European Cancer Inequalities Registry

NORWAY

Country Cancer Profile

2025

European Commission

OECD

BETTER POLICIES FOR BETTER LIVES

The Country Cancer Profile Series

The European Cancer Inequalities Registry is a flagship initiative of Europe's Beating Cancer Plan. It provides sound and reliable data on cancer prevention and care to identify trends, disparities and inequalities between Member States, regions and population groups. The Country Cancer Profiles identify strengths, challenges and specific areas of action for each of the 27 EU Member States, Iceland and Norway, to guide investment and interventions at the EU, national and regional levels under Europe's Beating Cancer Plan. The European Cancer Inequalities Registry also supports Flagship 1 of the Zero Pollution Action Plan. The Profiles are the work of the OECD in co-operation with the European Commission. The team is grateful for the valuable inputs received from national experts and comments provided by the OECD Health Committee and the EU Thematic Working Group on Cancer Inequality Registry.

Data and information sources

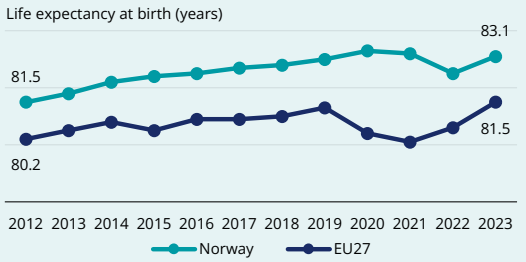
The data and information in the Country Cancer Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD Health Database.

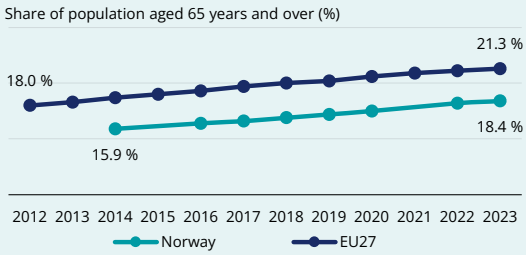
Additional data and information also come from the European Commission's Joint Research Centre (EC-JRC), the EU statistics on income and living conditions (EU-SILC) Survey, the World Health Organization (WHO), the International Agency for Research on Cancer (IARC), the International Atomic Energy Agency (IAEA), the European Society for Paediatric Oncology (SIOPE), the European Union Agency for Fundamental Rights (FRA LGBTIQ), the Health Behaviour in School-aged Children (HBSC) survey as well as from the 2023 Country Health and Cancer Profiles, and other national sources (independent of private or commercial interests). The calculated EU averages are weighted averages of the 27 Member States unless otherwise noted. These EU averages do not include Iceland and Norway. Mortality and incidence rates are age-standardised to the European standard population adopted by Eurostat in 2013.

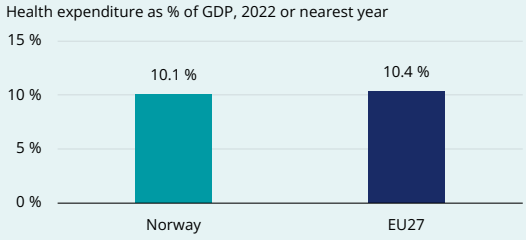
Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries.

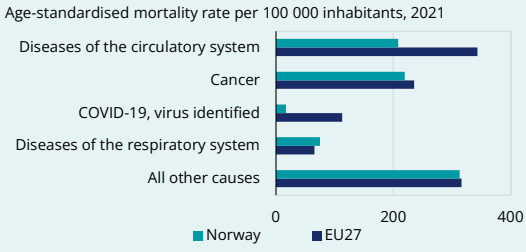
Contents

Key health system and demographic statistics



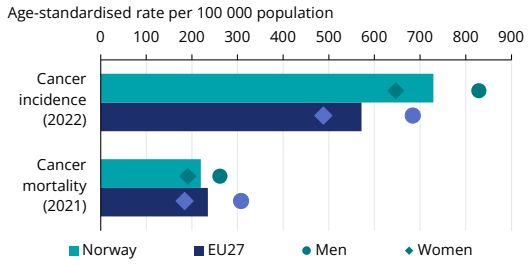






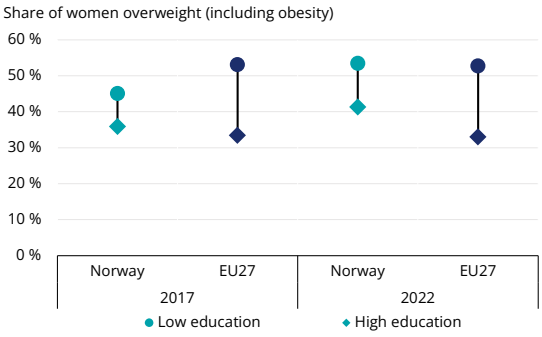
Source: Eurostat Database.

1. Highlights



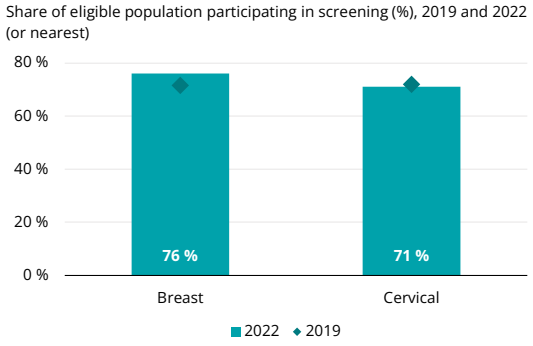
Cancer in Norway

Norway has one of Europe's highest estimated cancer incidence rates, with notably elevated rates for melanoma and colorectal cancers. Projections indicate that 40% of Norwegians will develop cancer by age 80. However, in 2021 Norway had a lower cancer mortality rate than the EU average. The country achieved a 23% decline in male cancer mortality over 2011-21 – the highest across Europe. As of 2023, 6% of the population was alive after having been diagnosed with cancer at some point – a 21% increase over 2010-20.



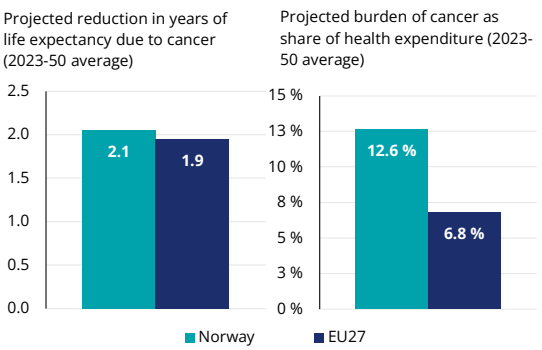
Risk factors and prevention policies

Norway excels in managing most cancer risk factors, with daily smoking rates at 7% in 2023 – the second lowest in Europe. However, snus use doubled in the past decade, and alcohol consumption has risen post-pandemic. More than half of Norwegian adults are overweight or obese, with notable socio-economic disparities. Among women, overweight rates are 30% higher among those with lower education levels than those with higher education levels. Achieving specific cancer risk factor targets could prevent thousands of new cases by 2050.



Early detection

Norway offers three population-based screening programmes for breast, cervical and colorectal cancer. Breast cancer screening participation rebounded to 76% in 2022 after a drop during the pandemic, while cervical cancer programme participation remained stable at around 70%. In 2023, several changes were introduced, including human papillomavirus tests and expanded age coverage. National rollout of the colorectal screening programme began at the end of 2022 and is ongoing. Norway is introducing at-home human papillomavirus tests, piloting lung cancer screening, and planning to enhance screening programmes with more technology and AI integration.



Cancer care performance

Despite having a higher number of healthcare professionals per cancer case than the EU average, Norway faces shortages that affect cancer care. Waiting times for general surgery and oncology appointments increased from 2018 to 2023, despite significant investments in imaging and radiation therapy equipment. Five-year cancer survival rates in 2023 were 78% for men and 77% for women. Norway's Directorate for Health prioritises cancer care quality through 24 clinical guidelines, 26 patient pathways and 12 national cancer quality registries. Overall, between 2023 and 2050, the burden of cancer is projected to account for 13% of all health expenditure.

2. Cancer in Norway

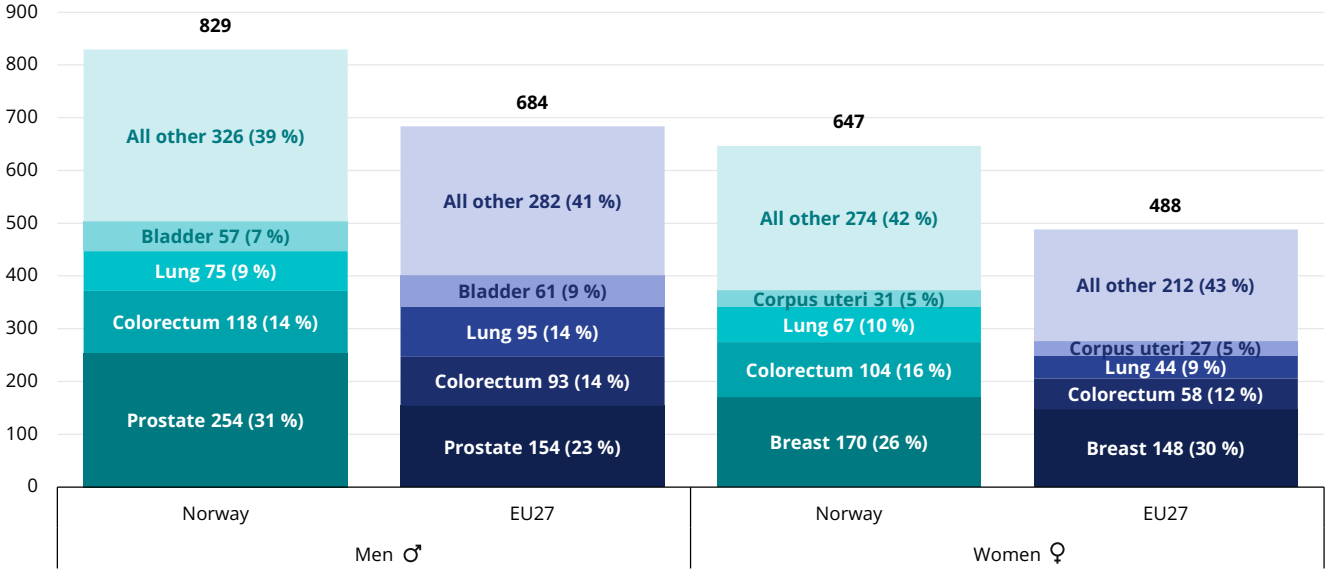
Norway has the highest cancer incidence rates across EU+2 countries

According to the European Cancer Information System (ECIS) of the Joint Research Centre based on incidence trends from pre-pandemic years, in 2022, age-standardised cancer incidence in Norway was the highest among men (829 per 100 000) and the second highest among women (647 per 100 000) across EU+2 countries.[1] Compared to the EU averages, incidence rates are 21% higher among men and 32% higher among women. Incidence disparities exist among population groups: in 2023, the Cancer Registry of Norway reported an age-standardised male-to-female cancer rate ratio of 1.2:1, with half of that year's cancer diagnoses occurring in individuals aged 71 and over, while those aged over 50 accounted for 90% of all cases (Cancer Registry of Norway, 2024a). County-specific incidence rates varied from 779 per 100 000 in Rogaland to 661 per 100 000 in Trøndelag in 2023.

ECIS data show that among men, prostate cancer was the most common cancer (31%), followed by colorectal (14%) and lung[2] (9%) cancers. For women, the three most common cancer types were breast (26%), colorectal (16%) and lung (10%) cancers – similar to the pattern across the EU (Figure 1). Norway has one of the lowest incidence rates of lung cancer among EU+2 countries, attributed to its low smoking prevalence (see Section 3). However, it has the highest incidence rates of melanoma skin cancer among men (67 cases per 100 000) and women (58 cases per 100 000) across all EU+2 countries – over 2.5 times higher than the EU average. Melanoma skin cancer was the fourth most common cancer site for both men (8%) and women (9%) in Norway. Colorectal cancer incidence is also notably high in Norway – particularly among women, with a rate 78% higher than the EU average (the rate is 27% higher than the EU average among men). However, according to data from the Cancer Registry Norway, ECIS estimations overestimate the country's colorectal cancer incidence rate (by around 19% among women and 15% among men).

