

Winter Sport Injuries – Data Brief

The Statewide Incident Reporting Network

Background

According to the U.S. Consumer Product Safety Commission, in 2015 more than 246,000 people were treated at hospitals, doctors' offices, and emergency rooms for injuries related to winter sports. 88,000 of these injuries occurred while skiing, 61,000 occurred while snowboarding, and 47,000 occurred while sledding, tobogganing, or snowtubing¹. Many of these injuries occur when individuals engage in winter sports for too long without taking a rest break, attempt to ski or snowboard on a trail above their skill level or off posted trails, or are injured due to faulty or improperly maintained equipment. Strains, sprains, head injuries, and fractures are some of the most common winter sports injuries². According to the National Ski Areas Association, in the 2015-2106 season there were 39 skier and snowboarder fatalities in the United States and 45 catastrophic injuries, which include paralysis, broken necks or backs, and life-altering severe head injuries³.

This data brief describes data and trends of winter sport-related injuries to Vermont residents injured in Vermont from 2014 to 2016 that resulted in Emergency Medical Services (EMS) being activated. For the purposes of this brief, a winter sport-related injury is defined as one that occurred while skiing, snowboarding, or sledding.

Data were gathered from the Statewide Incident Reporting Network (SIREN), Vermont's pre-hospital electronic documentation database. For more information about SIREN, including its strengths and limitations, please see the "What is SIREN?" document on the Health Department website.

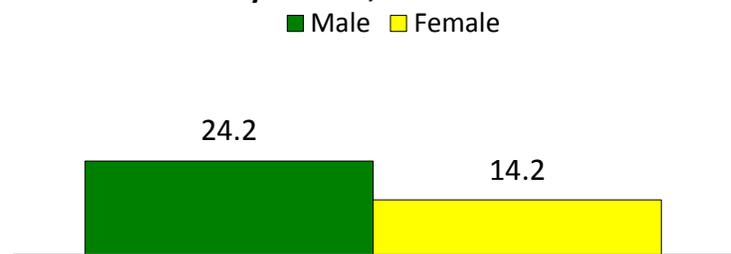
Overall

From 2014 to 2016 there were 378 injuries in Vermont among Vermont residents who were skiing, snowboarding, or sledding that resulted in an EMS call. This represents a rate of 20.1 per 100,000 people. 94.9% of these calls resulted in transport of the patient by EMS.

Gender

There was a statistically significant difference in rate of winter sport injuries between males and females in Vermont from 2014 to 2016. The male rate (24.2 per 100,000) was almost twice that of the female rate (14.2 per 100,000).

Rate (per 100,000) of Winter Sport Injuries in Vermont by Gender, 2014-2016



Age

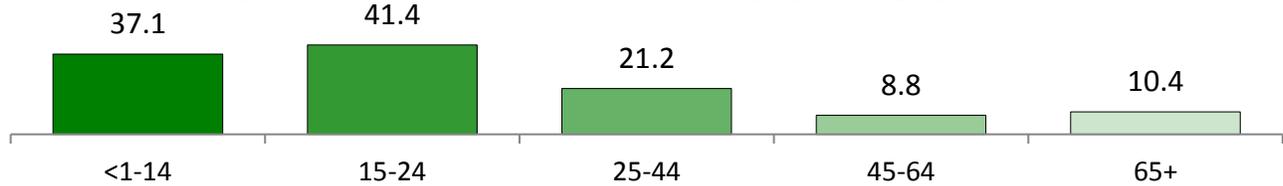
Vermonters under the age of 25 had statistically higher rates of winter sport-related injury than those over the age of 25. The rate among those 15 to 24 years of age was 41.4 per 100,000 and the rate among those under the age of 15 was 37.1 per 100,000.

¹ American Academy of Orthopedic Surgeons, Winter Sports Injury Prevention, <http://orthoinfo.aaos.org/topic.cfm?topic=A00062>

² American Orthopaedic Society for Sports Medicine, Skiing and Snowboarding Injuries, <http://www.sportsmed.org/aossmimis/stop/downloads/SkiingAndSnowboarding.pdf>

³ National Ski Areas Association, Industry Stats, <http://www.nsa.org/press/industry-stats>

Rate (per 100,000) of Winter Sport Injuries by Age Category, 2014-2016



County

Rates of winter sport-related injury varied widely across Vermont counties. These differences were likely driven by the fact that some counties contain several ski areas, while others contain none. The table below illustrates the rate of winter sport-related injury in those counties that have at least one ski area. Rates for some counties were suppressed due to low numbers.

| County | Number of Ski Areas | Rate of Injury (per 100,000) |
|------------|---------------------|------------------------------|
| Addison | 1 | Suppressed |
| Bennington | 1 | 1.1 |
| Caledonia | 1 | 1.4 |
| Chittenden | 2 | 3.1 |
| Lamoille | 2 | 2.5 |
| Orange | 1 | Suppressed |
| Orleans | 1 | 2.7 |
| Rutland | 2 | 2.0 |
| Washington | 2 | 2.6 |
| Windham | 3 | 2.3 |
| Windsor | 3 | 1.9 |

For more information regarding SIREN data, please contact Lauren Prinzing, MPH at:

lauren.prinzing@vermont.partner.gov