Statistics on Myocardial Infarctions 2019

In the year 2019, about 24,300 people suffered from acute myocardial infarction (AMI) and 5,200 people died with acute myocardial infarction as an underlying or contributing cause of death. The number of cases and mortality increases with age. More men than women suffers and dies from myocardial infarction.

Incidence and mortality rate decreases

In recent decades, both incidence, the number of myocardial infarctions per 100,000 inhabitants, and mortality, the number of deaths per 100,000 inhabitants, have decreased steadily (figure 1). In 2019, around 24,300 people suffered from acute myocardial infarction, corresponding to about 311 people per 100,000 inhabitants. Around 5,200 people died in 2019, corresponding to 66 deceased per 100,000 inhabitants.

It is much more common for men to suffer from acute myocardial infarction compared to women. The difference has decreased over time, but in 2019, both the age standardized incidence and the age standardized mortality rate were around twice as high for men as for women.

Figure 1. AMI incidence and mortality rate per 100,000 inhabitants, 20 years and older, by gender, 2002–2019

Large age differences

Acute myocardial infarction and mortality in myocardial infarction increases with increasing age, and men are more affected regardless of age. Less than five percent of the cases of acute myocardial infarction among men that occurred in
2019 were 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 2019. 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. For men it was three times more common.

![Figure 2. AMI incidence and mortality rate per 100,000 inhabitants by age and gender, 2019](image)

One in four with 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. By 2019, age-standardized case fatality rate was slightly the same among men compared to women.

In 16 percent of the cases of acute myocardial infarctions 2019, the person died the same day and in 24 percent of the cases, the person died within 28 days. Within a year, 33 percent of the men and the women who suffered a myocardial infarction had died, regardless of the cause of death.
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.

From 2015, the mortality among men with post-secondary education have been lower than among women with compulsory education only (figure 4). The reason is that men with post-secondary education have had a more favorable trend with regard to mortality.
Lower case fatality rate among people with high education

The proportion that dies within 28 days of an acute myocardial infarction follows almost the same pattern as the incidence and the mortality with regard to education (table 1). People with post-secondary education have a lower case fatality than those with upper secondary education and compulsory education only.

**Table 1. AMI case fatality rate, deaths within 28 days, 45-74 years of age, average 2015–2019**

<table>
<thead>
<tr>
<th></th>
<th>Compulsory education</th>
<th>Upper Secondary education</th>
<th>Post-secondary Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men</td>
<td>17.2</td>
<td>15.8</td>
<td>11.7</td>
</tr>
<tr>
<td>Women</td>
<td>19.8</td>
<td>15.0</td>
<td>11.5</td>
</tr>
</tbody>
</table>

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

Starting from this year hospitalizations that began in 2019 but ended in 2020 are now included. Before 2020, only hospitalizations that were started and ended in the same year were included, which meant that the statistics were presented as preliminary. For the measure of lethality in AMI, deaths within 365 days, preliminary data is presented for 2019.

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 https://www.socialstyrelsen.se/statistik-och-data/statistik/statistikamen/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

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