



## **“PREVENTING SUDDEN DEATH IN YOUTH SPORTS” Youth Sports Safety Summit Fact Sheet**

### **Overview:**

The National Athletic Trainers' Association (NATA) hosted its third annual Youth Sports Safety Summit on December 6, 2011, to provide additional medical insights, case histories and a call to action to improve the safety and care of youth sports athletes. Sixty-five sports and health organizations supported the program as part of the Youth Sports Safety Alliance, with the collective effort of promoting increased education, research and legislation.

### **Purpose:**

- To inform stakeholders, and raise awareness of the issues surrounding youth sports safety.
- To provide comprehensive recommendations to improve the on-field safety and off-field care of young athletes.

### **Key Insight:**

Young athletes are suffering chronic and sometimes catastrophic injuries from athletic activities that are otherwise designed to increase the spirit of competition, improve individual sports performance, instill a love of the game and provide potential collegiate and professional careers for an elite few.

### **Background on the Position Statement:**

“Preventing Sudden Death in Sports” was advance released at the December 6 summit and will be published in the February 2012 issue of the *Journal of Athletic Training*. This new position statement outlines 10 major health conditions and causes of sudden death among athletes – along with updated recommendations to ensure better prevention and treatment of sports injuries. It is the first time an association has provided this condensed information in one document to help medical professionals, coaches, parents and others make more effective and efficient return-to-play and care decisions. For a copy of the statement, please contact [robin@robwax.com](mailto:robin@robwax.com)

### **General Information:**

- Young athletes are losing their lives on the playing field: 50 in 2010; 40 to date in 2011; and seven individuals, including one adult coach, this past August 2011.
- High school athletes suffer 2 million injuries, 500,000 doctor visits and 30,000 hospitalizations every year.
- While concussion legislation has passed in 36 states, concussion is not the only problem in youth sports.
- The leading cause of death from youth sports is sudden cardiac arrest. The other conditions covered in the position statement include: asthma, catastrophic brain injuries, cervical spine injuries, diabetes, exertional heat stroke, exertional hyponatremia, exertional sickling, head-down contact in football and lightning.
- Only 42 percent of high schools have access to an athletic trainer, often the primary health care provider when a young athlete goes down on the playing field.

### **Position Statement Basic Recommendations by Key Topics:**

#### **Catastrophic Brain Injuries**

The position statement addresses the prevention of more serious brain injuries and the implications of mismanaging a potentially catastrophic brain injury.

- Proper on-field and sideline management involves identifying any deteriorating conditions indicative of intracranial hemorrhage or brain swelling.
- When a serious brain injury is suspected in a non-responsive athlete, the clinician must be prepared to provide hyperventilation and to administer intravenous diuretics and elevate the head to help decrease intracranial pressure.
- Transportation to a medical facility is paramount under these conditions.
- Proper management of a less serious brain injury, such as a concussion, must still be managed carefully using follow up assessments of symptoms, neurocognitive function and balance, prior to initiating a gradual return-to-play progression.
- The statement recommends a five-step, return-to-play progression following concussion that allows the clinician to determine any signs of deterioration that would prevent a premature return to activity.

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### Exertional Heat Stroke

- Cool first, transport second: Immediate cold water immersion is critical to reducing the temperature rapidly and maximizing odds the individual will survive.
- Determine core body temperature soon after collapse to ensure accurate and immediate assessment of a patient with suspected exertional heat stroke. Rectal temperature and gastrointestinal temperature (if available) are the only methods proven valid.
- Follow more detailed return to activity recommendations one week after rest; and a gradual return from low to high intensity activity in a temperate environment.

### Exertional Sickling

- Targeted education and tailored precautions offer a margin of safety for the athlete with sickle cell trait.
- Know the signs and symptoms of exertional sickling and be able to differentiate exertional sickling from other causes of collapse.
- Understand that exertional sickling can be brought about through intense, sustained activity, and modifying factors of environmental heat, dehydration, asthma, illness and newness to altitude increase the intensity of the activity.

### Asthma

- The sports medicine staff should be properly educated on the signs and symptoms regarding asthma breathing emergencies, how to activate the asthma emergency action plan in such emergencies, how to use asthma inhaler equipment and have supplemental oxygen available.
- A structured warm-up protocol may potentially decrease the risk of an exacerbation or reliance on medications.
- The sports medicine staff should make sure athletes with asthma are properly educated about their condition, including adherence to medications, proper use of inhaler equipment and how to recognize “good or bad” breathing days to prevent asthma exacerbations.

