# All cancers

1993-2022

(ICD10 codes: C00-C97)



Northern Ireland Cancer Registry, 2025

An official statistics publication

# ABOUT THIS REPORT

#### **Contents**

This report includes information on incidence of all cancers as recorded by the Northern Ireland Cancer Registry (NICR). Incidence data is available annually from 1993 to 2022, however in order to provide stable and robust figures the majority of information presented in this report is based upon the average number of cases diagnosed in the last five years.

## **Methodology**

The methodology used in producing the statistics presented in this report, including details of data sources, classifications and coding are available in the accompanying methodology report available at: www.gub.ac.uk/research-centres/nicr/CancerInformation/official-statistics.

## **Official statistics**

The incidence and prevalence statistics in this publication are designated as official statistics signifying that they comply with the Code of Practice for Official Statistics. Further information on this code is available at code.statisticsauthority.gov.uk.

#### **Cancer mortality data**

The NI Statistics and Research Agency (NISRA) is the official statistics provider of cancer mortality data in Northern Ireland. However, for completeness, data on cancer mortality is also provided in this report. While analysis is conducted by NICR staff, the original data is provided courtesy of the General Register Office (NI) via the Department of Health.

## **Reuse of information**

The information in this report (and any supplementary material) is available for reuse free of charge and without the need to contact NICR. However, we request that NICR is acknowledged as the source of any reused information. The following reference is recommended:

Northern Ireland Cancer Registry 2025. All cancers: 1993-2022. Available at: www.qub.ac.uk/research-centres/nicr

#### **Further information**

Further information is available at: www.qub.ac.uk/research-centres/nicr

**Phone:** +44 (0)28 9097 6028 **e-mail:** nicr@qub.ac.uk

#### **Acknowledgements**

The Northern Ireland Cancer Registry (NICR) uses data provided by patients and collected by the health service as part of their care and support.

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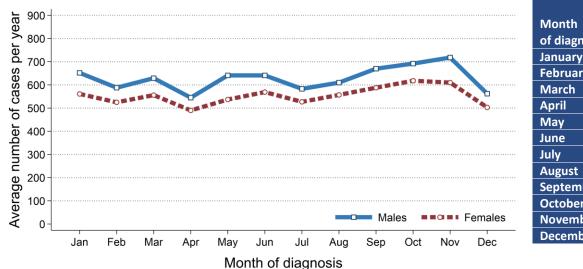




# Incidence

- There were 70,856 cases of cancer diagnosed during 2018-2022 in Northern Ireland. On average this was 14,171 cases per year.
- During this period 46.9% of cancer cases were among women (Male cases: 37,652, Female cases: 33,204). On average there were 7,530 male and 6,641 female cases of cancer per year.
- The most common diagnosis month during 2018-2022 was November among males with 718 cases per year and October among females with 618 cases per year.

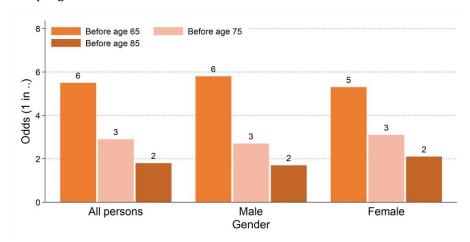
Figure 1: Average number of cases of cancer per year in 2018-2022 by month of diagnosis



	Average number					
Month	of cases per year					
of diagnosis	Males	Females				
January	652	561				
February	588	525				
March	629	556				
April	545	490				
May	641	537				
June	641	569				
July	583	527				
August	610	557				
September	670	588				
October	692	618				
November	718	610				
December	562	503				

- The cancer incidence rates for each gender were 805.7 cases per 100,000 males and 687.8 cases per 100,000 females.
- The odds of developing cancer before age 85 was 1 in 2 for men and 1 in 2 for women.

Figure 2: Odds of developing cancer in 2018-2022



# **INCIDENCE BY AGE**

- The median age of patients diagnosed with cancer during 2018-2022 was 71 years (Males: 71, Females: 69).
- The risk of developing cancer varied by age, with 39.3% of men and 36.9% of women diagnosed with cancer aged 75 and over at diagnosis.
- In contrast, 15.5% of patients diagnosed with cancer were aged 0 to 54 at diagnosis.

