Lymphoma

1993-2022

(ICD10 codes: C81-C86)

Northern Ireland Cancer Registry

Northern Ireland Cancer Registry, 2025

An official statistics publication

ABOUT THIS REPORT

Contents

This report includes information on incidence of lymphoma 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.qub.ac.uk/research-centres/nicr/CancerInformation/official-statistics.

Official statistics

The incidence, prevalence and survival 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. Lymphoma: 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

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Acknowledgements

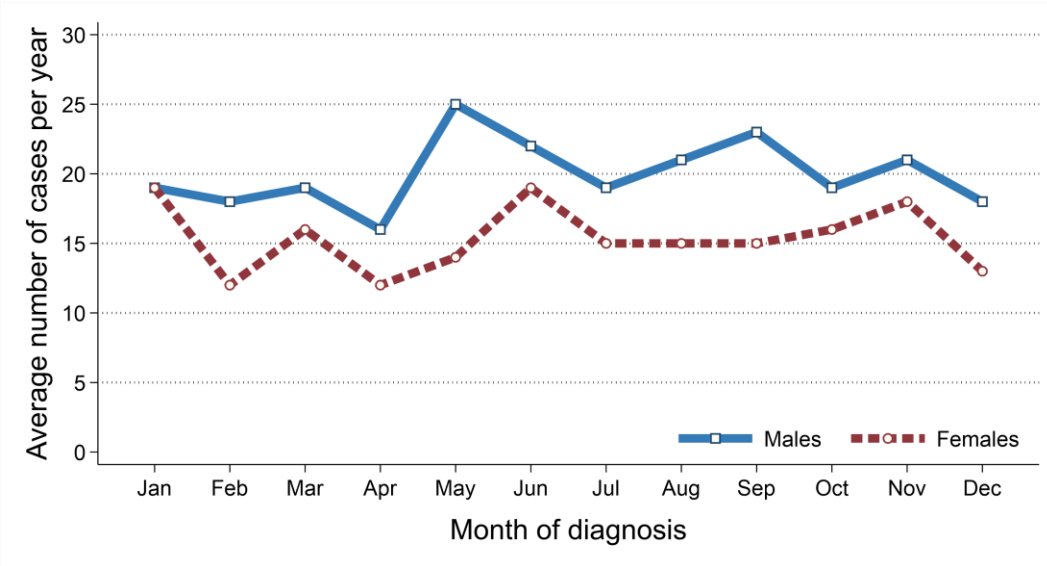
The Northern Ireland Cancer Registry (NICR) uses data provided by patients and collected by the health service as part of their care and support.

NICR is funded by the Public Health Agency and is based in Queen's University, Belfast.

INCIDENCE

- There were 2,113 cases of lymphoma diagnosed during 2018-2022 in Northern Ireland. On average this was 423 cases per year.
- During this period 43.6% of lymphoma cases were among women (Male cases: 1,192, Female cases: 921). On average there were 238 male and 184 female cases of lymphoma per year.
- The most common diagnosis month during 2018-2022 was May among males with 25 cases per year and January and June among females with 19 cases per year.

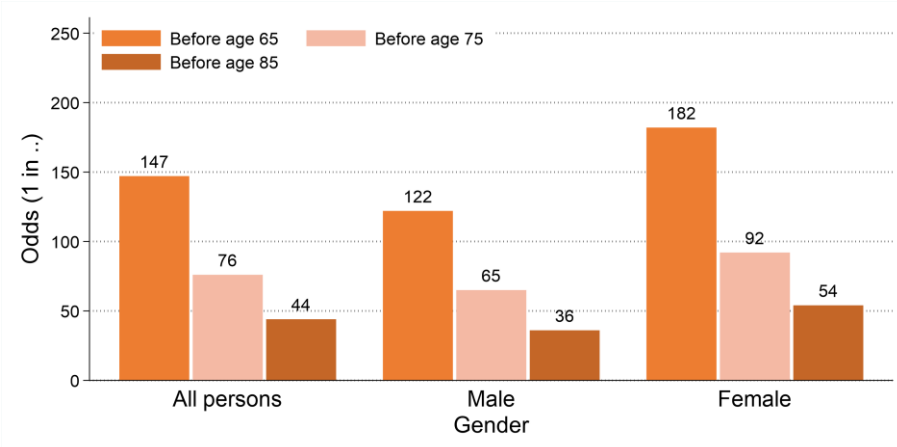
Figure 1: Average number of cases of lymphoma per year in 2018-2022 by month of diagnosis



Month of diagnosis	Average number of cases per year	
	Males	Females
January	19	19
February	18	12
March	19	16
April	16	12
May	25	14
June	22	19
July	19	15
August	21	15
September	23	15
October	19	16
November	21	18
December	18	13

- Lymphoma made up 4.5% of all male and 3.7% of all female cancer cases (excluding non-melanoma skin cancer).
- The lymphoma incidence rates for each gender were 25.5 cases per 100,000 males and 19.1 cases per 100,000 females.
- The odds of developing lymphoma before age 85 was 1 in 36 for men and 1 in 54 for women.

Figure 2: Odds of developing lymphoma in 2018-2022



INCIDENCE BY AGE

- The median age of patients diagnosed with lymphoma during 2018-2022 was 69 years (Males: 69, Females: 70).
- The risk of developing lymphoma varied by age, with 33.1% of men and 37.1% of women diagnosed with lymphoma aged 75 and over at diagnosis.
- In contrast, 21.5% of patients diagnosed with lymphoma were aged 0 to 54 at diagnosis.

