Non-melanoma skin cancer

(ICD10 codes: C44)



Northern Ireland Cancer Registry, 2025

An official statistics publication

ABOUT THIS REPORT

Contents

This report includes information on incidence of non-melanoma skin cancer 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.

<u>Methodology</u>

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.

Cancer mortality data

The NI Statistics and Research Agency (NISRA) is the official statistics provider of cancer mortality data in Northern Ireland. However, for completeness, data on cancer mortality is also provided in this report. While analysis is conducted by NICR staff, the original data is provided courtesy of the General Register Office (NI) via the Department of Health.

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. Non-melanoma skin cancer: 1993-2022. Available at: www.qub.ac.uk/research-centres/nicr

Further information

Further information is available at: www.qub.ac.uk/research-centres/nicr **Phone:** +44 (0)28 9097 6028 **e-mail:** nicr@qub.ac.uk

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.

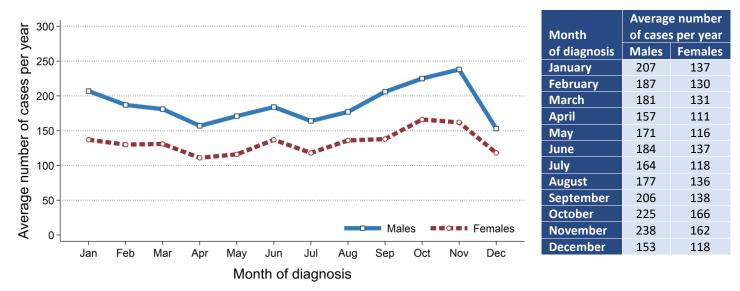




INCIDENCE

- There were 19,260 cases of non-melanoma skin cancer diagnosed during 2018-2022 in Northern Ireland. On average this was 3,852 cases per year.
- During this period 41.5% of non-melanoma skin cancer cases were among women (Male cases: 11,260, Female cases: 8,000). On average there were 2,252 male and 1,600 female cases of non-melanoma skin cancer per year.
- The most common diagnosis month during 2018-2022 was November among males with 238 cases per year and October among females with 166 cases per year.

Figure 1: Average number of cases of non-melanoma skin cancer per year in 2018-2022 by month of diagnosis



- The non-melanoma skin cancer incidence rates for each gender were 241.0 cases per 100,000 males and 165.7 cases per 100,000 females.

- The odds of developing non-melanoma skin cancer before age 85 was 1 in 4 for men and 1 in 7 for women.

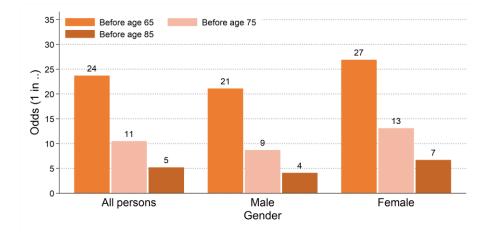


Figure 2: Odds of developing non-melanoma skin cancer in 2018-2022

INCIDENCE BY AGE

- The median age of patients diagnosed with non-melanoma skin cancer during 2018-2022 was 74 years (Males: 74, Females: 74).
- The risk of developing non-melanoma skin cancer varied by age, with 46.8% of men and 47.5% of women diagnosed with non-melanoma skin cancer aged 75 and over at diagnosis.
- In contrast, 12.3% of patients diagnosed with non-melanoma skin cancer were aged 0 to 54 at diagnosis.

Figure 3: Average number of cases of non-melanoma skin cancer diagnosed per year in 2018-2022 by age at diagnosis

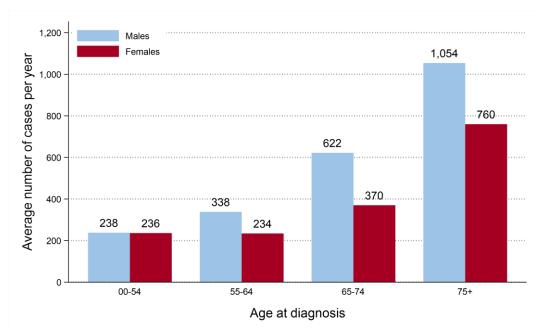
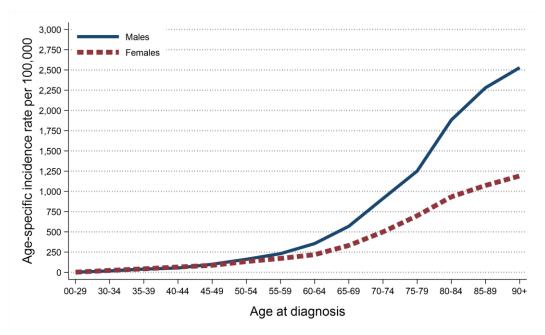


