Australian Government
Australian Institute of
Health and Welfare

Authoritative information and statistics
to promote better health and wellbeing

James Nelson
Committee Secretary
Standing Committee on Health
House of Representatives
PO Box 6021
Parliament House
Canberra ACT 2600

House of Representatives Standing Committee on Health
Inquiry into skin cancer in Australia: awareness, early diagnosis and management

Dear Mr Nelson

At the public hearing on 28 March 2014, the Committee asked the Australian Institute of Health and Welfare to supply additional data on melanoma incidence and mortality stratified by state and territory and remoteness category. Please find attached this additional information.

If you have any further questions about our submission please contact Lisa McGlynn on (02) 6244 1168.

Yours sincerely

David Kalisch
Director, AIHW

11 April 2014

Additional data on melanoma incidence and mortality by state and territory and remoteness area

In what follows there are three numbered sections which each have a consistent format. Each of these sections contains a table of data with the relevant information about the data's derivation and meaning. This is followed by two graphs presenting incidence and mortality rates, respectively.

Section 1 presents melanoma incidence and mortality data by state and territory. Section 2 presents these data by remoteness area at a national level. Section 3 presents these data by remoteness area within each state and territory.

A note about rates based on small counts or populations

The underlying incidence, or mortality, rate in any given year is subject to natural variation due to the random processes that are inherent in the world around us. Hence the value observed is only one out of a range of values that could occur under the same circumstances.

Some of the rates presented here are based on a very small number of cancer cases or deaths for that geographical area. The natural variation in such circumstances has a powerful effect on the observed rate. For example, consider two regions where there were 100 deaths and 1 death, respectively. If there had been just one more death in each region, the observed mortality rate would rise by 1% in the first region and by 100% in the second region. It is, therefore, important to consider the underlying number of cases or deaths that each rate is based on. The size of the population in the geographical area also influences the variability of rates for that area, with smaller populations leading to more variability. However, the population size has far less influence on variability than the number of cases or deaths.

To aid in interpreting the data that follow, rates that are subject to a high level of variability are accompanied by an asterisk and should be used with caution. Rates that are based on a very high level of variability have not been presented due to the unreliability of those data.

Data sources

The incidence data are from the Australian Cancer Database, which is compiled by the Australian Institute of Health and Welfare (AIHW) from data provided by the state and territory cancer registries. The mortality data are from the National Mortality Database, which is compiled by the AIHW from data provided by the state and territory Registries of Births, Deaths and Marriages and the National Coronial Information System, and coded by the Australian Bureau of Statistics.

1. Incidence and mortality of melanoma by state and territory

Incidence and mortality of melanoma by state and territory, Australia, 2006–2009

		Incidence		Mortality	
State/territory	Population(a)	Average number of cases per year	Incidence rate(b)	Average number of deaths per year	Mortality rate(b)
NSW	6,893,517	3,605	48.7	479	6.3
Vic	5,210,774	2,236	40.4	291	5.1
Qld	4,166,822	2,795	66.2	299	7.1
WA	2,142,168	1,046	48.7	129	6.1
SA	1,580,179	662	36.8	94	4.9
Tas	496,371	259	46.4	29	4.9
ACT	345,242	124	38.7	21	7.1
NT	217,177	50	30.9	3	2.2*
Australia	**21,054,860**	**10,775**	**48.7**	**1,344**	**6.0**

