

MALIGNANT MELANOMA



NUMBER OF CASES PER YEAR (2010-2014)			NUMBER OF DEATHS PER YEAR (2010-2014)		
Male	Female	Both sexes	Male	Female	Both sexes
144	188	332	26	21	47
FIVE-YEAR SURVIVAL (2005-2009)			22-YEAR PREVALENCE (2014)		
Male	Female	Both sexes	Male	Female	Both sexes
88.0%	92.5%	90.7%	1,453	2,302	3,755

INCIDENCE

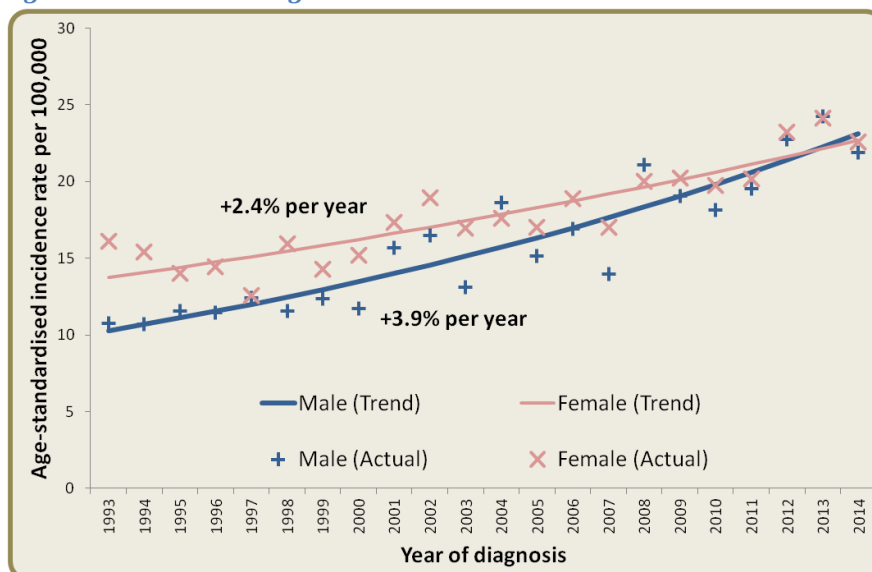
Between 2010 and 2014 there were an average of 144 males and 188 females diagnosed with malignant melanoma cancer each year in Northern Ireland. The probability that a male will develop malignant melanoma before the age of 75 is approximately 1 in 91 whilst the probability that a female will develop malignant melanoma before the age of 75 is 1 in 72. Over a ten-year period the number of malignant melanoma cases has increased in males and females from 233 in 2005 to 352 in 2014 (Table 1).

Incidence trends

Table 1: Incidence of malignant melanoma by gender and year of diagnosis: 2004-2013

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Males	99	109	95	138	123	116	129	152	169	155
Females	134	151	138	164	165	166	172	197	208	197
Both	233	260	233	302	288	282	301	349	377	352

