### Sickle Cell Trait

## Web page on http://dshs.texas.gov/newborn/sctrait.shtm

### Things to Know About Sickle Cell Trait

En Español

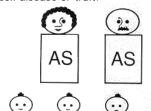
Sickle cell trait is an inherited blood condition. It is not a disease. It is not contagious. It occurs when a person has one gene for normal hemoglobin and one for sickle hemoglobin. (Hemoglobin is a protein in red blood cells and carries oxygen to your body.) Genes control the physical makeup of a person, such as height and eye color. Every person has two genes for hemoglobin. One gene is inherited from the mother and one from the father. To have sickle cell trait means a person carries one gene for sickle cell hemoglobin. This gene can be passed along to his or her children.

If you were tested years ago and told you did not have a sickle cell trait, you should be tested again. Some tests used years ago were not as accurate as tests used today.

## What Can Happen If You Have Sickle Cell Trait?

Most people with sickle cell trait lead completely normal lives and usually show no outward signs of it. People with the trait will not get sickle cell disease. But they may have severe problems with very extreme physical activity. It is important that your doctor knows if you or your child have sickle cell trait. Very rarely individuals with sickle cell trait can have additional problems such as a very rare form of kidney cancer found only in individuals with sickle cell trait.

When one parent has sickle cell trait and the other parent has sickle cell trait or another hemoglobin trait (such as hemoglobin C or beta-thalassemia), there is a one-in-four chance that their baby will be born with sickle cell disease. There is a one-in-two chance that their baby will be born with the trait and a one-in-four chance that their baby will not have sickle cell disease or trait.



Picture Caption: Each child has a 1 in 4 (25%) chance of having sickle cell disease if both parents carry the sickle cell trait.



# What is Sickle Cell Disease?

Sickle cell disease is an inherited blood disease that is very serious. A person with this disease has an abnormal hemoglobin in the red blood cells. Changes in the red blood cells cause them to be shaped like a "sickle." These blood cells are weak and sometimes get very stiff. They can get trapped in the blood vessels and harm blood flow. This can sometimes cause intense pain anywhere in the body. It can also damage body tissues and organs over time. Some serious problems can even cause death. To learn more about sickle cell disease, click here.

Commented [FD1]: hyperlink to main sickle cell disease page

#### Who Can Have Sickle Cell Trait?

People of different ethnic backgrounds can have sickle cell trait. These include Africans, Hispanics, Greeks, Italians, East Indians, Saudi Arabians, Asians, Syrians, Turks, Cypriots, Sicilians, Caucasians, and others. African Americans have the highest rate of sickle cell disease and sickle cell trait. In the U.S. About one in every 400 African-American babies is born with the disease, and about one in every 12 is born with sickle cell trait.

All newborns in Texas are tested for sickle cell disease and trait.

#### How Can You Find Out If You Have Sickle Cell Trait?

It is very important to know if you or your spouse or partner have the sickle cell trait before you have a baby.

Remember, people with sickle cell trait will never get the disease. But they carry a gene that could affect their children. If both partners carry a trait for an abnormal hemoglobin, even if it is not the same one, they may have a baby with a serious blood disease.

If you were born in Texas after November 1, 1983, you may get your newborn test result by contacting your birth doctor or your birth hospital. <u>If you were tested years ago and told you did not have a sickle cell trait, you should be tested again. Some tests used years ago were not as accurate as tests used today.</u>

This site and related brochures does not take the place of an informed discussion between a patient and their health care provider.

## Be informed . . . learn your hemoglobin type

# Resources

- · Your family doctor
- Things To Know About Sickle Cell Trait (English/Spanish brochure)
- Frequently Asked Questions About Sickle Cell Trait
- Sickle Cell Trait, Centers for Disease Control and Prevention
- Read more about <u>sickle cell disease</u>
- Sickle Cell Association of Texas Marc Thomas Foundation
- Sickle Cell Disease Association of North Texas
- Sickle Cell Association of Houston
- Sickle Cell Disease Association of America

## Contact Us

Texas Department of State Health Services Newborn Screening Unit PO Box 149347, MC 1918 Austin, TX 78714-9347

Phone: 1-800-252-8023 ext. 3957

Fax: 512-776-7450

Email: newborn@dshs.state.tx.us

This site and related brochures does not take the place of an informed discussion between a patient and their health-care provider.

Last updated December 14, 2016

Commented [FD2]: We can consider adding these sickle cell trait specific organizations:

As One Foundation

http://www.asonefoundation.org/

Chris Johnson Foundation

http://chrisjohnsonfoundation.org/

**Commented [TI3R2]:** Perhaps let's keep CBOs off this page.

Commented [TI4]: Add "FAQs" link here:

http://dshs.texas.gov/newborn/trait.shtm?term s=sickle%20cell%20disease

Commented [FD5]: hyperlink:

https://www.cdc.gov/ncbddd/sicklecell/traits.html

Commented [FD6]: Consider adding this group: "SOS Sickle Cell Parent Support Group", but maybe we can have a separate support group section on other page (there's a few more)