Figure 3: Average number of cases of cancer diagnosed per year in 2018-2022 by age at diagnosis

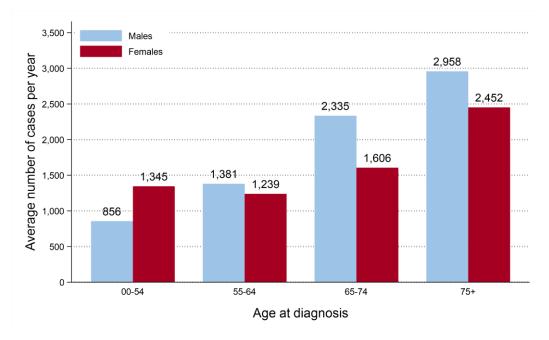
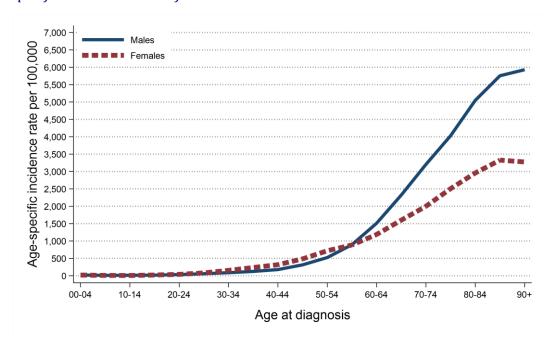


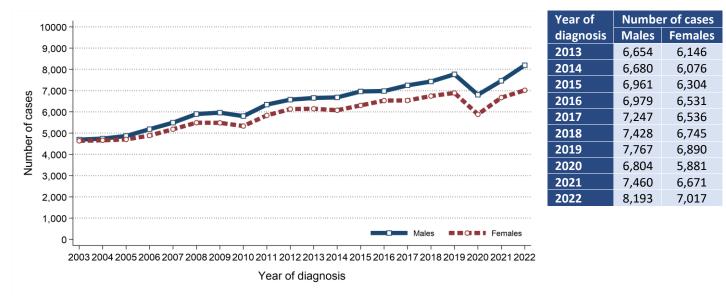
Figure 4: Age-specific incidence rates of cancer in 2018-2022



# INCIDENCE TRENDS

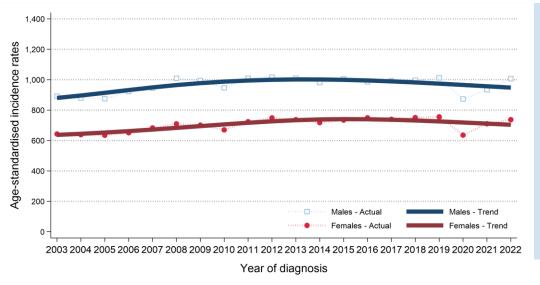
- The number of cases of cancer among males increased between 2013-2017 and 2018-2022 by 9.1% from 34,521 cases (6,904 cases per year) to 37,652 cases (7,530 cases per year).
- The number of cases of cancer among females increased between 2013-2017 and 2018-2022 by 5.1% from 31,593 cases (6,319 cases per year) to 33,204 cases (6,641 cases per year).





- Male age-standardised cancer incidence rates decreased between 2013-2017 and 2018-2022 by 3.1% from 995.0 to 964.3 cases per 100,000 males. This change was statistically significant.
- Female age-standardised cancer incidence rates decreased between 2013-2017 and 2018-2022 by 2.5% from 736.0 to 717.7 cases per 100,000 females. This change was statistically significant.

Figure 6: Trends in incidence rates of cancer from 2003 to 2022



Age-standardised incidence rates illustrate the change in the number of cases within a population of a fixed size and age structure (2013 European Standard).

They thus represent changes other than those caused by population growth and/or ageing.

Trends can also be influenced by changes in how cancer is classified and coded. (e.g. the move from ICD-0-2 to ICD-0-3 in 2019).

