

Test Your Knowledge

Q: What are the most common causes of spinal cord injuries (SCIs)?

A: The majority of SCIs are due to *preventable*, traumatic causes. Traumatic SCIs are caused by motor vehicle crashes, acts of violence, falls, sports and recreation. Nontraumatic causes include diseases such as cancer, arthritis, osteoarthritis and inflammation.¹

Q: After a SCI, how long is the average hospital stay?

A: The average in-patient hospital stay following a SCI is 11 days, followed by an additional 31 days in a rehabilitation center.²

Traumatic spinal cord injuries (SCIs) are defined as any occurrence of acute trauma to neural elements of the spinal cord. Spinal cord injuries result from damage to the vertebrae, ligaments or disks of the spinal column or to the spinal cord itself. SCIs are devastating due to the inability of spinal cord neurons to regenerate. This type of injury can result in lasting motor and/or sensory deficits. Because of this, these injuries will impact patients and their families in many various aspects of their lives.

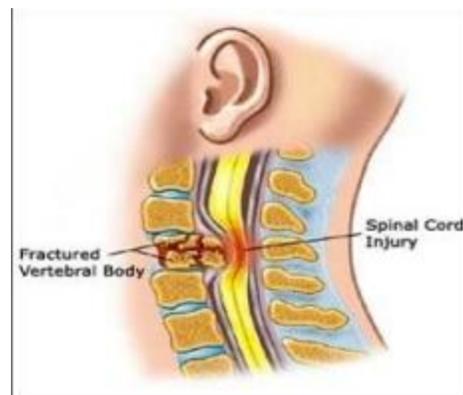


Diagram of a spinal cord injury

KNOW THE FACTS

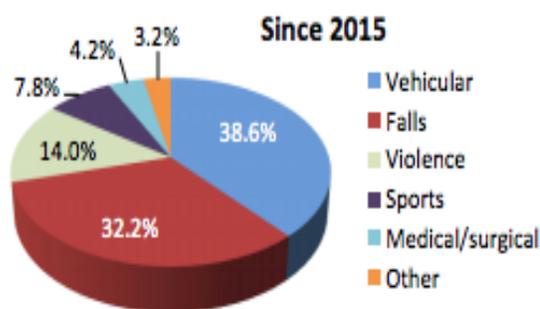
- In the United States, the estimated annual incidence of SCI is approximately 17,810 new cases per year.²
- Alcohol use is a contributing factor in about 1 out of every 4 spinal cord injuries.¹
- Worldwide, patients with SCI are 2-5 times more likely to die prematurely. This is especially true in low and middle income countries.³
- Mortality rates are highest within the first year of injury.²

WHO IS MOST AFFECTED BY SPINAL CORD INJURIES?¹

- Males account for 78% of new SCI cases²
- People between the ages of 16-30 who are more likely to engage in risky behavior
- Seniors over the age of 65 who are more likely to fall
- People with bone or joint disorders as minor injuries in these patients can result in a serious SCI

SCI SYMPTOMS¹

- Numbness/tingling in hands, fingers, feet or toes
- Loss or altered sensation
- Neck or back pain
- Impaired balance and/or walking ability
- Loss of movement
- Difficulty breathing or coughing
- Loss of bladder or bowel control
- Changes in sexual function (sensitivity and fertility)
- Weakness, incoordination, or paralysis in any body part



Etiology of SCI since 2015

ThinkFirst about...

Spinal Cord Injury Fast Facts

... protecting yourself and others from injury!

TYPES OF SPINAL CORD INJURIES (SCIs)^{1,4,5}

- Tetraplegia (quadriplegia): SCIs to the cervical (neck) region. Paralysis including the trunk and all 4 extremities.
- Paraplegia: SCIs to the thoracic or lumbar areas. Paralysis in all or part of the trunk and legs.
- Complete SCI: Complete loss of sensory and motor function below the site of the injury.
- Incomplete SCI: Some sensory and/or motor function remains below the site of injury.

