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# Cervical insitu tumours

## 1993-2022

(ICD10 codes: D06)

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Northern Ireland Cancer Registry, 2025

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 2022, 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](http://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](http://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 2025. Cervical insitu tumours: 1993-2022. Available at:*  
[www.qub.ac.uk/research-centres/nicr](http://www.qub.ac.uk/research-centres/nicr)

### Further information

Further information is available at: [www.qub.ac.uk/research-centres/nicr](http://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.

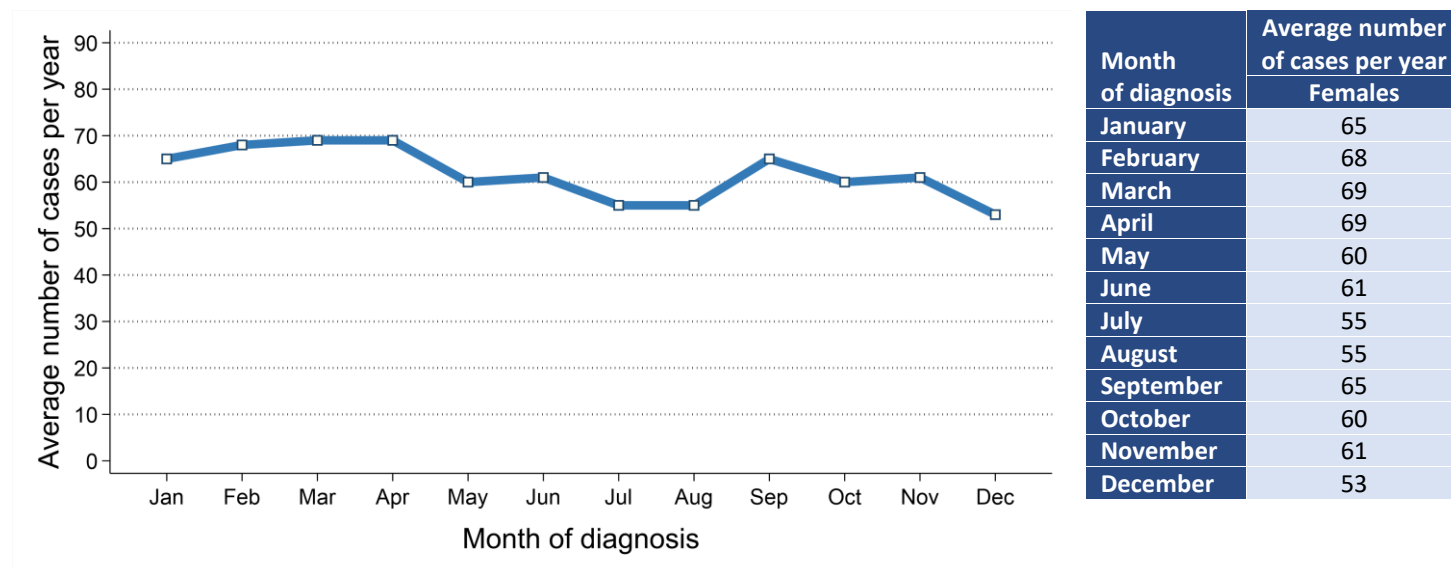
NICR is funded by the Public Health Agency and is based in Queen's University, Belfast.



## INCIDENCE

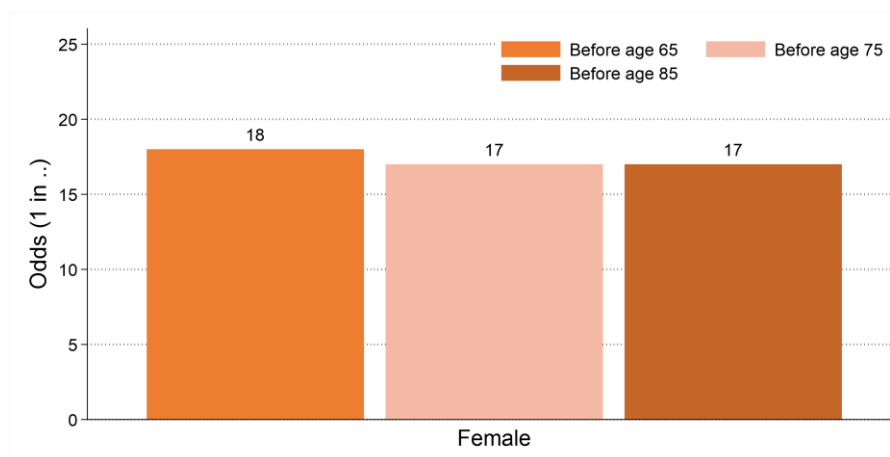
- There were 3,708 cases of cervical insitu tumours diagnosed during 2018-2022 in Northern Ireland. On average this was 742 cases per year.
- The most common diagnosis month during 2018-2022 was March and April with 69 cases per year.

