Sickle Cell Trait ("SCT") is an inheritance of an abnormal gene that can cause a red blood cell to deform (to a sickle shape). Over a recent seven-year span, nine athletes participating in NCAA sports died as an SCT complication. As a result, the NCAA now mandates testing or proof of testing before any practice, competition or conditioning.

As of the 2010-2011 academic year, the NCAA requires each athlete participating in Division I sports to:

- have SCT testing performed;
- show proof of SCT testing; or
- sign a waiver demonstrating that the athlete:
  - understands the importance of SCT testing;
  - declines testing; and
  - releases the athlete's institution from any liability related to declining testing.

SCT has been associated with exertional rhabdomyolysis, renal failure, as well as death. SCT’s symptoms can be aggravated by extreme exertion, increased heat, altitude and dehydration.

**Why get tested?** An SCT blood test is relatively easy to perform, and can provide educational information that is helpful to you both on and off the field. The test is helpful to know your SCT status, and can allow health care professionals to take better care of you. If you were born in the U.S., your testing results may be already available in your medical record, and can be used as proof of SCT testing.

**What happens if I test positive?** Even if you have SCT, you are permitted to participate in sports. But specific precautions need to be undertaken due to the serious nature of the condition. You then need to have a confirmatory test performed, and if the confirmatory test is positive, then the University will counsel you on what can be done to avoid complications.

**Who will know that I test positive?** By law and Health Services policy, test results are confidential. But the University will request your consent before releasing your information even to either the Sports Medicine department and Health Services (which needs to be aware of your SCT status in order to provide optimal care to you during practice, competition and conditioning).

**Is it mandatory that I have the sickle cell trait test?** Sports Medicine recommends that you be tested or show proof of prior testing for SCT. This testing should be obtained at home before the school year. Bring a copy of your test results to your sports physical. Contact Sports Medicine if you have any SCT test-scheduling concerns.

Indicate your SCT testing preference by placing your initials only once below:

___ I agree to SCT testing (please include copy of testing results, or ask for additional information).

___ I do not wish to have SCT testing performed, even though I understand the information provided above as well as the recommendation from Sports Medicine that SCT testing be performed on me.

Please sign below. If you are under eighteen years old, a parent or guardian must sign further below (including printed name). If you choose not to have testing performed, then your signature also confirms that you:

- understand the importance of SCT testing;
- decline SCT testing; and
- release the University of Hartford and its Regents, officers, employees and volunteers from any liability related to or resulting from your decline of SCT testing.

Signature __________________________ Date _________________
Printed Name of Student Athlete: ___________________________ Sport: __________________ Class Year: ______

(if Student Athlete under 18 yrs old): Parent/Guardian Signature __________________________
Date _________________ Printed Parent/Guardian name __________________________
About Sickle Cell Trait ("SCT")

- SCT is an inherited condition of the oxygen-carrying protein, hemoglobin, in the red blood cells.
- SCT is a common condition (> three million Americans)
- Persons of all races and ancestry (but less so with Caucasians) may test positive for sickle cell trait.
- For a variety of reasons, SCT seems to affect persons 18-24 years of age at greater degrees than younger individuals.
- Those affected by SCT show no symptoms and have no adverse health issues related to the condition unless stressed physically under extreme conditions.
- SCT symptoms sometimes appear during:
  - timed runs
  - all-out exertion of any type for 2 – 3 continuous minutes without a rest period
  - intense drills
  - other spurts of exercise after prolonged conditioning exercises
  - other extreme conditioning sessions.
- 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:
  - where the cells change from a normal disc shape to a crescent or sickle shape
  - which can accumulate in the bloodstream and slow blood vessel flow
  - which leads to collapse from the rapid breakdown of muscles starved of blood.
- Common signs and symptoms of a sickle cell emergency include, but are not limited to:
  - increased pain and weakness in the working muscles (especially the legs, buttocks, and/or low back)
  - cramping type pain of muscles
  - soft, flaccid muscle tone
  - immediate symptoms with no early warning signs.

What you need to do

1. Contact your parents/guardian and your pediatrician (at birth) and get documentation showing what your SCT status is.
   - If you were born after 1984, you probably were tested for SCT, and the documentation should be available from your family pediatrician.
   - Or –
2. Schedule an appointment with either your family physician to have SCT testing done for you.
   - This test needs to be in the form of a blood test.
   - Or –
3. Indicate on the reverse side that do not wish to have SCT testing performed, which means that you release the University of Hartford and its Regents, officers, employees and volunteers from any liability related to or resulting from your decline of SCT testing.
   - Not having SCT testing is not recommended. It is preferred that you know your status to help ensure your health and wellbeing while participating in athletics. We advise you to consult with your parent or guardian before signing the waiver, even if you are eighteen years or older.