

Facts About...

Sickle Cell Disease

What is Sickle Cell Disease?

Sickle Cell Disease is an inherited blood disorder affecting the red blood cells. People with sickle cell disease have red blood cells that contain an abnormal type of hemoglobin. Instead of the normal round shape, red blood cells can become crescent or sickle shaped and have difficulty passing through the body's small blood vessels. They may block the normal circulation to any organ in the body, leading to severe complications such as stroke, pain crisis, heart and lung disease, skin ulcers, life-threatening infections and even death.

Who is affected by sickle cell disease?

This chronic disease is most common among individuals of African descent occurring in approximately 1 in 500 African-American births. While 1 in 12 African-Americans carry the sickle cell trait. However, other ethnic groups can be affected, including people from the Middle East, Greece, Italy, Latin America and India.



What is Sickle Cell Trait?

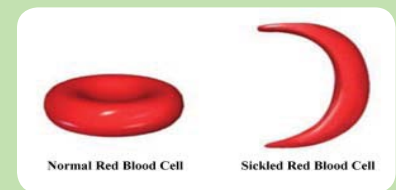
Sickle cell trait occurs when someone inherits only one abnormal gene. Sickle cell trait is not a disease. These red blood cells generally have normal function and sickle trait persons are eligible to be regular volunteer blood

What is Sickle Cell Anemia?

Sickle cell anemia is the loss of red cells and subsequent oxygen-carrying ability in sickle cell patients. Because of the abnormal sickle shape, red blood cells are viewed by the patient's body as "defective" and are removed from the blood stream. Additionally, many sickle cells are lost when blood clots form.

Why do Sickle Cell patients need blood transfusions?

Blood transfusions are the primary treatment to provide healthy red cells capable of carrying oxygen to the body. Regular blood transfusions may reduce or prevent the serious complications of Sickle Cell Disease.



Why do African-Americans need to donate blood for Sickle Cell Patients?

Although any donor who is sickle cell trait negative is a potential candidate, long-term survivors fighting this disease often receive multiple transfusions and develop antibodies (resistance) to donated blood. However, healthy blood from donors of similar ethnic origin is more likely to be compatible, minimizing or eliminating immune complications that sometimes occur.