

Spinal Cord Injury (SCI)

What is a spinal cord injury?

A Spinal Cord Injury (SCI) is damage to the spinal cord that results in a loss of function, either mobility or feeling. Frequent causes of damage are trauma (car accident, gunshot, falls, etc.) or disease (polio, spina bifida, etc.)

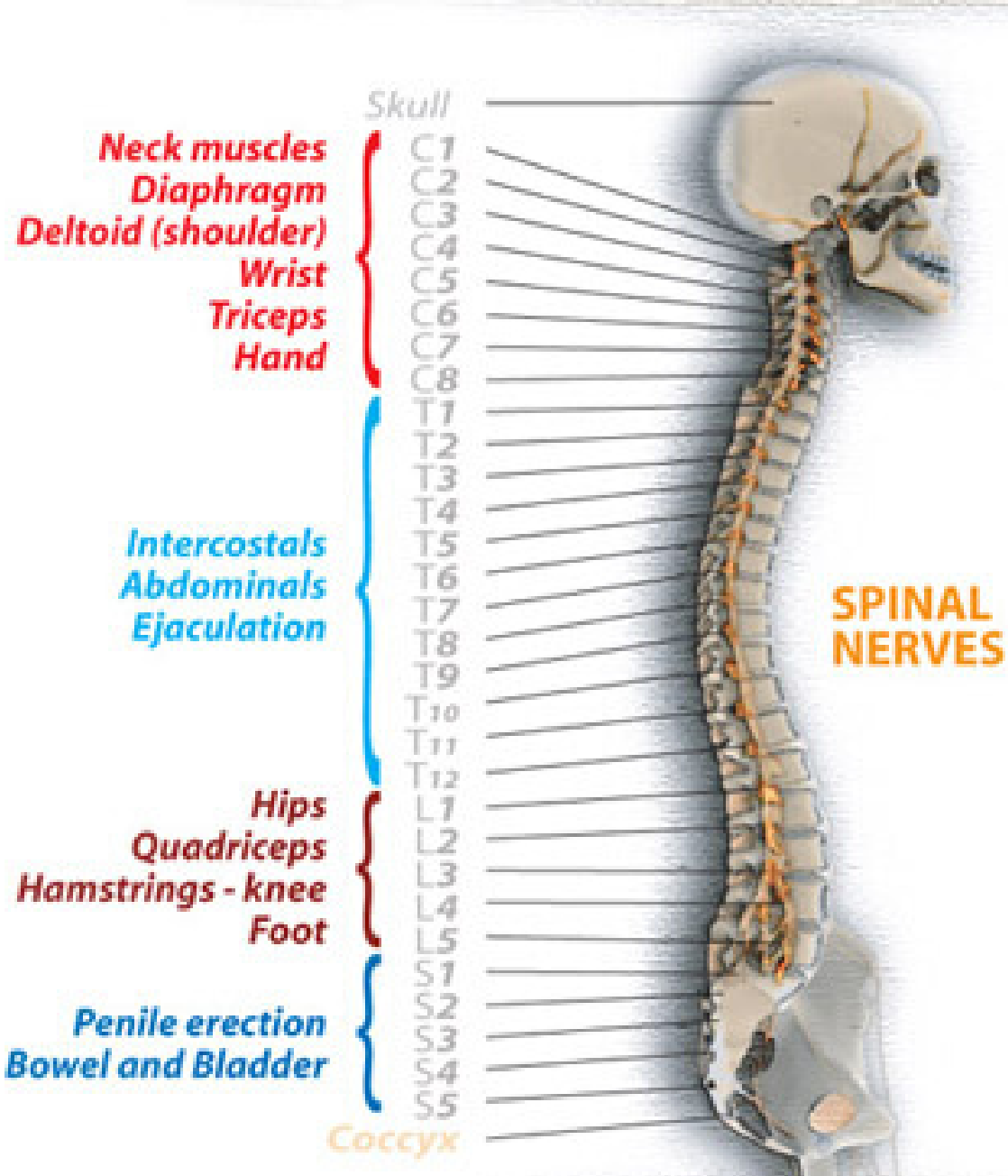
The spinal cord is about 18 inches long and extends from the base of the brain, down the middle of the back, to about the waist. The spinal cord is the major bundle of nerves that carries nerve impulses to and from the brain to the rest of the body. The brain and the spinal cord make up the Central Nervous System.

The spinal cord is surrounded by rings of bone called vertebra, the spinal column. The higher in the spinal column the injury occurs, the more dysfunction a person will experience. The vertebra are named and numbered according to their location – 8 Cervical, 12 Thoracic, 5 Lumbar and 5 Sacral .

What are the effects of an SCI?

The effects of SCI depend on the type of injury and the level of the injury. SCI can be divided into two types of injury – complete and incomplete. A complete injury means that there is no function below the level of the injury; no sensation and no voluntary movement. Both sides of the body are equally affected. An incomplete injury means that there is some functioning below the primary level of the injury. A person with an incomplete injury may be able to move one limb more than another, may be able to feel parts of the body that cannot be moved, or may have more functioning on one side of the body than the other.

Individuals with SCI also experience other changes. For example, they may experience dysfunction of the bowel and bladder. Sexual functioning is frequently affected : men with SCI may have their fertility affected, while women's fertility is generally not affected. Very high injuries (C-1, C-2) can result in a loss of many involuntary functions including the ability to breathe, necessitating breathing aids. Other effects of SCI may include low blood pressure, inability to regulate blood pressure effectively, reduced control of body temperature, inability to sweat below the level of injury, muscle spasms and chronic pain.



What does this mean for the person?

The person may regain some function up to 18 months afterwards, but it is generally a static condition. Most people use wheelchairs (manual or powered) but those with lighter effects may be able to use crutches.

Of course, people who use wheelchairs aren't always in them. They drive, swim, fly planes, ski, and do many activities out of their chair. If you hang around people who use wheelchairs long enough, you may see them sitting in the grass pulling weeds, sitting on your couch, or playing on the floor with children or pets. And of course, people who use wheelchairs don't sleep in them, they sleep in a bed. No one is "wheelchair bound."

People with SCI have the same desires as other people. That includes a desire to work and be productive. Of course, people with disabilities may need some changes to make their workplace more accessible, but oftentimes these accommodations are fairly simple.

