

Malignant melanoma

Number of cases per year (2014-2018) ¹			Number of deaths per year (2014-2018) ¹		
Male	Female	Both sexes	Male	Female	Both sexes
179	208	387	35	26	61
Five-year net survival (2009-2013)			25-year prevalence (2018)		
Male	Female	Both sexes	Male	Female	Both sexes
90.4%	96.0%	93.7%	1,822	2,785	4,607

Incidence

During 2014-2018:

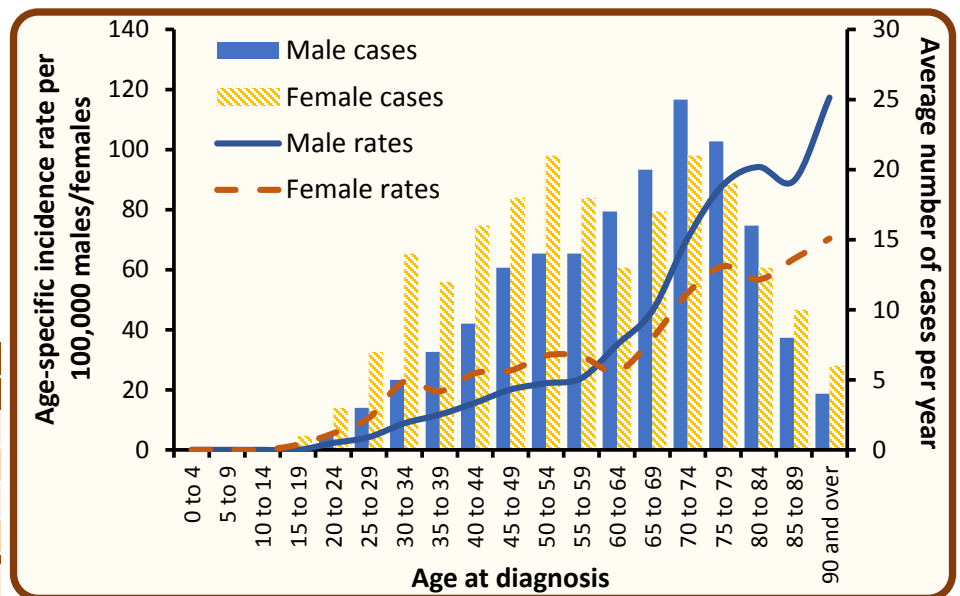
- There were 179 male and 208 female cases of melanoma diagnosed each year.
- There were 19.5 male and 22.0 female cases of melanoma per 100,000 males/females diagnosed each year.
- Melanoma made up 3.7% of all male cancers (ex NMSC), and 4.3% of all female cancers (ex NMSC).
- The risk of developing melanoma before the age of 75 was 1 in 77 for men and 1 in 70 for women.

Incidence by sex and age at diagnosis: Melanoma 2014-2018¹

During 2014-2018:

- The median age at diagnosis was 66 for men and 58 for women.
- Melanoma risk increased with age, with 53.1% of men and 41.3% of women aged 65 years or more at diagnosis.
- 28.2% of cases were diagnosed among those aged under 50.

Age at diagnosis	Average cases per year		
	Male	Female	Both sexes
0 - 49	38	71	109
50 - 64	45	52	97
65 - 74	45	38	83
75 +	50	48	98
All ages	179	208	387



Incidence by sex and year of diagnosis: Melanoma 2009-2018

- Among males the number of cases of melanoma increased by 29.7% from an annual average of 138 cases in 2009-2013 to 179 cases in 2014-2018.
- Among females the number of cases of melanoma increased by 14.3% from an annual average of 182 cases in 2009-2013 to 208 cases in 2014-2018.

