Plain Language Summary

Report: Cancer in Ireland 1994-2023. Annual Statistical Report of the National Cancer Registry 2026

NCRI Data:

The NCRI is the definitive source of cancer information in Ireland, collecting data on every new cancer case since 1994. We gather information from all hospitals and cancer services across the country, public and private, and our data are used by government leaders, researchers and healthcare professionals to understand cancer in our communities and to plan services to manage and reduce its impact.

This annual report presents the average number of new cancer diagnoses and cancer-related deaths for the three-year period 2021-2023, along with a description of long-term cancer trends over three decades (1994-2023) for the most common cancers diagnosed in Ireland.

What we found:

Number of cancers diagnosed 1994-2023

During the period 1994 to 2023, the population of Ireland experienced substantial growth from 3.6 million in 1994 to around 5.3 million by 2023. Over the same period, the proportion of people aged 65 years and over increased. This combination of population increase and the population growing older resulted in a steady increase in the numbers of cancer cases and deaths due to cancer since 1994 placing increasing demands on healthcare resources. However, after adjusting for age, the overall risk of developing cancer has remained largely stable in females since 2011, while in males there is some indication that the rate has been decreasing since 2009.

- From 2021 to 2023, 46,818 tumours were diagnosed each year in Ireland.
- One in five of these tumours were non-invasive or benign tumours.
- A further one quarter were non-melanoma skin cancers, which, although invasive, usually do not spread to other parts of the body.
- Overall, nearly 6 in 10 tumours (26,528 per year) were invasive cancers, which can be life-changing and often require major treatment.
- Excluding non-melanoma skin cancer, the most common invasive cancers were prostate, breast, colorectal, lung and melanoma skin cancer.

Deaths from cancer 2021-2023

Cancer was the leading cause of death in Ireland in 2023 accounting for almost 30% of all deaths. Between 2021 and 2023, an average of 10,007 people in Ireland died due to

invasive cancer each year. More deaths occurred in males (5,361) than in females (4,646).

- Lung cancer was the most common cause of cancer death in both males and females, accounting for 1 in 5 cancer deaths.
- Colorectal cancer was the second most common cause in both sexes (1 in 10).
- Prostate cancer was the second leading cause of cancer death in males (1 in 9).
- Breast cancer was the second leading cause of cancer death in females (1 in 6).
- Pancreatic cancer also accounted for a substantial number of deaths in both sexes (1 in 16).

Ireland compared favourably with European Union (EU) countries on cancer deaths before age 75, with a rate 11% lower than the EU average in 2024.

- Death rates in Ireland were substantially lower than the EU average for cancers subject to preventive strategies, such as tobacco control, including lung, pancreatic, stomach, and cancers of the oral cavity (mouth), pharynx (throat), and larynx (voice box).
- Ireland also had lower death rates for several cancers where early diagnosis and effective treatment can improve outcomes, including testicular, cervical, prostate, and colorectal cancers, as well as Hodgkin and non-Hodgkin lymphomas.
- Ireland had higher death rates than the EU average for a small number of cancers, including oesophageal, ovarian, uterine (womb), and breast cancers, as well as melanoma skin cancer, multiple myeloma, and brain tumours. For some of these cancers, including breast cancer, the difference in cancer death rates between Ireland and the EU average rate were very small.

Longer-term trends in new cancer cases and cancer deaths

Trends in new cancer diagnoses and cancer deaths were examined over 30 years (1994-2023). Although the total number of cancer cases and deaths have increased in line with Ireland's growing population, this was mainly due to more people living to older ages, when cancer is more common.

- In males, after adjusting for age, the risk of being diagnosed with invasive cancer (excluding non-melanoma skin cancer) increased from 1994 to 2009, before decreasing steadily at 0.7% per year through to 2023. In females, the risk rose between 1994 and 2011, then stabilised, with a slight decrease of 0.1% per year up to 2023.
- Cancer death rates have fallen over 30 years. Between 1994 and 2023, the age-adjusted death rate from cancer fell significantly by 1.5% per year in males and 1% per year in females. This shows that, overall, the chance of dying from cancer decreased over time due to improvements in diagnosis and treatment.

