European Cancer Inequalities Registry

GERMANY

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

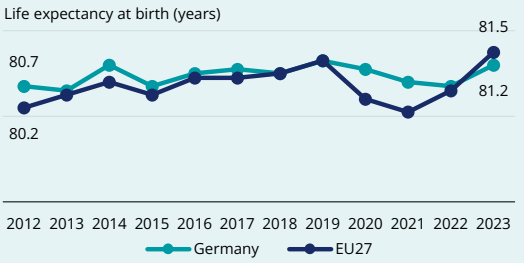
The data and information in the Country Cancer Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database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

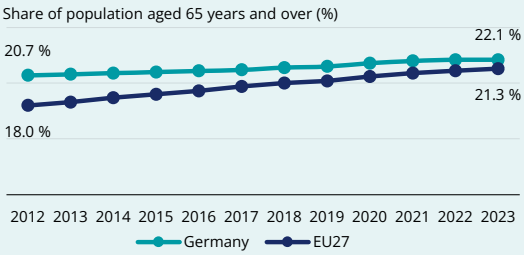
Additional data and information also come from the European Commission's Joint Research Centre (EC-JRC), the EU statistics on income and living conditions (EU-SILC) Survey, the World Health Organization (WHO), the International Agency for Research on Cancer (IARC), the International Atomic Energy Agency (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.

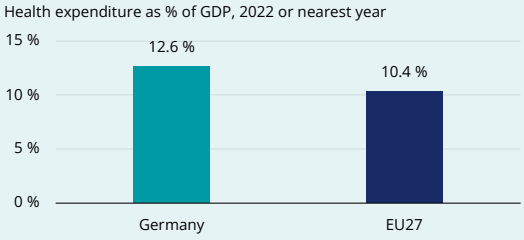
Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries.

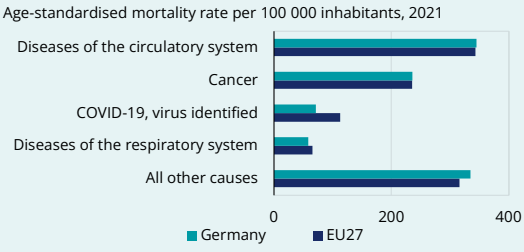
Contents

Key health system and demographic statistics



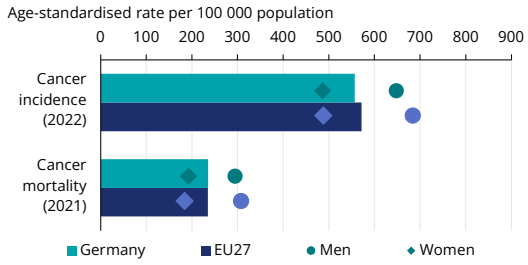






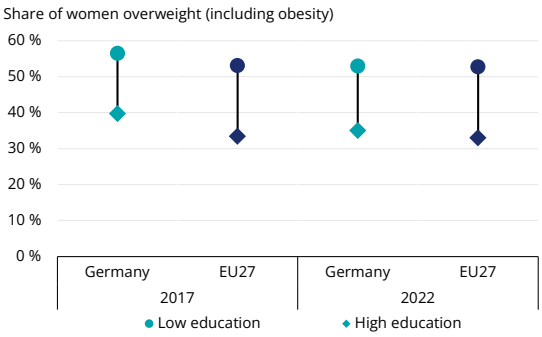
Source: Eurostat Database.

1. Highlights



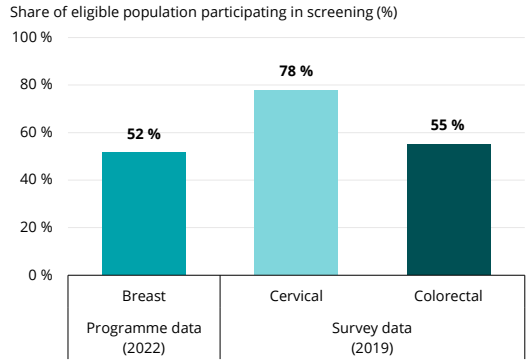
Cancer in Germany

The estimated cancer incidence rate in Germany is below the EU average, especially among men. Mortality remains comparable to the EU average, but is slightly higher among women and slightly lower among men than across the EU. Similar to trends in the EU, mortality rates are higher among men but have declined faster between 2011 and 2021.



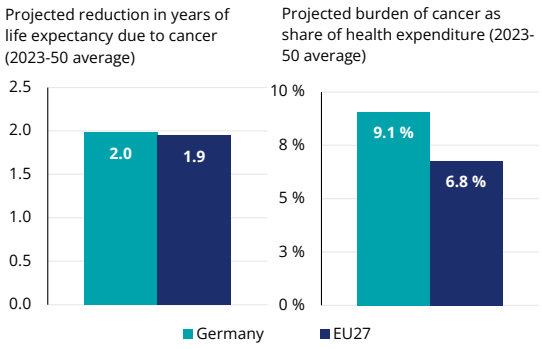
Risk factors and prevention policies

Prevalence of overweight is more than 50 % higher among women with lower education levels than those with higher education levels. In terms of other cancer risk factors, Germany lags behind most EU countries on vegetable consumption and HPV vaccination coverage. Cancer prevention is part of a broader national prevention strategy for non-communicable diseases. Similarly, prevalence of daily smoking in Germany has been decreasing and is lower than the EU average. There are socio-economic gaps in smoking, where those with lower income and education are more likely to smoke than those with higher socio-economic status.



Early detection

Programme data shows that screening rates for breast cancer have plateaued at slightly over 50 % of all eligible women between 2007 and 2022. Germany introduced a colorectal cancer screening programme in July 2019 and a cervical cancer screening programme in January 2020, but programme data for the screening rate among the entire eligible population is not available. According to EHIS data, there are larger socio-economic gaps in participation in cervical cancer screening, but the gaps in breast and colorectal cancer screening are fairly small.



Cancer care performance

Cancer care in Germany is covered by comprehensive social health insurance and provided by a relatively high supply of nurses and physicians. Germany offers very good access to new oncology medicines and biosimilars. Efforts are being made to improve survival estimates via concentration of care, and to improve well-being of patients through rehabilitative services, psychosocial and financial support. At 9.1 %, between 2023-50, the burden of cancer as a share of health expenditure in Germany is expected to be much higher than the EU average, while the reduction in life expectancy due to cancer is anticipated to be similar to that of the EU.

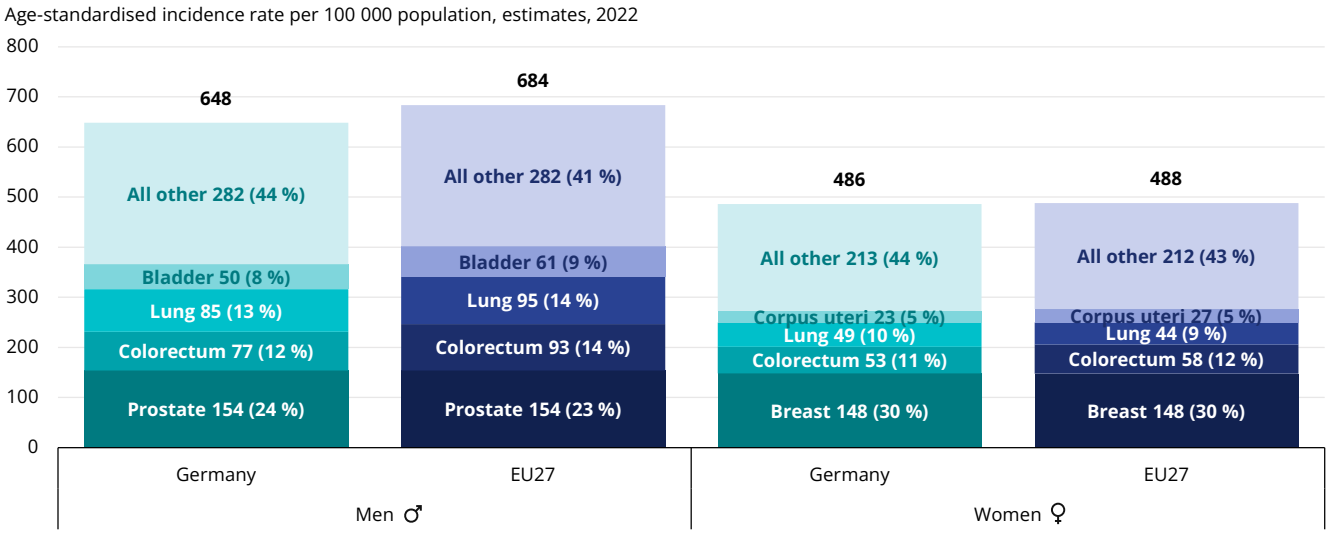
2. Cancer in Germany

Almost 530 000 new cancer cases were expected in Germany in 2022

According to the European Cancer Information System (ECIS) of the Joint Research Centre based on incidence trends from pre-pandemic years, a total of 529 955 new cancer cases were expected in Germany in 2022 (Figure 1). The age-standardised incidence rate was expected to be 557 per 100 000 population – slightly lower than the EU average (572 per 100 000). Men are more likely to be diagnosed with cancer than women, as seen in other EU countries, with estimated incidence of 278 113 new cases among men and 251 842 among women in 2022. Age-standardised incidence rates among women are 0.5 % lower than the EU average; among men they are 5.2 % lower than the EU average.

Among German women, breast cancer was expected to be the most common cancer type, accounting for 30 % of age-standardised incidence in 2022 – the same as the EU average. This was followed by colorectal (11 %), lung[1] (10 %) and uterus (5 %) cancers. The distribution across cancer types was almost the same across the EU. Among German men, prostate cancer was expected to be the most common type, accounting for 24 % of incidence rate, compared to 23 % in the EU. This was followed by lung (13 %), colorectal (12 %) and bladder (8 %) cancers – generally similar to the pattern across the EU.

Figure 1. Estimated cancer incidence in Germany in 2022 was lower than the EU average among men but similar to the EU average among women



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.

Cancer incidence among German men has fallen slightly over the last 20 years, while it has remained roughly the same for German women (RKI, 2023). These differences are mainly due to sex-specific trends in lung cancer and other cancers caused by cigarette smoking, which have been decreasing for men and increasing for women. A high proportion of the overall reduction in cancer incidence rates is due to favourable developments for stomach and colorectal cancers, which saw decreases of more than 20 % over the last 10 years. Per the Centre for Cancer Registry Data, in the long term, the number of people living with cancer is expected to increase in Germany (as in many other European countries), which is mainly a result of improved survival rates but is

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

also due to demographic ageing. Looking forward, ECIS estimates that cancer cases will increase by 15 % in Germany between 2022 and 2040.

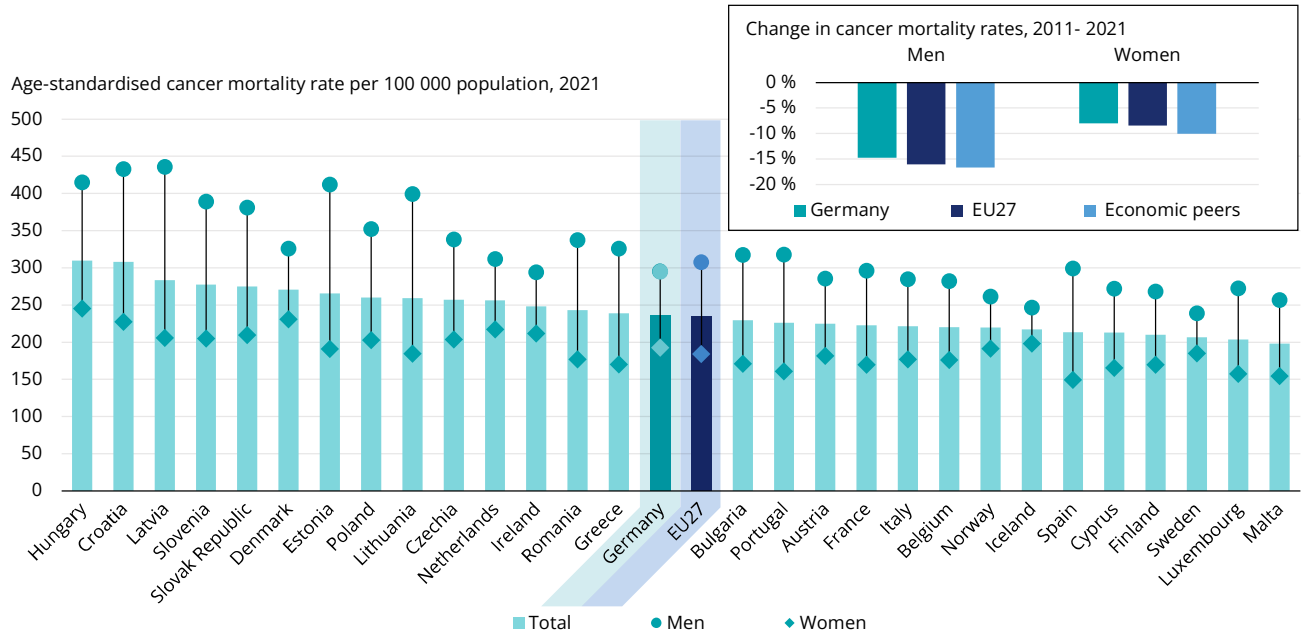
Studies of socio-economic differences in cancer incidence, using recent registry data, have shown varying patterns between women and men and across cancer sites (Jansen et al., 2023). Inequalities between the most and least socio-economic deprived populations are increasing. The largest inequalities were observed for lung cancer: incidence was 82 % higher among men and 88 % higher among women living in the most deprived areas compared to those living in the least deprived regions in 2018.

