

Hodgkin's lymphoma

Patients diagnosed 1993-2019
(ICD10: C81)

Further information

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

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Acknowledgements

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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.



Incidence

During 2015-2019:

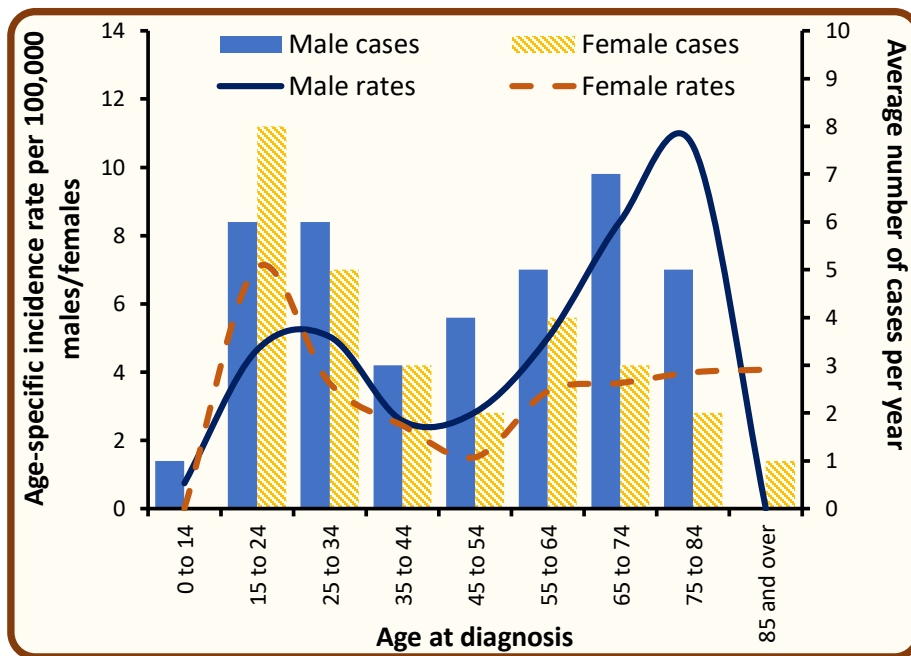
- There were 37 male and 27 female cases of Hodgkin's lymphoma diagnosed each year.
- Hodgkin's lymphoma made up 0.7% of all male, and 0.6% of all female cancers (ex NMSC).
- The risk of developing Hodgkin's lymphoma before the age of 75 was 1 in 337.2 for men and 1 in 459.6 for women, while before the age of 85 the risk was 1 in 243.8 for men and 1 in 391.2 for women.

Incidence by age at diagnosis - Hodgkin's lymphoma, Cases in 2015-2019

During 2015-2019:

- The median age at diagnosis was 48 for men and 38 for women.
- Cancer risk increased with age, with 45.9% of men and 37.0% of women aged 55 years or more at diagnosis.
- 40.6% of cases were diagnosed among those aged under 35.

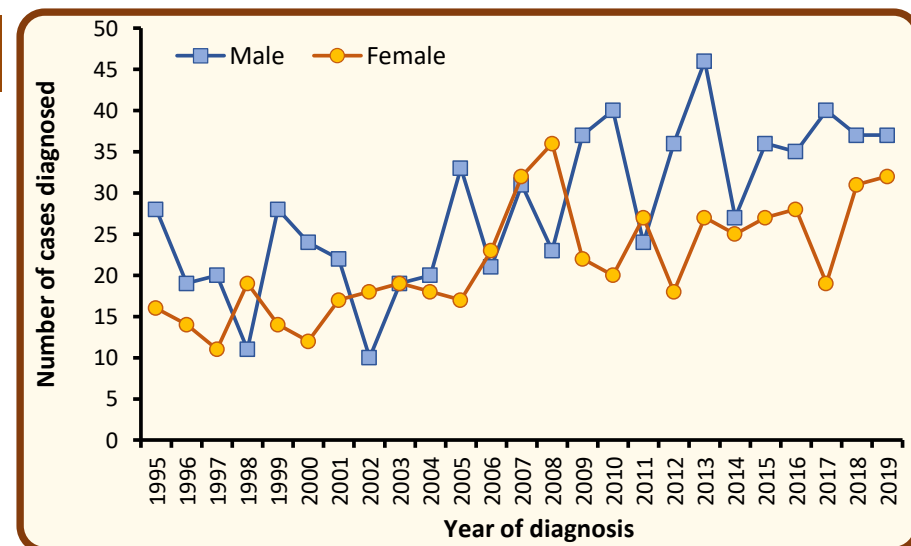
Age at diagnosis	Average cases per year		
	Male	Female	Both sexes
0 - 34	13	13	26
35 - 44	3	3	6
45 - 54	4	2	6
55+	17	10	27
All ages	37	27	64



Incidence by year of diagnosis - Hodgkin's lymphoma, Cases in 1995-2019

- Among males the number of cases of Hodgkin's lymphoma increased by 5.7% from an annual average of 35 cases in 2010-2014 to 37 cases in 2015-2019.
- Among females the number of cases of Hodgkin's lymphoma increased by 17.4% from an annual average of 23 cases in 2010-2014 to 27 cases in 2015-2019.

