

Statistics on Stroke 2023

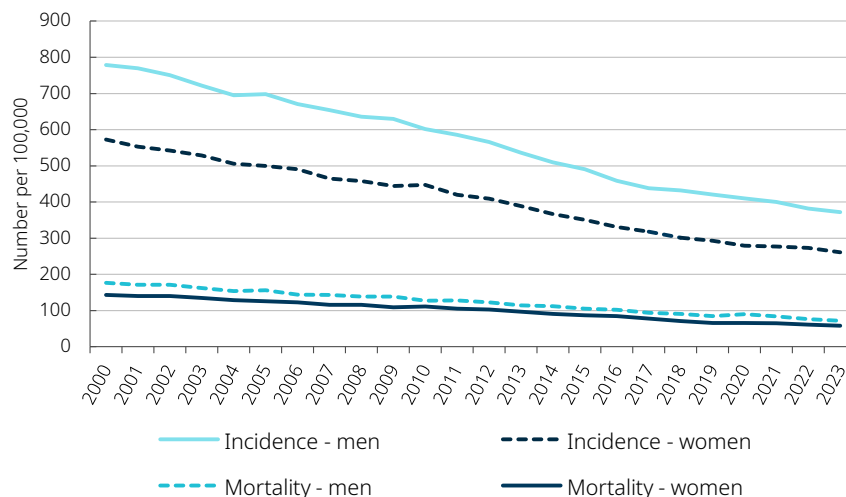
In 2023, approximately 26,400 cases of stroke occurred, affecting around 24,800 individuals, a decrease of roughly 300 people compared to the previous year. The number of stroke-related deaths also declined by about 160 compared to 2022. Throughout the 21st century, both the incidence of stroke and stroke-related mortality have halved, considering population growth and changes in age structure.

Incidence and mortality are decreasing

Statistics on stroke encompass both cerebral infarction and brain haemorrhage. In 2023, nearly 26,400 stroke cases occurred among 24,800 people, which is approximately 300 fewer than in 2022. Throughout the 2000s, both the incidence (the number of stroke cases per 100,000 inhabitants) and the mortality rate (the number of deaths per 100,000 inhabitants) have steadily declined. Figure 1 illustrates the trend for both women and men from 2000 to 2023. The numbers are age-standardised, meaning they have been adjusted to account for changes in the age structure of the population over the years. Since 2000, both incidence and mortality rates have been reduced by half. The reduction has been roughly equal among both men and women.

Figure 1. Number of stroke cases and stroke mortality per 100,000 inhabitants aged 20 years and older, by sex and year, 2000–2023

Age standardised numbers



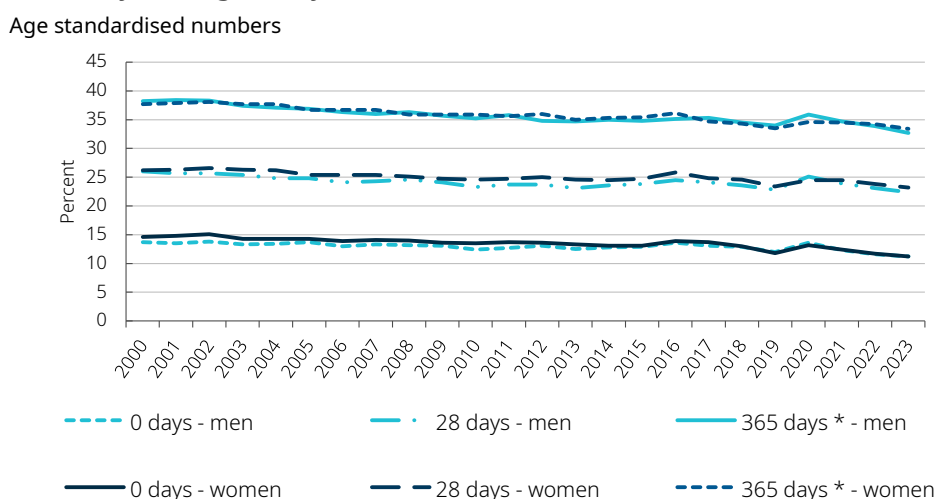
Source: The National Patient Register and the Causes of Death Register, The National Board of Health and Welfare

In 2023, approximately 5,500 people died with stroke being the cause of death, which is a decrease of around 160 from 2022. This statistic includes deaths where stroke was either the underlying cause or mentioned as another cause of death¹ on the death certificate.

