

SUDDEN CARDIAC ARREST (SCA) IN ATHLETES

Recent media reports have brought attention to Sudden Cardiac Arrest (SCA), a condition in which the heart suddenly and unexpectedly stops beating and can result in Sudden Cardiac Death (SCD) if not treated within minutes. This condition can often occur during or immediately following exercise, and is most frequently experienced by athletes.

<http://msn.foxsports.com/other/story/Fennville-High-School-ready-to-play-after-Wes-Leonard-player-death-030711?GT1=39002>

<http://abcnews.go.com/WNT/video/teen-athletes-sudden-death-17-colorado-school-rugby-13071687>

According to the American Heart Association (AHA), approximately 100 SCD's are reported in the United States each year, and the chance of SCD occurring to any individual high school athlete is about one in 200,000 per year.

In an effort to reduce the number of fatalities resulting from SCA, the AHA suggests that the following precautionary measures be considered.

- **Medical Screening/Physical Exam (prior to participation):** All athletes should be required to have a medical exam performed on an annual basis by their primary care physician to determine if the athlete experiences any symptoms during exercise or has a family history of heart disease, high blood pressure or heart murmur. If the physician has any concerns, an Electrocardiogram (EKG) test may be required to further evaluate the condition. While EKG tests have not been mandated by most organizations due to cost, these tests have been shown to be much more effective at detecting athletes with abnormal heart conditions than routine physical examinations. The International Olympic Committee (IOC) is currently mandating routine screening prior to participation and strongly encouraging EKG testing in athletes.
- **Emergency Medical Response Procedures (training and equipment):** In the event of SCA, the strongest determinate of survival is the time from cardiac arrest to defibrillation. Having emergency medical response procedures in place, including CPR trained coaches or officials with access to Automated External Defibrillator (AED) units, greatly improves the chance of survival.

Going forward, the United States may mandate specific requirements for amateur sports organizations with respect to SCA medical screening and emergency medical response procedures (including training and equipment). In the interim, having CPR trained coaches/officials and AED units available may make the difference between life and death for an athlete, and should be strongly encouraged by your organization.

For more information about SCA and SCD, please refer to the American Heart Association website: www.heart.org