Year of diagnosis	Male	Female	Both sexes
2010	40	20	60
2011	24	27	51
2012	36	18	54
2013	46	27	73
2014	27	25	52
2015	36	27	63
2016	35	28	63
2017	40	19	59
2018	37	31	68
2019	37	32	69

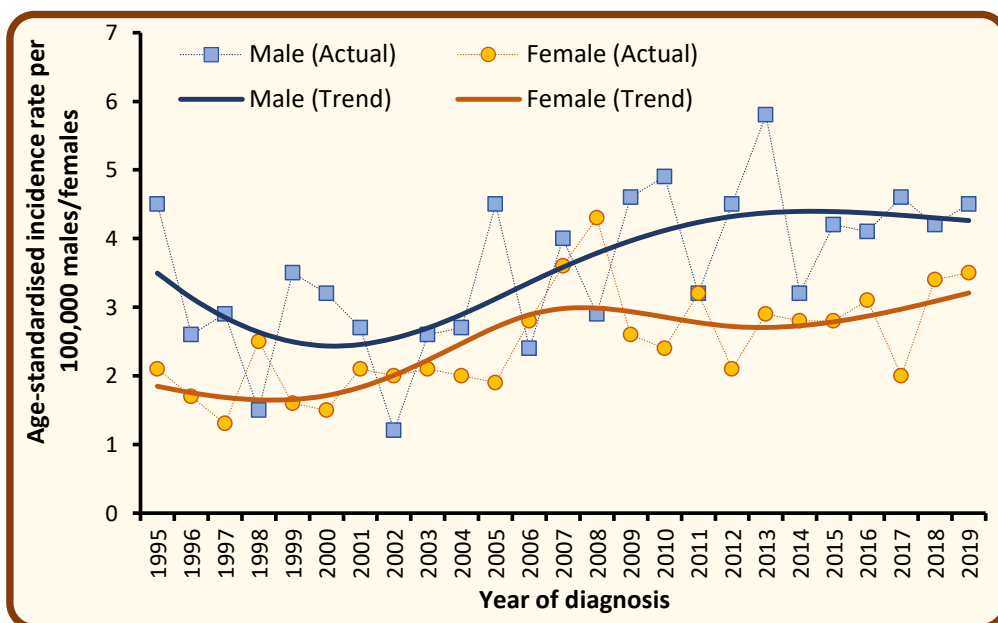


Note: Annual averages have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

NMSC: Non-melanoma skin cancer

Trends in age-standardised incidence rates - Hodgkin's lymphoma, Cases in 1995-2019

- Among males age-standardised incidence rates of Hodgkin's lymphoma did not change between 2010-2014 and 2015-2019 with an annual average of 4.3 per 100,000 person years in both five-year periods.
- Among females age-standardised incidence rates of Hodgkin's lymphoma increased by 11.1% from 2.7 per 100,000 person years in 2010-2014 to 3.0 cases per 100,000 persons years in 2015-2019. This difference was not statistically significant.



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 deprivation quintile - Hodgkin's lymphoma, Cases in 2015-2019

The annual number of cases during 2015-2019 varied in each deprivation quintile due to variations in population size and age.

After accounting for these factors, incidence rates:

