| Number of cases per year |  |  | Number of deaths per year |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $(2014-2018)^{1}$ |  |  | $(2014-2018)^{1}$ |  |  |
| Male | Female | Both sexes | Male | Female | Both sexes |
| 226 | 183 | 408 | 73 | 65 | 138 |
| Five-year net survival |  |  | 25-year prevalence |  |  |
| (2009-2013) |  |  | (2018) |  |  |
| Male | Female | Both sexes | Male | Female | Both sexes |
| 65.0\% | 69.2\% | 67.0\% | 1,986 | 1,774 | 3,760 |

## Incidence

During 2014-2018:

- There were 226 male and 183 female cases of lymphoma diagnosed each year.
- There were 24.7 male and 19.3 female cases of lymphoma per 100,000 males/females diagnosed each year.
- Lymphoma made up $4.7 \%$ of all male cancers (ex NMSC), and $3.8 \%$ of all female cancers (ex NMSC).
- The risk of developing lymphoma before the age of 75 was 1 in 61 for men and 1 in 87 for women.

Incidence by sex and age at diagnosis: Lymphoma 2014-2018 ${ }^{1}$
During 2014-2018:

- The median age at diagnosis was 67 for men and 70 for women.
- Lymphoma risk varied by age, with $55.8 \%$ of men and $63.9 \%$ of women aged 65 years or more at diagnosis.
- 17.6\% of cases were diagnosed among those aged under 50.

| Age at <br> diagnosis | Average cases per year |  |  |
| :--- | :---: | :---: | :---: |
|  | Male | Female | Both sexes |
| $\mathbf{0 - 4 9}$ | 42 | 30 | 72 |
| $50-64$ | 58 | 37 | 95 |
| $65-74$ | 62 | 50 | 110 |
| $75+$ | 64 | 67 | 130 |
| All ages | 226 | 183 | 408 |



Incidence by sex and year of diagnosis: Lymphoma 2009-2018

- Among males the number of cases of lymphoma increased by 9.7\% from an annual average of 206 cases in 2009-2013 to 226 cases in 2014-2018.
- Among females the number of cases of lymphoma increased by 7.6\% from an annual average of 170 cases in 2009-2013 to 183 cases in 2014-2018.

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 182 | 204 | 217 | 214 | 213 | 208 | 217 | 227 | 243 | 233 |
| Female | 160 | 177 | 194 | 155 | 162 | 196 | 177 | 181 | 175 | 184 |
| Both sexes | 342 | 381 | 411 | 369 | 375 | 404 | 394 | 408 | 418 | 417 |

1. Annual averages based upon several years 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

- Among males age-standardised incidence rates of lymphoma decreased by $2.0 \%$ from 30.5 per 100,000 person years in 20092013 to 29.9 cases per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised incidence rates of lymphoma decreased by $0.9 \%$ from 21.1 per 100,000 person years in 20092013 to 20.9 cases per 100,000 persons years in 2014-2018. 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.

Incidence (cases and rates) by sex and Health and Social Care Trust (HSCT): Lymphoma 2014-2018 ${ }^{1}$
The annual number of lymphoma cases during 2014-2018 varied in each HSCT due to variations in population size and age (see table). After accounting for these factors, incidence rates (see figure):

- 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 <br> Care Trust | Average cases per year |  |  |
| :--- | :---: | :---: | :---: |
|  | Male | Female | Both sexes |
| Belfast HSCT | 40 | 31 | 71 |
| Northern HSCT | 63 | 52 | 115 |
| South-Eastern HSCT | 47 | 34 | 81 |
| Southern HSCT | 42 | 34 | 76 |
| Western HSCT | 34 | 31 | 65 |
| Northern Ireland | 226 | 183 | 408 |



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 Northern Ireland average.

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

1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total. HSCT: Health and Social Care Trust

Incidence (cases and rates) by sex and deprivation quintile: Lymphoma 2014-2018 ${ }^{\mathbf{1}}$
The annual number of lymphoma cases during 2014-2018 varied in each deprivation quintile due to variations in population size and age (see table).
After accounting for these factors, incidence rates (see figure):

- 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) | 51 | 38 | 89 |
| Quintile 2 | 48 | 37 | 85 |
| Quintile 3 | 44 | 38 | 81 |
| Quintile 4 | 45 | 37 | 82 |
| Most deprived (Quintile 5) | 38 | 33 | 71 |
| Northern Ireland | 226 | 183 | 408 |

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.


