

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 SCI's 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 35 days in a rehabilitation center.²

A Traumatic spinal cord injury (SCI) is defined as any occurrence of acute trauma to neural elements of the spinal cord.³ 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.

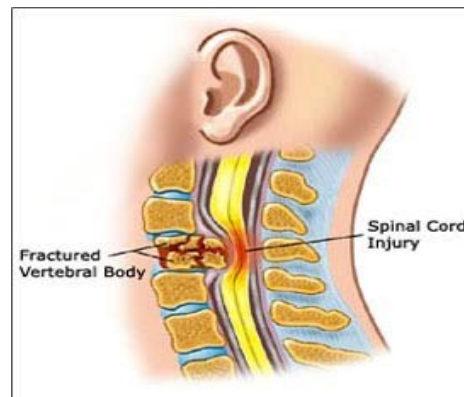


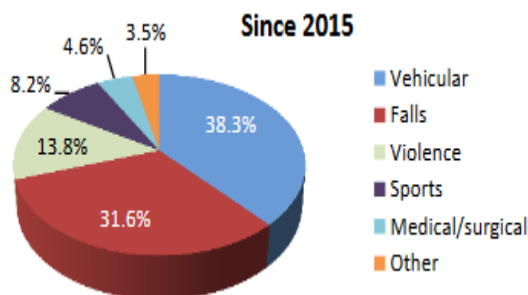
Diagram of a spinal cord injury⁵

KNOW THE FACTS

- In the United States, the estimated annual incidence of SCI is approximately 17,700 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.⁴
- Mortality rates are highest within the first year of injury.⁴

WHO IS MOST AFFECTED BY SPINAL CORD INJURIES?⁶

- 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



Etiology of SCI since 2015²

SCI SYMPTOMS^{7, 8}

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

ThinkFirst about...

Spinal Cord Injury Fast Facts

... protecting yourself and others from injury!

TYPES OF SPINAL CORD INJURIES (SCIs)⁹

- Tetraplegia (quadriplegia): SCI to the cervical (neck) region, affecting the arms, hands, trunk, legs and pelvic organs
- Paraplegia: SCI to the thoracic or lumbar areas, affecting the all or part of the trunk, legs and pelvic organs
- 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.

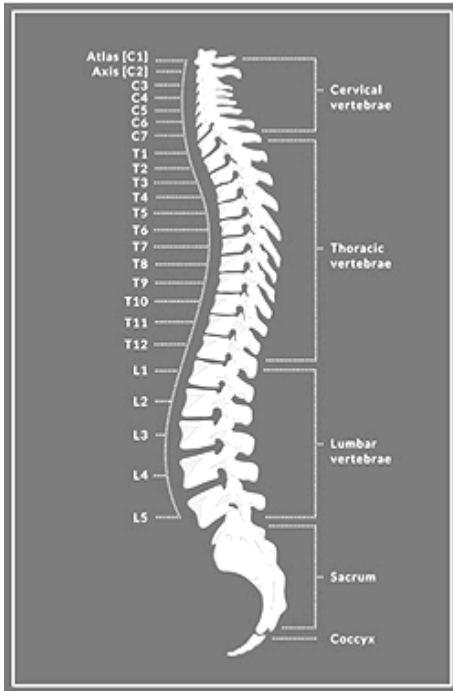


Diagram depicting the divisions of the spinal cord.¹⁰

PREVENTION TIPS

- Drive safe and sober; motor vehicle crashes are the leading cause of SCI.
- Always have everyone in the vehicle use a seat belt or child restraint.
- Children 12 and under should ride in the back to avoid air bag injuries.
- Avoid violence. Lock firearms away when not in use.
- Do not dive into water less than 12 feet deep.
- Take precautions when playing sports. Use appropriate sports gear. Avoid leading or hitting with your head.
- Clear hazards that might contribute to falls; use ladders cautiously.

WHAT TO DO IF YOU SUSPECT A SCI¹⁰

- Do not move the person; call 911 or emergency services.
- Keep the person still and prevent any movement of the head or neck.
- If the person 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.
- Keep the head and neck aligned when rolling or moving.

ThinkFirst

National Injury Prevention Foundation

www.thinkfirst.org

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.

Sources

¹Mayo Clinic Staff, Mayo Clinic. Diseases and Conditions: Spinal Cord Injury, Causes [Online]. Dec. 19, 2017. Available from URL: <http://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/basics/causes/con-20023837> Cited Sept. 9, 2018.

²The University of Alabama at Birmingham. National Spinal Cord Injury Statistical Center (NSCISC). Spinal Cord Injury (SCI) Facts and Figures at a Glance [Online]. 2017. Available from URL <https://www.nscisc.uab.edu/Public/Facts%20and%20Figures%20-%202018.pdf> Cited Sept. 9, 2018.

³The University of Alabama at Birmingham. National Spinal Cord Injury Statistical Center (NSCISC). Definition and Eligibility Criteria [Online]. Available from URL: https://www.nscisc.uab.edu/Public_Pages/Database_files/Definition%20and%20Eligibility.pdf Cited Sept. 2019.

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⁶Mayo Clinic Staff, Mayo Clinic. Diseases and Conditions: Spinal Cord Injury, Risk Factors [Online]. Dec. 19, 2017. Available from URL: <http://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/basics/risk-factors/con-20023837> Cited Mar. 5, 2018.

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⁹American Association of Neurological Surgeons (AANS). Patient Information: Conditions and Treatments, Spinal Cord Injury [Online]. Mar. 2015. Available from URL: <http://www.aans.org/patient%20information/conditions%20and%20treatments/spinal%20cord%20injury.aspx> Cited. Mar. 17, 2016.

¹⁰Mayo Clinic Staff, Mayo Clinic. Diseases and Conditions: Spinal Cord Injury, First aid [Online]. March 02, 2016. Available from URL: <https://www.mayoclinic.org/first-aid/first-aid-spinal-injury/basics/art-20056677> Cited Sept. 9, 2018.