

Non-melanoma skin cancer deaths

This factsheet presents statistics about deaths from skin cancers other than melanoma in New Zealand. Skin cancer is a persisting issue in New Zealand, as New Zealand has higher than average UV levels compared with other countries at similar latitudes.

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Key facts



In 2018, 204 people died from non-melanoma skin cancer (NMSC) in New Zealand. Rates of NMSC have increased from 2012 (1.5 per 100,000) to 2018 (2.0 per 100,000).



NMSC mortality rates have increased in men from 2012 (1.9 per 100,000) to 2018 (3.1 per 100,000) while female rates have remained stable at around 1.0 per 100,000.



In 2017-2018, NMSC mortality rates increased with age, with the 85+ year age group having rates roughly four times greater than the 75-84 year age group.



In 2009-2018, NMSC mortality rates in the European/Other ethnic group (1.9 deaths per 100,000) were almost four times greater than the next most affected ethnic group, Māori.



In 2014-18, rates were higher in the Wairarapa and South Canterbury district health boards (DHBs) compared to the national rate.

Background information

Types of skin cancer

Non-melanoma skin cancer (NMSC) refers to all types of skin cancer that are not melanoma. The two most common varieties of NMSC are basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). There is strong evidence that excessive UV exposure is a risk factor for both types (WHO 2010). Although NMSCs are common, they are rarely fatal (BPAC 2013). BCC and SCC are not included in the New Zealand skin cancer registry (Ministry of Health 2021), making it difficult to determine the impact these conditions have in New Zealand beyond mortality (BPAC 2013). An investigation in Auckland estimated that 78,000–87,000 cases of invasive NMSC occurred across New Zealand in 2016, based on 2008 data (Pondicherry 2018).

Non-melanoma skin cancer mortality rates increased since 2012

In 2018, 204 people died from NMSC in New Zealand, an increase from previous years (figure 1). Given there were 294 melanoma deaths recorded in the same year, approximately 40% of all skin cancer deaths in 2018 were NMSCs. Males represented roughly two-thirds of the total number of NMSC deaths in 2018 – 137 male deaths compared to 67 female deaths.

NMSC mortality rates in New Zealand have increased from 2012 (1.5 per 100,000) to 2018 (2.0 per 100,000) (figure 1). This increase was primarily driven by males, whose rates increased from 2012 (1.9 per 100,000) to 2018 (3.1 per 100,000) (figure 2). Over this time, female rates have remained at approximately 1.0 per 100,000.

