



Introduction

This Data Sheet provides a breakdown in causes of traumatic spinal cord injury (tSCI) that occurred between 2010 and 2022. During that timeframe, there were 9,207 (N) persons enrolled in the National Spinal Cord Injury Database, which represents roughly 6% of new tSCI cases in the United States.

Vehicular accidents accounted for 3,490 (37.91%) of traumatic spinal cord injuries and ranks 1st in causes of spinal cord injury.

Vehicular Crushes

25.01%	N=2303	Auto (includes cars, jeeps, trucks, dune buggies, and buses)
6.99%	N=644	Motorcycle (includes 2-wheeled, motorized vehicles)
3.19%	N=294	Bicycles (includes bicycles, tricycles and unicycles)
1.56%	N=144	All-Terrain (includes both 3-wheeled and 4-wheeled)
0.22%	N=20	Aircraft (includes fixed-wing and rotating-wing)
0.22%	N=20	Snowmobile
0.15%	N=14	Boat
0.55%	N=51	Other vehicular, unclassified (included tractor, bulldozer, go-cart, steamroller, train, road grader and forklift)

Falls accounted for 2,859 (31.05%) of traumatic spinal cord injuries and ranks 2nd in causes of spinal cord injury

Falls

6.68%	N=615	Fall on same level (includes slipping, tripping and stumbling)
5.12%	N=471	Fall on and from stairs and steps
3.98%	N=366	Fall from, out of, or through building or structure
3.30%	N=304	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)
2.20%	N=203	Fall on and from ladder
1.80%	N=166	Fall from one level to another
1.31%	N=121	Fall from tree
0.83%	N=76	Fall from bed
0.66%	N=61	Fall on and from scaffolding
0.61%	N=56	Fall due to ice and snow
0.58%	N=53	Non-Recreational fall, jump or diving into water
0.43%	N=40	Fall from chair
0.31%	N=29	Fall from other furniture other than chair or bed
0.27%	N=25	Intentional self-harm by jumping from a high place
0.41%	N=38	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)
1.44%	N=133	Unspecified falls
1.11%	N=102	Unknown type of falls

Acts of violence accounted for 1,351 (14.67%) of traumatic spinal cord injuries and ranks 3rd in causes of spinal cord injury.

Violence

13.42%	N=1236	Gunshot wounds
0.83%	N=76	Person-to-Person (includes assault with a blunt object and falls as a result of being pushed)
0.42%	N=39	Other penetrating wounds (includes explosion, stabbing and impalement)

Sports & recreational activities accounted for 784 (8.52%) of traumatic spinal cord injuries and ranks 4th in causes of spinal cord injury.

Sports and Recreation

3.65%	N=336	Diving
0.91%	N=84	Snow skiing
0.64%	N=59	Winter sports (includes sled, snow tube, toboggan, ice hockey, and snow-boarding)
0.58%	N=53	Surfing (includes body surfing)
0.42%	N=39	Horseback riding
0.30%	N=28	Air sports (includes parachuting, hang gliding and para-sailing)
0.24%	N=22	Trampoline
0.21%	N=19	Football
0.15%	N=14	Wrestling
0.12%	N=11	Gymnastics (includes all gymnastic activities other than trampoline)
0.10%	N=9	Field sports (includes field hockey, lacrosse, soccer, and rugby)
0.08%	N=7	Skateboarding
0.07%	N=6	Baseball/Softball
0.05%	N=5	Water skiing
0.04%	N=4	Rodeo (includes bronco/bull riding)
0.04%	N=4	Basketball and Volleyball
0.00%	N=0	Track and field (includes pole vault, high jump, etc.)
0.91%	N=84	Unclassified (includes auto racing, glider kite, slide, swimming, bungee jumping, scuba diving, rollerblading, jet-skiing, cheerleading, etc.)

723 (7.85%) of traumatic spinal cord injuries were a result of other causes.

Other

4.05%	N=373	Medical/ Surgical complication
1.98%	N=182	Hit by falling/ flying object
1.05%	N=97	Pedestrian
0.77%	N=71	Other unclassified (includes lightning, kicked by an animal, machinery accidents)

About the National Spinal Cord Injury Database

The Spinal Cord Injury Model Systems was created in 1970 as a prospective longitudinal multicenter study of demographics and the use of services by people with traumatic spinal cord injury in the United States. The National SCI Database was created in 1973, and the National Spinal Cord Injury Statistical Center (NSCISC), located at the UAB Department of Physical Medicine and Rehabilitation, supports and directs the collection, management and analysis of the National SCI Database, which is the world's largest and longest tSCI research database. As of November 2022, the database contained information on 36,275 persons who sustained traumatic spinal cord injuries.

Since 1973, 31 federally funded SCI Model Systems and 5 Form II (follow-up) centers have contributed data to the National SCI Database. To ensure comparability of data acquired over time 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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