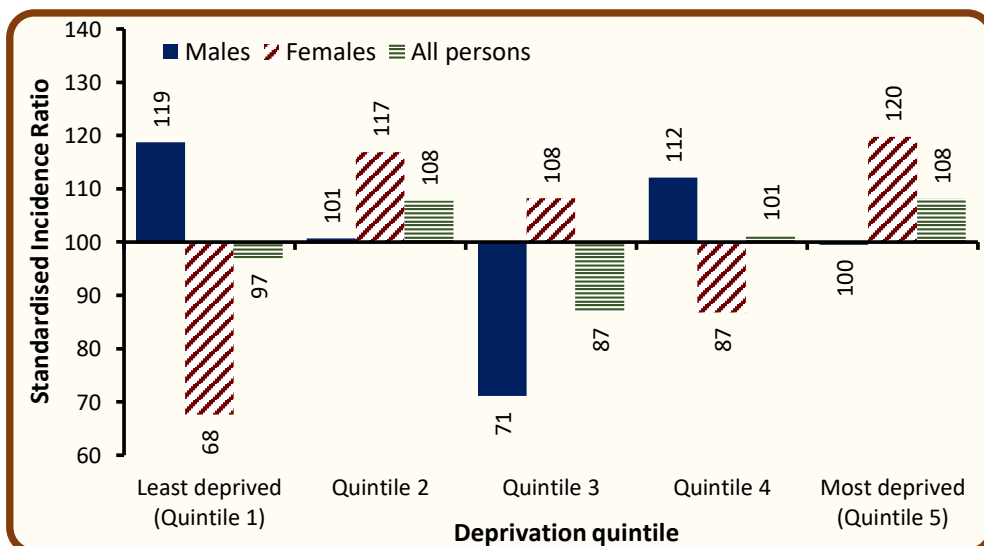
- in the most socio-economically deprived areas did not vary significantly from the NI average.
- in the least socio-economically deprived areas did not vary significantly from the NI average.

Deprivation quintile	Average cases per year		
	Male	Female	Both sexes
Least deprived (Quintile 1)	9	4	12
Quintile 2	8	7	14
Quintile 3	6	6	12
Quintile 4	8	5	13
Most deprived (Quintile 5)	7	6	13
Northern Ireland	37	27	64

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

A value above 100 means that incidence rates in that deprivation quintile are greater than the Northern Ireland average.

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



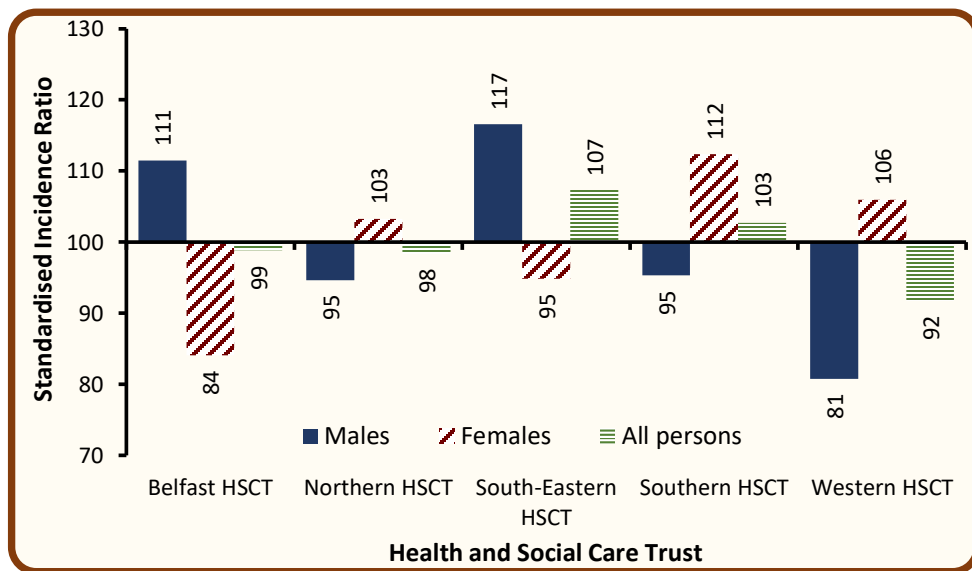
Incidence by Health and Social Care Trust (HSCT) - Hodgkin's lymphoma, Cases in 2015-2019

The annual number of cases during 2015-2019 varied in each HSCT 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.

Health and Social Care Trust	Average cases per year		
	Male	Female	Both sexes
Belfast HSCT	8	5	12
Northern HSCT	9	7	16
South-Eastern HSCT	8	5	13
Southern HSCT	7	6	13
Western HSCT	5	5	9
Northern Ireland	37	27	64



Standardised incidence ratios compare incidence rates in each HSC Trust with the Northern Ireland incidence rate. A value above 100 means that incidence rates in that HSC Trust 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.

