

Position Statement

Power Snow Blower/Thrower Safety

This Position Statement was developed as an educational tool based on the opinion of the authors. It is not a product of a systematic review. Readers are encouraged to consider the information presented and reach their own conclusions.

Nearly 230,000 injuries related to snow blowers, snow throwers and snow shovels were treated in hospital emergency departments, doctors' offices, and clinics in 2014, according to the National Electronic Injury Surveillance Systems of the U.S. Consumer Product Safety Commission (CPSC). The estimated medical, legal, insurance, and disability costs and other expenses of these injuries for 2014 were more than \$9.5 billion.¹

Injuries ranged from back and shoulders strains, to finger lacerations or amputations.² The most traumatic injuries can occur when individuals attempt to clear the auger/collector or discharge chute with their hands. Although many of these injuries can be managed in the emergency department, some injuries can be so traumatic that operating room care and surgery are needed.

There is a risk of death due to carbon monoxide poisoning resulting from leaving the snow blower engine running in an enclosed area. Additionally, deaths due to blunt trauma or even strangulation when clothes get caught in the machinery have been reported.

Many snow blowers have two fan blades. Operators of a two-stage snow blower may not realize that a second fan blade operates within the ejection chute. Therefore, even if the auger is visibly stopped, the ejection fan can still be running and cause injury. Children are at particular risk around snow blowers, and should be protected from touching exposed hot engine components or getting clothing entrapped in moving parts.

The American Academy of Orthopaedic Surgeons (AAOS) believes that most of the injuries resulting from power snow blowers are preventable. To ensure safety when using power snow blower equipment, the AAOS recommends the following safety guidelines.³

- Never put a hand in the snow blower to remove impacted snow or debris. Stop the engine and wait for the machine to be off for more than 5 seconds. Use a solid object to clear wet snow and debris from the chute. Beware of the recoil of the motor and blades after the machine has been turned off and unplugged.
- Do not leave the snow blower unattended when it is running.

- Do not allow children to operate or touch the snow blower; do not use the snow blower when children are nearby.
- Do not operate the machine in an enclosed area.
- Do not add fuel when the engine is running or hot. Add fuel before starting the engine.
- Be aware of where the power cord is at all times, so you don't trip on the cord, or that it doesn't get caught in or on the snow blower.
- Wear appropriate clothing during operation. Avoid loose-fitting clothing, And always use appropriate gloves and eye protection.

References:

1. US Consumer Product Safety Commission. NEISS data. Accessed June 2015.
2. Consumer Reports Web site. Snow Blower Safety Tips. Published December 6, 2013. Accessed June 3, 2015.
3. Preventing Snow Blowing and Snow Shoveling Injuries. Your Orthopaedic Connection Web site. <http://orthoinfo.aaos.org/topic.cfm?topic=A00060>. Accessed June 3, 2015.

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