

## SCREENING, SURVIVAL AND MORTALITY FOR CERVICAL CANCER

More than 100 000 women in EU countries are diagnosed each year with cervical cancer (see indicator on “Cancer incidence” in Chapter 3). Cervical cancer is highly preventable if precancerous cells are detected and treated before progression occurs. The human papilloma virus (HPV) is found in over 90% of cervical cancers (European Commission, 2018), and vaccination against the main types of HPV responsible for cervical cancer is expected to reduce incidence.

European countries follow various approaches to the prevention and early diagnosis of cervical cancer. Over half of the countries have implemented population-based cervical cancer screening programmes (IARC, 2017). WHO recommends HPV vaccination for girls aged 9-13 years (WHO, 2018). Most European countries now have national HPV vaccination programmes, but the target populations vary, based on epidemiological and other evidence such as cost-effectiveness that is specific to each country (ECDC, 2014). Vaccination for boys is also considered effective when coverage for girls is low.

On average, the proportion of women in EU countries aged 20-69 years who have been screened for cervical cancer within the past three years has increased from 56% to 61% over the past decade. However, the proportion has fallen in several countries. The proportion of screened women across EU countries still varies widely, from about 25% only in Latvia and Romania to over 80% in Austria and Sweden (Figure 6.16).

Cancer survival is one of the key measures of the effectiveness of health care systems in managing cancer, reflecting both early detection and the effectiveness of treatment. Among women diagnosed with cervical cancer between 2010 and 2014, age-standardised five-year net survival ranged from 70% in Denmark to 54% in Latvia (Figure 6.17). The average among EU countries has increased from 61% to 63% over the past decade. The variation across countries has decreased, because some of the countries that had among the lowest survival have converged to some extent towards the best performers.

Trends in cervical cancer mortality rates reflect the underlying trends in incidence and survival. The mortality rates for cervical cancer have declined across EU countries from 6.0 per 100 000 women in 2000 to 5.1 in 2015 (Figure 6.18).

However, in many Central and Eastern European countries, cervical cancer screening rates are low, incidence has not yet declined, five-year net survival remains low and mortality is still high or even rising. These trends suggest the need for greater policy attention to prevention, early diagnosis and effective treatment for cervical cancer.

### Definition and comparability

Screening rates are based on programme or survey data. Programme data are collected to monitor national screening programmes, but differences in target population and screening frequency may lead to variations in the data reported across countries. Survey data may be affected by recall bias.

Five-year net survival is the cumulative probability that cancer patients survive their cancer for at least 5 years, after controlling for the risks of death from other causes. Net survival is expressed as a percentage in the range of 0-100%. 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 was used, allowing estimation of 5-year survival when complete 5-year follow-up data were not yet available for all patients. Survival estimates are age-standardised with the International Cancer Survival Standard weights.

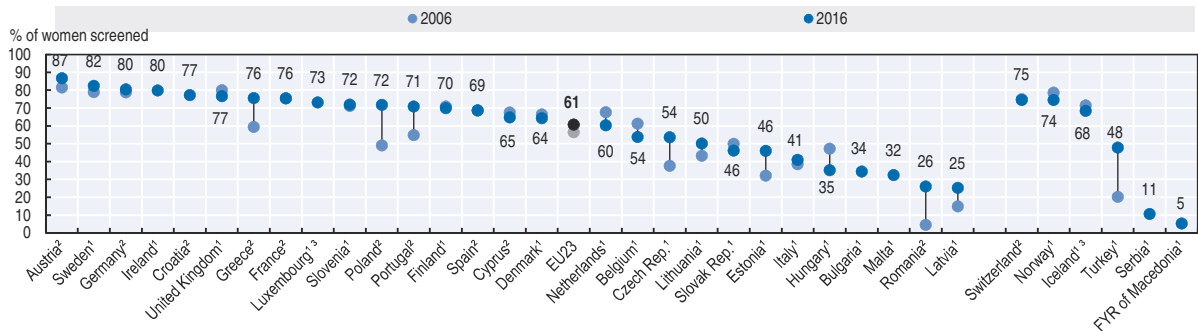
Data collection, quality control and analysis were performed as part of the CONCORD programme, the global programme for the surveillance of cancer survival (Allemani et al., 2018). In some countries, not all regional registries participated. Survival estimates for cervical cancer are based on the International Classification of Diseases for Oncology (ICD-O-3 C53.0-C53.1 and C53.8-C53.9).

See indicator “Mortality from cancer” in Chapter 3 for the definition of cancer mortality rates. Mortality from cervical cancer is based on ICD-10 C53.

