

injury

cord injury.

Recent Trends in Causes of **Spinal Cord Injury**



2021 SCI Data Sheet

Introduction

This Data Sheet provides a category breakdown for causes of spinal cord injury (SCI) that occurred between 2010 and 2020. During that timeframe, there were 7,761 (N) persons enrolled in the National Spinal Cord Injury Database. This represents roughly 6% of new SCI cases in the United States during that time. Vehicular accidents **Vehicular Crushes** accounted for 2.956 25.18% N=1954 Auto (includes cars, jeeps, trucks, dune buggies, and buses) (38.09%) of spinal 6.91% N=536 Motorcycle (includes 2-wheeled, motorized vehicles) cord injuries and ranks 3.32% N=258 Bicycles (includes bicycles, tricycles and unicycles) 1st in causes of spinal 1.58% N=123 All-Terrain (includes both 3-wheeled and 4-wheeled) cord injury. 0.23% N=18 Aircraft (includes fixed-wing and rotating-wing) 0.22% N=17 Snowmobile 0.12% N=9 Boat 0.53% N=41 Other vehicular, unclassified (included tractor, bulldozer, go-cart, steamroller, train, road grader and forklift) Falls accounted for Falls 2,423 (31.22%) of 6.46% N=501 Fall on same level (includes slipping, tripping and stumbling) spinal cord injuries 5.15% N=400 Fall on and from stairs and steps and ranks 2nd in 4.03% N=313 Fall from, out of, or through building or structure causes of spinal cord 3.30% N=256 Other slipping, tripping, stumbling and falls (includes fall from or off toilet, fall in or into shower or empty bathtub, and fall on same level due to stepping on an object) 2.28% N=177 Fall on and from ladder 1.89% N=147 Fall from one level to another 1.42% N=110 Fall from tree 0.77% N=60 Fall from bed 0.66% N=51 Fall on and from scaffolding 0.64% N=50 Fall due to ice and snow 0.61% N=47 Non-Recreational fall, jump or diving into water 0.40% N=31 Fall from chair 0.31% N=24 Intentional self-harm by jumping from a high place 0.30% N=23 Fall from other furniture other than chair or bed 0.40% N=31 Other (includes fall from cliff, fall on and from playground equipment, fall on same level due to collision with another person, fall from non-moving wheelchair, and fall while being carried/supported by other person) 1.58% N=123 Unspecified falls 1.02% N=79 Unknown type of falls Violence Acts of violence 12.94% N=1004 Gunshot wounds accounted for 1.104 (14.22%) of spinal 0.86% N=67 Person-to-Person (includes assault with a blunt object and falls as a result of being cord injuries and ranks pushed) 3rd in causes of spinal 0.43% N=33 Other penetrating wounds (includes explosion, stabbing and impalement)

| Sports & recreational activities accounted for 661 (8.52%) of spinal cord injuries and ranks 4 th in causes of spinal cord injury. | Sports and Recreation 3.59% N=279 Diving | | |
|--|---|-------|--|
| | 0.94% | N=73 | Snow skiing |
| | 0.64% | N=50 | |
| | | | Winter sports (includes sled, snow tube, toboggan, ice hockey, and snow- boarding) |
| | 0.54% | N=42 | Surfing (includes body surfing) |
| | 0.39% | N=30 | Horseback riding |
| | 0.32% | N=25 | Air sports (includes parachuting, hang gliding and para-sailing) |
| | 0.24% | N=19 | Trampoline |
| | 0.22% | N=17 | Football |
| | 0.17% | N=13 | Wrestling |
| | 0.14% | N=11 | Gymnastics (includes all gymnastic activities other than trampoline) |
| | 0.12% | N=9 | Field sports (includes field hockey, lacrosse, soccer, and rugby) |
| | 0.08% | N=6 | Skateboarding |
| | 0.08% | N=6 | Baseball/Softball |
| | 0.06% | N=5 | Water skiing |
| | 0.05% | N=4 | Rodeo (includes bronco/bull riding) |
| | 0.05% | N=4 | Basketball and Volleyball |
| | 0.00% | N=0 | Track and field (includes pole vault, high jump, etc.) |
| | 0.88% | N=68 | Unclassified (includes auto racing, glider kite, slide, swimming, bungee jumping, scuba diving, rollerblading, jet-skiing, cheerleading, etc.) |
| 617 (7.95%) of spinal | Other | | |
| cord injuries were a result of other causes. | 4.33% | N=336 | Medical/ Surgical complication |
| | 1.87% | N=145 | Hit by falling/ flying object |
| | 1.07% | N=83 | Pedestrian |
| | 0.68% | N=53 | Other unclassified (includes lightning, kicked by an animal, machinery accidents) |

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About the National Spinal Cord Injury Statistical Center and Database

The National Spinal Cord Injury Statistical Center (NSCISC) is located at the UAB Department of Physical Medicine and Rehabilitation. NSCISC supports and directs the collection, management and analysis of the National SCI Database, which is the world's largest and longest SCI research database.

The National SCI Database has been in existence since 1973. Since then, 29 federally funded SCI Model Systems have contributed data to the National SCI Database. There are currently 14 SCI Model Systems contributing data, with an additional 5 subcontract Centers collecting Form II (follow-up) data. For a complete list, go to http://www.msktc.org/sci/model-system-centers.

At the time of this publication (March 2021), the database contained information on 35,105 persons who sustained traumatic spinal cord injuries. To assure comparability of data acquired by personnel in various centers, rigid scientific criteria have been established for the collection, management and analysis of information entered into the database. Additional quality control procedures are also in place to further enhance the reliability and validity of the database.

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