



Sledding & Tobogganing Injuries in Alberta

TOPIC SUMMARY
August 2026

SLEDDING INJURIES

Sleds and toboggans are simple platform-shaped recreational devices used for sliding downhill on snow. Often made of plastic or wood, they are light weight and easily carried by children. But, this simplicity means that there is often very little steering control.

For the sledding seasons of 2015 to 2023 in Alberta (November to March), people using sleds and toboggans annually accounted for approximately¹:

669 EMERGENCY DEPARTMENT VISITS (5 PER DAY)

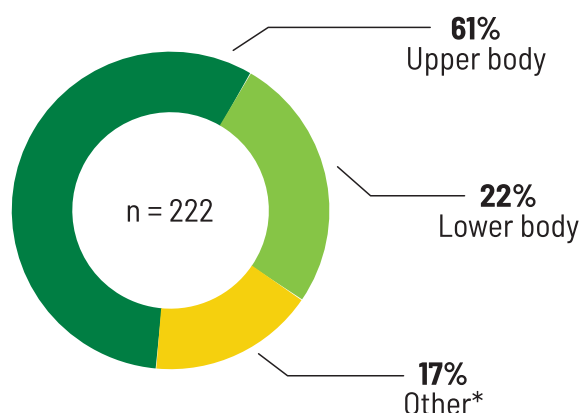
222 FRACTURES

54 CONCUSSIONS

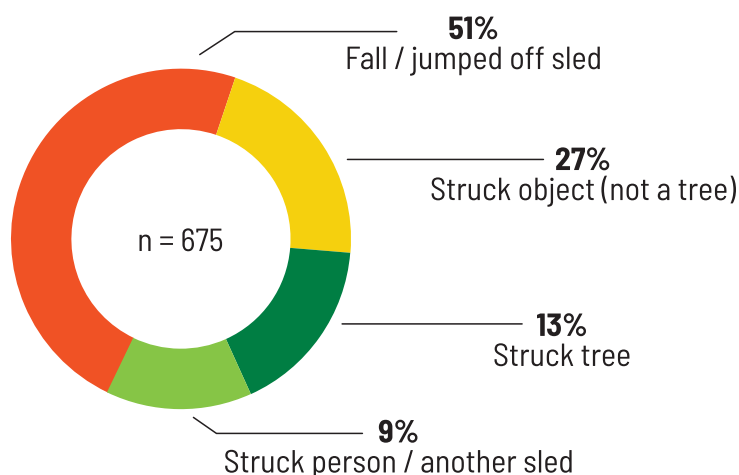


Bone fractures were diagnosed in 33% of all sledding injuries that were seen in emergency departments.

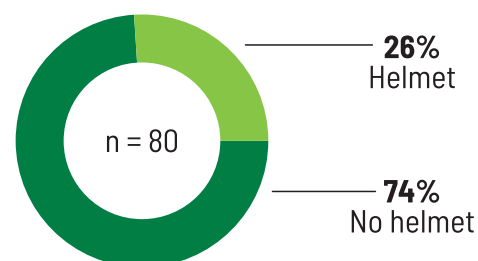
Percentage of fractures by body region



Mechanism of Sledding Injury¹



Percentage of Helmet Use



Where helmet use was documented, 74% were **not** wearing a helmet at the time of the incident.¹

*Other body regions include: head, vertebra, thorax, pelvis, lower back, hip.

PREVENTION PRIORITIES

Make Helmet Use a Habit: Head injuries represent the most-often injured body region during recreational sledding. Regardless of age, **everyone** should wear an approved ski or snowboard helmet while sledding.

Know the Hill: Not all hills are safe enough to use for sledding. Use designated areas whenever possible. Make sure the run is clear of obstacles such as trees, poles, and debris. Make sure there is enough stopping room at the end of the run, and that the run does **not** end at a road, parking lot, pond, or other unsafe area.

Know Hill Etiquette: Move off to the side when walking back up the hill so that you are not in the path of other sledders. Keep enough distance between you and others.

Control Your Sled: Most sleds have little-to-no steering control. Learn how to control steering with your body and position. Kneeling or sitting gives you the most control, and the ability to leap out of the way of obstacles. Always try to keep your sled on the ground. Avoid jumps and launches.

Choose Your Ride: Plastic sheets ("crazy carpets") should not be used because they are the least controllable and can be pierced by objects in the ground. Traditional wooden toboggans can often carry up to 2 people, but not all sleds are built for more than one. Be sure to read the label on your particular sled and do not exceed its capacity.

EVIDENCE

The Power of Protection: As few as 26% of sledding patients seen in emergency departments had been wearing a helmet.¹ Head injury is the leading cause of hospital admissions, serious long-term effects, and death in snow sports.^{2,3} Helmet use can reduce the risk of head injury by 35%.^{2,3} Whether children are wearing a helmet or not largely depends on rules being set by adults, as well as parental encouragement and role-modelling of helmet use.^{3,4}

The Pediatric Risk: Children should always be supervised by adults when sledding.⁵ The greatest number of sledding injuries occur in children between 5 and 14 years of age.²

Adults Are Not Immune: The majority of fatalities related to sledding were seen in adults as a result of the rider colliding with another object (including vehicles) at high speeds.⁶ Alcohol use during winter sports is largely underestimated and difficult to demonstrate, but is believed to be a contributing factor in many of these collisions.⁷

Each sled-related visit to an Emergency Department costs \$441. This doesn't include hospital admission costs or personal costs to families such as time away from work, away from school, pain and suffering and any follow-up medical treatment or rehabilitation.

REFERENCES

1. Alberta Health. Data unpublished. Line-by-line data received September 2025.
2. Herman R, Hirschl RB, Ehrlich PF. Sledding injuries a practice-based study is it time to raise awareness? (sic) *Pediatr Surg Int.* 2015; 21:237-240
3. Ruedl G, Pocecco E, Raas C, Blauth M, Brucker, PU, Burtcher M, Kopp M. Influence of adult role modelling on child/adolescent helmet use in recreational sledding: an observational study. *Wien Klin Wochenschr.* 2016; 128:266-270
4. Robertson DW, Lang BD, Schaefer JM. Parental attitudes and behaviours concerning helmet use in childhood activities: rural focus group interviews. *Accid Anal Prev.* 2014; 70:314-9
5. Heim D, Altgeld K, Hasler RM, Aghayev E, Exadaktylos AK. A 13-year analysis from Switzerland of non-fatal sledding (sledding or tobogganing) injuries. *Injury.* 2014 Jan;45(1):338-41.
6. Pediatric Sport and Exercise Medicine Committee. Tobogganing in Canada: opinion piece [Internet]. Ottawa (ON): Canadian Academy of Sport and Exercise Medicine; 2015 Oct [cited 2026 Jul 15]. 6 p. Available from: <https://www.casem-acmse.org/wp-content/uploads/2018/06/Tobogganing-In-Canada-Opinion-PSEM-Committee-Oct-2015-Edits.pdf>
7. Gaudio R, Barbieri S, Feltracco P, Spaziani F, Alberti M, Delantone M, et al. Impact of alcohol consumption on winter sports-related injuries. *Med Sci Law.* 2010;50(3):122-5.



If you would like additional information about this or other types of injuries, please visit injurypreventioncentre.ca or contact us via phone at **780.492.6019** or email ipc@ualberta.ca

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Funding and Support

The Injury Prevention Centre receives core business funding from the Ministry of Primary and Preventive Health Services and is part of the School of Public Health at the University of Alberta. Provision of funding by Primary and Preventive Health Services does not signify that this project represents the policies or views of Primary and Preventive Health Services.