1 Introduction

Australians living in regional and remote areas generally experience poorer health than their major city counterparts. This is illustrated, most robustly, in measures of mortality. In 2002–04, death rates in regional and remote areas were between 10–70% higher than in Major Cities (AIHW 2007). It is also true that, on average, people living in more inaccessible regions of Australia are disadvantaged with regard to educational and employment opportunities, income, access to goods and services and in some areas access to basic necessities, such as clean water and fresh food (AIHW 2006a). Indicators describing the nature and extent of health dimensions across regions and time provide a systematic set of measures which can inform rural health policy.

1.1 Background

In 2003, the Australian Institute of Health and Welfare (AIHW) released a Rural Health Information Framework (AIHW 2003a). This framework sought to identify all the types of information that are important to develop an understanding of, and to monitor, the health of rural, regional and remote populations. Consistent with the National Health Performance Framework, the Rural Health Information Framework consists of three tiers: Health status and outcomes; Determinants of health; and Health system performance (Figure 1). Within each of these tiers there are a number of dimensions (for example, within Determinants of health, the dimensions are environmental factors, socioeconomic factors, community capacity, health behaviours and person-related factors).

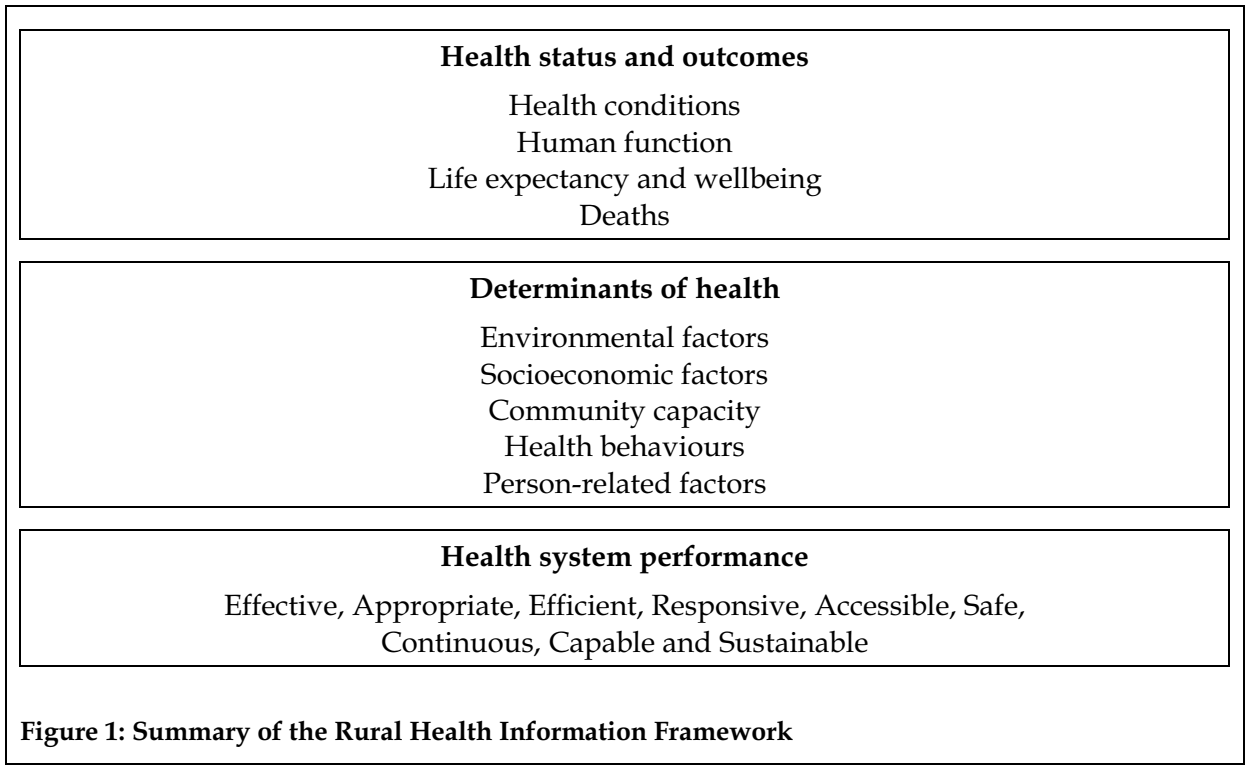


Figure 1: Summary of the Rural Health Information Framework

In 2005, the framework was updated to reflect data availability and improved statistical methodology (AIHW 2005b).

1.2 Purpose, scope and structure of this report

The first publication to report on the indicators in the Rural Health Information Framework was published in 2005 (AIHW 2005a). This current report updates as many as possible of the indicators relating to health status and outcomes, and determinants of health. A second report, updating health system performance indicators, is scheduled for release in mid-2008.

The main objective of this report is to present detailed statistical findings on each of the selected indicators. For each indicator, background information is also provided. An accompanying short publication, summarising the key findings of this report, is also available free on the AIHW website <www.aihw.gov.au> or in hard copy from the AIHW.

In relation to the indicators presented, this report seeks to answer the following key questions:

- Do inter-regional differences exist in indicators of health status and determinants of health, and what is the size of this difference? For example, are people living in rural and remote areas more likely to report an injury than those living in Major Cities, and if so, how much more likely?
- Are inter-regional differences constant over time? For example, is the inter-regional pattern of injury observed in 2005 similar to that observed in 1995?
- For any one region, do rates of health conditions or health behaviours change over time? For example, are people living in regional areas in 2005 more or less likely to report an injury than people living in the same areas in 1995?
- Is there strong evidence to suggest that an identified difference is real?

The summary statistics presented here are useful because they are objective. However, they are not capable of describing the subjective experience of living in regional or remote areas.

Some Tier 1 and 2 indicators specified in the Rural, Regional and Remote Health Information Framework are not yet able to be quantified for a number of reasons:

- the data do not exist
- the data exist, but they are considered to be inaccurate
- the data are available for some jurisdictions, but not nationally
- the data do not contain a geographic identifier (for example, postcode) with which to allocate a remoteness category.

In addition, some data may not have been provided by data suppliers prior to finalisation of the report.

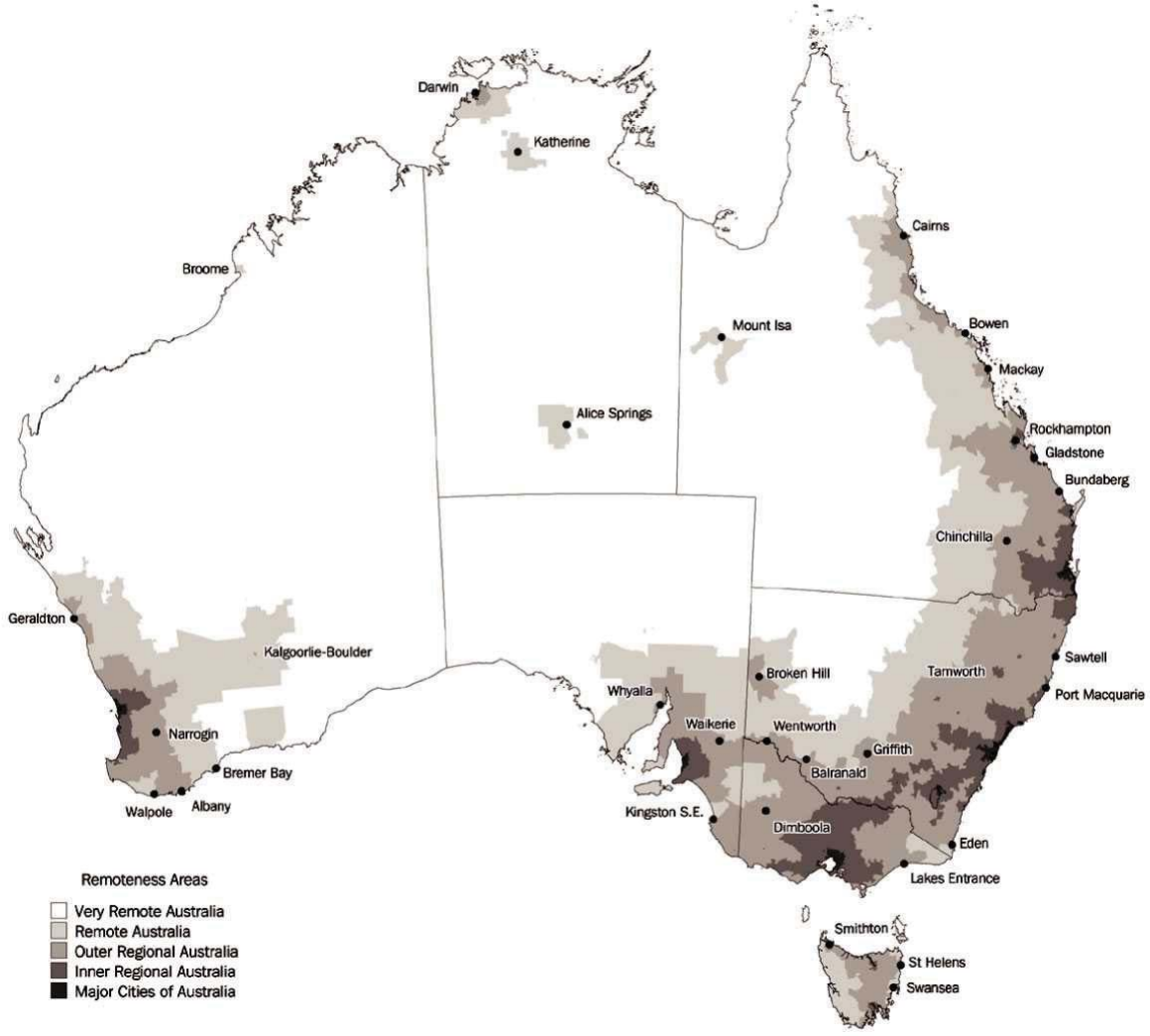
The body of this report consists of two chapters: Health status and outcomes, including data on health conditions, human function, life expectancy and wellbeing and mortality; and Determinants of health, including data on community capacity, health behaviours and person-related factors. The Appendixes contain details of the data sources and statistical methods used.

1.3 Defining regional and remote

This report classifies the areas where we live using the Australian Standard Geographical Classification Remoteness Areas (ASGC RA) classification (see Figure 2). The classification allocates one of five remoteness categories to areas depending on their distance from a range of five types of population centre. Areas are classified as Major Cities, Inner Regional, Outer Regional, Remote and Very Remote. Further information on how this terminology is used is provided in section 1.4.

The ASGC RA was selected as the geographic classification for this report in preference to the Accessibility/Remoteness Index of Australia (ARIA) and Rural, Remote and Metropolitan Areas classification. One major advantage of the ASGC RA classification is that it defines the least remote areas more tightly than the ARIA classification (AIHW 2004).

For more information on the various remoteness classifications please refer to AIHW (2004).



Source: Australian Bureau of Statistics.

Figure 2: ASGC Remoteness Areas of Australia

1.4 Data methodology and interpretation

This section is intended to provide guidance about interpreting the findings presented in this report. Two statistical methods—age standardisation and statistical significance (including 95% confidence intervals)—have been used to explore the difference in health conditions and health determinants across regions.

Age standardisation is required as patterns of illness and death are age related. Each population has its own demographic characteristics. For example, Indigenous Australian populations tend to have proportionally larger numbers of children and young people and smaller numbers of older people than non-Indigenous Australian populations. Similarly, there are differences between the age structure and the proportions of males and females living in major cities, regional and remote populations. Comparison of crude rates, percentages and means may simply reflect the different age and sex structures of populations rather than any difference in the underlying likelihoods of death, illness or

access to services. Age standardisation is a technique that can be used to adjust for such differences. For this report, the indirect method of standardisation has been used because several of the populations of interest are small and for some 'events' the number of cases in these areas are also relatively small (see Appendix A for more specific information).

Any variation in rates of health conditions or health behaviours across geographic regions may be due to natural variation. This report primarily uses indirect age-standardised rates (or ratios of observed to expected 'events') to investigate differences in regional and remote areas compared with Major Cities. A ratio of observed to expected cases is the actual number of 'events' (for example, self-reported injury or anxiety) to the number expected if Major Cities rates had applied in the area. The resultant statistic is a ratio (standardised prevalence ratio (SPR)), which in Major Cities will, by definition, be 1.0. A ratio of 0.5 would indicate the area had half the rate in Major Cities and a ratio of 2.0 would indicate that the rate in the area was double that in Major Cities. All statements about rates in this report are based on the ratio of observed to expected events or observations.

In this report, the SPR is assessed by a 95% confidence interval (see Appendix A). Sometimes, when data were provided in summary form by another agency, there was insufficient information with which to calculate confidence intervals. Confidence intervals were not calculated for census data.

Although indirect age-standardised rates can identify areas with significantly better or worse outcomes than others, they do not describe the magnitude of the issue. In cases such as these, the magnitude of the issue has been described using counts (for example, number of deaths or number of deaths in excess of what would be expected if Major Cities rates had applied in each area).

The methodology used for indicators 1.1.1b Chronic diseases—cancer , 1.4.1 Overall mortality and 1.4.5 Leading causes of death and excess death, differs slightly and is explained in the accompanying text for these indicators.

Notes on reading and interpreting the main tables

A standardised prevalence ratio is also used to compare data over time. This analysis includes comparison of inter-regional patterns of 'events' in different years and comparison of rates in each of the areas over a specific time period. The latter compares the observed number of 'events' in an area in one year (for example, 2001) with the number expected if age-specific rates of that area in a previous year (for example, 1995) applied.

Where possible, analysis of indicators by sex, Indigenous status and the population below 65 years of age has been completed, as:

- inter-regional comparisons of health patterns for people older than 65 years were different from those for younger people, potentially as a result of the migration of older people who required access to services not available in the more remote centres
- differentials may have been affected by Indigenous issues rather than issues of remoteness per se
- health outcomes in an area may differ by sex.

Although measures of health status in this report describe average health status for the population living in each area, they do not predict an individual's health status, nor is the health status of an area 'adopted' by an individual after moving there. Similarly, migration of people into and out of areas means that any historical influence of the area's environment

on health status statistics will be diluted by the influence of other areas from which people migrated.

Terminology used in the report

In figures and tables throughout this report, Major Cities, Inner Regional, Outer Regional, Remote and Very Remote categories have been abbreviated as MC, IR, OR, R and VR. In the majority of cases, when considered together, Inner Regional and Outer Regional areas are referred here as 'All regional' and Remote and Very Remote, as 'All remote'.

However, data for this report were sourced from several different administrative and survey sources. In some cases data were not available for Very Remote areas. This was particularly the case for surveys such as the National Health Survey, and varied terminology has been used to reflect this (Table 1).

Table 1: Summary of terminology used in this report

	Grouping terms				Demographic information	
	Abbreviations	Level 1	Level 2	Level 3	Population (no.)	Population in each area who are Indigenous Australian (per cent)
Major Cities	MC	Major Cities	Major Cities	Major Cities	13,600,000	1.1
Inner Regional	IR	All regional	Inner Regional	All regional/ Remote[(a)]	3,900,000	2.5
Outer Regional	OR		Other		1,900,000	5.3
Remote	R	All remote			290,000	13.4
Very Remote	VR		N/A	N/A	15,000	44.8

(a) In some data sources, the categories 'Other' and 'All regional/Remote' may contain some data from Very Remote areas.

Source: AIHW unpublished analysis of Australian Bureau of Statistics (ABS) Census 2006.

Technical notes on data presentation

- Percentages or numbers in tables may not add to 100 or other totals due to rounding.
- If there are twice as many events (for example, deaths) as expected, then the rate (for example, of death) can be assumed to be twice that of the comparison population.
- Where rates are statistically significantly different from one another, they are referred to in the text as 'significantly' different; if rates are not statistically significantly different, they are not said to be significantly different. Statistical significance is at the 95% level.
- Where there is some suggestion that real differences exist but the differences just fail to be statistically significant at the 95% level, the differences have been described as 'apparent' rather than 'significant' differences.
- Statistically significant figures are indicated in tables with an asterisk.

2 Health status and outcomes

This tier describes the health of the Australian population across the following four dimensions:

- Health conditions
- Human function
- Life expectancy and wellbeing
- Deaths.

Indicators in this domain help to answer the questions: How healthy are Australians? Is it the same for everyone? Where is the most opportunity for improvement?

Health conditions

Indicator 1.1.1a Chronic diseases

Summary of findings

In All regional/Remote areas females were 1.3 times as (that is, significantly more) likely to report diabetes, and males appeared slightly less likely to report diabetes as those in Major Cities.

There was no clear inter-regional difference in the prevalence of reported cerebrovascular disease.

In All regional/Remote areas females were 0.8 times as (that is, significantly less) likely, and males were about as likely to report osteoporosis as those in Major Cities.

The prevalence of asthma in Inner Regional areas was significantly higher than in Major Cities.

Males in All regional/Remote areas were significantly more (1.4 times as) likely, and females were as likely to report bronchitis as those in Major Cities.

In All regional/Remote areas, males and females were significantly more (respectively 1.3 and 1.2 times as) likely to report arthritis than those in Major Cities.

There was no strong evidence to suggest that rates of reported coronary heart disease differed across areas, except in Other areas (Outer Regional and Remote) where people were significantly less (0.6 times as) likely to report the condition as those in Major Cities.

Background

Chronic diseases, that tend to be long-lasting and persistent in their symptoms or development, are a major health concern in Australia, placing great burden on individuals, communities and health (AIHW 2006a). This indicator includes chronic diseases such as diabetes, heart disease and arthritis.

Data used to inform indicator 1.1.1a are derived from:

- The 1995, 2001 and 2004–05 Australian Bureau of Statistics National Health Surveys (ABS NHS)
- The 2004–05 Australian Bureau of Statistics National Aboriginal and Torres Strait Islander Health Survey (ABS NATSIHS).

Data on the incidence of cancer are provided in Indicator 1.1.1b Chronic disease (cancer).

All conditions described from the NHS are self-reported, which can reduce the validity of the numbers reported here. For example, a respondent who actually has diabetes, but is unaware of it, will report that they do not have diabetes. A respondent would have to have been tested, and then understand/remember the results of the test so as to state that they have diabetes. It is possible that people from some (for example, All remote) areas are less likely to have been tested than people from other areas (for example, Major Cities). So, it may be unclear whether lower reported prevalence of diabetes is because people are less likely to know if they have diabetes, or if they are actually less likely to have diabetes.

An alternative method for calculating the prevalence of cardiovascular disease from the NHS was endorsed by the ABS and National Heart, Stroke and Vascular Health Data Working Committee shortly after the completion of this analysis. The prevalence estimates for cerebrovascular disease (Table 5) and coronary heart disease (Table 20) may not be directly comparable to future estimates as a result of methodological changes.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

Diabetes

- Rates of self-reported diabetes were generally similar across areas in 2004–05 (Table 2).
- Self-reported rates of diabetes have increased significantly in all areas since 1995 (Table 3).

Table 2: Prevalence of self-reported diabetes, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males	4.0	1.00	0.83	0.95	0.88
Females	2.9	1.00	*1.31	1.18	*1.26
Persons	**3.5**	**1.00**	**1.03**	**1.04**	**1.03**
2001					
Males	3.1	1.00	*0.71	0.75	*0.72
Females	2.9	1.00	1.00	1.14	1.05
Persons	**3.0**	**1.00**	**0.85**	**0.93**	**0.88**
1995					
Males	2.4	1.00	0.93	*0.80	0.89
Females	2.2	1.00	0.87	1.03	0.93
Persons	**2.3**	**1.00**	***0.90**	**0.91**	***0.91**

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

Table 3: Changes in prevalence of self-reported diabetes, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995–2001				
Males	*1.26	0.97	1.20	1.05
Females	*1.27	*1.46	1.41	*1.44
Persons	***1.27**	**1.20**	***1.31**	***1.24**
1995 to 2004–05				
Males	*1.56	*1.42	*1.92	*1.60
Females	*1.26	*1.88	1.43	*1.70
Persons	***1.42**	***1.63**	***1.67**	***1.65**

* Findings statistically significant.

Notes

1. This table compares the prevalence of reporting diabetes in each area in 2004–05 and 2001, with that in 1995.
2. These results relate to persons aged 15 years and over.

Sources: 1995, 2001 and 2004–05 NHS.

- In 2005, Indigenous Australians in Major Cities were significantly more (3 times as) likely to report diabetes than the general population in Major Cities (Table 4). The prevalence of reported diabetes increased significantly with increasing remoteness; in All remote areas rates were 5.5 times as high as in Major Cities.

Table 4: Prevalence of self-reported diabetes amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	3.9	*2.48	*2.19	*3.62	*4.57	*3.28
Females	5.5	*4.04	*4.36	*4.65	*6.52	*4.95
Persons	**4.7**	***3.22**	***3.18**	***4.12**	***5.48**	***4.06**

* Findings statistically significant.

Notes

1. This table compares the prevalence of diabetes amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Cerebrovascular disease

- There were no clear inter-regional differences in the prevalence of self-reported cerebrovascular disease for both males and females in 2004–05 (Table 5).

Table 5: Prevalence of self-reported cerebrovascular disease, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR +R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males	0.5	1.00	0.58	0.82	0.68
Females	0.4	1.00	1.06	1.79	1.32
Persons	**0.5**	**1.00**	**0.78**	**1.19**	**0.93**
2001					
Males	0.7	1.00	0.61	0.74	*0.66
Females	0.5	1.00	1.30	0.72	1.10
Persons	**0.6**	**1.00**	**0.90**	**0.74**	**0.85**
1995					
Males	0.7	1.00	1.08	*0.46	0.87
Females	0.4	1.00	*1.36	1.38	*1.37
Persons	**0.5**	**1.00**	***1.20**	**0.83**	**1.08**

* Findings statistically significant.

Notes

1. An alternative method for calculating the prevalence of cerebrovascular disease from the NHS was nationally endorsed after this analysis. The prevalence estimates in this table may not be directly comparable to future estimates as a result of methodological changes.
2. The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- Rates of cerebrovascular disease in All regional/Remote areas were significantly lower in 2004–05 than they had been in 1995 (Table 6).

Table 6: Changes in prevalence of self-reported cerebrovascular disease, by Remoteness Area, between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
Males	0.75	*0.41	1.42	*0.62
Females	0.84	0.67	1.09	0.82
Persons	**0.79**	**0.53**	**1.21**	***0.72**

* Findings statistically significant.

Note: This table compares the prevalence of reporting cerebrovascular disease in each area in 2004–05 with that in 1995.

Sources: 1995 and 2004–05 NHS.

- Overall, Indigenous Australians appeared more likely to report cerebrovascular disease than people living in Major Cities. Rates for Indigenous men in Major Cities appeared similar to those for the total male population in Major Cities, and rates for Indigenous females appeared half those for all females in Major Cities (Table 7).

Table 7: Prevalence of self-reported cerebrovascular disease amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	0.6	1.24	1.70	1.29	2.41	1.70
Females	0.1	0.51	2.46	1.93	3.74	2.19
Persons	**0.3**	**0.93**	**2.06**	**1.61**	**3.01**	**1.92**

* Findings statistically significant.

Notes

1. This table compares the prevalence of cerebrovascular disease amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities (MC crude) is the crude percentage.

Source: 2004–05 NATSIHS.

Osteoporosis

- The prevalence of self-reported osteoporosis for females in All regional/Remote areas was significantly less (0.8 times) than that for females in Major Cities. For males, there were no clear inter-regional differences in the prevalence of self-reported osteoporosis (Table 8).
- The inter-regional pattern is similar across the three surveys (1995, 2001 and 2004–05).

Table 8: Prevalence of self-reported osteoporosis, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males	0.9	1.00	0.98	0.85	0.93
Females	5.3	1.00	0.89	*0.64	*0.80
Persons	**3.1**	**1.00**	**0.90**	***0.67**	***0.82**
2001					
Males	0.6	1.00	*0.45	0.85	*0.60
Females	2.7	1.00	0.82	0.91	0.85
Persons	**1.7**	**1.00**	***0.76**	**0.86**	***0.79**
1995					
Males	—	1.00	1.04	*0.53	0.85
Females	2.6	1.00	*0.83	*0.77	*0.81
Persons	**1.5**	**1.00**	***0.84**	***0.72**	***0.80**

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- In 2004–05, people in All regional/Remote areas were significantly more likely to report osteoporosis as people living in those areas in 1995 (Table 9).

Table 9: Changes in prevalence of self-reported osteoporosis, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995–2001				
Males	*1.80	0.78	3.07	1.28
Females	1.03	1.04	1.23	1.10
Persons	**1.12**	**1.01**	**1.40**	**1.12**
1995 to 2004–05				
Males	*2.54	*2.31	*4.44	*2.79
Females	*1.96	*2.13	*1.64	*1.96
Persons	***2.02**	***2.16**	***1.88**	***2.07**

* Findings statistically significant.

Note: The table compares the prevalence of reporting osteoporosis in each area in 2004–05 and 2001, with that in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

- Indigenous Australian females were significantly less likely (0.6 times) to report osteoporosis than Australian females living in Major Cities.
- Compared with the general population in Major Cities, rates of self-reported osteoporosis in Indigenous Australians were significantly lower in All remote areas (Table 10).

Table 10: Prevalence of self-reported osteoporosis amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	0.7	1.99	2.41	2.69	1.23	1.99
Females	1.4	0.79	1.02	*0.52	*0.16	*0.58
Persons	**1.1**	**0.99**	**1.24**	**0.82**	***0.33**	**0.80**

* Findings statistically significant.

Notes

1. This table compares the prevalence of osteoporosis amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Asthma

- The prevalence of self-reported asthma in Inner Regional areas was significantly higher (about 1.2 times) than in Major Cities (Table 11). There was no evidence of a difference in prevalence in Other areas (Outer Regional and Remote).
- The inter-regional pattern is not consistent across time: in 2001, there was, in the main, very little clear inter-regional variation, while in 1995 and 2004–05, there were significantly higher rates of asthma in All regional/Remote areas than in Major Cities.

Table 11: Prevalence of self-reported asthma, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males	8.6	1.00	*1.19	0.96	1.10
Females	10.7	1.00	*1.24	1.18	*1.22
Persons	**9.7**	**1.00**	***1.22**	**1.08**	***1.16**
2001					
Males	11.0	1.00	*0.88	0.91	*0.89
Females	12.4	1.00	1.05	1.08	1.06
Persons	**11.7**	**1.00**	**0.97**	**1.00**	**0.98**
1995					
Males	10.2	1.00	*1.13	*1.11	*1.12
Females	11.2	1.00	1.04	*1.09	*1.06
Persons	**10.7**	**1.00**	***1.09**	***1.09**	***1.09**

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- In Major Cities, rates of asthma increased significantly between 1995 and 2001, but significantly declined between 1995 and 2004–05 (Table 12). Between 1995 and 2004–05,

rates for males in All regional/Remote areas significantly decreased and rates for females appeared to increase.

Table 12: Changes in prevalence of self-reported asthma, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
	Standardised prevalence ratio			
1995–2001				
Males	*1.09	*0.84	0.88	*0.85
Females	*1.12	1.11	1.10	*1.11
Persons	***1.10**	**0.98**	**0.99**	**0.98**
1995 to 2004–05				
Males	*0.86	0.92	*0.74	*0.85
Females	0.97	1.13	1.05	1.10
Persons	***0.92**	**1.03**	**0.89**	**0.98**

* Findings statistically significant.

Note: This table compares the prevalence of reporting asthma in each area in 2004–05 and 2001, with that in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

- Indigenous Australians overall were significantly more likely (1.5 times) to report asthma as people in Major Cities (Table 13). Compared with Major Cities, asthma prevalence was significantly higher for Indigenous Australians living in Major Cities and All regional areas, but was similar in All remote areas.

Table 13: Prevalence of self-reported asthma amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	15.2	*1.54	*1.50	*1.42	*0.63	*1.26
Females	21.9	*2.02	*2.00	*1.41	1.16	*1.64
Persons	**18.6**	***1.79**	***1.76**	***1.42**	**0.91**	***1.47**

* Findings statistically significant.

Notes

1. This table compares the prevalence of asthma amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Bronchitis

- In All regional/Remote areas, males were significantly more (1.4 times as) likely, and females appeared as likely, to report bronchitis than those in Major Cities (Table 14).
- In previous surveys, rates in All regional/Remote areas tended to be lower than in Major Cities.

Table 14: Prevalence of self-reported bronchitis, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males	2.4	1.00	1.31	*1.60	*1.43
Females	3.1	1.00	1.06	1.15	1.09
Persons	**2.8**	**1.00**	**1.17**	***1.36**	***1.24**
2001					
Males	3.5	1.00	0.89	0.81	0.86
Females	3.7	1.00	1.02	*0.70	0.90
Persons	**3.6**	**1.00**	**0.96**	***0.75**	**0.88**
1995					
Males	4.1	1.00	0.97	*0.72	*0.88
Females	4.2	1.00	1.03	*0.84	0.96
Persons	**4.2**	**1.00**	**1.00**	***0.78**	***0.92**

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- Over time, the prevalence of self-reported bronchitis has tended to decline significantly in Major Cities and Inner Regional areas (Table 15).

Table 15: Changes in prevalence of self-reported bronchitis, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995–2001				
Males	*0.83	*0.75	0.93	*0.81
Females	0.89	0.90	0.76	0.85
Persons	***0.86**	***0.83**	**0.84**	***0.83**
1995 to 2004–05				
Males	*0.56	*0.76	1.23	0.91
Females	*0.73	*0.76	1.02	0.84
Persons	***0.65**	***0.76**	**1.12**	***0.88**

* Findings statistically significant.

