Survival and mortality for colorectal cancer

Colorectal cancer is the third most commonly diagnosed form of cancer after prostate and lung cancers, for men, and the second most common cancer after breast cancer, for women, across OECD countries (see indicator "Mortality from cancer" in Chapter 3). There are several factors that place certain individuals at increased risk for the disease, including age, ulcerative colitis, a personal or family history of colorectal cancer or polyps, and lifestyle factors such as a diet high in fat and low in fibre, lack of physical activity, obesity, and tobacco and alcohol consumption. Incidence is significantly higher for men than women across countries. Generally, rectal cancer is more difficult to cure than colon cancer due to a higher probability of spreading to other tissue, recurrence and postoperative complications.

Following screening for breast and cervical cancers, colorectal cancer screening has become available, and an increasing number of countries have introduced free population-based screening, targeting people in their 50s and 60s (OECD, 2013). Partly because of uncertainties about the cost-effectiveness of screening (Lansdorp-Vogelaar et al., 2010), countries are using different methods. In most countries that provide faecal occult blood test, screening is available every two years and the screening periodicity schedule is less frequent with colonoscopy and flexible sigmoidoscopy, generally every ten years. These differences make screening coverage difficult to compare across countries.

Advances in diagnosis and treatment of colorectal cancer including improved surgical techniques, radiation therapy and combined chemotherapy and their wider and timelier access have contributed to increased survival over the last decade. In general, OECD countries showed improvement in five-year net survival for colon and rectal cancers. On average across OECD countries, five-year colon cancer survival improved from 57.0% to 62.8% for patients with colon cancer between 2000-04 and 2010-14 periods while survival for rectal cancer also improved from 55.1% to 61.0% during the same periods (Figures 6.36 and 6.37). Some countries show a considerable improvement including Chile, Lithuania, Korea, Denmark and Estonia for colon cancer, and Latvia, Lithuania, Slovenia, Denmark, Ireland and Korea for rectal cancer. Generally, countries with low survival estimates for colon cancer tend to have low estimates also for rectal cancer. Among OECD countries, net survival estimates are low for both cancers in countries such as Chile, the Czech Republic, Poland, the Slovak Republic and Turkey.

In terms of mortality rates, most countries experienced a decline in recent years, with the average rate across OECD countries falling from 26.8 to 23.9 deaths per 100 000 population between 2005 and 2015 (Figure 6.38). The decline was particularly large in Austria, the Czech Republic, Denmark and Israel with a reduction of over 30%. Despite some progress, Central and Eastern European countries, particularly the Czech Republic, Slovenia and the Slovak Republic continue to have higher mortality rates than other OECD countries.

However, in some OECD countries, the mortality rate from colorectal cancer increased during the same period. For instance, Hungary which had the highest mortality rate a decade ago, reported even higher rates. In Latin American countries including Chile and Mexico, the increase was particularly large, by more than 10%, over the last decade, although the rate remains much lower than the OECD average. Despite increases, some of these countries have made progress in strengthening their systems to reduce the burden of colorectal cancer. For example, in 2013, Chile included treatment for colorectal cancer as part of its guaranteed health care coverage plan, which assures improved access, quality, financial protection and timeliness of care for priority diseases, and this may lead to improved outcomes of colorectal cancer in the future (OECD, 2018).

Definition and comparability

Net survival and mortality rates are defined in indicator "Screening, survival and mortality for breast cancer" in Chapter 6. See indicator "Mortality from cancer" in Chapter 3 for definition, source and methodology underlying cancer mortality rates. Mortality rates of colorectal cancer are based on ICD-10 codes C18-C21 (colon, rectosigmoid junction, rectum, and anus) while survival estimates are based on C18-C19 for colon cancer and C20-C21 for rectum cancer.

References

Lansdorp-Vogelaar, I., A.B. Knudsen and H. Brenner (2010), "Cost-effectiveness of Colorectal Cancer Screening –An Overview", *Best Practice & Research Clinical Gastroenterology*, Vol. 24, pp. 439-449.

OECD (2018, forthcoming), *OECD Reviews of Public Health; Chile*, OECD Publishing, Paris.

OECD (2013), *Cancer Care: Assuring Quality to Improve Survival*, OECD Publishing, Paris, *http://dx.doi.org/10.1787/9789264181052-en*.

