Cancer is the second leading cause of mortality in EU member states after diseases of the circulatory system, accounting for 28% of all deaths in 2010. In 2010, cancer mortality rates were the lowest in Cyprus, Finland and Sweden, as well as Switzerland, at under 150 deaths per 100 000 population. They were the highest in central European countries, including the Czech Republic, Hungary, Poland, the Slovak Republic and Slovenia, at close to or above 200 deaths per 100 000 population.

Cancer mortality rates are higher for men than for women (Figure 1.5.1). In 2010, the gender gap was particularly wide in Estonia, Latvia, Lithuania, Portugal, the Slovak Republic and Spain, with mortality rates among men more than twice those for women. This gap can be explained partly by the greater prevalence of risk factors among men, as well as the lesser availability or use of screening programmes for cancers affecting men, leading to lower survival rates after diagnosis.

Lung cancer still accounts for the greatest number of cancer deaths among men in EU member states, except in Sweden. Lung cancer is also one of the main causes of cancer mortality among women. Smoking is the most important risk factor for lung cancer. In 2010, death rates from lung cancer among men were the highest in Baltic and central European countries (Hungary, Latvia, Lithuania, Poland, as well as Croatia) (Figure 1.5.2). These are all countries where smoking rates among men are relatively high. Death rates from lung cancer among men are low in Nordic countries (Finland, Iceland, Norway and Sweden) as well as in Cyprus, countries with low smoking rates among men (see Indicator 2.5 "Smoking among adults"). Denmark and Iceland, however, have high rates of lung cancer mortality among women.

Breast cancer is the most common form of cancer among women in all European countries (Ferlay *et al.*, 2010). It accounted for around 30% of cancer incidence among women in 2008, and 18% of female cancer deaths in 2010. While there has been an increase in incidence rates of breast cancer over the past decade, death rates have declined or remained stable, indicating increases in survival rates due to earlier diagnosis and better treatment (see Indicator 4.8 "Screening, survival and mortality for breast cancer"). The lowest mortality rates from breast cancer are in Bulgaria, Portugal, Spain and Sweden, as well as Norway (below 20 deaths per 100 000 females), while the highest rates are in Belgium and Denmark (close to 30) (Figure 1.5.3).

Prostate cancer has become the most commonly occurring cancer among men in many European countries, particularly for those aged over 65 years of age, although death rates from prostate cancer remain lower than for lung cancer in all countries except Sweden. The rise in the reported incidence of prostate cancer in many countries during the 1990s and 2000s was largely due to the greater use of prostate-specific antigen (PSA) diagnostic tests. Death rates from prostate cancer in 2010 varied from lows of less than 15 per 100 000 males in Malta and Luxembourg – although annual numbers of deaths are small in these countries – to highs of more than 30 per 100 000 males in a range of central European and Nordic countries (Figure 1.5.4). The causes of prostate cancer are not well understood. Some evidence suggests that environmental and dietary factors might influence the risk of prostate cancer (Institute of Cancer Research, 2012).

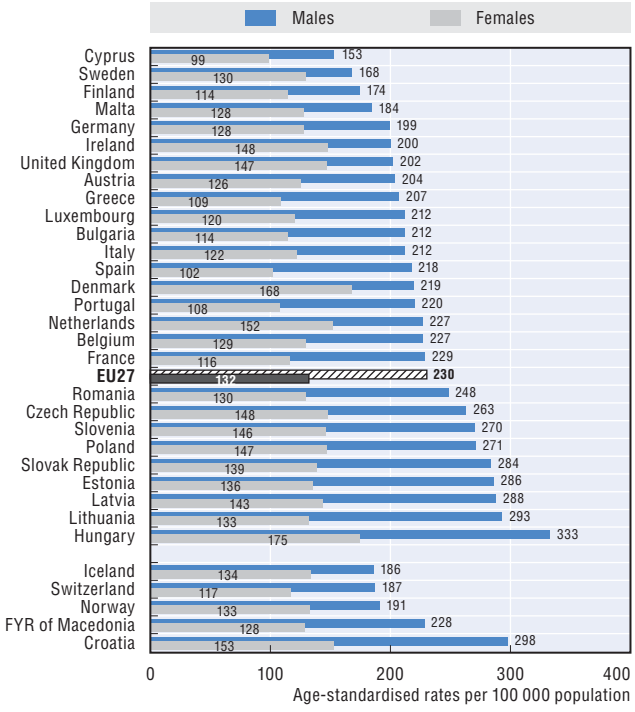
Death rates from all types of cancer for males and females have declined at least slightly in most member states since 1995, although the decline has been more modest than for cardiovascular diseases, explaining why cancer now accounts for a larger share of all deaths. The exceptions to this declining pattern are among Baltic and central European countries – Bulgaria, Latvia, Lithuania, Romania and the Former Yugoslav Republic of Macedonia – where cancer mortality has remained static or increased.

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 cancers are classified to ICD-10 Codes C00-C97, lung cancer to C32-C34, breast cancer to C50 and prostate cancer to C61. The international comparability of cancer mortality data can be affected by differences in medical training and practices as well as in death certification procedures across countries. Mathers *et al.* (2005) have provided a general assessment of the coverage, completeness and reliability of data on causes of death.