Note: The table compares the prevalence of reporting bronchitis in each area in 2004–05 and 2001, with that in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

- Overall, Indigenous Australians were significantly more likely (2.0 times) to report bronchitis as people in Major Cities. Indigenous Australians in All remote areas were significantly less likely to report bronchitis as those in Major Cities (Table 16).

Table 16: Prevalence of self-reported bronchitis amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	2.8	1.70	2.12	*2.40	0.73	1.67
Females	6.2	*2.75	*3.81	*1.84	*0.57	*2.15
Persons	**4.6**	***2.32**	***3.09**	***2.06**	***0.64**	***1.95**

* Findings statistically significant.

Notes

1. This table compares the prevalence of bronchitis amongst Aboriginal and Torres Strait Islander peoples in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Arthritis

- Males and females in All regional/Remote areas were significantly more (respectively 1.3 and 1.2 times) likely to report arthritis as those in Major Cities (Table 17).
- For males in All regional/Remote areas there were significantly higher rates of arthritis for those aged 45 years and older, while for females rates were significantly higher for those aged between 25 and 64 years.
- Previous surveys also showed significantly higher rates of arthritis in All regional/Remote areas than in Major Cities.

Table 17: Prevalence of self-reported arthritis, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	0.0	n.p.	n.p.	n.p.	n.p.
15–24	0.5	1.00	2.37	2.47	2.41
25–44	6.2	1.00	1.35	1.30	1.33
45–64	21.7	1.00	*1.45	*1.29	*1.39
65+	38.5	1.00	1.13	*1.32	*1.20
Total males	*11.3*	*1.00*	**1.31*	**1.31*	**1.31*
Females					
0–14	0.1	n.p.	n.p.	n.p.	n.p.
15–24	1.1	1.00	2.85	1.79	2.52
25–44	6.8	1.00	1.30	1.51	*1.38
45–64	28.9	1.00	*1.27	*1.26	*1.27
65+	55.7	1.00	1.07	0.96	1.03
Total females	*16.5*	*1.00*	**1.20*	**1.17*	**1.19*
Persons					
0–14	0.1	n.p.	n.p.	n.p.	n.p.
15–24	0.8	1.00	*2.70	2.06	*2.48
25–44	6.5	1.00	*1.32	*1.41	*1.36
45–64	25.3	1.00	*1.35	*1.27	*1.32
65+	48.1	1.00	1.09	1.11	1.10
Total persons	**14.0**	**1.00**	***1.24**	***1.23**	***1.24**
2001					
Males	10.2	1.00	*1.19	1.14	*1.17
Females	15.1	1.00	*1.14	1.11	*1.13
Persons	**12.7**	**1.00**	***1.16**	***1.11**	***1.14**
1995					
Males	10.6	1.00	*1.24	*1.24	*1.24
Females	17.1	1.00	*1.10	1.04	*1.08
Persons	**13.8**	**1.00**	***1.15**	***1.11**	***1.14**

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- Between 1995 and 2004–05, the prevalence of self-reported arthritis does not appear to have changed (Table 18).

Table 18: Changes in prevalence of self-reported arthritis, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995–2001				
Males	0.93	*0.89	0.87	*0.89
Females	*0.87	*0.89	0.93	*0.90
Persons	***0.89**	***0.89**	***0.90**	***0.90**
1995 to 2004–05				
Males	0.99	1.06	1.09	1.07
Females	*0.91	0.99	1.02	1.00
Persons	***0.95**	**1.02**	**1.05**	**1.03**

* Findings statistically significant.

Note: This table compares the prevalence of reporting arthritis in each area in 2004–05 and 2001, with that in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

- Indigenous Australians were significantly more (1.5 times as) likely to report arthritis as the general population in Major Cities (Table 19).
- Self-reported arthritis was less prevalent for Indigenous Australian males with increasing remoteness. Indigenous Australian females were most likely to report arthritis in Inner Regional areas and, it appears, least likely to report it in All remote areas.

Table 19: Prevalence of self-reported arthritis amongst IndigenousAustralians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	10.1	*2.07	*1.89	*1.71	0.87	*1.61
Females	11.6	*1.60	*2.23	*1.46	0.90	*1.49
Persons	**10.9**	***1.79**	***2.09**	***1.56**	**0.88**	***1.53**

* Findings statistically significant.

Notes

1. This table compares the prevalence of arthritis amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Coronary heart disease

- Overall, males and females in All regional/Remote areas were about as likely to report coronary heart disease as their counterparts in Major Cities (Table 20). However, males in Other areas (Outer Regional and Remote) were significantly less (0.6 times) likely to report coronary heart disease than those in Major Cities.
- The tendency for little inter-regional variation in self-reported prevalence is reflected in the 2001 survey.

Table 20: Prevalence of self-reported coronary heart disease, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males	2.1	1.00	1.11	*0.61	0.92
Females	1.3	1.00	1.19	0.67	1.01
Persons	**1.7**	**1.00**	**1.14**	***0.63**	**0.95**
2001					
Males	2.1	1.00	0.94	0.78	0.89
Females	1.5	1.00	1.11	1.07	1.10
Persons	**1.8**	**1.00**	**1.01**	**0.91**	**0.98**

* Findings statistically significant.

Notes

1. An alternative method for calculating the prevalence of coronary heart disease from the NHS was nationally endorsed after this analysis. The prevalence estimates in this table may not be directly comparable to future estimates as a result of methodological changes.
2. The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2001 and 2004–05 NHS.

- With the exception of Other areas (Outer Regional and Remote), there were no clear declines in the self-reported prevalence of coronary heart disease. In Other areas, self-reported prevalence in 2004–05 was 0.6 times less than in 2001 (Table 21).

Table 21: Changes in the prevalence of self-reported coronary heart disease, by Remoteness Area, between 2001 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
	Standardised prevalence ratio			
2001 to 2004–05				
Males	0.92	1.07	0.69	0.94
Females	0.84	0.91	*0.52	0.77
Persons	**0.88**	**1.00**	***0.61**	**0.87**

* Findings statistically significant.

Note: This table compares the prevalence of reporting coronary heart disease in each area in 2004–05, with that in 2001.

Sources: 2001 and 2004–05 NHS.

- Compared with the general population in Major Cities, the self-reported prevalence of coronary heart disease is significantly higher (2.5 times) for Indigenous Australians, particularly in Major Cities (3.8 times) (Table 22).

Table 22: Prevalence of self-reported coronary heart disease amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	**MC**	**IR**	**OR**	**All remote (R + VR)**	**Total**
	Per cent	**Standardised prevalence ratio**				
Males	1.8	2.54	1.54	1.75	1.63	1.91
Females	2.1	*6.42	2.60	2.49	2.71	3.58
Persons	**1.9**	***3.80**	**1.92**	**2.04**	**2.03**	***2.51**

* Findings statistically significant.

Notes

1. This table compares the prevalence of reporting coronary heart disease amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities (MC crude) is the crude percentage.

Source: 2004–05 NATSIHS.

Indicator 1.1.1b Chronic diseases (cancer)

Summary of findings

Compared with Major Cities, the incidence of cancer was significantly higher in 2001–03 in All regional areas and significantly lower in Very Remote areas.

Melanoma is responsible for the large proportion of the excess new cases of cancer in All regional areas (60%), followed by colorectal (16%), lip (15%) and lung (12%).

Background

Cancer was responsible for 19% of the total burden of disease and injury in Australia in 2003, with lung, colorectal, breast and prostate cancer accounting for half of this burden (AIHW: Begg et al. 2007).

Data for indicator 1.1.1b are sourced from the National Cancer Statistics Clearing House at the AIHW. Excluding non-melanoma skin cancer, invasive cancer in Australia is legally notifiable to state and territory cancer registries. All new cases of cancer since 1982 have been provided by the registries to the National Cancer Statistics Clearing House.

Table 23, 24 and Table 25 describe and compare cancer incidence in Major Cities, All regional and All remote areas in 2001–2003.

Table 23 compares the number of observed new cases of cancer in each area with the number that would be expected if Major Cities age-specific rates of cases of cancer incidence were applied to the population in each area; this ratio is the standardised incidence ratio. A ratio of 1.0 indicates the same incidence of cancer, a ratio of 0.5 would indicate the area had half the incidence apparent in Major Cities, and a ratio of 2.0 would indicate that incidence in the area was double that in Major Cities. Where ratios in Table 22 are statistically significantly different from 1.0 (that is, are different from those in Major Cities), they are accompanied by an asterisk. In the text, ratios found in Table 22 have been rounded to the closest 0.05 for increased specificity.

Table 24 reports the average annual number of new cases for each cancer. This is included so that the reader has an understanding of the relative magnitude of each type of cancer in each area. Table 25 describes the number of excess new cases of cancer. The excess is here defined as the difference between the number of observed new cases and the number of new cases expected if Major Cities age-specific rates applied to the population in each area. If there were no excess new cases, then the cancer incidence rate would be the same as in Major Cities. In many areas, there were fewer new cases of cancer than expected (indicated by negative numbers of excess new cases).

Detailed results

- The incidence of cancer for males in Inner Regional and Outer Regional areas, and for females in Inner Regional areas, was significantly higher (1.1 times) than that in Major Cities. The incidence of cancer in Very Remote areas was significantly lower (about 0.9 times) than that in Major Cities (Table 23).
- Melanoma is responsible for 60% of the excess new cases of cancer outside Major Cities (for example, 230 of the 496 excess new cases of cancer for males, and 236 of the 258 excess new cases of cancer for females in Inner Regional areas). Melanoma incidence was

significantly greater (1.1–1.2 times) than Major Cities incidence, except in Very Remote areas where it was significantly lower (0.8 times) than Major Cities incidence.

- Prostate cancer incidence in Inner Regional areas was significantly (3%) greater than Major Cities incidence, and accounted for about one-fifth of all excess new cases of cancer in males in Inner Regional areas.
- Lip cancer incidence in All regional and All remote areas was significantly higher (1.5 times) than in Major Cities. It contributed relatively large numbers of the excess new cases of cancer in each area (for example, 65 of the 496 excess new cases of cancer for males in Inner Regional areas).
- Compared with Major Cities, lung cancer incidence was similar in Inner Regional areas, but was significantly (1.1 times) higher in Outer Regional areas, 1.2 times higher in Remote areas for males, and up to 1.4 times significantly higher in Very Remote areas. Lung cancer was responsible for about 10% of excess new cases of cancer in All regional areas (and specifically about a quarter of excess new cases of cancer in Outer Regional areas). In All remote areas, new cases of lung cancer were a strong contributor to total excess cancer notifications.
- Head and neck cancer incidence was similar in Inner Regional areas compared with Major Cities but, for males in Outer Regional, Remote and Very Remote areas, incidence was significantly higher (respectively, 1.3, 1.7 and 2.4 times as high) as in Major Cities. For males, new cases of head and neck cancer made moderate contributions to overall excess new cases of cancer in Outer Regional areas, and very substantial contributions in Very Remote areas.
- The incidence of colorectal cancer was significantly higher in All regional areas than in Major Cities, but was similar to Major Cities rates in All remote areas. In Very Remote areas, rates were significantly lower (0.8 times) than those in Major Cities.
- Breast cancer incidence was significantly lower in All regional and All remote areas, being 0.9 times in Outer Regional and Remote areas, and 0.8 in Very Remote areas. Lower breast cancer incidence had a substantial effect in lowering the total number of excess deaths for females, especially in Outer Regional areas.
- Lymphoma also had significantly lower incidence in All regional and All remote areas having, in Inner Regional, Outer Regional, Remote and Very Remote areas, incidences 0.9, 0.8, 0.7 and 0.7 times those in Major Cities.
- Stomach cancer also had significantly lower incidence outside Major Cities: in Inner Regional, Outer Regional, Remote and Very Remote areas, 0.9, 0.8, 0.8 and 0.7 times the incidence in Major Cities.
- The incidence of liver cancer in Inner Regional and Outer Regional areas was significantly lower (0.6 and 0.7 times) than in Major Cities. It is unclear whether incidence of liver cancer in All remote areas was different from that in Major Cities.
- For males in Inner Regional areas, incidence of bladder cancer was significantly higher (about 1.1 times) than in Major Cities.
- The incidence of cancer of unknown primary site increased significantly with increasing remoteness. For males, incidence of cancers of unknown primary site were 1.1, 1.2, 1.3 and 1.4 times as high as those in Major Cities (respectively, for Inner Regional, Outer Regional, Remote and Very Remote areas). The contribution to overall excess new cases of cancer was relatively moderate in All regional areas, but relatively substantial in All remote areas.

Table 23: Standardised Incidence Ratios, new cases of cancer, by cancer site, sex and Remoteness Area, 2001–03

	Males					Females					Persons				
	MC	**IR**	**OR**	**R**	**VR**	**MC**	**IR**	**OR**	**R**	**VR**	**MC**	**IR**	**OR**	**R**	**VR**
Bladder	1.00	*1.10	1.04	0.98	0.93	1.00	1.03	1.16	1.06	0.90	1.00	*1.08	1.07	1.00	0.93
Brain	1.00	1.07	0.97	0.82	0.74	1.00	1.09	0.91	1.23	*0.44	1.00	*1.07	0.95	0.97	*0.63
Breast	1.00	1.01	1.03	1.03	0.93	1.00	*0.98	*0.91	*0.89	*0.78	1.00	*0.98	*0.92	*0.89	*0.78
Cervical	n.a.	n.a.	n.a.	n.a.	n.a.	1.00	0.98	*1.20	1.35	1.26	1.00	0.98	*1.20	1.35	1.26
Colorectal	1.00	1.03	*1.05	1.06	*0.81	1.00	*1.05	1.03	0.93	*0.72	1.00	*1.04	*1.04	1.01	*0.77
Connective soft tissue	1.00	1.04	0.93	0.82	1.42	1.00	1.07	*0.80	0.98	0.51	1.00	1.05	0.87	0.89	1.03
Head and neck	1.00	1.04	*1.25	*1.69	*2.36	1.00	1.00	0.95	1.04	1.36	1.00	1.03	*1.16	*1.51	*2.09
Kidney	1.00	0.97	0.97	0.84	0.70	1.00	1.02	1.02	0.95	0.70	1.00	0.99	0.98	0.87	*0.70
Leukemia	1.00	1.06	1.07	0.88	0.82	1.00	1.03	0.99	0.89	0.89	1.00	1.05	1.04	0.88	0.84
Lip	1.00	*1.49	*1.69	*1.84	1.56	1.00	*1.66	*1.60	1.47	1.96	1.00	*1.54	*1.66	*1.76	*1.64
Liver	1.00	*0.66	*0.72	*0.60	1.15	1.00	*0.60	*0.69	1.05	2.45	1.00	*0.64	*0.72	0.71	1.44
Lung	1.00	1.02	*1.10	*1.17	*1.36	1.00	1.01	*1.08	0.98	1.36	1.00	1.02	*1.09	1.11	*1.36
Lymphoma	1.00	*0.91	*0.81	*0.65	*0.65	1.00	*0.93	*0.84	*0.67	0.73	1.00	*0.92	*0.82	*0.66	*0.68
Melanoma	1.00	*1.20	*1.08	0.97	*0.79	1.00	*1.30	*1.24	*1.34	*0.78	1.00	*1.24	*1.15	*1.11	*0.78
Pancreas	1.00	1.04	0.97	0.87	0.92	1.00	1.07	1.11	1.18	0.94	1.00	1.05	1.03	1.00	0.93
Prostate	1.00	*1.03	1.02	1.01	*0.78	n.a.	n.a.	n.a.	n.a.	n.a.	1.00	*1.03	1.02	1.01	*0.78
Stomach	1.00	0.94	*0.84	0.92	0.76	1.00	*0.83	*0.86	*0.49	0.55	1.00	*0.90	*0.84	*0.78	*0.69
Unknown primary site	1.00	*1.10	*1.23	*1.26	*1.43	1.00	1.05	1.02	1.26	*1.81	1.00	*1.07	*1.13	*1.26	*1.58
All cancers	**1.00**	***1.05**	***1.05**	**1.02**	***0.93**	**1.00**	***1.03**	**1.00**	**0.99**	***0.88**	**1.00**	***1.04**	***1.03**	**1.01**	***0.91**

* Findings statistically significant.

Source: National Cancer Statistics Clearing House.

Table 24: Average annual numbers of new cases of cancer, by cancer site, sex and Remoteness Area, 2001–03

	Males					Females					Persons				
	MC	**IR**	**OR**	**R**	**VR**	**MC**	**IR**	**OR**	**R**	**VR**	**MC**	**IR**	**OR**	**R**	**VR**
Bladder	1,068	429	191	23	9	386	135	67	7	2	1,454	564	258	29	11
Brain	532	193	87	11	4	406	145	56	10	2	938	338	143	20	6
Breast	59	21	11	1	1	7,943	2,600	1,126	142	53	8,002	2,622	1,137	143	53
Cervical	n.a.	n.a.	n.a.	n.a.	n.a.	468	145	84	13	6	468	145	84	13	6
Colorectal	4,383	1,636	806	106	33	3,789	1,351	593	61	18	8,172	2,987	1,399	166	51
Connective soft tissue	218	77	34	4	3	220	78	27	4	1	438	155	61	8	4
Head and neck	735	269	161	30	19	351	117	51	7	4	1,085	387	211	37	22
Kidney	850	293	143	17	6	490	170	76	9	3	1,341	463	219	25	9
Leukemia	942	354	171	19	8	704	241	104	11	5	1,646	595	276	30	12
Lip	392	198	111	18	7	153	85	37	4	2	545	284	148	22	9
Liver	449	106	57	6	5	190	39	20	3	3	639	145	76	10	8
Lung	3,349	1,259	645	86	40	1,934	674	320	33	18	5,283	1,933	965	119	58
Lymphoma	1,518	476	209	23	11	1,254	389	158	15	7	2,772	865	367	39	18
Melanoma	3,307	1,371	608	78	28	2,446	1,028	458	66	17	5,753	2,399	1,066	143	46
Pancreas	626	236	105	12	5	599	218	100	12	3	1,225	454	205	24	9
Prostate	7,711	2,933	1,390	173	54	n.a.	n.a.	n.a.	n.a.	n.a.	7,711	2,933	1,390	173	54
Stomach	798	272	116	16	6	480	134	62	4	2	1,277	407	178	20	7
Unknown primary site	1,046	417	222	29	13	1,068	378	162	22	12	2,114	795	384	50	25
All cancers	**27,984**	**10,542**	**5,066**	**652**	**251**	**22,881**	**7,926**	**3,500**	**421**	**156**	**50,865**	**18,469**	**8,566**	**1,073**	**407**

Note: All cancers will not add up to the summed total of site-specific cancers due to inclusion of other cancers with low incidence.

Source: National Cancer Statistics Clearing House.

Table 25: Average annual numbers of excess new cases of cancer, by cancer site, sex and Remoteness Area, 2001–03

	Males					Females					Persons				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR
Bladder	0	39	7	0	–1	0	4	9	0	0	0	43	16	0	–1
Brain	0	12	–2	–2	–2	0	11	–5	2	–2	0	23	–8	–1	–3
Breast	0	0	0	0	0	0	–62	–106	–17	–15	0	–62	–105	–17	–15
Cervical	n.a.	n.a.	n.a.	n.a.	n.a.	0	–3	14	3	1	0	–3	14	3	1
Colorectal	0	42	40	6	–8	0	59	18	–4	–7	0	102	58	2	–15
Connective soft tissue	0	3	–3	–1	1	0	5	–7	0	–1	0	8	–9	–1	0
Head and neck	0	10	33	12	11	0	0	–3	0	1	0	10	30	13	12
Kidney	0	–11	–5	–3	–3	0	4	1	0	–1	0	–7	–4	–4	–4
Leukemia	0	20	11	–3	–2	0	6	–1	–1	–1	0	26	9	–4	–2
Lip	0	65	45	8	2	0	34	14	1	1	0	99	59	9	4
Liver	0	–56	–22	–4	1	0	–26	–9	0	2	0	–81	–30	–4	2
Lung	0	30	59	12	11	0	9	24	–1	5	0	39	83	12	15
Lymphoma	0	–50	–48	–13	–6	0	–28	–31	–8	–3	0	–77	–78	–20	–8
Melanoma	0	230	47	–2	–8	0	236	89	17	–5	0	467	137	15	–13
Pancreas	0	8	–4	–2	0	0	14	10	2	0	0	22	6	0	–1
Prostate	0	91	31	1	–15	n.a.	n.a.	n.a.	n.a.	n.a.	0	91	31	1	–15
Stomach	0	–17	–23	–1	–2	0	–28	–10	–4	–1	0	–45	–33	–6	–3
Unknown primary site	0	38	42	6	4	0	17	3	4	5	0	55	45	10	9
All cancers	0	496	223	12	–18	0	258	13	–6	–21	0	771	251	10	–38

Source: National Cancer Statistics Clearing House.

Indicator 1.1.2 Injury

Summary of findings

In 2004–05, people in All regional/Remote areas were significantly more (1.2 times) likely to report an injury in the previous four weeks and/or a long-term condition due to injury as those in Major Cities.

Across all areas, rates of self-reported injury increased significantly over time.

Background

Injuries were responsible for 7.0% of the total burden of disease and injury in Australia in 2003, with suicide and self-inflicted injuries, road traffic accidents and falls accounting for nearly two-thirds of this burden (AIHW: Begg et al. 2007).

Data used to inform indicator 1.1.2 are derived from the:

- 2001 and 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

Results from the 2001 and 2004–05 NHS are presented to describe inter-regional differences in the rate at which people report a long-term condition due to injury.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

Injuries received in the previous four weeks

- Males and females living in All regional/Remote areas were significantly more likely (1.2 times) to report an injury in the four weeks preceding the survey period, compared with their counterparts in Major Cities (Table 26).

Table 26: Prevalence of self-reported injury in the previous four weeks, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males					
0–14	24.2	1.00	0.99	1.02	1.00
15–24	20.0	1.00	*1.52	1.16	*1.38
25–44	16.8	1.00	*1.32	*1.39	*1.35
45–64	11.1	1.00	1.08	*1.52	1.24
65+	18.6	1.00	1.10	0.81	0.99
Total males	*17.6*	*1.00*	**1.18*	**1.18*	**1.18*
Females					
0–14	24.8	1.00	1.12	0.94	1.05
15–24	19.9	1.00	1.07	1.36	1.16
25–44	15.1	1.00	*1.38	*1.45	*1.41
45–64	11.1	1.00	*1.36	1.38	*1.37
65+	17.1	1.00	1.12	1.23	1.16
Total females	*16.9*	*1.00*	**1.21*	**1.23*	**1.22*
Persons					
0–14	24.5	1.00	1.05	0.98	1.02
15–24	19.9	1.00	*1.29	1.25	*1.27
25–44	16.0	1.00	*1.35	*1.42	*1.38
45–64	11.1	1.00	1.22	*1.45	*1.30
65+	17.7	1.00	1.11	1.00	1.07
Total persons	**17.2**	**1.00**	***1.20**	***1.21**	***1.20**
2001	12.6	1.00	*1.22	1.16	*1.20
Males	11.1	1.00	0.96	1.06	1.00
Females	11.8	1.00	*1.10	*1.12	*1.10
Persons	24.2	1.00	0.99	1.02	1.00

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2001 and 2004–05 NHS.

- Across all areas, rates of self-reported injury in 2004–05 were significantly higher than those seen in 2001 (Table 27).

Table 27: Changes in the prevalence of self-reported injury in the previous four weeks, by Remoteness Area, between 2001 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
2001 to 2004–05				
Males	*1.42	*1.38	*1.48	*1.42
Females	*1.54	*1.96	*1.79	*1.89
Persons	***1.48**	***1.62**	***1.62**	***1.62**

* Findings statistically significant.

Note: This table compares the prevalence of self-reporting injury in each area in 2004–05, with that in 2001.

Sources: 2001 and 2004–05 NHS.

- Compared with the general population in Major Cities, rates of self-reported prevalence of injury in the previous four weeks were similar for Indigenous Australians in regional areas and significantly lower for Indigenous Australians in All remote regions (Table 28).

Table 28: Prevalence of self-reported injury in the previous four weeks amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	23.0	1.15	1.10	1.15	*0.74	1.03
Females	19.0	1.00	0.95	0.85	*0.65	*0.86
Persons	**20.9**	**1.07**	**1.03**	**0.99**	***0.69**	**0.95**

* Findings statistically significant.

Notes

1. This table compares the prevalence of self-reporting injury in the previous four weeks amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to all persons.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Injuries resulting in a long-term condition

- Males and females living in All regional/Remote areas were significantly more likely (1.2 times) to report a long-term condition resultant from an injury, compared with their counterparts in Major Cities (Table 29).

Table 29: Prevalence of self-reported long-term condition due to injury, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	24.2	1.00	0.99	1.02	1.00
15–24	20.0	1.00	*1.52	1.16	*1.38
25–44	16.8	1.00	*1.32	*1.39	*1.35
45–64	11.1	1.00	1.08	*1.52	1.24
65+	18.6	1.00	1.10	0.81	0.99
Total males	*17.6*	*1.00*	**1.18*	**1.18*	**1.18*
Females					
0–14	24.8	1.00	1.12	0.94	1.05
15–24	19.9	1.00	1.07	1.36	1.16
25–44	15.1	1.00	*1.38	*1.45	*1.41
45–64	11.1	1.00	*1.36	1.38	*1.37
65+	17.1	1.00	1.12	1.23	1.16
Total females	*16.9*	*1.00*	**1.21*	**1.23*	**1.22*
Persons					
0–14	24.5	1.00	1.05	0.98	1.02
15–24	19.9	1.00	*1.29	1.25	*1.27
25–44	16.0	1.00	*1.35	*1.42	*1.38
45–64	11.1	1.00	1.22	*1.45	*1.30
65+	17.7	1.00	1.11	1.00	1.07
Total persons	**17.2**	**1.00**	***1.20**	***1.21**	***1.20**
2001	12.6	1.00	*1.22	1.16	*1.20
Males	11.1	1.00	0.96	1.06	1.00
Females	11.8	1.00	*1.10	*1.12	*1.10
Persons	24.2	1.00	0.99	1.02	1.00

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2001 and 2004–05 NHS.

- The proportion of people who reported a long-term condition due to injury declined significantly in All regional/Remote areas between 2001 and 2004–05 (Table 30).

Table 30: Changes in the prevalence of self-reported long-term condition due to injury, by Remoteness Area, between 2001 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
2001 to 2004–05				
Males	*0.89	0.90	*0.85	*0.88
Females	*0.91	0.92	1.01	0.95
Persons	***0.90**	***0.91**	**0.91**	***0.91**

* Findings statistically significant.

Note: This table compares the prevalence of self-reporting a long-term condition due to injury in each area in 2004–05, with that in 2001.

Sources: 2001 and 2004–05 NHS.

- Compared with the population of Major Cities, rates of self-reported prevalence of a long-term condition resulting from an injury are significantly higher for Indigenous Australians, particularly for those living in Inner Regional areas (Table 31).

Table 31: Prevalence of self–reported long-term condition due to injury amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	19.5	*2.57	*3.38	*2.44	*1.84	*2.51
Females	11.6	*1.93	*2.59	*1.66	*1.66	*1.92
Persons	**15.4**	***2.28**	***3.06**	***2.10**	***1.76**	***2.25**

* Findings statistically significant.

Notes

1. This table compares the prevalence of self-reporting a long-term condition due to injury amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Indicator 1.1.3 Mental health

Summary of findings

Overall, there were no statistically significant inter-regional differences in the prevalence of depression or anxiety.

Males in Other areas (Outer Regional and Remote) were significantly more (1.2 times) likely to show high to very high levels of psychological distress as those in Major Cities. The prevalence for males in Inner Regional areas and for females in All regional/Remote areas was similar to that for their counterparts in Major Cities.

Background

Mental disorders were responsible for 13% of the total burden of disease and injury in Australia in 2003, with anxiety and depression, alcohol abuse and personality disorders accounting for almost three-quarters of this disorder (AIHW: Begg et al. 2007).

Data used to inform indicator 1.1.3 are derived from the:

- 2001 and 2004–05 ABS NHS
- 1997 Australian Bureau of Statistics Survey of Mental Health and Wellbeing of Adults (SMHW)
- 2004–05 ABS NATSIHS.

Data on anxiety and depression presented here are sourced from the 2004–05 NHS. In previous publications (AIHW 2005a), this information was obtained from the 1997 SMHW, which has not been conducted since.

The NHS also collects information on psychological distress, which is defined as 'high to very high levels of psychological distress' on the Kessler 10 scale (K10). An individual's K10 score is based on their response to 10 questions about their emotional state in the four weeks prior to interview. People with very high levels of psychological distress potentially have a need for professional help.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

Depression

- Overall, in 2004–05, there was no significant inter-regional difference in the prevalence of depression (Table 32). More specifically, however, males aged 45 to 64 years of age living in All regional/Remote areas were significantly more (1.4 times) likely to experience depression that those living in Major Cities. Males aged 15–24 and 65 years and over living in Other areas were significantly less likely to experience depression than their Major City counterparts. The 1997 results presented here are from a different survey series (SMHW), preventing detailed comparisons between the two time periods, however, patterns appear similar to results from the earlier (1997) SMHW.

