The burden of breast cancer among women is significant in the Asia-Pacific region, where it is the cancer with the highest incidence and mortality rates. In 2018, approximately 839 000 women were diagnosed with breast cancer and over 286 000 died of the disease in the region (IARC, 2020[1]; see indicator "Mortality from cancer" in Chapter 3). Several factors are known to increase the risk of breast cancer, such as increasing age, genetic predisposition, oestrogen replacement therapy and lifestyle factors including obesity, physical inactivity, nutrition habits and alcohol consumption (World Cancer Research Fund/American Institute for Cancer Research, 2018[19]; González-Jiménez et al., 2014[20]).

In Asia-Pacific, the incidence rate of breast cancer varies remarkably between countries and territories, ranging from below 20 per 100 000 women in Bangladesh, Mongolia and Nepal to over 90 per 100 000 women in Australia and New Zealand in 2018 (Figure 7.7). In many Asia-Pacific countries, the incidence of breast cancer has increased over recent decades (IARC, 2020[21]). Age-standardised annual incidence rates per 100 000 women have risen quickly in countries and territories such as Hong Kong, China, Japan and the Republic of Korea, and the rates now approach 60 per 100 000 women in Japan and the Republic of Korea. Incidence rates were already high in Australia and New Zealand, where they have increased more slowly (IARC, 2020[22]).

In the 1990s, Australia, Japan and New Zealand introduced national breast cancer screening programmes to detect the disease early and reduce mortality (OECD, 2013[23]; IARC, 2016[24]). This has contributed to higher proportions of women being diagnosed at an early stage, and in those countries, over 50% of women with breast cancer were diagnosed at an early stage of disease during 2010-14 (OECD, 2019[17]). The Republic of Korea and Singapore also introduced a national screening programme around 2000, while China introduced screening programmes at the community level in the late 2000s (IARC, 2016[6]). In 2015, Indonesia rolled out its screening programme nationally and the roll-out of breast cancer programmes is ongoing in Brunei Darussalam and Viet Nam (Wahidin, 2018[25]; Pham et al., 2019[26]; Ministry of Health Brunei Darussalam, 2020[27]).

The wide range in age-standardised five-year net survival in Asia-Pacific countries and territories (Figure 7.8; Allemani et al., 2018[31]) suggests that the quality of breast cancer care varies widely in the region. For women diagnosed during 2010-14, age-standardised five-year net survival was highest in high-income countries such as Australia and Japan (89.5% and 89.4%, respectively), whereas in India, Malaysia and Thailand the probability that breast cancer patients survive their cancer for at least five years was less than 70% (Allemani et al., 2018[31]; see indicator definition below). In most Asia-Pacific countries and territories, five-year net survival for women with breast cancer has improved in recent years, reflecting overall improvement in the quality of cancer care. China, India, the Republic of Korea and Thailand in particular have seen a large improvement in five-year net survival since 2000-04.

In 2018, mortality rates from breast cancer varied over nine-fold between countries in the Asia-Pacific region. The rate was lowest in Mongolia at four per 100 000 women and the highest in Fiji at 37 per 100 000 women. The average age-standardised mortality rate was higher in upper-middle, lower-middle and low income countries than in high-income countries (Figure 7.9), although the pattern of incidence rates in the region was opposite.

In recent years, motivated providers and patients in Australia are increasingly using patient-reported outcome measures (PROMs) to help inform difficult clinical decisions based on patients' own assessment of their health status and quality of life during or after treatment, and in order to provide patient-centred care. For instance, outcomes of breast cancer care are measured using the relevant post-operative breast satisfaction scales from the BREAST-Q tool, an internationally validated instrument used to measure breast surgery outcomes reported by patients (Pusic et al., 2009[12]; OECD, 2019[7]). Australia is scaling up efforts to measure and monitor breast cancer PROMs as their value becomes more fully appreciated, and contributes to improved delivery of patient-centred breast cancer care.

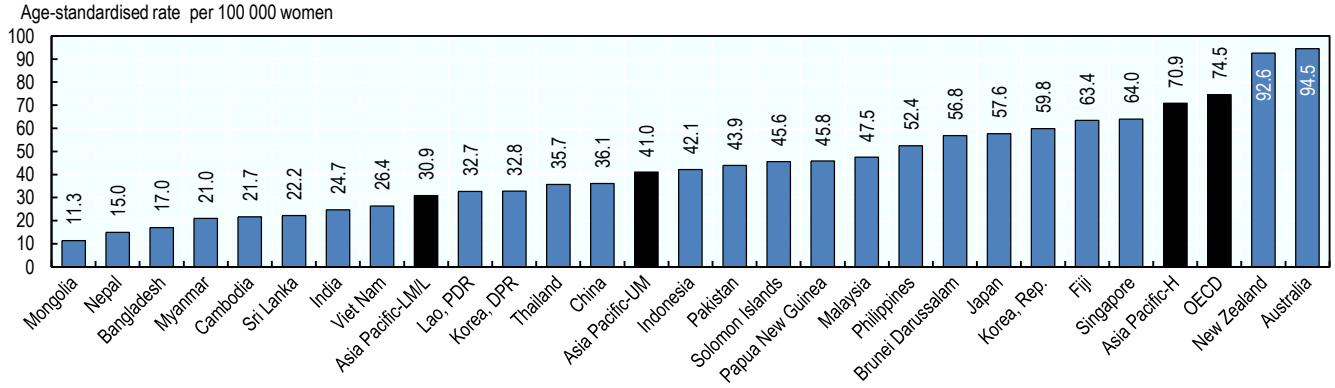
Definition and comparability

Incidence rates are from the Global Cancer Observatory 2020 at the International Agency of Research for Cancer (IARC). The estimation methods are specific to countries and the comparability of national estimates is affected by differences in the coverage, accuracy and timeliness of the data recorded in each country.