Figure 1: Trends in malignant melanoma incidence rates: 1993-2014



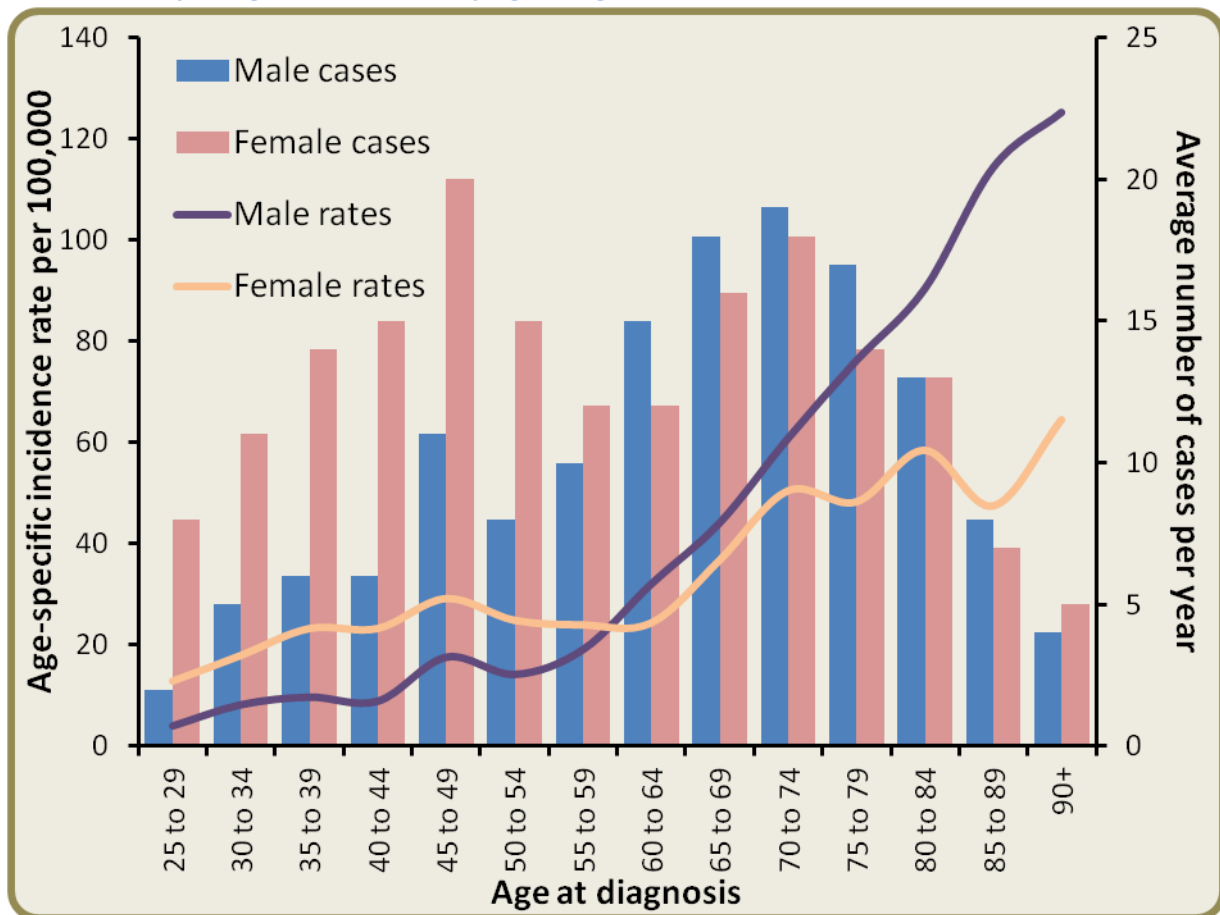
After accounting for the ageing population, there has been a 3.9% increase in yearly incidence of malignant melanoma in males and a 2.4% yearly increase in incidence of malignant melanoma in females.

Reasons for increasing incidence in both genders is potentially associated with higher levels of UV exposure.

Incidence and age

Malignant melanoma incidence is associated with increasing age. Almost 70% of patients diagnosed were over the age of 50. Incidence rates are highest among males and females aged 90 and over. There is an increase in the incidence of malignant melanoma in men after the age of 60 whereas women experience an increase in incidence of malignant melanoma as they grow older.