Table 32: Prevalence of depression, by Remoteness Area, 1997 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males					
0–14	0.8	1.00	0.48	0.64	0.54
15–24	4.1	1.00	0.96	*0.29	0.69
25–44	5.5	1.00	1.04	1.32	1.15
45–64	5.4	1.00	1.42	1.36	*1.40
65+	4.0	1.00	0.83	*0.33	0.63
Total males	*4.2*	*1.00*	*1.11*	*1.03*	*1.08*
Females					
0–14	0.9	1.00	0.63	1.51	0.99
15–24	6.9	1.00	0.97	1.38	1.10
25–44	8.4	1.00	1.06	1.14	1.09
45–64	8.1	1.00	1.23	0.80	1.06
65+	4.9	1.00	1.71	1.06	1.49
Total females	*6.3*	*1.00*	*1.17*	*1.05*	*1.12*
Persons					
0–14	0.8	1.00	0.56	1.12	0.78
15–24	5.5	1.00	0.97	0.89	0.94
25–44	6.9	1.00	1.05	1.21	1.11
45–64	6.7	1.00	*1.31	1.01	1.19
65+	4.5	1.00	1.34	0.71	1.11
Total persons	**5.2**	**1.00**	**1.15**	**1.04**	**1.11**
2001					
Males	4.1	1.00	1.23	0.71	1.03
Females	7.4	1.00	0.97	1.09	1.02
Persons	5.8	1.00	1.05	0.94	1.01

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2004–05 NHS and the 1997 SMHW.

- Indigenous Australians were significantly more (about 1.5 times) likely to report depression as people in Major Cities (Table 33). Prevalence of depression for Indigenous Australians was significantly higher in All regional areas and significantly lower in All remote areas (Table 33).

Table 33: Prevalence of depression amongst Indigenous Australians aged 15 years and over, by Remoteness Area, 2004–05

	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent			Standardised prevalence ratio		
Males	4.0	1.25	*2.53	1.57	*0.42	1.37
Females	8.9	*1.64	*2.48	*1.59	*0.67	*1.52
Persons	**6.5**	***1.50**	***2.50**	***1.58**	***0.58**	***1.46**

* Findings statistically significant.

Notes

1. This table compares the prevalence of depression amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Anxiety

- In 2004–05 there was no significant inter-regional difference in the prevalence of anxiety, except for females aged 45–64 years living in Other areas who were significantly less likely to experience anxiety than their Major City counterparts (0.7 times) (Table 34).
- As stated previously, although the 1997 results presented here are from a different survey series (SMHW), it is interesting to note that this survey also showed little inter-regional variation (apart from lower prevalence of anxiety for males in Other areas (Outer Regional and Remote)).

Table 34: Prevalence of anxiety, by Remoteness Area, 1997 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	2.4	1.00	1.04	0.58	0.86
15–24	4.0	1.00	1.16	0.86	1.04
25–44	4.9	1.00	0.73	0.72	0.73
45–64	4.7	1.00	1.15	0.98	1.09
65+	3.3	1.00	0.84	1.11	0.95
Total males	*4.1*	*1.00*	*0.97*	*0.84*	*0.92*
Females					
0–14	1.9	1.00	1.27	2.06	1.59
15–24	4.9	1.00	1.13	1.27	1.18
25–44	6.7	1.00	1.38	1.12	1.27
45–64	8.7	1.00	0.97	*0.67	0.85
65+	4.6	1.00	0.80	1.24	0.95
Total females	*5.8*	*1.00*	*1.11*	*1.03*	*1.08*
Persons					
0–14	2.2	1.00	1.13	1.25	1.18
15–24	4.4	1.00	1.15	1.05	1.11
25–44	5.8	1.00	1.10	0.95	1.04
45–64	6.7	1.00	1.03	0.77	0.93
65+	4.0	1.00	0.82	1.19	0.95
Total persons	**4.9**	**1.00**	**1.05**	**0.95**	**1.01**
2001					
Males	7.4	1.00	1.03	*0.73	0.92
Females	12.0	1.00	1.04	1.03	1.04
Persons	9.7	1.00	1.03	0.91	0.98

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2004–05 NHS and the 1997 SMHW.

- Indigenous Australians were equally likely to report anxiety as people in the general Major Cities population (Table 35).
- The prevalence of anxiety for Indigenous Australians appeared to be significantly higher in Inner Regional areas and lower in All remote areas compared with the general population living in Major Cities.

Table 35: Prevalence of anxiety amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	4.7	1.31	*2.20	0.82	*0.50	1.17
Females	6.9	1.40	*2.25	1.10	*0.49	1.25
Persons	**5.8**	***1.37**	***2.23**	**0.98**	***0.49**	**1.22**

* Findings statistically significant.

Notes

1. This table compares the prevalence of anxiety amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Psychological distress

- In 2004–05, males in Inner Regional areas were as likely, and those in Other areas (Outer Regional and Remote) were significantly more (1.2 times) likely, than those in Major Cities to show high to very high levels of psychological distress (Table 36). Females in All regional/Remote areas appeared to be about as likely as those from Major Cities to show high to very high levels of psychological distress.
- In the 2001 NHS, there were no significant inter-regional differences in the prevalence of psychological distress.

Table 36: Prevalence of psychological distress, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	9.7	1.00	*0.52	0.77	*0.62
25–44	10.2	1.00	0.94	1.26	1.06
45–64	9.7	1.00	*1.36	*1.48	*1.41
65+	9.5	1.00	1.15	1.27	1.20
Total males	*7.9*	*1.00*	*1.05*	**1.24*	*1.13*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	12.9	1.00	1.21	0.88	1.11
25–44	15.9	1.00	0.98	*1.35	1.13
45–64	15.5	1.00	1.01	*0.69	0.88
65+	10.9	1.00	1.14	1.25	1.18
Total females	*11.5*	*1.00*	*1.05*	*1.03*	*1.04*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	11.3	1.00	0.93	0.83	0.89
25–44	12.6	1.00	0.96	*1.31	1.10
45–64	12.7	1.00	1.15	0.98	1.08
65+	10.3	1.00	1.15	1.26	1.19
Total persons	**9.7**	**1.00**	**1.05**	**1.12**	**1.08**
2001					
Males	9.7	1.00	1.11	0.97	1.06
Females	15.5	1.00	1.01	0.91	0.97
Persons	12.6	1.00	1.05	0.94	1.01

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 2001 and 2004–05 NHS.

Indicator 1.1.4 Dental health

Summary of findings

The geographic classification used for this indicator (Table 37) is the Accessibility/ Remoteness Index of Australia (ARIA) classification.

In 2001:

- 6-year-old children in Moderately Accessible and Remote areas had more (1.3 to 1.6 times) decayed, missing (due to decay) or filled teeth than their counterparts in Highly Accessible areas.
- 12-year-old children in Moderately Accessible and Very Remote areas also tended to have more (1.2 to 1.3 times) decayed, missing or filled teeth than their counterparts in Highly Accessible areas. However, 12-year-old children in Remote areas had significantly lower rates of decayed, missing and filled teeth compared with their counterparts in highly accessible areas.
- Overall, the mean number of decayed, missing or filled teeth increased between 1998 and 2001.

Background

Oral health is an integral component of lifelong health and is much more than the absence of oral diseases. Dental caries is the single most common chronic disease among children (AIHW 2006a).

Data used to inform indicator 1.1.4 are derived from the 1998 and 2001 Child Dental Health Survey, conducted by the AIHW Dental Statistics and Research Unit.

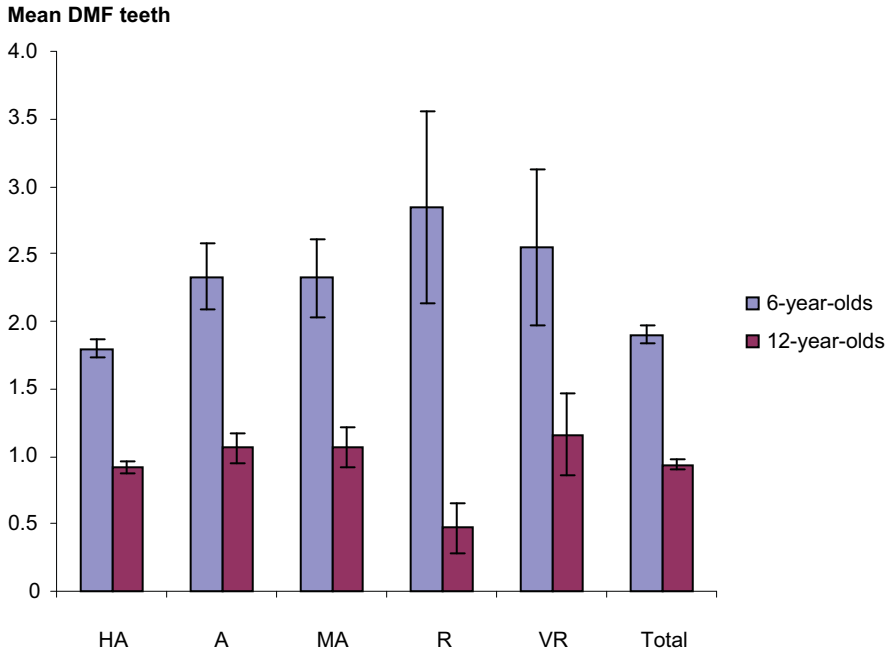
The average number of decayed, missing (due to decay) and filled teeth is frequently used as an indicator of child dental health. The World Health Organization (WHO) key age groups (6 and 12 years) are reported here. This indicator provides a measure of the population's oral health at an early age when the foundation for future oral health is being laid.

The geographic classification used for this indicator (Table 37) is the Accessibility/Remoteness Index of Australia (ARIA) classification. This is different from the ASGC Remoteness Areas classification which is the main geographic classification used in this report.
Refer to Appendix B for details of the scope and coverage of the data sources.

Detailed results

- In 2001, 6-year-olds living in less accessible areas tended to have more decayed, missing and filled teeth than those in Highly Accessible (HA) areas (Table 37). In Accessible (A), Moderately Accessible (MA), Remote (R) and Very Remote (VR) areas, they had 1.3, 1.3, 1.6 and 1.4 times as many decayed, missing and filled teeth, respectively, as 6–year-olds living in Highly Accessible areas.
- This compares with data from 1998 which shows that 6-year-olds living in Inner Regional, Outer Regional, Remote and Very Remote areas had 1.3, 1.3, 1.2 and 1.3 as many decayed, missing and filled teeth, respectively, as 6-year-olds living in Major Cities.
- In 2001, 12-year-olds living in less accessible areas tended to have more decayed, missing

and filled teeth than those in Highly Accessible areas. In Accessible, Moderately Accessible, Remote and Very Remote areas, they had varying numbers (1.2, 1.2, 0.5 and 1.3 times as many) of decayed, missing and filled teeth, respectively, as 12-year-olds living in Highly Accessible areas.



Notes

1. DMF: decayed, missing and filled.

2. Error bars indicate 95% confidence intervals. These indicate the amount of uncertainty about the precision of the calculated rate.

Source: 2001 Child Dental Health Survey.

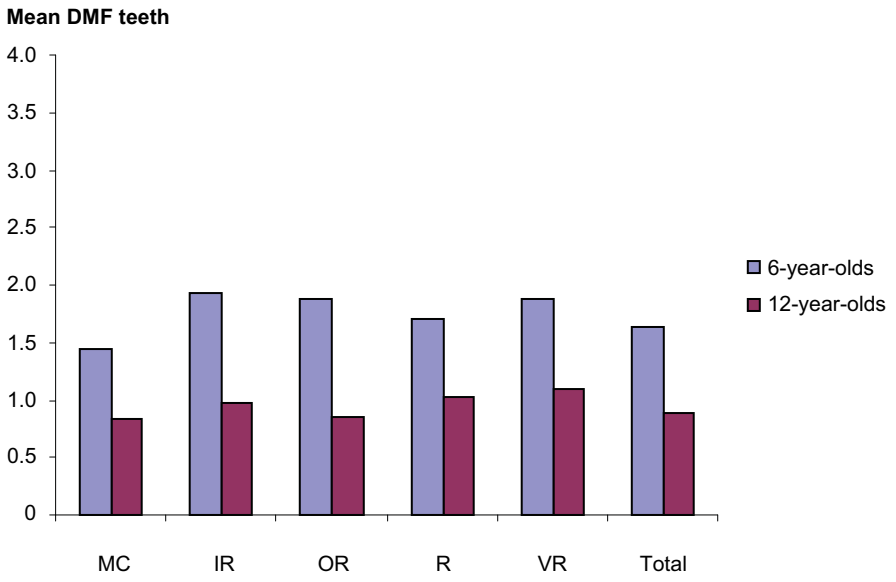
Figure 3: Mean number of decayed, missing and filled teeth in 6- and 12-year-olds, by ARIA category, 2001

Table 37: Mean number of decayed, missing and filled teeth in 6- and 12-year-olds, by ARIA category, 2001

	HA	A	MA	R	VR	Total
			Number			
6-year-olds	1.80	2.33	2.32	2.85	2.55	1.90
12-year-olds	0.92	1.06	1.07	0.47	1.16	0.94
Comparison with Highly Accessible Areas						
			Ratio			
6-year-olds	1.00	1.29	1.29	1.58	1.42	1.06
12-year-olds	1.00	1.15	1.16	0.51	1.26	1.02

Source: 2001 Child Dental Health Survey.

- This is roughly comparable with data from 1998 which shows that 12-year-olds living in Inner Regional, Outer Regional, Remote and Very Remote areas had 1.2, 1.0, 1.2 and 1.3 as many decayed, missing and filled teeth, respectively, as 12-year-olds living in Major Cities (Table 38).
- The overall mean number of decayed, missing or filled teeth is higher in 2001 compared with 1998 (1.9 compared with 1.6 for 6-year-olds, and 0.9 compared with 0.9 for 12-year-olds).



Source: 1998 Child Dental Health Survey.

Figure 4: Mean number of decayed, missing and filled teeth in 6- and 12-year-olds, by ASGC Remoteness Area, 1998

Table 38: Mean number of decayed, missing and filled teeth in 6- and 12-year-olds, by ASGC Remoteness Area, 1998

	MC	IR	OR	R	VR	Total
			Number			
6-year-olds	1.45	1.93	1.87	1.71	1.88	1.63
12-year-olds	0.84	0.98	0.85	1.02	1.09	0.89
Comparison with Major Cities						
			Ratio			
6-year-olds	1.00	1.33	1.29	1.18	1.30	1.12
12-year-olds	1.00	1.17	1.02	1.22	1.31	1.06

Note: These figures are slightly different from those published in the 1998 Child Dental Heath Survey report because they are based on adjusted data.

Source: 1998 Child Dental Health Survey.

Indicator 1.1.6 Birthweight

Summary of findings

Birthweights were similar in All regional and Major Cities areas but were slightly lower in Very Remote areas.

Lower birthweights outside Major Cities were particularly marked for babies of teenage mothers (those aged younger than 20 years).

In Major Cities, the average birthweight of babies born to Indigenous Australian mothers was lower (0.9 times) than those of non-Indigenous Australian mothers. The average birthweight for babies of Indigenous Australian mothers declined slightly with increasing remoteness.

The average birthweight of babies born to non-Indigenous Australian mothers showed relatively little inter-regional variation.

Background

Birthweight is an indicator of the health status of babies and of the community in general. Being a healthy baby is considered a good foundation for adult health.

Data used to inform indicator 1.1.6 are derived from the National Perinatal Data Collection.

Babies are defined as low birthweight if their birthweight is less than 2,500 grams. Within this category, those weighing less than 1,500 grams are designated as very low birthweight. Babies greater than 4,200 grams are considered large (AIHW 2001a).

Younger and older mothers are more likely to give birth to babies of low birthweight than are mothers of intermediate age (for example 30–34 years). In previous reports (AIHW 2005a) age standardisation was found to make little difference to inter-regional comparisons of birthweight. Consequently, mean birthweights in this report have not been age-standardised.

Data from the National Perinatal Data Collection for the years 2002, 2003 and 2004 were provided by the National Perinatal Statistics Unit (NPSU).

The percentage of liveborn singletons in the lowest 10th centile for their gestational age is considered a better indicator than mean birthweight, however, these data for recently-born babies were not available at the time of writing.

Refer to Appendix B for details of the scope and coverage of the data sources.

Detailed results

- In 2002–04, mean birthweight was similar in All regional and All remote areas to that in Major Cities (Table 39), and birthweights in Very Remote areas were lower than (0.96 times) those in Major Cities.

Table 39: Mean birthweight of live born singletons, by age of mother, 2002–04

Mother's age (years)	MC	IR	OR	R	VR
			Grams		
<20	3,296	3,313	3,240	3,137	3,068
20–24	3,358	3,375	3,349	3,300	3,197
25–29	3,407	3,436	3,419	3,409	3,329
30–34	3,430	3,463	3,441	3,455	3,361
35–39	3,417	3,442	3,424	3,420	3,356
≥40	3,370	3,402	3,383	3,302	3,354
Total	**3,406**	**3,425**	**3,397**	**3,373**	**3,261**
Deviation of total from MC	1.00	1.01	1.00	0.99	0.96

Notes

1. Remoteness refers to the area of the mother's residence.
2. Includes data from all Australian states and territories.
3. Excludes live births to mothers not usually resident in Australia and those whose state or territory of usual residence was 'Not stated'. Total includes live births to mothers whose maternal age was not stated.

Source: NPSU National Perinatal Data Collection.

- While mean birthweights for most maternal age groups were similar across the geographical areas, there was a tendency for birthweights to be lower in All remote (especially Very Remote) areas. This trend was particularly pronounced in babies born to mothers younger than 25 years of age and particularly those younger than 20 years of age.

Babies born to Indigenous Australian mothers

- Babies born to Indigenous Australian mothers had lower average birthweights than those born to non-Indigenous Australian mothers (Table 40).
- Babies of Indigenous Australian mothers in Major Cities had average birthweights that were lower (0.9 times) than those for babies of non-Indigenous Australian mothers in Major Cities (see last row, Table 40). Average birthweights for babies of Indigenous Australian mothers declined slightly with increasing remoteness.

Table 40: Mean birthweight of liveborn singletons, born to Indigenous Australian mothers, by maternal age, 2002–04

Mother's age (years)	Indigenous				
	MC	IR	OR	R	VR
			Grams		
<20	3,172	3,185	3,082	3,060	3,037
20–24	3,215	3,169	3,175	3,155	3,134
25–29	3,239	3,229	3,223	3,206	3,210
30–34	3,259	3,272	3,244	3,226	3,203
35–39	3,225	3,174	3,178	3,226	3,209
≥40	3,139	3,168	3,324	3,048	3,180
Total	**3,219**	**3,205**	**3,179**	**3,154**	**3,140**
Deviation of total from MC	1.00	1.00	0.99	0.98	0.98
Deviation from MC non-Indigenous	0.94	0.94	0.93	0.93	0.92

Notes

1. Remoteness refers to the area of the mother's residence.
2. Includes data from all Australian states and territories except Tasmania.
3. Excludes live births to mothers not usually resident in Australia and those whose state or territory of usual residence was 'Not stated'. Total includes live births to mothers whose maternal age was not stated.

Source: NPSU National Perinatal Data Collection.

Babies born to non-Indigenous Australian mothers

- The average birthweight for babies of non-Indigenous Australian mothers in 2002–04 tended to be similar in all areas, with slightly higher birthweights for all maternal age groups in Inner Regional areas (Table 41). Babies' birthweights for non-Indigenous Australian mothers younger than 20 years of age tended, on average, to decline with increasing remoteness.

Table 41: Mean birthweight of liveborn singletons, by age of non-Indigenous Australian mother, 2002–04

Mother's age (years)	MC	IR	OR	R	VR
			Grams		
<20	3,306	3,330	3,299	3,244	3,257
20–24	3,362	3,388	3,381	3,368	3,354
25–29	3,409	3,442	3,434	3,441	3,440
30–34	3,431	3,466	3,452	3,482	3,440
35–39	3,418	3,448	3,432	3,446	3,438
≥40	3,371	3,402	3,381	3,329	3,463
Total	**3,408**	**3,433**	**3,420**	**3,430**	**3,417**
Deviation of total from MC	1.00	1.01	1.00	1.01	1.00

Notes

1. Remoteness refers to the area of the mother's residence.
2. Includes data from all Australian states and territories except Tasmania.
3. Excludes live births to mothers not usually resident in Australia and those whose state or territory of usual residence was 'Not stated'. Total includes live births to mothers whose maternal age was not stated.

Source: NPSU National Perinatal Data Collection.

Human function dimension

Indicator 1.2.1 Disability

Summary of findings

In Major Cities in 2003, 19% of males and 20% of females had some disability—5% and 7%, respectively, had a disability with severe or profound core activity limitations, meaning they sometimes or always needed help with mobility, self-care and/or communication, or were unable to perform tasks in one of these areas.

Males in All regional/Remote areas were 1.2 times as likely to have a disability as males in Major Cities. They were also more likely to have a psychiatric disability, sensory/speech disability, acquired brain injury or a physical/diverse disability than those in Major Cities.

Females in All regional/Remote areas were about as likely as those in Major Cities to have any type of disability.

Background

Disability has significant impacts on the lives of affected people. In 2003 there were 3.9 million people (20% of the population) in Australia whose lives were affected by an impairment, activity limitation or participation restriction in the environment in which they lived (AIHW 2005c).

Data used to inform indicator 1.2.1 are derived from the 1998 and 2003 Australian Bureau of Statistics Survey of Disability, Ageing and Carers (SDAC).

Disability data were provided by AIHW analysis of the 2003 SDAC confidentialised unit record file. This survey collected information on disability and long-term health conditions, need for and receipt of assistance, use of aids and equipment and participation in community activities, as well as the experience of carers.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- In 2003, 19% of males and 20% of females in Major Cities had some disability—5% and 6.9% of males and females, respectively, had a disability with severe or profound core activity limitations (Table 42).
- Males in Inner Regional and Other areas (Outer Regional and Remote) were significantly more likely (1.2 times) to have a disability than those in Major Cities.
- Females in All regional/Remote areas were about as likely to have a disability as their counterparts in Major Cities.
- Males in Inner Regional areas were significantly more (1.3 times) likely to have a severe or profound core activity limitation as their counterparts in Major Cities.
- Females in All regional/Remote areas were about as likely to have a severe or profound core activity limitation as their counterparts in Major Cities.

Table 42: Selected disability[a] statistics compared with Major Cities, by Remoteness Area, 2003

Level of disability	MC	IR	Other (OR + R)	All regional/Remote	MC	IR	Other (OR + R)	All regional/Remote
	Crude percentage				Standardised prevalence ratio			
Males								
With disability	18.3	22.8	23.3	23.0	1.00	*1.17	*1.21	*1.19
Severe[b]/ profound[c] activity limitation	4.8	6.9	6.0	6.5	1.00	*1.31	1.19	*1.27
Females								
With disability	19.7	20.5	22.1	21.0	1.00	1.02	1.09	1.05
Severe[b]/ profound[c] activity limitation	6.9	7.5	7.5	7.5	1.00	1.05	1.05	1.05
Persons								
With disability	19.0	21.6	22.7	22.0	1.00	*1.10	*1.15	*1.12
Severe[b]/ profound[c] activity limitation	5.9	7.2	6.7	7.0	1.00	*1.16	1.11	*1.14

* Findings statistically significant.

(a) Defined by the World Health Organization (WHO) as any restriction or lack of ability (resulting from an impairment) to perform an action in the manner or within the range considered normal for a person. In the Survey of Disability, Ageing and Carers, a person has a disability if he/she has a limitation, restriction or impairment, which has lasted, or is likely to last, for at least 6 months and restricts everyday activities.

(b) Person sometimes needs help with communication, mobility or self-care.

(c) Person is unable to do, or always needs help with, communication, mobility or self-care.

Notes

1. Rates have been indirectly age standardised to the age-specific rates in Major Cities calculated from the SDAC.
2. The survey did not include people in sparsely settled parts of Australia. The category 'Other' includes Outer Regional, Remote and some of Very Remote.

Source: 2003 SDAC.

- The inter-regional pattern of disability in 2003 appears similar to 1998.

Table 43: Prevalence of disability[a], by Remoteness Area, 1998

Level of disability	MC	IR	Other (OR + R)	All regional/Remote
	Standardised prevalence ratio			
Males				
With disability	1.00	1.18	1.29	n.p.
Severe[b]/profound[c] activity limitation	1.00	1.40	1.21	n.p.
Females				
With disability	1.00	1.06	1.03	n.p.
Severe[b]/profound[c] activity limitation	1.00	1.06	0.91	n.p.

(a) Defined by the World Health Organization (WHO) as any restriction or lack of ability (resulting from an impairment) to perform an action in the manner or within the range considered normal for a person. In the Survey of Disability, Ageing and Carers, a person has a disability if he/she has a limitation, restriction or impairment, which has lasted, or is likely to last, for at least 6 months and restricts everyday activities.

(b) Person sometimes needs help with, communication, mobility or self-care.

(c) Person is unable to do, or always needs help with, communication, mobility or self-care.

Notes

1. Rates have been indirectly age standardised to the age-specific rates in Major Cities calculated from the SDAC.
2. The survey did not include people in sparsely settled parts of Australia. The category 'Other' includes Outer Regional, Remote and some of Very Remote.

Source: 1998 SDAC.

- For females, there appears to be little inter-regional variation in the rate of each disability grouping (Table 44).
- However, males in Inner Regional and Other areas (Outer Regional and Remote) have significantly (1.2 to 1.4 times) higher rates of psychiatric disability, sensory/speech disability, acquired brain injury and physical/diverse disability. There is a suggestion that rates of intellectual/learning disabilities may also be higher for males in these areas than in Major Cities.

Table 44: Prevalence of disability [(a)], by broad disability group and Remoteness Area, 2003

Broad disability group	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
Males				
Intellectual/learning	1.00	1.12	1.25	1.17
Psychiatric disability	1.00	*1.25	1.18	*1.23
Sensory/speech disability	1.00	*1.20	*1.33	*1.25
Acquired brain injury	1.00	*1.26	*1.62	*1.39
Physical/diverse disability	1.00	*1.17	*1.23	*1.19
Females				
Intellectual/learning	1.00	0.92	0.81	0.88
Psychiatric disability	1.00	1.02	1.03	1.02
Sensory/speech disability	1.00	0.97	1.10	1.01
Acquired brain injury	1.00	1.22	1.04	1.16
Physical/diverse disability	1.00	1.06	1.07	1.06
Persons				
Intellectual/learning	1.00	1.03	1.05	1.04
Psychiatric disability	1.00	1.12	1.10	*1.11
Sensory/speech disability	1.00	*1.10	*1.23	*1.14
Acquired brain injury	1.00	*1.25	*1.42	*1.31
Physical/diverse disability	1.00	*1.11	*1.15	*1.12

* Findings statistically significant.

(a) Defined by the World Health Organization (WHO) as any restriction or lack of ability (resulting from an impairment) to perform an action in the manner or within the range considered normal for a person. In the Survey of Disability, Ageing and Carers, a person has a disability if he/she has a limitation, restriction or impairment, which has lasted, or is likely to last, for at least 6 months and restricts everyday activities.

Notes

1. Rates have been indirectly age standardised to the age-specific rates in Major Cities calculated from the Survey of Disability, Ageing and Carers.
2. The survey did not include people in sparsely settled parts of Australia. The category 'Other' includes Outer Regional, Remote and some of Very Remote.

Source: 2003 SDAC.

Table 45 compares the rate of severe/profound core activity limitations within broad disability groups.

- There appears to be little inter-regional variation in the rate of each of these five groupings of disability.
- For males, rates in All regional/Remote areas appear higher for all broad disability groups than in Major Cities. However, it is only for sensory/speech disability and physical/diverse disability that All regional/Remote rates were significantly higher than rates in Major Cities. For these two broad groups, rates for males in All regional/Remote areas were significantly higher (1.3 times) than those for males in Major Cities.

Table 45: Prevalence of severe/profound core activity limitation[(a)], by broad disability group and Remoteness Area, 2003

Broad disability group	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
Males				
Intellectual/learning disability	1.00	1.16	1.17	1.16
Psychiatric disability	1.00	1.25	1.12	1.20
Sensory/speech disability	1.00	*1.29	1.33	*1.30
Acquired brain injury	1.00	1.37	1.30	1.35
Physical/diverse disability	1.00	*1.36	*1.27	*1.33
Females				
Intellectual/learning disability	1.00	1.05	0.82	0.97
Psychiatric disability	1.00	1.19	1.04	1.14
Sensory/speech disability	1.00	1.05	0.93	1.01
Acquired brain injury	1.00	0.97	0.86	0.93
Physical/diverse disability	1.00	1.05	1.05	1.05
Persons				
Intellectual/learning disability	1.00	1.11	1.00	1.07
Psychiatric disability	1.00	*1.21	1.07	*1.16
Sensory/speech disability	1.00	*1.16	1.12	*1.15
Acquired brain injury	1.00	1.19	1.09	1.16
Physical/diverse disability	1.00	*1.17	1.13	*1.16

* Findings statistically significant.

(a) Person sometimes needs help/is unable to do/always needs help with communication, mobility or self-care activities.

Notes

1. Rates have been indirectly age standardised to the age-specific rates in Major Cities calculated from the SDAC.
2. The survey did not include people in sparsely settled parts of Australia. The category 'Other' includes Outer Regional, Remote and some of Very Remote.

Source: 2003 SDAC.

Indicator 1.2.2 Reduced activity due to illness

Summary of findings

In 2004–05, the average number of days of reduced activity increased slightly with increasing remoteness, consistent with the pattern in 2001.

Males in Inner Regional and Other areas (Outer Regional and Remote) were more likely to experience reduced activity compared with Major Cities.

Females in Inner Regional and Other areas were slightly less likely to experience reduced activity compared with their counterparts in Major Cities.

Between 2001 and 2004–05, the number of days of reduced activity has declined. This decline has been greater for males in Major Cities (20%) than for those in 'other areas' (no change). The decline was approximately 10% for females in all areas.

Background

Days of reduced activity because of illness is a measure of short-term disability.

Data used to inform indicator 1.2.2 are derived from the 2001 and 2004–05 ABS NHS.

Necessarily, a 'normal level of activity' will be different for each person—what is a normal level for a healthy 25-year-old male will (in most cases) be greater than for someone who is 95 years old, or for someone of the same age but with a chronic illness.