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

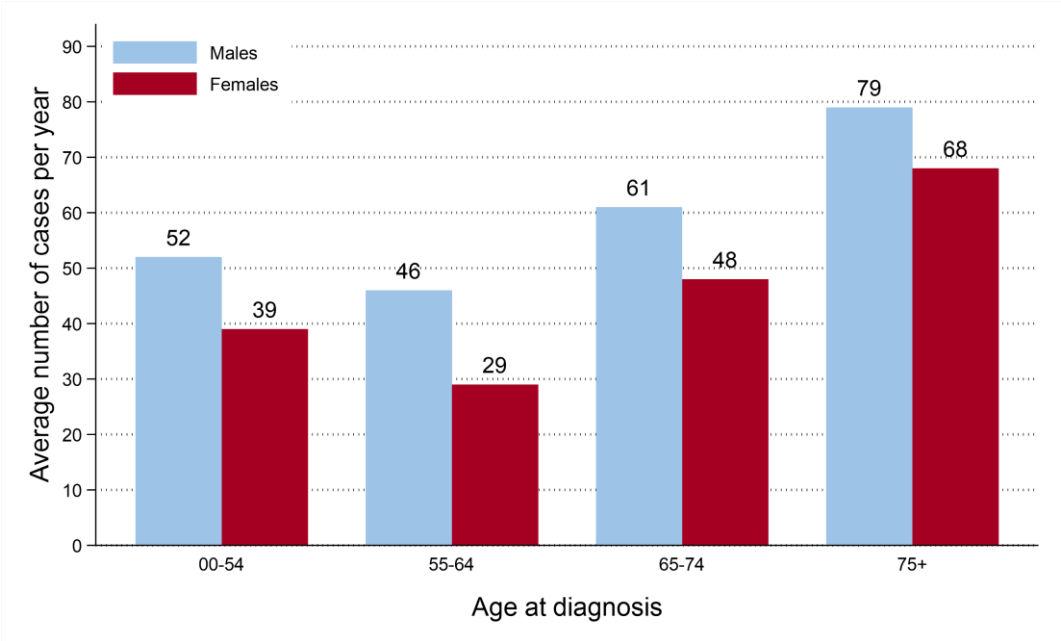
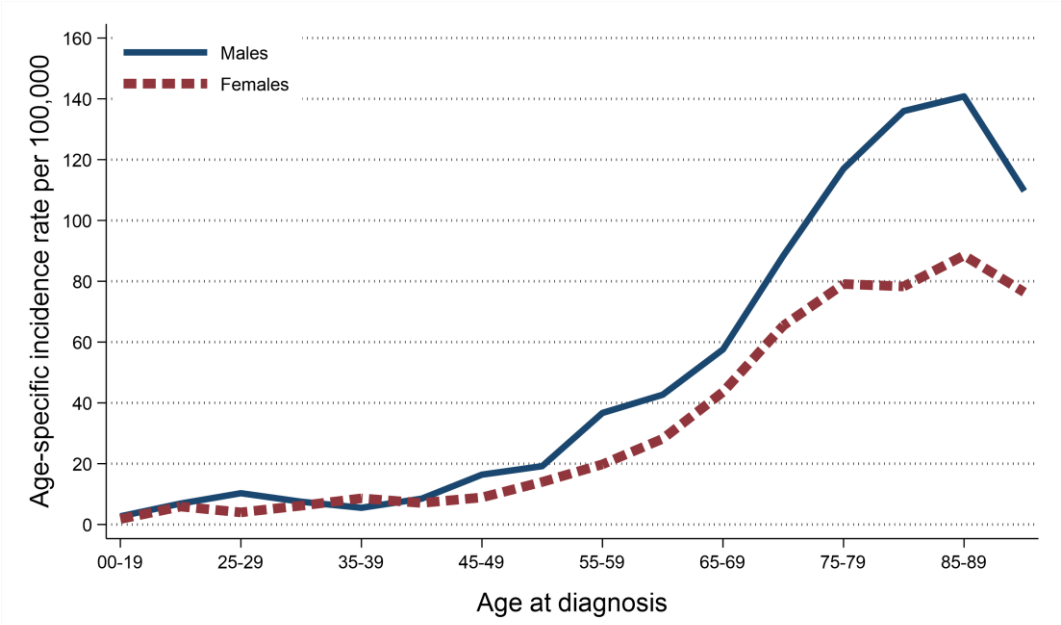


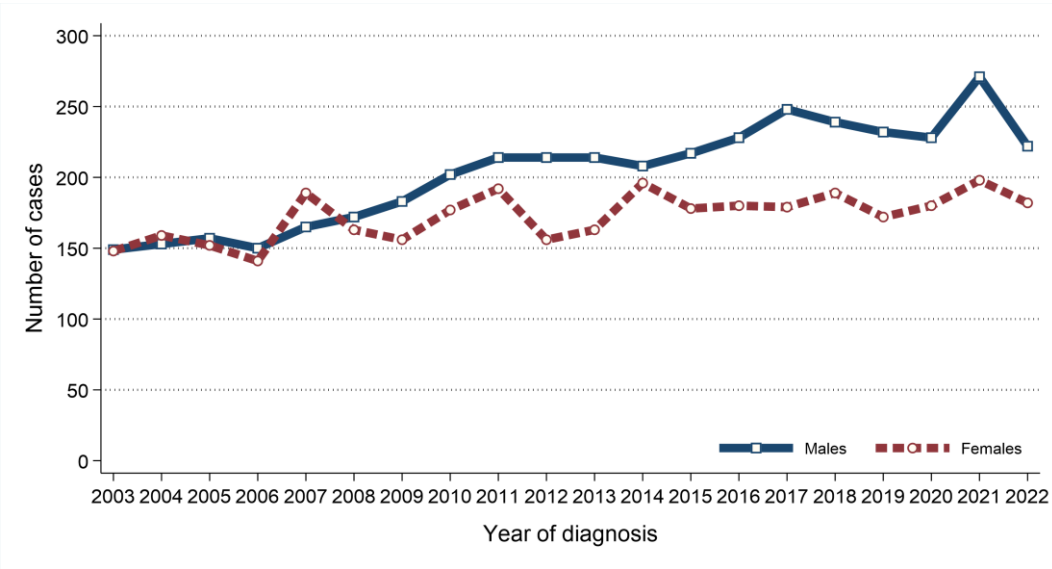
Figure 4: Age-specific incidence rates of lymphoma in 2018-2022



INCIDENCE TRENDS

- The number of cases of lymphoma among males increased between 2013-2017 and 2018-2022 by 6.9% from 1,115 cases (223 cases per year) to 1,192 cases (238 cases per year).
- The number of cases of lymphoma among females increased between 2013-2017 and 2018-2022 by 2.8% from 896 cases (179 cases per year) to 921 cases (184 cases per year).

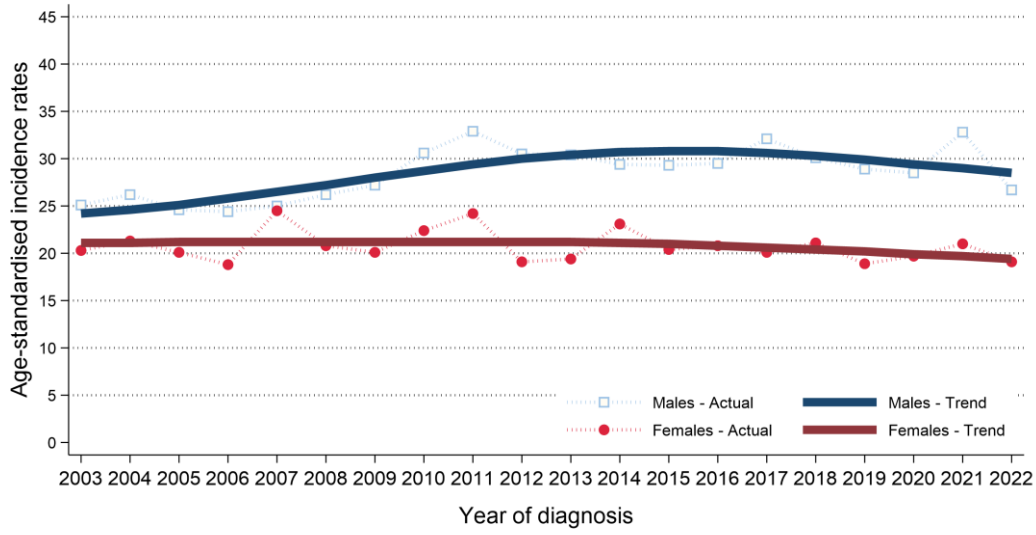
Figure 5: Trends in number of cases of lymphoma diagnosed from 2003 to 2022



