# Non-melanoma skin cancer mortality

This report presents an analysis of the most recent data on deaths from skin cancers other than melanoma in Aotearoa New Zealand available from the New Zealand Mortality Collection (2021 calendar year), provided to EHINZ by Health New Zealand – Te Whatu Ora (Health NZ) in December 2025.

## Key facts

- There were 186 deaths from non-melanoma skin cancer (NMSC) in New Zealand in 2021, down from 195 in 2020.
- In 2021, the NMSC mortality rate for men was 2.4 per 100,000, compared to 1.0 per 100,000 for females.
- In 2020–21, 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 2012–21, NMSC mortality rates in the European/Other ethnic group (1.9 deaths per 100,000) were nearly four times greater than the next most affected ethnic group, Māori.
- In 2017–21, the Taranaki and South Canterbury districts had high NMSC mortality rates.

## UV radiation exposure is a risk factor for non-melanoma skin cancer

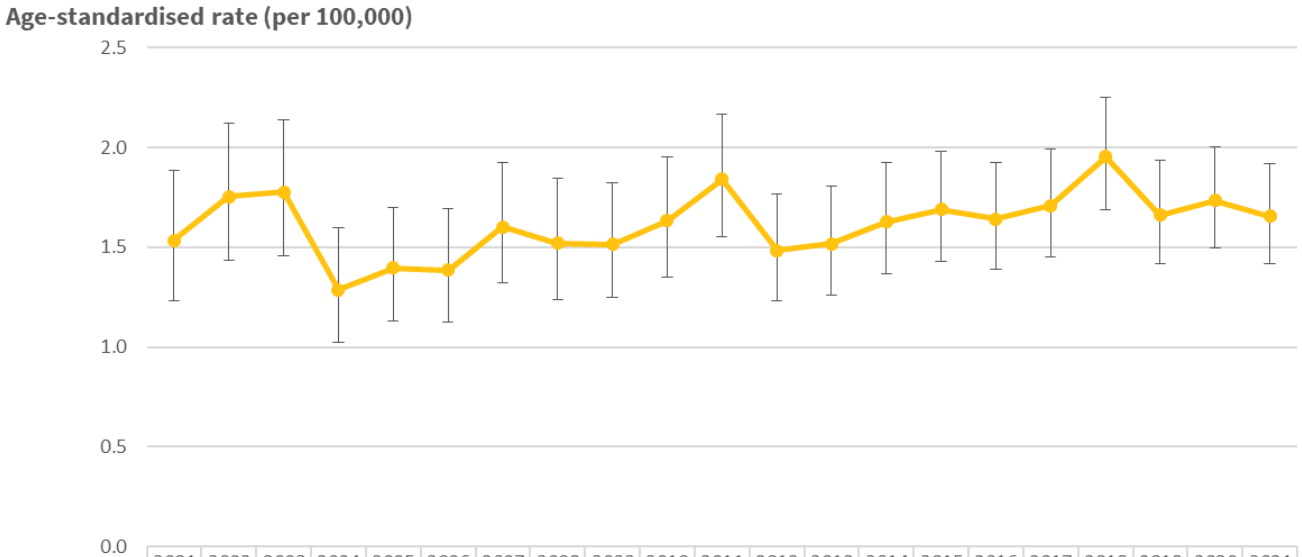
Non-melanoma skin cancer (NMSC) refers to all types of skin cancer that are not melanoma. The two most common varieties of NMSC are basal cell carcinoma (BCC) and squamous cell carcinoma (SCC). There is strong evidence that excessive UV exposure is a risk factor for both types (WHO 2010). Although NMSCs are common, they are rarely fatal (BPAC 2013). BCC and SCC are not included in the New Zealand skin cancer registry (Ministry of Health 2024), 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 stable over time

In 2021, 186 people died from NMSC in New Zealand, down from 195 in 2020, but still an increase from 175 in 2019. Given there were 333 melanoma deaths recorded in the same year, approximately 36% of all skin cancer deaths in 2021 were NMSCs. Males represented roughly two-thirds of the total number of NMSC deaths in 2021 – 118 male deaths compared to 68 female deaths.

The 2021 NMSC mortality rate was 1.7 deaths per 100,000 (95%CI 1.4–1.9). This rate was similar to the two previous years but lower than the 2018 rate (2.0 per 100,000, 95%CI 1.7–2.3) (Figure 1). The changes in rates are mostly due to changes in the rates of males. While rates for females over the past 10 years have remained at approximately 1.0 per 100,000, rates for males fluctuated around 2.5 per 100,000 except in 2018, when the rate increased to 3.1 per 100,000 (95%CI 2.6–3.7) (Figure 2).

