



Introduction

This data sheet provides a breakdown of causes of traumatic spinal cord injury (tSCI) that occurred between 2015 and 2025. During this time, 8,083 (N) persons were enrolled in the Spinal Cord Injury Model Systems (SCIMS) Database.

Vehicular Crashes

Vehicular crashes account for 2,981 (36.88%) of traumatic spinal cord injuries and rank first in cause of injury.

24.06%	N=1945	Auto (includes cars, jeeps, trucks, dune buggies, and buses)
6.97%	N=563	Motorcycle (includes 2-wheeled, motorized vehicles)
3.08%	N=249	Bicycles (includes bicycles, tricycles and unicycles)
1.53%	N=124	All-Terrain (includes both 3-wheeled and 4-wheeled)
0.24%	N=19	Snowmobile
0.21%	N=17	Aircraft (includes fixed-wing and rotating-wing)
0.17%	N=14	Boat
0.62%	N=50	Other vehicular, unclassified (includes tractor, bulldozer, go-cart, steamroller, train, road grader and forklift)

Falls

Falls account for 2,673 (33.07%) of traumatic spinal cord injuries and rank second in cause of injury.

8.34%	N=674	Fall on same level (includes slipping, tripping and stumbling)
5.63%	N=455	Fall on and from stairs and steps
3.82%	N=309	Fall from, out of, or through building or structure
3.51%	N=284	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)
2.12%	N=171	Fall on and from ladder
1.63%	N=132	Fall from one level to another
1.19%	N=96	Fall from tree
1.04%	N=84	Fall from bed
0.75%	N=61	Fall due to ice and snow
0.59%	N=48	Fall from chair
0.52%	N=42	Fall on and from scaffolding
0.38%	N=31	Non-recreational fall, jump, or diving into water
0.33%	N=24	Fall from other furniture other than chair or bed
0.22%	N=18	Intentional self-harm by jumping from a high place
0.47%	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, fall while being carried/supported by other person)
1.09%	N=88	Unspecified falls
1.45%	N=117	Unknown type of falls

Violence

Acts of violence account for 1,202 (14.87%) of traumatic spinal cord injuries and rank third in cause of injury.

13.82%	N=1117	Gunshot wounds
0.63%	N=51	Person-to-person (includes assault with a blunt object and falls as a result of being pushed)
0.42%	N=34	Other penetrating wounds (includes explosion, stabbing, and impalement)

Sports and Recreation

Sports & recreational activities account for 603 (7.46%) of traumatic spinal cord injuries and rank fourth in cause of injury.

3.30%	N=267	Diving
0.90%	N=73	Snow skiing
0.51%	N=41	Surfing (includes body surfing)
0.46%	N=37	Winter sports (includes sled, snow tube, toboggan, ice hockey, and snowboarding)
0.36%	N=29	Horseback riding
0.30%	N=24	Air sports (includes parachuting, hang gliding, and para-sailing)
0.19%	N=15	Trampoline
0.19%	N=15	Football
0.09%	N=7	Gymnastics (includes all gymnastic activities other than trampoline)
0.09%	N=7	Wrestling
0.06%	N=5	Field sports (includes field hockey, lacrosse, soccer, and rugby)
0.05%	N=4	Skateboarding
0.04%	N=3	Water skiing
0.03%	N=2	Baseball/Softball
0.02%	N=2	Basketball/Volleyball
0.01%	N=1	Rodeo (includes bronco/bull riding)
0.01%	N=1	Track and field (includes pole vault, high jump, etc.)
0.87%	N=70	Unclassified (includes auto racing, glider kite, slide, swimming, bungee jumping, scuba diving, rollerblading, jet skiing, cheerleading, etc.)

Other

624 (7.72%) of traumatic spinal cord injuries were a result of other causes.

3.67%	N=297	Medical/Surgical complication
2.04%	N=165	Hit by falling/flying object
1.20%	N=97	Pedestrian
0.80%	N=65	Other unclassified (includes lightning, kicked by an animal, machinery accidents)

About the National Spinal Cord Injury Statistical Center

The National Spinal Cord Injury Statistical Center, located at the UAB Department of Physical Medicine and Rehabilitation, supports and directs the collection, management and analysis of the SCIMS Database, which is the world's largest and oldest active tSCI research database. Since 1973, 31 federally funded SCIMS centers have contributed data to the SCIMS Database. As of February 2026, the database contained information on 55,715 (Registry and Form I) persons with tSCI.

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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