Figure 1. Norway has the highest cancer incidence across EU+2 countries, but the gender gap is narrower than the EU average

Age-standardised incidence rate per 100 000 population, estimates, 2022



Notes: 2022 figures are estimates based on incidence trends from previous years, and may differ from observed rates in more recent years. Includes all cancer sites except non-melanoma skin cancer. Corpus uteri does not include cancer of the cervix.
Source: European Cancer Information System (ECIS). From https://ecis.jrc.ec.europa.eu, accessed on 10 March 2024. © European Union, 2024. The incidence percentage breakdown was re-computed based on age-standardised incidence rates and as such differs from the percentage breakdown of absolute numbers shown on the ECIS website.

1 *EU+2 countries include 27 EU Member States (EU27), plus Iceland and Norway.*

2 *Lung cancer also refers to trachea and bronchus cancers.*

Despite population ageing and improved screening, over 2019-23, Norway has seen decreases in prostate, lung, and colorectal cancer incidence among men, and in cervical and ovarian cancer incidence among women (Cancer Registry of Norway, 2024a). Notably, stomach cancer incidence declined sharply by about 40% over the last 20 years. Despite these trends, the lifetime risk of cancer remains significant, with 4 in 10 Norwegians expected to develop cancer by age 80 – mainly prostate cancer among men and breast cancer among women. Furthermore, ECIS estimates that cancer cases will increase by 34% between 2022 and 2040.

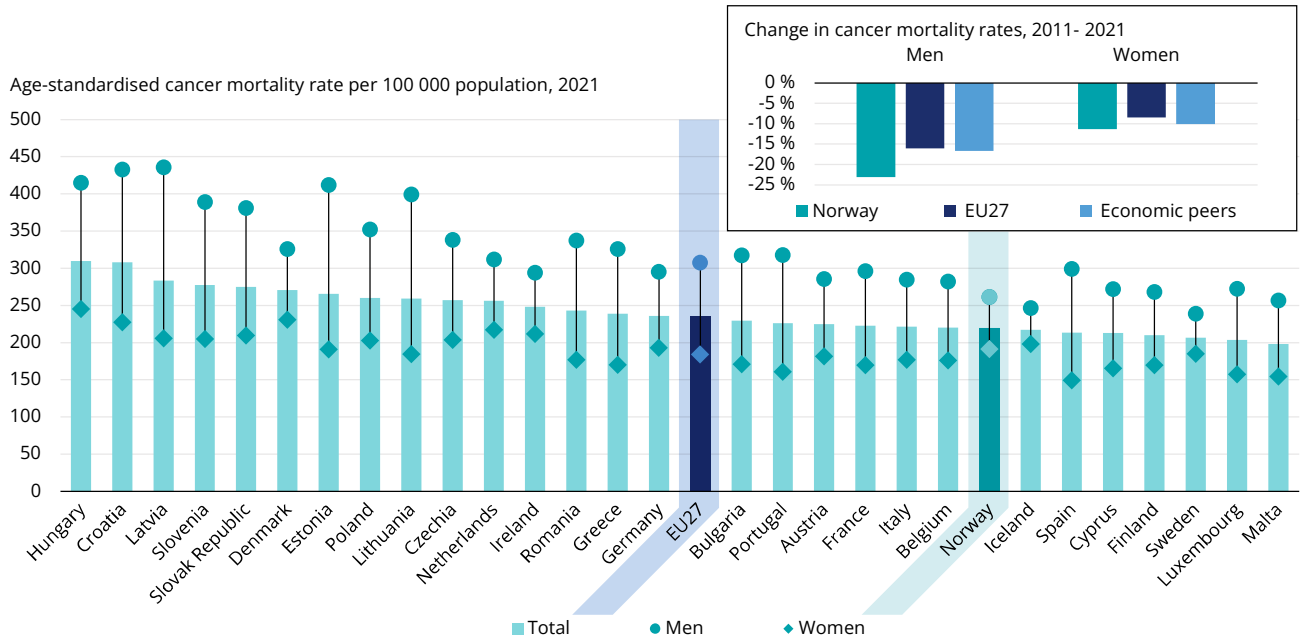
Cancer mortality in Norway is among the lowest in the EU, and one of the fastest decreasing

Cancer has been the leading cause of death in Norway since 2017. In 2021, the nation's age-standardised cancer mortality rate was 220 deaths per 100 000 people, which is 7% lower than the EU average of 235 per 100 000 but higher than rates observed in Iceland, Finland and Sweden (Figure 2). Notably, Norwegian men experienced higher mortality rates than women, although the gender gap of 70 per 100 000 was the third smallest among Nordic countries[3], behind Iceland (48 per 100 000) and Sweden (54 per 100 000).

According to the Cancer Registry of Norway, lung cancer constituted 19% of all cancer deaths in 2022, followed by colon (10%), prostate (9%), pancreatic (8%) and breast (6%) cancers. Together, these accounted for over half of all cancer-related deaths during the year (Cancer Registry of Norway, 2024a).

Over 2011-21, Norway registered a 17% decline in its overall cancer mortality rate, surpassing both the averages of 12% across the EU and 13% among its economic peers[4]. This reduction was particularly pronounced for lung (18%), bladder (31%), prostate (29%), breast (18%) and colorectal cancers (15%). Notably, the decline was higher among men (23%) than women (11%), marking the second steepest reduction after Luxembourg (25%). The pace of decline also varied significantly across age groups, with individuals aged under 65 seeing a 28% decrease compared to a 14% decrease among those aged 65 and over.

Figure 2. Norway has one of the narrowest gender gaps in cancer mortality



Notes: Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for NO are AT, BE, DE, DK, IE, IS, LU, NL and SE.
Source: Eurostat Database.

3 *Nordic countries refer to Denmark, Finland, Iceland, Norway and/or Sweden.*

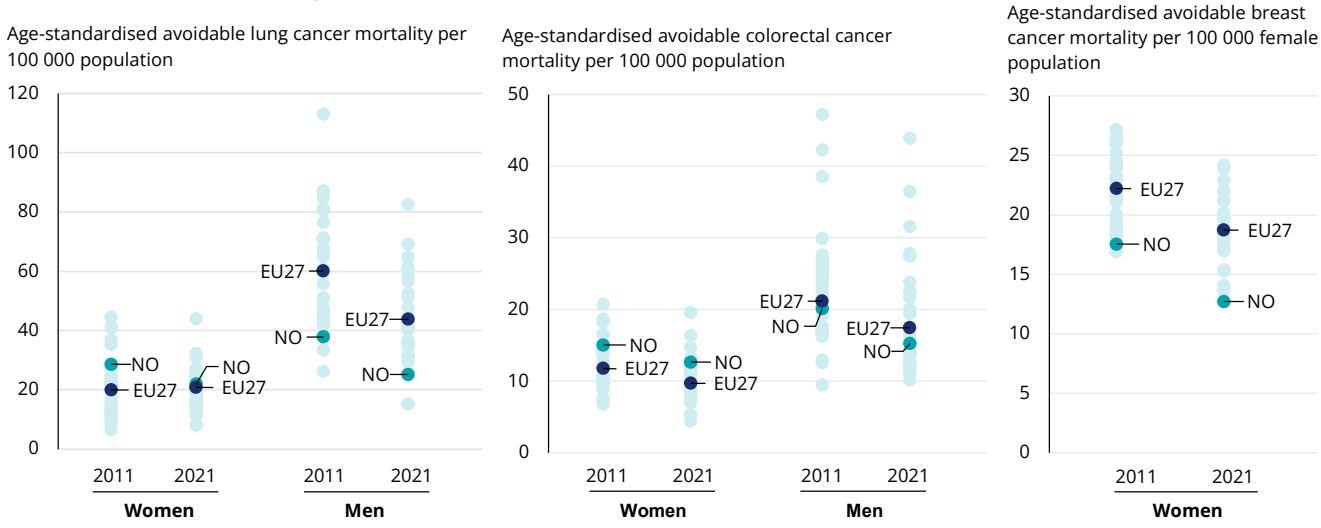
4 *Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for NO are AT, BE, DE, DK, IE, IS, LU, NL and SE.*

Despite improvements in avoidable mortality across the board, colorectal cancer mortality among women is still higher than in most countries

Thanks to improved prevention strategies and advances in treatment options, a significant proportion of cancer deaths among people under 75 are considered potentially avoidable.[5] In 2021, preventable cancer mortality among individuals under 75 in Norway totalled 40 deaths per 100 000 people – significantly lower than the EU average of 57 per 100 000, and the second lowest in the EU+2 after Sweden (33 per 100 000). Lung cancer accounted for 59% of all preventable deaths that year, with mortality rates of 22 per 100 000 women and 25 per 100 000 men. These figures are 5% higher for women and 43% lower for men than the EU averages (Figure 3). Since 2011, these rates have declined by 23% for women and 34% for men, reflecting the positive impact of smoke-free environments policies and anti-tobacco campaigns in recent decades.

Conversely, in 2021, treatable cancer mortality in Norway was 23 deaths per 100 000 people aged under 75 – below the EU average of 27 deaths per 100 000, but higher than the rates in Finland, Iceland and Sweden. The primary causes were colorectal (61% of treatable mortality) and breast (28%) cancers. Norway's breast cancer treatable mortality rate of 13 per 100 000 was the lowest among all EU+2 countries in 2021, and 32% lower than the EU average, reflecting a 28% decrease in breast cancer treatable mortality over 2011-21, which was nearly double the EU average improvement of 16%. Norway's overall treatable mortality rate was influenced by colorectal cancer rates (14 deaths per 100 000), which exceeded both the EU average (13 per 100 000) and rates in the other Nordic countries. Colorectal cancer mortality rates were 30% higher among women and 13% lower among men than the EU averages. Since 2011, these rates have decreased by 16% among women and 24% among men. Reduction in treatable cancer mortality for breast and colorectal cancers can be attributed to improved uptake of screening and early diagnosis initiatives, as well as provision of optimal oncological care.

Figure 3. Avoidable mortality rates improved over 2011-21, but are higher than the EU average for colorectal cancer among women



Note: Avoidable mortality figures relate to deaths of people aged under 75.
Source: Eurostat Database. Data refer to 2021.

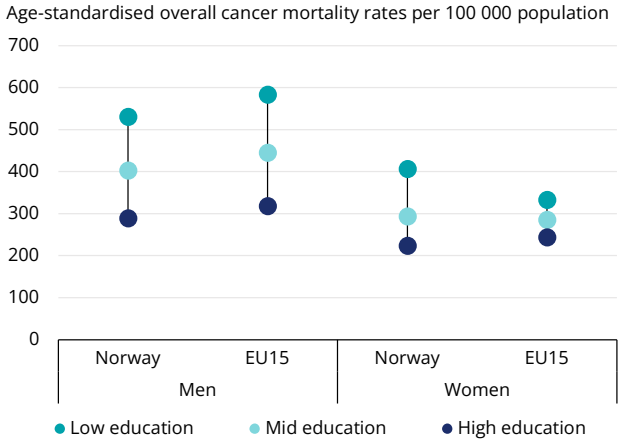
Individuals with lower education levels have higher cancer mortality rates

Overall cancer mortality rates in Norway are higher among individuals with lower than with higher education levels. While this disparity mirrors the EU average for men (whose rates are 1.8 times higher among those with lower than higher education levels), it is notably wider for women (whose rates are 1.8 times higher compared to the EU average) (Figure 4). Recent results from a study analysing cancer registry data during 2013-21 support this trend (Al-Rammahy et al., 2024), showing that areas of lower educational achievement had the highest proportion of late-stage diagnoses for most cancer types, and

5 *Avoidable mortality includes both preventable deaths that can be avoided through effective public health and prevention interventions, and treatable deaths that can be avoided through timely and effective healthcare interventions.*

lower five-year relative survival rates. While high-education areas showed higher cancer incidence (except for lung cancer), they also demonstrated better survival rates, possibly due to improved healthcare access, uptake of screening activities, and factors such as patient support networks and health literacy.

