

# 1.16 Social and emotional wellbeing

**The social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples expressed as a percentage by age group, age-standardised rate and ratio**

## Data sources

Data for this measure come from the National Aboriginal and Torres Strait Islander Health Survey, the National Aboriginal and Torres Strait Islander Social Survey, the Western Australian Aboriginal Child Health Survey, the Bettering the Evaluation and Care of Health survey, the AIHW National Hospital Morbidity Database, the AIHW National Mortality Database, the AIHW National Community Mental Health Care Database, and the AIHW National Residential Mental Health Care Database.

### **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS)**

The 2004–05 NATSIHS collected information from 10,439 Indigenous Australians of all ages. This sample was considerably larger than the supplementary Indigenous samples in the 1995 and 2001 National Health Surveys. The survey was conducted in remote and non-remote areas of Australia and collected a range of information from Indigenous Australians about health-related issues including health-related actions, health risk factors, health status, socioeconomic circumstances and women's health. It is planned to repeat the NATSIHS at 6-yearly intervals, with the next NATSIHS to be conducted in 2010–11. Selected non-Indigenous comparisons are available through the 2004–05 National Health Survey (NHS).

### **National Aboriginal and Torres Strait Islander Social Survey (NATSISS)**

The 2002 NATSISS collected information from 9,400 Indigenous Australians across all states and territories of Australia. The sample covered persons aged 15 years and over who were usual residents of private dwellings. It collected information on a wide range of subjects including family and culture, health, education, employment, income, financial stress, housing, and law and justice. The 2002 NATSISS is the second national social survey of Indigenous Australians conducted by the ABS. Selected non-Indigenous comparisons are available through the 2002 General Social Survey (GSS). The ABS plans to conduct the NATSISS every 6 years. The next survey is planned for 2008.

### **Western Australian Aboriginal Child Health Survey**

This survey was a large-scale investigation into the health of 5,289 Western Australian Aboriginal and Torres Strait Islander children aged 0–17 years. It was undertaken in 2001 and 2002 by the Telethon Institute for Child Health Research in conjunction with the Kulunga Research Network. The survey was the first to gather comprehensive health, educational and developmental information on a population-based sample of Aboriginal and Torres Strait Islander children and their families and communities.

### **Bettering the Evaluation and Care of Health (BEACH) survey**

Information about encounters in general practice is available from the BEACH survey, which is conducted by the AIHW Australian GP Statistics and Classification Centre. Information is collected from a random sample of approximately 1,000 general

practitioners (GPs) from across Australia each year. A sample of 100 consecutive encounters is collected from each GP.

The number of Indigenous patients identified in the BEACH survey is likely to be underestimated. This is because some GPs might not ask about Indigenous status, or the patient may choose not to identify (AIHW 2002). The estimates presented here are also derived from a relatively small sample of GP encounters involving Indigenous Australians.

Because of a late inclusion of a 'not stated' category of Indigenous status in 2001-02 (before which not stated responses were included with non-Indigenous encounters), GP encounters for which Indigenous status was not reported have been included with encounters for non-Indigenous people under the 'other' category.

Data are presented for the 5-year period 2002-03 to 2006-07, during which there were 7,542 GP encounters with Aboriginal and Torres Strait Islander patients recorded in the survey, representing 1.5% of total GP encounters in the survey.

## **Hospitalisations**

The National Hospital Morbidity Database is a compilation of episode-level records from admitted patient morbidity data collection systems in Australian hospitals in each state and territory. Information on the characteristics, diagnoses and care of admitted patients in public and private hospitals is provided annually to the AIHW by state and territory health departments.

Data are presented for the six jurisdictions which have been assessed by the AIHW as having adequate identification of Indigenous hospitalisations in 2004-05 – New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. These six jurisdictions represent approximately 96% of the Indigenous population of Australia. Data are presented by state/territory of usual residence of the patient.