Cancer mortality in Germany is on a par with the EU average

Cancer accounted for 23 % of all deaths in Germany, with lung cancer the most frequent cause of cancer death in 2021. The age-standardised cancer mortality rate was 295 per 100 000 men (lower than the 308 per 100 000 across the EU) and 193 per 100 000 women (higher than the 184 per 100 000 across the EU). This gender gap in mortality (53 %) is lower than the gap across the EU (67 %). Within Germany there are differences between regions. Baden-Württemberg is the federal state with the lowest cancer mortality rate, both for women and men. Mortality is highest for women in Schleswig-Holstein and for men in Saxony Anhalt (RKI, 2023).

Age-standardised cancer mortality rates in Germany fell by 15 % among men and by 8 % among women between 2011 and 2021, but these were slower declines than the averages across the EU and particularly among Germany's economic peers[2] (Figure 2). The slower decline among women can be explained in part by an increase in mortality due to lung cancer.

Figure 2. Mortality from cancer in Germany decreased at a slower pace than the EU average



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

The avoidable mortality rate from breast cancer in Germany remains above the EU average, but has been decreasing rapidly

Thanks to improved prevention strategies and advances in treatment options, a significant proportion of cancer deaths among people aged under 75 are considered avoidable.[3]

In Germany, preventable mortality from lung cancer is approximately 40 % lower among women than men, reflecting the historically higher prevalence of smoking among men. Compared to 2011, the rate has increased by 7 % among women (more than the 4 % increase in the EU) and decreased by 20 % among men (less than

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

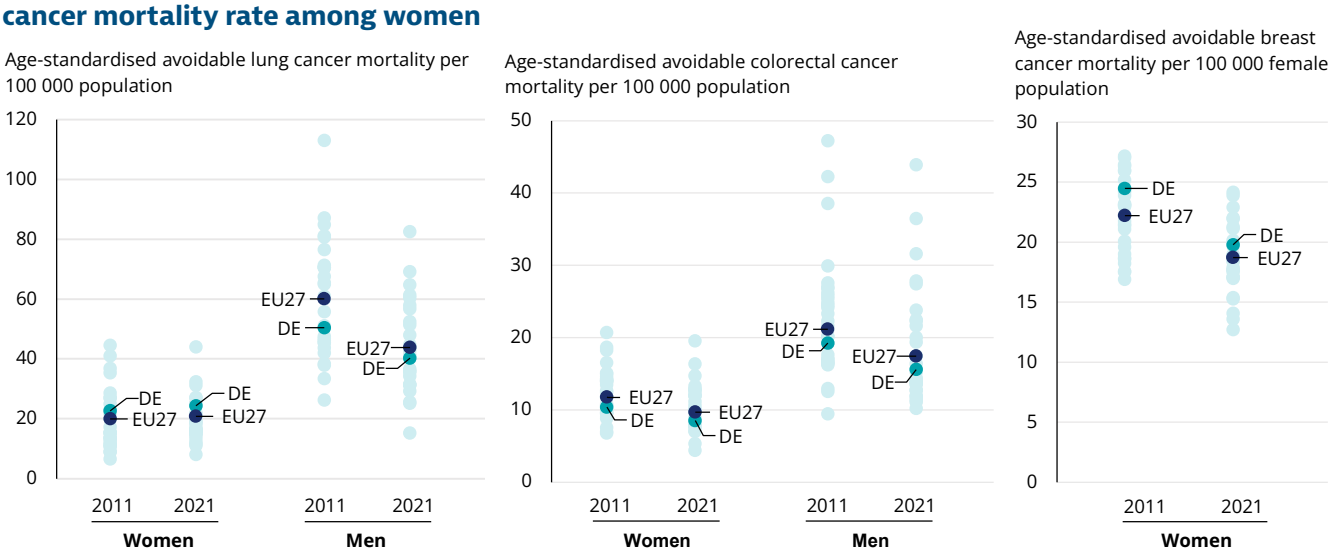
3 *Avoidable mortality includes both preventable deaths that can be avoided through effective public health and prevention interventions, and treatable deaths that can be avoided through timely and effective healthcare interventions.*

the 27 % decrease in the EU). This increase in avoidable mortality from lung cancer among women is a remnant of the significant increase in prevalence of smoking among women starting in the 1950s. However, the German Centre for Addiction Issues finds that since 2003, a decline in smoking has been observed among women, mostly in younger age groups. Nonetheless, as discussed in Section 3, Germany ranks almost last in the EU when it comes to implementing measures to reduce tobacco consumption.

In 2021, the treatable mortality rate from breast cancer in Germany was 20 per 100 000 women, which is almost 6 % higher than the EU average (Figure 3). However, it has decreased at a faster rate during 2011-21 in Germany (by one fifth) than the EU average (by one sixth), helping to close the gap. Since the end of the 1990s, breast cancer mortality rates have fallen sharply among women aged 60-69 (RKI, 2023). Advances in therapy have significantly improved the chances of survival for those affected, which has led to a reduction in mortality rates.

The decline in treatable mortality from colorectal cancer is on a par with the reduction across the EU (at around 18 % for both men and women). For both breast and colorectal cancers, avoidable mortality rates emphasize the importance of investing in improved uptake of screening and early diagnosis initiatives (see Section 4).

Figure 3. Germany's avoidable cancer-related mortality rates have decreased, except for the lung cancer mortality rate among women



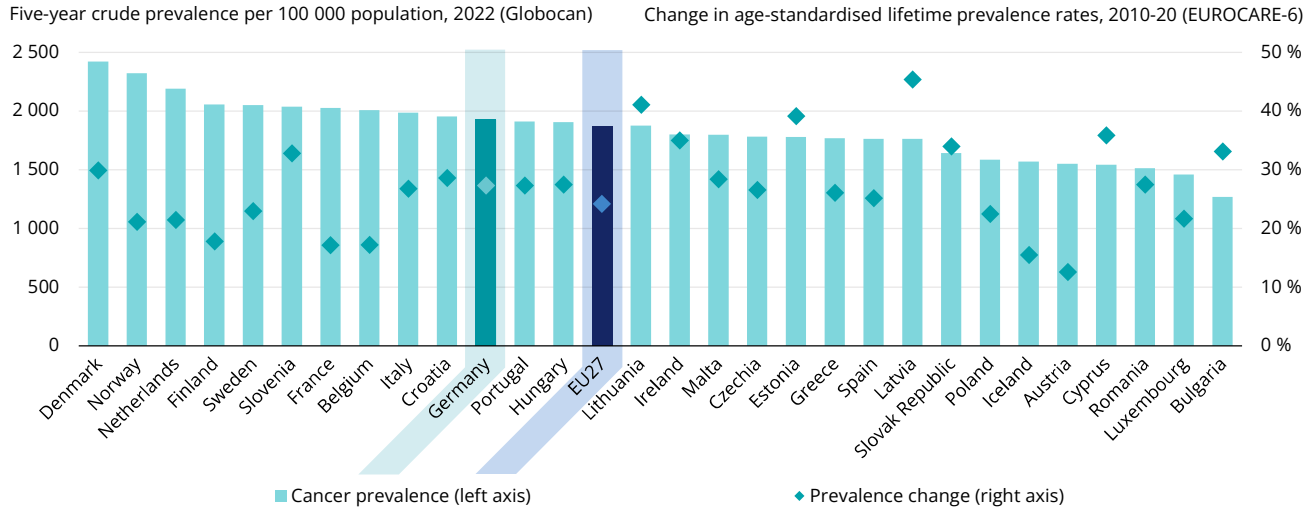
Note: Avoidable mortality figures relate to deaths of people aged under 75.
Source: Eurostat Database. Data refer to 2021.

Cancer prevalence is increasing in Germany

According to Globocan estimates, Germany had a five-year prevalence[4] of 1 927 cancer cases per 100 000 population in 2022, which is above the 1 876 per 100 000 EU average (Figure 4). In Germany, as across the EU, cancer prevalence is higher among men (1 976 per 100 000) than among women (1 879 per 100 000). Lifetime cancer prevalence increased more rapidly between 2010 and 2020 in Germany (27 %) than the EU (24 %). This upward trend emphasises the growing importance of addressing quality of life and survivorship (see Section 5.4), given the increasing number of people living longer with a history of cancer. This is especially true for patients who had skin, testicular, or thyroid cancer (RKI, 2023), for which the chance of survival is higher than other cancers (such as pancreas and mesothelioma).

4 *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.*

Figure 4. Cancer prevalence increased faster in Germany than in the EU



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

Federal initiatives aim to coordinate the multi-layered cancer care system

Initially formulated in 2008, the National Cancer Plan (NCP) serves as Germany's overarching cancer policy framework. Its development involved approximately 25 stakeholder organisations, various specialist medical associations and patient representatives. The Plan outlines 13 strategic objectives supported by around 40 targets across four action fields. It is aligned with Europe's Beating Cancer Plan, and include early detection, structural improvement of oncological care and quality assurance, access to treatment, and patient-centredness (Box 1).

The Federal Ministry of Education and Research launched the National Decade Against Cancer in 2019, bringing together relevant players in Germany in the fight against cancer. The National Decade Against Cancer aims at strengthening patient-centred cancer research by increasing patient involvement in the preparation, selection and implementation of research. Cancer prevention and early detection are particularly important, ensuring that research receives more targeted support and that innovations reach patients more quickly.

Coordination efforts aim at aligning actions across a complex system: responsibilities for cancer policy are shared among the federal government, the 16 federal states and social health insurance (SHI). The Federal Ministry of Health regulates the health system in general – including SHI and healthcare providers – via legislation, decrees and administrative regulations. Examples include laws on screening, nationwide establishment of clinical cancer registries by the federal states, standardisation of community-based psycho-oncological care, and expansion of hospice and palliative care. Cancer research falls in the realm of the Federal Ministry of Education and Research, while the Federal Ministry of Labour and Social Affairs handles prevention of work-related cancer and rehabilitation.

Since the adoption of the federal Prevention Act from 2015, the SHI and compulsory long-term care insurance are responsible for prevention services. Germany also has a special supreme decision-making body, the Federal Joint Committee (G-BA), with statutory responsibility for designing benefit entitlements based on high-quality scientific findings, including which healthcare services are paid for by SHI. In the area of oncology, the G-BA evaluates new drugs and treatment methods, monitors the quality of care and develops prevention and screening programmes. The G-BA fulfils its duties mainly by passing directives that are legally binding for all stakeholders and persons insured under SHI. The Federal Ministry of Health is responsible for legal supervision of the Federal Joint Committee.

Box 1. The National Cancer Plan and the National Decade Against Cancer align with Europe's Beating Cancer Plan

The NCP and the National Decade Against Cancer are comprehensive efforts to reduce the burden of cancer through improved prevention, diagnosis and treatment in Germany. Their key objectives align closely with Europe's Beating Cancer Plan (Table 1). The NCP focuses on four pillars: development of cancer screening, improvement of structural aspects of oncology care and quality assurance, ensuring effective oncological treatment (with an initial focus on drug therapy) and strengthening patient orientation in cancer care. The National Decade Against Cancer focuses on boosting cancer research (particularly in areas such as early detection, personalised medicine and innovative treatment method), on increasing prevention and early detection (through public awareness campaigns, promoting healthy lifestyles and enhancing screening programmes), and on encouraging patient involvement to improve care quality. Reducing cancer inequalities is a transversal theme in the NCP. Paediatric cancer is not a primary focus area, as oncological care in this area is already at a high level.