*Figure 1: Average number of cases of cervical insitu tumours per year in 2018-2022 by month of diagnosis*



- The cervical insitu tumour incidence rate was 76.8 cases per 100,000 females.
- The odds of developing a cervical insitu tumour before age 85 was 1 in 17.

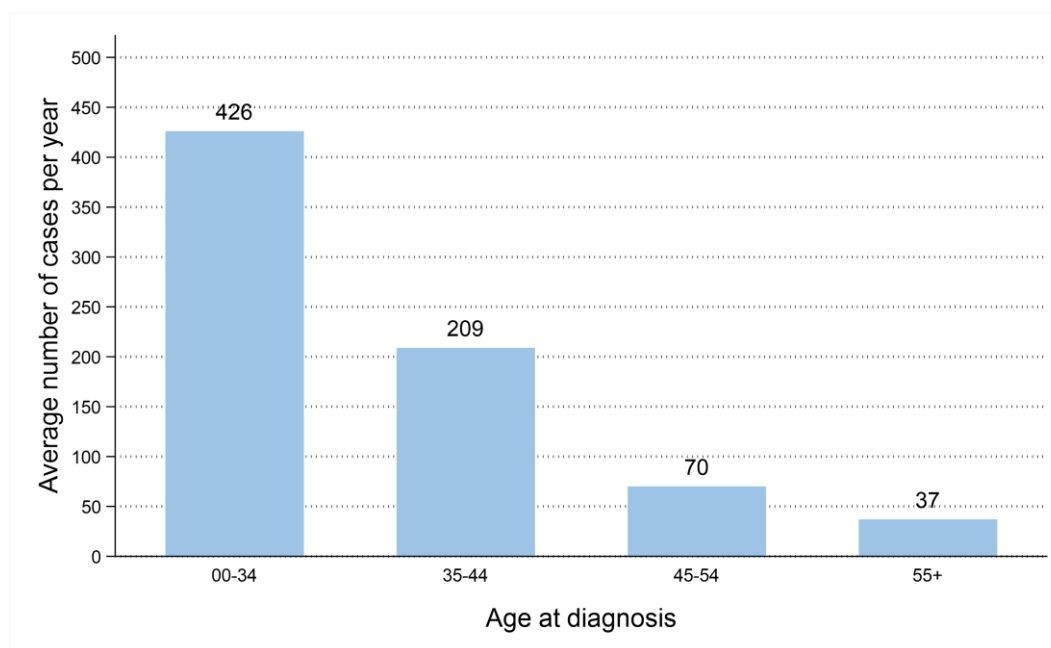
*Figure 2: Odds of developing a cervical insitu tumour in 2018-2022*