Year of diagnosis	Number of cases	
	Males	Females
2013	214	163
2014	208	196
2015	217	178
2016	228	180
2017	248	179
2018	239	189
2019	232	172
2020	228	180
2021	271	198
2022	222	182

- Male age-standardised lymphoma incidence rates decreased between 2013-2017 and 2018-2022 by 2.3% from 30.1 to 29.4 cases per 100,000 males. This change was not statistically significant.
- Female age-standardised lymphoma incidence rates decreased between 2013-2017 and 2018-2022 by 3.8% from 20.8 to 20.0 cases per 100,000 females. This change was not statistically significant.

Figure 6: Trends in incidence rates of lymphoma 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).

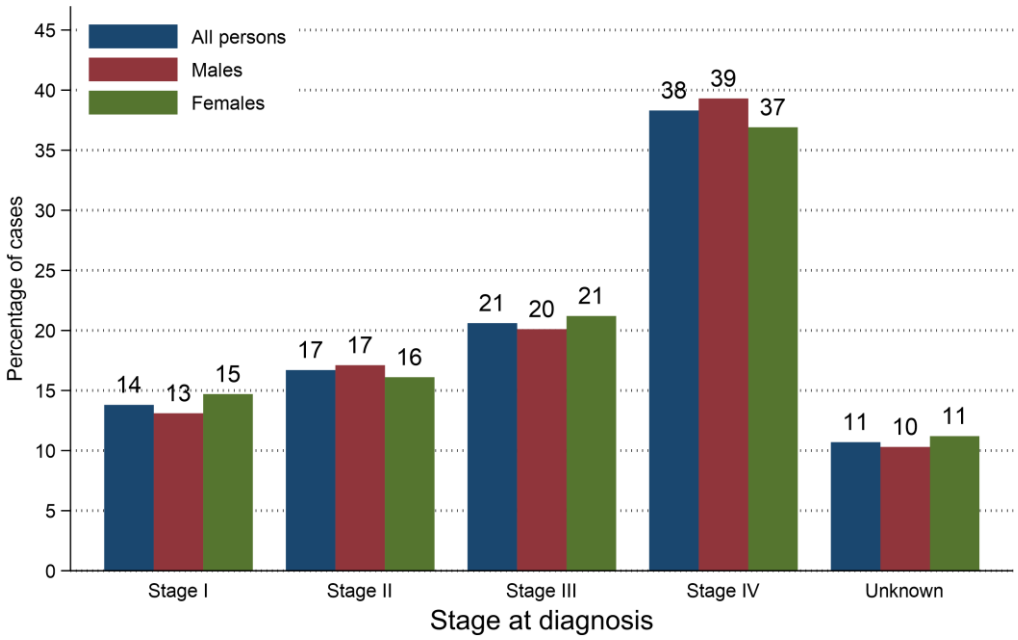
INCIDENCE BY STAGE AT DIAGNOSIS

- During 2018-2022 89.3% of lymphoma cases had a stage assigned.
- 13.8% of lymphoma cases were diagnosed at Stage I. (15.4% of staged cases)
- 38.3% of lymphoma cases were diagnosed at Stage IV. (42.9% of staged cases)

Table 1: Number of cases of lymphoma diagnosed in 2018-2022 by stage at diagnosis

Stage at diagnosis	All persons		Male		Female	
	Total cases in period	Average cases per year	Total cases in period	Average cases per year	Total cases in period	Average cases per year
All stages	**2,113**	**423**	**1,192**	**238**	**921**	**184**
	.	.	.	.	.	.
Stage I	291	58	156	31	135	27
Stage II	352	70	204	41	148	30
Stage III	435	87	240	48	195	39
Stage IV	809	162	469	94	340	68
Unknown	226	45	123	25	103	21

Figure 7: Proportion of cases of lymphoma diagnosed in 2018-2022 by stage at diagnosis



Cancer stage describes the size of a cancer and how far it has grown and spread.

This information is used to help decide what treatments are needed.

The classification used here to stage cancer is the TNM classification (Version 7 prior to 2018, Version 8 from 2018 onwards).

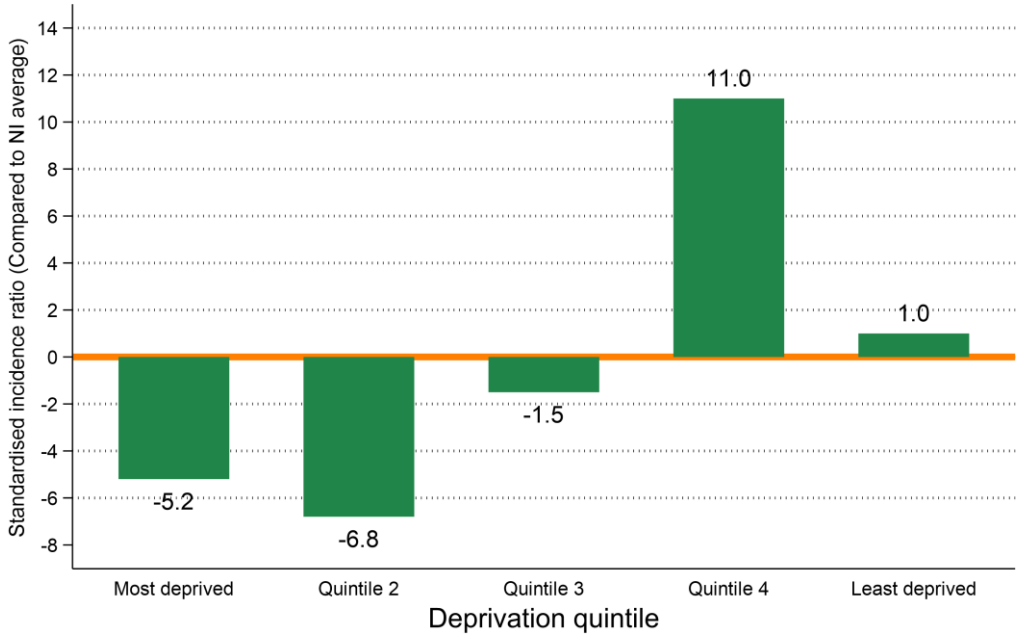
INCIDENCE BY DEPRIVATION

- The number of cases of lymphoma 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 did not vary significantly from the NI average.
  - in the least socio-economically deprived areas did not vary significantly from the NI average.

