Melanoma deaths

HIGHLIGHTS:

- **In 2014, 376 people died from melanoma in New Zealand, making melanoma the 6th most common cancer that people died from in 2014.**
- **The mortality rate for melanoma has remained relatively stable since 2001.**
- **In 2014, melanoma mortality rates were higher in males, and in older age groups, especially in 75+ years. Almost all melanoma deaths were in people of European/Other ethnicity (369 out of 376 deaths, 98%).**
- **Melanoma mortality rates were relatively similar across socioeconomic deprivation quintiles (NZDep2013).**
- **Melanoma mortality rates were higher in secondary urban areas, particularly for males. By District Health Board, the melanoma mortality rate was highest in Bay of Plenty DHB, and lowest in Capital and Coast DHB.**

Relevance of melanoma to environmental health

Melanoma is a type of skin cancer, and most melanoma (80–96%) is caused by UV exposure (WHO 2006). Risk factors for melanoma include sun exposure, fair skin, and childhood sun exposure/sunburns. Melanoma is one of the most common cancers in New Zealand. In 2012, New Zealand had the highest melanoma incidence and mortality rates in the world (IARC 2014).

Data for this indicator

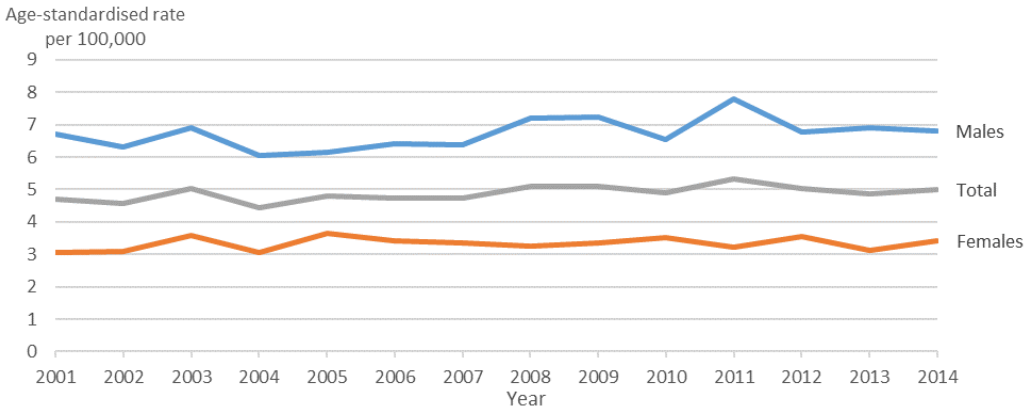
The New Zealand Mortality Collection collects registrations of all deaths in New Zealand. This indicator reports melanoma deaths (ICD-10AM C43) from 2001 to 2014. Data have been pooled for some years to give sufficient numbers for analysis. Analyses have excluded overseas visitors.

Melanoma mortality rates stay relatively stable

In 2014, 376 people died from melanoma in New Zealand. Melanoma was the 6th most common cancer that people died from in New Zealand in 2014, behind lung cancer, colon cancer, prostate cancer, breast cancer and pancreatic cancer. Males represented almost two-thirds of the deaths from melanoma in 2014 (235 male deaths, compared with 141 female deaths).

The melanoma mortality rate has stayed relatively stable since 2008 (Figure 1). The melanoma mortality rate was consistently higher for males than females over the last 15 years. In 2014, the age-standardised rate of melanoma deaths was 6.8 per 100,000 for males (95% confidence interval 6.0–7.7), compared with 3.4 per 100,000 for females (2.8–4.1).

Figure 1 : Melanoma deaths in New Zealand, by sex, 2001–2014 (age-standardised rate per 100,000)



