

Cancer incidence and mortality

Cancer was the second leading cause of death in OECD countries after circulatory diseases, accounting for 24% of all deaths in 2019. Leading causes of cancer-related mortality included lung cancer (21%), colorectal cancer (11%), breast cancer (15% among women) and prostate cancer (10% among men). These four represent 44% of all cancers diagnosed in OECD countries. Mortality rates from cancer have fallen in all OECD countries since 2000, although on average the decline has been more modest than for circulatory diseases.

Lung cancer is the main cause of death for both men and women, accounting for 24% of cancer deaths among men and 17% among women (Figure 3.13). Smoking represents the main risk factor for lung cancer. Colorectal cancer is also a major cause of death for both men and women, representing 11% of cancer-related deaths for both sexes. Widespread screening programmes for colorectal cancers for older populations have led to declining incidence of colorectal cancer among older adults. In recent years, however, many OECD countries have observed a rising incidence of colorectal cancer among younger patients. Apart from age and genetic factors, exposure to ultraviolet radiation, a diet high in fat and low in fibre, lack of physical activity, obesity, smoking and alcohol consumption all increase the risk of developing the illness.

Breast cancer is the second most common cause of cancer mortality in women (14.6% of deaths). While incidence rates for breast cancer have increased over the past decade, mortality rates have declined or stabilised – indicative of earlier diagnosis and treatment – and consequently survival rates are higher (see indicator on “Breast cancer care” in Chapter 6). Prostate cancer is the third most common cause of cancer mortality among men, accounting for 10% of all cancer-related deaths.

Cancer incidence rates vary across OECD member countries, from over 400 new cases per 100 000 people in Australia and New Zealand to fewer than 200 cases in Mexico, Chile, Colombia and Costa Rica (Figure 3.14). Cancer incidence is also comparatively low in all OECD partner countries. Cross-country variations in incidence rates, however, reflect differences not only in new cancers occurring each year but also in national cancer screening policies, quality of cancer surveillance and reporting. High rates in Australia and New Zealand are mainly driven by the high incidence of melanoma skin cancer.

Mortality rates from cancer averaged 191 deaths per 100 000 people across OECD countries in 2019 (Figure 3.14). Mortality rates were highest in Hungary, the Slovak Republic and Latvia (above 230) and lowest in Mexico, Turkey and Colombia (fewer than 145).

Earlier diagnosis and treatment significantly increase cancer survival rates. This partly explains why, for example, Australia and New Zealand have below-average mortality rates despite having the highest rates of cancer incidence. In both countries, five-year net survival from common cancers is also above the OECD average (see indicators “Breast cancer care” and “Survival for other major cancers” in Chapter 6).

Cancer incidence rates are higher for men than women in all OECD member and partner countries. Cancer mortality rates are also higher for men except in Mexico, Iceland, Indonesia and India. Greater prevalence of risk factors among men – notably smoking and alcohol consumption – drive much of this gender gap in cancer incidence and mortality.

The COVID-19 pandemic severely disrupted programmes across OECD countries for earlier cancer diagnosis and treatment, with falls in screening for breast and colorectal cancers observed in many countries (see Chapter 2 for further analysis). The long-term impact of the pandemic on cancer care will probably only be seen in the medium term, with the possibility of declines in survival rates associated with pandemic-related delays in diagnosis and treatment.

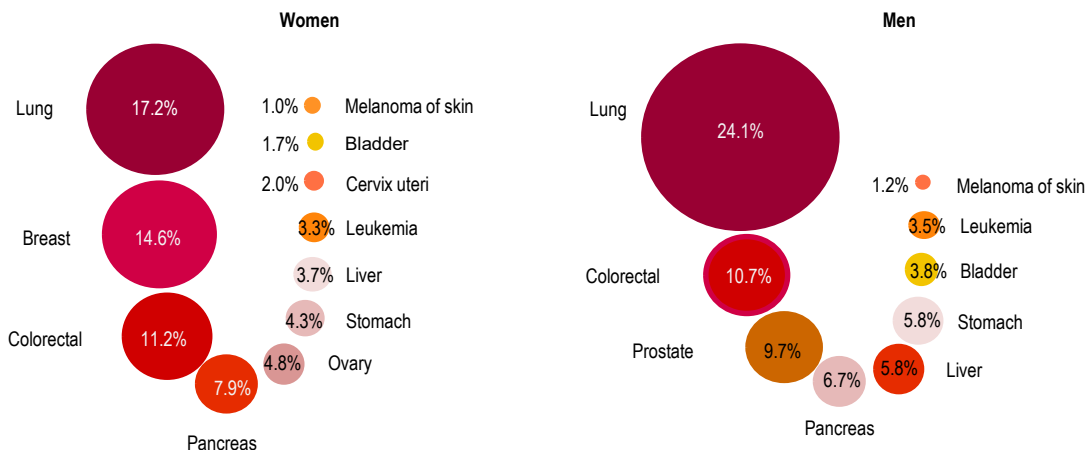
Definition and comparability

Cancer incidence rates are based on numbers of new cases of cancer registered in a country in a year divided by the population. Data include non-melanoma skin cancer and come from the International Agency for Research on Cancer (IARC) (GLOBOCAN, 2018[13]). These data may differ from national estimates owing to differences in methodology. Differences in the quality of cancer surveillance and reporting across countries may further affect the comparability of data. The incidence of all cancers is classified as ICD-10 codes C00-C97. Cancer mortality rates have been age-standardised based on the OECD population to remove variations arising from differences in age structures across countries and over time, while incidence rates were age-standardised based on Segi’s world population.