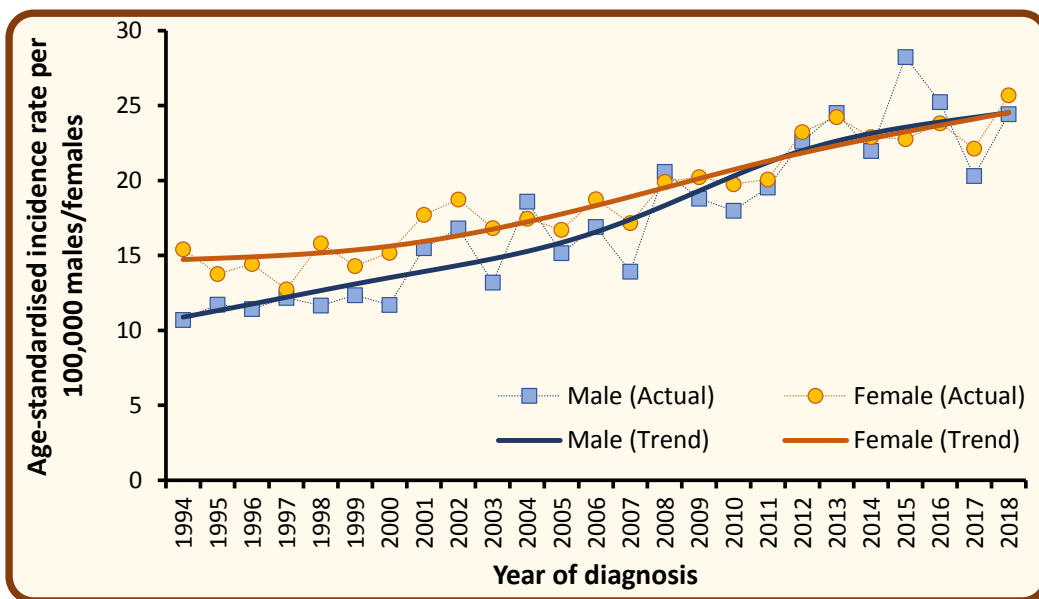
	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	122	115	129	151	171	156	209	185	154	190
Female	165	166	171	197	209	200	199	211	198	233
Both sexes	287	281	300	348	380	356	408	396	352	423

1. 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.

NMSC: Non-melanoma skin cancer

Trends in age-standardised incidence rates by sex: Melanoma 1994-2018

- Among males age-standardised incidence rates of melanoma increased by 15.7% from 20.8 per 100,000 person years in 2009-2013 to 24.0 cases per 100,000 persons years in 2014-2018. This difference was statistically significant.
- Among females age-standardised incidence rates of melanoma increased by 9.2% from 21.5 per 100,000 person years in 2009-2013 to 23.5 cases per 100,000 persons years in 2014-2018. This difference was not 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.

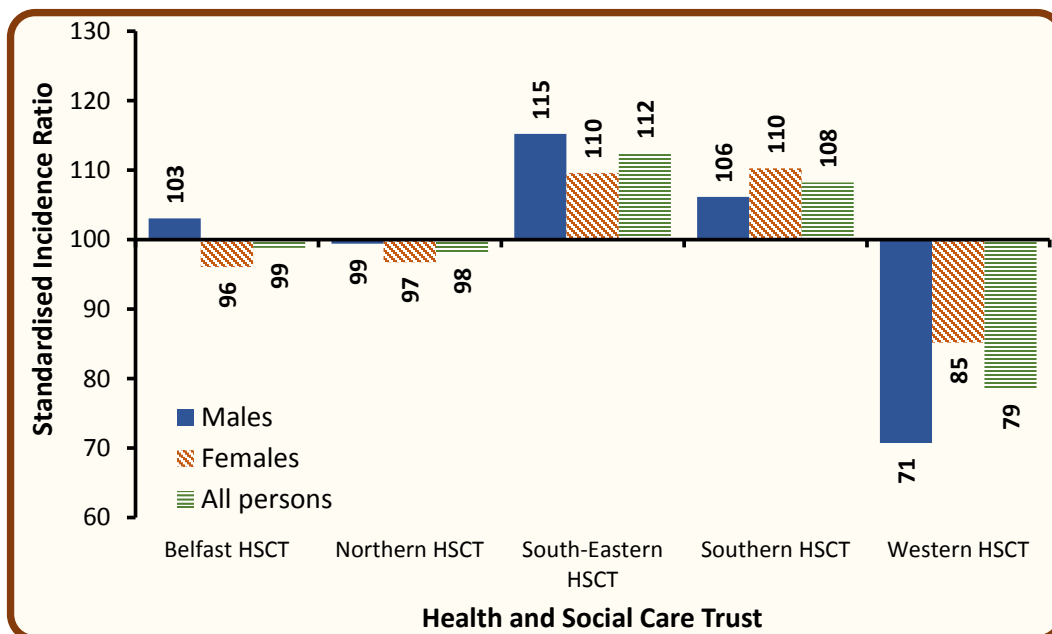
Incidence (cases and rates) by sex and Health and Social Care Trust (HSCT): Melanoma 2014-2018¹

The annual number of melanoma cases during 2014-2018 varied in each HSCT due to variations in population size and age (see table).