Figure 4. In Norway, the education gap in mortality is higher among men than women, but wider than the EU average among women



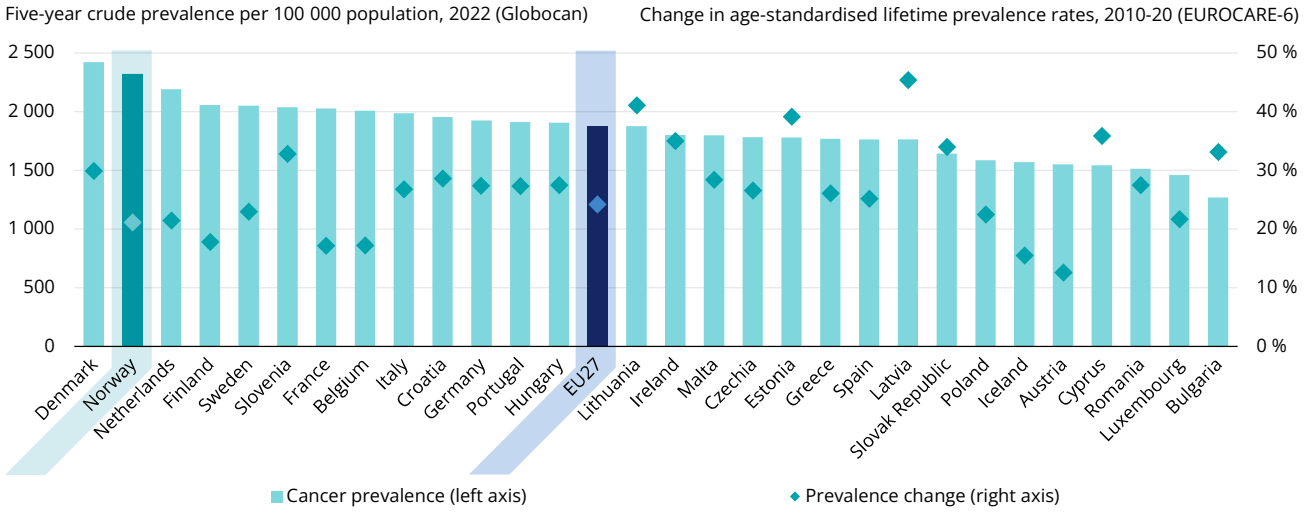
Notes: Data come from the EU-CanIneq study and refer to 2015-19.. EU15 refers to unweighted average of 14 EU countries and Norway.
Source: European Commission/IARC/Erasmus MC (2024), Mapping socio-economic inequalities in cancer mortality across European countries. ECIR Inequalities factsheet.

By the end of 2023, over 1 in every 20 people in Norway had had cancer at least once

According to Globocan estimates by the IARC, Norway's five-year cancer prevalence[6] rate in 2022 was 24% higher than the EU average, at 2 322 cancer cases per 100 000 population (compared to 1 876 per 100 000 across the EU) and second only to Denmark's (2 424 per 100 000) (Figure 5). Predictably, prevalence increased with age, and Norway recorded the highest rates among individuals aged 50 and over. Prevalence was 12% higher among men than women. According to the EUROCARE-6 study, cancer prevalence increased by 21% in Norway from 2010 to 2020 – slightly below the EU average increase of 24%.

By the end of 2023, the Cancer Registry of Norway estimated that 336 855 individuals, comprising 6% of the population, were alive after having been diagnosed with cancer at some point. This marked an increase on the prior year of approximately 10 000 people (Cancer Registry of Norway, 2024a). This upward trend emphasises the growing importance of addressing quality of life and survivorship (see Section 5.4) as people are living longer with cancer and more people have a history of the disease. The most common cancers were prostate (63 702 cases), breast (59 089 cases), melanoma of the skin (34 836 cases) and colon (27 108 cases). Variations in prognosis and median age at diagnosis accounted for most of the differences in prevalence across cancer sites.

Figure 5. Cancer prevalence in Norway is the second highest among EU+2 countries



Sources: IARC Globocan Database 2024; EUROCARE-6 study (De Angelis et al., 2024).

6 *Cancer prevalence refers to the proportion of the population who have been diagnosed with cancer and are still alive, including those currently undergoing treatment for cancer and those who have completed treatment. Five-year cancer prevalence includes people who have been diagnosed within the previous five years, while lifetime prevalence considers those who have ever received a cancer diagnosis.*

Norway has long prioritised cancer care through a robust registry and coherent strategies

Established in 1953, Norway boasts one of the world's oldest cancer registries, which has expanded over the years to include management of national breast, cervical and colorectal screening programmes. The Cancer Registry of Norway maintains near-complete registration dating back to 1953, with an estimated completeness rate of 98.7% for the most recent period 2019-23. It employs rigorous procedures for collecting clinical, medication and mortality data, alongside conducting patient surveys focused on patient-reported outcome and experience measures (PROMs and PREMs) to gauge health quality and related quality of life, which inform current and future cancer strategies (see Section 5.4).

Norway introduced its first National Cancer Strategy in 2012; this was revised in 2018, with a strong emphasis on enhancing quality of care and survivorship. In 2022, the Directorate of Health was tasked with revising the Strategy for 2025-35 while retaining the previous edition's five overarching objectives and aligning with EU plans and investment in cancer care (see Box 1). Although still in the consultation phase, the draft document prioritises the cancer strategy around prevention, quality of care, patient-centredness and enhancing quality of life.

Box 1. Norway's National Cancer Strategy aligns with Europe's Beating Cancer Plan

Norway's National Cancer Strategy 2025-35 was designed to build on and reinforce Europe's Beating Cancer Plan and Mission Cancer initiatives (Directorate of Health, 2023). It is organised around five target areas: being a pioneering country for cancer prevention; being a leading country for good patient outcomes; having more user-oriented cancer care; having more people surviving and living longer with cancer; and providing the best possible quality of life for patients and relatives. Each area is supported by specific national objectives and sub-goals, ranging from reducing smoking prevalence to bolstering palliative care services.

The Strategy comprehensively addresses all pillars and themes of Europe's Beating Cancer Plan, albeit with varying degrees of emphasis (Table 1). While all four pillars are extensively covered, only the transversal theme of research garners equal attention, with goals to leverage cancer registry quality and expertise, advancing personalised care through innovations such as in screening and new research opportunities, including those offered by the new proton radiation therapy centres. Despite their inclusion in the Strategy, addressing inequalities and paediatric oncology receive comparatively less emphasis.

Table 1. Norway's National Cancer Strategy 2025-35 aligns with Europe's Beating Cancer Plan

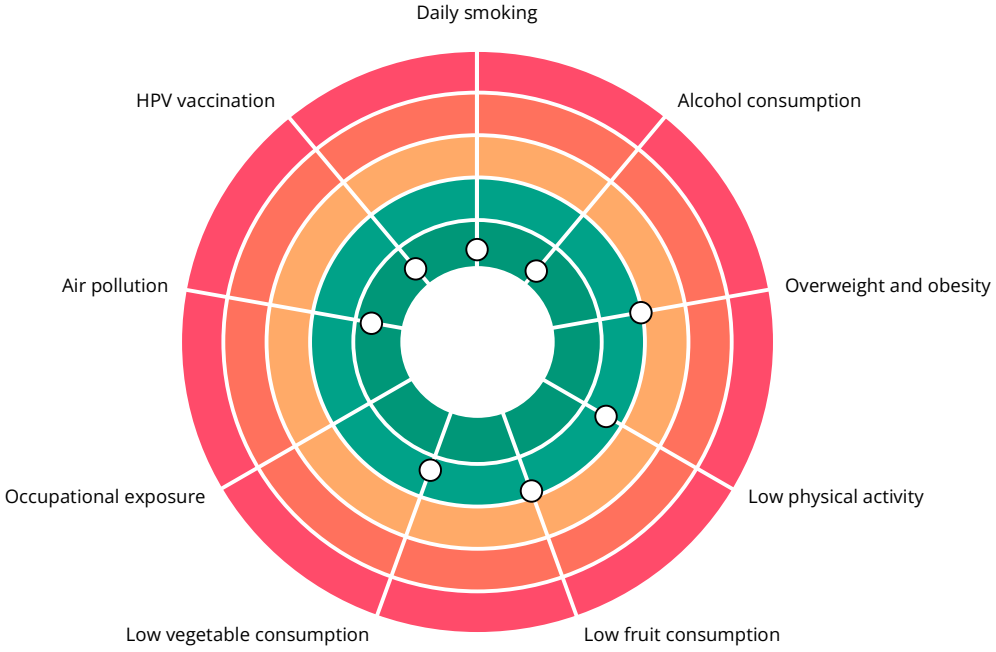
Pillars of EBCP				Transversal themes of EBCP		
Prevention	Early Detection	Diagnosis and treatment	Quality of life	Cancer inequalities	Paediatric cancer	Research and innovation
●	●	●	●	●	●	●

Notes: EBCP = Europe's Beating Cancer Plan. Blue indicates that the National Cancer Strategy includes a specific section on the topic; orange indicates that the topic is covered in one of the Strategy's sections without being the only focus; and pink indicates that this topic is not covered in the Strategy.
Source: Adapted from "Study on mapping and evaluating the implementation of Europe's Beating Cancer Plan" (not yet published).

3. Risk factors and prevention policies

In 2021, Norway allocated 3% of its healthcare expenditure (EUR 152, adjusted for differences in purchasing power), to preventive care – about half the EU average of 6% (EUR 213)[7]. In 2019, before the COVID-19 pandemic, Norway's share was 10% below the EU average, but its per capita spending (EUR 121) was 34% higher. Despite the recent apparent underinvestment, Norway excels in managing cancer risk factors like tobacco and alcohol consumption, air pollution and human papillomavirus (HPV) vaccination (Figure 6). While the country performs less well on dietary risk factors, overweight and obesity, the rates are comparable to EU averages.

Figure 6. Norway is among the best performing countries on smoking, alcohol consumption and human papillomavirus vaccination



Notes: The closer the dot is to the centre, the better the country performs compared to other EU+2 countries. No country is in the white "target area" as there is room for progress in all countries in all areas. Air pollution is measured as particulate matter with a diameter less than 2.5 micrometres ($PM_{2.5}$). Data not available for occupational exposure.
Sources: OECD calculations based on 2022 EU-SILC Survey for overweight, obesity, physical activity, fruit and vegetable consumption (in adults); Eurofound Survey for occupational exposure; OECD Health Statistics for smoking, alcohol consumption (in adults) and air pollution; and WHO for human papillomavirus (HPV) vaccination (15-year-old girls).

Norway's low smoking rates are overshadowed by rising alternative uses of tobacco

In 2023, only 7% of Norwegians aged over 15 were daily smokers – the second lowest after Iceland (6%) – marking a significant decrease from 19% in 2010, and well below the current EU average of 18%. Among those aged 15-24, only 3% smoked daily – the lowest across EU+2 countries – suggesting future reductions in overall smoking prevalence. However, most smokers in this age group were men (4% among men and 2% among women), and occasional smoking remained high at 15%, indicating a need for targeted policies (Ministry of Health and Care Services, 2023).

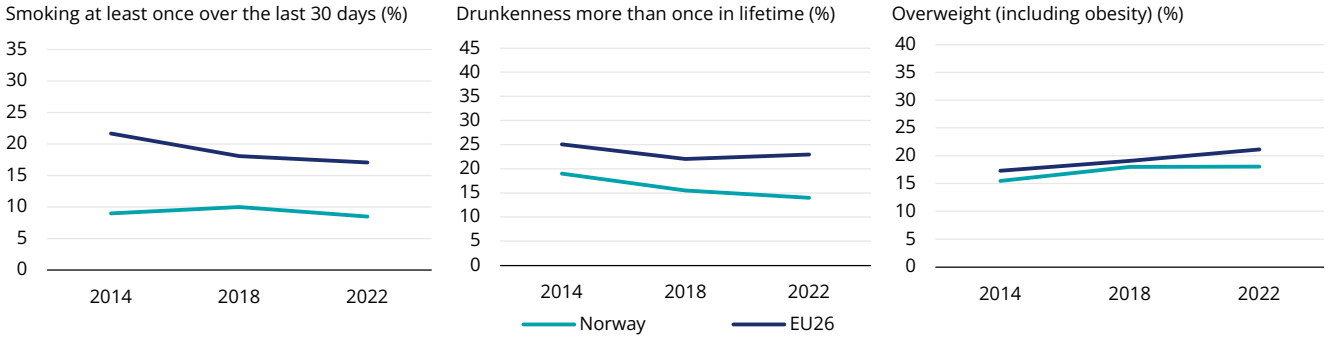
Among 15-year-olds, smoking prevalence in the last 30 days (9% in 2022) has been consistently lower than the EU average (17% in 2022) (Figure 7), but socio-economic disparities persist. Children from the least affluent households based on the Family Affluence Scale are twice as likely

7 *Prevention expenditures as reported in health accounts should include activities outside of national programmes (e.g. opportunistic cancer screening or counselling for smoking cessation during a routine physician contact), however in practice countries may have difficulty in identifying prevention spending outside of such programmes.*

to smoke than those from the most affluent families, with a particularly wide gap (three times greater likelihood) among boys. One in every ten 15-year-olds had used e-cigarettes in the past 30 days, with a similar pattern of socio-economic and gender inequalities. Notably, e-cigarette sales are expected to be permitted from 2025, following EU legislation harmonisation, having previously been banned in Norway.