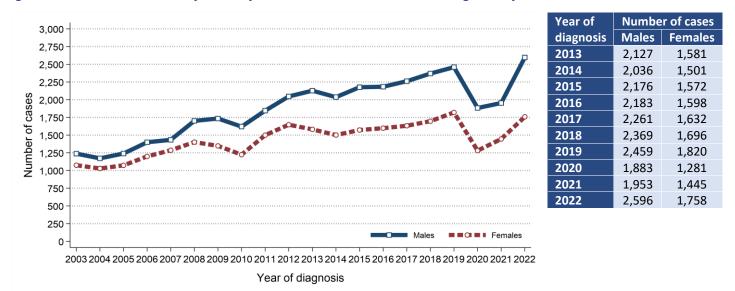
Figure 4: Age-specific incidence rates of non-melanoma skin cancer in 2018-2022



INCIDENCE TRENDS

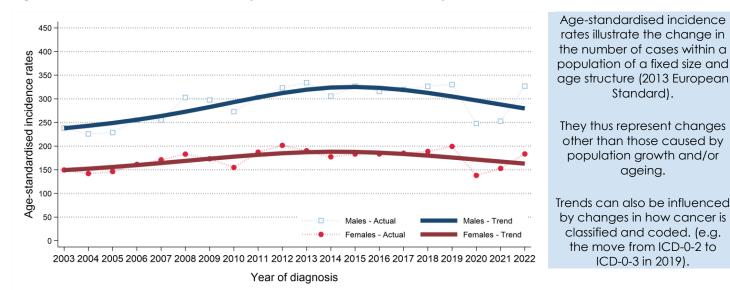
- The number of cases of non-melanoma skin cancer among males increased between 2013-2017 and 2018-2022 by 4.4% from 10,783 cases (2,157 cases per year) to 11,260 cases (2,252 cases per year).
- The number of cases of non-melanoma skin cancer among females increased between 2013-2017 and 2018-2022 by 1.5% from 7,884 cases (1,577 cases per year) to 8,000 cases (1,600 cases per year).

Figure 5: Trends in number of cases of non-melanoma skin cancer diagnosed from 2003 to 2022



- Male age-standardised non-melanoma skin cancer incidence rates decreased between 2013-2017 and 2018-2022 by 7.4% from 320.3 to 296.5 cases per 100,000 males. This change was statistically significant.
- Female age-standardised non-melanoma skin cancer incidence rates decreased between 2013-2017 and 2018-2022 by 6.3% from 183.9 to 172.3 cases per 100,000 females. This change was statistically significant.

Figure 6: Trends in incidence rates of non-melanoma skin cancer from 2003 to 2022



- Between 2013-2017 and 2018-2022 the number of cases of non-melanoma skin cancer among

- Persons aged 0 to 54 decreased by 3.9% among males and increased by 2.6% among females.
- Persons aged 55 to 64 increased by 4.6% among males and increased by 11.9% among females.
- Persons aged 65 to 74 decreased by 0.7% among males and decreased by 5.2% among females.
- Persons aged 75 and over increased by 9.9% among males and increased by 1.7% among females.

Table 1: Average number of cases per year of non-melanoma skin cancer by period of diagnosis in 2013-2022

Age at diagnosis	All persons		Male		Female	
	2013-2017	2018-2022	2013-2017	2018-2022	2013-2017	2018-2022
All ages	3,733	3,852	2,157	2,252	1,577	1,600
0 to 54	478	474	248	238	230	236
55 to 64	532	572	323	338	209	234
65 to 74	1,017	992	627	622	390	370
75 and over	1,707	1,814	959	1,054	748	760

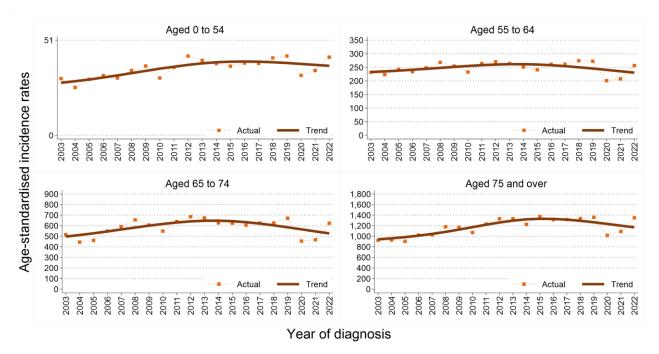
- Between 2013-2017 and 2018-2022 age-standardised incidence rates of non-melanoma skin cancer among

- Persons aged 0 to 54 did not change significantly among males or females.

- Persons aged 55 to 64 did not change significantly among males or females.

