National Cancer Registry Ireland

CANCER IN IRELAND 1994-2023

ANNUAL STATISTICAL REPORT OF THE NATIONAL CANCER REGISTRY

2026

www.ncri.ie

Authors:
Joe McDevitt
Patrice James
Ciaran Haugh
Aoife O'Donoghue
Aline Brennan
Deirdre Murray
Maria Theresa Redaniel

Published by:
National Cancer Registry
Building 6800,
Cork Airport Business Park,
Kinsale Road, Cork, Ireland.
T12 CDF7

Telephone: +353 21 4318014
Fax: +353 21 4318016
Email: info@ncri.ie
Website: www.ncri.ie

About the National Cancer Registry

NCRI is the State Agency responsible for collecting and analysing cancer data to inform policy, patient care and planning for services in Ireland. The National Cancer Registry was established by the Minister for Health in 1991. It has been collecting comprehensive cancer information for the population of Ireland since 1994. This information is used in research into the causes of cancer, in education and information programmes, and in the planning and management of cancer services to deliver the best cancer care to the whole population.

This report should be cited as:

National Cancer Registry Ireland (2026) Cancer in Ireland 1994-2023: Annual statistical report of the National Cancer Registry. NCRI, Cork, Ireland.

Acknowledgments

- This work uses data provided by patients and collected by the health service as part of their care and support.
- The Central Statistics Office and the General Register Office provided access to population and death certificate data.
- The National Cancer Registry is funded by the Department of Health.
- Drafts of this report were circulated to the Department of Health's Cancer Policy Unit; the Health Service Executive's National Cancer Control Programme; and the Board, Advisory Council, and Senior Management Team of the National Cancer Registry.

ABBREVIATIONS	
95% CI	95% confidence interval
AAPC	Average Annual Percentage Change
APC	Annual percentage change
ASR	Age-standardised rate
CNS	Central nervous system
CSO	Central Statistics Office
EASIR	European Age Standardised Incidence Rate
EASMR	European Age Standardised Mortality Rate
ESP	European Standard Population
IARC	International Agency for Research on Cancer
ICD	International Statistical Classification of Diseases and Related Health Problems
NCRI	National Cancer Registry Ireland
NHL	Non-Hodgkin lymphoma
NMSC	Non-melanoma skin cancer
NOS	Not otherwise specified
PA	Per annum
TNM	Tumour, node, metastasis (stage)

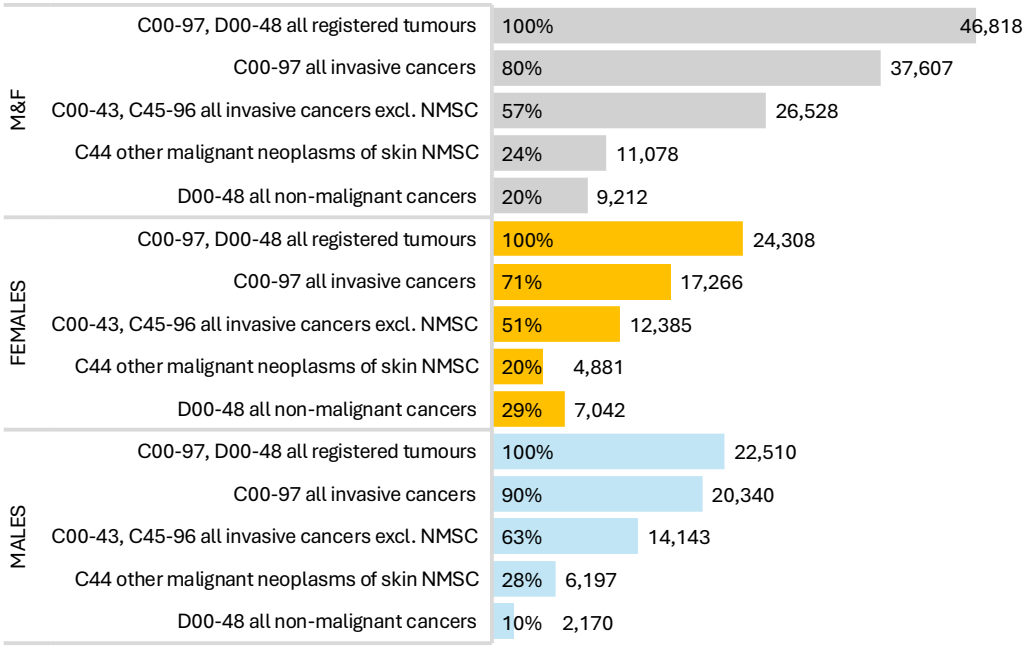
Contents

EXECUTIVE SUMMARY

Cancer incidence 2021-2023

On average, 46,818 cancers or related tumours were diagnosed each year during 2021-2023 (Figure 1).

Figure 1. Incident cancer cases: annual average 2021-2023



Percentages represent the proportion of *all registered tumours*.

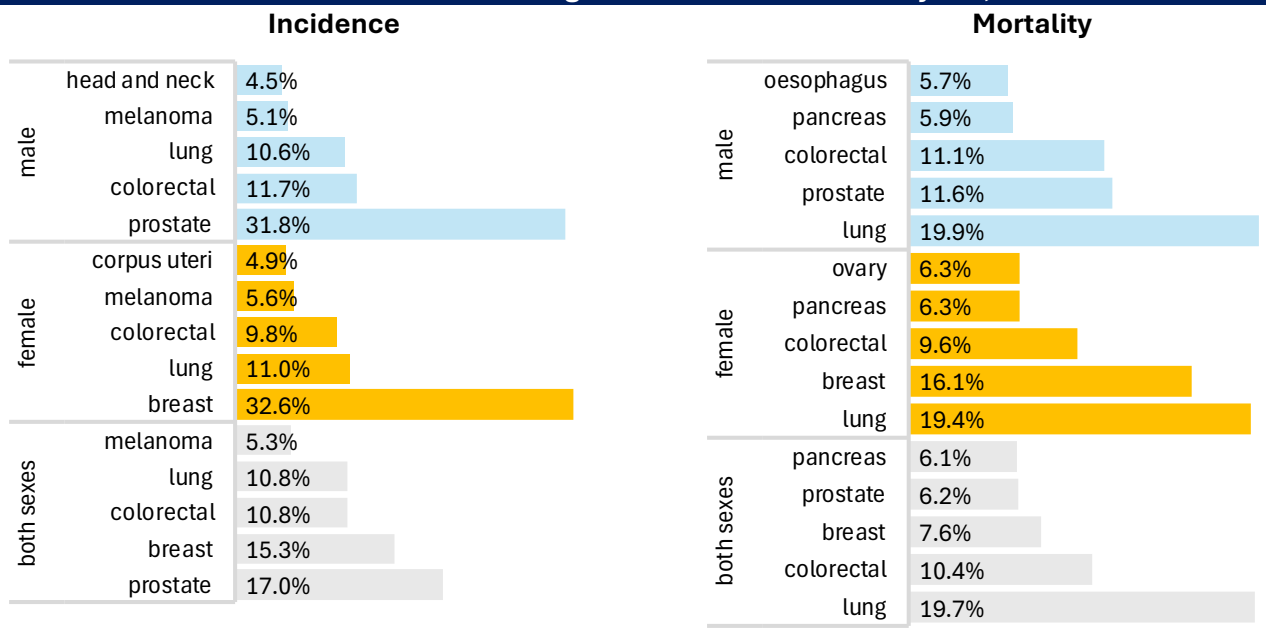
For example:
C44 other malignant neoplasms of skin (NMSC) comprised 20% (1 in 5) of all registered tumours in females and 28% (just over 1 in 4) in males

- The figure most often quoted in international comparisons ('all invasive cancer, excluding NMSC') averaged 26,528 cases (14,143 males and 12,385 females) diagnosed annually during 2021-2023, or 57% of all registered tumours (Figure 1). Most invasive cancers can be life-changing and can require extensive treatment, though their impact varies significantly.
- Approximately 24% of all registered tumours (almost 1 in 4) were non-melanoma skin cancers (NMSC).
- Approximately 20% (1 in 5) of all registered tumours were non-malignant neoplasms (in-situ carcinomas, tumours of uncertain behaviour and benign brain and CNS tumours) (Figure 1).

Most common incident cancers and cancer deaths during 2021-2023

The five most common incident invasive cancers and causes of cancer-related deaths are presented in Figure 2 and the key findings are summarised below the table.

Figure 2.
Most common incident cancers and leading causes of cancer death by sex, 2021-2023



- Excluding non-melanoma skin cancer (NMSC), prostate cancer in males (31.8%) and breast cancer in females (32.6%) were the most commonly diagnosed invasive cancers, each accounting for approximately one-third of all incident cancers in males and females respectively.
- Considering both sexes combined, prostate (17.0%) and breast cancer (15.3%) were the most commonly diagnosed cancers overall, followed by colorectal cancer (10.8%), lung cancer (10.8%), and melanoma of skin (5.3%).
- Lung cancer was the leading cause of cancer death in both sexes, accounting for approximately 1 in 5 cancer deaths overall (19.7%) and ranking first for both males (19.9%) and females (19.4%).
- For both sexes combined, colorectal cancer (10.4%), breast cancer (7.6%), prostate cancer (6.2%), and pancreatic cancer (6.1%) ranked next after lung cancer as leading causes of cancer mortality.

Cancer mortality: European Union-27 comparison

- Comparative analysis of age-standardised cancer mortality rates shows that Ireland performs favourably relative to the EU-27 average for premature cancer mortality (ages 0–74 years). Overall cancer mortality in this age range was 11% lower in Ireland than the EU-27 average, indicating comparatively positive outcomes for cancers that are most amenable to primary prevention, early detection and effective treatment including tobacco-related and screen-detectable cancers.
- A smaller number of cancer sites showed marginally higher premature mortality in Ireland than the EU-27, notably oesophageal cancer, ovarian cancer, melanoma of the skin and corpus uteri cancer, though in most cases absolute differences in rates were very small. These cancers represent potential areas for further gains through earlier diagnosis, improved access to optimal treatment, or targeted prevention strategies.
- When cancer mortality is examined across all ages (0–85+), Ireland's overall cancer mortality is marginally higher than the EU-27 average (by 2.6%). This shift reflects Ireland's comparatively high life expectancy, resulting in a larger proportion of the population surviving into very old age, where cancer risk and mortality are greatest and less amenable to prevention or curative treatment. Excess mortality at older ages is concentrated in cancers with steep age-related increases in risk and poorer prognosis in very elderly patients, including oesophageal, ovarian, melanoma and haematological cancers.
- Interpretation of international comparisons is therefore best informed by considering premature and all age mortality analyses together. These findings indicate that Ireland performs particularly well in reducing avoidable and premature cancer mortality (up to age 75), and that less favourable comparisons at older ages largely reflect demographic longevity rather than weaker cancer control.

Cancer incidence and mortality trends 1994-2023

- Between 1994 and 2023, trends for all invasive cancers combined (excluding NMSC) differed by sex but showed sustained improvements in mortality for both males and females.
- In males, overall cancer incidence has declined in since 2009, following earlier increases largely driven by prostate cancer.
- In females, all-cancer incidence has remained broadly stable, with increases in breast cancer offset by declines in other cancers such as colorectal cancer.
- Over the same period, mortality from all invasive cancers decreased significantly in both sexes, reflecting long-term progress in cancer prevention, early detection and treatment.
- Among the most common cancers, prostate cancer incidence in males increased during earlier years but has stabilised more recently, while mortality declined steadily since 2002.
- In females, breast cancer incidence increased modestly since 2008, whereas mortality showed a clear and sustained decline over the whole 30-year range (1994-2023).
- Colorectal cancer incidence and mortality decreased in both males and females, consistent with the impact of screening, earlier diagnosis and improved treatment.
- In contrast, melanoma of the skin showed a strong and continuing increase in incidence in both males and females. Melanoma mortality trends differed by sex, remaining relatively stable in males, while showing a significant increase in females in recent years.
- Overall, recent trends indicate declining mortality for all invasive cancers (excluding NMSC) and major gains in cancer survival in Ireland. However, the findings underscore the need for strengthened prevention and early detection efforts particularly for melanoma.

Cancer and age at diagnosis

Table 1 shows that the median age at cancer diagnosis varies by cancer type and follows an age gradient. For all invasive cancers (excluding NMSC), the median age at diagnosis was 68 years (IQR 59–78), indicating that most cancers occur in older adults. These medians summarise central tendencies only, and cancers can occur at almost any age outside these typical ranges.

Table 1. Median age at diagnosis for selected cancers, with categorisation by broad age group (<50, 50–69, ≥70 years), 2019–2023

AGE GROUP	CANCER	MEDIAN AGE	IQR*
	C00-43, C45-96 all invasive cancers excl. NMSC	68	[59, 78]
<50 years predominantly younger median age at diagnosis	C62 testis	37	[29, 44]
	C81 Hodgkin lymphoma	39	[21, 56]
	C53 cervix uteri	48	[37, 59]
	C73 thyroid	48	[36, 61]
50-69 years median age at diagnosis	C50 breast (F)	61	[50, 71]
	C71-72 brain & spinal cord	63	[50, 76]
	C56 ovary	65	[55, 76]
	C00-14, C30-32 head & neck	66	[57, 74]
	C54 corpus uteri (uterine)	66	[58, 74]
	C43 melanoma of skin	66	[54, 78]
	C64 kidney	67	[58, 76]
	C91-95 leukaemia	68	[56, 79]
	C61 prostate	68	[62, 74]
	C82-86 non-Hodgkin lymphoma	69	[60, 79]
≥70 years predominantly older median age at diagnosis	C18-20 colorectal	71	[61, 80]
	C90 multiple myeloma	71	[63, 79]
	C15 oesophagus	71	[63, 80]
	C22 liver	72	[64, 80]
	C33-34 lung	72	[65, 79]
	C16 stomach	73	[64, 82]
	C25 pancreas	74	[66, 82]
	C67,D090,D414,NMIBC (all bladder)	74	[66, 81]

IQR*: interquartile range

- A number of cancers tend to occur in younger people —particularly testicular cancer, Hodgkin lymphoma, cervical cancer, and thyroid cancer—and have substantially younger median ages (<50 years).
- A larger group of common cancers, including cancers of the breast, brain & spinal cord, ovary, head & neck, corpus uteri (uterine), melanoma of skin, kidney, leukaemia, prostate, non-Hodgkin lymphoma, tend to be diagnosed in middle years (50–69), with median ages ranging from 60-69.
- At the other end of the age spectrum, colorectal, multiple myeloma, oesophagus, liver, lung, stomach, pancreas, bladder cancers tend to be diagnosed at older ages (≥70 years), with median ages ranging from 71-74.

Cancer prevalence

- At the end of 2023, an estimated 230,946 people were living in Ireland with a previous diagnosis of invasive cancer (excluding non-melanoma skin cancer), representing approximately 4.4% of the Irish population.
- This total reflects complete cancer prevalence, combining observed survivors diagnosed since the establishment of national cancer registration in 1994 with a small, diminishing estimated group of survivors diagnosed prior to 1994.
- Prevalence was evenly distributed by sex, with 51% female and 49% male survivors.
- The most common cancers among survivors were breast cancer (22.5% of all cancer survivors), prostate cancer (21.4%), colorectal cancer (10.3%) and skin melanoma (7.1%).

Cancer survival

- Cancer survival in Ireland has improved markedly over the past two decades, with five-year age-standardised net survival for all invasive cancers combined (excluding NMSC) rising from 50% in 1999–2003 to 66% in 2019–2023.
- Survival gains were seen across all cancer types, though survival and scale of improvement varied widely.
    - Cancers with historically poorer prognosis including pancreatic and oesophageal cancer still have low survival, however there were notable relative improvements. For example, pancreatic cancer experienced the largest relative increase in five-year net survival (175%).
    - Cancers with intermediate survival such as colorectal cancer and multiple myeloma showed moderate to large absolute gains, reflecting advances in diagnosis and treatment.
    - Cancers with high survival (e.g., prostate and breast cancer) maintained very favourable outcomes, with more modest improvements.
- Stage at diagnosis remains a key driver of outcomes.
    - Early-stage disease was associated with very high five-year net survival approaching or exceeding 90-100% for some cancers, while survival declined sharply at more advanced stages.
    - There were also large differences in stage at diagnosis across cancer types, with some cancers more often detected early (e.g., melanoma, breast cancer) and others frequently diagnosed at advanced stages (e.g., lung and liver cancer), contributing to poorer outcomes.
- Overall, cancer survival continues to improve reflecting sustained progress in cancer control. However, substantial differences in outcome persist by cancer type and stage. A focus on prevention, early diagnosis, and therapeutic innovation remains essential, particularly for cancers often diagnosed late and with aggressive disease biology alongside improvements in care for cancers with already high survival.

METHODS

Sources of data

This report includes data on all cases of invasive cancer and non-invasive neoplasms (C00-C96, D00-48) diagnosed in Ireland 1994-2023. Data were downloaded from the NCRI database on 02/01/2026. Data extracted included age group, sex, cancer site (coded using ICD-10) and vital status. Stage data are not relevant for brain cancer (ICD-10 C71-72), multiple myeloma (C90) and leukaemia (C91-95) as these sites are not included in the TNM staging classification system. Due to historical variations in coding practices at the NCRI, some bladder tumours with behaviour codes 1 (uncertain) and 2 (in situ) may have been recorded under the ICD-10 code C67 in the earlier years of cancer registration, which is typically reserved for malignant cases (behaviour 3). To account for this and ensure consistency in longitudinal analyses, this report adopts a broader definition of bladder cancer for examining incidence, survival, and treatment. Specifically, it includes malignant bladder cancer (C67), carcinoma in situ (D09.0, behaviour 2), and neoplasms of uncertain behaviour (D41.4, behaviour 1), collectively encompassing both muscle-invasive and non-muscle invasive bladder cancer (NMIBC). Follow up time was censored on 31/12/2023.

Population denominators for rate calculations were published by the CSO (file PEA11). Data on the number of deaths per year with an underlying cause of cancer, by age-group at death were downloaded from the CSO website [1].

TNM staging

Since 2014, the NCRI has recorded tumour stage using the TNM7 classification system. Prior to this, staging was based on earlier versions, TNM4 and TNM5. Summary stage for cases diagnosed between 1994 and 2013 were retrospectively recoded to TNM7 criteria [2] using available clinical T, N, and M values to enable consistent comparisons over time for incidence and survival.

Incidence & mortality

We used data from the National Cancer Registry Ireland (NCRI), and mortality data from the Central Statistics Office (CSO). Incidence and mortality rates were estimated by dividing the number of cases (including all age groups) by the total mid-year population and expressed as number of cases per 100,000 population (crude rate). Rates are reported separately for males, females and both sexes combined. Mortality data do not capture tumour morphology or behaviour codes.

To account for differences in the age distribution of the population over time, these rates were age standardised using the 2013 European Standard Population (ESP) [3]. Age-standardisation is a key method for ensuring comparability, as crude rates or case counts can be misleading when comparing cancer patterns over time periods due to demographic changes in age structure.

Trends in European Age Standardised Incidence Rate (EASIR) and European Age Standardised Mortality Rate (EASMR) were assessed using Joinpoint regression [4]. Joinpoint regression determines inflection points where trends significantly change. The trend or slope between the inflection points was estimated using piecewise log-linear regression and expressed as annual percentage change (APC%). The trend or slope over the whole 30-year range (1994-2023) was expressed as the annual average percentage change (AAPC%) [5]. Age-standardised rates were plotted by year (1994–2023) and by sex where applicable. To provide context, case counts and crude rates per 100,000 population are presented alongside the age-standardised rates.

Age-specific rates were reported for all common cancer sites for age groups 0-14, 15-39, 40-54, 55-69, 70-84 and 85+ for the period 2019-2023.

Survival

Five-year net survival percentages with 95% confidence intervals were estimated for all common cancers using the ‘strs’ command in Stata [6], based on the Pohar Perme estimator [7]. Estimates were derived using a

lifetable derived from underlying age-specific population counts (file PEA 11) and all-cause mortality data published by the Central Statistics Office (file VSA35 and VSA29, CSO). The 'period' option was adopted for the range of years 2019-2023 [8] to obtain the most up-to-date five-year net-survival estimates possible at the time of writing with the censor date set at 31/12/2023.

Net survival represents the probability of surviving a specified period following a cancer diagnosis, from date of diagnosis to date of death or last known follow-up (31/12/2023), after adjusting for the background mortality experienced by the general population. It reflects the expected survival in a hypothetical scenario in which cancer is the only possible cause of death, with mortality from other causes adjusted for using the population life table. To compare survival outcomes among selected cancer types while accounting for potential differences in the distribution of age and stage at diagnosis, unstandardised and age-standardised, survival estimates were calculated. Age standardisation was performed using the International Cancer Survival Standard (ICSS) weights [9].

CANCER INCIDENCE 2021-2023

Table 1-1 presents the average annual incidence, incidence rates and cumulative risk for the most common cancers registered in Ireland during 2021-2023. The key findings are summarised below the table.

Table 1-1. Average annual incidence, incidence rates, and cumulative risk for the most common cancers in Ireland, 2021–2023

	case count			EASIR‡ rate per 100,000		risk # 1 in.. to age 75		risk # 1 in.. lifetime	
	male	female	both sexes ●	male	female	male	female	male	female
C00-97 all invasive cancers	20,340	17,266	37,607	1,018.2	760.9				
C00-43, C45-96 all invasive cancers excl. NMSC	14,143	12,385	26,528	703.1	542.8	3	4	2	2
C00-97, D00-48 all registered tumours	22,510	24,308	46,818	1,126.4	1,042.5				
D00-48 all non-malignant cancers	2,170	7,042	9,212	108.1	281.5				
C01-14 mouth and pharynx	424	178	602	20.0	7.8	95	228	66	147
C00-14, C30-32 head & neck	634	222	856	30.4	9.7	66	184	43	117
C15 oesophagus	372	167	539	18.9	7.7	119	332	63	126
C16 stomach	390	227	618	20.2	10.3	131	234	58	95
C18-20 colorectal	1,656	1,213	2,869	84.1	54.6	28	41	14	19
C22 liver and intrahepatic bile ducts	259	112	371	13.3	5.1	181	439	89	194
C25 pancreas	353	316	668	18.4	14.5	143	175	63	66
C34 bronchus and lung	1,491	1,364	2,856	77.0	62.8	32	33	15	16
C43 melanoma of skin	723	694	1,417	36.1	29.8	64	60	33	37
C44 other malignant neoplasms of skin NMSC	6,197	4,881	11,078	315.1	218.2	8	10	4	5
C50 breast	33	4,036	4,069	1.7	171.8	1,468	10	682	7
C53 cervix uteri	-	282	282	-	11.1		131		114
C54 corpus uteri	-	602	602	-	26.6		63		43
C56 ovary	-	372	372	-	16.3		110		68
C51-52,55,57,58 other gynaecological cancers *	-	201	201	-	9.0		244		116
C61 prostate	4,502	-	4,502	218.3	-	8		6	
C62 testis	174	-	174	6.7	-	201		198	
C64 kidney, except renal pelvis	488	251	738	23.4	11.1	85	174	53	97
C67 bladder	367	152	519	20.3	7.0	165	414	55	131
C67(T0,T1,Ta,Tis),D090,D414 NMIBC ◊	526	178	705	27.4	8.1	96	240	43	129
C71-72 brain & spinal cord	246	179	426	11.4	7.6	163	228	107	148
C73 thyroid	73	200	273	3.1	7.8	502	184	415	162
C81 Hodgkin lymphoma	89	63	153	3.7	2.5	405	546	342	485
C82-86 non-Hodgkin lymphoma	485	374	860	23.9	16.7	91	122	50	62
C90 multiple myeloma	227	173	400	11.7	7.8	199	275	102	131
C91-95 leukaemia	362	222	585	17.6	9.6	121	199	68	107

‡ Average age-standardised incidence rates for 2021-2023, the most recent years for which case registration is complete. ● both sexes are subject to rounding of annual averages.

Cumulative risk of developing a type of cancer before age 75 and full lifetime risk (both adjusted for population mortality), expressed as a proportion, e.g. during 2021-2023 the lifetime risk of developing an invasive cancer (excl. NMSC) was approximately 1 in 2 in both males and females, 1 in 7 for breast cancer (F) and 1 in 6 for prostate cancer, applying current probability method [10] [11].

◊ NMIBC, non-muscle invasive bladder cancer

* Vulva, vagina, other uterus, placenta and other unspecified gynaecological cancers.

On average, 46,818 cancers and other (non-invasive) tumours were diagnosed annually in Ireland during 2021–2023 (Table 1-1).

Approximately 20% of these were non-malignant tumours (9,212 cases per annum (PA), including in situ carcinomas, tumours of uncertain behaviour and benign brain and CNS tumours), and 24% were invasive non-melanoma skin cancers (NMSC) (11,078 cases PA).

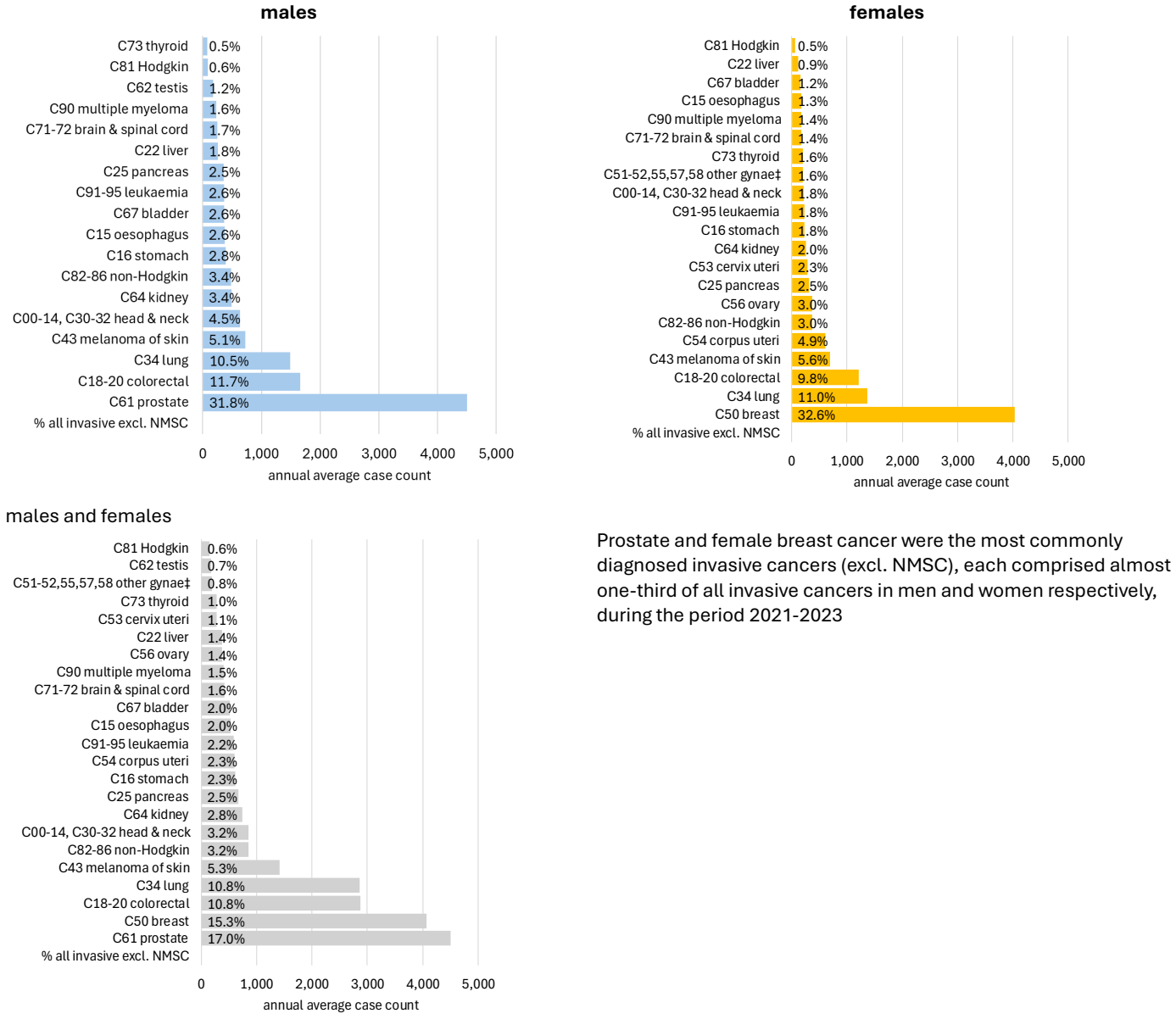
Invasive cancers (including NMSC) accounted for an average of 37,607 cases PA, corresponding to age-standardised incidence rates of 1,018 per 100,000 males and 761 per 100,000 females.

For all invasive cancers excluding NMSC, an annual average of 26,528 cases PA was diagnosed during 2021-2023 (14,143 males and 12,385 females), representing 57% of all registered tumours. This is equivalent to age-standardised incidence rates of 703 per 100,000 males and 543 per 100,000 females PA. The incidence

rate for invasive cancer (excluding NMSC) was approximately 30% higher in males than in females during 2021–2023.

The cumulative risk to age 75 years of being diagnosed with an invasive cancer other than NMSC during 2021–2023 was approximately 1 in 3 for men and 1 in 4 for women. The lifetime cumulative risk was approximately 1 in 2 for both men and women.

Figure 1-1.
Estimated percentages and rank of the most commonly diagnosed invasive cancer (excluding NMSC): annual average 2021-2023



Prostate and female breast cancer were the most commonly diagnosed invasive cancers (excl. NMSC), each comprised almost one-third of all invasive cancers in men and women respectively, during the period 2021-2023

Low-incidence invasive cancers are not shown (c.10%), therefore percentages do not sum to 100%.
‡ Other gynae: C51-52,55,57,58 vulva, vagina, other uterus, placenta and other unspecified gynaecological cancers

The most commonly diagnosed invasive cancers (excluding NMSC) in males during 2021–2023 were: (1) prostate cancer, accounting for about 32% of all invasive cancers, (2) colorectal cancer (12%), (3) lung cancer (around 11%), (4) melanoma of the skin (around 5%), and (5) cancers of the head and neck (around 5%) (Figure 1-1).

The most commonly diagnosed invasive cancers (excluding NMSC) in females during 2021–2023 were: (1) breast cancer, accounting for about 33% of all invasive cancers, (2) lung cancer (around 11%), (3) colorectal cancer (approximately 10%), (4) melanoma of the skin (around 6%), and (5) cancers of the uterus (corpus uteri) (around 5%) (Figure 1-1).

Cancer incidence: European Union-27 comparison

Table 1-2 compares European age-standardised cancer incidence rates (EASIRs) for people aged 0–85+ years in Ireland with the EU-27 average and ranks cancer sites by the relative difference between the two [12]. To allow fair comparison among EU countries, rates were weighted using the European Standard population 2013 [3].

Table 1-2. Age-standardised cancer incidence rates (ages 0–85+) in Ireland compared with the EU-27, 2024: relative differences by cancer site

Cancers: EASIR for Ireland was lower than the EU-27 average	EU-27 average EASIR	Ireland EASIR	relative difference % [(IRL/EU-27)-1]*100
Hypopharynx	2.1	1.2	-42.9%
Thyroid	11.2	6.5	-42.0%
Oropharynx	4.0	2.9	-27.5%
Testis	8.5	6.3	-25.9%
Bladder	31.5	24.1	- 23.5%
Cervix uteri	11.7	9.4	-19.7%
Lip, oral cavity	7.9	6.5	-17.7%
Larynx	5.2	4.3	-17.3%
Pancreas	20.1	16.9	-15.9%
Nasopharynx	0.7	0.6	- 14.3%
Leukaemia	14.4	13.1	-9.0%
Colorectum	68.9	63.9	-7.3%
Stomach	14.7	13.9	-5.4 %
Cancers: EASIR for Ireland was higher than the EU-27 average			
Liver	12.4	12.6	1.6 %
lung	63.3	66.0	4.3%
Kidney	16.7	17.9	7.2%
All cancers excluding NMSC	**545.3**	**588.5**	**7.9%**
Breast (F)	141.4	152.7	8.0%
Brain and other CNS	8.7	9.8	12.6%
Ovary	15.6	18.1	16.0%
Non-Hodgkin lymphoma	18.6	22.7	22.0%
Hodgkin lymphoma	2.7	3.4	25.9%
Prostate	144.0	192.9	34.0%
Multiple myeloma	6.9	10.1	46.4%
Melanoma skin	21.4	32.8	53.3%
Oesophagus	6.2	12.8	106.5%

Data source: Source: ECIS - European Cancer Information System. From https://ecis.jrc.ec.europa.eu. Accessed on 24-04-2026 (c) European Union 2026 [12]

Overall, Ireland's all-cancer incidence rate (excluding NMSC) in ages 0–85+ was 8% higher than the EU-27 average, corresponding to a higher absolute rate in Ireland (IRL 588.5; EU 545.3) (Table 1-2).

For a number of cancer types, Ireland recorded substantially lower incidence than the EU-27 average. These included hypopharyngeal (-43%), thyroid (-42%), oropharyngeal (–28%), testicular (–26%), and bladder cancer (–24%), as well as cervical cancer (–20%) and cancers of the lip and oral cavity (–18%) (Table 1-2).

Lower incidence was also observed for several other cancers, including pancreatic, nasopharyngeal, leukaemia, colorectal, and stomach cancers, although the differences were more modest (–5% to –16%) (Table 1-2). For example, colorectal cancer incidence was marginally lower (-7%) in Ireland (IRL 63.9; EU 68.9).

In contrast, Table 1-2 highlights a group of cancers for which incidence in Ireland exceeded the EU-27 average. Absolute differences were more substantial for prostate cancer (IRL 192.9; EU 144.0, +34%), melanoma of skin (IRL 32.8; EU 21.4, +53%), non-Hodgkin lymphoma (IRL 22.7; EU 18.6, +22%), multiple myeloma (IRL 10.1; EU 6.9, +46%), and oesophageal cancer (IRL 12.8; EU 6.2, 107%). By comparison, rate differences were modest for

ovarian cancer (IRL 18.1; EU 15.6, +16%) breast cancer (IRL 152.7; EU 141.4, +8%) and lung cancer (IRL 66.0; EU 63.3, +4%) (Table 1-2).

CANCER MORTALITY 2021-2023

In 2023, cancer was the leading cause of death in Ireland accounting for 29.4% of all deaths followed by cardiovascular diseases (27.4%) and respiratory diseases (11.6%). Together, these three disease groups accounted for 68.4% of all deaths in Ireland in 2023 [1].

Table 2-1. Annual average mortality attributable to cancer: 2021-2023

	deaths			EASMR‡ rate/100,000		risk # 1 in... to age 75	
	males	females	both sexes ●	males	females	males	females
C00-97, D00-48 all registered tumours	5,500	4,757	10,258	304.6	218.9	11	12
C00-97 all invasive cancers	5,361	4,646	10,007	296.1	213.7	11	13
C00-43, C45-96 all invasive cancers excl. NMSC	5,295	4,615	9,910	292.1	212.2	11	13
C01-14 mouth and pharynx	146	55	201	7.4	2.5	306	1,026
C00-14, C30-32 head & neck	213	72	285	11.0	3.3	216	756
C15 oesophagus	303	133	436	15.9	6.2	163	524
C16 stomach	196	116	312	10.8	5.4	310	523
C18-20 colorectal	595	447	1,042	32.8	20.6	100	149
C22 liver	274	171	444	14.7	7.9	202	339
C25 pancreas	320	294	614	17.2	13.7	176	212
C34 lung	1,069	902	1,971	56.7	42.0	48	58
C43 melanoma of skin	112	76	188	6.3	3.5	567	794
C50 breast	9	747	756	0.5	33.7	6,441	74
C53 cervix uteri	-	84	84	-	3.5		482
C54 corpus uteri	-	117	117	-	5.4		515
C56 ovary	-	294	294	-	13.4		167
C51-52,55,57,58 other gynae*	-	76	76	-	3.5		809
C61 prostate	621	-	621	39.0	-	177	
C62 testis	5	-	5	0.2	-	7,321	
C64 kidney	160	83	243	8.6	3.9	372	815
C67 bladder	151	76	227	9.3	3.6	737	1,488
C71-72 brain & spinal cord	198	129	327	9.3	5.6	211	323
C73 thyroid	13	14	27	0.7	0.7	4,048	3,557
C81 Hodgkin lymphoma	9	12	21	0.5	0.6	8,730	5,558
C82-86 non-Hodgkin lymphoma	159	124	283	9.0	5.9	418	607
C90 multiple myeloma	108	74	182	6.3	3.5	725	1,220
C91-95 leukaemia	190	106	296	10.7	4.9	363	644

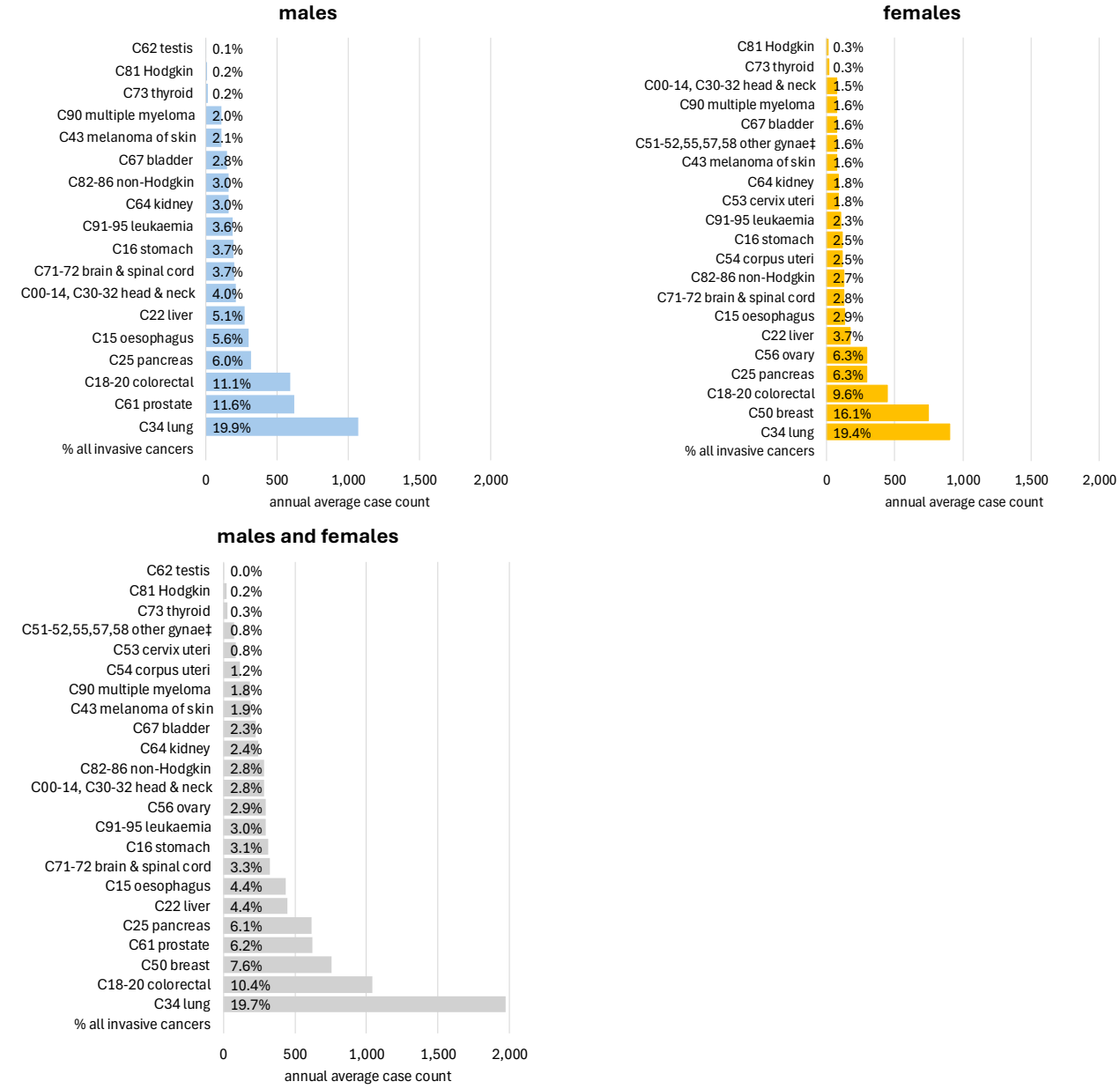
‡ Average age-standardised mortality rates for 2021-2023. Source of data: Central Statistics Office (2026).
● both sexes are subject to rounding of annual averages.
Cumulative risk of dying of cancer before 75th birthday calculated using method as described [13], expressed as odds, e.g. 1 in 11 in males; 1 in 12 in females.
*Vulva, vagina, other uterus, placenta and other unspecified gynaecological cancers

An annual average of 10,007 deaths from invasive cancer occurred in Ireland during 2021–2023, comprising 5,361 deaths in males and 4,646 deaths in females (Table 2-1). This represents estimated age-standardised mortality rates of 296 invasive cancer deaths per 100,000 males and 214 deaths per 100,000 females PA.

The estimated cumulative risk of dying from invasive cancer before the 75th birthday during 2021–2023 was approximately 1 in 11 for men and 1 in 13 for women.

Lung cancer was the leading cause of cancer death in both sexes, with an average of 1,971 deaths PA, accounting for approximately 20% of all cancer deaths in both males (56.7 deaths per 100,000) and females (42.0 deaths per 100,000) during 2021–2023 (Table 2-1)

Figure 2-1.
Percentages and rank of the most common cancer deaths: annual average 2021-2023



Cancers accounting for smaller percentages of cancer deaths (c.10% in total) are not shown, therefore percentages do not sum to 100%. Mortality data source: Central Statistics Office (2026). 'all invasive' refers to ICD10 C00-97.
‡ Other gynae: C51-52,55,57,58 vulva, vagina, other uterus, placenta and other unspecified gynaecological cancers

Colorectal cancer was the second most common cause of cancer death overall (but 3rd most common in females and in males), with an average of 1,042 deaths PA, accounting for approximately 11% of cancer deaths in males and 10% in females during 2021–2023 (Table 2-1, Figure 2-1). Deaths from lung, colorectal, breast and prostate cancers combined made up almost half (45%) of all deaths from cancer during 2021-2023.

Deaths from cancers of the pancreas and oesophagus in males ranked 4th and 5th, respectively, and together comprised approximately 12% of all cancer deaths in males (6.0% pancreas; 5.6% oesophagus) during 2021–2023 (Figure 2-1). Mortality rankings for these high-fatality cancers were substantially higher than their incidence rankings (12th and 9th, respectively) (Figure 1-1, Figure 2-1).

Deaths from cancers of the ovary and pancreas ranked 4th and 5th, respectively, in females, and together comprised approximately 13% of all cancer deaths in women (6.3% ovarian; 6.3% pancreatic) in 2021–2023. This is substantially higher than their incidence rankings for these high-fatality cancers (7th and 8th respectively) (Figure 1-1, Figure 2-1)

Cancer mortality: European Union-27 comparison

Table 2-2 compares age-standardised cancer mortality rates (EASMRs) for people aged 0–74 years in Ireland with the EU-27 average and ranks cancer sites by the relative difference between the two [12]. Mortality in this age range is widely used as an indicator of avoidable mortality, as deaths occurring before age 75 are considered more amenable to prevention through risk-factor reduction, early detection, and effective, timely treatment [14].

Table 2-2. Age-standardised cancer mortality rates (ages 0–74) in Ireland compared with the EU-27, 2024: relative differences by cancer site

Cancers: EASMR for Ireland was lower than the EU-27 average	EU-27 average EASMR	Ireland EASMR	relative difference % [(IRL/EU-27)-1]*100
Testis	0.4	0.2	-50.0%
Hypopharynx	0.9	0.5	-44.4%
Bladder	3.6	2.2	-38.9%
Larynx	1.6	1.0	-37.5%
Oral cavity	2.0	1.3	-35.0%
Hodgkin lymphoma	0.3	0.2	-33.3%
Nasopharynx	0.3	0.2	-33.3%
Stomach	5.7	4.1	-28.1%
Pancreas	10.7	7.7	-28.0%
Lung	33.7	25.1	-25.5%
Thyroid	0.4	0.3	-25.0%
Leukaemia	3.8	3.0	-21.1%
Cervix uteri	4.2	3.4	-19.0%
Prostate	9.5	7.9	-16.8%
Oropharynx	1.5	1.3	-13.3%
All cancers excl. NMSC	**139.6**	**123.8**	**-11.3%**
Non-Hodgkin lymphoma	3.1	2.8	-9.7%
Colorectum	14.4	13.1	-9.0%
Kidney	3.3	3.1	-6.1%
Liver	6.5	6.2	-4.6%
Cancers: EASMR for Ireland was higher than the EU-27 average			
Breast	19.5	19.8	1.5%
Brain and other CNS	5.6	5.8	3.6%
Multiple myeloma	1.8	2.0	11.1%
Corpus uteri	3.3	3.8	15.2%
Melanoma skin	1.9	2.2	15.8%
Ovary	6.8	8.3	22.1%
Oesophagus	3.7	6.2	67.6%

Data source: Source: ECIS - European Cancer Information System. From https://ecis.jrc.ec.europa.eu. Accessed on 24-04-2026 (c) European Union 2026 [12]

Overall, Ireland's all-cancer mortality rate (excluding NMSC) in ages 0–74 was 11% lower than the EU-27 average (Table 2-2).

For many cancers strongly influenced by primary prevention (notably tobacco control), Ireland recorded substantially lower mortality than the EU-27 average. These included lung cancer (–26%), pancreatic cancer (–28%), stomach cancer (–28%), and cancers of the oral cavity, pharynx and larynx (–33% to –44%) (Table 2-2).

Ireland also showed lower mortality for several cancers considered highly amenable to early diagnosis and effective treatment, including testicular cancer (-50%), Hodgkin lymphoma (-33%), cervical cancer (-19%), prostate cancer (-17%), colorectal cancer (-9%), and non-Hodgkin lymphoma (-10%) (Table 2-2).

In contrast, Table 2-2 highlights a smaller group of cancers for which mortality in Ireland exceeded the EU-27 average. Although the absolute differences in rates were marginal for melanoma of skin (EU 1.9; IRL 2.2), corpus uteri (EU 3.3; IRL 3.8), multiple myeloma (EU 1.8; IRL 2.0), brain and other CNS tumours (EU 5.6; IRL 5.8), and breast cancer (EU 19.5; IRL 19.8), they were noticeably higher for oesophageal (EU 3.7; IRL 6.2) and ovarian cancer (EU 6.8; IRL 8.3).

