Cervical insitu tumours

1993-2021

(ICD10 codes: D06)

Northern Ireland Cancer Registry, 2024

An official statistics publication

ABOUT THIS REPORT

Contents

This report includes information on incidence of cervical insitu tumours as recorded by the Northern Ireland Cancer Registry (NICR). Incidence data is available annually from 1993 to 2021, 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 and prevalence 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.

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 2024. Cervical insitu tumours: 1993-2021. 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

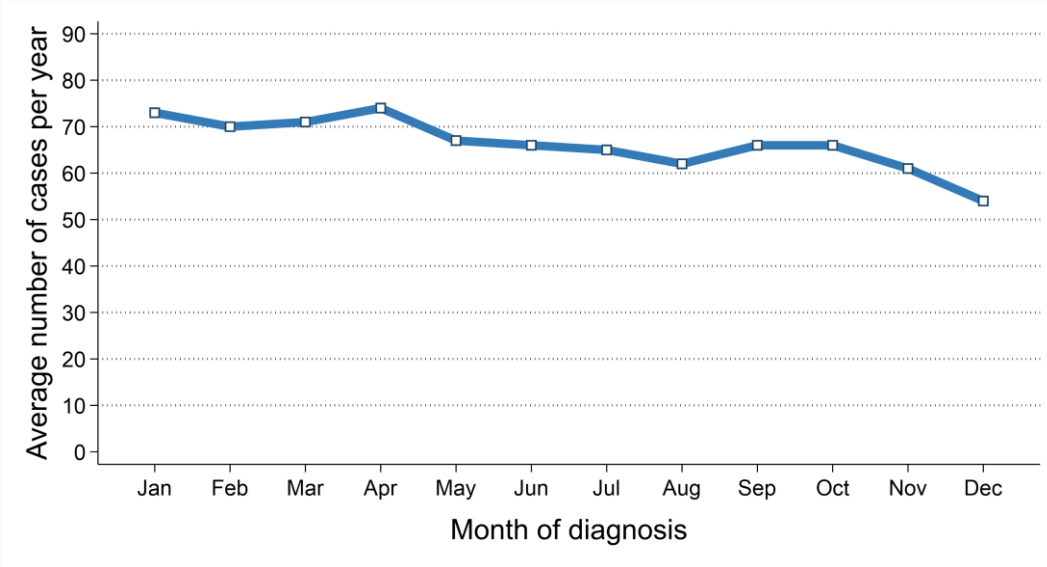
The Northern Ireland Cancer Registry (NICR) uses data provided by patients and collected by the health service as part of their care and support.

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

INCIDENCE

- There were 3,975 cases of cervical insitu tumours diagnosed during 2017-2021 in Northern Ireland. On average this was 795 cases per year.
- The most common diagnosis month during 2017-2021 was April with 74 cases per year.

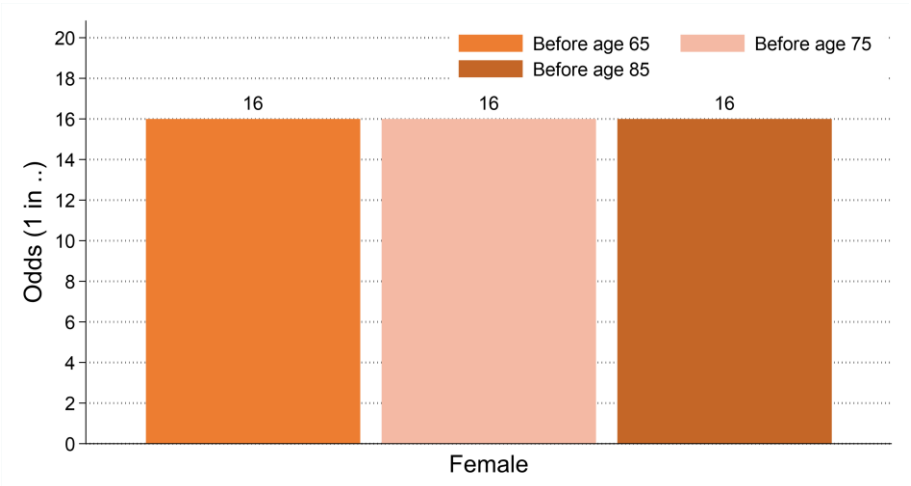
Figure 1: Average number of cases of cervical insitu tumours per year in 2017-2021 by month of diagnosis



Month of diagnosis	Average number of cases per year
	Females
January	73
February	70
March	71
April	74
May	67
June	66
July	65
August	62
September	66
October	66
November	61
December	54

- The cervical insitu tumour incidence rate was 82.9 cases per 100,000 females.
- The odds of developing a cervical insitu tumour before age 85 was 1 in 16.