Every fourth person with a stroke dies within 28 days

The case fatality rate refers to the proportion of individuals who die, regardless of the cause, within a specified timeframe after experiencing a stroke. These rates have remained relatively stable over recent decades, although a slight decrease can be observed over time. Figure 2 shows the proportion of women and men who died on the same day, within 28 days, and within 365 days of suffering a stroke between 2000 and 2023. The figures are age-standardised and categorised by gender.

Figure 2. Proportion dead within 0, 28 and 365* days of all cases of stroke by sex, aged 20 years and older, 2000–2023



*2023 figures are preliminary

Source: The National Patient Register and the Causes of Death Register, The National Board of Health and Welfare

Among the stroke cases that occurred in 2023, approximately 11 per cent died on the same day, around 23 per cent within 28 days, and 33 per cent within 365 days. The case fatality rate rose slightly in 2020, but has since shown a slight decline. There is only a marginal difference in case fatality rates between men and women. Just as mortality increases with age, so does the case fatality rate. Among individuals aged 85 or older who suffered a

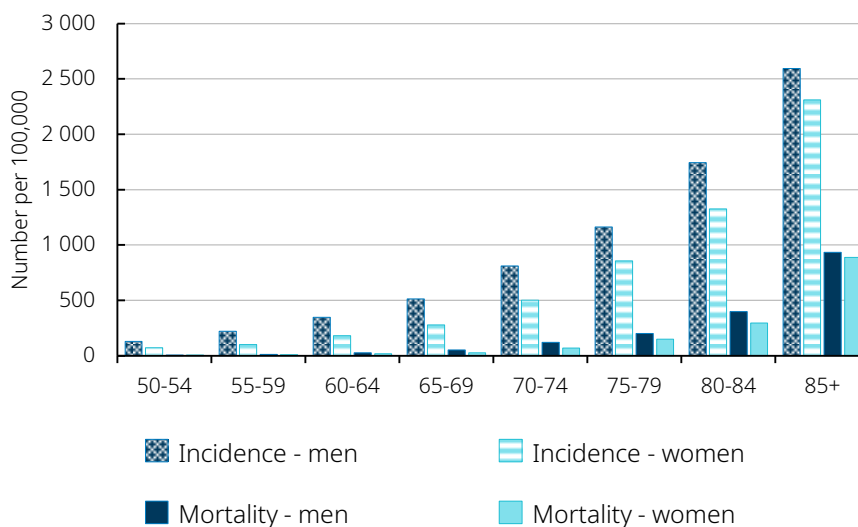
¹ The underlying cause of death is the disease or injury that initiated the chain of disease events that directly led to death, and the circumstances of an accident or act of violence that caused the fatal injury. In addition to the underlying cause of death, other causes of death are often mentioned on the cause of death certificate, such as complications due to the underlying cause of death and contributing causes of death.

stroke in 2023, approximately 22 per cent died on the same day, while around 40 per cent died within 28 days.

Stroke most common among the elderly

Figure 3 illustrates the incidence and mortality rates for both women and men across different age groups in 2023. Stroke occurs across all ages but is significantly more common among older individuals. Both the number of stroke cases and deaths per 100,000 inhabitants increase markedly with age.

Figure 3. Number of stroke cases and stroke mortality per 100,000 inhabitants, by sex and age, 2023



Source: The National Patient Register and the Causes of Death Register, The National Board of Health and Welfare

Slightly less than 4 per cent of the cases that occurred in 2023 involved people younger than 50 years, which translates to just over 1,000 people under this age suffering a stroke. Only 1 per cent of all stroke-related deaths were among those younger than 50, amounting to about 60 individuals. Three out of four people who suffered a stroke in 2023 were aged 70 or older, and of those who died from a stroke, nine out of ten were aged 70 or older.

Stroke more common among men

Considering age structure differences, there have been on average 43 per cent more stroke cases per 100,000 inhabitants among men than women over the past five years. The disparity between the sexes is slightly less pronounced concerning mortality rates. In the last five years, there have been, on average, 28 per cent more male deaths than female deaths when adjusted for age structure. In absolute terms, slightly fewer men than women died of stroke in 2023. This trend has persisted over the entire time period,

with the exception of 2020, when the number of deaths was roughly equal for both genders. The higher number of female stroke deaths can be attributed to older individuals being more likely to suffer strokes, and the proportion of women is greater among the older segments of the population.