Hospitalisations for which the Indigenous status of the patient was not reported have been included with hospitalisations data for non-Indigenous people under the 'other' category. This is to enable consistency across jurisdictions, as public hospitals in some states and territories do not have a category for the reporting of 'not stated' or inadequately recorded/reported Indigenous status.

Hospitalisation data are presented for the 2-year period July 2004 to June 2006. An aggregate of 2 years of data has been used, as the number of hospitalisations for some conditions is likely to be small for a single year.

The principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient's episode of care in hospital. The additional diagnosis is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of care. The term 'hospitalisation' has been used to refer to a separation which is the episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending a change in a type of care (for example, from acute to rehabilitation). 'Separation' also means the process by which an admitted patient completes an episode of care by being discharged, dying, transferring to another hospital or changing type of care.

## **Mortality**

The National Mortality Database is a national collection of de-identified information for all deaths in Australia and is maintained by the AIHW. Information on the characteristics

and causes of death of the deceased is provided by the Registrars of Births, Deaths and Marriages and coded nationally by the ABS. Information on the cause of death is supplied by the medical practitioner certifying the death, or by a coroner. The data are updated each calendar year.

Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification. These four jurisdictions represent approximately 60% of the Indigenous population of Australia. Data are presented by state/territory of usual residence rather than state/territory where death occurs.

Deaths for which the Indigenous status of the deceased was not reported have been excluded from the analysis.

Data have been combined for the 5-year period 2002–2006 because of the small number of deaths from some conditions each year. Data have been analysed using the year of registration of death for all years. Note that the 2006 edition of this report used year of occurrence of death for all years of analysis except for the latest year of available data for which year of registration of death was used. Data published in this report may therefore differ slightly from those published in the previous edition for comparable years of data.

### **Community mental health care**

Information on the use of community mental health services by Aboriginal and Torres Strait Islander peoples is available from the AIHW National Community Mental Health Care Database. The information collected in the database is a nationally agreed set of common data elements collected by service providers based on the National Minimum Data Set for Community Mental Health Care.

The quality of Indigenous identification in this database varies by jurisdiction. In 2005–06, Queensland, Western Australia, Tasmania, the Northern Territory and the Australian Capital Territory reported that the quality of their data was suitable for analysis.

As with hospitalisation data, service contacts in which the Indigenous status of the client was not reported have been included with contacts for non-Indigenous clients under the 'other' category.

### **Residential mental health care**

Information on the use of residential mental health services by Aboriginal and Torres Strait Islander peoples is available from the AIHW National Residential Mental Health Care Database. The information collected in the database is a nationally agreed set of common data elements collected by service providers based on the National Minimum Data Set for Residential Mental Health Care.

The quality of Indigenous identification in this database varies by jurisdiction. In 2005–06 there were no residential mental health care services in Queensland and the Northern Territory, and only Western Australia, Tasmania and the Australian Capital Territory reported that the quality of their data was suitable for analysis.

As with hospitalisation data, service contacts for which the Indigenous status of the client was not reported have been included with hospitalisations for non-Indigenous people under the 'other' category.

## Analyses

Age-standardised rates and ratios have been used for this indicator as a measure of the Indigenous population relative to other Australians. Ratios of this type illustrate differences between the rates among Indigenous people and those of other Australians, taking into account differences in age distributions.

### Self-reported prevalence

Self-reported data on the social and emotional wellbeing of Aboriginal and Torres Strait Islander peoples are available from the 2004–05 NATSIHS and the 2002 NATSISS. Data from these two surveys are outlined below.

The social and emotional wellbeing module in the 2004–05 NATSIHS comprised selected questions from two established mental health surveys – the Kessler Psychological Distress Scale and the Medical Outcome Short Form (SF-36). The module also included some questions relating to feelings of anger, the impact of psychological distress, cultural identification and stressors.