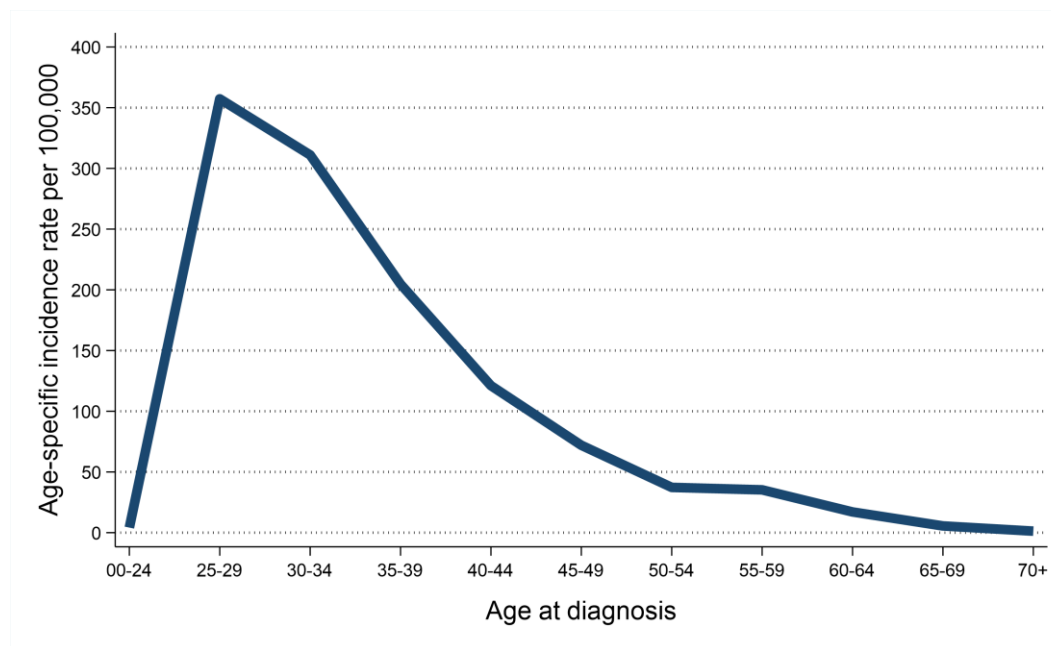
## INCIDENCE BY AGE

- The median age of females diagnosed with a cervical insitu tumour during 2018-2022 was 33 years.
- The risk of being diagnosed with a cervical insitu tumour varied by age, with 4.9% of women diagnosed with a cervical insitu tumour aged 55 and over at diagnosis.
- In contrast, 57.4% 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 2018-2022 by age at diagnosis*



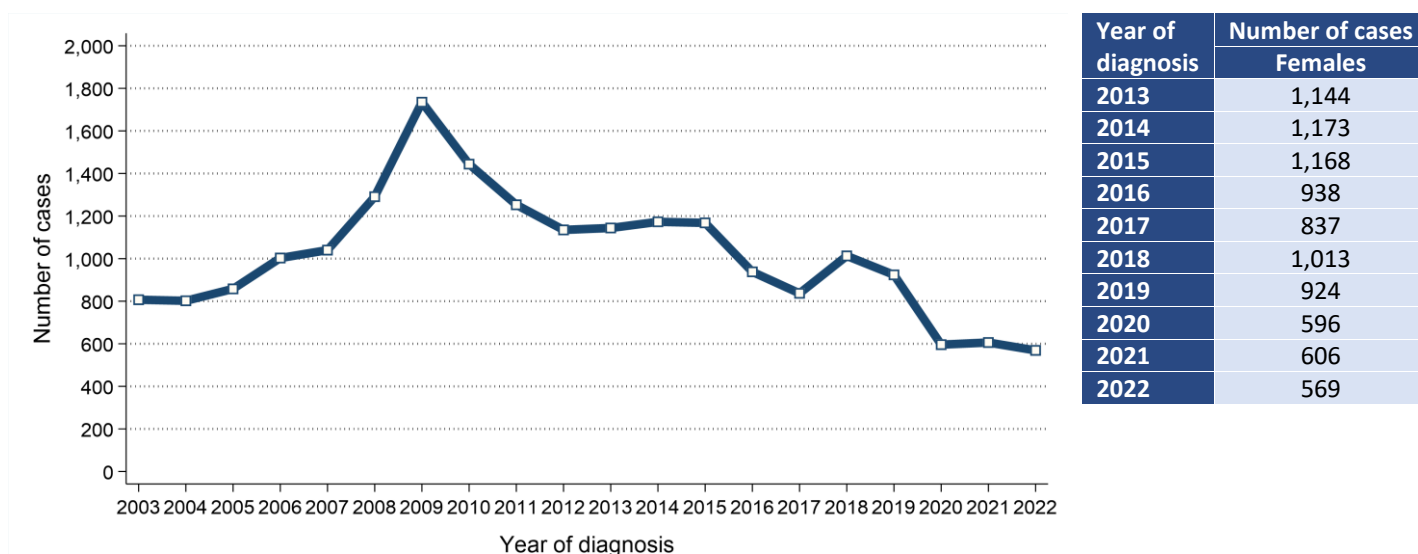
*Figure 4: Age-specific incidence rates of cervical insitu tumours in 2018-2022*



