Cervical insitu tumours

Patients diagnosed 1993-2019
(ICD10: D06)

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 972 female cervical insitu tumours diagnosed each year.

▪ The risk of being diagnosed with a cervical insitu tumour before the age of 75 was 1 in 13.3 for women. The risk did not increase between age 75 and age 85.

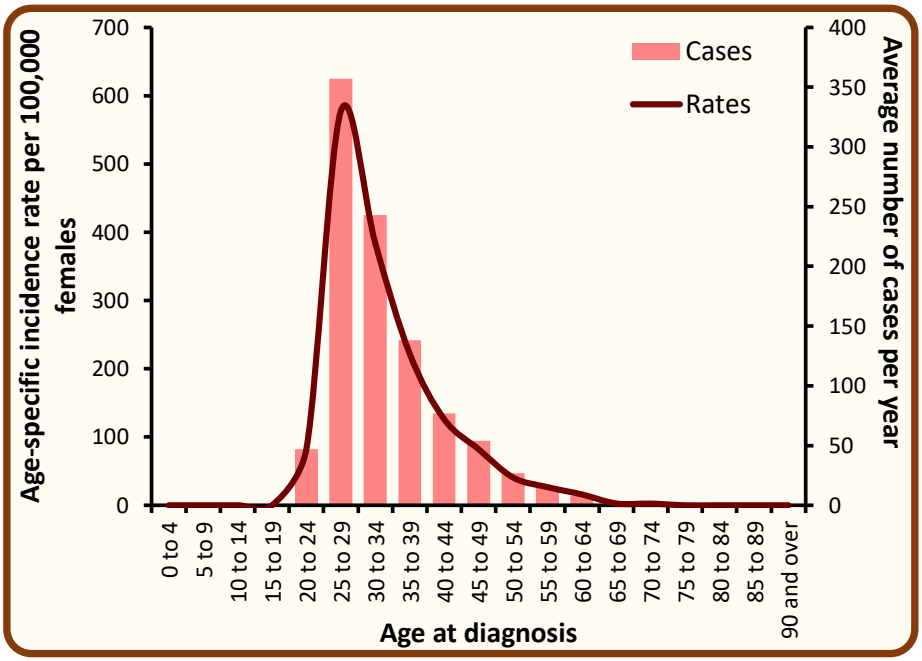
Incidence by age at diagnosis - *Cervical insitu tumours, Cases in 2015-2019*

During 2015-2019:

▪ The median age at diagnosis among women was 31.

▪ Cancer risk varied with age, with 2.7% of women aged 55 years or more at diagnosis, compared to 41.6% diagnosed among those aged under 30.

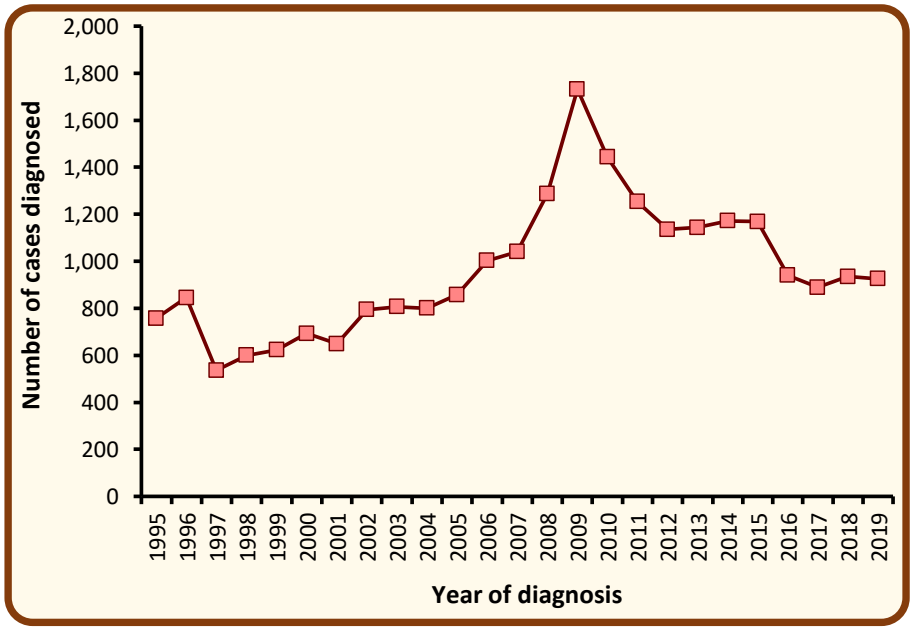
Age at diagnosis	Average cases per year
	Female
0 - 29	404
30 - 39	381
40 - 54	158
55 and over	26
All ages	972



Incidence by year of diagnosis - *Cervical insitu tumours, Cases in 1995-2019*

▪ The number of female cervical insitu tumours decreased by 20.9% from an annual average of 1,229 cases in 2010-2014 to 972 cases in 2015-2019.