Table 1. Germany's National Cancer Plan 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 NCP/National Decade Against Cancer include a specific section on the topic; orange indicates that the topic is covered but without being the only focus; and pink indicates that this topic is not covered.
Source: Adapted from "Study on mapping and evaluating the implementation of Europe's Beating Cancer Plan" (not yet published).

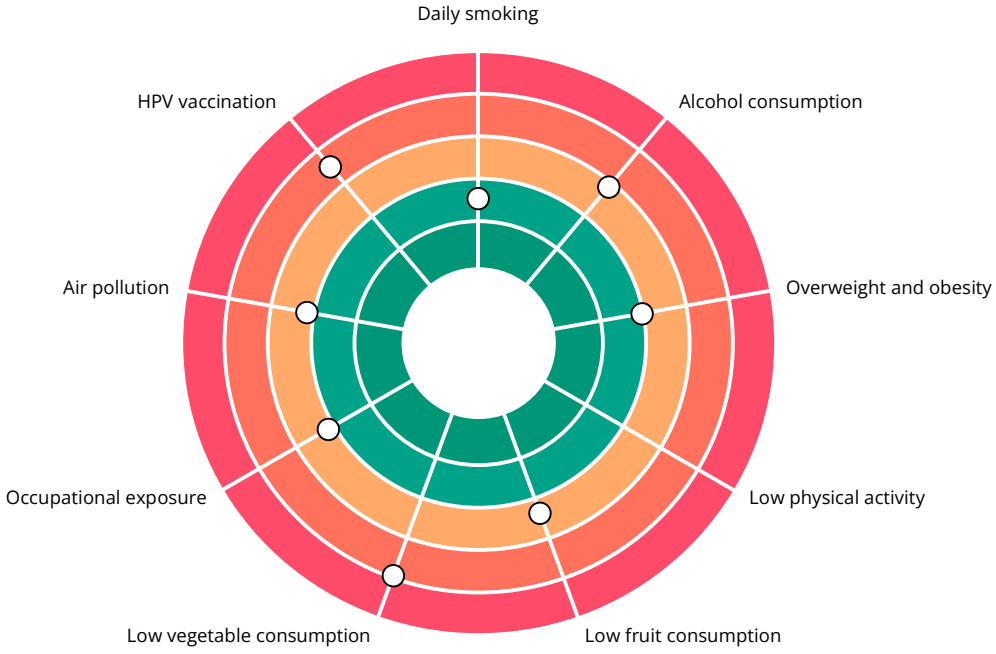
3. Risk factors and prevention policies

According to estimates by the German Cancer Research Centre, at least 37 % of all new cancer cases in Germany can be explained by modifiable risk factors. Of these, tobacco is the most significant. Although Germany performs better than many other EU countries on daily smoking (Figure 5), around 19 % of all new cases of cancer each year are attributable to smoking. Germany lags behind most EU countries on human papillomavirus (HPV) vaccination and vegetable consumption.

In 2021, Germany spent 6.6 % of health spending on prevention, which is higher than the EU average of 6.1 % and a large increase from the around 3 % level in the years before COVID-19.[5] The National Cancer Plan (NCP) does not cover primary prevention. Instead, a broader disease-unspecific approach to prevent non-communicable diseases was chosen, targeting common lifestyle-related risk factors such as smoking, alcohol consumption, unhealthy diets and physical inactivity. Cancer-specific activities among members of the German cancer community complement broader non-communicable disease prevention policies.

A Federal Institute for Prevention and Education in Medicine will be established in 2025, whose activities will be complemented by a National Prevention Initiative. Improving health literacy in Germany is a goal of the NCP, together with ensuring quality-assured accessible information and counselling. To achieve these goals, the Federal Ministry of Health launched a health literacy alliance, including members of the federal government, physicians, hospitals, health insurance funds, and other actors. The alliance aims to improve health literacy of citizens and organisations (e.g. in healthcare and education).

Figure 5. Germany lags behind in vegetable consumption and human papillomavirus vaccination rates



Notes: The closer the dot is to the centre, the better the country performs compared to other EU 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 physical activity.
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 HPV vaccination (15-year-old girls). For Germany, 2019 EHIS data is used for overweight, fruit and vegetable consumption (in adults).

5 *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.*

Tobacco and alcohol are major cancer risk factors in Germany

In Germany, around 15 % of the population were daily cigarette smokers in 2022 – below the EU average of 18 %. The total share of smokers in Germany has been decreasing steadily over the past decade among both men and women. Education and income influence the likelihood of smoking: prevalence of daily smoking is higher among people with lower (25 %) than higher (14 %) education levels and among those with lower (29 %) than higher (16 %) incomes.

Vaping has become increasingly popular, especially among those aged 15-24: 3 % of young women and 6 % of young men vape, higher than the rates in the total 15+ population. According to the 2021 Tobacco Control Scale, Germany ranked last among EU countries in an international comparison of tobacco control policies (OECD, 2024), such as policies regulating prices, availability of smoke-free places, advertising bans and health warnings. Since then, however, cigarette advertising on billboards was banned in 2022, as was advertising for heated tobacco in January 2023 and for e-cigarettes in January 2024.

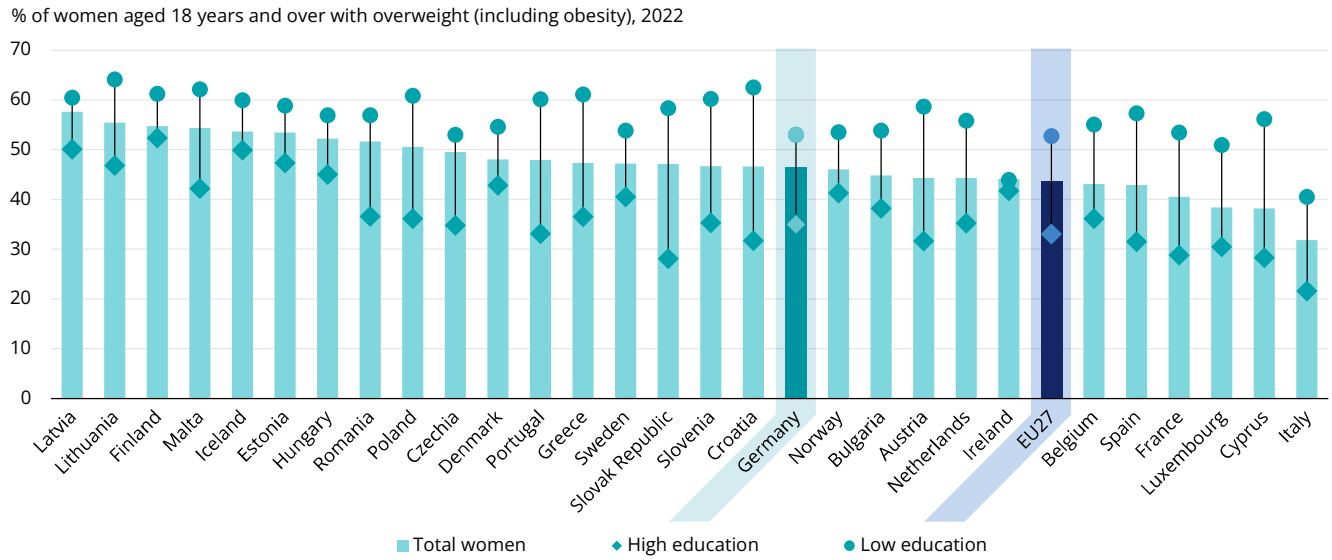
Alcohol consumption is also high in Germany. Germans aged 15+ consumed more (10.6 litres of alcohol per capita annually in 2019) than the EU average (10.0 litres). Hazardous alcohol consumption was also more common in Germany (5 % of the population) than across the EU (3 %) and among German men (5 %) than women (4 %). As seen in the EU, this is reflected in markedly higher incidence of cancer attributable to alcohol among men for cancers such as colorectal (5.6 per 100 000 among men compared to 1.1 per 100 000 among women), liver and oesophagus. In contrast to many other behavioural risk factors, hazardous drinking is more common among population groups with higher (6 %) than lower incomes (4 %); as well as among those with higher education and those living in urban areas. Across all these groups, the share of hazardous alcohol drinkers is higher in Germany than across the EU.

Over half of adults in Germany are overweight or obese

Obesity and lack of exercise also play a role in the development of new cases of cancer. Around 61 % of men and 47 % of women are overweight in Germany. Some 19 % of German adults are obese, with a body mass index (BMI) of over 30 kg/m^2, with similar rates among men and women.

Prevalence of overweight also increases with age and is significantly lower among people with higher socio-economic status (Figure 6). According to the European Health Interview Survey (EHIS), prevalence of overweight is 51 % higher among women with lower than those with higher education levels.

Figure 6. Prevalence of overweight is 51% higher among women with lower than those with higher education levels



Note: Overweight (including obesity) includes those with a BMI above 25.
Source: Eurostat Database. Data refer to 2022, except for Germany and Iceland, which refer to 2019.

Rates of physical inactivity are relatively high in Germany. According to a Eurobarometer survey conducted in 2022, more than half of men and 60 % of women in Germany report that they never or rarely exercise or play sports – slightly below the EU average. Poor dietary habits also contribute to overweight and obesity and increase the risk of developing cancer. In Germany, 44 % of adults reported consuming fruits less than once daily in 2019 and 54 % reported consuming vegetables less than once daily. Research among the German population aged 35-84 showed that a decrease in fibre intake of 10 g/day increases the risk of colorectal cancer by 11 % and the risk of breast cancer by 5 % (Behrens et al., 2018).

In 2024, the federal government adopted a new food strategy entitled Good Food for Germany to address overweight. It consolidates around 90 planned and existing food policy measures with the aim of making good food more accessible for everyone. The strategy has six goals: improving communal catering; reducing food waste; strengthening a plant-based diet; providing socially equitable access to healthy and sustainable food; supporting an adequate supply of nutrients, energy and exercise; and increasing the supply of sustainably produced food. Concrete actions to achieve these goals include promoting a more varied diet in daycare centres and schools (such as through binding nutritional standards and advice), promotion of school kitchens and drinking water dispensers, as well as nutrition education for children and educators.

Germany introduced the voluntary Nutri-Score front-of-pack labelling system by the end of 2020 (OECD, 2024), and the Federal Ministry of Food and Agriculture initiated a legislative proposal in early March 2023 to regulate advertising for foods high in fat, salt or sugar targeted at children. However, no incentives and rules have been implemented to create healthy retail and there is no policy on nutrition advice and counselling in healthcare settings.

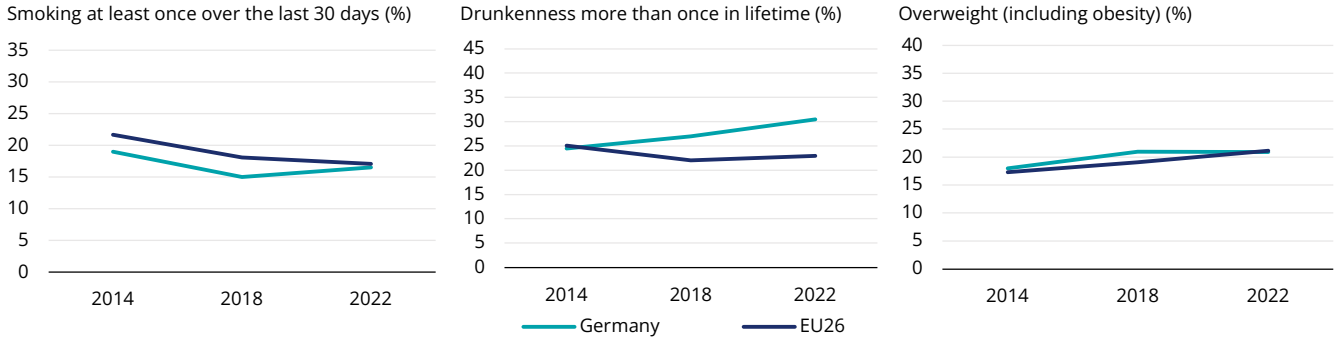
Prevention and health promotion for socially disadvantaged groups are coordinated by the National Collaborative Network for Equity in Health, initiated by the Federal Centre for Health Education in 2003. The network, composed of 75 organisations, collects, develops and disseminates expertise on good practice in health promotion, increases awareness about health promotion programmes via its practice database, and promotes the exchange between science and practice.

The increasing prevalence of alcohol abuse among teenagers is a cause for alarm

Exposure to risk factors accumulates over the lifecycle, which is why prevention is particularly important for young people. The prevalence of risk factors among adolescents (15-year-olds) in Germany is similar to the EU in smoking and overweight (Figure 7). For smoking, the rate used to be below the EU average in 2014 but has decreased more slowly in Germany to converge in recent years with the EU average at 17%. By contrast, the share of overweight among adolescents has increased from 18% in 2014 to 21% in 2022.