### Psychological distress

Five questions from the Kessler Psychological Distress Scale were used to measure psychological distress in the 2004–05 NATSIHS. The responses to these five psychological distress items were scored and summed to create a 'Kessler-5' (K5) psychological distress score. The results indicated that 27% of Indigenous adults had high or very high levels of psychological distress, with Indigenous females significantly more likely than Indigenous males to report high levels of psychological distress (32% and 21%, respectively) (AIHW 2008 forthcoming). Psychological distress did not differ significantly by age group or geographic remoteness.

As shown in Table 1.16.1, overall, 71% of Indigenous people reported low/moderate psychological distress levels and 27% reported feelings associated with high/very high levels of psychological distress. No psychological distress score could be calculated for the remaining 2% because of missing data. Indigenous females were significantly more likely than Indigenous males to report high/very high levels of distress (32% and 21%, respectively). In contrast, there were no significant differences in psychological distress levels by age or by remoteness category.

**Table 1.16.1: Proportion of Indigenous people aged 18 years and over who reported psychological distress, by level of psychological distress, by demographic characteristics, 2004–05 (per cent)**

	Low/ moderate	High/ very high	Total <sup>(a)</sup>
	Per cent		
<b>Sex</b>			
Male	77.1	21.4	100.0
Female	66.2	32.2	100.0
<b>Age</b>			
18–24 years	72.8	26.0	100.0
25–34 years	71.4	27.1	100.0
35–44 years	69.6	29.2	100.0
45–54 years	69.3	29.4	100.0
55 years and over	73.8	23.0	100.0
<b>Remoteness</b>			
Major Cities	74.2	25.2	100.0
Inner Regional	70.8	29.1	100.0
Outer Regional	68.7	29.6	100.0
Remote or Very Remote	70.4	26.0	100.0
<i>Total<sup>(a)</sup></i>	<i>71.3</i>	<i>27.2</i>	<i>100.0</i>
<b>Total no. of Indigenous people<sup>(a)</sup></b>	<b>184,123</b>	<b>70,168</b>	<b>258,297</b>

(a) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS.

By using data from both the 2004–05 NATSIHS and the 2004–05 NHS, the level of psychological distress among Indigenous and non-Indigenous Australians can be compared. After adjusting for age differences between the Indigenous and non-Indigenous populations, Indigenous Australians were twice as likely as non-Indigenous Australians to report high or very high levels of psychological distress. This difference applied to males as well as to females (AIHW 2008 forthcoming).

Across all age groups, with the exception of the age group 18–24 years, the rate of distress for Indigenous Australians was at least twice the non-Indigenous rate (Table 1.16.2).

**Table 1.16.2: Number and proportion of people aged 18 years and over who reported high or very high levels of psychological distress, by Indigenous status, by age, 2004–05**

	Indigenous		Non-Indigenous		Rate ratio <sup>(b)</sup>
	Number	Per cent <sup>(a)</sup>	Number	Per cent <sup>(a)</sup>	
18–24 years	14,727	26.0	299,556	16.1	1.6
25–34 years	18,935	27.1	338,165	12.2	2.2
35–44 years	17,231	29.2	389,503	13.4	2.2
45–54 years	11,656	29.4	369,117	13.6	2.2
55 years and over	7,620	23.0	528,206	11.7	2.0
<i>Total</i>	<i>70,168</i>	<i>26.6</i>	<i>1,924,547</i>	<i>13.1</i>	<i>2.0</i>
<b>Total no. of people<sup>(c)</sup></b>	<b>258,297</b>	<b>..</b>	<b>14,753,256</b>	<b>..</b>	<b>..</b>

(a) The rates for total persons were directly age-standardised, and the rates for each age group are crude rates.

(b) Rate ratio Indigenous:non-Indigenous.

(c) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS and 2004 NHS.

Significant differences by Indigenous status were also observed for each of the three remoteness categories for which there were data (Table 1.16.3), with the largest difference observed for those in Outer Regional areas, where 2.3 Indigenous adults reported high/very high psychological distress levels for every one non-Indigenous adult who reported the same level of psychological distress.

