Statistics on Myocardial Infarctions 2016

In year 2016 about 25,700 people suffered from an acute myocardial infarction (AMI). This is a decrease compared to 2015 when more than 26,800 people suffered from AMI. The number of attacks and of mortality in the population increases with age. The differences between men and women decrease over time, but still more men suffer from AMI and die as a result of AMI.

Incidence and mortality rate decreases

In recent decades, both incidence, number of attacks per 100,000 inhabitants, and mortality, number of deaths per 100,000 inhabitants, have decreased steadily. By 2016, almost 27,000 cases of acute myocardial infarction occurred, corresponding to 352 cases per 100,000 inhabitants. Nearly 6 300 people died, corresponding to 82 deceased per 100,000 inhabitants.

It is much more common for men to suffer from acute myocardial infarction compared with women. The difference between the sexes has decreased over time, but in 2016, both the age standardized incidence and the age standardized mortality rate were twice as high for men as for women (figure 1).

**Figure 1. AMI incidence and mortality rate per 100,000 inhabitants 20 years and older, by gender, 2002–2016**

*The number of incident cases of AMI 2016 is preliminary figures. Source: Swedish Patient Register and Swedish Cause of Death Register, National Board of Health and Welfare*
Large age differences

Acute myocardial infarction increases with increasing age. Less than 4 percent of the cases of AMI that occurred in 2016 affected a person younger than 50 years. Figure 2 shows incidence and mortality for different age groups in 2016. In the age group 85 years and older, acute myocardial infarction was close to five times more common than in the age group 65–69 years.

Figure 2. AMI incidence and mortality rate per 100,000 inhabitants by age, 50 years and older, 2016*

* The number of incident cases of AMI 2016 is preliminary figures

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

More heart attacks among people with low education

There are clear differences, both in cases of acute myocardial infarction and mortality, between groups with different educational levels. People with only compulsory education have the highest incidence and mortality per 100,000 inhabitants. Among people with post-secondary education, the occurrence is lowest.
The differences are clear both for women and for men. Until the end of the 21st century, mortality has been higher among men than among women regardless of education level. However, in recent years, mortality for men with post-secondary education has been somewhat lower than for women with compulsory education (figure 3).

**Reduced case fatality rate**

The case fatality rate, the proportion who die among the cases of AMI, has decreased over time (figure 4). The case fatality rate has been higher for men than for women, but the difference between the sexes has declined. By 2016, age-standardized case fatality rate was almost equal for women and men.
Of the acute myocardial infarctions that occurred in 2016, the person died the same day in 17 percent of the cases. In 25 percent of the cases, the person died within 28 days. Within a year, 34 percent of those who suffered from acute myocardial infarction had died, regardless of cause of death.

Higher case fatality rate among people with low education

The proportion that dies within 28 days of an acute myocardial infarction follows the same pattern as incidence and mortality in terms of education. People with the lowest level of education have the highest level of case fatality rate. The higher the education, the lower the case fatality rate (table 1). Among people with post-secondary education, the difference between the sexes is greatest. Women with high education have the lowest AMI case fatality rate.

Table 1. AMI case fatality rate, deaths within 28 days, 45–74 years of age, 2012–2016*

<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>19,2</td>
<td>16,5</td>
<td>13,2</td>
</tr>
<tr>
<td>Women</td>
<td>18,7</td>
<td>16,0</td>
<td>11,9</td>
</tr>
</tbody>
</table>

*Preliminary figures for 2016

Source: Swedish Patient Register and Swedish Cause of Death Register, National Board of Health and Welfare. Swedish Register of Education, Statistics Sweden
Preliminary figures from the Swedish Patient Register for 2016
In the AMI statistics the incidence date is estimated with the start date of the inpatient care in the Swedish Patient Register or the date of death in the Swedish Cause of Death Register. Hospitalizations in the Swedish Patient Register are reported when the patient is discharged. Hospitalizations that began in 2016 and ended in 2017 are therefore not included in this report, which means that the figures for inpatient care 2016 will be adjusted slightly. Hospitalizations with inpatient start date one year and discharge date the year after represents approximately 2 percent of the cases.

More information
You can find more tables, graphs and information in the following Excel file (in Swedish, but with English list of terms):
www.socialstyrelsen.se/publikationer2017/2017-10-24

If you want to use our statistical database:
www.socialstyrelsen.se/statistics/statisticaldatabase/ami

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