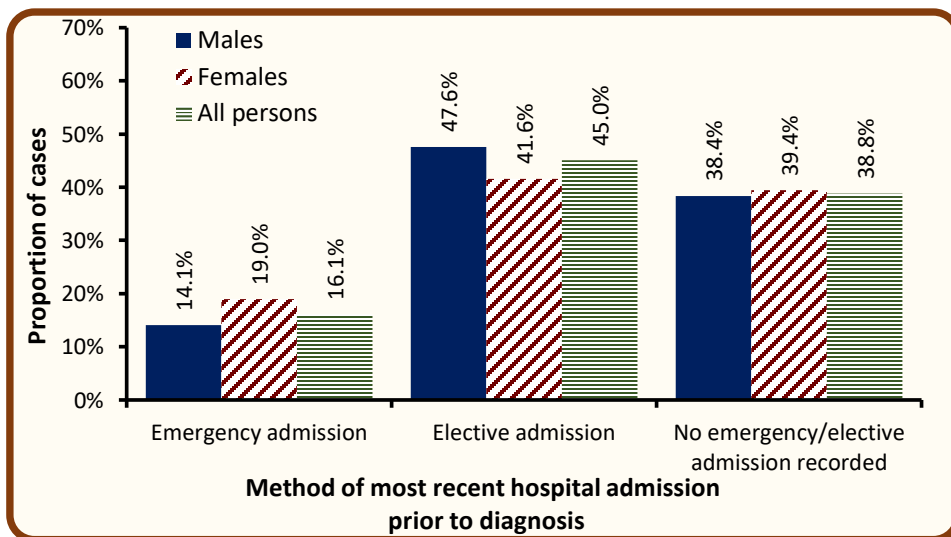
Data for Local Government Districts and Parliamentary Constituencies are available at www.qub.ac.uk/research-centres/nicr

Incidence by method of most recent admission to hospital - Hodgkin's lymphoma, Cases in 2015-2019

During 2015-2019:

- 16.1% of cases had an emergency admission to hospital recorded up to 30 days prior to their cancer diagnosis.
- 14.1% of male cases had an emergency admission up to 30 days prior to diagnosis, compared to 19.0% of female cases.
- In 38.8% of diagnosed cases there was no record of a hospital inpatient admission up to 30 days prior to the diagnosis.

Method of admission	Average cases per year		
	Male	Female	Both sexes
Emergency admission	5	5	10
Elective admission	18	11	29
No emergency/elective admission recorded	14	11	25
Total	37	27	64



Admission method refers to the most recent hospital inpatient admission that a patient had prior to cancer diagnosis, regardless of reason for the admission.

Admissions are considered up to a maximum of 30 days prior to diagnosis. Admissions up to two days post diagnosis are also considered to allow for a reasonable margin or error in data recording.

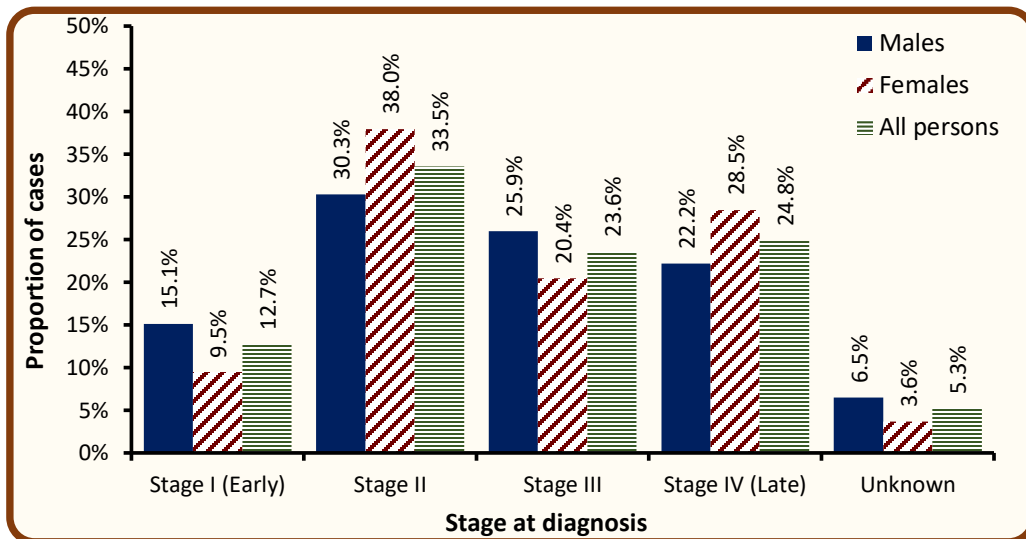
The majority of patients with no inpatient admission recorded prior to diagnosis are likely to have been diagnosed via an outpatient route.

