

## Sports medicine- Sickle Cell Testing

## About Sickle Cell Anemia

- Sickle cell anemia is where some red blood cells are shaped in a like a sickle, hence the name. Mechanically this diminishes the cells ability to do its job, to carry Oxygen.
- Sickle cell trait is a genetic disorder and is usually benign, but during intense, sustained
  exercise, such as seen in football, and military boot camp, hypoxia (lack of oxygen) in the
  muscles may cause exertional sickling of the red blood cells which can cause a logjam effect
  in the blood vesicles and lead to collapse and even death (Thompson 2013).
- Most people experience normal lifespans without serious health consequences with the trait, but some people who have the trait might be at increased risk of stroke, silent cerebral infarct and cognitive impairment (Sundaram 2011)
- Sickle cell trait does not appear to limit performance among elite athletes in many sports (Thompson 2013)
- Sickle cell trait is common among Nigerians, with about 25% of adults throughout the country who have the trait, (Akinyanju 1989) but it can occur in any population.
- Here at York College we implement universal precautions regardless of SCT results which embodies a profile of hydration and exertional precautions that may make athletic participation safer.

## Sickle Cell Trait Testing

Please watch the 6 minute NCAA video at- www.youtube.com/watch?v=EiEpmZLLcuM The NCAA recommends that all DIII athletes have knowledge of their sickle cell status.

York College recommends that all athletes who do not know their sickle cell status get tested prior to any sports participation here at York College.

If you DO HAVE the trait you will need to take a little more caution during exertion and remain well hydrated.

Sickle cell testing is in the form of a blood test and can be done at your primary care physician's office or by the school.

If you know you do not have the trait or do not want to be tested please sign below.

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