5.10. Screening, survival and mortality for breast cancer

Breast cancer is the most prevalent form of cancer in women. One in nine women will acquire breast cancer at some point in their life and one in thirty will die from the disease. Risk factors that increase a person's chance of getting this disease include, but are not limited to, age, family history of breast cancer, oestrogen replacement therapy, lifestyle, diet, and alcohol.

Most OECD countries have adopted breast cancer screening programmes as an effective way for detecting the disease early. The periodicity and population target groups vary across countries and are still the subjects of debate. EU guidelines (European Commission, 2006) suggest a desirable target screening rate of at least 75% of eligible women in European countries. Screening rates vary widely across OECD countries in 2011, ranging from less than 10% in Chile to over 80% in Finland, the Netherlands, the United States and Austria (Figure 5.10.1). Some countries that had high screening rates ten years ago experienced some reductions over the past decade, including Finland, the United States, the United Kingdom, Norway, Ireland and Canada. On the other side, Korea, Poland and the Czech Republic showed substantial increases, although they still remain below the OECD average.

Breast cancer survival reflects advances in improved treatments as well as public health interventions to detect the disease early through screening programmes and greater awareness of the disease. The introduction of combined breast conserving surgery with local radiation and neoadjuvant therapy, for example, have increased survival as well as the quality of life of survivors (Mauri et al., 2008). The availability and use of newer and more effective chemotherapy agents for metastatic breast cancer have also been shown to improve survival among women (Chia et al., 2007).

The relative five-year breast cancer survival has improved in many countries in recent periods (Figure 5.10.2), attaining over 80% in all OECD countries except Poland. In part, this may be related to the access of care in Poland where the numbers of cancer care centres and radiotherapy facilities are limited (OECD, 2013e). Five-year survival for breast cancer has increased considerably in central and eastern European countries, where survival has historically been low, as well as in Belgium and Ireland (Verdecchia et al., 2007). Recent studies suggest that some of the differences in cancer survival could be due to variations in the implementation of screening programmes (Rosso et al., 2010). Countries such as Chile, Greece and the Slovak Republic have non-population-based breast cancer screening programmes.

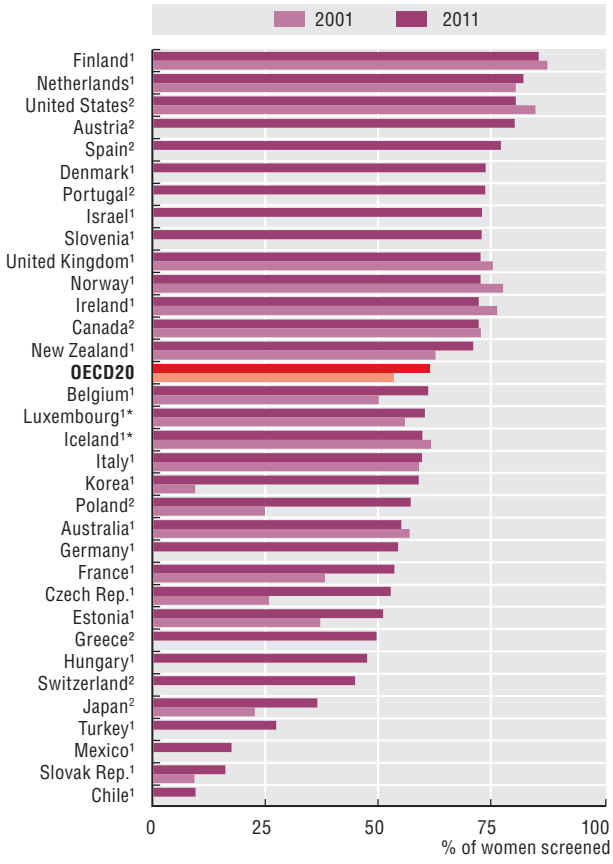
In addition to well organised screening programmes, a recent OECD report on cancer care showed that shorter waiting times and the provision of evidence-based best practice are also associated with improved survival in OECD countries. Developing comprehensive cancer control plans, setting national targets with a specified time frame, having guidelines, using case management and having mechanisms for monitoring and quality assurance were found to be associated with improved cancer survival (OECD, 2013e).

Mortality rates have declined in most OECD countries over the past decade (Figure 5.10.3). The reduction in mortality rates are a reflection of improvements in early detection and treatment of breast cancer, and are also influenced by the incidence of the disease. Improvements were substantial in Norway, Ireland and the Czech Republic. Denmark also reported a considerable decline over the last decade, but its mortality rate was still the highest in 2011. In Korea and Japan, the mortality rate from breast cancer increased over the decade, although it remains the lowest among OECD countries.

