

# Statistics on Myocardial Infarctions 2023

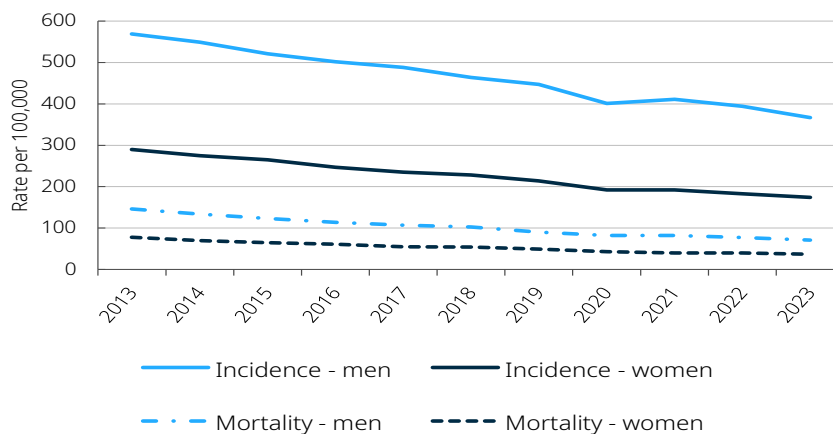
**The number of cases of acute myocardial infarction (AMI) and the number of deaths due to AMI continue to decline. Large differences exist between men and women, as well as among residents of different types of areas, which vary in their levels of socio-economic challenges. 22 percent of those who suffer an AMI die within 28 days.**

## The number of myocardial infarction cases continue to decrease

In 2023, approximately 22,200 cases of acute myocardial infarction (AMI) were reported, corresponding to 274 cases per 100,000 inhabitants. There was a decrease of approximately 1000 cases between 2022 and 2023. Men are twice as likely to be affected than women, both in terms of having and dying from an infarction. Over recent decades, both the incidence rate of AMI (number of cases per 100,000 inhabitants yearly) and the mortality rate (number of deaths with AMI per 100,000 inhabitants yearly) have declined steadily for both men and women. Figure 1 shows the trends for women and men between the years 2013 and 2023. The figures are age standardized, meaning that they are adjusted for differences in age distribution across the population over the years. In 2023, the incidence was the lowest recorded for the entire reported period for both men and women.

**Figure 1. Myocardial infarction incidence and mortality rate per 100,000 inhabitants 20 years of age and older, by sex 2013-2023**

Age standardized figures



Source: National Patient Register and National Cause of Death Register, National Board of Health and Welfare.

About 4,400 people died as a result of myocardial infarction in 2023, equivalent to 55 deaths per 100,000 inhabitants when adjusted for age distribution changes in the population. The age-standardized mortality rate decreased 7 percent compared to 2022 and 51 percent compared to 2013. It declined for both men and women between 2022 and 2023, with an estimated 37 deceased women and 71 deceased men per 100,000 inhabitants in 2023.

### **Sources of data**

The statistics are based on the diagnosis codes for acute myocardial infarction (I21) and subsequent myocardial infarction (I22) in ICD-10. The statistics include persons, 20 years or older, registered as hospitalised in The National Patient Register with these diagnosis codes as well as registered deaths with acute myocardial infarction as the underlying cause of death, as complications as a result of the underlying cause of death or as a contributing cause of death in the National Cause of Death Register. In the AMI statistics, the incidence date 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 National Cause of Death Register. Infarctions occurring within 28 days after the incidence date are included in the same case of acute MI.

