

RCS 6080  
Medical and Psychosocial Aspects of  
Rehabilitation Counseling

Spinal Cord Injury

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Spinal Cord Injury

- Epidemiology
  - 30-40 million per year
  - 10,000 new cases per year
- Etiology
  - Motor vehicle accident: 44.5%
  - Falls: 18.1%
  - Violence: 16.6% (and increasing)

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Spinal Cord Injury

- Classification
  - Paraplegia/Tetraplegia
  - ASIA Impairment Scale
  - ASIA Motor/Sensory
  - FIM – functional limitations
- Acute Care Management
  - Immediate spinal immobilization
  - Methylprednisolone within 8 hours of injury

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## Spinal Cord Injury

- Economic Consequences
  - Between \$7.3 billion and \$8.3 billion per year
  - A person with a high cervical injury at age 25 incurs lifetime costs of more than \$3 million
- Rehabilitation Treatment
  - Systematic, intensive, coordinated team approach

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## Spinal Cord Injury

- Potential Complications
  - Deep venous thrombosis (47-100%)
  - Pulmonary embolism (3-15%)
  - Pressure ulcers (25% annual incidence)
  - Pneumonia
  - Autonomic dysreflexia (usually above T6)
  - Spasticity (78%) and Spasms (95%)
  - Heterotopic ossification (16-53%)
  - Gastrointestinal complications (e.g., impactions – 33%)

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## Spinal Cord Injury

- Potential Complications
  - Urinary tract infections
  - Chronic pain (69%, severe 33%)
  - Overuse syndrome (35-68%)
  - Post-traumatic syringomyelia (1-5%)

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## Spinal Cord Injury

- Capabilities and Considerations According to Level of Spinal Cord Injury (complete)
  - C1-C3
  - C4
  - C5
  - C6
  - C7
  - T1-T8
  - T9-T12

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## Spinal Cord Injury

- Capabilities and Considerations According to Level of Spinal Cord Injury (complete)
  - L1-L2
  - L3-L5
  - S1-S5

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## Additional Resources and Information from the Web

- American Spinal Cord Injury Association ([www.asia-spinalinjury.org](http://www.asia-spinalinjury.org))
- TIRR Spinal Cord Injury Research Program ([www.tirr.org/research/?page=54](http://www.tirr.org/research/?page=54))
- Spinal Cord Injury Information Network ([www.spinalcord.uab.edu/show.asp?durki=19679](http://www.spinalcord.uab.edu/show.asp?durki=19679))
- American Paraplegia Society ([www.apssci.org](http://www.apssci.org))

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## Additional Resources and Information from the Web

- National Spinal Cord Injury Association ([www.spinalcord.org](http://www.spinalcord.org))
- Christopher & Dana Reeve Paralysis Resource Center ([www.paralysis.org](http://www.paralysis.org))
- Paralyzed Veterans of America ([www.pva.org](http://www.pva.org))
- American Association of Spinal Cord Injury Psychologists and Social Workers ([www.aascipsw.org](http://www.aascipsw.org))

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