Table 2: Number of cases of lymphoma diagnosed in 2018-2022 by deprivation quintile

Deprivation quintile	All persons		Male		Female	
	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	**2,113**	**423**	**1,192**	**238**	**921**	**184**
	.	.	.	.	.	.
Most deprived	333	67	194	39	139	28
Quintile 2	394	79	221	44	173	35
Quintile 3	439	88	246	49	193	39
Quintile 4	498	100	266	53	232	46
Least deprived	449	90	265	53	184	37
Unknown	0	0	0	0	0	0

Figure 8: Standardised incidence ratio comparing deprivation quintile to Northern Ireland for lymphoma 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.

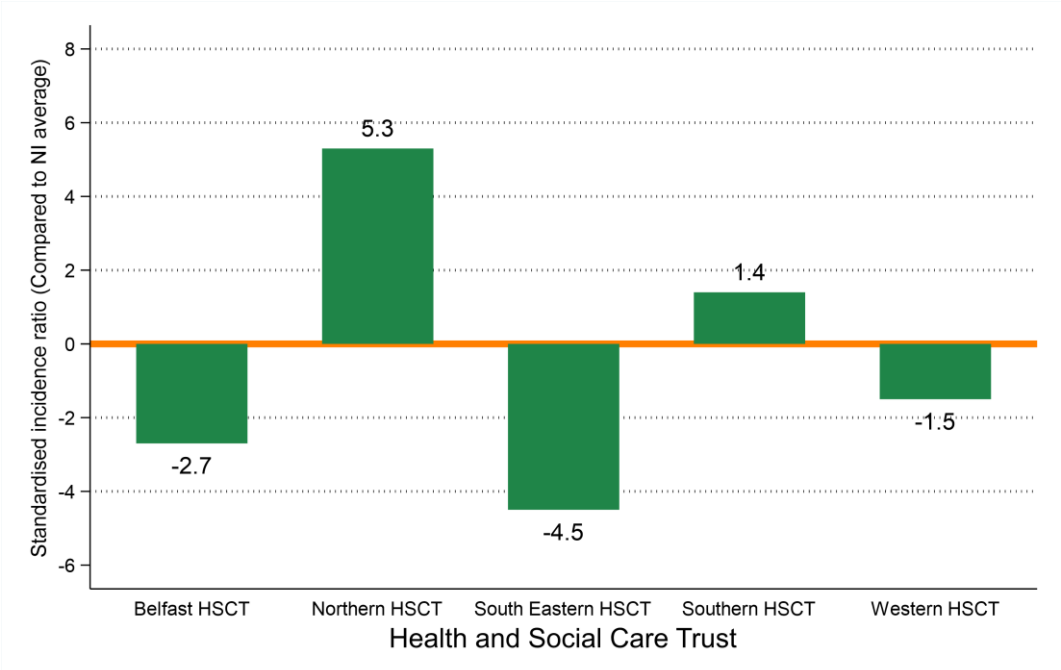
INCIDENCE BY HEALTH AND SOCIAL CARE TRUST

- The number of cases of lymphoma 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 did not vary significantly from the NI average.
  - in Northern HSCT did not vary significantly from the NI average.
  - in South Eastern HSCT did not vary significantly from the NI average.
  - in Southern HSCT did not vary significantly from the NI average.
  - in Western HSCT did not vary significantly from the NI average.

Table 3: Number of cases of lymphoma diagnosed in 2018-2022 by Health and Social Care Trust

Health and Social Care Trust	All persons		Male		Female	
	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	**2,113**	**423**	**1,192**	**238**	**921**	**184**
	.	.	.	.	.	.
Belfast HSCT	372	74	212	42	160	32
Northern HSCT	587	117	340	68	247	49
South Eastern HSCT	421	84	238	48	183	37
Southern HSCT	408	82	214	43	194	39
Western HSCT	325	65	188	38	137	27
Unknown	0	0	0	0	0	0

Figure 9: Standardised incidence ratio comparing Health and Social Care Trust to Northern Ireland for lymphoma diagnosed in 2018-2022



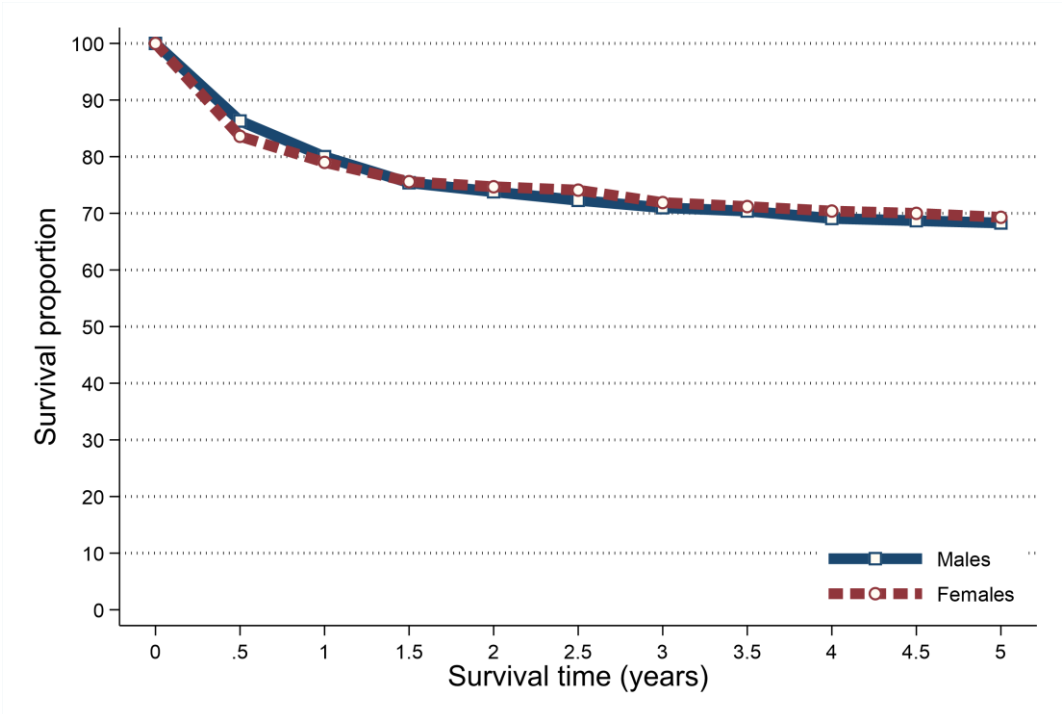
SURVIVAL

- 77.3% of patients were alive one year and 61.2% were alive five years from a lymphoma diagnosis in 2013-2017. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 79.5% one year and 68.7% five years from a lymphoma diagnosis in 2013-2017.
- Five-year survival (ASNS) for lymphoma patients diagnosed in 2013-2017 was 68.3% among men and 69.3% among women.

