

House Education and Labor Committee Hearing  
“Protecting Student Athletes from Concussions Act”

Thursday, September 23, 2010, 10:00 A.M.

2175 Rayburn House Office Building

Washington, DC

The National Athletic Trainers' Association (NATA), a not-for-profit society of health care professionals serving physically active children and adults, endorses the *Protecting Student Athletes from Concussions Act of 2010*. The NATA represents over 33,000 athletic trainers (ATs). As athletic trainers and health care professionals specializing in team sports, we are the first line of defense in the prevention, diagnosis and emergency treatment of head traumas and other athletic injuries. ATs are health care professionals who collaborate with physicians to optimize activity and participation of patients.

NATA supports the Act's goals of establishing requirements for prevention and treatment of concussions suffered as a result of participating in school sports and applauds the bill's efforts to make physical activity, well-being, and athletic safety a focus for America's youth.

All ATs have at least a bachelor's degree in Athletic Training from an accredited college or university, and 70% of our membership has a master's degree or higher. Certified ATs must pass a national certification exam. In most of the 47 states where they are licensed or otherwise regulated, the national certification is required for licensure. ATs maintain this certification with required continuing medical education. They work under a medical scope of practice and under the direction of physicians and adhere to a national code of ethics.

Although the issue of concussions in sports has received a great deal of attention in the media in recent months, it is not a new problem. Athletic trainers have been caring for concussed athletes and warning of the dangers posed by this unique injury for years.

NATA has a long history of working with research experts to explore the prevention and proper treatment of head injuries. In July 2009, NATA released a study in the *Journal of Athletic Training* entitled *Head Impacts During High School Football: A Biomechanical Assessment*. The study revealed that high school football players sustain greater head accelerations after impact than do college-level football players, which can lead to concussions and serious cervical spine injuries. Further, the study urged high school coaches to teach proper tackling techniques in order to reduce the risk of head and neck injuries among athletes.

While much focus has been given to players in the National Football League (NFL), it is important to remember that high school athletes represent the single largest segment of football players in the country and account for the majority of sport-related concussions. In a given year, between four and six percent of high school football athletes sustain concussions, corresponding to an estimated 43,200 to 67,200 injuries annually. In fact, there are five times as many catastrophic football injuries among high school athletes as college athletes. Estimates indicate, however, the true incidence of injury is likely much higher. Some research suggests that more than half of high school athletes who suffer concussions do not report their injuries to medical personnel. Even when faced with these disturbing trends and the fact that 7 million students participate in high school sports in

America, NATA estimates that only 42 percent of public high schools in America have access to an athletic trainer. In fact, NATA estimates that across the country, the ratio of students to athletic trainers is 2,678 to 1.

According to a *New York Times* article (Sports Imperative: Protecting Young Brains, August 24, 2009), “at least four American high school students died last year from football head injuries. Most suffered from what is called second-impact syndrome, a rare but catastrophic dysregulation of brain activity that can occur when a young player sustains another hit before the brain has recovered from an earlier concussion. In nearly all cases, such tragedies can be prevented if the symptoms of concussion are recognized and heeded, giving the injured brain time to fully heal.”

Furthermore, studies also show that fifty percent of second impact syndrome incidents result in death. Other startling statistics include:

- Female high school soccer athletes suffer almost 40% more concussions than males (29,000 annually). *Journal of Athletic Training, July – September 2003*
- Female high school basketball athletes suffer 240% more concussions than males (13,000 annually). *Journal of Athletic Training, July – September 2003*
- 400,000 brain injuries (concussions) occurred in high school athletics during the 2008-09 school year. *Compliance with return to play guidelines following concussion in US high school athletes, 2005-2008*
- Concussion symptoms such as headache and disorientation may disappear in fifteen minutes, but 75% of those tested 36 hours later still had problems with memory and cognition. *Journal of Athletic Training, July – September 2003*
- 15.8% of football players who sustain a concussion severe enough to cause loss of consciousness return to play the same day. *Center for Injury Research and Policy, The Research Institute at Nationwide Children’s Hospital, Dr. Dawn Comstock*

#### NATA’s Policy Principles for Concussion Management

In consultation with the NATA Secondary School Athletic Trainers’ Committee, the NATA Government Affairs Committee and the NATA Federal Legislative Council, NATA has developed a set of principles surrounding the issue of concussion management. NATA’s principles include the following:

- **Increasing student athletes’ access to a certified athletic trainer is the first step in helping to prevent concussions and manage concussions once they occur.** Legislation should incentivize schools and school districts to increase the accessibility of an athletic trainer to their student athletes.
- **Conducting baseline testing of student athletes prior to engagement in contact sports provides the greatest opportunity to ensure accurate assessment of a player’s condition after sustaining a concussion.** Funding

- **Educating parents, coaches, teachers and other stakeholders about the signs and symptoms of concussions is critically important.** Programs such as the Centers for Disease Control and Prevention's (CDC) "Head's Up" program are important tools. At the same time, concussion education and awareness programs should not provide a false sense of comfort that non-medical professionals are able to diagnose and treat concussions. Rather, a focus should be to educate stakeholders about making a proper referral if the signs and symptoms of a concussion are present in a student.
- **State Task Forces** that may be established to develop and implement state plans for concussion management **should include representatives of the state's athletic training association, athletic association, medical society, and Department of Education.**
- **Athletic trainers serve as the lynchpin medical professional who seeks input from all members of the concussion management team regarding the return to play decision.** Athletic trainers' standard practice is to ensure involvement of a team comprised of the student athlete, family/parent, treating physician and school personnel such as the coach, school nurse and teachers in their approach to concussion management with respect to a decision about return to play. The athletic trainer is responsible for coordinating the school's emergency action plan, concussion testing program, medical coverage and more. In the absence of an athletic trainer, these responsibilities often fall to unqualified, non-medical personnel.
- Although the best case scenario is for a school to have access to an athletic trainer on faculty or staff, in the absence of a licensed or certified athletic trainer, the treating physician should make return to play decisions in consultation with school personnel, the student athlete and his/her family.