

Cancer incidence and mortality

Cancer is the second leading cause of mortality in OECD countries after circulatory diseases, accounting for 25% of all deaths in 2017. Further, there was an estimated 7.5 million newly diagnosed cases of cancer across the OECD. Common cancers are lung cancer (21.5%), colorectal cancer (11%), breast cancer (14.5% among women) and prostate cancer (9.4% amongst men). These four represent more than 40% of all cancers diagnosed in OECD countries. Mortality rates from cancer have fallen in all OECD countries since 2000, although across the OECD the decline has been more modest than for circulatory diseases.

Cancer incidence rates vary across OECD countries, from over 400 new cases per 100 000 people in Australia and New Zealand, to around 200 cases or fewer in Mexico and Chile (Figure 3.12). Cancer incidence is also comparatively low in all partner countries. Cross-country variations in incidence rates, though, reflect differences not only in new cancers occurring each year but also differences 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 non-melanoma skin cancer.

Mortality rates from cancer averaged 201 deaths per 100 000 people across the OECD (Figure 3.13). They were highest in Hungary, the Slovak Republic and Slovenia (above 240); lowest in Mexico, Turkey and Korea (165 or less). Among partner countries with comparable data, cancer mortality rates were also comparatively low in Colombia, Costa Rica and Brazil.

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 various indicators on survival following cancer in Chapter 6).

Cancer incidence rates are higher for men than women in all OECD 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.

Lung cancer is the main cause of death for both men and women, with smoking the main risk factor. It accounts for 25% of cancer deaths among men and 17% among women (Figure 3.14). Colorectal cancer is a major cause of death for men and women (second main cause for men and third for women, accounting for about 10% of cancer-related deaths for each sex). Apart from age and genetic factors, 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 (14.5% of deaths). While incidence rates for breast cancer have increased over the past decade, mortality has declined or stabilised, indicative of earlier diagnosis and treatment, and consequently higher survival rates (see indicator on “Breast cancer outcomes” in Chapter 6). Prostate cancer is the third most common cause of cancer mortality among men, accounting for just over 10% of all cancer-related deaths.

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. Differences in the quality of cancer surveillance and reporting across countries may affect the comparability of data. Rates have been age-standardised based on Segi's world population to remove variations arising from differences in age structures across countries and over time. Data come from the International Agency for Research on Cancer (IARC), GLOBOCAN 2018. These data may differ from national estimates due to differences in methodology. The incidence of all cancers is classified to ICD-10 codes C00-C97.

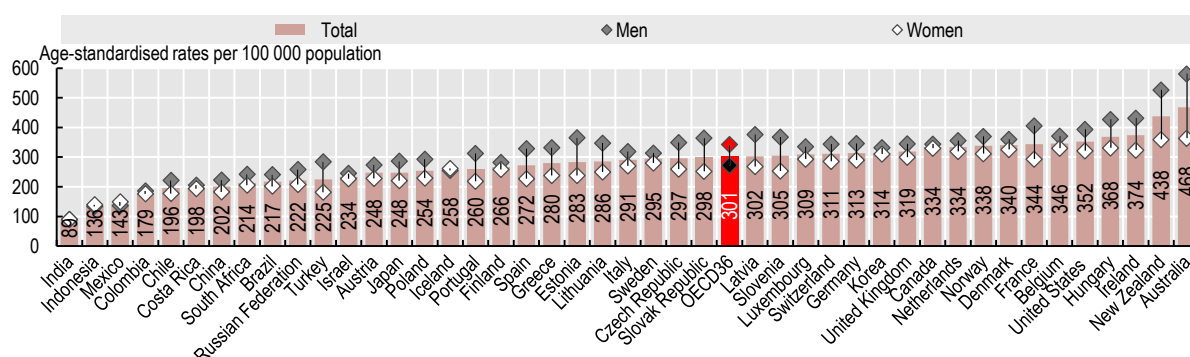
Mortality rates are based on numbers of deaths registered in a country in a year divided by the size of the corresponding population. The rates have been directly age-standardised to the 2010 OECD population (available at <http://oe.cd/mortality>). The source is the WHO Mortality Database.

Deaths from all cancers are classified to 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.

References

- [1] GLOBOCAN (2018), *Cancer Today*, <https://gco.iarc.fr/today/home>.
- [2] OECD (2013), *Cancer Care: Assuring Quality to Improve Survival*, OECD Health Policy Studies, OECD Publishing, Paris, <https://doi.org/10.1787/9789264181052-en>.