Conversely, snus (smokeless tobacco) use has doubled over the past decade, with 15% of the population using it daily. Usage is particularly high among younger adults: 22% among those aged 16-24 and 27% among those aged 25-34.

Figure 7. Norway performs better than the EU average across adolescent risk factors



Notes: The EU average is unweighted. Data refer to 2022, and are based on children aged 15 years. EU26 for smoking and drunkenness; EU25 for overweight.
Source: Health Behaviour in School-aged Children Survey.

Norway ranks sixth in the 2021 Tobacco Control Scale, excelling in smoke-free environments and anti-tobacco campaigns. The government's new strategy against smoking aims to create a tobacco-free generation and includes various initiatives, including a national smoking cessation programme, increased taxation, further protections against passive smoking, restrictions in advertising and exposure to tobacco products in social media, and expanded reporting obligations of the tobacco industry.

The COVID-19 pandemic disrupted the sustained decrease in alcohol consumption

Norway's alcohol consumption in 2022 was 6.6 litres per person – 34% below the EU average but higher than the 6.2 litres recorded a decade earlier. The COVID-19 pandemic hindered previous progress in this risk factor, as alcohol consumption rose from 6.1 litres in 2019 to 7.4 in 2021. In 2022, only 14% of Norwegian 15-year-olds reported having been drunk more than once in their lifetime, compared to the 23% EU average. According to the IARC, in 2020, alcohol-related cancer prevalence was 9 per 100 000 people – higher than in other Nordic countries (Sweden and Iceland).

Norway employs various policies to reduce alcohol consumption, including a restrictive licensing system (including a ban on sales in kiosks, gas stations and venues with events targeted at children and young people), a state-owned monopoly of liquor stores for drinks over 4.75% alcohol by volume, television and social media advertising bans, high taxes and age limits. The National Alcohol Strategy, extended to 2030, aims for a 20% reduction in line with WHO targets. As part of the Strategy, the Directorate of Health has recommended adding health warning labels to alcoholic products.

Eating habits have worsened, and overweight and obesity rates have increased in Norway

Poor nutrition and lack of physical activity contribute to overweight and obesity. In 2022, 44% of Norwegian adults consumed fruit (compared to 39% in the EU) and 35% consumed vegetables (compared to 40% in the EU) less than once daily, with women about 30% more likely than men to eat both daily. Since 2017, daily consumption has decreased by 12% for fruit and 4% for vegetables across all demographic groups. Among 15-year-olds, daily fruit (28%) and vegetable (35%) consumption were close to EU averages but declining, with girls and adolescents from the most affluent households showing higher consumption.

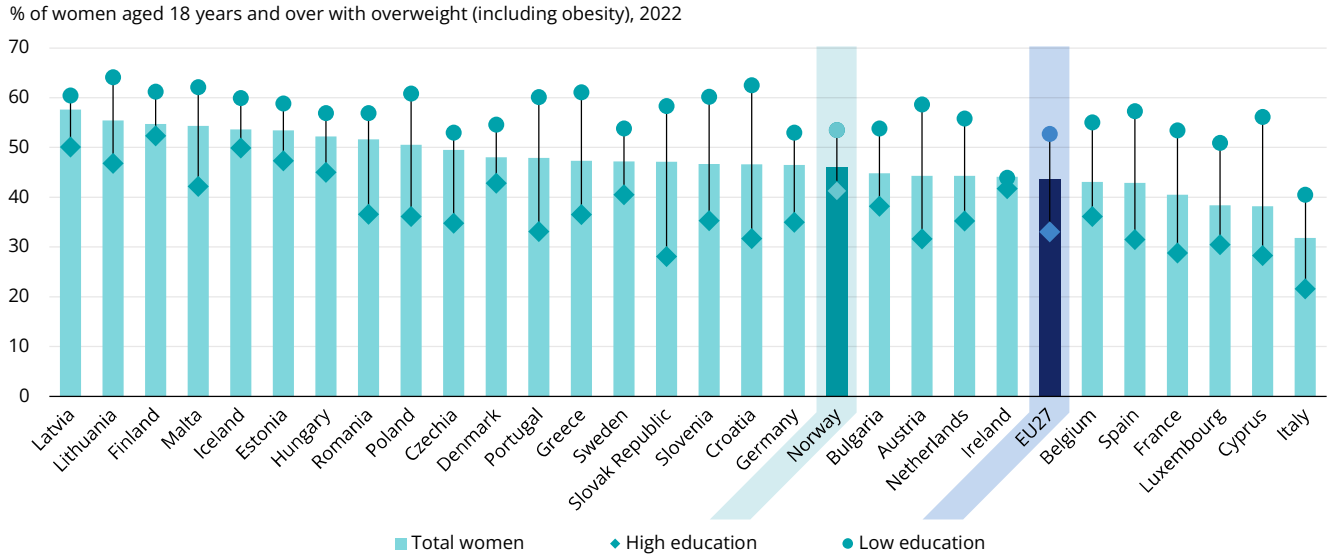
The government's 2022-23 National Strategy for the Elimination of Social Inequalities in Health aimed to improve eating habits, particularly among young people. Initiatives included enhancing food environments in kindergartens, schools and after-school settings through programmes like Skolefrukt and Skolelyst, which provide daily fruit and vegetables, and milk to school-aged children through various financing arrangements. Currently, 7% of pupils use Skolefrukt and 30% use Skolelyst.

The government is considering a nationwide free school meal scheme, already implemented in Oslo and Stavanger, as recommended by the Directorate of Health. In June 2023, the parliament also approved a ban on advertising unhealthy food and beverages to minors across all media channels. In August 2024, the government followed up by sending a proposal for implementation to public consultation (Blomhoff et al., 2023).

In 2022, 43% of Norwegians aged over 15 engaged in physical activity at least three times per week – above the EU average (31%) but below the rates in Denmark (60%), Sweden (60%) and Finland (63%). The government is implementing the Action Plan for Physical Activity 2020-29, a collaboration across 10 ministries focusing on activity-friendly environments and cross-sectoral innovation. Goals include zero growth in car passenger transport and daily physical activity in educational settings.

Overweight and obesity among Norwegian adults reached 54% in 2022 – above the EU average (51%) and the 2017 prevalence (49%). Notable socio-economic disparities exist, with obesity rates 20% higher among those with lower education levels than those with higher education levels. This gap is particularly pronounced among women (double the gap among men), although it remains one of the narrowest across EU+2 countries (Figure 8). Among 15-year-olds, overweight and obesity affected 18%, up from 16% in 2014. Socio-economic disparities are already visible at these young ages, with those from disadvantaged backgrounds more likely to be overweight or obese. In the lowest family affluence quintile, 29% of boys and 12% of girls were overweight or obese.

Figure 8. The prevalence of overweight among Norwegian women exceeds the EU average, but socio-economic disparities are small



Note: Overweight (including obesity) includes those with a body mass index (BMI) above 25.
Source: Eurostat Database.

Norway boasts some of the highest human papillomavirus vaccination rates

HPV vaccination coverage is provided using a 2-valent HPV vaccine. In 2023, it reached 93% for girls and 92% for boys – the second highest rate among EU+2 countries and well above the EU average (64% for girls), exceeding the WHO target for cervical cancer elimination.

The country provides free vaccinations through school-based programmes, with over 90% of the population supporting vaccine importance and safety (Steens et al., 2020). Tailored strategies have proved effective, and catch-up programmes introduced in 2016 increased coverage from around 70% in 2015 to almost 90% in 2019, while reducing inequities (Dong, Nygård & Hansen, 2021). The new National Cancer Strategy 2025-2035 aims to eliminate HPV-related cancer in Norway by 2030.

Norway has strategies in place to address its main environmental risk factors

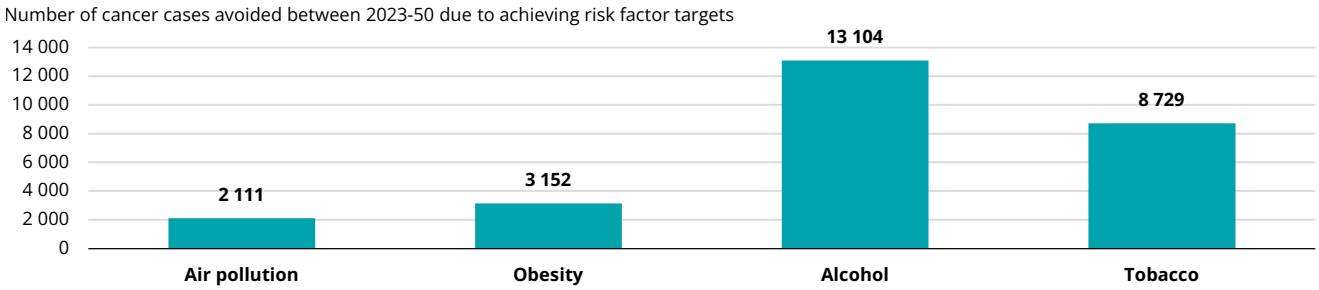
Norway's mean population exposure to $PM_{2.5}$ decreased by 42% from 2000 to 2020, reaching 6 µg/m³ –half the EU average (12 µg/m³). The country's Climate Action Plan aims for carbon neutrality by 2030, tackling air pollution through reduced car usage, cleaner wood-burning oven subsidies and electrified cruise ship docking stations.

Given Norway's high incidence of skin cancer, exposure to ultraviolet (UV) radiation is of particular importance. In 2018, 10% of all Norwegians and 25% of 15-24 year-olds had used tanning beds at least once in the prior year, while over 33% got sunburned (Nilsen et al., 2019). The National UV and Skin Cancer Strategy, developed by the Directorate for Radiation Protection and Nuclear Safety, focuses on awareness campaigns and research. While rejecting a solarium ban, the government is considering marketing restrictions, taxes and mandatory information measures (Ministry of Health and Care Services, 2023).

Norway has taken the lead on co-ordinating efforts for cancer prevention

According to OECD Strategic Public Health Planning (SPHeP) modelling work, meeting specific cancer risk factor targets in Norway (Figure 9) could prevent over thousands of new cancer cases between 2023 and 2050. Alcohol and tobacco reductions offer the largest potential gains, with 13 104 and 8 729 cancer cases prevented respectively. Since January 2024, Norway has led the Joint Action on Prevention of Non-Communicable Diseases (JA PreventNCD), the largest co-ordinated effort of its kind focused on cancer and NCD prevention. This initiative aims to reduce disease burden by addressing risk factors through strategies such as taxes on tobacco and sugar-sweetened beverages, assessing nutritional and health-related product labelling, and policies to restrict harmful marketing practices of unhealthy foods and beverages – especially to children – while supporting co-ordinated, multinational prevention efforts.

Figure 9. Achieving alcohol reduction targets could prevent over 13 000 new cancer cases in Norway



Notes: The target for tobacco is a 30% reduction in tobacco use between 2010 and 2025, and less than 5% of the population using tobacco by 2040. For alcohol, the target is a reduction of at least 20% in alcohol consumption and a 20% reduction in heavy drinking (six or more alcoholic drinks on a single occasion for adults) between 2010 and 2030. For air pollution, it is an annual average $PM_{2.5}$ level capped at 10 µg/m³ by 2030 and at 5 µg/m³ by 2050. For obesity, the target is a reduction to the 2010 obesity level by 2025.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

4. Early detection

Norway offers three cancer screening programmes, but not all are free of charge

Norway has established three population-based screening programmes for breast, cervical and colorectal cancers. The breast and cervical cancer programmes have been in place since the 1990s, while the national colorectal cancer screening was introduced in autumn 2022. All three programmes are administered by the Cancer Registry of Norway, ensuring co-ordinated management. In 2022, a joint national steering group, under the guidance of the Directorate of Health, was established to oversee all cancer screening programmes, providing advice, and monitoring their status and development. Simultaneously, an expert advisory group for each of the national cancer screening programmes was also established. However, decisions on new programmes or major changes are made by the Norwegian Parliament and the Ministry of Health and Care Services.

All three screening programmes have been implemented nationally, covering their entire target populations. Access differs in terms of invitation procedures and patient charges, however. Colorectal cancer screening is free, while cervical cancer screening involves deductible charges.

Breast cancer screening has a fixed, non-deductible fee of NOK 275 (approximately EUR 25). Recognising Norway's diverse population, the Cancer Registry of Norway provides information about these programmes in several languages, aiming to ensure equal access to crucial health information and to promote wider participation among the significant immigrant population.