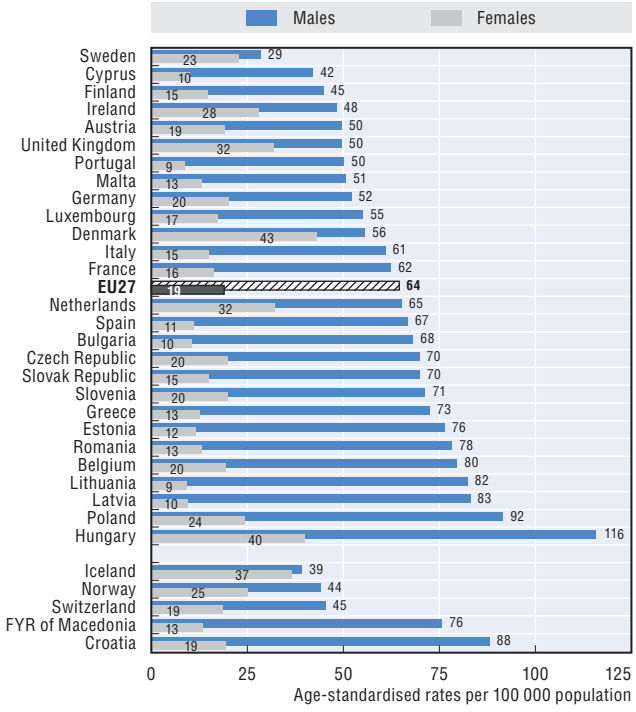
1.5.1. All cancers mortality rates, males and females, 2010 (or nearest year)



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

StatLink http://dx.doi.org/10.1787/888932703126

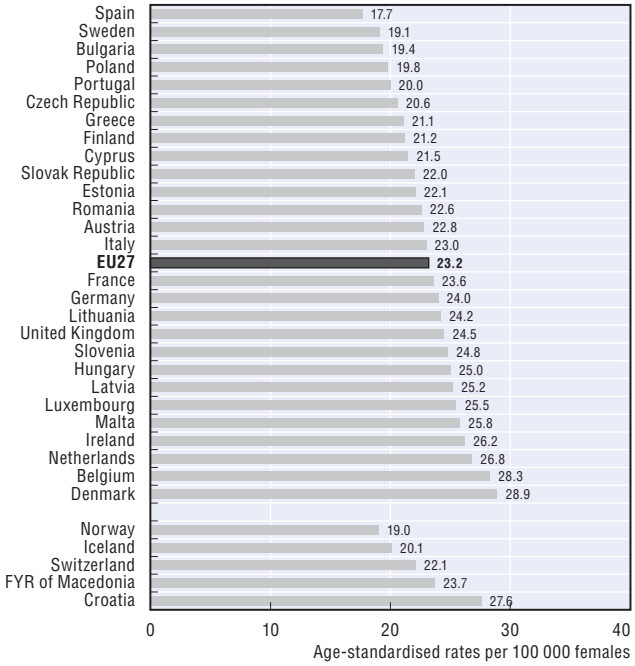
1.5.2. Lung cancer mortality rates, males and females, 2010 (or nearest year)



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

StatLink http://dx.doi.org/10.1787/888932703145

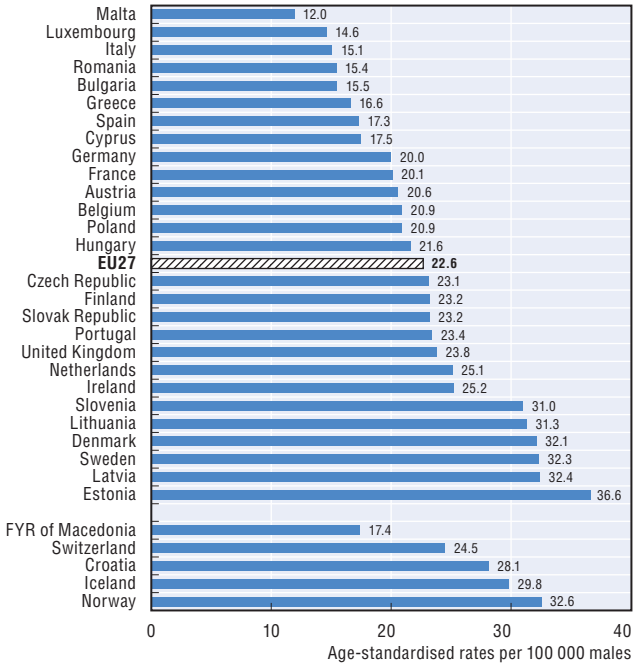
1.5.3. Breast cancer mortality rates, females, 2010 (or nearest year)



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

StatLink http://dx.doi.org/10.1787/888932703164

1.5.4. Prostate cancer mortality rates, males, 2010 (or nearest year)



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

StatLink http://dx.doi.org/10.1787/888932703183