SAINT LOUIS
SPORTS MEDICINE

SICKLE CELL POSITION STATEMENT

I. Purpose

On June 25, 2009 the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports adopted the recommendation that member colleges and universities test student-athletes to confirm their Sickle Cell Trait status if that information is not already known.

Effective August 1, 2010, the NCAA is mandating under rule that all student-athletes must be tested. The NCAA mandatory medical examination rule states: "… a first time participant shall be required to undergo a medical examination or evaluation administered or supervised by a physician (e.g. family physician, team physician). The examination or evaluation shall include a sickle cell solubility test (SST), unless documented results of a prior test are provided to the institution. To specify the student-athlete is required a medical examination or evaluation that student-athletes who are beginning their initial season of eligibility and students who are trying out for a team must undergo prior to participation in voluntary summer conditioning or voluntary individual workouts pursuant to the safety exception, practice, competition or out of season conditioning activities shall include a Sickle Cell Solubility Test (SST), unless documented results of a prior test are provided to the institution". The examination or evaluation must have been administered within six months prior to participation.

In accordance with NCAA regulations, Saint Louis University Department of Athletics is mandating that all student-athletes must be tested for sickle cell trait or show proof of a prior test. Per NCAA rules Sickle Cell Testing waivers can no longer be accepted.

II. About Sickle Cell Disease

Sickle cell disease is a term used for a group of conditions in which the pathology is due to the presence of hemoglobin S. Sickle cell anemia, or homozygous sickle cell disease, results from the inheritance of a sickle cell gene from both parents. Sickle cell disease is characterized by continuous red blood cell hemolysis usually resulting in anemia. This varies from patient to patient from inconsequential to severe; causing the variable presentation of painful vaso-occlusive crises; the potential for serious infections and acute complications involving any of the major organ systems, with progressive, irreversible organ damage. In sickle cell trait (the carrier state) there is always more normal (A) hemoglobin than S hemoglobin. Patients with sickle cell trait do not have symptoms from their sickle hemoglobin except under extraordinary conditions.

Eighty-five percent of people born with the disease now live to age 20, and most patients now survive at least until middle age. Patients are usually able to complete high school; many go on to college and graduate school; and all have the potential to lead productive lives.

Improved prognosis over the past generation is the result of comprehensive health maintenance, and the immediate treatment of acute complications, in combination with several therapeutic advances. Each patient with sickle cell disease needs a satisfactory "medical home" tailored to his or her individual needs.

- Sickle cell trait is an inherited disorder that affects red blood cells.
- Sickle cell trait is different from sickle cell disease, (commonly referred to as sickle cell anemia) and carriers of the trait cannot develop sickle cell disease.
- Usually, people with sickle cell trait do not have any medical problems and they can lead normal lives. However, sickle cell trait can change the shape of red blood cells during intense or extensive exertion, causing a blockage in blood vessels and rapid breakdown of muscles, including the heart, which may lead to a collapse or even death.
- More information regarding sickle cell trait and the NCAA's recommendation for sickle cell trait testing can be found at the official website for the NCAA.

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SPORTS MEDICINE

III. Requirements for Student-Athletes

Starting in 2010, all SLU student-athletes will be tested for Sickle Cell unless prior testing and results can be provided. Those student-athletes not wishing to be tested should submit prior test results or complete the Sickle Cell Trait Waiver Form before they can participate in any intercollegiate athletics event, including strength and conditioning sessions, practices or competitions.

A. Protocol for Submitting Prior Test Results

Infants born after 1984 were tested for the sickle cell trait and therefore the documentation should be available from the student-athlete's pediatrician. The screening test can be performed at Saint Louis University or with the student-athlete's physician. If the initial screening test is positive for sickle cell, then a follow-up test can be performed to determine if it is Sickle Cell Disease or Sickle Cell Trait. Educational sessions around the topic of sickle cell and the precautions that need to be undertaken due to the serious nature of the condition will be required for those individuals who are sickle cell trait positive.

Student-athletes must send documented results of sickle cell trait testing to:

Jonathan Burch, ATC
Director of Sports Medicine
Saint Louis University
Chaifetz Arena – Sports Medicine
3330 Laclede Blvd.
St. Louis, MO 63103
jburch7@slu.edu

B. Waiver of Testing

Due to recent NCAA rules no waiver of Sickle Cell Testing is allowed.

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SLU POLICY FOR STUDENT-ATHLETES WHO TEST POSITIVE FOR SICKLE CELL

For the Saint Louis University student-athlete that tests positive the following guidelines should be followed:

1. Stop athletic activities at onset of symptoms (e.g., cramping, pain, weakness, fatigue, shortness of breath).
2. Report any symptoms to ATC and coach
3. No timed “conditioning tests” (pre/in/post season).
4. Acclimatize to onset of conditioning or lifting programs.
5. No two a day practices or workouts for the first week.
6. Decreasing activity for conditioning drills (i.e., no timed sprints, no sustained running without breaks).
7. Undergo a conditioning program each season before return to sport activity.
8. Hydrate before, during, and after all activity.
9. Decrease/restrict activity in very hot or humid conditions.
10. Monitor when new to altitude (~ 5,000 ft.). Cut training effort; have oxygen tank ready.
11. Special considerations should be made to the student-athlete during intense travel (i.e. flying to a game/event with return trip over a 72 hour period). It will be advised that an automatic off day from activity be granted to allow for adequate hydration.
12. No practice or conditioning when ill (especially with a fever). Progress slowly back to activity after recovered from any illness.
13. Control any asthma symptoms.
14. Decreasing activity after sleep loss.

    - For specific parameters or activity restrictions (practice, conditioning, strength and conditioning activities, skill work… etc.) intensity or duration should be under the direct supervision of the athletic trainer (working in conjunction and under the supervision of the treating team physician) assigned to that particular student-athlete. The certified athletic trainer will develop or modify physical activities per student-athlete.

    - Oxygen tank should be readily available.