Statistics on Myocardial Infarctions 2021

In the year 2021, about 23,000 people suffered from acute myocardial infarction (AMI) and 4,700 people died with myocardial infarction as an cause of death. The number of cases and mortality increases with age. More men than women suffers and dies from myocardial infarction.

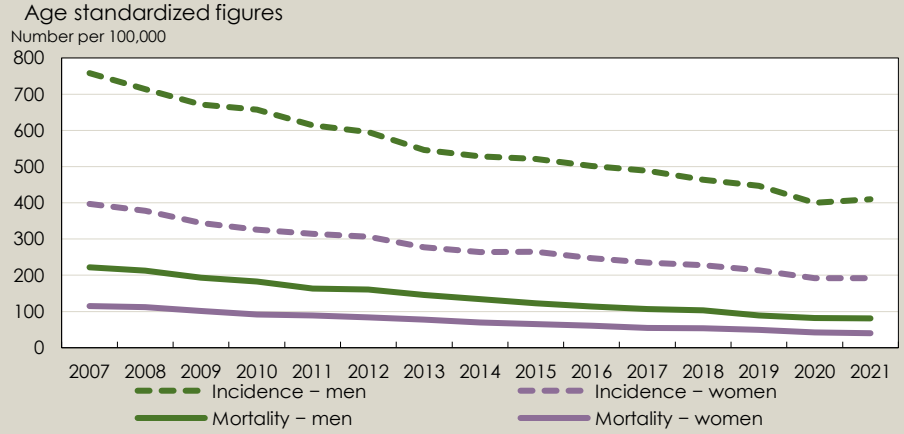
Mortality rate decreases and the incidence increase

For several decades, both incidence, the number of acute myocardial infarctions per 100,000 inhabitants, and mortality, the number of deaths per 100,000 inhabitants, have decreased (figure 1). In 2021, around 23,000 people suffered from myocardial infarction, corresponding to about 298 people per 100,000 inhabitants. In 2021 the incidence increased with 3 percent. The uncertainty that characterizes the data for 2020 as a result of the pandemic means that the change should be interpreted with caution [1]. Around 4,700 people died in myocardial infarction 2021, corresponding to 59 deceased per 100,000 inhabitants.

It is much more common for men to suffer from acute myocardial infarction compared to women, and the increase in incidence in 2021 was only among men. The difference has decreased over time, but in 2021, both the age standardized incidence and the age standardized mortality rate were around twice as high for men than for women.

Figure 1. AMI incidence and mortality rate per 100,000 inhabitants 20 years and older, by gender, 2007−2021

Age standardized figures

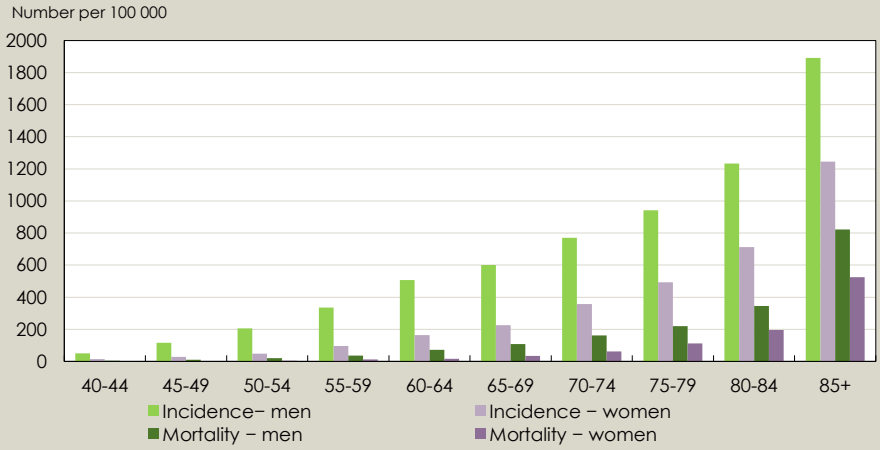


Source: Source: Swedish Patient Register and Swedish Cause of Death Register, National Board of Health and Welfare

Large age differences

Both acute myocardial infarction and mortality in acute myocardial infarction increases with increasing age. Men are more affected regardless of age. Around five percent of the cases of acute myocardial infarction among men in 2021 occurred among males younger than 50 years. The corresponding figure for women was two percent. Figure 2 shows incidence and mortality for different age groups in 2021. Among women, in the age group 85 years and older, acute myocardial infarction was almost six times more common than in the age group 65−69 years of age. For men it was three times more common.