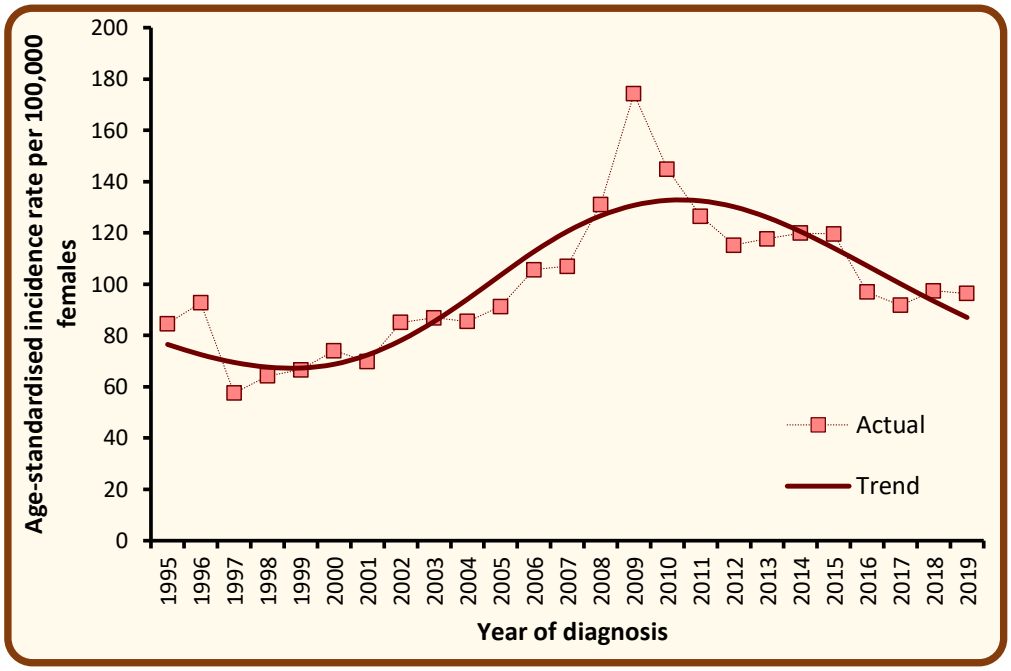
Year of diagnosis	Female cases
2010	1,443
2011	1,253
2012	1,135
2013	1,144
2014	1,172
2015	1,169
2016	940
2017	889
2018	935
2019	925



Note: 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.

Trends in age-standardised incidence rates - *Cervical insitu tumours, Cases in 1995-2019*

▪ Among females the age-standardised incidence rate of cervical insitu tumours decreased by 19.5% from 125.0 per 100,000 person years in 2010-2014 to 100.6 cases per 100,000 persons years in 2015-2019. This difference was 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 - *Cervical insitu tumours, 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 were 41.3% higher than the NI average.

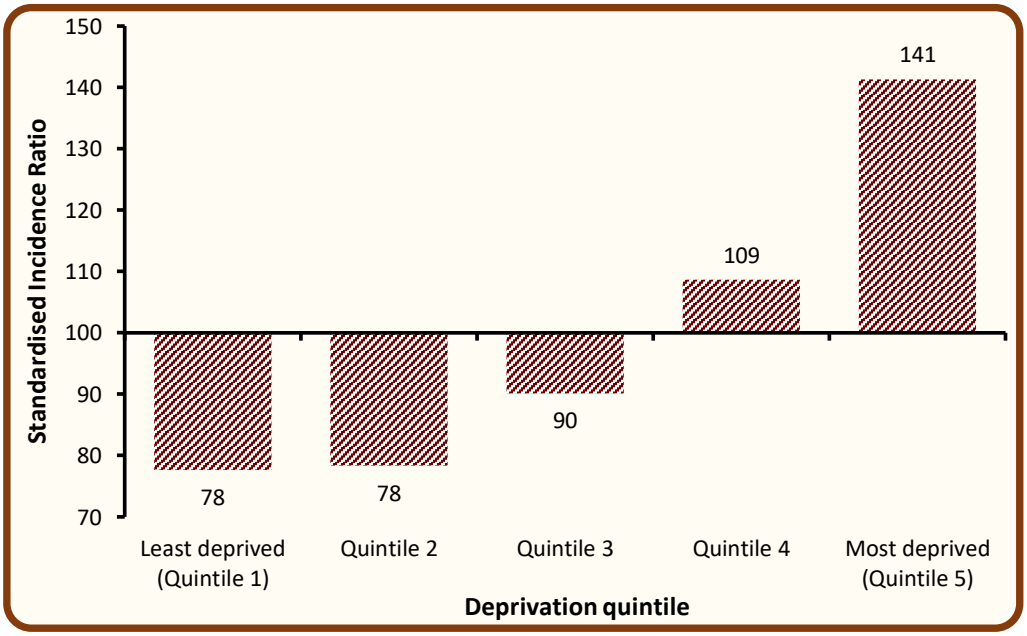
▪ in the least socio-economically deprived areas were 22.4% lower than the NI average.

