Statistics on deaths remain one of the most widely available and comparable sources of information on health. Registering deaths is compulsory in all European countries, and the data collected through the process of registration can be used by statistical and health authorities to monitor diseases and health status, and to plan health services. In order to compare levels of mortality across countries and over time, the data need to be standardised to remove the effect of differences in age structure.

In 2010 there were large variations in age-standardised mortality rates for all causes of death across European countries. Death rates were lowest in Spain and Italy, at less than 500 deaths per 100 000 population (Figure 1.3.1). The rate in Switzerland was also low. Rates in northern, western and southern European countries were lower than the EU average rate of 663. They were highest in Baltic and central European countries – Bulgaria, Latvia, Lithuania and Romania, for instance, had age-standardised rates almost twice those of the lowest countries at over 900 deaths per 100 000 population. Rates in Estonia, Hungary and the Slovak Republic were above 800.

Male mortality rates were lowest in Malta, Sweden and Italy, and among other countries, in Iceland and Switzerland. They were high in Latvia and Lithuania. Female rates were low in France, Italy and Spain, as well as in Switzerland, and high in Bulgaria and Romania, along with the Former Yugoslav Republic of Macedonia. A significant gender gap exists in mortality rates (Figure 1.3.1). Across all EU member states, the male mortality rate was, on average, 70% higher than the female rate in 2010. But large differences exist among countries – in Estonia, Latvia and Lithuania, male rates were more than twice those of females, whereas in the Denmark, the Netherlands, Sweden and the United Kingdom, they were only around 40% higher.

Lower mortality rates translate into higher life expectancies (see Indicator 1.1 "Life expectancy and healthy life expectancy at birth"). Differences in life expectancy among countries with the lowest and highest mortality rates are in the order of 8 years for females and 12 years for males. Some important causes of mortality that have been influenced through effective public health measures include ischemic heart disease, lung cancer, alcoholrelated mortality, suicide, transport accidents, cervical cancer and AIDS (Cayotte and Buchow, 2009).

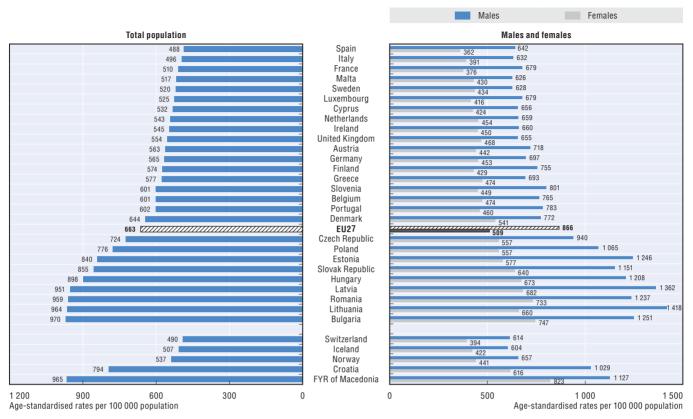
Although mortality rates in central Europe are still comparatively high, significant declines have occurred in a number of these countries since 1995 (Figures 1.3.2 and 1.3.3). Mortality rates in the Czech Republic, Estonia, Hungary, Poland and Slovenia have fallen by more than 25%, a decline that is greater than the EU average. Ireland has also seen a decline of close to 40%, driven largely by reductions in cardiovascular and respiratory diseases mortality, which in turn may be linked to rising living standards and increased expenditure on public and private health services in recent decades. In contrast, declines in the Slovak Republic, Bulgaria and Lithuania have been smaller. Declines in Belgium, Greece and Sweden have also been modest, although these countries began the period with rates that were already low.

The leading causes of death in Europe include cardiovascular diseases (such as heart attack and stroke), and cancer. Deaths from these diseases, plus selected external causes of death (transport accidents and suicide), are examined more closely in the following four indicators.

## Definition and comparability

Mortality rates are based on numbers of deaths registered in a country in a year divided by the size of the corresponding population. The rates have been directly age-standardised to the WHO European standard population to remove variations arising from differences in age structures across countries and over time. The source is the Eurostat Statistics Database.

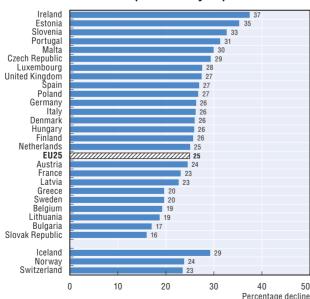
Deaths from all causes are classified to ICD-10 Codes A00-Y89, excluding S00-T98. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of data on causes of death.



## 1.3.1. Mortality rates from all causes of death, 2010 (or nearest year)

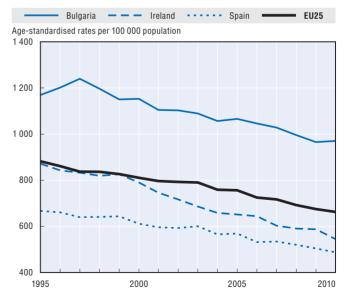
Source: Eurostat Statistics Database. Data are age-standardised to the WHO European standard population.

StatLink ans http://dx.doi.org/10.1787/888932702993



## 1.3.2. Decline in mortality rates from all causes, 1995-2010 (or nearest year)

## 1.3.3. Trends in mortality rates from all causes, selected EU member states, 1995-2010



Source: Eurostat Statistics Database. Data are age-standardised to the WHO European standard population.

StatLink and http://dx.doi.org/10.1787/888932703012

Source: Eurostat Statistics Database. Data are age-standardised to the WHO European standard population.

StatLink 🛲 http://dx.doi.org/10.1787/888932703031