Figure 2: Odds of developing a cervical insitu tumour in 2017-2021



INCIDENCE BY AGE

- The median age of females diagnosed with a cervical insitu tumour during 2017-2021 was 32 years.
- The risk of being diagnosed with a cervical insitu tumour varied by age, with 3.8% of women diagnosed with a cervical insitu tumour aged 55 and over at diagnosis.
- In contrast, 61.2% of women diagnosed with a cervical insitu tumour were aged 0 to 34 at diagnosis.

Figure 3: Average number of cases of cervical insitu tumours diagnosed per year in 2017-2021 by age at diagnosis

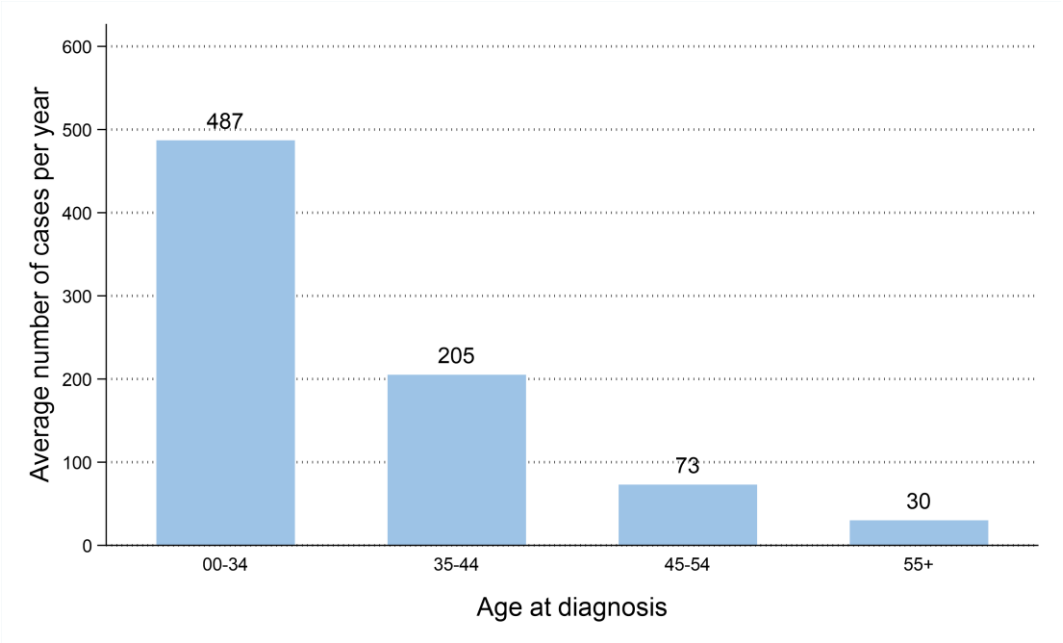
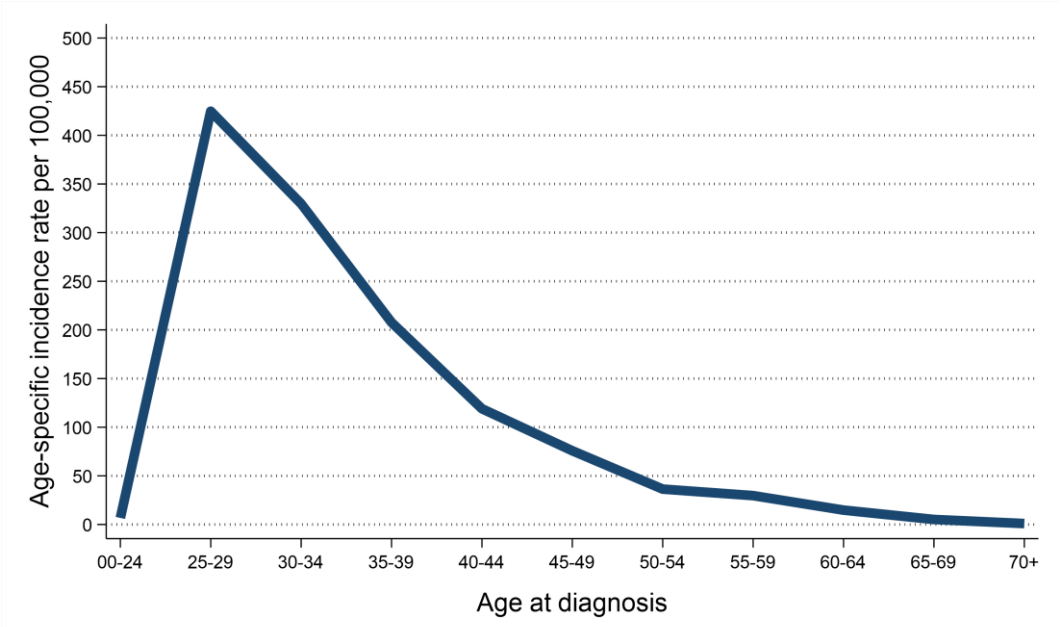


