

5. QUALITY OF CARE

5.9. Screening, survival and mortality for cervical cancer

Cervical cancer is highly preventable if precancerous changes are detected and treated before progression occurs. The main cause of cervical cancer, which accounts for approximately 95% of all cases, is sexual exposure to the human papilloma virus (HPV) (IARC, 1995; Franco et al., 1999). Countries follow different policies with regards to the prevention and early diagnosis of cervical cancer.

About half of OECD countries have cervical cancer screening organised through population-based programmes but the periodicity and target groups vary (OECD, 2013e). Some countries with low cervical cancer incidence such as Israel and Switzerland do not have an organised screening programme, but in both countries women in the eligible age group can have a Pap smear test performed every three years for free. Since the development of a vaccine against some HPV types, vaccination programmes have been implemented in around half of OECD countries (Brotherton et al., 2011), although there is an ongoing debate about the impact of the vaccine on cervical cancer screening strategies (Goldhaber-Fiebert et al., 2008; Wheeler et al., 2009).

Screening rates for cervical cancer range from 15.5% in Turkey to 85.0% in the United States in 2011 (Figure 5.9.1). Austria, Germany, Sweden, Norway and New Zealand also achieved coverage above 75%. Screening rates in Iceland and the United Kingdom declined substantially over the decade. However, in each of these cases changes to programme eligibility and data capture may account for part of this decrease. On the other hand, Korea increased the screening coverage by four-fold, although the rate still remains well below the OECD average.

Cancer survival is one of the key measures of the effectiveness of cancer care systems, taking into account both early detection of the disease and the effectiveness of treatment. In recent years, five-year relative survival for cervical cancer improved in many countries, possibly due to improved effectiveness of screening and treatment (Figure 5.9.2). The most notable increase of almost 16% was observed in Iceland in recent years. Cross-country differences in cervical cancer range from 52.7% in Poland to 76.8% in Korea in the most recent period. Some countries with relatively high screening coverage such as the United States, Germany and New Zealand have lower survival.

Mortality rates reflect the effect of cancer care over the past years and the impact of screening, as well as changes in incidence (Dickman and Adami, 2006). The mortality rates for cervical cancer declined in most OECD countries between 2001 and 2011 (Figure 5.9.3), following the broad trend of an overall reduction in mortality from all types of cancer (see Indicator 1.4 “Mortality from cancer”). The decline was large in Denmark, Iceland, New Zealand and Norway. Mexico also experienced a sharp decrease in cervical

cancer mortality, although it still has the highest rate among OECD countries. However, in some countries, such as Greece and Estonia, mortality rates from cervical cancer increased.

Definition and comparability

Screening rates reflect the proportion of women who are eligible for a screening test and actually receive the test. Some countries ascertain screening based on surveys and other based on encounter data, which may influence the results. Survey-based results may be affected by recall bias. Programme data are often calculated for monitoring national screening programmes, and differences in target population and screening frequency may also lead to variations in screening coverage across countries.

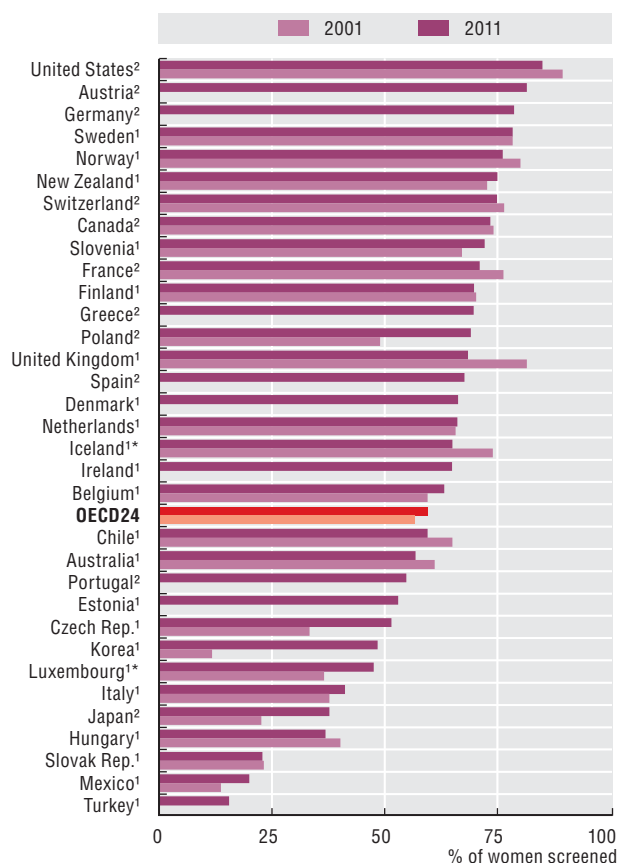
Relative survival is the ratio of the observed survival experienced by cancer patients over a specified period of time after diagnosis to the expected survival in a comparable group from the general population in terms of age, sex and time period. Relative survival captures the excess mortality that can be attributed to the diagnosis. For example, relative survival of 80% mean that 80% of the patients that were expected to be alive after five years, given their age at diagnosis and sex, are in fact still alive. Survival data for Germany and Portugal are based on a sample of patients, representing 27% and 44% of the population respectively.