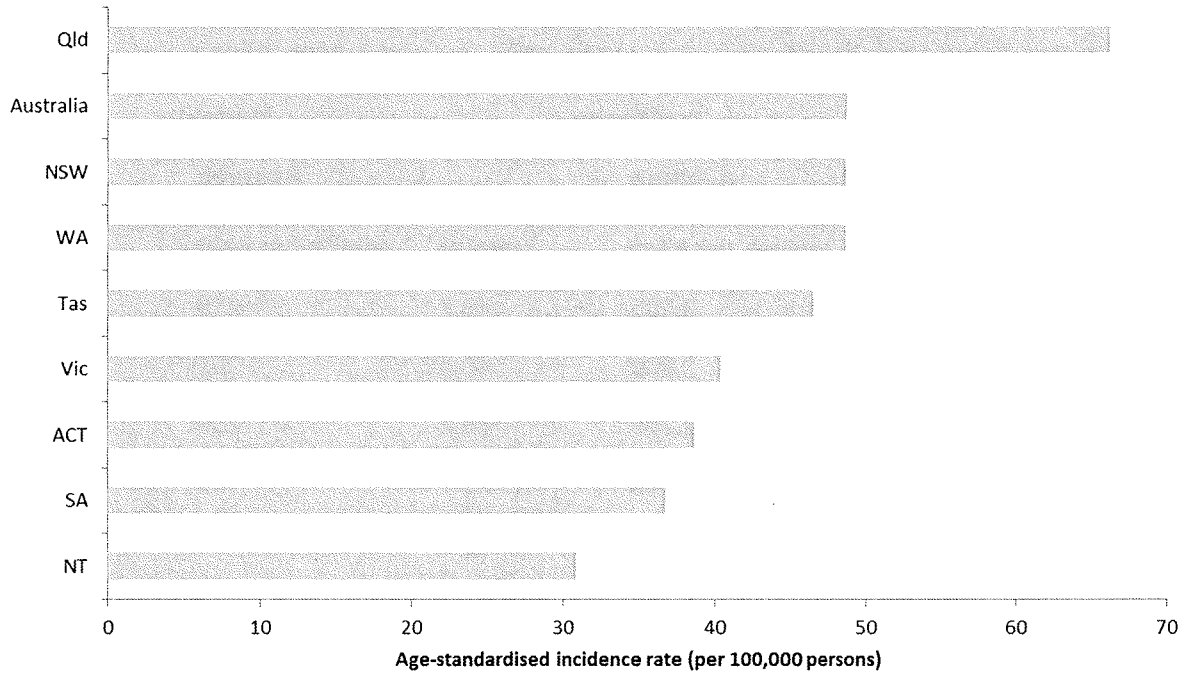
(a) Average population at 30 June over 2006–2009.

(b) Age-standardised incidence/mortality rate for the period 2006–2009, age-standardised to the Australian 2001 Standard Population and expressed per 100,000 persons.

* Rate subject to high variability and should be used with caution.

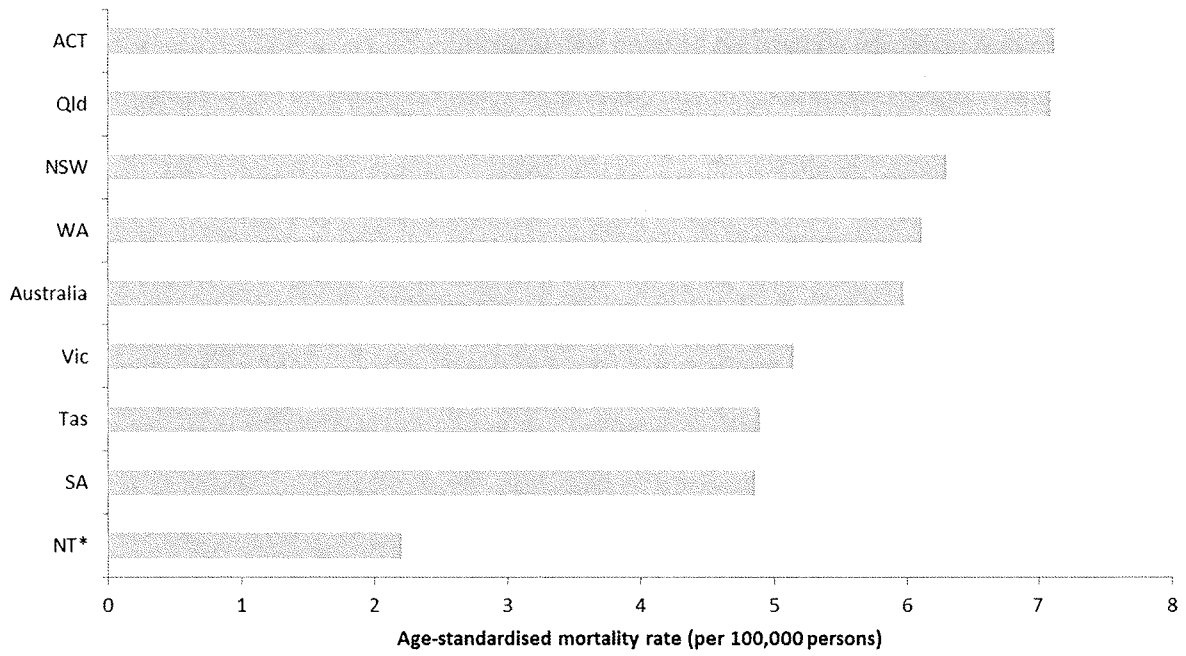
Sources: Australian Cancer Database 2010 and National Mortality Database 2011, Australian Institute of Health and Welfare.

