

# ` Quick Review of Model System Research

## Cause of Death Trends Among Persons With Spinal Cord Injury

## in the United States: 1960-2017

### What is the study about?

This study identifies trends in causes of death after spinal cord injury (SCI) to better understand why life expectancy after SCI has not improved in the last three decades.

### What did the study find?

Researchers found that, since 2010, respiratory diseases represent the highest mortality (death) rate for individuals with SCI. This was followed by heart disease, cancer, infective and parasitic diseases, and unintentional injuries. Mortality rates for respiratory diseases, cancer, stroke, urinary diseases, and digestive diseases, at first decreased significantly but remained relatively unchanging since 1980. There has been almost no progress for infective and parasitic diseases.

### Who participated in the study?

The study included individuals with traumatic SCI (N=49,266) enrolled in the SCI Collaborative Survival Study Database between 1973 and 2017. There was a total of 17,249 deaths among the 49,266 individuals.

### How was the study conducted?

This was a cohort study that looked at trends over time within the participant group. The researchers looked at differences in death rates, cause of death, and years post-injury (0-5 years, 6+ years) across demographics (age, sex, education), cause of injury, and neurological data.

### How can people use the results?

Individuals with SCI and their families can use these results to understand the most common causes of death after SCI. Additionally, researchers and clinicians can use these results to further investigate how to decrease mortality rates from respiratory diseases and infections, reverse current trends in diabetes and unintentional injury deaths, and continue to decrease mortality from heart disease and other leading causes.

### Reference

DeVivo, M. J., Chen, Y., & Wen, H. (2021). Cause of death trends among persons with spinal cord injury in the United States: 1960-2017*. Archives of Physical Medicine and Rehabilitation, S0003-9993*(21).[https://pubmed.ncbi.nlm.nih.gov/34800477/]

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