Incidence by stage at diagnosis - Hodgkin's lymphoma, Cases in 2015-2019

During 2015-2019:

- 94.7% of cases diagnosed had a stage assigned.
- 12.7% of cases were diagnosed at stage I. (13.4% of staged cases)
- 24.8% of cases were diagnosed at stage IV. (26.2% of staged cases)
- Among cases which were staged, 23.7% of male cases were diagnosed at stage IV, compared to 29.5% of female cases.

Stage at diagnosis	Average cases per year		
	Male	Female	Both sexes
Stage I (Early)	6	3	8
Stage II	11	10	22
Stage III	10	6	15
Stage IV (Late)	8	8	16
Unknown	2	1	3
All stages	37	27	64



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).

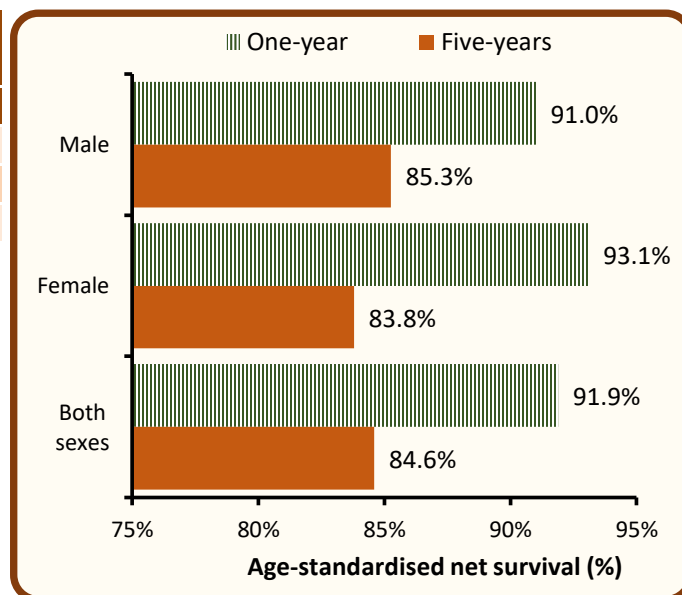
Survival

- 87.7% of patients were alive one year and 76.0% were alive five years from a Hodgkin's lymphoma diagnosis in 2010-2014. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 91.9% one year and 84.6% five years from a Hodgkin's lymphoma diagnosis in 2010-2014.
- Five-year survival (ASNS) for Hodgkin's lymphoma patients diagnosed in 2010-2014 was 85.3% among men and 83.8% among women.

Gender	Observed survival		Age-standardised net survival	
	One-year	Five-years	One-year	Five-years
Male	86.4%	75.1%	91.0%	85.3%
Female	89.5%	77.2%	93.1%	83.8%
Both sexes	87.7%	76.0%	91.9%	84.6%

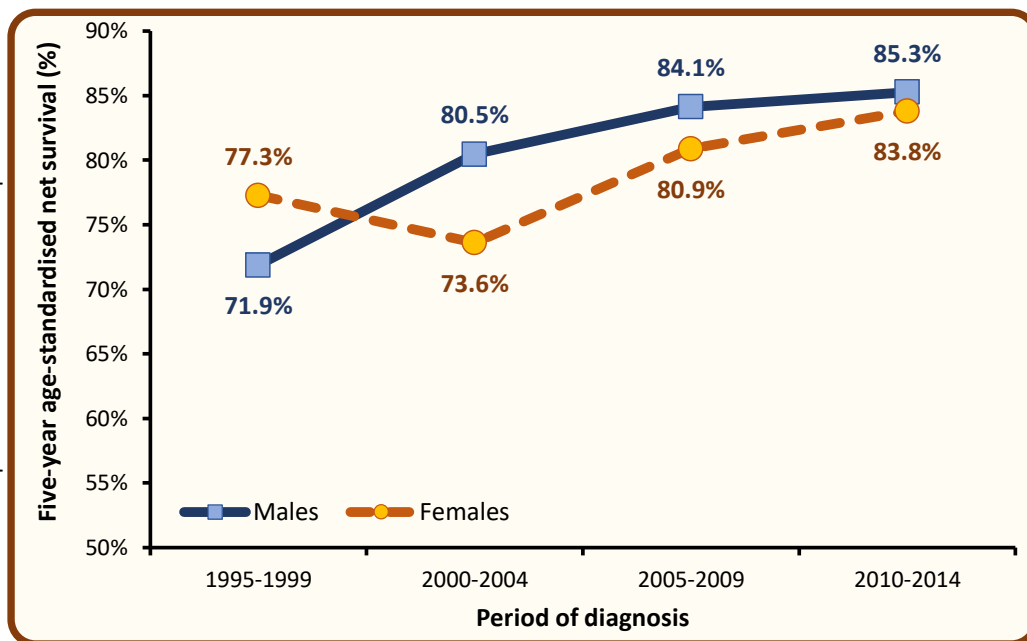
Observed survival is the proportion of patients still alive one/five years after diagnosis. However, in this measure patients may have died from causes unrelated to their cancer.