# INCIDENCE TRENDS BY AGE

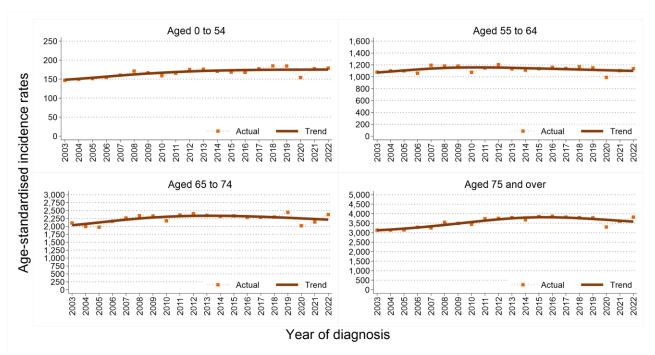
- Between 2013-2017 and 2018-2022 the number of cases of cancer among
- Persons aged 0 to 54 decreased by 2.3% among males and increased by 4.2% among females.
- Persons aged 55 to 64 increased by 10.8% among males and increased by 10.8% among females.
- Persons aged 65 to 74 increased by 8.3% among males and increased by 1.0% among females.
- Persons aged 75 and over increased by 12.7% among males and increased by 5.6% among females.

Table 1: Average number of cases per year of cancer by period of diagnosis in 2013-2022

Age at diagnosis	All pe	rsons	Male		Female	
	2013-2017	2018-2022	2013-2017	2018-2022	2013-2017	2018-2022
All ages	13,223	14,171	6,904	7,530	6,319	6,641
0 to 54	2,167	2,201	876	856	1,291	1,345
55 to 64	2,365	2,620	1,247	1,381	1,118	1,239
65 to 74	3,746	3,941	2,156	2,335	1,589	1,606
75 and over	4,945	5,410	2,625	2,958	2,321	2,452

- Between 2013-2017 and 2018-2022 age-standardised incidence rates of cancer among
- Persons aged 0 to 54 did not change significantly among males or females.
- Persons aged 55 to 64 did not change significantly among males or females.
- Persons aged 65 to 74 did not change significantly among males and decreased by 4.9% among females.
- Persons aged 75 and over decreased by 4.9% among males and decreased by 4.1% among females.

Figure 7: Trends in incidence rates of cancer from 2003 to 2022 by age group



# **INCIDENCE BY CANCER TYPE**

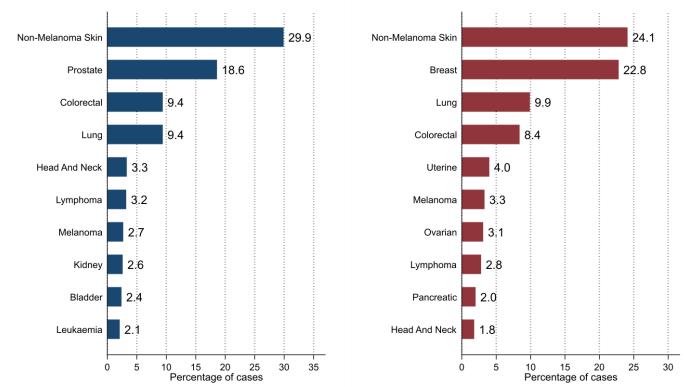
- During 2018-2022 the most common cancer types among males were non-melanoma skin cancer (29.9%), prostate cancer (18.6%), colorectal cancer (9.4%) and lung cancer (9.4%).
- Among females they were non-melanoma skin cancer (24.1%), breast cancer (22.8%), lung cancer (9.9%) and colorectal cancer (8.4%).

Table 2: Number of cases of cancer diagnosed in 2018-2022 by cancer type

	All persons		M	ale	Female	
Cancer type	Total cases in	Average cases	Total cases in	Average cases	Total cases in	Average cases
	period	per year	period	per year	period	per year
All cancers	70,856	14,171	37,652	7,530	33,204	6,641
Bladder cancer	1,262	252	885	177	377	75
Brain cancer (including central nervous system)	811	162	489	98	322	64
Breast cancer	7,613	1,523	47	9	7,566	1,513
Cervical cancer	422	84			422	84
Colorectal cancer	6,345	1,269	3,541	708	2,804	561
Gallbladder and other biliary cancer	549	110	218	44	331	66
Head and neck cancer	1,825	365	1,232	246	593	119
Kidney cancer	1,523	305	997	199	526	105
Leukaemia	1,296	259	772	154	524	105
Liver cancer	814	163	566	113	248	50
Lung cancer (including trachea)	6,802	1,360	3,531	706	3,271	654
Lymphoma	2,113	423	1,192	238	921	184
Malignant melanoma	2,120	424	1,015	203	1,105	221
Multiple myeloma (including plasma cell neoplasms)	864	173	520	104	344	69
Non-melanoma skin cancer	19,260	3,852	11,260	2,252	8,000	1,600
Oesophageal cancer	1,109	222	808	162	301	60
Ovarian cancer (including fallopian tube)	1,019	204			1,019	204
Pancreatic cancer	1,455	291	777	155	678	136
Prostate cancer	7,009	1,402	7,009	1,402		
Stomach cancer	942	188	585	117	357	71
Testicular cancer	324	65	324	65		
Thyroid cancer	772	154	219	44	553	111
Unknown primary cancer	907	181	434	87	473	95
Uterine cancer	1,343	269			1,343	269
Other cancer	2,357	471	1,231	246	1,126	225