Melanoma incidence rate by state/territory



Source: Australian Cancer Database 2010, Australian Institute of Health and Welfare

Melanoma mortality rate by state/territory



* Rate subject to high variability and should be used with caution.
Source: National Mortality Database 2011, Australian Institute of Health and Welfare

2. Incidence and mortality of melanoma by remoteness

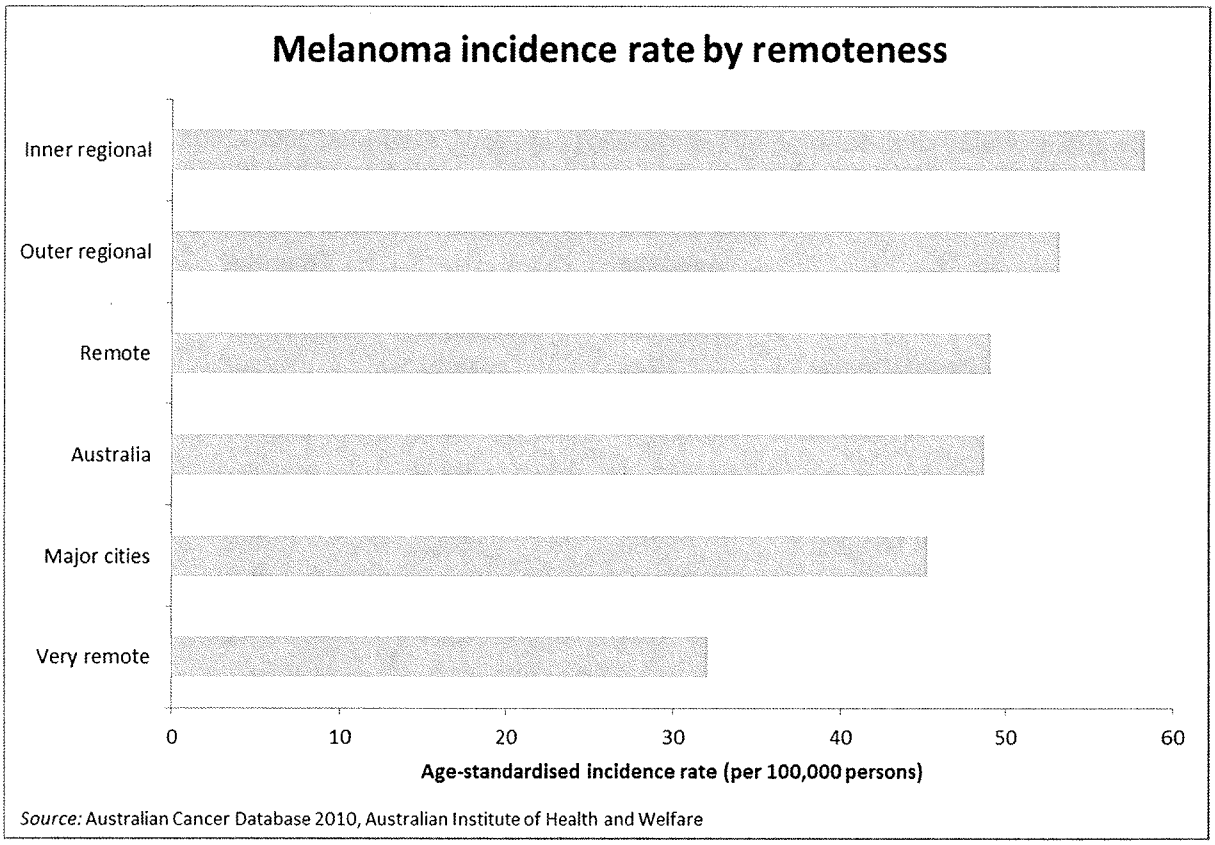
Incidence and mortality of melanoma by remoteness category, Australia, 2006–2009