Organised screening programmes in Ireland and elsewhere typically apply upper age limits (generally 69–74 years). Beyond these ages, cancers are more likely to be diagnosed symptomatically and at later stage, and treatment decisions are increasingly influenced by frailty, multimorbidity, and patient preference. This further amplifies mortality differences at older ages, particularly in countries such as Ireland where survival into older age is common. Table 2-3 compares age-standardised cancer mortality rates (EASMRs) for all ages (0–85+) in Ireland with the EU-27 average.

Table 2-3. Age-standardised cancer mortality rates (ages 0–85+) in Ireland compared with the EU-27, 2024: relative differences by cancer site

Cancers: EASMR for Ireland was lower than the EU-27 average	**EU-27 average EASMR**	**Ireland EASMR**	**relative difference % [(IRL/EU-27)-1]*100**
Testis	0.5	0.2	-60.0%
Hypopharynx	1.0	0.7	-30.0%
Thyroid	0.8	0.6	-25.0%
Bladder	9.3	7.1	-23.7%
Larynx	2.2	1.7	-22.7%
Liver	2.7	2.1	-22.2%
Oral cavity	2.7	2.1	-22.2%
Cervix uteri	5.1	4.0	-21.6%
Stomach	10.2	8.4	-17.6%
Pancreas	18.8	15.6	-17.0%
Oropharynx	1.7	1.5	-11.8%
Leukaemia	8.4	7.6	-9.5%
Lung	49.8	45.7	-8.2%
Colorectum	30.1	29.1	-3.3%
Nasopharynx	0.3	0.3	0.0%
Cancers: EASMR for Ireland was higher than the EU-27 average			
Kidney	6.2	6.3	1.6%
Prostate	36.5	37.3	2.2%
All cancers excl. NMSC	**249.6**	**256.2**	**2.6%**
Brain and other CNS	7.1	7.5	5.6%
Breast	32.6	35.2	8.0%
Non-Hodgkin lymphoma	6.7	7.8	16.4%
Corpus uteri	5.9	7.3	23.7%
Hodgkin lymphoma	0.4	0.5	25.0%
Multiple myeloma	4.1	5.2	26.8%
Melanoma skin	3.3	4.6	39.4%
Ovary	10.1	14.2	40.6%
Oesophagus	5.3	12.0	126.4%

Data source: Source: ECIS - European Cancer Information System. From https://ecis.jrc.ec.europa.eu. Accessed on 24-04-2026 (c) European Union 2026 [12]

In contrast to analyses restricted to ages 0–74, where Ireland exhibits lower overall cancer mortality, the 'all-age' analysis shows that mortality for a greater number of cancer sites is marginally higher in Ireland than the EU-27 average and that overall cancer mortality (excluding NMSC) (EU 249.6; IRL 256.2) is 2.6% higher (Table 2-3).

The cancers for which Ireland showed some excess mortality in 0-85+ analysis included oesophageal cancer, ovarian cancer, melanoma of skin, multiple myeloma, NHL and corpus uteri (uterine) cancer (Table 2-3). These cancers are characterised by either steeply increasing mortality with advancing age, poorer prognosis when diagnosed at older ages, or reduced tolerance among older patients for aggressive treatment regimens.

CANCER TRENDS 1994-2023

Overview

During the period 1994 to 2023, the population of Ireland experienced substantial demographic change with population growth from approximately 3.6 million in 1994 to around 5.3 million by 2023 [15]. Over the same period, the age profile of the population shifted, with the proportion of people aged 65 years and over increasing from about 11–12% in the mid1990s [16] to more than 15% in 2023 [15]. This combination of population growth and population ageing has resulted in a marked increase in the absolute number of cancer cases diagnosed and deaths due to cancer since 1994 placing increasing demands on healthcare resources.

The NCRI has collected and collated information about new cancer cases occurring in the population of Ireland since 1994. This section summarises trends in cancer incidence and mortality rates for the period 1994 to 2023 in males and females. Changes in the overall incidence and mortality rates for all invasive cancers excluding NMSC are reported along with analysis of trends for individual cancer sites.

Figures 3-1 to 3-25 present trends in case counts, crude rates and age-standardised rates. Case counts show number of new cases and reflect the absolute burden on health services; crude rates show the real-world burden of disease. Age-standardised incidence/mortality rates (EASIR/EASMR) enable fair comparisons over time by adjusting for differences in age and provide the best estimate of underlying population risk. By removing the effects of population ageing, they help determine whether any observed changes represent a real increase in underlying cancer risk during 1994–2023, rather than reflecting demographic shifts.

Table 3-1.
Summary of incidence and mortality rate trends in males by cancer type, 1994-2023

	INCIDENCE						MORTALITY					
CANCER	**period**		**APC%**	**95%CI**			**period**		**APC%**	**95%CI**		
C00-43, C45-96 all invasive cancers excl. NMSC	2009	2023	-0.7	-0.9	-0.5	↓	2009	2023	-1.9	-2.1	-1.6	↓
Incidence increased												
C43 melanoma of skin	2014	2023	1.7	0.3	3.1	↑	2010	2023	0.1	-1.9	2.2	↔
C81 Hodgkin lymphoma			1.5	0.9	2.2	↑	2017	2023	-13.1	-21.9	-3.3	↓
C00-14, C30-32 head & neck	2001	2023	0.9	0.7	1.2	↑			-1.1	-1.4	-0.8	↓
C90 multiple myeloma			0.4	0.0	0.9	↑			-1.9	-2.4	-1.4	↓
C67,D090,D414,NMIBC (all bladder)			0.2	0.0	0.4	↑	2019	2023	-7.7	-18.2	4.2	↔
Incidence static												
C61 prostate (1)	2015	2023	1.0	-0.1	2.0	↔	2002	2023	-2.7	-3.0	-2.4	↓
C25 pancreas			0.1	-0.2	0.4	↔			-0.5	-0.7	-0.2	↓
C15 oesophagus			0.0	-0.4	0.3	↔			-0.7	-1.0	-0.4	↓
C71-72 brain & spinal cord			0.0	-0.3	0.3	↔			-0.1	-0.6	0.3	↔
C62 testis	2007	2023	-0.3	-1.1	0.5	↔			-3.1	-5.0	-1.0	↓
C64 kidney	2012	2023	-0.5	-1.6	0.6	↔	2003	2023	-1.4	-2.2	-0.7	↓
C67 bladder (malignant)	2013	2023	-0.5	-1.6	0.6	↔	2019	2023	-7.7	-18.2	4.2	↔
C73 thyroid	2013	2023	-2.8	-5.5	0.0	↔			-0.5	-1.5	0.4	↔
Incidence decreased												
C44 NMSC	2014	2023	-0.9	-1.6	-0.3	↓						
C82-86 non-Hodgkin lymphoma	2014	2023	-1.9	-3.1	-0.7	↓			-0.6	-1.1	-0.1	↓
C18-20 colorectal (2)	2010	2023	-2.1	-2.5	-1.8	↓	2012	2023	-3.5	-4.5	-2.5	↓
C33-34 lung (3)	2013	2023	-2.2	-2.7	-1.7	↓	2012	2023	-3.3	-4.0	-2.6	↓
C16 stomach	2012	2023	-2.8	-3.6	-2.0	↓			-3.1	-3.4	-2.8	↓
C22 liver	2017	2023	-2.9	-5.8	0.0	↓			2.7	2.3	3.1	↑
C91-95 leukaemia	2019	2023	-6.3	-11.6	-0.6	↓	2009	2023	-0.8	-1.9	0.3	↔

APC% Annual Percentage Change in EASIR or EASMR; ↑=significant increase; ↓=significant decrease; ↔ no change at p<0.05; period =1994-2023 (30 years), or most recent stable Joinpoint trend up to 2023 otherwise. Top 3 most common incident cancers (excl. NMSC) in bold and rank during 2019-2023.

Table 3-1 summarises recent trends in cancer incidence and mortality rates among males in Ireland, based on Joinpoint regression analysis of EASIR/EASMR rates over the period 1994–2023, or the most recent stable trend where applicable. Trends are presented as annual percentage changes (APC), with statistical significance

indicated. For all invasive cancers combined (excluding NMSC), cancer incidence in males showed a small but statistically significant decline between 2009 and 2023 (APC –0.7% PA). Cancer mortality declined more rapidly, decreasing significantly (APC –1.9% PA) over the whole period 1994-2023.

Cancers with increasing incidence among males

Incidence rates increased significantly for a number of cancers, most notably:

- Melanoma of skin, which showed the strongest and most sustained increase since 2014 (APC +1.7%).
- Hodgkin lymphoma, head and neck cancers, multiple myeloma, and all bladder cancers, each showing modest but significant upward trends.

Despite rising incidence, mortality rates for these cancers were generally stable or declining, including significant mortality reductions for Hodgkin lymphoma, multiple myeloma, and head and neck cancers.

Cancers with stable incidence among males

Incidence rates for several common cancers, including prostate, pancreatic, oesophageal, testicular, brain and spinal cord, kidney, bladder (malignant) and thyroid cancer, remained broadly stable in recent years. However, for many of these cancers, mortality continued to decline significantly, particularly for prostate cancer and testicular cancer, highlighting ongoing gains in survival and treatment along with stable incidence.

Cancers with decreasing incidence among males

- Non-Hodgkin lymphoma
- Colorectal cancer
- Lung cancer
- Stomach cancer
- Liver cancer
- Leukaemia
- NMSC

For most of these cancers, mortality also declined, often more steeply than incidence, particularly for lung cancer, colorectal cancer and stomach cancer. An exception was liver cancer, where mortality showed a significant increase in recent years despite decreasing incidence.

In males, the period 1994–2023 was characterised overall by falling cancer incidence and consistently declining mortality. While incidence increased for a small number of cancer types—most notably melanoma of skin—mortality trends were generally more favourable, indicating improvements in treatment and survival. The divergence between increasing or stable incidence and declining mortality for many cancers suggests ongoing gains in survival.

Table 3-2 summarises recent trends in cancer incidence and mortality rates among females in Ireland, based on Joinpoint regression analysis of European age-standardised rates (EASIR/EASMR) over the period 1994–2023, or the most recent stable trend where applicable. Trends are presented as annual percentage changes (APC), with statistical significance indicated.

Table 3-2.
Summary of incidence and mortality rate trends in females (1994-2023), by cancer type

	INCIDENCE						MORTALITY					
CANCER	**period**		**APC%**	**95%CI**			**period**		**APC%**	**95%CI**		
C00-43, C45-96 all invasive cancers excl. NMSC	2011	2023	-0.1	-0.4	0.1	↔	2014	2023	-1.7	-2.1	-1.3	↓
Incidence increased												
C81 Hodgkin lymphoma			1.1	0.3	1.9	↑			-0.7	-2.2	0.8	↔
C00-14, C30-32 head & neck			1.1	0.7	1.5	↑			-0.9	-1.4	-0.4	↓
C43 melanoma of skin	2011	2023	1.0	0.1	2.0	↑			1.1	0.3	1.9	↑
C90 multiple myeloma			0.6	0.1	1.1	↑			-2.1	-2.5	-1.6	↓
C50 breast (1)	2008	2023	0.6	0.3	0.9	↑			-1.5	-1.7	-1.3	↓
C67,D090,D414,NMIBC (all bladder)			0.5	0.1	0.9	↑			-0.6	-1.3	0.1	↔
Incidence static												
C25 pancreas			0.2	-0.1	0.5	↔			-0.2	-0.5	0.1	↔
C71-72 brain & spinal cord			0.0	-0.4	0.4	↔			-0.8	-1.3	-0.2	↓
C33-34 lung (2)	2013	2023	-0.4	-0.9	0.1	↔	2014	2023	-1.8	-2.7	-0.9	↓
C44 NMSC	2013	2023	-0.7	-1.3	0.0	↔						
C54 corpus uteri	2016	2023	-0.9	-2.5	0.7	↔			1.6	1.0	2.1	↑
C22 liver	2017	2023	-3.0	-8.4	2.8	↔			2.4	1.9	3.0	↑
Incidence decreased												
C15 oesophagus			-0.8	-1.2	-0.5	↓			-1.4	-1.8	-1.0	↓
C18-20 colorectal (3)	2009	2023	-1.3	-1.7	-0.9	↓			-1.9	-2.1	-1.7	↓
C16 stomach			-1.5	-1.8	-1.2	↓			-3.2	-3.6	-2.8	↓
C67 bladder (malignant)			-1.8	-2.2	-1.3	↓			-0.6	-1.3	0.1	↔
C82-86 non-Hodgkin lymphoma	2013	2023	-2.2	-3.4	-1.0	↓	2000	2023	-1.7	-2.3	-1.1	↓
C91-95 leukaemia	2009	2023	-2.3	-3.4	-1.2	↓	1999	2023	-2.4	-2.9	-1.9	↓
C73 thyroid	2012	2023	-2.3	-4.1	-0.5	↓	2013	2023	-6.5	-10.6	-2.2	↓
C53 cervix uteri	2010	2023	-2.5	-3.9	-1.1	↓			-1.3	-1.8	-0.8	↓
C64 kidney	2016	2023	-3.2	-5.4	-0.9	↓			-0.2	-0.9	0.5	↔
C56 ovary	2015	2023	-4.2	-5.9	-2.4	↓	2019	2023	-6.2	-14.2	2.5	↔

APC% Annual Percentage Change in EASIR or EASMR; ↑=significant increase; ↓=significant decrease; ↔ no change at p<0.05; period =1994-2023 (30 years), or most recent stable Joinpoint trend up to 2023 otherwise. Top 3 most common incident cancers (excl. NMSC) in bold and rank during 2019-2023.

Overall cancer trends among females

For all invasive cancers combined (excluding NMSC), female cancer incidence remained broadly stable between 2011 and 2023 (APC –0.1% PA; not statistically significant). In contrast, cancer mortality declined significantly between 2014 and 2023 (APC -1.7% PA).

Cancers with increasing incidence among females

Incidence rates increased significantly for several cancers, including:

- Breast cancer, which showed a sustained increase since 2008 (APC +0.6%).
- Melanoma of skin, which showed a sustained increase since 2011 (APC +1.0%).
- Hodgkin lymphoma, head and neck cancers, multiple myeloma, and all bladder cancers, each showing modest but statistically significant upward trends.

For many of these cancers, mortality rates were stable or declining, including significant mortality reductions for breast cancer, multiple myeloma, and head and neck cancers, suggesting improved survival despite rising incidence. In contrast the increased incidence of melanoma of skin was accompanied by increasing mortality.

Cancers with stable incidence among females
Incidence rates remained broadly stable for pancreatic cancer, brain and spinal cord tumours, lung cancer, non-melanoma skin cancer, corpus uteri (uterine), and liver cancers.
Mortality trends within this group were mixed. While mortality declined for lung cancer and brain and spinal cord tumours, it increased significantly for corpus uteri (uterine) and liver cancers, indicating poorer survival for certain cancers despite stable incidence.

Cancers with decreasing incidence among females
Significant declines in incidence were observed for:

- Oesophageal cancer
- Colorectal cancer
- Stomach cancer
- Bladder cancer (malignant)
- Non-Hodgkin lymphoma
- Leukaemia
- Thyroid cancer
- Cervix uteri (cervical) cancer
- Kidney cancer
- Ovary

For most of these cancers, mortality also declined significantly, notably for oesophageal, colorectal, stomach cancers, leukaemia and thyroid cancer, reflecting improvements in prevention, detection, and treatment. Mortality trends for bladder, kidney and ovarian cancer were broadly stable.

Among females, the period 2011–2023 was characterised overall by stable cancer incidence (APC -0.1% PA) alongside consistent and significant declines in cancer mortality. The increase in breast cancer incidence rate since 2008 (APC +0.6% PA) exerted an upward influence on the overall cancer rate due to high case numbers. In the absence or moderation of this increase, the overall incidence trend would likely be in decline as seen in males. Although incidence increased for several cancers—particularly breast cancer—mortality trends were generally favourable, indicating improving management and survival. However, rising mortality for corpus uteri (uterine), liver cancer and melanoma of skin, highlights areas where further investigation and targeted interventions may be warranted.

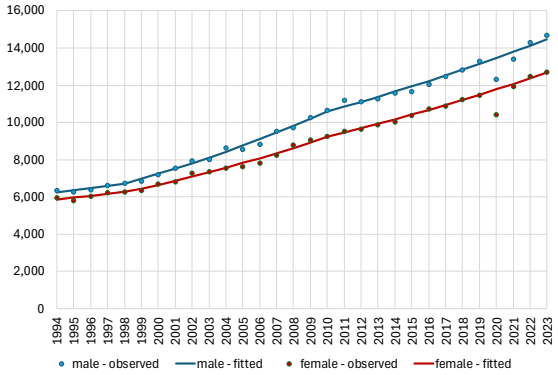
Trends in cancer incidence and mortality, 1994–2023

C00-43, C45-96 All invasive cancers excl. NMSC

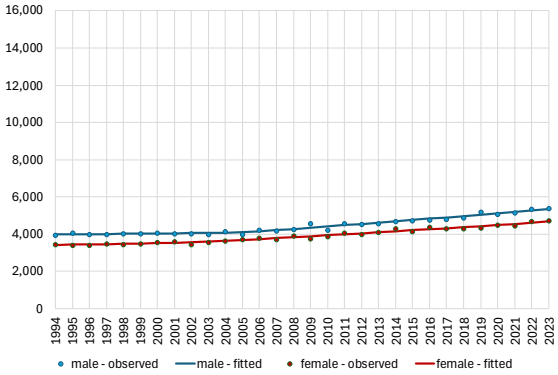
Figure 3-1 presents trends in incidence and mortality for all invasive cancers combined excluding NMSC in males and females during the period 1994–2023.

Figure 3-1. C00-43, C45-96 all invasive cancers excl. NMSC, incidence and mortality trends 1994-2023

Cases

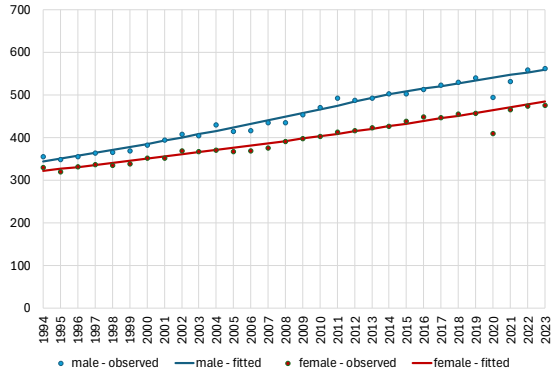


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	1998	1.7	-0.4	3.8	↔				
M	1998	2010	3.9	3.5	4.3	↑				
M	2010	2023	2.4	2.2	2.7	↑	2.9	2.6	3.3	↑
F	1994	1999	1.9	0.7	3.1	↑				
F	1999	2010	3.3	3	3.7	↑				
F	2010	2023	2.5	2.3	2.7	↑	2.7	2.4	3	↑

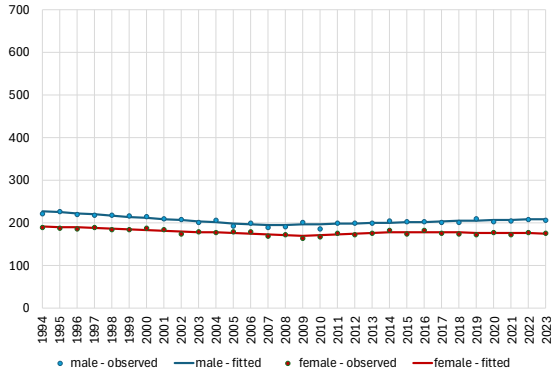


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	0.2	-0.1	0.6	↔				
M	2005	2023	1.5	1.4	1.7	↑	1.0	0.9	1.2	↑
F	1994	2002	0.5	-0.1	1	↔				
F	2002	2023	1.3	1.2	1.5	↑	1.1	0.9	1.3	↑

Crude rate x100,000

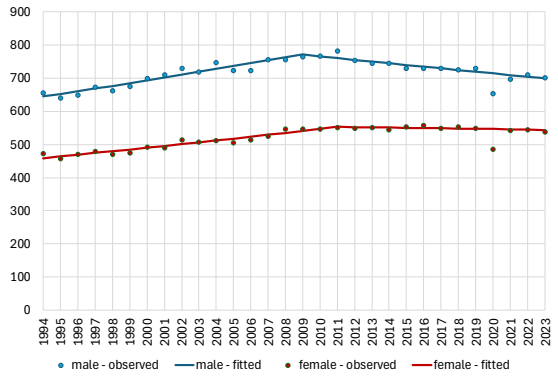


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2014	1.9	1.8	2.1	↑				
M	2014	2023	1.2	0.8	1.7	↑	1.7	1.5	1.9	↑
F	1994	2023	1.4	1.4	1.5	↑	1.4	1.4	1.5	↑

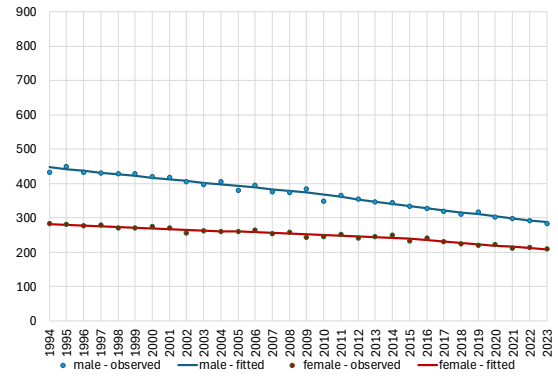


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2007	-1.2	-1.5	-0.9	↓				
M	2007	2023	0.5	0.2	0.7	↑	-0.3	-0.5	-0.1	↓
F	1994	2009	-0.8	-1.0	-0.6	↓				
F	2009	2014	1.0	-0.6	2.6	↔				
F	2014	2023	-0.2	-0.7	0.2	↔	-0.3	-0.6	0.0	↔

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2009	1.2	1.0	1.4	↑				
M	2009	2023	-0.7	-0.9	-0.5	↓	0.3	0.1	0.4	↑
F	1994	2011	1.1	0.9	1.3	↑				
F	2011	2023	-0.1	-0.4	0.1	↔	0.6	0.5	0.7	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2009	-1.2	-1.4	-0.9	↓				
M	2009	2023	-1.9	-2.1	-1.6	↓	-1.5	-1.7	-1.4	↓
F	1994	2014	-0.8	-0.9	-0.6	↓				
F	2014	2023	-1.7	-2.1	-1.3	↓	-1.0	-1.2	-0.9	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

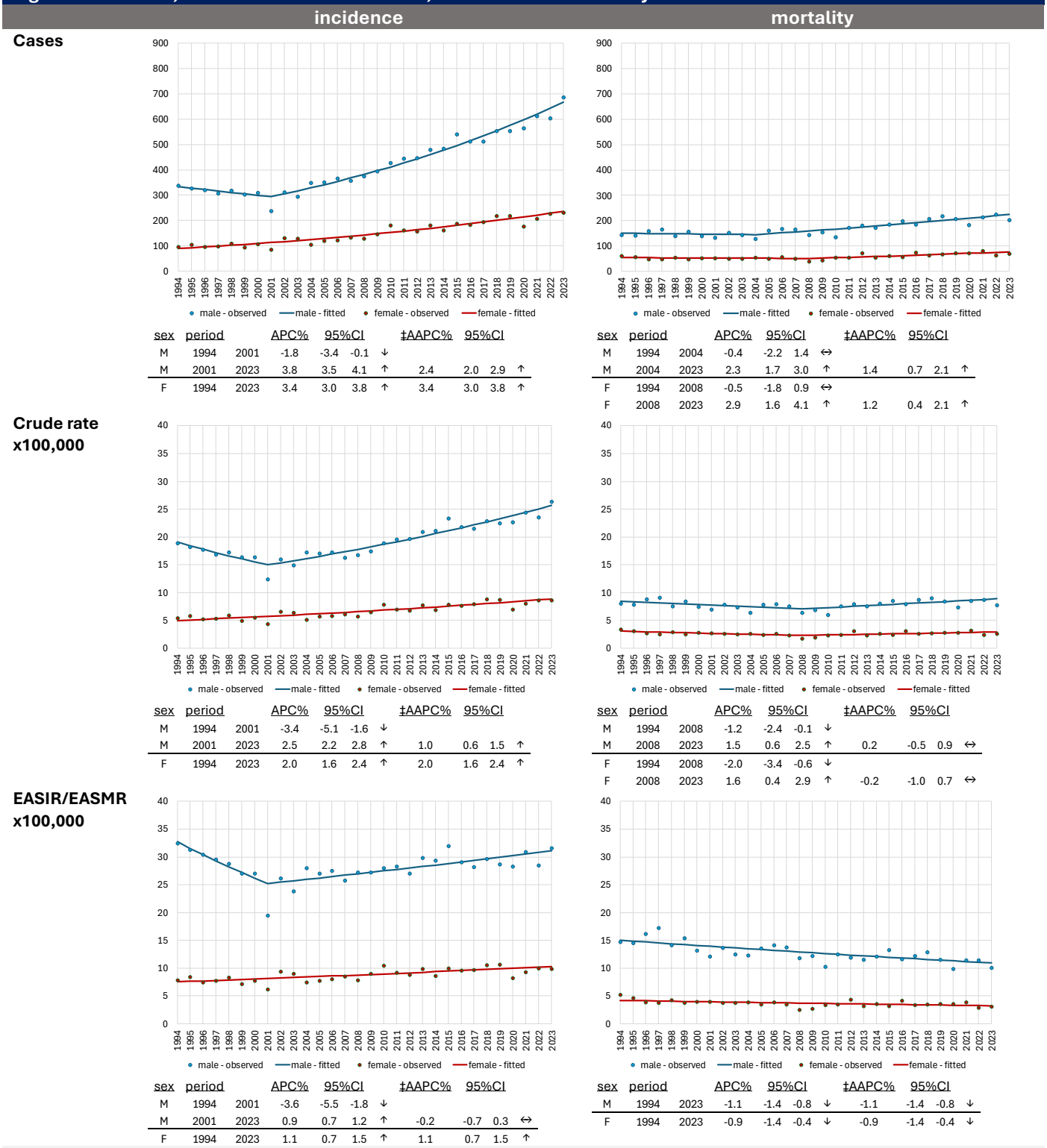
Cancer case numbers and crude incidence rates increased steadily over the period in both males and females, reflecting population growth and ageing. However, EASIR incidence showed more modest change in recent years. In males, EASIR incidence declined significantly by –0.7% PA from 2009 to 2023, following earlier periods of increase. In females, EASIR incidence stabilised during the period 2011-2023 (-0.1%) with no significant change.

In contrast, mortality rates declined consistently across the study period for both sexes. In the most recent stable trends, EASMR mortality decreased significantly by –1.9% PA in males (2009–2023) and by –1.7% PA in females (2014–2023). These sustained declines in age-standardised mortality highlight continued improvements in cancer outcomes adjusted for demographic ageing.

C00-14, C30-32 Head & neck cancer

Figure 3-2 presents trends in incidence and mortality for head and neck cancers in males and females during the period 1994–2023.

Figure 3-2. C00-14, C30-32 head & neck cancer, incidence and mortality trends 1994-2023



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2001	-1.8	-3.4	-0.1	↓				
M	2001	2023	3.8	3.5	4.1	↑	2.4	2.0	2.9	↑
F	1994	2023	3.4	3.0	3.8	↑	3.4	3.0	3.8	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	-0.4	-2.2	1.4	↔				
M	2004	2023	2.3	1.7	3.0	↑	1.4	0.7	2.1	↑
F	1994	2008	-0.5	-1.8	0.9	↔				
F	2008	2023	2.9	1.6	4.1	↑	1.2	0.4	2.1	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2001	-3.4	-5.1	-1.6	↓				
M	2001	2023	2.5	2.2	2.8	↑	1.0	0.6	1.5	↑
F	1994	2023	2.0	1.6	2.4	↑	2.0	1.6	2.4	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2008	-1.2	-2.4	-0.1	↓				
M	2008	2023	1.5	0.6	2.5	↑	0.2	-0.5	0.9	↔
F	1994	2008	-2.0	-3.4	-0.6	↓				
F	2008	2023	1.6	0.4	2.9	↑	-0.2	-1.0	0.7	↔

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2001	-3.6	-5.5	-1.8	↓				
M	2001	2023	0.9	0.7	1.2	↑	-0.2	-0.7	0.3	↔
F	1994	2023	1.1	0.7	1.5	↑	1.1	0.7	1.5	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-1.1	-1.4	-0.8	↓	-1.1	-1.4	-0.8	↓
F	1994	2023	-0.9	-1.4	-0.4	↓	-0.9	-1.4	-0.4	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of head and neck cancer cases increased over the study period in both males and females, with substantially higher case numbers and rates observed in males throughout. Crude incidence rates rose steadily for both sexes, reflecting population increase and ageing.

In males, after a period of decline from 1994, EASIR incidence increased significantly in the most recent stable period by +0.9% PA from 2001 to 2023. In females, EASIR incidence also increased over the whole range by +1.1% PA.

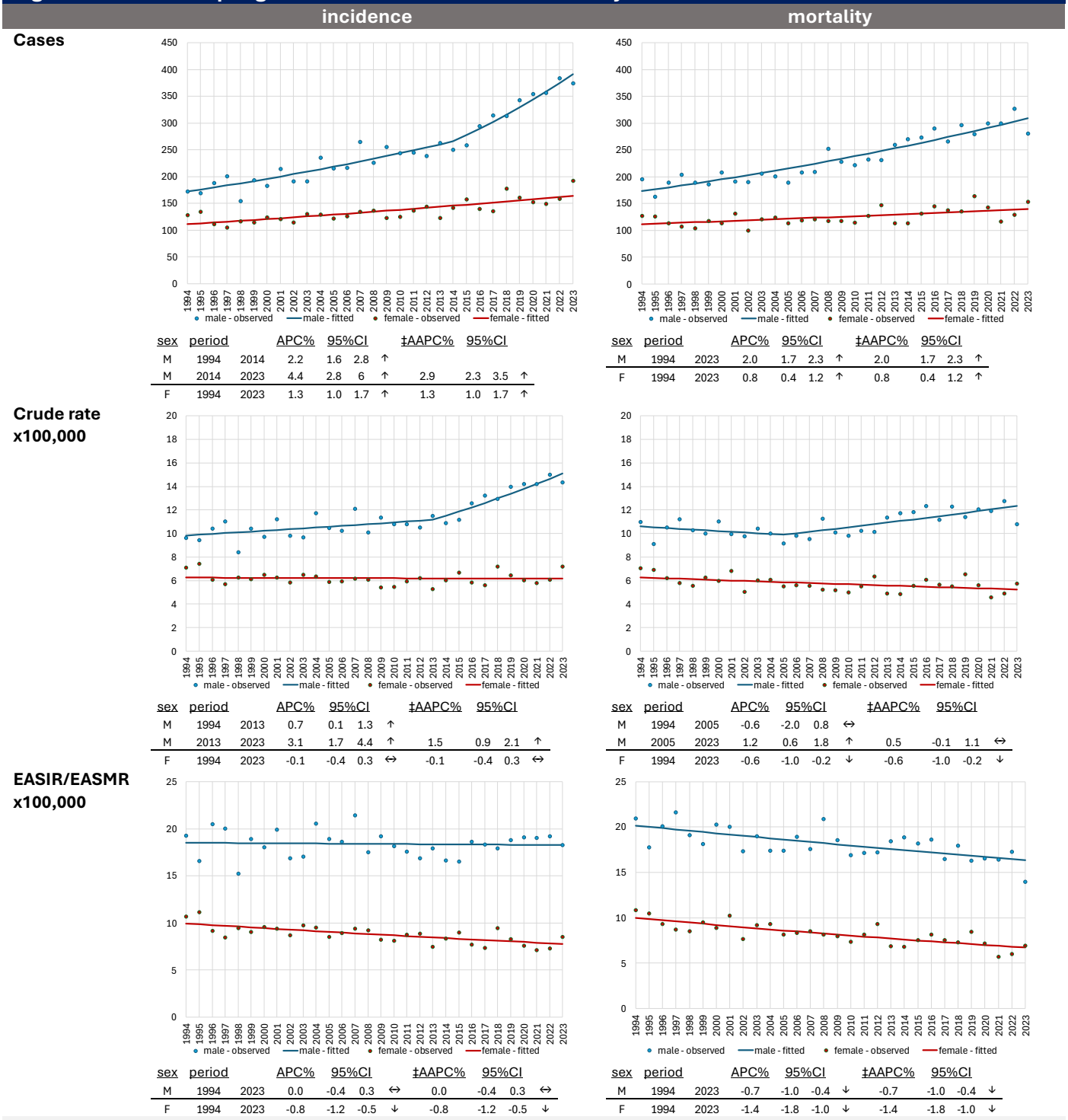
While crude mortality rates were broadly stable over the whole period, EASMR mortality declined. In males, EASMR mortality decreased significantly by –1.1% PA over the whole range (1994-2023). In females, EASMR mortality also decreased significantly by –0.9% PA over the whole range.

Overall, this figure shows that although the underlying incidence of head and neck cancer has increased, age-standardised mortality has continued to decline for both sexes, suggesting improvements in survival despite rising incidence.

C15 Oesophageal cancer

Figure 3-3 presents trends in incidence and mortality for oesophageal cancer in males and females during the period 1994–2023.

Figure 3-3. C15 oesophageal cancer: incidence and mortality trends 1994-2023



sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2014	2.2	1.6	2.8	↑			
M	2014	2023	4.4	2.8	6	↑	2.9	2.3	3.5	↑
F	1994	2023	1.3	1.0	1.7	↑	1.3	1.0	1.7	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	2.0	1.7	2.3	↑	2.0	1.7	2.3	↑
F	1994	2023	0.8	0.4	1.2	↑	0.8	0.4	1.2	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2013	0.7	0.1	1.3	↑			
M	2013	2023	3.1	1.7	4.4	↑	1.5	0.9	2.1	↑
F	1994	2023	-0.1	-0.4	0.3	↔	-0.1	-0.4	0.3	↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2005	-0.6	-2.0	0.8	↔			
M	2005	2023	1.2	0.6	1.8	↑	0.5	-0.1	1.1	↔
F	1994	2023	-0.6	-1.0	-0.2	↓	-0.6	-1.0	-0.2	↓

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	0.0	-0.4	0.3	↔	0.0	-0.4	0.3	↔
F	1994	2023	-0.8	-1.2	-0.5	↓	-0.8	-1.2	-0.5	↓

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	-0.7	-1.0	-0.4	↓	-0.7	-1.0	-0.4	↓
F	1994	2023	-1.4	-1.8	-1.0	↓	-1.4	-1.8	-1.0	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of oesophageal cancer cases increased over the study period in both males and females, with substantially higher case numbers and rates observed in males throughout. Crude incidence rates increased in males and remained broadly stable in females.

EASIR incidence showed differing patterns by sex. In males, incidence rates were stable over the study period, with no significant overall change from 1994 to 2023 (APC 0.0%). In females, EASIR incidence declined significantly over the period (APC −0.8%).

In males, the EASMR mortality rate declined over the full period (APC −0.7%) while in females a similar significant downward trend was observed (APC −1.4%) indicating sustained improvements in outcomes.

Overall, this figure shows that EASIR incidence of oesophageal cancer was stable in males and declined in females during 1994-2023, EASMR mortality has declined for both sexes, consistent with improvements in survival.

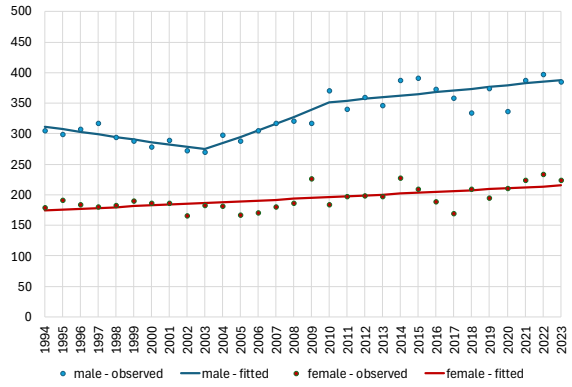
C16 Stomach cancer

Figure 3-4 presents trends in incidence and mortality for stomach cancer in males and females during the period 1994–2023.

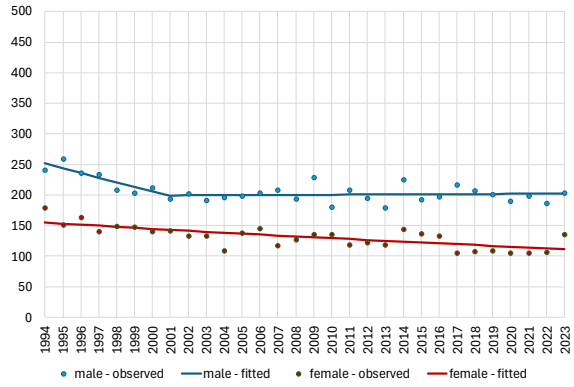
Figure 3-4. C16 stomach cancer, incidence and mortality trends 1994-2023

incidence | **mortality**

Cases

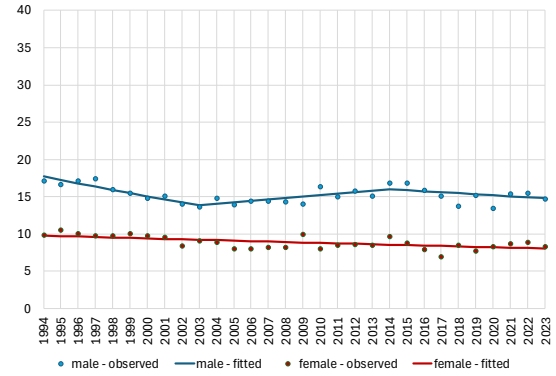


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2003	-1.4	-2.6	-0.2	↓				
M	2003	2010	3.6	1.4	5.8	↑				
M	2010	2023	0.8	0.1	1.4	↑	0.8	0.1	1.4	↑
F	1994	2023	0.7	0.4	1.1	↑	0.7	0.4	1.1	↑

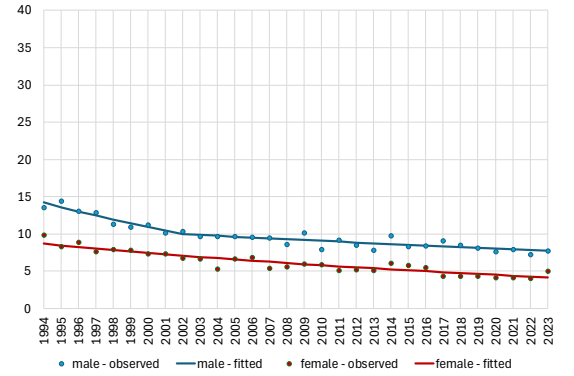


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2001	-3.3	-5.4	-1.1	↓				
M	2001	2023	0.1	-0.4	0.5	↔	-0.8	-1.4	-0.2	↓
F	1994	2023	-1.1	-1.5	-0.7	↓	-1.1	-1.5	-0.7	↓

Crude rate x100,000

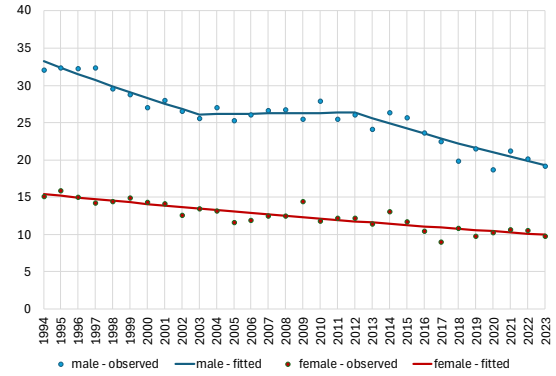


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2003	-2.7	-3.9	-1.4	↓				
M	2003	2014	1.3	0.2	2.4	↑				
M	2014	2023	-0.9	-2.0	0.3	↔	-0.6	-1.2	0	↔
F	1994	2023	-0.7	-1.0	-0.3	↓	-0.7	-1	-0.3	↓

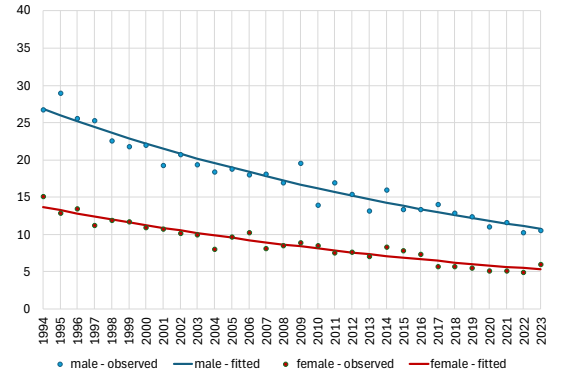


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2002	-4.3	-6.1	-2.6	↓				
M	2002	2023	-1.2	-1.6	-0.7	↓	-2.1	-2.6	-1.5	↓
F	1994	2023	-2.5	-2.9	-2.1	↓	-2.5	-2.9	-2.1	↓

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2003	-2.7	-3.9	-1.4	↓				
M	2003	2012	0.1	-1.3	1.6	↔				
M	2012	2023	-2.8	-3.6	-2	↓	-1.9	-2.5	-1.2	↓
F	1994	2023	-1.5	-1.8	-1.2	↓	-1.5	-1.8	-1.2	↓



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-3.1	-3.4	-2.8	↓	-3.1	-3.4	-2.8	↓
F	1994	2023	-3.2	-3.6	-2.8	↓	-3.2	-3.6	-2.8	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of stomach cancer cases increased in a stepwise fashion in males over the whole period (AAPC +0.8% PA) and also increased consistently in females (AAPC +0.7% PA), although male case numbers remained substantially higher throughout.

Crude incidence rates in males decreased marginally (AAPC -0.6% PA) and significantly and consistently in females over the whole range (AAPC -0.7 PA).

In males, EASIR incidence fell markedly from 1994-2003 (APC −2.7% PA) and then stabilised during 2003-2012, followed by another period of decline from 2012-2023 (APC -2.8% PA). In females, incidence also declined steadily over the full period (APC −1.5%), indicating a sustained reduction in risk.

EASMR mortality declined consistently over the whole period in males (APC −3.1% PA) and females (APC −3.2% PA).

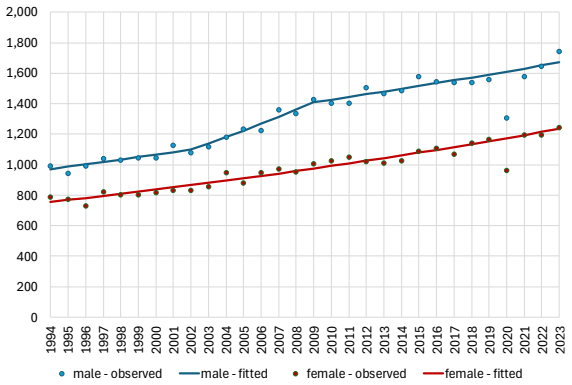
Overall, this figure shows a clear and sustained decline in both incidence and mortality rates of stomach cancer in Ireland since the mid-1990s, with particularly pronounced reductions in mortality for both sexes.

C18-20 Colorectal cancer

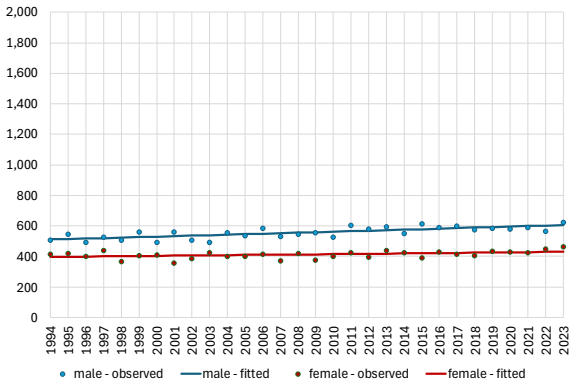
Figure 3-5 presents trends in incidence and mortality for colorectal cancer in males and females during the period 1994–2023.

Figure 3-5. C18-20 colorectal cancer, incidence and mortality trends 1994-2023

Cases

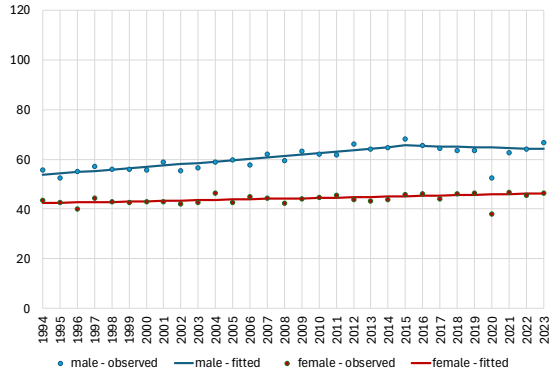


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2002	1.6	0.5	2.6	↑				
M	2002	2009	3.6	2.1	5.1	↑				
M	2009	2023	1.2	0.9	1.6	↑	1.9	1.4	2.4	↑
F	1994	2023	1.7	1.6	1.8	↑	1.7	1.6	1.8	↑

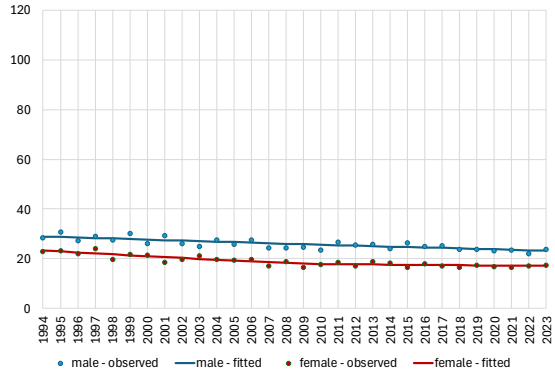


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.6	0.4	0.8	↑	0.6	0.4	0.8	↑
F	1994	2023	0.3	0.1	0.5	↑	0.3	0.1	0.5	↑

Crude rate x100,000

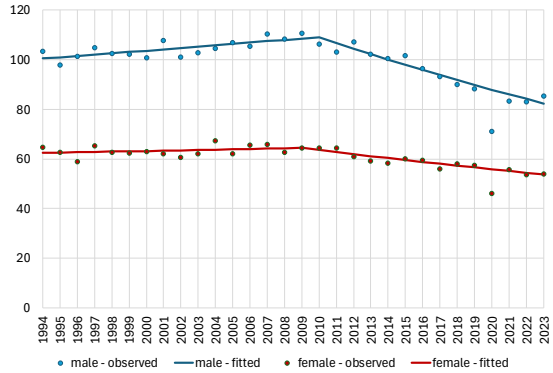


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2015	0.9	0.7	1.2	↑				
M	2015	2023	-0.3	-1	0.5	↔	0.6	0.4	0.9	↑
F	1994	2023	0.3	0.2	0.4	↑	0.3	0.2	0.4	↑

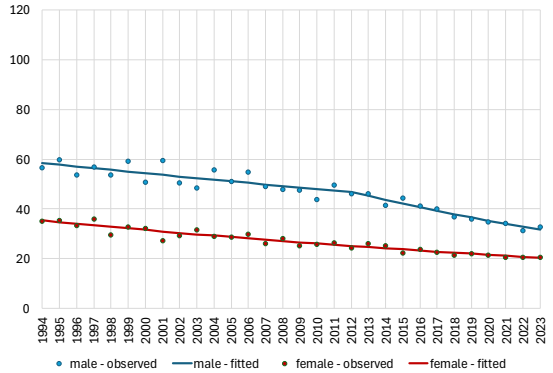


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-0.8	-1.0	-0.5	↓	-0.8	-1.0	-0.5	↓
F	1994	2009	-1.8	-2.3	-1.2	↓				
F	2009	2023	-0.4	-1.0	0.3	↔	-1.1	-1.5	-0.7	↓

EASIR/ EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2010	0.5	0.2	0.8	↑				
M	2010	2023	-2.1	-2.5	-1.8	↓	-0.7	-0.9	-0.5	↓
F	1994	2009	0.2	-0.2	0.6	↔				
F	2009	2023	-1.3	-1.7	-0.9	↓	-0.5	-0.8	-0.3	↓



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2012	-1.2	-1.7	-0.7	↓				
M	2012	2023	-3.5	-4.5	-2.5	↓	-2.1	-2.6	-1.6	↓
F	1994	2023	-1.9	-2.1	-1.7	↓	-1.9	-2.1	-1.7	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population);APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of colorectal cancer cases increased over the study period in both males and females, with higher case numbers and rates observed in males throughout. Crude incidence rates rose gradually but significantly in both males (AAPC +0.6%) and females (AAPC +0.3%), reflecting population growth and ageing.