Table 4: Survival from lymphoma for patients diagnosed in 2013-2017

Time since diagnosis	All persons		Male		Female	
	Observed survival	Age-standardised net survival	Observed survival	Age-standardised net survival	Observed survival	Age-standardised net survival
6 months	83.8%	85.1%	85.8%	86.3%	81.2%	83.6%
One year	77.3%	79.5%	78.8%	80.0%	75.4%	79.0%
Two years	70.7%	74.2%	71.4%	73.8%	69.9%	74.7%
Five years	61.2%	68.7%	61.6%	68.3%	60.7%	69.3%

Figure 10: Age-standardised net survival from lymphoma for patients diagnosed in 2013-2017



Observed survival examines the time between diagnosis and death from any cause, however, due to the inclusion of non-cancer deaths it may not fully reflect how changes in cancer care impact survival from cancer.

Age-standardised net survival provides an estimate of patient survival which has been adjusted to take account of deaths unrelated to cancer. It is more widely used to assess the impact of changes in cancer care on patient survival.

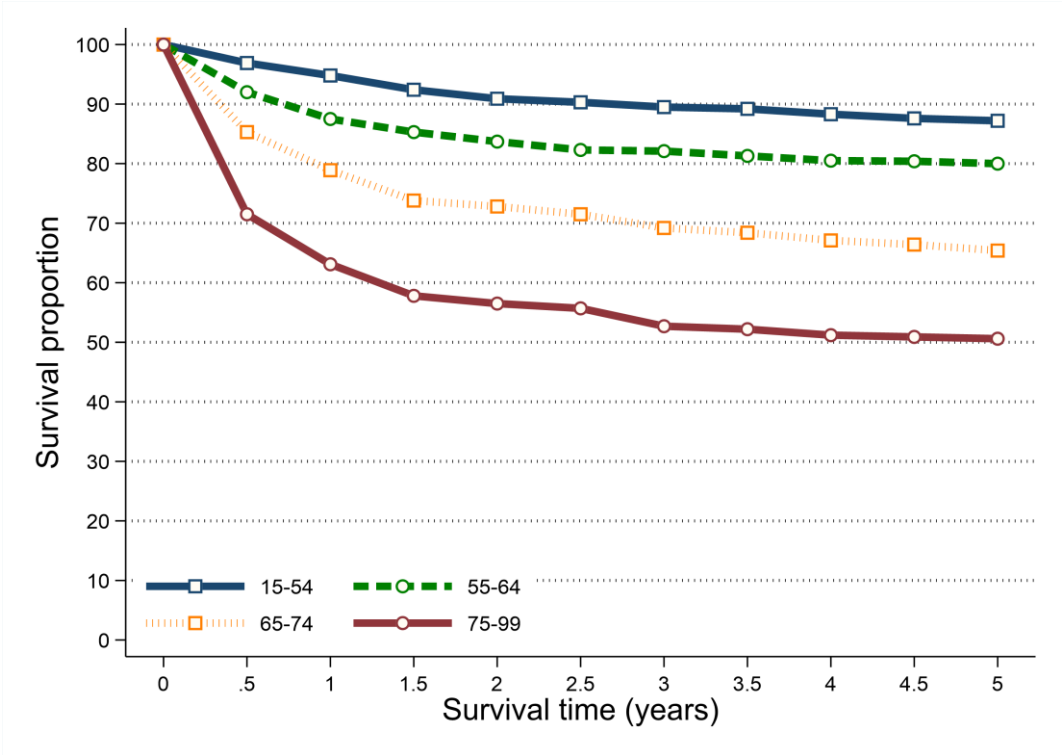
SURVIVAL BY AGE

- Survival from lymphoma among patients diagnosed during 2013-2017 was related to age with better five-year survival among younger age groups.
- Five-year net survival ranged from 87.2% among patients aged 15 to 54 at diagnosis to 50.6% among those aged 75 to 99.

Table 5: Net survival from lymphoma for patients diagnosed in 2013-2017 by age at diagnosis

Age group	All persons	
	One-year	Five-years
15 to 54	94.8%	87.2%
55 to 64	87.5%	80.0%
65 to 74	78.9%	65.4%
75 to 99	63.1%	50.6%

Figure 11: Net survival from lymphoma for patients diagnosed in 2013-2017 by age at diagnosis

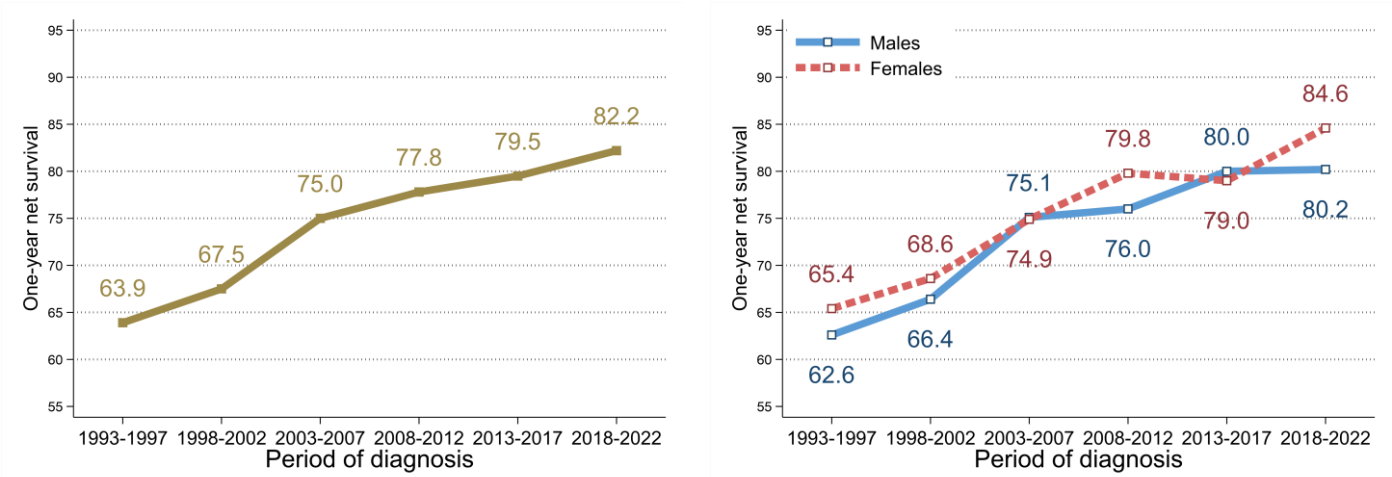


SURVIVAL TRENDS

ONE-YEAR NET SURVIVAL

- Between 2013-2017 and 2018-2022 there was no significant change in one-year survival (ASNS) from lymphoma. However, there was a significant increase between the two time periods for females (79.0% to 84.6%) but not males.
- Compared to 1993-1997 one-year survival (ASNS) from lymphoma in 2018-2022 increased significantly from 63.9% to 82.2%. This increase was significant for males (62.6% to 80.2%) and females (65.4% to 84.6%).