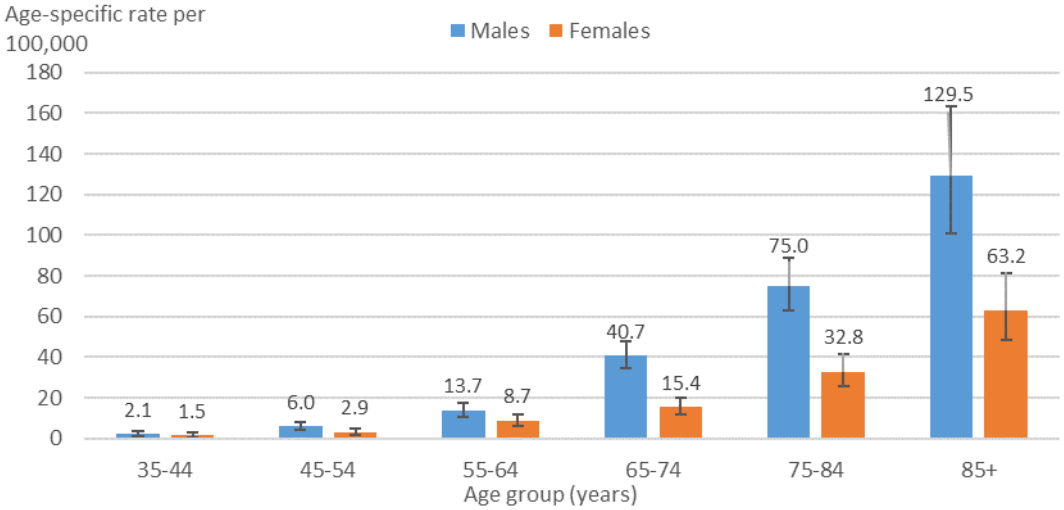
Source: New Zealand Mortality Collection

Melanoma deaths

Melanoma deaths were more common in the older age groups

In 2013–14, melanoma deaths were more common in the older age groups, particularly among people aged 85 years and over (Figure 2). Males had a much higher rate of melanoma cancer deaths than females in the age groups 65–74, 75–84 and 85+ years.

Figure 2 : Melanoma deaths, by age group and sex, 2013–14 (age-specific rate per 100,000)

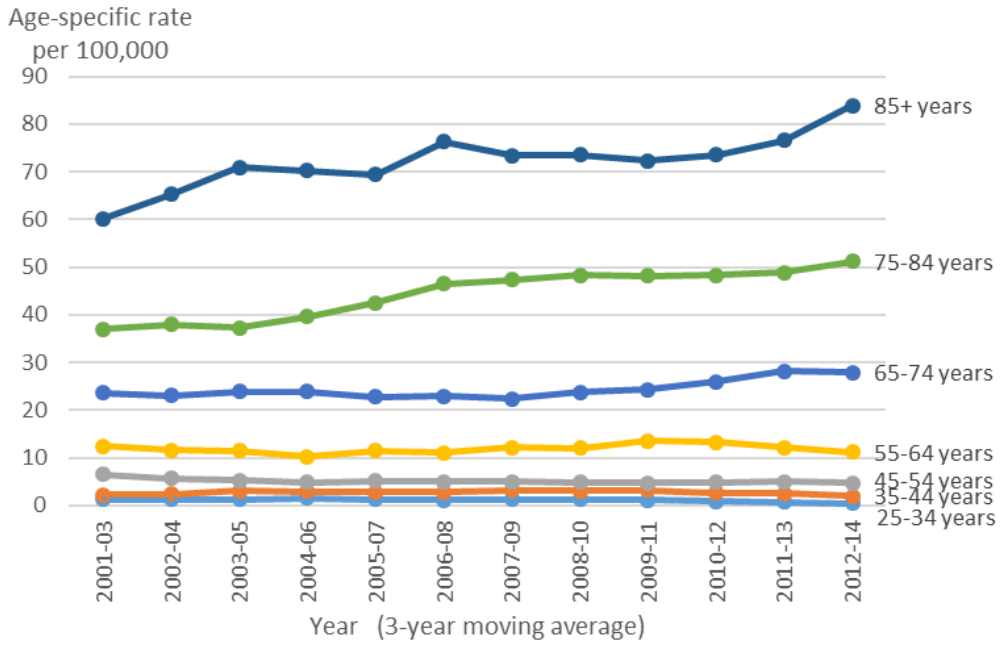


Source: New Zealand Mortality Collection

Mortality rate increasing in the older age groups

Since 2001, the melanoma mortality rate has increased substantially in the age groups 75–84 years and 85+ years (Figure 3). The mortality rates have remained relatively stable in the other age groups.