Cancer survival calculated through period analysis is up-to-date estimate of cancer patient survival using more recent incidence and follow-up periods than cohort analysis which uses survival information of a complete five-year follow-up period. In the United Kingdom, cohort analysis was used for 2001-06 data while 2006-11 data are calculated through period analysis. The reference periods vary slightly across countries. All the survival estimates presented here have been age-standardised using the International Cancer Survival Standard (ICSS) population (Corazziari et al., 2004). The survival is not adjusted for tumour stage at diagnosis, hampering assessment of the relative impact of early detection and better treatment.

See Indicator 1.4 “Mortality from cancer” for definition, source and methodology underlying cancer mortality rates.

5.9. Screening, survival and mortality for cervical cancer

5.9.1. Cervical cancer screening in women aged 20-69, 2001 to 2011 (or nearest year)



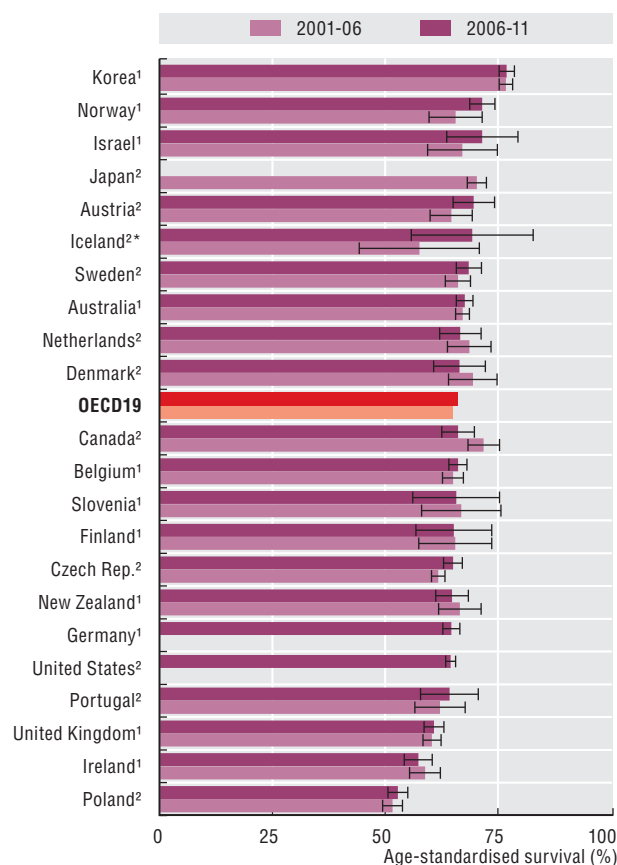
1. Programme.

2. Survey.

* Three-year average.

Source: OECD Health Statistics 2013, <http://dx.doi.org/10.1787/health-data-en>.StatLink <http://dx.doi.org/10.1787/888932918149>

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



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

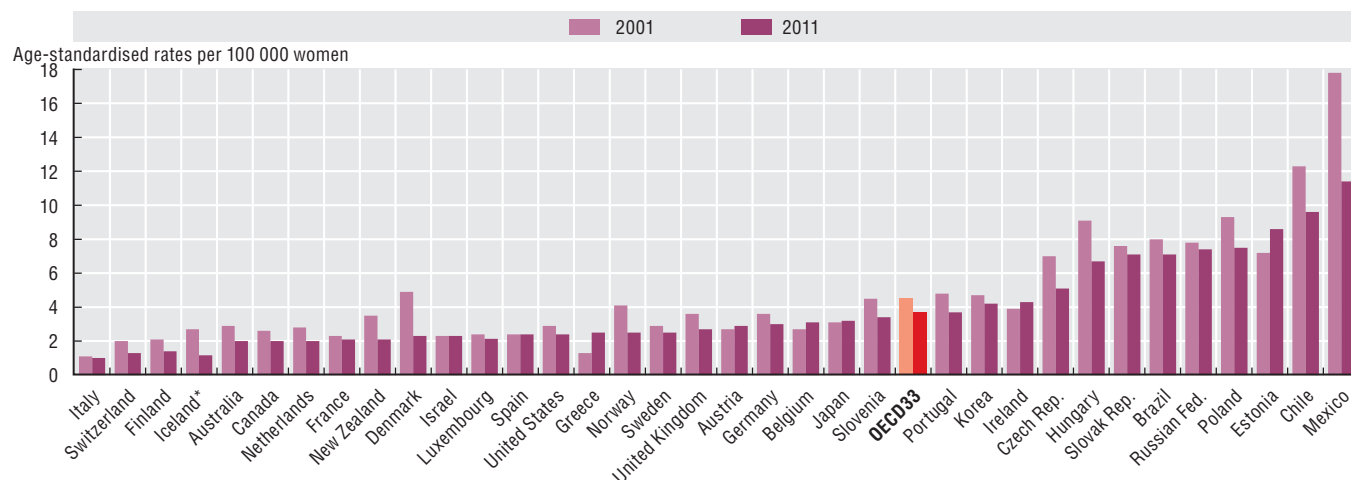
1. Period analysis.

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/10.1787/888932918168>

5.9.3. Cervical cancer mortality, 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/10.1787/888932918187>



From:
Health at a Glance 2013
OECD Indicators

Access the complete publication at:
https://doi.org/10.1787/health_glance-2013-en

Please cite this chapter as:

OECD (2013), "Screening, survival and mortality for cervical cancer", in *Health at a Glance 2013: OECD Indicators*, OECD Publishing, Paris.

DOI: https://doi.org/10.1787/health_glance-2013-51-en

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