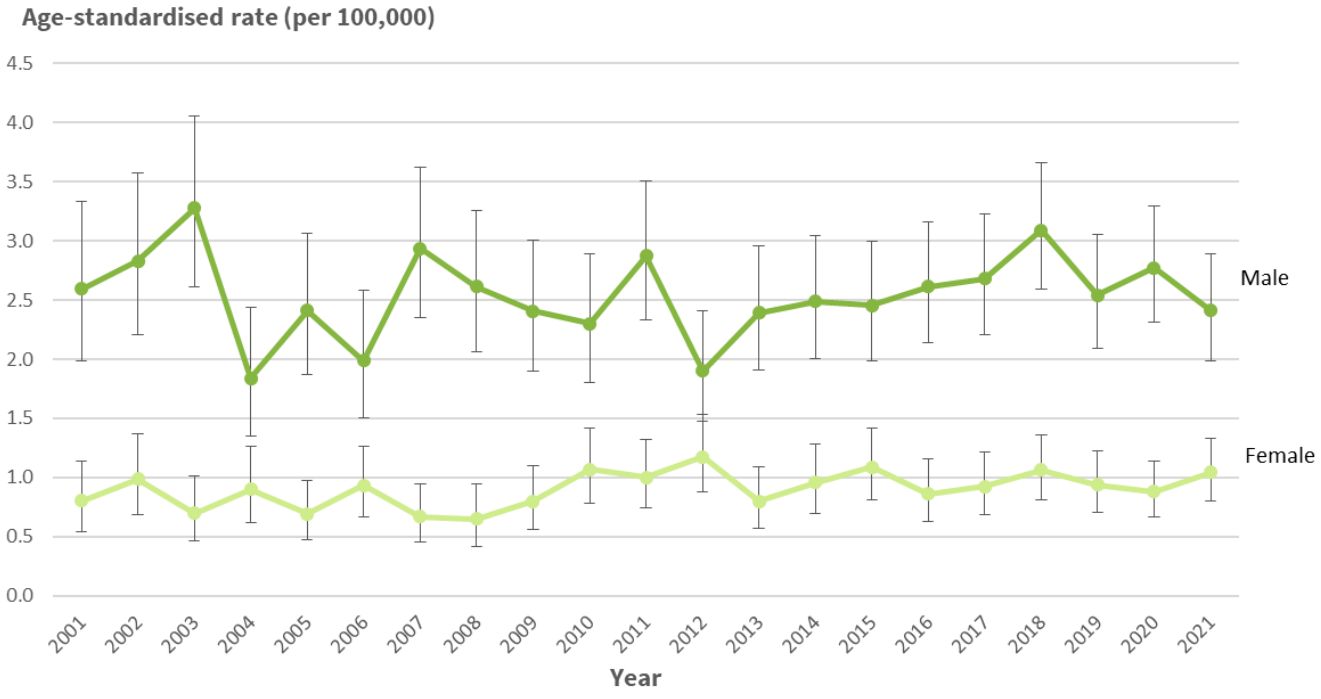
## Figure 1: NMSC mortality rates, 2001–2021




| | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ASR per 100,000 | 1.5 | 1.8 | 1.8 | 1.3 | 1.4 | 1.4 | 1.6 | 1.5 | 1.5 | 1.6 | 1.8 | 1.5 | 1.5 | 1.6 | 1.7 | 1.6 | 1.7 | 2.0 | 1.7 | 1.7 | 1.7 |
| Count | 96 | 111 | 115 | 85 | 102 | 102 | 122 | 108 | 119 | 129 | 154 | 132 | 132 | 145 | 157 | 159 | 170 | 204 | 175 | 195 | 186 |

Note: 95% confidence intervals have been presented as vertical bars.
Source: New Zealand Mortality Collection

