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CONTACT:

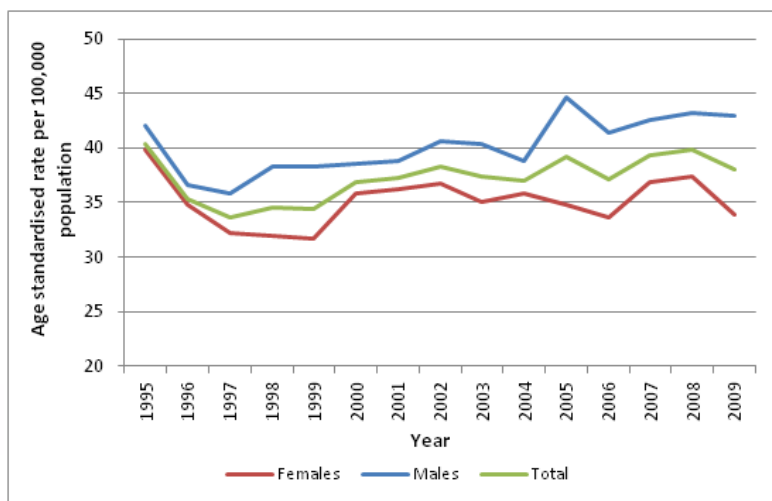
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MELANOMA INCIDENCE PER 100,000 POPULATION

Current national levels and trends

From 1995 to 2009, the overall age-standardised melanoma rate has decreased by 6%, from 40.4 registered cases per 100,000 population to 38.0 (Figure 1). Over the mid to late 1990s there was a general downward trend in rates of melanoma. Rates then increased, peaking in 2008 at levels similar to those observed at the start of the recorded period. In 2009, 2212 people were diagnosed with melanoma, a slight decrease from the 2259 people who were diagnosed in 2008 (Appendix 1).

FIGURE 1: AGE-STANDARDISED MELANOMA INCIDENCE BY SEX, 1995-2009



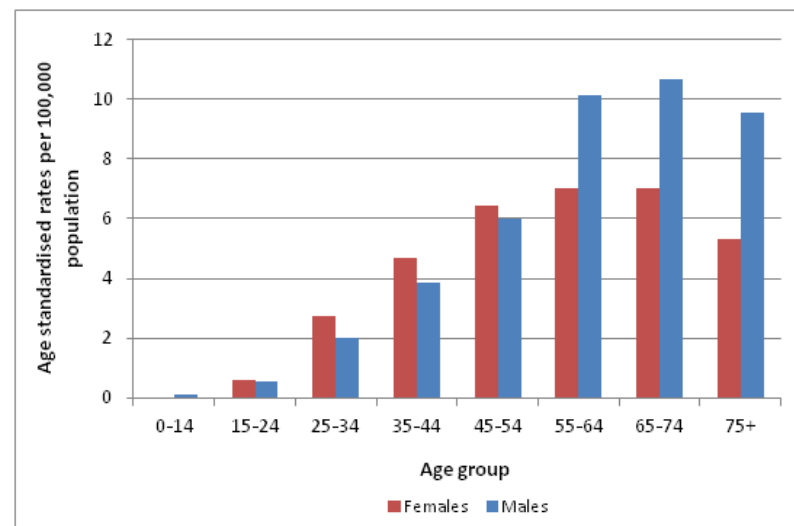
Age and sex differences

Males and females show a similar age distribution pattern with the lowest rates among youth and the highest rates among the elderly (Figure 2). The incidence of melanoma steadily increases until the age of 54 years for both males and females, with females having a higher incidence rate. Over the age of 54 years, the male rate rapidly increases (peaking at 10.7 cases per 100,000 for those aged 65-74 years) and remains higher than the female rate for the older age groups.

Both males and females experience a decrease in the age-standardised rate in the oldest age group compared with the 65-74 year age group. The highest rate for females was 7.0 per 100,000, occurring in both the 55-64 and 65-74 year age groups. For males, the highest rate was for the 65-74 year age group (10.7 per 100,000). During 2009, ages of males at diagnosis ranged from 10 to 99 years and from 18 to 100 years for females, with a median of 61 years for both males and females.

The overall decline in the total age-standardised incidence rate is dominated by the reduction in female incidence. As can be seen in Figure 1, males have had a higher melanoma incidence rate than females over time, but the gap between them has fluctuated. The female to male ratio has increased from approximately 1:1 in 1995 to 1:1.3 in 2009.