Figure 8: Proportion of cases of cancer in 2018-2022 by cancer type

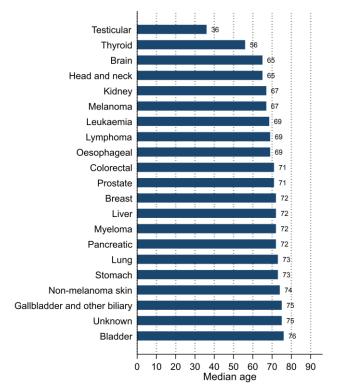
MALE FEMALE

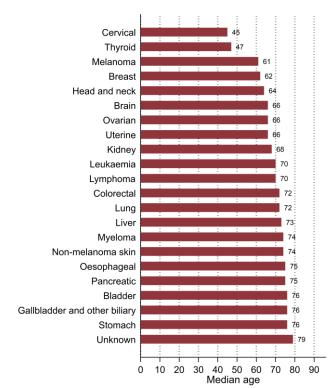


- The median age at diagnosis for most types of cancer during 2018-2022 was 60 years or more.
- Exceptions included testicular cancer (36) and thyroid cancer (56) among males and cervical cancer (45) and thyroid cancer (47) among females.

Figure 9: Median age of cancer in 2018-2022 by cancer type







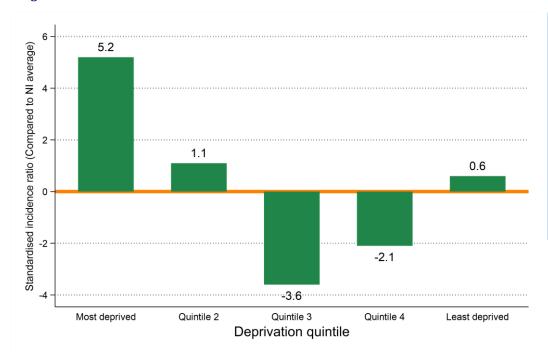
# INCIDENCE BY DEPRIVATION

- The number of cases of cancer diagnosed during 2018-2022 varied in each deprivation quintile due to variations in population size and age.
- After accounting for these factors, incidence rates:
- in the most socio-economically deprived areas were 5.2% higher than the NI average.
- in the least socio-economically deprived areas did not vary significantly from the NI average.

Table 3: Number of cases of cancer diagnosed in 2018-2022 by deprivation quintile

	All pe	rsons	Male		Female	
Deprivation quintile	Total cases in period	Average cases per year	Total cases in period	Average cases per year	Total cases in period	Average cases per year
Northern Ireland	70,856	14,171	37,652	7,530	33,204	6,641
Most deprived	12,172	2,434	6,280	1,256	5,892	1,178
Quintile 2	14,299	2,860	7,625	1,525	6,674	1,335
Quintile 3	14,399	2,880	7,738	1,548	6,661	1,332
Quintile 4	14,786	2,957	7,860	1,572	6,926	1,385
Least deprived	15,190	3,038	8,143	1,629	7,047	1,409
Unknown	10	2	6	1	4	1

Figure 10: Standardised incidence ratio comparing deprivation quintile to Northern Ireland for cancer diagnosed in 2018-2022



Standardised incidence ratios compare incidence rates in each deprivation quintile with the Northern Ireland incidence rate.

A value above 0 means that incidence rates in that deprivation quintile are greater than the NI average.

This measure takes account of population size and age structure. Differences are thus not a result of these factors.

