

# MALIGNANT MELANOMA



NUMBER OF CASES PER YEAR (2009-2013)			NUMBER OF DEATHS PER YEAR (2009-2013)		
Male	Female	Both sexes	Male	Female	Both sexes
138	181	319	24	22	46
FIVE-YEAR SURVIVAL (2004-2008)			21-YEAR PREVALENCE (2013)		
Male	Female	Both sexes	Male	Female	Both sexes
88.3%	92.5%	90.8%	1,389	2,215	3,604

## INCIDENCE

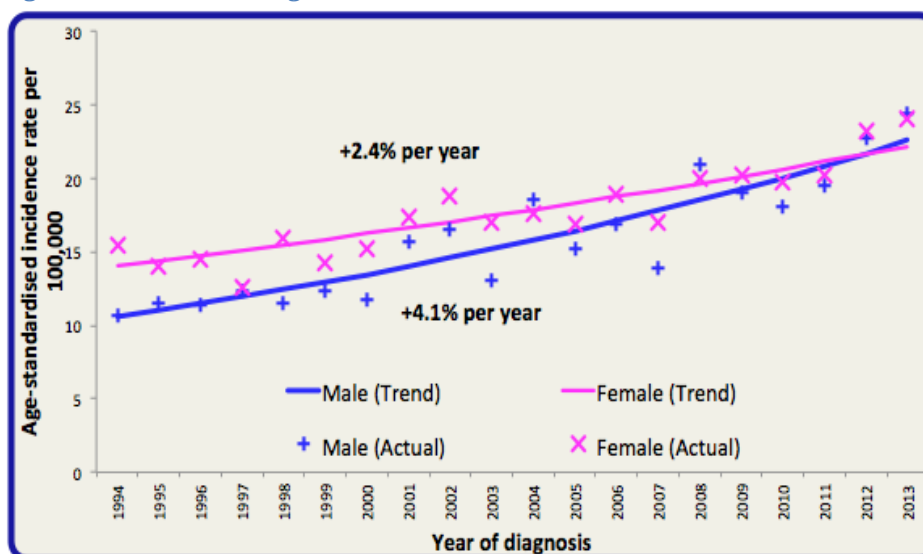
Between 2009 and 2013 there were an average of 138 males and 181 females diagnosed with malignant melanoma cancer each year in Northern Ireland. The probability that a male will develop malignant melanoma before the age of 75 is approximately 1 in 94 whilst the probability that a female will develop malignant melanoma before the age of 75 is 1 in 74. Over a ten-year period the number of malignant melanoma cases has increased in males and females from 244 in 2004 to 377 in 2013 (Table 1).

### Incidence trends

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

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Males	108	99	109	95	137	123	116	129	152	170
Females	136	133	151	138	164	165	166	172	197	207
Both	244	232	260	233	301	288	282	301	349	377

