

# A 22-year follow-up of the incidence of traumatic spinal cord injuries in Western Denmark

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## Background

Retrospective population-based epidemiological study.

## Objective

To assess temporal trends in the incidence of traumatic spinal cord injuries (TSCI) and demographic and clinical characteristics of a geographically defined cohort in the period 1990-2011.

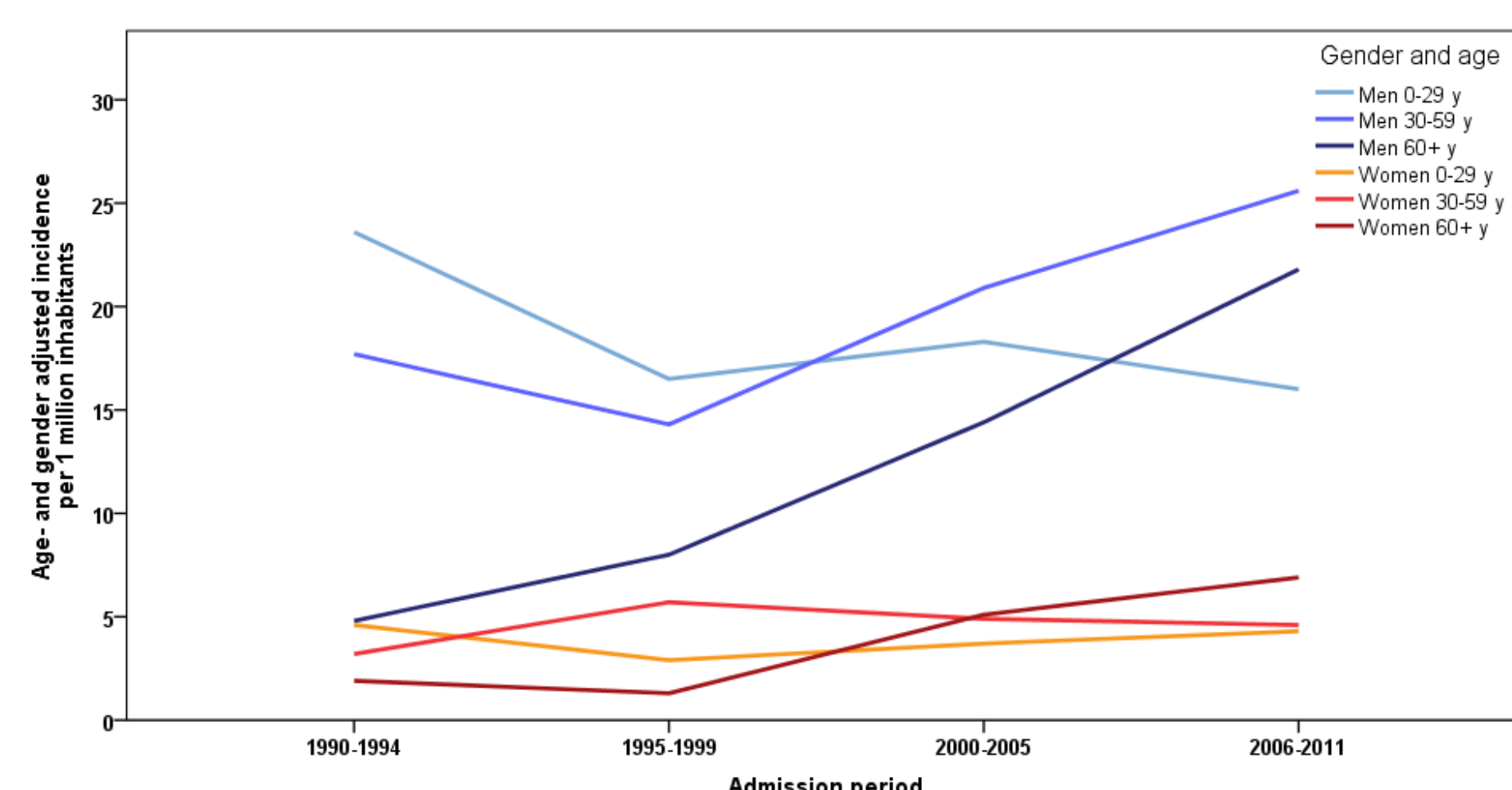


## Patients and Methods

The patients were identified from hospital records. Crude rates and age-adjusted rates were calculated for each year.

