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Original Research

Epidemiology of Cheerleading Stunt-Related Injuries in the United States

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Abstract

Context: Cheerleading-related injuries are on the rise. To date, no epidemiologic studies of cheerleading stunt-related injuries have been published.

Objective: To describe and compare cheerleading stunt-related injuries by type of cheerleading team (All Star, college, high school, middle school, or recreation league) and event (practice, pep rally, athletic event, or cheerleading competition).

Design: Prospective injury surveillance study.

Setting: Participant exposure and injury data were collected from US cheerleading teams via the Cheerleading RIO (Reporting Information Online) surveillance tool.

Patients or Other Participants: Athletes from enrolled cheerleading teams who participated in official, organized cheerleading practices, pep rallies, athletic events, or cheerleading competitions.

Main Outcome Measure(s): The numbers, types, and rates of cheerleading stunt-related injuries during a 1-year period (2006–2007) are reported.

Results: Stunt-related injuries accounted for 60% (338/567) of the injuries sustained by US cheerleaders who participated in the study and 96% (22/23) of the concussions and closed head injuries (CHIs) reported during the study. Collegiate cheerleaders were more likely to sustain a concussion or CHI than were cheerleaders on other types of teams ($P = .02$, odds ratio = 3.10, 95% confidence interval = 1.20, 8.06). Most injuries occurred while the cheerleader was spotting or basing another cheerleader (34%, 115/338), and these injuries comprised 32% (51/161) of all stunt-related strains and sprains. Four cheerleaders (1.2%, 4/335) were admitted to the hospital, and 9 cheerleaders (2.7%, 9/335) required surgery.

Conclusions: Cheerleading stunts pose an increased risk for injury, especially in

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terms of sustaining a concussion or CHI. Spotters and bases were most likely to be injured during the performance of cheerleading stunts and were at risk for sustaining strain and sprain injuries. The ankle, lower back, and wrist were the sites most likely to be reinjured while performing cheerleading stunts.

Keywords: [injury surveillance](#), [athletic injuries](#), [collegiate athletes](#), [high school athletes](#), [youth athletes](#), [recreational athletes](#)

Brenda J. Shields, MS, contributed to conception and design; acquisition and analysis and interpretation of the data; and drafting, critical revision, and final approval of the article. Soledad A. Fernandez, PhD, contributed to conception and design, analysis and interpretation of the data, and critical revision and final approval of the article. Gary A. Smith, MD, DrPH, contributed to conception and design and critical revision and final approval of the article.

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