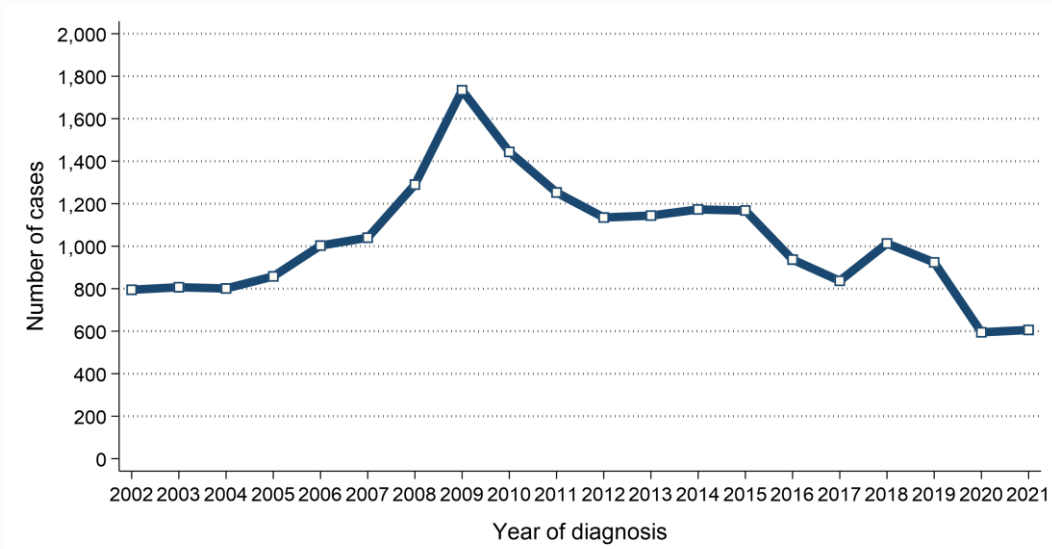
Figure 4: Age-specific incidence rates of cervical insitu tumours in 2017-2021



INCIDENCE TRENDS

- The number of cases of cervical insitu tumours among females decreased between 2012-2016 and 2017-2021 by 28.5% from 5,557 cases (1,111 cases per year) to 3,975 cases (795 cases per year).