Breast cancer screening participation rebounded from a low during the pandemic, and the country is exploring new technologies to boost it

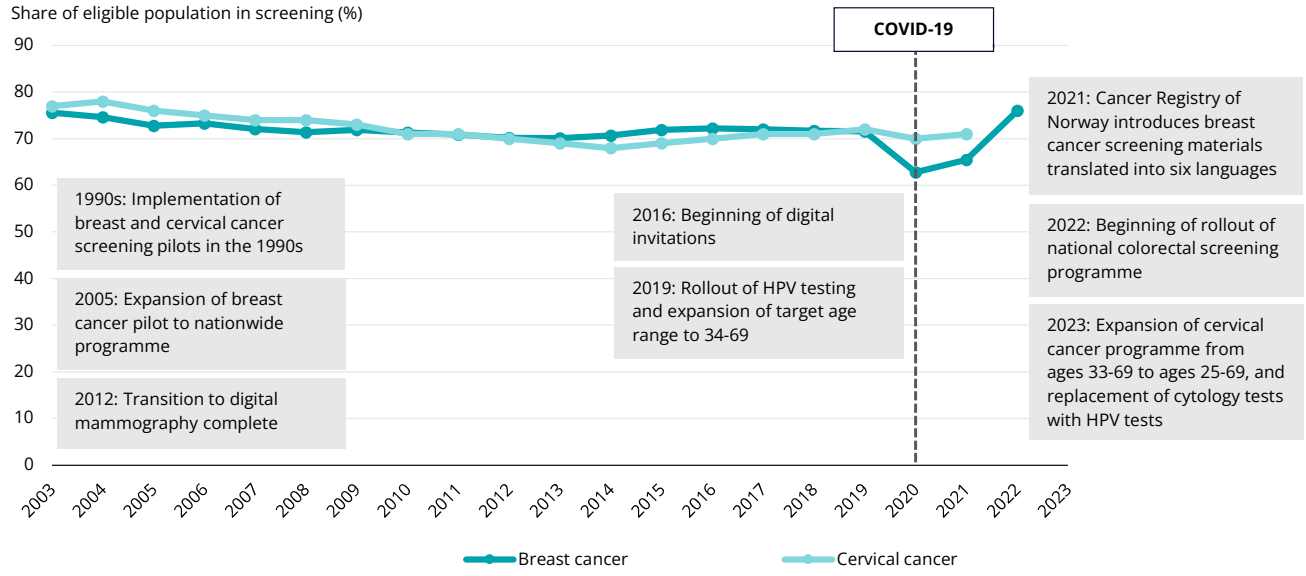
Breast cancer screening in Norway, initially a pilot project in 1995, was expanded nationwide in 2005. It targets women aged 50-69 for double-read mammographic screening every two years, which has been exclusively digital since 2012. This aligns with the 2022 Council recommendation on cancer screening that recommends biennial, organised, population-based breast cancer screening for women 50-69 years old.

The programme has an opt-out design, and about 4% of women opt out – half of whom cite a prior breast cancer diagnosis. Screening occurs at 30 units (26 stationary and 4 mobile) associated with 17 screening areas and breast centres. Mobile units typically serve rural areas with long travel times to stationary units. Local health trusts decide on mobile unit deployment and help identify eligible women.

Women receive invitation letters three weeks before scheduled appointments. Since 2016, digital invitations have been available, and 57% were sent digitally in 2021 (Bjørnson et al., 2022). The programme communicates through these personalised invitations and response letters; in some areas, information letters are sent to women before their first invitation to increase awareness. Non-respondents receive a reminder 5-6 weeks later, which has a 17% historical uptake rate and contributes to about 5 percentage points of overall screening coverage. The Cancer Registry of Norway communicates results, with breast centres handling positive screening results and offering further assessment.

Since 2010, breast screening participation has averaged 71%, peaking at 76% in 2022 after a sharp drop to 63% in 2020 following the onset of the COVID-19 pandemic (Figure 10). Some screening centres faced 5-7 month delays by September 2021. Social inequalities persist, particularly among immigrant women (58% attendance compared to 77% for non-immigrants) and in urban areas like Oslo (67% attendance compared to 82% in Sogn og Fjordane). To address these disparities, the Cancer Registry of Norway introduced translated materials in six languages in 2021 (Northern Sami, English, Arabic, Polish, Somali and Urdu). Despite challenges, the programme's effectiveness is evident, with nearly 80% of breast cancers detected through screening between 2017-21 (Bjørnson et al., 2022).

Figure 10. Breast and cervical cancer screening participation have remained stable at around 70% since 2010



Notes: Data refer to mammography screening among women aged 50-69 within the past two years (programme data) and HPV test screening among women aged 25-69 within the past five years (programme data). No national data through 2023 is available for colorectal cancer screening as the programme has been gradually rolled out since the 2022 pilot.
Source: OECD Health Statistics 2024.

The Cancer Registry of Norway has been at the forefront of research on the role of artificial intelligence (AI) and risk-based or personalised breast cancer screening. These efforts include conducting or financing several initiatives: a randomised controlled trial comparing AI in combination with radiographers to the current standard procedure; development of AI algorithms to aid in mammography image assessment; research into the importance of mammographic density to screening outcomes; a comparison of tomosynthesis to standard digital mammography; and use of AI to detect breast cancer in screening with both standard mammography and tomosynthesis. The importance of these two lines of work has been highlighted in the new National Cancer Strategy 2025-35, and a review of the current breast cancer screening age groups will be conducted by the Directorate of Health.

Norway is deploying home tests to boost participation and eliminate human papilloma-virus-related cancers by 2030

The cervical cancer screening programme, established in 1995, offers women aged 25-69 in Norway systematic, quality-assured, population-based screening. It aims for 80% participation and minimal unnecessary tests. The programme has evolved, with recent changes in 2023 including expansion of the screening age range from 33-69 to 25-69, and replacement of cytology tests with HPV tests. Women with negative HPV results are recommended for rescreening after five years. Positive HPV tests undergo cytological assessment to determine the need for colposcopy and biopsy, or follow-up HPV testing in 12, 24 or 36 months. General practitioners (GPs) primarily perform cervical examinations, with some conducted by gynaecologists and midwives in certain municipalities. Samples are analysed across 18 laboratories.

Women receive invitation letters (digital or physical) two months before their next cervical smear test is due. They can opt out of invitations. If no cervical smear is registered within a year, two more reminders are sent annually. 25-year-olds get an additional information letter to encourage participation. The programme employs an omnichannel campaign approach, including traditional and social media, youth brands and influencers, as seen in the Norwegian Cancer Society's #sjekkdeg (#checkyou) campaign. The attendance rate within 12 months is 40-50% for the first reminder (43% in 2021), 20-30% for the second and about 20% for the third, resulting in stable overall cervical screening participation at around 70% over 2011-21 (see Figure 10).

The 2023 cervical cancer screening report showed a participation rate of 72.6% – slightly above previous years (Cancer Registry of Norway, 2024b). Participation was highest among women aged 34-54 (75.2%), while those aged 25-33 and 55-69 had rates around 70%. The 55-69 age group had the most regional variation.

Norway's new National Cancer Strategy 2025-35 aims to eliminate HPV-related cancer by 2030. Screening plays a crucial role, with estimates indicating that cervical cancer incidence is 70% lower with than without screening. Vaccination is equally important: in 2021, only 20% of women aged 25-26 who had received HPV vaccines through the national childhood vaccination programme showed precancerous changes in cervical cells, compared to 35% of their unvaccinated peers.

A 2023 White Paper from the Cancer Registry of Norway identified the country as performing poorly on HPV elimination. It advocated expanded screening coverage using home HPV testing, and adopting an HPV vaccine covering additional HPV types responsible for precancerous or dysplastic lesions. Responding to 81% of Norwegian women preferring home tests, HPV self-sampling kits became available in GP practices nationwide in late 2023, targeting women over 25 facing barriers to traditional screening.

From 2025, the cervical cancer screening programme expects to mail HPV home tests to women who have not had a cervical test in 10 or more years – an estimated 190 000 women. Additionally, extended HPV genotyping for better risk stratification will be introduced nationally, with regional health authorities planning implementation, and revised HPV test requirements expected by summer.

Norway is expanding colorectal cancer screening and focusing on vulnerable populations

Following a May 2022 pilot phase, Norway's national colorectal screening programme began its phased rollout in autumn 2022, continuing through 2023. Targeting individuals aged 55-65, the programme mails faecal immunochemical test sample kits with return envelopes to participants, providing results within four weeks. Those with positive results are invited for a colonoscopy examination, while negative results lead to a new invitation in two years.

Recognising the need to enhance screening participation among vulnerable and historically less adherent populations, the Cancer Registry of Norway expanded its efforts in 2024. As part of the broader Immigrant Screen Project, it launched a research initiative to assess the impact of targeted outreach. This study will compare contacting non-participating Pakistani and Somali immigrants via telephone in their native languages to the current practice of sending reminder letters, to evaluate which method is more effective at encouraging participation.

Several innovations in cancer screening aim to boost early detection

Responding to the country's high skin cancer incidence rate, community pharmacists offer dermatological screening services, assessing moles and pigmented lesions with innovative technology that sends images to specialists for interpretation. Additionally, Norway launched a pilot lung cancer screening programme in 2022. The programme enrolled 1 000 individuals aged 60-79 with a history of smoking a pack a day for more than 35 years or a risk above 2.6% in a validated risk calculator for selection of patients to lung cancer screening programmes. These patients receive computed tomography (CT) scans every one or two years, aiming to evaluate the feasibility, costs and benefits of a national screening programme.

Looking ahead, the National Cancer Strategy 2025-35 seeks to enhance these initiatives. It focuses on integrating more technology and AI into screening activities, expanding coverage and methods, while addressing overdiagnosis issues and reducing opportunistic screening. By combining innovative screening approaches with cutting-edge technology, Norway aims to improve early detection and ultimately enhance cancer outcomes.

5. Cancer care performance

5.1 Accessibility

Norway's national health insurance system, funded through general taxation, provides universal health coverage – including primary, ambulatory and hospital care, as well as outpatient prescription drugs. This coverage extends to asylum seekers, refugees and other legally resident immigrants. The government covers nearly all inpatient care costs (99%) and almost 90% of outpatient care costs. In 2023, voluntary health insurance represents a very small portion of health expenditure (0.2%), while 14% is covered by household out-of-pocket payments, primarily due to copayments. These copayments are capped at approximately EUR 265 per year, with over 40% directed towards retail pharmaceuticals and outpatient medical care.

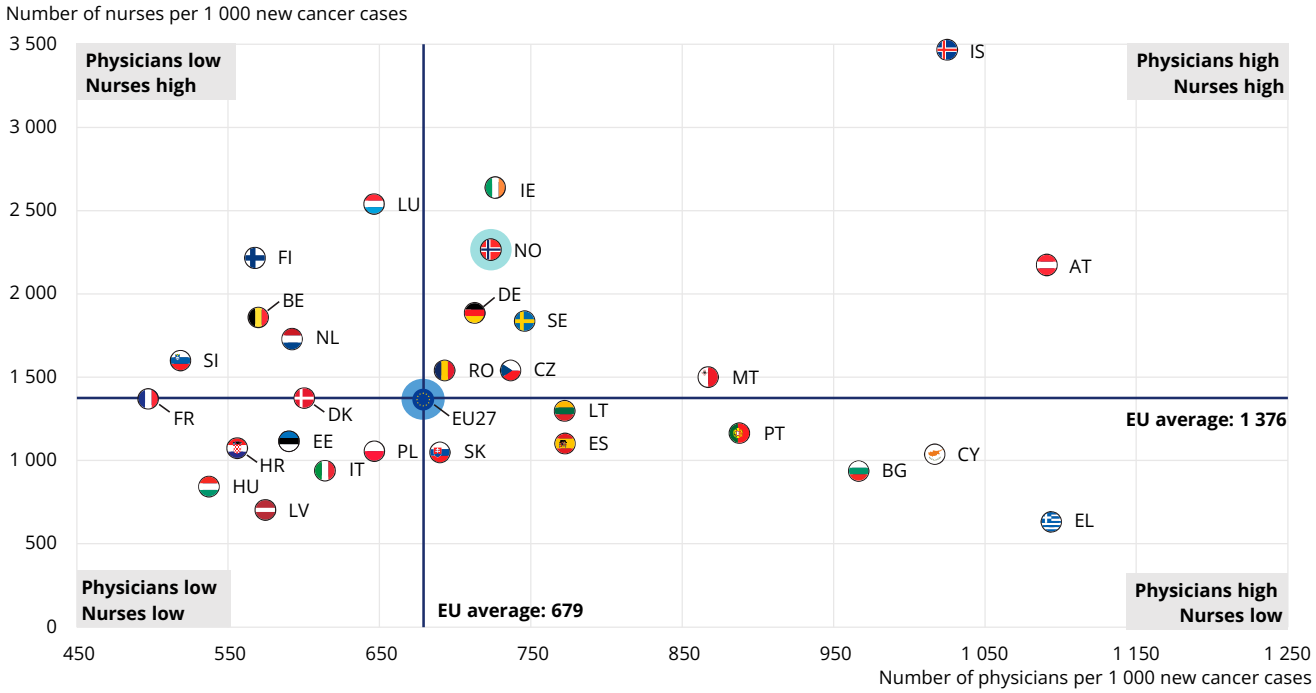
Norway grapples with cancer healthcare staff shortages

GPs in Norway are crucial for cancer care, from primary and secondary prevention to palliative care. They manage risk factors, promote healthy lifestyles, conduct screening tests and collaborate with specialists in investigating potential cancers. GPs also initiate care pathways, support treatment, address comorbidities and side-effects, and provide follow-up and rehabilitation (Directorate of Health, 2023).