Figure 3: Melanoma deaths, by age group, 2001–14 (age-specific rate per 100,000)



Notes: Three-year moving averages have been used.
Source: New Zealand Mortality Collection

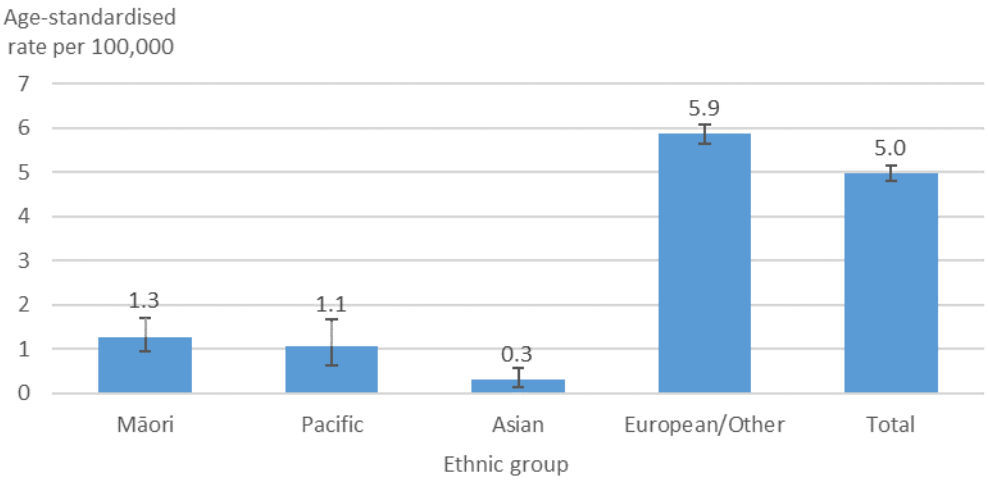
Melanoma deaths

Mostly people of European/Other ethnicity affected

In 2014, almost all melanoma deaths were for people of European/Other ethnicity (369 out of 376 deaths, 98%). Only a small number of melanoma deaths were among Māori (3 deaths), Pacific peoples (2 deaths) and Asians (2 deaths).

Standardising for age, Māori, Pacific peoples and Asians also had much lower mortality rates for melanoma than people of European/Other ethnicity in the ten-year period 2005–14 (Figure 4).

Figure 4: Melanoma deaths, by ethnic group, 2005–14 (age-standardised rate per 100,000)



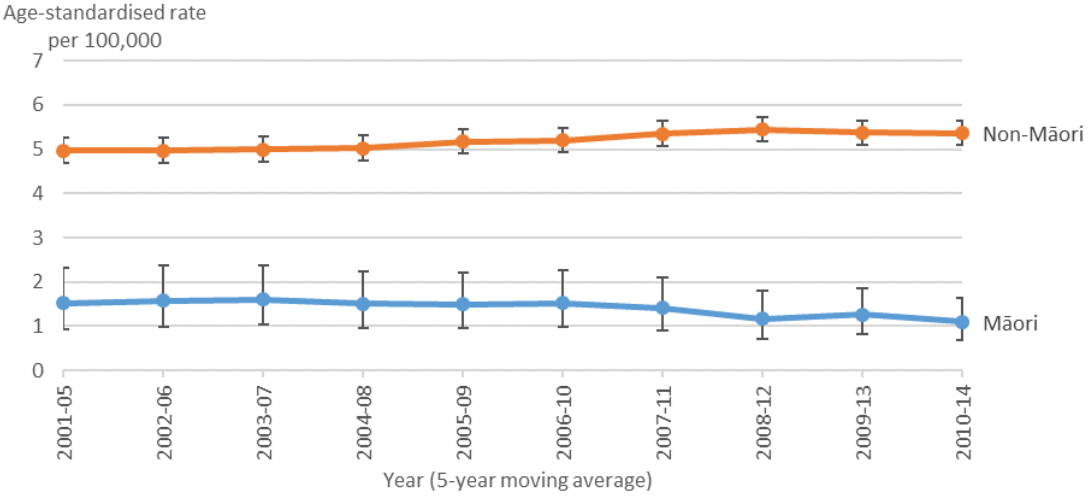
Notes: Prioritised ethnicity has been used, whereby people reporting multiple ethnicities were prioritised to an ethnic group in the following order: Māori, Pacific, Asian, European/Other.