		Incidence		Mortality	
Remoteness category	**Population(a)**	**Average number of cases per year**	**Incidence rate(b)**	**Average number of deaths per year**	**Mortality rate(b)**
Major cities	14,494,616	6,732	45.2	873	5.8
Inner regional areas	4,107,530	2,718	58.3	320	6.6
Outer regional areas	1,961,022	1,130	53.2	130	6.0
Remote areas	316,522	144	49.1	15	5.8
Very remote areas	175,172	41	32.0	5	4.3
Unknown		11		1	
Australia	**21,054,860**	**10,775**	**48.7**	**1,344**	**6.0**

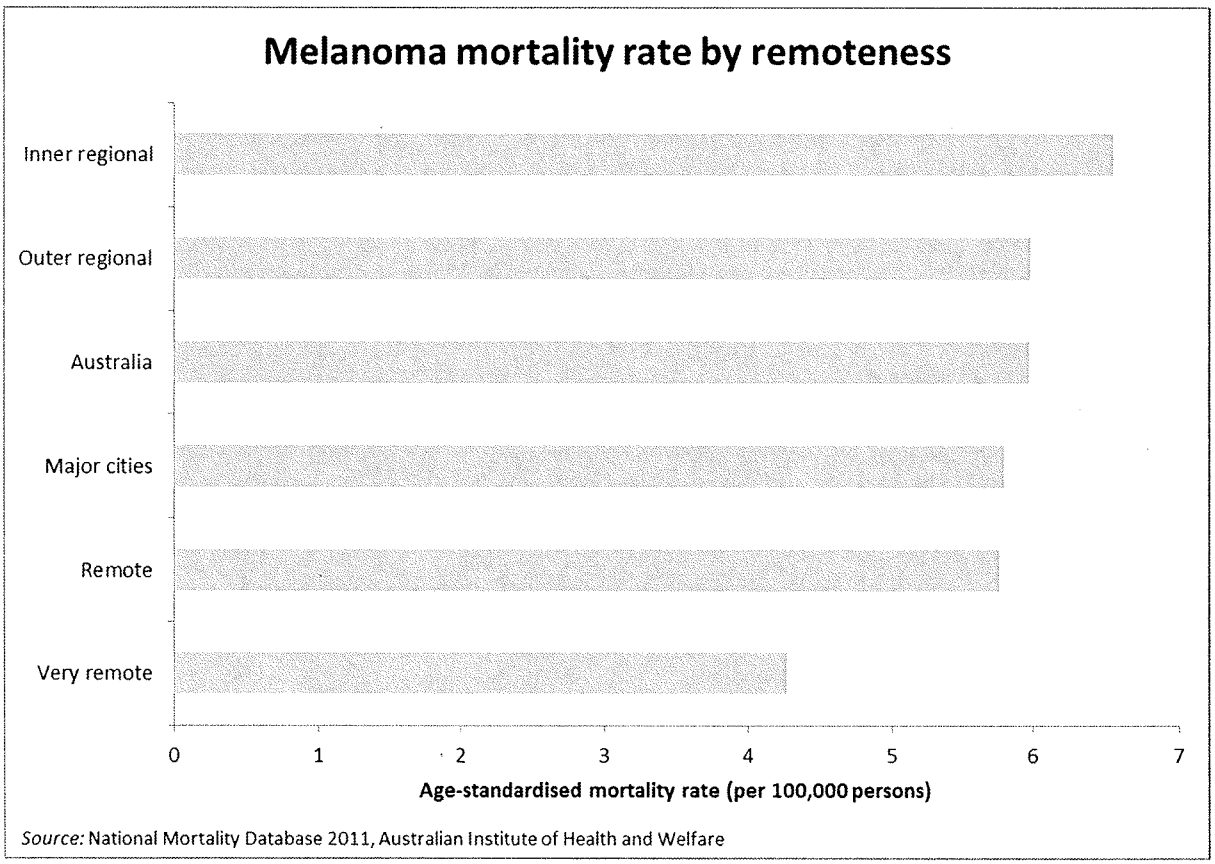
(a) Average population at 30 June over 2006–2009.