After accounting for these factors, incidence rates (see figure):

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

Health and Social Care Trust	Average cases per year		
	Male	Female	Both sexes
Belfast HSCT	33	39	72
Northern HSCT	47	52	99
South-Eastern HSCT	42	46	88
Southern HSCT	36	44	80
Western HSCT	20	27	48
Northern Ireland	179	208	387



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 Northern Ireland average. This measure takes account of population size and age structure. Differences are thus not a result of these factors.

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HSCT: Health and Social Care Trust

Incidence (cases and rates) by sex and deprivation quintile: Melanoma 2014-2018¹

The annual number of melanoma cases during 2014-2018 varied in each deprivation quintile due to variations in population size and age (see table).

After accounting for these factors, incidence rates (see figure):

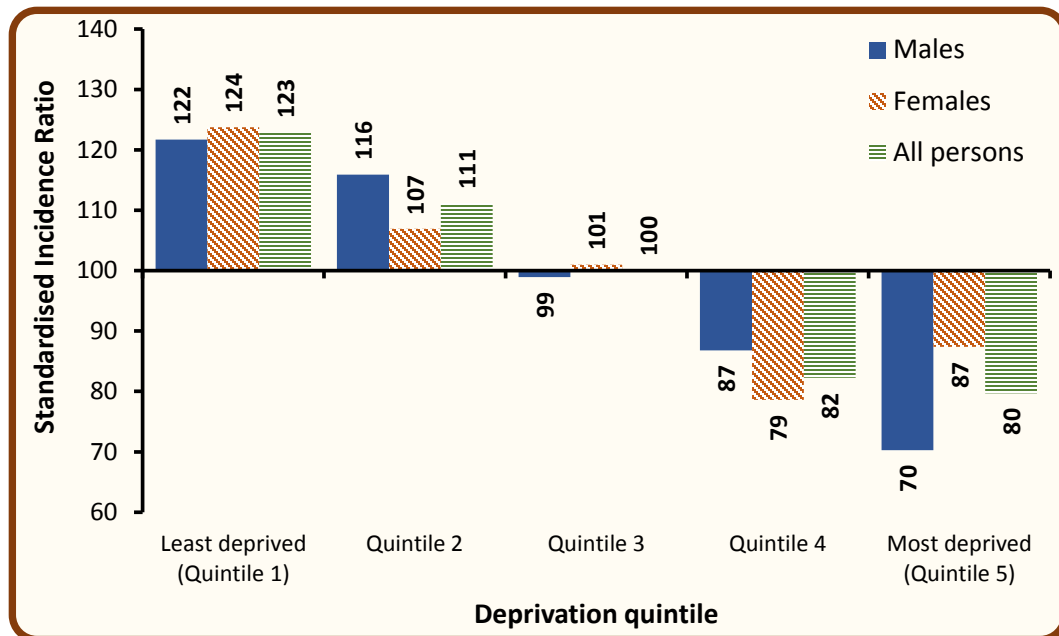
- in the most socio-economically deprived areas were 20.3% lower than the NI average.
- in the least socio-economically deprived areas were 22.9% higher than the NI average.

Deprivation quintile	Average cases per year		
	Male	Female	Both sexes
Least deprived (Quintile 1)	45	53	98
Quintile 2	44	47	91
Quintile 3	38	44	81
Quintile 4	31	33	64
Most deprived (Quintile 5)	21	32	53
Northern Ireland	179	208	387

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.



