New cardiovascular disease death rates show stark inequalities between European countries
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Diseases of the heart and blood vessels are the most common cause of death in Europe, resulting in over four million deaths a year (45% of all deaths) according to the latest available figures published today (Wednesday) in the European Heart Journal.

Although deaths from cardiovascular disease (CVD) are declining in most of Europe, there are large inequalities between European countries, with higher death rates seen in Eastern Europe. These high death rates correspond to the lower life expectancy also found in these countries, indicating the impact of CVD on inequalities in longevity throughout Europe.

Eight European countries have CVD death rates of less than 250 per 100,000 women in the population: France, Israel, Spain, Denmark, The Netherlands, Norway, Switzerland and the UK. Six have death rates of over 1,000 per 100,000 women: the former Yugoslav Republic of Macedonia, Ukraine, Republic of Moldova, Kyrgyzstan, Uzbekistan and Turkmenistan (although the last two have data that is less recent than the other countries: 2005 and 1998 respectively).

Similar results were found in men. Three countries (Israel, France and Spain) have CVD death rates of less than 300 per 100,000 men, while Ukraine and Turkmenistan have CVD death rates over 1,500 per 100,000 men (although issues of comparability of data remain for these countries).

The researchers, led by Dr Nick Townsend, senior researcher at the BHF Centre on Population Approaches for Non-Communicable Disease Prevention at the University of Oxford (UK), say that although CVD is predominantly a disease of old age, it still causes over 1.4 million deaths in those aged under 75 years and nearly 700,000 deaths in those aged under 65. Overall, more women than men die from CVD, but among those aged under 75 similar proportions of women (36%) and men (35%) die from CVD, while 30% of men die from CVD under the age of 65 compared to 26% of women.

Disparities in premature deaths were also seen between European countries: Switzerland, Norway, San Marino, Luxembourg, The Netherlands, Israel and France have CVD death rates of less than 80 per 100,000 men under 75 years, while Uzbekistan, Belarus and Turkmenistan have CVD death rates of over 650 per 100,000 men. Among women under 75 years, CVD death rates were less than 35 per
100,000 in France, Switzerland, Spain, Israel, Iceland and Norway, while they were over 350 per 100,000 in Tajikistan, Uzbekistan and Turkmenistan. Similar inequalities were found in the death rates among those aged under 65.

Dr Nick Townsend said: "These figures show the stark reality of the high burden of deaths from cardiovascular disease in Europe, with over four million people dying from these diseases each year, making it the most common cause of death. CVD results in 49% of deaths among women and 41% among men. To put this in context with deaths from other causes, coronary heart disease kills 20% of women in Europe each year, while two per cent die from breast cancer. Obviously, we should continue to raise awareness on breast cancer and strengthen efforts to diagnose and treat it, but we should also recognise the impact that CVD has on the health of women in Europe. I think many people may be surprised to learn how many women in Europe die from CHD, relative to deaths from other conditions."

In their paper, the authors conclude: "Some may point to decreases in CVD mortality as an indication of success for both national and Europe-wide efforts to tackle CVD. However, the inequality of the current burden between European countries, the high mortality burden from CVD in comparison with other NCDs [non-communicable diseases], along with increases in risk factors for CVD, such as obesity, should sound a note of warning to health professionals throughout Europe."

Dr Townsend concluded: "Although deaths from CVD are decreasing overall in Europe, the increases we are seeing in obesity and diabetes will either counter that decrease, leading to a reversal of the favourable trend, or place an extra burden on health services in treating those at high risk of CVD in order to prevent them from developing chronic cardiovascular conditions and to keep them alive into older age."

This study is the authors' third consecutive report on CVD in Europe. Europe is defined as the 53 member states of the World Health Organization (WHO) European region. Any comparisons with death rates in the previous reports should be made with caution as, for the 2015 report, the authors used the new European Standard Population (ESP) based on 2013 population data, which reflect the increase in the elderly population. Previous reports were based on the 1976 ESP.


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