Repeated drunkenness is more common in Germany compared to other EU countries. The share of 15-year-olds who reported being drunk at least twice in their life increased from 25% in 2014 to 31 % in 2022, and is almost a third higher than the EU average. Reported daily vegetable consumption among adolescents is lower in Germany (30%) than in the EU (34%) and participation in 60 minutes of daily physical activity is also lower in Germany (12%) than the EU (15%). However, rates of both fruit and vegetable consumption among adolescents has increased since 2014, with rates of daily fruit consumption higher in Germany (38%) compared to the EU average (30%).

Figure 7. Adolescents in Germany report higher rates of repeated drunkenness, but similar rates of smoking and overweight as their peers in the EU



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.

HPV vaccination rates have increased over time, but are still below the EU average

In Germany, children aged 9-14 are targeted for HPV vaccination (OECD, 2024). The rate of those fully vaccinated against HPV has been increasing, reaching 54 % of girls aged 15 in 2023, up from 27 % a decade earlier. However, compared to the EU average (64 %), Germany performs among the bottom third of countries. Furthermore, rates among boys are still quite low, with only 17 % of 15-year-old boys receiving their full HPV vaccination doses in 2023. Catch-up vaccinations for older individuals are available until the age of 18. However, there is no HPV vaccination recall and reminder system and no national school-based vaccination programme.

Exposure to air pollution in Germany was reduced by a third over the past decade

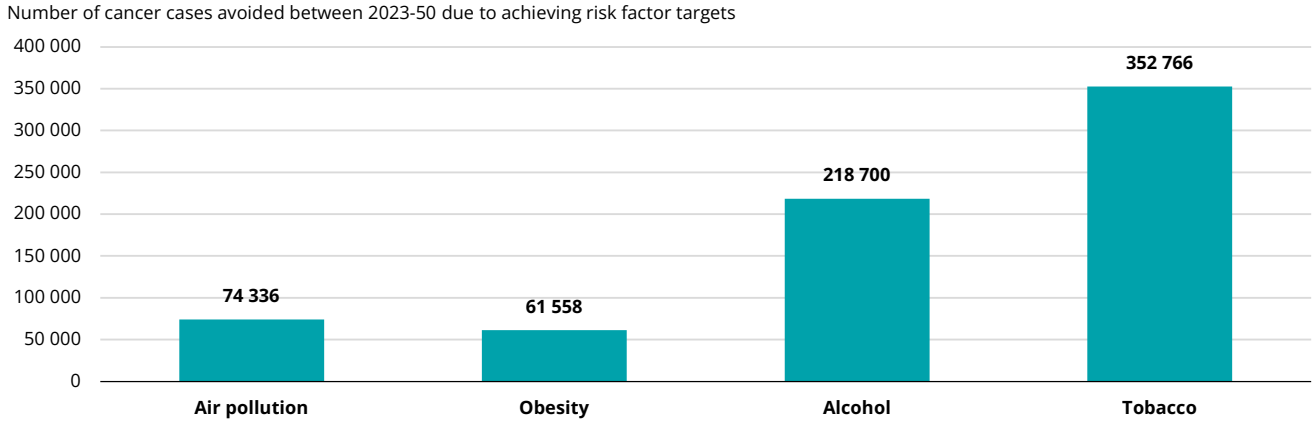
In 2020, average exposure to air pollution, measured as $PM_{2.5}$, was estimated at 10.3 µg/m³ – a reduction of about a third since 2010 (16.2 µg/m³), and below the EU average of 11.7 µg/m³. The majority of air pollution measuring stations report concentrations around or below the limit and target values defined by the EU (Umweltbundesamt, 2024). The main sources of air pollutants are road traffic and combustion processes in industry, the energy sector, households and agriculture.

There are specific rules and regulations for occupational safety and health to prevent cancer at the workplace. In particular, the Hazardous Substances Ordinance and the Ordinance on Preventive Occupational Healthcare provide protection and preventive medical assistance.

Many new cancer cases would be prevented if target reductions in risk factors were achieved

According to OECD Strategic Public Health Planning (SPHeP) modelling work, meeting specific cancer risk factor targets in Germany could prevent hundreds of thousands of new cancer cases between 2023 and 2050 (Figure 8). Meeting the tobacco target would offer the largest potential reduction in cases (352 766) and meeting the alcohol target would prevent 218 700 cases. Meeting air pollution (74 336 cases) and obesity (61 558 cases) targets could also prevent a significant number of cancer cases.

Figure 8. Achieving tobacco reduction targets could prevent over 350 000 cancer cases in Germany between 2023 and 2050



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 (2024), Tackling the Impact of Cancer on Health, the Economy and Society, OECD Health Policy Studies, OECD Publishing, Paris, DOI: https://doi.org/10.1787/85e7c3ba-en.

4. Early detection

National population-based screening programmes are in place for breast, colorectal and cervical cancer, while a lung cancer detection programme is under development

The Federal Ministry of Health provides the legal framework for early detection. Within this framework, the Federal Joint Committee (G-BA) defines the specific technical details of screening measures in its directives. National population-based screening programmes that adhere to EU guidelines are in place in Germany for breast, colorectal and cervical cancer. The breast cancer screening programme was implemented in 2005 and reached nationwide coverage in 2009. The colorectal cancer screening programme was implemented in mid-2019, and the cervical cancer screening programme in early 2020, based on the Cancer Screening and Registries Act of 2013 (replacing opportunistic screening arrangements for colorectal and cervical cancer in place from the 1970s).

As part of the invitation system of the organised screening programmes, evidence-based information on the advantages and disadvantages of participating in screening are sent to the eligible population alongside the invitation letters. This practice aims at fostering informed decision-making concerning participation in screening, as defined in the Cancer Screening and Registries Act of 2013. In addition, various stakeholders such as the independent "Institute for Quality and Efficiency in Health Care" and the "Cancer Information Service" at the German Cancer Research Centre, as well as the national health portal of the German government provide quality assured information about cancer screening.

An early lung cancer detection programme using low-dose computed tomography (CT) for heavy active and former smokers aged 50-75 is in development. A corresponding regulation by the Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection has been in place since July 2024. In December 2023, the G-BA initiated its consultation process regarding the introduction of the screening service. A key challenge for the G-BA is to define the technical details of lung cancer screening for Germany, as European guidelines on organised lung cancer screening are not yet available.

Mammography screening rates in Germany have decreased slightly over the past decade

Germany's breast cancer screening programme invites women aged 50-69 insured under the SHI for screening every two years. In July 2024, the upper age limit was extended to 75. Based on programme data, the breast cancer screening uptake rate for women increased between 2008 and 2013 from around 53 % to 57 % (Kooperations-gemeinschaft Mammographie, 2021). Since then, there has been a slight decrease and rates have stabilised around 50 %, with the 2022 rate standing at 52 % (Figure 9).

The population-based colorectal cancer screening programme has been in place since July 2019 for men and women from the age of 50. This organised programme replaced former opportunistic colorectal cancer screening. The eligible population receives an invitation letter and supporting information every five years. Colonoscopy is regarded as the most reliable method for early detection of bowel cancer. As an alternative screening method, the eligible population can opt for a faecal occult blood tests (FOBT) annually between ages 50-54 and then every two years after age 55.

Survey data from 2019 shows that 55 % of the population aged 50-74 reported having had their most recent colorectal cancer screening test in the last three years. This is a decrease from the 64 % that reported screening in 2009. However, it is not possible to report programme data on colorectal cancer screening rates for the total population, since programme data is split by FOBT test and colonoscopy. According to the 2019 Annual Report on Early Detection Colonoscopy, participation rates in FOBT testing among the targeted population over a two year period (2018-19) stood at 17 % for those aged 55+ and colonoscopy rates over a ten year period (2010-19) stood at 15 %(Zentralinstitut für die kassenärztliche Versorgung in Deutschland, 2019). In addition, in 2019, 11% of the eligible age group participated in colorectal cancer counselling sessions. Women were more likely to participate in FOBT testing than men (19 % vs. 15 % in 2018-19) as well as in counselling (12% vs. 10%). For colonoscopy, participation rates for both genders were around 15 % over the 2010-19 period.

Population-based cervical cancer screening was introduced in 2020 for women aged 20 and above, with invitations sent every five years up to the age of 65 years. For women aged 20 to 34 years, the cancer screening programme provides for an annual cervical smear test and cytological examination. For women above age of 35, an HPV test combined with the smear ("co-testing") is offered every three years. This was implemented following a change in directives of the G-BA based on the Cancer Screening and Registry Act in 2020.

According to 2019 survey data, 78 % of women in Germany aged 20-69 reported being screened for cervical cancer in the last three years, a rate that has held steady from the 79 % figure in 2009. Because of the design of the screening programme, data on screening rates for the entire eligible population is not available. According to an evaluation report on the cervical cancer screening programme, among women between 20-34 years old, cytology screening rates stood at 45 % in 2021 and 47 % in 2022. About 9 % of eligible women above age 35 underwent co-testing in 2021, and 5 % did so in 2022 (Gesundheitsforen Leipzig GmbH, 2024). This decrease was expected given that 2021 was the first year of full implementation of the programme guidelines, which call for women 35+ to get tested only once every three years. Participation rates were highest in the 35-39 group and decreased substantially with age.

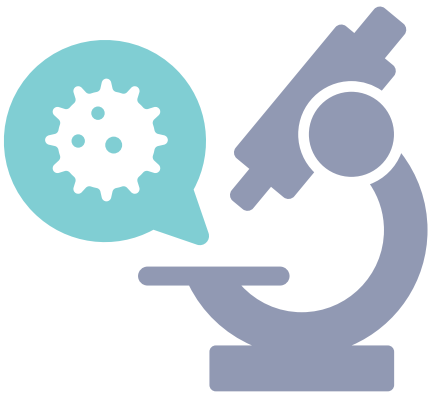
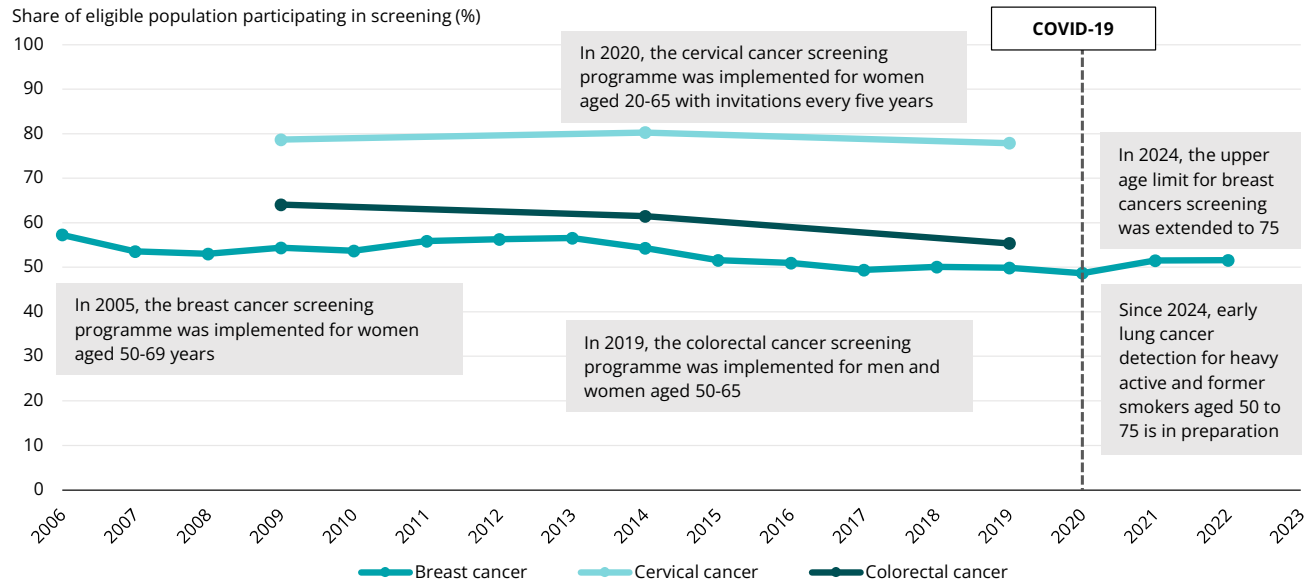


Figure 9. Trends in screening participation rates have been relatively stable over time



Notes: Breast cancer screening data refer to mammography rates among women aged 50-69 within the past two years (programme data). Cervical cancer screening data refers to women aged 20-69 who reported screening within the past three years (survey data). Colorectal cancer screening data refers to people aged 50-74 who reported screening in the last three years (survey data).
Source: OECD Health Statistics 2024. Eurostat Database.

