



Embargoed for release until 12:01 a.m. PST Feb. 12, 2024

For more information, contact:

Deanna Killackey	847-384-4035	630-815-5195	killackey@aaos.org
Lauren P. Riley	847-384-4031	708-227-1773	pearson@aaos.org

New Study Identifies Increased Fracture Risk for Older Pickleball Players

SAN FRANCISCO (Feb. 12, 2024)—Pickleball has become one of the fastest-growing sports in America, and with its increased popularity, the number of associated injuries has also risen. A new study presented at the 2024 Annual Meeting of the [American Academy of Orthopaedic Surgeons](https://www.aaos.org) (AAOS), “**Trends in Pickleball- Related Fractures in the United States: An Analysis of the 2002-2022 National Electronic Injury Surveillance System (NEISS) Database**” found that there was a 90-fold increase in fractures over the past 20 years and most occurred in players ages 60-69.

The Sports and Fitness Industry Association identified an 11.5% average annual growth rate of pickleball players over the past five years, with approximately 1.4 million “core” players (those who play more than eight times per year) in 2020.

“To date, there weren’t any studies with a detailed analysis of pickleball-related fractures,” said Yasmine Ghattas, a fourth-year medical student at the University of Central Florida College of Medicine. “With paucity in the literature, we wanted to determine the risk factors and prevalence of demographic variables associated with more serious injuries such as fractures since these can lead to hospitalization and surgery.”

The research team used the Consumer Product Safety and Commission’s publicly available database, NEISS, to compare a sample of data from 2002 to 2022 to identify pickleball-related fracture trends, mechanisms of injuries, anatomic locations and gender distributions.

A highlight of findings from the study include:

- Throughout the study, there was a **90-fold increase in fractures**, with a noticeable surge from 2020 onward where fractures doubled.
- The fractures most observed were of the **upper extremity in women aged 65+ following a fall**, potentially reflecting diminishing bone health of this postmenopausal population.
- Despite the female predominance in fractures, **men were 2.3 times more likely to be admitted for a fracture**. This may be a consequence of the anatomic locations and subsequent severity of their fracture which often included lower extremity fractures of the hip, femur and some truncal fractures.
- Interestingly, there were significant age differences in men who were discharged from the emergency room and admitted to the hospital, which was not found in women.

“Despite its reputation as a low-impact sport, pickleball can pose serious risk for players especially if they have weaker bones from osteoporosis,” said Kurt P. Spindler, MD, FAAOS, orthopaedic surgeon at Cleveland Clinic in Florida. “It’s important to understand your risk profile of injury and to speak with your physician to see how you can lower your risk. For example, if you know you’re at risk for weakened bones, it’s important to build your bone mass as you age with appropriate nutrients such as calcium and Vitamin D and choosing weightbearing activities.”

###

[2024 AAOS Annual Meeting Disclosure Statement](#)

About the AAOS

With more than 39,000 members, the [American Academy of Orthopaedic Surgeons](https://www.aaos.org) is the world’s largest medical

association of musculoskeletal specialists. The AAOS is the trusted leader in advancing musculoskeletal health. It provides the highest quality, most comprehensive education to help orthopaedic surgeons and allied health professionals at every career level to best treat patients in their daily practices. The AAOS is the source for information on bone and joint conditions, treatments and related musculoskeletal healthcare issues; and it leads the healthcare discussion on advancing quality.

Follow the AAOS on [Facebook](#), [X](#), [LinkedIn](#) and [Instagram](#).