

## Sickle Cell Trait Testing

In accordance with the recent NCAA (National College Athletic Association) mandate, which is effective August 1, 2012, all Division II student-athletes must know their sickle cell trait status or sign a written waiver declining testing prior to participation in intercollegiate athletics. Prospective student-athletes must provide documentation of test results for sickle cell trait or a written waiver to Health Services which will be shared with the Athletic Trainer from the Intercollegiate Athletic Department at Millersville University. Beginning August 1, 2012 a student-athlete may not practice or play his/her sport for the upcoming season without providing the University with this documentation.

The NCAA Bylaw states: 17.1.5.1 Sickle Cell Solubility Test. "The examination or evaluation of student-athletes who are beginning their initial season of eligibility and students who are trying out for a team shall include a sickle cell solubility test (SST), unless documented results of a prior test are provided to the institution or the student-athlete declines the test and signs a written release."

### About Sickle Cell Trait

Sickle cell trait is not a disease, but a life-long condition that will not change over time. Sickle cell trait is the inheritance of one gene for sickle hemoglobin and one for normal hemoglobin. Hemoglobin is the iron containing oxygen-transport protein in red blood cells. During intense or extensive exertion, the sickle hemoglobin can change the shape of a normally round red blood cell to an abnormal quarter moon or "sickle" shape. This change in the shape of the red blood cells can pose a serious health risk for some student-athletes. During intense exercise, student-athletes with sickle cell trait have experienced significant physical distress, collapse and even death.

Research has shown that sickled red blood cells can clump and block normal blood vessels. This blockage can lead to the athlete's collapse from rhabdomyolysis, the rapid breakdown of muscles starved of blood. Heat, dehydration, altitude and asthma can increase the risk for the "sickling" of the red blood cells and worsen the symptoms, even when exercise is not intense.

Persons of any race and ancestry may carry the sickle cell trait, but it is more common in some groups of people. All newborns in the United States are currently screened. You may be able to contact the state department of health in the state you were born to see if you can obtain your sickle cell test records.

### FAQ's and Answers:

**Q: Why should I get tested for sickle cell trait?** A: This blood test can provide educational information that can be helpful on and off the field. Knowing your sickle cell status can allow health care professionals to take better care of you. It is also helpful for the future to know your status if you plan to have children.

**Q: Is it mandatory that I have the sickle cell trait test?** A: No, testing is not mandatory but the Intercollegiate Athletic and Health Services Departments at Millersville University strongly recommend that every student athlete be tested or present proof of prior testing for the sickle cell trait. This testing can be obtained at home prior to the student athlete arriving on campus. A copy of your test results

needs to be provided with your pre-participation sports physical paperwork. If you do not have this documentation, you can also decide to be tested via Health Services through an outside lab.

**Q: Can I decide not to be tested?** A: Yes, but if you choose not to be tested, you must sign a waiver stating that you are aware of the risk associated with sickle cell trait and that you understand the importance of testing and have declined to be tested. When you sign the waiver, you are also releasing Millersville University from any and all liabilities related to any loss or personal injury that may be a result from your non-compliance with the mandate of the NCAA and Millersville University.

**Q: What if I test positive for sickle cell trait?** A: If a student athlete has a positive test result for the sickle cell trait, the student-athlete will obtain a medical consultation with the Health Services medical director or certified nurse practitioner. The student athlete will be informed of the implications of the sickle cell trait and possible medical effects on that individual participating in athletics. Student athletes with a positive test result for sickle cell trait are permitted to participate in intercollegiate athletics, but must also meet with their coach, athletic trainer and Health Services medical director or certified nurse practitioner to be counseled and sign a waiver that they understand the implications of positive sickle cell trait testing and participating in intercollegiate athletics.

**Q: Who will know that I have tested positive for sickle cell trait?** A: All medical information at Health Services, Millersville University is kept in confidence in accordance with MU policy, HIPPA and FERPA laws and state laws. However, your team coach/assistant coaches, athletic trainers will be made aware of your sickle cell trait status so that proper care is provided to you during all organized team conditioning, practices and competitions.

**Summary: 3 options to obtain this necessary documentation**

1) **Preferred method:** Have your sickle cell trait testing completed by a physician at home prior to your arrival on campus. Provide this documentation during pre-participation sports physical/clearance. The student athlete will be responsible for any expenses incurred due to testing. 2) **Provide documentation of your test results if you were tested at birth.** Contact your birth state Health Department to obtain this documentation. You will need to sign a release of information and possibly other paperwork based on that state Health Department's requirements. This option would require you to wait to see if newborn infant sickle cell trait test results can be located and a copy sent to you. Please plan ahead as any wait may delay your participation status as a student athlete. 3) **Or Sign the Sickle Cell Trait Testing Waiver.** This acknowledges that you are aware of the facts and risk of sickle cell trait and are declining the recommendations of the NCAA and Millersville University to be tested to learn your sickle cell trait. Choosing this option waives the student athlete's decision for only one year. The waiver would need to be resigned prior to each year of participation.

Please refer to the NCAA fact sheet for student-athletes on "Sickle Cell Trait". For more information and resources, visit [www.NCAA.org/health-safety](http://www.NCAA.org/health-safety). To obtain sickle cell test results, please contact Department of Health in state you were born. For Department of Health in Pa: [www.health.state.pa.us](http://www.health.state.pa.us) or 877-PA-HEALTH.