

Coaches: 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 it is true that some athletes with SCT have experienced physical problems during intense physical activities, including collapse, or even death, this is an extremely rare event. 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?

Intense conditioning sessions appear to put athletes at higher risk for harm than competitions; however, scientific information specific to SCT is currently limited. Even so, 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.



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



These include

- Sudden increase in exercise intensity;
- Failure to adjust gradually or to be able to adapt 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.

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

Athletes with SCT should take the same precautions to prevent exercise-related illness 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;
- 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 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 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 cases, death. 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, including those with SCT?

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

- Have an emergency action plan in place that is reviewed and rehearsed at least once per year.
- Develop a sport-specific preseason conditioning program that is based on sound scientific principles and prepares the athletes for the rigors of the sport;
- Implement a program that starts off slowly and gradually builds in intensity, and sets a safe tempo and recovery schedule;
- Avoid repeated high intensity timed drills with limited recovery time in the first two weeks of every new training session, or until the athlete is adequately conditioned;
- Provide ample rest and recovery between repetitions, especially during “sprints” and intense stations or drills;
- Make fluids readily available and schedule frequent breaks;
- Allow athletes that are showing signs of physical distress to set their own pace;
- Be ready to act when athletes show signs of distress;
- Allow healthcare providers and athletic trainers to plan and change activities as needed to ensure the health and safety of all athletes;



- Instruct athletes to rest while experiencing symptoms, as they may soon feel better and be ready to continue;
- If symptoms recur, get worse or do not improve with rest, make the athlete stop and get checked out by a healthcare provider, or activate your emergency action plan;
- Encourage athletes to report any health symptoms immediately; and
- Never use exercise as a form of punishment for an athlete in physical distress.

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

- Learn about SCT and the impact of dehydration, illness, and altitude on participation in strenuous exercise; and
- Protect the privacy of confidential medical information, such as whether or not an athlete has SCT.

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>