## **More common among the elderly**

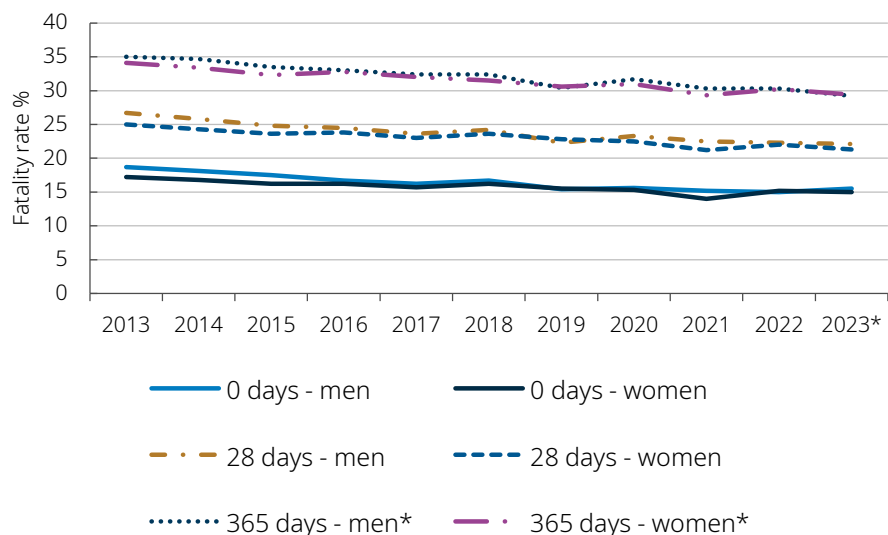
Suffering an acute myocardial infarction is most common among the elderly population. In 2023, 1.3 percent of women aged 85 and over suffered an acute myocardial infarction. The corresponding figure for men was 2.0 percent. Among those aged 80–84, 1.3 percent of men and 0.8 percent of women were affected. Among younger people, only 0.03 percent of men and 0.01 percent of women aged 20–49 were affected in 2023.

Of the people who suffered a myocardial infarction in 2023, 15 percent died on the same day and 22 percent within 28 days. Within a year, 29 percent of those who had suffered an infarction had died. Case fatality rate, i.e. the proportion of people who suffer an acute myocardial infarction and then die regardless of the cause of death, has decreased over time (see figure 2). However, the reduction over the last five years has not been as substantial. The percentage of those who died on the same day as the infarction remains at the same level as in 2019. Historically, men have had a higher mortality rate following acute myocardial infarction than women, but this gap has gradually narrowed and is now largely similar for both sexes. Case fatality rate also rises with increasing age. In 2023, among those aged 85 and older, 37 percent of women and 38 percent of men died within 28 days of an acute

myocardial infarction. In the age group 20–49 years, 8 percent of men and 9 percent of women died within 28 days of experiencing an acute myocardial infarction.

**Figure 2. Myocardial infarction case fatality rate, deaths within 0, 28 and 365 days, 20 years of age and older, by sex 2013–2023**

Age standardized figures.



Source: National Patient Register and National Cause of Death Register, National Board of Health and Welfare. \* Preliminary figures for 2023

## Higher incidence among people who live in areas with major socio-economic challenges

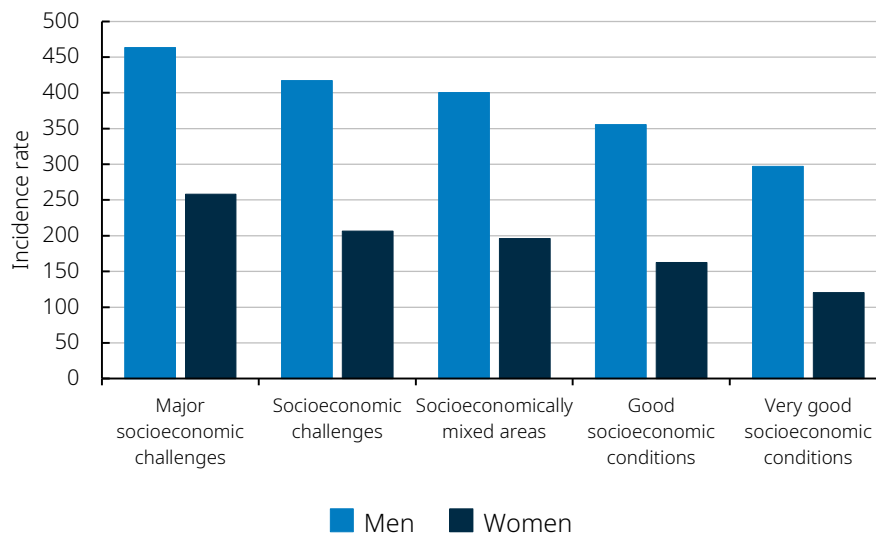
The incidence rate of myocardial infarction is substantially higher in areas with major socio-economic challenges (see figure 3). Men are affected to a greater extent than women in all area types. Between 2013 and 2023, the incidence rate of acute myocardial infarction declined across all area types, with a proportionally similar reduction across these areas.