Age-standardised net survival is the proportion of patients who would survive if the patient could not die from causes unrelated to their cancer. This measure is more typically used in studies of cancer survival.



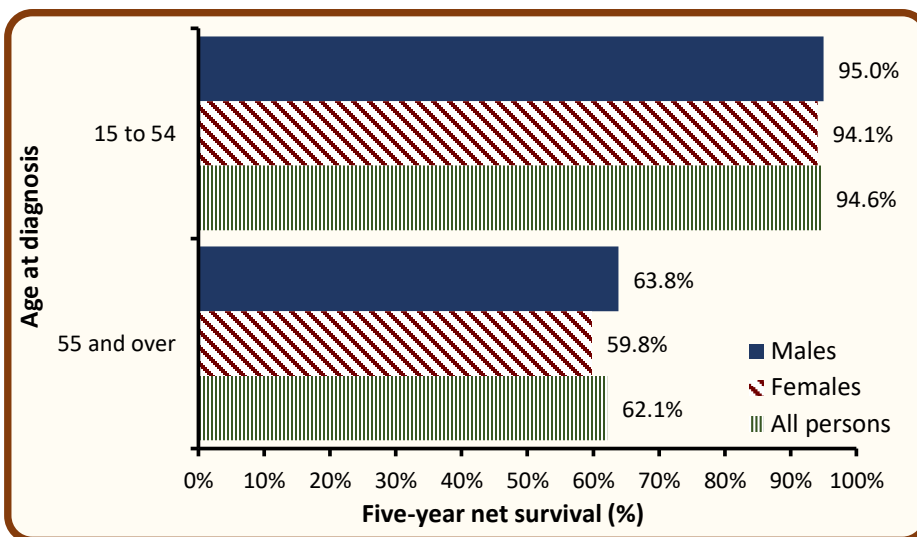
Trends in survival - Hodgkin's lymphoma, Patients diagnosed in 1995-2014

- Among men five-year survival (ASNS) from Hodgkin's lymphoma increased from 84.1% in 2005-2009 to 85.3% in 2010-2014. This difference was not statistically significant.
- Among women five-year survival (ASNS) from Hodgkin's lymphoma increased from 80.9% in 2005-2009 to 83.8% in 2010-2014. This difference was not statistically significant.



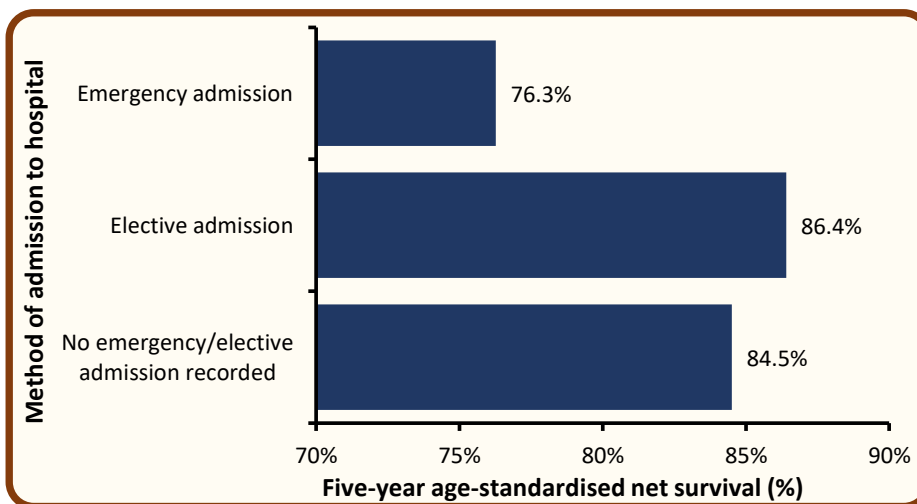
Survival by age at diagnosis - Hodgkin's lymphoma, Patients diagnosed in 2010-2014

- Survival from Hodgkin's lymphoma among patients diagnosed in 2010-2014 was strongly related to age with five-year survival decreasing as age increases.
- Five-year net survival ranged from 94.6% among patients aged 15 to 54 at diagnosis to 62.1% among those aged 55 and over.
- Five-year net survival among patients aged 55 and over was 63.8% for men and 59.8% for women.