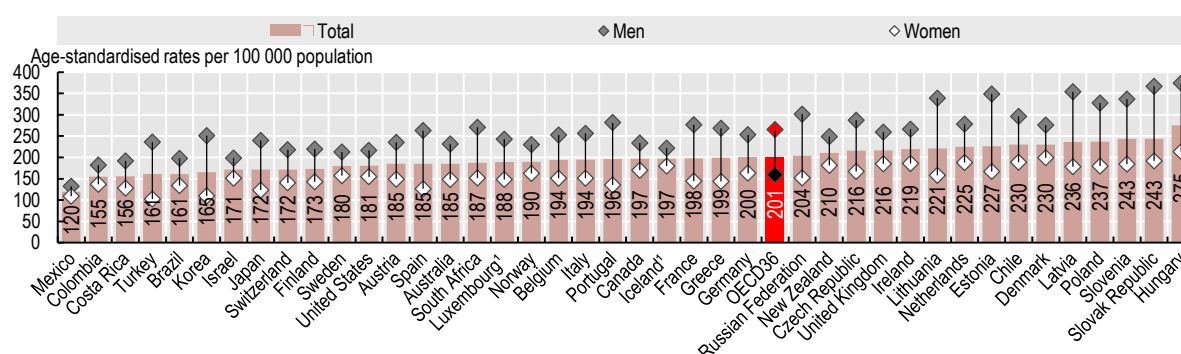
Figure 3.12. All cancer incidence by sex, 2018 (estimated)



Source: International Agency for Research on Cancer (IARC), GLOBOCAN 2018.

StatLink <https://doi.org/10.1787/888934015030>

Figure 3.13. Cancer mortality, by sex, 2017 (or nearest year)

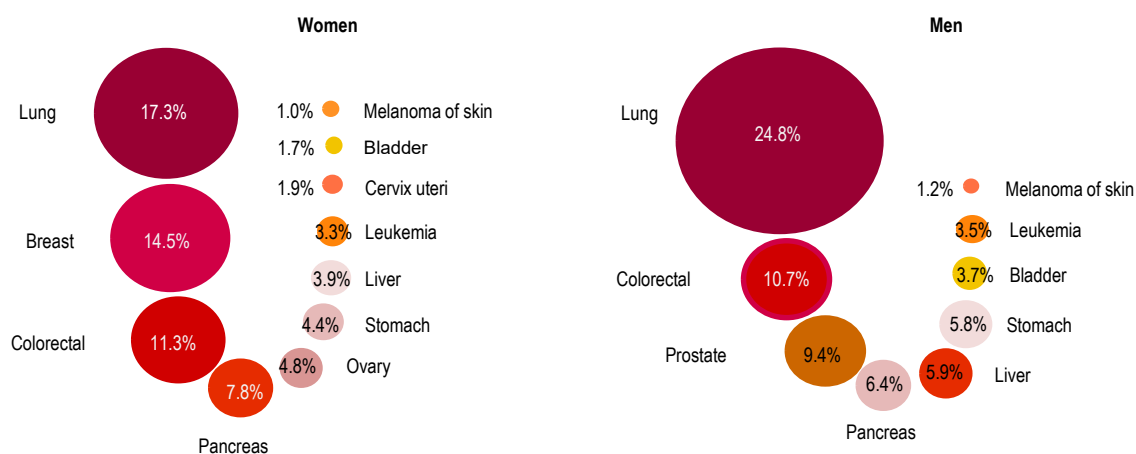


1. Three-year average.

Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934015049>

Figure 3.14. Main causes of cancer mortality across OECD countries, by sex, 2017 (or nearest year)



Note: Proportion of the sums of cancer-related deaths across OECD countries, by sex.

Source: OECD Health Statistics 2019.

StatLink <https://doi.org/10.1787/888934015068>



From:
Health at a Glance 2019
OECD Indicators

Access the complete publication at:
<https://doi.org/10.1787/4dd50c09-en>

Please cite this chapter as:

OECD (2019), “Cancer incidence and mortality”, in *Health at a Glance 2019: OECD Indicators*, OECD Publishing, Paris.

DOI: <https://doi.org/10.1787/ac388762-en>

This work is published under the responsibility of the Secretary-General of the OECD. The opinions expressed and arguments employed herein do not necessarily reflect the official views of OECD member countries.

This document, as well as any data and map included herein, are without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. Extracts from publications may be subject to additional disclaimers, which are set out in the complete version of the publication, available at the link provided.

The use of this work, whether digital or print, is governed by the Terms and Conditions to be found at <http://www.oecd.org/termsandconditions>.