EASIR incidence increased during the early part of the period before reversing in more recent years from 2009-2010. In males, EASIR incidence declined significantly in the most recent stable period during 2010-2023 (APC –2.1% PA), following an earlier increase. In females, EASIR also decreased significantly in during 2009-2023 (APC –1.3% PA).

In males, mortality EASMR decreased significantly (APC –3.5% PA) from 2012 to 2023, while in females EASMR mortality declined significantly (APC –1.9% PA) over the whole period (1994-2023), reflecting continued improvements in colorectal cancer outcomes.

The introduction of BowelScreen in 2012 is consistent with subsequent changes in colorectal cancer trends, including a decline in incidence growth, and a sustained decline in mortality. These patterns align with the expected effects of screening, including the initial detection of prevalent cases and longer-term reductions in cancer incidence and mortality through earlier diagnosis and removal of in-situ lesions.

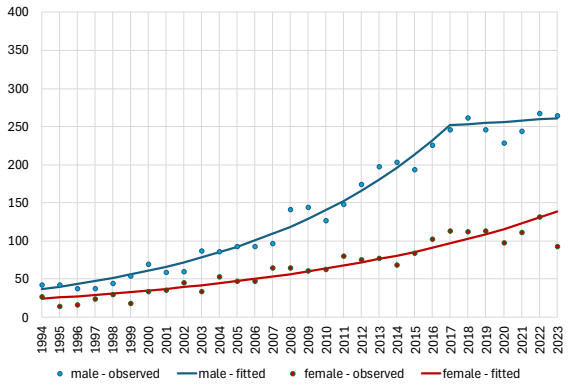
Overall, this figure demonstrates that despite increases in case numbers, both incidence and mortality age-standardised rates for colorectal cancer have declined.

C22 Liver cancer

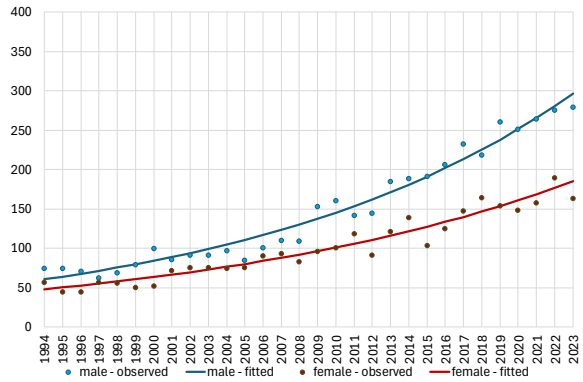
Figure 3-6 presents trends in incidence and mortality for liver cancer in males and females during the period 1994–2023.

Figure 3-6. C22 liver cancer, incidence and mortality trends 1994-2023

Cases

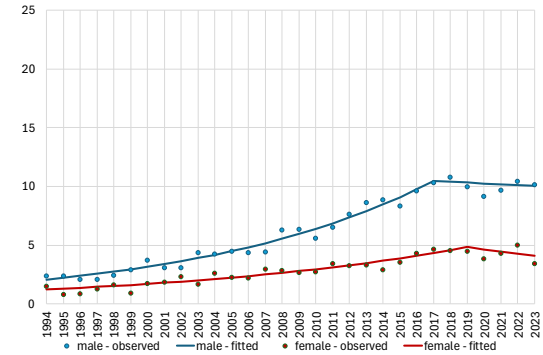


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2017	8.7	8.0	9.5	↑				
M	2017	2023	0.6	-2.5	3.7	↔	7.0	6.1	7.9	↑
F	1994	2023	6.2	5.3	7.1	↑	6.2	5.3	7.1	↑

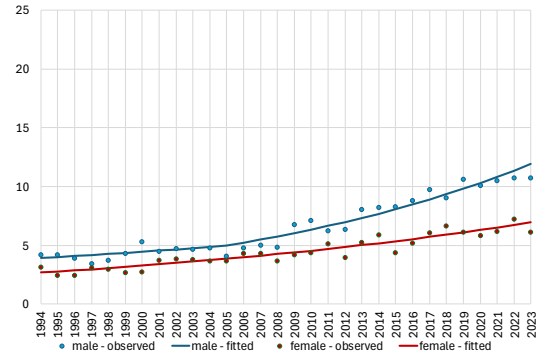


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	5.6	5.2	6.1	↑	5.6	5.2	6.1	↑
F	1994	2023	4.8	4.3	5.3	↑	4.8	4.3	5.3	↑

Crude rate x100,000

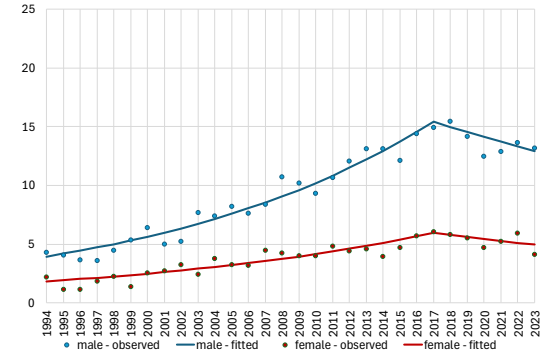


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2017	7.3	6.6	8.0	↑				
M	2017	2023	-0.6	-3.5	2.4	↔	5.6	4.8	6.4	↑
F	1994	2019	5.7	4.7	6.7	↑				
F	2019	2023	-4.1	-18.2	12.4	↔	4.3	2.0	6.6	↑

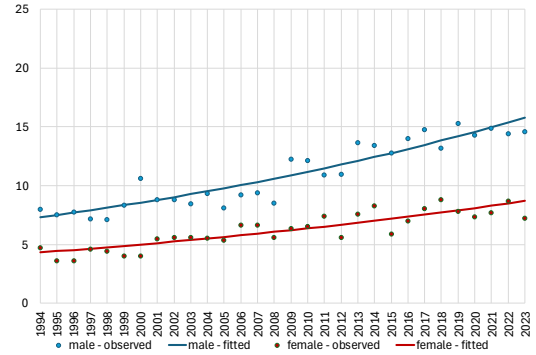


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	2.2	-0.1	4.6	↔				
M	2005	2023	5.0	4.2	5.8	↑	3.9	2.9	4.9	↑
F	1994	2023	3.3	2.9	3.8	↑	3.3	2.9	3.8	↑

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2017	6.1	5.4	6.8	↑				
M	2017	2023	-2.9	-5.8	0.0	↓	4.2	3.4	5.0	↑
F	1994	2017	5.3	4.0	6.5	↑				
F	2017	2023	-3.0	-8.4	2.8	↔	3.5	2.0	5.0	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.7	2.3	3.1	↑	2.7	2.3	3.1	↑
F	1994	2023	2.4	1.9	3.0	↑	2.4	1.9	3.0	↑

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of liver cancer cases increased substantially over the study period with a stabilisation of case counts for males during 2017-2023 and a consistent increase for females over the whole period, with higher case numbers and rates observed in males throughout.

Crude incidence rates rose steadily up to 2017 in males and 2019 in females followed by a stabilisation in recent years up to 2023.

In males, EASIR incidence increased significantly from 1994 to 2017 (APC +6.1%) followed by a significant decline (APC –2.9% PA) up to 2023. In females, EASIR incidence increased significantly from 1994 to 2017 (APC +5.3% PA) followed by marginal decline (APC -3.0% PA) during 2017 to 2023.

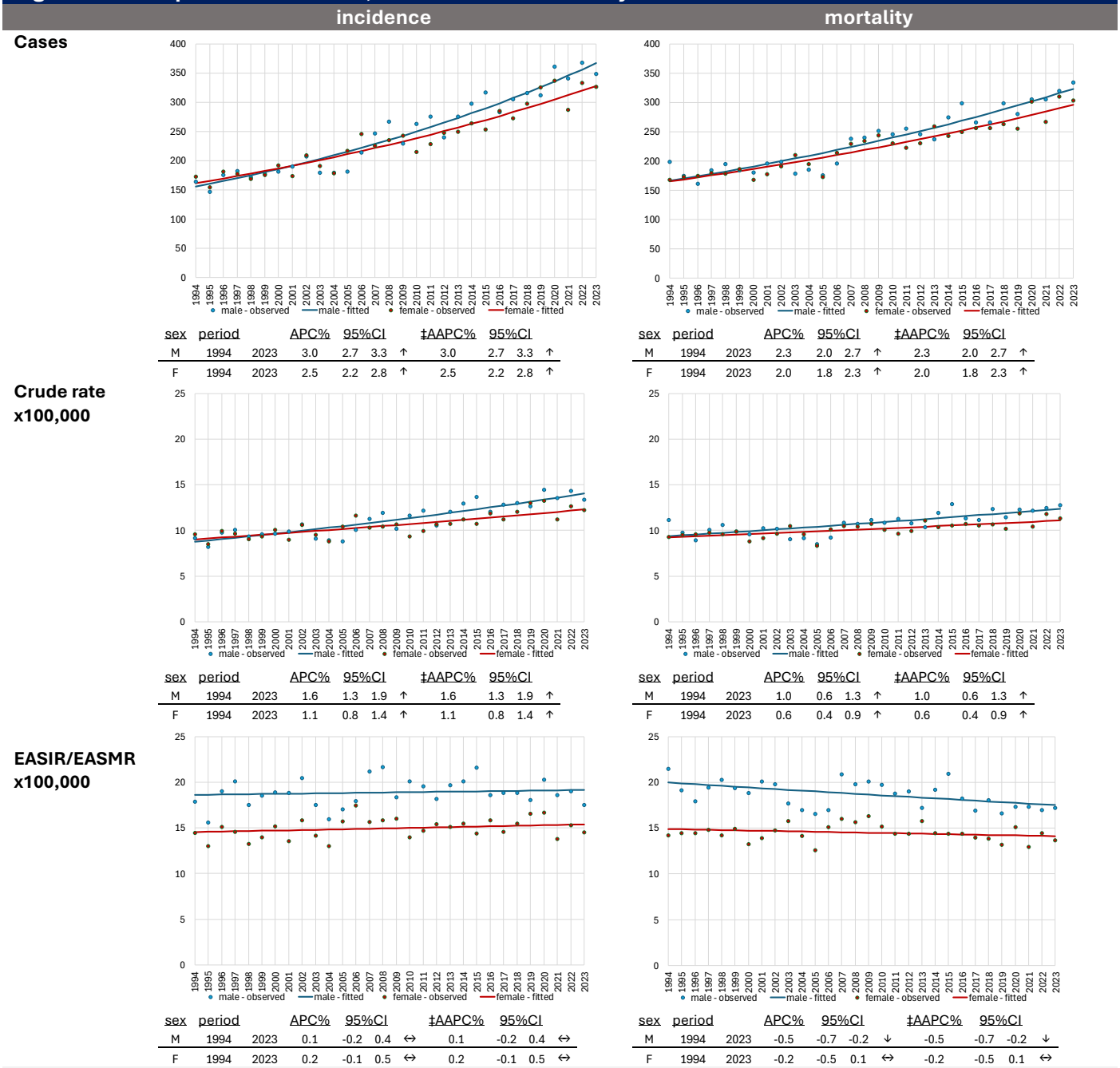
Crude and age-standardised mortality rates increased throughout the whole period in both sexes. EASMR mortality increased significantly (APC +2.7% PA) in males and significantly in females (APC +2.4% PA) over the whole period.

Overall, this figure shows that age-standardised incidence of liver cancer increased significantly up to 2017 followed by a period of stabilisation up 2023, but age-standardised mortality increased significantly and consistently for both sexes over the whole 30-year period.

C25 Pancreatic cancer

Figure 3-7 presents trends in incidence and mortality for pancreatic cancer in males and females during the period 1994–2023.

Figure 3-7. C25 pancreatic cancer, incidence and mortality trends 1994-2023



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	3.0	2.7	3.3	↑	3.0	2.7	3.3	↑
F	1994	2023	2.5	2.2	2.8	↑	2.5	2.2	2.8	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.3	2.0	2.7	↑	2.3	2.0	2.7	↑
F	1994	2023	2.0	1.8	2.3	↑	2.0	1.8	2.3	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.6	1.3	1.9	↑	1.6	1.3	1.9	↑
F	1994	2023	1.1	0.8	1.4	↑	1.1	0.8	1.4	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.0	0.6	1.3	↑	1.0	0.6	1.3	↑
F	1994	2023	0.6	0.4	0.9	↑	0.6	0.4	0.9	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.1	-0.2	0.4	↔	0.1	-0.2	0.4	↔
F	1994	2023	0.2	-0.1	0.5	↔	0.2	-0.1	0.5	↔

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-0.5	-0.7	-0.2	↓	-0.5	-0.7	-0.2	↓
F	1994	2023	-0.2	-0.5	0.1	↔	-0.2	-0.5	0.1	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of pancreatic cancer cases increased steadily over the full period in both males and females, with slightly higher case numbers and rates observed in males throughout. Crude incidence rates increased significantly for both sexes, reflecting population growth and ageing.

In both sexes, EASIR incidence showed no significant change from 1994 to 2023, with an APC close to 0.0% PA over the full 30-year period indicating relative stability in underlying pancreatic cancer incidence once age was accounted for.

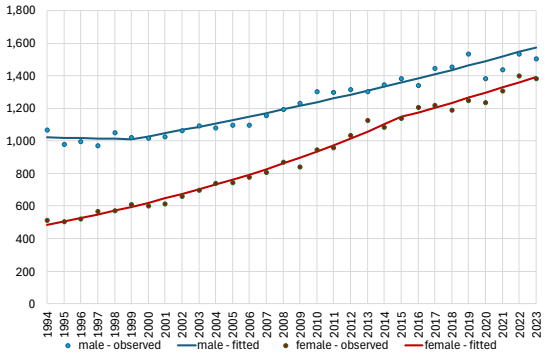
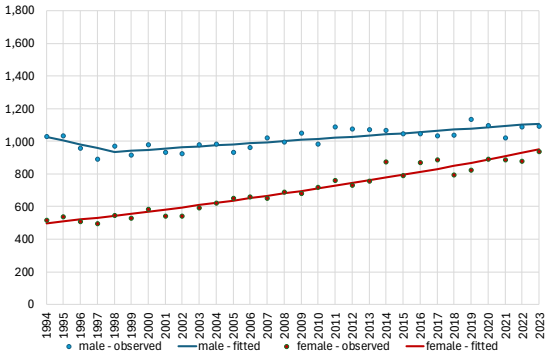
While crude mortality rates increased gradually, EASMR mortality declined over time. In males, EASMR mortality decreased significantly (APC –0.5% PA) from 1994 to 2023, while in females EASMR mortality was stable or declined marginally (APC –0.2% PA) over the same period, indicating modest but sustained improvements in pancreatic cancer mortality.

Overall, this figure shows that despite rising case numbers and crude rates, the underlying age-standardised incidence of pancreatic cancer has remained stable, while age-standardised mortality has declined slowly but consistently.

C33-34 Lung cancer

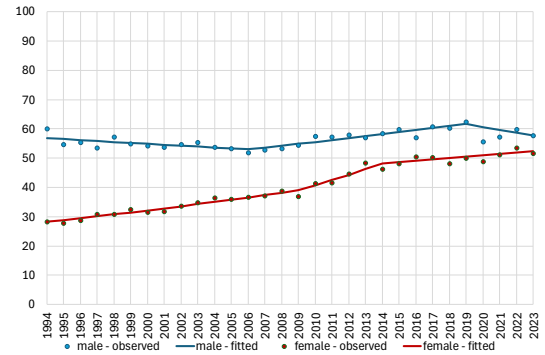
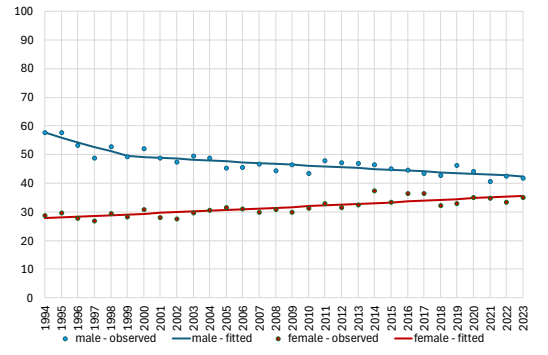
Figure 3-8 presents trends in incidence and mortality for lung cancer in males and females during the period 1994–2023.

Figure 3-8. C33-34 lung cancer, incidence and mortality trends 1994-2023

	incidence	mortality
Cases		

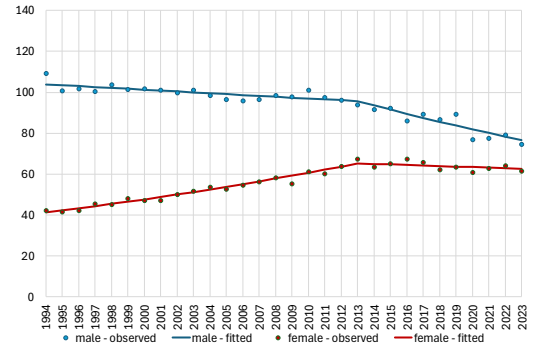
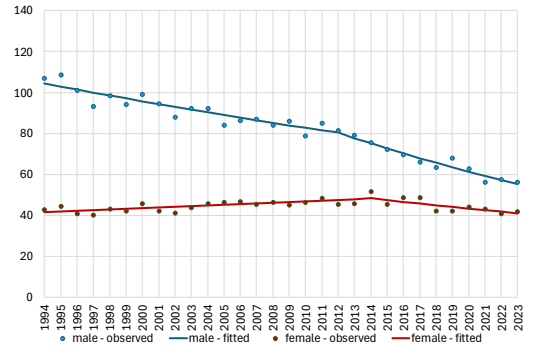
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	1999	-0.2	-2.5	2.1	↔				
M	1999	2023	1.9	1.7	2.1	↑	1.5	1.1	1.9	↑
F	1994	2015	4.2	3.9	4.4	↑				
F	2015	2023	2.5	1.7	3.3	↑	3.7	3.4	4	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	1998	-2.3	-5.5	1	↔				
M	1998	2023	0.7	0.5	0.9	↑	0.3	-0.2	0.7	↔
F	1994	2023	2.3	2.0	2.5	↑	2.3	2	2.5	↑

Crude rate x100,000		

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2006	-0.6	-1.0	-0.1	↓				
M	2006	2019	1.2	0.8	1.6	↑				
M	2019	2023	-1.7	-4.7	1.5	↔	0.0	-0.4	0.5	↔
F	1994	2009	2.2	1.9	2.5	↑				
F	2009	2014	4.3	2.3	6.3	↑				
F	2014	2023	0.9	0.4	1.4	↑	2.2	1.8	2.5	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	1999	-3.0	-5.4	-0.5	↓				
M	1999	2023	-0.6	-0.9	-0.4	↓	-1.1	-1.5	-0.6	↓
F	1994	2023	0.8	0.6	1.1	↑	0.8	0.6	1.1	↑

EASIR/EASMR x100,000		

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2013	-0.4	-0.7	-0.2	↓				
M	2013	2023	-2.2	-2.7	-1.7	↓	-1.0	-1.3	-0.8	↓
F	1994	2013	2.4	2.2	2.7	↑				
F	2013	2023	-0.4	-0.9	0.1	↔	1.5	1.2	1.7	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2012	-1.4	-1.8	-1.1	↓				
M	2012	2023	-3.3	-4.0	-2.6	↓	-2.2	-2.5	-1.8	↓
F	1994	2014	0.8	0.4	1.1	↑				
F	2014	2023	-1.8	-2.7	-0.9	↓	-0.1	-0.4	0.3	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

In males, case numbers increased significantly from 1999 to 2023 (APC +1.9% PA). Crude incidence rates fluctuated over time but were stable over the whole period (AAPC 0.0% PA). However, after adjusting for age,

incidence declined: EASIR decreased significantly by −0.4% per annum during 1994–2013, with a more pronounced decline thereafter (2013–2023: APC −2.2% PA).

Deaths increased from 1998 to 2023, but crude mortality rates declined steadily and significantly during 1999-2023 (APC -0.6% PA). EASMR mortality declined during 1994-2012 (APC -1.4% PA) with a steeper decline thereafter during 2012–2023 (APC –3.3% PA).

In females, case numbers increased markedly and significantly from 1994 to 2015 (APC +4.2% PA), followed by a slower but still significant rise during 2015–2023 (APC +2.5% PA). Crude incidence rates fluctuated over time but showed a clear overall increase over the whole period (AAPC +2.2% PA). Age-standardised incidence (EASIR) increased significantly between 1994 and 2013 (APC +2.4% PA), before stabilising or declining marginally in recent years (2013–2023: APC −0.4% PA).

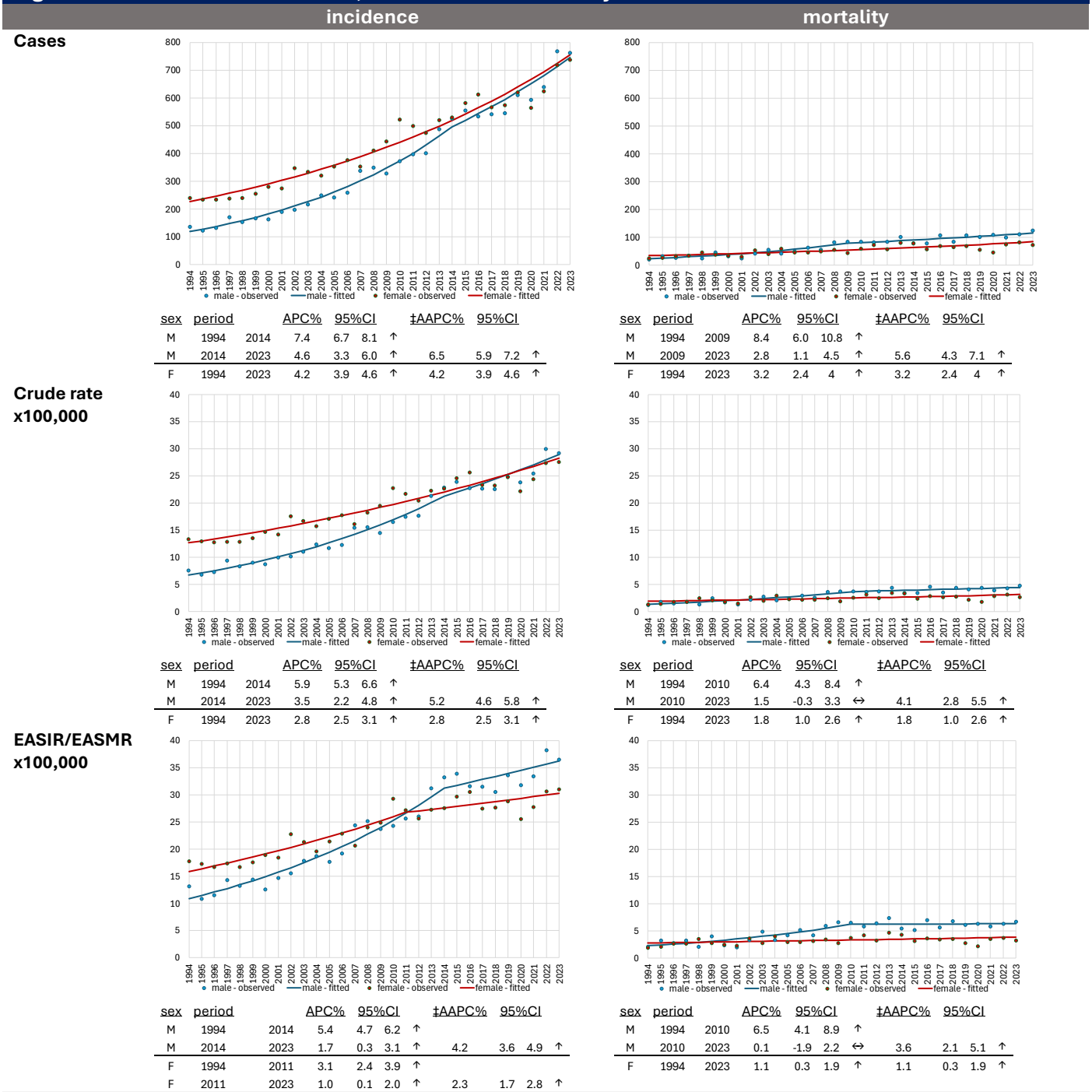
Mortality trends were less favourable than in males: deaths increased significantly over the full period (1994–2023: APC +2.3% PA), while crude mortality rose more gradually (APC +0.8% PA). EASMR mortality increased significantly from 1994 to 2014 (APC +0.8% PA), with a modest though significant decline emerging in the recent period from 2014 to 2023 (APC −1.8% PA).

Overall, lung cancer trends differ markedly by sex. Age-standardised incidence declined significantly in males (AAPC −1.0% PA) but increased in females (AAPC +1.5% PA) over the whole period. Similarly, age-standardised mortality fell substantially in males (AAPC −2.2% PA) but remained broadly stable in females (AAPC −0.1% PA). These contrasting patterns likely reflect historical differences in smoking prevalence, with peak smoking occurring later in females than in males [17], [18]. Consequently, declines in female mortality may lag behind those already observed in males.

C43 Melanoma of skin

Figure 3-9 presents trends in incidence and mortality for melanoma of skin in males and females during the period 1994–2023.

Figure 3-9. C43 melanoma of skin, incidence and mortality trends 1994-2023



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2014	7.4	6.7	8.1	↑				
M	2014	2023	4.6	3.3	6.0	↑	6.5	5.9	7.2	↑
F	1994	2023	4.2	3.9	4.6	↑	4.2	3.9	4.6	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2009	8.4	6.0	10.8	↑				
M	2009	2023	2.8	1.1	4.5	↑	5.6	4.3	7.1	↑
F	1994	2023	3.2	2.4	4	↑	3.2	2.4	4	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2014	5.9	5.3	6.6	↑				
M	2014	2023	3.5	2.2	4.8	↑	5.2	4.6	5.8	↑
F	1994	2023	2.8	2.5	3.1	↑	2.8	2.5	3.1	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2010	6.4	4.3	8.4	↑				
M	2010	2023	1.5	-0.3	3.3	↔	4.1	2.8	5.5	↑
F	1994	2023	1.8	1.0	2.6	↑	1.8	1.0	2.6	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2014	5.4	4.7	6.2	↑				
M	2014	2023	1.7	0.3	3.1	↑	4.2	3.6	4.9	↑
F	1994	2011	3.1	2.4	3.9	↑				
F	2011	2023	1.0	0.1	2.0	↑	2.3	1.7	2.8	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2010	6.5	4.1	8.9	↑				
M	2010	2023	0.1	-1.9	2.2	↔	3.6	2.1	5.1	↑
F	1994	2023	1.1	0.3	1.9	↑	1.1	0.3	1.9	↑

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of skin melanoma cases increased markedly over the study period in both males and females. Case numbers and crude incidence rates rose steadily, with rates converging between the sexes since 2015.

Age-standardised incidence rates (EASIR) increased significantly for both sexes throughout most of the period. In males, EASIR incidence increased significantly by approximately +5.4 % PA from 1994 to 2014, followed by a continued but slower significant increase of about +1.7% PA from 2014 to 2023. In females, EASIR incidence

also increased significantly by approximately +3.1% PA from 1994 to 2011, moderating to +1.0 % PA from 2011 to 2023. These trends indicate sustained growth in the underlying incidence of melanoma for both sexes.

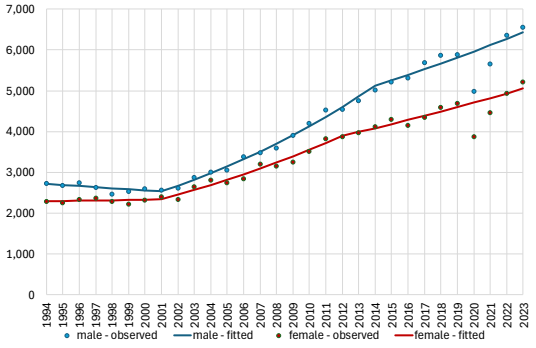
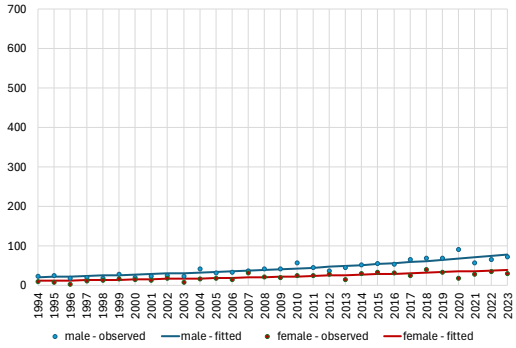
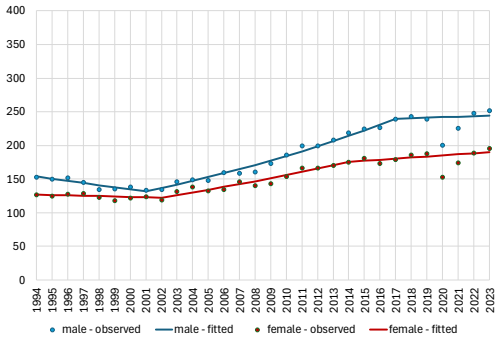
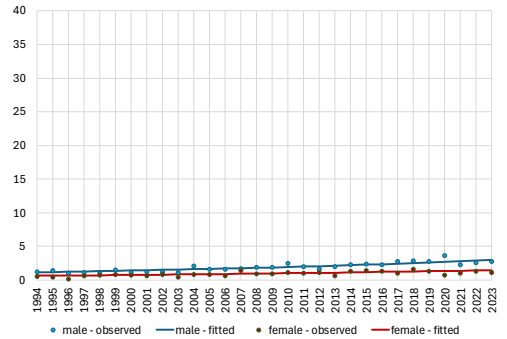
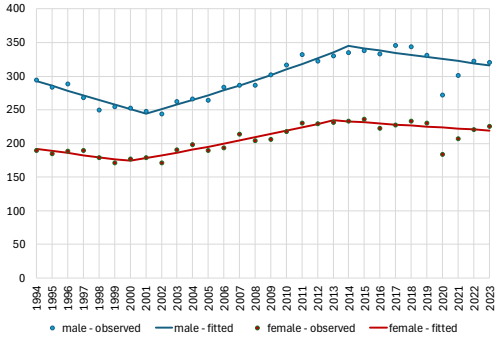
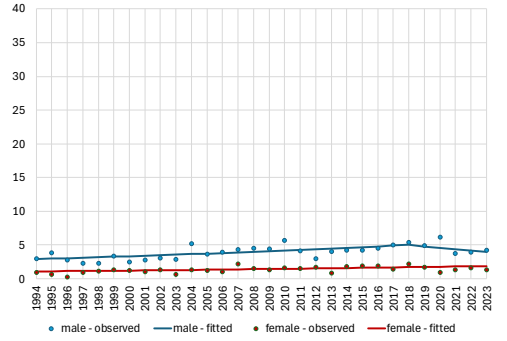
Mortality rates were considerably lower than incidence rates but also increased over time. EASMR mortality rose significantly for both sexes. In males, EASMR mortality increased significantly (AAPC 3.6% PA) from 1994 to 2023, while in females EASMR mortality increased significantly (AAPC +1.1% PA) over the same period.

Overall, this figure shows that both incidence and mortality of melanoma of skin have increased over the past three decades. Even though mortality rates are much lower than incidence rates, the mortality rates for melanoma increased significantly in line with incidence rates despite an overall very favourable and improving 5-year survival percentage (92% for cases diagnosed during 2019-2023 (Figure 6-1).

C44 Non-melanoma skin cancer

Figure 3-10 presents trends in incidence and mortality for non-melanoma skin cancer in males and females during the period 1994–2023.

Figure 3-10. C44 non-melanoma skin cancer, incidence and mortality 1994-2023

	incidence	mortality
Cases		
Crude rate x100,000		
EASIR/EASMR x100,000		

male - observed male - fitted female - observed female - fitted

Cases

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2001	-1.0	-2.5	0.5	↔			
M	2001	2014	5.6	5	6.2	↑			
M	2014	2023	2.6	1.8	3.3	↑	3.0	2.5	3.5	↑
F	1994	2001	0.3	-1.4	1.9	↔			
F	2001	2012	4.8	3.9	5.6	↑			
F	2012	2023	2.4	1.8	3	↑	2.8	2.2	3.3	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	4.7	3.9	5.4	↑	4.7	3.9	5.4	↑
F	1994	2023	4.3	3.1	5.6	↑	4.3	3.1	5.6	↑

Crude rate x100,000

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2001	-2.2	-3.8	-0.7	↓			
M	2001	2017	3.8	3.4	4.2	↑			
M	2017	2023	0.3	-1.0	1.7	↔	1.6	1.1	2.1	↑
F	1994	2002	-0.4	-1.8	0.9	↔			
F	2002	2014	3.0	2.3	3.8	↑			
F	2014	2023	0.9	0.1	1.7	↑	1.4	0.9	1.9	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	3.3	2.6	4	↑	3.3	2.6	4	↑
F	1994	2023	2.9	1.7	4.1	↑	2.9	1.7	4.1	↑

EASIR/EASMR x100,000

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2001	-2.6	-4.0	-1.1	↓			
M	2001	2014	2.7	2.1	3.3	↑			
M	2014	2023	-0.9	-1.6	-0.3	↓	0.3	-0.2	0.7	↔
F	1994	2000	-1.6	-3.6	0.4	↔			
F	2000	2013	2.3	1.7	3	↑			
F	2013	2023	-0.7	-1.3	0.0	↔	0.5	-0.1	1.0	↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2018	2.3	1.1	3.5	↑			
M	2018	2023	-4.6	-12.7	4.2	↔	1.1	-0.6	2.8	↔
F	1994	2023	1.9	0.7	3.2	↑	1.9	0.7	3.2	↑

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05; note the different Y-axis scale for incidence and mortality.

Non-melanoma skin cancer (NMSC) accounted for a very large proportion of all registered neoplasms (about 1 in 4) throughout the period, with case numbers and crude incidence rates increasing substantially in both males and females. Rates were consistently higher in males.

Age-standardised incidence rates (EASIR) increased over much of the study period before levelling off in recent years. In males, EASIR incidence increased significantly during 2001-2014 (APC +2.7% PA) and then declined significantly in recent years (2014–2023, APC -0.9% % PA). In females, EASIR incidence followed a similar pattern, with earlier significant increases during (2000-2013, APC +2.3% PA) followed by marginal decline or relative stability in the more recent period (2013-2023, APC -0.7% PA). These trends indicate sustained high underlying incidence, albeit with some recent slowing in growth.

In contrast to incidence, mortality from NMSC was very low throughout the whole period for both sexes. EASMR mortality was static during 1994-2023 (AAPC +1.1% PA) in males and increased significantly from a low base in females throughout the whole period. (AAPC +1.9% PA)

Overall, this figure highlights the distinctive profile of NMSC, characterised by very high and increasing incidence but comparatively low mortality. Despite accounting for a substantial proportion of all cancer diagnoses, NMSC has very low mortality with generally favourable prognosis.

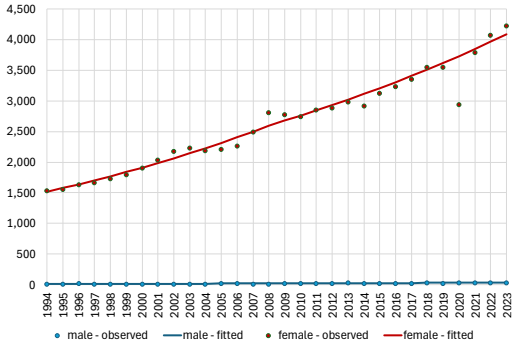
C50 Breast cancer

Figure 3-11 presents trends in incidence and mortality for breast cancer in males and females during the period 1994–2023.

Figure 3-11. C50 breast cancer, incidence and mortality 1994-2023

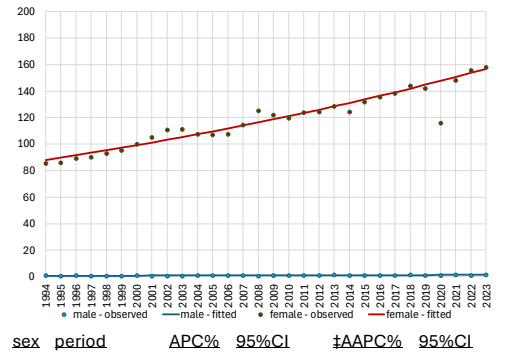
incidence

Cases



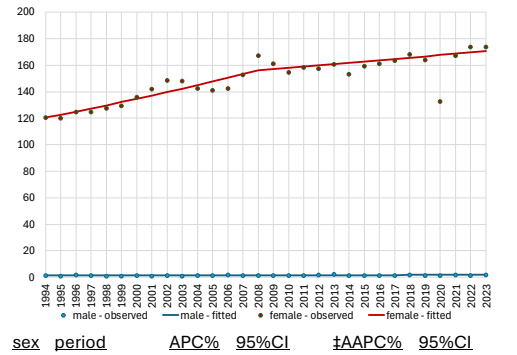
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	4.0	3.2	4.9	↑	4.0	3.2	4.9	↑
F	1994	2008	3.9	3.4	4.4	↑				
F	2008	2023	3.1	2.7	3.4	↑	3.5	3.2	3.8	↑

Crude rate x100,000



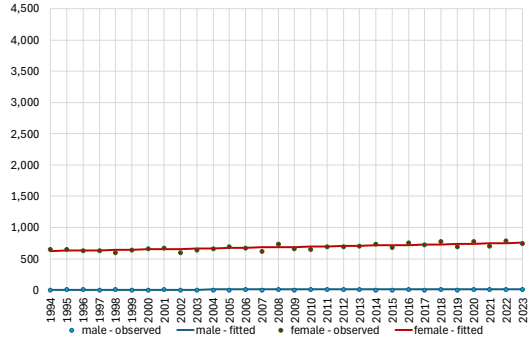
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.7	1.9	3.5	↑	2.7	1.9	3.5	↑
F	1994	2023	2.0	1.9	2.2	↑	2.0	1.9	2.2	↑

EASIR/EASMR x100,000

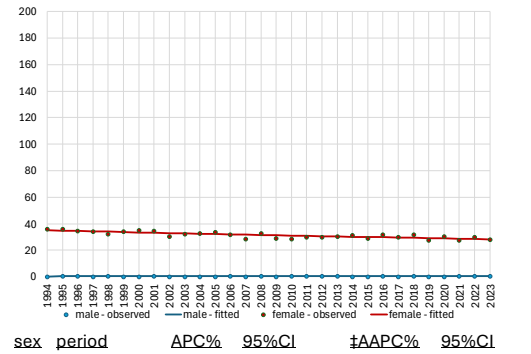


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.4	0.7	2.2	↑	1.4	0.7	2.2	↑
F	1994	2008	1.9	1.4	2.3	↑				
F	2008	2023	0.6	0.3	0.9	↑	1.2	0.9	1.5	↑

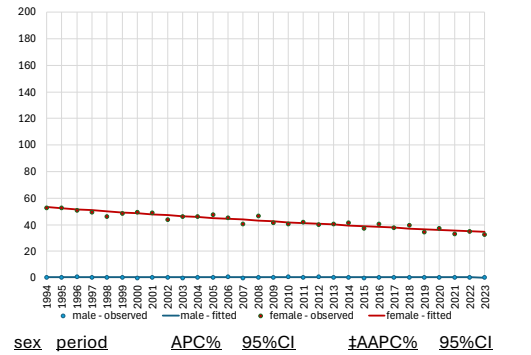
mortality



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.0	0.3	3.9	↑	2.0	0.3	3.9	↑
F	1994	2023	0.7	0.5	0.9	↑	0.7	0.5	0.9	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.7	-1.1	2.5	↔	0.7	-1.1	2.5	↔
F	1994	2023	-0.7	-0.9	-0.5	↓	-0.7	-0.9	-0.5	↓



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-0.4	-2.2	1.5	↔	-0.4	-2.2	1.5	↔
F	1994	2023	-1.5	-1.7	-1.3	↓	-1.5	-1.7	-1.3	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of female breast cancer cases increased substantially over the whole 30-year period (1994-2023, AAPC +4% PA). Crude incidence rates in females rose steadily (AAPC 2.7% PA) over the same period, reflecting both population ageing and increases in underlying incidence.

EASIR incidence rate increased by approximately +1.9% PA from 1994 to 2008, followed by a slower though significant increase of +0.6% PA from 2008 to 2023, indicating sustained growth in underlying breast cancer incidence after adjustment for age. Age-standardised incidence rates in males remained very low and broadly stable.

While crude mortality rates in females declined marginally over time (AAPC, -0.7% PA), EASMR mortality rates declined significantly over the whole period (AAPC -1.5% PA), indicating sustained improvement in female breast cancer survival and outcomes. Mortality from male breast cancer remained very low and showed little variation over time.

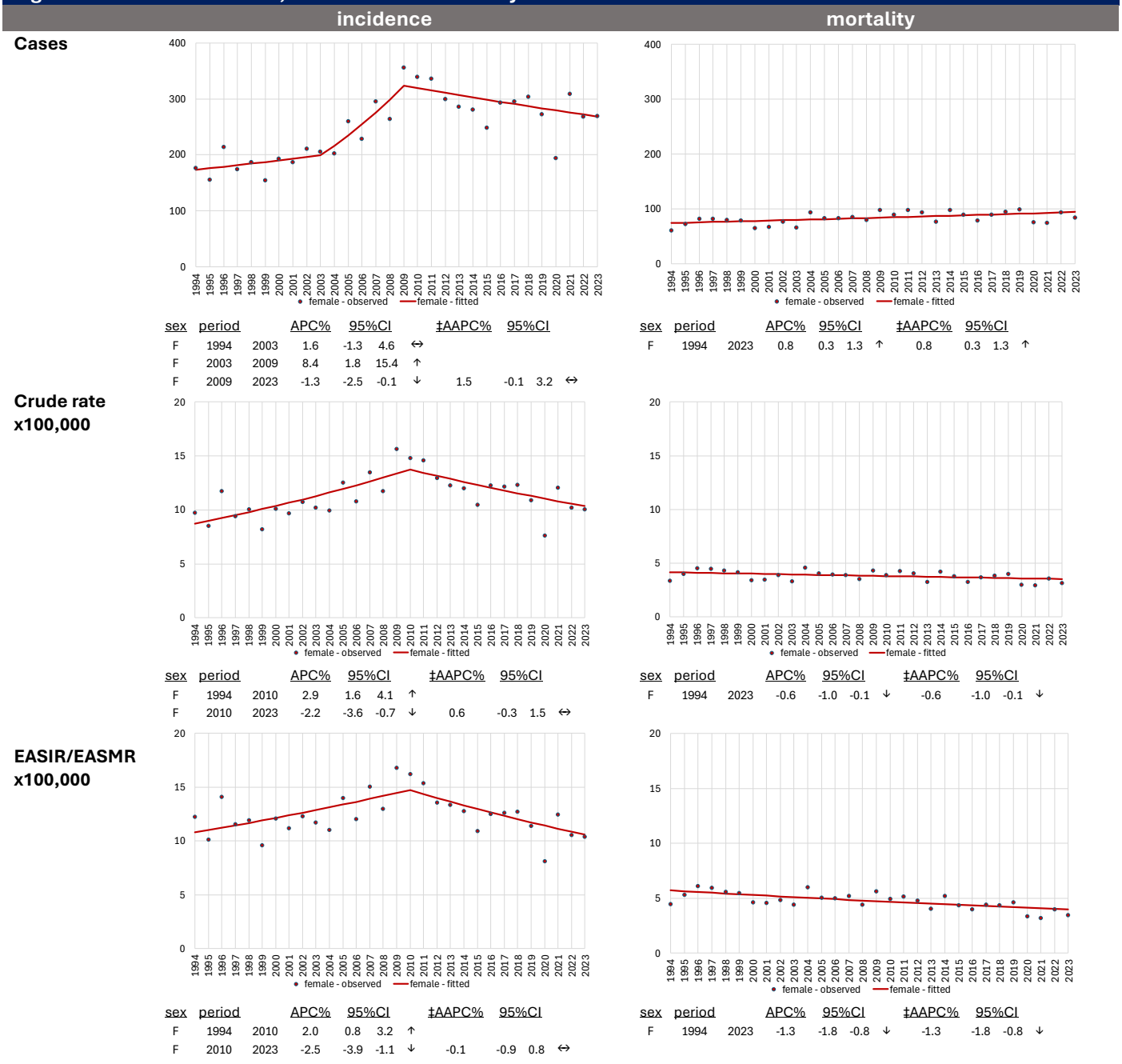
The introduction and phased expansion of BreastCheck from 2000-2007 is consistent with the continued rise in breast cancer incidence, likely reflecting increased detection of asymptomatic disease, alongside a gradual decline in mortality rates, in keeping with the expected impact of screening through earlier diagnosis.