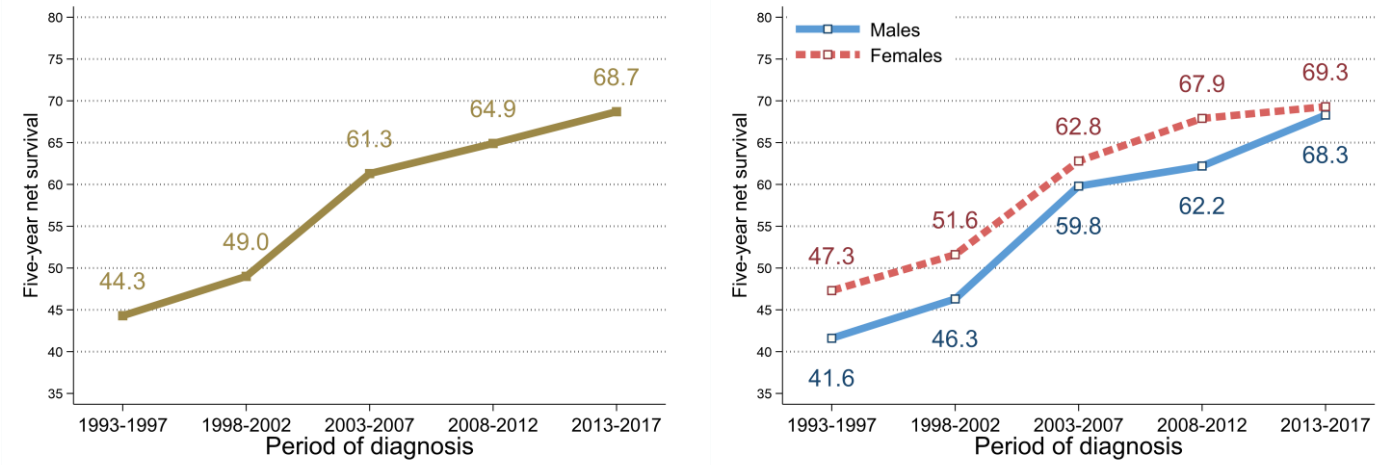
Figure 12: Trends in one-year age-standardised net survival from lymphoma in 1993-2022



FIVE-YEAR NET SURVIVAL

- Between 2008-2012 and 2013-2017 there was no significant change in five-year survival (ASNS) from lymphoma.
- Compared to 1993-1997 five-year survival (ASNS) from lymphoma in 2013-2017 increased significantly from 44.3% to 68.7%. This increase was significant for males (41.6% to 68.3%) and females (47.3% to 69.3%).

Figure 13: Trends in five-year age-standardised net survival from lymphoma in 1993-2017



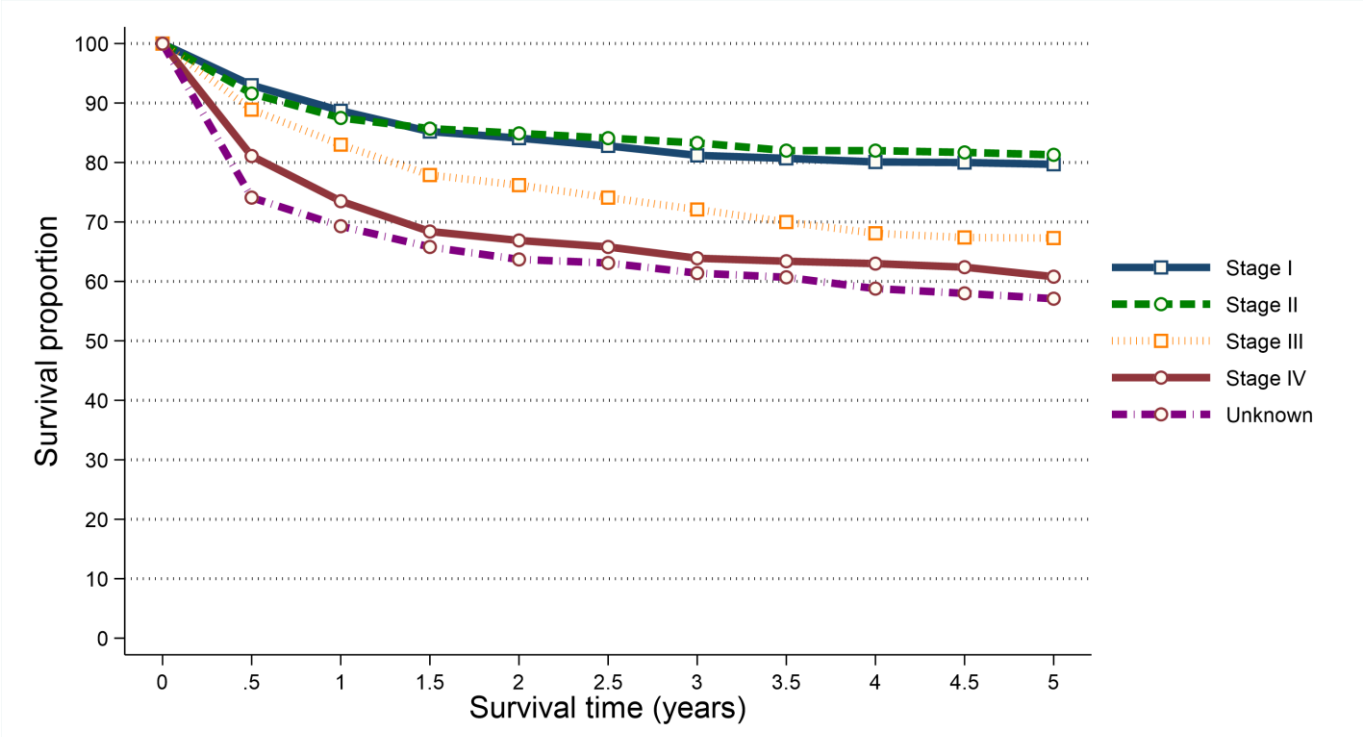
SURVIVAL BY STAGE

- Survival from lymphoma among patients diagnosed during 2013-2017 was strongly related to stage with better five-year survival among those diagnosed at earlier stages.
- Five-year survival (ASNS) ranged from 81.3% among patients diagnosed at Stage II to 60.8% among those diagnosed at Stage IV.

