Colorectal cancer is the third most common cause of cancer death after prostate and lung cancers among men, and the second most common cause after breast cancer among women. It is estimated that about 190 000 men and 150 000 women will be diagnosed with colorectal cancer in the EU in 2020, and 156 000 people will die from it (see indicator "Mortality from cancer" in Chapter 3; JRC, 2020). The main risk factors for colorectal cancer include age; ulcerative colitis; a personal or family history of colorectal cancer or polyps; lifestyle factors, such as a diet high in fat and low in fibre, physical inactivity, obesity, tobacco and alcohol consumption.

After having introduced population-based screening programmes for breast and cervical cancer, a growing number of European countries have also introduced free, large scale screening programmes for colorectal cancer. These programmes provide faecal occult blood tests either annually or every other year, mostly to people in their 50s and 60s (EC, 2017; IARC, 2017). Participation rates in colorectal cancer screening varies from a high of over 70% in the Netherlands to a low of less than 20% in Hungary (in 2014) and Latvia (in 2018). Hungary has introduced a new population-based screening programme for colorectal cancer in 2020 to increase screening rates. In most countries, screening rates are at least slightly higher among women than men (Figure 6.26).

Cross-country variations in survival following a diagnosis of colon cancer are wider than for many other types of cancer, such as breast and lung cancer (see indicators "Breast cancer outcomes" and "Incidence, survival and mortality for lung cancer"). This suggests large differences in the capacity to ensure timely diagnosis and access to pharmaceuticals and other treatments for colon cancer. On average across EU countries, the five-year net survival for colon cancer was about 60% for people diagnosed during 2010-14, ranging from 65% or more in Belgium, Finland, Sweden and Germany to less than 55% in many Central and Eastern European countries including Latvia, Croatia, the Slovak Republic, Romania, Bulgaria and Poland (Figure 6.27). These countries also have low five-year net survival for rectal cancer (Allemani et al., 2018). Various drugs have been approved and covered by public payers for colorectal cancer treatment in Europe, but the availability of new drugs varies across countries (OECD, 2020).

Advances in diagnosis and treatment of colorectal cancer, including improved surgical techniques, radiation therapy and combined chemotherapy, have contributed to increasing survival rates between 2000-04 and 2010-14. The average five-year net survival rate for colon cancer in EU countries increased from 54% to 59% between 2000-04 and 2010-14, and from 51% to 58% for rectal cancer. Survival for colon cancer increased particularly rapidly in many Central and Eastern European countries (Bulgaria, the Czech Republic, Denmark, Estonia, Latvia, Lithuania and Slovenia).

In all EU countries, mortality rates from colorectal cancer are substantially higher among men than among women (Figure 6.28). Together with the promotion of healthy lifestyles, efforts to increase colorectal cancer screening rates, particularly among men, may reduce this gender gap to some extent.

Definition and comparability

Colorectal cancer screening rates are based on programme or survey data. Differences in the target population and screening frequency in national screening programmes may limit the comparability of programme-based data. 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 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).

The 2020 cancer 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.

