Participating in regular physical activity is one of the most important things you can do for your health. This is true for everyone, including those with Sickle Cell Trait (SCT). You just have to be aware of the warning signs and complications of exercise-related illness, listen to your body, and take steps to protect yourself. Below are answers to some commonly asked questions about SCT, participation in sports, exercise related illness, and what to do to stay safe and healthy while engaging in physical activity.

Should people with SCT be allowed to play sports?
Absolutely! People with SCT can safely participate in all sports provided they take a few general precautions, such as

- Drinking enough water;
- Taking breaks when needed; and
- Not overdoing it, especially when starting a new exercise program.

While most people with SCT participate in sports without problems, there have been occasional serious complications and even deaths associated with dehydration, overheating, and other avoidable situations. All athletes should be aware of the warning signs of exercise-related illness and know what to do if they experience any of these signs or symptoms.

Are there conditions that increase the risk of exercise-related illness among people with SCT?

Scientific information specific to SCT is currently limited. However, the conditions that increase the risk of exercise-related illness for athletes with SCT appear to be the same as those that increase the risk for athletes who do not have SCT and include

- Significant and sudden increase in exercise intensity;
- Failure to adjust gradually to new environmental conditions like higher altitude, increased heat, or higher humidity;
- Exercising when ill or dehydrated (lack of fluids); and
- Drug, alcohol or stimulant use.

Centers for Disease Control and Prevention
National Center on Birth Defects and Developmental Disabilities

American Society of Hematology
Sickle Cell Disease Foundation
What steps can you take to prevent exercise-related illness?

Athletes with SCT should take the same precautions that can prevent exercise-related illness as athletes who do not have SCT. To prevent exercise-related illness, you should

- Obtain a physical examination before beginning an exercise program;
- Make a plan with a coach/fitness trainer before beginning an exercise program;
- Begin conditioning exercise gradually;
- Set your own pace;
- Stay hydrated by drinking plenty of water;
- Refrain from consuming high caffeine energy drinks and other stimulants;
- Seek care or assistance immediately if showing signs/symptoms of exercise-related illness;
- Be aware of and adjust gradually to a change in altitude as this may increase the risk of dehydration; and
- Limit exercise when sick.

What are the signs or symptoms of exercise-related illness or complications?

Some signs of exercise-related illness include

- Muscle burning or tenderness;
- Muscle weakness or pain;
- Muscle cramps;
- Rapid breathing without wheezing;
- Feeling overheated;
- Inability to cool, reduced sweating at rest; and
- Prolonged exhaustion or fatigue.

What should you do if you experience any of these signs or symptoms while exercising?

If you display any of the signs or symptoms of distress above, you should

- Immediately stop exercising;
- Report the symptoms immediately to the coach, athletic trainer, or person overseeing your training;
- Rest and re-hydrate;
- Move out of the heat, cool down with wet towels or ice; and
- Seek prompt medical care if symptoms worsen or do not improve with rest.

For more information, visit:

http://www.cdc.gov/ncbddd/sicklecell/traits.html
http://www.hematology.org/Patients/Anemia/Sickle-Cell-Trait.aspx
http://www.sicklecelldisease.org/index.cfm?page=about-scd
http://www.sicklecelldisease.org/index.cfm?page=sickle-cell-trait-athletics