There are notable differences in screening participation across population groups

Germany collects and links socio-economic data on screening participation. Since 2008, the Robert Koch Institute has conducted a nationwide cross-sectional survey of the population on behalf of the Federal Ministry of Health, called the German Health Update. It provides information about uptake of and inequalities in cancer screening based on sex, age, migration background and education level.

Significant variations can be observed in cancer screening uptake by migration background. Migrant women from non-EU (50 %) and EU (53 %) countries consistently report lower participation in cervical cancer screening than non-migrant women (57 %) (Brzoska, Aksakal & Yilmaz-Aslan, 2020). The main barriers to cervical cancer screening for migrant groups included a lack of information, the absence of female healthcare providers, limited proficiency in the local language and feelings of fear, embarrassment and discomfort about the test. To increase participation among migrant groups, Germany offers information about breast cancer screening in 12 different languages, and information leaflets about the colorectal cancer screening programme are available in simple language.

Income levels also affect cancer screening participation. According to 2019 EHIS data, the self-reported screening rate for cervical cancer among women aged 20-69 in the highest income quintile in Germany was 78 % compared to only 58 % among those in the lowest quintile. The same is true for breast cancer screening, with significant differences between women aged 50-69 in the highest (69 %) and lowest (58 %) income quintiles, although this gap is slightly lower than the EU average. In Germany, new delivery models have been adopted to reach socially vulnerable populations, including rural and underserved communities. In the federal states of Germany there are a total of 70 “Mammobils” – buses offering mobile mammography screening (Box 2). In addition, centres for familial cancers have been established to increase awareness and improve prevention and early detection among populations at risk.

Box 2. Several innovations in Germany aim to increase screening and early detection

New delivery models, such as mobile cancer screening programmes, have a key role in bringing cancer screening to people in the communities where they live and work. In the federal states of Germany there are a total of 70 "Mammobils" – buses offering mobile mammography screening to women driving through remote areas. The location of the Mammobils, for example on busy market squares, are announced on a website, where women can also make an appointment directly.

Centres for familial breast and ovarian cancer and centres for familial colorectal cancer have been established in Germany for risk-stratified screening. They provide counselling, genetic testing and intensified prevention and early detection to populations at risk (such as women with hereditary breast and ovarian cancers).

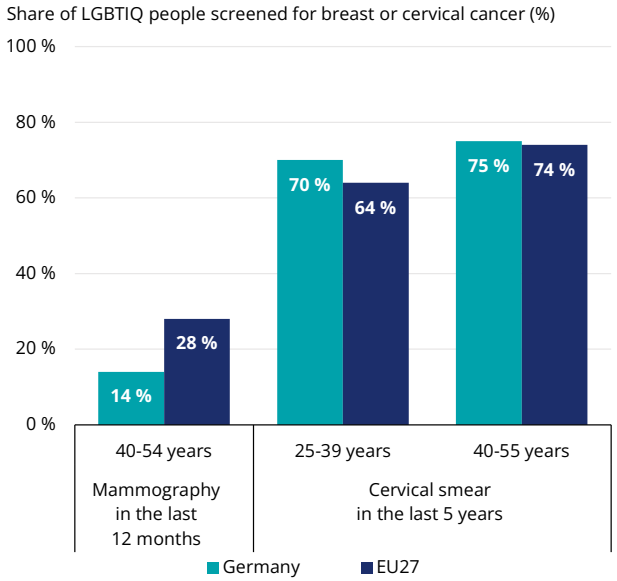
From early summer 2021 until summer 2023, the HANSE prevention programme offered free lung exams for former and active smokers in northern Germany. Three lung cancer centres in the region invited people aged 55-79 who were at an increased risk of lung tumours as either smokers or ex-smokers to a free lung exam. A mobile study truck travelled between three cities, offering up to 5 000 participants a free low-dose CT examination. The programme was coordinated by a multiprofessional team and was intended to provide evidence through a pilot study on the potential effectiveness of an early detection programme for lung cancer.

As part of the National Strategy for Genomic Medicine – genomDE – the model project for genome sequencing according to Section 64e of Book V of the Social Code started in 2024. Its primary goal is to harness genome sequencing to deliver thorough diagnoses while pinpointing appropriate treatment options for patients with rare diseases and cancer. For this purpose, clinical and genomic data will be integrated securely within a framework that complies with the Genetic Diagnostics Act and data protection regulations. Patients will also have the option to provide their data for research purposes, based on consent. Thus, not only diagnoses, but also research and the development of new therapies will be improved.

LGBTIQ persons in Germany participate slightly more in cervical cancer screening than their counterparts in the EU

According to the EU LGBTIQ Survey III, 14 % of LGBTIQ cisgender females, trans women and intersex people aged 40-54 years in Germany reported having had a mammogram in the previous 12 months, half of the EU average of 28 % (Figure 10). For cervical cancer screening, 70 % of the relevant LGBTIQ population aged 25-39 in Germany reported having had a smear test in the previous 5 years (higher than the 64 % in the EU), while 75 % of those aged 40-55 in the country reported a smear test (slightly higher than the 74% in the EU).

Figure 10. Mammography rates among LGBTIQ people aged 40-54 in Germany are relatively low



Note: LGBTIQ survey results refer to age groups and/or screening intervals that do not align with the population screening approach in EU countries, and should not be compared.
Source: The European Union Agency for Fundamental Rights (EU LGBTIQ Survey III).

5. Cancer care performance

5.1 Accessibility

Equal and free access to cancer care is a major objective of the National Cancer Plan

A main strategic objectives of the NCP (see Section 2) is access for all cancer patients to high-quality care, regardless of age, sex, ethnic background, place of residence and insurance status.

To ensure financial access to cancer care, SHI covers about 90 % of the German population. Most of the rest of the population is covered by private insurance (including certain occupational groups and high earners who can opt out of SHI coverage). Rehabilitation is partly funded by statutory pension insurance. Work-related cancer prevention as well as treatment and rehabilitation of recognised occupational diseases (e.g. cancer) is covered by the German Social Accident Insurance.

Cancer services are generally free of charge at the point of use, and waiting times must not exceed four weeks. According to the EU-SILC survey, unmet medical needs for reasons related to finances, geographical accessibility or waiting lists have declined in Germany in the past decade, and have been close to zero since 2016, while 2 % of the population of the EU was estimated to have forgone medical examinations for these reasons in 2023.

Even though most treatment and healthcare costs are covered by public support, factors such as loss of income, additional transport costs and small copayments for medication can create financial strain for some households. Patients must pay up to a threshold of 2 % of annual gross household income for these costs although in specific circumstances the limit can be reduced to 1 % (Deutsche Krebsgesellschaft, 2022).

The supply of nurses and physicians relative to cancer cases is higher in Germany than in the EU

The German health system is characterised by a combination of hospital care and community based care provided both by general practitioners (GPs) and specialists. The densities of nurses and physicians are above the EU averages, with 715 physicians per 1 000 new cancer cases, compared to the EU average of 679 per 1 000, and 1 882 nurses per 1 000 new cases, compared to the EU average of 1 376 per 1 000 (Figure 11).

There is currently no profession of specialist in oncology in Germany. There are internal haemato-oncologists, but otherwise the relevant specialist disciplines (gynaecology, urology, gastroenterology, dermatology, pneumology and so on) are responsible for providing cancer care. Information on other staff relevant to cancer care is lacking, but in the 2023 OECD Policy Survey on Cancer Care Performance, Germany reported shortages of professionals engaging in cancer care such as GPs. Due to their critical role in the coordination and follow-up of cancer care, a shortage of GPs can affect delivery of cancer prevention, screening, diagnosis, treatment, follow-up and palliative care.

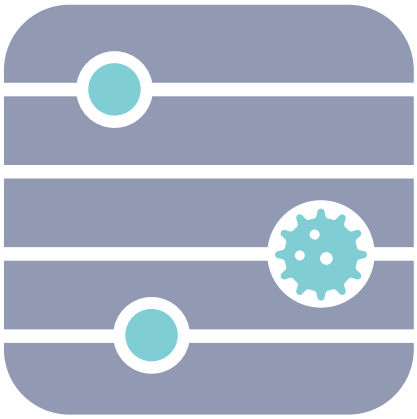
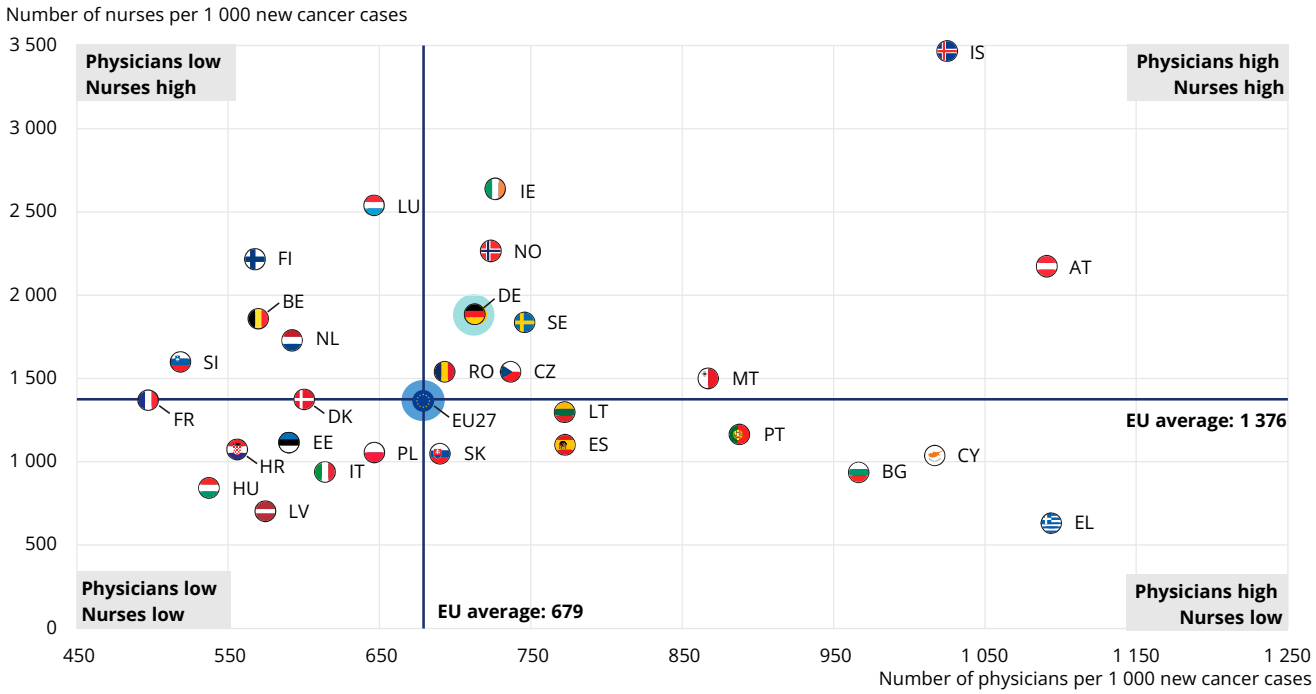


Figure 11. The density of nurses and physicians in Germany is higher than the EU average



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.

Cancer nursing specialist training at the university level is recognised at the state but not at the national level. After three-year vocational education and training to become a general nurse, there are many options for further training in Germany. The part-time specialist training programme for oncology lasts two years and comprises around 720 theoretical and around 2 000 practical hours. However, there is no nurse-led cancer care in Germany (EONS, 2020).

Insufficient diagnostic services are resulting in longer waiting times

The Federal Network of Radiological and Nuclear Medicine Practices has recently issued a warning about gaps in diagnostic services. Whereas a few years ago breast cancer patients could get an appointment for a mammogram within a few weeks, waiting times have increased. In some regions, patients can wait up to a year to have suspicious breast and armpit examination findings clarified. According to the Network, many practices lack trained mammography staff, and the corresponding vocational education and training spots are also rare. In addition, SHI no longer reimburses health professionals for the full cost of mammograms, so fewer professionals offer them, especially in rural areas (RadiologenGruppe, 2024).

The availability of diagnostic equipment is above the EU average, except for mammographs

Reliable data on the supply of radiotherapy equipment in Germany is not available. However, Germany has a higher supply of other equipment used in cancer diagnosis and care, including a supply of CT scanners per 1 000 000 population that is 37 % higher than the EU average, and a supply of MRIs that is 90 % higher than the EU average. This is in contrast to a mammographs supply that is only about one-quarter that of the EU average.

