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Trampoline parks may cause more severe trauma than at home trampoline use

New research compares injuries sustained at commercial jump parks versus home trampolines

ROSEMONT, Ill. (January 22, 2019)—According to new research published in the January 1, 2019 issue of [the Journal of the American Academy of Orthopaedic Surgeons](#), trampoline parks and jump parks have been linked to a higher percentage of total fractures among pediatric and adult patients, including lower extremity fractures, fractures in adults, open fractures and surgical fractures when compared with home trampolines.

“Recreational jump parks have gained popularity with children and adults as this business venture has skyrocketed across the U.S. over the last five years,” said Ryan Voskuil, MD, lead study author and orthopaedic surgeon at University of Tennessee Health Center. “The safety of jump parks is largely unknown across all ages although it has been generally advertised as safe by jump park promoters.”

The U.S. Consumer Safety Commission estimates more than 100,000 emergency department (ED) visits were related to trampoline use across the United States in 2014.

The study authors aimed to establish a baseline of mechanisms, injury patterns, surgical interventions, and overall severity of injuries sustained at jump parks as seen among children and adults in comparison to home trampolines. Over a two-year period, 439 patients were identified within a university healthcare network and treated for trampoline-related injuries. Of these injuries:

- More injuries occurred on home trampolines than at jump parks (66 percent versus 34 percent). However, jump parks resulted in a higher percentage of severe injuries with 55 percent diagnosed with a fracture or dislocation compared to 44 percent on home trampolines.
- Both adult and pediatric patients had higher rates of fractures or dislocations when participating at a jump park versus on a home trampoline.
 - Adults experienced a 45 percent fracture rate at jump parks versus 17 percent on home trampolines.
 - Children experienced a 59 percent fracture rate at jump parks versus 47 percent on home trampolines.
- Adults with jump park-related injuries were more than twice as likely to have surgery than with home trampoline-related injuries (23 percent versus 10 percent).

“The more severe injuries experienced at jump parks when compared to home trampolines may be caused by less coordinated falls and high-flying acrobatics seen at these facilities,” explained Dr. Voskuil. “Both adults and children that visit jump parks should understand the risks involved before participating. The study findings could be especially helpful as an emphasis on public safety continues to be placed on injury prevention in the face of rising health care expenses.”

The authors concluded that future research is needed to further evaluate the societal and economic impact of jump park-related injuries and referenced safety recommendations from the [American Academy of Orthopaedic Surgeons](#) position statement and the [American Academy of Pediatrics rules and regulations](#) to help reduce the risk of trampoline-related injuries.

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