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## Spinal Cord Injuries

Your spinal cord is a bundle of nerves that runs down the middle of your back. It carries signals back and forth between your body and your brain. A spinal cord injury disrupts the signals. Spinal cord injuries usually begin with a blow that fractures [https://medlineplus.gov/fractures.html] (breaks) or dislocates [https://medlineplus.gov/dislocations.html] your vertebrae, the bone disks that make up your spine. Most injuries don't cut through your spinal cord. Instead, they cause damage when pieces of vertebrae tear into cord tissue or press down on the nerve parts that carry signals.

Spinal cord injuries can be complete or incomplete. With a complete spinal cord injury, the cord can't send signals below the level of the injury. As a result, you are paralyzed [https://medlineplus.gov/paralysis.html] below the injury. With an incomplete injury, you have some movement and sensation below the injury.

A spinal cord injury is a medical emergency. Immediate treatment can reduce long-term effects. Treatments may include medicines, braces or traction to stabilize the spine, and surgery. Later treatment usually includes medicines and rehabilitation therapy. Mobility aids [https://medlineplus.gov/mobilityaids.html] and assistive devices [https://medlineplus.gov/assistivedevices.html] may help you to get around and do some daily tasks.

*NIH: National Institute of Neurological Disorders and Stroke*

## Start Here

- About Spinal Cord Injury [https://www.nichd.nih.gov/health/topics/spinalinjury/conditioninfo]  
 (Eunice Kennedy Shriver National Institute of Child Health and Human Development)  
Also in Spanish [https://espanol.nichd.nih.gov/salud/temas/spinalinjury/informacion]
- FAQs about Spinal Cord Injury (SCI) [https://www.uab.edu/medicine/sci/faqs-about-spinal-cord-injury-sci]  
(University of Alabama at Birmingham)
- Overview of Spinal Cord Disorders [https://www.merckmanuals.com/home/brain-spinal-cord-and-nerve-disorders/spinal-cord-disorders/overview-of-spinal-cord-disorders] (Merck & Co., Inc.)  
Also in Spanish [https://www.merckmanuals.com/es-us/hogar/enfermedades-cerebrales-medulares-y-nerviosas/trastornos-de-la-m%C3%A9dula-espinal/introducci%C3%B3n-a-los-trastornos-de-la-m%C3%A9dula-espinal]
- Spinal Cord Injury [https://www.ninds.nih.gov/health-information/disorders/spinal-cord-injury]  
 (National Institute of Neurological Disorders and Stroke)  
Also in Spanish [https://www.ninds.nih.gov/es/health-information/disorders/lesion-de-la-medula-espinal]
- Spinal cord injury - Symptoms and causes [https://www.mayoclinic.org/diseases-conditions/spinal-cord-injury/symptoms-causes/syc-20377890?p=1] (Mayo Foundation for Medical Education and Research)  
Also in Spanish [https://www.mayoclinic.org/es/diseases-conditions/spinal-cord-injury/symptoms-causes/syc-20377890?p=1]

## Diagnosis and Tests

- How Is Spinal Cord Injury (SCI) Diagnosed? [https://www.nichd.nih.gov/health/topics/spinalinjury/conditioninfo/diagnosed]  
 (Eunice Kennedy Shriver National Institute of Child Health and Human Development)  
Also in Spanish [https://espanol.nichd.nih.gov/salud/temas/spinalinjury/informacion/diagnostica]
- Spine MRI [https://www.radiologyinfo.org/en/info/spinemr] (American College of Radiology; Radiological Society of North America)

## Treatments and Therapies

- Spinal Injury: First Aid [<https://www.mayoclinic.org/first-aid/first-aid-spinal-injury/basics/ART-20056677?p=1>] (Mayo Foundation for Medical Education and Research)  
Also in Spanish [<https://www.mayoclinic.org/es/first-aid/first-aid-spinal-injury/basics/art-20056677?p=1>]
- What Are the Treatments for Spinal Cord Injury (SCI)?  
[<https://www.nichd.nih.gov/health/topics/spinalinjury/conditioninfo/treatments>]  
 (Eunice Kennedy Shriver National Institute of Child Health and Human Development)  
Also in Spanish [<https://espanol.nichd.nih.gov/salud/temas/spinalinjury/informacion/tratamientos>]