Germany is a leader in access to new oncology medicines and biosimilars

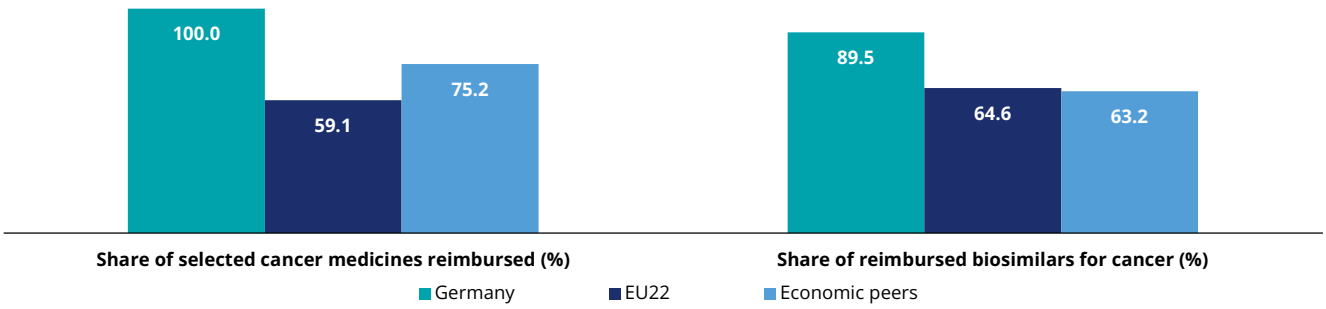
One of the primary objectives of Germany's health policy is ensuring access to high-quality medication for patients, especially in the case of life-threatening diseases. Due to rising expenditures for medication, ensuring a fair balance between the cost of innovation and the sustainable funding of the health system is challenging. The proportion of indications of a sample of cancer medicines with high clinical benefit that are publicly covered in Germany is 100 %, compared to the averages of 75 % among the country's economic peers (Figure 12). The share

of biosimilars for cancer medicines with public reimbursement/coverage is 90 %, which is the second highest in the EU, and compares favourably to the average among Germany's economic peers (63 %).

In addition, the mean time between the centralised EU-marketing authorisation and patient access to new medicines is shortest in Germany, at 102 days. In Germany, medicines are immediately reimbursed after centralised EU-marketing authorisation and launch.

The German Reform Act on the reorganisation of the market for medicinal products (Arzneimittelmarktneuordnungsgesetz) came into force in 2011. It ensures an efficient supply of high-quality medicinal products by stipulating a value-based reimbursement price in order to control spending, while maintaining financial incentives for innovation.

Figure 12. Germany has the highest share of selected new oncology medicines with public reimbursement in the EU



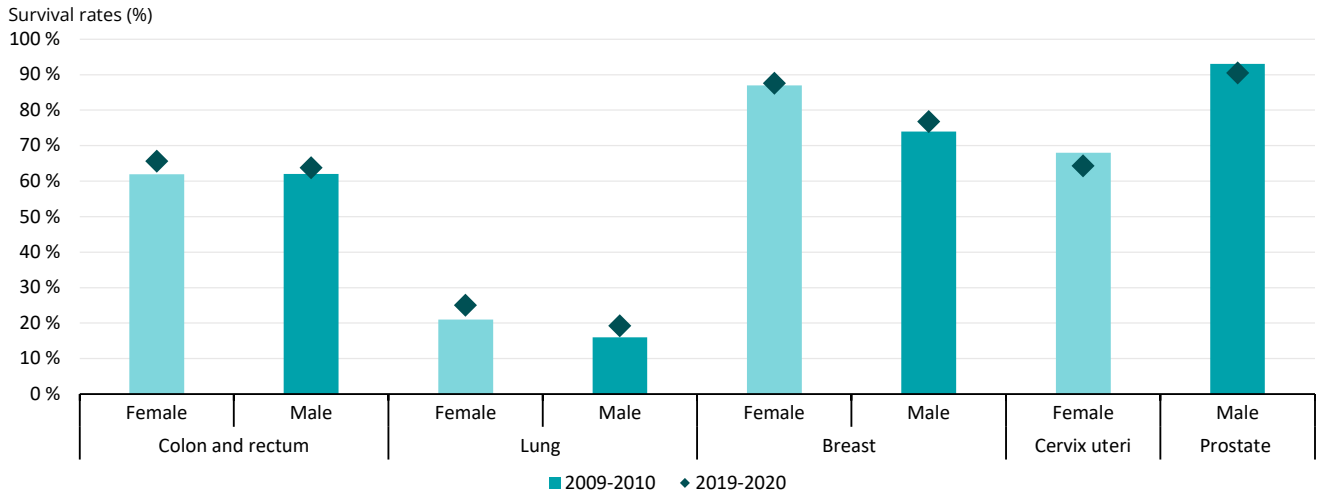
Notes: The analysis includes a sample of 13 indications of 10 new cancer medicines for breast and lung cancer with a high clinical benefit and nineteen biosimilars of three cancer medicines (bevacizumab, rituximab, trastuzumab), with active marketing authorisation by the European Medicines Agency as 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 DE are AT, BE, DK, IE, IS, NL, NO and SE. The EU average is unweighted.
Source: Hofmarcher, Berchet and Dedet (2024), "Access to oncology medicines in EU and OECD countries", OECD Health Working Papers, No. 170, OECD Publishing, Paris, https://doi.org/10.1787/c263c014-en.

5.2 Quality

Five-year survival rates for most cancers have been relatively stable in Germany over the past decade

The German Centre for Cancer Registry Data shows that five-year net survival increased slightly from 65 % to 66 % among women and 60 % to 62 % among men for all cancers except non-melanoma skin cancer between 2010 and 2020. Among cancer sites, the highest survival rate is achieved for prostate cancer (91 %), as seen in Figure 13. Survival is also high for breast cancer (88 %) but remains poor for lung cancer (19 % for men and 25 % for women). Notable increases in survival were achieved during 2010-20 in lung cancer, while breast cancer survival remained steady, and cervical cancer survival declined by 4 percentage points.

Figure 13. Overall cancer survival increased slightly, but cervical and prostate cancer survival has been declining for several years



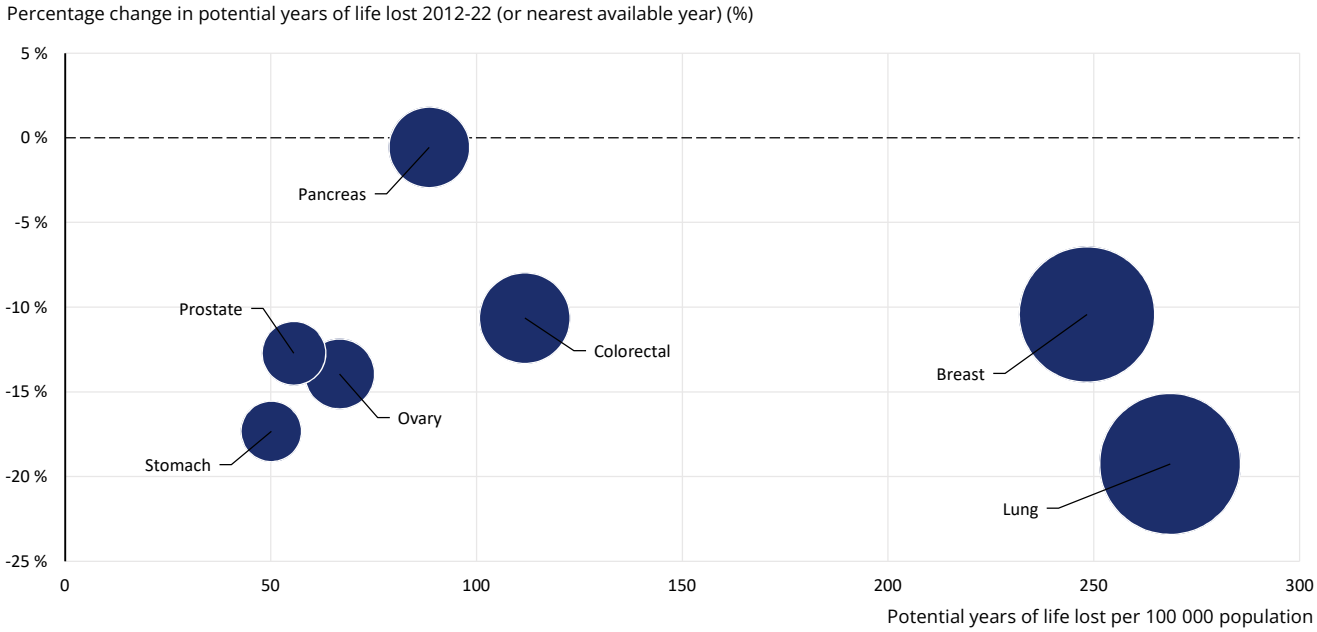
Source: German Centre for Cancer Registry Data, Robert Koch Institute: Database Query with estimates for cancer incidence, prevalence and survival in Germany, based on data of the population based cancer registries, doi: 10.18444/5.03.01.0005.0016.0001. Mortality data provided by the Federal Statistical Office. www.krebsdaten.de/database, Latest Update: 13.09.2022

Potential years of life lost declined at a slower pace than in the EU on average

In addition to survival data, potential years of life lost (PYLL) is a complementary measure of the impact of different cancers on society, putting a higher weight on cancer deaths among younger individuals. Examining the change in PYLL over time across various cancer sites can point to improvements in cancer care systems via reductions in premature mortality. In Germany, the overall PYLL rate due to cancer across all sites was 1 243 per 100 000 population in 2020, which is 8 % lower than the EU average. In line with improvements in cancer mortality, the PYLL rate due to cancer has decreased by 13 % since 2012, compared to a 19 % decrease across the EU.

In 2020, the cancer responsible for the most PYLL was lung cancer, at 269 years per 100 000 population – a reduction of 19 % since 2012 (Figure 14). No cancer site registered an increase in PYLL between 2012 and 2020.

Figure 14. Lung cancer claims the highest rates of potential years of life lost in Germany



Notes: The rate of PYLL from breast, cervical and ovarian cancer is calculated in women only, while the rate of PYLL from prostate cancer refers to men. Pink bubbles signal an increase in the percentage change in PYLL during 2012-2022 (or latest available year); blue bubbles signal a decrease. The size of the bubbles is proportional to the PYLL rates in 2022.
Source: OECD Health Statistics 2024.

The cancer care delivery system in Germany has three tiers and is led by clinical guidelines

Germany has a relatively concentrated cancer care delivery system, facilitating access for users and increasing quality of care. It is based on three tiers: in the first tier, around 1 700 certified organ cancer centres specialise in one cancer type or specialty. The second tier includes certified oncology centres (currently 132) that provide care across several cancer types and specialties. Finally, the third tier has 15 certified comprehensive cancer centres that provide care for a broad spectrum of cancer types across all clinical aspects, and also lead research and teaching. The nationwide voluntary certification system for the different cancer centres was established in 2003 by the German Cancer Society. As of 2024, approximately 60 % of annual incident cancer cases are treated in certified centres. To gain and maintain certification, centres are audited based on universal and tumour-specific quality criteria that include adherence to national clinical guidelines and case volume targets.

Structural improvement of oncological care and quality assurance is one of the focal areas of the NCP. In this context, evidence-based clinical guidelines offer important guidance for high-quality care. Guidelines address all major cancer types and cover early detection, diagnosis, therapy, follow-up and palliative care. The corresponding German Guideline Programme of Oncology of the Association of Scientific Medical Societies (AWMF) – the German Cancer Society and the German Cancer Aid Foundation - covers stakeholder and patient involvement, systematic search, selection and appraisal of evidence, and formal consensus-building processes.

Centralisation is expected to improve quality and outcomes of care

In May 2024, the German Government decided on a major hospital reform with three central objectives: ensuring the quality of treatment, guaranteeing comprehensive medical care for patients, and reducing bureaucracy. The goal is to ensure that treatments are genuinely necessary and performed to the highest quality standards. Patients will also be able to receive information on services offered and quality of hospitals, via a transparency campaign.