Figure 2: Incidence of malignant melanoma by age and gender: 2009-2014



Incidence by Trust area

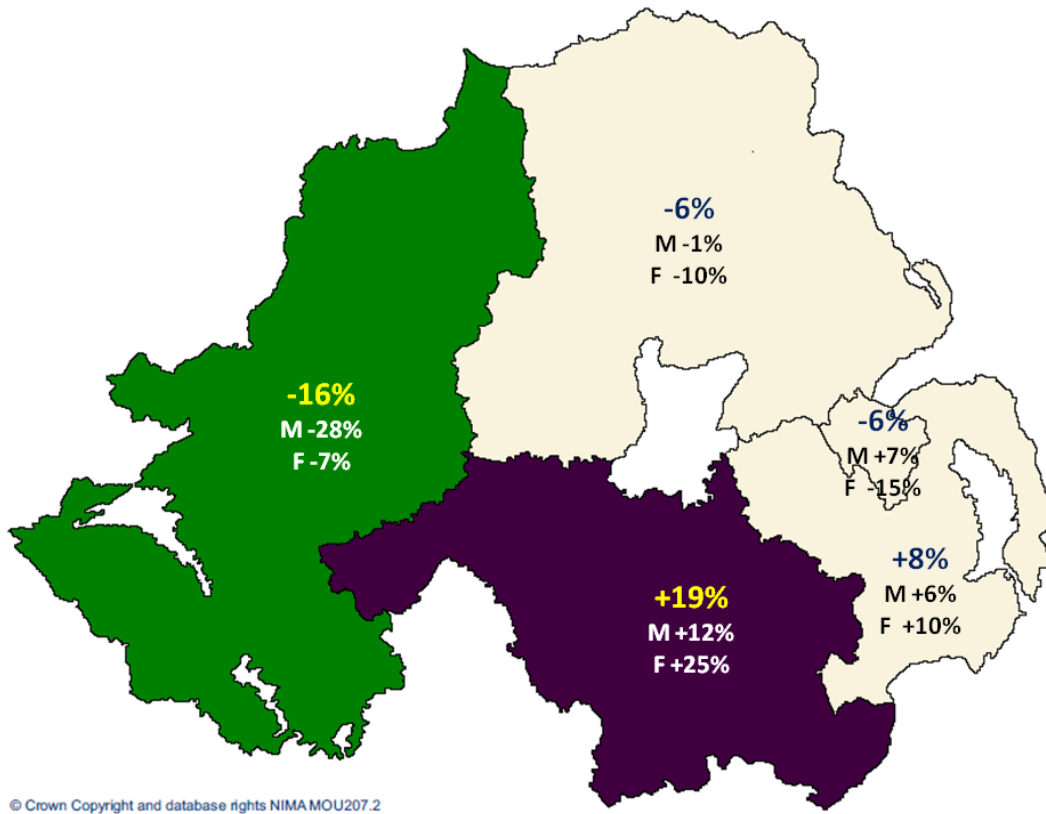
Malignant melanoma incidence rates in 2010-2014 were 19% above the NI average in people living in the Southern health and social care trust (HSCT) with females accounting for the majority of this increased incidence (female melanoma incidence 25% above the NI average in this trust).

Malignant melanoma incidence rates in 2010-2014 were 16% below the NI average in people living in the Western health and social care trust (HSCT) with males accounting for the majority of this decreased incidence (male melanoma incidence 16% below the NI average in this trust).

There was no statistically significant difference in the incidence of malignant melanoma in any of the other health and social care trusts when compared to the NI average.

Please refer to figure 3.

Figure 3: Malignant melanoma incidence rates compared to the NI average by HSC Trust of residence: 2010-2014 comparison

