

The Risk of Recreational Trampoline use in the Pediatric Population: A Retrospective Study

Haley B. Frizzell,*¹ Rachael E. Hartke,*¹ Ashley N. Huntley,*¹
Janelle L. Kylo,*¹ Abby S. Russell*¹

Faculty: Michelle Wallace,¹ LaDonna Hale,¹ Steven M. Hollenbeck,² Justin Gooden³

¹*Department of Physician Assistant, College of Health Professions*

²*Department of Orthopedic Surgery and Pediatrics, University of Kansas School of Medicine - Wichita*

³*Emergency Services Professional Association*

INTRODUCTION: Indoor recreational trampoline parks are increasing in number across the US and with this trend has come an increase in trampoline related injuries. Extensive research has been conducted dating back to the introduction of trampolines; however, with the emergence of trampoline parks, few studies have been done to evaluate the risk to the pediatric population in this new setting.

PURPOSE: The purpose of this study is to provide insight into the risks of trampoline parks and home trampolines by identifying common injuries associated with recreational trampoline use in the pediatric population.

METHODS: A retrospective medical record review of pediatric patients presenting to one urban emergency department from October 1, 2015 to December 31, 2016, was completed. Extracted information included weight, height, sex, mechanism of injury, type of injury, location of trampoline, disposition of care, diagnostic studies used, and treatment required.

RESULTS: Of the 173 children seen in the ED for trampoline-related injuries that met the inclusion criteria, 46% suffered a fracture, 15% required procedural sedation and/or surgery, and 65% required follow-up care with a primary care physician or orthopaedic surgeon. The most common injuries occurred in the lower extremity with 17% of all visits involving treatment for a fracture of the tibia.

CONCLUSION: The data collected emphasizes the risk to children with recreational trampoline use. It may assist in improving regulations and safety protocols at trampoline parks and help healthcare providers guide parents on safety issues of trampoline parks and home trampolines.