# INCIDENCE BY DEPRIVATION AND CANCER TYPE

- While cancer incidence is higher in the most deprived communities overall, the relationship between cancer and socio-economic deprivation varies by cancer site.
- During 2018-2022 incidence of cervical cancer, head and neck cancer, kidney cancer, liver cancer, lung cancer, oesophageal cancer, stomach cancer and unknown primary cancer was higher in the most deprived areas than the NI average.
- During 2018-2022 incidence of malignant melanoma, non-melanoma skin cancer and prostate cancer was higher in the least deprived areas than the NI average.

Table 4: Incidence and deprivation by cancer type in 2018-2022

Higher in most deprived areas	Higher in least deprived areas	Not higher in either
Cervical cancer	Malignant melanoma	Bladder cancer
Head and neck cancer	Non-melanoma skin cancer	Brain cancer (including central nervous system)
Kidney cancer	Prostate cancer	Breast cancer
Liver cancer		Colorectal cancer
Lung cancer (including trachea)		Gallbladder and other biliary cancer
Oesophageal cancer		Leukaemia
Stomach cancer		Lymphoma
Unknown primary cancer		Multiple myeloma (including plasma cell neoplasms)
		Ovarian cancer (including fallopian tube)
		Pancreatic cancer
		Testicular cancer
		Thyroid cancer
		Uterine cancer

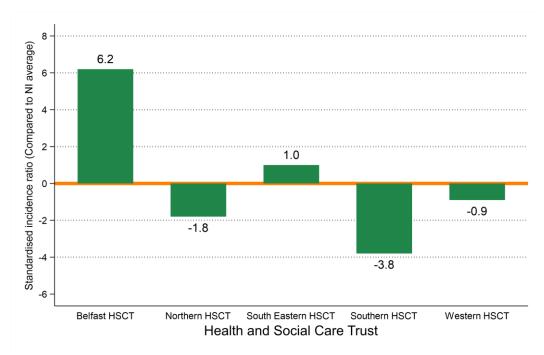
# INCIDENCE BY HEALTH AND SOCIAL CARE TRUST

- The number of cases of cancer diagnosed during 2018-2022 varied in each Health and Social Care Trust due to variations in population size and age.
- After accounting for these factors, incidence rates:
- in Belfast HSCT were 6.2% higher than the NI average.
- in Northern HSCT were 1.8% lower than the NI average.
- in South Eastern HSCT did not vary significantly from the NI average.
- in Southern HSCT were 3.8% lower than the NI average.
- in Western HSCT did not vary significantly from the NI average.

Table 5: Number of cases of cancer diagnosed in 2018-2022 by Health and Social Care Trust

	All pe	rsons	Male		Female	
Health and Social Care Trust	Total cases in period	Average cases per year	Total cases in period	Average cases per year	Total cases in period	Average cases per year
Northern Ireland	70,856	14,171	37,652	7,530	33,204	6,641
		•				•
Belfast HSCT	13,470	2,694	6,948	1,390	6,522	1,304
Northern HSCT	18,453	3,691	9,882	1,976	8,571	1,714
South Eastern HSCT	15,093	3,019	8,068	1,614	7,025	1,405
Southern HSCT	12,883	2,577	6,800	1,360	6,083	1,217
Western HSCT	10,947	2,189	5,948	1,190	4,999	1,000
Unknown	10	2	6	1	4	1

Figure 11: Standardised incidence ratio comparing Health and Social Care Trust to Northern Ireland for cancer diagnosed in 2018-2022



# **PREVALENCE**

- At the end of 2022, there were 107,619 people (Males: 51,442; Females: 56,177) living with cancer who had been diagnosed with the disease during 1998-2022.
- Of these 11.6% had been diagnosed in the previous year (one-year prevalence) and 68.8% in the previous 10 years (ten-year prevalence).
- 39.9% of cancer survivors were aged 75 and over at the end of 2022.

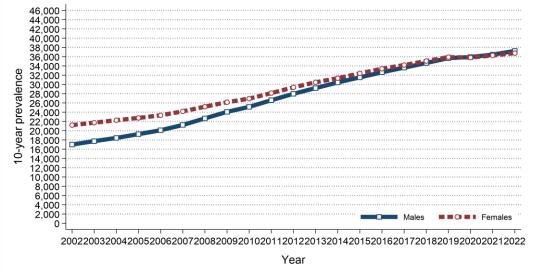
Table 6: 25-year prevalence of cancer by age at end of 2022