## INCIDENCE TRENDS

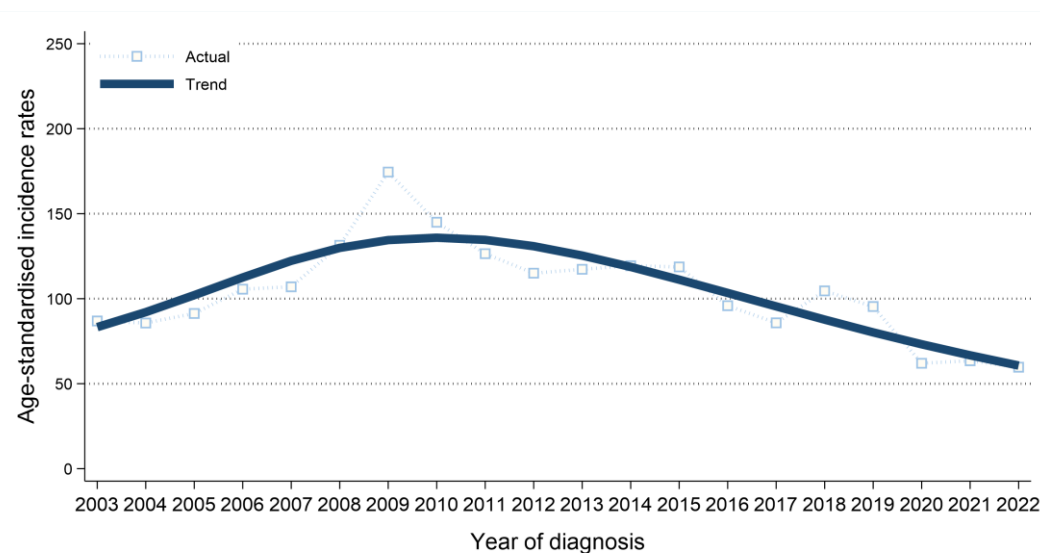
- The number of cases of cervical insitu tumours among females decreased between 2013-2017 and 2018-2022 by 29.5% from 5,260 cases (1,052 cases per year) to 3,708 cases (742 cases per year).

*Figure 5: Trends in number of cases of cervical insitu tumours diagnosed from 2003 to 2022*



- Female age-standardised cervical insitu tumour incidence rates decreased between 2013-2017 and 2018-2022 by 28.1% from 107.5 to 77.3 cases per 100,000 females. This change was statistically significant.

*Figure 6: Trends in incidence rates of cervical insitu tumours from 2003 to 2022*



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).