### 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

**Figure 3. Myocardial infarction incidence rate per 100,000 inhabitants, 20 years of age and older, by sex and area type 2023**

Age standardized figures



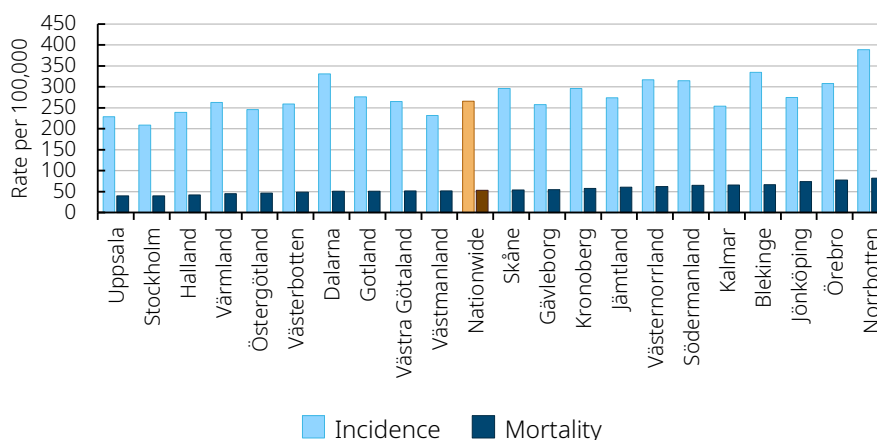
Source: The National Patient Register, The National Board of Health and Welfare and Statistics Sweden

## Differences between counties

The incidence and mortality rate in acute myocardial infarction also vary between different counties in Sweden. In 2023, Norrbotten County reported the highest number of cases of acute myocardial infarction and the highest number of deaths from myocardial infarction per 100,000 inhabitants, adjusted for age distribution (see figure 4). Stockholm County had the lowest age-standardised incidence rate, while both Uppsala and Stockholm counties had the lowest mortality rates, with 40 deaths per 100,000 inhabitants.

**Figure 4. Myocardial infarction incidence and mortality rate per 100,000 inhabitants, 20 years of age and older, by county 2023**

Age standardized figures



Source: National Patient Register and National Cause of Death Register, National Board of Health and Welfare.

### More information

You can find more tables, graphs and information here (select Tillhörande dokument och bilagor): [www.socialstyrelsen.se/statistik-och-data/statistik/alla-statistikamnen/hjartinfarkter](http://www.socialstyrelsen.se/statistik-och-data/statistik/alla-statistikamnen/hjartinfarkter) (in Swedish, but with English list of terms).

If you want to use our statistical database:

[https://sdb.socialstyrelsen.se/if\\_hji/val\\_eng.aspx](https://sdb.socialstyrelsen.se/if_hji/val_eng.aspx)

## Contact information:

Karin Sköldin, questions regarding statistics

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

E-mail: [patientregistret@socialstyrelsen.se](mailto:patientregistret@socialstyrelsen.se)

Bruno Ziegler, questions regarding the subject of myocardial infarction

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

E-mail: [bruno.ziegler@socialstyrelsen.se](mailto:bruno.ziegler@socialstyrelsen.se)