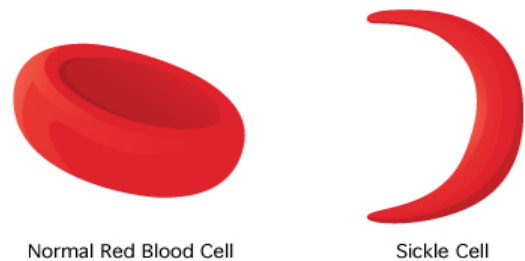


Sickle Cell Trait: KNOWLEDGE is POWER



What Is Sickle Cell Trait?

- Sickle cell trait is not a disease.
- Sickle cell trait means that someone is a carrier for one copy of the gene that causes sickle cell disease.
- Most people with sickle cell trait lead normal lives
- Sickle cell trait can not develop into sickle cell disease

What is Sickle Cell Disease?

- SCD is a genetic condition that is present at birth.
- In SCD, the red blood cells become hard and sticky and look like a farm tool called a “sickle.”
- People with SCD have anemia or a constant shortage of red blood cells.
- Sickled cells can get stuck in the blood vessels and clog the blood flow. This can cause significant pain and other serious problems.
- Persons with SCD may have lifelong medical problems and premature death

Does Sickle Cell Trait Cause Problems?

- Most people with sickle cell trait have no symptoms and will not have any health complications. Occasionally people with sickle cell trait can have blood in their urine.
- In very rare cases or extreme conditions (such as high altitude, scuba diving, severe dehydration-too little water in the body, or very high intensity physical activity typically associated with high temperatures, people with sickle cell trait can have problems with their red blood cells.
- Complications include muscle breakdown (rhabdomyolysis), problem with blood supply to the spleen, or increased pressure in the eye (glaucoma) following eye injuries.
- More research is needed to find out why some people with SCT have complications and others do not.
- **Finally, a very rare form of kidney cancer (renal medullary carcinoma) has been associated with sickle cell trait. Persons with sickle cell trait who develop blood in their urine should be evaluated.**

Can I Play Sports with Sickle Cell Trait?

- Sickle cell trait should not stop anyone from participating in sports or exercise.
- It is important for everyone to stay hydrated (drink a lot of water) and understand how to avoid injuries to make exercise safer. This is important for ALL individuals, including those with sickle cell trait.



Should I Be Screened for Sickle Cell Trait?

- Everyone should know their trait because it gives you more information about YOUR body and YOUR health.
- Knowing your trait is especially important if you are considering having children with someone else who may carry the trait. However- you should have counseling when you undergo screening so you can make educated decisions.

When Should Someone With Sickle Cell Trait See a Doctor?

- People with sickle cell trait should see a doctor if they have blood in their urine, experience eye trauma, or have heat exhaustion or severe muscle cramping during exercise.
- They should also seek counseling when they want to start a family

How Does Someone Get Sickle Cell Trait?

- People who have inherited one sickle cell gene and one normal gene have SCT. This means the person won't have the disease, but will be a trait "carrier" and can pass it on to his or her children.

Who Is Affected By Sickle Cell Trait?

- There are 1 million to 3 million Americans with sickle cell trait. It is estimated that 8 to 10 percent of African Americans have sickle cell trait. This means 1 out of 12 Blacks in the United States.
- Sickle cell trait can also affect Hispanics, South Asians, Caucasians from southern Europe, and people from Middle Eastern countries. More than 100 million people worldwide have sickle cell trait.

How Do I Get Tested for Sickle Cell Trait?

- The test for screening is a blood test, which is not dangerous.
- Prior to having any genetic test, it is very important to have accurate information about the results.
- Once your results are available, the discussion for the interpretation of the results must be with a professional who has knowledge and experience with sickle cell.
- Screening tests can also be harmful if your rights to privacy are not protected because of discrimination that may occur by others.

Where Can I Get More Information?

- Email the SC² program at MUSC
sicklestrong@musc.edu
- Visit the American Society of Hematology website
<http://hematology.org/Advocacy/Policy-Statements/7705.aspx>

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