Definition and comparability

Screening rates and survival are defined in Indicator 5.9 "Screening, survival and mortality for cervical cancer". See Indicator 1.4 "Mortality from cancer" for definition, source and methodology underlying cancer mortality rates.

5.10.1. Mammography screening in women aged 50- 69, 2001 to 2011 (or nearest year)



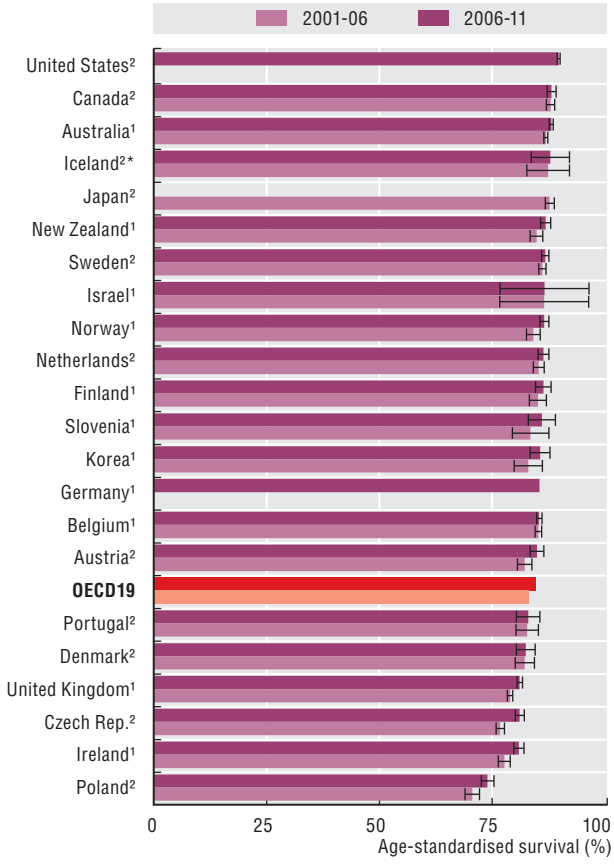
1. Programme.
2. Survey.

* Three-year average.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918206

5.10.2. Breast cancer five-year relative survival, 2001-06 and 2006-11 (or nearest period)



Note: 95% confidence intervals represented by |—|.

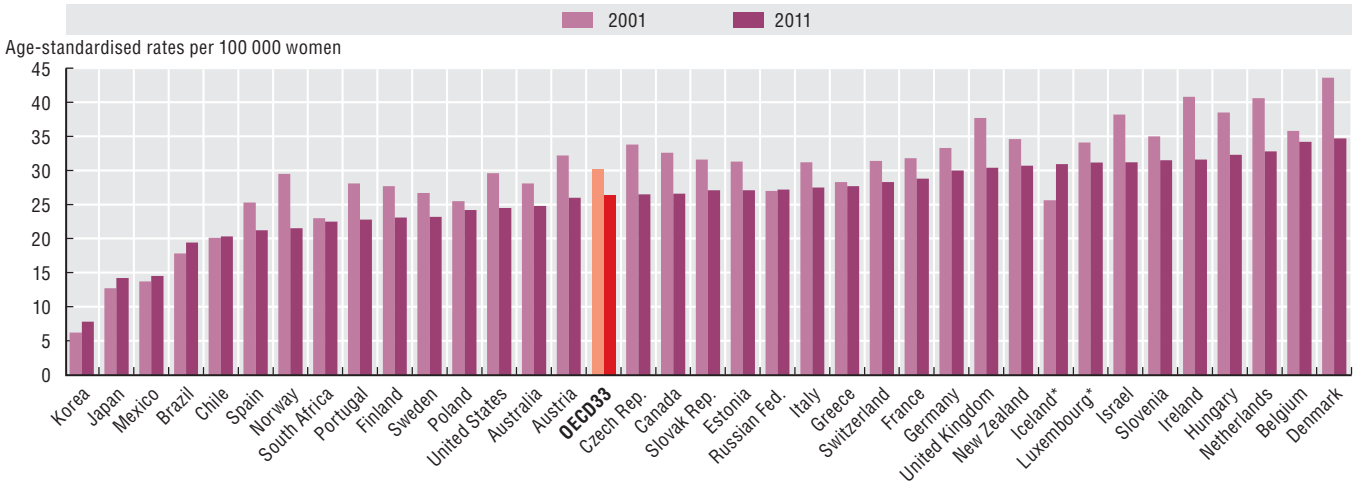
1. Period analysis.
2. Cohort analysis.

* Three-period average.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918225

5.10.3. Breast cancer mortality in women, 2001 to 2011 (or nearest year)



* Three-year average.

Source: OECD Health Statistics 2013, http://dx.doi.org/10.1787/health-data-en.

StatLink http://dx.doi.org/10.1787/888932918244

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