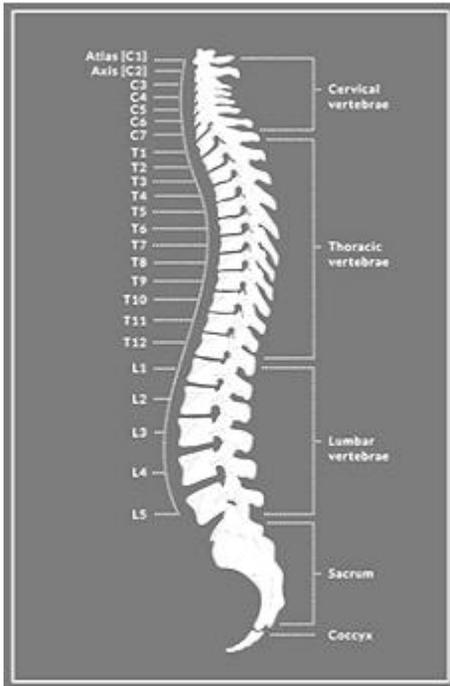


Diagram depicting the divisions of the spinal cord.

PREVENTION TIPS

- Wear a certified helmet and do not wear headphones when biking.
- Always buckle your seatbelt in a vehicle.
- Children 12 and under should ride in the back to avoid air bag injuries.
- Lock firearms away when not in use.
- Do not dive into water less than 10 feet deep.
- Make sure protective sports gear is not broken or damaged
- Never drive under the influence of drugs or alcohol
- Clear in-home hazards that might contribute to falls

WHAT TO DO IF YOU SUSPECT A SCI⁶

- Call 911 immediately.
- Keep the victim still and prevent any movement of the head or neck.
- If the victim is wearing a helmet, do not remove it.
- If CPR is necessary, modify your technique so that the head is not tilted back to open the airway. Instead, use fingers to gently lift the jaw open.
- Try to avoid rolling the person alone. Keep the head and neck aligned when rolling or moving.

ThinkFirst
National Injury Prevention Foundation

The ThinkFirst Foundation is a 501c3 nonprofit organization dedicated to preventing brain, spinal cord and other traumatic injuries through education, research and advocacy. Visit our website to learn more and use our chapter directory to locate a chapter near you — your resource for injury prevention presentations.

www.thinkfirst.org

Sources

¹Mayo Clinic Staff, Mayo Clinic. Diseases and Conditions: Spinal Cord Injury, [Online]. Sep. 17, 2019. Available from URL: <http://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/basics/causes/con-20023837> Cited Apr. 25, 2020.

²The University of Alabama at Birmingham, National Spinal Cord Injury Statistical Center (NSCISC). Spinal Cord Injury (SCI) Facts and Figures at a Glance [Online]. 2020. Available from URL: <https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%202020.pdf> Cited Apr. 25, 2020.

³World Health Organization (WHO). Media Centre, Spinal Cord Injury [Online]. Nov. 2013. Available from URL: <http://www.who.int/mediacentre/factsheets/fs384/en/> Cited Mar. 14, 2018.

⁴American Association of Neurological Surgeons (AANS). Patient Information: Neurosurgical Conditions and Treatments, Spinal Cord Injury [Online]. Available from URL: <https://www.aans.org/Patients/Neurosurgical-Conditions-and-Treatments/Spinal-Cord-Injury> Cited. Apr. 25, 2020.

⁵National Institute of Neurological Disorders and Stroke (NINDS). Spinal Cord Injury: Hope Through Research [online]. Mar 2020. Available from URL: <https://www.ninds.nih.gov/Disorders/Patient-Caregiver-Education/Hope-Through-Research/Spinal-Cord-Injury-Hope-Through-Research> Cited. Apr. 25, 2020.

⁶Mayo Clinic Staff, Mayo Clinic. Diseases and Conditions: Spinal Cord Injury, First aid [Online]. Feb. 13, 2020. Available from URL: <https://www.mayoclinic.org/first-aid/first-aid-spinal-injury/basics/art-20056677> Cited Apr. 25, 2020.