## Figure 2: NMSC mortality rates, by sex, 2001–2021

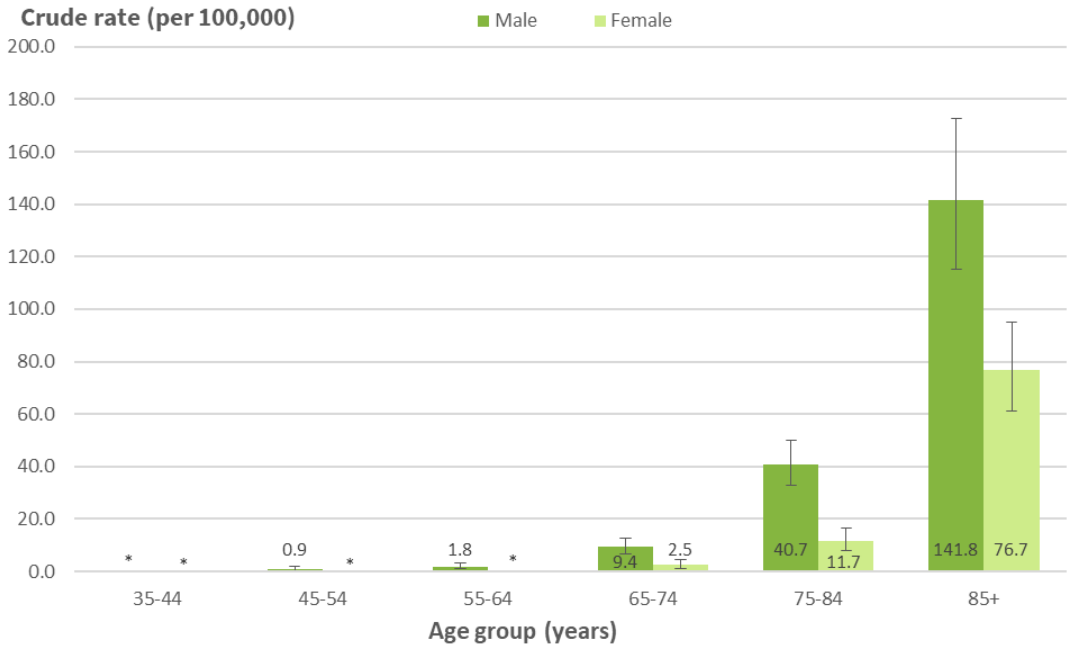



Note: 95% confidence intervals have been presented as vertical bars.
Source: New Zealand Mortality Collection

## Non-melanoma mortality rates increase with age

In 2020–21, NMSC mortality rates were highest in the 85+ year age group for both males (141.8 deaths per 100,000, 95%CI 115.1–172.8) and females (76.7 deaths per 100,000, 95%CI 61.1–95.1) (Figure 3). Males had higher rates than females for all age groups.

**Figure 3: Non-melanoma skin cancer rates, by age group and sex, 2020–21**




Notes: 95% confidence intervals have been presented as vertical bars. * = Rate not shown due to a low count of deaths (<5).
Source: New Zealand Mortality Collection

## European/Other ethnic group has the highest mortality rate

The age-standardised rate (aggregated over ten years) for the European/Other ethnic group (1.9 per 100,000, 95%CI 1.8–2.0) was nearly four times that of the next most affected ethnic group, Māori (0.5 per 100,000, 95%CI 0.3–0.7) (Table 1).

**Table 1: Non-melanoma skin cancer mortality, by ethnic group (prioritised), 2012–21**

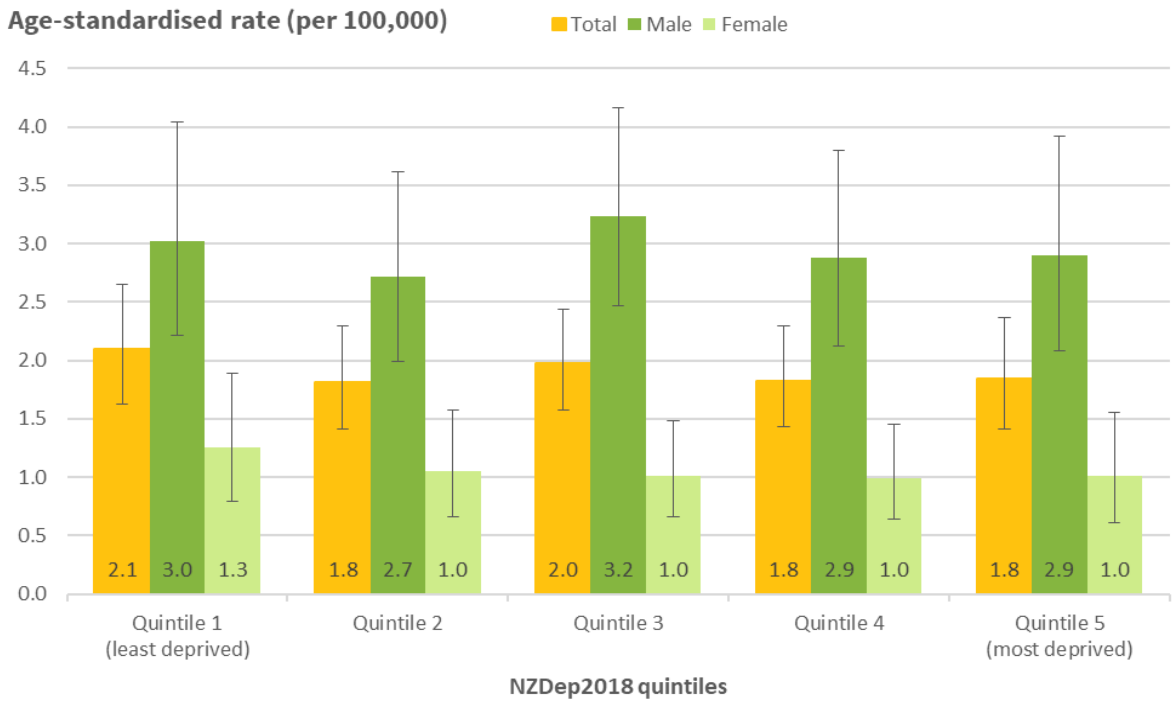
| Ethnic group | Number of deaths | Crude rate per 100,000 (95%CI) | Age-standardised rate per 100,000 (95%CI) |
|---|---|---|---|
| Māori | 25 | 0.3 (0.2–0.5) | 0.5 (0.3–0.7) |
| Pacific | 12 | 0.4 (0.2–0.7) | * |
| Asian | 8 | 0.1 (0.1–0.2) | * |
| European/Other | 1,610 | 5.4 (5.1–5.6) | 1.9 (1.8–2.0) |
| **Total** | **1,655** | **3.5 (3.3–3.7)** | **1.7 (1.6–1.8)** |

