# Sudden Death and Catastrophic Injury Reporting: A Call to Action for Athletic Trainers

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For more than 35 years, the National Center for Catastrophic Sports Injury Research (NCCSIR) has served as a public health resource to raise awareness about the frequency and nature of sudden death and catastrophic injuries in sports. Data collected by the NCCSIR inform rule and policy changes to reduce the number of tragic and life-threatening events, thereby making sports safer.<sup>1-4</sup> Despite these successes, gathering information about sudden deaths and catastrophic injuries has many challenges. A major obstacle to event identification and, ultimately, the accurate calculation of the incidence of these events, is the lack of a mandatory reporting system in the United States for sudden death and catastrophic injury in athletes. Thus, most statistics to date rely on extensive searches of available media reports or voluntary reporting to the NCCSIR by representatives of local, state, or national organizations governing or associated with student-athletes' well-being.

To prevent catastrophic events, we must first understand the frequency and nature of these injuries. We must also identify the factors that led to positive (ie, avoidance of death or permanent disablement) and negative (ie, death or permanent disablement) outcomes when these unfortunate and tragic events occur. This letter is a call to action for all athletic trainers (ATs) to make the reporting of sport-related deaths, near deaths, and catastrophic injuries a routine part of clinical practice and responsibilities.

# NEW MODEL FOR SURVEILLANCE

In 2013, to bolster reporting, the NCCSIR expanded into a Consortium for Catastrophic Injury Monitoring in Sport with 3 research divisions: the Division of Cardiac Injury in Sport at the University of Washington, the Division of Exertional Injury in Sport at the Korey Stringer Institute at the University of Connecticut, and the Division of Traumatic Injuries in Sport at the University of North Carolina at Chapel Hill (UNCCH).<sup>5</sup> The research consortium is supported by research partners at the University, High School Reporting Information Online at the Colorado School of Public Health, the Injury Prevention Research Center at UNCCH, and the Datalys Center for Sports Injury Research and Prevention, Inc.

An understanding of the incidences, causes, and contributing factors is critically important to developing preventive strategies that will reduce sudden death and catastrophic injuries. However, it is difficult to develop best practices for the prevention and management of sudden death and catastrophic injuries without accurate and complete reporting of both positive and negative outcomes. In the sport setting, ATs and team physicians are the health care professionals most likely to encounter a sudden death, near death, or catastrophic injury during sports. Thus, ATs and team physicians are not only responsible for the management of serious and life-threatening events but also best positioned to report such events with sufficient accuracy and detail that reliable statistics can inform the risk and the development of evidence-based prevention policies. Indeed, athletic training is one of the few public health and health care professions that lists prevention as a main responsibility.6,7

# CATASTROPHIC INJURY REPORTING

The NCCSIR strives to capture all sports-related deaths, near deaths, and catastrophic injuries. Specifically, the NCCSIR collects data on fatalities, permanent disability injuries, serious injuries (eg, fractured cervical spine or serious head injury), temporary or transient paralysis, exertional heat stroke, sickle cell trait-associated collapse, sudden cardiac arrest and death, commotio cordis, and severe acquired cardiac illness.<sup>8</sup> The primary focus is on events occurring in middle school, high school, collegiate, and professional athletes. Although most events occur during sports and exercise, the NCCSIR monitors all cases of sudden cardiac arrest or sudden cardiac death in a student-athlete (even those occurring in the absence of exercise).

Anyone can report a catastrophic death, near death, or injury event. The reporting process was created to recognize the significance and sensitivity of these events for the affected athlete, family, and sports community. The NCCSIR consortium has procedures for filtering multiple reports of the same event, ensuring that the injury or illness meets the definition, and gathering additional information about the event when possible via a consent process approved by the institutional review board at the UNCCH. Catastrophic deaths, near deaths, and injuries can be reported through a Health Insurance Portability and Accountability Act-compliant online portal (https://www.sportinjuryreport.org) or by phone (919-843-8357) or e-mail (nccsir@unc.edu).

# **CRITICAL ROLE OF ATs**

The most difficult part of the process for the NCCSIR is learning that an event has occurred. Because ATs serve in every facet of sports, they play a crucial role in the success of catastrophic injury-reporting and -prevention efforts. Providing every available detail of the death, near death, or injury can aid in the development of future policy or rule changes and the implementation of other preventive measures. For example, consider the collapse of an athlete due to an undiagnosed cardiac condition. The details of the resuscitation, emergency action plan, location of the automated external defibrillator, and involved personnel that led to either a positive or negative outcome can be highly informative to the sports and medical community in managing similar future events.

As health care professionals whose job duties list prevention as a primary responsibility,<sup>6,7</sup> ATs have both a moral and a professional responsibility to report these events. Together, ATs and the NCCSIR can continue to work collaboratively to reduce sudden death, near death, and catastrophic injuries in athletes through accurate reporting and prevention efforts.

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