Figure 2: AGE DISTRIBUTION OF MELANOMA BY SEX, 2009



Note: Year to 31 December.
Source: Statistics New Zealand (2011)



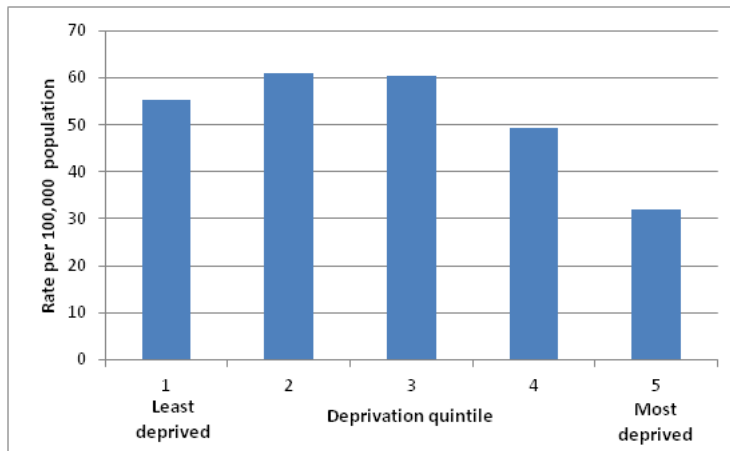
Ethnic differences

There are marked ethnic differences in melanoma incidence. During 2009, 97.8% of melanoma cases occurred in people of European ethnicity (where ethnicity was known, 2036/2212 cases) followed by Maori with 1.1% of registrations. This is a large disparity given that according to the 2006 census; 67.6% of the population identified as European.

Socioeconomic differences

Based on the place of residence at diagnosis (data not available for two cases), it is evident that disparities exist in the incidence of melanoma by socioeconomic status, as measured by the New Zealand Deprivation Index 2006 (NZDep2006)¹. There was a gradual increase in the number of melanoma cases diagnosed in 2009 for those who lived in the most socioeconomically deprived areas (452 cases – quintile 1) through to a peak in those living in moderately deprived areas (524 cases – quintile 3) followed by a decrease for those living in the most deprived areas which had the lowest number of cases (290 cases – quintile 5) (Figure 3).

FIGURE 3: INCIDENCE OF MELANOMA CASES BY DEPRIVATION QUILTILES, 2009



Geographic differences

Figure 4 illustrates that age-standardised rates of melanoma incidence during 2009 vary across the country. Rates calculated at the territorial authority level range from 0 per 100,000 in the Chatham Islands Territory to 67.4 per 100,000 (n=26 cases) in South Taranaki District, compared to the national incidence rate of 38.0 per 100,000. The map demonstrates that rates of melanoma tend to be highest in the central North Island and upper and eastern parts of the South Island.

International comparison

Currently, Australia and New Zealand have the highest incidence of melanoma in the world. Using 2008 data, Australia and New Zealand combined have an age-standardised incidence rate of 36.6 per 100,000 followed by Northern America with 13.9 per 100,000². The global disparities in melanoma incidence of Australia and New Zealand compared with other regions has persisted since 2002 when the first global incidence estimates became available³.

Notes

Case inclusion and exclusion criteria:

inclusion – only one registration per person to avoid including patients with metastatic melanoma

exclusion – incorrect or absent data, benign naevi, and melanoma *in situ*

Data source: New Zealand Cancer Registry, Ministry of Health

The 2009 figures are provisional

Rates are calculated using 2009 population estimates⁴

Rates are age standardised using the WHO standard population⁵



References

1. Salmond, C., P. Crampton, and J. Atkinson. 2007. NZDep2006 Index of Deprivation. Wellington: Department of Public Health, University of Otago
2. Ferlay, J., et al. 2008 GLOBOCAN 2008 v1.2, Cancer Incidence and Mortality Worldwide: IARC CancerBase No. 10. [cited 13 September 2011]; Available from: <http://globocan.iarc.fr>.
3. Parkin, D., et al., 2005. Global Cancer Statistics, 2002. A Cancer Journal for Clinicians, 55(2): 74-108.
4. Statistics New Zealand. Estimated Subnational Population (TA, AU) by Age and Sex at 30 June 2006–10 [cited 15 September 2011]; Available from: http://www.stats.govt.nz/tools_and_services/tools/TableBuilder/intercensal-population-estimates-tables.aspx.
5. Ahmad, O.B., et al. 2001. Age standardization of rates: A new WHO standard. GPE Discussion Paper Series: No.31. World Health Organization

APPENDIX

APPENDIX 1: INCIDENCE OF MELANOMA CASES BY SEX, 2009

	Females		Males		Total	
	Number	Rate	Number	Rate	Number	Rate
1995	844	39.8	829	42.1	1673	40.4
1996	772	34.8	739	36.6	1511	35.3
1997	739	32.2	745	35.8	1484	33.6
1998	750	32.0	819	38.3	1569	34.5
1999	745	31.6	824	38.3	1569	34.4
2000	857	35.9	848	38.6	1705	36.8
2001	888	36.2	865	38.8	1753	37.2
2002	903	36.7	931	40.7	1834	38.3
2003	889	35.1	958	40.4	1847	37.4
2004	944	35.8	948	38.8	1892	37.0
2005	928	34.8	1120	44.7	2048	39.3
2006	942	33.7	1067	41.4	2009	37.2
2007	1054	36.9	1127	42.6	2181	39.3
2008	1077	37.4	1182	43.3	2259	39.9
2009	1015	33.9	1197	42.9	2212	38.0

FIGURE 1: AGE-STANDARDISED MELANOMA INCIDENCE BY SEX, 1995-2009