- Persons aged 65 to 74 decreased by 10.0% among males and decreased by 11.1% among females.
- Persons aged 75 and over decreased by 6.9% among males and decreased by 7.4% among females.

Figure 7: Trends in incidence rates of non-melanoma skin cancer from 2003 to 2022 by age group



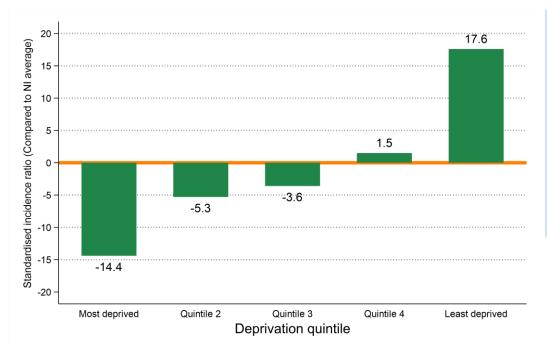
INCIDENCE BY DEPRIVATION

- The number of cases of non-melanoma skin cancer 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 14.4% lower than the NI average.
- in the least socio-economically deprived areas were 17.6% higher than the NI average.

Table 2: Number of cases of non-melanoma skin cancer diagnosed in 2018-2022 by deprivation quintile

	All persons		Male		Female	
Deprivation quintile	Total cases in period	Average cases per year	Total cases in period	Average cases per year	Total cases in period	Average cases per year
Northern Ireland	19,260	3,852	11,260	2,252	8,000	1,600
Most deprived	2,658	532	1,474	295	1,184	237
Quintile 2	3,638	728	2,171	434	1,467	293
Quintile 3	3,917	783	2,352	470	1,565	313
Quintile 4	4,160	832	2,419	484	1,741	348
Least deprived	4,883	977	2,842	568	2,041	408
Unknown	4	1	2	0	2	0

Figure 8: Standardised incidence ratio comparing deprivation quintile to Northern Ireland for nonmelanoma skin cancer diagnosed in 2018-2022



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.

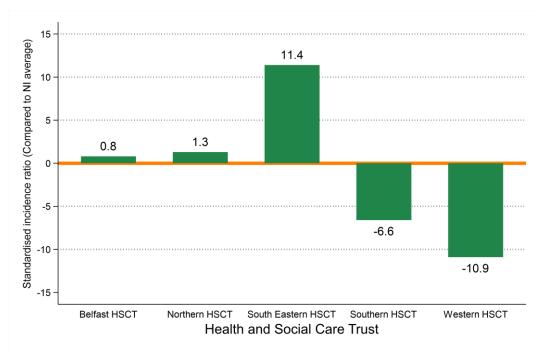
INCIDENCE BY HEALTH AND SOCIAL CARE TRUST

- The number of cases of non-melanoma skin cancer 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 did not vary significantly from the NI average.
- in South Eastern HSCT were 11.4% higher than the NI average.
- in Southern HSCT were 6.6% lower than the NI average.
- in Western HSCT were 10.9% lower than the NI average.

Table 3: Number of cases of non-melanoma skin cancer diagnosed in 2018-2022 by Health and Social Care Trust

	All persons		Male		Female	
Health and Social Care Trust	Total cases in period	Average cases per year	Total cases in period	Average cases per year	Total cases in period	Average cases per year
Northern Ireland	19,260	3,852	11,260	2,252	8,000	1,600
Belfast HSCT	3,491	698	1,965	393	1,526	305
Northern HSCT	5,194	1,039	3,006	601	2,188	438
South Eastern HSCT	4,550	910	2,656	531	1,894	379
Southern HSCT	3,374	675	2,025	405	1,349	270
Western HSCT	2,647	529	1,606	321	1,041	208
Unknown	4	1	2	0	2	0

Figure 9: Standardised incidence ratio comparing Health and Social Care Trust to Northern Ireland for nonmelanoma skin cancer diagnosed in 2018-2022



PREVALENCE

- At the end of 2022, there were 40,372 people (Males: 22,010; Females: 18,362) living with non-melanoma skin cancer who had been diagnosed with the disease during 1998-2022.
- Of these 9.9% had been diagnosed in the previous year (one-year prevalence) and 67.3% in the previous 10 years (ten-year prevalence).
- 52.8% of non-melanoma skin cancer survivors were aged 75 and over at the end of 2022.