Despite having a slightly higher than EU average number of GPs (0.9 per 1 000 population), Norway reported a GP shortage in 2023 (OECD, 2024). Over 220 000 Norwegians (4% of the population) lack a GP or must travel long distances for appointments. The country also reports shortages of oncologists, radiologists, radiation therapists, and oncology and community-based nurses.

While Norway's ratio of physicians per 1 000 new cancer cases (724 per 1 000) is 7% above the EU average of 679 per 1 000; and the ratio of nurses (2 267 per 1 000) is 65% above the EU average of 1 376 (Figure 11), the shortage of cancer care professionals persists.

Figure 11. Norway has more doctors and nurses per 1 000 cancer cases than the EU average



Notes: The data on nurses include all categories of nurses (not only those meeting the EU Directive on the Recognition of Professional Qualifications). Data refer to practising nurses except in Portugal and the Slovak Republic, where they refer to professionally active nurses. In Greece, the number of nurses is underestimated as it only includes those working in hospitals. In Portugal and Greece, data refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors. The EU average is unweighted.
Source: OECD Health Statistics 2024. Data refer to 2022 or latest available year.

According to the European Oncology Nursing Society (EONS) Cancer Nursing Index, Norway scored highly on cancer nursing development, alongside Sweden, with specific education programmes and recognition for cancer nursing (EONS, 2024). However, Norway scored poorly on cancer care delays because nursing shortages have a persistent negative impact on cancer care delivery. As in other countries, Norway's shortage issue extends beyond the number of healthcare professionals to a reportedly inadequate geographical distribution.

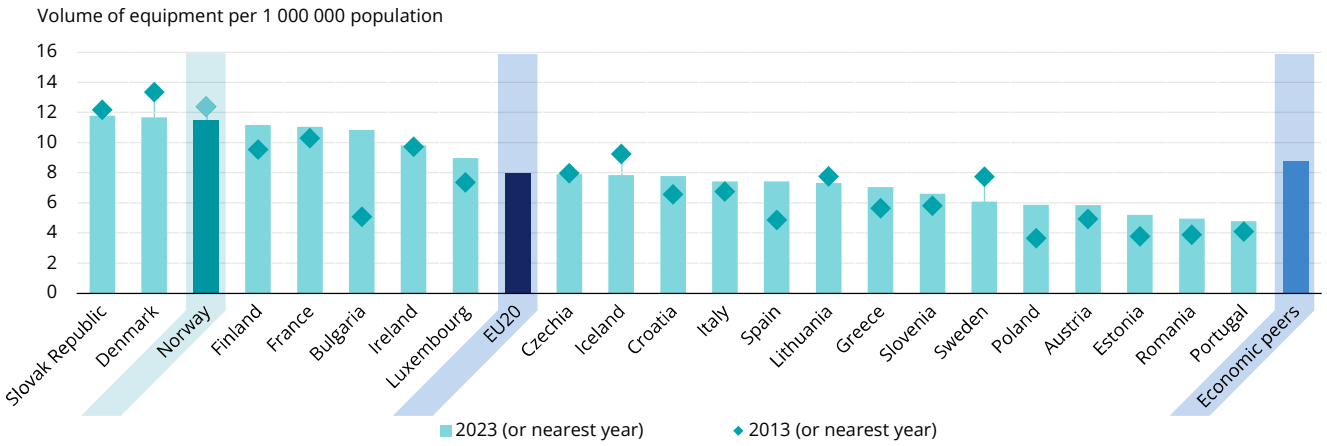
To address these challenges, Norway has increased training capacity and recruitment efforts. The annual number of newly recognised medical oncologists rose by almost 50% between 2013 and 2023. By early 2024, the total number of practising medical oncologists had reached 412 – more than double the number a decade earlier (176).

Norway has been investing significantly in diagnostic and radiation therapy equipment

Norway has among the highest volumes of radiation therapy equipment per 1 000 000 people (Figure 12). With 11.5 units per 1 000 000 in 2023, it surpasses averages across the EU by 44% and among its economic peers by 30%. In 2021, 61 pieces of equipment were distributed across 10 radiation therapy centres, including 42 megavoltage radiotherapy units and 12 brachytherapy machines. About 66% (41 units) were under 15 years old, meeting the WHO optimal lifespan for radiotherapy equipment. The first proton therapy centres under construction in Oslo and Bergen were expected to be operational by early 2025.

Since 2016, Norway has invested significantly in diagnostic equipment. By 2023, the density of mammographs (13 per 1 000 000 people) and CT machines (28 per 1 000 000) had nearly doubled, while the density of magnetic resonance imaging (MRI) machines (31 per 1 000 000) had increased seven-fold and of positron emission tomography (PET) scanners (4 per 1 000 000) had increased nine-fold. The more modest increase in CT (17%) and MRI (25%) exams highlights trade-offs between accessibility, efficiency and adoption of new radiology technology. The new National Cancer Strategy 2025-35 aims to ensure sufficient imaging and treatment capacity through equipment acquisition and personnel training and recruitment.

Figure 12. Norway has among the highest volumes of radiation therapy equipment in the EU+2 countries



Notes: The vast majority of radiotherapy equipment in EU countries is found in hospitals. Data for Portugal and France includes equipment in hospitals only while data for other countries refer to all equipment. Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for NO are AT, DK, IE, IS, LU and SE. The EU average is unweighted.
Source: OECD Health Statistics 2024.

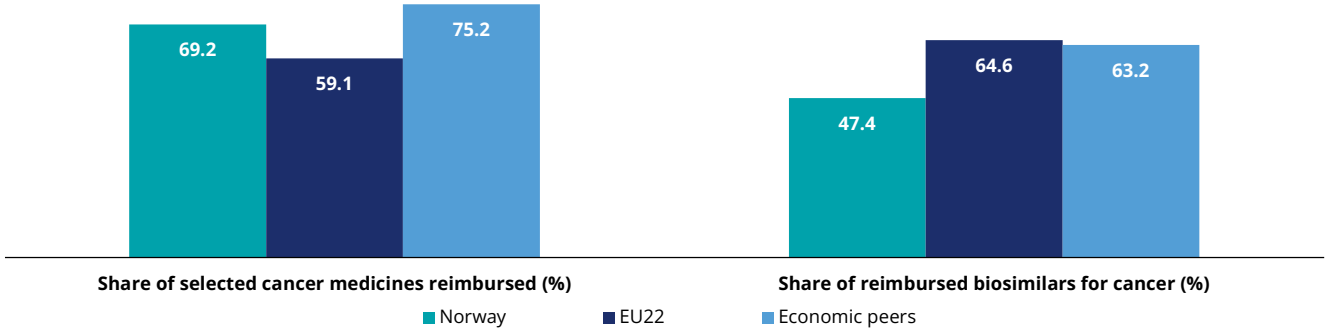
Norway reimburses most new cancer medicines, and decisions are faster than the average of EU countries

Access to new medicines depends on their availability and coverage. Norway's National Cancer Strategy 2025-35 aims to provide swift access to new, safe, effective and cost-effective drug treatments. In Norway, after European Medicines Agency (EMA) authorisation, all new cancer treatments undergo evaluation through the national system for managed introduction of new health technologies for reimbursement decisions (see Section 5.3).

Norway publicly reimburses 69% of indications for a sample of new cancer medicines (for breast and lung cancer) with high clinical benefit, surpassing the average across the EU (59%) but below the average among the country's economic peers (75%) (Figure 13). The mean time between EMA approval and coverage decisions for these drugs was 366 days, which is 29% shorter than the EU average (516 days).

However, in 2023, the share of biosimilar cancer medicines with public reimbursement was relatively lower compared to other EU+2 countries. In 2023, 47% of biosimilars for cancer medicines are publicly reimbursed, which is below the averages across the EU (65%) and among its economic peers (63%). Nevertheless, Norway's average decision time for reimbursing these drugs following EMA approval was 402 days (13 months), which is less than the EU average of 505 days.

Figure 13. Norway reimburses more new cancer medicines than the average in the EU countries



Notes: The analysis includes a sample of 13 indications of 10 new cancer medicines for breast and lung cancer with a high clinical benefit and 19 biosimilars of three cancer medicines (bevacizumab, rituximab, trastuzumab), with active marketing authorisation by the European Medicines Agency as of 26 March 2023. The data represent the share of the indications or biosimilars that were on the public reimbursement list on 1 April 2023. Economic peers are defined as tercile clusters based on 2022 GDP per capita in purchasing power standard terms. Economic peers for NO are AT, BE, DE, DK, IE, IS, NL and SE. The EU average is unweighted.
Source: Hofmarcher, Berchet and Dedet (2024), "Access to oncology medicines in EU and OECD countries", https://doi.org/10.1787/c263c014-en.

Waiting times for cancer care worsened from 2018 to 2023

Norway's Patients' Rights Act mandates specific care timeframes, prompting the Directorate of Health to monitor waiting times across regional health authorities, providers and care areas. In 2023, waiting times were 55 days for breast and endocrine surgery, 74 days for general surgery and 103 days for oncology appointments (Directorate of Health, 2024a). These figures represent a deterioration from 2018, when national waiting times were 31 days for breast and endocrine surgery, 62 days for general surgery and 68 days for oncology appointments. This increase reflects the strain of increasing incidence and prevalence, despite an expanding workforce. Significant geographical variation was also observed, with oncology waiting times ranging from 57 days in the Northern Regional Health Authority (Helse Nord) to 297 days in the Central Regional Health Authority (Helse Midt-Norge).

To enhance efficiency and accessibility, Norway is adopting digital technologies. The Directorate of Health's Digital Treatment and Self-treatment Plan enables real-time collaboration on comprehensive follow-up across service levels. This tool allows both practitioners and patients to track patient progress, access medical records and communicate digitally with health services. Testing has shown that patients report improvements in quality of life and have lower usage of healthcare services after implementation.

5.2 Quality

Cancer survival estimates in Norway are high, but lower among men

Net survival estimates where cancer is the only possible cause of death is often assessed over five-year intervals. In Norway, overall five-year net survival for all cancer sites in 2023 (for patients diagnosed between 2019 and 2023) was 78% for men and 77% for women. During 2017-21, Norway ranked second among Nordic countries in age-standardised five-year cancer survival estimates for both men (77%) and women (75%), trailing only Sweden (78% for men and 76% for women).

Among key cancer locations, prostate cancer among men and breast cancer among women showed the highest survival rates – both exceeding 80% for 15-year net survival in 2023 (Figure 14). Considerable gender differences exist in colon and lung cancer survival, with men consistently showing lower rates, particularly for longer intervals (10-year and 15-year survival).