**Table 1.16.3: Number and proportion of people aged 18 years and over who reported high or very high levels of psychological distress, by Indigenous status, by remoteness<sup>(a)</sup>, 2004–05**

	Indigenous		Non-Indigenous		Rate ratio <sup>(c)</sup>
	Number	Per cent <sup>(b)</sup>	Number	Per cent <sup>(b)</sup>	
Major Cities	19,871	25.4	1,301,362	12.9	2.0
Inner Regional	14,995	27.9	403,581	13.9	2.0
Outer Regional	16,383	29.0	198,968	12.8	2.3
<i>Total<sup>(d)</sup></i>	<i>70,168</i>	<i>26.6</i>	<i>1,924,547</i>	<i>13.1</i>	<i>2.0</i>
<b>Total no. of people<sup>(d)(e)</sup></b>	<b>258,297</b>	<b>..</b>	<b>14,753,256</b>	<b>..</b>	<b>..</b>

(a) Since the remote sample of the NHS did not have the same scope and coverage as that of the NATSIHS, comparisons of psychological distress can be made only between Indigenous and non-Indigenous people living in non-remote areas of Australia.

(b) Directly age-standardised using the Australian 2001 standard population.

(c) Rate ratio Indigenous:non-Indigenous.

(d) Includes those living in Remote or Very Remote areas.

(e) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS and 2004 NHS.

## Impact of psychological distress

Among Indigenous Australians who indicated some level of psychological distress (i.e. those who answered ‘a little of the time’, ‘some of the time’, ‘most of the time’ or ‘all of the time’ to at least one K5 question), 21% indicated having been unable to work or carry out their normal activities because of their distress for at least 1 day during the previous 4 weeks, and 12% had seen a doctor or other health professional at least once

for this reason over the same time period. One in seven (15%) of those who indicated some level of psychological distress indicated that physical health problems were the main cause of those feelings all or most of the time.

### Visits to health professional

The majority (87%) of those who reported at least some level of psychological distress (a score of more than 5) did not see a doctor or other health professional about their feelings of distress in the 4-week period, but 12% did so (Table 1.16.4). Those who did seek help saw a health professional, on average, 2.1 times during the 4 weeks before interview. Indigenous women were more likely than Indigenous men to have visited a health professional about their distress (14% compared with 8%, respectively). Further, those aged 45–54 years were significantly more likely to have seen a health professional about their distress than those aged 18–24 years (14% and 8%, respectively). Among those who reported one or more visits, the average number of visits did not differ significantly by age, sex or remoteness area.

**Table 1.16.4: Proportion of Indigenous people aged 18 years and over who reported a level of psychological distress, by whether saw a health professional because of psychological distress<sup>(a)</sup>, by demographic characteristics, 2004–05**

	No (0 days)	Yes (1 day or more)		Total <sup>(b)</sup>
	%	%	Average number of visits	%
<b>Sex</b>				
Male	89.5	8.4	2.4	100.0
Female	84.3	14.2	2.0	100.0
<b>Age</b>				
18–24 years	91.3	7.5	2.1	100.0
25–34 years	86.7	12.0	2.2	100.0
35–44 years	85.3	13.0	2.3	100.0
45–54 years	84.1	14.3	1.8	100.0
55 years and over	83.0	12.8	2.2	100.0
<b>Remoteness</b>				
Major Cities	87.4	11.2	2.3	100.0
Inner Regional	86.4	13.2	2.5	100.0
Outer Regional	88.1	10.0	2.0	100.0
Remote or Very Remote	84.4	12.4	1.8	100.0
<i>Total</i>	86.6	11.6	2.1	100.0
<b>Total no. of Indigenous people<sup>(b)</sup></b>	<b>182,994</b>	<b>24,582</b>	<b>..</b>	<b>211,390</b>

(a) Analysis excludes those who had no stress—K5 score = 5 (18%).