(b) Age-standardised incidence/mortality rate for the period 2006–2009, age-standardised to the Australian 2001 Standard Population and expressed per 100,000 persons.

Sources: Australian Cancer Database 2010 and National Mortality Database 2011, Australian Institute of Health and Welfare.



Source: Australian Cancer Database 2010, Australian Institute of Health and Welfare



Source: National Mortality Database 2011, Australian Institute of Health and Welfare

3. Incidence and mortality of melanoma by state and remoteness

Incidence and mortality of melanoma by state/territory and remoteness, Australia, 2006–2009

		Incidence		Mortality	
State/territory and remoteness category	Population(a)	Average number of cases per year	Incidence rate(b)	Average number of deaths per year	Mortality rate(b)
NSW – Major cities	5,034,507	2,287	44.2	320	6.1
NSW – Inner regional	1,384,832	1,017	62.2	121	6.9
NSW – Outer regional	437,403	283	53.4	36	6.5
NSW – Remote	32,346	13	38.9	1	4.1*
NSW – Very remote	4,428	2	41.6*	< 1	n.p.
Vic – Major cities	3,923,503	1,497	37.0	195	4.8
Vic – Inner regional	1,036,740	588	50.2	76	6.2
Vic – Outer regional	245,940	147	48.4	19	6.1
Vic – Remote	4,591	2	34.7*	< 1	n.p.
Qld – Major cities	2,513,601	1,647	65.6	180	7.2
Qld – Inner regional	900,773	689	70.3	77	7.6
Qld – Outer regional	620,439	394	65.0	35	6.1
Qld – Remote	83,238	42	54.6	4	6.3*
Qld – Very remote	48,771	16	40.3	2	6.2*
WA – Major cities	1,526,951	702	45.8	93	6.1
WA – Inner regional	272,601	177	59.0	18	6.0
WA – Outer regional	192,654	105	52.9	12	6.1
WA – Remote	95,887	49	60.5	4	6.5*
WA – Very remote	54,075	13	33.1	2	4.8*
SA – Major cities	1,151,327	474	36.4	64	4.6
SA – Inner regional	191,325	79	35.3	12	4.9
SA – Outer regional	178,624	84	40.4	14	5.9
SA – Remote	45,035	20	40.7	3	6.3*
SA – Very remote	13,868	4	32.6	1	n.p.

State/territory and remoteness category	Population(a)	Incidence		Mortality	
		Average number of cases per year	Incidence rate(b)	Average number of deaths per year	Mortality rate(b)
Tas – Inner regional	320,372	169	47.6	16	4.4
Tas – Outer regional	165,719	85	45.0	12	5.7
Tas – Remote	7,712	3	31.0*	1	n.p.
Tas – Very remote	2,569	3	78.0*	< 1	n.p.
ACT – Major cities	344,728	124	38.7	21	7.1
ACT – Inner regional	514	0	0.0	0	0.0
NT – Outer regional	120,242	33	35.3	2	2.2*
NT – Remote	47,713	14	35.8	1	n.p.
NT – Very remote	49,221	3	7.2*	< 1	n.p.
Australia	**21,054,860**	**10,775**	**48.7**	**1,344**	**6.0**

(a) Average population at 30 June over 2006–2009.

