

1. HEALTH STATUS

1.11. Cancer incidence

In 2008, an estimated 5.2 million new cases of cancer were diagnosed in OECD countries, at an average of 261 per 100 000 population. Incidence rates varied substantially among countries, being comparatively high in Denmark, Ireland, Australia, Belgium and New Zealand at over 300 (Figure 1.11.1). In a number of OECD and emerging countries including India, Mexico, Indonesia and Turkey, rates were below 150.

High-income countries tend to have higher cancer incidence rates than middle- or lower-income ones. People in high-income countries are more likely to be overweight, have higher alcohol consumption and be inactive, and each of these factors increase the risk of several common cancers. The high levels of cancer incidence in Denmark are related to these factors, given the above average proportions of Danish women who smoke, and the high consumption of alcohol. However, Denmark and other high income countries also have good records of diagnosing cancers, which contributes to higher rates. In Australia and New Zealand, high rates of melanoma of the skin contribute to the high overall incidence rate, along with above average rates of breast and prostate cancer. The lower incidence of cancer in emerging countries is in part related to the lesser use of screening tests and issues of data quality, but also due to the much smaller impact, to date, of tobacco, poor diet and lack of exercise.

The most commonly diagnosed cancers in OECD countries in 2008 were colorectal (665 000 cases) and lung cancer (663 000 cases), each making up 13% of all new cases. Among men, prostate cancer was the most common cancer (632 000 cases, or 23% of all new male cancers), followed by lung and colorectal. Among women, breast cancer was most common (639 000 cases, or 27% of all new female cancers), and then colorectal and lung cancer.

Relatively high incidence rates of breast cancer are reported in Belgium, France, Israel, the Netherlands and Ireland, with rates close to or exceeding 100 cases per 100 000 females (Figure 1.11.2). A number of countries have rates which are less than half this value, at 50 or below – Estonia, Poland and the Russian Federation, as well as Japan, Korea and a number of emerging countries. Age, family history of the disease, previous diagnosis, increased exposure to hormones, overweight and excessive alcohol drinking all increase the risk of developing breast cancer.

Incidence rates for breast cancer have increased over the past decade in almost all OECD countries for which data are available. These increases are largely due to improvements in diagnosis and the growing number of women who receive mammography screening, leading to a subsequent rise in the detection of new cases. An exception is the

United States, where a recent decline in breast cancer incidence has been linked to a lower use of menopausal hormones, as well as a decline in mammography screening (American Cancer Society, 2010) (see Indicator 5.9, “Screening, survival and mortality for breast cancer”).

Prostate cancer has become the most commonly diagnosed cancer among males in most OECD countries, particularly among men over 65 years of age. The rise in the reported incidence of prostate cancer in many countries since the 1990s is due largely to the greater use of prostate-specific antigen (PSA) diagnostic tests, although the use of these tests has also fluctuated because of their cost and uncertainty about the long-term benefit to patients. In 2008, the incidence of prostate cancer was highest in Ireland, France, Norway and Sweden, with an age-standardised rate of more than 110 cases per 100 000 males (Figure 1.11.3). Among OECD countries, low rates of prostate cancer were reported in Turkey, Greece, Korea and Japan.

The causes of prostate cancer are not well-understood. Age and family history are the main risk factors. Some evidence suggests that a number of dietary and environmental factors might also influence the risk of prostate cancer (American Cancer Society, 2010).

Definition and comparability

Cancer incidence rates are the number of new cancer cases diagnosed in a year per 100 000 population. Rates have been age-standardised to the WHO World Standard Population.

All cancers are defined as cancers coded to ICD-10 C00-C97 (excluding non-melanoma skin cancer C44), colorectal C18-C21, lung C33-C34, female breast C50, cervix C53 and prostate C61.

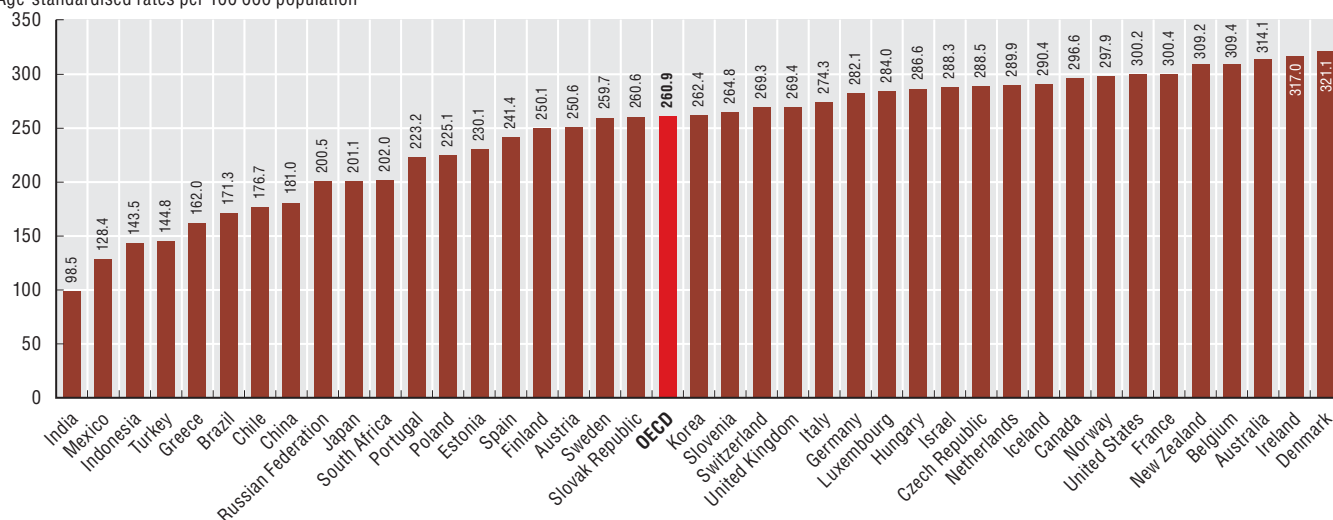
Data are sourced from the International Agency for Research on Cancer (IARC) *GLOBOCAN Database* (Ferlay et al., 2010). Estimates for 2008 are based on cancer incidence rates over recent years.

