

**Contact**

Robin Waxenberg  
Robin Waxenberg & Associates  
[robin@robwax.com](mailto:robin@robwax.com)  
917-301-1350

October 19, 2022

**New Study Examines Association Between Access to Athletic Trainers and Emergency Medical Services Activations for Sport-Related Injuries**

**Published online today in  
Journal of Athletic Training**

DALLAS, TX – A new study, [“The Association Between Access to Athletic Trainers and Emergency Medical Services Activations for Sport-Related Injuries,”](#) appears online today followed by publication in next month’s issue of the Journal of Athletic Training, the [National Athletic Trainers’ Association](#) scientific journal.

“Secondary schools with athletic trainers (ATs) are better prepared for sport-related emergencies than those without,” says NATA President, Kathy Dieringer, EdD, LAT, ATC. “Athletic trainers are typically employed directly by the school district, through a medical or university facility or as independent contractors. Unfortunately, only 37% of public U.S. high schools have access to a full-time athletic trainer.”

“This is the first study to investigate how frequently EMS [emergency medical services] was called for sport-related emergencies based on a locale’s access to athletic training services. Athletic trainers are educated to recognize sport-related emergencies and provide necessary care, which includes determining when contacting EMS is warranted,” adds study lead author Rebecca Hirschhorn, PhD, ATC, NRAEMT, CSCS, School of Kinesiology, Louisiana State University.

**Key Statistics:**

- Over 2,800 catastrophic sport-related injuries and fatalities have been documented by the National Center for Catastrophic Sport Injury Research in its 30-year history.<sup>1</sup>
- Of those injuries, 79% were sustained by high school athletes.<sup>1</sup>
- Among patients with life-threatening injuries who presented to emergency departments, 14% of these injuries have been attributed to sports activities.<sup>2</sup>
- According to the Athletic Training Location and Services (ATLAS) Project report, only 66% of secondary schools in the U.S. had access to athletic training services, ranging from 13% to 90% within states.<sup>3</sup>

**Key Points**

- Areas with access to athletic training services utilized EMS more frequently for secondary school-aged athletes who sustained a sport-related injury than areas without such access.
- Areas where ATs were employed by a medical or university facility utilized EMS for sport-related injuries less often than areas where their counterparts were employed directly by school districts.
- The positive influence of access to athletic training services was not limited to school-based sports but noted in recreational and non-school-based activities as well.

## Study Design

Data were obtained from two sources – the Athletic Training Locations and Services (ATLAS) Project and the National EMS Information System (NEMSIS). The ATLAS Project surveys secondary schools across the country each academic year to determine the prevalence of athletic training services and how ATs are hired at each school. The NEMSIS collects data from EMS agencies across the United States.

A common variable was created to merge information from these two sources. In this case, NEMSIS was unable to provide specific location information that would have allowed researchers to calculate how many EMS activations occurred at each secondary school, but the authors were able to identify EMS activations by zip code. Data from the ATLAS Project were then aggregated by zip code and merged with the data from the NEMSIS for analysis with the help of the NEMSIS Technical Assistance Center.

The study focused on individuals aged 13–18 years who sustained a sport-related injury that resulted in calling 9-1-1 for EMS. Analyses were then conducted to determine the incidence of EMS activations and how they were associated with the level of athletic training services and athletic training employment model.

On average, the study identified approximately three EMS activations for sport-related injuries per zip code from 2017–2018. Emergency medical services activations ranged from one to 81 across zip codes. There was at least one AT employed in 65% of zip codes; however, only 34% had full-time access to athletic training services. Nearly 50% of zip codes had ATs employed directly by the school district or through a medical or university facility.

The study was fully funded by the NATA Research & Education Foundation and co-sponsored by the Korey Stringer Institute and the ATLAS Project at the University of Connecticut.

“This week also marks Youth Sport Specialization Awareness Week hosted by NATA,” says Dieringer. “It’s our educational effort to help reduce risk of injury from [participation](#) in sports. This study shines an important spotlight on emergency care and provides timely insights for parents, coaches, athletic departments, and others who ensure gold-standard protocols are in place when it comes to sport and physical activity.”

For more information on Youth Sport Specialization Week, please visit: [www.atyourownrisk.org](http://www.atyourownrisk.org)

## About NATA: National Athletic Trainers’ Association – 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 40,000 members of the athletic training profession. Visit [nata.org](http://nata.org) for more information.

#### **About the LSU School of Kinesiology**

The LSU School of Kinesiology advances the understanding of physical activity, sport, and health to optimize the quality of life for diverse populations through excellence in teaching, learning, discovery, and engagement. Visit the School of Kinesiology at [lsu.edu/kinesiology](http://lsu.edu/kinesiology).

###

<sup>1</sup>Kucera KL, Cantu RC. *Catastrophic Sports Injury Research Thirty-Seventh Annual Report Fall 1982–Spring 2019*. National Center for Catastrophic Sport Injury Research at the University of North Carolina at Chapel Hill 2020. 2020-03

<sup>2</sup>Meehan III WP, Mannix R. A substantial proportion of life-threatening injuries are sport-related. *Pediatric Emergency Care*. 2013;29(5):624.

<sup>3</sup>Huggins RA, Coleman KA, Endres BD, Casa DJ. *Athletic Training Locations and Services (ATLAS) Project 2nd Annual Report*. June 25, 2019.