Sources of data

In the stroke statistics, the incidence date from inpatient care is estimated using the admission date in the National Patient Register. In case the patient died without having received treatment at a hospital, the incidence date is estimated using the date of death in the Swedish Cause of Death Register. All events from day 0 to day 27 belong to the same incidental case.

Stroke diseases in the statistics according to ICD-10

- Intracerebral haemorrhage (I61)
- Cerebral infarction (I63)
- Stroke, not specified as haemorrhage or infarction (I64)

Regional statistical areas and area type

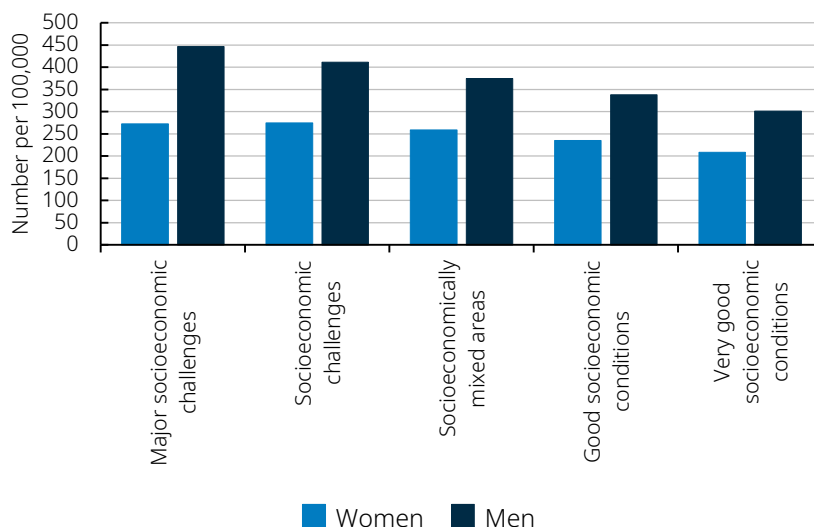
Area type is a measure of socioeconomic conditions. The measure is based on an index that contains the proportion of people with a low economic standard, the proportion of people with pre-secondary education and the proportion with financial assistance and/or the long-term unemployed. In total, there are five area types that range from areas with very large socio-economic challenges (1) to areas with very good socio-economic conditions (5). The area types are categorized based on regional statistical areas, RegSo. RegSo divides Sweden into 3,363 areas that follow the county and municipal borders, and this information is updated annually based on the population as of 31 December.

Higher incidence of stroke in areas with socioeconomic challenges

Figure 4 illustrates the incidence of stroke in 2023 among people living in different area types, categorised by gender. Men are affected to a greater extent than women across all area types. The disparity is particularly pronounced in areas facing major socioeconomic challenges, where men have a notably higher incidence of stroke than women. This gender disparity persists even in areas with very good socioeconomic conditions, where the number of stroke cases among men still exceeds that of women.

Figure 4. Number of stroke cases per 100,000 inhabitants by area type and sex, 2023

Age standardised numbers



Source: The National Patient Register, The National Board of Health and Welfare, Statistics Sweden

Between 2014 and 2023, the number of stroke cases has decreased by approximately 21–29 percent across all area types. Despite this reduction, disparities persist, with stroke rates remaining higher in areas with major socioeconomic challenges, even though these areas have seen a 25 percent reduction—a greater decrease than in areas with very good socioeconomic conditions. These differences can be linked to variations in living conditions, lifestyle factors, and access to healthcare.

More information

You find more tables, diagrams and information here

<https://www.socialstyrelsen.se/en/statistics-and-data/statistics/>

If you want to use our statistical database (in Swedish):

www.socialstyrelsen.se/statistik-och-data/statistik/statistikdatabasen

Contact:

Malin Johansson, statistical inquiries

Telephone: +46 (0)75-247 30 00

E-mail: patientregistret@socialstyrelsen.se

Anastasia Simi, inquiries regarding the subject of stroke

Telephone: +46 (0)75-247 41 49

E-mail: anastasia.simi@socialstyrelsen.se