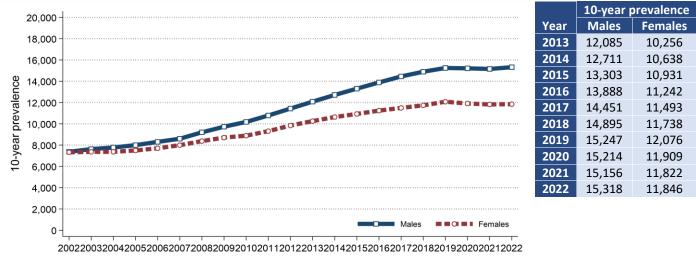
Table 4: 25-year prevalence of non-melanoma skin cancer by age at end of 2022

	Age at end of 2022	25-year prevalence	Time since diagnosis					
Gender			0 to 1 year	1 to 5 years	5 to 10 years	10 to 25 years		
All persons	All ages	40,372	3,996	11,997	11,171	13,208		
	0 to 74	19,037	2,049	6,020	5,257	5,711		
	75 and over	21,335	1,947	5,977	5,914	7,497		
Male	All ages	22,010	2,381	6,794	6,143	6,692		
	0 to 74	10,569	1,231	3,417	2,941	2,980		
	75 and over	11,441	1,150	3,377	3,202	3,712		
Female	All ages	18,362	1,615	5,203	5,028	6,516		
	0 to 74	8,468	818	2,603	2,316	2,731		
	75 and over	9,894	797	2,600	2,712	3,785		

PREVALENCE TRENDS

- 10-year prevalence of non-melanoma skin cancer among males increased between 2017 and 2022 by 6.0% from 14,451 survivors to 15,318 survivors.
- 10-year prevalence of non-melanoma skin cancer among females increased between 2017 and 2022 by 3.1% from 11,493 survivors to 11,846 survivors.

Figure 10: Trends in 10-year prevalence of non-melanoma skin cancer in 2002-2022



MORTALITY

- There were 183 deaths from non-melanoma skin cancer during 2018-2022 in Northern Ireland. On average this was 37 deaths per year.
- During this period 35.5% of non-melanoma skin cancer deaths were among women (Male deaths: 118, Female deaths: 65). On average there were 24 male and 13 female deaths from non-melanoma skin cancer per year.
- The median age of patients who died from non-melanoma skin cancer during 2018-2022 was 84 years (Males: 83, Females: 87).
- The risk of dying from non-melanoma skin cancer varied by age, with 48.6% of those who died from nonmelanoma skin cancer aged 85 and over at death.
- In contrast, 7.7% of patients who died from non-melanoma skin cancer were aged 0 to 64 at death.

Figure 11: Average number of deaths from non-melanoma skin cancer per year in 2018-2022 by age at death

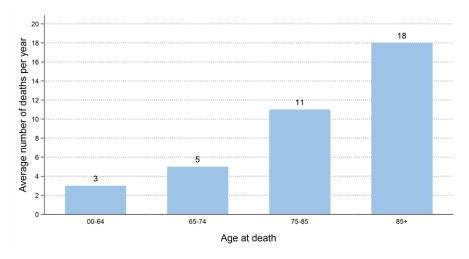
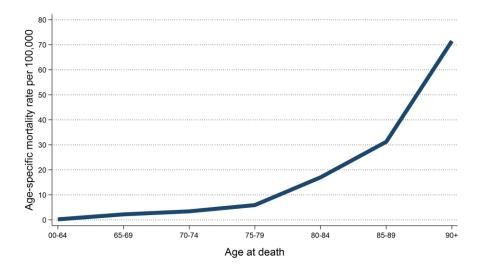
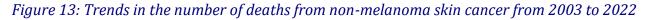


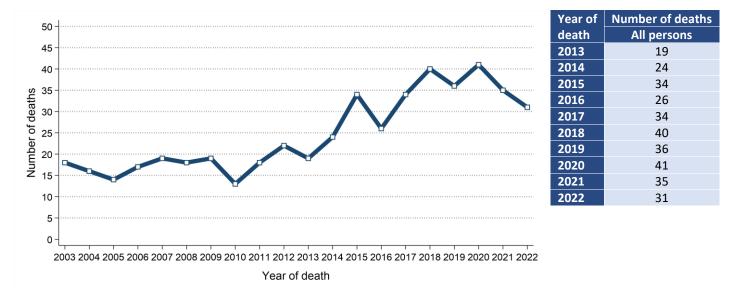
Figure 12: Age-specific mortality rates of non-melanoma skin cancer in 2018-2022



MORTALITY TRENDS

- The number of deaths from non-melanoma skin cancer increased between 2013-2017 and 2018-2022 by 33.6% from 137 deaths (27 deaths per year) to 183 deaths (37 deaths per year).





- Age-standardised non-melanoma skin cancer mortality rates increased between 2013-2017 and 2018-2022 by 21.1% from 1.9 to 2.3 deaths per 100,000 persons. This change was not statistically significant.





Age-standardised mortality rates illustrate the change in the number of deaths 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.

Year of death

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 Jul 2024 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. non-melanoma skin cancer 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. non-melanoma skin cancer 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.