Figure 1: Trends in malignant melanoma incidence rates: 1993-2013



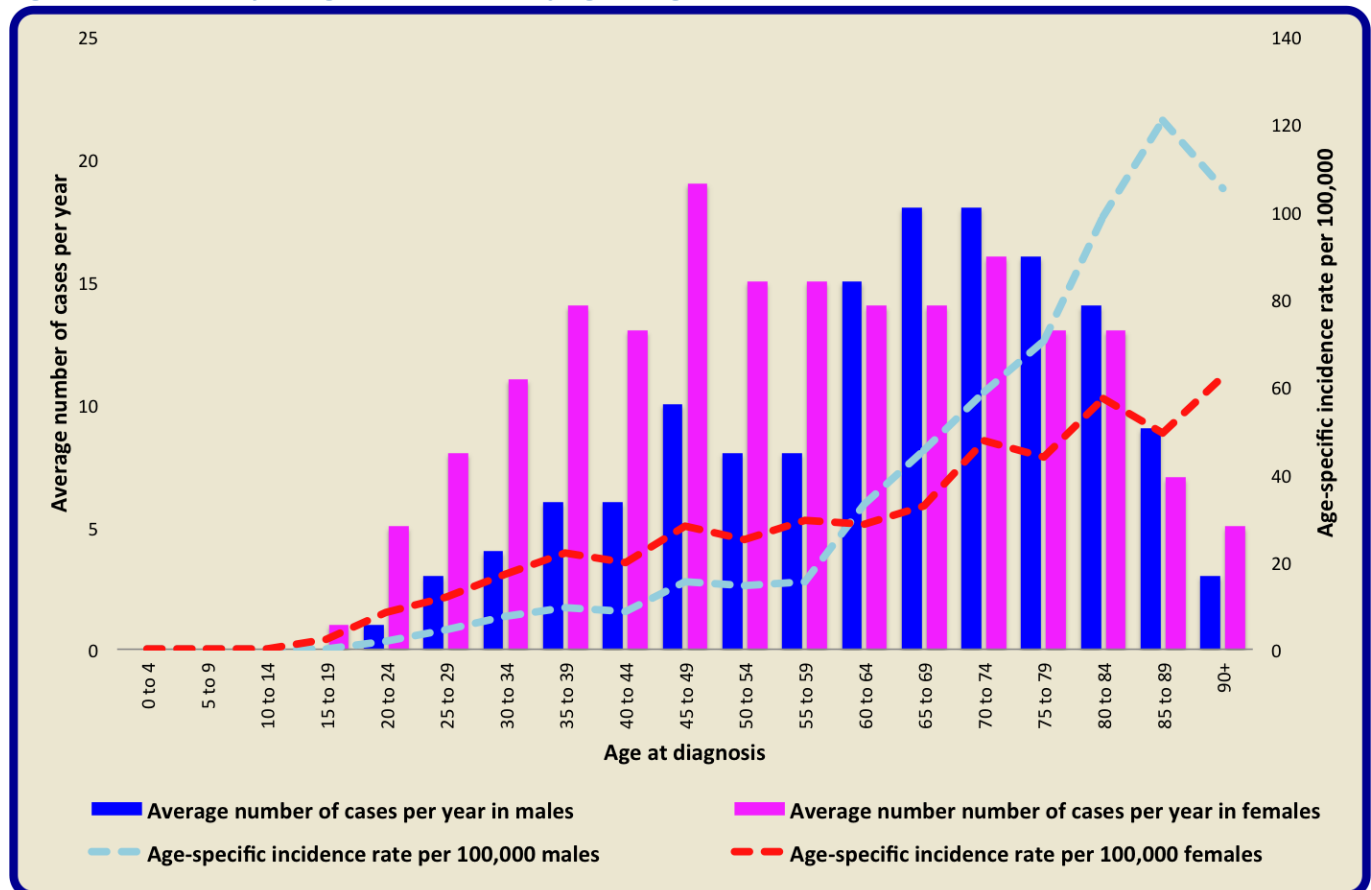
After accounting for the ageing population, there has been a 4.1% increase in yearly incidence of malignant melanoma in males and a 2.4% yearly increase in incidence of malignant melanoma in females.

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 aged 85-89 and highest amongst 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: 2009-2013



