

Protect your kids from trampoline injuries at home

Robert A. Gallo, M.D., M.H.A.
Penn State Hershey Medical Center

School closures and shelter-in-place initiatives have increased the amount of recreational activities performed at home. With the arrival of spring, many families are turning to outdoor activities to keep kids active. For those with home trampolines, these lifestyle changes result in increased opportunity for injury. According to the U.S. Consumer Product Safety Commission, more than 300,000 people sustained medically treated trampoline injuries in 2018 and more than one-third required a visit to the emergency room (1). Any injury has the potential for a visit to an emergency department or urgent care center.

While the percentage of trampoline injuries sustained at “trampoline parks” continues to rise, the vast majority of injuries still occur at home (2). Children are the most vulnerable to injury and account for 90% of trampoline injuries. The vast majority of injuries happen to those between ages of 5 and 14 years (1). Nearly one-third of injuries are fractures, most frequently involving the upper extremity (3). To place the number of injuries into perspective, 6% of all fractures that children sustain are trampoline-related (2).

Based on these statistics, home trampoline use has been discouraged by both the American Academy of Orthopaedic Surgeons and American Academy of Pediatrics (3,4). That said, both organizations have offered several guidelines that can help reduce the risk of injury:

- **Allow only one child on trampoline at a time.** Three-fourths of injuries occur when two or more children are using trampoline at same time (3).
- **Have adult supervision at all times.** Most injuries happen when children play on the trampoline without adult supervision (3).
- **High-risk maneuvers, such as somersaults, should be avoided unless adequate supervision and training.** Somersaults and flips are a leading cause of cervical spine injury among children using a trampoline (3).
- **Inspect the trampoline to confirm that all components are adequately maintained and serviced.** Life expectancy for most trampolines made after 2004 is 5 years (5). Padding can rapidly deteriorate making potential injury from springs and frame more likely (4).
- **Remove trampoline ladders after use.** Lack of a ladder prevents younger children from accessing the trampoline without supervision (1).
- **Trampolines should be set as close to ground as possible, on level ground, and away from potential hazards.** Falls off a trampoline account for roughly one-third of trampoline injuries (4,5).

References:

1. American Academy of Orthopaedic Surgeons (2019). Trampoline injury prevention. Retrieved from <https://orthoinfo.aaos.org/en/staying-healthy/trampoline-injury-prevention>. Accessed on April 6, 2020.
2. American Academy of Pediatrics (2019). Study Shows Trampoline Injuries Have Increased Over the Past Decade. Retrieved from <https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/Study-Shows-Trampoline-Injuries-Have-Increased-Over-the-Past-Decade.aspx>. Accessed on April 6, 2020.
3. American Academy of Orthopaedic Surgeons (2015). Trampolines and trampoline safety. Retrieved from <https://aaos.org/contentassets/1cd7f41417ec4dd4b5c4c48532183b96/1135---trampolines-and-trampoline-safety.pdf>. Accessed on April 6, 2020.
4. Council on Sports Medicine and Fitness, American Academy of pediatrics, Briskin S, LaBotz M. Trampoline safety in childhood and adolescence. *Pediatrics* 2012;130:774–9.
5. Alexander K, Eager D, Scarrott C, Sushinsky G. Effectiveness of pads and enclosures as safety interventions on consumer trampolines. *Inj Prev*. 2010;16(3):185–189.