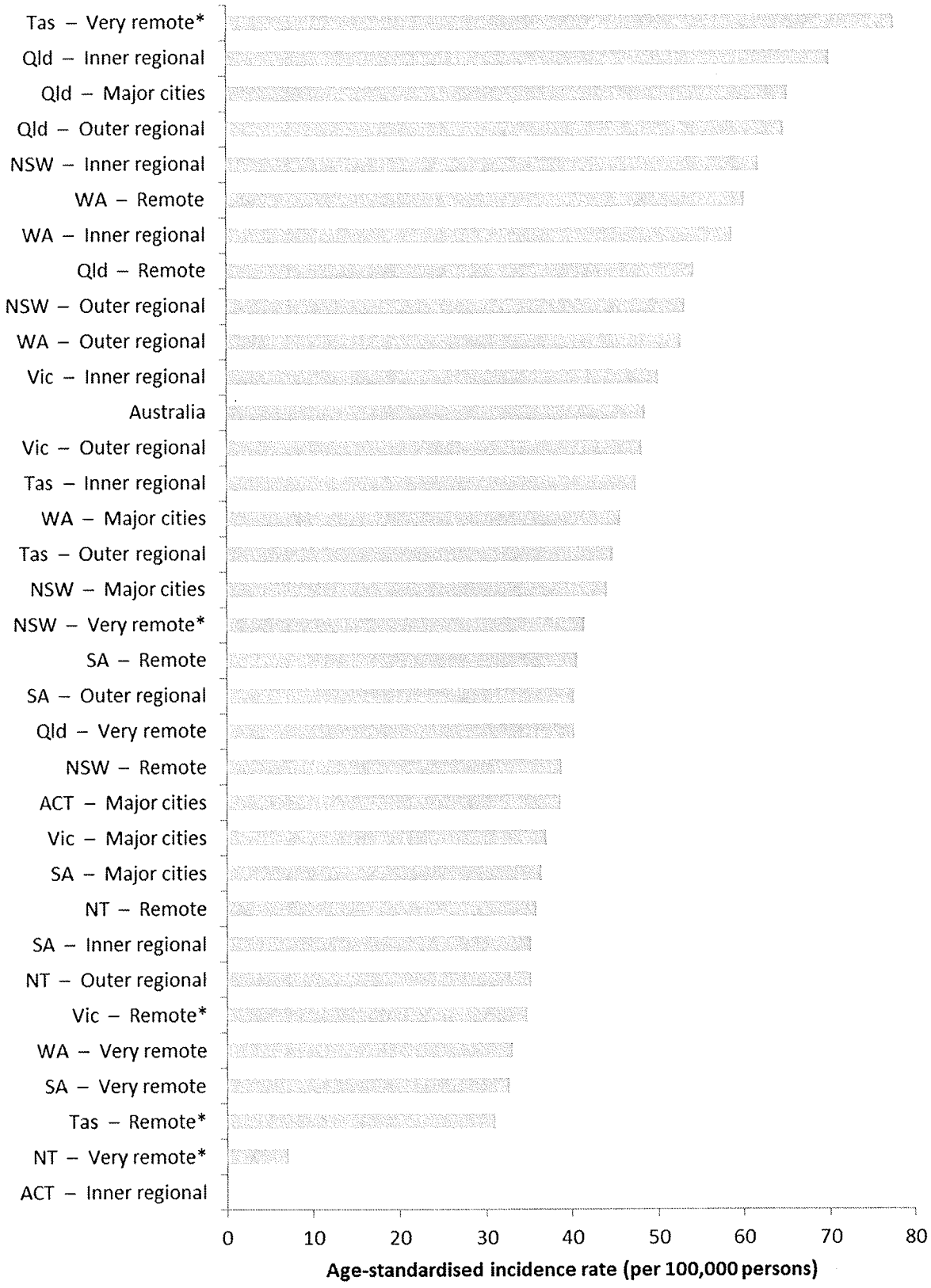
(b) Age-standardised incidence/mortality rate for the period 2006–2009, age-standardised to the Australian 2001 Standard Population and expressed per 100,000 persons.

* Rate subject to high variability and should be used with caution.

n.p. Rate not presented because it is subject to very high variability and is not reliable.

Sources: Australian Cancer Database 2010 and National Mortality Database 2011, Australian Institute of Health and Welfare.