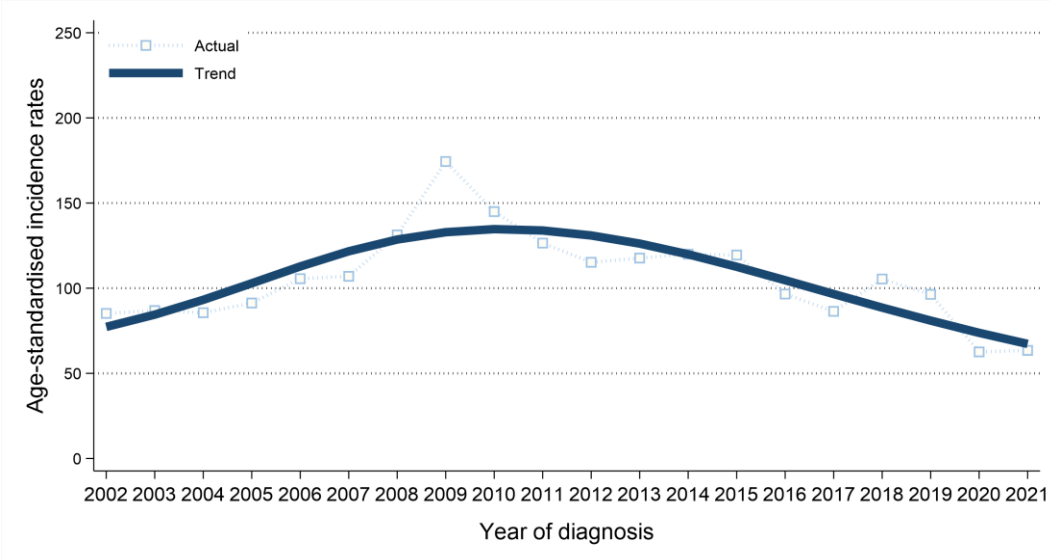
Figure 5: Trends in number of cases of cervical insitu tumours diagnosed from 2002 to 2021



Year of diagnosis	Number of cases Females
2012	1,135
2013	1,144
2014	1,173
2015	1,168
2016	937
2017	837
2018	1,013
2019	924
2020	595
2021	606

- Female age-standardised cervical insitu tumour incidence rates decreased between 2012-2016 and 2017-2021 by 27.1% from 113.9 to 83.0 cases per 100,000 females. This change was statistically significant.

Figure 6: Trends in incidence rates of cervical insitu tumours from 2002 to 2021



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

- The number of cases of cervical insitu tumours diagnosed during 2017-2021 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 were 36.3% higher than the NI average.
  - in the least socio-economically deprived areas were 20.9% lower than the NI average.

Table 1: Number of cases of cervical insitu tumours diagnosed in 2017-2021 by deprivation quintile

Deprivation quintile	Female	
	Total cases in period	Average cases per year
Northern Ireland	**3,975**	**795**
	.	.
Most deprived	1,109	222
Quintile 2	857	171
Quintile 3	775	155
Quintile 4	663	133
Least deprived	568	114
Unknown	3	1

Figure 7: Standardised incidence ratio comparing deprivation quintile to Northern Ireland for cervical insitu tumours diagnosed in 2017-2021

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.

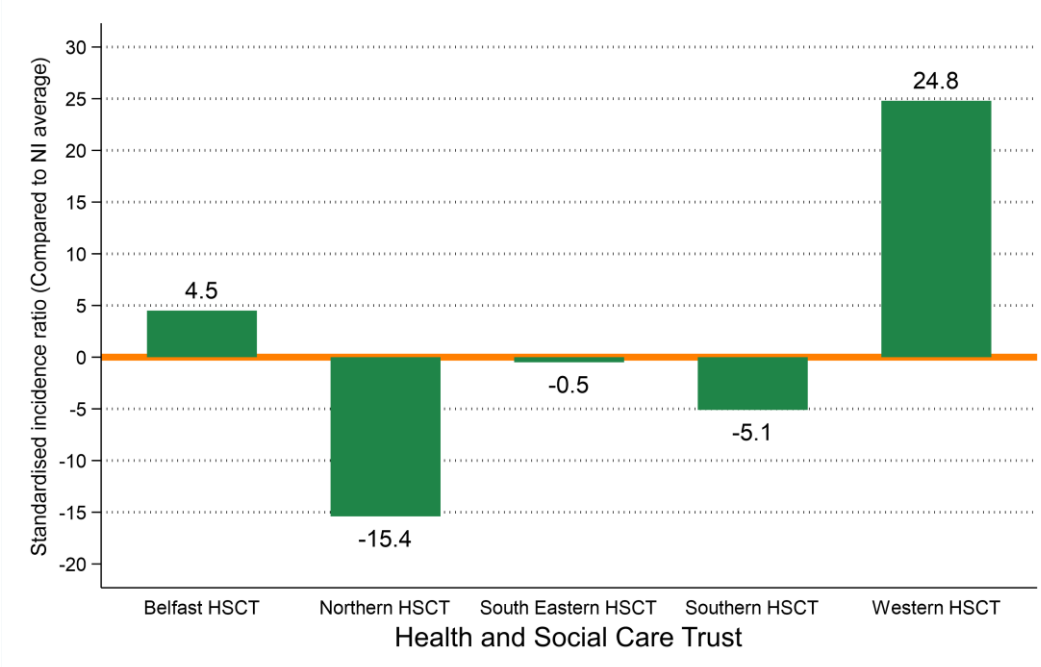
INCIDENCE BY HEALTH AND SOCIAL CARE TRUST

- The number of cases of cervical insitu tumours diagnosed during 2017-2021 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 were 15.4% lower than 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 were 24.8% higher than the NI average.