## Incidence by Trust area

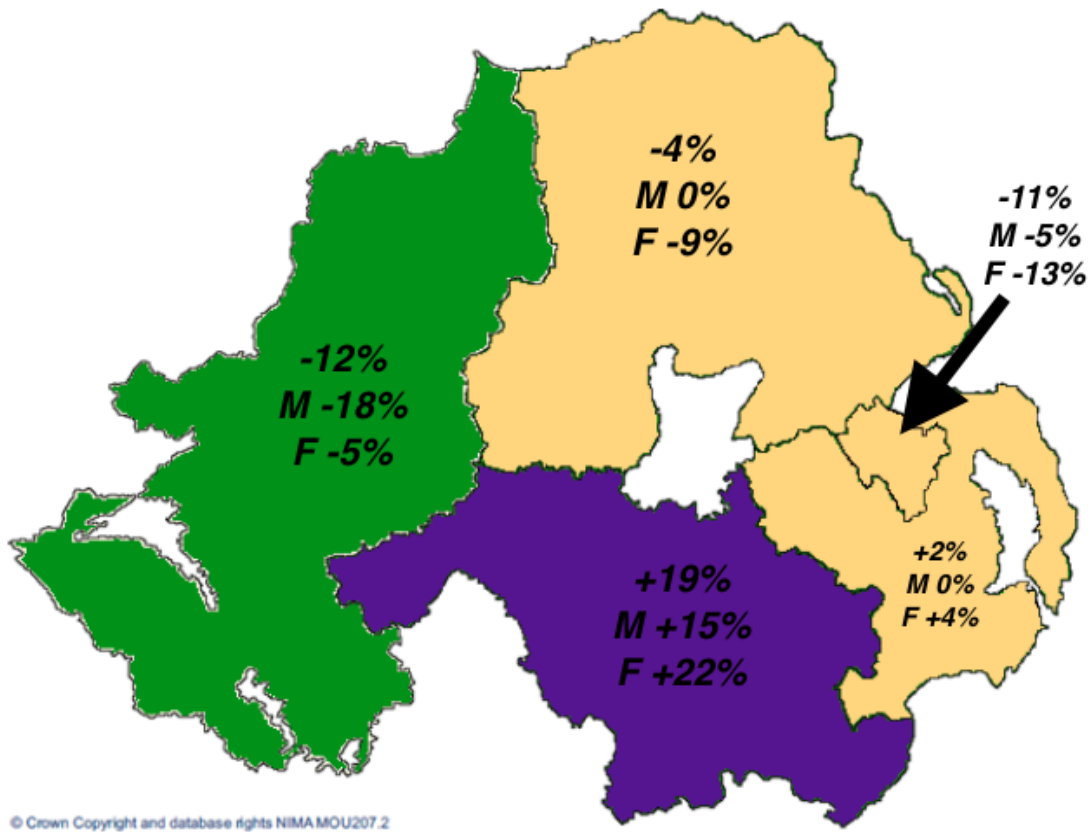
Malignant melanoma incidence rates in 2009-2013 were 19% above the NI average in people living in the Southern health and social care trust (HSCT) with females accounting for the majority of this increased incidence (female melanoma incidence 22% above the NI average in this trust).

Malignant melanoma incidence rates in 2009-2013 were 12% 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 18% 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: 2009-2013 comparison