The hospital reform has important implications for cancer care in Germany. The new remuneration scheme will lead to stronger concentration of cancer treatment in fewer hospitals, based on minimum volume requirements. As about 40 % of cancer cases were still treated in general non-certified hospitals in 2024, this reform is expected to improve care quality. A government commission advocated going one step further and allowing only certified centres to provide cancer care, as research showed significant improvements in outcomes. (Regierungskommission für eine moderne und bedarfsgerechte Krankenhausversorgung, 2023). For example, the "Effectiveness of Care in Certified Cancer Centres" found that in Germany, overall survival rates were higher for patients initially treated in certified cancer centres as compared to patients initially treated outside of such centres, for all 11 cancers examined (Schmitt et al., 2023[1]). However, while care concentration means better care quality for patients, it also means – in some circumstances – longer travelling distances to reach specialised hospitals. As of October 2024, the draft Act was in the parliamentary process.

To complement the hospital reform with improvements in outpatient care, the government agreed to a draft Act to Strengthen Healthcare Provision in May 2024. Objectives include making the GP profession more attractive, facilitating establishment of municipal medical care centres to better shape care at the local level, and facilitating access to medically necessary aids for individuals with severe illnesses, including cancer. As of October 2024, this draft Act was also in the parliamentary process.

Recent efforts aim to improve care quality through transparency

In May 2024, the Federal Ministry of Health published an interactive website called Federal Clinic Atlas, allowing users to compare about 1 700 hospitals in Germany based on a range of indicators including case numbers, specialties and nursing staff ratios. Patients can search by cancer type and identify the best suited hospital for their needs.

Measures to include the patient perspective are another way to improve transparency in the healthcare sector. According to Section 137a of the Fifth Book of the German Social Code, the Federal Joint Committee (G-BA) must develop patient surveys to measure and present the quality of care. Patient surveys for localised prostate cancer are already being developed and planned. Smaller initiatives to survey the patient perspective are taking place as well, including the collection by hospitals of patient-reported outcomes data in areas such as breast surgery, to use for internal quality improvements.

Integrated cancer registries are expanding data collection

Epidemiological cancer registries have existed nationwide in Germany since 2009. Clinical cancer registries were established by 2020 (based on the Cancer Screening and Registries Act of 2013) and collect data not only on primary diagnosis and survival but also on treatment and disease course (e.g. recurrence). Both types of registries, epidemiological and clinical, are now combined as comprehensive clinical cancer registries. Such registries have been established in all 16 states in Germany, with data integrated on the national level. In addition, third parties can apply to access cancer registry data for scientific research purposes. Following the Act on the Consolidation of Cancer Registry Data of August 2021, integration of cancer registry data with other data sources is under development.

Important initiatives are being undertaken on coordination and translational research

Several initiatives in Germany on care coordination and building cancer networks are helping improve the quality of cancer care: The National Collaborative Network for Equity in Health, established in 2003 by the Federal Centre for Health Education, coordinates prevention and health promotion for socially disadvantaged groups; the Hospice Palliative Care Act of 2015 promotes co-operation between professional and voluntary services across medical, nursing, hospice and psychosocial professions in networks; the Cancer Information Network provided by the German Cancer Aid Foundation provides cancer-specific information; and the Society for Paediatric Oncology and Haematology oversees the network of specialised oncological centres for paediatric cancer patients.

As the initiator of the National Decade Against Cancer, the Federal Ministry of Education and Research is investing more than EUR 9 million in pilots in four regions until 2027, with the aim of linking research and care and thereby creating new insights to improve care quality. Priorities are improving data exchange, facilitating patient access to clinical trials, and making data from healthcare available for research. To this end, the pilots will contribute to further development of personalised cancer medicine in other regions.

Stronger co-operation is also being used to strengthen innovation in cancer care. Recently, the National Centre for Tumour Diseases was expanded to create a better research infrastructure in Germany. The close collaboration between research and care at the Centre enables more patients to participate in clinical trials.

Data are also used to monitor the quality of cancer care for continuous improvement. A directive of the G-BA on data-supported quality assurance across facilities monitors some service areas including cancer care (e.g. breast surgery and gynaecological surgery), and the German Cancer Society also publishes annual anonymised reports about the results of cancer centre audits, which include adherence to national clinical guidelines and case volume targets.

Implementation of multidisciplinary tumour boards is a requirement for certification

Multidisciplinary tumour boards are key for oncological care in Germany. For certification of oncological treatment centres by the German Cancer Society, it is mandatory to offer multidisciplinary tumour boards. Specific requirements have been formulated, which include structural features such as participation of certain professions – for example, specialists from surgery, radiology, pathology, radiotherapy and internal oncology (Hermes-Moll et al., 2021).

5.3 Costs and value for money

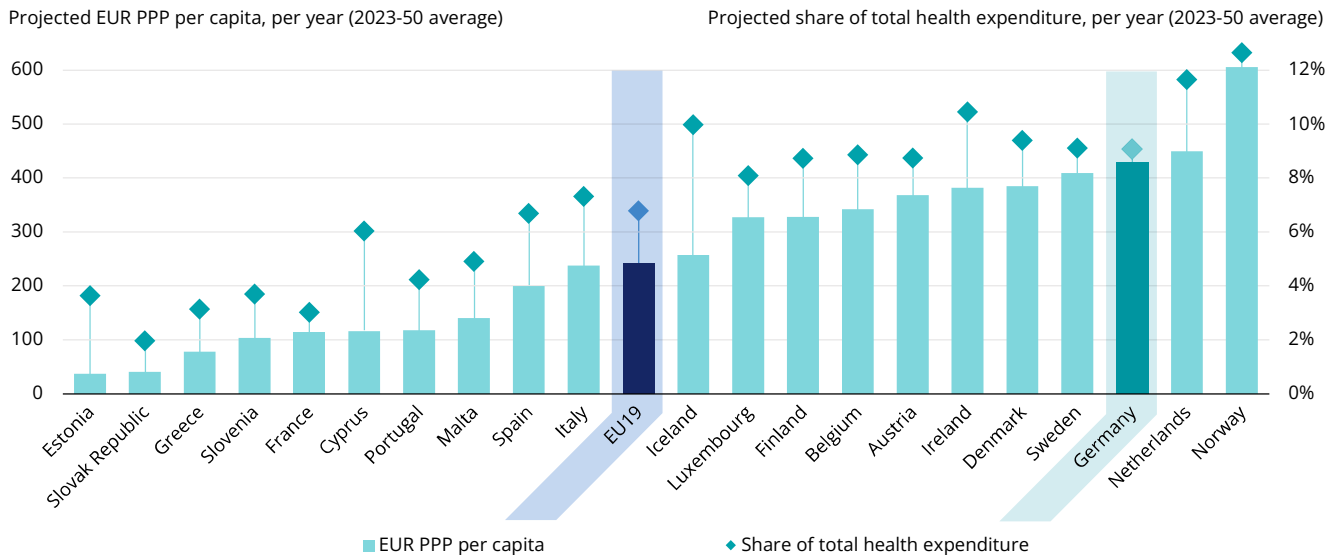
The burden of cancer on health expenditure in Germany is expected to be among the highest in the EU

Germany has the highest overall healthcare expenditure per capita among EU countries, both in absolute terms and relative to GDP. The complex and sometimes overlapping responsibilities between the different levels of government and other stakeholders make systemic cost containment difficult.

According to OECD SPHeP modelling work, between 2023 and 2050, total health expenditure is estimated to be 9 % higher in Germany due to the burden of cancer. This equates to an average of EUR (PPP) 429 per person per year (Figure 15). 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 48 % in Germany between 2023 and 2050, compared to 59 % in the EU27.

The Federal Statistical Office's cost-of-illness calculation shows that EUR 39 130 million was spent on cancer in 2020, compared to EUR 22 842 million in 2015 – a growth of 71 % in five years.

Figure 15. The burden of cancer on health expenditure between 2023 and 2050 is expected to be higher in Germany than the EU average



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

In terms of other costs, it is estimated that between 2023 and 2050 there will be a loss of 205 full-time equivalent workers (FTEs) per 100 000 people in Germany due to the need to reduce employment because of cancer – more than the EU average of 178 FTEs per 100 000. A loss of 99 FTEs per 100 000 people due to both absenteeism and presenteeism[6] is also expected, which is higher than the EU average of 81 FTEs per 100 000.

Disease Management Programmes help to better coordinate breast cancer care

Disease Management Programmes (DMPs) cover six major chronic disease areas in Germany including breast cancer. DMPs are designed to encourage co-operation among all those involved in treatment. For example, patients with breast cancer enrolled in the DMP agree to actively participate in treatment and follow-up care – for instance, by seeing a doctor regularly every three or six months. Participating specialists (doctors, nurses, and staff at rehabilitation centres among others) commit to comply with the specified quality criteria and treatment plans. Participation is voluntary and free of charge to the patient (Frauenselbsthilfe Krebs, 2024).

5.4 Well-being and quality of life

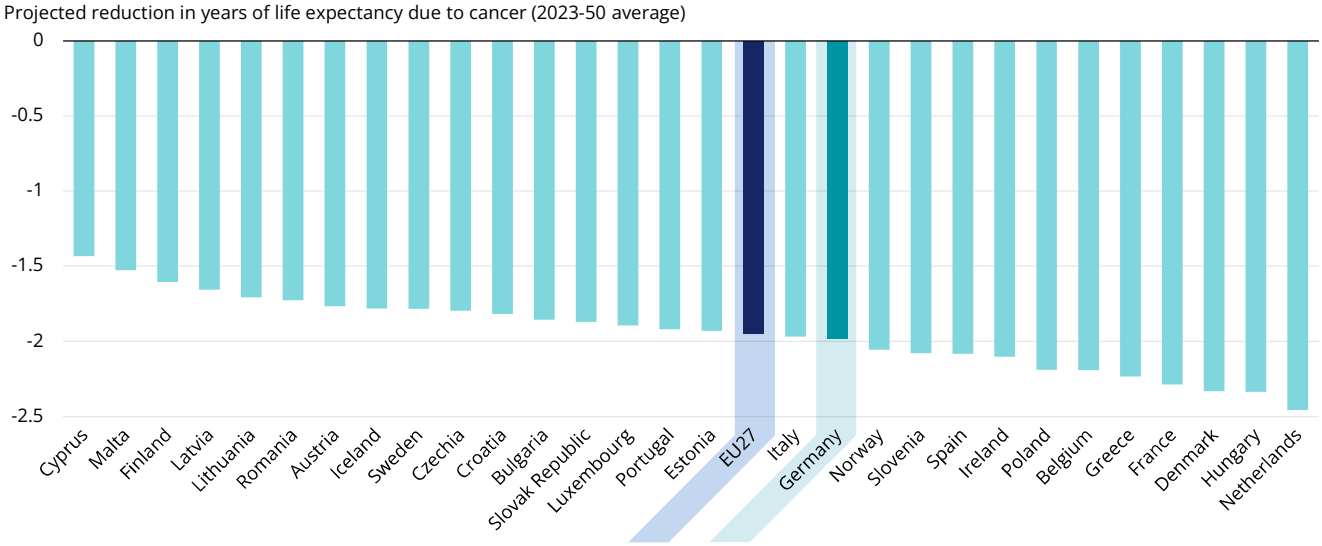
Between 2023-50, it is estimated that cancer will reduce life expectancy by 2 years

The OECD SPHeP model predicts that between 2023 and 2050, cancer will reduce life expectancy by 2 years in Germany compared to a scenario without cancer, which is similar to the EU average of 1.9 years (Figure 16).

In addition, cancer takes a substantial toll on the mental health of the population through its associated symptoms and treatment side effects, and impact on daily life, social roles and work. According to the OECD's SPHeP model, Germany is expected to have an additional age-standardised depression rate of 13 cases per 100 000 people per year – slightly lower than the EU average of 17 cases per 100 000.

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

Figure 16. Cancer is expected to reduce life expectancy in Germany over the coming years



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

Financial and fertility support during cancer treatment is provided to patients in Germany

Generally, if a person is unable to work in Germany, their employer continues to pay their salary for six weeks. After that, SHI pays 70 % of the gross salary (capped at EUR 120.75 per day in 2024) and a maximum of 90 % of the net salary. This sickness benefit is limited to 78 weeks within three years (BMG, 2024). Beyond the 78 weeks, the "reduced earning capacity pension" comes into play, the amount of which depends on how long the person has paid into the pension insurance scheme. The average in 2022 was EUR 862 per month, but it is often significantly less among younger people.

Since 2019, Germany supports fertility preservation procedures before the start of active treatment. According to the Appointment Service and Supply Act, freezing sperm and eggs is paid for by SHI.

Germany offers rehabilitation measures free of charge to patients, ranging from medical services for physical and psychological health to occupational rehabilitation

Oncological rehabilitation involves a retreat that usually lasts up to three weeks – the exact duration and measures entailed depend on the type of cancer and patient preferences. Rehabilitation includes medical measures to alleviate the physical consequences of the cancer and the therapy, as well as psychosocial counselling services to help patients cope better with the situation. Within the first two years, individuals can take advantage of additional rehabilitation retreats after 12 and after 24 months if the medical conditions continue to exist.

