

**15 March 2022**

## **LUNG CANCER INCIDENCE AND SURVIVAL STATISTICS FOR NORTHERN IRELAND: 1993-2020**

Official Statistics on lung cancers diagnosed in Northern Ireland during 1993-2020 were published on 15th March 2022 at 9:30am. This release provides details of the number of lung cancer cases diagnosed each year along with incidence rates over time and data for a range of geographic areas. Survival trends and prevalence (the number of people alive) is also provided.

Key facts and figures are presented below.

### **Number of cancer cases diagnosed: 2016-2020**

- There were 1,355 (697 male, 657 female) cases of lung cancer diagnosed each year during 2016-2020.
- Lung cancer risk was strongly related to age with 42% of cases occurring among people aged 75 years and over.
- The odds of developing lung cancer by the age of 75 during 2016-2020 was 1 in 24. By the age of 85 it was 1 in 13.
- Lung cancer incidence rates were 69% higher in the most deprived areas compared to the Northern Ireland average and were 34% lower than average in the least deprived areas.
- During 2016-2020 the proportion of lung cancer patients diagnosed with late stage disease (stage IV) was 44%, while 26% of lung cancer patients had an emergency inpatient admission to hospital recorded up to 30 days prior to their cancer diagnosis.

### **Trends in cancer cases diagnosed: 1993-2020**

- Over the last five years the average number of lung cancer cases per year increased among men by 4% from 673 cases in 2011-2015 to 697 cases in 2016-2020. Among women the number of cases per year increased by 20% from an annual average of 549 cases in 2011-2015 to 657 cases in 2016-2020.

- After removing the effect of changes in the age and size of the population over time, lung cancer incidence rates among males decreased by 8% between 2011-2015 and 2016-2020. In contrast, lung cancer incidence rates in females increased by 10% between 2011-2015 and 2016-2020.

### **Cancer survival: 2011-2015**

- Among lung cancer patients diagnosed during 2011-2015, one-year net survival after diagnosis was 36%, while five-year net survival was 14%.
- Cancer survival improved significantly between 2006-2010 and 2011-2015 among women with five-year survival increasing from 11% to 17%.
- Lung cancer survival varied considerably depending upon age at diagnosis. For patients diagnosed in 2011-2015 five-year survival ranged from 25% for 15-54 year olds to 7% for 75+ year olds.
- Stage at diagnosis remains the biggest factor in lung cancer survival. Five-year survival for patients diagnosed in 2011-2015 was 1% for late stage lung cancer, compared to 50% for early stage.

### **Cancer prevalence: 2020**

- At the end of 2020 there were 2,627 people living in Northern Ireland who had been diagnosed with lung cancer since 1996 (i.e. over the last 25 years). Of these 47.0% were male, 40.4% were aged 75 and over and 27.1% had been diagnosed in the previous year.

## **IMPACT OF COVID-19 ON LUNG CANCER INCIDENCE AND SURVIVAL**

Due to the Covid-19 pandemic, which began in 2020, a further report has been compiled detailing how incidence and survival from lung cancer has changed between April-December 2018-2019 and 2020 thereby providing an overview of the impact of the pandemic on lung cancer patients and cancer services in general.

Key facts and figures from this report are presented below.

Comparing the April-December 2020 period when Covid-19 was present to the equivalent April-December period in 2018-2019:

- The number of cases of lung cancer decreased by 7% from 1,029 per year in 2018-2019 to 952 in 2020.
- The decrease was greater among females (12% decrease from 503 to 441 cases per year) than males (3% decrease from 527 to 511 per year).
- Among people aged 65 to 74 the number of cases of lung cancer decreased by 14% from 366 per year in 2018-2019 to 313 in 2020. Between the same two time periods the number of cases among people aged 75 and over decreased by 3% from 432 per year to 418.
- Among residents of the most deprived areas the number of cases of lung cancer decreased by 6% from 282 per year in 2018-2019 to 266 in 2020. Between the same two time periods the number of cases among residents of the least deprived areas decreased by 22% from 162 per year to 127.
- The number of lung cancer cases diagnosed pathologically decreased by 16% from 697 per year in 2018-2019 to 585 in 2020, while the number of cases diagnosed clinically increased by 9% from 328 per year to 358. This represents a significant decrease in the proportion of cases diagnosed pathologically: from 68% in 2018-2019 to 61% in 2020.
- The number of lung cancer cases diagnosed at Stage I decreased by 18% from 196 per year in 2018-2019 to 160 in 2020. Between the same two time periods the number of cases diagnosed at Stage IV increased by 4% from 439 per year to 456. This represents a significant increase in the proportion of cases diagnosed with stage IV disease: from 43% in 2018-2019 to 48% in 2020.