Overall, this figure shows that although the incidence of breast cancer among females has continued to increase on an age-standardised basis, mortality has declined steadily, highlighting ongoing improvements in early detection and treatment.

C53 Cervix uteri

Figure 3-12 presents trends in incidence and mortality for cancer of the cervix uteri during the period 1994–2023.

Figure 3-12. C53 cervix uteri, incidence and mortality 1994-2023



Cases – incidence

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2003	1.6	-1.3	4.6	↔			
F	2003	2009	8.4	1.8	15.4	↑			
F	2009	2023	-1.3	-2.5	-0.1	↓	1.5	-0.1	3.2 ↔

Cases – mortality

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2023	0.8	0.3	1.3	↑	0.8	0.3	1.3 ↑

Crude rate x100,000 – incidence

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2010	2.9	1.6	4.1	↑			
F	2010	2023	-2.2	-3.6	-0.7	↓	0.6	-0.3	1.5 ↔

Crude rate x100,000 – mortality

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2023	-0.6	-1.0	-0.1	↓	-0.6	-1.0	-0.1 ↓

EASIR/EASMR x100,000 – incidence

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2010	2.0	0.8	3.2	↑			
F	2010	2023	-2.5	-3.9	-1.1	↓	-0.1	-0.9	0.8 ↔

EASIR/EASMR x100,000 – mortality

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2023	-1.3	-1.8	-0.8	↓	-1.3	-1.8	-0.8 ↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of cervical cancer cases increased steeply during the early period (2003-2023, APC +8.4% PA), peaking in 2009, followed by a gradual significant decline in more recent years (2009-2023, APC -1.3% PA). Crude incidence rates showed a similar trend, increasing steadily from 1994 before decreasing from 2009.

Age-standardised incidence rates (EASIR) increased significantly during 1994-2010 (APC +2.0% PA) before declining significantly during 2010-2023 (APC -2.5% PA).

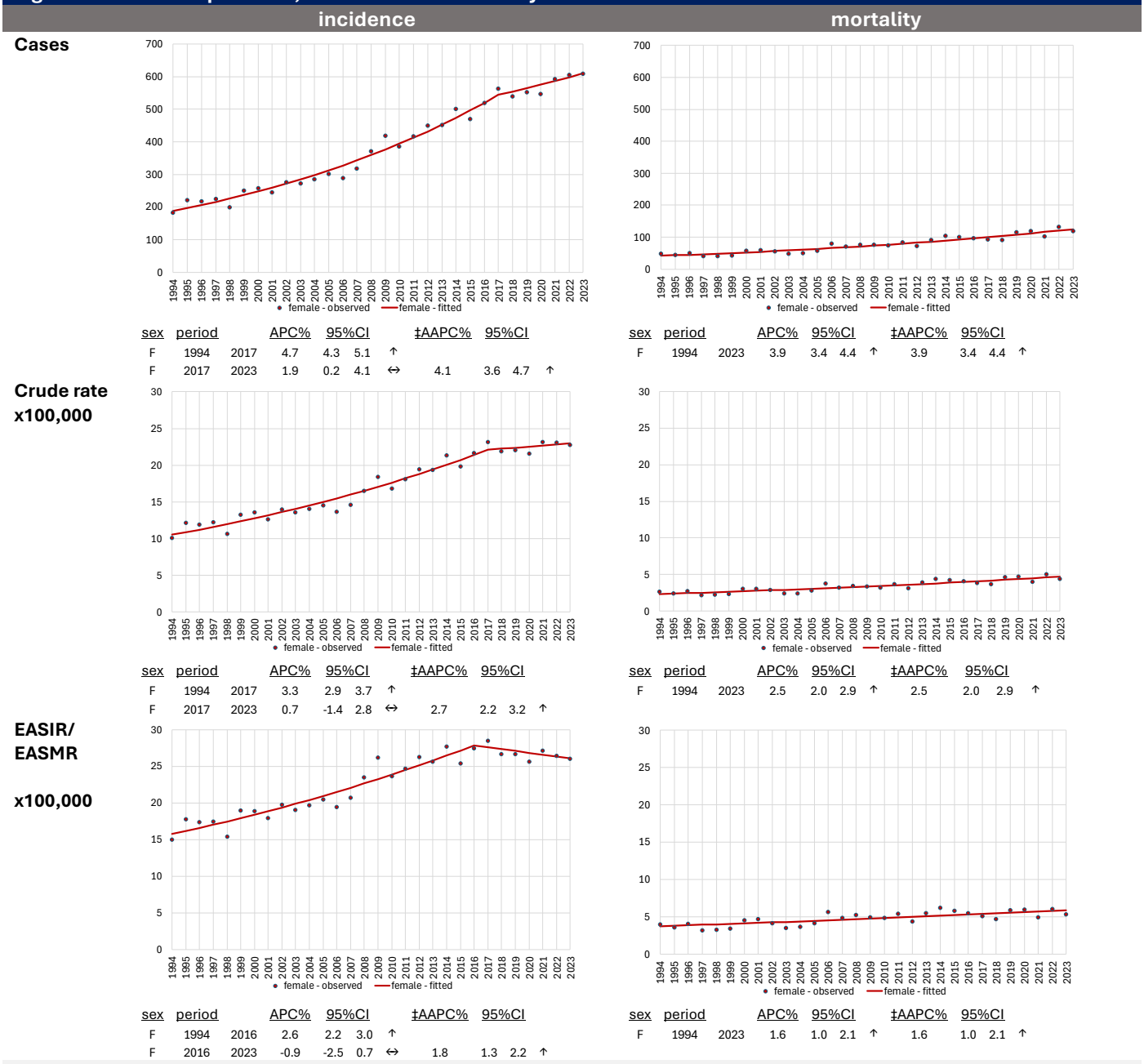
Both crude (AAPC -0.6% PA) and EASMR mortality rates (AAPC -1.3% PA) declined steadily over the whole period, reflecting continued improvements in outcomes for cervical cancer.

Screening activity (i.e. introduction of the organised CervicalCheck program from 2008 onwards) may have had some bearing on the sustained downward trend in incidence rates from 2009-2023 likely through increased detection of in situ lesions before progression to invasive carcinoma. Reductions in mortality are likely to reflect advances in treatment, improved management, and possibly earlier stage at diagnosis associated with screening.

C54 Corpus uteri

Figure 3-13 presents trends in incidence and mortality for cancer of the corpus uteri during the period 1994–2023.

Figure 3-13. C54 corpus uteri, incidence and mortality 1994-2023



sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2017	4.7	4.3	5.1	↑		
F	2017	2023	1.9	0.2	4.1	↔	4.1	3.6 4.7 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2023	3.9	3.4	4.4	↑	3.9	3.4 4.4 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2017	3.3	2.9	3.7	↑		
F	2017	2023	0.7	-1.4	2.8	↔	2.7	2.2 3.2 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2023	2.5	2.0	2.9	↑	2.5	2.0 2.9 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2016	2.6	2.2	3.0	↑		
F	2016	2023	-0.9	-2.5	0.7	↔	1.8	1.3 2.2 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
F	1994	2023	1.6	1.0	2.1	↑	1.6	1.0 2.1 ↑

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of corpus uteri cancer cases increased steadily and significantly during 1994-2017 (APC +4.7% PA) with stabilisation during 2017-2023 (APC +1.9% PA). Crude incidence rates mirrored this trend, reflecting both population ageing and increases in underlying incidence.

Age-standardised incidence rates (EASIR) increased significantly during 1994-2016 (APC +2.6% PA) followed by a recent stabilisation from 2016 to 2023 (APC -0.9% PA), indicating a levelling off of incidence in more recent years after a prolonged period of growth.

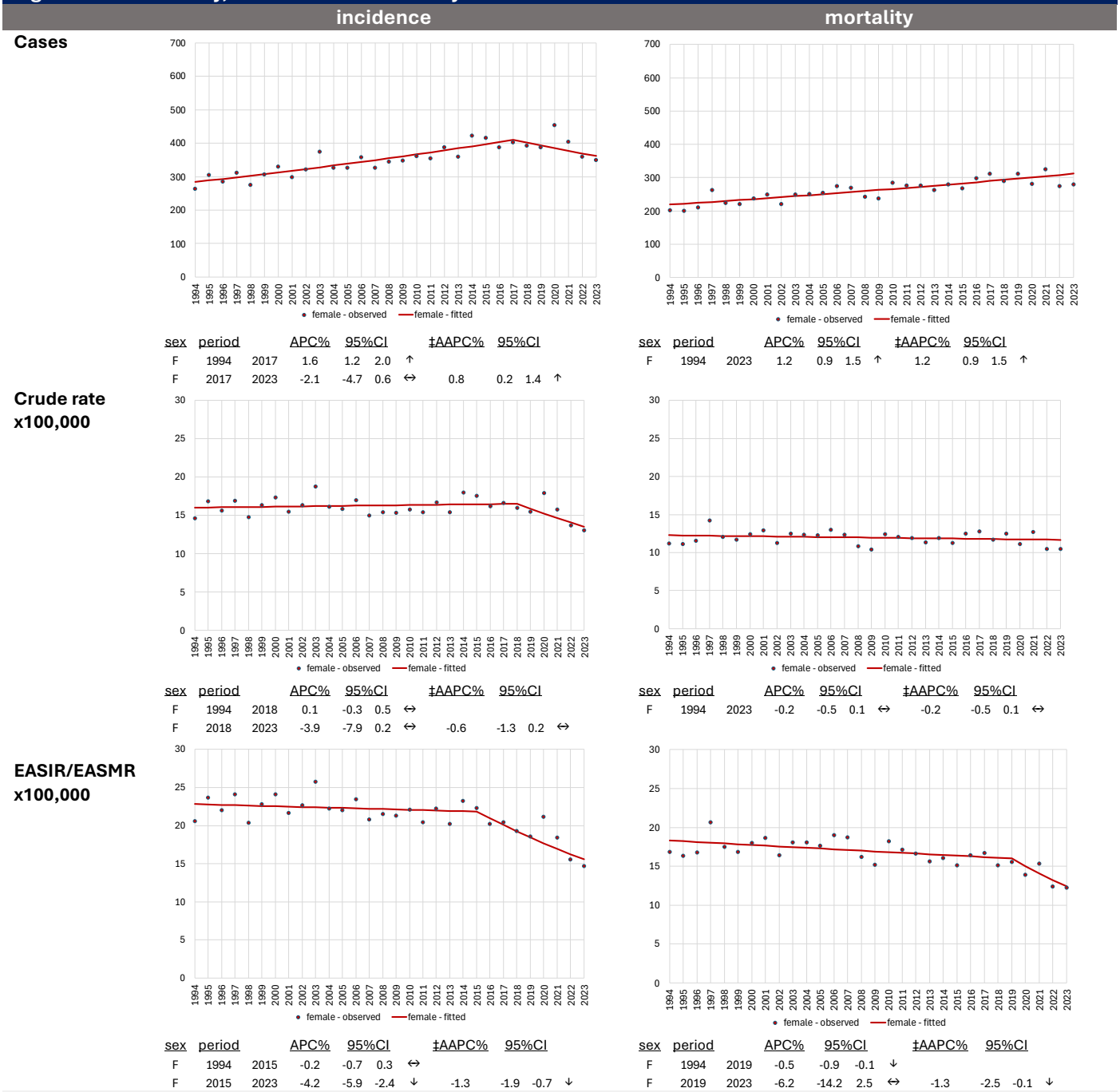
Mortality trends were less favourable. Both crude (AAPC +2.5% PA) and EASMR mortality (AAPC 1.6% PA) rates increased gradually and significantly over the whole period indicating a sustained rise in corpus uteri cancer mortality over the study period.

Overall, this figure shows that corpus uteri cancer in Ireland has been characterised by long-term increases in incidence and mortality on an age-standardised basis, with only recent signs of stabilisation in incidence and no corresponding reduction in mortality.

C56 Ovary

Figure 3-14 presents trends in incidence and mortality for ovarian cancer during the period 1994–2023.

Figure 3-14. C56 ovary, incidence and mortality 1994-2023



sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2017	1.6	1.2	2.0	↑			
F	2017	2023	-2.1	-4.7	0.6	↔	0.8	0.2	1.4 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2023	1.2	0.9	1.5	↑	1.2	0.9	1.5 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2018	0.1	-0.3	0.5	↔			
F	2018	2023	-3.9	-7.9	0.2	↔	-0.6	-1.3	0.2 ↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2023	-0.2	-0.5	0.1	↔	-0.2	-0.5	0.1 ↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2015	-0.2	-0.7	0.3	↔			
F	2015	2023	-4.2	-5.9	-2.4	↓	-1.3	-1.9	-0.7 ↓

sex	period		APC%	95%CI		‡AAPC%	95%CI		
F	1994	2019	-0.5	-0.9	-0.1	↓			
F	2019	2023	-6.2	-14.2	2.5	↔	-1.3	-2.5	-0.1 ↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of ovarian cancer cases increased steadily and significantly during 1994-2017 (APC +1.6% PA) with stabilisation during 2017-2023 (APC -2.1% PA). The crude rate was static during 1994-2018 (APC +0.1% PA) before a marginal downward trajectory emerged during the recent period (2018-2023, APC -3.9% PA)

Adjusting for age, the EASIR rate decreased marginally during 1994-2015 (APC -0.2% PA) followed by a more recent significant decline from 2015 to 2023 (APC -4.2% PA).

While the number of deaths increased during the whole period (APC 1.2% PA), the crude mortality rate was stable over the whole period (APC -0.2% PA).

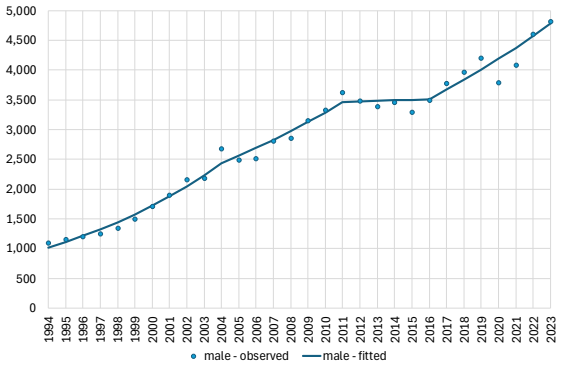
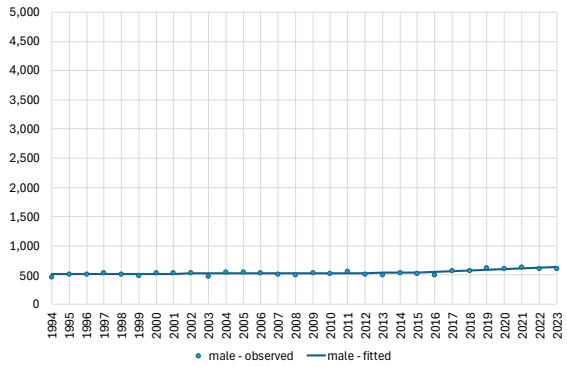
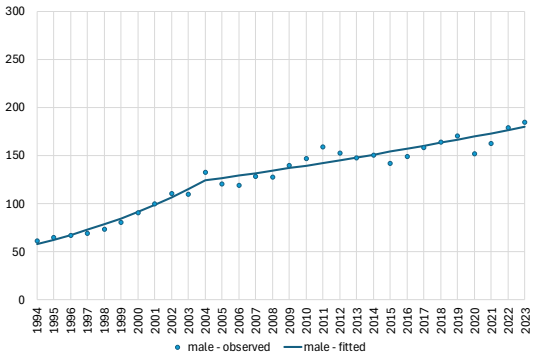
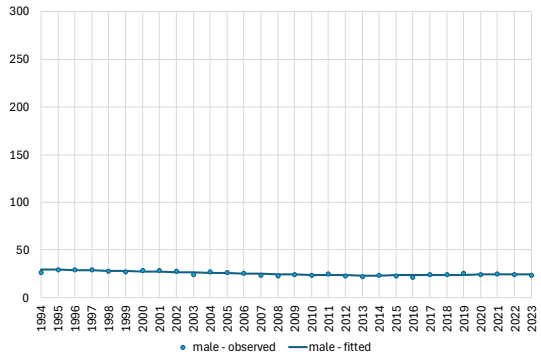
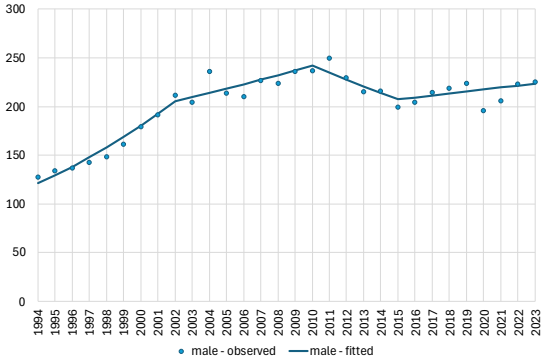
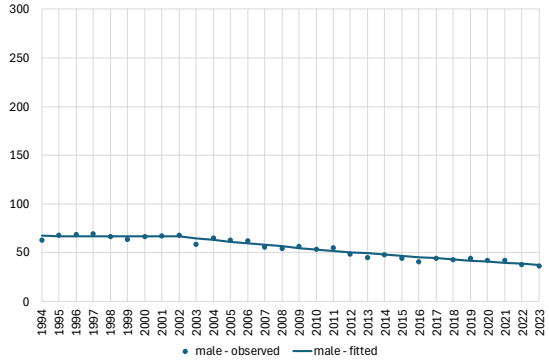
EASMR mortality decreased significantly over the whole period (AAPC -1.3% PA) with evidence of a steeper decline emerging after 2019.

Overall, this figure shows that ovarian cancer incidence has declined in recent years on an age-standardised basis, with concurrent decline in the mortality rate over time.

C61 Prostate cancer

Figure 3-15 presents trends in incidence and mortality for prostate cancer during the period 1994–2023.

Figure 3-15. C61 prostate cancer, incidence and mortality 1994-2023

	incidence	mortality
Cases		
Crude rate x100,000		
EASIR/EASMR x100,000		

male - observed — male - fitted

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2004	9.1	7.9	10.3	↑		
M	2004	2011	5.1	3.3	7.0	↑		
M	2011	2016	0.3	-2.7	3.4	↔		
M	2016	2023	4.5	3.3	5.7	↑	5.5	4.7 6.3 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2015	0.2	-0.1	0.6	↔		
M	2015	2023	2.2	0.7	3.7	↑	0.8	0.3 1.2 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2004	8.0	6.3	9.7	↑		
M	2004	2023	2.0	1.6	2.4	↑	4.0	3.4 4.6 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2013	-1.3	-1.8	-0.9	↓		
M	2013	2023	0.7	-0.4	1.8	↔	-0.6	-1.1 -0.2 ↓

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2002	6.8	4.9	8.8	↑		
M	2002	2010	2.1	0.4	3.7	↑		
M	2010	2015	-3.0	-6.2	0.2	↔		
M	2015	2023	1.0	-0.1	2.0	↔	2.1	1.3 3.0 ↑

sex	period		APC%	95%CI		‡AAPC%	95%CI	
M	1994	2002	-0.1	-1.7	1.4	↔		
M	2002	2023	-2.7	-3.0	-2.4	↓	-2.0	-2.5 -1.5 ↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of prostate cancer cases increased significantly and unevenly over the whole period (AAPC +5.5% PA). Crude incidence rates also increased over the whole period (AAPC +4.0% PA), reflecting population ageing and changes in PSA diagnostic activity over time.

Adjusting for age, the EASIR rate increased throughout most of the period peaking in 2010, with evidence of fluctuation in the rate of increase, but with an overall significant increase in the rate over the whole period (AAPC +2.1% PA).

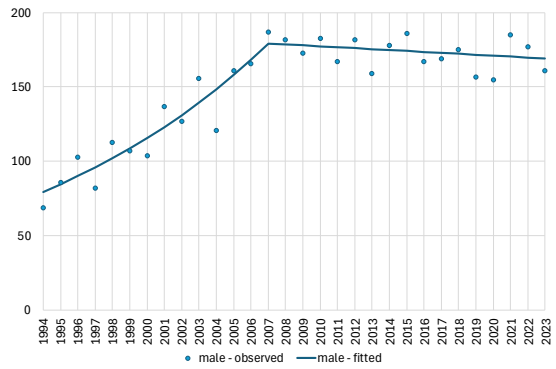
While the number of deaths increased significantly over the whole period (AAPC +0.8% PA), crude mortality rates declined gradually (AAPC -0.6% PA) and EASMR mortality rates declined significantly at a steeper rate over the whole period (AAPC -2.0% PA) indicating continued and substantial improvements in prostate cancer outcomes.

Overall, this figure shows a clear divergence between incidence and mortality trends for prostate cancer, with age-standardised incidence continuing to increase, while age-standardised mortality has declined significantly since 2002, reflecting ongoing improvements in survival and management.

C62 Testis

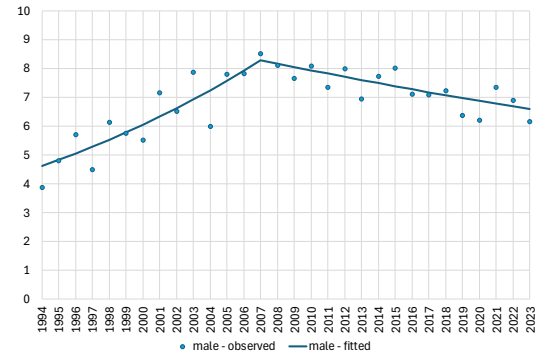
Figure 3-16 presents trends in incidence and mortality for testicular cancer during the period 1994–2023.

Figure 3-16. C62 testis, incidence and mortality 1994-2023



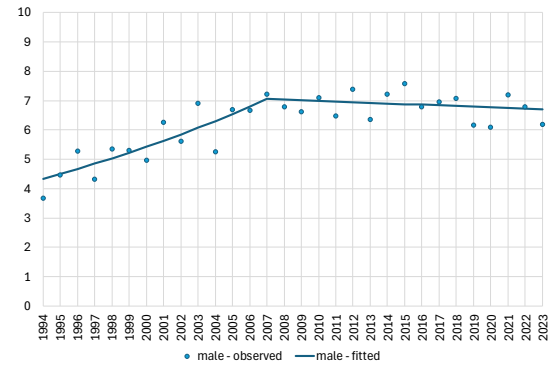
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2007	6.5	5.0	7.9	↑				
M	2007	2023	-0.4	-1.2	0.5	↔	2.6	1.9	3.4	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-1.2	-2.9	0.6	↔	-1.2	-2.9	0.6	↔



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2007	4.6	3.1	6.1	↑				
M	2007	2023	-1.4	-2.3	-0.6	↓	1.2	0.5	2.0	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-2.5	-4.2	-0.8	↓	-2.5	-4.2	-0.8	↓



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2007	3.8	2.4	5.3	↑				
M	2007	2023	-0.3	-1.1	0.5	↔	1.5	0.8	2.3	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-3.1	-5.0	-1.0	↓	-3.1	-5.0	-1.0	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of testicular cancer cases increased during 1994-2007 (APC +6.5% PA), peaking in 2007, followed by a slight decline or stabilisation in more recent years (APC -0.4% PA). Crude incidence rates showed a similar trend, increasing initially before levelling off.

Age-standardised incidence rates (EASIR) increased during the 1994-2007 (APC +3.8% PA) before stabilising during 2007-2023 (APC -0.3% PA).

Mortality from testicular cancer was very low throughout the whole period. EASMR mortality rates declined significantly and steadily over the whole period (APC -3.1% PA).

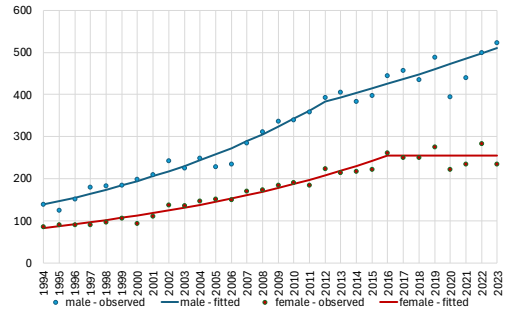
Overall, the figure shows that the EASIR incidence rate for testicular cancer rose until 2007, after which it stabilised through to 2023. Meanwhile, the consistently very low—and declining EASMR indicates a favourable prognosis and high survivability for this cancer.

C64 Kidney cancer

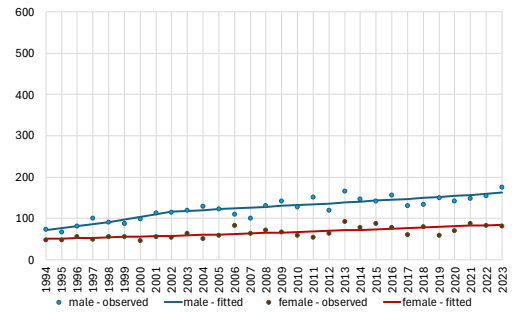
Figure 3-17 presents trends in incidence and mortality for kidney cancer in males and females during the period 1994–2023.

Figure 3-17. C64 kidney cancer, incidence and mortality 1994-2023

Cases

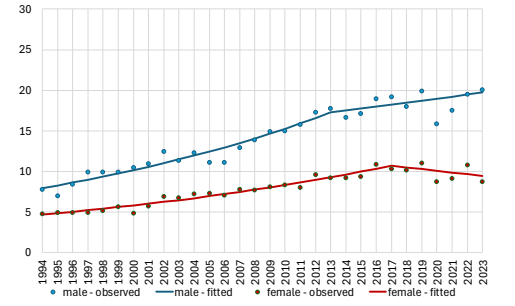


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2012	5.8	5.1	6.5	↑				
M	2012	2023	2.6	1.6	3.7	↑	4.6	4.0	5.2	↑
F	1994	2016	5.2	4.7	5.8	↑				
F	2016	2023	0.0	-2.2	2.3	↔	3.9	3.3	4.6	↑

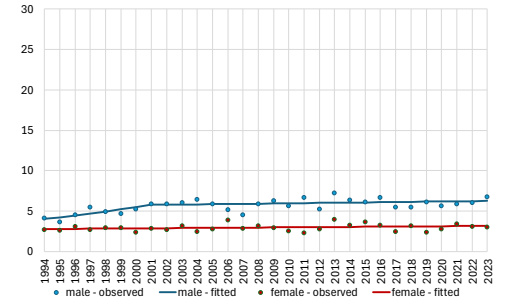


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2002	6.3	2.4	10.3	↑				
M	2002	2023	1.6	0.9	2.3	↑	2.9	1.7	4.0	↑
F	1994	2023	1.9	1.2	2.5	↑	1.9	1.2	2.5	↑

Crude rate x100,000

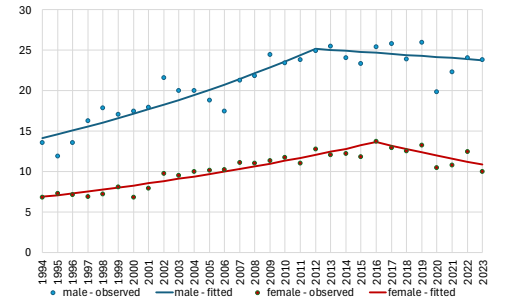


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2013	4.2	3.5	4.8	↑				
M	2013	2023	1.3	0.1	2.6	↑	3.2	2.6	3.8	↑
F	1994	2017	3.7	3.2	4.1	↑				
F	2017	2023	-2.0	-4.7	0.7	↔	2.5	1.8	3.1	↑

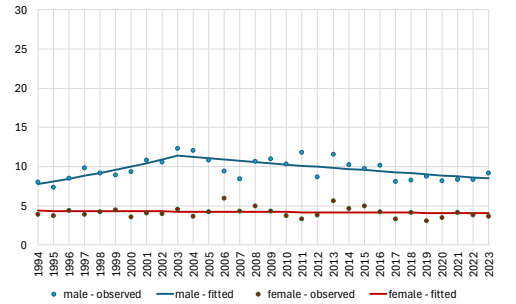


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2001	5.3	0.4	10.5	↑				
M	2001	2023	0.4	-0.3	1.1	↔	1.5	0.3	2.8	↑
F	1994	2023	0.5	-0.2	1.1	↔	0.5	-0.2	1.1	↔

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2012	3.3	2.5	4.1	↑				
M	2012	2023	-0.5	-1.6	0.6	↔	1.8	1.2	2.4	↑
F	1994	2016	3.2	2.6	3.7	↑				
F	2016	2023	-3.2	-5.4	-0.9	↓	1.6	0.9	2.3	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2003	4.3	1.1	7.6	↑				
M	2003	2023	-1.4	-2.2	-0.7	↓	0.3	-0.7	1.4	↔
F	1994	2023	-0.2	-0.9	0.5	↔	-0.2	-0.9	0.5	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of kidney cancer cases increased over the study period in both males (1994-2012, APC +5.8% PA) and females (1994-2016, APC +5.2%), with some evidence of a slower increase in males after 2012 and stabilisation in females after 2016. Crude incidence rates showed similar trends for over the same period respectively.

In males, EASIR incidence increased significantly from 1994 to 2012 (APC+3.3%), followed by stabilisation or marginal decline during 2012 to 2023 (APC -0.5% PA). In females, EASIR incidence increased significantly from 1994 to 2016 (APC 3.2% PA), before declining significantly during 2016–2023 (APC -3.2% PA).

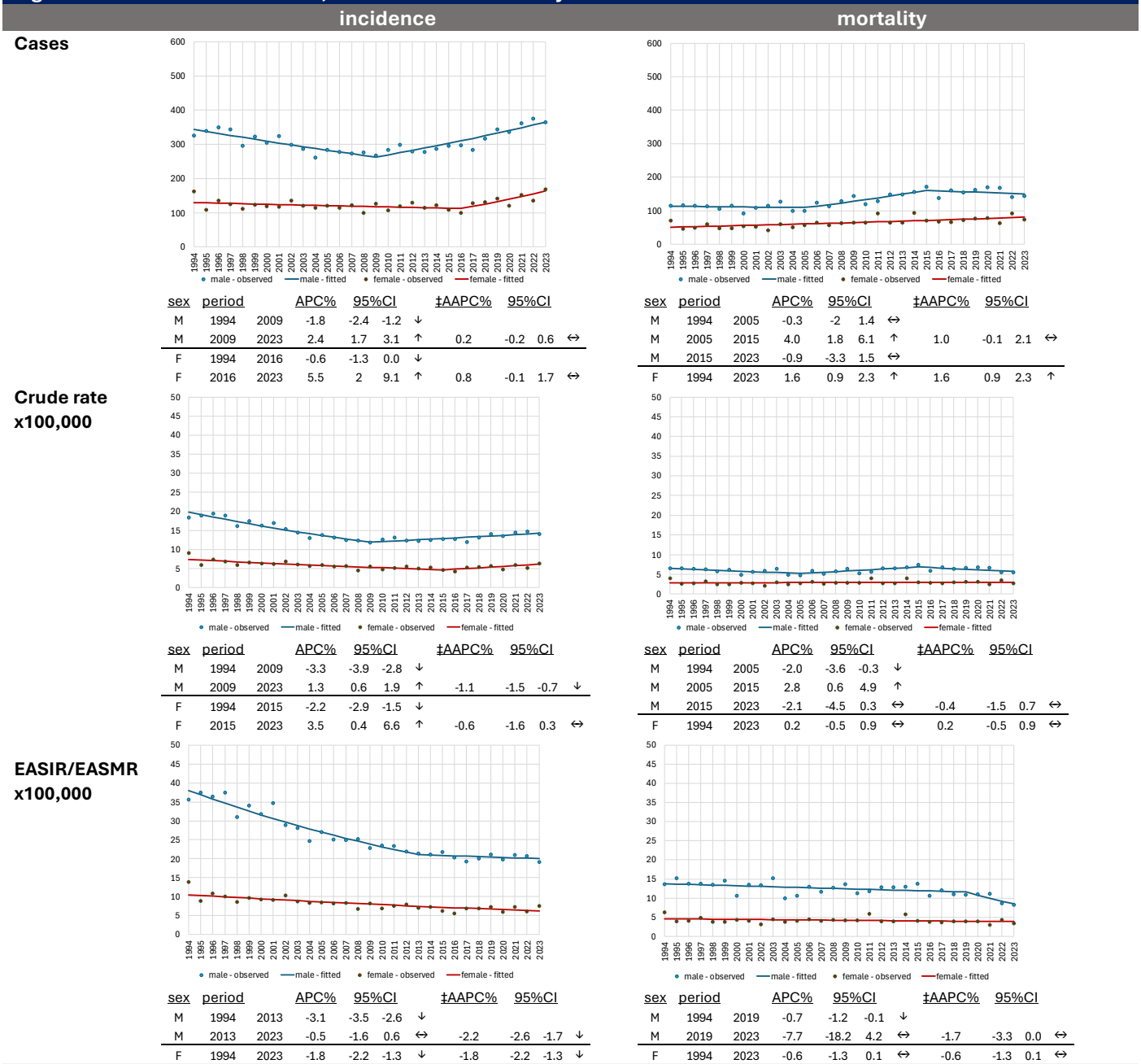
EASMR mortality rates were broadly stable over the whole period. In males, EASMR mortality increased marginally or stabilised over the whole period (AAPC +0.3% PA). In females, EASMR mortality declined marginally or stabilised over the whole period (AAPC -0.2% PA).

Overall, this figure shows that kidney cancer in Ireland has been characterised by increases in age-standardised incidence, particularly among males, while age-standardised mortality was relatively stable for both sexes over the whole period.

C67 Bladder cancer

Figure 3-18 presents trends in incidence and mortality for bladder cancer in males and females during the period 1994–2023.

Figure 3-18. C67 bladder cancer, incidence and mortality 1994-2023



Cases

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2009	-1.8	-2.4	-1.2	↓				
M	2009	2023	2.4	1.7	3.1	↑	0.2	-0.2	0.6	↔
F	1994	2016	-0.6	-1.3	0.0	↓				
F	2016	2023	5.5	2	9.1	↑	0.8	-0.1	1.7	↔

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	-0.3	-2	1.4	↔				
M	2005	2015	4.0	1.8	6.1	↑	1.0	-0.1	2.1	↔
M	2015	2023	-0.9	-3.3	1.5	↔				
F	1994	2023	1.6	0.9	2.3	↑	1.6	0.9	2.3	↑

Crude rate x100,000

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2009	-3.3	-3.9	-2.8	↓				
M	2009	2023	1.3	0.6	1.9	↑	-1.1	-1.5	-0.7	↓
F	1994	2015	-2.2	-2.9	-1.5	↓				
F	2015	2023	3.5	0.4	6.6	↑	-0.6	-1.6	0.3	↔

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	-2.0	-3.6	-0.3	↓				
M	2005	2015	2.8	0.6	4.9	↑				
M	2015	2023	-2.1	-4.5	0.3	↔	-0.4	-1.5	0.7	↔
F	1994	2023	0.2	-0.5	0.9	↔	0.2	-0.5	0.9	↔

EASIR/EASMR x100,000

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2013	-3.1	-3.5	-2.6	↓				
M	2013	2023	-0.5	-1.6	0.6	↔	-2.2	-2.6	-1.7	↓
F	1994	2023	-1.8	-2.2	-1.3	↓	-1.8	-2.2	-1.3	↓

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2019	-0.7	-1.2	-0.1	↓				
M	2019	2023	-7.7	-18.2	4.2	↔	-1.7	-3.3	0.0	↔
F	1994	2023	-0.6	-1.3	0.1	↔	-0.6	-1.3	0.1	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of invasive bladder cancer cases declined during 1994-2009 in males and 1994-2016 in females before increasing again from 2009 in males and 2015 in females, with consistently higher case numbers and

rates observed in males. Crude incidence rates decreased initially and then stabilised or increased slightly in a similar fashion.

Age-standardised incidence rates (EASIR) declined substantially over time. In males, EASIR incidence decreased significantly by –3.1% PA from 1994 to 2013, followed by a slower marginal decline of –0.5% PA from 2013 to 2023. In females, EASIR incidence declined significantly by –1.8% PA over the whole period.

Crude mortality rates were relatively stable in males (AAPC -0.4% PA) and in females (AAPC +0.2%). Similarly, EASMR mortality rates were relative stable. In males, EASMR mortality showed a marginal decline over the full period (AAPC -1.7%) with evidence of steeper decline emerging from 2019. In females, EASMR mortality remained stable or declined marginally over the whole period (AAPC -0.6% PA).

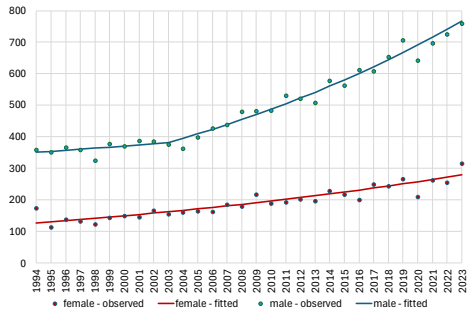
Overall, this figure shows that invasive bladder cancer in Ireland has been characterised by declines in age-standardised incidence, particularly among males, while age-standardised mortality remained largely unchanged during 1994-2023.

C67,D090,D414,NMIBC (All bladder cancer)

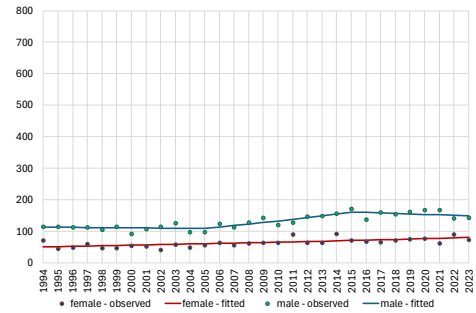
Figure 3-19 presents trends in incidence and mortality for all bladder cancers, including non-muscle-invasive bladder cancer (NMIBC), in males and females during the period 1994–2023.

Figure 3-19. C67,D090,D414,NMIBC (all bladder cancer), incidence and mortality 1994-2023

Cases

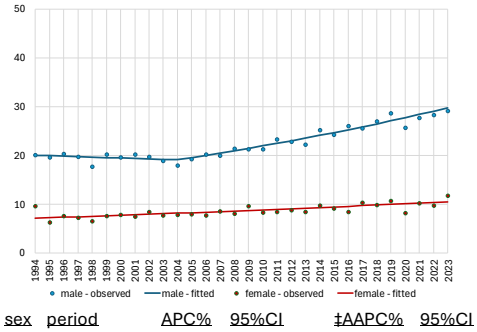


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2003	0.9	-0.3	2.1	↔				
M	2003	2023	3.6	3.2	3.9	↑	2.7	2.3	3.2	↑
F	1994	2023	2.8	2.3	3.2	↑	2.8	2.3	3.2	↑

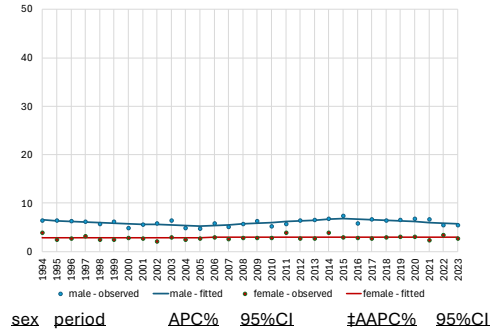


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	-0.3	-2.0	1.4	↔				
M	2005	2015	4.0	1.8	6.1	↑				
M	2015	2023	-0.9	-3.3	1.5	↔	1.0	-0.1	2.1	↔
F	1994	2023	1.6	0.9	2.3	↑	1.6	0.9	2.3	↑

Crude rate x100,000

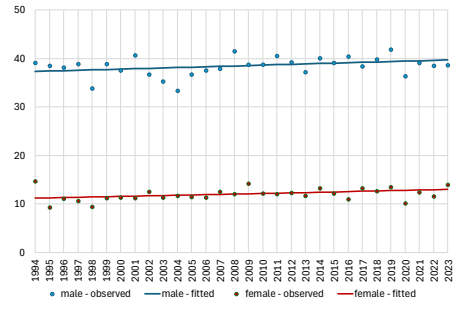


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	-0.5	-1.4	0.4	↔				
M	2004	2023	2.4	2.1	2.7	↑	1.4	1.0	1.7	↑
F	1994	2023	1.4	1	1.8	↑	1.4	1.0	1.8	↑

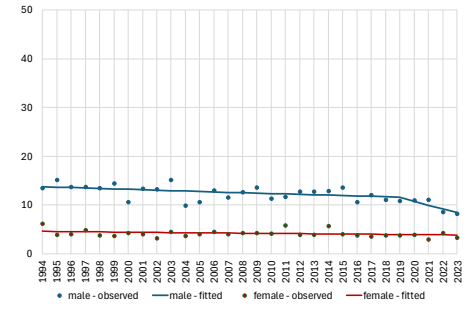


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2005	-2.0	-3.6	-0.3	↓				
M	2005	2015	2.8	0.6	4.9	↑				
M	2015	2023	-2.1	-4.5	0.3	↔	-0.4	-1.5	0.7	↔
F	1994	2023	0.2	-0.5	0.9	↔	0.2	-0.5	0.9	↔

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.2	0.0	0.4	↑	0.2	0.0	0.4	↑
F	1994	2023	0.5	0.1	0.9	↑	0.5	0.1	0.9	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2019	-0.7	-1.2	-0.1	↓				
M	2019	2023	-7.7	-18.2	4.2	↔	-1.7	-3.3	0.0	↔
F	1994	2023	-0.6	-1.3	0.1	↔	-0.6	-1.3	0.1	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of all bladder cancer cases (including NMIBC) increased over the whole 30-year period for both males and females, with higher case numbers and rates observed in males throughout. Crude incidence rates also increased, reflecting demographic change.

Age-standardised incidence rates (EASIR) increased modestly and consistently over time. EASIR incidence increased significantly over the whole period in males (AAPC +0.2% PA) and in females (AAPC +0.5% PA), indicating small but sustained increases in rates once age is accounted for.

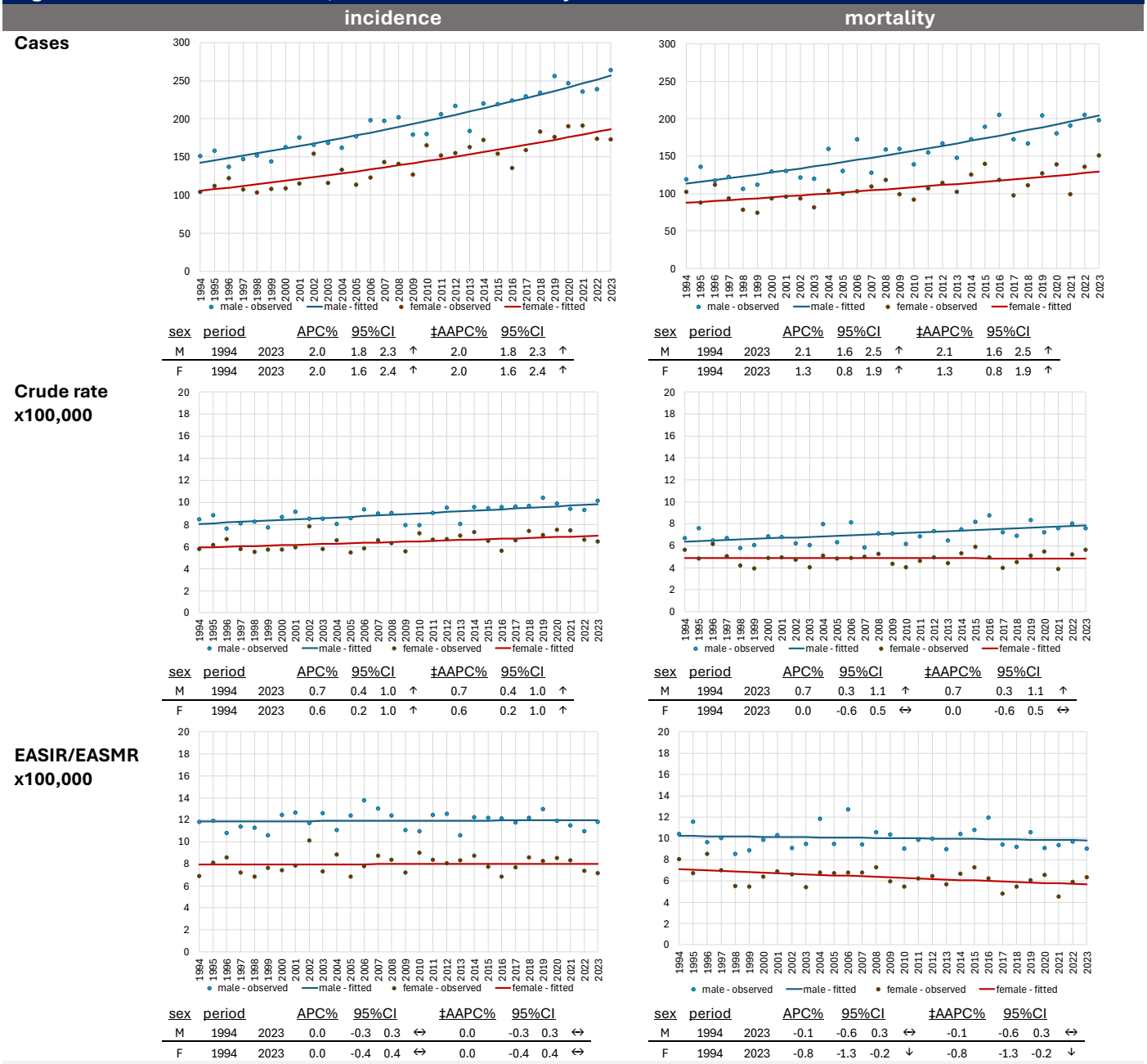
Crude mortality rates were relatively stable in males (AAPC -0.4% PA) and in females (AAPC +0.2% PA) over the whole period. Similarly, age-standardised mortality rates were relative stable. In males, EASMR mortality

showed a marginal decline over the full period (AAPC -1.7% PA) with evidence of steeper decline emerging from 2019. In females, EASMR mortality remained stable or declined marginally over the whole period (AAPC -0.6% PA).

C71-72 Brain and CNS cancer

Figure 3-20 presents trends in incidence and mortality for brain and CNS cancers in males and females during the period 1994–2023.