Rehabilitation also includes support with various occupational measures to help patients re-enter working life. Further education and training offerings, technical and personal aids are also available. The possibility of gradual reintegration, as done via one model known as the Hamburg Model, is of particular importance. It regulates reintegration by specifying different stages of workload. During this gradual reintegration period, cancer patients are still considered unfit for work and therefore continue to receive sickness benefit. Depending on the situation, the employer may pay part of the salary, which is deducted from the sickness benefit.

People who need to change their professional situation after a cancer diagnosis can participate in training or further education free of charge (both shorter courses and full vocational education and training programmes). Eligibility depends on a person's previous profession, possible restrictions due to the illness and the current situation in the labour market. Finally, technical aids can often enable a person to continue working in their previous job – for example, improvements in the workplace like an adapted desk or a technical aid for heavy physical activities.

Palliative care is well structured in Germany

Since 2007, people with SHI in Germany are entitled to specialised outpatient palliative care around the clock in accordance with the Fifth Book of the German Social Code. Around 1 500 outpatient hospice services provide palliative care: around 260 inpatient hospices for adults and 19 for children, adolescents and young adults; and around 340

palliative care units in hospitals, 4 of which are for children and adolescents. The 260 inpatient adult hospices include about 2 500 hospice beds, in which around 35 000 people are cared for every year. Data from the German Hospice and Palliative Care Association shows that the average occupancy rate is 80 %, and the average length of stay is 22 days. In addition, there are 403 specialised outpatient palliative care teams, 36 of which are for children and adolescents. The proportion of private care services offering palliative care is 67 %; non-profit providers account for 33 % and municipal providers for less than 1 %. By 2021, 14 620 doctors had completed additional training in palliative medicine (Deutscher Hospiz- und Palliativ Verband e.V., 2023).

Since 2017, information on palliative care services has been available in several languages including Turkish, English, Arabic, French, Romanian, Polish, Vietnamese, Russian and (since 2022) Ukrainian.

Long-term care benefits are available for people with cancer and their carers in Germany

Various benefits are available for people with cancer, including non-residential in-kind long-term care benefits, a care allowance, respite care benefits and a so-called relief allowance (Entlastungsbetrag). For those with certain severity of care needs (at least care level 2), the in-kind home care services includes nursing activities, companion care and housekeeping capped at a certain maximum amount. A person in need can also decide to be cared for by relatives, friends or other voluntary helpers at home, using the care allowance. The care allowance can also be combined with the in-kind services (Kombinationsleistung).

Family carers also receive support from the long-term care insurance. Individuals who provide unpaid care for a certain number of hours and days on a regular basis are eligible for social security benefits, including contributions to pension and unemployment insurance. Employees who, under the Caregiver Leave Act (Pflegezeitgesetz), either stop working for up to six months or reduce their hours substantially, may also apply for additional allowances for health and long-term care insurance, provided they are not covered by non-contributory family insurance. If the caregiver is unable to provide care for various reasons, the long-term care insurance fund will cover the cost of substitute care. Additional support for home care arrangements includes the relief amount (Entlastungsbetrag), as well as semi-residential day and night care, and short-term care benefits.

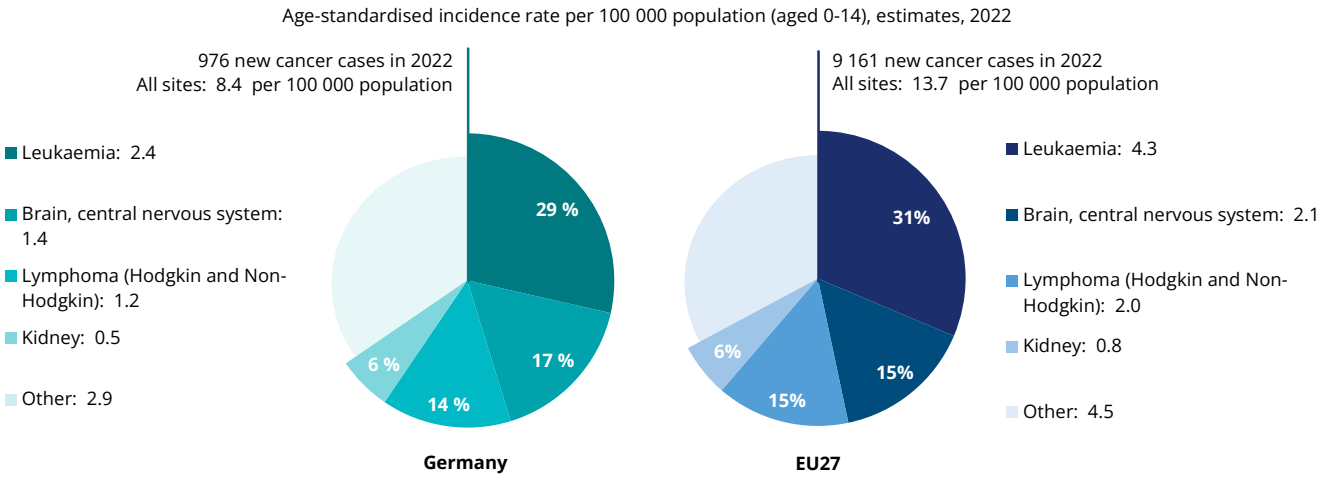
For individuals who prefer care in a fully residential long-term care facility, the long-term care insurance provides benefits for those with care levels 2 to 5.

6. Spotlight on paediatric cancer

According to ECIS, it is estimated that 976 children and adolescents up to age 15 were diagnosed with cancer in Germany in 2022. Incidence rates for ages 0-14 in 2022 were estimated at 8.4 per 100 000 children, much lower than the 13.7 per 100 000 across the EU (Figure 17). Eurostat data shows that mortality rates are slightly lower, with a 3-year average mortality rate of 2.0 per 100 000 children in Germany as compared to 2.1 in the EU.

Similar to the trend across the EU, incidence rates are higher among boys than girls in Germany. The most common cancer groups are leukaemia at 2.4 cases per 100 000 children (29 %), brain and central nervous system cancer at 1.4 cases per 100 000 (17 %), lymphoma at 1.2 cases per 100 000 (14 %) and kidney cancer at 0.5 per 100 000 (6 %).

Figure 17. Cancer incidence rates among children in Germany are well below the EU average



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 10/03/2024.
© European Union, 2024.

The probability of a newborn child suffering a malignant disease within the first 18 years of life is 0.3 %. Most often the onset of the disease is among children aged 0-5. Around 80 % of all children currently survive cancer for at least 15 years. The German Childhood Cancer Registry shows that around 7 % of patients develop a second cancer type (not a recurrence) within 30 years of diagnosis. Survival from paediatric tumours of the central nervous system has, by and large, improved consistently, leading to a growing population of childhood cancer survivors (Wellbrock et al., 2024).

According to SIOPE's OCEAN Project on paediatric cancer care, Germany has around 60 institutions dedicated to treating children and young people with cancer (SIOPE, 2024). Among these, 4 are designated as cancer centres and 13 are considered part of the Innovative Therapies for Children and Adolescents with Cancer (ITCC) Consortium, which aims at facilitating the development of new, effective therapies particularly for those facing cancers with poor prognoses or limited treatment options.

All key infrastructural and treatment modalities are available for children and young people in Germany, including stem cell transplant, access to phase I and II trials, survivorship care clinic and palliative care. From 2010 to 2022, among the 436 cancer care clinical trials involving children and young people conducted in Europe, one third were conducted in Germany. However, in 2018, 74 % of the 68 medicines identified as essential for treating cancer in patients aged 0 to 18 were available in Germany, compared to 76 % in the EU on average (Vassal et al., 2021).

References

Behrens et al. (2018), Krebs durch Übergewicht, geringe körperliche Aktivität und ungesunde Ernährung, www.aerzteblatt.de/archiv/199673/Krebs-durch-Uebergewicht-geringe-koerperliche-Aktivitaet-und-ungesunde-Ernaehrung#:~:text=Ein%20R%C3%BCckgang%20der%20Ballaststoffzufuhr%20von,Lungenkrebs%20(um%209%20%25)

Brzoska P, Aksakal T, Yilmaz-Aslan Y (2020), Utilization of cervical cancer screening among migrants and non-migrants in Germany: results from a large-scale population survey, BMC Public Health, 20(1):5. doi:10.1186/s12889-019-8006-4.

De Angelis R et al. (2024), Complete cancer prevalence in Europe 2020 by disease duration and country (EUROCARE-6): a population-based study, Lancet Oncology, 25(3):293-307. doi:10.1016/S1470-2045(23)00646-0.

Deutsche Krebsgesellschaft (2022), Krebs und finanzielle Not: www.krebsgesellschaft.de/onko-internetportal/basis-informationen-krebs/leben-mit-krebs/beratung-und-hilfe/armutsrisiko-krebs.html.

EONS (2020), EONS Cancer Nursing Index 2020: https://cancernurse.eu/advocacy/eons-cancer-nursing-index-2020.

Frauenselbsthilfe Krebs (2024), Disease-Management-Programm Brustkrebs, www.frauenselbsthilfe.de/infothek/dmp-brustkrebs.html.

Gesundheitsforen Leipzig GmbH (2024), Evaluationsbericht Zervixkarzinom, www.g-ba.de/downloads/17-98-5680/2024-04-24_oKFE-Evaluationsbericht-Gebaermutterhalskrebs_GFL_2021-2022.pdf.

Hermes-Moll et al. (2021), Multidisziplinäre Tumorkonferenzen in Deutschland, www.krebsgesellschaft.de/files/dkg/deutsche-krebsgesellschaft/content/pdf/Zertifizierung/Publikationen/Hermes-Moll_K2021_Multidisziplin%C3%A4re%20Tumorkonferenzen%20in%20Deutschland.pdf.

Jansen L et al. (2023), Trends in cancer incidence by socio-economic deprivation in Germany in 2007 to 2018: an ecological registry-based study, International Journal of Cancer, 153(10):1784-96. doi:10.1002/ijc.34662.

OECD (2024), Beating cancer inequalities in the EU: spotlight on cancer prevention and early detection. Paris, OECD Publishing, https://doi.org/10.1787/14fdc89a-en.

Regierungskommission für eine moderne und bedarfsgerechte Krankenhausversorgung (2023), Verbesserung von Qualität und Sicherheit der Gesundheitsversorgung - Potenzialanalyse anhand exemplarischer Erkrankungen. Berlin, Ministry of Health, www.bundesgesundheitsministerium.de/fileadmin/Dateien/3_Downloads/K/Krankenhausreform/5_Stellungnahme_Potenzialanalyse_bf_Version_1.1.pdf.

RKI (2023), Krebs in Deutschland, www.krebsdaten.de/Krebs/DE/Content/Publikationen/Krebs_in_Deutschland/krebs_in_deutschland_2023.pdf?__blob=publicationFile.

Schmitt, J. et al. (2023), "Initial cancer treatment in certified versus non-certified hospitals", Deutsches Ärzteblatt international, https://doi.org/10.3238/arztebl.m²023.0169.

SIOPE (2024), Childhood Cancer Country Profile: Germany. Brussels, SIOP Europe, https://siope.eu/media/documents/ocean-projectgermany.pdf.

Umwelt Bundesamt (2024), Luftqualität 2023, www.umweltbundesamt.de/sites/default/files/medien/3521/publikationen/uba_hgp_luftqualitaet_dt.pdf.

Vassal, G. et al. (2021), "Access to essential anticancer medicines for children and adolescents in Europe", Annals of Oncology, Vol. 32/4, pp. 560-568, https://doi.org/10.1016/j.annonc.2020.12.015.

Wellbrock M et al. (2024), Registration, incidence patterns, and survival trends of central nervous system tumors among children in Germany 1980–2019: an analysis of 40 years based on data from the German Childhood Cancer Registry, Pediatric Blood and Cancer, 71(6):e30954. doi:10.1002/pbc.30954.

Zentralinstitut für die kassenärztliche Versorgung in Deutschland (2019), Früherkennungskoloskopie Jahresbericht, www.zi.de/fileadmin/Downloads/Themen/Evaluation/koloskopie/Zentralinstitut.2021.Koloskopie-Jahresbericht_2019.pdf.

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: Germany 2025*, EU Country Cancer Profiles, OECD Publishing, Paris, https://doi.org/10.1787/f3a3cfcf-en.

Series: EU Country Cancer Profiles

European Commission

OECD
BETTER POLICIES FOR BETTER LIVES