## Related Issues

- Bladder Management [<https://sci.washington.edu/info/pamphlets/bladder.asp>]  
(University of Washington, Department of Rehabilitation Medicine)
- Depression and Spinal Cord Injury [[https://sci.washington.edu/info/pamphlets/depression\\_sci.asp](https://sci.washington.edu/info/pamphlets/depression_sci.asp)]  
(University of Washington, Department of Rehabilitation Medicine)
- Dressing with Ease, Style, and Comfort [<https://www.als.org/navigating-als/resources/fyi-dressing-ease-style-and-comfort>]  
(ALS Association)
- Taking Care of Pressure Sores [[https://sci.washington.edu/info/pamphlets/pressure\\_sores.asp](https://sci.washington.edu/info/pamphlets/pressure_sores.asp)]  
(University of Washington, Department of Rehabilitation Medicine)
- Taking Care of Your Bowels -- The Basics [[https://sci.washington.edu/info/pamphlets/bowels\\_1.asp](https://sci.washington.edu/info/pamphlets/bowels_1.asp)]  
(University of Washington, Department of Rehabilitation Medicine)

## Specifics

- Central Cord Syndrome [<https://www.ninds.nih.gov/health-information/disorders/central-cord-syndrome>]  
 (National Institute of Neurological Disorders and Stroke)
- Central Pain Syndrome [<https://www.ninds.nih.gov/health-information/disorders/central-pain-syndrome>]  
 (National Institute of Neurological Disorders and Stroke)
- Spinal Cord Infarction [<https://www.ninds.nih.gov/health-information/disorders/spinal-cord-infarction>]  
 (National Institute of Neurological Disorders and Stroke)

## Videos and Tutorials

- Preventing Bedsores (Pressure Ulcers) [<https://facingdisability.com/expert-topics/preventing-pressure-sores>]  
 (Hill Foundation for Families Living with Disabilities)
- Spinal Cord Injury Basics [<https://facingdisability.com/expert-topics/spinal-cord-injury-101>]  
 (Hill Foundation for Families Living with Disabilities)
- Spinal Cord Injury Rehabilitation Basics [<https://facingdisability.com/expert-topics/the-basics-of-sci-rehabilitation>]  
 (Hill Foundation for Families Living with Disabilities)

## Clinical Trials

- ClinicalTrials.gov: Spinal Cord Injuries [<https://clinicaltrials.gov/search?cond=%22Spinal+Cord+Injuries%22&aggFilters=status:not%20rec>]  
 (National Institutes of Health)

## Journal Articles

References and abstracts from MEDLINE/PubMed (National Library of Medicine)

- Article: Rehabilitation of the lower extremities, standing and walking function in people...  
[<https://www.ncbi.nlm.nih.gov/pubmed/40655926>]

• Article: Randomized, crossover clinical trial on the safety, feasibility, and usability of...  
[<https://www.ncbi.nlm.nih.gov/pubmed/40424335>]

• Article: Closed-loop vagus nerve stimulation aids recovery from spinal cord injury.  
[<https://www.ncbi.nlm.nih.gov/pubmed/40399668>]

• Spinal Cord Injuries -- see more articles [<https://pubmed.ncbi.nlm.nih.gov/?term=%22Spinal+Cord+Injuries%22%5Bmajr%3Aexp%5D+AND+humans%5Bmh%5D+AND+english%5Bla%5D+AND-%22last+1+Year%22+%5Bdat%5D+AND+%28patient+education+handout%5Bpt%5D+OR+guideline%5Bpt%5D+OR+clinical+trial%5Bpt%5D%29++NOT+%28letter%5Bpt%5D+OR+case+reports%5Bpt%5D+OR+editorial%5Bpt%5D+OR+comment%5Bpt%5D%29+AND+free+full+text%5Bsb%5D+>]