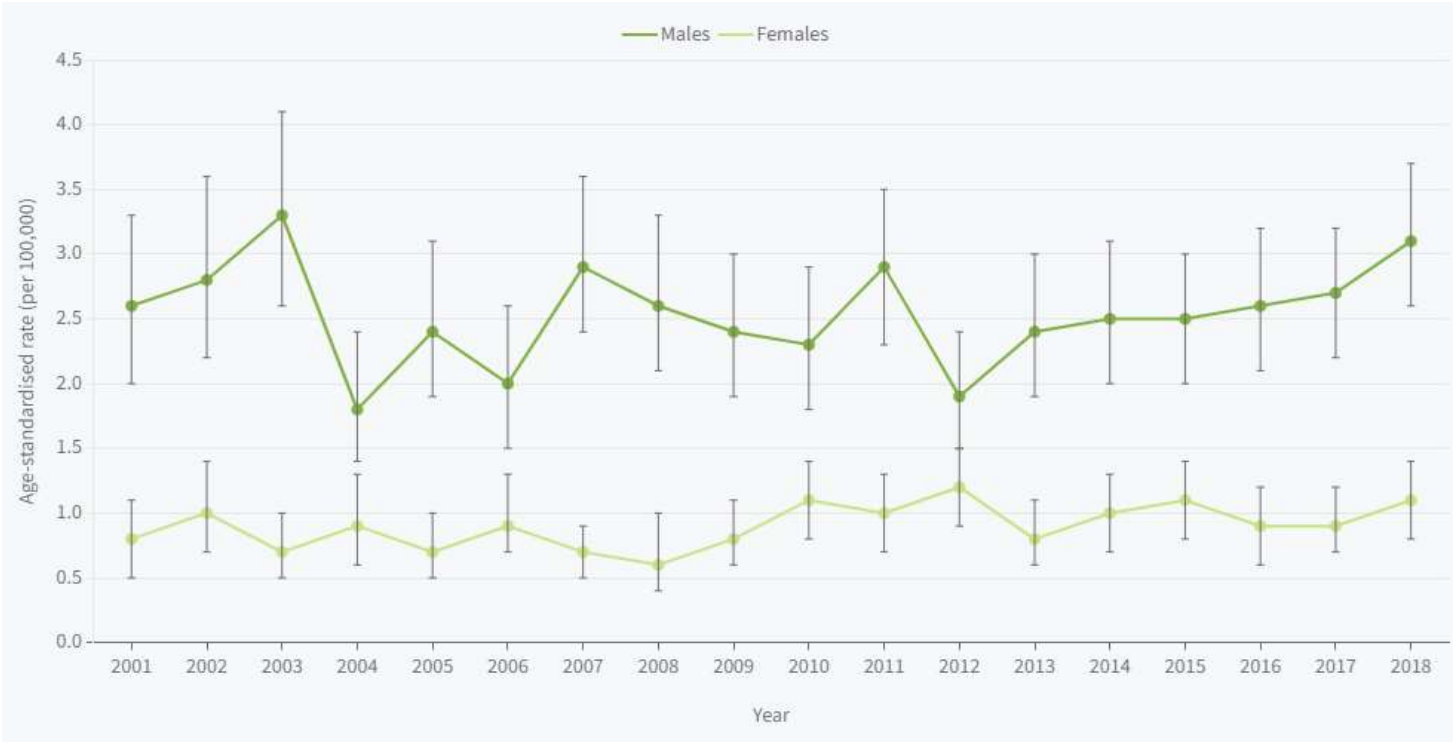
Figure 1 NMSC mortality rates over time, 2001–18



Note: 95% confidence intervals have been presented as error bars. See Metadata for more information on how to interpret this graph.

Source: New Zealand Mortality Collection

Figure 2 NMSC mortality rates over time, by sex, 2001–18



Note: 95% confidence intervals have been presented as error bars. See [Metadata](#) for more information on how to interpret this graph.

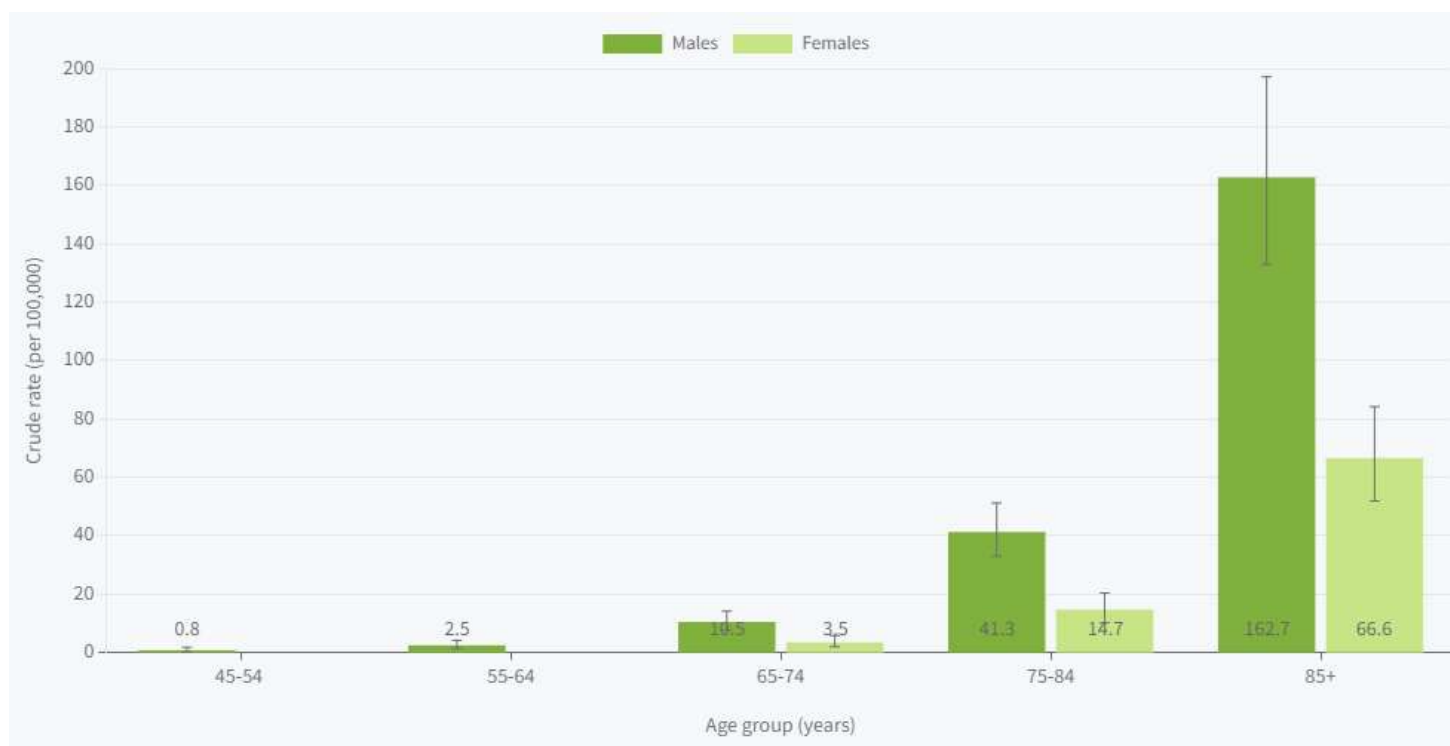
Source: New Zealand Mortality Collection