Survival

- 95.7% of patients were alive one year and 81.9% were alive five years from a melanoma diagnosis in 2009-2013. (observed survival)
- Age-standardised net survival (ASNS), which removes the effect of deaths from causes unrelated to cancer, was 98.3% one year and 93.7% five years from a melanoma diagnosis in 2009-2013.
- Five-year survival (ASNS) for patients diagnosed in 2009-2013 was 90.4% among men and 96.0% among women.
- Estimates for survival (ASNS) of patients diagnosed during 2012-2016 are 98.4% one year, and 92.8% five years from diagnosis.

Period of diagnosis ²	Gender	Observed survival		Age-standardised net survival	
		One-year	Five-years	One-year	Five-years
2009-2013	Male	92.9%	74.9%	96.6%	90.4%
	Female	97.8%	87.1%	99.3%	96.0%
	Both sexes	95.7%	81.9%	98.3%	93.7%
2012-2016 estimates	Male	94.0%	75.1%	97.3%	90.1%
	Female	97.4%	85.5%	99.2%	95.0%
	Both sexes	95.8%	80.8%	98.4%	92.8%

Observed survival is the proportion of patients still alive one/five years after diagnosis. However, in this measure patients may have died from causes unrelated to their cancer.

Age-standardised net survival is the proportion of patients who would survive if the patient could not die from causes unrelated to their cancer. This measure is more typically used in studies of cancer survival.

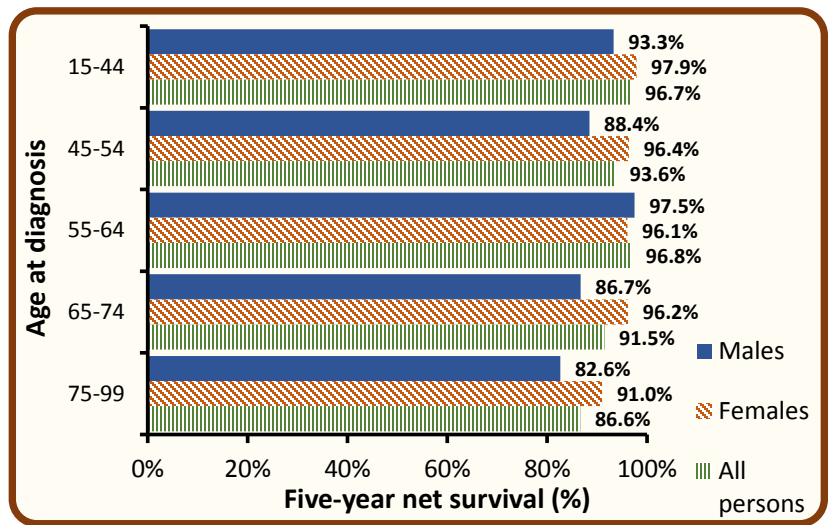
1. Annual averages based upon several years have been rounded to the nearest integer. Sums of numbers in table rows or columns may thus differ slightly from the given total.

2. Five-year survival for 2012-2016 are estimates as not all patients have five years worth of follow up.

ASNS: Age-standardised net survival

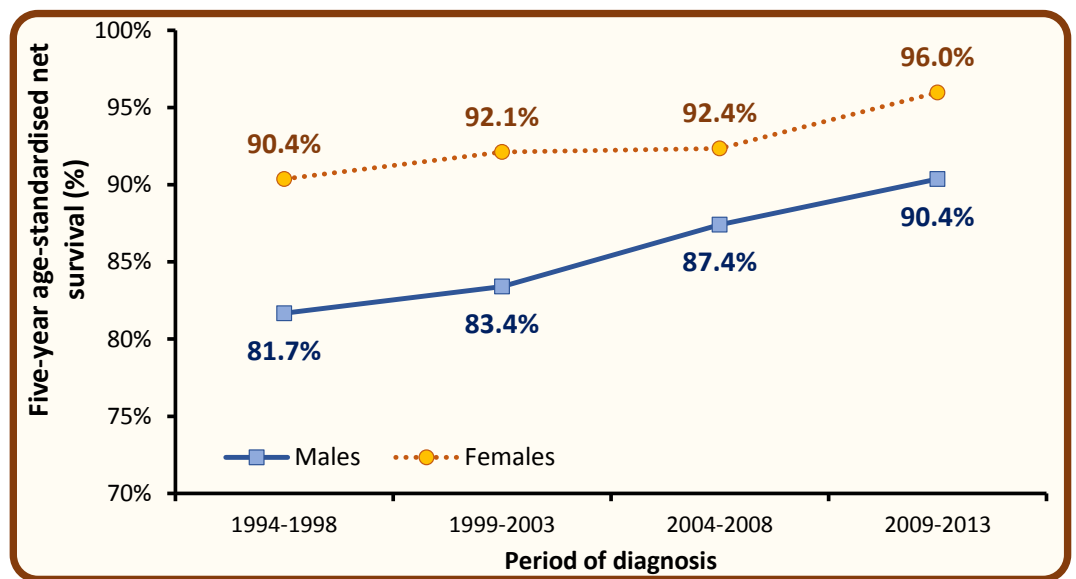
Survival by sex and age at diagnosis: Melanoma 2009-2013

