About Sickle Cell Trait

- Sickle Cell trait is the inheritance of one gene of sickle hemoglobin and one for normal hemoglobin.
- Sickle Cell trait is a common condition (more than 3 million Americans)
- Sickle cell trait is most predominant in those whose ancestors are from Africa, South or Central America, Caribbean, Mediterranean countries, India, and Saudi Arabia, but persons of all races and ancestry may test positive for the trait.
- Sickle cell trait occurs in 8% of U.S. African Americans and 1 in 2,000 – 10,000 Caucasians.
- Sickle Cell trait is usually benign, but 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), which can accumulate in the bloodstream and “logjam” blood vessels, leading to collapse from the rapid breakdown of muscles starved of blood.
- A sickling collapse is a medical emergency; Sickle Cell disease can be fatal.

Sickle Cell Trait Testing

The NCAA mandates that all NCAA student-athletes have knowledge of their sickle cell trait status before the student-athlete participates in any intercollegiate athletics event, including strength and conditioning sessions, practices, competitions, etc.

The NJCAA, which governs intercollegiate athletics at the Junior College level, has not implemented this mandate. However, the Daytona State College Department of Athletics complies with the NCAA mandate for sickle cell testing because: (1) if you are positive for the trait you can take steps to avoid the risk of complications and (2) many of our athletes intend to continue their athletic career at an NCAA institution at which time you will be required to show proof of your Sickle Cell Trait status.

The Options

To participate on an athletic team at Daytona State College, you must do one of the following:

1. Provide proof of testing with the resulting sickle cell trait status to the DSC Sports Medicine department. Check with your pediatrician to see if there is a record of that test in your chart from birth.
   *NOTE: If you choose this option, you must submit documentation along with your insurance and medical forms.

OR

2. Daytona State College provides Sickle Cell Trait testing at no cost to the athlete. This is done through Halifax Medical Center’s laboratory before any athletic participation commences.