



N.J. ATHLETIC TRAINERS URGES SPORTS PROGRAMS TO PREPARE GUIDELINES FOR EMERGENCY PLANNING AND MANAGEMENT OF SUDDEN CARDIAC ARREST IN ATHLETICS

May, 2009 – The Athletic Trainers’ Society of New Jersey is urging sports programs to prepare comprehensive guidelines for emergency planning and management of sudden cardiac arrest in athletics.

Sudden cardiac death (SCD)) is the leading cause of death in young athletes To manage SCD during athletic practices and competitions, many health-related organizations have issued management guidelines

The underlying cause of sudden cardiac death (SCD) is usually a structural heart abnormality that can sometimes go undetected during routine pre-participation physical examinations,” states Michael Prybicien, MA, ATC, CSCS, EMTB, President of the ATSNJ. “In the event of sudden cardiac arrest, the strongest determinate of survival is the time from cardiac arrest to defibrillation. Access to defibrillation within three to five minutes is essential. Each minute lost reduces the chance of survival by approximately 10 percent. Increased training and the practicing of emergency action plans will help rescuers correctly identify sudden cardiac arrest (SCA) and prevent critical delays in beginning resuscitation. Sudden cardiac arrest can happen to athletes, officials, team staffs and spectators alike. It’s vital that comprehensive emergency planning, management and preparations are in place to ensure a timely and efficient response to SCA.

The ATSNJ recommends following a consensus statement that was developed with input from the following groups: American Academy of Emergency Medicine, American Academy of Pediatrics, American College of Emergency Physicians, American College of Sports Medicine, American Heart Association, American Medical Society for Sports Medicine, American Orthopaedic Society for Sports Medicine, American Osteopathic Academy for Sports Medicine, American Physical Therapy Association Sports Physical Therapy Section, National Association of Emergency Medical Service Physicians, National Association of Emergency Medical Technicians, National Athletic Trainers’ Association, National Collegiate Athletic Association, National Federation of State High School Associations, and Sudden Cardiac Arrest Association. Its key recommendations include:

1. Emergency Preparedness

- Every school, group or institution that sponsors athletic activities should have a written and structured emergency action plan (EAP).
- The EAP should be developed and coordinated in consultation with local EMS personnel, school public safety officials, on-site first responders and school administrators.
- The EAP should be specific to each individual athletic venue and encompass emergency communication, personnel, equipment and transportation to appropriate emergency facilities.
- The EAP should be reviewed and practiced at least annually with certified athletic trainers, team and attending physicians, athletic training students, school and institutional safety personnel, administrators and coaches.
- Targeted first responders should receive certified training in CPR and automated external defibrillator (AED) use.
- Access to early defibrillation is essential, and a target goal of less than three to five minutes from the time of collapse to the first shock is strongly recommended.
- Review of equipment readiness and the EAP by on-site event personnel for each athletic event is desirable.

2. Management of Sudden Cardiac Arrest

- Management begins with appropriate emergency preparedness, CPR and AED training for all likely first responders, and access to early defibrillation.
- Essential components of SCA management include early activation of EMS, early CPR, early defibrillation and rapid transition to advanced cardiac life support.
- High suspicion of SCA should be maintained for any collapsed and unresponsive athlete.
- SCA in athletes can be mistaken for other causes of collapse. Rescuers should be trained to recognize SCA in athletes with special focus on potential barriers to recognizing SCA including inaccurate rescuer assessment of pulse or respirations, occasional or agonal gasping and myoclonic or seizure-like activity.
- Young athletes who collapse shortly after being struck in the chest by a firm projectile or by contact with another player should be suspected of having SCA from a condition known as commotio cordis.
- Any collapsed and unresponsive athlete should be managed as a sudden cardiac arrest with application of an AED as soon as possible for rhythm analysis and defibrillation, if indicated.
- CPR should be provided while waiting for an AED.
- Interruptions in chest compressions should be minimized and CPR stopped only for rhythm analysis and shock.
- CPR should be resumed immediately after the first shock, beginning with chest compressions, with repeat rhythm analysis following two minutes or five cycles of CPR, or until advanced life support providers take over or the victim starts to move.
- Rapid access to the SCA victim should be facilitated for EMS personnel.

Prybicien also advocates that sports programs develop formal emergency action plans and practice them to best prepare themselves for emergency situations when they occur.

Sports programs interested in learning more about what they can do to prepare an emergency action plan contact the ATSNJ at 973-933-4933 or visit the ATSNJ website at www.atsnj.org

ABOUT THE ATHLETIC TRAINERS' SOCIETY OF NEW JERSEY

ATSNJ, Inc. consists of Licensed Athletic Trainers, physicians and other allied health care professionals whose goal is to promote quality healthcare for athletes in any setting.

References*

1. Hazinski MF, Markenson D, Neish S, et al. Response to cardiac arrest and selected life-threatening medical emergencies: the medical emergency response plan for schools: A statement for healthcare providers, policymakers, school administrators, and community leaders. *Circulation* 2004;109(2):278-91.
2. Andersen J, Courson RW, Kleiner DM, McLoda TA. National Athletic Trainers' Association Position Statement: Emergency Planning in Athletics. *J Athl Train* 2002;37(1):99-104.
3. Drezner JD, Courson RW, Roberts WO, Mosesso VN, Link MS, Maron BJ. Inter-Association Task Force Recommendation on Emergency Preparedness and Management of Sudden Cardiac Arrest in High School and College Athletic Programs: A Consensus Statement