According to the International Agency for Research on Cancer, New Zealand was estimated to have the third highest NMSC mortality rate (3.7 deaths per 100,000) in the world in 2020. However, after standardising for age, New Zealand’s estimated mortality rate in 2020 (1.3 deaths per 100,000) was lower than 21 other nations (Global Cancer Observatory 2020).

Non-melanoma skin cancer mortality rates increased with age

In 2017–18, NMSC mortality rates were highest in the 85+ year age group for both males (162.7 deaths per 100,000) and females (66.6 deaths per 100,000) (figure 3). In age groups 65+ years, males had higher rates than females in the same age group. In age groups younger than 65 years, fewer than 5 females died from melanoma over this 2 year period.

Figure 3 NMSC mortality rates over time, by age group and sex, 2017–18



Note: 95% confidence intervals have been presented as error bars. The rate is suppressed due to an unreliable estimate with small numbers. See [Metadata](#) for more information on how to interpret this graph.

Source: New Zealand Mortality Collection

People of European/Other Ethnicity were most affected

From 2009–18, the age-standardised rate for the European/Other ethnic group (1.9 per 100,000) is almost four times that of the next most affected ethnic group, Māori (0.5 per 100,000) (table 1).

Table 1 Non-melanoma skin cancer mortality, by prioritised ethnic groups, 2009–18