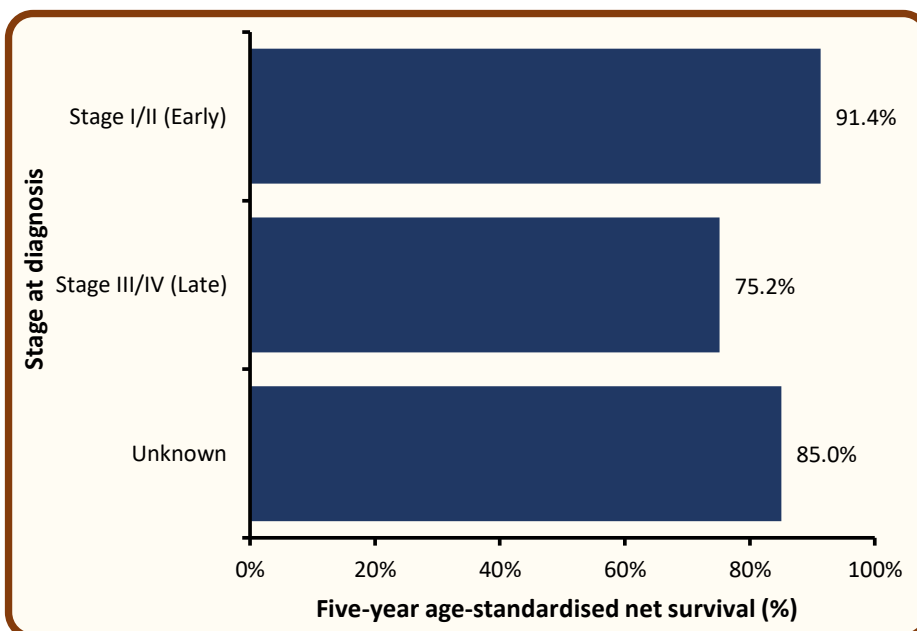
Survival by method of most recent admission to hospital - Hodgkin's lymphoma, Patients diagnosed in 2010-2014

- Five-year survival (ASNS) among Hodgkin's lymphoma patients who had an emergency admission to hospital up to 30 days prior to their cancer diagnosis was 76.3% compared to 86.4% among those with elective admissions and 84.5% among those who had no hospital admissions recorded up to 30 days prior to diagnosis.



Survival by stage at diagnosis - Hodgkin's lymphoma, Patients diagnosed in 2010-2014

- Stage at diagnosis is one of the most important factors in Hodgkin's lymphoma survival with five-year survival decreasing as stage increases.
- Five-year survival (ASNS) ranged from 91.4% for early stage (stage I/II) disease to 75.2% for late stage (stage III/IV) disease.
- Five-year survival for unstaged cancer was 85.0%.



Prevalence

- At the end of 2019, there were 853 people (Males: 471; Females: 382) living with Hodgkin's lymphoma who had been diagnosed with the disease during 1995-2019.
- Of these, 55.2% were male, 37.7% were aged 55 and over, and 7.4% had been diagnosed in the previous year.

25-year prevalence refers to the number of cancer survivors who were alive at the end of 2019, and had been diagnosed with their cancer in the previous 25 years (i.e. 1995-2019).

Time since diagnosis	25-year prevalence								
	Aged 0-54			Aged 55+			All ages		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
0-1 year	14	17	31	19	13	32	33	30	63
1-5 years	80	63	143	43	28	71	123	91	214
5-10 years	76	50	126	45	37	82	121	87	208
10-25 years	115	116	231	79	58	137	194	174	368
0-25 years	285	246	531	186	136	322	471	382	853

Trends in 10-year prevalence - Hodgkin's lymphoma, Patients alive at end of each year from 2010-2019

- Among males the number of survivors from Hodgkin's lymphoma who had been diagnosed within the previous ten years increased by 11.2% from 249 survivors in 2014 to 277 survivors in 2019.
- Among females the number of survivors from Hodgkin's lymphoma who had been diagnosed within the previous ten years increased by 7.8% from 193 survivors in 2014 to 208 survivors in 2019.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Male	205	200	218	250	249	254	262	263	274	277
Female	173	179	173	185	193	200	205	199	198	208
Both sexes	378	379	391	435	442	454	467	462	472	485

Mortality

- During 2015-2019 there were 8 male and 4 female deaths from Hodgkin's lymphoma each year.
- Hodgkin's lymphoma made up 0.3% of all male, and 0.2% of all female cancer deaths (ex NMSC).

Deaths by age at death - Hodgkin's lymphoma, Deaths in 2015-2019

- The median age at death during 2015-2019 was 73 for men and 80 for women.
- Risk of death from Hodgkin's lymphoma was strongly related to age, with 90.9% of patients aged 55 years or more at time of death.