- Survival from melanoma varies slightly by age at diagnosis with five-year survival decreasing moderately as age increases.
- Five-year net survival ranged from 96.7% among patients aged 15-44 at diagnosis to 86.6% among those aged 75 and over.
- Five-year net survival among melanoma patients aged 75 and over was 82.6% for men and 91.0% for women.



Trends in age-standardised net survival by sex: Melanoma 1994-2013

- Among men five-year survival (ASNS) from melanoma increased from 81.7% for those diagnosed in 1994-1998 to 90.4% for those diagnosed in 2009-2013. This difference was not statistically significant.
- Among women five-year survival (ASNS) from melanoma increased from 90.4% for those diagnosed in 1994-1998 to 96.0% for those diagnosed in 2009-2013. This difference was not statistically significant.



Prevalence

- At the end of 2018, there were 4,607 people (Males: 1,822; Females: 2,785) living with melanoma who had been diagnosed with the disease during 1994-2018.
- Of these, 39.5% were male, 38.2% were aged 70 and over, and 9.1% had been diagnosed in the previous year.

25-year prevalence refers to the number of cancer survivors who were alive at the end of 2018, and had been diagnosed with their cancer in the previous 25 years (i.e. 1994-2018).

Time since diagnosis	25-year prevalence								
	Aged 0-69			Aged 70+			All ages		
	Male	Female	Both sexes	Male	Female	Both sexes	Male	Female	Both sexes
0-1 year	110	143	253	78	87	165	188	230	418
1-5 years	320	481	801	252	233	485	572	714	1,286
5-10 years	231	497	728	214	237	451	445	734	1,179
10-25 years	376	687	1,063	241	420	661	617	1,107	1,724
0-25 years	1,037	1,808	2,845	785	977	1,762	1,822	2,785	4,607