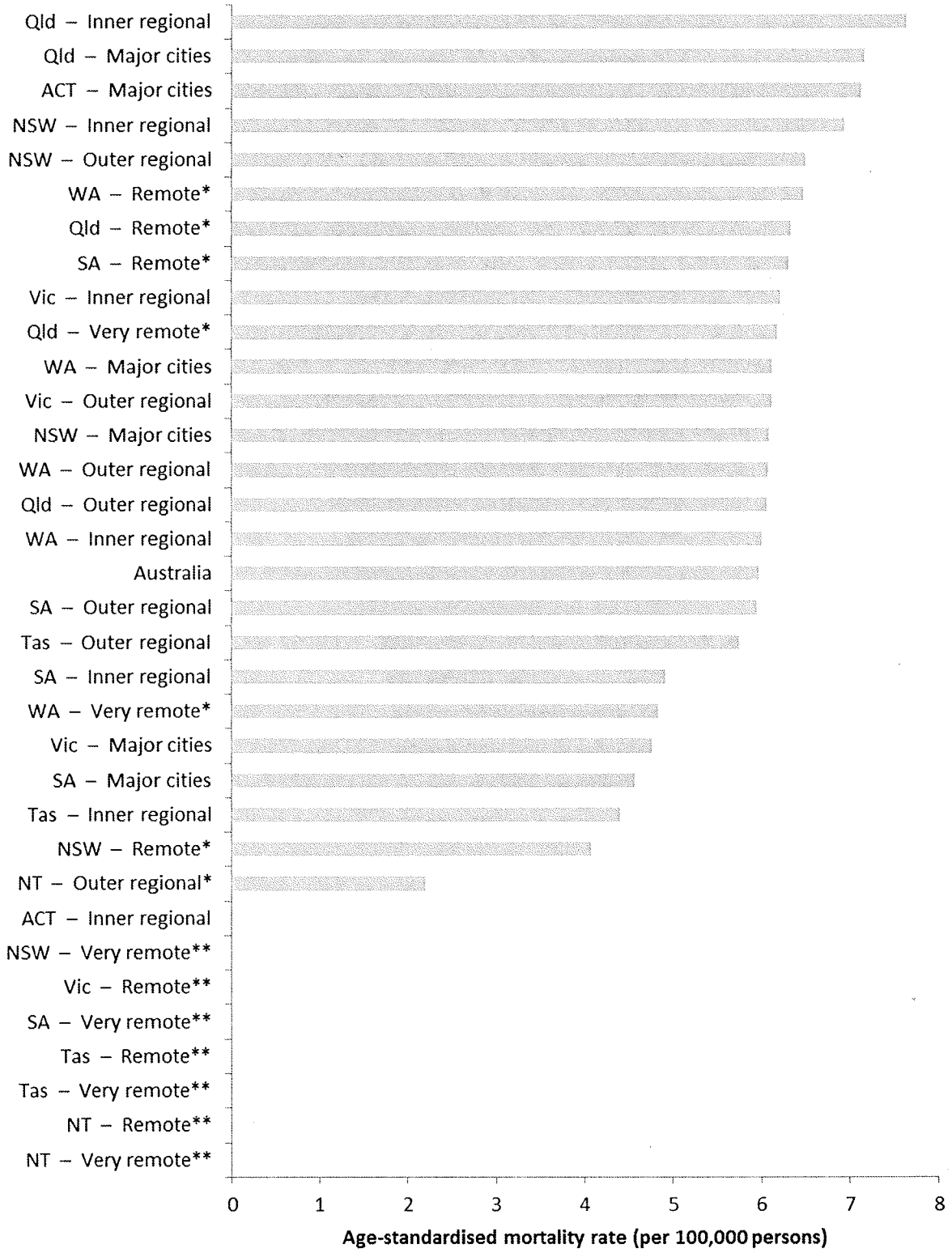
Melanoma incidence rate by state and remoteness



* Rate subject to high variability and should be used with caution.

Source: Australian Cancer Database 2010, Australian Institute of Health and Welfare

Melanoma mortality rate by state and remoteness



* Rate subject to high variability and should be used with caution.
** Rate not presented because it is subject to very high variability and is not reliable.
Source: National Mortality Database 2011, Australian Institute of Health and Welfare