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 2010 OECD population (available at <http://oe.cd/mortality>). The source is the WHO Mortality Database.

Deaths from all cancers are classified as ICD-10 codes C00-C97. The international comparability of cancer mortality data can be affected by differences in medical training and practices, as well as in death certification across countries.

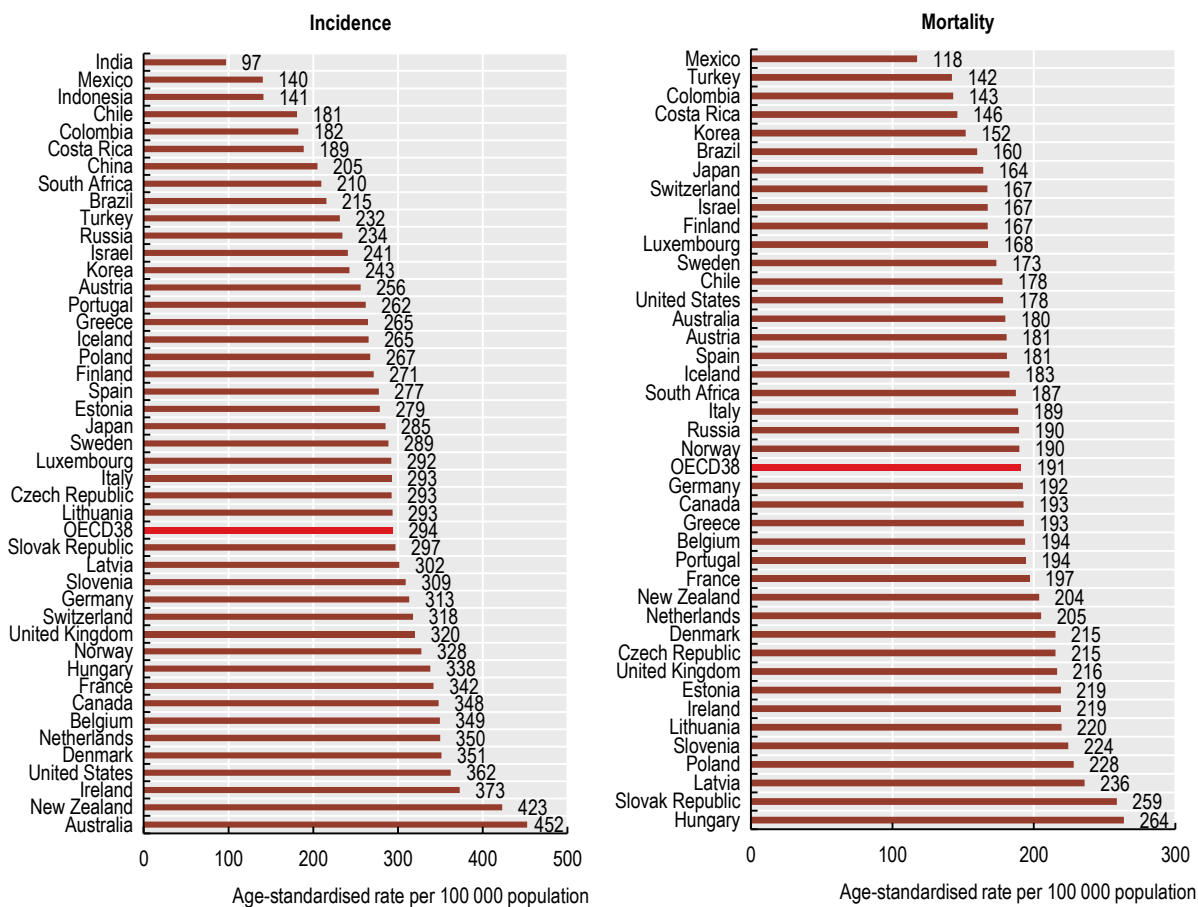
Figure 3.13. Main causes of cancer mortality across OECD countries, by sex, 2019



Source: OECD Health Statistics 2021.

StatLink <https://stat.link/2d4t7v>

Figure 3.14. Cancer incidence (estimated), 2020, and mortality, 2019



Source: IARC GLOBOCAN 2020, OECD Health Statistics 2021.

StatLink <https://stat.link/hkenr4>



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