## Reference Desk

- Brain Basics: The Life and Death of a Neuron [<https://www.ninds.nih.gov/health-information/public-education/brain-basics/brain-basics-life-and-death-neuron>]  (National Institute of Neurological Disorders and Stroke)
- Central Nervous System: The Brain and Spinal Cord [<https://kidshealth.org/en/parents/central-nervous-system.html>] (Nemours Foundation)  
Also in Spanish [<https://kidshealth.org/es/parents/central-nervous-system.html>]

## Find an Expert

- Find a Physical Medicine & Rehabilitation Physician [[https://members.aapmr.org/AAPMR/AAPMR\\_FINDER.aspx](https://members.aapmr.org/AAPMR/AAPMR_FINDER.aspx)] (American Academy of Physical Medicine and Rehabilitation)
- National Institute of Neurological Disorders and Stroke [<https://www.ninds.nih.gov/>] 

## Children

- Spinal Cord Injuries (For Parents) [<https://kidshealth.org/en/parents/spinal-cord-injuries.html>] (Nemours Foundation)
- Spinal Cord Injury [<https://girlshealth.gov/disability/types/spinal.html>]  
(Department of Health and Human Services, Office on Women's Health)

## Patient Handouts

- Daily bowel care program [<https://medlineplus.gov/ency/patientinstructions/000133.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000133.htm>]
- Self catheterization - female [<https://medlineplus.gov/ency/patientinstructions/000144.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000144.htm>]
- Self catheterization - male [<https://medlineplus.gov/ency/patientinstructions/000143.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000143.htm>]
- Spinal cord stimulation [<https://medlineplus.gov/ency/article/007560.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/007560.htm>]
- Spinal cord trauma [<https://medlineplus.gov/ency/article/001066.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/001066.htm>]
- Spinal injury [<https://medlineplus.gov/ency/article/000029.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/article/000029.htm>]
- Suprapubic catheter care [<https://medlineplus.gov/ency/patientinstructions/000145.htm>] (Medical Encyclopedia)  
Also in Spanish [<https://medlineplus.gov/spanish/ency/patientinstructions/000145.htm>]



## MEDICAL ENCYCLOPEDIA

Autonomic dysreflexia [<https://medlineplus.gov/ency/article/001431.htm>]

CSF leak [<https://medlineplus.gov/ency/article/001068.htm>]

Daily bowel care program [<https://medlineplus.gov/ency/patientinstructions/000133.htm>]

Indwelling catheter care [<https://medlineplus.gov/ency/patientinstructions/000140.htm>]

Lumbar MRI scan [<https://medlineplus.gov/ency/article/007352.htm>]

Self catheterization - female [<https://medlineplus.gov/ency/patientinstructions/000144.htm>]

Self catheterization - male [<https://medlineplus.gov/ency/patientinstructions/000143.htm>]

Spinal cord stimulation [<https://medlineplus.gov/ency/article/007560.htm>]

Spinal cord trauma [<https://medlineplus.gov/ency/article/001066.htm>]

Spinal injury [<https://medlineplus.gov/ency/article/000029.htm>]

Suprapubic catheter care [<https://medlineplus.gov/ency/patientinstructions/000145.htm>]

Thoracic spine CT scan [<https://medlineplus.gov/ency/article/007442.htm>]

Urinary catheters [<https://medlineplus.gov/ency/article/003981.htm>]

Urine drainage bags [<https://medlineplus.gov/ency/patientinstructions/000142.htm>]

## Related Health Topics

Paralysis [<https://medlineplus.gov/paralysis.html>]

## National Institutes of Health

The primary NIH organization for research on *Spinal Cord Injuries* is the National Institute of Neurological Disorders and Stroke [<http://www.ninds.nih.gov/>]

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