'Days of reduced activity due to illness' is a preferred measure to 'days off work (or study) due to illness', because the indicator includes the elderly and children, and people who are unemployed or not in the paid workforce. 'Days of reduced activity' includes 'days off work' as well as days when normal activities other than paid work could not be undertaken.

The age-standardisation process was direct, and involved applying the age-specific averages from each sex and area to the 2001 Australian population in each age group. The resultant total 'expected' number of days of reduced activity was then divided by the total 2001 Australian population, to give a direct age-standardised average.

Detailed results

- On average, males and females experienced 0.8 and 0.9 days of reduced activity due to illness in the 2 weeks prior to the 2004–05 NHS (Table 46).

Table 46: Crude mean number of days of reduced activity due to illness, people aged 5 years and over, 2004–05

Age group	Males				Females			
	MC	IR	Other (OR + R)	Total	MC	IR	Other (OR + R)	Total
	Mean				Mean			
5–14	0.41	0.42	0.34	0.40	0.34	0.40	0.32	0.51
15–24	0.49	0.45	1.06	0.47	1.06	0.47	0.72	0.79
25–44	0.72	0.82	0.98	0.90	0.98	0.90	0.91	0.88
45–64	0.87	1.20	1.20	1.20	1.20	1.20	1.13	1.19
65+	1.12	1.22	1.17	1.15	1.17	1.15	1.50	1.42
Total	**0.71**	**0.83**	**0.93**	**0.84**	**0.93**	**0.84**	**0.88**	**0.93**

Source: 2004–05 NHS.

- In 2004–05, days away from usual activity because of illness increased with increasing remoteness for males, with approximately an extra 0.2 days per fortnight in Other areas compared with Major Cities (Table 46). This trend is similar, but more pronounced, than in 2001 (Figure 5).
- For females, days away from usual activity because of illness increased slightly with increasing remoteness, but then declined in Other areas. This is consistent with the pattern for females in 2001 (Figure 6).
- Between 2001 and 2004–05 there was a slight decline in the number of days away from usual activity because of illness for people in all areas, with the exception of males in Other areas (Table 47).

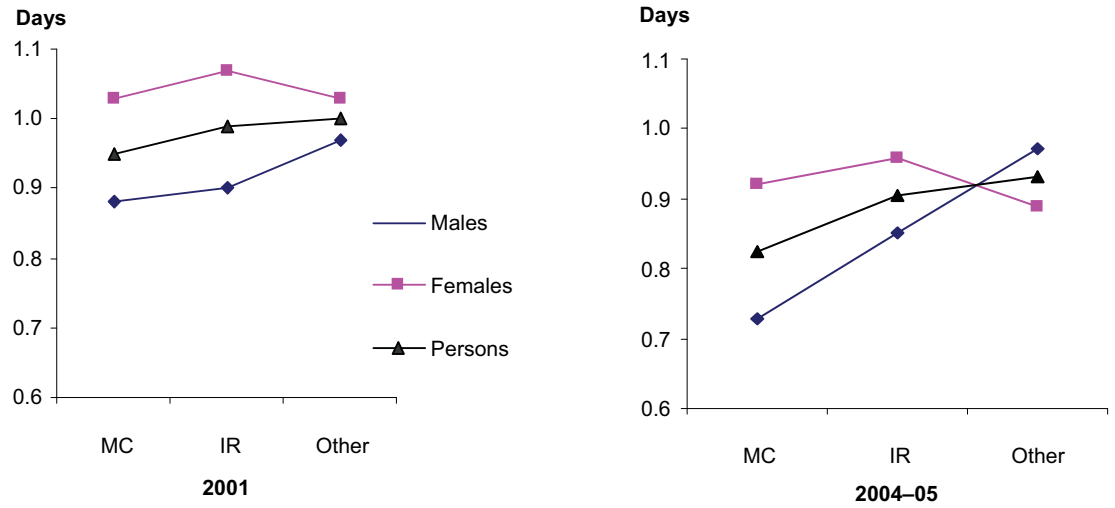
Table 47: Direct age-standardised mean number of days of reduced activity due to illness, people aged 5 years and over, 2001 and 2004–05

	Males				Females				Persons			
	MC	IR	Other (OR + R)	Total	MC	IR	Other (OR + R)	Total	MC	IR	Other (OR + R)	Total
						Mean						
2004–05 (a)	0.73	0.85	0.97	0.87	0.92	0.96	0.89	0.91	0.82	0.90	0.93	0.89
2001 (b)	0.88	0.90	0.97	0.89	1.03	1.07	1.03	1.03	0.95	0.99	1.00	0.96
Ratio (a/b)	0.83	0.95	1.00	0.98	0.89	0.90	0.86	0.88	0.86	0.91	0.93	0.93

Notes

1. Directly age standardised to the 2001 Australian population.
2. Ratio is the 2004–05 age-standardised mean divided by the 2001 age-standardised mean. It describes the relative change in mean number of days away from usual activity due to illness between the two surveys.

Sources: 2001 and 2004–05 NHS.



Note: Directly age-standardised to the 2001 Australian population.

Sources: 2001 and 2004–05 NHS.

Figure 5: Age-standardised mean number of days of reduced activity in the previous two weeks due to illness, for persons aged 5 years and over, by ASGC Remoteness Area, 2001 and 2004–05

Life expectancy and wellbeing dimension

Indicator 1.3.1 Life expectancy

Summary of findings

Compared with Major Cities, the life expectancy in All regional and All remote areas is, respectively, 1–2 years and up to 7 years lower, and decreases with increasing remoteness.

Life expectancy in 2002–04 increased (by up to about 2 years) since the last reporting period (1997–99).

Life expectancy for Indigenous Australians is about 17 years less than for all Australians (ABS & AIHW 2005).

The typical probability of non-Indigenous Australian males and females living to 65 years is, respectively, 2–3% and 1% lower in All regional and All remote areas, compared with Major Cities.

Background

Life expectancy at birth is the average number of years a newborn can expect to live if the existing mortality patterns prevail over the individual's lifetime. Life expectancy is one of the most common summary indicators of a population's health.

Data used to inform indicator 1.3.1 are derived from the Australian Institute of Health and Welfare National Mortality Database.

Life expectancy is a measure of the number of years a person can expect to live, given current death rates. With improvements in medical care and public health, the age people reach has been increasing over time, and this trend is likely to continue (at least for some time).

Because estimates of life expectancy are based on current death rates, they cannot predict future improvements in the real likelihood of living a long life. Life expectancy is affected by mortality at all ages and is lowered by high infant death rates and high death rates among the elderly.

It is possible that calculated death rates for older people in All remote areas may be lowered (and calculated life expectancies increased) because of migration of less healthy people to less remote areas where they can access services. This would concentrate elderly people in good health (with lower death rates) in All remote areas. Consequently, the 'probability of living to 65 years of age' is also included as an indicator.

Life expectancies and probabilities of living to 65 years of age reported in this section relate to a hypothetical child born in the period 2002–04, and assume that current rates of death experienced in a particular area will remain unchanged for the child's lifetime and that the child will live in that area all their life. These statistics do not report the actual length of time that a particular child will live, or the actual probability that they will live to 65 years of age—they simply translate current death rates into a more tangible statistic.

Detailed results

- Life expectancies for males and females were highest in Major Cities and lowest in Very Remote areas (Table 48 and Figure 6).

Table 48: Life expectancy, by Remoteness Area, 2002–04

Sex	MC	IR	OR	R	VR	Total
			Years			
Males	79.0	77.8	76.9	76.5	72.1	78.4
Females	83.8	83.1	82.6	81.8	77.6	83.4

Source: AIHW National Mortality Database.

Source: AIHW National Mortality Database.

Figure 6: Life expectancy, by Remoteness Area, 2002–04

- The average life expectancy of a male born in the period 2002–04 ranged from 79 years in Major Cities to 72 years in Very Remote areas. The average life expectancy of a female born during this period ranged from 84 years in Major Cities to 78 years in Very Remote areas.

Change in life expectancy between 1997–99 and 2002–04

- Life expectancy for 2002–04 reported in the body of this section cannot validly be compared with life expectancy for 1997–99 reported in the previous report in this series (AIHW 2005a). Data used to describe life expectancy for 1997–99 were based on death rates in each of 16 age groups, whereas life expectancy for 2002–04 reported here is based on death rates in each of 18 age groups.
- To illustrate, Table 49 presents life expectancies for 2002–04 recalculated using the same 16 age groups that were available for the calculation of the 1997–99 life expectancies reported previously. Life expectancies in Table 49 (using 16 age groups) are consistently higher than those in Table 48 (using 18 age groups) above.

- Comparison of the numbers in Table 48 with those in the previous report (AIHW 2005a) indicates that life expectancy in all areas has increased between the two periods.

Table 49: Life expectancy, by Remoteness Area, 2002–04 (using 16 age groups)

	MC	IR	OR	R	VR	Total
			Years			
Life expectancy (2002–04)						
Males	80.3	78.9	77.9	77.6	73.4	79.6
Females	85.5	84.7	84.2	83.5	79.0	85.1
Life expectancy (1997–99)						
Males	77.9	76.7	76.0	75.3	72.2	77.3
Females	83.9	83.3	82.6	82.7	78.5	83.6
Increase in life expectancy (1997–99 to 2002–04)						
Males	2.4	2.2	1.9	2.3	1.2	2.3
Females	1.6	1.4	1.6	0.8	0.5	1.5

Source: AIHW National Mortality Database.

Indigenous Australians

- Life expectancy for Indigenous Australians is substantially lower than for non-Indigenous Australians. A life expectancy of 59 years has been reported for Indigenous Australian males compared with 77 years for all Australian males, and Indigenous Australian females have a life expectancy of 65 years compared with 82 years for all Australian females (ABS & AIHW 2005).
- Though these life expectancies are calculated in a slightly different way from those presented in this section and use mortality data from slightly different years, these figures clearly illustrate the substantially lower life expectancies experienced by Indigenous Australians. Life expectancies for Indigenous Australians from individual Remoteness Areas have not been calculated because of concerns about differences in the accuracy of Indigenous Australian identification in each of the areas (AIHW 2003b).
- Indigenous Australians make up 44% of the population of Very Remote areas but only 1%, 2%, 5% and 13% of the populations of Major Cities, Inner Regional, Outer Regional and Remote areas, respectively. Consequently the effect of reduced life expectancy of Indigenous persons on overall life expectancy is much greater in Very Remote areas than in other areas.

Non-Indigenous Australians

- Life expectancies for non-Indigenous Australian males and females were relatively similar in all areas (Table 50 and Figure 7). For males they ranged from 77 years in Outer Regional areas, to 79 years in Major Cities, and 78 years in the other areas. For females they were 84 years in Major Cities and Very Remote areas, and 83 years in the other areas.

Table 50: Life expectancy for non-Indigenous Australians, by Remoteness Area, 2002–04

Sex	MC	IR	OR	R	VR	Total
			Years			
Males	79.1	77.9	77.2	78.1	78.3	78.6
Females	83.8	83.1	83.0	83.4	84.2	83.6

Source: AIHW National Mortality Database.

Figure 7: Life expectancy for non-Indigenous Australians, by Remoteness Area, 2002–04

Probability of living to 65 years

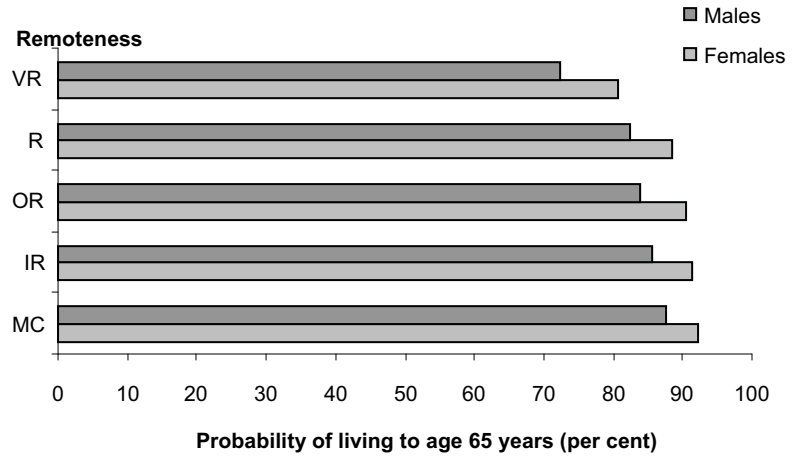
- The probability that a newborn will reach its 65th birthday is a more appropriate means of comparing life expectancy in each area because it reduces the effect of any migration of elderly people to less remote areas. The 'probability of living to 65 years' protects against the overestimation of life expectancy in more remote areas and the underestimation of life expectancy in less remote areas.
- The probability of newborn males and females living to their 65th birthday decreased with increasing remoteness (Table 51). Male and female newborns in Very Remote areas had the lowest probability of living to their 65th birthday (73% and 81% respectively in 2002–04 (69% and 77% in 1997–99)), and those in Major Cities had the highest probability (88% and 92% in 2002–04 (85% and 91% in 1997–99)). This is an increase from the probabilities reported in the previous report for all areas (AIHW 2005a).

Table 51: Probability of living to age 65 years, by Remoteness Area, 1997–99 and 2002–04

	MC	IR	OR	R	VR	Total
			Per cent			
Probability (2002–04)						
Males	87.5	85.6	83.8	82.5	72.5	86.4
Females	92.3	91.4	90.5	88.6	80.6	91.8
Probability (1997–99)						
Males	84.8	83.2	81.6	79.4	69.3	83.9
Females	91.1	90.3	89.6	87.4	77.0	90.6
Increase in probability (1997–99 to 2002–04)						
Males	2.7	2.4	2.2	3.1	3.2	2.5
Females	1.2	1.1	0.9	1.2	3.6	1.2

Sources: AIHW National Mortality Database and AIHW 2005a.

- As for life expectancy, and for the same reasons, the lower probability of living to 65 years of age for those in Very Remote areas (Figure 8) is largely a reflection of the lower life expectancy of Indigenous Australians and the relatively large numbers of Indigenous Australians who live in these areas.



Source: AIHW National Mortality Database.

Figure 8: Probability of living to age 65 years, by Remoteness Area, 2002–04

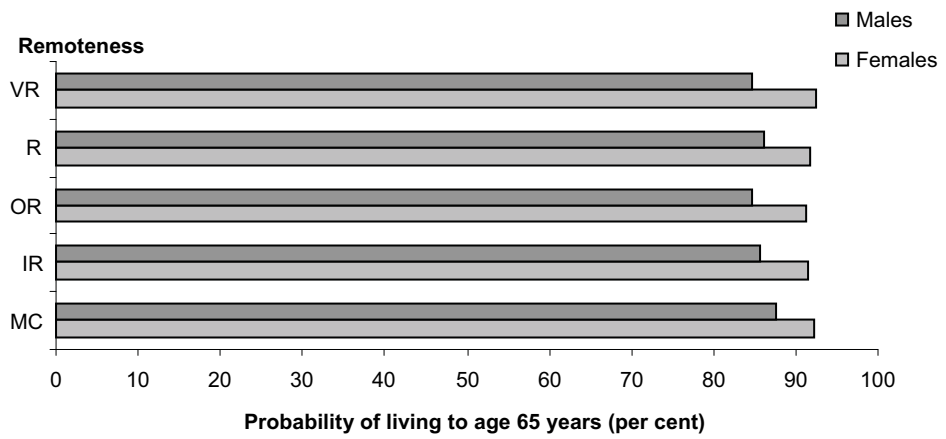
Non-Indigenous Australians

- The probability of non-Indigenous newborns living to their 65th birthday also decreased with increasing remoteness (Table 52), but the inter-regional differences were not as great as for the total population.

Table 52: Probability of living to age 65 years for non-Indigenous Australians, by Remoteness Area, 1997–99 and 2002–04

	MC	IR	OR	R	VR	Total
			Per cent			
Probability (2002–04)						
Males	87.6	85.7	84.6	86.2	84.6	86.8
Females	92.3	91.6	91.2	91.7	92.5	92.0
Probability (1997–99)						
Males	84.9	83.3	82.5	82.6	81.7	84.3
Females	91.1	90.4	90.3	90.4	88.6	90.9
Increase in probability (1997–99 to 2002–04)						
Males	2.7	2.4	2.1	3.6	2.9	2.5
Females	1.2	1.2	0.9	1.3	3.9	1.1

Sources: AIHW National Mortality Database and AIHW 2005a.



Source: AIHW National Mortality Database.

Figure 9: Probability of living to age 65 years for non-Indigenous persons, by Remoteness Area, 2002–04

Indicator 1.3.2 Self-assessed health status

Summary of findings

In 2004–05, compared with those in Major Cities, people in All regional/Remote areas were significantly:

- less likely (0.9 times) to report excellent or very good health
- more likely (1.2 times) to report fair or poor health.

There was no evidence of inter-regional differences in self-reported health status in 1995.

Between 1995 and 2004–05:

- people in Major Cities became significantly more likely (1.1 times) to report excellent or very good health and less likely to report fair or poor health, while
- people in All regional/Remote areas became significantly less likely to report excellent or very good health and significantly more (1.1 times) likely to report fair or poor health.

Indigenous Australians were nearly twice as likely to report fair or poor health as the general Major Cities population.

Background

Self-assessed health status provides an indication of the extent and persistence of illness and its impact on the ability of people to function normally.

Data used to inform indicator 1.3.2 are derived from the:

- 1995, 2001 and 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

This indicator compares levels of self-assessed health in Inner Regional and Other areas with that in Major Cities in 2004–05. The results are compared with those from the 1995 and 2001 NHS surveys.

Respondents were asked to self-report their health as excellent, very good, good, fair or poor. Their response depended on their awareness and expectation of their own health.

The number who reported excellent or very good health and those who reported fair or poor health is compared with the number expected if Major Cities rates applied in all areas.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- In 2004–05, people in All regional/Remote areas were significantly less (0.9 times as) likely to report excellent or very good health compared with those in Major Cities (Table 53). They were also significantly more (1.2 times) likely to report fair or poor health compared with those in Major Cities (Table 55).
- This pattern is different from that in 1995, when people in All regional/Remote areas were as likely to report excellent or very good health and fair or poor health as those in Major Cities.

Table 53: Prevalence of self-reported excellent/very good health, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	70.5	1.00	1.08	0.92	1.02
25–44	60.3	1.00	0.98	0.94	0.96
45–64	52.3	1.00	0.95	*0.79	*0.90
65+	58.9	1.00	*0.58	*0.48	*0.54
Total males	*59.6*	*1.00*	**0.93*	**0.82*	**0.89*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	69.0	1.00	0.97	0.95	0.96
25–44	66.8	1.00	0.99	*0.85	0.93
45–64	52.7	1.00	1.02	*0.69	*0.89
65+	36.4	1.00	1.07	1.09	1.07
Total females	*58.1*	*1.00*	**0.91*	**0.84*	**0.88*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	69.8	1.00	1.02	0.93	0.99
25–44	63.6	1.00	0.99	*0.89	0.95
45–64	52.5	1.00	0.99	*0.74	*0.89
65+	46.4	1.00	*0.78	*0.69	*0.75
Total persons	**58.8**	**1.00**	***0.92**	***0.83**	***0.88**
2001					
Males	51.8	1.00	0.97	0.93	*0.95
Females	52.8	1.00	1.02	1.02	1.02
Persons	52.3	1.00	0.99	0.98	0.99
1995					
Males	55.6	1.00	1.01	0.97	0.99
Females	54.8	1.00	*1.03	*0.96	1.01
Persons	55.2	1.00	*1.02	*0.97	1.00

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

Between 1995 and 2004–05, people in:

- Major Cities became significantly more likely to report excellent or very good health and significantly less likely to report fair or poor health
- All regional/Remote areas became significantly less likely to report excellent or very good health and more likely to report fair or poor health (Tables 54 and 56).

Table 54: Changes in the prevalence of self-reported excellent/very good health, by Remoteness Area, 1995 to 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
Total males	*1.09	1.02	0.93	0.99
Total females	*1.07	*0.93	0.92	*0.93
Total persons	***1.08**	**0.98**	***0.93**	***0.96**

* Findings statistically significant.

Note: This table compares the prevalence of reporting excellent/very good health in each area in 2004–05 with that in 1995.

Sources: 1995 and 2004–05 NHS.

Table 55: Prevalence of self-reported fair/poor health, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	5.7	1.00	1.31	1.23	1.28
25–44	10.9	1.00	1.10	1.07	1.09
45–64	18.0	1.00	1.20	*1.66	*1.37
65+	38.2	1.00	1.03	1.04	1.03
Total males	*15.7*	*1.00*	*1.12*	**1.26*	**1.18*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	5.7	1.00	*2.01	1.75	*1.93
25–44	8.2	1.00	1.11	*1.86	*1.40
45–64	19.1	1.00	0.99	0.99	0.99
65+	31.2	1.00	1.03	0.96	1.00
Total females	*14.7*	*1.00*	**1.16*	**1.19*	**1.17*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	5.7	1.00	*1.67	1.45	*1.59
25–44	9.5	1.00	1.10	*1.41	*1.22
45–64	18.5	1.00	1.09	*1.30	*1.17
65+	34.3	1.00	1.03	1.00	1.02
Total persons	**15.2**	**1.00**	***1.14**	***1.23**	***1.17**
2001					
Males	17.5	1.00	1.02	1.05	1.03
Females	17.7	1.00	0.96	1.11	1.01
Persons	17.6	1.00	0.99	1.08	1.02
1995					
Males	16.3	1.00	0.97	1.02	0.99
Females	16.4	1.00	1.01	1.08	1.04
Persons	16.3	1.00	0.99	1.05	1.01

* Findings statistically significant.

Note: The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

Table 56: Changes in the prevalence of self-reported fair/poor health, by Remoteness Area, 1995 to 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
Males	0.93	1.10	*1.18	*1.13
Females	*0.88	1.02	0.99	1.01
Persons	***0.91**	**1.06**	**1.09**	***1.07**

* Findings statistically significant.

Note: This table compares the prevalence of reporting fair/poor health in each area in 2004–05 with that in 1995.

Sources: 1995 and 2004–05 NHS.

Indigenous Australians

- In 2004–05, Indigenous Australians were significantly less (0.7 times) likely to report excellent or very good health, and were significantly more likely (almost 2 times) to report fair or poor health than all people in Major Cities (Table 57).
- While there was little inter-regional difference in the prevalence of self-reported excellent/very good health in 2004–05, the prevalence of fair/poor health declined significantly as remoteness increased.

Table 57: Self-assessed health status of Indigenous Australians aged 15 years and older, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Excellent/very good health						
Males	25.6	*0.72	*0.80	*0.75	*0.69	*0.74
Females	28.3	*0.68	*0.59	*0.71	*0.34	*0.58
Persons	**27.0**	***0.70**	***0.70**	***0.73**	***0.50**	***0.65**
Fair/poor health						
Males	11.8	*1.80	*1.62	*1.85	*1.52	*1.70
Females	18.5	*2.74	*2.54	*2.00	1.09	*2.07
Persons	**15.2**	***2.29**	***2.07**	***1.93**	***1.30**	***1.89**

* Findings statistically significant.

Notes

1. This table compares the prevalence of self-assessed health status by Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.

Source: 2004–05 NATSIHS.

Deaths

Indicator 1.4.1 Overall mortality

Summary of findings

In 2002–04, death rates for males in Inner Regional, Outer Regional, Remote and Very Remote areas were significantly higher, respectively, 1.1, 1.2, 1.2 and 1.7 times, than their counterparts in Major Cities.

Females in these areas also had significantly higher death rates, respectively, 1.1, 1.1, 1.2 and 1.7 times, than their counterparts in Major Cities.

In the period 1992–2003, death rates have declined in all areas.

Non-Indigenous Australians

Death rates for non-Indigenous Australian males in Inner Regional, Outer Regional and Remote areas were significantly higher (1.1 times) than those for their counterparts in Major Cities.

With the exception of Very Remote areas, death rates for non-Indigenous Australian females were significantly higher than those for their counterparts in Major Cities.

The above patterns are consistent with the previous reporting period (1997–99).

In All remote areas, the death rates of those who were 75 years and over were significantly lower than for their counterparts in Major Cities this was substantially so in Very Remote areas.

For non-Indigenous Australian males under 65 years, death rates were significantly higher (1.2, 1.3, 1.1 and 1.2 times) than those in Major Cities. For non-Indigenous Australian females under 65 years, death rates in Inner Regional and Outer Regional areas were significantly higher (about 1.1 and 1.3 times) than those in Major Cities, but were similar in All remote areas to those in Major Cities.

Indigenous Australians

In 2002–04, average death rates for Indigenous Australians in the Northern Territory, Western Australia, South Australia and Queensland were 3.2 times as high as for their non-Indigenous counterparts in Australian Major Cities.

Death rates for Indigenous Australians generally were between 3 and 6 times as high as for non-Indigenous Australians in most age groups, and 1.3 times as high as for those aged 75 years and over.

Background

Data used to inform indicator 1.4.1 are derived from the AIHW National Mortality Database.

Mortality, the rate of death, is possibly the best ultimate measure of health. Although it does not measure the quality of life or the average day-to-day health of people, as a measure it has a number of advantages over other indicators.

Although some personal characteristics recorded (such as Indigenous status) are less than accurate, all deaths are recorded and, as such, it is a complete collection of the deaths of

people in Australia. Also, the rate of death is a reflection of the health of individual people in the population during their lifetime.

In this indicator, the leading causes of death are described in two ways, by comparing across the four areas:

- the number of observed and expected deaths
- the average annual number of observed deaths.

Comparison statistics are provided for the total population in each area, the non-Indigenous Australian population in each area, the non-Indigenous Australian population younger than 65 years, and the total Indigenous Australian population in the aggregated area of Queensland, Western Australia, South Australia, and the Northern Territory.

The data are sourced from the mortality data collection and pertain to the three-year period 2002–04. Because of differences in the age and sex structure of the populations in each area, the results have been age standardised and reported for each sex. Standardisation has been by the indirect method. This method basically compares the number of deaths observed with the number expected if Major Cities death rates applied uniformly across all areas; the ratio is referred to as the SMR—standardised mortality ratio. If there were twice as many deaths as expected, then the SMR is 2.0; if there were as many as expected, then the SMR is 1.0; if there were half as many as expected, then the SMR is 0.5.

The number of expected deaths is calculated by multiplying the number of people in each age group in an area by the death rate experienced by people in that age group in Major Cities.

A substantial proportion of the poorer health outcomes in more remote areas can be a consequence of poor Indigenous health. Two issues affect the reporting of data for Indigenous Australians:

- Concerns about the inter-regional differences in the accuracy of the recording of Indigenous deaths prevent reporting on Indigenous mortality separately for the five regions used in this report. Reporting of differences between areas may reflect differences in the accuracy of the records rather than real differences in mortality. Consequently, overall rather than regional mortality rates for Indigenous Australians are presented.
- Identification of Indigenous mortality was considered to be most reliable in the Northern Territory, South Australia, Western Australia and Queensland during the study period. Overall mortality rates for Indigenous Australians have been calculated using data from these jurisdictions only.

Because a 'non-Indigenous' person has been defined in this report as someone who is not identified as Indigenous, under-identification of Indigenous Australians will necessarily mean over reporting of non-Indigenous Australians in the mortality data. However, the effect on reporting by area will be much less than for Indigenous Australians (minimal in Major Cities and in All regional areas), because non-Indigenous persons constitute the vast majority of the population. A full discussion of the combined effects of differences in the proportions of Indigenous Australians and their propensity to identify as such can be found in *Rural, regional and remote health: a study on mortality* (AIHW 2003b).

Frequently, death rates for elderly non-Indigenous Australians from remote areas appear substantially lower than for their Major Cities counterparts, whereas rates for younger people from remote areas were higher than for those in Major Cities. It is possible that this effect is due to elderly people in poorer health migrating to less remote areas where they can

access services, leaving behind the healthier individuals, who have lower death rates. To control for this apparent effect, death rates for the population under 65 years have been presented alongside those for the total population.

Further information on how to interpret the following mortality tables can be found at the end of this section.