## Results

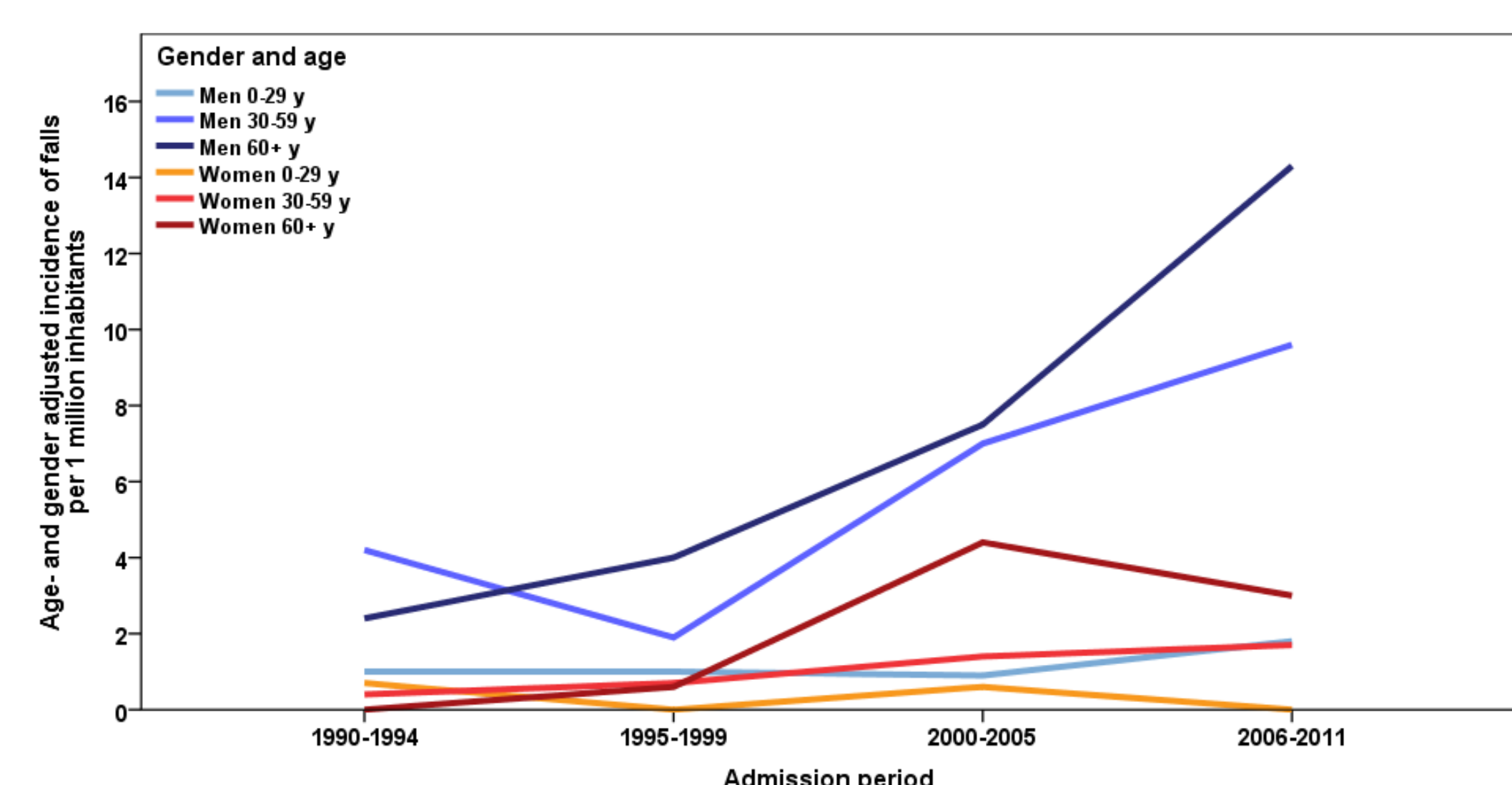
A total of 676 patients were admitted to the Spinal Cord Injury Centre of Western Denmark, 554 men and 122 women.



The incidence of TSCI increased during the observation period among men >30 years. The annual incidence varied between 6.6 (1995) and 14.2 (2009) per million; men 7.5-17.4 and women 0.5-5.4 per million. Mean age on admission for whole period was 38.6 years (men: 37.9 years and women: 41.6 years).

