

In Europe, lung cancer is the second most commonly diagnosed form of cancer after prostate cancer among men, and the third most common cancer after breast and colorectal cancer among women. In 2020, about 320 000 people in EU countries are expected to be newly diagnosed with lung cancer, and it is expected to continue to be the leading cause of cancer death with over 257 000 deaths across the EU (JRC, 2020). The main risk factors for lung cancer are tobacco smoking and environmental factors, particularly air pollution.

Partly reflecting different historical trends in smoking between men and women, the incidence of lung cancer is higher among men than women in all European countries, although the gender gap has narrowed as incidence rates decreased more rapidly among men in most countries in recent decades (Fidler-Benaoudia et al., 2020). In 2020, the incidence rate of lung cancer among men in the EU as a whole is expected to be close to 100 per 100 000 men, more than twice the rate among women (45 per 100 000 women). The incidence rates are almost the same for men and women in Denmark and Sweden, reflecting a narrower gender gap in smoking in recent decades (Figure 6.23).

Compared with breast and colorectal cancers, lung cancer continues to be associated with relatively low survival after diagnosis. For patients diagnosed with lung cancer during 2010-14, the cumulative probability of surviving their cancer for at least five years (after correction for other causes of death) was 15% on average across EU countries. These probabilities range from 10% or less in Croatia, Lithuania and Bulgaria to 20% in Austria, Sweden, Iceland and Switzerland (Figure 6.24). This suggests significant differences in timely diagnosis and access to pharmaceuticals and other treatments. Various pharmaceuticals have been approved and covered by public payers for lung cancer treatment in Europe, but the availability of new drugs for the treatment of some types of lung cancer (e.g. non-small cell) varies greatly across countries (OECD, 2020).

Between 2000-04 and 2010-14, five-year net survival following diagnosis of lung cancer increased from 11% to 15% on average across EU countries. All EU countries have achieved progress except Croatia.

The overall mortality rate from lung cancer in 2020 is expected to be 54 per 100 000 population in the EU as a whole. Cross-country variations in mortality rate are more than three-fold for men and more than four-fold for women (Figure 6.25). Hungary is expected to have the highest mortality rate from lung cancer in 2020 for both men and women. Reflecting differences in incidence rates, the gender gap in mortality rates is small in Nordic countries such as Sweden and Denmark, and large in some Southern and Eastern European countries (e.g. Greece and Estonia).

In general, trends in mortality rates for lung cancer have followed trends in incidence rates with a time lag as survival probabilities have remained relatively low in all countries. This is partly due to the absence of any large-scale screening

programme for lung cancer in EU countries, particularly for high-risk populations, impeding the detection and treatment of lung cancer at an early stage. Effective treatment of lung cancer also remains difficult. The most promising approach to reducing lung cancer mortality is therefore to strengthen prevention to further reduce incidence, notably through tobacco control policies and policies to reduce air pollution (see Chapter 2 on air pollution).

Definition and comparability

The 2020 cancer incidence and mortality estimates have been computed using the European Cancer Information System (ECIS) which is used for reporting the cancer burden in Europe. See the indicator "Cancer incidence and mortality" in Chapter 3 for additional information on the method underlying these estimations.

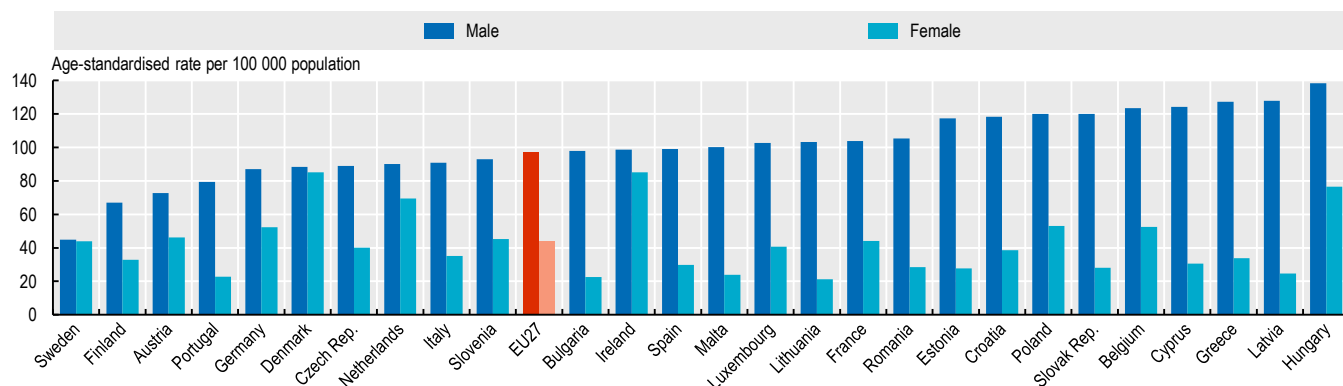
Five-year net survival is the cumulative probability that cancer patients survive their cancer for at least five years since diagnosis, after controlling for the risks of death from other causes and taking into account that competing risks of deaths are higher in the elderly. Cancer survival estimates are age-standardised with the International Cancer Survival Standard (ICSS) weights.

