

Information topic	Details
Indicator name	Melanoma cancer registrations
Domain and topic	UV exposure domain: Melanoma
Indicator definition and units	Registration rates for melanoma, per 100,000. Melanoma is defined as melanoma of the skin (ICD-10 AM C43).
Data source	New Zealand Cancer Registry, Ministry of Health
Numerator	Number of new melanoma registrations (ICD-10-AM C43). Non-residents have been excluded from the analysis.
Denominator	Population estimates (mid-year), prepared by Statistics New Zealand.
Methodology	<p>Prioritised ethnicity has been used, in the following order: Māori, Pacific, Asian, European/Other. Results are presented by year, gender, age group, ethnic group, NZDep2018, urban/rural 2013 classification, and district (former district health board areas).</p> <p>Rates are per 100,000 people and have been age-standardised to the WHO world standard population (Ahmad et al 2001), to account for different age structures of populations.</p> <p>Follow-up cancer registrations (i.e. multiple tumours) are not counted, only the original registration.</p>
Melanoma thickness categories	<p>Melanoma thickness categories are based on survival rates:</p> <ul style="list-style-type: none"> • ≤ 1 mm thick: 92% ten-year survival rate • >1–2mm thick: 80% ten-year survival rate • >2–4mm thick: 63% ten-year survival rate • > 4mm thick: 50% ten-year survival rate (BPAC 2020)
Time period and time scale	From 2001–2022. Data for each year is recorded in the original source. Some breakdowns use moving averages for a range of years to provide sufficient data for analysis.
Population coverage	New Zealand usually resident population of all ages.
Spatial Coverage	All New Zealand
Measures of frequency	Results are presented by year, gender, age group, ethnic group, NZDep2018, urban/rural 2013 classification, and district (former district health board areas).
Confidence interval methodology	95% confidence intervals were calculated based on the methodology outlined in APHO (2008). Confidence intervals are presented as error bars on graphs.

Limitations of indicator	The reported year of registration is the year the cancer was formally recorded, not necessarily the actual year it was developed.
Related indicators	Daily UV levels Melanoma cancer deaths Non-melanoma skin cancer deaths Vitamin D deficiency
References	<p>Ahmad O B, et al. (2001). <i>Age Standardization of Rates: A New WHO Standard (Technical Report)</i>. GPE Discussion Paper Series: No. 31. Geneva: World Health Organization.</p> <p>APHO. (2008). <i>Technical Briefing 3: Commonly used public health statistics and their confidence intervals</i>. York, UK: Association of Public Health Observatories.</p> <p>BPAC. 2020. <i>Reducing the burden of melanoma in New Zealand. Part 2: Early detection of melanoma</i>. Accessed 03/05/2021. URL: https://bpac.org.nz/2020/docs/melanoma-part2.pdf</p>