

Moving Forward Faster: The Quest to Apply Evidence-Based Emergency Practice Guidelines in High School Sports

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In the summer of 2013, “The Inter-Association Task Force for Preventing Sudden Death in Secondary School Athletics Programs: Best-Practices Recommendations” was published in the *Journal of Athletic Training*.¹ This collaborative document represented a critical milestone in sports medicine for many reasons: (1) For the first time, best practices for preventing sudden death were specifically addressed for high school athletes; (2) high school athletes represent the largest contingent of organized sport in the United States; (3) high school athletes have the highest prevalence of sudden death in sport; and (4) the material was presented so that high schools could critique their own athletic health care standards against the recommended best practices. But perhaps the most important and unique aspect of these recommendations was the quality and quantity of the organizations that contributed and officially endorsed the material (14 organizations in all). This was a seminal moment in high school athletic health care, and there was universal agreement that the standards in the document were not merely aspirational but essential to ensure that we do everything we can to protect high school athletes. Three of the key organizations that endorsed this document are the National Federation of State High School Associations, which is the administrative organization responsible for high school sport in the United States; the National Athletic Trainers' Association (NATA), which is the professional membership association of athletic trainers, who serve as vital health care professionals in a variety of settings, including high schools; and the American Medical Society for Sports Medicine (AMSSM), which is the largest national organization of primary care team physicians in the United States. Physicians and athletic trainers work together to ensure that best practices are being adopted and properly implemented at all levels of sport. The coming together of these 3 organizations, as well as the others that endorsed the document, created a unified movement to promote the adoption of best medical practices to protect the health and safety of high school athletes.

Nearly all deaths and serious injuries that have long-term complications can be avoided when the proper steps are taken to prevent, recognize, and treat the major medical conditions that a high school athlete may experience during practices and competitions. Boden et al² recently showed that 4 conditions account for more than 90% of catastrophic injuries in high school athletes. These 4 conditions—cardiac injuries, exertional heat stroke, head and spinal cord

injuries, and exertional sickling—are the primary focus of the best-practices recommendations. Although other medical conditions (eg, asthma, lightning injuries, hyponatremia) can have serious consequences, addressing the 4 most common catastrophic conditions provides an appropriate starting point for advancing our clinical practice and emergency guidelines. The best-practices document¹ covers personnel and infrastructure factors that can be challenging in a high school athletic setting, including emergency action plans, coaching education, safety of strength and conditioning sessions, and access to on-site athletic training services. When sound policies are in place, all athletes will have the best opportunity for proper prevention, recognition, and treatment of the myriad medical conditions they may experience.

Recent data indicate that high schools are recognizing the need for and benefits of athletic training (AT) services. The February issue of the *Journal* contained the results of a benchmark study that evaluated the extent of AT services at US high schools.³ Staffers at the Korey Stringer Institute called every public high school in America (yes, every public high school) to determine whether they had AT services and, if so, the level of services. The findings are promising: 70% of high schools have access to an athletic trainer and approximately half have an athletic trainer present at daily practices. Percentages from the larger schools were even more impressive. We are encouraged by the fact that this many high schools and millions of athletes can be influenced by AT services: more than 86% of athletes had AT services.

However, only 37% of schools employed a full-time athletic trainer, and larger schools were much more likely to do so. We must move toward the goal of a full-time athletic trainer in every US high school that sponsors athletic activities. Not only will this ensure that athletes have access to critical medical services but also that best practices for preventing sudden death are implemented. High school athletic health care is not just about the on-site care of a seriously injured athlete; it also focuses on coaching education, emergency action plans, and follow-up care, thereby creating a culture that supports, nurtures, and prioritizes the health and safety of student-athletes.

After publishing the best-practices document,¹ the NATA and AMSSM developed a plan to work toward adoption of the recommendations by all 50 states. Achieving policy change at the high school level is no easy task. Each state

has its own state high school association that decides on the policies and procedures for its schools, coaches, and athletes to follow. Hence, the journey to a universal standard of care could be an arduous one.

Working together, the NATA and AMSSM, with assistance from the Korey Stringer Institute, developed an ambitious goal of bringing together the key personnel (executive and medical advisory leaders) from every state with the intention of an annual meeting to discuss topics and develop strategies to create an efficient process for implementing best practices that advance the safety of student-athletes in secondary schools. The first meeting took place on March 26 and 27, 2015, at the National Football League Headquarters in New York City. The NATA and AMSSM are steadfast in their commitment to assist in any way possible to ensure that athletic health care and the specific planning and services needed to prevent sudden death in athletes are delivered in the optimal

manner to every student-athlete. Our abundant knowledge can prevent catastrophic events in high school athletes. Now we face the task of translating that information into clinical practice and achieving nationwide adoption of the recommendations.

References

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