Table 6: Age-standardised net survival from lymphoma for patients diagnosed in 2013-2017 by stage at diagnosis

Stage at diagnosis	All persons	
	One-year	Five-years
Stage I	88.7%	79.7%
Stage II	87.5%	81.3%
Stage III	83.0%	67.3%
Stage IV	73.5%	60.8%
Unknown	69.3%	57.1%

Figure 14: Age-standardised net survival from lymphoma for patients diagnosed in 2013-2017 by stage at diagnosis



PREVALENCE

- At the end of 2022, there were 4,087 people (Males: 2,170; Females: 1,917) living with lymphoma who had been diagnosed with the disease during 1998-2022.
- Of these 8.4% had been diagnosed in the previous year (one-year prevalence) and 62.4% in the previous 10 years (ten-year prevalence).
- 33.0% of lymphoma survivors were aged 75 and over at the end of 2022.

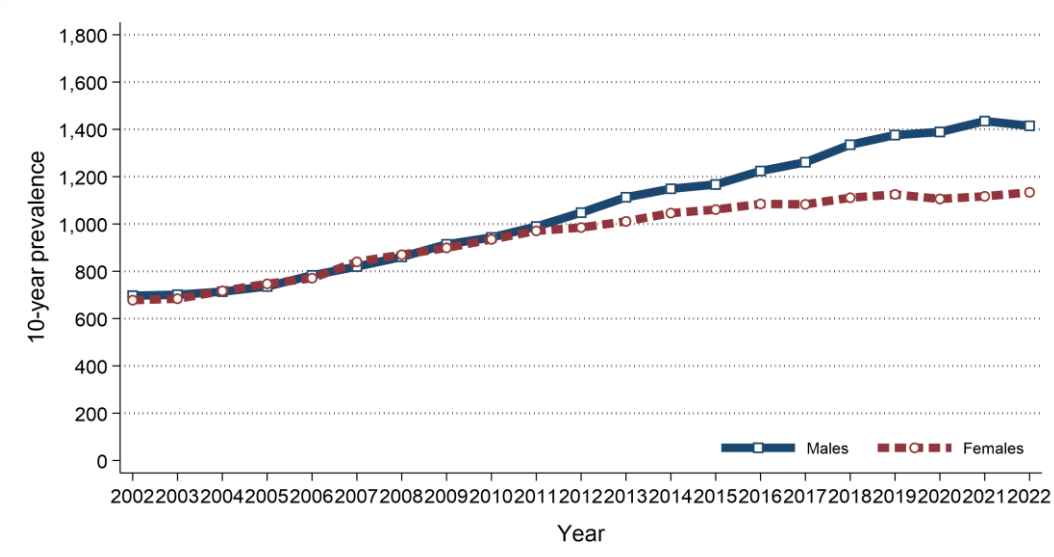
Table 7: 25-year prevalence of lymphoma by age at end of 2022

Gender	Age at end of 2022	25-year prevalence	Time since diagnosis			
			0 to 1 year	1 to 5 years	5 to 10 years	10 to 25 years
All persons	All ages	4,087	343	1,135	1,071	1,538
	0 to 74	2,740	220	776	718	1,026
	75 and over	1,347	123	359	353	512
Male	All ages	2,170	181	642	592	755
	0 to 74	1,551	118	458	419	556
	75 and over	619	63	184	173	199
Female	All ages	1,917	162	493	479	783
	0 to 74	1,189	102	318	299	470
	75 and over	728	60	175	180	313

PREVALENCE TRENDS

- 10-year prevalence of lymphoma among males increased between 2017 and 2022 by 12.2% from 1,261 survivors to 1,415 survivors.
- 10-year prevalence of lymphoma among females increased between 2017 and 2022 by 4.7% from 1,083 survivors to 1,134 survivors.

Figure 15: Trends in 10-year prevalence of lymphoma in 2002-2022



Year	10-year prevalence	
	Males	Females
2013	1,113	1,011
2014	1,149	1,046
2015	1,167	1,061
2016	1,224	1,085
2017	1,261	1,083
2018	1,335	1,111
2019	1,376	1,125
2020	1,389	1,106
2021	1,435	1,117
2022	1,415	1,134

MORTALITY

- There were 686 deaths from lymphoma during 2018-2022 in Northern Ireland. On average this was 137 deaths per year.
- During this period 45.2% of lymphoma deaths were among women (Male deaths: 376, Female deaths: 310). On average there were 75 male and 62 female deaths from lymphoma per year.
- Lymphoma deaths made up 3.1% of all male and 2.9% of all female cancer deaths.
- The median age of patients who died from lymphoma during 2018-2022 was 78 years (Males: 76, Females: 78).
- The risk of dying from lymphoma varied by age, with 56.1% of men and 62.3% of women who died from lymphoma aged 75 and over at death.
- In contrast, 5.5% of patients who died from lymphoma were aged 0 to 54 at death.

Figure 16: Average number of deaths from lymphoma per year in 2018-2022 by age at death

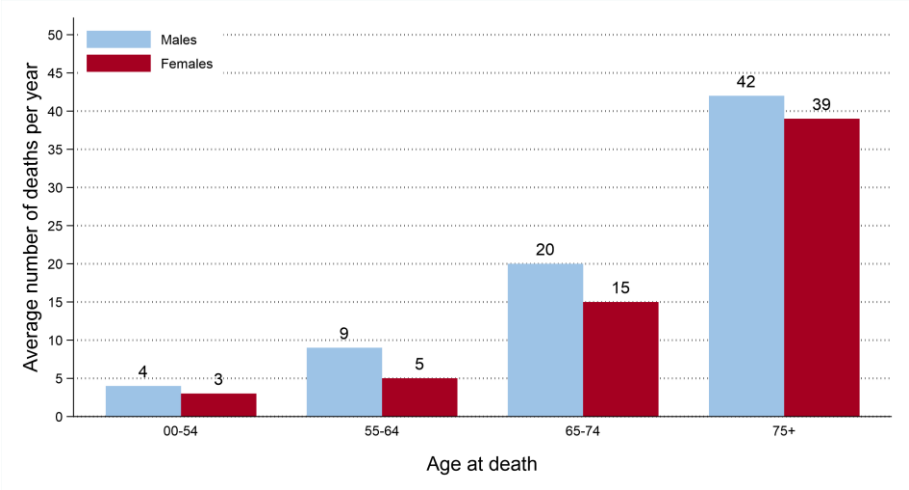
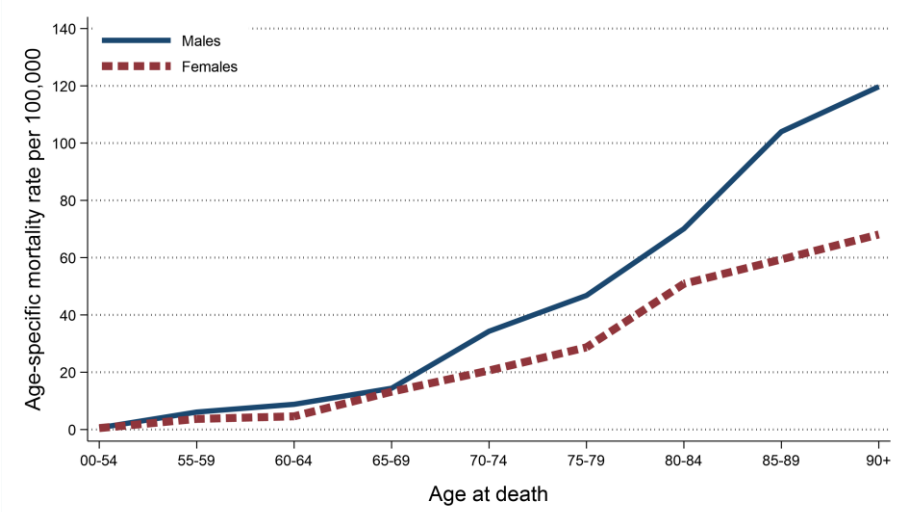