- The number of cases of lung cancer where the patient had an emergency admission recorded as the most recent hospital admission type up to 30 days prior to diagnosis increased by 3% from 275 per year in 2018-2019 to 283 in 2020.
- The proportion of lung cancer patients receiving treatment within six months of diagnosis decreased from 54% among those diagnosed in April-December 2018-2019 to 46% among those diagnosed in April-December 2020. Specifically:
  - The proportion receiving surgery decreased from 12% in 2018-2019 to 8% in 2020.
  - The proportion receiving chemotherapy did not change between 2018-2019 and 2020, with 23% of patients receiving this treatment type.
  - The proportion receiving radiotherapy decreased from 34% in 2018-2019 to 27% in 2020.
- Observed survival (which considers death from any cause) among lung cancer patients one month after diagnosis decreased from 87% among those diagnosed in April-December of 2018-2019 to 83% among those diagnosed in April-December of 2020, while three-month survival decreased from 70% to 63%.
- Net survival (which only considers deaths related to cancer) among lung cancer patients one month after diagnosis decreased from 88% among those diagnosed in April-December of 2018-2019 to 84% among those diagnosed in April-December of 2020, while three-month net survival decreased from 72% to 65%.
- During 2020 there were a total of 45 deaths from Covid-19 among lung cancer patients diagnosed at any point since 1993. Among the patients who died of Covid-19, 22 were diagnosed with lung cancer in 2020, while 12 were diagnosed in 2019.
- Excluding the first quarter of each year the number of deaths from lung cancer increased by 0.9% from 778 per year in 2018-2019 to 785 in 2020.

## **NOTES TO EDITORS:**

1. All the statistics in this release are available at <http://www.qub.ac.uk/research-centres/nicr/CancerInformation/official-statistics/>
2. Legislation designating the Northern Ireland Cancer Registry (NICR) as an official producer of statistics came into place on 1<sup>st</sup> April 2012. Today's release of data adheres to the code of practice referenced in this legislation.
3. About the data:
  - a. New cases of cancer are registered from pathology reports, hospital administration records, and death certificates. GP or hospital charts may also be accessed if the above sources do not yield a reliable registration.
  - b. Registrations are validated and quality-checked according to internationally recognised standards.
  - c. Released statistics are not patient identifiable.
4. Incidence refers to the number of new cases of cancer diagnosed in a particular period of time and population. Prevalence is the number of people diagnosed with cancer in the past twenty-five years who were still alive at the end of 2020.
5. Incidence rates are defined as the number of cases divided by the population that the cases came from. It is usually expressed as cases per 100,000 people. Age-standardised rates, using the 2013 European Standard Population, are used to detect trends over time, or differences between regions, that are not related to differences in the size or age of the population.
6. Five-year survival refers to the proportion of people diagnosed with a cancer who are still alive five years later. Age-standardised net survival used here is a survival statistic that has been adjusted for background mortality and age profile between periods. Net survival is the theoretical survival of patients if they could die only from the cancer in question.
7. The data in this release was produced by:  
Northern Ireland Cancer Registry  
Mulhouse Building, Grosvenor Road, Belfast BT12 6DP  
Tel: 028 9097 6028  
Email: [nicr@qub.ac.uk](mailto:nicr@qub.ac.uk)  
Web site: <https://www.qub.ac.uk/research-centres/nicr/>

Media inquiries to Queen's University communications office.

Tel: +44 (0) 28 9097 3259

Email: [comms.officer@qub.ac.uk](mailto:comms.officer@qub.ac.uk)