

## **Sickle Cell Trait Information**

- Sickle Cell Trait is the inheritance of one gene for sickle hemoglobin and one for normal hemoglobin. During
  intense or extensive exertion, the sickle hemoglobin can change the shape of red blood cells from round to
  quarter-moon, or "sickle." This change, called Exertional Sickling, can pose a grave risk for some athletes.
  Athletes with the Sickle Cell Trait are more susceptible to heat related disorders and ischemic
  rhabdomyolysis a rapid breakdown of muscle tissue.
- Sickle cell trait is a common condition (more than three million Americans). Although Sickle cell trait is most predominant in African-Americans and those of Mediterranean, Middle, Eastern, Indian, Caribbean, and South and Central American ancestry, persons of all races and ancestry may test positive for sickle cell trait.
- In recent years, Exertional Sickling has contributed to the death of athletes, ages 12 through 19.
   Participation is athletics is allowed as long as proper precautions and activity modifications are followed to prevent such instances from occurring. In the event that an athlete is identified with the sickle cell trait, the athlete, parents, and coaches will be given information, clarification, and assistance on modifying activities to prevent Exertional Sickling.
- NCAA legislation beginning in 2009, recommends that all colleges and universities confirm the <u>Sickle Cell</u>
   <u>Trait</u> status of all student-athletes. The NCAA's testing recommendation follows the latest guidelines from the National Athletic Trainers' Association and the College of American Pathologists, both of which recommend screening for the Sickle Cell Trait if a student-athlete's status is not known.
- In order to show compliance with this NCAA legislation, FDU is requiring all new student-athletes (freshman and transfers) to provide documentation of their Sickle Cell Trait status in order to begin their FDU eligibility.

All 50 states now require screening for "hemoglobinopathies" (genetic blood disorders) at birth, and Sickle Cell Trait is one of these issues so the test results may be available from the pediatrician/ hospital of birth. IF YOU HAVE NOT BEEN TESTED BEFORE – AND THERE ARE NO SICKLE CELL OR "HGB" RESULTS ON YOUR BIRTH RECORDS - YOU MUST TAKE THE FOLLOWING STEPS:

- 1. Call your family physician and ask him for a script ordering the hemoglobin solubility test.
- 2. Go to a local lab that takes your insurance and have the simple blood test done
- 3. Forward the Results to the Athletic Training Staff at fax 201-692-2171.

For more information on Sickle Cell Trait and Athletics please visit:

www.nata.org/statements/consensus/sicklecell.pdf www.scinfo.org/sicklept.htm www.ncaa.org/health-safety.