	Ago at and of	2E year	Time since diagnosis					
Gender	Age at end of 2022	25-year prevalence	0 to 1 year	1 to 5 years	5 to 10 years	10 to 25 years		
All persons	All ages	107,619	12,430	33,544	28,032	33,613		
	0 to 74	64,674	7,874	21,218	16,849	18,733		
	75 and over	42,945	4,556	12,326	11,183	14,880		
Male	All ages	51,442	6,657	17,119	13,457	14,209		
0 to 74	0 to 74	29,416	4,096	10,268	7,655	7,397		
	75 and over	22,026	2,561	6,851	5,802	6,812		
Female	All ages	56,177	5,773	16,425	14,575	19,404		
	0 to 74	35,258	3,778	10,950	9,194	11,336		
	75 and over	20,919	1,995	5,475	5,381	8,068		

# PREVALENCE TRENDS

- 10-year prevalence of cancer among males increased between 2017 and 2022 by 10.7% from 33,631 survivors to 37,234 survivors.
- 10-year prevalence of cancer among females increased between 2017 and 2022 by 7.6% from 34,188 survivors to 36,773 survivors.

Figure 12: Trends in 10-year prevalence of cancer in 2002-2022



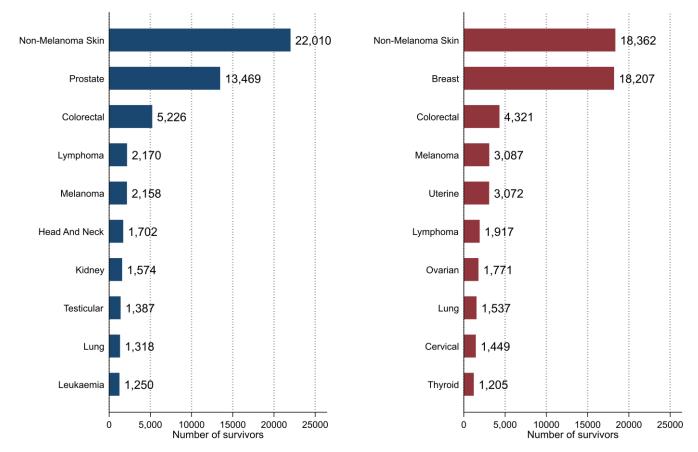
	10-year p	orevalence	
Year	Males	Females	
2013	29,211	30,463	
2014	30,433	31,349	
2015	31,526	32,397	
2016	32,634	33,389	
2017	33,631	34,188	
2018	34,634	35,056	
2019	35,690	35,901	
2020	35,916	35,808	
2021	36,443	36,265	
2022	37,234	36,773	

# PREVALENCE BY CANCER TYPE

- At the end of 2022 the most prevalent cancer types among males were non-melanoma skin cancer (22,010), prostate cancer (13,469) and colorectal cancer (5,226). Among females they were non-melanoma skin cancer (18,362), breast cancer (18,207) and colorectal cancer (4,321).

Figure 13: 25-year prevalence of cancer at the end of 2022 by cancer type

MALE FEMALE



# MORTALITY

- There were 22,803 deaths from all cancers during 2018-2022 in Northern Ireland. On average this was 4,561 deaths per year.
- During this period 47.5% of cancer deaths were among women (Male deaths: 11,971, Female deaths: 10,832). On average there were 2,394 male and 2,166 female deaths from cancer per year.
- The median age of patients who died from cancer during 2018-2022 was 75 years (Males: 75, Females: 76).
- The risk of dying from cancer varied by age, with 52.6% of men and 54.1% of women who died from cancer aged 75 and over at death.
- In contrast, 7.1% of patients who died from cancer were aged 0 to 54 at death.

Figure 14: Average number of deaths from cancer per year in 2018-2022 by age at death

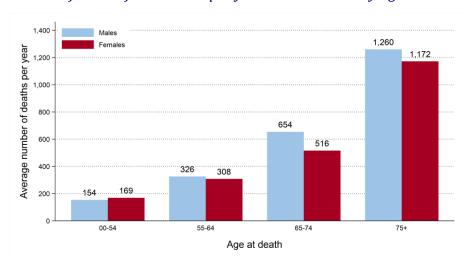
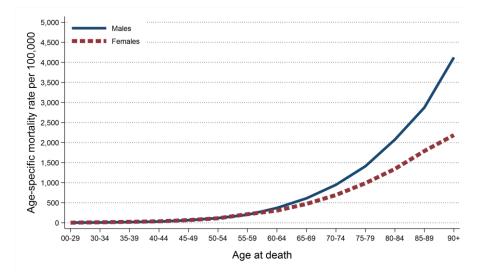