Detailed results

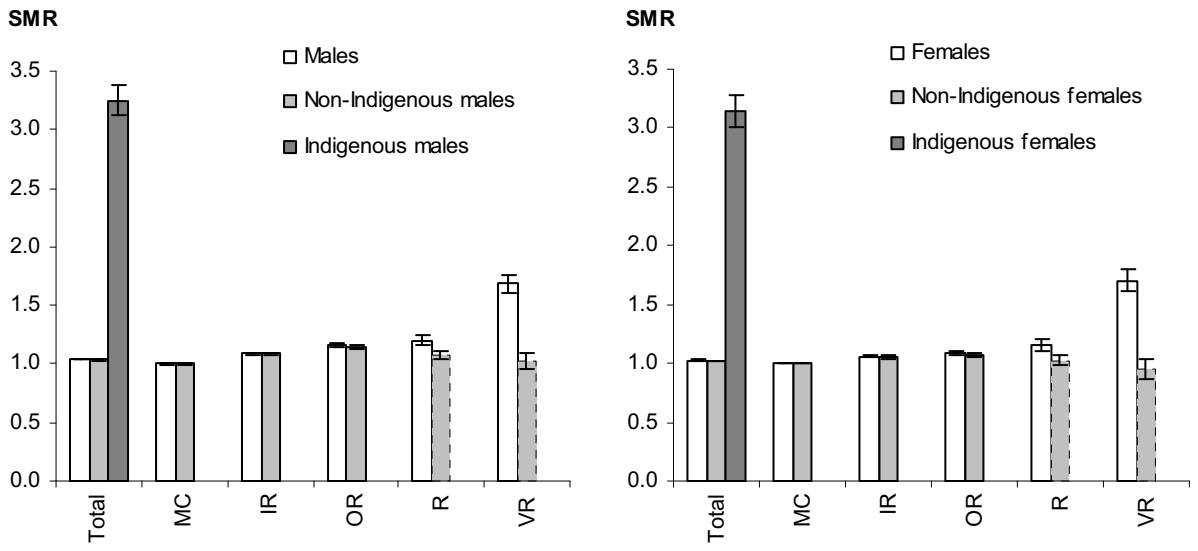
- In 2002–04, males in Inner Regional, Outer Regional, Remote and Very Remote areas were significantly more likely (respectively, 1.1, 1.2, 1.2 and 1.7 times) to die during this period as their counterparts in Major Cities (Figure 10 and Table 58). This compares with 1.1, 1.1, 1.2 and 1.6 times in the preceding reporting period (1997–99). Females in these areas were significantly more (respectively, 1.1, 1.1, 1.2 and 1.7 times) likely to die during this period as their counterparts in Major Cities. This compares with 1.0, 1.1, 1.1 and 1.6 times in the preceding reporting period (1997–99).
- It is in the age groups 5–14, 15–24 and 25–44 years that death rates in All regional and All remote areas show the greatest difference from those in Major Cities. For example, death rates for 15–24 year old males in Remote and Very Remote areas were significantly higher (respectively, than 1.9 and 4.9 times as high) for their counterparts in Major Cities.
- Death rates for people in Very Remote areas in the oldest age group tended to be lower than for their counterparts in Major Cities, even though rates for younger people in Very Remote areas were significantly higher than for their Major City counterparts. This may be a consequence of older people in poor health migrating to larger, less remote centres so as to access services, thereby leaving more healthy older people behind, which would lower death rates in those areas.
- In the period 1992–2003, death rates have declined in all areas (Figure 11).

Mortality of non-Indigenous Australians

- In 2002–04, non-Indigenous Australian males in All regional and Remote areas were significantly more likely, and those in Very Remote areas as likely to die, as their Major Cities counterparts. This pattern was similar for non-Indigenous Australian females, although those living in Very Remote areas were significantly less likely to die during the period than those in Major Cities.
- In All remote areas, the death rates of those who were 75 years and over were significantly lower than for their counterparts in Major Cities, substantially so in Very Remote areas.
- For non-Indigenous Australian males under 65 years, death rates were significantly higher than those in Major Cities. For non-Indigenous Australian females under 65 years, death rates in Inner Regional and Outer Regional areas were significantly (about 1.1 and 1.3 times) higher than those in Major Cities, but were similar in All remote areas to Major Cities rates.

Mortality of Indigenous Australians

- In 2002–04, average death rates for Indigenous Australian males and females in the Northern Territory, Western Australia, South Australia and Queensland were 3.2 times as high as for their non-Indigenous counterparts in Australian Major Cities.

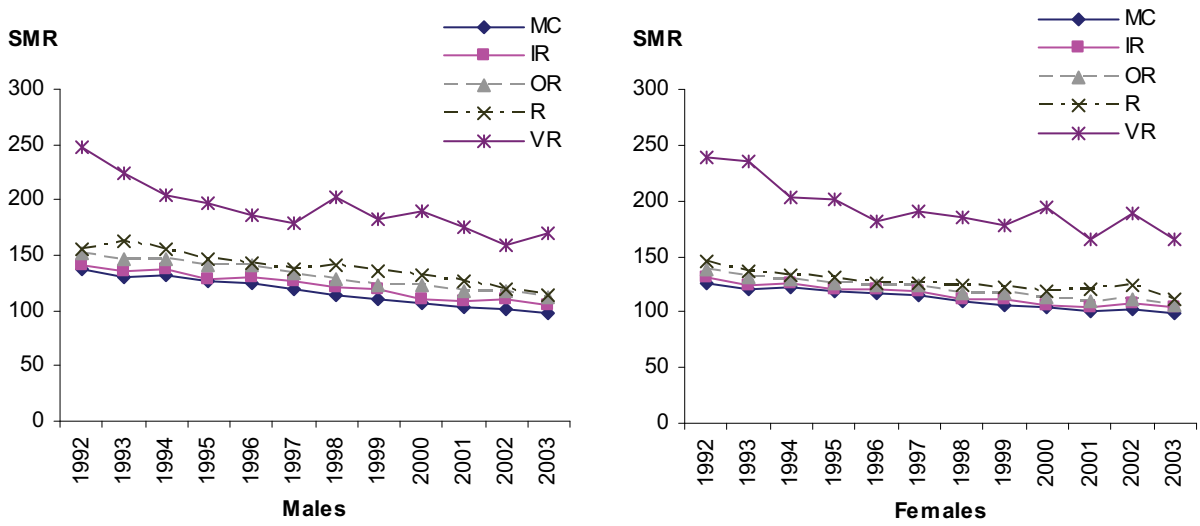


Notes

1. While the figure allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes.
2. The presented SMR is the ratio of the observed number of deaths to the number expected if Major Cities rates applied in each area.
3. SMRs calculated for non-Indigenous Australian persons from Remote and Very Remote areas (dashed) should be treated with caution.
4. The SMRs for Indigenous Australian persons are for SA, WA, NT and Qld combined.

Source: AIHW National Mortality Database.

Figure 10: Standardised mortality ratios for all causes of death, by sex, 2002–04



Note: SMRs calculated using Major Cities rates in the period 2001–2003 as the standard, and expressed as multiples of 100.

Source: AIHW National Mortality Database.

Figure 11: Overall trend in standardised mortality ratios for all causes of death, by sex, 1992–2003

Table 58: SMRs for deaths due to all causes, 2002–04 and 1997–99

	Males					Females					Persons				
	MC	IR	OR	R	VR	MC	IR	OR	R	VR	MC	IR	OR	R	VR
	Rate		Ratio			Rate		Ratio			Rate		Ratio		
2002–04															
0–4	118	*1.10	*1.39	*1.57	*2.46	96	1.05	*1.35	*1.51	*2.67	107	*1.08	*1.37	*1.55	*2.55
5–14	12	*1.26	*1.51	1.52	*4.15	9	*1.27	1.17	*2.67	*2.43	10	*1.26	*1.37	*2.00	*3.44
15–24	59	*1.52	*1.82	*1.91	*4.87	25	*1.44	*1.67	*2.84	*3.94	42	*1.50	*1.78	*2.15	*4.62
25–44	110	*1.30	*1.39	*1.74	*3.65	55	*1.23	*1.32	*1.83	*4.17	82	*1.27	*1.37	*1.77	*3.80
45–64	450	*1.12	*1.27	*1.36	*2.04	279	*1.08	*1.19	*1.39	*2.45	364	*1.10	*1.24	*1.37	*2.17
65–74	2,028	*1.09	*1.17	*1.22	*1.58	1,169	*1.06	*1.13	*1.24	*1.97	1,579	*1.08	*1.15	*1.23	*1.70
75+	7,641	*1.06	*1.07	1.01	*0.86	6,332	*1.04	*1.04	1.00	1.01	6,843	*1.05	*1.05	1.01	*0.93
Total	644	*1.09	*1.16	*1.20	*1.68	625	*1.06	*1.08	*1.16	*1.70	635	*1.07	*1.12	*1.18	*1.69
Total<65	177	*1.17	*1.32	*1.48	*2.66	107	*1.11	*1.24	*1.55	*2.91	142	*1.15	*1.29	*1.50	*2.74
1997–99															
Total	643	*1.07	*1.12	*1.20	*1.62	600	*1.03	*1.08	*1.12	*1.66	621	*1.05	*1.10	*1.17	*1.64
Total<65	191	*1.13	*1.25	*1.48	*2.41	109	*1.09	*1.18	*1.48	*2.86	150	*1.12	*1.23	*1.48	*2.55
Total†	*1.16	*1.23	*1.29	*1.39	*1.90	*1.07	*1.10	*1.16	*1.21	*1.81	*1.11	*1.17	*1.23	*1.32	*1.87
Total<65†	*1.18	*1.33	*1.47	*1.74	*2.89	*1.12	*1.22	*1.32	*1.67	*3.29	*1.16	*1.29	*1.42	*1.72	*3.02

* Findings statistically significant.

† See 'Notes on reading and interpreting Tables 58 and 59' on page 67.

Notes

1. While the figure allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes.
2. The presented SMR is the ratio of the observed number of deaths to the number expected if Major Cities rates applied in each area.
3. SMRs calculated for non-Indigenous Australians from Remote and Very Remote areas (dashed) should be treated with caution.

Source: AIHW National Mortality Database.

Table 59: SMR for deaths due to all causes for Indigenous Australian and non-Indigenous Australian people, 2002–04 and 1997–99

	Males						Females						Persons					
	Non-Indigenous					*Indigenous*	Non-Indigenous					*Indigenous*	Non-Indigenous					*Indigenous*
	MC	IR	OR	R	VR		MC	IR	OR	R	VR		MC	IR	OR	R	VR	
	Rate	Ratio					Rate	Ratio					Rate	Ratio				
2002–04																		
0–4	108	1.08	*1.29	1.29	0.86	*3.22	89	1.02	*1.24	1.18	0.96	*2.95	99	1.05	*1.26	1.24	0.90	*3.10
5–14	11	*1.31	*1.54	1.44	*4.14	*2.96	9	1.16	1.00	*2.16	2.53	*2.61	10	*1.25	*1.31	*1.75	*3.44	*2.81
15–24	55	*1.57	*1.87	*1.73	*2.59	*3.99	23	*1.48	*1.52	1.41	1.68	*4.62	39	*1.55	*1.77	*1.65	*2.39	*4.18
25–44	103	*1.29	*1.29	1.10	*1.34	*6.13	52	*1.20	*1.19	0.86	0.99	*6.56	77	*1.26	*1.26	1.03	*1.24	*6.28
45–64	435	*1.11	*1.23	1.08	1.08	*4.92	269	*1.07	*1.14	1.07	0.88	*5.04	351	*1.09	*1.19	*1.08	1.02	*4.97
65–74	1,974	*1.08	*1.16	*1.14	1.11	*2.85	1,133	*1.06	*1.10	1.08	1.00	*3.90	1,535	*1.07	*1.14	*1.12	1.08	*3.28
75+	7,458	*1.06	*1.08	1.01	*0.84	1.04	6,164	*1.04	*1.04	1.00	0.94	*1.27	6,669	*1.05	*1.06	1.01	*0.88	*1.16
Total	630	*1.09	*1.14	*1.07	1.02	*3.25	612	*1.05	*1.07	1.03	0.95	*3.14	621	*1.07	*1.11	*1.05	1.00	*3.20
Total<65	170	*1.16	*1.27	*1.12	*1.21	*4.86	103	*1.10	*1.16	1.07	0.95	*4.90	136	*1.14	*1.23	*1.10	*1.13	*4.87
1997–99																		
Total	675	*1.07	*1.11	*1.09	*1.08	*3.13	628	*1.04	*1.08	1.00	0.94	*3.24	652	*1.06	*1.10	*1.05	1.03	*3.17
Total<65	197	*1.14	*1.20	*1.20	*1.24	*4.62	112	*1.10	*1.11	1.06	1.15	*4.90	155	*1.12	*1.17	*1.16	*1.22	*4.73
Total†	*1.19	*1.26	*1.31	*1.30	*1.29	n.p.	*1.12	*1.15	*1.20	*1.11	1.05	n.p.	*1.16	*1.21	*1.26	*1.22	*1.20	n.p.
Total<65†	*1.23	*1.39	*1.47	*1.47	*1.53	n.p.	*1.17	*1.28	*1.29	*1.24	*1.35	n.p.	*1.20	*1.35	*1.41	*1.39	*1.47	n.p.

* Findings statistically significant.

† See 'Notes on reading and interpreting Tables 58 and 59' on page 67.

Notes

1. While the figure allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes.
2. The presented SMR is the ratio of the observed number of deaths to the number expected if Major Cities rates applied in each area. Ratios for Indigenous people are for SA, WA, NT and Qld data combined.
3. SMRs calculated for non-Indigenous Australians from Remote and Very Remote areas should be treated with caution.

Source: AIHW National Mortality Database.

Notes on reading and interpreting Tables 58 and 59

Each set of two tables describes:

- in the first table, death rates for the total population; and
- in the second table, death rates for the non-Indigenous Australian population in each remoteness area and for Indigenous Australians in South Australia, Western Australia, Northern Territory and Queensland.

The structure of the two tables is similar.

Three sets of columns across the page report for males, females and for persons.

Within each set in the first table (reporting mortality for all people) are five columns which provide details for MC, IR, OR, R and VR areas. In the second of the tables (relating to Indigenous and non-Indigenous mortality) there are six columns each for males, females and persons—the five regional columns for non-Indigenous mortality, and a single column for Indigenous mortality in South Australia, Western Australia, Northern Territory and Queensland.

Each table reports death rates, usually as standardised mortality ratios (SMRs), ratios which compare the number of deaths in a population with the number that would be expected if age- and sex-specific rates of death in a specified standard population were to apply to the population in each area. For example, if there were 100 deaths in a population, but only 50 expected, then the ratio would be 2.0, and we could say that the death rate in the population was twice that of the standard population. SMRs have the advantage of being useful in comparing death rates in small populations or for causes of death that are relatively uncommon. However, their disadvantages are that the comparison of death rate is, strictly speaking, with the standard population, and that the ratio does not give a measure of the burden due to that cause of death (for example, the SMR for disease X may be 5.54 (and therefore alarming), while for disease Y it may be 1.1 (and therefore less alarming), however disease X may be very rare, killing one person per year, while disease Y may be common, killing 1,000 people per year).

The first column for males, females and persons contains crude death rates for the Major Cities population in 2002–04 (expressed as deaths per 100,000 population). These are provided because, by definition, the SMR for Major Cities is equal to 1.0 in every case (therefore, there is no point reporting it) and because a crude rate, like a count of the number of deaths, provides a measure of the burden of mortality; for example, a crude death rate of 5 per 100,000 population per annum indicates less of a burden than a crude death rate of 2,000 per 100,000 per annum.

Death rates (crude death rates and SMRs) are reported in some detail for the three-year period 2002–04, for each life stage age group, for the total population and for the population younger than 65 years. The SMRs presented here compare the actual number of deaths in each population with the number expected if the age- and sex-specific death rates in Major Cities in 2002–04 had applied to these populations.

A little lower down the table, death rates for the previous reporting period (1997–99) are detailed. The first two rows (shaded) in this section use Major City age- and sex- specific rates in 1997–99 as the standard and compare death rates in each of the areas with that in Major Cities in the same year (1997–99). Consequently, these first two shaded rows can be used to compare regional and remote death rates with those in Major Cities within 1997–99.

The second two (unshaded) rows (marked with a '†') use Major Cities age- and sex-specific

rates in 2002–04 as the standard and compare death rates in each of the areas (including Major Cities) in 1997–99 with death rates in Major Cities in 2002–04. These second two (unshaded) rows can be used to compare death rates in each of the areas (including Major Cities) directly with death rates in Major Cities in 2002–04 (and indirectly with death rates in each of the areas in 2002–04).

For example and with reference to Table 58:

- In 1997–99, death rates in Very Remote areas were 1.6 times those in Major Cities at the time. Several years later in 2002–04, death rates in Very Remote areas were 1.7 times those in Major Cities at that time.
- In 1997–99, death rates in Major Cities were 1.1 times what they were to become in 2002–04 (that is, rates in Major Cities declined substantially between these two periods). In Very Remote areas between 1997–99 and 2002–04, the death rate had declined from 1.9 to 1.7 times the 2002–04 Major City rate.
- Death rates have declined in all areas, but the death rate in Very Remote areas is still (1.7 times) as high as in Major Cities (because rates in Major Cities declined at approximately the same rate as those in Very Remote areas).

SMRs for males, females and persons cannot be compared with one another as they relate to different standards. Similarly, SMRs cannot be compared across age groups for the same reason and comparisons between SMRs for different causes of death cannot validly be made.

Indicator 1.4.2 Perinatal mortality

Summary of findings

Compared with Major Cities:

- Fetal death rates were similar in Inner Regional, Outer Regional and Remote areas, but were significantly (1.6 times) higher in Very Remote areas.
- Neonatal death rates in Inner Regional, Outer Regional, Remote and Very Remote areas were significantly higher (respectively, 1.2, 1.4, 1.4 and 2.0 times).

The high perinatal death rates in Very Remote areas were likely to be strongly influenced by the high overall perinatal death rates for babies of Indigenous mothers, high Indigenous fertility, and proportionally large numbers of Indigenous Australians in these areas.

Background

Perinatal mortality is an indicator of population health and birth outcomes.

Data used to inform indicator 1.4.2 are derived from ABS births and perinatal deaths data.

A fetal death (stillbirth) is defined as the death, before birth, of a fetus of 400 grams or more birthweight or 20 weeks or more gestation. A neonatal death is defined as the death of a newborn within 28 days of birth. Perinatal deaths are the sum of all fetal and neonatal deaths.

With available data, it is not possible to accurately comment on the inter-regional patterns for either Indigenous or non-Indigenous Australians.

A small number of records in the perinatal deaths data set did not contain details of the mother's age, or the postcode of the mother's address, and so were excluded from certain analysis (see Table 60).

Indirect age-standardised death rates provide an inter-regional comparison of the risk of death in each area that allows for differences in the age of the women giving birth. The risk of perinatal death is greater for very young and very old mothers, and the births in Very Remote areas are more likely to be to younger mothers. Crude perinatal death rates and numbers of deaths are descriptive statistics, providing an understanding of the size of the issue in each area.

Refer to Appendix B for details of the scope and coverage of the data source.

Detailed results

- The rate of fetal death was similar in Major Cities, Inner Regional, Outer Regional and Remote areas. The fetal death rate was 1.6 times higher in Very Remote areas than in Major Cities (Table 60).
- In Inner Regional, Outer Regional, Remote and Very Remote areas, the rate of neonatal death was higher respectively, 1.2, 1.4, 1.4 and 2.0 times than in Major Cities.
- Overall perinatal death rates in Inner Regional, Outer Regional, Remote and Very Remote areas were significantly higher (respectively, 1.1, 1.2, 1.3 and 1.7 times) than the perinatal death rates in Major Cities.

Table 60: Number, crude rate and indirect age-standardised rate of fetal and neonatal death, 2002–04

	MC	IR	OR	R	VR	Total
Average number per year[(a)]			**Number**			
Fetal deaths	816	257	143	30	28	1,274
Neonatal	446	153	96	19	17	730
Total (perinatal)	*1,262*	*409*	*238*	*49*	*45*	*2,004*
Births	171,789	49,724	26,533	5,050	3,217	256,313
Crude rate per 1,000 births[(a)]			**Per cent**			
Fetal deaths	4.8	5.3	5.5	6.2	9.2	5.1
Neonatal	2.7	3.2	3.7	3.9	5.8	2.9
Total (perinatal) deaths	7.5	8.4	9.3	10.1	14.9	8.0
Ratio of observed to expected death[(b)]			**Standardised prevalence ratio**			
Fetal deaths	1.00	1.05	1.08	1.21	*1.57	n.p.
Neonatal	1.00	*1.20	*1.41	*1.44	*1.98	n.p.
Total (perinatal)	1.00	*1.10	*1.19	*1.29	*1.70	n.p.

* Findings statistically significant.

(a) Data where mother's age is unknown are included. Data where mother's remoteness area of usual residence was not known are excluded.

(b) Excludes data where mother's age and remoteness area of usual residence was not known.

Note: Expected deaths are calculated as the number of fetal and neonatal deaths that would have occurred if Major City maternal age-specific death rates applied in each area.

Sources: ABS births and perinatal deaths data.

- Analysis of National Perinatal Data Collection data showed that for the period 1998–2002, the perinatal mortality rate for babies born to Indigenous Australian women in Queensland, Western Australia, South Australia and the Northern Territory was twice that for babies born to non-Indigenous Australian women in these jurisdictions (ABS & AIHW 2005).
- The high perinatal death rates in Very Remote areas are likely to be affected by the high overall perinatal death rates for Indigenous Australian infants (ABS & AIHW 2005), high Indigenous Australian fertility, and proportionally large numbers of Indigenous Australians in these areas.

Indicator 1.4.5 Leading causes of death and excess death

Summary of findings

The leading causes of death in Australia are circulatory diseases (37%), cancers (29%), respiratory diseases (9%) and injury (6%), with a similar pattern being observed both inside and outside Major Cities.

However, the leading causes of the higher death rates experienced in All regional and All remote areas (expressed as excess deaths) are mainly circulatory diseases (38%), neoplasms (cancers—20%) and injury (20%), with diseases of the endocrine system (largely diabetes) and diseases of the respiratory system each contributing 6–7% of the excess.

More specifically, coronary heart disease (19%), other cardiovascular disease (18%), chronic obstructive pulmonary disease (9%), motor vehicle traffic accidents (9%), other neoplasms (7%), diabetes (6%), other injuries (5%) and suicide (6%) were the main contributors to the 'excess' deaths that elevate All regional and All remote area mortality above levels experienced in Major Cities. Prostate and lung cancers together contribute another 8% of the 'excess' deaths.

Background

Data used to inform indicator 1.4.5 are derived from the AIHW National Mortality Database.

As in indicator 1.4.1, the leading causes of death for this indicator are described in two ways, by comparing across the four areas:

- the number of observed and expected deaths
- the average annual number of observed deaths.

In addition to the above two methods, indicator 1.4.5 also describes the average annual number of 'excess' deaths. The annual number of 'excess' deaths is equal to the difference between the number of observed deaths and the number of expected deaths each year if Major Cities rates applied in all areas. 'Excess' deaths have been reported because although SMRs provide a measure of inequity, they do not provide a measure of magnitude (that is, an understanding of the absolute size of disadvantage for particular causes of death in each region, in terms of human lives lost).

See indicator 1.4.1 for detailed background information on the presentation of mortality data.

Detailed results

- The overall annual leading causes of death are circulatory disease (48,736 deaths), cancers (38,477 deaths), respiratory diseases (11,714 deaths) and injury (7,712 deaths), which were responsible nationally for 37%, 29%, 9% and 6% of deaths, respectively.
- The leading specific causes of death that raise death rates in All regional and All remote areas are summarised in Tables 61 and 62, while Tables 63–65 provide further detail.
- Overall, coronary heart disease and other circulatory diseases (excluding cerebrovascular disease) are responsible for about 19% and 18% (total of 37%) of all excess deaths outside Major Cities (Table 61).
- Motor vehicle traffic accidents and chronic obstructive pulmonary disease are each responsible for 9% of the excess deaths outside Major Cities.

- Other neoplasms (that is, excludes lung, colorectal, breast, cervical, prostate cancer and melanoma) are responsible for 7% of the excess deaths outside Major Cities.
- Diabetes as the primary cause of death is responsible for 6% of excess deaths; however, the importance of diabetes to mortality is understated in this report, because it is frequently a contributing factor to other deaths (for example, those classified as due to circulatory diseases).
- Other injuries (that is, excludes suicide, motor vehicle traffic accidents, other land transport accidents, falls and interpersonal violence) are responsible for 5% of the excess deaths outside Major Cities.
- Suicide, prostate cancer and lung cancer are each responsible for 4% of the excess deaths outside Major Cities.
- Table 63 compares, for each cause, the rates of deaths in each area with those in Major Cities. The presented statistic is the ratio of the number of deaths observed to the number expected if Major Cities rates applied in each area. This measure provides an indication of the inter-regional 'inequity' in the risk of death from each cause.
- Table 64 compares, for each cause, the annual number of deaths in each area. This measure provides an indication of the relative 'importance' of each cause of death in each area.
- Table 65 estimates, for each cause, the annual number of deaths in excess of the number expected if Major Cities rates applied in each area. This measure identifies the specific causes of the higher overall death rates, and describes the magnitude of their contribution to these higher rates.

Table 61: Percentage of leading causes of excess death outside Major Cities, 2002–04

	Males			Females			Persons		
Cause of death	**All regional**	**All remote**	**All regional and All remote**	**All regional**	**All remote**	**All regional and All remote**	**All regional**	**All remote**	**All regional and All remote**
					Per cent				
Coronary heart disease	20.0	13.0	19.0	21.0	10.0	19.0	21.0	12.0	19.0
Other circulatory disease	13.0	12.0	13.0	30.0	20.0	28.0	19.0	15.0	18.0
MVTA	10.0	11.0	10.0	8.0	7.0	8.0	9.0	10.0	9.0
COPD	11.0	9.0	10.0	6.0	5.0	6.0	9.0	7.0	9.0
Other neoplasms[(a)]	9.0	2.0	8.0	7.0	8.0	7.0	8.0	4.0	7.0
Other causes n.e.c[(b)]	4.0	14.0	5.0	7.0	18.0	9.0	5.0	15.0	7.0
Diabetes	3.0	9.0	4.0	8.0	17.0	9.0	5.0	12.0	6.0
Other injuries	5.0	8.0	5.0	5.0	5.0	5.0	5.0	7.0	5.0
Suicide	6.0	9.0	6.0	0.0	0.0	0.0	4.0	6.0	4.0
Prostate cancer	8.0	–1.0	6.0	0.0	0.0	0.0	5.0	0.0	4.0
Lung cancer	4.0	1.0	4.0	5.0	2.0	4.0	4.0	1.0	4.0
Total	**92.0**	**87.0**	**92.0**	**96.0**	**91.0**	**95.0**	**95.0**	**89.0**	**93.0**

(a) Other neoplasms excludes lung, colorectal, breast, cervical, prostate cancer and melanoma.

(b) Other causes not elsewhere classified (n.e.c.) excludes neoplasms, circulatory and respiratory diseases, injury and poisoning, diabetes, renal failure and liver disease.

Table 62: Percentage of leading causes of excess death outside Major Cities for people aged less than 65 years, 2002–04

	Males			Females			Persons		
Cause of death	**All regional**	**All remote**	**All regional and All remote**	**All regional**	**All remote**	**All regional and All remote**	**All regional**	**All remote**	**All regional and All remote**
					Per cent				
MVTA	20.0	13.0	18.0	20.0	8.0	16.0	20.0	11.0	18.0
Coronary heart disease	13.0	15.0	14.0	12.0	12.0	12.0	13.0	14.0	13.0
Suicide	12.0	10.0	12.0	2.0	1.0	2.0	9.0	7.0	9.0
Other causes n.e.c[(a)]	5.0	15.0	7.0	6.0	21.0	11.0	5.0	17.0	8.0
Other neoplasms[(b)]	11.0	2.0	9.0	3.0	5.0	3.0	9.0	3.0	7.0
Other circulatory disease	4.0	7.0	5.0	7.0	12.0	8.0	5.0	9.0	6.0
Lung cancer	5.0	2.0	4.0	9.0	2.0	7.0	6.0	2.0	5.0
COPD	4.0	3.0	4.0	7.0	3.0	6.0	5.0	3.0	4.0
Diabetes	1.0	6.0	2.0	5.0	11.0	6.0	2.0	8.0	4.0
Liver disease	2.0	5.0	3.0	2.0	6.0	3.0	2.0	5.0	3.0
Other land transport accidents	2.0	2.0	2.0	1.0	0.0	1.0	2.0	2.0	2.0
Total	**80.0**	**81.0**	**80.0**	**73.0**	**82.0**	**76.0**	**78.0**	**81.0**	**79.0**

(a) Other neoplasms excludes lung, colorectal, breast, cervical, prostate cancer and melanoma.

(b) Other causes not elsewhere classified (n.e.c.) excludes neoplasms, circulatory and respiratory diseases, injury and poisoning, diabetes, renal failure and liver disease.