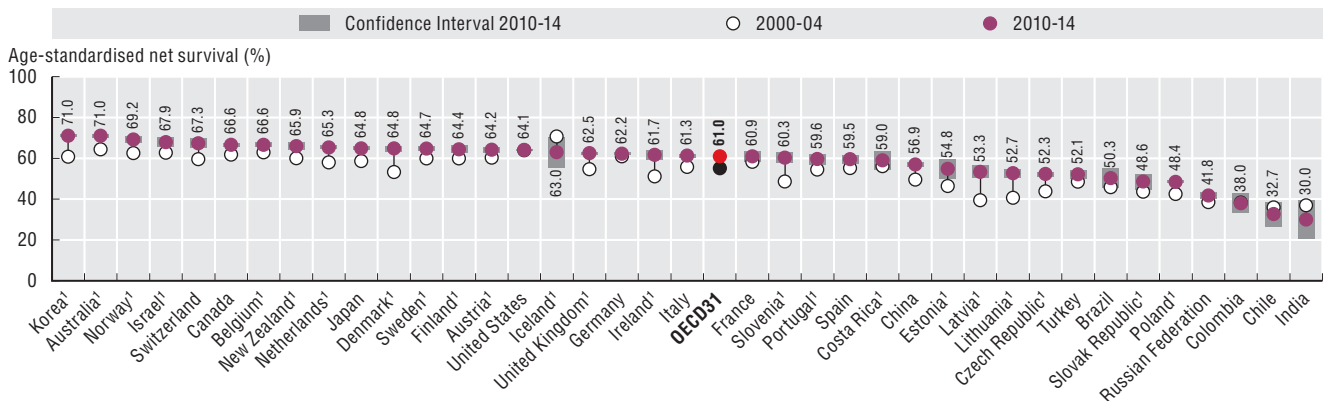### 6.36. Colon cancer five-year net survival, 2000-04 and 2010-14
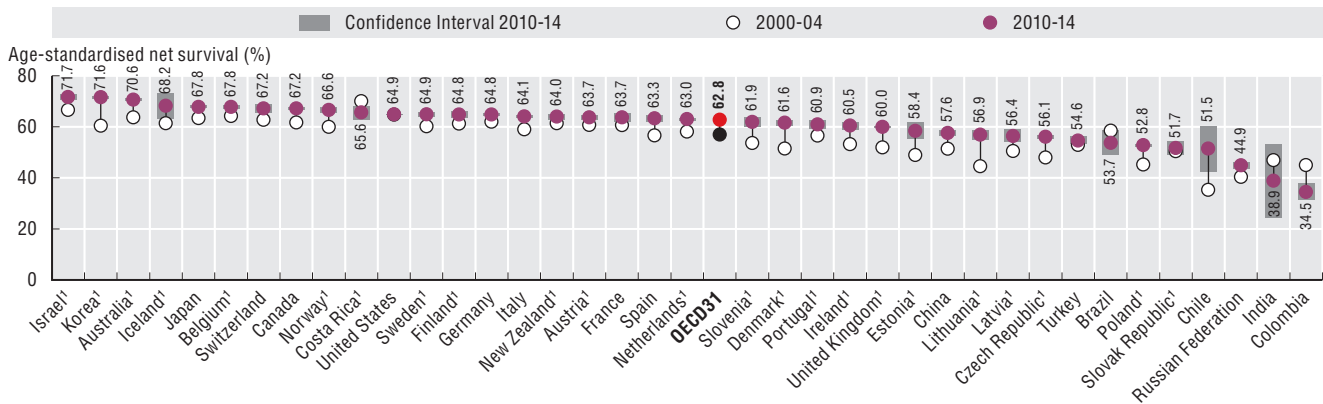
Note: 95% confidence intervals have been calculated for all countries, represented by grey areas. Expected updates in the data may reduce the survival estimate for Chile to 43.9, and may also reduce the estimate for Costa Rica. Updates may also lead to very small changes in the survival estimates for Canada and for the OECD average.
1. Data with 100% coverage of the national population.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink ᴐᴈᴘ *http://dx.doi.org/10.1787/888933604020*

6.37. Rectal cancer five-year net survival, 2000-04 and 2010-14

Note: 95% confidence intervals have been calculated for all countries, represented by grey areas. Expected updates in the data may reduce the survival estimate for Costa Rica.
1. Data with 100% coverage of the national population.
Source: CONCORD programme, London School of Hygiene and Tropical Medicine.

StatLink ᴐᴈᴘ *http://dx.doi.org/10.1787/888933604039*

6.38. Colorectal cancer mortality, 2005 and 2015 (or nearest years)
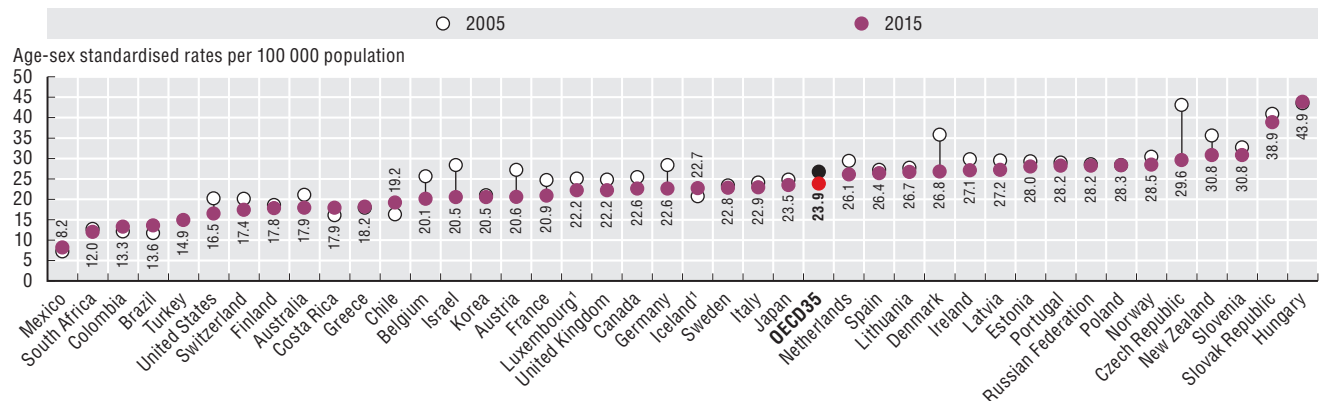
1. Three-year average.
Source: OECD Health Statistics 2017.

StatLink ᴐᴈᴘ *http://dx.doi.org/10.1787/888933604058*

From:
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OECD Indicators

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