### Sudden Cardiac Arrest

- Recognition is key to treatment: sudden cardiac arrest (SCA) should be suspected in any athlete who has collapsed and is unresponsive.
- Advance preparation is the key to survival once SCA has occurred: public access to automated external defibrillators (AEDs) and established emergency action plans greatly improve the likelihood of survival.
- Access to early defibrillation is essential: a goal of less than 3-5 minutes from the time of collapse to delivery of the first shock from an AED is strongly recommended.
- The new position statement incorporates the 2010 American Heart Association CPR guideline updates, with emphasis on chest compressions and AED application as soon as possible.

### Speakers:

- **Marjorie J. Albohm, MS, ATC**, president, National Athletic Trainers' Association; director of Clinical Research and Fellowships, Ossur Americas
- **Jon Almquist, ATC, VATL**, administrator, Fairfax County Public Schools Athletic Training Program
- **Douglas J. Casa, PhD, ATC, FACSM, FNATA**, chief operating officer, Korey Stringer Institute; director, Athletic Training Education; professor, Department of Kinesiology; Neag School of Education, University of Connecticut
- **Yvette L. Coursey, DPA**, chief executive officer, Sickle Cell Foundation of Palm Beach County and Treasure Coast, Inc.
- **Chris Draft**, founder, Chris Draft Family Foundation and former NFL linebacker
- **E. Randy Eichner, MD**, professor emeritus of Medicine at the University of Oklahoma Health Sciences Center
- **Rhonda Fincher**, co-founder and executive director, Kendrick Fincher Hydration Foundation
- **Laura Friend**, program coordinator, Project ADAM Texas at Cook Children's Medical Center

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- **Lisa Gfeller**, vice president and treasurer, Matthew Gfeller Foundation
- **Kevin Guskiewicz, PhD, ATC**, Kenan distinguished professor and founding director of the Matthew Gfeller Sport-Related Traumatic Brain Injury Research Center and the Center for the Study of Retired Athletes, University of North Carolina at Chapel Hill
- **Amy Elizabeth Valasek, MD**, clinical associate, Johns Hopkins Pediatric Emergency Department; assistant professor, Johns Hopkins Orthopedics, Pediatric Division
- **Victoria L. Vetter, MD**, attending staff physician, Children's Hospital of Philadelphia, Division of Pediatric Cardiology

### Distinguished Guests and Honorees:

The Youth Sports Safety Alliance recognized the following individuals for their tireless efforts on the youth sports safety front. Through their efforts they have brought these issues forward to the public through research, proposed legislation and commitment to ensure the safety of equipment.

- **Rep. Tim Bishop (NY-1)**, who sponsored HR 469, the Protecting Student Athletes from Concussions Act of 2011.
- **R. Dawn Comstock, PhD**, associate professor at the Ohio State University College of Medicine, Department of Pediatrics and College of Public Health, Division of Epidemiology, whose research make her an invaluable resource to organizations monitoring and adopting new medical protocols to protect young athletes.
- **Rep. Keith M. Ingram (Arkansas)**, who was instrumental in the passage of Act 1214, which promotes the health and safety of students in public school athletic activities through the use of athletic trainers and professional development for coaches.
- **Beth Mallon** who, with her son Tommy, founded the Advocates for Injured Athletes (AIA) Foundation; and
- **"Football High," a PBS FRONTLINE/Ark Media** production that investigated the new face of high school football and what was being done to ensure players' safety. Producers **Rachel Dretzin and Caitlin McNally** led the team that created this groundbreaking special report at a time when youth sports safety legislation was, and continues to be, considered at both the state and national levels.

**Youth Sports Safety Alliance:** More than 60 organizations have joined the Youth Sports Safety Alliance, in order to collectively seek increased education, research and legislation to protect young athletes.

**Web Site:** For more information, please visit [www.nata.org](http://www.nata.org) or [www.youthsportssafetyalliance.org](http://www.youthsportssafetyalliance.org)

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### About NATA:

#### *National Athletic Trainers' Association (NATA) – Health Care for Life & Sport*

*Athletic trainers are health care professionals who specialize in the prevention, diagnosis, treatment and rehabilitation of injuries and sport-related illnesses. They prevent and treat chronic musculoskeletal injuries from sports, physical and occupational activity, and provide immediate care for acute injuries. Athletic trainers offer a continuum of care that is unparalleled in health care. The National Athletic Trainers' Association represents and supports 34,000 members of the athletic training profession. Visit [www.nata.org](http://www.nata.org)*

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