Table 63: Standardised mortality ratios for leading causes of death for all persons, byASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Coronary heart disease	All people	*1.09	*1.15	*1.16	*1.42	n.p.	*1.07	*1.08	1.08	*1.46	n.p.
	Non-Indigenous	*1.09	*1.13	1.04	*0.84	n.p.	*1.07	*1.08	1.03	0.86	n.p.
	Non-Indigenous (0–64 years)	*1.11	*1.24	1.02	1.14	n.p.	*1.24	*1.35	0.93	1.22	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*3.5	n.p.	n.p.	n.p.	n.p.	*3.2
Other circulatory diseases	All people	*1.16	*1.30	*1.47	*1.94	n.p.	*1.18	*1.27	*1.45	*2.44	n.p.
	Non-Indigenous	*1.16	*1.29	*1.35	1.19	n.p.	*1.18	*1.26	*1.35	*1.38	n.p.
	Non-Indigenous (0–64 years)	*1.10	*1.24	1.32	1.38	n.p.	*1.17	1.05	1.43	1.47	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*3.4	n.p.	n.p.	n.p.	n.p.	*3.9
MVTA	All people	*1.95	*2.10	*2.38	*5.09	n.p.	*2.04	*2.40	*3.01	*6.40	n.p.
	Non-Indigenous	*1.97	*2.16	*2.30	*3.57	n.p.	*2.10	*2.32	*2.10	2.29	n.p.
	Non-Indigenous (0–64 years)	*2.11	*2.26	*2.39	*3.88	n.p.	*2.51	*2.69	*2.51	2.47	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*4.2	n.p.	n.p.	n.p.	n.p.	*8.5
COPD	All people	*1.20	*1.41	*1.58	*2.26	n.p.	*1.10	*1.13	1.23	*2.17	n.p.
	Non-Indigenous	*1.20	*1.38	*1.46	*1.60	n.p.	*1.09	*1.11	1.18	1.13	n.p.
	Non-Indigenous (0–64 years)	*1.42	*1.75	1.49	1.59	n.p.	*1.43	*1.56	*2.02	2.05	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*3.7	n.p.	n.p.	n.p.	n.p.	*4.3
Other neoplasms	All people	*1.05	*1.07	1.03	1.07	n.p.	*1.03	1.03	*1.14	*1.23	n.p.
	Non-Indigenous	*1.05	*1.07	1.00	0.84	n.p.	1.02	1.03	1.09	0.90	n.p.
	Non-Indigenous (0–64 years)	*1.12	*1.13	0.93	0.87	n.p.	0.98	1.03	1.08	*0.61	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*1.9	n.p.	n.p.	n.p.	n.p.	*1.8

(continued)

Table 63 (continued): Standardised mortality ratios for leading causes of death for all persons by, ASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Diabetes	All people	*1.06	*1.32	*1.89	*3.27	n.p.	*1.12	*1.42	*2.47	*5.45	n.p.
	Non-Indigenous	1.05	*1.23	*1.35	1.24	n.p.	*1.11	*1.30	*1.63	1.27	n.p.
	Non-Indigenous (0–64 years)	0.98	1.03	1.44	1.08	n.p.	*1.25	*1.59	*2.55	1.81	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*10.7	n.p.	n.p.	n.p.	n.p.	*15.0
Other injuries	All people	*1.15	*1.43	*1.48	*2.71	n.p.	*1.12	*1.27	*1.40	*2.48	n.p.
	Non-Indigenous	*1.15	*1.37	*1.28	*2.24	n.p.	*1.11	*1.22	1.05	1.31	n.p.
	Non-Indigenous (0–64 years)	*1.15	*1.42	1.31	*2.24	n.p.	*1.17	*1.26	0.90	1.37	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*3.5	n.p.	n.p.	n.p.	n.p.	*4.1
Suicide	All people	*1.25	*1.42	*1.68	*2.58	n.p.	1.08	0.88	0.94	1.43	n.p.
	Non-Indigenous	*1.25	*1.42	*1.48	1.11	n.p.	1.06	0.84	0.71	0.78	n.p.
	Non-Indigenous (0–64 years)	*1.31	*1.46	*1.44	0.96	n.p.	1.12	0.90	0.72	0.77	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*4.0	n.p.	n.p.	n.p.	n.p.	*3.9
Prostate cancer	All people	*1.20	*1.21	1.00	0.79	n.p.	. .	. .	. .	. .	. .
	Non-Indigenous	*1.20	*1.22	1.02	0.99	n.p.	. .	. .	. .	. .	. .
	Non-Indigenous (0–64 years)	*1.29	1.21	1.00	1.02	n.p.	. .	. .	. .	. .	. .
	Indigenous	n.p.	n.p.	n.p.	n.p.	0.6	. .	. .	. .	. .	. .
Lung cancer	All people	*1.05	*1.11	0.96	*1.30	n.p.	*1.05	*1.12	1.13	1.11	n.p.
	Non-Indigenous	*1.05	*1.11	0.94	1.08	n.p.	*1.05	*1.08	1.10	0.80	n.p.
	Non-Indigenous (0–64 years)	*1.10	*1.22	1.05	1.00	n.p.	*1.13	*1.25	1.25	0.70	n.p.
	Indigenous	n.p.	n.p.	n.p.	n.p.	*2.2	n.p.	n.p.	n.p.	n.p.	*3.0

* Findings statistically significant.

Notes

1. Caution should be used when making inferences about ratios that are not significantly different from 1.
2. Ratios for Indigenous Australians are for Qld, WA, SA and NT.
3. Although the table allows comparison of deaths between areas for each sex, it does not allow comparison between the sexes.
4. SMRs calculated for non-Indigenous persons from Remote and Very Remote areas should be treated with caution.

Source: AIHW National Mortality Database.

Table 64: Average annual number of observed deaths for leading causes of death for all persons, by ASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Coronary heart disease	All people	3,289	1,597	196	95	13,425	2,753	1,195	117	54	11,819
	Non-Indigenous	3,171	1,516	162	42	12,893	2,652	1,141	103	22	11,377
	Non-Indigenous (0–64 years)	526	294	35	15	2,252	129	65	6	2	507
	Indigenous	n.p.	n.p.	n.p.	n.p.	147	n.p.	n.p.	n.p.	n.p.	88
Other circulatory disease	All people	1,254	645	89	47	5,021	1,528	706	80	46	6,234
	Non-Indigenous	1,216	614	74	21	4,818	1,472	671	69	18	5,985
	Non-Indigenous (0–64 years)	162	92	15	6	720	92	38	7	2	374
	Indigenous	n.p.	n.p.	n.p.	n.p.	54	n.p.	n.p.	n.p.	n.p.	58
MVTA	All people	317	171	32	38	1,097	126	68	12	13	416
	Non-Indigenous	301	161	26	15	1,015	121	60	7	2	375
	Non-Indigenous (0–64 years)	262	139	23	15	875	94	46	6	2	274
	Indigenous	n.p.	n.p.	n.p.	n.p.	40	n.p.	n.p.	n.p.	n.p.	23
COPD	All people	810	433	57	31	3,156	532	235	26	16	2,230
	Non-Indigenous	783	409	48	17	3,026	507	221	23	6	2,125
	Non-Indigenous (0–64 years)	64	40	5	2	239	55	28	4	1	198
	Indigenous	n.p.	n.p.	n.p.	n.p.	29	n.p.	n.p.	n.p.	n.p.	25
Other neoplasms	All people	2,618	1,260	154	66	10,940	2,082	920	112	46	9,105
	Non-Indigenous	2,533	1,208	138	39	10,584	2,013	883	98	23	8,808
	Non-Indigenous (0–64 years)	724	364	45	16	3,066	447	216	30	6	2,058
	Indigenous	n.p.	n.p.	n.p.	n.p.	76	n.p.	n.p.	n.p.	n.p.	60
Diabetes	All people	420	243	42	29	1,810	371	203	36	28	1,620
	Non-Indigenous	401	217	28	8	1,696	356	178	22	4	1,512
	Non-Indigenous (0–64 years)	61	32	7	2	282	32	19	4	1	131
	Indigenous	n.p.	n.p.	n.p.	n.p.	57	. .	. .	. .	. .	60

(continued)

Table 64 (continued): Average annual number of observed deaths for leading causes of death for all persons, by ASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Other injuries	All people	380	231	36	34	1,715	270	137	18	13	1,184
	Non-Indigenous	361	206	27	18	1,594	255	123	12	4	1,108
	Non-Indigenous (0–64 years)	207	128	19	13	985	82	42	4	2	365
	Indigenous	n.p.	n.p.	n.p.	n.p.	45	n.p.	n.p.	n.p.	n.p.	26
Suicide	All people	388	224	44	36	1,721	103	40	6	5	468
	Non-Indigenous	363	204	33	10	1,577	96	35	4	2	432
	Non-Indigenous (0–64 years)	311	175	28	8	1,351	83	31	4	1	369
	Indigenous	n.p.	n.p.	n.p.	n.p.	58	n.p.	n.p.	n.p.	n.p.	13
Prostate cancer	All people	745	344	33	10	2,816	. .	. .	. .	. .	. .
	Non-Indigenous	724	334	31	10	2,744	. .	. .	. .	. .	. .
	Non-Indigenous (0–64 years)	57	27	3	1	214	. .	. .	. .	. .	. .
	Indigenous	n.p.	n.p.	n.p.	n.p.	4	. .	. .	. .	. .	. .
Lung cancer	All people	1,122	559	60	33	4,659	585	275	31	11	2,508
	Non-Indigenous	1,086	539	55	21	4,510	567	254	27	6	2,412
	Non-Indigenous (0–64 years)	260	145	18	7	1,110	159	82	10	2	662
	Indigenous	n.p.	n.p.	n.p.	n.p.	33	n.p.	n.p.	n.p.	n.p.	23

Notes

1. Numbers of deaths of males from breast cancer and those of females from accidental shooting have not been provided because the numbers are very small.

2. Figures for Indigenous Australians are for the aggregated area of SA, WA, NT and Qld. This, and the inaccuracies in the identification of Indigenous deaths, prevent calculation from the table of the number of Indigenous deaths in each area. The sum of the number of Indigenous and non-Indigenous Australians will not equal the total because figures for the Indigenous Australian population refer to the four jurisdictions in which identification is thought to be most accurate.

Source: AIHW National Mortality Database.

Table 65: Average annual number of 'excess' deaths for leading causes of death for all persons, by ASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Coronary heart disease	All people	283	207	27	28	545	182	93	9	17	301
	Non-Indigenous	259	180	7	–8	438	165	81	3	–4	245
	Non-Indigenous (0–64 yrs)	54	57	1	2	114	25	17	0	0	42
	Indigenous	n.p.	n.p.	n.p.	n.p.	106	n.p.	n.p.	n.p.	n.p.	60
Other circulatory diseases	All people	172	147	28	23	370	236	150	25	27	438
	Non-Indigenous	169	136	19	3	327	222	137	18	5	382
	Non-Indigenous (0–64 yrs)	14	18	4	2	38	14	2	2	1	19
	Indigenous	n.p.	n.p.	n.p.	n.p.	38	n.p.	n.p.	n.p.	n.p.	43
MVTA	All people	154	90	18	31	293	64	40	8	11	123
	Non-Indigenous	148	86	15	11	260	63	34	4	1	102
	Non-Indigenous (0–64 yrs)	138	77	14	11	240	57	29	4	1	91
	Indigenous	n.p.	n.p.	n.p.	n.p.	30	n.p.	n.p.	n.p.	n.p.	20
COPD	All people	136	126	21	17	300	47	26	5	9	87
	Non-Indigenous	132	113	15	6	266	41	21	3	1	66
	Non-Indigenous (0–64 yrs)	19	17	2	1	39	17	10	2	1	30
	Indigenous	n.p.	n.p.	n.p.	n.p.	21	n.p.	n.p.	n.p.	n.p.	20
Other neoplasms	All people	126	84	4	4	218	55	29	14	8	106
	Non-Indigenous	110	74	–1	–7	176	43	26	8	–2	75
	Non-Indigenous (0–64 yrs)	76	41	–3	–2	112	–7	5	2	–4	–4
	Indigenous	. .	. .	. .	. .	36	n.p.	n.p.	n.p.	n.p.	27
Diabetes	All people	24	60	20	20	124	39	60	21	23	143
	Non-Indigenous	19	40	7	2	68	35	41	8	1	85
	Non-Indigenous (0–64 yrs)	1	1	2	0	2	6	7	2	0	15
	Indigenous	n.p.	n.p.	n.p.	n.p.	52	. .	. .	. .	. .	56

(continued)

Table 65 (continued): Average annual number of 'excess' deaths for leading causes of death for all persons, by ASGC Remoteness Area, 2002–04

		Males					Females				
Cause	**Population group**	**IR**	**OR**	**R**	**VR**	**Total**	**IR**	**OR**	**R**	**VR**	**Total**
Other injuries	All people	48	69	12	21	150	29	29	5	8	71
	Non-Indigenous	48	56	6	10	120	25	22	1	1	49
	Non-Indigenous (0–64 yrs)	28	38	5	7	78	12	9	0	1	22
	Indigenous	n.p.	n.p.	n.p.	n.p.	32	n.p.	n.p.	n.p.	n.p.	19
Suicide	All people	77	66	18	22	183	7	–5	0	1	3
	Non-Indigenous	73	61	11	1	146	6	–7	–2	0	–3
	Non-Indigenous (0–64 yrs)	73	55	9	0	137	9	–4	–1	0	4
	Indigenous	n.p.	n.p.	n.p.	n.p.	44	n.p.	n.p.	n.p.	n.p.	10
Prostate cancer	All people	125	60	0	–3	182	. .	. .	. .	. .	. .
	Non-Indigenous	119	60	0	0	179	. .	. .	. .	. .	. .
	Non-Indigenous (0–64 yrs)	13	5	0	0	18	. .	. .	. .	. .	. .
	Indigenous	n.p.	n.p.	n.p.	n.p.	–3	. .	. .	. .	. .	. .
Lung cancer	All people	53	55	–3	8	113	29	29	3	1	62
	Non-Indigenous	48	53	–3	2	100	29	19	3	–1	50
	Non-Indigenous (0–64 yrs)	23	26	1	0	50	19	17	2	–1	37
	Indigenous	n.p.	n.p.	n.p.	n.p.	18	n.p.	n.p.	n.p.	n.p.	16

Notes

1. 'Excess' deaths are calculated as the difference between the number of deaths observed in each area, and the number expected if Major Cities age-specific death rates applied in each area. The number of expected deaths of 'All people' is based on the age-specific death rates for 'All people' living in Major Cities. The number of expected deaths of non-Indigenous and Indigenous Australians are based on the age-specific death rates for non-Indigenous Australians living in Major Cities.
2. Numbers of 'excess' deaths for Indigenous Australians are for the combined area of Qld, WA, SA and NT only. Numbers of deaths for non-Indigenous Australians and 'All people' are for Australia.
3. Estimates of the number of excess deaths of non-Indigenous Australians in Remote and Very remote areas should be treated with caution.

Source: AIHW National Mortality Database.

3 Determinants of health

Determinants of health are factors that raise or lower the level of health in an individual or population. This tier of the framework seeks to answer the questions: Are the factors that determine good health changing for the better? Is it the same for everyone? Where and for whom are these determinants changing?

The dimensions covered by the second tier are:

- Environmental factors
- Socioeconomic factors
- Community capacity
- Health behaviours
- Person-related factors.

Many of the indicators under the environmental and socioeconomic dimensions rely on the availability of recently collected census data. It is anticipated that the remainder of the indicators will be published in a future report.

Community capacity dimension

Indicator 2.3.1 Demography

Summary of findings

In 2001, 66% of the population lived in Major Cities, and 21%, 10%, 2% and 1% lived in Inner Regional, Outer Regional, Remote and Very Remote areas, respectively.

Of the Indigenous Australian population, 30% lived in Major Cities, whereas 20%, 23%, 9% and 17%, respectively, lived in Inner and Outer Regional, Remote and Very Remote areas.

Females slightly outnumbered males in Major Cities, and males outnumbered females in the other areas, substantially so in some age groups in remote areas.

There were substantial differences in the age structure of the populations in each area. Children were proportionally more numerous in regional and especially remote areas; people aged 25–44 years were less numerous in regional areas, but proportionally more numerous in remote areas; and people aged 65 years and over were slightly more numerous in regional areas, and substantially less numerous in remote areas.

Background

It is important for policy development to take into account the population profile in the regional and remote setting. Issues like population growth, ageing, changes in sex ratios and in the proportion who are Indigenous Australian have implications for health status, policy and allocation of resources.

Data used to inform indicator 2.3.1 are derived from Population Estimates.

The age and sex of the population as well as the proportion who are Indigenous Australian

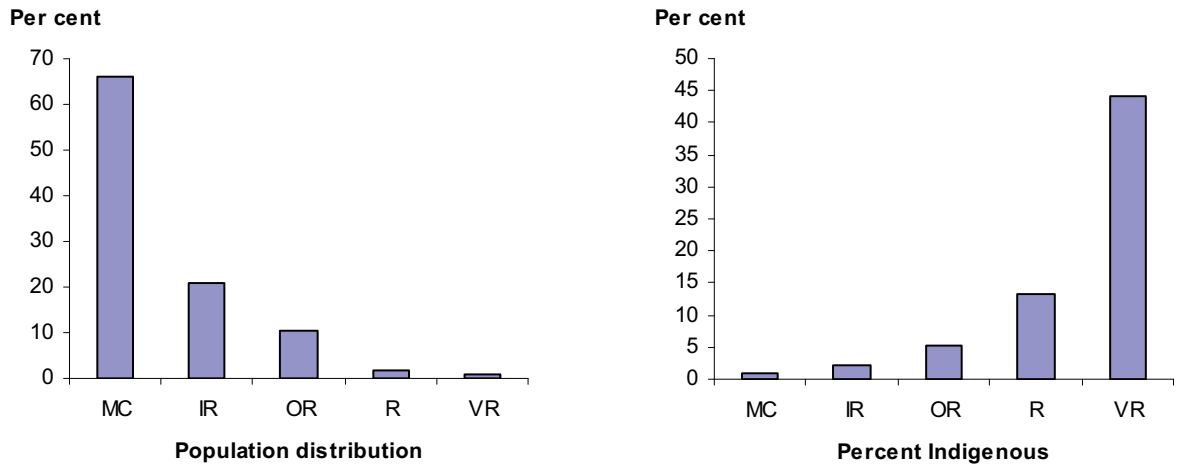
are important issues, both in their own right and for the interpretation of many of the other indicators.

The counts and simple proportions presented here have been derived from the 2001 Census estimates of the population in each area.

Pending the availability of 2006 Census data, the demographic details provided for this indicator are identical to those released in the previous report, *Rural, regional and remote health: Indicators of Health* (AIHW 2005a).

Detailed results

- In 2001, 66% of the Australian population lived in Major Cities, making Australia one of the most urbanised populations in the world. A further 21% and 10% lived in Inner and Outer Regional areas, and 2% and 1% lived in Remote and Very Remote areas, respectively (Figure 12).
- Although Indigenous Australians comprise 2.4% of the total Australian population, they comprise 27% of the population in remote areas, including 45% of Very Remote areas (Figure 13).
- This substantial representation of Indigenous Australians in All regional, and especially All remote areas, reflects the relatively smaller numbers of non-Indigenous Australians in these areas, and the more even distribution of the Indigenous Australian population across the country (30%, 20%, 23%, 9% and 17% of the Indigenous Australian population lived in Major Cities, Inner and Outer Regional, Remote and Very Remote areas, respectively) (Table 66).



Source: 2001 population estimates.

Figure 12: Population distribution, by Remoteness Area and the percentage who are Indigenous Australian in each Remoteness Area, 2001

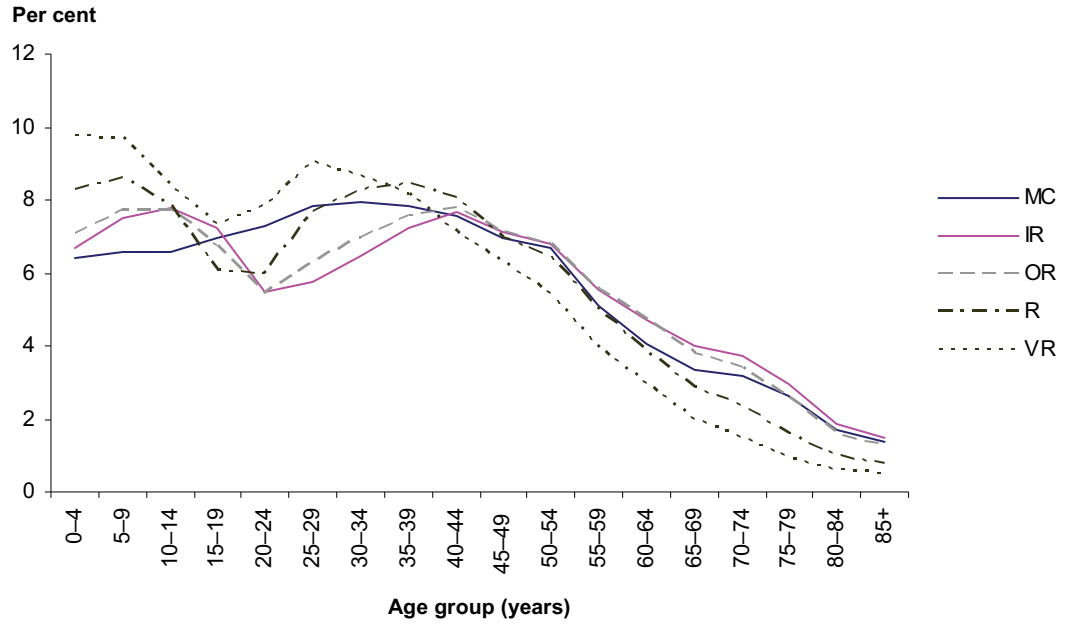
- There are also differences in the age distribution of the populations. Figure 13 and Table 66 describe differences in the age structure of populations in each of the areas in 2001.

- There are also distinct differences in the ratio of males to females in each area. Males constituted about 49%, 50%, 51%, 53% and 53%, respectively, of the population in the five areas in 2001. Between 55% and 60% of the population aged 40–64 years in Very Remote areas were male (Figure 14).
- All regional area populations had proportionally more children aged 0–14 years (22% and 23%) than Major Cities (20%), fewer people aged 25–44 years (27% and 29% compared with 31% in Major Cities), and slightly more people aged 65 years and over.
- All remote area populations had proportionally more children (25% and 28%) than Major Cities and All regional areas, more people aged 25–44 years (32% and 33%), and fewer people aged 65 years and over (9% and 5%).
- Between 2001 and 2006, populations in Major Cities, Inner and Outer Regional, Remote and Very Remote areas increased by 6%, 8%, 4%, 1% and 1%, respectively (BTRE 2007). Garnaut et al. (2001) showed that in the previous 10 years, populations in capital cities grew by 14%, and those in other metropolitan areas, and coastal, inland and remote areas grew by 28%, 23%, 7% and 8%, respectively.

Table 66: Age structure for Indigenous and non-Indigenous Australian populations, 2001

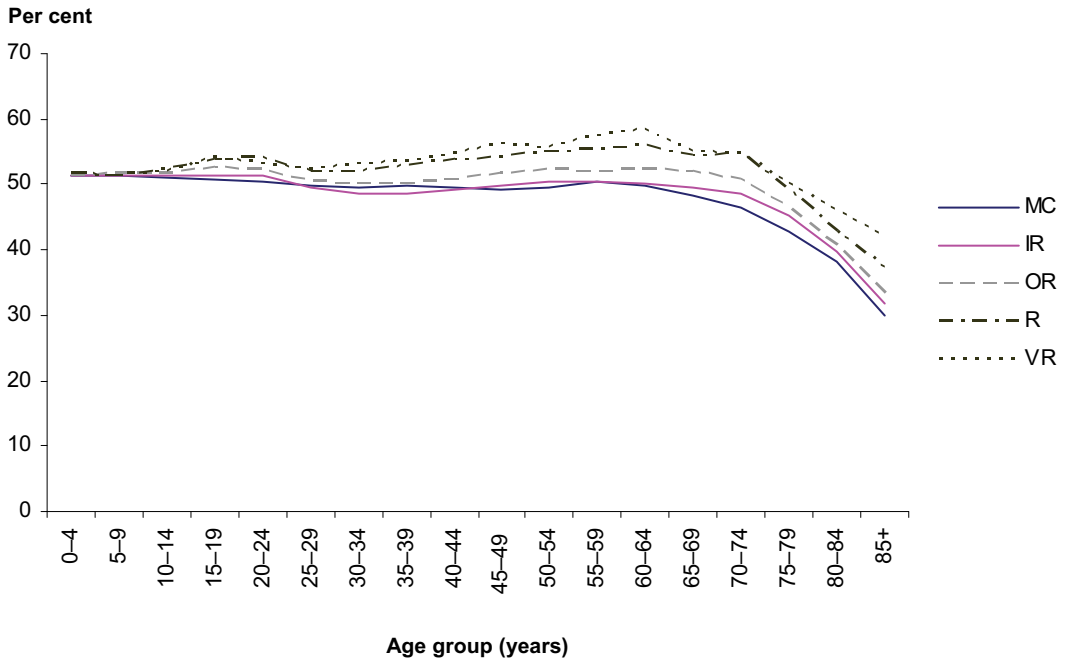
	MC	IR	OR	R	VR	Total
			Per cent			
Indigenous						
0–14	39.0	42.0	40.0	37.0	36.0	39.0
15–24	19.0	18.0	18.0	17.0	19.0	18.0
25–44	29.0	26.0	28.0	29.0	29.0	28.0
45–64	12.0	11.0	12.0	13.0	12.0	12.0
65+	2.0	3.0	3.0	3.0	4.0	3.0
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Non-Indigenous						
0–14	19.0	21.0	22.0	23.0	21.0	20.0
15–24	14.0	13.0	12.0	11.0	12.0	14.0
25–44	31.0	27.0	29.0	33.0	36.0	30.0
45–64	23.0	24.0	25.0	24.0	24.0	23.0
65+	12.0	14.0	13.0	9.0	7.0	13.0
Total	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*	*100.0*
Total						
0–14	20.0	22.0	23.0	25.0	28.0	21.0
15–24	14.0	13.0	12.0	12.0	15.0	14.0
25–44	31.0	27.0	29.0	32.0	33.0	30.0
45–64	23.0	24.0	24.0	22.0	19.0	23.0
65+	12.0	14.0	13.0	9.0	5.0	13.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

Source: 2001 population estimates.



Source: 2001 population estimates.

Figure 13: Age distribution of the population in each Remoteness Area, 2001



Source: 2001 population estimates.

Figure 14: Percentage of the population in each Remoteness Area who are male, by age group, 2001

Table 67: Population distribution of Indigenous and non-Indigenous Australians, by ASGC Remoteness Area, 2001

	MC	IR	OR	R	VR	Total
			Per cent of total Indigenous Australian population in each area			
0–14	30.0	22.0	24.0	9.0	16.0	100.0
15–24	31.0	20.0	22.0	9.0	18.0	100.0
25–44	31.0	19.0	23.0	10.0	18.0	100.0
45–64	30.0	20.0	24.0	10.0	17.0	100.0
65+	26.0	18.0	23.0	11.0	21.0	100.0
Total	**30.0**	**20.0**	**23.0**	**9.0**	**17.0**	**100.0**
			Per cent of population in each area who are Indigenous Australian			
0–14	2.0	4.0	9.0	20.0	57.0	4.0
15–24	1.0	3.0	8.0	19.0	56.0	3.0
25–44	1.0	2.0	5.0	12.0	39.0	2.0
45–64	1.0	1.0	3.0	8.0	28.0	1.0
65+	0.0	0.0	1.0	5.0	28.0	1.0
Total	**1.0**	**2.0**	**5.0**	**13.0**	**44.0**	**2.0**
			Population number			
0–14	2,520,842	883,436	453,253	80,083	49,585	3,987,198
15–24	1,834,243	510,157	244,593	39,055	27,108	2,655,157
25–44	4,010,213	1,094,487	576,344	105,251	58,862	5,845,157
45–64	2,926,336	972,579	485,905	72,130	33,245	4,490,194
65+	1,579,210	565,030	253,742	27,810	9,742	2,435,534
Total	**12,870,843**	**4,025,689**	**2,013,837**	**324,329**	**178,542**	**19,413,240**
			Per cent of population in each area			
Total	**66.0**	**21.0**	**10.0**	**2.0**	**1.0**	**100.0**

Source: 2001 population estimates.

Indicator 2.3.4 Fertility

Summary of findings

In 2002–04, women in Inner Regional, Outer Regional, Remote and Very Remote areas were more likely, respectively, 1.1, 1.2, 1.3 and 1.4 times as likely, to give birth as their counterparts in Major Cities. This compares with 1.0 times, 1.1 times, 1.4 times and 1.5 times as likely for the previous reporting period (1999–2001).

The birth rate for women aged 15–19 years increased with increasing remoteness. In Very Remote areas the birth rate was seven times that in Major Cities. The birth rate for women in All regional and All remote areas aged 20–29 years was 1.5 to 1.9 times as high as in Major Cities.

In 2003, fertility rates for Indigenous Australian women were at least 2.2 babies per woman compared with 1.8 babies for all Australian women, while the teenage birth rate among Indigenous Australian women was more than four times the overall Australian teenage birth rate (ABS & AIHW 2005).

Background

Data used to inform indicator 2.3.4 are derived from the 2002–04 National Perinatal Data Collection.

Fertility impacts on health services and on poverty. Teenage fertility can have an adverse impact on life opportunities for parents and their children, and risks surrounding birth are greater for very young and older mothers (AIHW 2003a).

Comparison statistics of the fertility for the total population of women in each area have been age standardised.

Refer to Appendix B for details of the scope and coverage of the data source.

Detailed results

- In the period 2002–04, women in Inner Regional, Outer Regional, Remote and Very Remote areas were, respectively, 1.1, 1.2, 1.3 and 1.4 times as likely to give birth as their counterparts in Major Cities (Table 68). This compares with 1.0 times, 1.1 times, 1.4 times and 1.5 times as likely for the previous reporting period (1999–2001, in AIHW 2005a).
- The birth rate for women in Inner Regional and Remote areas aged 20–29 years was, respectively, 1.5 and 1.8 times as high as in Major Cities. For younger women, fertility increased to seven times Major Cities rates in All remote areas.
- For women in All regional and All remote areas aged 30 years and older, fertility tended to be lower (between 0.7 to 0.9 times) than that in Major Cities.
- In Major Cities, most births (93%) occur in women aged 20–39 years. As remoteness increases, the proportion of births occurring in women of this age declines, with a corresponding increase in the proportion born to women younger than 20 years of age (Table 68).

Table 68: Ratio of the number of observed births to the expected number if 2002–04 Major Cities rates had occurred in each ASGC Remoteness Area, by age of mother, 2002–04

Age of mother	MC	IR	OR	R	VR
			Standardised prevalence ratio		
15–19[(a)]	1.00	1.61	2.35	3.94	7.01
20–29	1.00	1.50	1.70	1.82	1.70
30–39	1.00	0.86	0.84	0.88	0.80
40–44[(b)]	1.00	0.70	0.70	0.75	0.72
Total	**1.00**	**1.11**	**1.19**	**1.30**	**1.36**

(a) The small number of births to mothers fewer than 15 years of age have been included in this age group.

(b) The small number of births to mothers aged 45 years and over have been included in this age group.

Source: National Perinatal Data Collection, 2002–04.

Table 69: Average annual number of births, by ASGC Remoteness Area and age of mother, 2002–04

Age of mother	MC	IR	OR	R	VR
			Average number of births		
15–19[(a)]	5,716	3,040	1,990	463	521
20–29	67,900	23,313	13,066	2,473	1,630
30–39	91,074	21,656	10,640	1,965	985
40–44[(b)]	5,910	1,328	635	106	50
Total[(c)]	**170,614**	**49,361**	**26,338**	**5,008**	**3,186**

(a) The small number of births to mothers under 15 years of age have been included in this age group.