Source: New Zealand Mortality Collection

Relatively stable mortality rates for melanoma for Māori and non-Māori

The melanoma mortality rates for Māori and non-Māori have remained relatively consistent since 2001 (Figure 5). The rates for non-Māori have stayed much higher than the rates for Māori over this time period. In 2010–14, the age-standardised mortality rate for non-Māori was 5.4 per 100,000, compared with 1.1 per 100,000 for Māori.

Figure 5: Melanoma mortality rate, by Māori/non-Māori, 2001–14 (age-standardised rate per 100,000) (5-year moving averages)



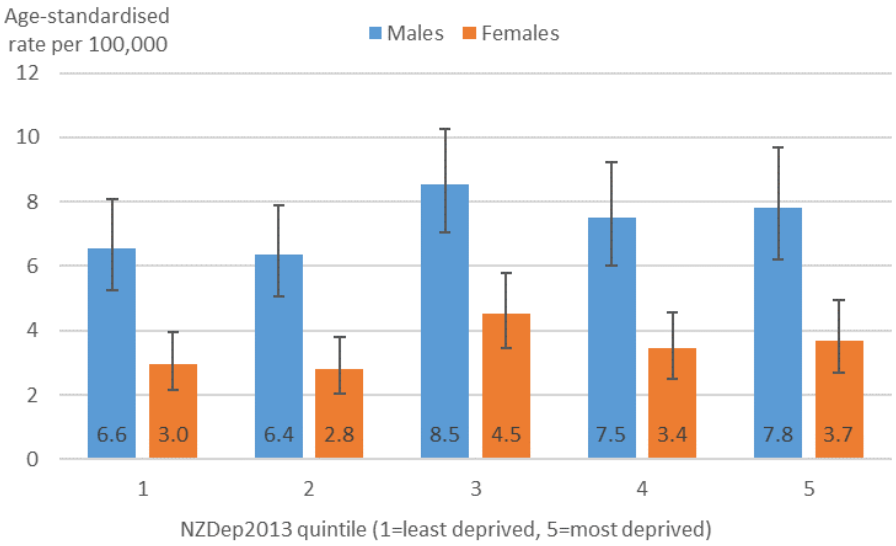
Source: New Zealand Mortality Collection

Melanoma deaths

Melanoma mortality rates are relatively consistent across socioeconomic deprivation quintiles

The melanoma mortality rates were relatively similar across NZDep2013 quintiles in 2013–2014, for both males and females (Figure 6).

Figure 6: Melanoma mortality rate, by sex and NZ Index of Deprivation 2013 quintiles, 2013–14 (age-standardised rate per 100,000)

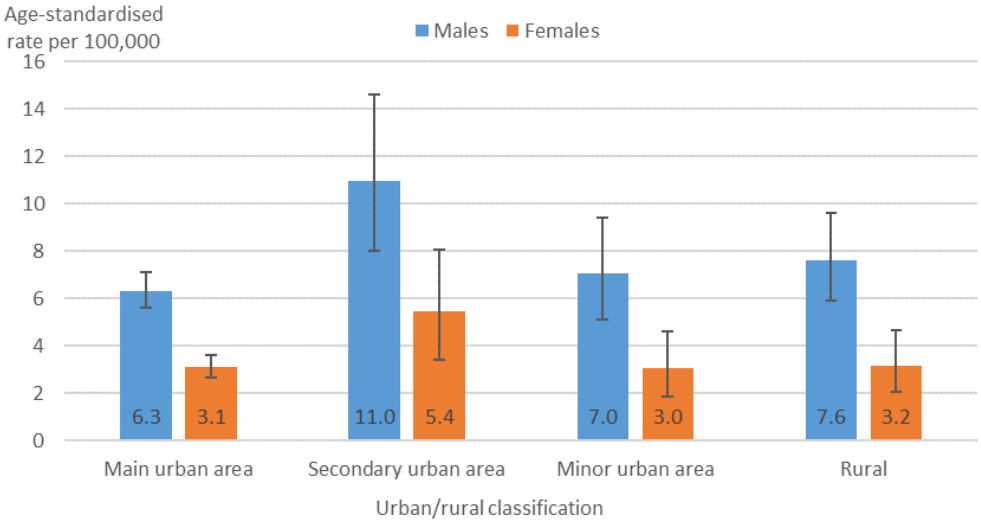


Source: New Zealand Mortality Collection

People living in secondary urban areas have higher melanoma mortality rates

In 2013–14, the melanoma mortality rate was higher in secondary urban areas than other areas, particularly for males (Figure 7).

