

Team Doctors (Trainers): Don't Let Your Athletes Get Sidelined By Sickle Cell Trait!

Help Them Play it Safe with These Helpful Tips!



Participating in regular physical activity is one of the most important things you can do for your health. This is true for everyone, even those with Sickle Cell Trait (SCT). Athletes with SCT just have to be aware of the warning signs and complications of exercise-related illness, listen to their body, and take steps to protect themselves. Below are answers to some commonly asked questions about SCT, participation in sports, exercise related illness, and what to do to help keep your athletes 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. Make sure you and your athletes are aware of the warning signs of exercise-related illness and know what to do if any of them experience signs or symptoms.

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

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. However, intense conditioning sessions appear to put athletes at higher risk for harm from competitions; though, scientific information specific to SCT is currently limited.

These include

- 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; and
- Drug, alcohol or stimulant use.

What steps can athletes with SCT take to prevent exercise-related illness?

Athletes with SCT should take the same precautions to prevent exercise-related illnesses as athletes who do not have SCT. To prevent exercise-related illness, all athletes should

- Obtain a physical examination before beginning an exercise program;
- Make a plan with a coach/fitness trainer before they begin an exercise program;



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- Begin conditioning exercise gradually;
- Set their own pace;
- Stay hydrated by drinking plenty of water (to learn more visit http://www.acefitness.org/fitfacts/pdfs/fitfacts/itemid_173.pdf);
- Refrain from consuming high caffeine energy drinks and other stimulants;
- Seek care early when they have symptoms;
- Be aware of, and adjust gradually to, a change in altitude as this may increase the risk of dehydration; and
- Limit exercise when they are sick.

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

Athletes with SCT may have more problems recovering and should be monitored closely. Some signs of exercise-related illness that an athlete may experience 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 an athlete has any of these signs or symptoms?

Pushing the athlete to continue exercising while showing signs of distress (for “toughness” or discipline) can lead to collapse or, in rare case, death. Unlike athletes who experience sudden symptoms from some heat-related or heart conditions, athletes with SCT experiencing exercise-related illness may initially appear fatigued, but can often talk, and may be having muscle pain or weakness. If an athlete displays any of the signs or symptoms of distress above, you should ensure that they

- Immediately stop exercising;
- Report the symptoms;
- 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.

What steps can you take to protect the health of all your athletes before they start participating in training or sports?



The majority of steps you can take to protect the health of your athletes apply to everyone regardless of whether or not they have SCT, these include

- Develop policy to address pre-season planning and the pre-participation evaluation of athletes;
- Teach athletes about any medical conditions, issues, and/or predisposing conditions that may affect him or her during exercise, such as hypoglycemia (low blood sugar), diabetes, asthma, history of cramping, history of heat illness, SCT, or other conditions;
- Teach coaches, strength and conditioning specialists, and personal trainers about any factors that may limit, affect, or put an athlete at risk during exercise, such as environmental risk factors (such as climate or altitude), and medical conditions, issues, or predisposing conditions;
- Share athletes' medical history if relevant with other healthcare professionals who are responsible for medical coverage for practice, workouts and sideline of competitions; and
- Establish an emergency response plan with appropriate medical equipment and staff to step in and help during an emergency situation.

In addition, if you know an athlete has SCT, you should

- Learn about SCT and how altitude, dehydration and illness while participating in strenuous exercise can affect persons with SCT.

What steps can you take to protect the health of all your athletes while they are participating in training or sports?

The majority of steps you can take to protect the health of your athletes apply to everyone, regardless of whether or not they have SCT. These include

- Set a safe pace for exercise;
- Assess potential environmental conditions such as altitude, temperature, humidity and other weather conditions that would put athletes at risk;
- Step in and change the activity if needed to keep athletes safe and healthy;
- Be prepared to recognize, intervene, evaluate and treat any athlete who shows signs of distress; and
- Develop, carry out, and teach others about venue-specific emergency action plans.

In addition, if you know an athlete has SCT, you should

- Encourage the athlete to obtain appropriate genetic counseling if he or she has not already done so.

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>