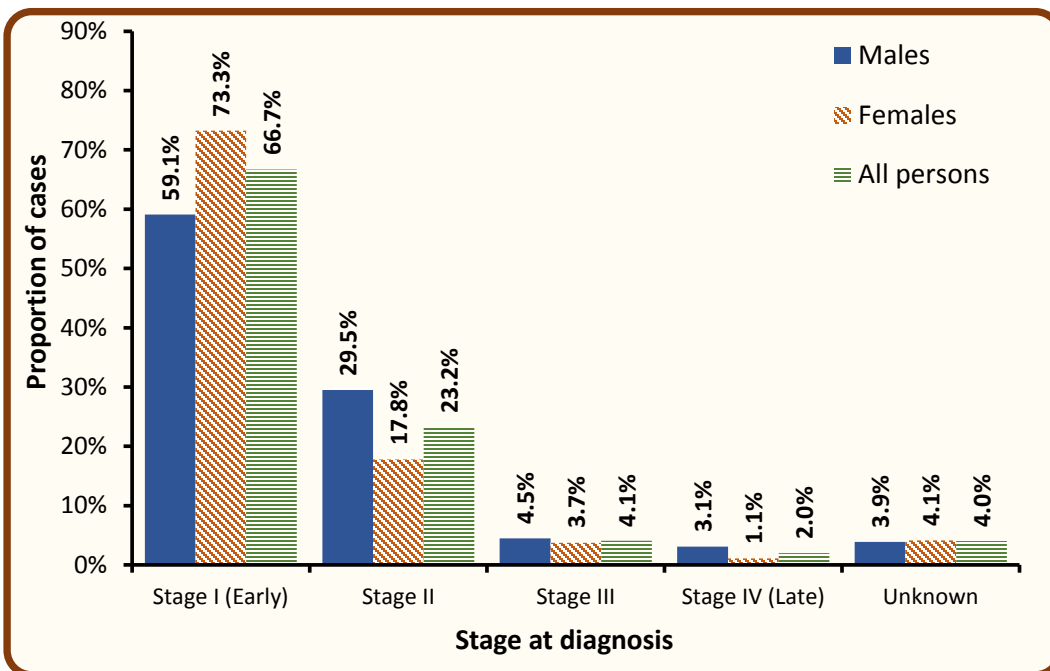
Cancer stage

Incidence by sex and stage at diagnosis: Melanoma 2013-2017¹

During 2013-2017:

- 96.0% of cases diagnosed had a stage assigned.
- 66.7% of cases were diagnosed at stage I. (69.5% of staged cases)
- 2.0% of cases were diagnosed at stage IV. (2.1% of staged cases)
- Among cases which were staged, 3.2% of male cases were diagnosed at stage IV, compared to 1.1% of female cases.

Stage at diagnosis	Average cases per year		
	Male	Female	Both sexes
Stage I (Early)	103	149	252
Stage II	52	36	88
Stage III	8	8	15
Stage IV (Late)	5	2	8
Unknown	7	8	15
All stages	175	203	378



Cancer stage describes the size of a cancer and how far it has grown and spread.

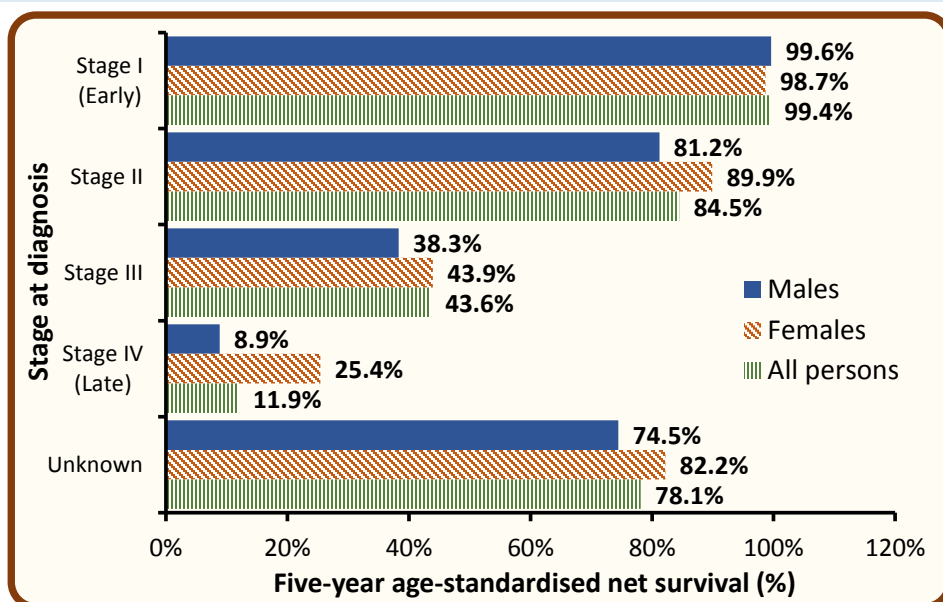
This information is used to help decide what treatments are needed.

The classification used here to stage cancer is the TNM (version 7) classification.

Data on cancer stage in 2018, classified using TNM (version 8), is available online at www.qub.ac.uk/nicr

Survival by sex and stage at diagnosis: Melanoma 2012-2016 estimates*

- Stage at diagnosis is one of the most important factors in melanoma survival with five-year survival decreasing as stage increases.
- Five-year survival (ASNS) ranged from 99.4% for early stage (stage I) disease to 11.9% for late stage (stage IV) disease.**
- Five-year survival (ASNS) for unstaged melanoma was 78.1%.
- Five-year survival (ASNS) for stage IV melanoma was 8.9% for men, compared to 25.4% for women.



1. 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.

* Survival is presented for the 2012-2016 period as staging information is not available or incomplete prior to 2012. However, these figures are estimates as five years of follow up is not available for all patients.