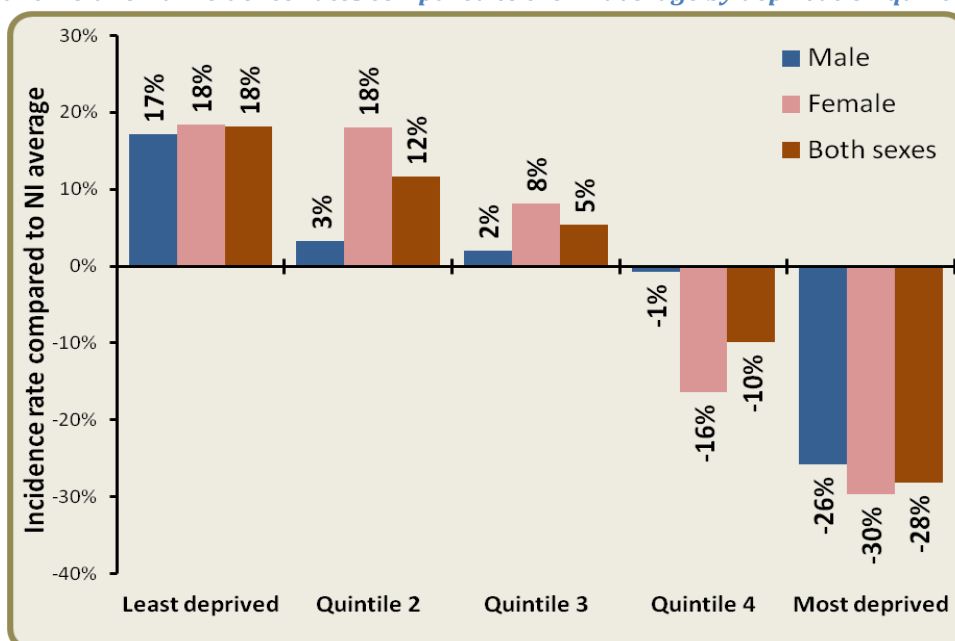


■ Significantly higher than average ■ Significantly lower than average

Incidence by deprivation

Cancer incidence rates are consistently lower than the NI average among males and females within the most deprived communities (-28%) and higher amongst the least deprived communities (+18%) suggesting a relationship between socioeconomic status and risk factor (UV) exposure.

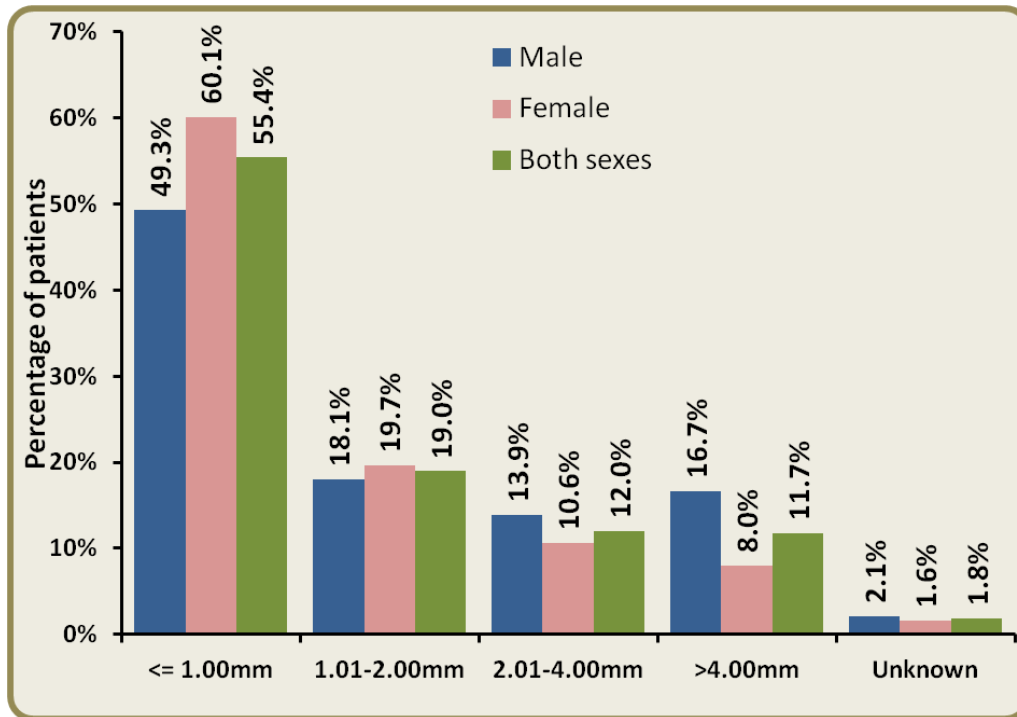
Figure 4: Malignant melanoma incidence rates compared to the NI average by deprivation quintile: 2010-2014



Incidence by stage

Cancer stage is a way of describing the size of a cancer and how far it has grown and spread. This information is important in helping decide what treatments are needed and stage of disease at diagnosis is strongly associated with survival. Malignant melanoma is staged according to depth of tumour at diagnosis (Breslow depth) measured in millimetres (mm) up to a maximum of 4mm. More than 98% of patients diagnosed with malignant melanoma were assigned a stage at diagnosis.