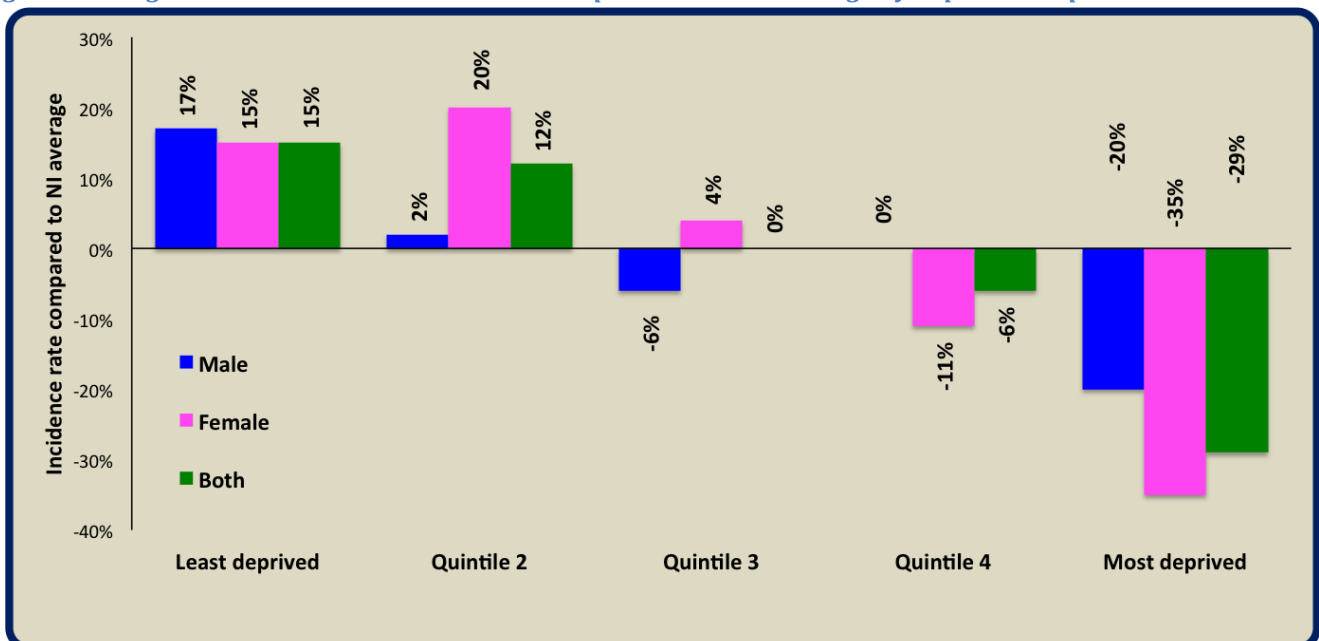


Significantly higher than average      Significantly lower than average

### Incidence by deprivation

Cancer incidence rates are consistently lower than the NI average among males and females within the most deprived communities (-29%) and higher amongst the least deprived communities (+15%) suggesting a relationship between socioeconomic status and risk factor (UV) exposure.

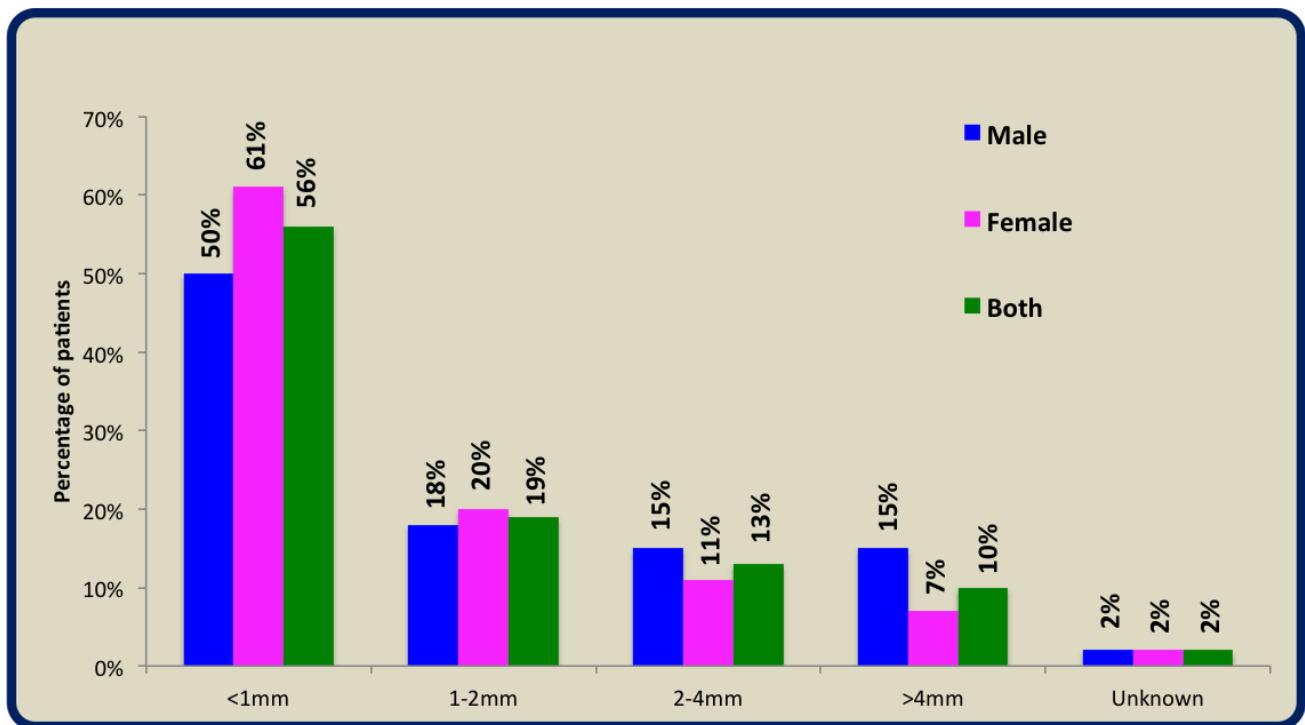
Figure 4: Malignant melanoma incidence rates compared to the NI average by deprivation quintile: 2009-2013



