

Non-melanoma skin cancer deaths

HIGHLIGHTS:

- In 2014, 145 people died from non-melanoma skin cancer (NMSC) in New Zealand.
- The mortality rate for non-melanoma skin cancer has remained relatively stable since 2001.
- In 2014, non-melanoma skin cancer mortality rates were higher in males, and in older age groups, especially in 75+ years. Almost all NMSC deaths were in people of European/Other ethnicity (143 out of 145 deaths, 99%).
- Non-melanoma skin cancer mortality rates were higher in more socioeconomically deprived areas (NZDep2013 quintiles 3–5), than in the least deprived areas (quintile 1).
- Non-melanoma skin cancer mortality rates were higher in secondary urban areas than other areas, particularly for males. By District Health Board (DHB), the non-melanoma skin cancer mortality rate was highest in Wairarapa DHB, and lowest in Waitemata DHB.



Relevance of non-melanoma skin cancer to environmental health

Non-melanoma skin cancer refers to all types of skin cancer that are not melanoma. There are two main types of non-melanoma skin cancer: basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). There is strong evidence that excessive UV exposure is a risk factor for these types of skin cancer (WHO 2010). Although both BCC and SCC are common, BCC is rarely fatal (BPAC 2013).

Data for this indicator

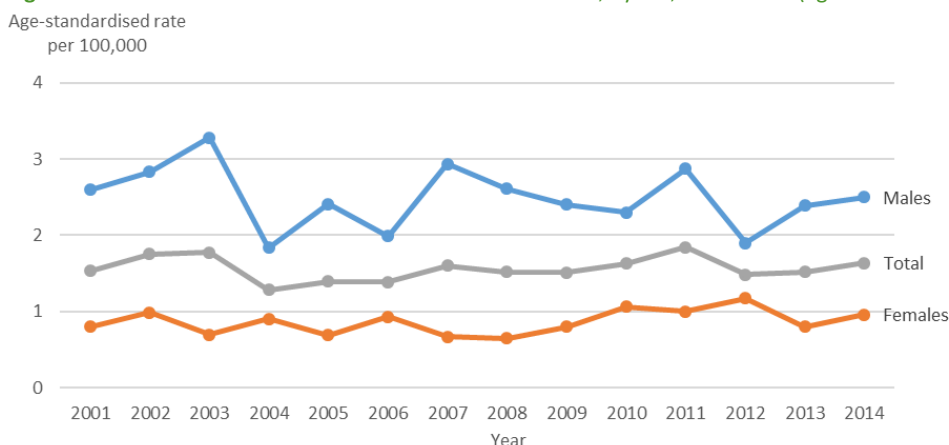
The New Zealand Mortality Collection collects registrations of all deaths in New Zealand. This indicator reports non-melanoma skin cancer deaths (ICD-10AM C44) from 2001 to 2014. The mortality dataset does not allow differentiation between BCC and SCC. Data have been pooled for some years to give sufficient numbers for analysis. Analyses have excluded overseas visitors.

Non-melanoma skin cancer mortality rates stay relatively stable

In 2014, 145 people died from non-melanoma skin cancer in New Zealand. Males represented two-thirds of the deaths from non-melanoma skin cancer in 2014 (95 male deaths, compared with 50 female deaths).

Since 2001, the age-standardised rate of non-melanoma skin cancer deaths has been relatively stable (Figure 1). In 2014, the mortality rate for non-melanoma skin cancer was much higher for males (2.5 per 100,000, 95% confidence interval 2.0–3.1) than females (1.0 per 100,000, 0.7–1.3).