The international comparability of cancer incidence data can be affected by differences in medical training and practices across countries, as well as the completeness and quality of cancer registry data.

Information on data for Israel: <http://dx.doi.org/10.1787/888932315602>.

1.11.1 All cancers incidence rates, total population, 2008

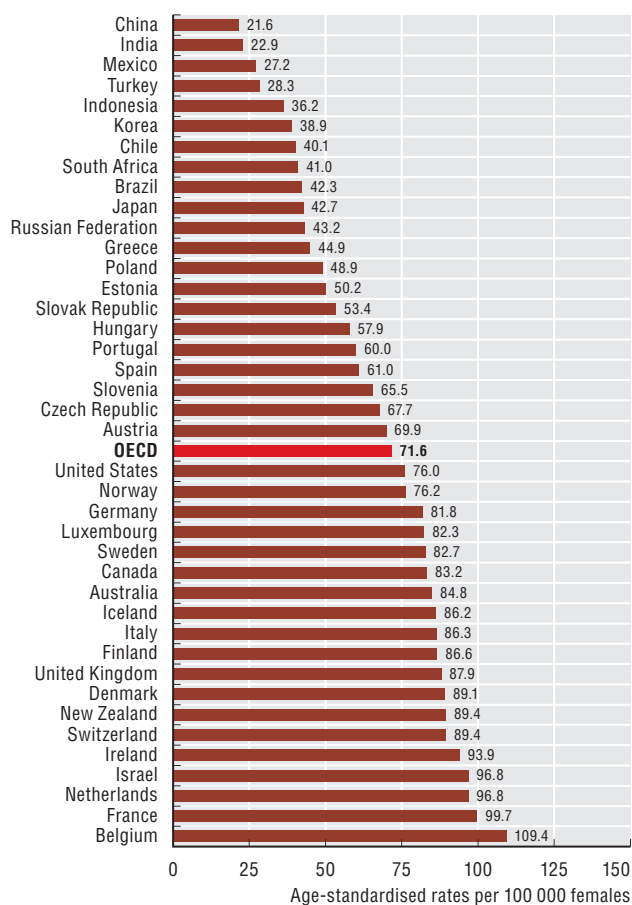
Age-standardised rates per 100 000 population



Source: Ferlay et al. (2010).

StatLink <http://dx.doi.org/10.1787/888932523785>

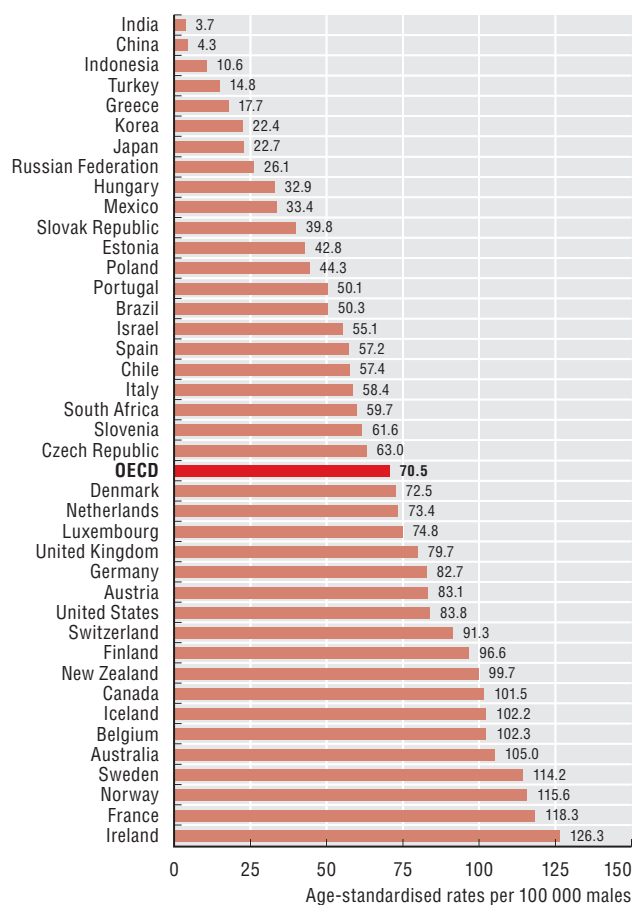
1.11.2 Female breast cancer incidence rates, 2008



Source: Ferlay et al. (2010).

StatLink <http://dx.doi.org/10.1787/888932523804>

1.11.3 Male prostate cancer incidence rates, 2008



Source: Ferlay et al. (2010).

StatLink <http://dx.doi.org/10.1787/888932523823>



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