Figure 3-20. C71-72 brain cancer, incidence and mortality 1994-2023



sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	2.0	1.8	2.3	↑	2.0	1.8	2.3	↑
F	1994	2023	2.0	1.6	2.4	↑	2.0	1.6	2.4	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	2.1	1.6	2.5	↑	2.1	1.6	2.5	↑
F	1994	2023	1.3	0.8	1.9	↑	1.3	0.8	1.9	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	0.7	0.4	1.0	↑	0.7	0.4	1.0	↑
F	1994	2023	0.6	0.2	1.0	↑	0.6	0.2	1.0	↑

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	0.7	0.3	1.1	↑	0.7	0.3	1.1	↑
F	1994	2023	0.0	-0.6	0.5	↔	0.0	-0.6	0.5	↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	0.0	-0.3	0.3	↔	0.0	-0.3	0.3	↔
F	1994	2023	0.0	-0.4	0.4	↔	0.0	-0.4	0.4	↔

sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	-0.1	-0.6	0.3	↔	-0.1	-0.6	0.3	↔
F	1994	2023	-0.8	-1.3	-0.2	↓	-0.8	-1.3	-0.2	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of primary brain and CNS cancer cases increased steadily over the study period in both males and females, with higher case numbers and rates observed in males throughout. Crude incidence rates also increased gradually and significantly over the whole period for both sexes, reflecting demographic change.

Adjusting for age, EASIRs were very stable over the whole period (AAPC 0.0% PA) in both sexes indicating no real change in underlying risk.

While crude mortality increased in males over the whole period (AAPC +0.7%) and was stable in females (AAPC 0.0% PA), after adjusting for age, the EASMR rate was stable or declined marginally in males (AAPC -0.1% PA) and declined significantly in females (AAPC% -0.8% PA) over the whole period.

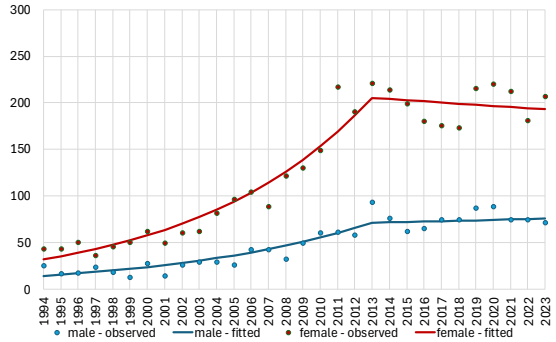
Overall, this figure shows stable age-standardised incidence rates in both sexes and declining age-standardised mortality rates over the whole period, particularly in females.

C73 Thyroid cancer

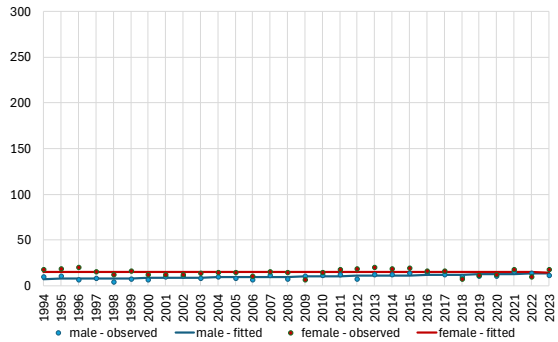
Figure 3-21 presents trends in incidence and mortality for thyroid cancer in males and females during the period 1994–2023.

Figure 3-21. C73 thyroid cancer, incidence and mortality 1994-2023

Cases

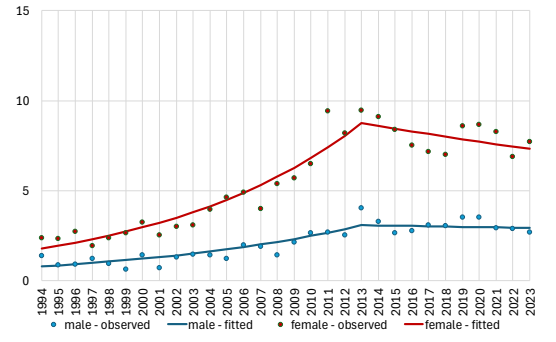


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2013	8.9	7.0	10.8	↑				
M	2013	2023	0.6	-2.4	3.7	↔	5.9	4.4	7.5	↑
F	1994	2013	10.3	8.8	11.8	↑				
F	2013	2023	-0.6	-2.9	1.7	↔	6.4	5.2	7.6	↑

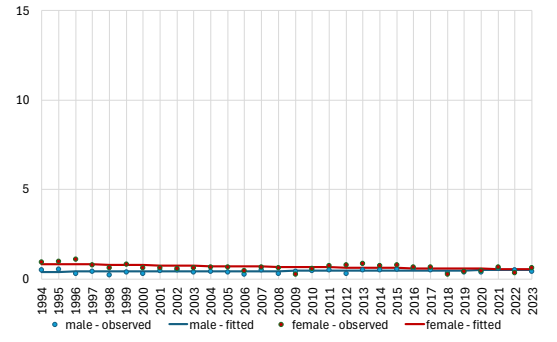


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.1	1.2	3	↑	2.1	1.2	3.0	↑
F	1994	2023	-0.1	-1.2	1	↔	-0.1	-1.2	1.0	↔

Crude rate x100,000

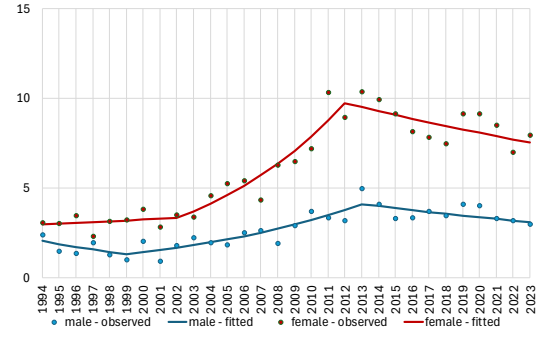


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2013	7.3	5.5	9.2	↑				
M	2013	2023	-0.5	-3.4	2.6	↔	4.6	3.1	6.1	↑
F	1994	2013	8.7	7.2	10.2	↑				
F	2013	2023	-1.8	-4.0	0.5	↔	5.0	3.8	6.2	↑

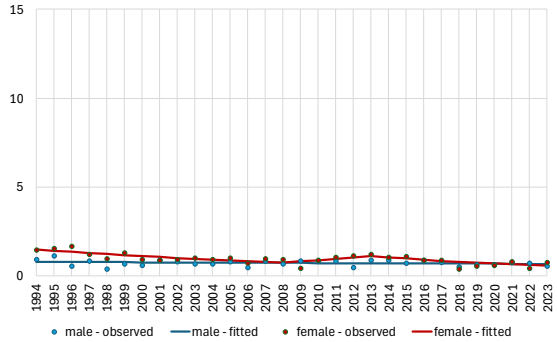


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.7	-0.2	1.7	↔	0.7	-0.2	1.7	↔
F	1994	2023	-1.5	-2.5	-0.4	↓	-1.5	-2.5	-0.4	↓

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	1999	-8.6	-21.2	6.0	↔				
M	1999	2013	8.5	5.6	11.5	↑				
M	2013	2023	-2.8	-5.5	0.0	↔	1.4	-1.4	4.4	↔
F	1994	2002	1.4	-4.7	7.9	↔				
F	2002	2012	11.3	7.6	15.2	↑				
F	2012	2023	-2.3	-4.1	-0.5	↓	3.3	1.1	5.4	↑



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-0.5	-1.5	0.4	↔	-0.5	-1.5	0.4	↔
F	1994	2008	-4.6	-7.2	-1.9	↓				
F	2008	2013	7.9	-13.3	34.2	↔				
F	2013	2023	-6.5	-10.6	-2.2	↓	-3.2	-7.1	0.8	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of thyroid cancer cases increased substantially over the study period, where females consistently accounted for the majority of cases. Crude incidence rates rose sharply during the late 1990s and 2000s before levelling off or declining since 2013.

In females, EASIR incidence increased significantly from 2002 to 2012 (APC +11.3% PA) followed by a significant decline from 2013 to 2023 (APC -2.3% PA). In males, EASIR incidence also increased significantly during the period 1999 to 2013 (APC +8.5% PA) and then stabilised or declined from 2013 to 2023 (APC -2.8% PA).

Mortality from thyroid cancer remained very low throughout the period. Case numbers and crude mortality rates changed little over time. Age-standardised mortality rates showed small declines. In females, EASMR mortality declined marginally during the whole period (AAPC -3.2%), while in males EASMR mortality was stable or declined marginally (AAPC -0.5%) over the same period, remaining at very low absolute levels in both sexes.

Overall, this figure shows that thyroid cancer in Ireland is characterised by historically rapid increases in incidence followed by recent stabilisation or declines on an age-standardised basis, while the EASMR mortality rate was very low and decreased in females, consistent with the generally favourable prognosis of this cancer.

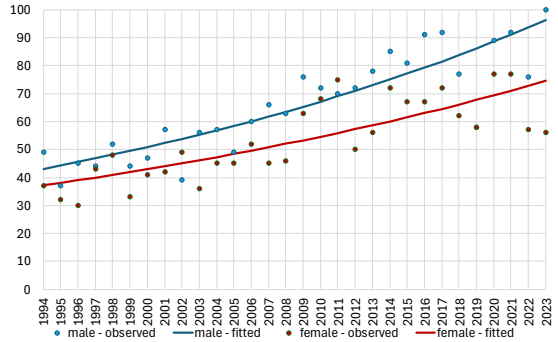
C81 Hodgkin lymphoma

Figure 3-22 presents trends in incidence and mortality for Hodgkin lymphoma in males and females during the period 1994–2023.

Figure 3-22. C81 Hodgkin lymphoma, incidence and mortality 1994-2023

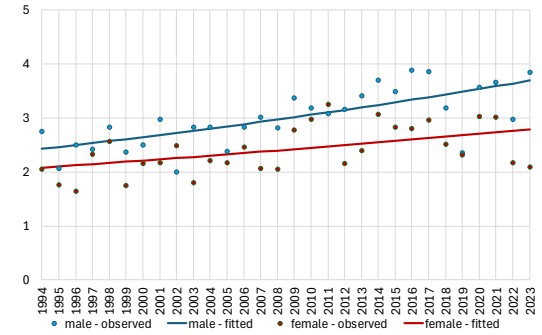
incidence

Cases



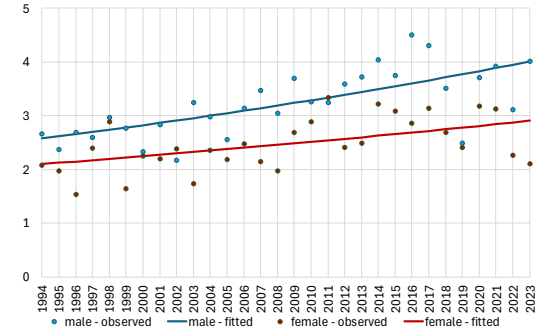
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	2.8	2.2	3.4	↑	2.8	2.2	3.4	↑
F	1994	2023	2.4	1.7	3.2	↑	2.4	1.7	3.2	↑

Crude rate x100,000



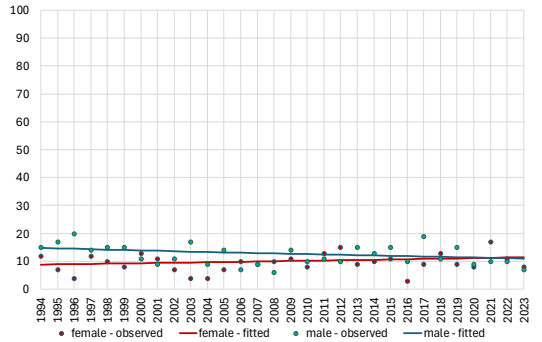
sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.5	0.9	2.0	↑	1.5	0.9	2.0	↑
F	1994	2023	1.0	0.3	1.8	↑	1.0	0.3	1.8	↑

EASIR/EASMR x100,000

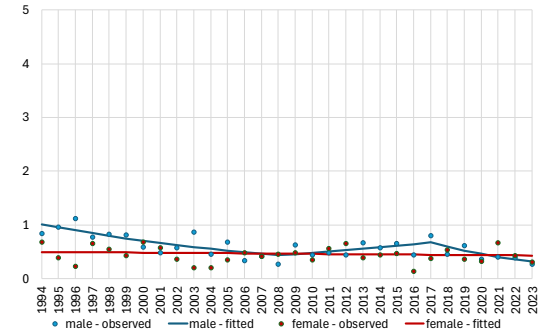


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.5	0.9	2.2	↑	1.5	0.9	2.2	↑
F	1994	2023	1.1	0.3	1.9	↑	1.1	0.3	1.9	↑

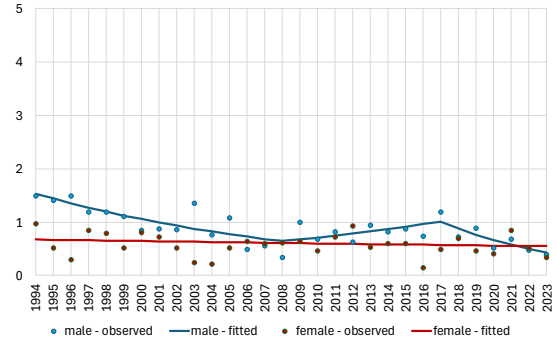
mortality



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-1.0	-2.2	0.2	↔	-1.0	-2.2	0.2	↔
F	1994	2023	0.9	-0.5	2.3	↔	0.9	-0.5	2.3	↔



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2008	-5.8	-8.5	-3.0	↓				
M	2008	2017	5.0	-2.0	12.5	↔				
M	2017	2023	-12.1	-22.1	-0.8	↓	-4.0	-7.2	-0.7	↓
F	1994	2023	-0.5	-1.9	0.9	↔	-0.5	-1.9	0.9	↔



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2008	-6.0	-8.5	-3.4	↓				
M	2008	2017	5.2	-1.2	12	↔				
M	2017	2023	-13.1	-21.9	-3.3	↓	-4.2	-7.1	-1.3	↓
F	1994	2023	-0.7	-2.2	0.8	↔	-0.7	-2.2	0.8	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of Hodgkin lymphoma cases increased steadily over the study period in both males and females, with higher case numbers and rates observed in males. Crude incidence rates rose gradually for both sexes, reflecting increases in the number of diagnoses over time.

Age-standardised incidence rates (EASIR) increased significantly during 1994-2023. In males, EASIR incidence increased significantly (APC +1.5% PA) as did females over the same period (APC +1.1% PA), indicating sustained increases in underlying incidence after adjusting for age.

In contrast, mortality trends were favourable. Mortality from Hodgkin lymphoma remained very low throughout the study period. In males, with some fluctuation the EASMR mortality rate declined over the whole period (AAPC -4.2% PA and declined marginally over the same period in females (AAPC -0.7% PA), reflecting continued improvements in survival and treatment outcomes.

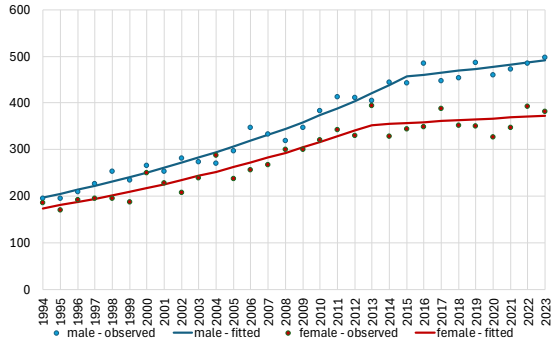
Overall, this figure shows that although the incidence of Hodgkin lymphoma increased, mortality declined and remains low, consistent with the generally good prognosis for this cancer.

C82-86 Non-Hodgkin lymphoma

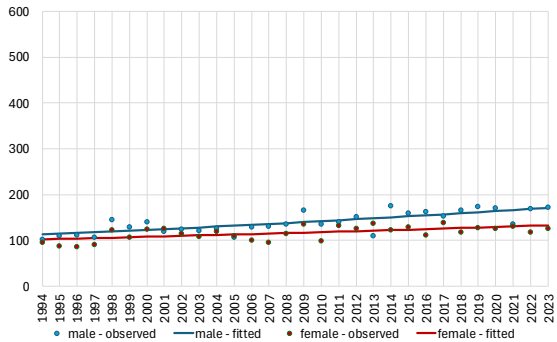
Figure 3-23 presents trends in incidence and mortality for non-Hodgkin lymphoma in males and females during the period 1994–2023.

Figure 3-23. C82-86 non-Hodgkin lymphoma, incidence and mortality 1994-2023

Cases

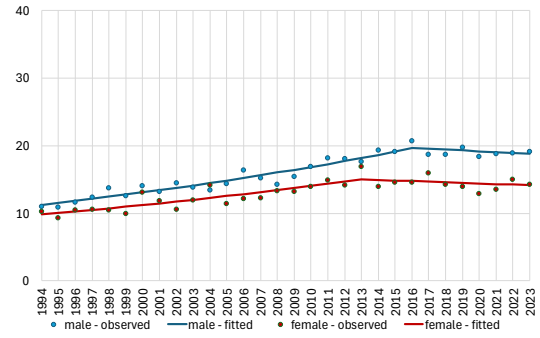


sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2015	4.1	3.7	4.4	↑			
M	2015	2023	0.9	-0.3	2.2	↔	3.2	2.8	3.6	↑
F	1994	2013	3.8	3.2	4.4	↑			
F	2013	2023	0.6	-0.7	1.9	↔	2.7	2.1	3.3	↑

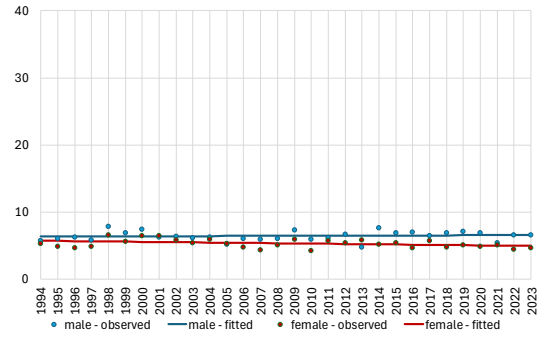


sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	1.5	1.0	2.0	↑	1.5	1.0	2.0	↑
F	1994	2023	0.9	0.4	1.4	↑	0.9	0.4	1.4	↑

Crude rate x100,000

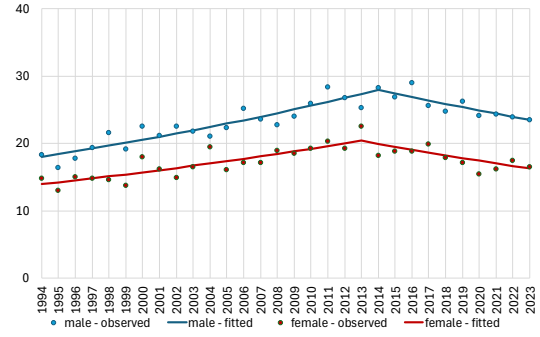


sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2016	2.6	2.2	2.9	↑			
M	2016	2023	-0.6	-2.1	1.0	↔	1.8	1.3	2.2	↑
F	1994	2013	2.3	1.7	2.9	↑			
F	2013	2023	-0.6	-1.9	0.7	↔	1.3	0.7	1.9	↑

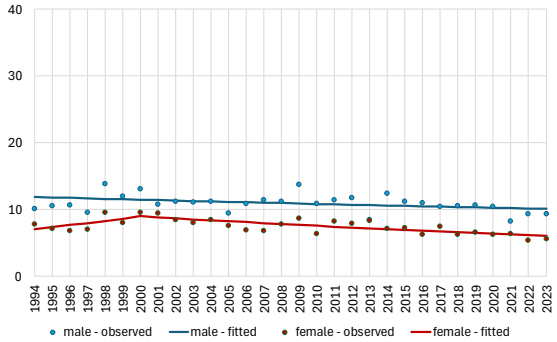


sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	0.1	-0.4	0.6	↔	0.1	-0.4	0.6	↔
F	1994	2023	-0.5	-1	0.0	↔	-0.5	-1.0	0.0	↔

EASIR/EASMR x100,000



sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2014	2.2	1.8	2.7	↑			
M	2014	2023	-1.9	-3.1	-0.7	↓	0.9	0.5	1.4	↑
F	1994	2013	2.0	1.4	2.6	↑			
F	2013	2023	-2.2	-3.4	-1.0	↓	0.5	0	1.1	↔



sex	period		APC%	95%CI		‡AAPC%	95%CI		
M	1994	2023	-0.6	-1.1	-0.1	↓	-0.6	-1.1	-0.1	↓
F	1994	2000	4.0	-1.3	9.6	↔			
F	2000	2023	-1.7	-2.3	-1.1	↓	-0.5	-1.7	0.6	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of non-Hodgkin lymphoma cases increased over the study period in both males and females, with higher case numbers and rates observed in males throughout. Crude incidence rates increased significantly during 1994-2016 in males (APC +2.6% PA) and during 1994-2013 (APC +2.3 PA) in females, after which the trend stabilised up to 2023.

After adjusting for age, the same trends were still apparent. In males the EASIR increased significantly up to 2014 (APC +2.2% PA) and up to 2013 in females (APC +2.0% PA) followed by significant declines in males (APC -1.9% PA) and in females (APC -2.2% PA) up to 2023.

While deaths increased over the whole period in both sexes (males, APC +1.5%, females, APC +0.9% PA), age-standardised mortality rates declined over time. In males, EASMR mortality decreased significantly during the whole period (APC -0.6% PA), while in females EASMR mortality declined significantly from 2000-2023 (APC -1.7% PA), reflecting improvements in treatment and survival for non-Hodgkin lymphoma.

Overall, this figure shows that although non-Hodgkin lymphoma deaths increased over the past three decades, recent stabilisation in EASIR incidence since the mid-2010s and reductions in mortality EASMR indicate improving outcomes and a moderating disease burden for this cancer.

C90 Multiple myeloma

Figure 3-24 presents trends in incidence and mortality for multiple myeloma in males and females during the period 1994–2023.

Figure 3-24. C90 multiple myeloma, incidence and mortality 1994-2023

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	3.3	2.8	3.7	↑	3.3	2.8	3.7	↑
F	1994	2023	2.9	2.3	3.5	↑	2.9	2.3	3.5	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.7	0.2	1.2	↑	0.7	0.2	1.2	↑
F	1994	2023	0.0	-0.4	0.4	↔	0.0	-0.4	0.4	↔

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	1.9	1.5	2.3	↑	1.9	1.5	2.3	↑
F	1994	2023	1.5	0.9	2.1	↑	1.5	0.9	2.1	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2010	-1.9	-3.1	-0.7	↓				
M	2010	2023	0.9	-0.6	2.5	↔	-0.6	-1.6	0.3	↔
F	1994	2023	-1.4	-1.8	-0.9	↓	-1.4	-1.8	-0.9	↓

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	0.4	0.0	0.9	↑	0.4	0.0	0.9	↑
F	1994	2023	0.6	0.1	1.1	↑	0.6	0.1	1.1	↑

sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2023	-1.9	-2.4	-1.4	↓	-1.9	-2.4	-1.4	↓
F	1994	2023	-2.1	-2.5	-1.6	↓	-2.1	-2.5	-1.6	↓

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

The number of multiple myeloma cases increased steadily over the study period in both males and females, with higher case numbers and rates observed in males throughout. Crude incidence rates also increased for both sexes, reflecting population ageing and rising diagnosis.

Age-standardised incidence rates (EASIR) showed modest upward trends. EASIR rates increased significantly during the whole 30-year period (males APC +0.4%, female APC +0.6% PA), indicating small but sustained increases in underlying incidence after adjustment for age.

EASMR mortality decreased steadily and significantly during the whole period in males (APC -1.9% PA) and females (APC -2.1% PA), reflecting substantial improvements in survival and treatment outcomes for multiple myeloma.

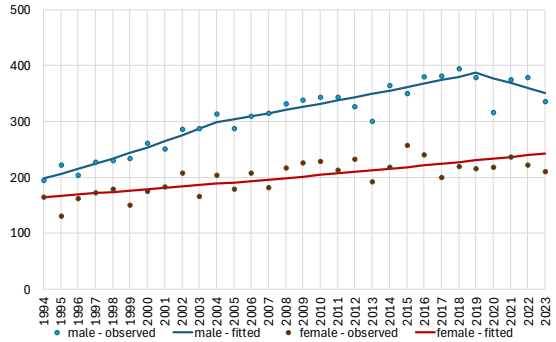
Overall, this figure shows that although the incidence rate of multiple myeloma has increased over the whole period, mortality has declined markedly for both sexes, highlighting major progress in the management of this cancer over the past three decades.

C91-95 Leukaemia

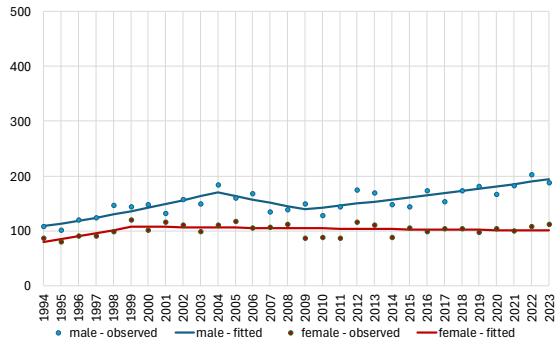
Figure 3-25 presents trends in incidence and mortality for leukaemia in males and females during the period 1994–2023.

Figure 3-25. C91-95 leukaemia, incidence and mortality 1994-2023

Cases

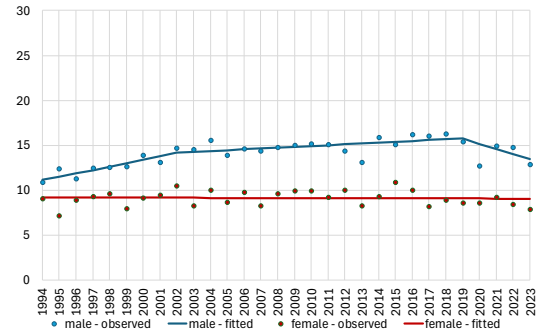


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	4.2	2.9	5.6	↑				
M	2004	2019	1.7	1.1	2.4	↑				
M	2019	2023	-2.4	-8.6	4.3	↔	2.0	1.0	3.0	↑
F	1994	2023	1.3	0.9	1.8	↑	1.3	0.9	1.8	↑

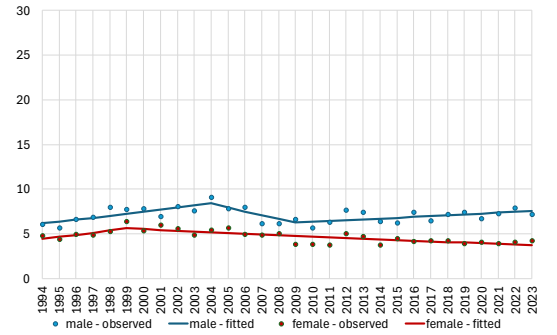


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	4.6	2.6	6.8	↑				
M	2004	2009	-3.9	-10.9	3.6	↔				
M	2009	2023	2.4	1.3	3.5	↑	2.0	0.5	3.6	↑
F	1994	1999	6.2	-0.1	12.9	↔				
F	1999	2023	-0.3	-0.8	0.3	↔	0.8	-0.3	1.9	↔

Crude rate x100,000

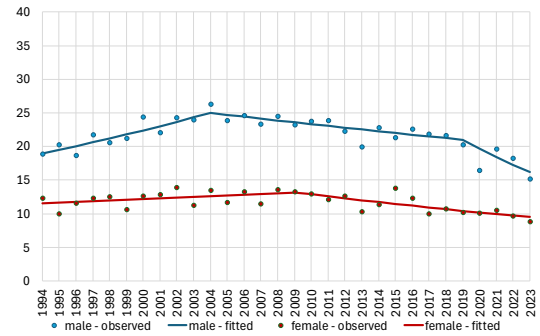


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2002	3.0	1.1	5.0	↑				
M	2002	2019	0.6	0.1	1.2	↑				
M	2019	2023	-3.8	-10	2.8	↔	0.7	-0.4	1.7	↔
F	1994	2023	-0.1	-0.5	0.4	↔	-0.1	-0.5	0.4	↔

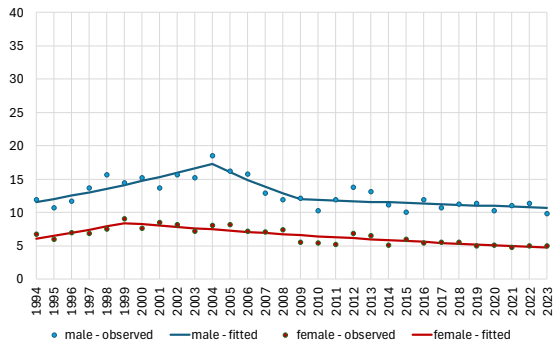


sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	3.2	1.1	5.3	↑				
M	2004	2009	-5.9	-12.9	1.7	↔				
M	2009	2023	1.4	0.3	2.5	↑	0.7	-0.8	2.2	↔
F	1994	1999	4.8	-1.7	11.9	↔				
F	1999	2023	-1.7	-2.2	-1.1	↓	-0.6	-1.7	0.6	↔

EASIR/EASMR x100,000



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	2.8	1.5	4	↑				
M	2004	2019	-1.2	-1.7	-0.6	↓				
M	2019	2023	-6.3	-11.6	-0.6	↓	-0.5	-1.4	0.4	↔
F	1994	2009	0.9	-0.3	2.1	↔				
F	2009	2023	-2.3	-3.4	-1.2	↓	-0.7	-1.4	0.1	↔



sex	period		APC%	95%CI			‡AAPC%	95%CI		
M	1994	2004	4.1	1.9	6.4	↑				
M	2004	2009	-7.0	-14.2	0.7	↔				
M	2009	2023	-0.8	-1.9	0.3	↔	-0.3	-1.8	1.3	↔
F	1994	1999	6.6	0.5	13.2	↑				
F	1999	2023	-2.4	-2.9	-1.9	↓	-0.9	-1.9	0.2	↔

EASIR/EASMR: European Age-Standardised Incidence/Mortality Rate (weighted using 2013 European Standard Population); APC%: Annual Percentage Change over discrete range of years ('period'); ‡AAPC% Average Annual Percentage Change over whole range 1994-2023; ↑= significant increase; ↓=significant decrease; ↔ flat trend at p<0.05

Leukaemia cases numbers increased significantly in males during 1994-2004 (APC 4.2% PA), moderating to +1.7% annually up to 2019 and then stabilised or declined in the recent period 2019-2023 (APC -2.4% PA). Case number in females increased significantly over the whole period 1994-2023 (APC +1.3% PA). Crude rates

broadly followed the same trends with the same fluctuations, but over the whole 30-year period the trend was stable in males (AAPC +0.7% PA) and females (APC -0.1% PA).

Adjusting for age and population size, leukaemia EASIR rates in males increased significantly during 1994-2004 (APC 2.8% PA) followed by periods of significant decline during 2004-2019 (APC-1.2%) and 2019-2023 (APC -6.3% PA). Rates in females increased marginally during 1994-2009 (APC +0.9%) and then entered a period of significant decline during 2009-2019 (APC -2.3% PA).

The number of leukaemia deaths increased in males during 2009-2023 (APC +2.4% PA) after an earlier period of fluctuation, whereas in females the number of deaths was stable or declining slightly during 2009-2023 (APC -0.3%PA). The crude mortality rates broadly followed the same trends and fluctuations. After adjusting for age, EASMR mortality in males was stable or declined marginally from 2009-2023 (APC -0.8% PA). In females EASMR mortality rates declined significantly during 1999-2023 (APC -2.4% PA).

Overall, this figure shows that although leukaemia incidence increased earlier in the study period, both incidence and mortality stabilised or declined marginally on an age-standardised basis in recent years.

CANCER AND AGE PROFILE

Table 4-1 shows median age at cancer diagnosis and death. Medians summarise central tendencies only, and diagnosis and death can occur at any almost any age outside these typical ranges. Median age at cancer diagnosis and death varied substantially by cancer type and age-of-onset category during 2019–2023. For all invasive cancers combined (excluding NMSC), the median age at diagnosis was 68 years, compared with 76 years at death. The difference of eight years between these medians reflects the population-level separation between the distributions of age at diagnosis and age at death, rather than survival time for individuals.

Table 4-1.
Median age at cancer diagnosis and death, with interquartile ranges (IQR) and estimated diagnosis–death interval, by age-of-onset category (2019–2023)

AGE DISTRIBUTION	CANCER	INCIDENCE		MORTALITY		
		median age	IQR	median age	IQR	difference (years)
	C00-43, C45-96 all invasive cancers excl. NMSC	68	[59, 78]	76	[68, 84]	8
Predominantly younger onset <50	C62 testis	37	[29, 44]	42	[34, 50]	5
	C81 Hodgkin lymphoma	39	[21, 56]	76	[69, 84]	38
	C53 cervix uteri	48	[37, 59]	59	[48, 70]	11
	C73 thyroid	48	[36, 61]	73	[64, 82]	25
Predominantly middle age onset 60-69	C50 breast (F)	61	[50, 71]	79	[69, 89]	18
	C71-72 brain & spinal cord	63	[50, 76]	69	[60, 78]	6
	C56 ovary	65	[55, 76]	75	[66, 84]	10
	C00-14, C30-32 head & neck	66	[57, 74]	72	[63, 80]	6
	C54 corpus uteri (uterine)	66	[58, 74]	76	[68, 84]	11
	C43 melanoma of skin	66	[54, 78]	80	[72, 89]	14
	C64 kidney	67	[58, 76]	75	[66, 84]	8
	C61 prostate	68	[62, 74]	80	[73, 86]	11
	C82-86 non-Hodgkin lymphoma	69	[60, 79]	78	[71, 85]	9
Predominantly older age onset 70+	C18-20 colorectal	71	[61, 80]	78	[69, 86]	7
	C44 NMSC	71	[61, 80]	85	[79, 90]	14
	C90 multiple myeloma	71	[63, 79]	80	[73, 86]	9
	C15 oesophagus	71	[63, 80]	74	[66, 82]	3
	C22 liver	72	[64, 80]	74	[66, 82]	2
	C33-34 lung	72	[65, 79]	74	[67, 81]	2
	C16 stomach	73	[64, 82]	76	[68, 85]	4
	C25 pancreas	74	[66, 82]	76	[68, 83]	2
	C67,D090,D414,NMIBC (all bladder)	74	[66, 81]	81	[74, 87]	7
	C67 bladder	76	[68, 83]	81	[74, 87]	5
Bimodal age distribution	C91-95 leukaemia	68	[56, 79]	78	[70, 85]	10

Cancers with a predominantly younger age at onset (<50) were diagnosed decades earlier than death, resulting in large diagnosis–death intervals, particularly for Hodgkin lymphoma, thyroid cancer and cervical cancer, consistent with prolonged survival (Table 4-1).

Middle-age onset cancers, including breast, brain, ovarian, head and neck, melanoma, kidney, prostate cancers and NHL, showed diagnosis mainly in the early to mid-60s, with mortality occurring later and moderate separation between age at diagnosis and death except for breast (18 years), melanoma (14 years) and prostate (11 years) which showed longer separation reflecting longer survival for these common cancers.

In contrast, predominantly older-onset cancers, such as colorectal, lung, stomach, pancreas and bladder cancers, showed diagnosis and death concentrated at older ages (70+) with shorter diagnosis–death intervals reflecting poorer survival following later-life diagnosis.

Leukaemia displayed a bimodal pattern (Table 4-9), with diagnosis occurring across a wide age range and death concentrated at older ages (Figure 6-1).

Table 4-2 shows average annual incidence and mortality for all invasive cancers (excluding NMSC) by age group in both sexes. Both incidence and mortality rates increase sharply with age, but the age distribution differs between incidence and mortality.

Table 4-2. Average annual incidence and mortality, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C00-43, C45-96 all invasive cancers excl. NMSC							
	0–14	147	0.6%	14.5	18	0.2%	1.8
	15–39	1,120	4.4%	67.3	131	1.3%	7.9
	40–54	3,737	14.7%	338.1	698	7.1%	63.2
	55–69	9,061	35.6%	1,124.7	2,499	25.6%	310.2
	70–84	9,385	36.9%	2,138.6	4,574	46.8%	1,042.4
	85+	1,974	7.8%	2,476.0	1,847	18.9%	2,316.5

rate (per 100,000)

Cancer incidence is highest among adults aged 55–69 and 70–84 years, which together account for over 70% of all new cases (Table 4-2). The 70–84 age group represents the single largest share of diagnoses (36.9%), followed closely by those aged 55–69 years (35.6%). In contrast, children and young adults contribute very little to the overall burden, with individuals under 40 accounting for just 5% of cases, and those aged 0–14 years comprising less than 1%.

Mortality is even more strongly concentrated at older ages than incidence. Nearly half of all cancer deaths (46.8%) occur among individuals aged 70–84 years, and a further 18.9% occur in those aged 85 years and over. While people aged 55–69 account for a large proportion of diagnoses, their share of deaths (25.6%) is noticeably lower than that of the 70–84 age group, reflecting poorer prognosis and higher competing risks at older ages.

Age-specific rates highlight the steep increase in cancer burden with advancing age. Incidence rates rise from 14.5 per 100,000 in children aged 0–14 to 2,476.0 per 100,000 among those aged 85 years and over. Mortality rates show an even more pronounced gradient, increasing from 1.8 per 100,000 in children to 2,316.5 per 100,000 in the oldest age group.

Overall, cancer is diagnosed most frequently in people aged 55–84 years, cancer mortality is disproportionately concentrated in the oldest age groups, particularly those aged 70 years and over.

Table 4.3. Average annual incidence and mortality by age group for head and neck, gastrointestinal and lung cancer, 2019–2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C00-14, C30-32 head & neck							
	0–14	2	0.2%	0.2	-	0.0%	-
	15–39	22	2.7%	1.4	2	0.6%	0.1
	40–54	140	17.2%	12.7	26	9.5%	2.4
	55–69	348	42.6%	43.2	100	36.0%	12.4
	70–84	262	32.1%	59.8	119	43.0%	27.2
	85+	42	5.1%	52.4	30	10.9%	37.9
C15 oesophagus							
	0–14	-	0.0%	-	-	0.0%	-
	15–39	4	0.7%	0.2	4	0.8%	0.2
	40–54	49	9.3%	4.4	32	7.4%	2.9
	55–69	190	36.2%	23.6	134	30.5%	16.6
	70–84	227	43.1%	51.6	198	45.1%	45.2
	85+	56	10.7%	70.2	71	16.1%	88.8
C16 stomach							
	0–14	0	0.0%	0.0	-	0.0%	-
	15–39	15	2.5%	0.9	4	1.3%	0.2
	40–54	63	10.6%	5.7	26	8.4%	2.3
	55–69	174	29.3%	21.6	74	23.9%	9.2
	70–84	272	45.8%	62.0	147	47.6%	33.5
	85+	70	11.7%	87.3	58	18.9%	73.0
C18-20 colorectal							
	0–14	5	0.2%	0.5	-	0.0%	-
	15–39	88	3.2%	5.3	14	1.4%	0.8
	40–54	315	11.6%	28.5	78	7.6%	7.1
	55–69	907	33.3%	112.5	259	25.1%	32.1
	70–84	1,103	40.5%	251.5	446	43.2%	101.6
	85+	303	11.1%	380.5	235	22.8%	295.2
C22 liver and intrahepatic bile ducts							
	0–14	2	0.7%	0.2	-	0.0%	-
	15–39	4	1.0%	0.2	4	1.0%	0.3
	40–54	30	8.2%	2.7	26	6.0%	2.3
	55–69	119	33.1%	14.8	122	28.3%	15.1
	70–84	169	47.0%	38.5	217	50.4%	49.4
	85+	36	10.1%	45.4	62	14.3%	77.3
C25 pancreas							
	0–14	1	0.1%	0.1	-	0.0%	-
	15–39	9	1.3%	0.5	2	0.3%	0.1
	40–54	47	7.1%	4.3	28	4.7%	2.5
	55–69	198	29.6%	24.6	162	27.1%	20.1
	70–84	320	47.9%	73.0	306	51.3%	69.8
	85+	93	13.9%	116.9	99	16.6%	124.7
C33-34 bronchus, lung and trachea							
	0–14	-	0.0%	-	0	0.0%	0.0
	15–39	17	0.6%	1.0	5	0.3%	0.3
	40–54	171	6.1%	15.5	93	4.7%	8.5
	55–69	982	35.1%	121.8	597	30.2%	74.1
	70–84	1,385	49.5%	315.7	1,029	52.2%	234.6
	85+	243	8.7%	305.0	249	12.6%	312.0

rate (per 100,000)

Table 4.3 shows differences between cancer sites in the extent to which mortality is displaced to older ages relative to incidence, reflecting underlying survival patterns. Very few cases are observed below age 40, with incidence for most sites concentrated in older age groups, particularly at ages 70–84 years, reflecting the predominance of these cancers in later life. Lower numbers and rates at age 85+ years largely reflect the smaller population size in this age group. For oesophageal, stomach, liver, lung and pancreatic cancers, there is close correspondence between the age distributions of incidence and mortality, indicating poor prognosis

and short survival following diagnosis. In contrast, colorectal cancer shows a degree of divergence, with mortality more heavily concentrated at older ages than incidence, consistent with better survival among those diagnosed at younger ages.

Head and neck cancers (C00–14)
Head and neck cancers show a relatively broad age distribution at diagnosis, with most incident cases occurring in the 55–69 age group, and lower proportions diagnosed at ages 70–84 and 85+ (Table 4-3). In contrast, mortality is more heavily concentrated in older age groups, particularly ages 70–84. This shift indicates better survival among patients diagnosed at younger ages and a clearer separation between age at diagnosis and age at death.

Oesophageal cancer (C15)
Incidence of oesophageal cancer is strongly concentrated at older ages, and the majority occurring in the 55–69 and 70–84 age groups (Table 4-3). Mortality closely mirrors this pattern, with most deaths occurring in those aged 70–84. The close correspondence between age at incidence and age at death reflects the poor prognosis of oesophageal cancer and limited survival following diagnosis.

Stomach cancer (C16)
Stomach cancer incidence increases steadily across age groups, with most diagnoses occurring in those aged 70–84 and 85+ (Table 4-3). Mortality is also concentrated at older ages, with deaths occurring in the 70–84 and 85+ age groups. This pattern suggests limited survival, with little separation between age at diagnosis and death.

Colorectal cancer (C18–20)
Colorectal cancer shows a wide age distribution at incidence, with substantial numbers of cases diagnosed in the 40–54, 55–69, and 70–84 age groups (Table 4-3). Although incidence rises with increasing age, mortality is more heavily weighted towards older ages, particularly 70–84 and 85+. The divergence between the incidence and mortality age distributions indicates relatively better survival among those diagnosed in younger age groups.

Liver and intrahepatic bile duct cancers (C22)
Liver cancer incidence is rare in younger age groups and rises sharply from age 55–69, peaking in the 70–84 age group (Table 4-3). Mortality closely follows the incidence distribution but is even more concentrated in the 70–84 and 85+ age groups. The similarity of these age profiles, combined with high mortality rates at older ages, indicates poor survival, particularly among elderly patients.

Pancreatic cancer (C25)
Pancreatic cancer incidence is heavily concentrated at older ages, with the majority occurring in the 70–84 age group (Table 4-3). Mortality exhibits an almost identical age distribution, with most deaths occurring in the 70–84 and 85+ age groups. This near-overlap of incidence and mortality profiles highlights the extremely poor prognosis associated with pancreatic cancer.

Lung, bronchus and trachea cancers (C33–34)
Lung cancer incidence spans a broad adult age range but increases steeply from 55–69 onwards, with the largest burden in the 70–84 age group (Table 4-3). Mortality is also more concentrated among those aged 70+, compared with incidence. The close correspondence between incidence and mortality rates in the older age groups, particularly from age 70 years onwards, indicates poor prognosis with high mortality rates at age 85 years and over.

Table 4-4. Average annual incidence and mortality, skin cancers, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C43 melanoma of skin							
	0–14	1	0.1%	0.1	0	0.1%	0.0
	15–39	104	7.9%	6.3	3	1.9%	0.2
	40–54	263	19.8%	23.8	19	10.6%	1.7
	55–69	405	30.5%	50.3	41	23.4%	5.1
	70–84	437	32.9%	99.5	72	41.0%	16.4
	85+	117	8.8%	147.0	40	23.0%	50.7
C44 other malignant neoplasms of skin NMSC							
	0–14	2	0.0%	0.2	-	0.0%	-
	15–39	285	2.7%	17.1	1	0.6%	0.0
	40–54	1,474	14.0%	133.4	4	4.0%	0.4
	55–69	3,307	31.4%	410.5	15	15.1%	1.9
	70–84	4,405	41.8%	1,003.9	38	37.5%	8.6
	85+	1,066	10.1%	1,337.1	43	42.9%	54.2

rate (per 100,000)

Malignant melanoma of skin (C43)

Incidence of malignant melanoma shows a broad adult age distribution, with cases occurring across all adult age groups but increasing steadily with age (Table 4-4). Most incident cases occur in the 40–54, 55–69 and 70–84 age groups, with the highest proportion in those aged 70–84. Incidence rates rise sharply with increasing age, particularly in the 70–84 and 85+ groups. In contrast, mortality is more heavily concentrated at older ages, with most deaths occurring in the 70–84 and 85+ age groups. The rate and proportion of deaths at ages 85+ are substantially higher than the proportion and rate of incident cases in this age group, indicating a clear shift towards older age at death relative to age at diagnosis. This pattern is consistent with better survival among patients diagnosed at younger ages and poorer outcomes at advanced ages.

Other malignant neoplasms of skin (NMSC, C44)

NMSC incidence is strongly age-dependent, with very few cases diagnosed below age 40 and a marked increase from 55–69 onwards (Table 4-4). The largest proportion of cases occurs in the 70–84 age group, with highest age-specific incidence rates observed in those aged 85+.

Mortality, while very much lower in absolute terms than incidence, is almost exclusively concentrated in the oldest age groups. Deaths are very rare below age 55 and occur predominantly in the 70–84 and 85+ groups, with the highest proportion of deaths at ages 85+. Compared with incidence, mortality is more strongly shifted towards extreme old age, reflecting the generally favourable prognosis of most NMSCs.