Deprivation quintile	Average cases per year
	Female
Least deprived (Quintile 1)	134
Quintile 2	154
Quintile 3	181
Quintile 4	218
Most deprived (Quintile 5)	284
Northern Ireland	972

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.



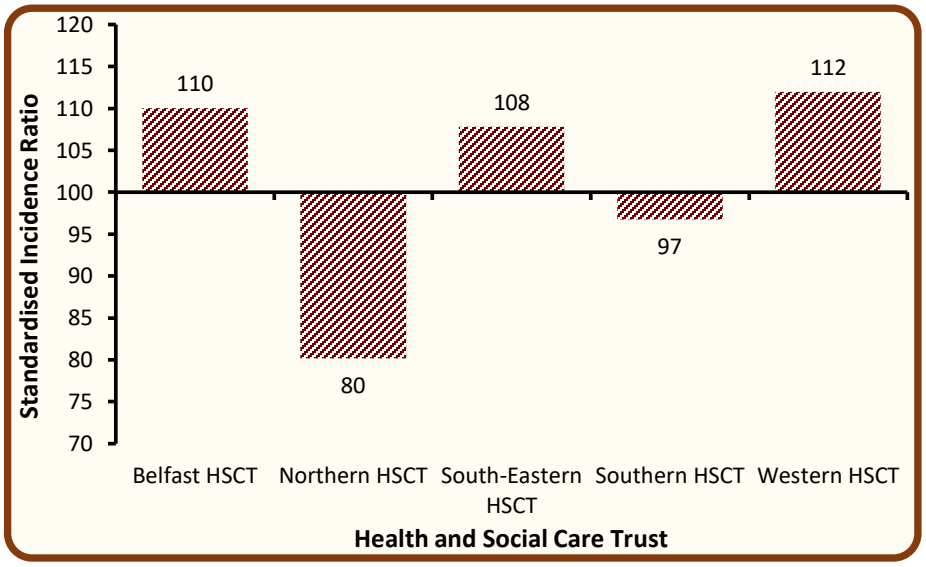
Incidence by Health and Social Care Trust (HSCT) - *Cervical insitu tumours, Cases in 2015-2019*

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 were significantly higher than the NI average.
- in Northern HSCT were significantly lower than the NI average.
- in South-Eastern HSCT were significantly higher than the NI average.
- in Southern HSCT did not vary significantly from the NI average.
- in Western HSCT were significantly higher than the NI average.

Health and Social Care Trust	Average cases per year
	Female
Belfast HSCT	226
Northern HSCT	190
South-Eastern HSCT	191
Southern HSCT	193
Western HSCT	171
Northern Ireland	972



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

Prevalence

- At the end of 2019, there were 22,630 women living with cervical insitu tumours who had been diagnosed in the previous 25 years.
- Of these, 55.9% were aged 40 and over, and 4.0% 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 0-39	Aged 40+	All ages
0-1 year	682	214	896
1-5 years	2,856	972	3,828
5-10 years	3,822	2,091	5,913
10-25 years	2,626	9,367	11,993
0-25 years	9,986	12,644	22,630

Trends in 10-year prevalence - *Cervical insitu tumours, Patients alive at end of each year from 2010-2019*

- Among women the number of survivors from cervical insitu tumours who had been diagnosed within the previous ten years decreased by 9.6% from 11,765 survivors in 2014 to 10,637 survivors in 2019.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Female	10,167	10,752	11,070	11,399	11,765	12,046	11,979	11,823	11,438	10,637

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. cervical insitu tumours 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 tumours 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.