Figure 5: Malignant melanoma stage distribution: 2010-2014



The majority of patients diagnosed with malignant melanoma were diagnosed with a Breslow depth of less than or equal to 1mm (56%). The next most common stage to be diagnosed at was a Breslow depth of 1.01-2.00mm (19%).

SURVIVAL

The age-standardised survival for men diagnosed with malignant melanoma between 2005-2009 was 88.0% at five years. The age-standardised survival for women during the same time period was 92.5%. Survival is consistently higher in females compared to males.

Table 2: Five-year malignant melanoma survival by survival time and gender

Time since diagnosis	Diagnosed 2005-2009		
	Male	Female	Both sexes
6 months	99.8%	100.0%	99.9%
1 year	97.7%	99.5%	98.7%
5 years	88.0%	92.5%	90.7%

Survival Trends

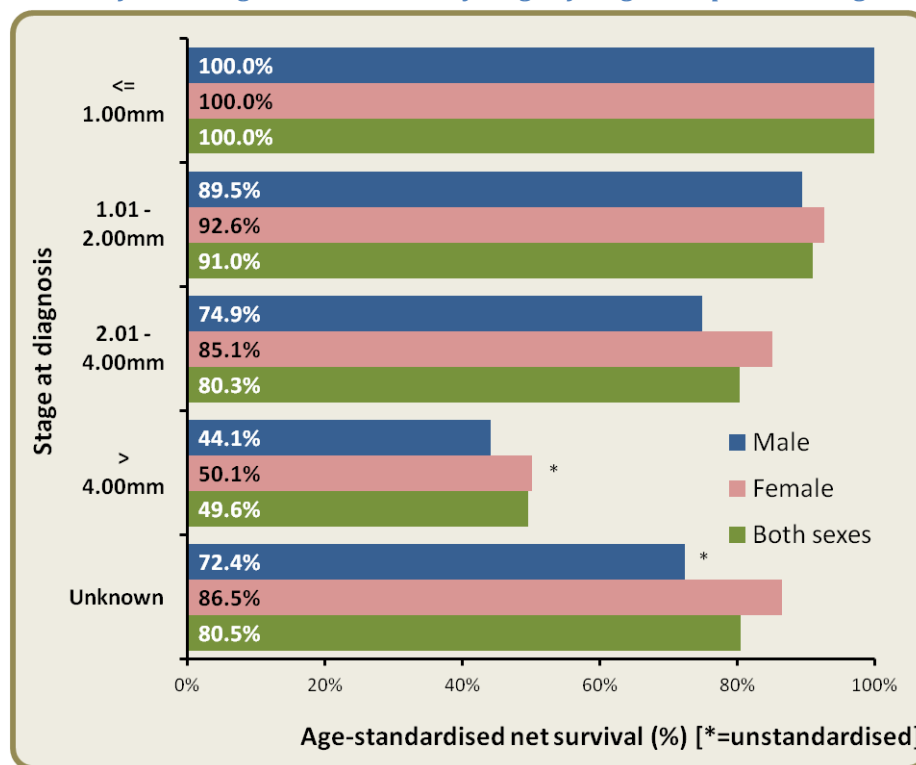
Five-year survival for malignant melanoma in Northern Ireland has increased from the 1993-1999 diagnosis period to the 2005-2009 diagnosis period in both males and females. Five-year survival in men between 1993-1999 was 84.4% and 88.0% between 2005-2009. Five-year survival in women between 1993-1999 was 91.1% and 92.5% between 2005-2009. This makes malignant melanoma one of the most survivable cancers alongside non-melanoma skin cancers such as basal cell and squamous cell cancer.