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



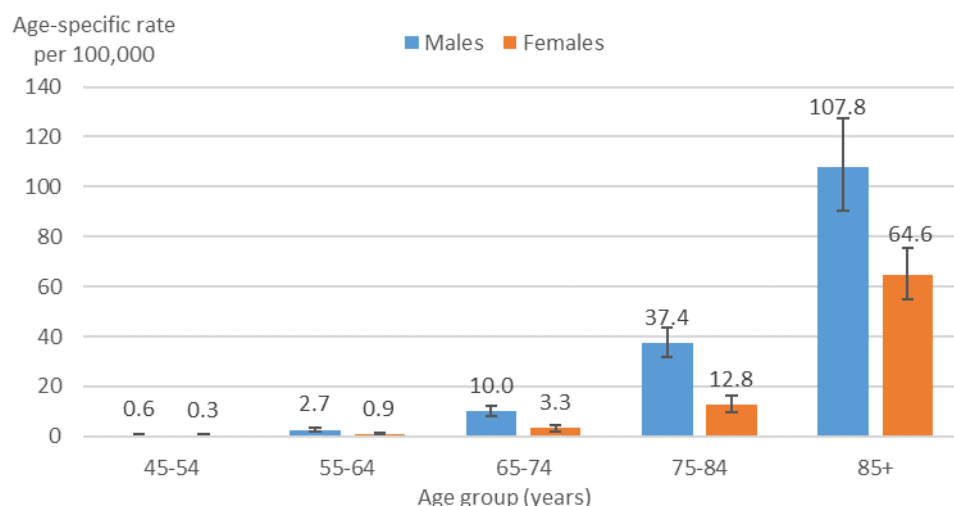
Source: New Zealand Mortality Collection

Non-melanoma skin cancer deaths

Non-melanoma skin cancer deaths were more common in the older age groups

In 2010–14, non-melanoma skin cancer deaths were much more common in the older age groups, particularly among people aged 85 years and over (Figure 2). Males had a much higher mortality rate for non-melanoma skin cancer than females in all age groups, but particularly in the age groups 65–74, 75–84 and 85+ years.

Figure 2 : Non-melanoma skin cancer deaths in New Zealand, by age group and sex, 2010–14 (age-specific rate per 100,000)



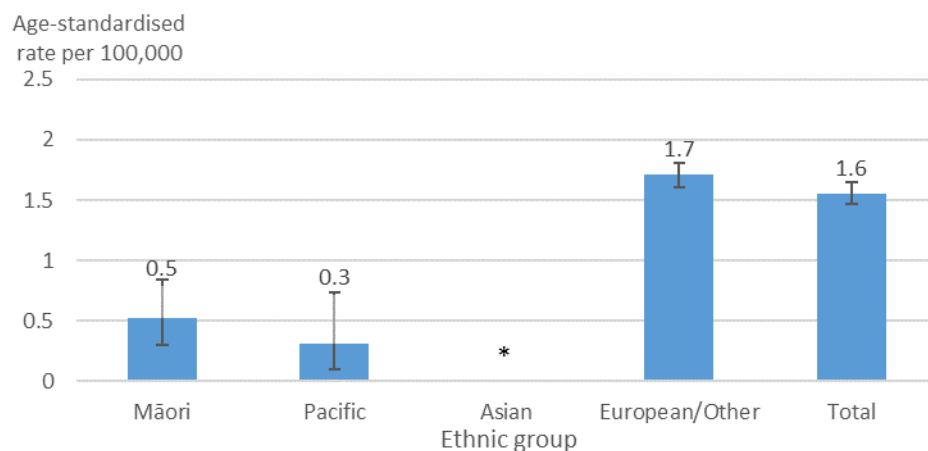
Source: New Zealand Mortality Collection

Mostly people of European/Other ethnicity affected

In 2014, almost all non-melanoma skin cancer deaths were among people of European/Other ethnicity (143 out of 145 deaths, 99%).

Standardising for age, Māori and Pacific peoples had much lower mortality rates for non-melanoma skin cancer than people of European/Other ethnicity in the ten-year period 2005–14 (Figure 3). The age-standardised mortality rate for Asians was suppressed due to low numbers.

Figure 3 : Non-melanoma skin cancer deaths in New Zealand, by ethnic group, 2005–14 (age-standardised rate per 100,000)



*Results for Asians have been suppressed due to counts less than 5.