Looking at specific cancers, death rates fell for most types of cancer in Ireland. In particular:

- Since the mid-2010s, both diagnosis *and* death rates have decreased for colorectal, stomach and non-Hodgkin lymphoma.
- For lung cancer, diagnosis rates fell significantly in males and marginally in females during 2013-2023, while death rates fell significantly in both sexes since the mid-2010s.
- In males, the diagnosis rate for prostate cancer stabilised between 2015-2023, while the death rate continued to fall between 2002 and 2023.
- The breast cancer diagnosis rate increased during 2008-2023, but the death rate fell steadily over 30 years (1994-2023).

Three cancers were noteworthy:

- Melanoma skin cancer diagnosis rates increased in both sexes from the mid-2010s, and death rate increased steadily in females throughout 1994-2023.
- Death rates due to liver cancer increased in both sexes during 1994-2023.
- Death rate due to uterine (womb) cancer increased steadily during 1994-2023.

Cancer and age

Cancer becomes more common from middle age onwards.

- The risk of being diagnosed with cancer increases sharply with each birthday from age 55.
- Most cancer deaths occur in older people, particularly those aged 70 and over (66%).
- Cancers typically diagnosed at a younger age, such as testicular, cervical, thyroid and Hodgkin lymphoma, tend to have good long-term survival.
- Some cancers typically diagnosed later in life, such as lung, oesophageal, stomach, pancreatic and bladder cancers, tend to have a poorer prognosis and shorter survival.

Cancer survival at the 5-year mark after diagnosis

The percentage surviving up to 5 years after diagnosis is a commonly used measurement quoted by cancer registries.

- Cancer survival has improved significantly in Ireland, with the percentage of people surviving at 5 years after an invasive cancer diagnosis (excluding non-melanoma skin cancer) rising from 50% for cases diagnosed during 1999-2003 to 66% for cases diagnosed during 2019-2023.
- While survival gains were seen across all cancer types, the extent of improvement varied:

    - Cancers such as lung (25%), pancreatic (15%), and oesophageal (25%) still have relatively poor outcomes, but survival for these improved considerably over two decades, reflecting advances in treatment.
    - In contrast, cancers with already high five-year survival, including prostate (95%) and breast cancer (89%), experienced more modest increases over the same period.
- The stage of the cancer at diagnosis had an important impact on survival. Early-stage disease (e.g. stage I and II) was generally associated with higher five-year survival, and survival tended to decrease with advancing stage (e.g. stage III and IV) at diagnosis.
- Some cancers with good survival prospects were more likely to be detected early (e.g., melanoma of skin, breast, prostate), whereas some cancers with poor survival prospects were more likely to be detected at a more advanced stage (III/IV) (e.g. lung, oesophagus, pancreas, liver).

People living with and beyond a cancer diagnosis in Ireland

With consistent improvements in cancer survival, the number of people living after a diagnosis of invasive cancer is increasing.

- By the end of 2023, an estimated 230,946 cancer survivors were living in Ireland, about 1 in every 23 people.
- The number of male and female cancer survivors was similar.
- The most common cancers among survivors were breast, prostate, colorectal, and melanoma skin cancer.
- Cancers with poorer survival prospects such as liver, pancreatic, and oesophageal cancers comprised only a small proportion of cancer survivors.

Conclusion

Overall, these trends are encouraging and underline the importance of continued investment in cancer prevention, early detection, treatment and survivorship services. They also sit alongside broader progress in outcomes, with cancer mortality in Ireland 11% lower than the EU average for the under 75s. Together, the findings point to measurable progress in cancer control in Ireland and offer reassurance that outcomes are improving for many people affected by cancer.