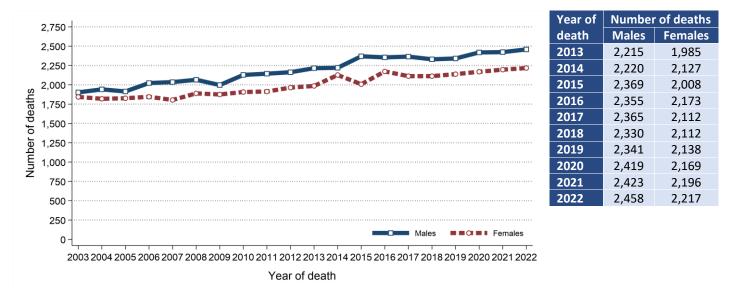
Figure 15: Age-specific mortality rates of cancer in 2018-2022



# MORTALITY TRENDS

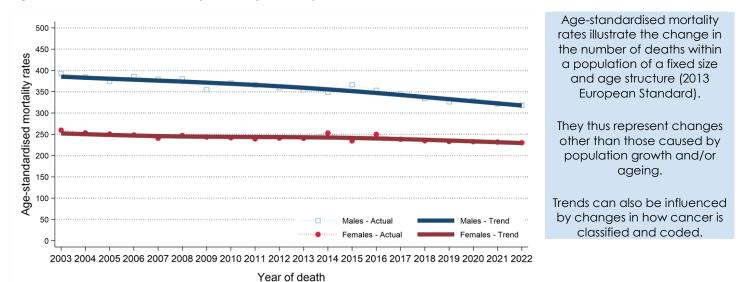
- The number of deaths from cancer among males increased between 2013-2017 and 2018-2022 by 3.9% from 11,524 deaths (2,305 deaths per year) to 11,971 deaths (2,394 deaths per year).
- The number of deaths from cancer among females increased between 2013-2017 and 2018-2022 by 4.1% from 10,405 deaths (2,081 deaths per year) to 10,832 deaths (2,166 deaths per year).

Figure 16: Trends in the number of deaths from cancer from 2003 to 2022



- Male age-standardised cancer mortality rates decreased between 2013-2017 and 2018-2022 by 7.9% from 353.7 to 325.7 deaths per 100,000 males. This change was statistically significant.
- Female age-standardised cancer mortality rates decreased between 2013-2017 and 2018-2022 by 4.4% from 243.3 to 232.5 deaths per 100,000 females. This change was statistically significant.

Figure 17: Trends in mortality rates of cancer from 2003 to 2022



# MORTALITY BY CANCER TYPE

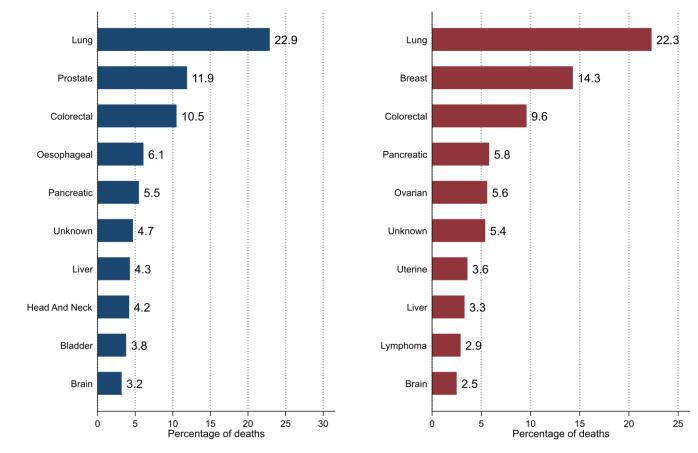
- During 2018-2022 the most common causes of cancer death among males were lung cancer (22.9%), prostate cancer (11.9%) and colorectal cancer (10.5%). Among females they were lung cancer (22.3%), breast cancer (14.3%) and colorectal cancer (9.6%).