Figure 7: Melanoma mortality rates, by sex and urban/rural classification, 2013–14 (age-standardised rate per 100,000)



Notes: Urban/rural classification is for 2013. Main urban areas refer to major towns and cities with a population of 30,000 or more. Secondary urban areas are smaller towns with a population of 10,000–29,999 people. Minor urban areas are towns with a population of 1,000–9,999. Rural areas include rural centres, and rural areas outside of these.

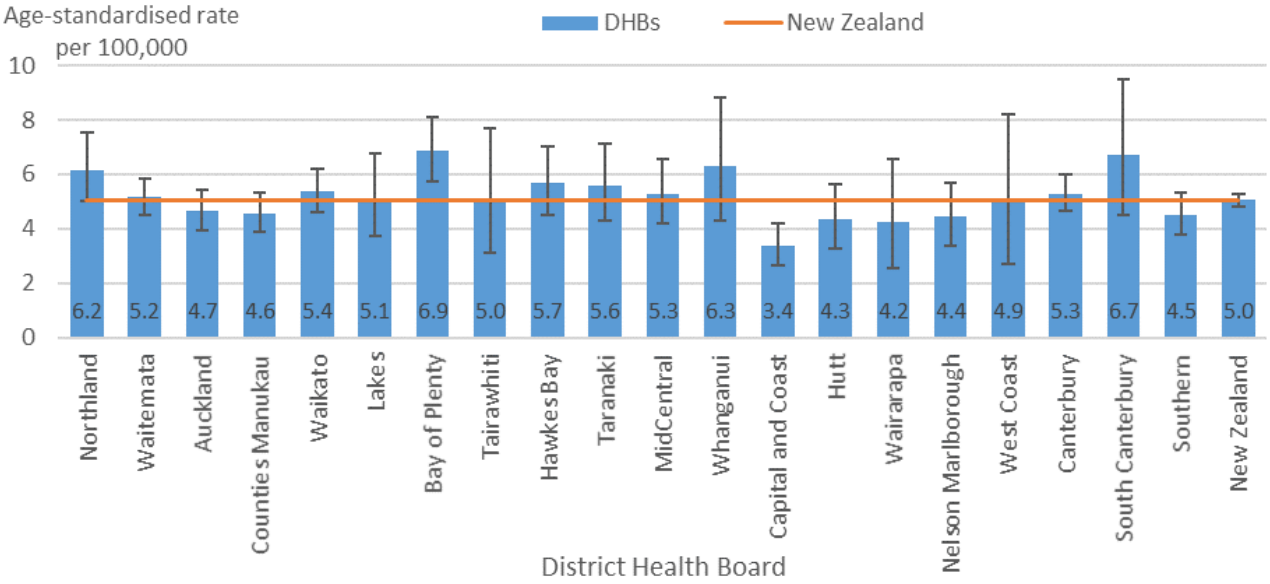
Source: New Zealand Mortality Collection

Melanoma deaths

Highest melanoma mortality rate in Bay of Plenty DHB

There were substantial regional differences in the melanoma mortality rate by District Health Board (DHB) in the five-year period 2009–14 (Figure 8). The highest melanoma mortality rates were in Bay of Plenty, South Canterbury, Whanganui and Northland DHBs. The lowest melanoma mortality rate was in Capital and Coast DHB.

Figure 8: Melanoma mortality rate, by District Health Board, 2009–14 (age-standardised rate per 100,000)



Source: New Zealand Mortality Collection

DATA SOURCES

Data come from the New Zealand Mortality Collection, from the Ministry of Health. Analyses excluded overseas visitors. For more information about this indicator, see the metadata.

RELATED INDICATORS

Related environmental health indicators for UV exposure, available from the EHINZ website (www.ehinz.ac.nz), include:

- Melanoma cancer registrations
- Non-melanoma skin cancer deaths.

REFERENCES

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