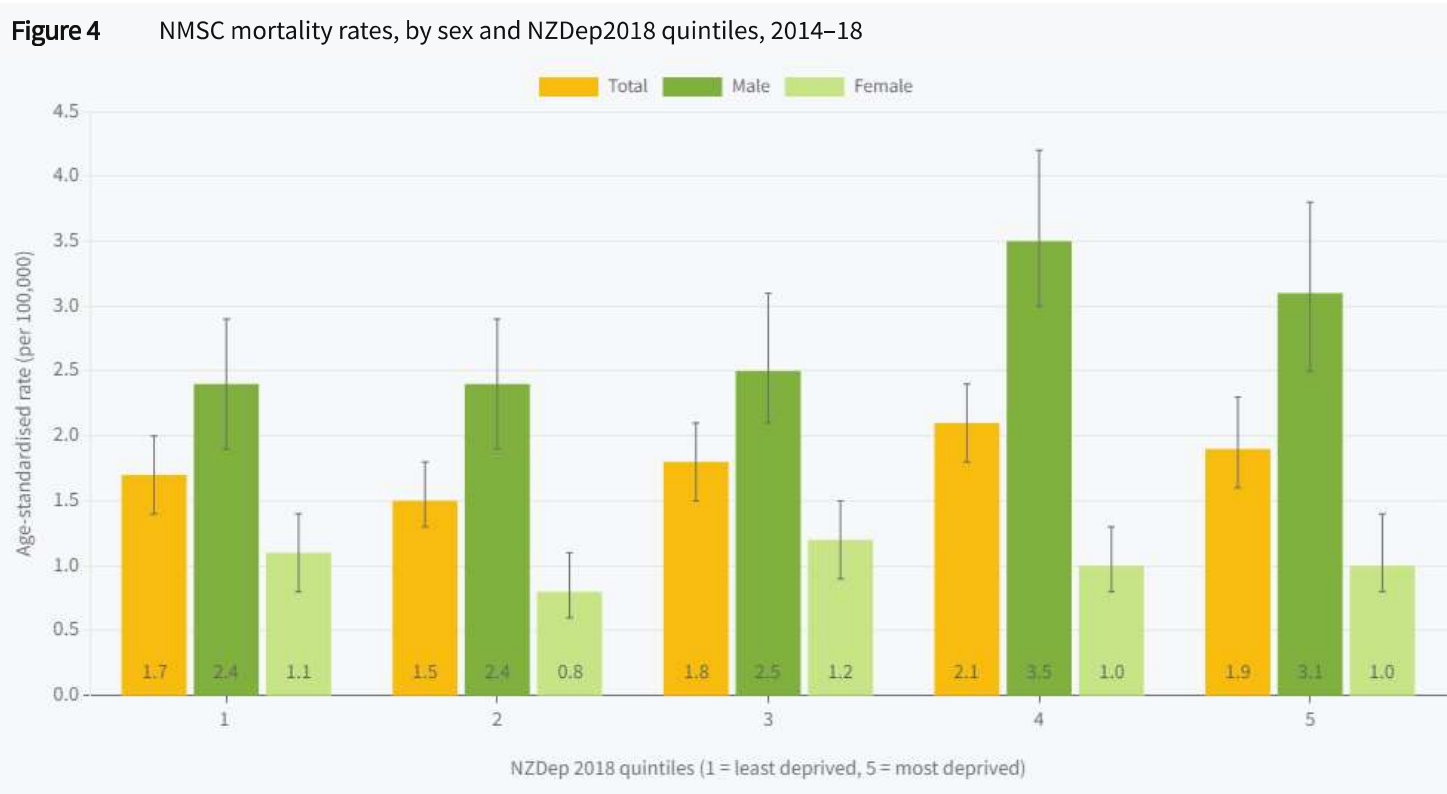
Ethnic group	Number of deaths	Crude rate (per 100,000)	Age-standardised rate (per 100,000)
European/Other	1467	5.0 (4.7–5.2)	1.9 (1.8–2.0)
Māori	23	0.3 (0.2–0.5)	0.5 (0.3–0.8)
Pacific	6	0.2 (0.1–0.5)	*
Asian	5	0.1 (0.1–0.3)	*
Total	1501	3.3 (3.1–3.5)	1.7 (1.6–1.8)

Note: * The rate is suppressed due to an unreliable estimate with small numbers. Prioritised ethnic groups have been used. See [Metadata](#) for more information on how to interpret this graph. Rates for the Pacific and Asian groups are based on a low number of deaths and caution should be taken when interpreting these results.

Source: New Zealand Mortality Collection

Higher rates occurred for males living in more deprived areas

In 2014–18, NMSC mortality rates were elevated for males living in the most deprived areas (NZDep2018 quintiles 4 and 5) compared to males living in the least deprived areas (quintiles 1 and 2) (figure 4). The same trend was not present for females.



