

## ***Facts About Sickle Cell Disease***

### **What is Sickle Cell Disease?**

Sickle Cell Disease is an inherited blood disease that affects the red blood cells that carry oxygen throughout our bodies. Normal red cells are doughnut shaped and move easily through small blood vessels. Sickle cells are rigid and become stuck and cause blockages of blood flow, which can be painful and damaging to your organs or your body.

### **Who is affected?**

In the United States, most people who have Sickle Cell Disease are African Americans; about 1 in 375 African American children have the disease. Hispanic Americans from the Caribbean, Central America and parts of South America may also have the disease, as may people from Turkey, Greece, Italy, the Middle East, or East India.

### **How is it inherited?**

If both parents carry the sickle trait, the chances are 1 in 4 that their child will develop Sickle Cell Anemia by inheriting one abnormal gene from each parent. Two in 4 children will carry the trait, and 1 in 4 will have normal hemoglobin.

### **What is Sickle Cell Anemia?**

Sickle Cell Anemia is one of several Sickle Cell Syndromes. It affects a person's red cells by causing them to deform, reducing them in number, and shortening their lifespan. SCA also can cause severe pain and complications such as strokes, skin ulcers, liver, kidney, and lung disease.

### **Why do Sickle Cell patients need blood transfusions?**

Transfusions give sickle cell patients a fresh supply of healthy red blood cells, replacing or diluting the sickle-shaped cells. These transfusions help eliminate or reduce painful crises and organ damage, and can mean the difference between life and death.

### **Why do African Americans need to give blood?**

In addition to the more common ABO and Rh types, there are about a dozen more red cell types that are important in transfusion therapy. Certain blood types are more common in certain populations, and frequently transfused patients respond better to transfusions that more closely match their extended blood type. More African Americans in our database would make it easier to quickly find and recruit matching donors and have a ready supply of special blood types for emergency use by sickle cell patients, rather than waiting the 1-2 days after donation that are needed to process, test, and deliver the blood to local hospitals.

### **Who else could my blood be used for besides a sickle cell patient?**

Surgery patients, accident victims, Leukemia and cancer patients all use blood products. Every day we need over 300 units to serve our area, and every 15 minutes someone in our community will need a blood product.