(b) The small number of births to mothers aged 45 years and over have been included in this age group.

(c) Total includes births to mothers of unstated age.

Source: National Perinatal Data Collection, 2002–04.

- Age-specific birth rates (Table 70) mirror the ratios for observed and expected numbers of births (Table 68), but they also express the absolute rate of birth for each age group in each area.
- In 2003, Indigenous Australian fertility was estimated to be at least 2.2 babies per woman which compares with 1.8 babies for all Australian women. However, due to under-identification issues, the difference is likely to be greater (ABS & AIHW 2005).
- In 2003, the teenage birth rate among Indigenous Australian women was more than four times the overall Australian teenage birth rate (ABS & AIHW 2005). These statistics help to explain the higher overall birth rates and higher proportions of babies born to younger women in All remote (especially Very Remote) areas, where Indigenous Australians constitute a large proportion of the population.

Table 70: Age-specific birth rate, by ASGC Remoteness Area and age of mother, 2002–04

Age of mother	MC	IR	OR	R	VR	Total
			Rates per 1,000 women			
15–19[(a)]	13	21	30	51	91	18
20–29	69	104	118	126	118	81
30–39	88	76	74	78	70	84
40–44[(b)]	12	8	8	9	8	10
Total (crude rate)	**58**	**60**	**66**	**76**	**81**	**59**

(a) The small number of births to mothers younger than 15 years of age have been included in this age group.

(b) The small number of births to mothers aged 45 years and over have been included in this age group.

Source: National Perinatal Data Collection, 2002–04.

Indicator 2.3.6 Risk taking

Summary of findings

Males in Outer Regional and All remote areas were significantly more (1.2 and 1.3 times, respectively) likely to engage in personally risky behaviour while intoxicated than their counterparts in Major Cities.

Females in Inner Regional areas were significantly less (0.8 times) likely, while females in Outer Regional and All remote areas were equally as likely to engage in personally risky behaviour while intoxicated as their counterparts in Major Cities.

There was no statistically significant difference in the likelihood of males in All regional or All remote areas, or of females in Outer Regional and All remote areas engaging in socially risky behaviour compared with their counterparts in Major Cities. Females in Inner Regional areas were significantly more (1.2 times) likely to engage in socially risky behaviour compared with their counterparts in Major Cities.

Personally risky behaviour is defined here as working, swimming, boating, driving or operating hazardous machinery in the past 12 months while intoxicated with alcohol or an illicit drug.

Socially risky behaviour is defined here as creating a public disturbance, damaging property, stealing or verbally or physically abusing someone in the past 12 months while intoxicated with alcohol or an illicit drug.

Background

Risk-taking behaviour increases the likelihood of accident or of chronic disease. Understanding inter-regional differences in the prevalence of risk taking behaviour could be useful in developing strategies to reduce rates of accident or chronic disease outside Major Cities.

Data used to inform indicator 2.3.6 are derived from the 2001 and 2004 National Drug Strategy Household Surveys (NDSHS).

The NDSHS is the most comprehensive survey concerning licit and illicit drug use ever undertaken in Australia. This survey asked respondents whether they had engaged in certain behaviours in the previous 12 months while intoxicated with alcohol or an illicit drug.

Respondents reported working, swimming, boating, driving or operating hazardous machinery in the past 12 months while intoxicated with alcohol or an illicit drug—primarily a risk to the person concerned (personally risky) although others may also be harmed. They also reported creating a public disturbance, damaging property, stealing or verbally or physically abusing someone in the past 12 months, while intoxicated with alcohol or an illicit drug—primarily a risk to others (socially risky) although not without some personal risk.

Standard errors were not available with the 2001 data; consequently it is not possible to comment on the statistical significance of the 2001 results.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- Compared with their counterparts in Major Cities, males in Inner Regional areas were as likely, while females in Inner Regional areas were significantly less (0.8 times as) likely, to engage in personally risky behaviour while intoxicated (Table 71).
- In Outer Regional and All remote areas, males were significantly more (respectively, 1.2 and 1.3 times as) likely while females were equally likely to engage in personally risky behaviour while intoxicated compared with their Major Cities counterparts.
- In All regional and All remote areas, males were as likely as those in Major Cities to engage in socially risky behaviour while intoxicated (Table 72).
- In Inner Regional areas, females were significantly more (1.2 times as) likely, while in Outer Regional and All remote areas they were as likely as those in Major Cities, to engage in socially risky behaviour while intoxicated.
- These results for 2004 are broadly comparable to those in 2001 for personally risky behaviour. Apparent differences relating to comparisons of socially risky behaviour may be a consequence of relatively wide confidence intervals for estimates in each year and may be due to chance.

Table 71: Personally risky behaviour while intoxicated, persons aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC (crude)	MC	IR	OR	Remote and Very Remote
	Per cent		Standardised prevalence ratio		
2004					
Males					
12–19	14.9	1.00	0.91	1.05	*0.40
20–29	41.2	1.00	1.00	*1.45	*1.50
30–39	34.9	1.00	0.94	1.06	1.26
40–49	27.8	1.00	1.11	1.15	1.27
50–59	17.7	1.00	1.17	1.23	1.26
60+	8.8	1.00	0.82	0.78	1.33
Total males	*24.9*	*1.00*	*1.00*	**1.17*	**1.25*
Females					
12–19	13.3	1.00	0.92	1.10	0.91
20–29	23.4	1.00	0.83	1.25	0.99
30–39	14.6	1.00	1.10	0.89	1.79
40–49	14.1	1.00	0.95	1.08	0.67
50–59	9.5	1.00	*0.39	*0.62	*0.33
60+	2.9	1.00	*0.42	0.61	0.49
Total females	*12.7*	*1.00*	**0.84*	*1.01*	*1.01*
2001					
Males	25.7	1.00	1.04	1.07	1.19
Females	13.2	1.00	0.83	1.03	1.12
Persons	19.4	1.00	0.98	1.04	1.16

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Ratios reported for 2001 are reported without confidence intervals and relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

Table 72: Socially risky behaviour while intoxicated, persons aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC (crude)	MC	IR	OR	Remote and Very Remote
	Per cent		Standardised prevalence ratio		
2004					
Males					
12–19	15.1	1.00	1.33	0.96	0.95
20–29	25.9	1.00	0.94	0.77	1.45
30–39	11.2	1.00	0.96	0.96	1.70
40–49	5.3	1.00	1.21	1.58	0.56
50–59	2.6	1.00	1.43	*0.40	1.37
60+	1.5	1.00	0.57	0.83	1.23
Total males	*10.4*	*1.00*	*1.08*	*0.92*	*1.28*
Females					
12–19	11.4	1.00	1.39	0.97	1.43
20–29	12.5	1.00	1.25	0.71	0.77
30–39	4.8	1.00	0.89	0.82	1.46
40–49	3.3	1.00	1.43	1.03	0.93
50–59	1.6	1.00	0.58	0.00	0.47
60+	0.5	1.00	0.27	0.76	1.91
Total females	*5.3*	*1.00*	**1.20*	*0.82*	*1.06*
2001					
Males	10.2	1.00	1.29	1.17	1.08
Females	5.3	1.00	1.36	1.19	1.25
Persons	7.8	1.00	1.32	1.15	1.12

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Ratios reported for 2001 are reported without confidence intervals and relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

Health behaviours dimension

Indicator 2.4.1 Tobacco

Summary of findings

In 2004–05 (NHS), people in Inner Regional and Other areas were significantly more (1.2 and 1.3 times as) likely to report daily or current smoking as those in Major Cities.

In 2004 (NDSHS), people in All regional areas were significantly more (1.2 times as) likely to report daily or current smoking as those in Major Cities. In All remote areas, males and females were both significantly more (1.5 and 1.3 times as) likely to smoke than those in Major Cities.

In 2004–05 (NHS), people in Major Cities were significantly less (0.8 times as) likely to smoke than in 1995, however, for people in All regional/Remote areas, the prevalence of smoking does not appear to have changed.

Indigenous Australians were significantly more (2 times as) likely to smoke as people who lived in Major Cities.

Background

Tobacco was responsible for 8% of the total burden of disease and injury in Australia in 2003, with lung cancer, chronic obstructive pulmonary disease and ischaemic heart disease accounting for more than three-quarters of this burden (AIHW: Begg et al. 2007).

Data used to inform indicator 2.4.1 are derived from the:

- 1995, 2001 and 2004–05 ABS NHS
- 2004 NDSHS
- 2004–05 ABS NATSIHS.

The ratios and percentages presented for each age group are unadjusted, and those for the total population in each area have been age standardised to largely remove any distorting effects of the different age structure of the various populations.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

National Health Survey

- A significantly higher proportion of men and women living in Outer Regional areas reported daily or current smoking, compared with their Major City counterparts. This difference was particularly marked among men and women aged 25–44 years (Table 73).
- Specifically, people in Inner Regional and Other areas were significantly more likely, respectively, 1.2 and 1.3 times as likely, to smoke as those in Major Cities.
- In 2001, the inter-regional pattern was similar (although the differences between All regional/Remote areas and Major Cities were less pronounced).
- In 1995, people in Other areas were significantly more (1.1 times as) likely to smoke than

those in Major Cities.

- In summary, there appears to have been an increase in the 'difference' between smoking prevalence in Major Cities and All regional/Remote areas. This is reinforced by data in Table 75, which show a sustained decline in the prevalence of smoking in Major Cities (to 0.8 times that in 1995), but no clear change in All regional/Remote areas areas from 1995 levels.

National Drug Strategy Household Survey

- The inter-regional pattern described by the NDSHS is very similar to that for the NHS, notwithstanding the differences between the two data sets discussed previously.
- People in All regional areas were significantly more (1.2 times as) likely to be daily smokers as those in Major Cities. Males and females in All remote areas were significantly more likely (respectively 1.5 and 1.3 times) to be daily smokers than those in Major Cities (Table 74).

Table 73: Prevalence of self-reported daily or current smoking by persons aged 15 years and over, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	34.2	1.00	0.92	1.20	1.02
25–44	30.2	1.00	*1.29	*1.35	*1.31
45–64	20.5	1.00	1.07	1.17	1.11
65+	7.0	1.00	0.82	1.19	0.97
Total males	*23.2*	*1.00*	*1.11*	**1.26*	**1.17*
Females					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	27.4	1.00	0.81	0.97	0.86
25–44	24.1	1.00	*1.31	*1.57	*1.41
45–64	14.6	1.00	*1.30	*1.38	*1.33
65+	4.4	1.00	1.29	0.96	1.17
Total females	*17.2*	*1.00*	**1.20*	**1.37*	**1.26*
Persons					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	30.9	1.00	0.87	1.10	0.95
25–44	27.1	1.00	*1.30	*1.44	*1.36
45–64	17.5	1.00	*1.16	*1.26	*1.20
65+	5.6	1.00	1.02	1.10	1.05
Total persons	**20.2**	**1.00**	***1.15**	***1.30**	***1.21**
2001					
Males	27.5	1.00	0.98	*1.18	1.05
Females	20.2	1.00	*1.15	*1.27	*1.19
Persons	23.8	1.00	1.05	*1.22	*1.11
1995					
Males	29.3	1.00	0.96	*1.10	1.01
Females	21.8	1.00	1.05	*1.07	*1.06
Persons	25.5	1.00	1.00	*1.09	*1.03

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 18 years and over.

Sources: 1995, 2001 and 2004–05 NHS.

Table 74: Prevalence of self-reported daily or current smoking by persons aged 12 years and over, by Remoteness Area, 2004

	MC crude	MC	IR	OR	Remote and Very Remote
	Per cent	Standardised prevalence ratio			
Males					
12–19	8.9	1.00	1.41	1.06	0.87
20–29	29.6	1.00	*1.25	1.08	1.15
30–39	28.4	1.00	1.03	1.09	*1.73
40–49	24.6	1.00	1.14	1.29	*1.52
50–59	20.0	1.00	1.13	1.16	*1.80
60+	10.6	1.00	*1.37	1.27	1.40
Total males	*21.0*	*1.00*	**1.18*	**1.16*	**1.48*
Females					
12–19	10.0	1.00	1.35	1.01	1.48
20–29	26.6	1.00	*1.19	*1.28	0.93
30–39	23.9	1.00	*1.28	1.09	1.37
40–49	21.0	1.00	*1.22	1.24	*1.62
50–59	15.1	1.00	1.04	1.28	1.39
60+	6.8	1.00	1.26	1.55	1.97
Total females	*16.2*	*1.00*	**1.22*	**1.22*	**1.33*

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 18 years and over.

Source: 2004 NDSHS.

Table 75: Changes in prevalence of self-reported current and daily smoking, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
	Standardised prevalence ratio			
1995–2001				
Total males	*0.95	0.96	1.01	0.98
Total females	*0.93	1.03	1.12	1.06
Total persons	*0.94	0.99	1.06	1.02
1995 to 2004–05				
Total males	*0.83	0.95	0.94	0.95
Total females	*0.84	0.96	1.09	1.01
Total persons	*0.83	0.96	1.00	0.97

* Findings statistically significant.

Notes

1. This table compares the prevalence of current and daily smoking in each area in 2004–05 and 2001, with that in 1995.
2. This question was asked of persons aged 18 years and over.
3. The standards used in the calculation of the ratios in this table were the age-specific rates for the population in each of the areas in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

- Indigenous Australians were significantly more (2 times as) likely to smoke than all people who lived in Major Cities (Table 76). There was little overall inter-regional difference in the prevalence of smoking.

Table 76: Prevalence of self-reported current and daily smoking by Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	Remote and Very Remote	Total
	Per cent	Standardised prevalence ratio				
Males	46.7	*1.64	*1.89	*1.83	*2.23	*1.89
Females	53.8	*2.53	*2.18	*2.39	*2.36	*2.39
Persons	**50.7**	***2.07**	***2.02**	***2.09**	***2.29**	***2.12**

* Findings statistically significant.

Notes

1. This table compares the prevalence of current and daily smoking by Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 18 years and over.

Source: 2004–05 NATSIHS.

Indicator 2.4.2 Alcohol

Summary of findings

From the 2004–05 NHS:

- Males in Inner Regional and Other areas (Outer Regional and Remote) were significantly more (1.2 and 1.4 times as) likely than those in Major Cities to report risky or high-risk alcohol consumption.
- Females in All regional/Remote areas were equally likely as those in Major Cities to report risky or high-risk alcohol consumption.

This inter-regional pattern is broadly similar to that seen in previous years. However, the prevalence of such alcohol consumption has increased in all areas, particularly for females. For example, in 2004–05 males and females in Major Cities were significantly more (respectively, 1.4 and 1.9 times as) likely to report risky or high-risk alcohol consumption than in 1995.

Data from the 2004 NDSHS showed males outside Major Cities were significantly more likely to drink in quantities risking harm in the short and long term.

In All remote areas, people appeared more likely to consume alcohol in quantities risking harm in the short term than those in Major Cities.

Indigenous Australians were significantly more (1.3 times as) likely to consume alcohol in hazardous or harmful quantities than people living in Major Cities.

Indigenous Australian males in Inner Regional areas appeared more likely to consume alcohol in hazardous or harmful quantities compared with those in Major Cities, while females in these areas appeared less likely to consume in these quantities. Otherwise, inter-regional variation appeared to be relatively small.

Background

Alcohol has both hazardous and protective effects on health. Alcohol harm was responsible for 3.2% of the total burden of disease and injury in Australia in 2003. Alcohol also prevented 0.9% of the total burden in 2003. Alcohol abuse, road traffic accidents and suicide contributed two-thirds of the harm attributable to alcohol (AIHW: Begg et al. 2007).

Data used to inform indicator 2.4.2 are derived from the:

- 1995, 2001 and 2004–05 ABS NHS
- 2001 and 2004 NDSHS
- 2004–05 ABS NATSIHS.

The definitions of harmful drinking in the NHS and the NDSHS are different:

- The NHS defines risky/high-risk alcohol consumption as the consumption of more than 25 ml of alcohol per day for females, and 50 ml per day for males, and is based on National Health and Medical Research Council risk levels for harm in the long term.
- The NDSHS defines risk of harm in the short term (for example, motor vehicle accidents) as at least one episode of alcohol consumption per week of 7 standard drinks or more for males, and 5 standard drinks or more for females. Risk of harm in the long term (for example, liver cirrhosis) is defined as average weekly consumption of alcohol over the

past 12 months that exceeded 29 standard drinks for males and 15 standard drinks for females.

NHS results have not been presented for non-Indigenous Australians, because results for the non-Indigenous and the total populations in each area are almost identical. The number of Indigenous Australians in the sample was too small for inter-regional comparisons.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

National Health Survey

- Risky or high-risk alcohol consumption was 1.2 and 1.4 times as prevalent among men living in Inner Regional and Other areas of Australia, compared with those living in Major Cities (Table 77).
- For women, the prevalence rates outside Major Cities did not differ significantly from rates in Major Cities.
- This inter-regional pattern is similar to those in 1995 and 2001.

Table 77: Prevalence of risky or high-risk alcohol consumption amongst people aged 15 years and over, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	15.6	1.00	0.61	*1.62	0.97
25–44	14.1	1.00	*1.44	*1.57	*1.50
45–64	14.4	1.00	*1.33	1.32	*1.33
65+	6.7	1.00	0.74	0.89	0.80
Total males	*13.0*	*1.00*	**1.19*	**1.41*	**1.27*
Females					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	11.2	1.00	1.26	1.62	1.38
25–44	11.7	1.00	1.04	*1.47	1.21
45–64	11.1	1.00	1.29	0.93	1.16
65+	6.3	1.00	0.70	*0.57	*0.65
Total females	*10.3*	*1.00*	*1.12*	*1.16*	*1.13*
Persons					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	13.5	1.00	0.89	*1.62	1.14
25–44	12.9	1.00	*1.26	*1.53	*1.37
45–64	12.7	1.00	*1.32	1.15	*1.25
65+	6.5	1.00	*0.72	0.74	*0.73
Total persons	**11.7**	**1.00**	***1.16**	***1.30**	***1.21**
2001					
Males	12.0	1.00	*1.30	*1.39	*1.33
Females	8.3	1.00	1.06	1.09	1.07
Persons	10.1	1.00	*1.20	*1.27	*1.22
1995					
Males	9.5	1.00	*1.22	*1.45	*1.31
Females	6.1	1.00	1.06	0.91	1.00
Persons	7.8	1.00	*1.16	*1.24	*1.19

* Findings statistically significant.

Notes

1. This question was asked of persons aged 18 years and over.
2. The percentage in Major Cities is the crude percentage (MC crude).
3. Risky alcohol consumption refers to an average daily consumption of more than 50–75 mL for males and more than 25–50 mL for females; high-risk refers to more than 75 mL for males and more than 50 mL for females.

Sources: 1995, 2001 and 2004–05 NHS.

- The prevalence of risky or high-risk alcohol consumption has increased in all areas over time at what appear to be broadly similar rates (Table 78). In 2004–05, people in Major Cities, Inner Regional and Other areas were 1.5 to 1.7 times as likely to engage in risky or high-risk alcohol consumption as they were in 1995. This appears to be a continuation of a trend apparent, but less evident, in the 2001 data.

Table 78: Changes in prevalence of risky or high-risk alcohol consumption, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995—2001				
Total males	*1.26	*1.36	*1.22	*1.31
Total females	*1.36	*1.35	*1.69	*1.45
Total persons	*1.30	*1.36	*1.35	*1.36
1995 to 2004–05				
Total males	*1.39	*1.40	*1.40	*1.40
Total females	*1.69	*1.73	*2.29	*1.91
Total persons	*1.51	*1.53	*1.65	*1.58

* Findings statistically significant.

Notes

1. This table compares the prevalence of risky or high-risk alcohol consumption in each area in 2004–05 and 2001, with that in 1995.
2. This question was asked of persons aged 18 years and over.
3. The standards used in the calculation of the ratios in this table were the age-specific rates for the population in each of the areas in 1995.

Sources: 1995, 2001 and 2004–05 NHS.

National Drug Strategy Household Survey

Risk of harm in the short term

- Males in All regional and All remote areas were significantly more likely to consume alcohol in quantities that risk harm in the short term, than their Major Cities counterparts (Table 79).
- There was no difference in the consumption of alcohol in quantities risking harm in the short term for females in Inner Regional areas compared with Major Cities.
- This pattern is different to that in 2001, where both males and females in All regional areas appeared more likely to risk harm in the short term than those in Major Cities.

Table 79: Prevalence of alcohol consumption that risks harm in the short term amongst those aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC crude	MC	IR	OR	Remote and Very Remote
	Per cent	Standardised prevalence ratio			
2004					
Males					
12–19	18.1	1.00	1.36	1.06	0.69
20–29	41.4	1.00	1.15	*1.34	*1.60
30–39	28.2	1.00	1.00	*1.27	1.46
40–49	19.6	1.00	*1.24	*1.80	*1.61
50–59	16.9	1.00	1.21	1.00	1.29
60+	7.8	1.00	0.97	1.40	1.05
Total males	*22.5*	*1.00*	**1.15*	**1.33*	**1.38*
Females					
12–19	21.7	1.00	1.17	0.80	1.34
20–29	36.7	1.00	0.97	1.16	0.94
30–39	17.5	1.00	*1.29	*1.46	*1.86
40–49	15.6	1.00	0.96	*1.32	1.12
50–59	8.0	1.00	0.91	0.68	1.74
60+	3.5	1.00	*0.60	0.72	0.86
Total females	*16.7*	*1.00*	*1.04*	*1.14*	**1.26*
2001					
Males	8.2	1.00	1.20	1.41	0.93
Females	5.2	1.00	1.25	1.27	1.23
Persons	6.7	1.00	1.22	1.34	1.04

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Ratios reported for 2001 are reported without confidence intervals and relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

Risk of harm in the long term

- Males in Inner Regional, Outer Regional and All remote areas were significantly more (respectively, 1.2, 1.3 and 1.9 times as) likely to consume alcohol in quantities that risk harm in the long term than those in Major Cities (Table 80).
- Females appeared as likely to consume alcohol in quantities that risk harm in the long term as those in Major Cities.
- In 2001, there was some suggestion that alcohol consumption that risks harm in the long term was also more prevalent outside Major Cities than within them.

Table 80: Prevalence of alcohol consumption that risks harm in the long term for those aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC crude	MC	IR	OR	Remote and Very Remote
	Per cent		Standardised prevalence ratio		
2004					
Males					
12–19	5.2	1.00	1.55	0.89	*0.21
20–29	13.3	1.00	1.21	1.39	1.86
30–39	9.4	1.00	0.99	*1.68	2.22
40–49	8.1	1.00	*1.45	1.35	1.98
50–59	10.6	1.00	1.24	1.30	*2.20
60+	7.7	1.00	0.98	1.13	1.83
Total males	*9.1*	*1.00*	**1.20*	**1.34*	**1.86*
Females					
12–19	9.2	1.00	1.07	0.94	1.06
20–29	15.2	1.00	0.77	1.24	1.40
30–39	8.6	1.00	*1.37	1.53	*1.90
40–49	10.2	1.00	0.94	1.22	1.31
50–59	7.7	1.00	0.85	0.79	1.62
60+	5.6	1.00	0.84	*0.65	*0.13
Total females	*9.3*	*1.00*	*0.96*	*1.11*	*1.37*
2001					
Males	9.6	1.00	1.24	1.35	1.05
Females	9.3	1.00	1.13	1.15	1.17
Persons	9.5	1.00	1.18	1.23	1.12

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Ratios reported for 2001 are reported without confidence intervals and relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

- Overall, Indigenous Australians were significantly more (1.3 times as) likely than people living in Major Cities to consume alcohol in hazardous or harmful quantities (Table 81).
- Indigenous Australian males in All regional areas were significantly more likely to consume alcohol in hazardous or harmful quantities compared with those in Major Cities, while there is no strong evidence of this in females.

Table 81: Prevalence of hazardous and harmful alcohol consumption by Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	Remote and Very Remote	Total
	Per cent	Standardised prevalence ratio				
Males	17.1	1.19	*1.74	*1.44	1.15	*1.35
Females	15.0	1.37	1.07	1.23	1.26	1.25
Persons	**15.9**	***1.28**	***1.45**	***1.34**	**1.20**	***1.31**

* Findings statistically significant.

Notes

1. The table compares the prevalence of hazardous and harmful alcohol consumption by Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 18 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Indicator 2.4.3 Illicit drugs

Summary of findings

Compared with Major Cities, there is no strong evidence that cannabis use in the previous 12 months was more prevalent outside Major Cities; however, there is some evidence to suggest that cannabis use is more prevalent in All remote areas.

Compared with Major Cities, other illicit drug use in the previous 12 months was:

- significantly less likely for males in Inner Regional, Outer Regional and All remote areas (respectively, 0.8, 0.7 and 0.5 times)
- significantly less (0.8 times as) likely for females in Outer Regional areas and about as likely for females in Inner Regional and All remote areas.

Background

Illicit drugs were responsible for 2.0% of the total burden of disease and injury in Australia in 2003. Illicit drugs are a direct cause of death and disability as well as being risk factors for conditions such as HIV AIDS, hepatitis, low birthweight, inflammatory heart disease, poisoning and suicide and self-inflicted injuries (AIHW: Begg et al. 2007).

Data presented here are from the 2001 and 2004 National Drug Strategy Household Surveys (NDSHS), which are the most comprehensive surveys concerning licit and illicit drug use ever undertaken in Australia (AIHW 2002).

Illicit drugs described here exclude tobacco and alcohol, but include cannabis, prescription drugs used for non-medical purposes, hallucinogens, amphetamines, opiates including heroin and methadone, ecstasy, cocaine and inhalants.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

Cannabis

- The prevalence of cannabis use is similar in All regional areas compared with Major Cities (Table 82).
- Cannabis is apparently more likely to be used in All remote areas than in Major Cities.
- The pattern in 2001 showed little inter-regional variation.

Table 82: Use of cannabis in the previous 12 months by those aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC crude	MC	IR	OR	Remote and Very Remote
	Per cent		Standardised prevalence ratio		
2004					
Males					
12–19	13.1	1.00	1.44	0.79	0.86
20–29	33.9	1.00	0.85	0.74	0.94
30–39	21.7	1.00	0.92	1.08	0.72
40–49	10.5	1.00	1.28	1.16	*3.34
50–59	3.5	1.00	1.37	2.00	*3.04
60+	0.4	1.00	1.44	1.17	0.00
Total males	*14.3*	*1.00*	*1.06*	*0.97*	*1.31*
Females					
12–19	13.0	1.00	1.27	*0.60	1.44
20–29	20.5	1.00	0.83	*0.67	1.17
30–39	10.0	1.00	1.09	1.31	1.35
40–49	4.9	1.00	*1.55	1.22	1.77
50–59	1.9	1.00	1.29	1.22	0.99
60+	0.2	1.00	0.82	*0.39	6.67
Total females	*8.1*	*1.00*	*1.10*	*0.91*	*1.33*
2001					
Males	16.7	1.00	1.06	1.10	0.96
Females	11.1	1.00	0.89	1.08	1.11
Persons	13.9	1.00	1.00	1.08	1.01

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Bold numbers are statistically significantly different from 1.00 at the 95% level of confidence. Ratios reported for 2001 are rate ratios, are reported without confidence intervals and relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

Other illicit drugs

Compared with their counterparts in Major Cities (Table 83):

- males in Inner Regional, Outer Regional and All remote areas were significantly less (0.8, 0.7 and 0.5 times as) likely to have used other illicit drugs in the past 12 months
- females in Outer Regional areas were also significantly less (0.8 times as) likely to have used other illicit drugs in the past 12 months
- for females who lived in Inner Regional and All remote areas, rates of other illicit drug usage were not significantly different from that in Major Cities
- Data from 2001 also suggest people outside Major Cities were less likely to use other illicit drugs than their counterparts in Major Cities.

Table 83: Use of illicit drugs other than cannabis in the previous 12 months by those aged 12 years and over, by Remoteness Area, 2001 and 2004

	MC crude	MC	IR	OR	Remote and Very Remote
	Per cent		Standardised prevalence ratio		
2004					
Males					
12–19	7.0	1.00	1.00	1.11	*0.37
20–29	23.9	1.00	*0.60	*0.53	0.70
30–39	14.1	1.00	*0.53	0.68	*0.35
40–49	6.1	1.00	0.86	0.82	*0.20
50–59	3.8	1.00	1.20	0.74	0.56
60+	3.4	1.00	1.43	1.19	1.23
Total males	*10.1*	*1.00*	**0.78*	**0.73*	**0.54*
Females					
12–19	9.4	1.00	1.11	*0.57	1.14
20–29	16.3	1.00	0.82	*0.67	0.79
30–39	9.0	1.00	*0.62	0.77	0.85
40–49	4.9	1.00	0.85	0.89	0.57
50–59	2.5	1.00	1.61	1.07	0.86
60+	3.4	1.00	1.44	1.00	2.42
Total females	*7.5*	*1.00*	*0.95*	**0.76*	*0.92*
2001					
Males	10.2	1.00	0.76	0.86	0.93
Females	8.1	1.00	0.75	0.98	0.78
Persons	9.2	1.00	0.76	0.90	0.85

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over. Ratios reported for 2001 are rate ratios reported without confidence intervals .They relate to those aged 14 years and older (as do the MC crude percentages).

Sources: 2001 and 2004 NDSHS.

Indicator 2.4.4 Physical inactivity

Summary of findings

In 2004–05:

- Males in Inner Regional and Other areas (Outer Regional and Remote) were significantly more (respectively, 1.2 and 1.4 times as) likely than those in Major Cities to report being sedentary.
- Females in All regional/Remote areas were as likely as those in Major Cities to report being sedentary.