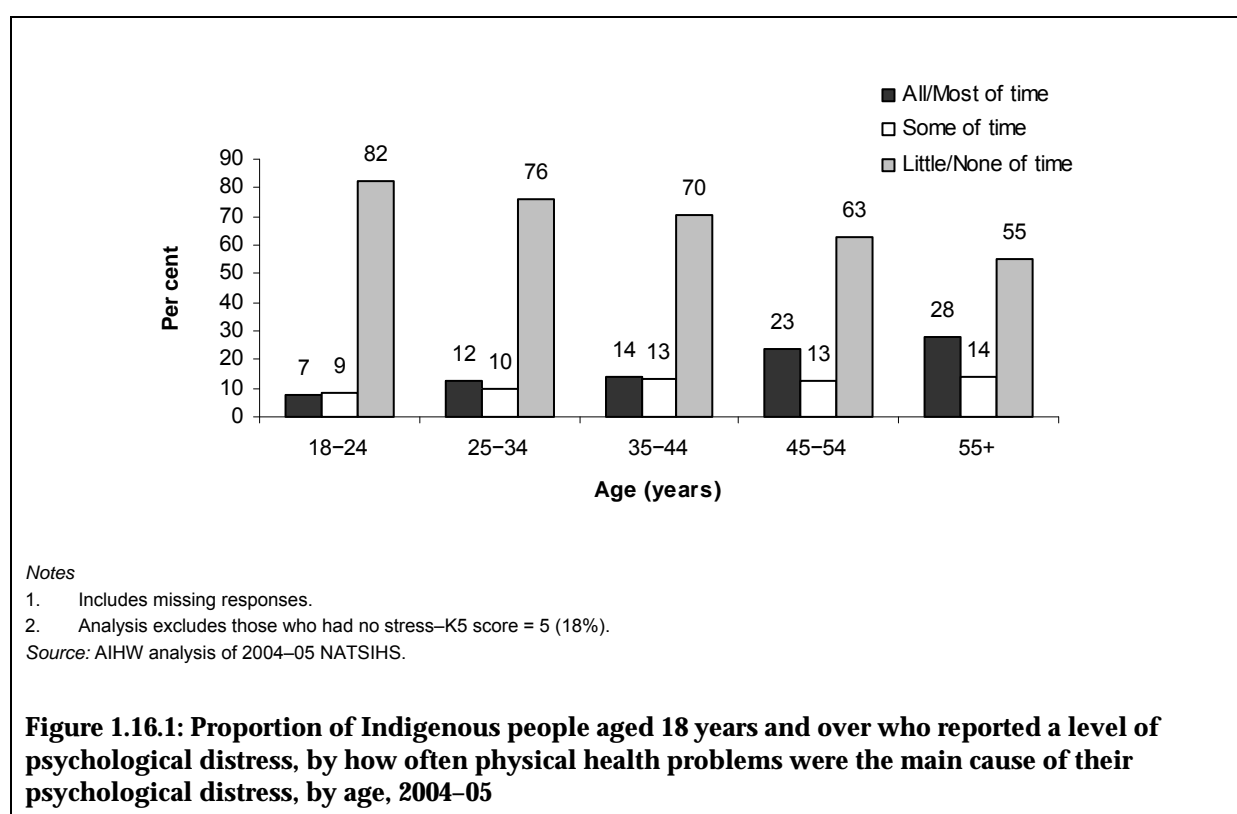
(b) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS.

## Relationship between physical and mental health

Of those who had indicated some level of psychological distress in the previous 4 weeks, 15% said that physical health problems were the main cause of their feelings all or most of the time. Thus, most of the psychological distress that was reported by Indigenous Australians was not an outcome of physical illness.

Although there was no significant difference by sex, there was a clear association with age – as age increased, physical health problems were more likely to be reported as the main cause of feelings of distress all or most of the time (Figure 1.16.1). Indigenous Australians who lived in Major Cities (18%) were more likely than those who lived in Remote or Very Remote areas (11%) to indicate that physical health problems were the main cause of their feelings of distress all or most of the time.