### References

- Allemani, C. et al. (2018), “Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): Analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries”, *The Lancet*, Vol. 391 (10125), pp. 1023-1075, [http://dx.doi.org/10.1016/S0140-6736\(17\)33326-3](http://dx.doi.org/10.1016/S0140-6736(17)33326-3).
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- WHO (2018), *Human papillomavirus (HPV) and cervical cancer – Key facts*, WHO, Geneva, [www.who.int/en/news-room/factsheets/detail/human-papillomavirus-\(hpv\)-and-cervical-cancer](http://www.who.int/en/news-room/factsheets/detail/human-papillomavirus-(hpv)-and-cervical-cancer).

### 6.16. Cervical cancer screening in women aged 20-69 within the past 3 years, around 2006 and around 2016



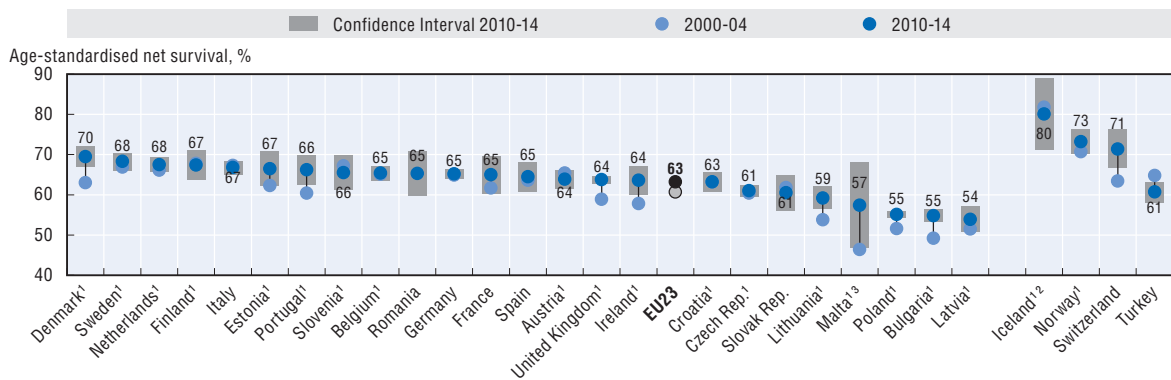
1. Programme.
2. Survey.
3. Three-year average.

Note: The EU average is unweighted and only includes countries with data covering the whole time period.

Source: OECD Health Statistics 2018, <https://doi.org/10.1787/health-data-en>.

StatLink <http://dx.doi.org/10.1787/888933835915>

### 6.17. Cervical cancer five-year net survival, 2000-04 and 2010-14



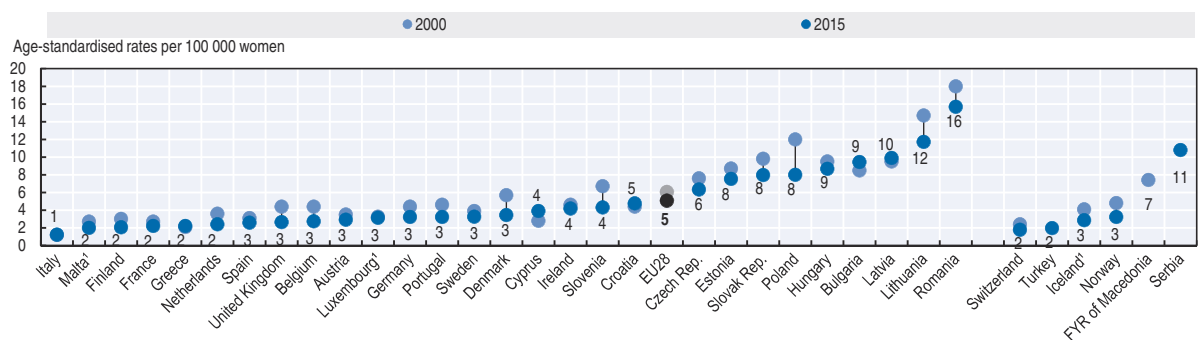
1. Data with 100% coverage of the national population.
2. Data not age-standardised.
3. Data for 2000-04 not age-standardised.

Note: 95% confidence intervals have been calculated for all countries, represented by grey areas. The EU average is unweighted and only includes countries with data covering the whole time period.

Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink <http://dx.doi.org/10.1787/888933835934>

### 6.18. Cervical cancer mortality in women, 2000 and 2015



1. Three-year average.

Note: EU average for 2000 has been calculated by the OECD.

Source: Eurostat Database.

StatLink <http://dx.doi.org/10.1787/888933835953>



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