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

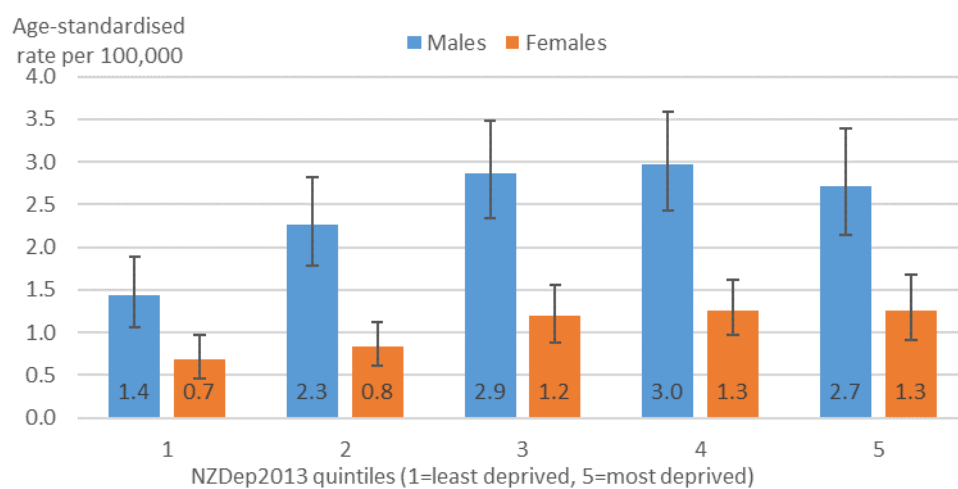
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Higher non-melanoma skin cancer mortality rates in more deprived areas

The non-melanoma skin cancer mortality rates were higher in more deprived areas (NZDep2013 quintiles 3–5) than in the least deprived areas (quintile 1) in 2010–2014, for both males and females (Figure 4).

Standardising for age, people living in the most deprived areas (NZDep2013 quintile 5) were 1.8 times as likely to die from non-melanoma skin cancer than those living in the least deprived areas (quintile 1) (95% confidence interval 1.4–2.4).

Figure 4: Non-melanoma skin cancer mortality rate, by sex and NZ Index of Deprivation 2013 quintiles, 2010–14 (age-standardised rate per 100,000)

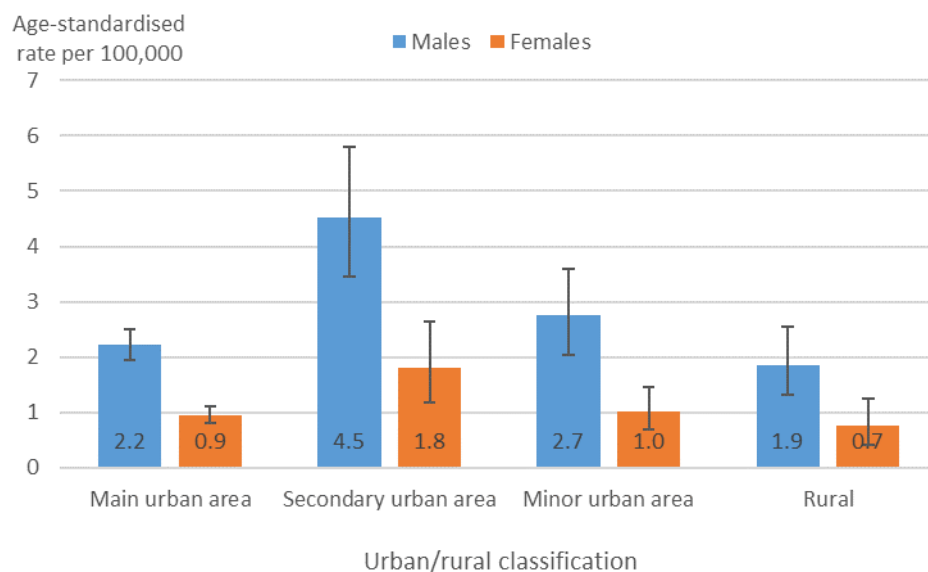


Source: New Zealand Mortality Collection

People living in secondary urban areas have higher mortality rates for non-melanoma skin cancer

In 2010–14, the non-melanoma skin cancer mortality rate was higher in secondary urban areas than other areas, for both males and females (Figure 5).