** Survival data for female Stage IV melanoma not age-standardised due to the small number of diagnosed cases.

ASNS: Age-standardised net survival

Mortality

During 2014-2018:

- There were 35 male and 26 female deaths from melanoma each year.
- Death from melanoma made up 1.5% of all male cancer deaths (ex NMSC), and 1.2% of all female cancer deaths (ex NMSC).

Deaths by sex and age at death: Melanoma 2014-2018¹

During 2014-2018:

- The median age at death was 73 for men and 74 for women.
- Risk of death from melanoma was strongly related to age, with 71.4% of men and 76.9% of women aged 65 years or more at time of death.
- 8.2% of melanoma deaths occurred among those aged under 50.

Age at death	Average deaths per year		
	Male	Female	Both sexes
0 - 49	5	2	5
50 - 64	6	6	13
65 - 74	9	6	15
75 +	16	14	29
All ages	35	26	61

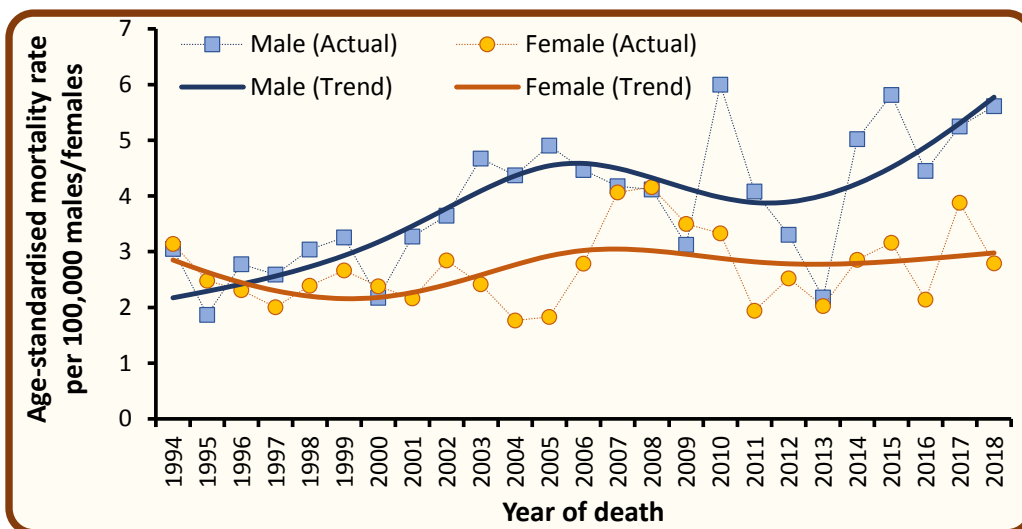
Deaths by sex and year of death: Melanoma 2009-2018

- Among males the number of deaths from melanoma increased by 45.8% from an annual average of 24 deaths in 2009-2013 to 35 deaths in 2014-2018.
- Among females the number of deaths from melanoma increased by 18.2% from an annual average of 22 deaths in 2009-2013 to 26 deaths in 2014-2018.

	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Male	18	39	26	22	15	30	36	30	38	41
Female	27	27	16	21	17	25	27	18	35	25
Both sexes	45	66	42	43	32	55	63	48	73	66

Trends in age-standardised mortality rates by sex: Melanoma 1994-2018

- Among males age-standardised mortality rates from melanoma increased by 40.5% from 3.7 per 100,000 person years in 2009-2013 to 5.2 deaths per 100,000 persons years in 2014-2018. This difference was statistically significant.
- Among females age-standardised mortality rates from melanoma increased by 12.3% from 2.6 per 100,000 person years in 2009-2013 to 3.0 deaths per 100,000 persons years in 2014-2018. This difference was not statistically significant.



Mortality data are provided by the Northern Ireland General Registrar Office via the Department of Health.

Counts of the number of deaths are based upon the year that death occurred, and upon the primary cause of death only.

Age-standardised mortality rates remove changes over time caused by population growth and/or ageing.

¹. 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.
NMSC: Non-melanoma skin cancer

Further Information

Further data is available from the NI Cancer Registry web site: www.qub.ac.uk/nicr
Phone: +44 (0)28 9097 6028
e-mail: nicr@qub.ac.uk



Acknowledgements

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