Table 4-5. Average annual incidence and mortality, cancers in females, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C50 breast							
	0–14	0	0.0%	0.0	-	0.0%	-
	15–39	210	5.6%	12.6	17	2.2%	1.0
	40–54	1,162	31.0%	105.2	115	15.3%	10.4
	55–69	1,289	34.4%	160.1	191	25.5%	23.8
	70–84	890	23.7%	202.9	286	38.1%	65.1
	85+	201	5.4%	251.8	142	18.9%	177.6
C53 cervix uteri							
	0–14	-	0.0%	-	-	0.0%	-
	15–39	76	29.1%	4.6	9	10.8%	0.6
	40–54	95	36.4%	8.6	24	28.2%	2.2
	55–69	59	22.6%	7.4	26	31.1%	3.3
	70–84	27	10.3%	6.2	20	23.1%	4.5
	85+	4	1.6%	5.3	6	6.8%	7.3
C54 corpus uteri							
	0–14	-	0.0%	-	-	0.0%	-
	15–39	11	1.8%	0.6	0	0.2%	0.0
	40–54	93	16.0%	8.4	7	6.0%	0.6
	55–69	273	46.9%	33.8	33	28.0%	4.1
	70–84	178	30.6%	40.5	56	47.6%	12.7
	85+	27	4.6%	33.9	21	18.3%	26.8
C56 ovary							
	0–14	2	0.4%	0.2	0	0.1%	0.0
	15–39	24	6.2%	1.5	5	1.8%	0.3
	40–54	78	20.0%	7.1	31	10.6%	2.8
	55–69	137	34.9%	17.0	92	31.1%	11.4
	70–84	121	31.0%	27.7	127	43.1%	29.0
	85+	30	7.6%	37.1	39	13.3%	49.2

rate (per 100,000)

Breast cancer (C50)

Breast cancer incidence is concentrated in mid-to-older adult ages, with most cases diagnosed in the 40–54 and 55–69 age groups, and substantial numbers also in 70–84 (Table 4-5). Incidence rates increase with age and are highest in the 70–84 and 85+ groups.

Mortality, however, is more strongly concentrated at older ages, with the largest proportion of deaths occurring in 70–84. The proportion of deaths at ages 85+ is markedly higher than the proportion of incident cases in this age group, indicating a clear shift towards older age at death relative to diagnosis and reflecting better survival for this common cancer.

Cervical cancer (C53)

Cervical cancer shows a younger age distribution at incidence than other female cancers, with most cases occurring in the 15–39 and 40–54 age groups (Table 4-5). Incidence declines at older ages, with relatively few cases diagnosed in those aged 70–84 and 85+.

In contrast, mortality is shifted towards older age groups, with deaths distributed mainly across 40–54, 55–69, and 70–84. This divergence suggests that although cervical cancer is often diagnosed at younger ages, deaths tend to occur later, indicating a longer interval between diagnosis and death for some patients.

Cancer of the corpus uteri (C54)

Incidence of corpus uteri (uterine) cancer is largely confined to older adult ages, with most cases diagnosed in the 55–69 and 70–84 age groups (Table 4-5). Incidence rates increase sharply from 40–54 onwards.

Mortality is even more concentrated at older ages, particularly in the 70–84 group, with a substantial proportion of deaths also occurring at 85+. The age distribution of deaths is shifted towards older ages compared with incidence, indicating poorer outcomes with increasing age.

Ovarian cancer (C56)

Ovarian cancer incidence rises steadily with age, with most cases diagnosed in the 55–69 and 70–84 age groups (Table 4-5). Mortality is more heavily concentrated in the oldest age groups, particularly 70–84 and 85+, compared with incidence. The proportion of deaths and rate occurring at 85+ are notably higher than the corresponding proportion of incident cases, reflecting poorer survival at advanced ages and a shift towards older age at death relative to diagnosis.

Table 4-6. Average annual incidence and mortality, cancers in males, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C61 prostate							
	0–14	1	0.0%	0.1	-	0.0%	-
	15–39	3	0.1%	0.2	-	0.0%	-
	40–54	341	7.9%	30.8	4	0.6%	0.3
	55–69	2,180	50.7%	270.6	75	12.1%	9.3
	70–84	1,636	38.0%	372.7	318	51.2%	72.6
	85+	138	3.2%	173.6	224	36.0%	280.9
C62 testis							
	0–14	1	0.5%	0.1	-	0.0%	-
	15–39	106	63.2%	6.4	2	38.5%	0.1
	40–54	50	29.8%	4.5	1	26.9%	0.1
	55–69	9	5.1%	1.1	1	15.4%	0.1
	70–84	2	1.0%	0.4	1	11.5%	0.1
	85+	1	0.4%	0.8	0	7.7%	0.5

rate (per 100,000)

Prostate cancer (C61)

Prostate cancer incidence is predominantly a disease of older age, with very few cases diagnosed below age 40 (Table 4-6). The majority of incident cases occur in the 55–69 and 70–84 age groups, with the largest proportion in 55–69. Incidence rates rise sharply with age, peaking in the 70–84 group before declining slightly at ages 85+. In contrast, mortality is more strongly concentrated in the oldest age groups, with over half of deaths occurring in those aged 70–84 and a substantial additional proportion at 85+. The proportion of deaths and rate in the 85+ age group are markedly higher than the corresponding proportion and rate of incident cases, indicating a clear shift towards older age at death relative to diagnosis. This pattern reflects relatively good survival following diagnosis at younger ages and poorer outcomes at advanced ages.

Testicular cancer (C62)

Testicular cancer shows a distinctly younger age distribution at incidence, with most cases diagnosed in the 15–39 age group and a substantial additional proportion in 40–54 (Table 4-6). Incidence declines sharply after age 55, with very few cases among those aged 70–84 and 85+.

Mortality, while very low in absolute numbers, is less concentrated in the youngest age group than incidence and is distributed across 15–39, 40–54, and 55–69, with deaths also occurring at older ages. The presence of deaths in older age groups despite very low incidence at these ages reflects both long-term survival following earlier diagnosis for most patients. Overall, testicular cancer demonstrates a pronounced separation between the age profile of incidence and mortality, consistent with its generally favourable survival prognosis.

Table 4-7. Average annual incidence and mortality, urological cancers, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C64 kidney, except renal pelvis							
	0–14	7	0.9%	0.7	1	0.3%	0.1
	15–39	23	3.1%	1.4	1	0.4%	0.1
	40–54	127	17.7%	11.5	21	9.0%	1.9
	55–69	266	37.0%	33.0	60	25.9%	7.4
	70–84	251	34.9%	57.2	103	44.8%	23.5
	85+	45	6.3%	56.9	45	19.6%	56.4
C67 bladder							
	0–14	1	0.2%	0.1	0	0.1%	0.0
	15–39	3	0.7%	0.2	0	0.2%	0.0
	40–54	26	5.2%	2.3	7	2.8%	0.6
	55–69	124	24.8%	15.4	35	14.8%	4.3
	70–84	260	52.0%	59.2	114	49.1%	26.1
	85+	86	17.1%	107.4	77	33.0%	96.3
C67,D090,D414,NMIBC(all bladder)							
	0–14	1	0.1%	0.1	0	0.1%	0.0
	15–39	10	1.1%	0.6	0	0.2%	0.0
	40–54	67	6.9%	6.1	7	2.8%	0.6
	55–69	284	29.3%	35.3	35	14.8%	4.3
	70–84	485	50.1%	110.4	114	49.1%	26.1
	85+	121	12.5%	151.5	77	33.0%	96.3

rate (per 100,000)

Kidney cancer, excluding renal pelvis (C64)

Kidney cancer is predominantly diagnosed at older ages, with most cases occurring in the 55–69 and 70–84 age and incidence declines at ages 85+ (Table 4-7). Mortality is more heavily concentrated in older age groups, particularly 70–84, with a substantial proportion of deaths also occurring at 85+. Compared with incidence, deaths are shifted towards older ages, indicating better survival among those diagnosed at younger ages and poorer outcomes with increasing age.

Bladder cancer (C67)

Bladder cancer incidence is strongly age-dependent, with most cases diagnosed in the 70–84 age group and a substantial proportion also occurring at 55–69 and 85+ (Table 4-7). Incidence rates increase markedly with age up to 85+, particularly after age 55.

Mortality follows a similar age distribution but is even more concentrated at older ages, with the majority of deaths occurring in the 70–84 group and a larger proportion at 85+ than seen for incidence. This shift suggests limited survival at advanced ages and increased vulnerability among the oldest patients.

Bladder cancer including NMIBC (C67, D090, D414, NMIBC)

When all bladder cancers are considered, including non-muscle-invasive bladder cancer (NMIBC), the age distribution of incidence remains heavily skewed towards older ages, with most cases diagnosed in the 55–69 and 70–84 age groups and very high incidence rates at 70–84 and 85+ (Table 4-7).

Mortality, while lower relative to incidence because of the inclusion of NMIBC, is predominantly concentrated in the oldest age groups, particularly 70–84 and 85+. The age distribution of deaths is shifted more towards extreme old age than the distribution of diagnoses, reflecting the generally favourable prognosis of NMIBC alongside poorer outcomes for invasive disease and increasing frailty with age.

Table 4-8. Average annual incidence and mortality, brain and thyroid cancers, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C71-72 brain & spinal cord							
	0–14	25	5.9%	2.5	7	2.1%	0.7
	15–39	55	12.9%	3.3	21	6.6%	1.3
	40–54	71	16.6%	6.4	55	16.8%	5.0
	55–69	131	30.6%	16.3	116	35.5%	14.4
	70–84	124	28.8%	28.2	110	33.9%	25.2
	85+	22	5.2%	27.8	17	5.2%	21.1
C73 thyroid							
	0–14	2	0.7%	0.2	-	0.0%	-
	15–39	89	31.1%	5.4	0	1.6%	0.0
	40–54	89	31.1%	8.1	1	4.8%	0.1
	55–69	64	22.3%	7.9	7	27.2%	0.8
	70–84	38	13.2%	8.6	13	52.0%	3.0
	85+	5	1.6%	5.8	4	14.4%	4.5

rate (per 100,000)

Table 4-8 illustrates markedly contrasting patterns: a high-fatality cancer with late-age predominance (brain and spinal cord) versus a much lower-fatality cancer with earlier age distribution (thyroid) and very good survival prospects.

Brain and spinal cord cancers (C71–72)

Primary brain and spinal cord cancers show a broad age distribution at incidence, with cases occurring across all age groups, including children (Table 4-8). While a small proportion of cases are diagnosed at ages 0–14, incidence increases through adulthood, with most diagnoses occurring in the 55–69 and 70–84 age groups. Incidence rates rise steadily with age, peaking in older age groups.

Mortality broadly mirrors the incidence distribution but is slightly more concentrated at older ages, particularly in the 55–69 and 70–84 groups. The proportion of deaths at ages 85+ is similar to incidence, indicating relatively limited long-term survival across age groups. Overall, the close alignment between age at diagnosis and age at death reflects the generally poor prognosis associated with many brain and spinal cord tumours.

Thyroid cancer (C73)

Thyroid cancer shows a predominantly younger age distribution at incidence compared with most other cancer sites (Table 4-8). The majority of cases are diagnosed in the 15–39 and 40–54 age groups, with fewer cases occurring at older ages. Incidence declines after age 55–69, and relatively few cases are diagnosed at 70–84 and 85+.

In contrast, mortality while quite low is markedly shifted towards older age groups, with most deaths occurring in those aged 70–84, followed by 55–69 and 85+. The proportion of deaths at older ages is substantially higher than the proportion of incident cases in these age groups, reflecting the typically favourable prognosis of thyroid cancer at younger ages and relatively low numbers of deaths occurring later in life, often among older individuals.

Table 4-9. Average annual incidence and mortality, haematological cancers, percent and age-specific rate: 2019-2023

		INCIDENCE			MORTALITY		
CANCER	AGE	CASES	%	RATE	DEATHS	%	RATE
C81 Hodgkin lymphoma							
	0–14	8	5.4%	0.8	-	0.0%	-
	15–39	68	45.7%	4.1	2	7.7%	0.1
	40–54	25	17.2%	2.3	1	3.8%	0.1
	55–69	25	17.2%	3.2	4	18.3%	0.5
	70–84	19	12.8%	4.3	11	51.0%	2.4
	85+	3	1.8%	3.3	4	19.2%	5.0
C82-86 non-Hodgkin lymphoma							
	0–14	6	0.7%	0.6	1	0.2%	0.1
	15–39	48	5.7%	2.9	4	1.3%	0.2
	40–54	112	13.3%	10.1	10	3.6%	0.9
	55–69	267	31.7%	33.1	54	18.6%	6.7
	70–84	349	41.5%	79.4	155	53.5%	35.3
	85+	60	7.1%	74.7	66	22.8%	82.8
C90 multiple myeloma							
	0–14	-	0.0%	-	-	0.0%	-
	15–39	5	1.3%	0.3	-	0.0%	-
	40–54	41	10.5%	3.7	5	2.8%	0.5
	55–69	138	35.2%	17.1	33	18.0%	4.2
	70–84	169	43.1%	38.4	100	53.8%	22.8
	85+	39	9.9%	48.7	47	25.5%	59.4
C91-95 leukaemia							
	0–14	47	8.1%	4.6	3	1.1%	0.3
	15–39	37	6.5%	2.3	5	1.8%	0.3
	40–54	74	12.8%	6.7	15	5.2%	1.4
	55–69	163	28.3%	20.3	55	19.2%	6.8
	70–84	204	35.4%	46.5	143	49.9%	32.7
	85+	51	8.9%	64.0	65	22.8%	82.0

rate (per 100,000)

Hodgkin lymphoma (C81)

Hodgkin lymphoma shows a younger age distribution at incidence compared with other haematological malignancies (Table 4-9). Most cases are diagnosed in the 15–39 age group, with smaller proportions in 40–54 and 55–69, and relatively few cases at older ages.

Mortality, while very low, is shifted towards older age groups, with the largest proportion of deaths occurring in 70–84, followed by 85+ and 55–69. The clear divergence between the young age profile of incidence and the older age profile of mortality reflects the generally favourable prognosis for younger patients and poorer outcomes with increasing age

Non-Hodgkin lymphoma (C82–86)

Non-Hodgkin lymphoma incidence increases markedly with age, with most cases diagnosed in the 55–69 and 70–84 age groups (Table 4-9). Incidence rates rise steeply across adult age groups and remain high at 85+. Mortality closely follows the incidence distribution but is more heavily concentrated at older ages, particularly in the 70–84 and 85+ groups. The modest shift towards older age at death relative to diagnosis indicates reduced survival with advancing age, consistent with disease heterogeneity and increasing comorbidity.

Multiple myeloma (C90)

Multiple myeloma is predominantly a cancer of older age, with most cases diagnosed in the 55–69 and 70–84 age groups (Table 4-9). Incidence rates increase steadily with age and are highest in the oldest groups.

Mortality is strongly concentrated at older ages, particularly in 70–84 and 85+ and closely mirrors the incidence distribution. The limited separation between age at diagnosis and age at death reflects the poor long-term survival associated with multiple myeloma, especially at advanced ages.

Leukaemia (C91–95)

Leukaemia comprises several major subtypes, each with a characteristic age profile. Leukaemia shows a bimodal age distribution at incidence with a notable proportion of cases diagnosed at 0–14, alongside increasing incidence from 55–69 onwards (Table 4-9). The largest number of cases occurs in the 70–84 age group. Mortality is predominantly concentrated in older age groups, particularly 70–84 and 85+, with relatively few deaths at younger ages. The shift towards older age at death relative to incidence indicates better survival among children and younger adults, with substantially poorer outcomes at older ages.

Across haematological cancers (Table 4-9), age patterns vary considerably by subtype. Hodgkin lymphoma shows the greatest separation between age at incidence and age at death, reflecting excellent survival at younger ages. In contrast, non-Hodgkin lymphoma and multiple myeloma show strong concentration of both incidence and mortality at older ages, with limited separation between diagnosis and death. Leukaemia displays mixed age patterns, with childhood incidence but mortality largely confined to older adults. Together, these findings highlight the strong influence of cancer subtype and age-related prognosis on observed mortality distributions.

CANCER PREVALENCE

Complete cancer prevalence is defined as the number of persons diagnosed with cancer who were still alive at a particular point in time (i.e. alive on 31/12/2023 at the time of writing). For a cancer registry, fixed-duration prevalence is the number of cancer survivors calculated directly from observed data collected by the cancer registry since it was established. The NCRI began national collation of cancer registration in 1994, and it currently holds 30 years of complete incidence and follow-up information on cancer cases, up to the end of 2023. However, there remains a subset of cancer patients alive at the end of 2023 who are not included in NCRI data because they were diagnosed before 1994. The size of this small hidden subset will gradually diminish as the registry accrues 40+ years of cancer incidence and follow-up data [19] from 2036 onwards. In the meantime, the size of the hidden subset was estimated [20]. The sum of the fixed-duration cancer survivor population (1994-2023) and estimated numbers of survivors from the hidden cancer subset (pre-1994) gives an estimate of complete prevalence.

Table 5-1. Fixed duration and estimated complete prevalence by sex: Estimated number of cancer survivors* at end of 2023.

Sex	Fixed duration prevalence – diagnosed during 1994-2023	%	Complete prevalence – diagnosed up to end of 2023	%
both sexes	220,099	100%	230,946	100%
males	108,704	49%	112,564	49%
females	111,395	51%	118,382	51%

*Survivors of any invasive cancer other than NMSC (ICD-10 C00-96 excluding C44).
Only the first invasive cancer was counted per patient ignoring any subsequent cancers in other body sites.

The figure reported for complete cancer prevalence (up to 31/12/2022) in the annual report of 2024 was 220,728 [21]. For this report (up to 31/12/2023) the same figure was estimated at 230,946 (Table 5-1) which comprised c.4.4% of the Irish population in 2023. These figures include patients still undergoing active treatment or palliative treatment at the end of 2023, in addition to longer-term survivors. Prevalence was evenly distributed by sex, with 51% female and 49% male survivors.

Table 5-2. Fixed duration and estimated complete prevalence, by cancer type: Number of cancer survivors at the end of 2023.

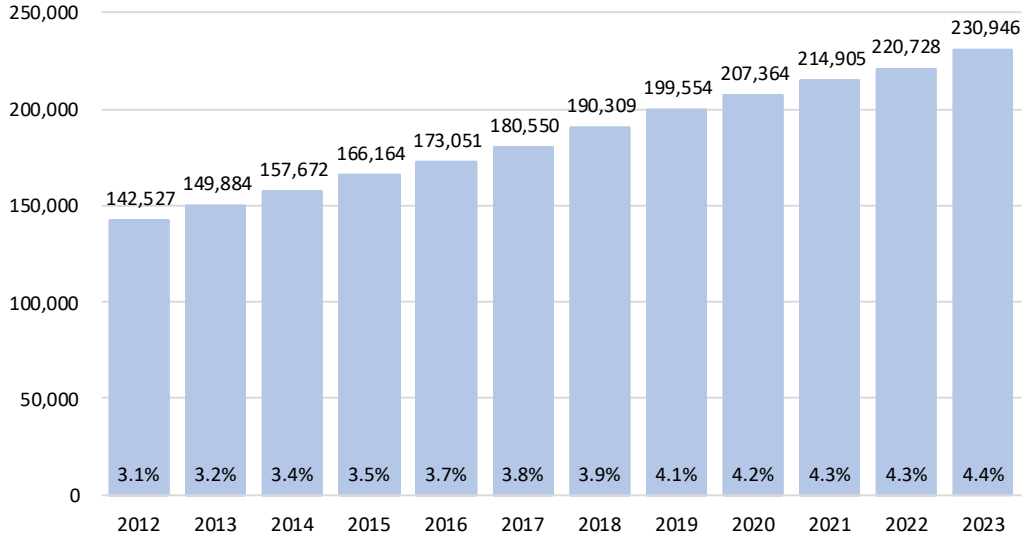
	Fixed duration prevalence diagnosed during 1994-2023	Complete prevalence diagnosed up to end of 2023	%*
C50 breast	48,985	51,913	22.5%
C61 prostate	48,944	49,407	21.4%
C18-20 colorectal	22,526	23,696	10.3%
C43 melanoma of skin	15,179	16,308	7.1%
C82-86 non-Hodgkin lymphoma	8,389	8,978	3.9%
C34 bronchus and lung	6,975	7,046	3.1%
C54 corpus uteri	6,300	6,708	2.9%
C91-95 leukaemia	5,908	6,513	2.8%
C00-14, C30-32 head & neck	5,903	6,095	2.6%
C64 kidney, except renal pelvis	5,818	6,042	2.6%
C62 testis	4,407	5,792	2.5%
C53 cervix uteri	4,088	5,329	2.3%
C73 thyroid	3,879	4,105	1.8%
C67 bladder	3,053	3,695	1.6%
C56-57 ovary and other and unspecified female genital organs	3,036	3,447	1.5%
C81 Hodgkin lymphoma	2,652	3,305	1.4%
C16 stomach	2,470	2,537	1.1%
C71-72 brain & spinal cord	2,236	2,253	1.0%
C90 multiple myeloma	1,926	2,249	1.0%
C15 oesophagus	1,532	1,557	0.7%
C25 pancreas	986	995	0.4%
C22 liver and intrahepatic bile ducts	747	757	0.3%

*Percentage of all cancer survivors (C00-43, C45-96). Percentages do not add up to 100% of the 'all cancer' set displayed in Table 5-1 (N=230,946) as the patient's first cancer may have been of a rarer type not listed in Table 5-2.

Overall, the topmost common cancers in the prevalent cancer population were breast cancer (22.5% of all cancer survivors), prostate cancer (21.4%), colorectal cancer (10.3%) and skin melanoma (7.1%) (Table 5-2).

Lung cancer, a common cancer with relatively poor survival, accounted for only 3.1% of survivors, and less common cancers with poor survival such as liver, pancreatic, oesophageal cancers and multiple myeloma comprised <3% of all cancer survivors combined (Table 5-2).

Figure 5-1.
Estimated complete cancer prevalence in Ireland up to end of 2023

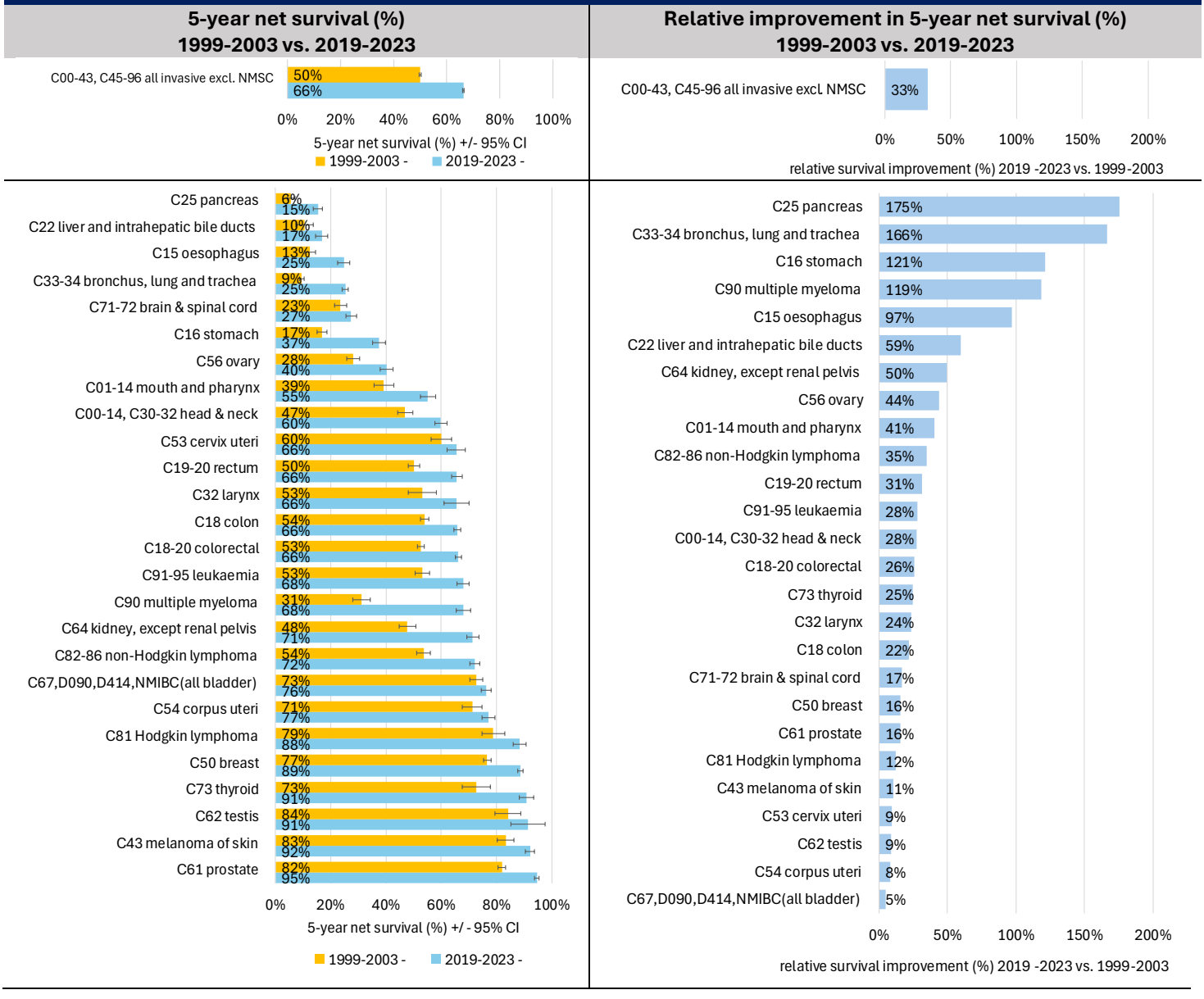


The numbers above the bars show the numbers living with a cancer diagnosis at the end of the year on the x-axis.
Percentages represent the proportion of the Irish population living with a cancer diagnosis.
Figures for 2023 are based on the latest available complete data at the time of writing.

CANCER SURVIVAL

Five-year net survival for all invasive cancers combined (excluding NMSC) increased from 50% in 1999–2003 to 66% in 2019–2023, representing a relative improvement of 33% over the period (Figure 6-1).

FIGURE 6-1.
Five-year age-standardised net survival by cancer site, with relative improvement between 1999–2003 and 2019–2023



Survival improvements were observed for all cancer types shown, although levels and gains varied widely (Figure 6-1). For the period 2019–2023, five-year net survival remained lowest for pancreatic cancer (15%), followed by liver cancer, oesophageal cancer and lung cancer, all with survival at 25%. Despite low survival, some of these cancers showed substantial relative improvements compared to cases diagnosed during 1999-2003, particularly pancreatic cancer and lung cancer, which experienced the largest relative increases in five-year survival (approximately 175% and 166%, respectively).

Cancers with intermediate survival in 2019–2023 included stomach, head and neck, colorectal cancer, multiple myeloma and ovarian cancer, all of which showed clear improvements since 1999–2003. Breast, prostate, melanoma of skin, testicular cancer, and thyroid cancer had five-year survival exceeding 80% in 2019–2023.

The largest absolute survival gains were generally observed for cancers with low or intermediate baseline survival, including pancreatic cancer, lung cancer, stomach cancer and oesophageal cancer. In contrast, cancers with already high survival, such as breast, prostate, testicular, thyroid, and bladder & NMIBC (all bladder), showed smaller relative improvements.

Overall, there was sustained improvements in cancer survival in Ireland over the past two decades, alongside persistent low survival for certain high-fatality cancers, notably pancreatic, liver, and oesophageal and lung cancers.

Survival by cancer site and stage

Figure 6-2. Five-year net survival (2019-2023), by cancer site and stage at diagnosis: number and percentage at time 0

cancer	stage	No. at time 0	[%]	5-yr net survival	[%]
C00-14, C30-32 head & neck	unstaged	584	17%		61%
	IV	1,335	39%		43%
	III	531	15%		66%
	II	342	10%		79%
	I	639	19%		92%
C15 oesophagus	unstaged	684	31%		21%
	IV	588	26%		2%
	III	481	22%		19%
	II	185	8%		42%
	I	287	13%		79%
C16 stomach	unstaged	773	31%		50%
	IV	746	30%		4%
	III	402	16%		29%
	II	215	9%		54%
	I	330	13%		85%
C18-20 colorectal	unstaged	1,294	11%		43%
	IV	2,453	21%		14%
	III	3,352	29%		72%
	II	2,495	22%		91%
	I	1,984	17%		100%
C22 liver	unstaged	395	27%		19%
	IV	427	29%		6%
	III	208	14%		7%
	II	232	16%		22%
	I	217	15%		34%
C25 pancreas	unstaged	416	15%		15%
	IV	1,243	45%		3%
	III	208	8%		5%
	II	450	16%		18%
	I	415	15%		33%
C33-34 lung	unstaged	1,482	13%		20%
	IV	4,766	42%		6%
	III	2,175	19%		19%
	II	722	6%		37%
	I	2,222	20%		60%
C43 melanoma of skin	unstaged	201	3%		85%
	IV	269	5%		40%
	III	523	9%		73%
	II	1,206	21%		85%
	I	3,610	62%		103%

Head & neck (C00–14, C30–32)
Five-year net survival declined steadily with advancing stage, from very high survival at stage I (over 90%) to around 40% at stage IV (Figure 6-2).

Oesophagus (C15)
A large proportion of cases were diagnosed at advanced stage. Five-year net survival was particularly poor for stage IV disease (2%), with substantially better outcomes only for stage I cancers (79%) (Figure 6-2).

Stomach (C16)
Nearly one-third of stomach cancers were diagnosed at stage IV. Survival varied markedly by stage, from very low survival for stage IV (4%) to high survival for stage I cases (85%) (Figure 6-2).

Colorectal (C18–20)
Colorectal cancer showed a more even stage distribution, with the largest proportion diagnosed at stage III. Five-year net survival was excellent for stage I (100%), stage II (91%), stage III (72%) but was much lower for stage IV disease (14%) (Figure 6-2).

Liver (C22)
Liver cancer was frequently diagnosed at advanced stage. Five-year net survival was low across all stages, particularly for stage IV (6%), with only modestly better survival among stage III (7%) and stage II (22%) and stage I (34%) (Figure 6-2).

Pancreas (C25)
Pancreatic cancer had the highest proportion of stage IV diagnoses. Survival was very poor at all stages; five-year net survival for stage IV (3%), stage III (5%) and stage II (18%) and only 33% for stage I disease (Figure 6-2).

Lung (C33–34)
Most lung cancers were diagnosed at stage IV or stage III. Five-year net survival was low overall, especially for stage IV (6%), but substantially better for stage I cases (60%) (Figure 6-2).

Melanoma of skin (C43)
Melanoma was predominantly diagnosed at stage I. Correspondingly, five-year net survival was very high for stage I/II disease (85–100%) and declined with advancing stage; stage III (73%), stage IV (40%) (Figure 6-2).

Figure 6-3. Five-year net survival (2019-2023), by cancer site and stage: number and percentage at time 0

cancer	stage	No. at time 0	[%]	5-yr net survival [%]
C50 breast	unstaged	964	5%	69%
	IV	1,040	6%	37%
	III	2,276	13%	80%
	II	7,020	40%	95%
	I	6,459	36%	100%
C53 cervix uteri	unstaged	104	8%	59%
	IV	173	14%	21%
	III	268	21%	63%
	II	182	14%	84%
	I	529	42%	95%
C54 corpus uteri	unstaged	208	8%	47%
	IV	194	8%	19%
	III	327	13%	51%
	II	113	4%	77%
	I	1,729	67%	96%
C56 ovary	unstaged	212	12%	40%
	IV	369	21%	18%
	III	535	31%	27%
	II	123	7%	49%
	I	488	28%	88%
C61 prostate	unstaged	2,663	13%	88%
	IV	2,026	10%	52%
	III	3,242	16%	102%
	II	3,850	19%	105%
	I	8,274	41%	104%
C62 testis	unstaged	45	5%	76%
	III	69	8%	87%
	II	93	11%	94%
	I	633	75%	100%
C64 kidney	unstaged	191	6%	54%
	IV	527	18%	16%
	III	654	22%	83%
	II	209	7%	83%
	I	1,410	47%	91%
C67 bladder	unstaged	192	10%	34%
	IV	389	21%	13%
	III	163	9%	35%
	II	418	22%	45%
	I	726	38%	73%

Breast (C50)
Most breast cancers were diagnosed at early stage (stages I–II accounted for over three-quarters of cases). Five-year net survival was extremely high for stage I (100%) and stage II (95%), declining with advancing stage but remaining relatively favourable even for stage III (80%). Stage IV survival was substantially lower (37%) (Figure 6-3).

Cervix uteri (C53)
Cervical cancer was most commonly diagnosed at stage I. Five-year net survival was very high for stage I (95%) and for stage II (84%) but dropped for stage III (63%) and stage IV (21%) disease (Figure 6-3).

Corpus uteri (C54)
Most corpus uteri cancers were diagnosed at stage I. Five-year net survival was very high for stage I (96%), with progressively poorer survival at more advanced stages, particularly stage IV (19%) (Figure 6-3).

Ovary (C56)
Ovarian cancer showed a less favourable stage distribution, with many cases diagnosed at stage III or IV. Five-year net survival was high for stage I (88%) but fell sharply for stage III (27%) and stage IV (18%) disease, reflecting late diagnosis and poorer prognosis (Figure 6-3).

Prostate (C61)
Prostate cancer was frequently diagnosed at early stage. Five-year net survival exceeded 100% for stages I–III reflecting that these patients have a higher probability of survival compared to people of the same age in the general population (Figure 6-3).

Testis (C62)
Most testicular cancers were diagnosed at stage I. Five-year net survival was excellent across all stages, reaching around 100% for stage I and remaining very high even for more advanced disease (Figure 6-3).

Kidney (C64)
Nearly half of kidney cancers were diagnosed at stage I. Five-year net survival was high for early-stage disease (91% for stage I) and declined gradually with increasing stage, with poor outcomes for stage IV (16%) (Figure 6-3).

Bladder (C67)

Bladder cancer showed a mixed stage distribution, with a substantial proportion diagnosed at stage I. Five-year net survival was moderate overall, highest for stage I (73%), and decreased steadily with advancing stage, particularly for stage IV (13%) (Figure 6-3).

DISCUSSION

Cancer incidence

Between 2021 and 2023, an average of 46,818 cancers or related tumours were recorded each year in Ireland. Invasive cancers (excluding NMSC) accounted for 57% of all registered tumours annually, totalling approximately 26,528 cases each year. Invasive cancer incidence (excluding NMSC) was concentrated among a small number of common cancer types: prostate, colorectal and lung cancers accounted for 54% of invasive cancers in males, while breast, lung and colorectal cancers accounted for 53% in females. The high incidence of these cancers aligns with European and global estimates [22], [23], [24]. Consistent with the wider literature [25], [26], age-specific incidence rates in Ireland increased steeply from mid-life onwards, with the highest rates observed among those aged 55 and older.

Case counts and crude incidence rates increased in both sexes between 1994 and 2023 posing challenges for providing sustainable, high-quality cancer care. However, stable or decreasing age-standardised incidence rates indicate that these increases were largely driven by demographic change and population aging rather than by an increase in underlying cancer risk. The national population grew from 3.6 million in 1994 to around 5.3 million by 2023 [15]. Over the same period, the age profile of the population shifted, with the proportion of people aged 65 years and over increasing from about 11–12% in the mid1990s [16] to more than 15% in 2023 [15]. After adjusting for age, incidence rates for all invasive cancers combined (excluding NMSC) remained stable among females from 2011 and decreased significantly among males from 2009 onwards.

These trends broadly align with cancer trends among the EU population, where crude cancer incidence increased by about 30% in both sexes between 2000 and 2022, driven by an ageing population and increasing life expectancy [27]. After age standardisation, trends in EU incidence rates were less favourable than in Ireland, with a substantial increase in cancer incidence in females, a slight increase in males and a faster rate of increase among females than males between 2000 and 2022 [27]. At EU level, lung, stomach, breast, prostate cancers and skin melanoma exerted a substantial influence on recent overall cancer incidence trends. In females, breast and lung cancers were key drivers of rising cancer incidence, while in males, substantial decreases in the incidence of lung and stomach cancers were offset by increases in prostate cancer and skin melanoma [27].

The same cancers—lung, stomach, breast, prostate and skin melanoma—also influenced overall cancer incidence trends in Ireland but, with some important differences. As in the EU, age-standardised breast cancer incidence increased steadily in Ireland over the long term (1994-2023), exerting an upward influence on the overall incidence trend among females. In contrast to the EU pattern, lung cancer incidence among females in Ireland, after increasing from 1994, has stabilised or begun to decline since 2013. Among males, and consistent with EU trends [27], skin melanoma incidence is increasing in Ireland, while lung and stomach cancer incidence is declining. Although prostate cancer incidence is increasing in the EU [27], it has stabilised in Ireland in recent years (2010-2023), following a steep increase between 1994 and 2010.

During 2021-2023, lung cancer in Ireland accounted for an average of 1 in 9 incident invasive cancers (excluding NMSC) in both sexes. In 2022, an estimated 73% of lung cancer cases in Ireland were attributable to smoking [28]. In males, incidence of lung cancer decreased from 1994–2013 followed by a steeper decline from 2013–2023, whereas in females, incidence rose significantly between 1994 and 2013 before flattening thereafter up to 2023. The contrasting trajectories for lung cancer incidence among males and females in Ireland reflect the later uptake and slower decline of smoking among females, with the tobacco epidemic curve shifted later in females than in males [17]. Overall, this illustrates a converging but still lagged epidemiological pattern, where male lung cancer burden is in sustained decline in Ireland, while female trends are only more recently transitioning from increase to stabilisation and decline, mirroring historical smoking behaviours in

Ireland and comparable European populations [29], [30]. In females, lung cancer trends in Ireland reflect a later stage in the tobacco epidemic curve than the EU average, i.e., lung cancer incidence appears to have peaked in Ireland and may be starting to decline, while it is still increasing among females in the EU. These trends reflect the contribution of preventive strategies such as tobacco control to reducing the incidence of lung cancer in Ireland.

Incidence of skin melanoma in Ireland has increased markedly in both sexes over the past 30 years. Age-standardised incidence rates were higher in females than in males between 1994 and 2010. However, incidence rates have converged over time and incidence in males surpassed that in females around 2011, reflecting a faster rate of increase in males over the entire period (1994-2023). This steeper increase in the incidence of skin melanoma in males was also seen in England in recent decades and was noted to be consistent with greater sun exposure and poorer sun-protective behaviour of males relative to females [31].

When comparing Ireland to the EU-27 average in 2024 [12], the age-standardised incidence rate for all invasive cancers (excluding NMSC) among individuals aged 0–85+ years was 8% higher in Ireland in 2024. However, incidence patterns varied substantially by cancer type. Ireland reported lower incidence rates of oropharyngeal, cervical, colorectal, pancreatic and stomach cancers, while higher rates were observed for some common cancers, including lung and breast cancer, although absolute rate differences were small. These findings indicate that incidence rates for these cancers are at least on a par with other EU countries. In contrast, age-standardised incidence rates for prostate, multiple myeloma, skin melanoma and oesophageal cancers in Ireland were substantially higher in Ireland than the EU-27 average. There is substantial between country variation in cancer incidence across the EU, with countries in Northern and Western Europe generally having higher incidence than several Eastern and Southern European countries [32], [33]. These differences in cancer incidence can be attributed to a combination of factors, including differences in genetic disposition, variations in lifestyle and environmental risk factors, preventive strategies, levels of participation in screening, and the capacity of healthcare systems for early diagnosis [32], [34]. They also partly reflect differences in cancer registration systems [34]. Ireland benefits from a long-established, population-based national cancer registry with high completeness [35], whereas in some larger EU countries, cancer registration is organised at a regional level, with varying coverage and maturity. Such structural differences in registration systems can influence the completeness and comparability of incidence estimates across countries [36].

Cancer mortality

Between 2021 and 2023, an average of 10,007 individuals died each year in Ireland from invasive cancer, with mortality concentrated in older age groups, particularly among those aged 70 and older. Over the 30-year period 1994-2023, age-standardised mortality rates for all cancers combined (excluding NMSC) decreased significantly in both sexes. Mortality rates for most cancers in Ireland, including the four most common cancers (lung, colorectal, breast and prostate), also showed downward trends. These patterns are consistent with EU mortality trends, where cancer mortality has declined across almost all main cancer sites [27]. Between 2000 and 2023, age-standardised cancer mortality in the EU declined by 26% in males and 18% in females [27]. As in Ireland, declines in cancer mortality in Europe were driven by reductions in mortality from colorectal and stomach cancers in both sexes, lung and prostate cancers in males, and breast cancer in females [27]. These reductions in Ireland likely reflect improvements in early diagnosis, reconfiguration of cancer services and advances in treatment [37], [38], [39].

Lung cancer accounted for 1 in 5 cancer-related deaths in Ireland during 2021-2023. Among males, lung cancer mortality showed sustained long-term declines, with a strong early decline during 1994–2012 and a marked acceleration thereafter from 2012–2023. Among females, mortality increased during 1994–2014 before beginning to decline from 2014–2023, resulting in an overall stable trajectory across the full period (1994–2023). As with lung cancer incidence, these patterns are consistent with the earlier peak and subsequent

decline in smoking among males compared with females, with downstream effects on mortality emerging after expected lag periods [17].

Deaths occurring before age 75 are widely regarded as potentially avoidable through prevention, early detection, and timely treatment [14]. Mortality between ages 0–74 years is therefore often used as an indicator of premature mortality. Ireland compared favourably with the EU for age-standardised mortality before age 75, with a rate 11% lower than the 2024 EU-27 average for all cancers combined (excluding NMSC). Notably, among the four most common cancers, Ireland's premature mortality rates were lower than the EU average for lung, prostate and colorectal cancers, while breast cancer mortality was marginally higher than the EU-27 average [12]. Mortality rates in Ireland were also substantially lower than European rates for several cancers for which early diagnosis and effective treatment can improve outcomes, including testicular, colorectal, cervical and prostate cancers, as well as for cancers amenable to prevention, including oropharyngeal, lung, laryngeal and stomach cancers. These findings suggest that organised population-based screening programmes (e.g., BreastCheck, CervicalCheck and BowelScreen), efficient diagnostic pathways, higher quality cancer care delivery and preventive strategies (e.g., tobacco control) in Ireland have contributed to reducing premature mortality from these cancers.

Life expectancy at birth in Ireland is approximately 82.6 years, exceeding the EU-27 average of 81.5 years and ranking among the highest in Europe [40]. Consequently, a larger proportion of the Irish population survives into very old age, where cancer risk and mortality are highest. Including the very elderly (85+ years) in mortality rate calculations substantially increases the contribution of late-life cancer deaths, which are generally less amenable to prevention, screening, and curative treatment than deaths occurring before age 75. Overall age-standardised cancer mortality across the full age spectrum (0-85+) was slightly higher in Ireland than the EU average (2.6%). This pattern should be interpreted alongside Ireland's success in reducing premature mortality: it reflects, in part, more people reaching ages at which cancer mortality is higher, rather than indicating weaker cancer control.

In 2024, ovarian and oesophageal cancers were among the small number of cancers in Ireland for which age-standardised incidence and mortality rates exceeded the EU average. This higher relative burden contrasts with long-term improvements in Ireland, where mortality rates for both cancers declined between 1994 and 2023. Improvements in five-year net survival for ovarian and oesophageal cancers, also reported in other countries, reflect substantial advances in treatment [41], [42]. However, despite these gains, survival for both cancers remains among the lowest across all cancer sites. Further research is needed to understand the factors contributing to differences in ovarian and oesophageal cancer outcomes between Ireland and the EU, and to identify measures that could improve outcomes among those affected. Previous studies suggest that international differences in ovarian cancer survival may reflect variation in stage at diagnosis, access to optimal surgical and systemic treatment, and wider health-system barriers that affect timely care [43], [44]. Similar determinants have been reported for oesophageal cancer, although additional factors may also contribute, including population awareness, geographic variation in histological subtypes, surveillance for oesophageal adenocarcinoma among individuals with Barrett's oesophagus, and access to improved treatment protocols such as neoadjuvant therapy [45], [46].

Although mortality from skin melanoma remains low relative to other major cancer sites, age-standardised mortality rates increased in Ireland in both sexes between 1994 and 2023 with some evidence of stabilisation of rates in males since 2010. Five-year net survival for skin melanoma has improved and it is among the invasive cancers in Ireland with the best prognosis. The relative improvement in 2019-2023 compared with 1999-2003 was modest (92% vs 83%, relative improvement 11%). Between 2000 and 2014, similar modest improvements in 5-year net survival were seen in other European countries including Denmark, Norway and the UK [47]. Given the increasing incidence of skin cancer in Ireland, and that most cases are potentially preventable, the National

Skin Cancer Prevention Plan 2023–2026 aims to promote SunSmart behaviours from an early age and to encourage their continuation into adulthood [48].

International evidence from tobacco control and HPV vaccination illustrates the substantial potential of prevention to reduce cancer mortality across generations. In the US, a recent study estimated that reductions in lung cancer mortality between 1970 and 2022 prevented approximately 3.9 million deaths and added 76 million person-years of life, largely through lower incidence associated with reduced smoking [49]. Looking ahead, modelling suggests that more than one million lung cancer deaths could be prevented globally by implementing a tobacco-free generation policy for people born between 2006 and 2010 across 185 countries [50]. These findings highlight the future mortality burden that could be avoided through restrictions on tobacco sales. Similarly, HPV vaccination has the potential to reduce cervical cancer mortality over time. In Ireland, the national HPV vaccination programme was introduced in 2010/11 for girls aged 12–13 years, with a three-year catch-up programme for girls aged 17–18 years [51]. The programme was extended to boys in 2019, and catch-up campaigns for both sexes are ongoing [52]. Women vaccinated through the initial catch-up programme became eligible for cervical screening at age 25 in 2019 [53]. Although early evidence suggested a positive impact by the time of first cervical cancer screening with a reduction in the rate of high-grade cytology [53], the effect of HPV vaccination on cervical cancer incidence and mortality in Ireland will take time to become evident. Recent evidence from England, however, reported a substantial reduction in cervical cancer mortality among women aged 20–29 years associated with high HPV vaccination uptake [54].

Cancer survival

Cancer survival in Ireland has improved substantially over the past two decades. For all invasive cancers combined (excluding NMSC), five-year age-standardised net survival rose from 50% in 1999–2003 to 66% in 2019–2023, a relative improvement of 33%. Survival improved for all cancer types examined; however, both survival rates and the magnitude of improvement varied markedly between cancers when comparing earlier and later periods (1999–2003 vs. 2019–2023). Cancers such as breast, prostate, testicular, thyroid and skin melanoma maintained very high five-year net survival in the period 2019-2023 (89-95%) while also achieving small relative gains since 1999-2003. For common cancers, such as breast, prostate and skin melanoma, small relative gains can have a large impact at population level.