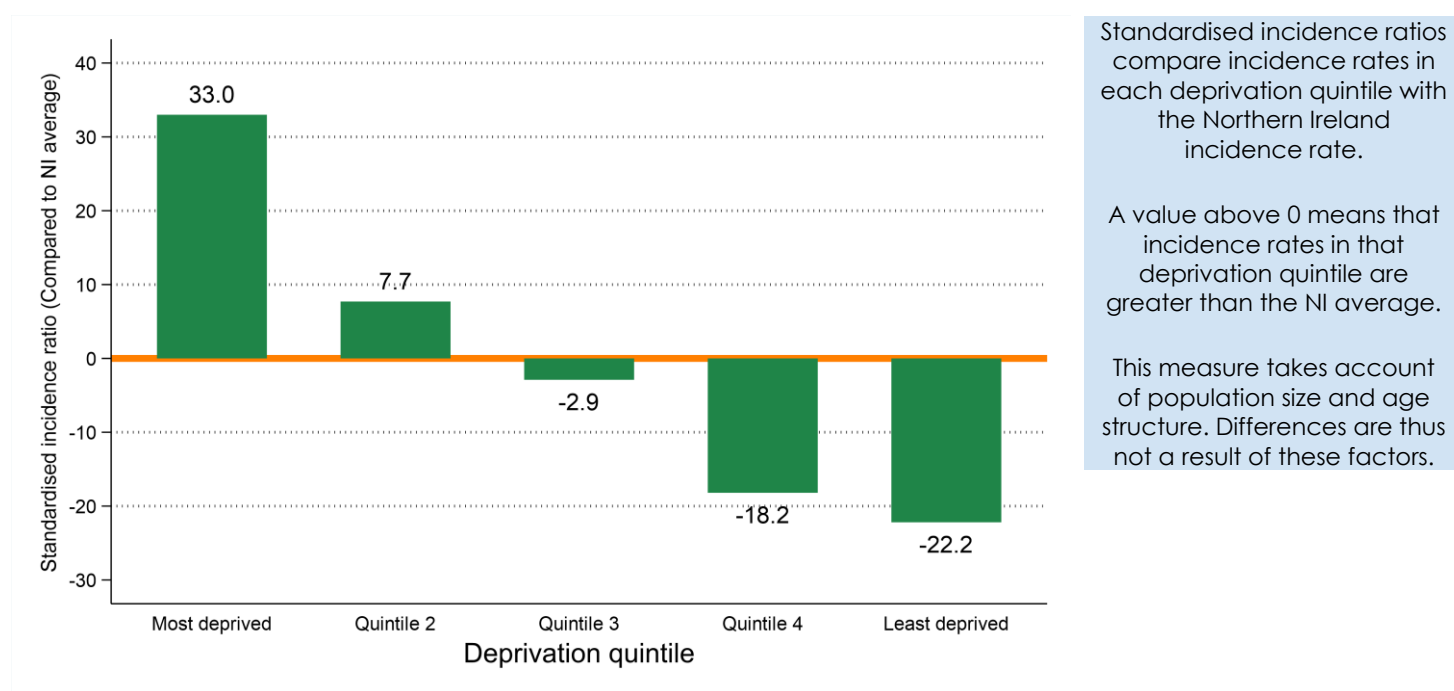
## INCIDENCE BY DEPRIVATION

- The number of cases of cervical insitu tumours diagnosed during 2018-2022 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 33.0% higher than the NI average.
  - in the least socio-economically deprived areas were 22.2% lower than the NI average.

*Table 1: Number of cases of cervical insitu tumours diagnosed in 2018-2022 by deprivation quintile*

Deprivation quintile	Female	
	Total cases in period	Average cases per year
Northern Ireland	3,708	742
Most deprived	1,008	202
Quintile 2	820	164
Quintile 3	740	148
Quintile 4	617	123
Least deprived	523	105
Unknown	0	0

*Figure 7: Standardised incidence ratio comparing deprivation quintile to Northern Ireland for cervical insitu tumours diagnosed in 2018-2022*



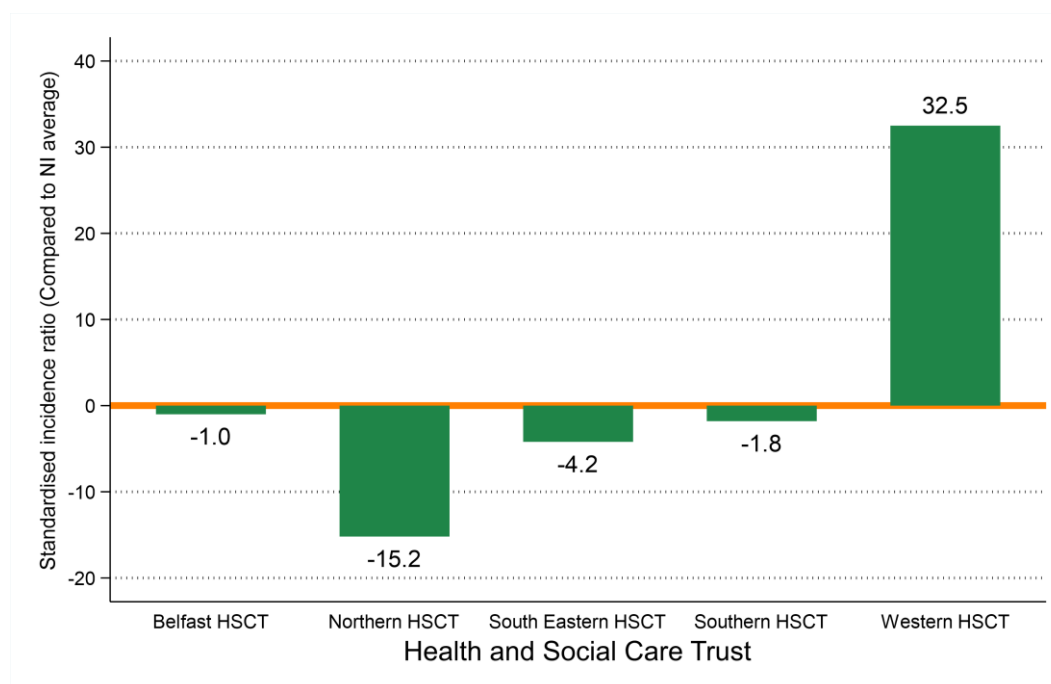
## INCIDENCE BY HEALTH AND SOCIAL CARE TRUST

- The number of cases of cervical insitu tumours diagnosed during 2018-2022 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 15.2% 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 32.5% higher than the NI average.