### 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: 2009-2013



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%). A total of 167 patients (86 males and 81 females) were diagnosed with malignant melanoma with a Breslow depth of more than or equal to 4mm during the 2009-2013 diagnostic period.

## SURVIVAL

The age-standardised survival for men diagnosed with malignant melanoma between 2004-2008 was 88.3% 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 2004-2008		
	Male	Female	Both sexes
6 months	99.1%	99.8%	99.6%
1 year	97.5%	99.1%	98.6%
5 years	88.3%	92.5%	90.8%

## Survival Trends

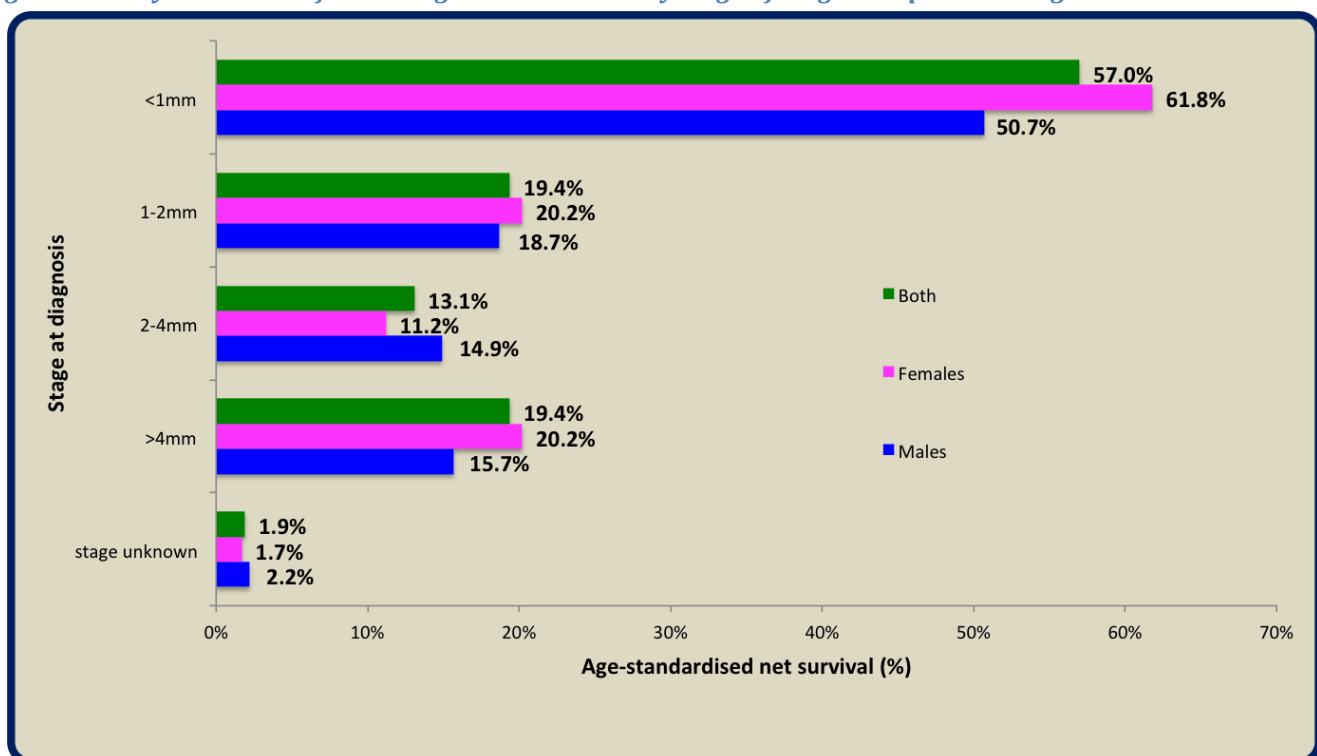
Five-year survival for malignant melanoma in Northern Ireland has increased from the 1993-1998-diagnosis period to the 2004-2008-diagnosis period in both males and females. Five-year survival in men between 1993-1998 was 82.8% and 88.3% between 2004-2008. Five-year survival in women between 1993-1998 was 90.6% and 92.5% between 2004-2008. 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
1993-1998	82.8%	90.6%	87.9%
1999-2003	84.5%	92.3%	89.2%
2004-2008	88.3%	92.5%	90.8%