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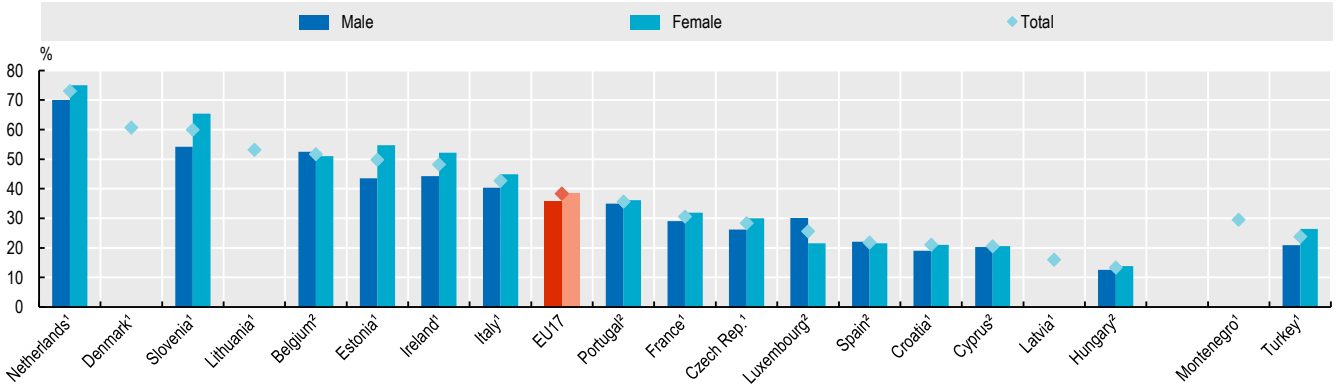
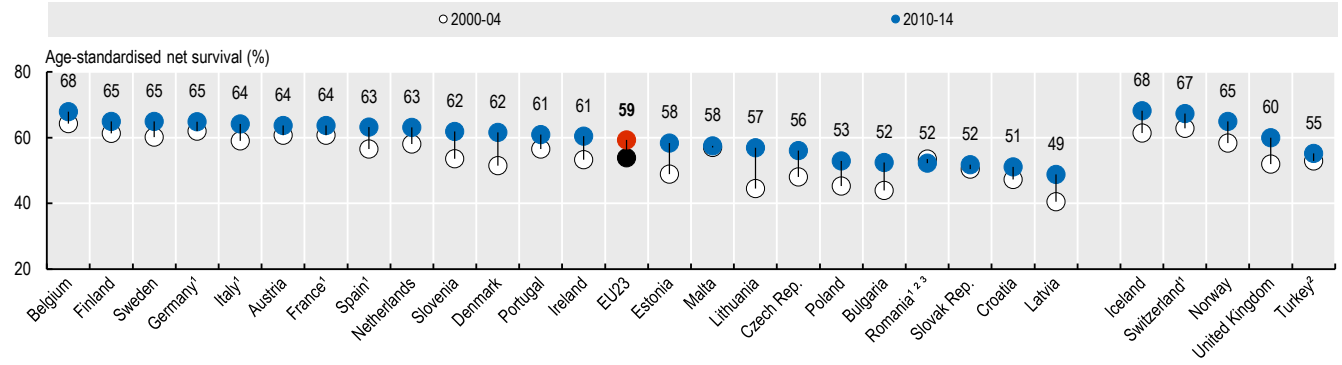
Figure 6.26. **Coverage of colorectal cancer screening programmes by sex, 2018 (or nearest year)**



Note: The EU average is unweighted. Gender-specific data are not available for Denmark, Latvia, Lithuania and Montenegro. 1. Programme. 2. Survey.
Source: OECD/Eurostat/WHO-Europe Joint Questionnaire on Non-Monetary Health Care Statistics – 2020 Pilot Data Collection.

StatLink https://stat.link/z9s0i5

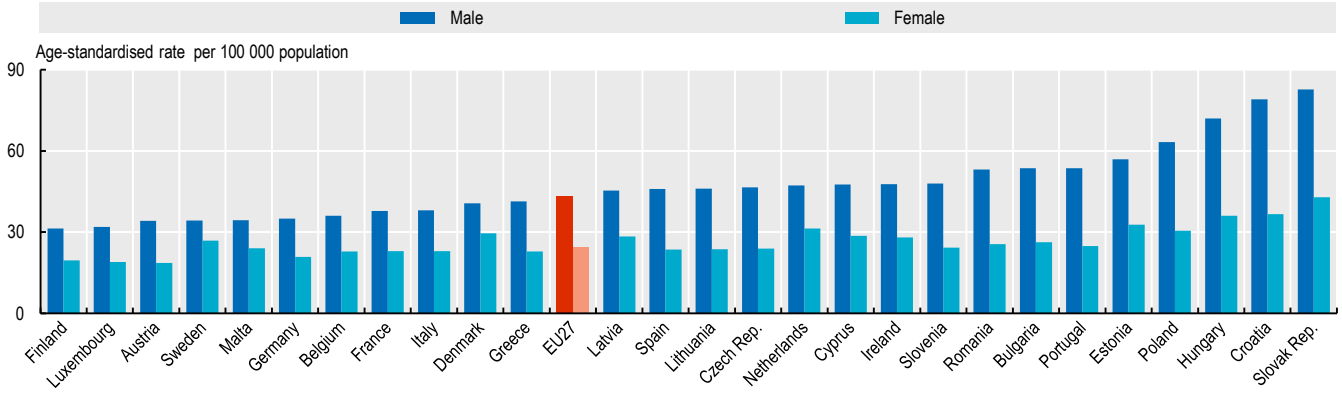
Figure 6.27. **Colon cancer five-year net survival (%), patients diagnosed during 2000-04 and 2010-14**



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/kmf50a

Figure 6.28. **Colorectal 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/n4bc8x

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