Figure 5: Non-melanoma skin cancer mortality rates, by sex and urban/rural classification, 2010–14 (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.

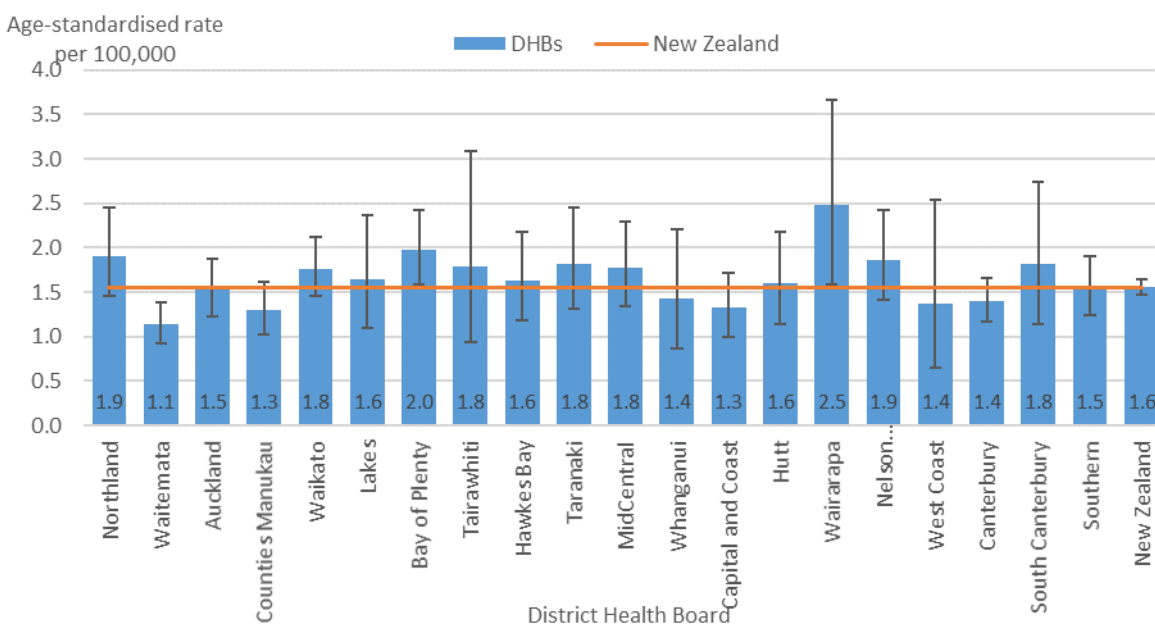
Source: New Zealand Mortality Collection

Non-melanoma skin cancer deaths

Highest non-melanoma skin cancer mortality rate in Wairarapa DHB

There were substantial regional differences in the non-melanoma skin cancer mortality rate by District Health Board (DHB) in the ten-year period 2005–14 (Figure 7). The highest melanoma mortality rate was in Wairarapa DHB. The lowest mortality rate was in Waitemata DHB.

Figure 7: Non-melanoma skin cancer mortality rate, by District Health Board, 2005–14 (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. 95% confidence intervals have been presented as error bars in graphs. 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
- Melanoma deaths.

REFERENCES

- BPAC. 2013. Managing non-melanoma skin cancer in primary care. *BPJ* 57: 4–16. Accessed online (October 2017): <http://www.bpac.org.nz/BPJ/2013/December/docs/BPJ57-non-melanoma.pdf>
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