Notes: * = Rate was suppressed due to a low count of deaths (<20). Crude 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

## No consistent trend in rates by neighbourhood deprivation

Mortality rates from NMSC did not show a consistent trend across NZDep2018 quintiles. The highest aggregated rates for 2020–21 were for quintiles 1 (least deprived) (2.1 per 100,000, 95%CI 1.6–2.6) and 3 (2.0 per 100,000, 95%CI 1.6–2.4), while quintile 5 (the most deprived areas) had a similar rate to quintiles 2 and 4 (1.8 per 100,000, 95%CI 1.4–2.4) (Figure 4). The age-standardised NMSC mortality rate for males was nearly three times higher than that for females in all quintiles.

**Figure 4: Non-melanoma mortality rates, by NZDep2018 quintiles and sex, 2020–21**

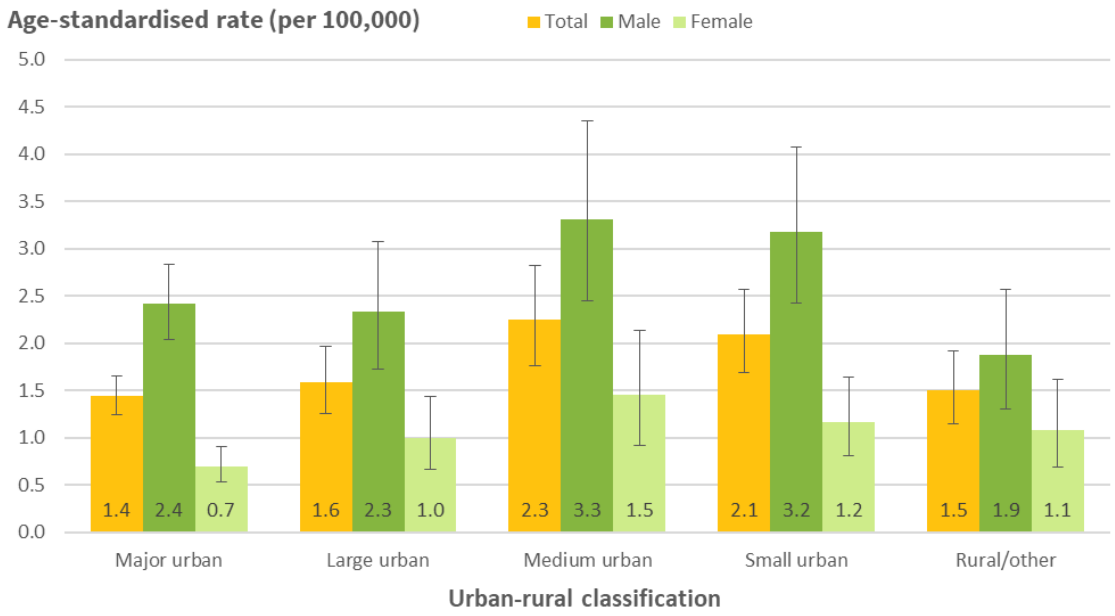



Note: 95% confidence intervals have been presented as vertical bars.
Source: New Zealand Mortality Collection

## Medium and small urban areas have the highest rates

In 2020–21, males in all urban-rural area types had NMSC mortality rates that were more than two times the rate for females in the same area type (Figure 5). Medium urban areas have the highest NMSC rates at 2.3 per 100,000 (95%CI 1.7–2.9), followed by small urban areas at 2.1 per 100,000 (95%CI 1.6–2.7). There was no statistically significant difference between urban-rural categories.