Table 3: Five-year malignant melanoma survival by period of diagnosis and gender

Period of diagnosis	Male	Female	Both sexes
1993-1999	84.4%	91.1%	88.7%
2000-2004	83.5%	92.8%	88.8%
2005-2009	88.0%	92.5%	90.7%

Survival and stage

Figure 6: Five-year survival from malignant melanoma by stage of diagnosis: patients diagnosed 2002-2009



Stage at diagnosis is one of the most important factors in malignant melanoma survival with five-year survival decreasing as stage at diagnosis increases. Five-year survival ranged from 100% for early (Breslow depth less than or equal to 1mm) disease to 49.6% for late (Breslow depth more than 4mm) disease, thus highlighting the importance of an early diagnosis.

Females in Northern Ireland are more likely to survive for at least five years after diagnosis of a malignant melanoma with Breslow depth exceeding 4mm than males with 50.1% of females alive for at least five years after this diagnosis and only 44.1% of males able to achieve the same.

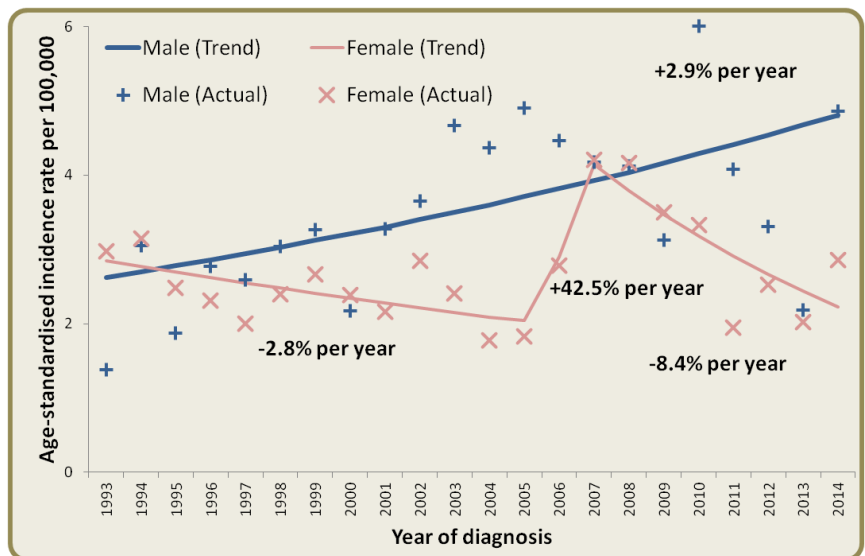
MORTALITY

In 2010-2014 there were an average of 47 deaths from malignant melanoma each year.

Mortality trends

When adjusted for age and population change, melanoma mortality rates in males had a 2.9% increase per year. Female mortality decreased by 2.8% each year until 2005 before rising by 42.5% each year until 2007, however this rise is not statistically significant. Female mortality then significantly decreased by 8.4% until 2014.

Figure 7: Trends in malignant melanoma mortality rates: 1993-2014



PREVALENCE

At the end of 2014 there were a total of 3,755 people living in Northern Ireland with a diagnosis of malignant melanoma between 1993 and 2014 of which over 60% were female, close to 10% had been diagnosed in the previous year, and 35% were over 70 and 27% were under the age of 50.

Table 4: Number of people living with malignant melanoma at the end of 2014 who were diagnosed from 1993-2014 by time since diagnosis and gender

Sex	Age	Time since diagnosis				22-year Prevalence
		0-1 year	1-5 years	5-10 years	10-22 years	
Male	0-69	87	259	243	266	855
	70+	65	211	137	185	598
	All ages	152	470	380	451	1453
Female	0-69	137	464	412	557	1570
	70+	55	208	159	310	732
	All ages	192	672	571	867	2302
Both	0-69	224	723	655	823	2425
	70+	120	419	296	495	1330
	All ages	344	1142	951	1318	3755

FURTHER INFORMATION

Further data is available from the Northern Ireland Cancer Registry web site: www.qub.ac.uk/nicr

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