This inter-regional pattern is broadly similar to those in previous years. However, while the prevalence of physical inactivity has declined by about 5–10% in Major City males, the prevalence for Inner Regional males hasn't changed, and that for Outer Regional males has increased by about 10%.

Background

Physical inactivity was responsible for 6.6% of the total burden of disease and injury in Australia in 2003, with ischaemic heart disease, type 2 diabetes and stroke accounting for more than four-fifths of this burden (AIHW: Begg et al. 2007).

Data used to inform indicator 2.4.4 are derived from the:

- 1995, 2001 and 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

The 2004–05 NATSIHS collected details from 10,439 Indigenous Australians in All remote and non-All remote areas of Australia.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- People living in All regional/Remote areas (particularly Outer Regional areas) were significantly more likely to report sedentary levels of activity than their counterparts living in Major Cities (Table 84). These differences were particularly marked for men aged 25–64 years.
- Males in Inner Regional and Other areas were significantly more (1.2 and 1.4 times as) likely to be sedentary than those in Major Cities. Females living inside and outside Major Cities appeared equally likely to be sedentary.
- While this inter-regional pattern is similar to that in previous years (1995 and 2001), the differences between Major Cities and All regional/Remote areas was more pronounced in 2004–05.

Table 84: Prevalence of self-reported sedentary levels of physical activity amongst persons aged 15 years and over, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent	Standardised prevalence ratio			
2004–05					
Males					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	22.1	1.00	1.15	1.14	1.15
25–44	27.5	1.00	*1.24	*1.54	*1.36
45–64	34.5	1.00	1.13	*1.42	*1.24
65+	37.4	1.00	1.11	1.28	1.18
Total males	*30.0*	*1.00*	**1.16*	**1.39*	**1.25*
Females					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	32.1	1.00	0.90	1.06	0.95
25–44	29.5	1.00	1.11	1.19	1.14
45–64	32.0	1.00	1.00	1.06	1.02
65+	48.5	1.00	1.03	1.05	1.03
Total females	*33.8*	*1.00*	*1.02*	*1.10*	*1.05*
Persons					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	27.0	1.00	1.00	1.10	1.03
25–44	28.5	1.00	*1.17	*1.36	*1.25
45–64	33.3	1.00	1.07	*1.24	*1.13
65+	43.6	1.00	1.06	1.15	1.10
Total persons	**31.9**	**1.00**	***1.09**	***1.24**	***1.15**
2001					
Males	29.0	1.00	1.06	*1.15	*1.09
Females	31.7	1.00	0.96	1.11	1.01
Persons	30.3	1.00	1.01	*1.13	*1.05
1995					
Males	31.9	1.00	*1.08	*1.15	*1.10
Females	34.5	1.00	*0.95	1.02	0.98
Persons	33.2	1.00	1.01	*1.08	*1.04

* Findings statistically significant.

Notes

1. This question was asked of persons aged 15 years and over.
2. Sedentary is defined as less than 100 minutes of exercise in the two weeks prior to the survey, and includes those who undertook no exercise.
3. The percentage in Major Cities is the crude percentage (MC crude).

Sources: 1995, 2001 and 2004–05 NHS.

- Between 1995 and 2001, there were significant declines in sedentary behaviour in all areas (Table 85). However, over the longer period 1995 to 2004–05, there was a significant decline in sedentary behaviour in Major Cities, little change in Inner Regional areas and a significant increase in sedentary behaviour (for males) in Other areas (to 1.1 times 1995 levels).

Table 85: Changes in the prevalence of self-reported sedentary levels of physical activity, by Remoteness Area, between 1995 and 2001, and between 1995 and 2004–05

	MC	IR	Other (OR + R)	All regional/Remote
		Standardised prevalence ratio		
1995–2001				
Total males	*0.90	*0.88	*0.89	*0.89
Total females	*0.91	*0.93	0.99	0.95
Total persons	*0.91	*0.91	*0.94	*0.92
1995 to 2004–05				
Total males	*0.93	1.01	*1.12	1.05
Total females	0.97	1.05	1.04	1.04
Total persons	*0.95	1.03	*1.08	*1.05

* Findings statistically significant.

Notes

1. This table compares the prevalence of reporting sedentary levels of physical activity in each area in 2004–05 and 2001, with that in 1995.
2. This question was asked of persons aged 15 years and over.
3. Sedentary is defined as less than 100 minutes of exercise in the two weeks prior to the survey, and includes those who undertook no exercise.

Sources: 1995, 2001 and 2004–05 NHS.

- Indigenous Australians were significantly more likely (1.6 times) to report sedentary levels of physical activity in the 12 months preceding the survey (Table 86). For females, the highest rates of sedentary behaviour were seen in Outer Regional areas (1.8 times the rates observed amongst the general population in Major Cities).

Table 86: Prevalence of self-reported sedentary levels of physical activity amongst Indigenous Australians aged 15 years and over, by Remoteness Area, 2004–05

		Indigenous			
	MC crude	MC	IR	OR	Total
	Per cent	Standardised prevalence ratio			
Males	42.7	*1.56	*1.56	*1.48	*1.54
Females	48.7	*1.55	*1.53	*1.76	*1.61
Persons	**45.9**	***1.56**	***1.54**	***1.64**	***1.58**

* Findings statistically significant.

Notes

1. This table compares the prevalence of sedentary levels of physical activity amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. Sedentary is defined as less than 100 minutes of exercise in the two weeks prior to the survey, and includes those who undertook no exercise. These results do not include persons who reported low levels of physical activity.
3. These results relate to persons aged 15 years and over.
4. The percentage in Major Cities is the crude percentage (MC crude).
5. Data were unavailable for All remote areas.

Source: 2004–05 NATSIHS.

Indicator 2.4.5 Nutrition

Summary of findings

Compared with people living in Major Cities:

- people living in All regional/Remote areas were significantly less (about 0.9 times as) likely to consume low fat or skim milk
- people living in Other areas (Outer Regional and Remote) were significantly less (0.9 times as) likely to consume the recommended two serves of fruit per day
- people living in All regional/Remote areas were significantly more (1.5 times as) likely to consume the recommended four or more serves of vegetables per day
- females living in All regional/Remote areas were 1.3 times as likely to report food insecurity than their Major City counterparts.

Indigenous Australians were significantly less likely to report consumption of low fat or skim milk, two serves of fruit and four or more serves of vegetables per day and significantly more likely to report food insecurity than the general population in Major Cities. However, Indigenous Australians in All regional areas were significantly more likely to report consumption of four or more serves of vegetables per day than those in Major Cities.

Background

Low fruit and vegetable consumption was responsible for 2.1% of the total burden of disease and injury in Australia in 2003. Eating enough fruit and vegetables helps to prevent cancers, ischaemic heart disease and, to a lesser extent, stroke (AIHW: Begg et al, 2007).

Data used to inform indicator 2.4.5 are derived from the:

- 2001 and 2004–05ABS NHS
- 2004–05 ABS NATSIHS.

The Australian Guide to Healthy Eating (Smith et al. 1998) recommends that adolescents aged 12–18 years consume at least four serves (300 grams) and adults five serves (375 grams) of vegetables and legumes each day. It also recommends consumption of at least two serves of fruit per day (300 grams).

Four measures of nutrition are described here: consumption of sufficient fruit and vegetables, consumption of low fat or skim milk, and food insecurity.

Sufficient vegetables is defined here as four or more serves per day (data pertaining to five serves or more (the recommended quantity) were unavailable).

Sufficient fruit is defined as two serves or more per day.

Dairy products contribute significantly to overall saturated fat intake (Marks et al. 2001), and as a result, the type of milk consumed can be used as a proxy for saturated fat intake. The consumption of reduced fat milk (skim or low fat milk) suggests a lower overall saturated fat intake.

The term 'food security' refers to the availability of healthy, affordable foods and the capacity of individuals and communities to access them (AIHW 2006a). Food insecurity in this report relates to lack of food, or limited food in the house. Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

Type of milk consumed

- People living in All regional/Remote areas were significantly less (0.9 times as) likely to consume low fat or skim milk than people living in Major Cities (Table 87).
- Males aged 15–44 years in All regional/Remote areas were particularly less likely to consume low fat or skim milk compared with their counterparts in Major Cities.

Table 87: Type of milk usually consumed by those aged 12 years and over, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	28.9	1.00	0.91	*0.67	*0.81
25–44	37.5	1.00	*0.77	*0.75	*0.76
45–64	45.8	1.00	0.99	0.96	0.98
65+	47.9	1.00	0.92	0.89	0.91
Total males	*39.8*	*1.00*	**0.90*	**0.84*	**0.88*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	45.5	1.00	0.98	0.76	0.91
25–44	48.4	1.00	0.97	*0.78	*0.89
45–64	60.4	1.00	0.96	*0.84	0.92
65+	55.2	1.00	0.94	0.86	0.91
Total females	*52.5*	*1.00*	*0.96*	**0.81*	**0.91*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	37.1	1.00	0.95	*0.72	*0.87
25–44	43.0	1.00	*0.88	*0.76	*0.84
45–64	53.1	1.00	0.98	*0.89	0.94
65+	52.0	1.00	0.93	0.88	0.91
Total Persons	**46.3**	**1.00**	***0.94**	***0.83**	***0.89**

* Findings statistically significant.

Notes

1. The percentage in Major Cities is the crude percentage (MC crude).
2. This question was asked of persons aged 12 years and over.

Source: 2004–05 NHS.

- Indigenous Australians were significantly less likely (0.4 times) to consume low fat or skim milk compared with those in Major Cities. This was true across all areas and particularly evident in All remote areas (Table 88).

Table 88: Type of milk usually consumed by Indigenous Australians aged 12 years and over, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	18.2	*0.50	*0.50	*0.43	*0.15	*0.39
Females	24.4	*0.49	*0.55	*0.37	*0.14	*0.38
Persons	**21.6**	***0.49**	***0.53**	***0.40**	***0.14**	***0.38**

* Findings statistically significant.

Notes

1. This table compares the prevalence of consumption of skim and low or reduced fat milk amongst Aboriginal and Torres Strait Islander peoples in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 12 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Usual consumption of fruit

- People living in Other areas (Outer Regional and Remote) were significantly less (0.9 times as) likely to report consuming the recommended two serves of fruit per day compared with their counterparts living in Major Cities (Table 89). Those aged 15–24 years in All regional/Remote areas were particularly less likely to consume sufficient fruit compared with Major Cities.
- These results are broadly similar to those for 2001.

Table 89: Proportion of the population aged 12 years and over usually consuming two or more serves of fruit per day, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	44.2	1.00	0.83	*0.72	*0.78
25–44	41.1	1.00	1.07	0.89	1.00
45–64	51.9	1.00	1.07	1.00	1.05
65+	62.7	1.00	0.96	0.89	0.93
Total males	*47.8*	*1.00*	*1.01*	**0.90*	*0.97*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	54.7	1.00	0.89	*0.70	*0.83
25–44	56.4	1.00	0.94	*0.86	*0.91
45–64	65.6	1.00	1.00	0.97	0.99
65+	69.5	1.00	0.96	1.02	0.98
Total females	*60.9*	*1.00*	*0.96*	**0.91*	**0.94*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	49.4	1.00	*0.86	*0.71	*0.81
25–44	48.8	1.00	1.00	*0.87	0.95
45–64	58.8	1.00	1.03	0.98	1.01
65+	66.5	1.00	0.96	0.95	0.96
Total persons	**54.5**	**1.00**	**0.98**	***0.90**	***0.95**
2001					
Males	47.1	1.00	0.96	0.94	*0.95
Females	57.9	1.00	1.04	0.95	1.00
Persons	52.6	1.00	1.00	*0.94	0.98

* Findings statistically significant.

Note: These results relate to persons aged 12 years and over.

Sources: 2001 and 2004–05 NHS.

- Indigenous Australians were significantly less likely (0.1 times) to report consuming two or more serves of fruit per day in the 12 months preceding the survey (Table 90).

Table 90: Proportion of the population aged 12 years and over usually consuming two or more serves of fruit per day, Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous			
	MC crude	MC	IR	OR	Total [(a)]
	Per cent	Standardised prevalence ratio			
Males	18.2	*0.50	*0.50	*0.43	*0.15
Females	24.4	*0.49	*0.55	*0.37	*0.14
Persons	**21.6**	***0.49**	***0.53**	***0.40**	***0.14**

* Findings statistically significant.

(a) Results for Remote and Very Remote areas were unavailable at the time of publication.

Notes

1. This table compares the prevalence of consumption of two or more serves of fruit per day by Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 12 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Usual consumption of vegetables

- In contrast to usual fruit consumption, people living in All regional/Remote areas were significantly more (1.5 times) likely to consume four or more serves of vegetables per day compared with those in Major Cities (Table 91).
- These results are broadly similar to those for 2001.

Table 91: Proportion of the population aged 12 years and over usually consuming four or more serves of vegetables per day, by Remoteness Area, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	18.5	1.00	*1.66	*1.77	*1.71
25–44	19.8	1.00	*1.80	*1.87	*1.83
45–64	29.5	1.00	*1.41	*1.51	*1.45
65+	36.1	1.00	*1.59	*1.61	*1.60
Total males	*24.7*	*1.00*	**1.58*	**1.66*	**1.61*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	20.8	1.00	*1.42	*1.84	*1.55
25–44	28.6	1.00	*1.50	*1.61	*1.54
45–64	38.2	1.00	*1.26	*1.29	*1.27
65+	39.6	1.00	1.19	1.31	*1.23
Total females	*31.9*	*1.00*	**1.33*	**1.44*	**1.37*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	19.6	1.00	*1.53	*1.80	*1.62
25–44	24.2	1.00	*1.62	*1.71	*1.66
45–64	33.9	1.00	*1.33	*1.38	*1.35
65+	38.0	1.00	*1.37	*1.46	*1.40
Total persons	**28.3**	**1.00**	***1.44**	***1.54**	***1.48**
2001					
Males	22.4	1.00	*1.49	*1.63	*1.54
Females	28.6	1.00	*1.51	*1.43	*1.48
Persons	25.6	1.00	*1.50	*1.52	*1.51

* Findings statistically significant.

Note: These results relate to persons aged 12 years and over.

Sources: 2001 and 2004–05 NHS.

- Indigenous Australians in Major Cities were significantly less likely (0.8 times) to consume four or more serves of vegetables per day than the general population in Major Cities (Table 92). In contrast, Indigenous Australians in All regional areas were significantly more likely to consume four or more serves of vegetables per day than the general population in Major Cities.

Table 92: Proportion of the population aged 12 years and over usually consuming four or more serves of vegetables per day, Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous			
	MC crude	MC	IR	OR	Total [(a)]
	Per cent	Standardised prevalence ratio			
Males	17.6	0.81	1.22	*1.47	1.13
Females	23.2	*0.82	1.20	1.05	0.99
Persons	**20.7**	***0.82**	***1.21**	***1.22**	**1.05**

* Findings statistically significant.

(a) Results for Remote and Very Remote areas were unavailable at the time of publication.

Notes

1. This table compares the prevalence of consumption of four or more serves of vegetables per day amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 12 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Food insecurity

- People in All regional/Remote areas were significantly more (1.2 times as) likely to report food insecurity compared to all people in Major Cities (Table 93).
- Overall, food insecurity appears highest among men and women aged 15–24 years and 65 years and over, although there is no strong evidence of this.

Table 93: Proportion of the population aged 18 years and over reporting food insecurity, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	8.9	1.00	1.38	1.17	1.28
25–44	5.6	1.00	0.94	1.10	1.01
45–64	2.8	1.00	1.19	0.96	1.11
65+	0.7	1.00	2.04	2.12	2.07
Total males	*4.5*	*1.00*	*1.14*	*1.12*	*1.13*
Females					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	8.3	1.00	1.48	1.13	1.37
25–44	7.3	1.00	1.07	1.25	1.14
45–64	3.9	1.00	1.34	1.21	1.29
65+	0.8	1.00	1.66	3.35	2.23
Total females	*5.3*	*1.00*	*1.24*	*1.28*	**1.26*
Persons					
0–14	n.p.	n.p.	n.p.	n.p.	n.p.
15–24	9.7	1.00	1.43	1.15	1.32
25–44	6.5	1.00	1.02	1.19	1.09
45–64	2.9	1.00	1.28	1.11	1.22
65+	0.6	1.00	1.82	2.74	2.16
Total persons	**4.5**	**1.00**	**1.19**	**1.21**	***1.20**

* Findings statistically significant.

Note: This question was asked of persons aged 18 years and over.

Source: 2004–05 National Health Survey.

- Indigenous Australians were significantly more (3.4 times) likely to report food insecurity in the 12 months preceding the survey compared with those in the general population in Major Cities. This was true across all areas and particularly striking for those in All remote areas (Table 94).

Table 94: Proportion of the population aged 18 years and over reporting food insecurity, Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	13.5	*2.25	*2.40	*2.32	*5.37	*3.11
Females	22.7	*3.36	*2.74	*2.66	*5.25	*3.61
Persons	**18.5**	***2.88**	***2.58**	***2.51**	***5.30**	***3.38**

* Findings statistically significant.

Notes

1. This table compares the prevalence of food insecurity (if the respondent ran out of food at all in the preceding 12 months) amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 18 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Person-related factors dimension

Indicator 2.5.1 Self-reported high blood pressure

Summary of findings

Males were about as likely, and females were 1.2 times as likely, to report high blood pressure than those in Major Cities. It is unclear whether this indicates that people in All regional/Remote areas were less likely to have elevated blood pressure, or whether they were less likely to be aware of their blood pressure level. No comparison has been made with previous years.

Indigenous Australians were significantly more (1.7 times) likely to report high blood pressure than people in Major Cities. Among Indigenous Australians, the prevalence of self-reported high blood pressure appeared to increase gradually with increasing remoteness.

Background

High blood pressure was responsible for 7.6% of the total burden of disease and injury in Australia in 2003, with ischaemic heart disease and stroke accounting for 93% of this burden (AIHW: Begg et al. 2007).

Data used to inform indicator 2.5.1 are derived from the:

- 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- Females in All regional/Remote areas were significantly more (1.2 times) likely than those in Major Cities to report high blood pressure (Table 95). Females in Other areas aged 25–44 years of age were significantly more likely to report high blood pressure than their counterparts in Major Cities.
- Males in All regional/Remote areas were about as likely as those in Major Cities to report high blood pressure, although rates for 45–64 year olds were significantly higher (1.3 times those) for males of that age in Major Cities.

Table 95: Prevalence of self-reported high blood pressure, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	0.1	n.p.	n.p.	n.p.	n.p.
15–24	0.6	n.p.	n.p.	n.p.	n.p.
25–44	4.0	1.00	0.84	1.10	0.94
45–64	17.7	1.00	*1.33	1.20	*1.29
65+	37.5	1.00	0.91	1.00	0.94
Total males	*19.6*	*1.00*	*1.09*	*1.08*	*1.08*
Females					
0–14	0.0	n.p.	n.p.	n.p.	n.p.
15–24	0.3	n.p.	n.p.	n.p.	n.p.
25–44	2.2	1.00	1.48	*2.60	*1.92
45–64	18.1	1.00	1.19	1.05	1.14
65+	40.9	1.00	1.04	1.12	1.07
Total females	*10.4*	*1.00*	*1.13*	*1.18*	**1.15*
Persons					
0–14	0.1	n.p.	n.p.	n.p.	n.p.
15–24	0.5	n.p.	n.p.	n.p.	n.p.
25–44	3.1	1.00	1.07	*1.64	1.29
45–64	17.9	1.00	*1.26	1.12	*1.21
65+	39.4	1.00	0.98	1.06	1.01
Total persons	**10.0**	**1.00**	***1.11**	**1.13**	***1.12**

* Findings statistically significant.

Source: 2004–05 National Health Survey.

- Indigenous Australians were significantly more (1.7 times as) likely to report high blood pressure than people in Major Cities (Table 96). Among Indigenous Australians, the prevalence of reported high blood pressure increased slightly with increasing remoteness.

Table 96: Prevalence of self-reported high blood pressure amongst Indigenous Australians, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	4.4	1.13	1.07	*1.72	*2.09	*1.52
Females	6.1	*1.54	*1.91	*1.63	*2.21	*1.83
Persons	**5.3**	**1.34**	***1.48**	***1.67**	***2.15**	***1.68**

* Findings statistically significant.

Notes

1. This table compares the prevalence of self-reported high blood pressure amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.

Indicator 2.5.2 Self-reported high cholesterol

Summary of findings

People in All regional/Remote areas were significantly less (about 0.9 times) likely to report high cholesterol than people in Major Cities. It is unclear whether this indicates that people in All regional/Remote areas are less likely to have elevated cholesterol, or whether they are less likely to be aware of their cholesterol level.

Indigenous Australians were about as likely as people in Major Cities to report high cholesterol and there was little inter-regional variation.

Background

High blood cholesterol was responsible for 6.2% of the total burden of disease and injury in Australia in 2003, with ischaemic heart disease and stroke accounting for this entire burden (AIHW: Begg et al. 2007).

Data used to inform indicator 2.5.2 are derived from the:

- 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

Cholesterol is a fatty substance produced by the liver and carried by the blood to supply the rest of the body. High blood cholesterol is a prime factor in the development of atherosclerosis, the process that blocks arteries. A diet high in saturated fats (meat, dairy products, and many takeaway and processed foods) is thought to be a major cause of high blood cholesterol (AIHW 2006a).

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- People in All regional/Remote areas were significantly less (about 0.9 times) likely to report high cholesterol than people in Major Cities (Table 97). This trend was particularly strong for people aged 65 years and older.

Table 97: Prevalence of self-reported high cholesterol, by Remoteness Area, 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	0.0	n.p.	n.p.	n.p.	n.p.
15–24	0.6	n.p.	n.p.	n.p.	n.p.
25–44	3.2	1.00	0.95	0.81	0.89
45–64	14.0	1.00	0.92	0.87	0.90
65+	25.7	1.00	*0.76	0.87	*0.81
Total males	*7.2*	*1.00*	*0.85*	*0.86*	**0.85*
Females					
0–14	0.0	n.p.	n.p.	n.p.	n.p.
15–24	0.3	n.p.	n.p.	n.p.	n.p.
25–44	1.8	1.00	0.97	1.36	1.12
45–64	12.5	1.00	1.05	0.76	0.94
65+	24.6	1.00	*0.76	*0.68	*0.73
Total females	*6.8*	*1.00*	*0.91*	**0.77*	**0.86*
Persons					
0–14	0.0	n.p.	n.p.	n.p.	n.p.
15–24	0.5	n.p.	n.p.	n.p.	n.p.
25–44	2.5	1.00	0.95	1.01	0.98
45–64	13.2	1.00	0.98	0.82	0.92
65+	25.1	1.00	*0.76	*0.78	*0.77
Total persons	**7.0**	**1.00**	***0.88**	***0.82**	***0.85**

* Findings statistically significant.

Source: 2004–05 NHS.

- Indigenous Australians appeared to be about as likely to report high cholesterol as people in Major Cities. Among Indigenous Australians, there appeared to be little inter-regional variation in the prevalence of reported cholesterol (Table 98).

Table 98: Prevalence of self-reported high cholesterol amongst Indigenous Australians, by Remoteness Area, 2005

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	3.3	0.64	*0.57	1.33	0.82	0.83
Females	4.5	1.07	1.40	0.89	1.28	1.15
Persons	**3.9**	**0.85**	**0.95**	**1.11**	**1.04**	**0.99**

* Findings statistically significant.

Notes

1. This table compares the prevalence of self-reported high cholesterol amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities (MC crude) is the crude percentage.

Source: 2004–05 NATSIHS.

Indicator 2.5.3 Overweight/obesity

Summary of findings

People living in All regional/Remote areas were significantly more (1.1 times as) likely to be overweight or obese than those in Major Cities.

This finding is consistent with the inter-regional pattern in previous surveys.

The prevalence of obesity has increased over time in all areas.

Indigenous Australian females appear about 1.4 times as likely to be overweight or obese compared with the general population of females in Major Cities.

Background

People who are overweight or obese are more likely to suffer from ill health—diseases and conditions such as coronary heart disease, heart failure, stroke, type 2 diabetes, osteoarthritis and sleep apnoea (AIHW 2001b).

Data used to inform indicator 2.5.3 are derived from the:

- 1995, 2001 and 2004–05 ABS NHS
- 2004–05 ABS NATSIHS.

Classification of a respondent as overweight or obese is based on a measure of body mass index (BMI), itself calculated from self-reported height and weight. BMI is equal to weight (kg) divided by the square of height (m). Overweight is defined as a BMI of 25.0 to less than 30.0, and obese is defined as a BMI of 30.0 or greater (AIHW 2006a).

Self-reported height and weight tend to be, respectively, higher and lower than height and weight measured with instruments (Flood et al. 2000). BMI calculations based on self-assessed height and weight are therefore likely to be lower than their actual values, consequently reported estimates of the percentage of the population who are overweight/obese will be lower than the actual value. This problem does not affect inter-regional comparisons of the observed and expected numbers of people who are overweight/obese (unless there is a relationship between the accuracy of self-assessment and remoteness).

In the 2004–05 NHS, 5% of men and 11% of women declined to give their height and/or weight. Analysis has taken account of these missing data.

Refer to section 1.4 for guidance on interpreting the tables and Appendix B for details of the scope and coverage of data sources.

Detailed results

- People living in All regional/Remote areas were significantly more (1.1 times as) likely to be overweight or obese (Table 99). This finding is comparable to the inter-regional pattern in previous surveys.
- The prevalence of obesity has increased over time in all areas (Table 100).

Table 99: Prevalence of self-reported overweight and obesity for those aged 15 years and over, by Remoteness Area, 1995, 2001 and 2004–05

	MC crude	MC	IR	Other (OR + R)	All regional/Remote
	Per cent		Standardised prevalence ratio		
2004–05					
Males					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	29.6	1.00	1.09	1.25	1.16
25–44	63.4	1.00	1.04	1.13	1.08
45–64	69.9	1.00	1.01	1.09	1.04
65+	55.0	1.00	1.03	1.15	1.08
Total males	*58.2*	*1.00*	*1.03*	**1.13*	**1.07*
Females					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	22.9	1.00	1.03	1.29	1.11
25–44	39.8	1.00	1.11	1.06	1.09
45–64	52.8	1.00	1.05	1.07	1.06
65+	47.4	1.00	1.12	1.26	1.17
Total females	*42.0*	*1.00*	*1.08*	*1.11*	**1.09*
Persons					
0–14	n.a.	n.a.	n.a.	n.a.	n.a.
15–24	26.4	1.00	1.06	1.27	1.14
25–44	51.7	1.00	1.07	1.11	*1.08
45–64	61.6	1.00	1.03	1.08	1.05
65+	51.0	1.00	1.08	*1.20	*1.12
Total persons	**50.2**	**1.00**	***1.05**	***1.12**	***1.08**
2001					
Males	. .	1.00	1.03	1.08	*1.05
Females	. .	1.00	*1.10	1.09	*1.10
Persons	. .	1.00	*1.06	*1.08	*1.07
1995					
Males	. .	1.00	1.00	1.04	1.01
Females	. .	1.00	*1.08	*1.18	*1.12
Persons	. .	1.00	*1.03	*1.09	*1.06

* Findings statistically significant.

Notes

1. This question was asked of persons aged 15 years and over.
2. Overweight refers to a BMI of 25.0 and over, and obese to a BMI of 30.0 and over.
3. In the NHS, BMI is calculated from self-reported height and weight.
4. From 1995 and 2001 data provided by ABS, it was not possible to calculate MC crude.

Sources: 1995, 2001 and 2004–05 NHS.

Table 100: Prevalence of self-reported changes in overweight and obesity for those aged 15 years and over, by Remoteness Area, between 1995 and 2004–05

	MC	IR	Other areas	All regional/Remote
		Standardised prevalence ratio		
Males	*1.13	*1.15	*1.24	*1.19
Females	*1.13	*1.12	1.09	*1.11
Persons	***1.13**	***1.14**	***1.18**	***1.15**

* Findings statistically significant.

Notes

1. This table compares the prevalence of overweight and obesity in each area in 2004–05 with that in 2001.
2. This question was asked of persons aged 15 years and over.
3. Overweight refers to a BMI of 25.0 and over, and obese to a BMI of 30.0 and over.
4. In the NHS, BMI is calculated from self-reported height and weight.

Sources: 1995 and 2004–05 NHS.

- Indigenous Australian males appear to be equally likely to be overweight or obese compared with the general population of males in Major Cities, while Indigenous Australian females were significantly more (about 1.4 times as) likely to be overweight or obese compared with the general population of females in Major Cities (Table 101).
- Among Indigenous Australians, there appeared to be little inter-regional variation in the prevalence of self-reported overweight/obesity.

Table 101: Prevalence of overweight and obesity amongst Indigenous Australians aged 15 years and over, by Remoteness Area, 2004–05

		Indigenous				
	MC crude	MC	IR	OR	All remote (R + VR)	Total
	Per cent	Standardised prevalence ratio				
Males	48.8	1.04	1.05	1.17	1.05	1.07
Females	43.4	*1.43	*1.41	*1.46	*1.48	*1.44
Persons	**45.9**	***1.21**	***1.18**	***1.29**	***1.22**	***1.23**

Notes

1. The table compares the prevalence of overweight and obesity amongst Aboriginal and Torres Strait Islander people in each area in 2004–05 with the number expected in each population if age-specific rates prevalent for the total population in Major Cities in 2004–05 applied in those populations.
2. These results relate to persons aged 15 years and over.
3. The percentage in Major Cities is the crude percentage (MC crude).

Source: 2004–05 NATSIHS.