Figure 14. Men have lower survival rates for colon and lung cancers than women

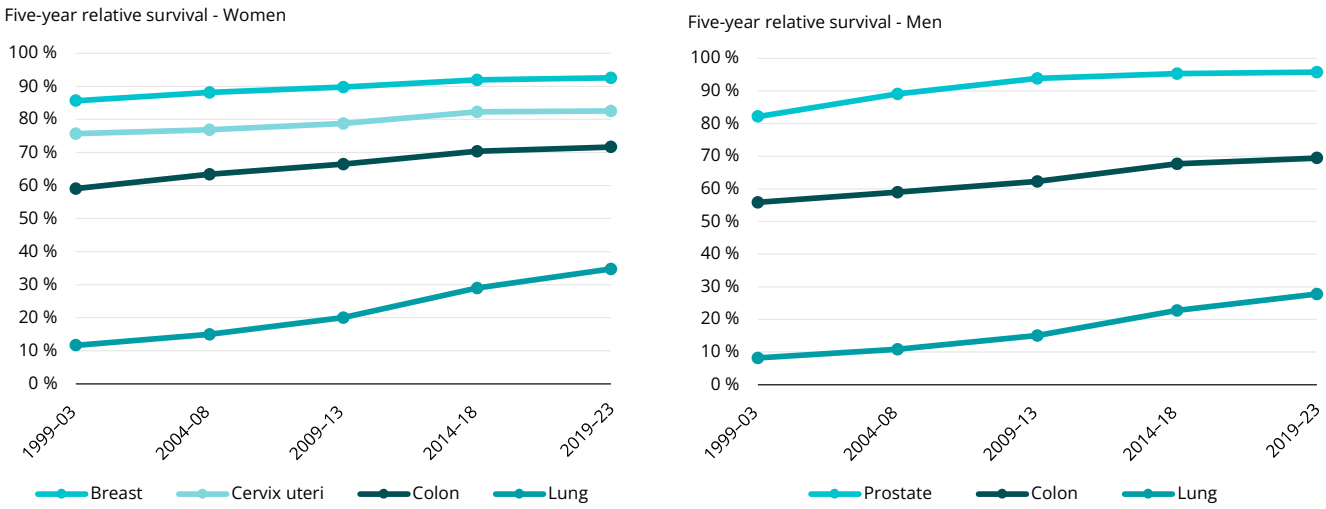
Individuals diagnosed in 2019-23	Prostate cancer	Breast cancer	Cervical cancer	Colon cancer		Lung cancer	
	Men	Women	Women	Men	Women	Men	Women
1 year net survival	99.5%	98.2%	93.0%	85.9%	85.1%	54.2%	61.2%
5 year net survival	95.8%	92.6%	82.6%	69.5%	71.7%	27.8%	34.8%
15 year net survival	86.8%	83.6%	77.2%	52.3%	64.2%	12.8%	17.9%

Source: Cancer Registry of Norway (2024a).

Survival rates in Norway have improved steadily over the last two decades

Norway's cancer survival evolution has been remarkable. Over the last 20 years, colon cancer survival estimates increased by 24% for men and 21% for women to around 70% (Figure 15). Prostate cancer followed a similar pattern, but most gains occurred before 2003, after which survival improved by 17% to over 95%. Breast and cervical cancer survival increases have been consistent but less steep, starting from over 75% in 2003. Lung cancer survival increased more than three-fold over the 20-year period, with most improvements for both genders occurring after 2008. Advances in colon cancer survival have seen the gender gap decrease to 2%, while a gender gap of 7% remains for lung cancer survival.

Figure 15. Five-year survival rates have improved steadily for both men and women across all cancers since the end of the 1990s



Source: Cancer Registry of Norway (2024a).

Quality of cancer care is improving in several dimensions, but challenges remain at the end-of-life stage

Several other indicators of cancer care quality in Norway show sustained progress, and compare well with other countries. The average length of hospital stay for cancer patients decreased from 8 days to 5 days between 2000 and 2021 (a drop of 34%) – one of the lowest rates across the EU, and significantly below the EU average of 7 days. This steady decline was similar for most cancer sites. Breast cancer surgery has also evolved considerably over the past 20 years towards less radical surgery and lower need for inpatient stays. In 2021, 73% of all mastectomies performed were partial – up from 61% in 2013 and slightly above the EU average of 70%. Additionally, only 27% of partial mastectomies were inpatient procedures – down from 57% in 2013 and well below the 64% EU average.

End-of-life care quality is another crucial dimension. Recognising when patients are approaching death can be challenging, and failure to do so may result in aggressive overtreatment and delayed palliative care. In Norway, 18% of cancer patients who died in 2021 experienced more than one unplanned or urgent inpatient admission during their last 30 days of life – a rate significantly higher than that in Sweden (9%) or the Netherlands (3%). This share rises to 57% when considering the last 180 days of life (compared to 47% in Sweden and 19% in the Netherlands). These rates are about 65% higher than the share for all causes of death, highlighting additional challenges in end-of-life cancer care that can increase patient suffering and healthcare costs.

National treatment guidelines and patient pathways were developed to ensure high-quality and equal access to cancer care

Norway's Directorate for Health has prioritised cancer quality by publishing 24 clinical guidelines for all major cancers. These aim to ensure that quality care is equally available nationwide, targeting GPs, surgeons, oncologists, radiologists and pathologists. Comprehensive recommendations have also been issued, identifying resources, processes and expertise to guarantee competence and quality in cancer surgery centres (Directorate of Health, 2024b). Concurrently, 26 cancer-related patient pathways were introduced to align treatment with national guidelines, and to provide patients with care co-ordinators for continuity and system navigation.

Another quality-focused strategy involves 12 national cancer quality registries (covering paediatric, lung, breast, prostate, bowel, lymphoma and leukaemia, gynaecological, pancreatic, oesophagus and stomach, sarcoma, melanoma, and brain and spinal cord cancers). These registries include genomic information, diagnosis stage, treatment, follow-up care, and PREMs and PROMs, enabling monitoring of process and performance indicators at regional and hospital levels. By publishing annual reports, Norway provides transparent quality checks and feedback to professionals and providers. A similar, albeit less systematic, process occurs with yearly reports on screening programmes.

Aligning with the flagship Europe's Beating Cancer Plan, Norway aims to ensure that 90% of its population has access to a comprehensive cancer centre (CCC) by 2030. Despite the desire

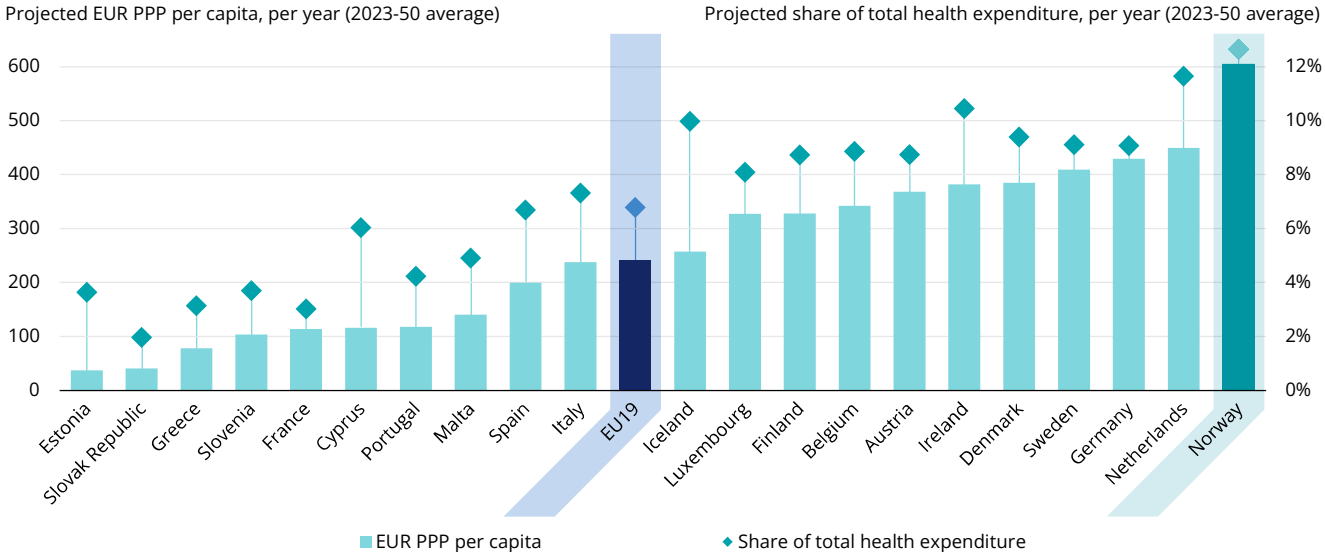
for one CCC per health region, Norway's 20-year cancer care centralisation has led many healthcare organisations to facilitate regional co-operation and find alternative common solutions, which can provide the basis for a solution to address the CCC population coverage challenge. As of July 2024, there was one CCC in Norway.

5.3 Costs and value for money

The burden of cancer on health expenditure is projected to increase by 45% in Norway between 2023-50

According to OECD SPHeP modelling work, between 2023 and 2050, total health expenditure is estimated to be 13% higher in Norway due to the burden of cancer. This equates to an average of EUR (PPP) 605 per person per year (Figure 16). This figure is much higher than the EU19 average (EUR 242). Overall, the per capita health expenditure on cancer care is expected to grow by 45% in Norway between 2023 and 2050, compared to 59% in the EU27.

Figure 16. The burden of cancer on health expenditure in Norway is expected to be the highest in EU+2 countries



Note: The EU average is unweighted.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

A significant portion of cancer care expenditure in Norway goes on pharmaceuticals. In 2022, the country allocated around EUR 500 million to oncology and immunomodulator drugs alone, accounting for the largest share (22%) of total pharmaceutical expenditure, and representing 2% of the EUR 25.1 billion government health expenditure during the year (Dansie et al., 2023). In 2013, Norway implemented a national system for managed introduction of new health technologies called Nye Metoder [New Methods]. This provides a consistent process for assessment and decision making on public funding for new health technologies, ensuring that resources are allocated efficiently. Following an evaluation of the system in 2021, several improvements have been adopted to enhance its effectiveness. These include faster case processing for medicines (see Section 5.1) and a more focused approach to prioritising which non-pharmaceutical technologies should be assessed.

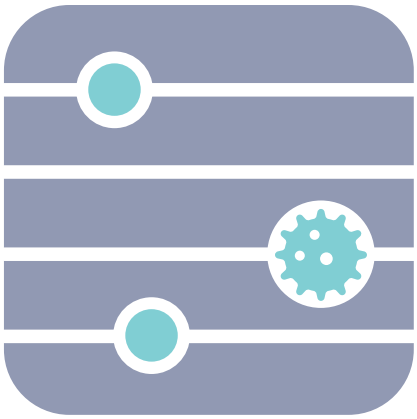
Recognising the importance of balancing innovation with cost – effectiveness, the new National Cancer Strategy 2025-35 has defined a goal of having more cancer surgical methods and medical technology equipment assessed through the Nye Metoder system. This approach aims to ensure that patients receive the most beneficial treatments while maintaining the sustainability of the healthcare system.

Cancer imposes substantial societal costs beyond healthcare in Norway

The true cost of cancer extends far beyond direct healthcare expenditure. In 2019, the Directorate of Health calculated that the total annual societal costs from cancer – encompassing the burden

of disease, health service costs and production losses – reached NOK 262 billion (EUR 22.2 billion) (Sælensminde & Line, 2019). This substantial figure is expected to increase significantly due to rising incidence, improved survival rates, growing prevalence and escalating therapeutic technology costs. To illustrate the scale of this issue, even a single type of cancer can have a considerable economic impact. For instance, skin cancer alone has been estimated to represent total annual societal costs of NOK 6.5 billion (EUR 550 million).

The OECD SPHeP modelling work provides further insight into the indirect costs of cancer. Between 2023 and 2050, on average, cancer is expected to lead to a loss of 187 full-time equivalent workers (FTEs) per 100 000 people in Norway due to reduced employment. This figure is higher than the EU average of 178 FTEs per 100 000, highlighting the significant impact of cancer on workforce participation in Norway. Additionally, annual losses of 46 FTEs per 100 000 people due to absenteeism (compared to 38 per 100 000 across the EU) and 52 FTEs per 100 000 due to presenteeism[8] (compared to 43 per 100 000 across the EU) are expected, representing a substantial productivity loss attributable to cancer's effects on working individuals.