Five-year net survival refers to the cumulative probability that cancer patients survive for at least 5 years after diagnosis, after controlling for the risk of death from other causes. Five-year net survival for patients diagnosed during 2000-04 is based on a cohort approach, since all patients have been followed up for at least 5 years. For patients diagnosed during 2010-14, a period approach is used, which allows estimation of 5-year survival although 5 years of follow-up are not available for all patients. Cancer survival estimates are age-standardised with the International Cancer Survival Standard (ICSS) weights. Cancer patient data were provided by national or regional cancer registries. Data collection, quality control and analysis for age-standardised five-year net survival were performed centrally as part of the CONCORD programme for the global surveillance of cancer survival, led by the London School of Hygiene and Tropical Medicine (Allemani et al., 2018[28]). Survival estimates for breast cancer are based on the International Classification of Diseases for Oncology (ICD-O-3 C50.0–C50.6 and C50.8–C50.9).

See indicator "Mortality from cancer" in Chapter 3 for the definition of cancer mortality rates. Incidence and mortality from breast cancer is based on ICD-10 code C50.

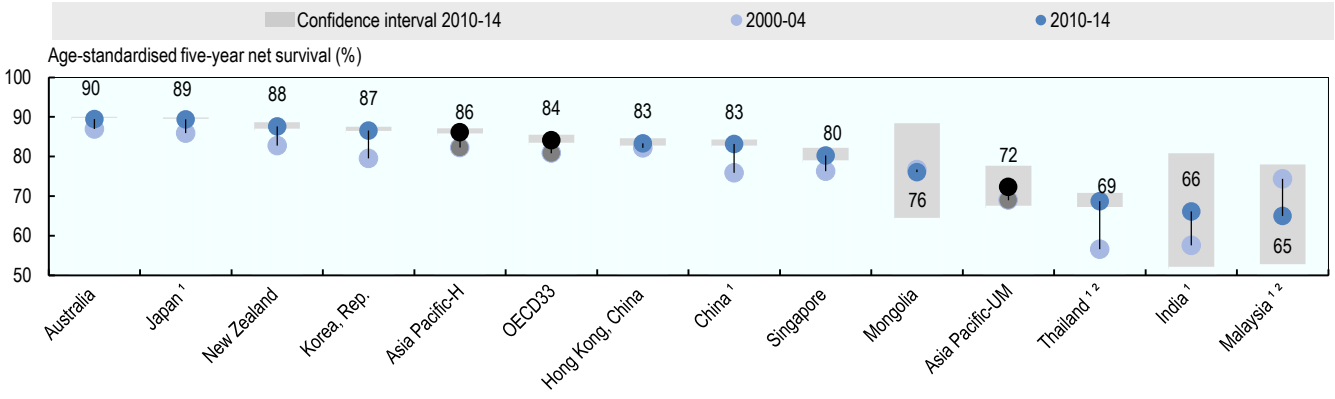
Figure 7.7. **Breast cancer incidence, 2018**



Source: IARC Global Cancer Observatory 2020.

StatLink https://stat.link/hmatkr

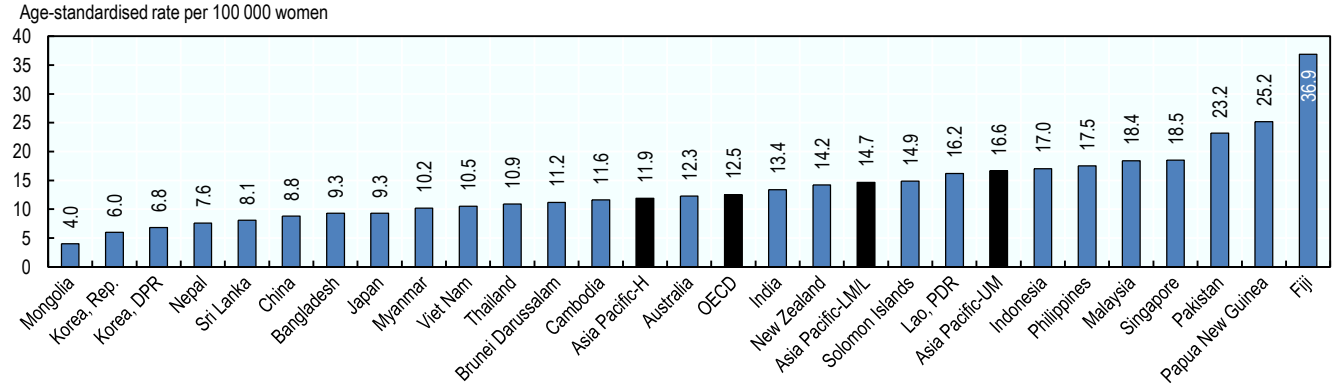
Figure 7.8. **Breast cancer five-year net survival, women diagnosed during 2000-04 and 2010-14**



Note: For all countries, 95% confidence intervals for women diagnosed during 2010-14 are represented by grey areas. For Hong Kong, China; Mongolia; and Malaysia the estimate in light blue is for 2005-09. 1. Data represent coverage of less than 100% of the national population. 2. Survival estimates are considered less reliable. See Allemani et al. (2018) for more information.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink https://stat.link/ik2695

Figure 7.9. **Breast cancer mortality, 2018**



Source: IARC Global Cancer Observatory 2020.

StatLink https://stat.link/9dq8en

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