## Figure 5: Non-melanoma mortality rates, by sex and urban-rural classification, 2020–21

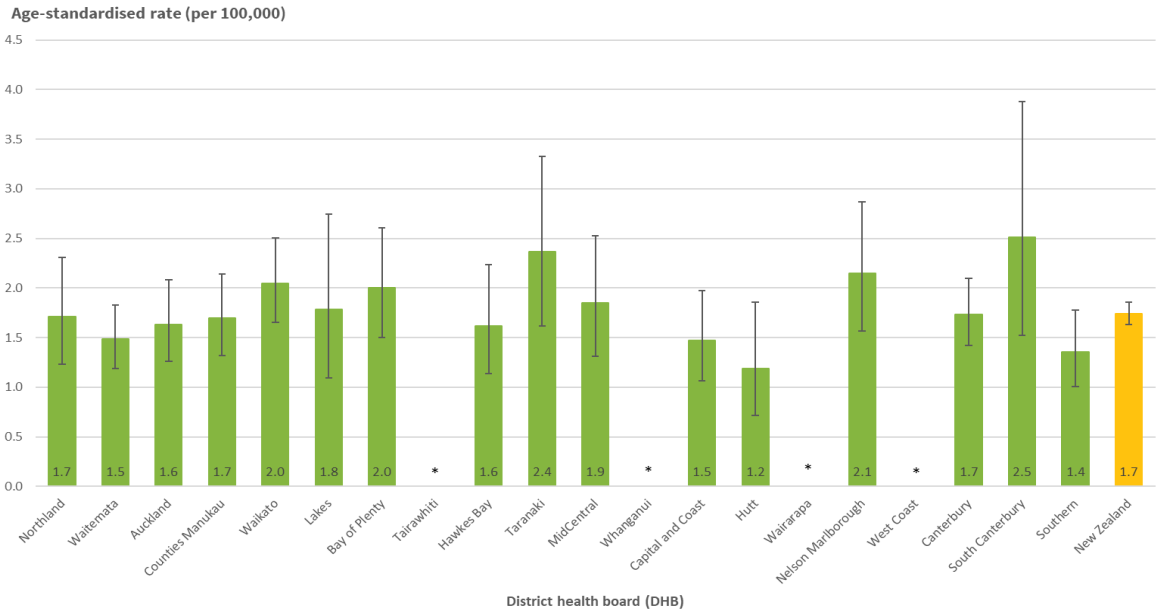



Notes: 95% confidence intervals have been presented as vertical bars. The Statistics NZ urban-rural classification for 2018 has been used. Major urban areas are major towns and cities with a population of 100,000 or more. Large urban areas are smaller centres with a population of 30,000–99,999. Medium urban areas are towns with a population of 10,000–29,999. Small urban areas are towns with a population of 1,000–9,999. Rural areas include rural centres and surrounding rural areas.
Source: New Zealand Mortality Collection

# Non-melanoma mortality rates were high in Taranaki and South Canterbury

In 2017–21, the Taranaki and South Canterbury districts had high NMSC mortality rates (Figure 6).

## Figure 6: Non-melanoma mortality rates, by district, 2017–21




Notes: 95% confidence intervals have been presented as vertical bars. * = Rate was suppressed due to a low count of deaths (<20).
Source: New Zealand Mortality Collection

## Data for this indicator

This indicator reports analysis of the most recent data available from the New Zealand Mortality Collection (2021 calendar year), provided to EHINZ by Health New Zealand – Te Whatu Ora (Health NZ) in December 2025. There is a longer time lag for mortality data than other datasets due to the need to wait for coronial findings. More information on the Mortality Data Collection is available from the Health NZ website.

Crude rates presented in this surveillance report do not take into account varying age distributions when comparing between populations. In contrast, the age-standardised rates presented in this surveillance report do take into account varying age distributions when comparing between populations.

For additional information, see the Metadata sheet.

## References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