

FACT SHEET ON SICKLE CELL TRAIT



What is Sickle Cell Trait (SCT)?

Sickle Cell Trait is not a disease. It is an inheritance of one gene for normal hemoglobin (hemoglobin A) and one gene for sickle hemoglobin (hemoglobin S). SCT is not Sickle Cell Anemia, in which two abnormal genes are inherited (both hemoglobin S). SCT will not turn into Sickle Cell Anemia. SCT is considered generally benign and consistent with a long, healthy and active life.

Why Test for SCT?

During intense or extensive exertion, red blood cells containing sickle hemoglobin can change shape, from round to quarter-moon shape (or “sickle” shape). Sickle cells may accumulate in the bloodstream, blocking blood flow to the tissues and muscles, including the heart.

During intense exercises, athletes with SCT have sometimes experienced significant physical distress, collapsed and even died. Heat, dehydration, and asthma can increase the risk for and worsen complications associated with SCT, even when exercises is not intense. Athletes with SCT should not be excluded from participation, as precautions can be put in place, but most athletes with SCT don't know they have it.

(web address)

Who may have SCT?

While any person may have SCT, individuals at high risk for having SCT are those whose ancestors come from **Africa, South or Central America, India, Saudi Arabia, and Caribbean and Mediterranean countries.**

SCT occurs in about 8% of African-Americans in the United States and between one in 2,000 to one in 10,000 in the Caucasian population. Today, all 50 states have newborn screening programs that identify sickle cell trait status at birth, however not all states adopted screening in the same year.

How can I be tested for SCT?

SCT is diagnosed by a simple blood test. Wartburg College encourages all student athletes to be tested, particularly those whose ancestors come from the areas identified above. Testing options include:

- If you have already been tested, obtain a copy of the test results from your health care provider
- Have your health care provider arrange for the test before you come to campus

What if I choose not to be tested for SCT?

You have the option to complete and sign a waiver of Sickle Cell Testing on page 3 stating that you choose not to be tested and waiving your right to know if you have SCT. Wartburg College encourages you to discuss this decision with your health care provider and your parents.