

# Epidemiology of cardiovascular diseases in Croatia

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Cardiovascular diseases are a leading public health problem both in the world and in Croatia<sup>1-4</sup>. In recent decades, starting from the second half of the 20th century, there has been an increase in chronic non-communicable diseases (NCD) in almost all countries of the world. The increase was first observed in the developed countries of the world, followed by the low-income countries. Cardiovascular diseases (CVDs) contribute the most to the burden of NCDs, and among them, ischemic heart disease and stroke are the most common causes of mortality and morbidity. They are responsible for 18.6 million deaths annually, and 80% of these deaths occur in middle- and low-income countries. It is estimated that by 2030, this number of deaths will increase to 23 million per year if the current trends are not stopped.

In Croatia, CVDs have been the leading cause of death for decades. In 2021, 23 184 people died from CVDs, which accounts for 37% of all deaths. Analysis by gender shows that it is the cause of death in 41.8% of women and in 32% of men. The leading diagnostic subgroups are ischemic heart disease with 7 773 deaths and cerebrovascular diseases with 5 011 deaths.

It is a well-known fact that most CVDs can be prevented by avoiding risk factors and that is possible to prevent up to 80% of premature deaths. By eliminating risk factors such as smoking, alcohol, unhealthy diet and insufficient physical activity, as well as timely early detection and treatment of hypertension, dyslipidemia and diabetes, cardiovascular health can be significantly improved, and cardiovascular morbidity and mortality can be reduced.

In the last fifteen years, there has been a trend of decreasing mortality from cardiovascular diseases in Croatia, as was previously recorded in developed countries, but CVDs continue to represent the leading cause of mortality and morbidity. Compared to EU countries, Croatia with a standardized mortality rate of 572.8/100.000 is among the countries with higher mortality rates than the EU average of 367.6/100.000.

There are huge inequalities within and between EU countries in CVD prevalence, mortality and adequate cardiovascular care, often due to social and economic reasons. CVD mortality rates are higher in Central and Eastern Europe than in other parts of Europe. For example, the age-standardized death rate from heart disease is 13 times higher in women in Lithuania than in France, and 9 times higher in men.

Although mortality rates from CVDs are decreasing in developed countries, the number of people living with these diseases is increasing, which is related to longer life expectancy and better survival of people with cardiovascular diseases, as well as more effective preventive and therapeutic procedures. All this results in a higher prevalence of CVDs. The COVID-19 pandemic will further contribute to the increase in morbidity and mortality from CVDs and other chronic diseases. Due to demographic changes in terms of population aging, high prevalence of risk factors, better prevention and improvement of treatment, a higher prevalence of stroke and a growing burden can be expected, if comprehensive prevention measures are not taken through a systematic comprehensive program.

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## LITERATURE

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