Table 2: Number of cases of cervical insitu tumours diagnosed in 2017-2021 by Health and Social Care Trust

Health and Social Care Trust	Female	
	Total cases in period	Average cases per year
Northern Ireland	**3,975**	**795**
	.	.
Belfast HSCT	869	174
Northern HSCT	820	164
South Eastern HSCT	730	146
Southern HSCT	778	156
Western HSCT	775	155
Unknown	3	1

Figure 8: Standardised incidence ratio comparing Health and Social Care Trust to Northern Ireland for cervical insitu tumours diagnosed in 2017-2021



PREVALENCE

- At the end of 2021, there were 22,059 females living with a cervical insitu tumour who had been diagnosed with the disease during 1997-2021.
- Of these 2.7% had been diagnosed in the previous year (one-year prevalence) and 41.5% in the previous 10 years (ten-year prevalence).
- 12.2% of cervical insitu tumour survivors were aged 55 and over at the end of 2021.

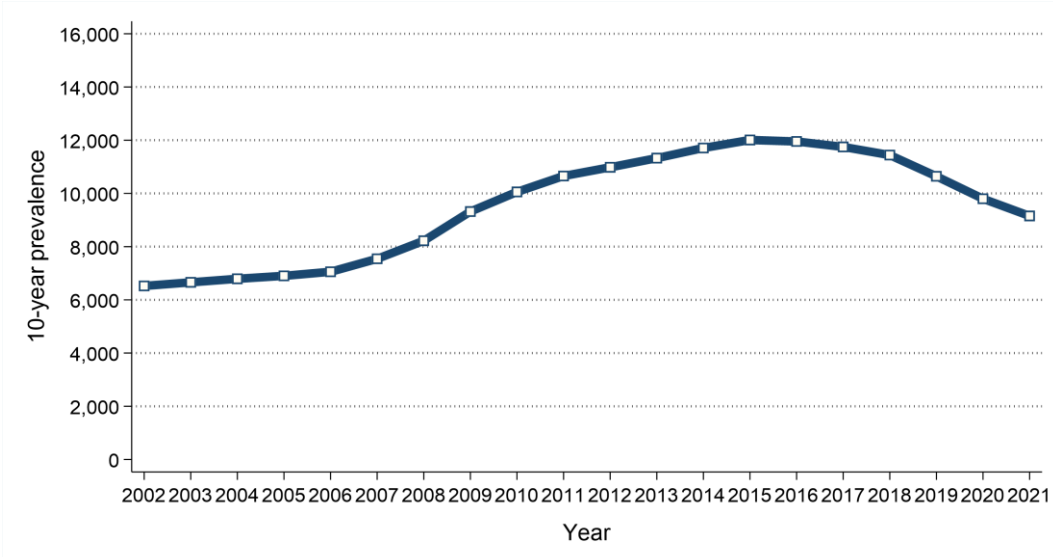
Table 3: 25-year prevalence of cervical insitu tumours by age at end of 2021

Age at end of 2021	25-year prevalence	Time since diagnosis			
		0 to 1 year	1 to 5 years	5 to 10 years	10 to 25 years
All ages	22,059	591	3,224	5,339	12,905
0 to 54	19,377	563	3,053	5,027	10,734
55 and over	2,682	28	171	312	2,171

PREVALENCE TRENDS

- 10-year prevalence of cervical insitu tumours among females decreased between 2016 and 2021 by 23.4% from 11,953 survivors to 9,154 survivors.

Figure 9: Trends in 10-year prevalence of cervical insitu tumours in 2002-2021



Year	10-year prevalence Females
2012	10,982
2013	11,326
2014	11,707
2015	12,009
2016	11,953
2017	11,748
2018	11,441
2019	10,643
2020	9,799
2021	9,154

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 Jan 2023 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. cervical insitu tumour 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 insitu tumour 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 2021 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.