*Table 2: Number of cases of cervical insitu tumours diagnosed in 2018-2022 by Health and Social Care Trust*

Health and Social Care Trust	Female	
	Total cases in period	Average cases per year
Northern Ireland	3,708	742
Belfast HSCT	773	155
Northern HSCT	765	153
South Eastern HSCT	660	132
Southern HSCT	749	150
Western HSCT	761	152
Unknown	0	0

*Figure 8: Standardised incidence ratio comparing Health and Social Care Trust to Northern Ireland for cervical insitu tumours diagnosed in 2018-2022*



## PREVALENCE

- At the end of 2022, there were 22,070 females living with a cervical insitu tumour who had been diagnosed with the disease during 1998-2022.
- Of these 2.5% had been diagnosed in the previous year (one-year prevalence) and 39.1% in the previous 10 years (ten-year prevalence).
- 13.0% of cervical insitu tumour survivors were aged 55 and over at the end of 2022.

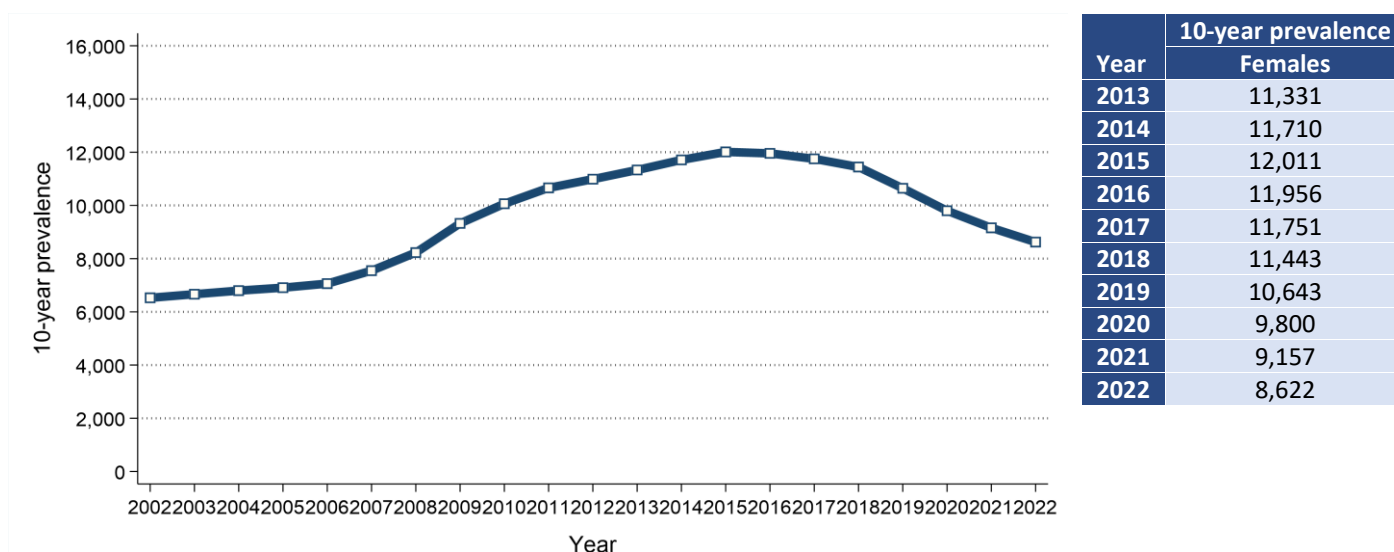
*Table 3: 25-year prevalence of cervical insitu tumours by age at end of 2022*

Age at end of 2022	25-year prevalence	Time since diagnosis			
		0 to 1 year	1 to 5 years	5 to 10 years	10 to 25 years
All ages	22,070	559	2,993	5,070	13,448
0 to 54	19,201	514	2,804	4,737	11,146
55 and over	2,869	45	189	333	2,302

## PREVALENCE TRENDS

- 10-year prevalence of cervical insitu tumours among females decreased between 2017 and 2022 by 26.6% from 11,751 survivors to 8,622 survivors.

*Figure 9: Trends in 10-year prevalence of cervical insitu tumours in 2002-2022*



## 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#/I>

**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](http://www.nisra.gov.uk)).

**Geographic areas:** Geographic areas are assigned based on a patient's postcode of usual residence at diagnosis using the Jul 2024 Central Postcode Directory (CPD) produced by the NI Statistics and Research Agency (available at [www.nisra.gov.uk](http://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](http://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 2022 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.