

## QUESTIONS & ANSWERS

### *Does sickle cell trait cause health problems?*

Rarely, if ever, does sickle cell trait affect health. In some cases, people with sickle cell trait have problems at high altitudes or in places where oxygen levels are low.

### *Years ago, I was tested and told I didn't have sickle cell trait. Should I be tested again?*

Yes, you should. Unfortunately, some sickle cell tests used years ago were not as accurate as tests used today.

### *Should people with sickle cell trait or disease avoid having children?*

There's no right or wrong answer to this question. It's a decision that couples need to make after considering all the facts. Many couples have been helped by genetic counselors (experts in inherited disorders and counseling).

## SOURCES OF HELP & SUPPORT

**El Paso Department of Health and Environment**  
(719) 578-3113 [www.elpasocountyhealth.org](http://www.elpasocountyhealth.org)

### **Sickle Cell Disease Association of America**



3700 Koppers Street, Suite 570

Baltimore, Maryland 21227

[www.sicklecelldisease.org](http://www.sicklecelldisease.org)

Toll Free (800) 421-8453

Email: [admin@sicklecelldisease.org](mailto:admin@sicklecelldisease.org)

### **Resources, Educational Materials & Links**

<https://www.sicklecelldisease.org/we-can-help/links-and-resources/>

### **Sickle Cell Specialty Care in Denver**

**PEDS:** CCBD Clinic at Children's Hospital Colorado  
Phone: 720-777-6740

**ADULTS:** UCHealth Hematology & Cancer Center  
Phone: 720-848-0300

## LOCAL RESOURCES & SUPPORT

### **Ella Mae Bransom (EMB) Sickle Cell Association**

PO Box 16456, Colorado Springs, CO 80935

(719) 602-1961 <http://ellamae.org>

[sicklecellofcoloradosprings@gmail.com](mailto:sicklecellofcoloradosprings@gmail.com)

<http://ellamae.org/facebook>

### **Sickle Cell Specialty Care in Colorado Springs**

**PEDS:** CCBD Clinic at Children's Hospital Colorado

4125 Briargate Pkwy, Su 200, CS, CO 80920

Phone: 719-305-9025

**ADULTS:** UCHealth Hematology & Cancer Care

525 Bob Peters Grove, Su 202, CS, CO 80910

Phone: 719-365-6568

### **Colorado Sickle Cell Treatment & Research Center**

University of Colorado - Anschutz Medical Campus

13121 E. 17<sup>th</sup> Ave., C-222, Aurora, CO 80045

(303) 724-9070 [Cheri.Burge@ucdenver.edu](mailto:Cheri.Burge@ucdenver.edu)

[www.medicalschool.ucdenver.edu/sicklecell](http://www.medicalschool.ucdenver.edu/sicklecell)

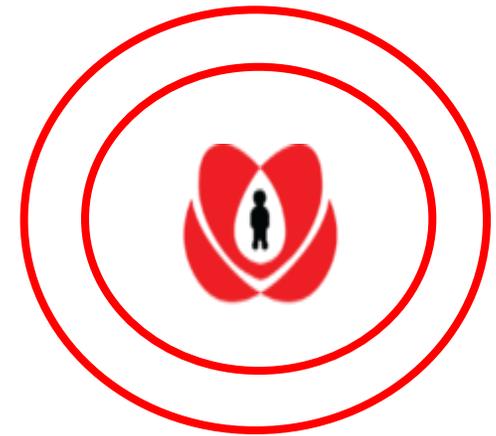
Michael Regier, MSW, LCSW – Transition Coordinator

303-724-9066 [Michael.Regier@ucdenver.edu](mailto:Michael.Regier@ucdenver.edu)

## HOW CAN YOU HELP THE LOCAL SICKLE CELL POPULATION?

- ✓ Join our e-mail distribution list
- ✓ Friend us on Facebook
- ✓ Donations (tax-deductible) can be made on our website or by check to address above
- ✓ Become a Member - \$10 annual dues
- ✓ Sponsorships Available
- ✓ Participate in annual fundraising activities
- ✓ Encourage your colleagues, friends and neighbors to support EMB too
- ✓ Volunteer your time to assist when needed
- ✓ Participate in our monthly on-line meetings
- \*\* Call or E-mail EMB for more information

