



Wabash College Athletic Training Sickle Cell Trait Education

About Sickle Cell Trait

- Sickle cell trait is an inherited abnormality of the oxygen-carrying protein hemoglobin in the red blood cells.
- Sickle cell trait is a common condition found in over three million Americans.
- Although Sickle cell trait is most predominant in those of African-American, Mediterranean, Middle Eastern, Indian, Caribbean, and south and Central American ancestry, persons of all races, sexes and ancestry may test positive for sickle cell trait.
- Sickle cell trait is usually benign, but can be life-threatening, especially during intense sustained exercise. Hypoxia (lack of oxygen) in the muscles may cause sickling of red blood cells (red blood cells changing from a normal disc shape to a crescent or “sickle” shape) that can accumulate in the bloodstream and result in a “logjam” in blood vessels, leading to oxygen starvation to the muscles and destruction of muscle tissue, a condition called rhabdomyolysis.
- While sickle cell trait is not a barrier to participation in competitive sports, athletes with sickle cell trait have experienced significant physical distress including collapse and death during intense exercise. Heat, dehydration, inadequate acclimatization, altitude and asthma can increase the risk for medical complications in athletes with sickle cell trait.
- You may obtain additional education by reading the [NCAA Sickle Cell Fact Sheet](#) or by watching an [NCAA video](#) (note that the video is somewhat outdated and refers to a “waiver” that is no longer an option).

Sickle Cell Trait Testing

- The NCAA mandates that all NCAA student-athletes have knowledge of their sickle cell trait status before participating in any intercollegiate athletics event, including strength and conditioning sessions, practices, competitions, etc.
- If you are an incoming freshman or an upperclassman who will be participating in NCAA varsity athletics for the first time, you can complete this requirement by doing one of the following and reporting your results using the Wabash Student Health Portal **by July 15th**:
 - Contact your medical provider to see if you can obtain a copy of your newborn screening blood work that should include a sickle cell screening test.
 - Contact the hospital where you were born to see if they can provide a copy to you.
 - Ask your medical provider to order a blood draw to screen for sickle cell hemoglobin (also known as Hemoglobin S, Hb S, Hgb S).
 - If you do not have a primary care provider, contact your local health department for advice on where you can get tested.
 - If you still can't get tested, contact Tori Gregory, Assistant Director of Athletics and Campus Wellness, at gregoryv@wabash.edu.