Cancer patient data were provided by national or regional cancer registries. Quality control, analysis of stage distribution and estimation of age-standardised five-year net survival were performed centrally as part of CONCORD, the global programme for the surveillance of cancer survival, led by the London School of Hygiene and Tropical Medicine (Allemani et al., 2018).

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Figure 6.23. Lung cancer incidence rates by sex, estimates for 2020

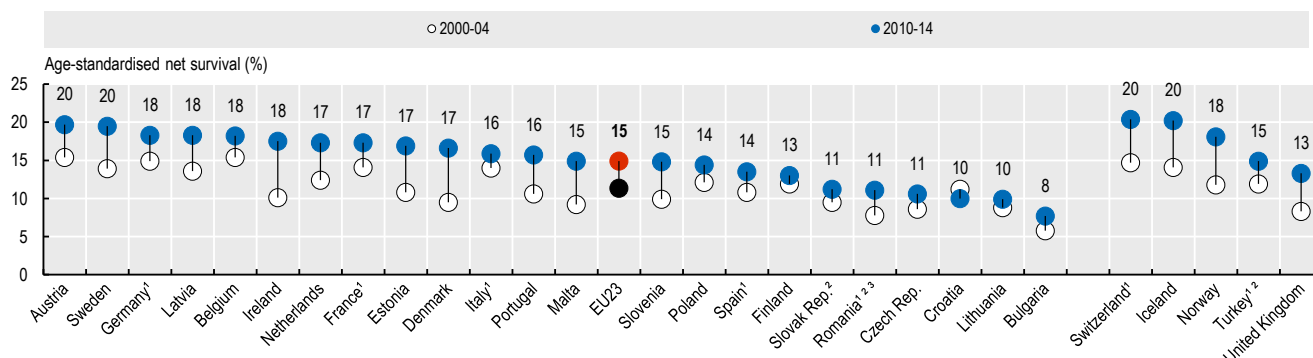


Note: The EU average is weighted.

Source: ECIS – European Cancer Information System 2020.

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Figure 6.24. Lung cancer five-year net survival (%), patients diagnosed during 2000-04 and 2010-14

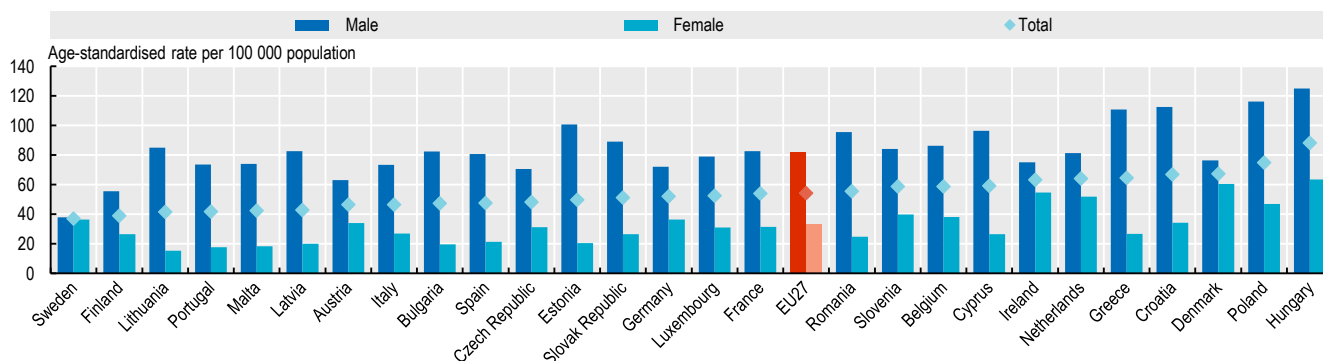


Note: The EU average is unweighted. 1. Coverage is less than 100% of the national population. 2. Survival estimates are considered less reliable. 3. Data for 2000-04 refer to 2005-09.

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

StatLink <https://stat.link/g0kn1w>

Figure 6.25. Lung cancer mortality rates by sex, estimates for 2020



Note: The EU average is weighted.

Source: ECIS – European Cancer Information System 2020.

StatLink <https://stat.link/zct8ga>



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