## Survival and stage

*Figure 6: Five-year survival from malignant melanoma by stage of diagnosis: patients diagnosed 2001-2008*



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 99.7% for early (Breslow depth less than or equal to 1mm) disease to 49.1% 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 54.6% of females alive for at least five years after this diagnosis and only 42% of males able to achieve the same.

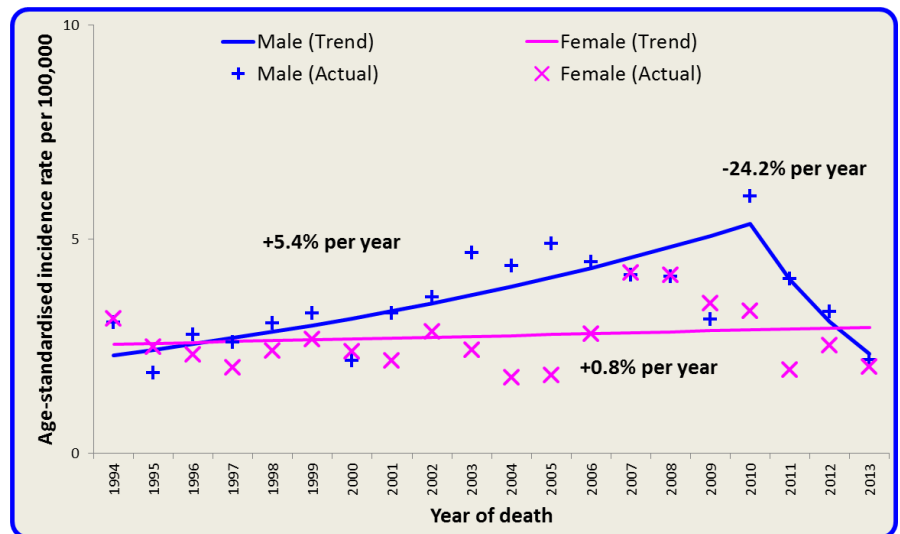
## MORTALITY

In 2009-2013 there were an average of 46 deaths from malignant melanoma each year.

### Mortality trends

When adjusted for age and population change, melanoma mortality rates in males increased by 5.4% each year until 2010 before falling by 24.2% each year until 2013, however this fall is not statistically significant. Female mortality remained relatively unchanged with a 0.8% increase per year.

Figure 7: Trends in malignant melanoma mortality rates: 1993-2013



## PREVALENCE

At the end of 2013 there were a total of 3,604 people living in Northern Ireland with a diagnosis of malignant melanoma between 1993 and 2013 of which over 60% were female, 10% had been diagnosed in the previous year, and 35% were over 70 and 28% were under the age of 50.

Table 4: Number of people living with malignant melanoma at the end of 2013 who were diagnosed from 1993-2013 by time since diagnosis and gender

Sex	Age	Time since diagnosis				21-year Prevalence
		0-1 year	1-5 years	5-10 years	10-21 years	
Male	0-69	97	235	246	249	827
	70+	70	198	137	157	562
	All ages	167	433	383	406	1389
Female	0-69	142	445	405	523	1515
	70+	62	191	156	291	700
	All ages	204	636	561	814	2215
Both	0-69	239	680	651	772	2342
	70+	132	389	293	448	1262
	All ages	371	1069	944	1220	3604

## FURTHER INFORMATION

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

### NI Cancer Registry

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