this test rarely detects presence of these other hemoglobin cells.

Why wasn't my donation screened for sickle cell trait?

While rare, some donations may not be able to be tested due to processing issues. Donors will need to have a successful donation to receive sickle cell trait screening results. Per standard procedures, only successful donations are sent to our laboratory for testing.

What does it mean to have a positive sickle cell screening result?

A positive result indicates that the screening detected the presence of an abnormal type of hemoglobin called hemoglobin S or sickled hemoglobin, a key indicator of sickle cell trait. This means it is likely the individual inherited one sickle cell gene and one normal gene from their parents. If an individual receives a positive result, they should consult their medical provider to discuss their test results and pursue additional confirmatory testing.

In addition to providing individuals with their results via the Blood Donor App and donor portal on RedCrossBlood.org, those who have positive results will also receive a letter in the mail.

It's important to note, that carrying the sickle cell trait does not mean that an individual has sickle cell disease. In general, many individuals who carry the sickle cell trait have no medical problems related to sickle cell trait.

Is this sickle cell trait screenings the Red Cross is using FDA approved?

The Red Cross is using the Pacific Hemostasis® SickleScreen® Sickling Hemoglobin Screening Kit and the Streck Sickledex® Solubility Testing Kit to screen donations from self-identified African Americans for abnormal hemoglobin—a key indicator of sickle cell trait. Both screenings are authorized for use by the FDA and are highly accurate.

Will the Red Cross be providing sickle cell trait screening results to anyone beside the donor?

No. The Red Cross will not release your screening result or any other test result without your written permission unless required by law. The Red Cross is only required to report positive sickle cell trait results in writing to donor. We do encourage those individuals who receive a positive sickle cell trait result to consult their medical provider to discuss their test results and pursue additional confirmatory testing.

What if a donor does not want to have their donation screened for sickle cell trait?

If an individual does not want their donation to be screened for sickle cell trait, they should select the “I prefer not to answer or other” response regarding their race and ethnicity. Only donations from self-identified multiracial and Black or African American donors will be screened for sickle cell trait.

Self-identifying your race and ethnicity helps the Red Cross better and more efficiently locate rare blood types to best meet the needs of all patients of all backgrounds. Certain blood characteristics are inherited making them more likely to be found within certain donor groups. These matched blood products provide a more compatible unit for transfusion to patients in need.

How does this screening test differ from the required sickle cell test performed on newborns at risk for sickle cell disease and/or sickle cell trait?

Since May 2006, all babies receive a newborn screening test for sickle cell anemia to identify a potential medical emergency, appropriately treat the disease early and reduce infant mortality.

Will every donation be screened every time?

No, because a donor’s sickle cell trait status does not change over time, donations will only be tested once. This information, along with other blood type attributes becomes part of an individual’s confidential donor record and is used to help the Red Cross identify compatible units for patients in crisis as quickly as possible.