#### **BLUE TAG PROGRAM:**

The American Red Cross and Ann & Robert H.
Lurie Children's Hospital of Chicago developed
and created a Cooperative Sickle Cell Donor
Program dedicated to meeting the transfusion
needs of sickle cell patients.

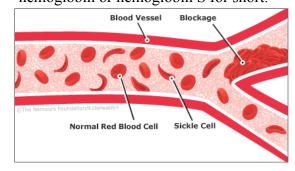


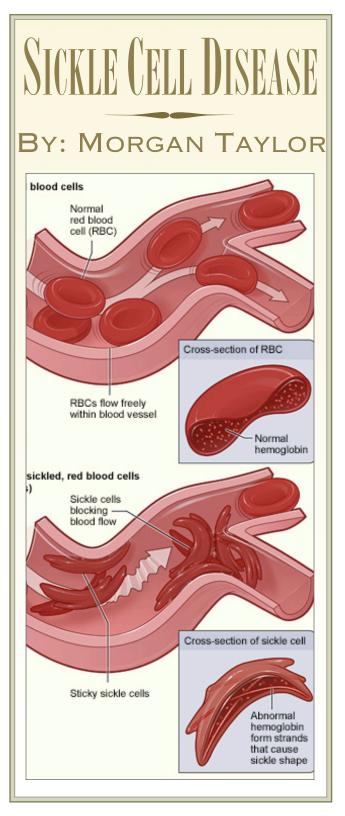
# **History of The Blue Tag Program:**

The Penn-Jersey Blood Services
Region's Sickle Cell Donor Program was
developed in 1997 in collaboration with
the Children's Hospital of Philadelphia
(CHOP) to meet the chronic transfusion
needs of patients with Sickle Cell
Disease. The treating physicians at
CHOP in conjunction with the publicized
research of Elliott Vichinsky recognized
that the transfusion needs of chronically
transfused Sickle Cell patients were
going to rapidly increase and that better
matching of extended blood types was
needed.

A "blue tag: is placed on blood donation from self-identified African Americans and Black-identified blood donors. This "blue tag" identifies the unit as one designated for the Sickle Cell Donor Program which prompts additional testing in order to match a Sickle Cell patient. Example of these additional tests includes testing "blue tag" donors for the presence of hemoglobin S. Hemoglobin S is one of the types of hemoglobin responsible for the sickling effect of red blood cells in Sickle Cell Disease patients.

Hemoglobin is the complex molecule of your red blood cells that helps carry oxygen from your lungs to the rest of your body. It is also what gives blood its characteristic deep red color. Most people have only the most common type of hemoglobin, called hemoglobin A, in their red blood cells. Testing positive for hemoglobin S simply means that your red blood cells contain a different type of hemoglobin called sickle cell hemoglobin or hemoglobin S for short.





#### **CDC Gives The Definition:**

Sickle cell disease (SCD) is a group of inherited red blood cell disorders. In SCD, the red blood cells become hard and sticky and look like a C-shaped farm tool called a "sickle."

People with SCD can live full lives and enjoy most of the activities that other people do. If you have SCD, it's important to learn how to stay as health as possible.

#### **Health Complications:**

"Pain Episode" or "Crisis": Sickle cells don't move easily through small blood vessels and can get stuck and clog blood flow. This causes pain that can start suddenly, be mild to severe, and last for any length of time.

**Infection:** People with SCD, especially infants and children, are more likely to experience harmful infections such as flu, meningitis, and hepatitis.

**Hand-Foot Syndrome:** Swelling in the hands and feet, often along with a fever, is caused by the sickle cells getting stuck in the blood vessels and blocking the blood from flowing freely through the hands and feet.

Eye Disease: SCD can affect the blood vessels in the eye and lead to long term damage.

Acute Chest Syndrome (ACS): Blockage of the flow of blood to the lungs can cause acute chest syndrome. ACS is similar to pneumonia; symptoms include chest pain, coughing, difficulty breathing, and fever. It can be life threatening and should be treated in a hospital.

**Stroke:** Sickle cells can clog blood flow to the brain and cause a stroke. A stroke can result in lifelong disabilities and learning problems.

## **About The Disease**

### **Statistics/Facts:**

- More than 70,000 Americans have sickle cell anemia. And about 2 million Americans including 1 in 12 African Americans have sickle cell trait, which means they carry a single gene for the disease and can pass this gene along to their children, but do not have the disease itself.
- It is estimated that:
  - SCD (Sickle Cell Disease) affects 90,000 to 100,000 Americans.
  - SCD (Sickle Cell Disease) occurs among about 1 out of every 500 Black or African-American births.
  - SCD (Sickle Cell Disease) occurs among about 1 out of every 36,000 Hispanic-American births.
  - SCT (Sickle Cell Trait) occurs among about 1 in 12 Blacks or African Americans.
- SCD (Sickle Cell Disease) is a genetic condition that is present at birth. It is inherited when a child receives two sickle cell genes—one from each parent.

- People cannot catch SCD from being around a person who has it.
- People with SCD (Sickle Cell Disease) start to have signs of the disease during the first year of life, usually around 5 months of age. Symptoms and complications of SCD (Sickle Cell Disease) are different for each person and can range from mild to severe. There is no single best treatment for all people with SCD (Sickle Cell Disease). Treatment options are different for each person depending on the symptoms.
- The only cure for SCD (Sickle Cell Disease) is bone marrow or stem cell transplant.
- SCD (Sickle Cell Disease) is diagnosed with a simple blood test. It most often is found at birth during routine newborn screening tests at the hospital. In addition, SCD (Sickle Cell Disease) can be diagnosed before birth. Because children with SCD (Sickle Cell Disease) are at an increased risk of infection and other health problems, early diagnosis and treatment are important.