Deprivation quintile

## Survival

- $76.8 \%$ of patients were alive one year and $60.2 \%$ were alive five years from a lymphoma diagnosis in 2009-2013. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was $78.2 \%$ one year and 67.0\% five years from a lymphoma diagnosis in 2009-2013.
- Five-year survival (ASNS) for patients diagnosed in 2009-2013 was $65.0 \%$ among men and $69.2 \%$ among women.
- Estimates for survival (ASNS) of patients diagnosed during 2012-2016 are 78.9\% one year, and 67.2\% five years from diagnosis.

| Period of diagnosis ${ }^{2}$ | Gender | Observed survival |  | Age-standardised net survival |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | One-year | Five-years | One-year | Five-years |
| 2009-2013 | Male | 76.7\% | 58.4\% | 77.5\% | 65.0\% |
|  | Female | 76.9\% | 62.3\% | 78.8\% | 69.2\% |
|  | Both sexes | 76.8\% | 60.2\% | 78.2\% | 67.0\% |
| 2012-2016 estimates | Male | 78.9\% | 59.6\% | 80.1\% | 66.6\% |
|  | Female | 74.8\% | 59.9\% | 77.8\% | 68.3\% |
|  | Both sexes | 77.0\% | 59.7\% | 78.9\% | 67.2\% |

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.

[^0]
## Survival by sex and age at diagnosis: Lymphoma 2009-2013

- Survival from lymphoma is strongly related to age at diagnosis with five-year survival decreasing as age increases.
- Five-year net survival ranged from 90.5\% among patients aged 15-44 at diagnosis to $46.2 \%$ among those aged 75 and over.
- Five-year net survival among lymphoma patients aged 75 and over was $46.6 \%$ for men and $45.9 \%$ for women.


Trends in age-standardised net survival by sex: Lymphoma 1994-2013

- Among men five-year survival (ASNS) from lymphoma increased from 43.4\% for those diagnosed in 1994-1998 to 65.0\% for those diagnosed in 2009-2013. This difference was statistically significant.
- Among women five-year survival (ASNS) from lymphoma increased from 48.5\% for those diagnosed in 1994-1998 to 69.2\% for those diagnosed in 2009-2013. This difference was statistically significant.



## Prevalence

- At the end of 2018, there were 3,760 people (Males: 1,986; Females: 1,774 ) living with lymphoma who had been diagnosed with the disease during 1994-2018.

25-year prevalence refers to the number of cancer survivors who were alive at the end of 2018, and had been diagnosed with their cancer in the previous 25 years (i.e. 1994-2018).

- Of these, $52.8 \%$ were male, $42.6 \%$ were aged 70 and over, and $9.8 \%$ had been diagnosed in the previous year.

| Time since diagnosis | 25-year prevalence |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Aged 0-69 |  |  | Aged 70+ |  |  | All ages |  |  |
|  | Male | Female | Both sexes | Male | Female | Both sexes | Male | Female | Both sexes |
| 0-1 year | 121 | 78 | 199 | 85 | 86 | 171 | 206 | 164 | 370 |
| 1-5 years | 362 | 258 | 620 | 250 | 215 | 465 | 612 | 473 | 1,085 |
| 5-10 years | 317 | 233 | 550 | 194 | 231 | 425 | 511 | 464 | 975 |
| 10-25 years | 430 | 360 | 790 | 227 | 313 | 540 | 657 | 673 | 1,330 |
| 0-25 years | 1,230 | 929 | 2,159 | 756 | 845 | 1,601 | 1,986 | 1,774 | 3,760 |

[^1]
## Cancer stage

Incidence by sex and stage at diagnosis: Lymphoma 2013-2017 ${ }^{\mathbf{1}}$
During 2013-2017:

- $82.2 \%$ of cases diagnosed had a stage assigned.
- $18.3 \%$ of cases were diagnosed at stage I. (22.2\% of staged cases)
- 28.6\% of cases were diagnosed at stage IV. (34.8\% of staged cases)
- Among cases which were staged, $34.8 \%$ of male cases were diagnosed at stage IV, compared to $34.7 \%$ of female cases.

| Stage at diagnosis | Average cases per year |  |  |
| :--- | :---: | :---: | :---: |
|  | Male | Female | Both sexes |
| Stage I (Early) | 42 | 31 | 73 |
| Stage II | 34 | 30 | 64 |
| Stage III | 44 | 33 | 77 |
| Stage IV (Late) | 64 | 50 | 114 |
| Unknown | 38 | 33 | 71 |
| All stages | 222 | 178 | 400 |



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 (version 7) classification.

Data on cancer stage in 2018, classified using TNM (version 8), is available online at www.qub.ac.uk/nicr

Survival by sex and stage at diagnosis: Lymphoma 2012-2016 estimates*

- Stage at diagnosis is one of the most important factors in lymphoma survival with five-year survival decreasing as stage increases.
- Five-year survival (ASNS) ranged from 85.4\% for early stage (stage I) disease to 56.3\% for late stage (stage IV) disease.
- Five-year survival (ASNS) for unstaged lymphoma was 59.5\%.
- Five-year survival (ASNS) for stage IV lymphoma was $56.1 \%$ for men, compared to $57.3 \%$ for women.


[^2]
## Mortality

During 2014-2018:

- There were 73 male and 65 female deaths from lymphoma each year.
- Death from lymphoma made up 3.2\% of all male cancer deaths (ex NMSC), and $3.1 \%$ of all female cancer deaths (ex NMSC).

Deaths by sex and age at death: Lymphoma 2014-2018 ${ }^{1}$

## During 2014-2018:

- The median age at death was 74 for men and 80 for women.
- Risk of death from lymphoma was strongly related to age, with $79.5 \%$ of men and
$87.7 \%$ of women aged 65 years or more at time of death.
- 4.3\% of lymphoma deaths occurred among those aged under 50.

| Age at <br> death | Average deaths per year |  |  |
| :--- | :---: | :---: | :---: |
|  | Male | Female | Both sexes |
| $0-49$ | 3 | 2 | 6 |
| $50-64$ | 12 | 6 | 18 |
| $65-74$ | 22 | 13 | 35 |
| $75+$ | 36 | 44 | 80 |
| All ages | 73 | 65 | 138 |

Deaths by sex and year of death: Lymphoma 2009-2018

- Among males the number of deaths from lymphoma increased by $10.6 \%$ from an annual average of 66 deaths in 2009-2013 to 73 deaths in 2014-2018.
- Among females the number of deaths from lymphoma increased by 10.2\% from an annual average of 59 deaths in 2009-2013 to 65 deaths in 2014-2018.

|  | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male | 51 | 74 | 79 | 76 | 51 | 78 | 84 | 67 | 76 | 62 |
| Female | 47 | 58 | 61 | 67 | 64 | 67 | 67 | 59 | 67 | 63 |
| Both sexes | 98 | 132 | 140 | 143 | 115 | 145 | 151 | 126 | 143 | 125 |

Trends in age-standardised mortality rates by sex: Lymphoma 1994-2018

- Among males age-standardised mortality rates from lymphoma decreased by 2.1\% from 11.2 per 100,000 person years in 20092013 to 10.9 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.
- Among females age-standardised mortality rates from lymphoma decreased by 1.8\% from 7.5 per 100,000 person years in 20092013 to 7.4 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.


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.

1. Annual averages based upon several years 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

## Further Information

Further data is available from the NI Cancer Registry web site: www.qub.ac.uk/nicr Phone: +44 (0)28 90976028 e-mail: nicr@qub.ac.uk

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[^0]:    1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.
    2. Five-year survival for 2012-2016 are estimates as not all patients have five years worth of follow up.

    ASNS: Age-standardised net survival

[^1]:    ASNS: Age-standardised net survival

[^2]:    1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.
     not available for all patients.
    ASNS: Age-standardised net survival