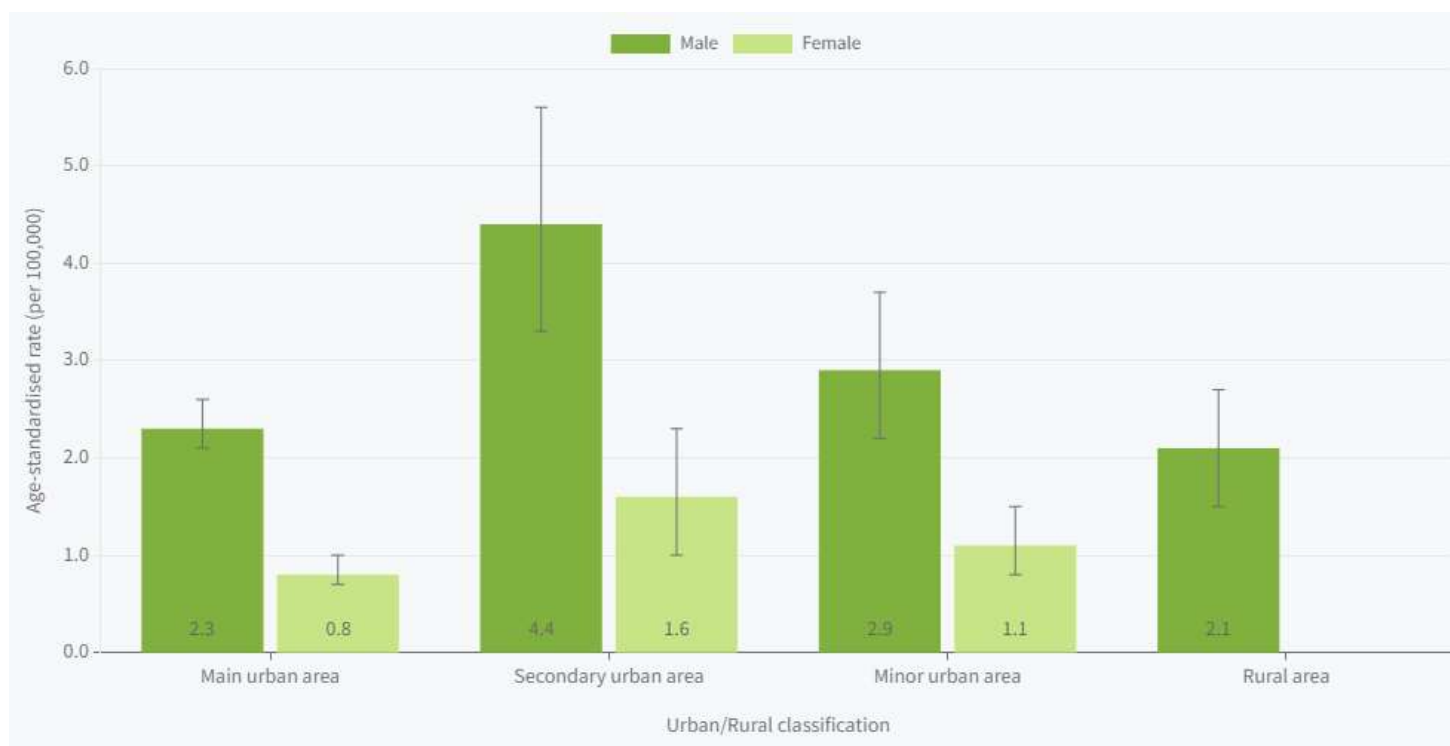
Note: 95% confidence intervals have been presented as error bars. The rate is suppressed due to an unreliable estimate with small numbers. See [Metadata](#) for more information on how to interpret this graph.

Source: New Zealand Mortality Collection

People in secondary urban areas were most affected

In 2013–17, males in all urban-rural area types had NMSC mortality rates that were almost three times the rate for females in the same area type (figure 5). Secondary urban areas, towns with a population of 10,000–29,999, had the highest rates in New Zealand.

Figure 5 NMSC mortality rates, by sex and urban-rural classification, 2013–17



Note: *The rate is suppressed as it is an unreliable estimate based on small numbers. 95% confidence intervals have been presented as error bars. The Statistics New Zealand urban-rural classification for 2013 has been used. See [Metadata](#) for more information on how to interpret this graph.

Source: New Zealand Mortality Collection

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Data for this indicator

This indicator includes the most recent data available from the New Zealand Mortality Collection, provided to EHINZ by the Ministry of Health in August, 2021.

The crude rates presented in this factsheet do not take into account varying age distributions when comparing between populations.

The age-standardised rates presented in this factsheet take into account varying age distributions when comparing between populations.

For additional information, see the metadata link below.

References

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