Cancers showing larger improvements in five-year net survival between 1999–2003 and 2019–2023 included stomach, head and neck, colorectal cancers and multiple myeloma. The largest absolute survival gains were generally observed in these cancers (particularly stomach cancer and multiple myeloma), reflecting improvements in diagnosis and treatment. For example, recent advances in targeted therapies for multiple myeloma, including immunomodulatory agents, proteasome inhibitors, monoclonal antibodies, BCMA directed immunotherapy and combinations have substantially improved survival [55].

During 2019–2023, five-year net survival remained lowest for pancreatic, liver, oesophageal and lung cancers, at or below 25%. Nonetheless, each of these cancers showed substantial relative improvements compared with 1999–2003. Pancreatic cancer showed the largest relative increase in five-year net survival. Similar improvements in pancreatic cancer survival have been reported in other countries [42], [56], with progress in clinical management, including neoadjuvant therapy and the centralisation of pancreatic surgery, thought to have contributed to these gains [56], [57], [58].

Stage at diagnosis was a dominant determinant of survival across cancer sites. Early-stage disease was consistently associated with very high survival, particularly for skin melanoma, breast, prostate, testicular, colorectal and cervix uteri (cervical) cancers, for which stage I cancer diagnosis was associated with five-year net survival approaching or exceeding 95%. This pattern reflects, in part, the benefits of detecting cancer before symptoms develop, including through organised population-based screening programmes, which can

facilitate earlier treatment and improve outcomes [59]. However, more intensive diagnostic activity may also increase the detection of very small or indolent tumours that may never have caused symptoms or death within the patient's lifespan, resulting in overdiagnosis [47], [60].

In contrast, survival declined sharply with advancing stage for most cancers. A high proportion of stomach, pancreatic, liver, lung and oesophageal cancers were diagnosed at stage IV (26-45%) where five-year net survival was particularly poor (2-6%). Often asymptomatic in the early stages, these cancers may present with non-specific symptoms at a later stage, increasing the likelihood of delayed diagnosis and poorer survival. Lung cancer is an important example of this pattern, as late presentation (61% of cases diagnosed at stage III or IV) remains a major contributor to its relatively low survival. Liver cancer is also likely to present at an advanced stage (43% of cases diagnosed at stage III or IV) and has very low five-year net survival, second only to pancreatic cancer. Furthermore, age-standardised mortality from liver cancer has increased in Ireland over the past 30 years. This reflects a similar pattern in other high-income countries where liver cancer survival has improved but prognosis remains poor [47], [61]. Further work is needed to strengthen prevention, facilitate earlier diagnosis, and enhance treatment pathways for people diagnosed with cancers that carry a poorer prognosis [47].

Cancer prevalence

At the end of 2023, an estimated 230,946 people were living in Ireland with a previous diagnosis of invasive cancer (excluding NMSC), representing approximately 4.4% of the Irish population. The prevalent cancer population is dominated by cancers that are common or associated with good survival. Breast cancer (22.5%) and prostate cancer (21.4%) together accounted for almost half of all cancer survivors, followed by colorectal cancer (10.3%) and skin melanoma (7.1%). In contrast, cancers with poorer survival, such as lung, pancreatic, liver and oesophageal cancers, accounted for a relatively small proportion of survivors despite their public health importance.

Overall, increasing cancer prevalence reflects rising cancer incidence, substantial improvements in survival over time, and changes in population demographics (e.g., an ageing population) [62], [63]. Cancer survivors have diverse healthcare needs that differ depending on prognosis and time since diagnosis [62]. Advances in early detection and treatment have increased cancer survival, resulting in a growing population facing complex physical, social and emotional challenges arising from cancer and its treatment [64]. This issue is particularly pressing given the rise in cancer incidence among young adults and those under 50 [27]. At the end of 2023, approximately 1 in every 23 people in Ireland were living with and beyond a cancer diagnosis, highlighting the ongoing and expanding impact of cancer on individuals, health services and society in Ireland.

Conclusion

Three decades of national cancer data demonstrate substantial progress in cancer control in Ireland. Survival has improved across all major cancer sites, and age-standardised mortality has declined for most cancers, reflecting advances in prevention, earlier diagnosis and treatment. Rising numbers of cancer cases and deaths largely reflect population growth and ageing rather than increasing age-standardised risk. Ireland compares favourably with the EU for premature cancer mortality, with mortality among people aged under 75 years 11% lower than the EU average. Nevertheless, important challenges remain. Incidence and mortality rates for some cancers, remain higher than the EU average, and several poor-prognosis cancers continue to be diagnosed at advanced stage. At the same time, the growing population of people living with and beyond a cancer diagnosis highlights the need for sustained investment in survivorship care, rehabilitation and long-term service planning. Continued emphasis on prevention, early detection, timely access to optimal treatment and high-quality national cancer surveillance will be essential to consolidate recent gains, reduce inequalities, and improve patient outcomes for cancers where progress remains limited.

APPENDIX I: NATIONAL INCIDENT CASES

3-year annual average 2021-2023: cases, risk of developing cancer before 75th birthday and lifetime risk

cancer	male cases	female cases	both sexes cases	males ~risk # to age 75	males ~risk # lifetime	females ~risk # to age 75	females ~risk # lifetime
C00-97 all invasive cancers	20,340	17,266	37,607				
C00-43, C45-96 all invasive cancers excl. NMSC	14,143	12,385	26,528	3	2	4	2
C00-97, D00-48 all registered tumours	22,510	24,308	46,818				
D00-48 all non-malignant cancers	2,170	7,042	9,212				
C00 lip	27	6	32	2,114	800	10,100	3,555
C01 base of tongue	46	11	57	756	618	3,404	2,487
C02 other and unspecified parts of tongue	61	36	97	635	428	1,081	702
C03 gum	11	10	22	3,383	2,270	4,395	2,207
C04 floor of mouth	33	13	46	1,018	885	2,714	2,038
C05 palate	23	12	35	1,861	1,101	3,442	2,164
C06 other and unspecified parts of mouth	25	14	39	1,750	1,019	3,380	1,644
C07 parotid gland	32	14	46	1,728	670	3,359	1,605
C08 other and unspecified major salivary glands	6	5	11	7,169	4,426	7,481	4,653
C09 tonsil	88	28	116	395	340	1,201	1,116
C10 oropharynx	35	11	45	1,012	762	3,441	2,345
C11 nasopharynx	14	5	19	3,003	1,887	9,893	5,633
C12 pyriform sinus	20	4	23	2,143	1,232	13,042	6,670
C13 hypopharynx	21	10	30	1,908	1,276	4,511	2,367
C01-C06 and C09-C13 oral and pharyngeal cancer	377	153	530	104	76	261	172
C14 other and ill-defined sites in the lip, oral cavity and pharynx	10	5	15	4,720	2,331	7,179	4,881
C01-14 mouth and pharynx	424	178	602	95	66	228	147
C15 oesophagus	372	167	539	119	63	332	126
C15 oesophagus (adenocarcinoma)	236	50	286	181	102	1,050	437
C15 oesophagus (squamous)	111	100	211	425	206	541	213
C16 stomach	390	227	618	131	58	234	95
C17 small intestine	78	64	142	519	312	656	379
C18 colon	987	833	1,819	49	23	63	26
C19 rectosigmoid junction	111	81	192	416	210	591	290
C20 rectum	558	300	858	77	44	144	80
C18-20 colorectal	1,656	1,213	2,869	28	14	41	19
C18-21 colorectal and anus	1,688	1,270	2,958	27	14	39	18
C19-20 rectum and rectosigmoid junction	669	380	1,050	65	36	116	63
C21 anus	32	57	89	1,284	842	703	468
C22 liver and intrahepatic bile ducts	259	112	371	181	89	439	194
C23 gallbladder	19	44	62	3,101	1,183	1,269	475
C24 other and unspecified parts of biliary tract	112	93	205	484	189	588	225
C23-24 gallbladder and biliary tract	131	136	267	419	163	402	153
C25 pancreas	353	316	668	143	63	175	66
C26 other and ill-defined digestive organs	40	39	79	1,374	522	1,783	497
C30 nasal cavity and middle ear	13	8	21	3,165	2,119	5,369	3,246
C31 accessory sinuses	8	4	12	4,459	3,855	9,443	6,837
C32 larynx	163	27	190	253	154	1,410	946
C00-14, C30-32 head & neck	634	222	856	66	43	184	117
C33 trachea	3	1	4	14,847	9,806	31,413	31,413
C34 bronchus and lung	1,491	1,364	2,856	32	15	33	16
C33-34 bronchus, lung and trachea	1,494	1,365	2,859	32	15	33	16
C34 small cell lung cancer (SCLC)	164	188	352	244	151	202	130
C34 non-small cell lung cancer (NSCLC)	1,328	1,176	2,504	37	17	40	19
C37 thymus	11	10	21	3,532	2,434	4,105	2,683
C38 heart, mediastinum and pleura	15	4	18	3,681	1,403	14,149	6,057
C40 bone and articular cartilage of limbs	10	7	17	3,816	3,248	6,005	3,739
C41 bone and articular cartilage of other and unspecified sites	13	9	22	2,930	1,946	4,104	3,506
C41-42 bone and articular cartilage of limbs and other and unspecified sites	13	9	22	2,930	1,946	4,104	3,506
C43 melanoma of skin	723	694	1,417	64	33	60	37
C44 other malignant neoplasms of skin NMSC	6,197	4,881	11,078	8	4	10	5
C45 mesothelioma	41	10	51	1,641	511	3,547	2,362
C46 Kaposi sarcoma	6	0	6	6,389	5,822		
C47 peripheral nerves and autonomic nervous system	2	3	5	18,009	12,023	11,978	11,978
C48 retroperitoneum and peritoneum	10	20	31	4,157	2,384	1,827	1,186
C49 other connective and soft tissue	141	65	206	363	163	694	383
C50 breast	33	4,036	4,069	1,468	682	10	7
C51 vulva	-	73	73			696	313
C52 vagina	-	15	15			3,420	1,471
C53 cervical adenocarcinoma	-	57	57			644	609
C53 cervical squamous cell carcinoma	-	207	207			177	155
C53 cervix uteri	-	282	282			131	114
C54 corpus uteri	-	602	602			63	43
C55 uterus, part unspecified	-	28	28			1,493	927
C56 ovary	-	372	372			110	68
C57 other and unspecified female genital organs	-	85	85			589	269
C56-57 ovary and other and unspecified female genital organs	-	456	456			93	55
C58 placenta	-	1	1				
C51-52,55,57,58 other gynaecological cancers	-	201	201			244	116
C60 penis	56	-	56	753	439		
C61 prostate	4,502	-	4,502	8	6		
C62 testis	174	-	174	201	198		

3-year annual average 2021-2023: cases, risk of developing cancer before 75th birthday and lifetime risk							
	male	female	both sexes	males		females	
cancer	cases	cases	cases	~risk # to age 75	~risk # lifetime	~risk # to age 75	~risk # lifetime
C63 other and unspecified male genital organs	6	-	6	6,235	3,852		
C60,C63 penis and other unspecified male genital organs	62	-	62	672	394		
C64 kidney, except renal pelvis	488	251	738	85	53	174	97
C65 renal pelvis	21	17	38	2,176	1,049	3,076	1,227
C66 ureter	27	16	43	2,196	759	3,419	1,271
C64-66 kidney incl. renal pelvis and ureter	536	284	820	79	47	158	84
C67 bladder	367	152	519	165	55	414	131
C67(T0,T1,Ta,Tis),D090,D414 NMIBC *	526	178	705	96	43	240	129
C67,D090,D414,NMIBC (all bladder)	728	277	1,005	74	30	182	77
C68 other and unspecified urinary organs	9	7	16	7,705	2,275	8,316	3,448
C69 eye and adnexa	41	35	76	1,003	622	1,130	784
C70 meninges	2	2	5	24,240	10,915	19,109	10,057
C71 brain	239	172	411	169	110	237	152
C72 spinal cord, cranial nerves and other parts of CNS	7	7	14	4,635	4,635	5,159	4,573
C71-72 brain & spinal cord	246	179	426	163	107	228	148
C71-72,D32-33,D42-43 all brain and CNS	376	416	792	108	71	101	63
C73 thyroid	73	200	273	502	415	184	162
C74 adrenal gland	15	19	34	2,534	1,826	1,676	1,569
C75 other endocrine glands and related structures	8	6	14	4,543	4,169	6,764	4,777
C751-753 pituitary craniopharyngeal pineal brain	2	2	4	20,453	14,571	20,230	10,487
C76 other and ill-defined sites	24	17	41	1,847	978	3,769	1,237
C80 malignant neoplasm without specification of site	230	227	457	262	88	294	86
C81 Hodgkin lymphoma	89	63	153	405	342	546	485
C82 follicular [nodular] non-Hodgkin lymphoma	120	124	244	341	214	329	201
C83 diffuse non-Hodgkin lymphoma	261	173	433	170	92	271	133
C84 peripheral and cutaneous T-cell lymphomas	45	26	71	999	539	1,885	939
C85 other and unspecified types of non-Hodgkin lymphoma	60	52	111	862	378	1,039	406
C82-86 non-Hodgkin lymphoma	485	374	860	91	50	122	62
C88 malignant immunoproliferative diseases	12	8	20	3,616	1,823	6,111	2,931
C90 multiple myeloma	227	173	400	199	102	275	131
C91 lymphoid leukaemia	217	120	337	195	115	356	197
C92 myeloid leukaemia	133	91	224	343	180	494	265
C93 monocytic leukaemia	3	2	5	11,789	8,067	16,712	11,682
C95 leukaemia of unspecified cell type	9	8	18	6,761	2,246	8,150	2,390
C96 other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue	231	184	415	227	96	257	125
C91-95 leukaemia	362	222	585	121	68	199	107
acute lymphoblastic leukaemia ALL◊	34	26	60	1,065	893	1,289	1,207
acute myeloblastic leukaemia AML ◊	89	64	153	516	266	713	374
chronic lymphocytic leukaemia CLL◊	158	80	238	283	149	597	271
chronic myeloid leukaemia CML ◊	46	29	74	951	539	1,517	876
D00 carcinoma in situ of oral cavity, oesophagus and stomach	21	20	42				
D01 carcinoma in situ of other and unspecified digestive organs	31	44	75				
D02 carcinoma in situ of middle ear and respiratory system	23	12	35				
D03 melanoma in situ	486	495	981				
D04 carcinoma in situ of skin	698	863	1,561				
D05 carcinoma in situ of breast	2	539	541				
D06 carcinoma in situ of cervix uteri	-	4,208	4,208				
D07 carcinoma in situ of other and unspecified genital organs	73	85	158				
D09 carcinoma in situ of other and unspecified sites	362	131	492				
D090 carcinoma in-situ of bladder	347	121	468				
D17 benign lipomatous neoplasm	0	0	1				
D18 haemangioma and lymphangioma, any site	2	2	5				
D32 benign neoplasm of meninges	58	158	217				
D32-D33 benign brain & CNS	84	189	273				
D33 benign neoplasm of brain and other parts of CNS	26	31	57				
D35 benign neoplasm of other and unspecified endocrine glands	60	51	111				
D352-354 benign pituitary craniopharyngeal pineal brain	60	51	111				
D36 benign neoplasm of other and unspecified sites	0	0	1				
D37 neoplasm of uncertain or unknown behaviour of oral cavity and digestive organs	34	45	79				
D38 neoplasm of uncertain or unknown behaviour of middle ear and respiratory and intrathoracic organs	8	6	14				
D39 neoplasm of uncertain or unknown behaviour of female genital organs	-	115	115				
D40 neoplasm of uncertain or unknown behaviour of male genital organs	4	-	4				
D41 neoplasm of uncertain or unknown behaviour of urinary organs	22	10	32				
D414 neoplasm of uncertain behaviour of bladder	14	5	19				
D42 neoplasm of uncertain or unknown behaviour of meninges	12	19	32				
D43 neoplasm of uncertain or unknown behaviour of brain and CNS	33	28	62				
D42-D43 neoplasm of uncertain meninges, brain & CNS	46	48	93				
D44 neoplasm of uncertain or unknown behaviour of endocrine glands	13	25	38				
D443-445 uncertain or unknown pituitary craniopharyngeal pineal brain	7	4	11				
D47 other neoplasms of uncertain or unknown behaviour of lymphoid, haematopoietic and related tissue	88	69	157				
D48 neoplasm of uncertain or unknown behaviour of other and unspecified sites	112	84	197				

† 3-year annual averages: male and female totals are subject to rounding.

* NMIBC non-muscle invasive bladder cancer

◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL

3-year annual average 2021-2023: cases, risk of developing cancer before 75th birthday and lifetime risk

cancer	male cases	female cases	both sexes cases	males ~risk # to age 75	~risk # lifetime	females ~risk # to age 75	~risk # lifetime

(C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].◊ AML (ICD10: C920, C923–C926, C930, C940, C942, C944–C945), ALL (C910), CML (C921), CLL (C911) [65].

Cumulative risk of developing cancer was calculated using the current probability method[10], [11]. Calculating the lifetime risk requires an estimate of incidence and mortality for the whole lifetime of individuals in a birth cohort using age-period-cohort modelling [66]. The lifetime risk to age 85+ (and risk up to age 75) probabilities in this report were obtained by applying the cancer incidence and the all-cause mortality rates at different ages in a particular year as if they were to apply to a cohort as they aged. The risk figures (e.g., 1 in 10) presented here should be viewed as approximations. # Cumulative risk of developing cancer was calculated using the current probability method[10], [11]. Calculating the lifetime risk requires an estimate of incidence and mortality for the whole lifetime of individuals in a birth cohort using age-period-cohort modelling [66]. The lifetime risk to age 85+ (and risk up to age 75) probabilities in this report were obtained by applying the cancer incidence and the all-cause mortality rates at different ages in a particular year as if they were to apply to a cohort as they aged. The risk figures (e.g., 1 in 10) presented here should be viewed as approximations.

APPENDIX II: NATIONAL INCIDENT CANCER RATES

European age-standardised incidence rate (EASIR, per 100,000) was calculated using the European standard populations (ESP) age-weights.

CRUDE AND AGE-STANDARDISED INCIDENCE RATE (EASIR, PER 100,000): ANNUAL AVERAGE FOR 2021-2023

	CRUDE RATE X 100,000			AGE-STANDARDISED RATE x 100,000		
cancer	**male**	**female**	**both sexes**	**male**	**female**	**both sexes**
C00-97 all invasive cancers	794.0	659.0	725.7	1,018.2	760.9	879.9
C00-43, C45-96 all invasive cancers excl. NMSC	552.1	472.8	512.0	703.1	542.8	617.0
C00-97, D00-48 all registered tumours	878.7	927.9	903.6	1,126.4	1,042.5	1,075.7
D00-48 all non-malignant cancers	84.7	269.0	177.9	108.1	281.5	195.8
C00 lip	1.0	0.2	0.6	1.4	0.3	0.8
C01 base of tongue	1.8	0.4	1.1	2.1	0.5	1.3
C02 other and unspecified parts of tongue	2.4	1.4	1.9	2.9	1.6	2.2
C03 gum	0.4	0.4	0.4	0.6	0.5	0.5
C04 floor of mouth	1.3	0.5	0.9	1.5	0.6	1.0
C05 palate	0.9	0.5	0.7	1.1	0.5	0.8
C06 other and unspecified parts of mouth	1.0	0.5	0.7	1.2	0.6	0.9
C07 parotid gland	1.2	0.5	0.9	1.7	0.6	1.1
C08 other and unspecified major salivary glands	0.2	0.2	0.2	0.3	0.2	0.2
C09 tonsil	3.4	1.1	2.2	3.9	1.2	2.5
C10 oropharynx	1.4	0.4	0.9	1.6	0.5	1.0
C11 nasopharynx	0.6	0.2	0.4	0.7	0.2	0.4
C12 pyriform sinus	0.8	0.1	0.5	1.0	0.2	0.6
C13 hypopharynx	0.8	0.4	0.6	1.0	0.4	0.7
C01-C06 and C09-C13 oral and pharyngeal cancer	14.7	5.9	10.2	17.6	6.7	11.9
C14 other and ill-defined sites in the lip, oral cavity and pharynx	0.4	0.2	0.3	0.5	0.2	0.4
C01-14 mouth and pharynx	16.6	6.8	11.6	20.0	7.8	13.6
C15 oesophagus	14.5	6.4	10.4	18.9	7.7	13.0
C15 oesophagus (adenocarcinoma)	9.2	1.9	5.5	11.8	2.3	6.8
C15 oesophagus (squamous)	4.3	3.8	4.1	5.7	4.6	5.1
C16 stomach	15.2	8.7	11.9	20.2	10.3	14.9
C17 small intestine	3.0	2.4	2.7	3.9	2.8	3.3
C18 colon	38.5	31.8	35.1	50.9	37.7	43.8
C19 rectosigmoid junction	4.3	3.1	3.7	5.7	3.6	4.5
C20 rectum	21.8	11.4	16.6	27.6	13.3	20.0
C18-20 colorectal	64.6	46.3	55.4	84.1	54.6	68.4
C18-21 colorectal and anus	65.9	48.5	57.1	85.6	57.1	70.4
C19-20 rectum and rectosigmoid junction	26.1	14.5	20.3	33.2	16.9	24.6
C21 anus	1.2	2.2	1.7	1.5	2.4	2.0
C22 liver and intrahepatic bile ducts	10.1	4.3	7.2	13.3	5.1	9.0
C23 gallbladder	0.7	1.7	1.2	1.0	2.0	1.5
C24 other and unspecified parts of biliary tract	4.4	3.5	4.0	6.1	4.3	5.1
C23-24 gallbladder and biliary tract	5.1	5.2	5.2	7.0	6.3	6.6
C25 pancreas	13.8	12.0	12.9	18.4	14.5	16.4
C26 other and ill-defined digestive organs	1.6	1.5	1.5	2.2	1.8	2.0
C30 nasal cavity and middle ear	0.5	0.3	0.4	0.6	0.4	0.5
C31 accessory sinuses	0.3	0.1	0.2	0.3	0.2	0.3
C32 larynx	6.4	1.0	3.7	8.0	1.2	4.4
C00-14, C30-32 head & neck	24.8	8.5	16.5	30.4	9.7	19.6
C33 trachea	0.1	0.0	0.1	0.1	0.0	0.1
C34 bronchus and lung	58.2	52.1	55.1	77.0	62.8	69.3
C33-34 bronchus, lung and trachea	58.3	52.1	55.2	77.2	62.9	69.3
C34 small cell lung cancer (SCLC)	6.4	7.2	6.8	8.1	8.6	8.3
C34 non-small cell lung cancer (NSCLC)	51.8	44.9	48.3	69.0	54.2	60.9
C37 thymus	0.4	0.4	0.4	0.5	0.4	0.5
C38 heart, mediastinum and pleura	0.6	0.1	0.4	0.8	0.2	0.4
C40 bone and articular cartilage of limbs	0.4	0.3	0.3	0.4	0.3	0.3
C41 bone and articular cartilage of other and unspecified sites	0.5	0.3	0.4	0.6	0.3	0.5
C41-42 bone and articular cartilage of limbs and other and unspecified sites	0.5	0.3	0.4	0.6	0.3	0.5
C43 melanoma of skin	28.2	26.5	27.3	36.1	29.8	32.4
C44 other malignant neoplasms of skin NMSC	241.8	186.2	213.7	315.1	218.2	262.9
C45 mesothelioma	1.6	0.4	1.0	2.2	0.5	1.3
C46 Kaposi sarcoma	0.2	0.0	0.1	0.2	0.0	0.1
C47 peripheral nerves and autonomic nervous system	0.1	0.1	0.1	0.1	0.1	0.1
C48 retroperitoneum and peritoneum	0.4	0.8	0.6	0.5	0.9	0.7
C49 other connective and soft tissue	5.5	2.5	4.0	7.1	2.7	4.7
C50 breast	1.3	154.0	78.5	1.7	171.8	89.8
C51 vulva	-	2.8	1.4	-	3.2	1.7
C52 vagina	-	0.6	0.3	-	0.7	0.4

CRUDE AND AGE-STANDARDISED INCIDENCE RATE (EASIR, PER 100,000): ANNUAL AVERAGE FOR 2021-2023						
	CRUDE RATE X 100,000			AGE-STANDARDISED RATE x 100,000		
C53 cervical adenocarcinoma	-	2.2	1.1	-	2.2	1.1
C53 cervical squamous cell carcinoma	-	7.9	4.0	-	8.2	4.2
C53 cervix uteri	-	10.8	5.5	-	11.1	5.7
C54 corpus uteri	-	23.0	11.6	-	26.6	13.8
C55 uterus, part unspecified	-	1.1	0.5	-	1.2	0.6
C56 ovary	-	14.2	7.2	-	16.3	8.5
C57 other and unspecified female genital organs	-	3.2	1.6	-	3.8	2.0
C56-57 ovary and other and unspecified female genital organs	-	17.4	8.8	-	20.1	10.5
C58 placenta	-	0.1	0.0	-	0.1	0.0
C51-52,55,57,58 other gynaecological cancers	-	7.7	3.9	-	9.0	4.7
C60 penis	2.2	-	1.1	2.8	-	1.3
C61 prostate	175.7	-	86.8	218.3	-	105.1
C62 testis	6.8	-	3.4	6.7	-	3.3
C63 other and unspecified male genital organs	0.2	-	0.1	0.3	-	0.1
C60,C63 penis and other unspecified male genital organs	2.4	-	1.2	3.1	-	1.4
C64 kidney, except renal pelvis	19.0	9.6	14.2	23.4	11.1	17.0
C65 renal pelvis	0.8	0.6	0.7	1.1	0.8	0.9
C66 ureter	1.1	0.6	0.8	1.5	0.7	1.1
C64-66 kidney incl. renal pelvis and ureter	20.9	10.8	15.8	26.0	12.6	19.0
C67 bladder	14.3	5.8	10.0	20.3	7.0	13.0
C67(T0,T1,Ta,Tis),D090,D414 NMIBC	20.5	6.8	13.6	27.4	8.1	17.0
C67,D090,D414,NMIBC (all bladder)	28.4	10.6	19.4	38.8	12.7	24.7
C68 other and unspecified urinary organs	0.4	0.3	0.3	0.5	0.3	0.4
C69 eye and adnexa	1.6	1.3	1.5	2.0	1.5	1.7
C70 meninges	0.1	0.1	0.1	0.1	0.1	0.1
C71 brain	9.3	6.6	7.9	11.2	7.4	9.1
C72 spinal cord, cranial nerves and other parts of CNS	0.3	0.3	0.3	0.3	0.3	0.3
C71-72 brain & spinal cord	9.6	6.9	8.2	11.4	7.6	9.4
C71-72,D32-33,D42-43 all brain and CNS	14.7	15.9	15.3	17.3	17.6	17.4
C73 thyroid	2.9	7.6	5.3	3.1	7.8	5.5
C74 adrenal gland	0.6	0.7	0.7	0.7	0.8	0.7
C75 other endocrine glands and related structures	0.3	0.2	0.3	0.3	0.2	0.3
C751-753 pituitary craniopharyngeal pineal brain	0.1	0.1	0.1	0.1	0.1	0.1
C76 other and ill-defined sites	0.9	0.6	0.8	1.2	0.7	1.0
C80 malignant neoplasm without specification of site	9.0	8.7	8.8	12.7	10.5	11.4
C81 Hodgkin lymphoma	3.5	2.4	3.0	3.7	2.5	3.1
C82 follicular [nodular] non-Hodgkin lymphoma	4.7	4.7	4.7	5.7	5.5	5.6
C83 diffuse non-Hodgkin lymphoma	10.2	6.6	8.4	12.9	7.7	10.2
C84 peripheral and cutaneous T-cell lymphomas	1.8	1.0	1.4	2.2	1.1	1.6
C85 other and unspecified types of non-Hodgkin lymphoma	2.3	2.0	2.1	3.1	2.4	2.7
C82-86 non-Hodgkin lymphoma	19.0	14.3	16.6	23.9	16.7	20.1
C88 malignant immunoproliferative diseases	0.5	0.3	0.4	0.7	0.4	0.5
C90 multiple myeloma	8.9	6.6	7.7	11.7	7.8	9.6
C91 lymphoid leukaemia	8.5	4.6	6.5	10.4	5.2	7.6
C92 myeloid leukaemia	5.2	3.5	4.3	6.6	4.0	5.2
C93 monocytic leukaemia	0.1	0.1	0.1	0.1	0.1	0.1
C94 other leukaemia of specified cell type	-	0.0	0.0	-	0.0	0.0
C95 leukaemia of unspecified cell type	0.4	0.3	0.3	0.5	0.4	0.4
C96 other and unspecified malignant neoplasms of lymphoid, haematopoietic and related tissue	9.0	7.0	8.0	12.1	8.2	9.9
C91-95 leukaemia	14.2	8.5	11.3	17.6	9.6	13.4
chronic lymphocytic leukaemia CLL	6.2	3.1	4.6	8.0	3.7	5.7
chronic myeloid leukaemia CML	1.8	1.1	1.4	2.2	1.2	1.7
acute lymphoblastic leukaemia ALL	1.3	1.0	1.2	1.3	0.9	1.1
acute myeloblastic leukaemia AML	3.5	2.4	3.0	4.4	2.8	3.5
D00 carcinoma in situ of oral cavity, oesophagus and stomach	0.8	0.8	0.8	1.0	0.9	1.0
D01 carcinoma in situ of other and unspecified digestive organs	1.2	1.7	1.5	1.6	2.0	1.8
D02 carcinoma in situ of middle ear and respiratory system	0.9	0.4	0.7	1.2	0.5	0.8
D03 melanoma in situ	18.9	18.9	18.9	23.7	21.3	22.3
D04 carcinoma in situ of skin	27.2	32.9	30.1	35.7	39.8	37.9
D05 carcinoma in situ of breast	0.1	20.5	10.4	0.1	22.3	11.4
D06 carcinoma in situ of cervix uteri	-	160.9	81.4	-	158.4	80.6
D07 carcinoma in situ of other and unspecified genital organs	2.8	3.2	3.0	3.4	3.5	3.4
D09 carcinoma in situ of other and unspecified sites	14.1	5.0	9.5	18.6	5.9	11.8
D090 carcinoma in-situ of bladder	13.5	4.6	9.0	17.8	5.4	11.2
D17 benign lipomatous neoplasm	0.0	0.0	0.0	0.0	0.0	0.0
D18 haemangioma and lymphangioma, any site	0.1	0.1	0.1	0.1	0.1	0.1
D32 benign neoplasm of meninges	2.3	6.0	4.2	2.9	7.0	5.0
D32-D33 benign brain & CNS	3.3	7.2	5.3	4.0	8.2	6.2
D33 benign neoplasm of brain and other parts of CNS	1.0	1.2	1.1	1.1	1.2	1.1
D35 benign neoplasm of other and unspecified endocrine glands	2.3	1.9	2.1	2.8	2.0	2.4
D352-354 benign pituitary craniopharyngeal pineal brain	2.3	1.9	2.1	2.8	2.0	2.4

CRUDE AND AGE-STANDARDISED INCIDENCE RATE (EASIR, PER 100,000): ANNUAL AVERAGE FOR 2021-2023						
	CRUDE RATE X 100,000			AGE-STANDARDISED RATE x 100,000		
D36 benign neoplasm of other and unspecified sites	0.0	0.0	0.0	0.0	0.0	0.0
D37 neoplasm of uncertain or unknown behaviour of oral cavity and digestive organs	1.3	1.7	1.5	1.6	1.9	1.8
D38 neoplasm of uncertain or unknown behaviour of middle ear and respiratory and intrathoracic organs	0.3	0.2	0.3	0.4	0.2	0.3
D39 neoplasm of uncertain or unknown behaviour of female genital organs	-	4.4	2.2	-	4.6	2.3
D40 neoplasm of uncertain or unknown behaviour of male genital organs	0.2	-	0.1	0.2	-	0.1
D41 neoplasm of uncertain or unknown behaviour of urinary organs	0.8	0.4	0.6	1.0	0.5	0.7
D414 neoplasm of uncertain behaviour of bladder	0.5	0.2	0.4	0.7	0.2	0.4
D42 neoplasm of uncertain or unknown behaviour of meninges	0.5	0.7	0.6	0.6	0.8	0.7
D43 neoplasm of uncertain or unknown behaviour of brain and CNS	1.3	1.1	1.2	1.3	1.0	1.1
D42-D43 neoplasm of uncertain meninges, brain & CNS	1.8	1.8	1.8	1.9	1.9	1.8
D44 neoplasm of uncertain or unknown behaviour of endocrine glands	0.5	1.0	0.7	0.6	1.0	0.8
D443-445 uncertain or unknown pituitary craniopharyngeal pineal brain	0.3	0.2	0.2	0.3	0.2	0.2
D47 other neoplasms of uncertain or unknown behaviour of lymphoid, haematopoietic and related tissue	3.4	2.7	3.0	4.5	3.2	3.8
D48 neoplasm of uncertain or unknown behaviour of other and unspecified sites	4.4	3.2	3.8	5.8	3.4	4.4

APPENDIX III: NATIONAL MORTALITY

3-YEAR ANNUAL AVERAGE DEATHS (2021-2023) AND RISK OF DYING OF CANCER BEFORE 75TH BIRTHDAY

	deaths			# risk of cancer death before 75th birthday	
cancer	**males**	**females**	**both sexes●**	**males**	**females**
C00-97 all invasive cancers	5,361	4,646	10,007	11	13
C00-43, C45-96 all invasive cancers excl. NMSC	5,295	4,615	9,910	11	13
C00-97, D00-48 all registered tumours	5,500	4,757	10,258	11	12
D00-48 all non-malignant cancers	140	111	251	740	984
C01-14 mouth and pharynx	146	55	201	306	1,026
C15 oesophagus	303	133	436	163	524
C16 stomach	196	116	312	310	523
C17 small intestine	18	14	32	3,053	4,183
C18 colon	210	192	402	335	455
C19 rectosigmoid junction	268	192	460	196	289
C20 rectum	117	63	180	522	956
C18-20 colorectal	595	447	1,042	100	149
C18-21 colorectal and anus	604	458	1,062	98	145
C19-20 rectum and rectosigmoid junction	386	255	640	143	222
C21 anus	9	11	20	5,017	4,644
C22 liver and intrahepatic bile ducts	274	171	444	202	339
C23 gallbladder	12	30	42	5,070	2,035
C24 other and unspecified parts of biliary tract	20	16	36	2,417	4,195
C23-24 gallbladder and biliary tract	32	46	78	1,637	1,370
C25 pancreas	320	294	614	176	212
C26 other and ill-defined digestive organs	68	60	128	1,176	2,024
C30 nasal cavity and middle ear	1	1	1		78,779
C31 accessory sinuses	4	3	7	13,310	16,333
C32 larynx	62	11	73	786	3,830
C00-14, C30-32 head & neck	213	72	285	216	756
C34 bronchus and lung	1,069	902	1,971	48	58
C33-34 bronchus, lung and trachea	1,069	903	1,972	48	58
C37 thymus	0	2	2	98,698	53,891
C38 heart, mediastinum and pleura	4	1	4	20,394	38,370
C40 bone and articular cartilage of limbs	2	1	3	21,903	111,576
C41 bone and articular cartilage of other and unspecified sites	16	9	25	2,789	5,650
C41-42 bone and articular cartilage of limbs and other and unspecified sites	16	9	25	2,789	5,650
C43 melanoma of skin	112	76	188	567	794
C44 other malignant neoplasms of skin NMSC	66	31	97	1,372	5,151
C45 mesothelioma	35	10	45	2,576	3,752
C47 peripheral nerves and autonomic nervous system	2	1	3	25,319	32,101
C48 retroperitoneum and peritoneum	4	10	15	15,302	9,805
C49 other connective and soft tissue	41	25	66	1,375	1,695
C50 breast	9	747	756	6,441	74
C51 vulva	-	22	22		4,593
C52 vagina	-	7	7		12,338
C53 cervix uteri	-	84	84		482
C54 corpus uteri	-	117	117		515
C55 uterus, part unspecified	-	35	35		1,602
C56 ovary	-	294	294		167
C57 other and unspecified female genital organs	-	12	12		3,280
C56-57 ovary and other and unspecified female genital organs	-	306	306		159
C51-52,55,57,58 other gynaecological cancers	-	76	76		809
C60 penis	10	-	10	6,335	
C61 prostate	621	-	621	177	
C62 testis	5	-	5	7,321	
C63 other and unspecified male genital organs	1	-	1	42,447	
C60,C63 penis and other unspecified male genital organs	11	-	11	5,512	
C64 kidney, except renal pelvis	160	83	243	372	815
C65 renal pelvis	0	1	1	81,522	
C66 ureter	2	3	5	40,136	87,062
C64-66 kidney incl. renal pelvis and ureter	162	87	249	367	807
C67 bladder	151	76	227	737	1,488
C68 other and unspecified urinary organs	61	26	87	917	2,415
C69 eye and adnexa	5	3	8	14,397	23,046
C70 meninges	1	1	2	35,339	73,217
C71 brain	196	127	323	213	327
C72 spinal cord, cranial nerves and other parts of CNS	2	1	4	21,358	27,072
C71-72 brain & spinal cord	198	129	327	211	323

3-YEAR ANNUAL AVERAGE DEATHS (2021-2023) AND RISK OF DYING OF CANCER BEFORE 75TH BIRTHDAY					
	deaths			# risk of cancer death before 75th birthday	
D32-D33 benign brain & CNS	9	14	23	9,088	7,614
D42-D43 neoplasm of uncertain meninges, brain & CNS	19	15	34	2,512	4,306
C71-72,D32-33,D42-43 all brain and CNS	226	157	384	190	289
C73 thyroid	13	14	27	4,048	3,557
C74 adrenal gland	6	6	12	6,201	6,462
C75 other endocrine glands and related structures	3	1	4	14,658	57,449
C76 other and ill-defined sites	20	17	37	2,532	7,598
C80 malignant neoplasm without specification of site	240	214	454	261	334
C81 Hodgkin lymphoma	9	12	21	8,730	5,558
C82 follicular [nodular] non-Hodgkin lymphoma	6	6	12	19,392	8,957
C83 diffuse non-Hodgkin lymphoma	50	34	84	1,169	1,914
C84 peripheral and cutaneous T-cell lymphomas	8	7	15	8,097	8,739
C85 other and unspecified types of non-Hodgkin lymphoma	93	77	170	768	1,113
C86 Other specified types of T/NK-cell lymphoma	2	0	3	16,891	
C82-86 non-Hodgkin lymphoma	159	124	283	418	607
C88 malignant immunoproliferative diseases	6	4	10	28,155	15,741
C90 multiple myeloma	108	74	182	725	1,220
C91 lymphoid leukaemia	66	35	101	1,214	2,419
C92 myeloid leukaemia	105	60	164	597	1,017
C93 monocytic leukaemia	9	3	12	7,819	25,993
C95 leukaemia of unspecified cell type	11	9	20	7,714	8,482
C91-95 leukaemia	190	106	296	363	644

source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67]. source of data: Central Statistics Office, Ireland [67].

● 3-year annual averages: (i.e., male + female) deaths are subject to rounding

risk of dying of cancer before 75th birthday calculated using the cumulative risk method [13]: 1 in [...], e.g. 1 in 11 risk for males of dying of an invasive cancer (C00-97) before 75th birthday during the period 2021-2023.

APPENDIX IV: NATIONAL MORTALITY RATES

European age-standardised mortality rate (EASMR, per 100,000) was calculated using 2013 European Standard Populations (ESP) age-weights [3].

