

**2 April 2020**

## **CANCER INCIDENCE AND SURVIVAL STATISTICS FOR NORTHERN IRELAND 1993-2018**

Official Statistics on cancers diagnosed in Northern Ireland during 1993-2018 were published today. This release provides details of the number of cancer cases diagnosed each year, along with incidence rates from 1993 to 2018 for all cancers combined and a wide range of cancer types. The number of cases and rates for a range of geographic areas is also available. Survival trends by cancer type and prevalence (the number of people alive) for these cancers is also provided.

Key facts and figures are presented below.

### **Number of cancer cases diagnosed**

- There were 9,629 (4,810 male, 4,819 female) patients diagnosed with cancer each year during 2014-2018.
- This excludes the frequently diagnosed but easily treated non-melanoma skin cancer (NMSC). There were on average 3,823 cases of NMSC diagnosed each year.
- The most common cancers diagnosed between 2014 and 2018 were:
  - Prostate cancer (1,187 cases per year, 25% of all male cancers ex NMSC), lung cancer (687 cases per year, 14%) and bowel cancer (648 cases per year, 13%) among men;
  - Breast cancer (1,443 cases per year, 30% of all female cancers ex NMSC), lung cancer (626 cases per year, 13%) and bowel cancer (530 cases per year, 11%) among women.
- Cancer risk was strongly related to age with 63% of cases occurring among people aged 65 years and over. Incidence rates were greatest for those aged 85-89 years.
- Despite this, younger people can still get cancer. On average 52 children (aged 0-14) were diagnosed with cancer each year, while half of all testicular cancers were diagnosed among men aged under 35 and half of all cervical cancers were among women aged under 43.
- The odds of developing cancer by the age of 75 during 2014-2018 was 1 in 3.5 for men and 1 in 3.7 for women. By the age of 85 it was 1 in 2.1 for men and 1 in 2.5 for women.

## **Trends in cancer cases diagnosed**

- Over the last ten years the number of cancer cases (ex. NMSC) has increased by 18% from 8,356 cases in 2009 to 9,897 cases in 2018. These increases are largely due to our ageing population.
- The magnitude of the increase was slightly greater for women than men. Specifically there was a:
  - 17% increase for men, from 4,223 cases in 2009 to 4,934 cases in 2018;
  - 20% increase for women, from 4,133 cases in 2009 to 4,963 cases in 2018.
- After removing the effect of changes in the age and size of the population over time:
  - Cancer incidence rates in males decreased by 3% between 2009-2013 and 2014-2018.
  - In contrast, cancer incidence rates in females increased by 4% between 2009-2013 and 2014-2018.
- Cancer types with increases greater than 20% in the average number of cases per year between 2009-2013 and 2014-2018 were:
  - For men: kidney cancer (36% increase), myeloma (35% increase), melanoma (30% increase), pancreatic cancer (30% increase), oesophageal cancer (23% increase) and liver cancer (23% increase);
  - For women: liver cancer (50% increase), myeloma (32% increase) and lung cancer (28% increase).
- Decreases in the number of cases were observed between 2009-2013 and 2014-2018 for female stomach cancer (2% decrease), male bowel cancer (4% decrease), male stomach cancer (10% decrease), and cervical cancer (21% decrease).
- Changes in the number of cases diagnosed over time are driven by changes in the population size, particularly the number of elderly people. Removing these factors for the four most common cancers, between 2009-2013 and 2014-2018:
  - Rates of female breast cancer increased by 5%;
  - Rates of bowel cancer decreased by 14% for men and by 7% for women;
  - Rates of lung cancer decreased by 6% for men and increased by 18% for women;
  - Rates of prostate cancer decreased by 2%.

## **Geographic patterns in cancer cases diagnosed**

- Incidence rates (age-standardised) of cancer in 2014-2018 were 7% higher among people living within the Belfast Health and Social Care Trust area compared to the

Northern Ireland average. Incidence rates were lower than average among people living in the South-Eastern Trust area.

- Cancer incidence rates were 15% higher in the most deprived areas compared to the Northern Ireland average and 6% lower than average in the least deprived areas.
- The relationship with deprivation varies by cancer type with incidence of lung cancer, bowel cancer (males only), head & neck cancer, oesophageal cancer, stomach cancer (male only), kidney cancer (female only) and cervical cancer higher than average in the most deprived areas. Incidence of melanoma, prostate cancer and brain cancer (male only) were higher than average in the least deprived areas.

### **Cancer survival**

- Among patients diagnosed with cancer during 2009-2013, one-year net survival after diagnosis was 72%, while five-year net survival was 57%. However, one in five (21%) of patients died within 6 months of diagnosis.
- Five-year net survival for patients diagnosed between 2009 and 2013 for the most common cancers was as follows:
  - Female breast = 83%;
  - Male bowel = 62%, Female bowel = 62%;
  - Prostate = 87%;
  - Male lung = 11%, Female lung = 13%.
- Five-year net survival was highest for testicular cancer (96%) and melanoma (94%), but remained poor for liver cancer (13%) and pancreatic cancer (6%).
- Cancer survival improved significantly between 2004-2008 and 2009-2013, with one-year survival increasing for men from 68% to 71% and for women from 70% to 73%. Five-year survival increased among men from 51% to 54% and among women from 55% to 58%.
- For specific cancers, there were significant improvements in five-year survival between 2004-2008 and 2009-2013 for bowel cancer and female kidney cancer. No cancer type demonstrated significant reductions in cancer survival during his period.
- Over a longer period of time, there were significant improvements in five-year survival between 1994-1998 and 2009-2013 for bowel cancer, lung cancer, female breast cancer, prostate cancer, kidney cancer, male oesophageal cancer, uterine cancer, male myeloma, leukaemia, and lymphoma.

- Cancer survival varies considerably depending upon age at diagnosis. For the four most common cancer types five-year survival between younger and older age groups diagnosed in 2009-2013 was as follows:
  - Breast cancer: 86% for 15-44 year olds, compared to 71% for 75+ year olds;
  - Bowel cancer: 71% for 15-44 year olds, compared to 51% for 75+ year olds;
  - Lung cancer: 34% for 15-44 year olds, compared to 6% for 75+ year olds;
  - Prostate cancer: 93% for 15-54 year olds, compared to 57% for 85+ year olds.
- However, stage at diagnosis remains the biggest factor in cancer survival. The contrast in five-year survival between early and late stage disease for patients diagnosed in 2009-2013 was as follows:
  - 18% for late stage breast cancer, compared to 99% for early stage;
  - 8% for late stage bowel cancer, compared to 98% for early stage;
  - 1% for late stage lung cancer, compared to 46% for early stage;
  - 39% for late stage prostate cancer, compared to 99.7% for early stage.

### **Cancer prevalence**

- At the end of 2018 there were 65,722 people living in Northern Ireland who had been diagnosed with cancer since 1994 (i.e. over the last 25 years). Of these, 44% were male, 48% were aged 70 and over and 12% had been diagnosed in the previous year.
- The most prevalent types of cancer were prostate cancer, with 10,938 men living with the disease, and breast cancer, with 16,462 women living with the disease.

## **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 is 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 2018.
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:  
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