Age at death	Average deaths per year
	Both sexes
0 - 34	0
35 - 44	1
45 - 54	0
55+	10
All ages	11

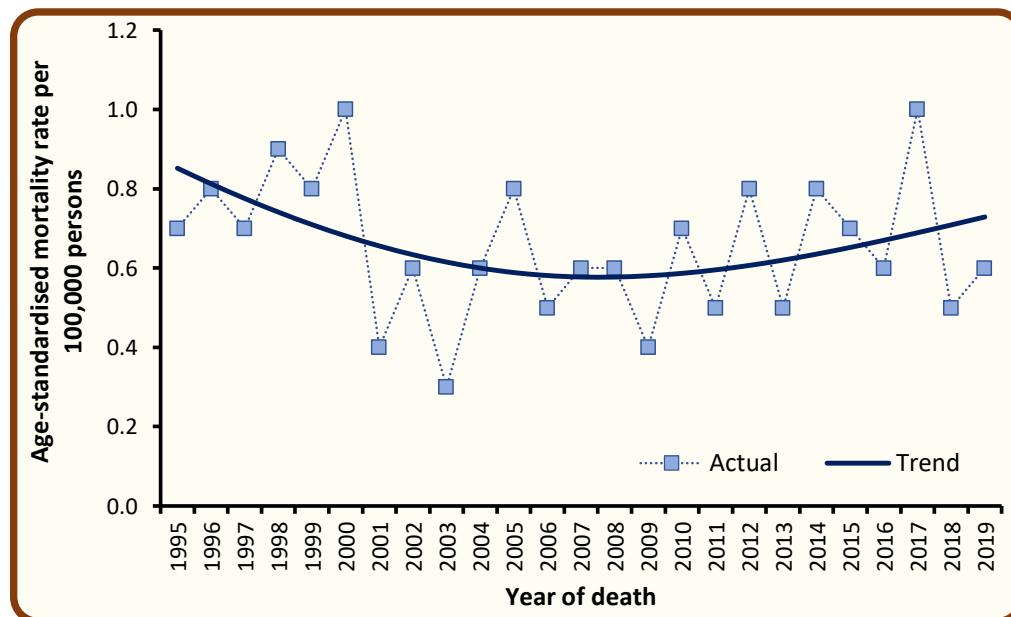
Deaths by year of death - Hodgkin's lymphoma, Deaths in 2010-2019

- The number of deaths from Hodgkin's lymphoma increased by 10.0% from an annual average of 10 deaths in 2010-2014 to 11 deaths in 2015-2019.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Both sexes	10	7	12	8	12	11	11	16	8	10

Trends in age-standardised mortality rates - Hodgkin's lymphoma, Deaths in 1995-2019

- Age-standardised mortality rates from Hodgkin's lymphoma did not change between 2010-2014 and 2015-2019 with 0.7 deaths per 100,000 persons years during both periods.



Mortality data are provided by the Northern Ireland General Registrar Office via the Department of Health.

Counts of the number of deaths are based upon the year that death occurred, and upon the primary cause of death only.

Age-standardised mortality rates remove changes over time caused by population growth and/or ageing.

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 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 are assigned based on a patient's postcode of usual residence at diagnosis using the Jan 2021 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).

A **crude incidence/mortality rate** is 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.

An **age-standardised incidence/mortality rate** per 100,000 person years is an estimate 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.

A **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 are a measure of the precision of a statistic (e.g. colorectal 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. cervical 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 2019 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.

Observed survival refers to the proportion of patients who survive a specified amount of time from their date of diagnosis. Observed survival considers death from any cause and is not adjusted for the age of the patient. Cause of death may be unrelated to the cancer the patient has been diagnosed with.

Net Survival is an estimate of survival where the effect on survival of background population mortality rates has been removed. It represents the [theoretical] survival of cancer patients if they could only die from cancer-related causes. Age-standardised net survival estimates are the estimates that would occur if that population of cancer patients had a standard population age structure. The age groups and weights used here are those used by international studies such as EUROCARE, an international study group that compares cancer survival among European countries. However, due to the small number of patients in NI, the last two age categories in the standard population are combined.

Mortality: Information relating to cancer mortality is sourced from the General Registrar Office (GRONI) via the Department of Health (NI). Results are based upon the date on which death occurs, and may thus differ slightly than those produced by the Northern Ireland Statistics and Research Agency (NISRA), which produces deaths data based upon the date on which the death is registered with GRONI.