8 *Presenteeism refers to lost productivity that occurs when employees are not fully functioning in the workplace because of an illness, injury or other condition.*

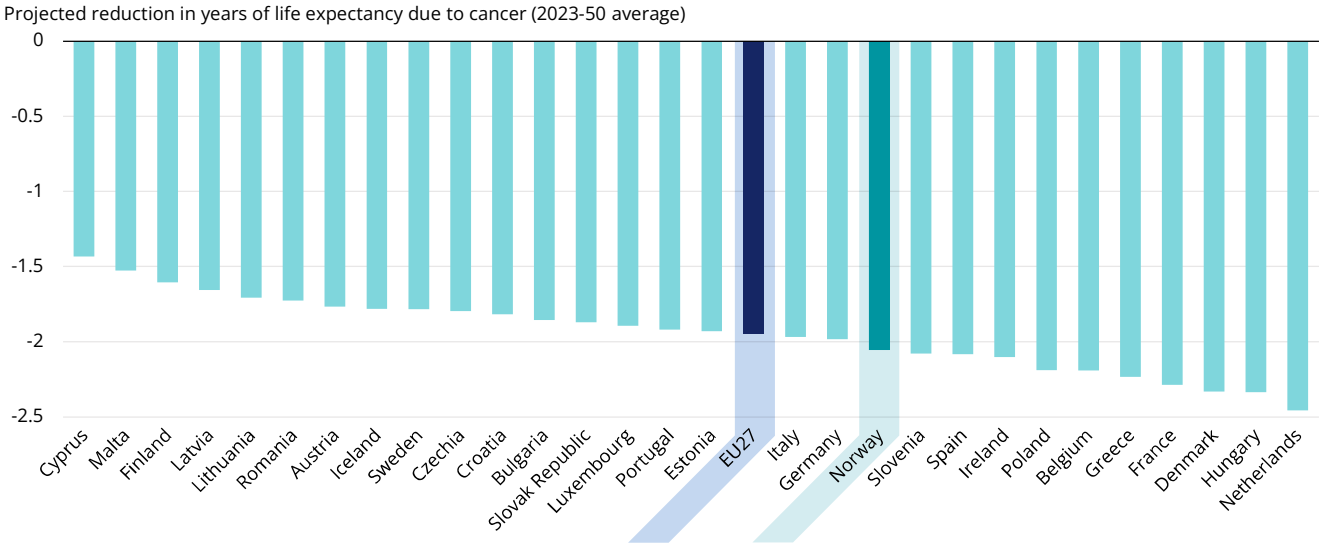
5.4 Well-being and quality of life

Cancer's impact on Norway's life expectancy is slightly higher than the EU average

The increasing incidence of cancer (see Section 2) in Norway is expected to have a growing impact on public health and well-being. According to OECD SPHeP modelling work, between 2023 and 2050, cancer will reduce average life expectancy in the country by 2.1 years compared to a scenario without cancer. This reduction is slightly higher than the EU average of 1.9 years (Figure 17).

In addition, cancer takes a substantial toll on the mental health of the population through its associated symptoms and treatment side effects, impact on daily life, social roles and work. According to the OECD's SPHeP model, Norway is projected to experience the lowest rate of new depression cases due to cancer, with an age-standardised rate of an additional 7 cases per 100 000 people per year during 2023-50 – substantially below the EU average of 17 per 100 000.

Figure 17. Cancer is expected to reduce life expectancy in Norway by over 2 years between 2023 and 2050



Note: The EU average is unweighted.
Source: OECD (2024b), Tackling the Impact of Cancer on Health, the Economy and Society, https://doi.org/10.1787/85e7c3ba-en.

Norway fosters comprehensive cancer rehabilitation, emphasising personalised care and multidisciplinary support

Norway's Directorate of Health has implemented a Rehabilitation, Habilitation, Individual Plan and Co-ordinator Guideline that, while not cancer-specific, applies to cancer care. It aims to enhance functional and coping abilities, maximising independence, participation and quality of life. Rooted in respect for human dignity, it ensures equitable services regardless of demographics or individual needs. The approach emphasises personalised, holistic care, involving patients, families and cross-disciplinary teams to provide co-ordinated support.

Cancer rehabilitation in Norway addresses medical, social and psychological needs through various services: physical activity and training, psychological support, dietary adjustments, economic and practical assistance, and workplace accommodation. In some hospitals and health regions, patients can access professionals such as sexologists, psychologists, nutritionists and physiotherapists, covered by the national health insurance system. Rehabilitation options range from self-managed programmes to structured interventions at hospitals, community health services or specialised centres. For complex cases, individualised plans ensure co-ordinated care. Additionally, peer support and educational courses help patients and families adapt to life during and after cancer treatment.

Norway provides comprehensive support for carers, including training, paid leave and financial benefits

Support for carers is crucial in Norway's cancer care system. Municipalities are obliged to provide training to carers offering intense care under specific conditions. Municipal centres offer courses

to help close family members cope with their daily responsibilities while caring for cancer patients.

Norway offers paid care leave for carers of non-terminally ill cancer patients, though it is limited to less than one month, compensated at the full wage rate. Additionally, Norway provides two direct cash benefits to carers, one of which is specifically for end-of-life care. These benefits are not exclusive to carers of older people, and do not require a contract with public authorities.

The care allowance is income-dependent and capped at approximately EUR 870 per month. For end-of-life care, the monthly amount differs, ranging from EUR 117 to EUR 701 in 2020, with a maximum duration of 60 days. In Norway, about 70% of care beneficiaries are women; as of 2019, there were 1 167 beneficiaries for end-of-life care benefits (Rocard & Llena-Nozal, 2022).

Norway provides quality-driven palliative care for cancer patients

In Norway, end-of-life care is provided mostly free of charge, and is organised according to national standards and guidelines. While basic palliative and end-of-life care is offered by all healthcare services and professionals, specialist care is provided by dedicated teams and units in hospitals and nursing homes.

The palliative care system in Norway has several key features. While there is no mandatory training certification, recommendations for qualified personnel exist. The National Action Programme for Palliative Care outlines specific competency requirements for all professions in palliative care teams (Directorate of Health, 2015). Approved educational units, which comprise about 50% of all palliative care hospital programmes, undergo regular audits and quality evaluations. These units report annually to the Directorate of Health, and are visited regularly by a national quality committee.

The palliative care pathway for cancer patients employs a holistic, multidisciplinary approach across physical, psychological, social and spiritual domains. Physical management focuses on maintaining function and independence, while nutritional care addresses malnutrition and cachexia. Psychological and spiritual support are provided through conversations, respecting patients' beliefs and values. Family involvement is integral, offering education and resources for coping. The pathway emphasises effective co-ordination and documentation among healthcare providers, using individualised plans to enhance care quality. This integrated strategy aims to improve quality of life for patients and families throughout the illness journey, offering personalised and compassionate care at each stage.

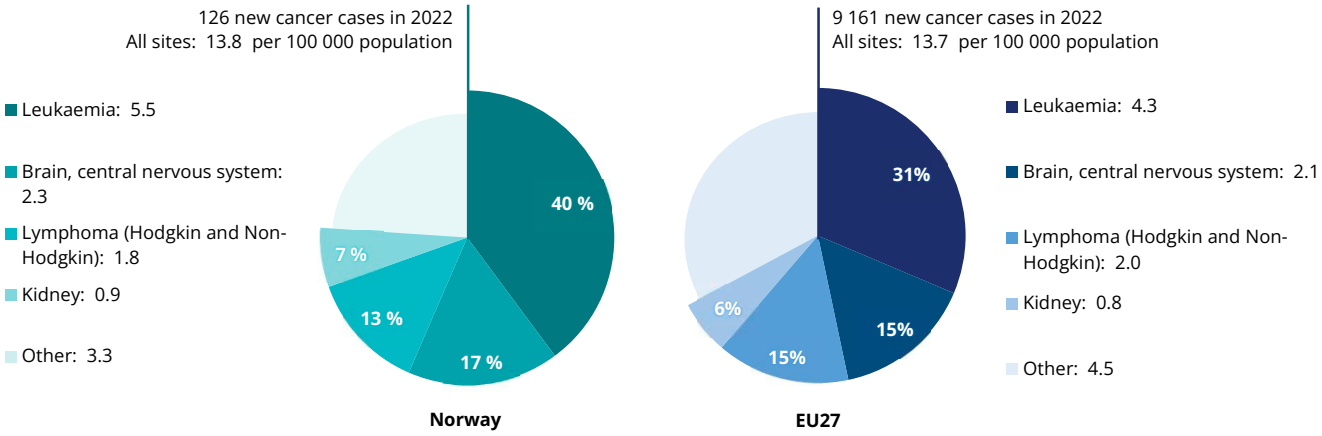
6. Spotlight on paediatric cancer

According to ECIS, it is estimated that 126 children and adolescents up to age 15 were diagnosed with cancer in Norway in 2022. Incidence rates for ages 0-14 were estimated at 13.8 per 100 000 children, compared to 13.7 per 100 000 among EU countries (Figure 18). Incidence rates among boys were slightly higher than among girls in Norway – similar to the trend across the EU. The most common cancer groups were leukaemia, at 5.5 cases per 100 000 children (40%), brain and central nervous system, at 2.3 cases per 100 000 (17%), lymphoma, at 1.8 cases per 100 000 (13%) and kidney, at 0.9 per 100 000 (7%).

Eurostat data shows that mortality rates are lower in Norway, with a 3-year average mortality rate of 1.7 per 100 000 children as compared to 2.1 in the EU.

Figure 18. Cancer incidence rates among children in Norway are in line with the EU averages

Age-standardised incidence rate per 100 000 population (aged 0-14), estimates, 2022



Notes: 2022 estimates are based on incidence trends from previous years, and may differ from observed rates in more recent years. "All sites" includes all cancer sites except non-melanoma skin cancer.
Source: European Cancer Information System (ECIS) for cancer incidence. From https://ecis.jrc.ec.europa.eu, accessed on 10 March 2024. © European Union, 2024.

Norway's paediatric cancer care is delivered through a regionalised network based at four university hospitals (Oslo, Haukeland, St. Olav's, and Northern Norway), with local children's departments providing follow-up care. Three national specialist groups oversee care for leukaemia/lymphoma, central nervous system tumours and solid tumours outside the central nervous system. Since 2021, digital national multidisciplinary meetings for solid tumours occur two or three times per month, complementing regular interdisciplinary discussions at each institution.

According to the European Society of Paediatric Oncology (SIOPE)'s Organisation of Care & Research for Children with Cancer in Europe (OCEAN) Project, of 13 key infrastructural and treatment modalities, 11 are available in Norway, with proton radiation therapy expected by 2025 (SIOPE, 2024). The country's paediatric cancer quality registry reported an overall five-year relative survival rate of 89% in 2023. Norway conducted 9% (37) of the 436 European paediatric and adolescent cancer clinical trials between 2010 and 2022. The country has an Innovative Therapies for Children and Adolescents with Cancer Consortium Centre located at the Oslo University Hospital.

As of the end of 2023, over 7 000 individuals were alive after having received a cancer diagnosis before the age of 18, 80% of whom experienced late effects of varying severity. Recognising the importance of lifelong care for these survivors, the Directorate of Health has developed comprehensive guidelines for palliative care for children and young people.

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Country abbreviations

Austria	AT	Denmark	DK	Hungary	HU	Luxembourg	LU	Romania	RO
Belgium	BE	Estonia	EE	Iceland	IS	Malta	MT	Slovak Republic	SK
Bulgaria	BG	Finland	FI	Ireland	IE	Netherlands	NL	Slovenia	SI
Croatia	HR	France	FR	Italy	IT	Norway	NO	Spain	ES
Cyprus	CY	Germany	DE	Latvia	LV	Poland	PL	Sweden	SE
Czechia	CZ	Greece	EL	Lithuania	LT	Portugal	PT		

European Cancer Inequalities Registry

Country Cancer Profile 2025

The European Cancer Inequalities Registry is a flagship initiative of the Europe's Beating Cancer Plan. It provides sound and reliable data on cancer prevention and care to identify trends, disparities and inequalities between Member States and regions. The Registry contains a website and data tool developed by the Joint Research Centre of the European Commission (https://cancer-inequalities.jrc.ec.europa.eu/), as well as an alternating series of biennial Country Cancer Profiles and an overarching Report on Cancer Inequalities in Europe.

The Country Cancer Profiles identify strengths, challenges and specific areas of action for each of the 27 EU Member States, Iceland and Norway, to guide investment and interventions at the EU, national and regional levels under the Europe's Beating Cancer Plan. The European Cancer Inequalities Registry also supports Flagship 1 of the Zero Pollution Action Plan.

The Profiles are the work of the OECD in co-operation with the European Commission. The team is grateful for the valuable comments and suggestions provided by national experts, the OECD Health Committee and the EU Thematic Working Group on Cancer Inequality Registry.

Each Country Cancer Profile provides a short synthesis of:

- the national cancer burden
- risk factors for cancer, focusing on behavioural and environment risk factors
- early detection programmes
- cancer care performance, focusing on accessibility, care quality, costs and quality of life.

Please cite this publication as:
OECD/European Commission (2025), *EU Country Cancer Profile: Norway 2025*, EU Country Cancer Profiles, OECD Publishing, Paris, https://doi.org/10.1787/bf26204a-en.

Series: EU Country Cancer Profiles

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