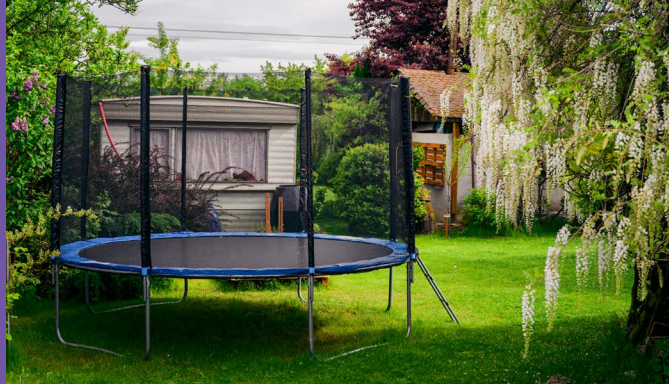
BC INJURY research and prevention unit

Trampoline Injuries: Risk Factors and Prevention



Background

Trampolines, both at trampoline parks and at home, are a popular way for children, youth, and adults to have fun and stay active. However, the Canadian Paediatric Society discourages the use of trampolines, as the risk of injury is high when rules are not followed.[1,2] Despite this warning, many parents feel pressured to allow trampoline use. They may find it difficult to balance wanting their children to have fun and keeping them safe.[3]

This factsheet provides information on risk factors related to trampoline injuries, and offers suggestions on how they can be prevented.

What is the burden of trampoline injuries?

In British Columbia, 339 people were hospitalized for trampoline-related injuries between 2020 and 2024, with an average of 68 cases annually. The majority of these hospitalizations were among children and youth under 15 years of age. One-fifth were among young children under 5 years of age, nearly 40% were among children aged 5 to 9 years, and almost one-quarter were among youth aged 10-14 years.[4]

Current research shows that:[5]

- Approximately 2 to 3% of trauma-related emergency department visits among children and youth are due to trampoline-related injuries.
- Musculoskeletal, lower extremity, and injuries requiring surgery are more commonly reported from trampoline parks.
- Upper extremity injuries, concussions, and lacerations are more commonly reported for trampolines at home.

Trampoline injuries can include:

fractures, concussions, and lacerations

Injuries at trampoline parks tend to be **more severe**, are associated with **longer hospital stays**, and have **higher surgery rates**

What are the risk factors for trampoline injuries?

1. **Stunts:** Head and neck injuries most commonly occur due to mis-landing after attempting a somersault or flip.[6,7]
2. **Multiple jumpers:** Multiple jumpers on the trampoline at one time increases the risk of injury from collisions, especially for smaller or younger jumpers.[6]
3. **Home vs. trampoline park:** Injuries at trampoline parks tend to be more severe, are associated with longer hospital stays, and have higher surgery rates.[8-10] Most trampoline park injuries involve foam pits or inflatable bags.[11]

Children **younger than 6 years should not be allowed** to use a trampoline

Head and neck injuries happen most often because of failed **somersaults or flips**

How can trampoline injuries be prevented?

Bounce Smart:

- Only one jumper on the trampoline at a time.[6,12]
- Children <6 years should not be allowed to use a trampoline.[12]
- No high-risk maneuvers, including backflips and somersaults.[5,6]
- Adult supervision at all times to enforce safe behaviours.[7,10,12]

Install Smart:[12]

- Home trampolines should be placed on a flat, level ground and away from hazards, including trees, buildings, fences, and power lines. There should be at least 2 metres of clearance around the sides of the trampoline and an overhead clearance of 8 metres.
- A net should be installed around the outside of the trampoline.
- Keep the surface and underside of the trampoline clear of toys and other objects.
- Before use, trampolines should be checked for any worn or damaged parts. If damage is found, the trampoline should not be used until it has been repaired.
- If the trampoline has springs, the shock-absorbing pads should fully cover the springs, hook, and frame.

Think Smart:

- Educate your children about the risks associated with trampoline use and teach them safe practices.[3]
- Even if there is not a trampoline at home, your children may encounter trampolines elsewhere, such as at the home of friends, at birthday parties, or at community events. Making sure children understand how to use trampolines safely can reduce the risk of injury.

For more information, check out **Health Canada's guidelines** on backyard trampoline safety.[12]

Prevent trampoline injuries by:

- ☑ **Bouncing Smart:** One at a time, no flips
- ☑ **Installing Smart:** Clear from hazards, use a net
- ☑ **Thinking Smart:** Encourage safe practices among your children

References

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