CRUDE AND AGE-STANDARDISED MORTALITY RATE: ANNUAL AVERAGE 2021-2023						
	CRUDE RATE X100,000			AGE-STANDARDISED RATE X100.000		
cancer	male	female	both sexes	males	females	both sexes
C00-97 all invasive cancers	209.3	177.4	193.2	296.1	213.7	249.6
C00-43, C45-96 all invasive cancers excl. NMSC	206.8	176.2	191.3	292.1	212.2	247.1
C00-97, D00-48 all registered tumours	214.8	181.6	198.0	304.6	218.9	256.3
D00-48 all non-malignant cancers	5.5	4.2	4.8	8.5	5.2	6.6
C01-C06 and C09-C13 oral and pharyngeal cancer	4.5	1.7	3.1	5.8	2.1	3.9
C01-14 mouth and pharynx	5.7	2.1	3.9	7.4	2.5	4.9
C15 oesophagus	11.8	5.1	8.4	15.9	6.2	10.8
C16 stomach	7.7	4.4	6.0	10.8	5.4	7.8
C17 small intestine	0.7	0.5	0.6	1.0	0.7	0.8
C18 colon	8.2	7.3	7.8	12.1	9.0	10.4
C19 rectosigmoid junction	10.5	7.3	8.9	14.3	8.7	11.2
C20 rectum	4.6	2.4	3.5	6.5	2.9	4.5
C18-20 colorectal	23.2	17.1	20.1	32.8	20.6	26.1
C18-21 colorectal and anus	23.6	17.5	20.5	33.3	21.1	26.6
C19-20 rectum and rectosigmoid junction	15.1	9.7	12.4	20.8	11.6	15.7
C21 anus	0.3	0.4	0.4	0.4	0.5	0.5
C22 liver and intrahepatic bile ducts	10.7	6.5	8.6	14.7	7.9	11.0
C23 gallbladder	0.5	1.1	0.8	0.7	1.4	1.1
C24 other and unspecified parts of biliary tract	0.8	0.6	0.7	1.0	0.7	0.9
C23-24 gallbladder and biliary tract	1.3	1.8	1.5	1.7	2.1	2.0
C25 pancreas	12.5	11.2	11.8	17.2	13.7	15.3
C26 other and ill-defined digestive organs	2.7	2.3	2.5	4.1	2.8	3.4
C30 nasal cavity and middle ear	0.0	0.0	0.0	0.0	0.0	0.0
C31 accessory sinuses	0.1	0.1	0.1	0.2	0.1	0.2
C32 larynx	2.4	0.4	1.4	3.3	0.5	1.8
C00-14, C30-32 head & neck	8.3	2.7	5.5	11.0	3.3	6.9
C34 bronchus and lung	41.7	34.4	38.0	56.7	42.0	48.7
C33-34 bronchus, lung and trachea	41.7	34.5	38.1	56.8	42.0	48.8
C37 thymus	0.0	0.1	0.0	0.0	0.1	0.0
C38 heart, mediastinum and pleura	0.1	0.0	0.1	0.2	0.0	0.1
C40 bone and articular cartilage of limbs	0.1	0.1	0.1	0.1	0.1	0.1
C41 bone and articular cartilage of other and unspecified sites	0.6	0.3	0.5	0.7	0.4	0.5
C41-42 bone and articular cartilage of limbs and other and unspecified sites	0.6	0.3	0.5	0.7	0.4	0.5
C43 melanoma of skin	4.4	2.9	3.6	6.3	3.5	4.7
C44 other malignant neoplasms of skin NMSC	2.6	1.2	1.9	4.0	1.5	2.6
C45 mesothelioma	1.4	0.4	0.9	2.0	0.5	1.2
C47 peripheral nerves and autonomic nervous system	0.1	0.0	0.1	0.1	0.0	0.1
C48 retroperitoneum and peritoneum	0.2	0.4	0.3	0.2	0.5	0.4
C49 other connective and soft tissue	1.6	1.0	1.3	2.1	1.1	1.5
☐ C50 breast	0.4	28.5	14.6	0.5	33.7	18.4
C51 vulva	-	0.8	0.4	-	1.0	0.6
C52 vagina	-	0.3	0.1	-	0.3	0.2
C53 cervix uteri	-	3.2	1.6	-	3.5	1.8
C54 corpus uteri	-	4.5	2.3	-	5.4	2.9
C55 uterus, part unspecified	-	1.4	0.7	-	1.6	0.9
C56 ovary	-	11.2	5.7	-	13.4	7.1
C57 other and unspecified female genital organs	-	0.5	0.2	-	0.6	0.3
C56-57 ovary and other and unspecified female genital organs	-	11.7	5.9	-	13.9	7.4
C58 placenta	-	0.0	0.0	-	0.0	0.0
C51-52,55,57,58 other gynaecological cancers	-	2.9	1.5	-	3.5	1.9
C60 penis	0.4	-	0.2	0.6	-	0.3
C61 prostate	24.3	-	12.0	39.0	-	16.7
C62 testis	0.2	-	0.1	0.2	-	0.1

CRUDE AND AGE-STANDARDISED MORTALITY RATE: ANNUAL AVERAGE 2021-2023						
	CRUDE RATE X100,000			AGE-STANDARDISED RATE X100.000		
cancer	male	female	both sexes	males	females	both sexes
C63 other and unspecified male genital organs	0.0	-	0.0	0.1	-	0.0
C60,C63 penis and other unspecified male genital organs	0.4	-	0.2	0.7	-	0.3
C64 kidney, except renal pelvis	6.2	3.2	4.7	8.6	3.9	6.0
C65 renal pelvis	0.0	0.0	0.0	0.0	0.0	0.0
C66 ureter	0.1	0.1	0.1	0.1	0.1	0.1
C64-66 kidney incl. renal pelvis and ureter	6.3	3.3	4.8	8.8	4.0	6.2
C67 bladder	5.9	2.9	4.4	9.3	3.6	6.0
C68 other and unspecified urinary organs	2.4	1.0	1.7	3.2	1.2	2.1
C69 eye and adnexa	0.2	0.1	0.2	0.3	0.1	0.2
C71 brain	7.6	4.8	6.2	9.2	5.5	7.3
C72 spinal cord, cranial nerves and other parts of CNS	0.1	0.1	0.1	0.1	0.0	0.1
C71-72 brain & spinal cord	7.7	4.9	6.3	9.3	5.6	7.4
D32-D33 benign brain & CNS	0.4	0.5	0.4	0.5	0.6	0.6
D42-D43 neoplasm of uncertain meninges, brain & CNS	0.8	0.6	0.7	1.0	0.7	0.8
C71-72,D32-33,D42-43 all brain and CNS	8.8	6.0	7.4	10.9	6.9	8.8
C73 thyroid	0.5	0.5	0.5	0.7	0.7	0.7
C74 adrenal gland	0.2	0.2	0.2	0.3	0.2	0.3
C75 other endocrine glands and related structures	0.1	0.1	0.1	0.1	0.1	0.1
C76 other and ill-defined sites	0.8	0.6	0.7	1.1	0.8	1.0
C80 malignant neoplasm without specification of site	9.4	8.2	8.8	13.5	9.9	11.5
C81 Hodgkin lymphoma	0.4	0.5	0.4	0.5	0.6	0.5
C82 follicular [nodular] non-Hodgkin lymphoma	0.2	0.2	0.2	0.4	0.3	0.3
C83 diffuse non-Hodgkin lymphoma	1.9	1.3	1.6	2.7	1.6	2.1
C84 peripheral and cutaneous T-cell lymphomas	0.3	0.3	0.3	0.4	0.3	0.4
C85 other and unspecified types of non-Hodgkin lymphoma	3.6	3.0	3.3	5.4	3.7	4.4
C86 Other specified types of T/NK-cell lymphoma	0.1	0.0	0.1	0.1	0.0	0.1
C82-86 non-Hodgkin lymphoma	6.2	4.8	5.5	9.0	5.9	7.3
C88 malignant immunoproliferative diseases	0.2	0.2	0.2	0.4	0.2	0.3
C90 multiple myeloma	4.2	2.8	3.5	6.3	3.5	4.7
C91 lymphoid leukaemia	2.6	1.3	1.9	3.8	1.6	2.6
C92 myeloid leukaemia	4.1	2.3	3.2	5.8	2.8	4.1
C93 monocytic leukaemia	0.4	0.1	0.2	0.5	0.1	0.3
C95 leukaemia of unspecified cell type	0.4	0.3	0.4	0.6	0.4	0.5
C91-95 leukaemia	7.4	4.0	5.7	10.7	4.9	7.5

APPENDIX V: FIVE-YEAR NET SURVIVAL BY CANCER SITE, SEX AND STAGE, 2019-2023

cancer	sex	stage	No. at time 0 period 2019-2023	%	‡ 5-yr net survival %	lower 95%CI	upper 95%CI
C00-43, C45-96 all invasive cancers excl. NMSC	F	all stage	52,573	100%	67.5%	67.0%	68.0%
C00-43, C45-96 all invasive cancers excl. NMSC	M	all stage	58,725	100%	66.9%	66.4%	67.4%
C00-43, C45-96 all invasive cancers excl. NMSC	M&F	all stage	111,298	100%	67.2%	66.8%	67.5%
C00-14, C30-32 head & neck	F	all stage	897	100%	64.2%	60.2%	67.8%
C00-14, C30-32 head & neck	F	I	200	22%	92.5%	83.9%	96.6%
C00-14, C30-32 head & neck	F	II	100	11%	75.3%	62.9%	84.0%
C00-14, C30-32 head & neck	F	III	128	14%	65.3%	55.2%	73.7%
C00-14, C30-32 head & neck	F	IV	312	35%	46.6%	40.1%	52.8%
C00-14, C30-32 head & neck	F	unstaged	157	18%	50.9%	38.2%	62.2%
C00-14, C30-32 head & neck	M	all stage	2,534	100%	61.1%	58.7%	63.4%
C00-14, C30-32 head & neck	M	I	439	17%	91.7%	85.2%	95.4%
C00-14, C30-32 head & neck	M	II	242	10%	80.5%	72.7%	86.3%
C00-14, C30-32 head & neck	M	III	403	16%	65.8%	60.1%	70.9%
C00-14, C30-32 head & neck	M	IV	1,023	40%	41.7%	38.4%	44.9%
C00-14, C30-32 head & neck	M	unstaged	427	17%	64.9%	55.8%	72.6%
C00-14, C30-32 head & neck	M&F	all stage	3,431	100%	61.9%	59.9%	63.9%
C00-14, C30-32 head & neck	M&F	I	639	19%	92.0%	87.2%	95.0%
C00-14, C30-32 head & neck	M&F	II	342	10%	79.0%	72.7%	84.0%
C00-14, C30-32 head & neck	M&F	III	531	15%	65.7%	60.8%	70.1%
C00-14, C30-32 head & neck	M&F	IV	1,335	39%	42.8%	39.9%	45.7%
C00-14, C30-32 head & neck	M&F	unstaged	584	17%	61.0%	53.6%	67.6%
C15 oesophagus	F	all stage	709	100%	24.3%	20.7%	28.1%
C15 oesophagus	F	I	86	12%	71.0%	55.2%	82.1%
C15 oesophagus	F	II	65	9%	37.7%	25.6%	49.7%
C15 oesophagus	F	III	133	19%	23.0%	15.5%	31.5%
C15 oesophagus	F	IV	156	22%	2.9%	1.0%	6.4%
C15 oesophagus	F	unstaged	269	38%	19.6%	13.9%	26.0%
C15 oesophagus	M	all stage	1,516	100%	23.6%	21.2%	26.2%
C15 oesophagus	M	I	201	13%	81.8%	71.7%	88.6%
C15 oesophagus	M	II	120	8%	44.8%	34.4%	54.6%
C15 oesophagus	M	III	348	23%	17.7%	13.6%	22.3%
C15 oesophagus	M	IV	432	28%	2.2%	1.1%	3.8%
C15 oesophagus	M	unstaged	415	27%	20.9%	15.5%	26.8%
C15 oesophagus	M&F	all stage	2,225	100%	23.9%	21.8%	26.0%
C15 oesophagus	M&F	I	287	13%	78.6%	70.4%	84.7%
C15 oesophagus	M&F	II	185	8%	42.2%	34.2%	49.9%
C15 oesophagus	M&F	III	481	22%	19.0%	15.3%	23.0%
C15 oesophagus	M&F	IV	588	26%	2.4%	1.4%	3.8%
C15 oesophagus	M&F	unstaged	684	31%	20.6%	16.5%	24.9%
C16 stomach	F	all stage	934	100%	41.3%	37.5%	45.1%
C16 stomach	F	I	131	14%	87.4%	74.5%	94.0%
C16 stomach	F	II	93	10%	50.2%	37.4%	61.7%
C16 stomach	F	III	133	14%	26.9%	18.5%	35.9%
C16 stomach	F	IV	248	27%	5.3%	2.9%	8.9%
C16 stomach	F	unstaged	329	35%	58.5%	50.9%	65.3%
C16 stomach	M	all stage	1,532	100%	32.8%	30.0%	35.6%
C16 stomach	M	I	199	13%	83.4%	72.3%	90.3%
C16 stomach	M	II	122	8%	55.9%	45.2%	65.3%
C16 stomach	M	III	269	18%	30.0%	24.0%	36.2%
C16 stomach	M	IV	498	33%	3.4%	2.0%	5.3%
C16 stomach	M	unstaged	444	29%	43.3%	36.5%	49.8%
C16 stomach	M&F	all stage	2,466	100%	35.9%	33.6%	38.2%
C16 stomach	M&F	I	330	13%	84.9%	77.0%	90.3%
C16 stomach	M&F	II	215	9%	53.9%	45.7%	61.4%
C16 stomach	M&F	III	402	16%	29.1%	24.1%	34.2%
C16 stomach	M&F	IV	746	30%	3.9%	2.6%	5.5%
C16 stomach	M&F	unstaged	773	31%	50.0%	44.9%	54.8%
C18-20 colorectal	F	all stage	5,016	100%	65.4%	63.7%	67.0%
C18-20 colorectal	F	I	885	18%	100.4%	100.4%	100.4%
C18-20 colorectal	F	II	1,089	22%	92.2%	88.1%	95.0%
C18-20 colorectal	F	III	1,396	28%	69.8%	66.6%	72.7%
C18-20 colorectal	F	IV	1,069	21%	13.4%	11.4%	15.5%
C18-20 colorectal	F	unstaged	577	12%	47.5%	39.9%	54.7%
C18-20 colorectal	M	all stage	6,562	100%	65.6%	64.1%	67.1%

cancer	sex	stage	No. at time 0 period 2019-2023	%	‡ 5-yr net survival %	lower 95%CI	upper 95%CI
C18-20 colorectal	M	I	1,099	17%	99.7%	0.2%	100.0%
C18-20 colorectal	M	II	1,406	21%	89.3%	85.8%	92.0%
C18-20 colorectal	M	III	1,956	30%	72.8%	70.1%	75.3%
C18-20 colorectal	M	IV	1,384	21%	15.0%	13.1%	17.1%
C18-20 colorectal	M	unstaged	717	11%	38.3%	31.1%	45.4%
C18-20 colorectal	M&F	all stage	11,578	100%	65.5%	64.4%	66.6%
C18-20 colorectal	M&F	I	1,984	17%	100.0%	0.0%	100.0%
C18-20 colorectal	M&F	II	2,495	22%	90.6%	88.0%	92.6%
C18-20 colorectal	M&F	III	3,352	29%	71.5%	69.5%	73.4%
C18-20 colorectal	M&F	IV	2,453	21%	14.3%	12.9%	15.8%
C18-20 colorectal	M&F	unstaged	1,294	11%	42.6%	37.3%	47.8%
C22 liver and intrahepatic bile ducts	F	all stage	452	100%	15.0%	11.5%	18.9%
C22 liver and intrahepatic bile ducts	F	I	62	14%	33.6%	21.6%	46.0%
C22 liver and intrahepatic bile ducts	F	II	50	11%	17.5%	8.3%	29.4%
C22 liver and intrahepatic bile ducts	F	III	51	11%	12.8%	5.4%	23.6%
C22 liver and intrahepatic bile ducts	F	IV	150	33%	4.2%	1.6%	8.9%
C22 liver and intrahepatic bile ducts	F	unstaged	139	31%	17.0%	9.4%	26.5%
C22 liver and intrahepatic bile ducts	M	all stage	1,027	100%	16.2%	13.9%	18.7%
C22 liver and intrahepatic bile ducts	M	I	155	15%	34.4%	26.9%	42.1%
C22 liver and intrahepatic bile ducts	M	II	182	18%	23.1%	17.4%	29.3%
C22 liver and intrahepatic bile ducts	M	III	157	15%	5.2%	2.6%	9.2%
C22 liver and intrahepatic bile ducts	M	IV	277	27%	6.5%	3.9%	9.9%
C22 liver and intrahepatic bile ducts	M	unstaged	256	25%	19.9%	13.1%	27.8%
C22 liver and intrahepatic bile ducts	M&F	all stage	1,479	100%	15.8%	13.8%	17.9%
C22 liver and intrahepatic bile ducts	M&F	I	217	15%	34.1%	27.6%	40.6%
C22 liver and intrahepatic bile ducts	M&F	II	232	16%	22.0%	17.0%	27.5%
C22 liver and intrahepatic bile ducts	M&F	III	208	14%	6.8%	4.0%	10.6%
C22 liver and intrahepatic bile ducts	M&F	IV	427	29%	5.7%	3.6%	8.3%
C22 liver and intrahepatic bile ducts	M&F	unstaged	395	27%	18.7%	13.4%	24.7%
C25 pancreas	F	all stage	1,333	100%	12.1%	10.2%	14.1%
C25 pancreas	F	I	232	17%	34.9%	28.2%	41.7%
C25 pancreas	F	II	224	17%	16.8%	11.8%	22.6%
C25 pancreas	F	III	102	8%	4.9%	2.0%	9.8%
C25 pancreas	F	IV	577	43%	2.3%	1.2%	3.9%
C25 pancreas	F	unstaged	198	15%	12.8%	7.2%	20.0%
C25 pancreas	M	all stage	1,399	100%	11.3%	9.5%	13.3%
C25 pancreas	M	I	183	13%	31.1%	23.5%	39.0%
C25 pancreas	M	II	226	16%	18.6%	13.4%	24.4%
C25 pancreas	M	III	106	8%	4.5%	1.4%	10.5%
C25 pancreas	M	IV	666	48%	3.9%	2.5%	5.7%
C25 pancreas	M	unstaged	218	16%	17.3%	10.6%	25.4%
C25 pancreas	M&F	all stage	2,732	100%	11.7%	10.3%	13.1%
C25 pancreas	M&F	I	415	15%	33.2%	28.2%	38.4%
C25 pancreas	M&F	II	450	16%	17.8%	14.0%	21.8%
C25 pancreas	M&F	III	208	8%	4.8%	2.4%	8.3%
C25 pancreas	M&F	IV	1,243	45%	3.2%	2.2%	4.3%
C25 pancreas	M&F	unstaged	416	15%	14.6%	10.0%	20.0%
C33-34 bronchus, lung and trachea	F	all stage	5,433	100%	26.8%	25.5%	28.2%
C33-34 bronchus, lung and trachea	F	I	1,245	23%	66.3%	62.9%	69.5%
C33-34 bronchus, lung and trachea	F	II	330	6%	40.6%	35.1%	46.1%
C33-34 bronchus, lung and trachea	F	III	1,005	18%	22.0%	19.4%	24.8%
C33-34 bronchus, lung and trachea	F	IV	2,135	39%	5.8%	4.8%	6.9%
C33-34 bronchus, lung and trachea	F	unstaged	718	13%	22.0%	15.6%	29.2%
C33-34 bronchus, lung and trachea	M	all stage	5,934	100%	18.8%	17.7%	20.0%
C33-34 bronchus, lung and trachea	M	I	977	16%	51.4%	47.5%	55.1%
C33-34 bronchus, lung and trachea	M	II	392	7%	33.8%	29.0%	38.6%
C33-34 bronchus, lung and trachea	M	III	1,170	20%	16.7%	14.5%	19.0%
C33-34 bronchus, lung and trachea	M	IV	2,631	44%	5.5%	4.6%	6.6%
C33-34 bronchus, lung and trachea	M	unstaged	764	13%	17.4%	12.0%	23.7%
C33-34 bronchus, lung and trachea	M&F	all stage	11,367	100%	22.6%	21.7%	23.5%
C33-34 bronchus, lung and trachea	M&F	I	2,222	20%	59.5%	56.9%	62.0%
C33-34 bronchus, lung and trachea	M&F	II	722	6%	37.0%	33.4%	40.7%
C33-34 bronchus, lung and trachea	M&F	III	2,175	19%	19.1%	17.4%	20.8%
C33-34 bronchus, lung and trachea	M&F	IV	4,766	42%	5.6%	4.9%	6.3%
C33-34 bronchus, lung and trachea	M&F	unstaged	1,482	13%	19.6%	15.3%	24.3%
C43 melanoma of skin	F	all stage	2,967	100%	95.9%	93.7%	97.4%
C43 melanoma of skin	F	I	1,978	67%	102.0%	102.0%	102.0%
C43 melanoma of skin	F	II	566	19%	92.5%	82.4%	96.9%
C43 melanoma of skin	F	III	241	8%	74.1%	66.1%	80.5%
C43 melanoma of skin	F	IV	92	3%	46.0%	33.9%	57.1%
C43 melanoma of skin	F	unstaged	90	3%	97.0%	0.0%	100.0%
C43 melanoma of skin	M	all stage	2,842	100%	89.1%	86.6%	91.2%

cancer	sex	stage	No. at time 0 period 2019-2023	%	‡ 5-yr net survival %	lower 95%CI	upper 95%CI
C43 melanoma of skin	M	I	1,632	57%	103.2%	103.2%	103.2%
C43 melanoma of skin	M	II	640	23%	78.4%	71.5%	83.9%
C43 melanoma of skin	M	III	282	10%	71.5%	63.8%	77.9%
C43 melanoma of skin	M	IV	177	6%	36.6%	28.3%	45.0%
C43 melanoma of skin	M	unstaged	111	4%	75.4%	56.3%	87.0%
C43 melanoma of skin	M&F	all stage	5,809	100%	92.7%	91.1%	94.0%
C43 melanoma of skin	M&F	I	3,610	62%	102.5%	102.5%	102.5%
C43 melanoma of skin	M&F	II	1,206	21%	85.1%	80.0%	89.1%
C43 melanoma of skin	M&F	III	523	9%	72.8%	67.4%	77.4%
C43 melanoma of skin	M&F	IV	269	5%	39.8%	32.9%	46.6%
C43 melanoma of skin	M&F	unstaged	201	3%	85.1%	62.8%	94.6%
C50 breast	F	all stage	17,637	100%	90.3%	89.6%	90.9%
C50 breast	F	I	6,436	36%	100.0%	100.0%	100.0%
C50 breast	F	II	6,968	40%	94.6%	93.4%	95.5%
C50 breast	F	III	2,251	13%	79.8%	77.5%	81.8%
C50 breast	F	IV	1,024	6%	37.1%	33.9%	40.3%
C50 breast	F	unstaged	958	5%	69.4%	59.2%	77.5%
C50 breast	M	all stage	122	100%	94.8%	58.5%	99.5%
C50 breast	M	I	23	19%	118.6%	118.6%	118.6%
C50 breast	M	II	52	43%	95.9%	11.3%	99.9%
C50 breast	M	III	25	20%	99.0%	0.0%	100.0%
C50 breast	M	IV	16	13%	43.1%	14.9%	69.0%
C50 breast	M	unstaged	6	5%	90.9%	0.0%	99.9%
C50 breast	M&F	all stage	17,759	100%	90.3%	89.6%	91.0%
C50 breast	M&F	I	6,459	36%	100.1%	100.1%	100.1%
C50 breast	M&F	II	7,020	40%	94.6%	93.4%	95.5%
C50 breast	M&F	III	2,276	13%	80.0%	77.7%	82.0%
C50 breast	M&F	IV	1,040	6%	37.1%	33.9%	40.3%
C50 breast	M&F	unstaged	964	5%	69.4%	59.3%	77.5%
C53 cervix uteri	F	all stage	1,256	100%	74.0%	71.3%	76.4%
C53 cervix uteri	F	I	529	42%	94.9%	92.6%	96.6%
C53 cervix uteri	F	II	182	14%	83.6%	76.3%	88.9%
C53 cervix uteri	F	III	268	21%	63.3%	57.1%	68.8%
C53 cervix uteri	F	IV	173	14%	20.6%	14.9%	26.8%
C53 cervix uteri	F	unstaged	104	8%	58.5%	39.1%	73.7%
C54 corpus uteri	F	all stage	2,571	100%	80.0%	78.0%	81.9%
C54 corpus uteri	F	I	1,729	67%	95.5%	93.5%	96.9%
C54 corpus uteri	F	II	113	4%	77.0%	65.0%	85.3%
C54 corpus uteri	F	III	327	13%	51.2%	44.7%	57.3%
C54 corpus uteri	F	IV	194	8%	18.6%	13.5%	24.2%
C54 corpus uteri	F	unstaged	208	8%	46.9%	35.9%	57.2%
C56 ovary	F	all stage	1,727	100%	43.9%	41.4%	46.4%
C56 ovary	F	I	488	28%	88.3%	84.1%	91.5%
C56 ovary	F	II	123	7%	48.8%	39.6%	57.4%
C56 ovary	F	III	535	31%	27.1%	23.4%	31.0%
C56 ovary	F	IV	369	21%	18.1%	14.5%	22.0%
C56 ovary	F	unstaged	212	12%	39.9%	28.8%	50.7%
C61 prostate	M	all stage	20,055	100%	97.1%	96.3%	97.6%
C61 prostate	M	I	8,274	41%	103.8%	103.8%	103.8%
C61 prostate	M	II	3,850	19%	105.1%	105.1%	105.1%
C61 prostate	M	III	3,242	16%	102.2%	102.2%	102.2%
C61 prostate	M	IV	2,026	10%	52.3%	49.5%	55.1%
C61 prostate	M	unstaged	2,663	13%	88.2%	81.8%	92.4%
C62 testis	M	all stage	840	100%	97.1%	95.3%	98.3%
C62 testis	M	I	633	75%	100.2%	100.2%	100.2%
C62 testis	M	II	93	11%	93.5%	87.0%	96.8%
C62 testis	M	III	69	8%	87.5%	77.0%	93.4%
C62 testis	M	unstaged	45	5%	75.9%	46.4%	90.6%
C64 kidney, except renal pelvis	F	all stage	1,070	100%	74.0%	70.6%	77.1%
C64 kidney, except renal pelvis	F	I	562	53%	92.1%	87.5%	95.1%
C64 kidney, except renal pelvis	F	II	82	8%	87.6%	72.6%	94.7%
C64 kidney, except renal pelvis	F	III	180	17%	80.4%	71.5%	86.7%
C64 kidney, except renal pelvis	F	IV	179	17%	10.4%	6.2%	15.9%
C64 kidney, except renal pelvis	F	unstaged	67	6%	52.5%	36.9%	65.9%
C64 kidney, except renal pelvis	M	all stage	1,921	100%	72.4%	69.8%	74.9%
C64 kidney, except renal pelvis	M	I	848	44%	90.4%	86.6%	93.2%
C64 kidney, except renal pelvis	M	II	127	7%	80.9%	66.9%	89.4%
C64 kidney, except renal pelvis	M	III	474	25%	83.5%	78.0%	87.8%
C64 kidney, except renal pelvis	M	IV	348	18%	18.1%	14.0%	22.6%
C64 kidney, except renal pelvis	M	unstaged	124	6%	55.2%	40.5%	67.7%
C64 kidney, except renal pelvis	M&F	all stage	2,991	100%	73.0%	70.9%	75.0%
C64 kidney, except renal pelvis	M&F	I	1,410	47%	91.1%	88.3%	93.3%

cancer	sex	stage	No. at time 0 period 2019-2023	%	‡ 5-yr net survival %	lower 95%CI	upper 95%CI
C64 kidney, except renal pelvis	M&F	II	209	7%	83.4%	73.6%	89.8%
C64 kidney, except renal pelvis	M&F	III	654	22%	82.6%	78.1%	86.3%
C64 kidney, except renal pelvis	M&F	IV	527	18%	15.6%	12.4%	19.0%
C64 kidney, except renal pelvis	M&F	unstaged	191	6%	54.1%	43.6%	63.5%
C67 bladder	F	all stage	570	100%	38.6%	33.6%	43.5%
C67 bladder	F	I	184	32%	73.9%	61.6%	82.8%
C67 bladder	F	II	118	21%	37.2%	27.0%	47.3%
C67 bladder	F	III	62	11%	25.1%	15.3%	36.1%
C67 bladder	F	IV	136	24%	11.6%	6.8%	17.7%
C67 bladder	F	unstaged	70	12%	21.7%	9.8%	36.7%
C67 bladder	M	all stage	1,318	100%	49.9%	46.2%	53.5%
C67 bladder	M	I	542	41%	73.3%	66.8%	78.8%
C67 bladder	M	II	300	23%	47.6%	39.5%	55.3%
C67 bladder	M	III	101	8%	41.8%	29.6%	53.5%
C67 bladder	M	IV	253	19%	13.2%	9.2%	18.0%
C67 bladder	M	unstaged	122	9%	42.3%	29.5%	54.5%
C67 bladder	M&F	all stage	1,888	100%	46.5%	43.5%	49.5%
C67 bladder	M&F	I	726	38%	73.4%	67.8%	78.2%
C67 bladder	M&F	II	418	22%	44.6%	38.1%	50.8%
C67 bladder	M&F	III	163	9%	35.0%	26.7%	43.4%
C67 bladder	M&F	IV	389	21%	12.8%	9.5%	16.5%
C67 bladder	M&F	unstaged	192	10%	34.4%	24.9%	44.0%
C73 thyroid	F	all stage	945	100%	95.8%	93.7%	97.3%
C73 thyroid	F	I	232	25%	101.4%	101.4%	101.4%
C73 thyroid	F	II	74	8%	104.7%	104.7%	104.7%
C73 thyroid	F	III	74	8%	102.8%	102.8%	102.8%
C73 thyroid	F	IV	41	4%	57.7%	40.5%	71.6%
C73 thyroid	F	unstaged	524	55%	94.5%	91.6%	96.4%
C73 thyroid	M	all stage	335	100%	91.0%	85.7%	94.3%
C73 thyroid	M	I	61	18%	103.2%	103.2%	103.2%
C73 thyroid	M	II	18	5%	97.5%	0.0%	100.0%
C73 thyroid	M	III	28	8%	91.6%	69.3%	97.9%
C73 thyroid	M	IV	51	15%	73.7%	53.6%	86.1%
C73 thyroid	M	unstaged	177	53%	91.2%	84.0%	95.3%
C73 thyroid	M&F	all stage	1,280	100%	94.6%	92.6%	96.0%
C73 thyroid	M&F	I	293	23%	101.8%	101.8%	101.8%
C73 thyroid	M&F	II	92	7%	103.5%	103.5%	103.5%
C73 thyroid	M&F	III	102	8%	98.6%	43.7%	100.0%
C73 thyroid	M&F	IV	92	7%	65.3%	52.7%	75.4%
C73 thyroid	M&F	unstaged	701	55%	93.6%	91.0%	95.5%
C81 Hodgkin lymphoma	F	all stage	320	100%	88.6%	83.9%	92.0%
C81 Hodgkin lymphoma	F	I	25	8%	94.9%	63.4%	99.4%
C81 Hodgkin lymphoma	F	II	125	39%	93.2%	86.6%	96.6%
C81 Hodgkin lymphoma	F	III	43	13%	81.4%	64.4%	90.8%
C81 Hodgkin lymphoma	F	IV	62	19%	77.9%	64.2%	86.9%
C81 Hodgkin lymphoma	F	unstaged	65	20%	79.0%	18.9%	96.7%
C81 Hodgkin lymphoma	M	all stage	405	100%	89.6%	85.2%	92.7%
C81 Hodgkin lymphoma	M	I	34	8%	97.2%	44.2%	99.9%
C81 Hodgkin lymphoma	M	II	119	29%	97.1%	88.1%	99.3%
C81 Hodgkin lymphoma	M	III	65	16%	83.2%	71.1%	90.6%
C81 Hodgkin lymphoma	M	IV	73	18%	78.2%	66.3%	86.3%
C81 Hodgkin lymphoma	M	unstaged	114	28%	106.7%	106.7%	106.7%
C81 Hodgkin lymphoma	M&F	all stage	725	100%	89.1%	86.1%	91.5%
C81 Hodgkin lymphoma	M&F	I	59	8%	96.5%	76.9%	99.5%
C81 Hodgkin lymphoma	M&F	II	244	34%	95.0%	90.7%	97.4%
C81 Hodgkin lymphoma	M&F	III	108	15%	82.5%	73.3%	88.8%
C81 Hodgkin lymphoma	M&F	IV	135	19%	78.2%	69.8%	84.6%
C81 Hodgkin lymphoma	M&F	unstaged	179	25%	89.1%	32.0%	98.8%
C82-86 non-Hodgkin lymphoma	F	all stage	1,591	100%	73.2%	70.4%	75.8%
C82-86 non-Hodgkin lymphoma	F	I	303	19%	81.9%	75.5%	86.8%
C82-86 non-Hodgkin lymphoma	F	II	202	13%	76.0%	68.1%	82.2%
C82-86 non-Hodgkin lymphoma	F	III	229	14%	68.6%	61.3%	74.8%
C82-86 non-Hodgkin lymphoma	F	IV	468	29%	69.3%	64.2%	73.8%
C82-86 non-Hodgkin lymphoma	F	unstaged	389	24%	73.6%	64.5%	80.6%
C82-86 non-Hodgkin lymphoma	M	all stage	2,111	100%	72.0%	69.4%	74.4%
C82-86 non-Hodgkin lymphoma	M	I	424	20%	84.4%	78.7%	88.6%
C82-86 non-Hodgkin lymphoma	M	II	227	11%	74.3%	66.9%	80.3%
C82-86 non-Hodgkin lymphoma	M	III	303	14%	70.9%	64.6%	76.4%
C82-86 non-Hodgkin lymphoma	M	IV	677	32%	64.2%	59.7%	68.3%
C82-86 non-Hodgkin lymphoma	M	unstaged	480	23%	70.4%	60.4%	78.3%
C82-86 non-Hodgkin lymphoma	M&F	all stage	3,702	100%	72.5%	70.6%	74.3%
C82-86 non-Hodgkin lymphoma	M&F	I	727	20%	83.3%	79.3%	86.7%

cancer	sex	stage	No. at time 0 period 2019-2023	%	‡ 5-yr net survival %	lower 95%CI	upper 95%CI
C82-86 non-Hodgkin lymphoma	M&F	II	429	12%	75.3%	70.0%	79.7%
C82-86 non-Hodgkin lymphoma	M&F	III	532	14%	69.9%	65.2%	74.1%
C82-86 non-Hodgkin lymphoma	M&F	IV	1,145	31%	66.3%	63.0%	69.4%
C82-86 non-Hodgkin lymphoma	M&F	unstaged	869	23%	71.8%	65.2%	77.4%

‡ 5-year net survival, not standardised for age because, for some cancers, there were no cases in some combinations of age and stage.

REFERENCES

[1] 'Vital Statistics Annual Report 2023 – Deaths (Table 2.2)'. Central Statistics Office, Cork, Ireland, Nov. 03, 2025. Accessed: Apr. 23, 2026. [Online]. Available: https://www.cso.ie/en/releasesandpublications/ep/p-vsar/vitalstatisticsannualreport2023/deaths2023/

[2] L. H. Sobin, Gospodarowicz, M.K., and Wittekind, Ch., *TNM classification of malignant tumours*, 7th edn. UICC, Wiley-Blackwell, 2009.

[3] EUROSTAT, 'Revision of the European Standard Popul ation — Report of Eurostat's task force Luxembourg: Publications Offi ce of the European Union 2013 — 121 pp. — 21 x 29.7 cm ISBN 978-92-79-31094-2'.

[4] H. J. Kim, M. P. Fay, E. J. Feuer, and D. N. Midthune, 'Permutation tests for joinpoint regression with applications to cancer rates', *Stat Med*, vol. 19, no. 3, pp. 335–351, Feb. 2000.

[5] 'Joinpoint Regression Program'. Accessed: Jun. 19, 2026. [Online]. Available: https://surveillance.cancer.gov/joinpoint/index.html

[6] Dickman, P and Coviello, E, 'Estimating and modeling relative survival', *The Stata Journal*, vol. 15, no. 1, pp. 186–215, Jan. 2015.

[7] M. P. Perme, J. Stare, and J. Estève, 'On estimation in relative survival', *Biometrics*, vol. 68, no. 1, pp. 113–120, Mar. 2012, doi: 10.1111/j.1541-0420.2011.01640.x.

[8] H. Brenner and T. Hakulinen, 'Up-to-date long-term survival curves of patients with cancer by period analysis', *J. Clin. Oncol.*, vol. 20, no. 3, pp. 826–832, Feb. 2002, doi: 10.1200/JCO.2002.20.3.826.

[9] I. Corazziari, M. Quinn, and R. Capocaccia, 'Standard cancer patient population for age standardising survival ratios', *Eur. J. Cancer*, vol. 40, no. 15, pp. 2307–2316, Oct. 2004, doi: 10.1016/j.ejca.2004.07.002.

[10] P. D. Sasieni, J. Shelton, N. Ormiston-Smith, C. S. Thomson, and P. B. Silcocks, 'What is the lifetime risk of developing cancer?: the effect of adjusting for multiple primaries', *Br J Cancer*, vol. 105, no. 3, pp. 460–465, Jul. 2011, doi: 10.1038/bjc.2011.250.

[11] CRUK, 'Lifetime risk of cancer calculator tool', Cancer Research UK. Accessed: Oct. 16, 2020. [Online]. Available: https://www.cancerresearchuk.org/health-professional/cancer-statistics/cancer-stats-explained/our-calculations-explained

[12] 'ECIS - European Cancer Information System'. Accessed: Mar. 10, 2026. [Online]. Available: https://ecis.jrc.ec.europa.eu

[13] Day NE, 'Cumulative rates and cumulative risk', in *Five Continents: Muir C, Waterhouse J, Mack T, Powell J, Whelan S (eds)vol. V, 787–789.International Agency for Research on Cancer. (IARC Scientific Publications No. 88)*, Lyon, France, 1987.

[14] 'Deaths from preventable and treatable diseases'. Eurostat, Jun. 30, 2025. [Online]. Available: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20250630-1

[15] Central Statistics Office, 'Annual Population Estimates: PEA01 - Population Estimates (Persons in April)'. Accessed: May 14, 2026. [Online]. Available: https://data.cso.ie/

[16] 'Census 1996 Principal Demographic Results - CSO - Central Statistics Office'. Accessed: Jun. 19, 2026. [Online]. Available: https://www.cso.ie/en/census/census1996reports/census1996principaldemographicresults/

[17] A. D. Lopez, N. E. Collishaw, and T. Piha, 'A descriptive model of the cigarette epidemic in developed countries', *Tobacco Control*, vol. 3, no. 3, p. 242, Sep. 1994, doi: 10.1136/tc.3.3.242.

[18] J. Lortet-Tieulent *et al.*, 'Convergence of decreasing male and increasing female incidence rates in major tobacco-related cancers in Europe in 1988–2010', *European Journal of Cancer*, Nov. 2013, doi: 10.1016/j.ejca.2013.10.014.

[19] R. Capocaccia and R. De Angelis, 'Estimating the completeness of prevalence based on cancer registry data', *Stat Med*, vol. 16, no. 4, pp. 425–440, Feb. 1997.

[20] J. Maddams *et al.*, 'Cancer prevalence in the United Kingdom: estimates for 2008', *Br. J. Cancer*, vol. 101, no. 3, pp. 541–547, Aug. 2009, doi: 10.1038/sj.bjc.6605148.

[21] 'Cancer in Ireland 1994-2022: Annual statistical report of the National Cancer Registry'. National Cancer Registry Ireland, 2024. Accessed: Mar. 11, 2026. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/cancer-in-ireland-1994-2022-annual-statistical-report-of-the-national

[22] F. Bray, J. Ferlay, I. Soerjomataram, R. L. Siegel, L. A. Torre, and A. Jemal, 'Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries', *CA Cancer J Clin*, vol. 68, no. 6, pp. 394–424, Nov. 2018, doi: 10.3322/caac.21492.

[23] M. Elmadani, P. O. Mokaya, A. A. A. Omer, E. K. Kiptulon, S. Klara, and M. Orsolya, 'Cancer burden in Europe: a systematic analysis of the GLOBOCAN database (2022)', *BMC Cancer*, vol. 25, no. 1, p. 447, Mar. 2025, doi: 10.1186/s12885-025-13862-1.
[24] J. Ferlay *et al.*, 'Cancer incidence and mortality patterns in Europe: Estimates for 40 countries and 25 major cancers in 2018', *Eur J Cancer*, vol. 103, pp. 356–387, Nov. 2018, doi: 10.1016/j.ejca.2018.07.005.
[25] National Cancer Institute, 'SEER Program: Risk Factors: Age'. Accessed: May 14, 2026. [Online]. Available: https://www.cancer.gov/about-cancer/causes-prevention/risk/age
[26] M. C. White, D. M. Holman, J. E. Boehm, L. A. Peipins, M. Grossman, and S. J. Henley, 'Age and Cancer Risk: A Potentially Modifiable Relationship', *American Journal of Preventive Medicine*, vol. 46, no. 3, pp. S7–S15, Mar. 2014, doi: 10.1016/j.amepre.2013.10.029.
[27] OECD and European Commission, *Delivering High Value Cancer Care: European Cancer Inequalities Registry Analytical Report*. OECD Publishing, 2026. doi: 10.1787/060869fe-en.
[28] C. O'Hare *et al.*, 'Tobacco-Related Cancers Report', National Cancer Registry Ireland, 2025. Accessed: Jun. 04, 2026. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/tobacco-related-cancers-report
[29] A. D. Lopez, N. E. Collishaw, and T. Piha, 'A descriptive model of the cigarette epidemic in developed countries', *Tob Control*, vol. 3, no. 3, p. 242, Sep. 1994, doi: 10.1136/tc.3.3.242.
[30] J. Lortet-Tieulent *et al.*, 'Convergence of decreasing male and increasing female incidence rates in major tobacco-related cancers in Europe in 1988–2010', *European Journal of Cancer*, Nov. 2013, doi: 10.1016/j.ejca.2013.10.014.
[31] A. Memon *et al.*, 'Changing epidemiology and age-specific incidence of cutaneous malignant melanoma in England: An analysis of the national cancer registration data by age, gender and anatomical site, 1981-2018', *Lancet Reg Health Eur*, vol. 2, p. 100024, Mar. 2021, doi: 10.1016/j.lanepe.2021.100024.
[32] 'The latest EU cancer data: what is new? - Joint Research Centre'. Accessed: Jun. 03, 2026. [Online]. Available: https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/latest-eu-cancer-data-what-new-2025-12-17_en
[33] OECD, *Beating Cancer Inequalities in the EU: Spotlight on Cancer Prevention and Early Detection*. in OECD Health Policy Studies. OECD Publishing, 2024. doi: 10.1787/14fdc89a-en.
[34] 'ECIS contributing studies | ECIS - European Cancer Information System'. Accessed: Jun. 03, 2026. [Online]. Available: https://ecis.jrc.ec.europa.eu/ecis-contributing-studies
[35] National Cancer Registry Ireland, 'Completeness of case ascertainment at the National Cancer Registry, Ireland', NCRI, Cork, 2020. Accessed: Jun. 04, 2026. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/completeness-of-case-ascertainment-at-the-national-cancer-registry
[36] 'The European Cancer Information System (ECIS) | Knowledge for policy'. Accessed: Jun. 18, 2026. [Online]. Available: https://knowledge4policy.ec.europa.eu/cancer/topic/cancer-information/ecis_en
[37] National Cancer Registry Ireland, 'Cancer Trends 38 - Breast, cervical and colorectal cancer 1994-2019', 2022. Accessed: Jun. 11, 2026. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/cancer-trends-38-breast-cervical-and-colorectal-cancer-1994-2019
[38] National Cancer Registry Ireland, 'Cancer care and survival in relation to centralisation of Irish cancer services: an analysis of National Cancer Registry data 1994-2015', Cork: National Cancer Registry Ireland., 2019. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/cancer-care-and-survival-in-relation-to-centralisation-of-irish-cancer
[39] C. Haugh *et al.*, 'Urological Cancers in Ireland 1994–2023', Cork, Ireland: National Cancer Registry Ireland, 2026. Accessed: Jun. 16, 2026. [Online]. Available: https://www.ncri.ie/en/reports-publications/reports/urological-cancers-in-ireland-1994-2023
[40] 'New report highlights positive trends in health and wellbeing of older people in Ireland', gov.ie. Accessed: Jun. 19, 2026. [Online]. Available: https://www.gov.ie/en/department-of-health/press-releases/new-report-highlights-positive-trends-in-health-and-wellbeing-of-older-people-in-ireland/
[41] E. Morgan *et al.*, 'International trends in oesophageal cancer survival by histological subtype between 1995 and 2014', *Gut*, vol. 70, no. 2, pp. 234–242, Feb. 2021, doi: 10.1136/gutjnl-2020-321089.
[42] M. Arnold *et al.*, 'Progress in cancer survival, mortality, and incidence in seven high-income countries 1995-2014 (ICBP SURVMARK-2): a population-based study', *Lancet Oncol*, vol. 20, no. 11, pp. 1493–1505, Nov. 2019, doi: 10.1016/S1470-2045(19)30456-5.

[43] C. Maringe *et al.*, 'Stage at diagnosis and ovarian cancer survival: evidence from the International Cancer Benchmarking Partnership', *Gynecol Oncol*, vol. 127, no. 1, pp. 75–82, Oct. 2012, doi: 10.1016/j.ygyno.2012.06.033.
[44] C. H. Norell *et al.*, 'Exploring international differences in ovarian cancer treatment: a comparison of clinical practice guidelines and patterns of care', *Int J Gynecol Cancer*, vol. 30, no. 11, pp. 1748–1756, Nov. 2020, doi: 10.1136/ijgc-2020-001403.
[45] A. T. Gavin *et al.*, 'Oesophageal cancer survival in Europe: a EUROCARE-4 study', *Cancer Epidemiol*, vol. 36, no. 6, pp. 505–512, Dec. 2012, doi: 10.1016/j.canep.2012.07.009.
[46] M. Arnold *et al.*, 'International variation in oesophageal and gastric cancer survival 2012-2014: differences by histological subtype and stage at diagnosis (an ICBP SURVMARK-2 population-based study)', *Gut*, vol. 71, no. 8, pp. 1532–1543, Aug. 2022, doi: 10.1136/gutjnl-2021-325266.
[47] C. Allemani *et al.*, 'Global surveillance of trends in cancer survival 2000-14 (CONCORD-3): analysis of individual records for 37 513 025 patients diagnosed with one of 18 cancers from 322 population-based registries in 71 countries', *Lancet*, vol. 391, no. 10125, pp. 1023–1075, Mar. 2018, doi: 10.1016/S0140-6736(17)33326-3.
[48] Department of Health and HSE National Cancer Control Programme, 'National Skin Cancer Prevention Plan 2023-2026', Dublin: Department of Health. Accessed: Jun. 22, 2026. [Online]. Available: https://www.gov.ie/en/department-of-health/publications/national-skin-cancer-prevention-plan-2023-2026/
[49] F. Islami *et al.*, 'Averted lung cancer deaths due to reductions in cigarette smoking in the United States, 1970-2022', *CA Cancer J Clin*, vol. 75, no. 3, pp. 216–225, 2025, doi: 10.3322/caac.70005.
[50] J. Rey Brandariz *et al.*, 'Estimated impact of a tobacco-elimination strategy on lung-cancer mortality in 185 countries: a population-based birth-cohort simulation study', *The Lancet Public Health*, vol. 9, no. 10, pp. e745–e754, Oct. 2024, doi: 10.1016/S2468-2667(24)00185-3.
[51] Health Protection Surveillance Centre, 'HPV vaccine uptake in Ireland: 2011/2012', Dublin, 2013. [Online]. Available: https://www.hpsc. ie/az/vaccinepreventable/vaccination/immunisationuptakestatist ics/hpvtdapmencmenacwyuptakestatistics/hpvimmunisationuptak ereports2011-2018/File,14255,en.pdf
[52] 'Ministers for Health and Education and Youth announce the next phase of the Laura Brennan HPV Vaccine Catch-Up Programme', gov.ie. Accessed: Jun. 19, 2026. [Online]. Available: https://www.gov.ie/en/department-of-health/press-releases/ministers-for-health-and-education-and-youth-announce-the-next-phase-of-the-laura-brennan-hpv-vaccine-catch-up-programme/
[53] M. Rourke *et al.*, 'The effect of HPV vaccination on the rate of high-grade cytology in 25-year-old women attending cervical screening in Ireland', *Ir J Med Sci*, vol. 193, no. 2, pp. 665–668, Apr. 2024, doi: 10.1007/s11845-023-03551-y.
[54] P. Sasieni and M. Falcaro, 'Cervical cancer mortality trends following HPV vaccination in England, 2001–24: an analysis of population-based mortality data', *The Lancet*, p. S0140673626009189, Jun. 2026, doi: 10.1016/S0140-6736(26)00918-9.
[55] O. Nadeem, Y.-T. Tai, and K. C. Anderson, 'Immunotherapeutic and Targeted Approaches in Multiple Myeloma', *Immunotargets Ther*, vol. 9, pp. 201–215, 2020, doi: 10.2147/ITT.S240886.
[56] C. J. Cabasag *et al.*, 'Pancreatic cancer survival by stage and age in seven high-income countries (ICBP SURVMARK-2): a population-based study', *Br J Cancer*, vol. 126, no. 12, pp. 1774–1782, Jun. 2022, doi: 10.1038/s41416-022-01752-3.
[57] J.-Y. Jang *et al.*, 'Oncological Benefits of Neoadjuvant Chemoradiation With Gemcitabine Versus Upfront Surgery in Patients With Borderline Resectable Pancreatic Cancer: A Prospective, Randomized, Open-label, Multicenter Phase 2/3 Trial', *Ann Surg*, vol. 268, no. 2, pp. 215–222, Aug. 2018, doi: 10.1097/SLA.0000000000002705.
[58] R. Ahola, J. Sand, and J. Laukkarinen, 'Centralization of Pancreatic Surgery Improves Results: Review', *Scand J Surg*, vol. 109, no. 1, pp. 4–10, Mar. 2020, doi: 10.1177/1457496919900411.
[59] WHO Regional Office for Europe, 'A short guide to cancer screening. Increase effectiveness, maximize benefits and minimize harm. Copenhagen: Licence: CC BY-NC-SA 3.0 IGO.', Copenhagen, 2022.
[60] P. M. Marcus, P. C. Prorok, A. B. Miller, E. J. DeVoto, and B. S. Kramer, 'Conceptualizing overdiagnosis in cancer screening', *J Natl Cancer Inst*, vol. 107, no. 4, p. djv014, Apr. 2015, doi: 10.1093/jnci/djv014.
[61] M. J. Rutherford *et al.*, 'Comparison of liver cancer incidence and survival by subtypes across seven high-income countries', *Int J Cancer*, vol. 149, no. 12, pp. 2020–2031, Dec. 2021, doi: 10.1002/ijc.33767.

[62] R. De Angelis *et al.*, 'Complete cancer prevalence in Europe in 2020 by disease duration and country (EUROCARE-6): a population-based study', *The Lancet Oncology*, vol. 25, no. 3, pp. 293–307, Mar. 2024, doi: 10.1016/S1470-2045(23)00646-0.
[63] E. Crocetti *et al.*, 'Cancer prevalence in United States, Nordic Countries, Italy, Australia, and France: an analysis of geographic variability', *Br J Cancer*, vol. 109, no. 1, pp. 219–228, Jul. 2013, doi: 10.1038/bjc.2013.311.
[64] A. C. Hamilton, D. W. Donnelly, D. Fitzpatrick, and H. G. Coleman, 'Early-Onset Cancers in Adults: A Review of Epidemiology, Supportive Care Needs and Future Research Priorities', *Cancers*, vol. 14, no. 16, p. 4021, Jan. 2022, doi: 10.3390/cancers14164021.
[65] N. Zhang *et al.*, 'Global burden of hematologic malignancies and evolution patterns over the past 30 years', *Blood Cancer J.*, vol. 13, no. 1, pp. 1–13, May 2023, doi: 10.1038/s41408-023-00853-3.
[66] A. S. Ahmad, N. Ormiston-Smith, and P. D. Sasieni, 'Trends in the lifetime risk of developing cancer in Great Britain: comparison of risk for those born from 1930 to 1960', *Br J Cancer*, vol. 112, no. 5, pp. 943–947, Mar. 2015, doi: 10.1038/bjc.2014.606.
[67] 'Deaths 2022 Vital Statistics Annual Report 2022 - Central Statistics Office'. Accessed: Nov. 01, 2024. [Online]. Available: https://www.cso.ie/en/releasesandpublications/ep/p-vsar/vitalstatisticsannualreport2022/deaths2022/