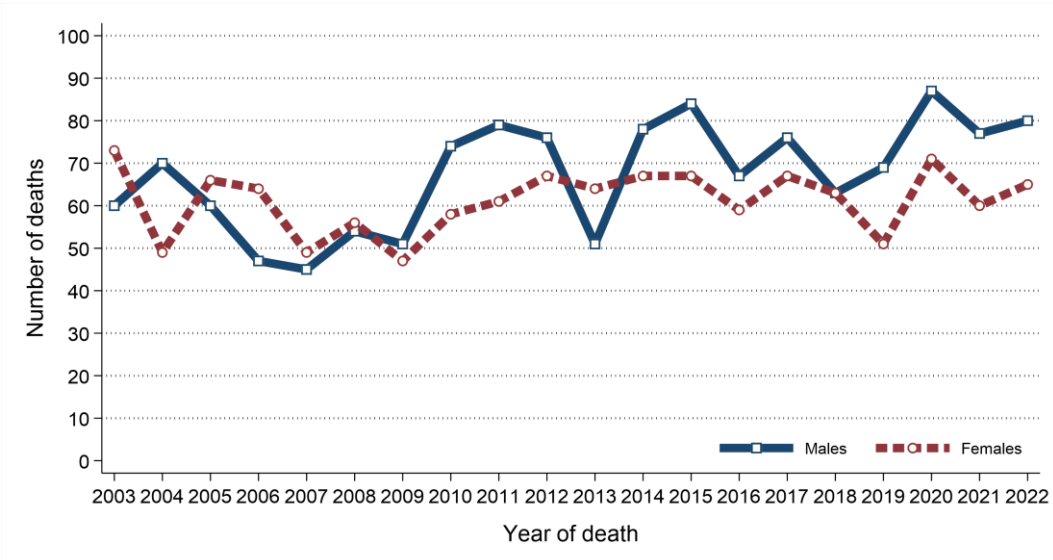
Figure 17: Age-specific mortality rates of lymphoma in 2018-2022



MORTALITY TRENDS

- The number of deaths from lymphoma among males increased between 2013-2017 and 2018-2022 by 5.6% from 356 deaths (71 deaths per year) to 376 deaths (75 deaths per year).
- The number of deaths from lymphoma among females decreased between 2013-2017 and 2018-2022 by 4.3% from 324 deaths (65 deaths per year) to 310 deaths (62 deaths per year).

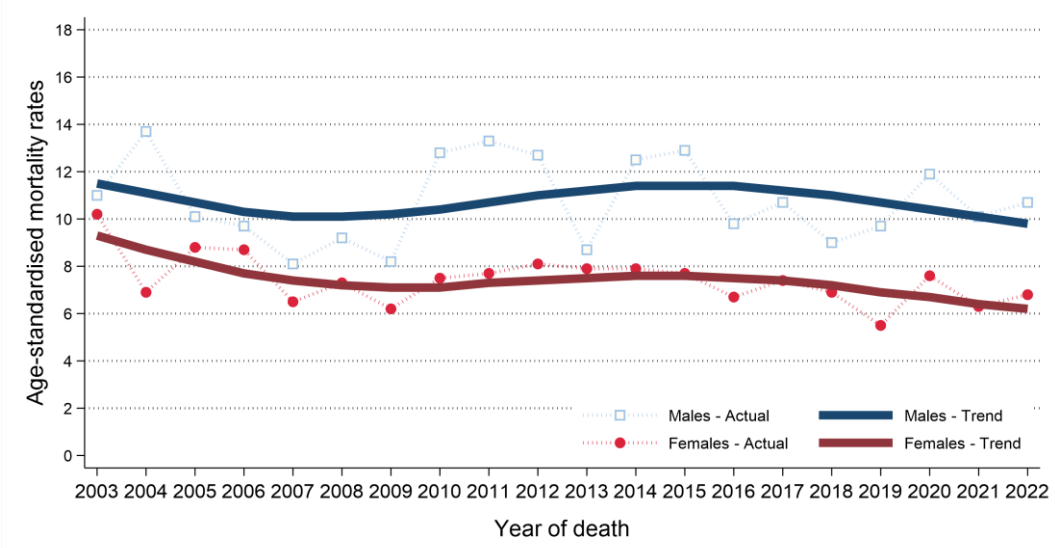
Figure 18: Trends in the number of deaths from lymphoma from 2003 to 2022



Year of death	Number of deaths	
	Males	Females
2013	51	64
2014	78	67
2015	84	67
2016	67	59
2017	76	67
2018	63	63
2019	69	51
2020	87	71
2021	77	60
2022	80	65

- Male age-standardised lymphoma mortality rates decreased between 2013-2017 and 2018-2022 by 5.5% from 10.9 to 10.3 deaths per 100,000 males. This change was not statistically significant.
- Female age-standardised lymphoma mortality rates decreased between 2013-2017 and 2018-2022 by 12.0% from 7.5 to 6.6 deaths per 100,000 females. This change was not statistically significant.

Figure 19: Trends in mortality rates of lymphoma from 2003 to 2022



Age-standardised mortality rates illustrate the change in the number of deaths 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.

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. lymphoma 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. lymphoma 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.

Patient survival is evaluated using two measures. Observed survival examines the time between diagnosis and death from any cause. It thus represents what cancer patients experience, however, due to the inclusion of non-cancer deaths (e.g. heart disease), it may not reflect how changes in cancer care impact survival from cancer. Thus age-standardised net survival is also examined. This measure provides an estimate of patient survival which has been adjusted to take account of deaths unrelated to cancer. It also assumes a standard age distribution thereby removing the impact of changes in the age distribution of cancer patients on changes in survival over time. While this measure is hypothetical, as it assumes patients can only die from cancer related factors, it is a better indicator of the impact of changes in cancer care on patient survival.