Table 7: Number of deaths from cancer in 2018-2022 by cancer type

	All persons		Male		Female	
Cancer type	Total deaths in period	Average deaths per year	Total deaths in period	Average deaths per year	Total deaths in period	Average deaths per year
All cancers	22,803	4,561	11,971	2,394	10,832	2,166
Bladder cancer	687	137	455	91	232	46
Brain cancer (including central nervous system)	656	131	385	77	271	54
Breast cancer	1,566	313	16	3	1,550	310
Cervical cancer	103	21			103	21
Colorectal cancer	2,297	459	1,260	252	1,037	207
Gallbladder and other biliary cancer	191	38	60	12	131	26
Head and neck cancer	697	139	500	100	197	39
Kidney cancer	567	113	366	73	201	40
Leukaemia	546	109	306	61	240	48
Liver cancer	875	175	520	104	355	71
Lung cancer (including trachea)	5,158	1,032	2,738	548	2,420	484
Lymphoma	686	137	376	75	310	62
Malignant melanoma	294	59	169	34	125	25
Multiple myeloma (including plasma cell neoplasms)	430	86	238	48	192	38
Non-melanoma skin cancer	183	37	118	24	65	13
Oesophageal cancer	993	199	736	147	257	51
Ovarian cancer (including fallopian tube)	602	120			602	120
Pancreatic cancer	1,292	258	662	132	630	126
Prostate cancer	1,425	285	1,425	285		
Stomach cancer	581	116	345	69	236	47
Thyroid cancer	57	11	25	5	32	6
Unknown primary cancer	1,149	230	562	112	587	117
Uterine cancer	388	78			388	78
Other cancer	1,380	276	709	142	671	134

Figure 18: Proportion of deaths from cancer in 2018-2022 by cancer type

MALE FEMALE



# BACKGROUND NOTES

Cancer classification: Classification of tumour sites is carried out using ICD10 codes. For a listing and explanation of ICD10 codes see: World Health Organisation at http://apps.who.int/classifications/icd10/browse/2010/en#/II

**Population data:** Population data for Northern Ireland, and smaller geographic areas, are extracted from the NI mid-year population estimates available from the NI Statistics and Research Agency (available at www.nisra.gov.uk).

**Geographic areas:** Geographic areas are assigned based on a patient's postcode of usual residence at diagnosis using the Jul 2024 Central Postcode Directory (CPD) produced by the NI Statistics and Research Agency (available at www.nisra.gov.uk).

**Deprivation quintiles:** Super output areas (SOA) are assigned to each patient based on their postcode of usual residence at diagnosis. Using the SOA each patient is assigned a socio-economic deprivation quintile based on the 2017 Multiple Deprivation Measure. The 2017 Multiple Deprivation Measure is available from the NI Statistics and Research Agency (available at www.nisra.gov.uk).

**Crude incidence/mortality rate:** The number of cases/deaths per 100,000 person years in the population. Person years are the sum of the population over the number of years included.

Age-standardised incidence/mortality rates per 100,000 person years are estimates of the incidence/mortality rate if that population had a standard age structure. Throughout this report the 2013 European Standard Population has been used. Standardising to a common Standard Population allows comparisons of incidence/mortality rates to be made between different time periods and geographic areas while removing the effects of population change and ageing.

Standardised Incidence/Mortality Ratio (SIR/SMR) is the ratio of the number of cases/deaths observed in a population to the expected number of cases/deaths, based upon the age-specific rates in a reference population. This statistic is often used to compare incidence/mortality rates for geographic areas (e.g. Trusts) to the national incidence/mortality rates (i.e. Northern Ireland). An SIR/SMR of 100 indicates there is no difference between the geographic area and the national average.

Confidence intervals measure the precision of a statistic (e.g. cancer incidence rate). Typically, when numbers are low, precision is poorer and confidence intervals will be wider. As a general rule, when comparing statistics (e.g. cancer incidence rate in year 2012 vs year 2013), if the confidence interval around one statistic overlaps with the interval around another, it is unlikely that there is any real difference between the two. If there is no overlap, the difference is considered to be statistically significant.

**Lifetime risk** is estimated as the cumulative risk of getting cancer up to age 75/85, calculated directly from the age-specific incidence rates. The odds of developing the disease before age 75/85 is the inverse of the cumulative risk.

**Prevalence** is the number of cancer patients who are alive in the population on a specific date (31st December 2022 in this report). Since data from the NI Cancer Registry are only available since 1993, prevalence only refers to a fixed term (10 and 25 years in this report). There may be members of the population living with a diagnosis of cancer for more than 25 years.