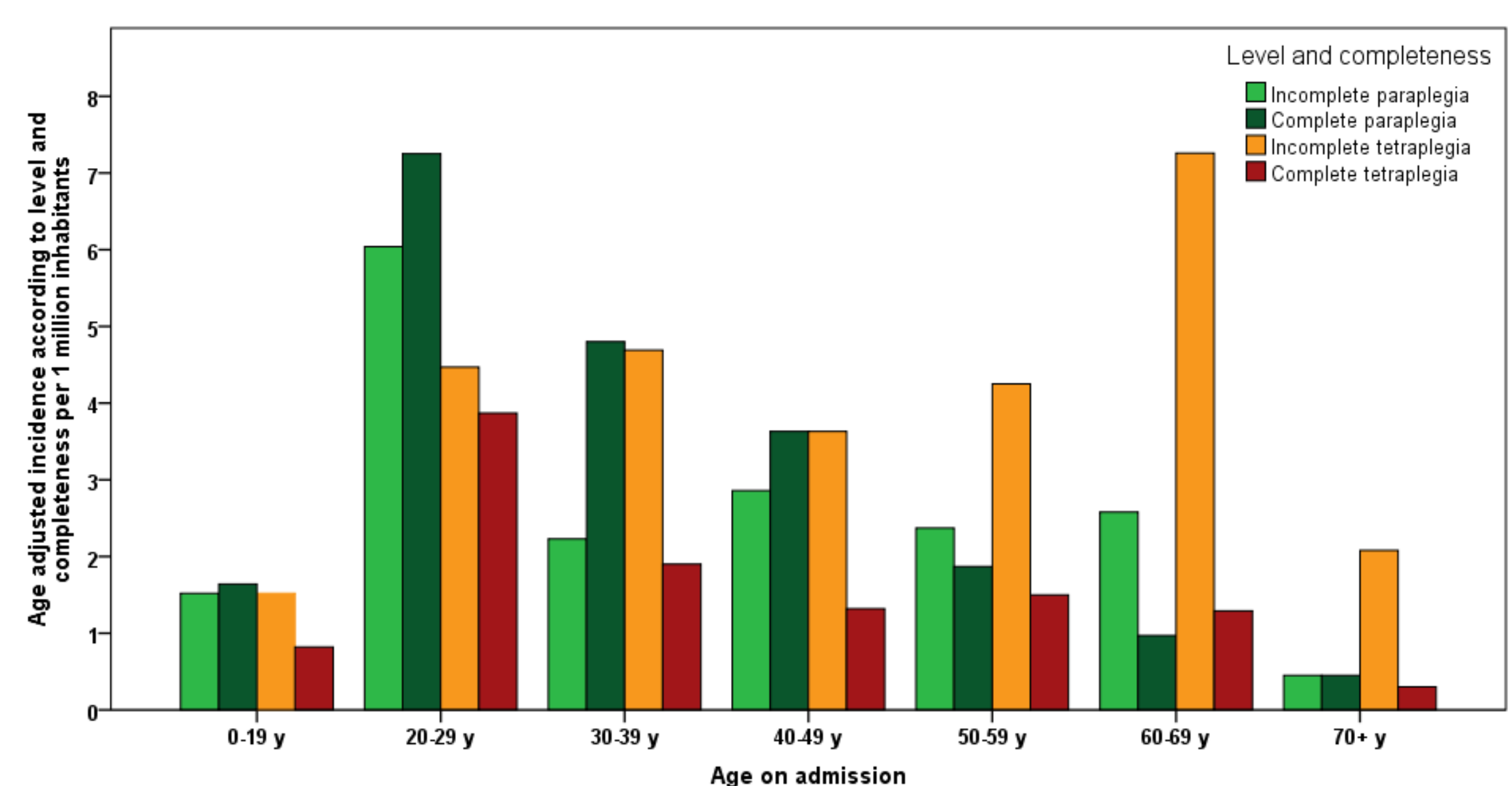
Causes	Men (n=554)	Women (n=122)	Total (n=676)
MVA	51.3 %	48.4 %	50.5 %
Falls	23.5 %	24.6 %	24.0 %
Sport and leisure activities	14.8 %	18.0 %	15.4 %
Other traumatic causes	10.1 %	9.0 %	9.9 %

The incidence of fall-related injuries increased, especially among men >60 years.



The level of lesion was cervical in 51.2 % and thoracolumbar in 48.5 %.

The neurological level of lesion was clinically incomplete in 57.2 % and complete in 41.7 % of the cases. The incidence of incomplete tetraplegia decreased among men <30 years, and increased among men >60 years.



## Conclusion

- The incidence of TSCI has remained stable during the last 22 years..
- Falls and MVA are potentially preventable causes.
- The increasing proportion of older patients with cervical incomplete injuries poses a challenge to the health system.