**Published by: EMB Sickle Cell Association**



# Information about Sickle Cell Disease and Sickle Cell Trait

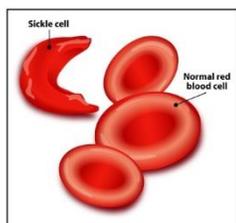
## WHAT ARE SICKLE CELLS

Sickle cells are inherited red blood cells that are shaped like a sickle or quarter moon due to a chemical defect in the hemoglobin. Normal red blood cells are round. Hemoglobin (protein in red blood cells) in the cell carries oxygen from the lung to all parts of the body. It also determines the shape of the cell, whether sickle or normal.

## SICKLE CELL DISEASE

Sickle cell disease is a group of related disorders that affect red blood cells.

- ✓ Normal red blood cells move easily through the body because they're: Soft, Smooth, and Round.
- ✓ With sickle cell disease, red blood cells can become: Hard, Sticky, and Shaped like sickles.



These changes can cause numerous medical problems. Cells with hemoglobin also carry oxygen, but:

- ✓ Sickle cells flow differently in blood vessels. Being rigid and pointy, they tend to jam up in small blood vessels, stopping the flow.
- ✓ Sickle cells live for only about 60 days, and are more fragile than normal blood cells, which live for about 120 days.

## ABOUT SICKLE CELL TRAIT

Sickle cell trait is not a disease. If you have sickle cell trait that means that you inherited sickle hemoglobin from one of your parents and normal hemoglobin from the other. The normal

hemoglobin prevents the cells from developing the sickle shape in the body. People with sickle cell trait will never get the disease, but they do carry a gene that could affect their children. Genes determine everything about a child's physical makeup – hair and skin color, height, built, etc. When one parent has sickle cell disease and the other parent has regular hemoglobin, all their children will have sickle cell trait.

## UNDERSTAND THE FACTS

Sickle cell is not restricted to one group. People in many ethnic groups can have sickle cell trait or disease. It's most common among African Americans, but people of Greek or western Asian, Native Americans, Hispanic, Caucasian, and people in other groups may have it too.

Sickle cell disease is not contagious. A person cannot catch sickle disease through the air, water, skin, etc. The only way to get it is to have it passed on from your parents.

With sickle cell trait, you can expect to lead a normal, healthy life.

## WHAT IS SICKLE CELL ANEMIA

Sickle cell anemia is the most common sickle cell disease. About one in 500 Black Americans has inherited sickle cell hemoglobin from both parents and therefore has sickle cell anemia. A person with sickle cell anemia may have:

- ✓ Infections: Curved, sticky blood cells can clog the spleen and prevent it from doing its job – helping the body kill germs.
- ✓ Anemia: Sickle cells have a shorter life than regular red blood cells. The body cannot

make new red blood cells fast enough to replace old ones. With fewer red blood cells, organs and tissues do not get the oxygen they need.

- ✓ Organ Damage: Lack of oxygen over many years can lead to tissue and organ damage in any part of the body.
- ✓ Pain: Crescent-shaped cells can get stuck in smaller blood vessels. This may block blood and oxygen flow to tissues, resulting in excruciating pain and/or a sickle cell Pain Crisis requiring an ED visit or hospitalization.
- ✓ Hand-And-Foot Syndrome: This involves pain and swelling of the hands and feet. It's caused by sickle cells that clog the blood vessels of the hands and feet. It usually occurs in smaller children.
- ✓ Leg Ulcers: Poor circulation can lead to sores that are difficult to heal. These often occur around the ankles.
- ✓ Jaundice: This is a yellowish tinge on the white of the eyes. It's usually painless, but indicates a problem with the blood.

## OTHER PROBLEMS ASSOCIATED WITH SICKLE CELL DISEASE:

- > Chest pain and trouble breathing
- > Painful erections in men
- > Stroke
- > Blood in the urine
- > Gallstones
- > Pneumonia

## SICKLE CELL CAN BE CONTROLLED

- ✓ **Medication:** pain relievers and antibiotics
- ✓ **Special Drugs:** make cells less sticky and increase water contents of cells
- ✓ **Bone Marrow Transplants:** are curing many patients