



Sickle Cell Disease

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What is Sickle Cell Disease?



Sickle Cell is a group of inherited blood disorders causing episodes of severe pain and organ damage.

The red blood cells stiffen into a crescent or sickle shape reducing blood flow to the entire body.

Is Sickle Cell Disease Contagious?



NO

It is genetic or passed from parents to their children.

A person cannot “catch” sickle cell disease through the air, water, skin, etc.

Who is at Risk?

Many Nationalities:

- African Americans
- Latin Americans
- Italians
- Greeks
- Arabs
- Africans
- Caucasian
- Those from India



How Can I Be Tested?



You can be tested by your doctor or screened by your family doctor, local health department, or at Community Health Interventions and Sickle Cell Agency, Inc. in Charlotte.

All babies born in North Carolina are screened at birth.

What are the Complications of Sickle Cell Disease?



- Pain Episodes
- Strokes
- Increased Infections
- Bone & Organ Damage
- Blindness
- Low Red Blood Cell Counts (Anemia)
- Delayed Growth

How to Manage Sickle Cell Disease:



- Drink Water
- Avoid Extreme Temperatures
- Avoid Overexertion
- Minimize Stress
- Rest
- See Your Doctor Regularly
- See a Hematologist --
(blood specialist)
- Take Rx medications as directed

Sickle Cell Trait



- Someone can have sickle cell trait & not know it.
- If you have trait and your partner has trait; statistically 1 out of 4 babies could have sickle cell disease.
- Sickle Cell Trait can be symptomatic
- If you do not know if you have the trait get screened for free by calling 704 332-4184 or see your doctor.

You Can Help By...



- Be a blood donor. A sickle cell patient may need many blood transfusions over a lifetime.
- Get screened. Ask your partner to get screened.
- Learn more about Sickle Cell Disease— the most commonly inherited disease in this country!

For More Information:

- **Presbyterian Comprehensive Sickle Cell Disease Management Program:
(704) 384-7460**
- **Blume Pediatric Hematology & Oncology Clinic
(704) 384-1900**
- **Community Health Interventions and Sickle Cell Agency, Inc.**
- **The Sickle Cell Information Center:
www.scinfo.org**

Please Take One



For more information Presbyterian Healthcare's services visit www.presbyterian.org or call 704-384-CARE.

Presbyterian also offers a speaker's bureau for you community organization. To schedule a speaker, call 704-384-7507.

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Sickle Cell Disease and Trait

The Georgia Comprehensive Sickle Cell Center at Grady Health System, Atlanta GA
www.SCInfo.org

What is Sickle Cell Disease ?

Sickle Cell disease is a group of inherited red blood cell disorders. It is the most common genetic disease in the US.



Over 70,000 Americans have sickle cell disease.

Normal red blood cells are round like doughnuts, and they move through small blood tubes in the body to deliver oxygen. Sickle red blood cells become hard, sticky and shaped like sickles used to cut wheat. When these hard



and pointed red cells go through the small blood tube, they clog the flow and break apart. This can cause pain, damage and a low blood count, or anemia.

What makes the red cell sickle?

There is a substance in the red cell called hemoglobin that carries oxygen inside the cell. One little change in this substance causes the hemoglobin to form long rods in the red cell when it gives away oxygen. These rigid rods change the red cell into a sickle shape.

How do you get sickle cell anemia?

You inherit the abnormal hemoglobin from both parents who may be carriers with sickle cell trait or parents with sickle cell disease. You can not catch it. You are born with the sickle cell hemoglobin and it is present for life.

Is Sickle Cell only in African Americans?

Sickle cell is in many nationalities including African Americans, Arabs, Greeks, Italians, Latin Americans and people from India. All races should be screened for this hemoglobin at birth. In the US, 1 out of 10 African Americans have sickle cell trait and 1 out of 625 newborns have the disease.

How can I be Tested?

A simple blood test called the hemoglobin electrophoresis can be done by your doctor or local sickle cell foundation. This test will tell if you are a carrier of the sickle cell trait or if you have the disease.

Newborn Screening

Most States now perform the sickle cell test when babies are born. The simple blood test will detect sickle cell disease or sickle cell trait . Other types of traits that may be discovered include: Hemoglobin C trait, Hemoglobin E trait, Hemoglobin Barts - which indicates an alpha thalassemia trait

What is sickle cell trait?

Sickle cell trait is a person who carries one sickle hemoglobin producing gene inherited from their parents and one normal hemoglobin gene. Normal hemoglobin is called type A. Sickle hemoglobin called S. Sickle cell trait is the presence of hemoglobin AS on the hemoglobin electrophoresis. This will NOT cause sickle cell disease. Other hemoglobin traits common in the United States are AC and AE traits.

Are there different types of sickle cell disease?

There are three common types of sickle cell disease in the United States.

1. Hemoglobin SS or or sickle cell anemia
2. Hemoglobin SC disease
3. Hemoglobin sickle beta-thalassemia

Each of these can cause sickle pain episodes and complications, but some are more common than others. All of these may also have an increase in fetal hemoglobin which can protect the red cell from sickling and help prevent complications. The medication hydroxyurea also increases fetal hemoglobin.

Where can I get more information?

Presbyterian Sickle Cell Disease Management Program 704-384-4139