Figure 2. AMI incidence and mortality rate per 100,000 inhabitants by age and gender, 2021



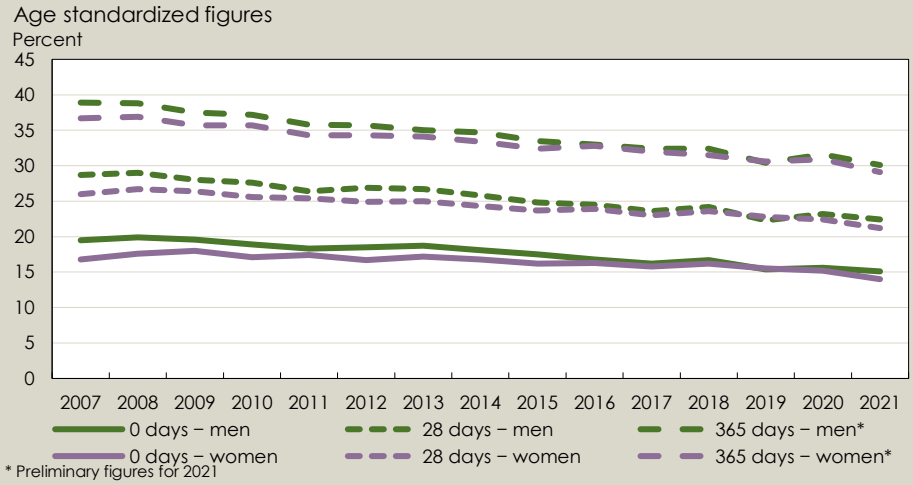
Source: Swedish Patient Register and Swedish Cause of Death Register, National Board of Health and Welfare

One in four persons with acute myocardial infarction dies within 28 days

The case fatality rate, the proportion who die among the cases of acute myocardial infarction has decreased over time (figure 3). The case fatality rate has been higher for men than for women, but the difference between the sexes has declined. In 2021, the age-standardised case fatality rate decreased slightly more for women than for men at both 0, 28 and 365 days, increasing the difference in mortality between women and men.

In 15 percent of the cases of acute myocardial infarctions 2021, the person died the same day and in 22 percent of the cases, the person died within 28 days. Within a year, 30 percent of the men and the women who suffered a myocardial infarction had died, regardless of the cause of death.

Figure 3. AMI case fatality rate, deaths within 0, 28 and 365 days, 20 years of age and older, 2007–2021



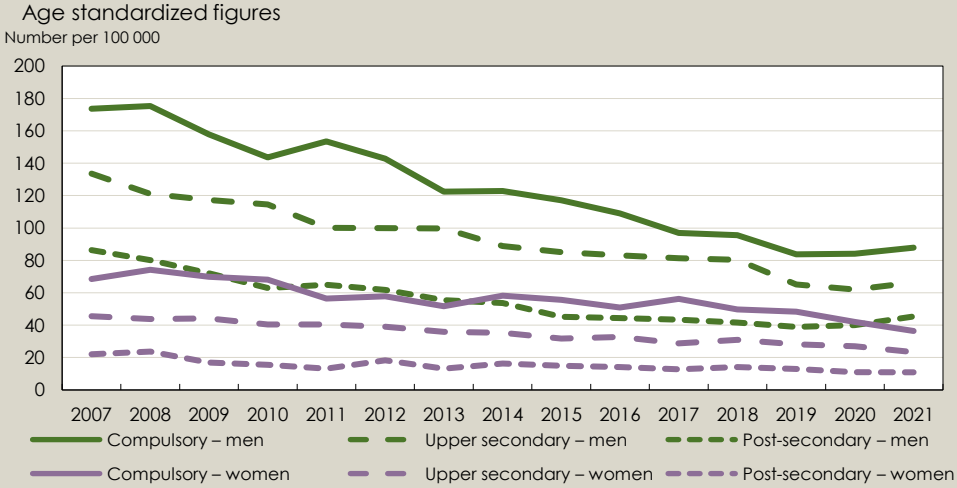
* Preliminary figures for 2021

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

Higher mortality among people with low education

There are clear differences in the acute myocardial infarction mortality between groups with different educational levels. People with compulsory education only have the highest mortality rate.

Figure 4. AMI mortality rate per 100,000 inhabitants, by sex, educational level, 45-74 years of age, 2007-2021



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

In 2021, there was a greater percentage increase in mortality among men with secondary and post-secondary education than among men with only compulsory education. This increase did not appear among women, but among women mortality decreased regardless of education level.

Sources of data
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 Swedish Cause of Death Register. The statistics are based on the diagnosis codes for acute myocardial infarction(I21.x) and subsequent myocardial infarction (I22.x).

Age standardized numbers
Some of the figures are age standardized, which means they are adjusted for differences in the age structure of the population.

More information
You can find more tables, graphs and information in the following Excel file (in Swedish, but with English list of terms):
https://www.socialstyrelsen.se/statistik-och-data/statistik/statistikamnen/hjartinfarkter/
If you want to use our statistical database:
https://sdb.socialstyrelsen.se/if_hji/val_eng.aspx

References

1. Swedeheart/RIKS HIA, (2022). Swedeheart Annual report 2021. https://www.ucr.uu.se/swedeheart/dokument-sh/arsrapporter-sh/1-swedeheart- annual-report-2021-english/viewdocument/3384

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