## Population characteristics

Table 1.16.5 presents the level of psychological distress for Indigenous persons aged 18 years and over by selected population characteristics.

- In 2004–05, a higher proportion of Indigenous persons with fair/poor health reported high/very high levels of psychological distress than Indigenous persons with excellent or very good health (46% compared with 18%).
- Indigenous persons who reported four or more stressors were more likely to have high/very high levels of psychological distress than those who reported three or fewer stressors.
- A higher proportion of Indigenous persons in the lowest income quintile reported high/very high levels of psychological distress than Indigenous persons in the highest income quintile (32% compared with 13%).

- Approximately 31% of Indigenous persons who were renters reported high/very high levels of psychological distress compared with 18% of Indigenous persons who were home owners.
- Indigenous persons who completed Year 9 or below as their highest year of school completed or who did not have a non-school qualification were more likely to have high/very high levels of psychological distress than persons who completed Year 12 or had a non-school qualification.
- Approximately 37% of Indigenous persons who were unemployed reported high/very high levels of psychological distress compared with 21% of Indigenous persons who were employed.

**Table 1.16.5: Proportion of people who reported psychological distress, by level of psychological distress, by selected population characteristics, Indigenous persons aged 18 years and over, 2004–05 (per cent)**

	Level of psychological distress	
	Low/moderate	High/very high
	%	%
<b>Self-assessed health status</b>		
Excellent/very good	82.2	17.8
Good	73.6	26.4
Fair/poor	54.1	45.9
<b>Number of stressors</b>		
0–3	77.1	22.9
4–7	60.5	39.5
8–11	54.0	46.0
12–15	64.9	35.1
<b>Individual income</b>		
1st quintile (lowest)	67.7	32.3
5th quintile (highest)	86.9	13.1
<b>Housing</b>		
Owner	82.4	17.6
Renter	69.1	30.9
<b>Highest year of school completed</b>		
Year 9 or below	66.9	33.1
Year 10	71.8	28.2
Year 12	80.1	19.9
<b>Whether has non-school qualification</b>		
Has a non-school qualification	75.0	25.0
Does not have a non-school qualification	71.1	28.9
<b>Employment status</b>		
Employed	79.3	20.7
Unemployed	62.6	37.4
Not in labour force	65.1	34.9
<b>Total</b>	<b>72.4</b>	<b>27.6</b>
<b>Total number</b>	<b>184,123</b>	<b>70,168</b>

Source: AIHW analysis of 2004–05 NATSIHS.

## Stressors

Respondents of the NATSIHS were asked to indicate which (if any) of 15 stressors they, their family and/or friends had experienced during the 12 months before interview (ABS 2006a).

- In 2004–05, approximately 77% of Indigenous people aged 18 years and over reported that they had experienced at least one stressor in the last 12 months. The most common stressors reported were the death of a family member or close friend (42%), serious illness or disability (28%) alcohol-related problems (20%), and a family member sent to, or currently in, jail (19%) (Table 1.16.6).
- The types of stressors reported by respondents differed significantly according to remoteness area. For example, Indigenous adults who lived in Remote or Very Remote areas were significantly more likely than other Indigenous adults to say that they, their family and/or friends had been witness to violence; experienced overcrowding at home; had a member of family sent to jail/currently in jail; or had a gambling problem. Those living in Inner Regional areas reported an average of 2.2 stressors in the previous 12 months, whereas those living in Remote or Very Remote areas reported an average of 3.
- There were significant differences in the number of stressors reported by Indigenous people across age groups. On average, Indigenous people aged 25–44 experienced the highest number of stressors, those aged 55 years and over experienced the lowest number of stressors and those aged 18–24 were the most likely to report they had experienced no stressors in the last 12 months (AIHW 2008 forthcoming).

**Table 1.16.6: Proportion of Indigenous people aged 18 years and over reporting a stressor, by remoteness, by type of stressor, 2004–05 (per cent)**

Type of stressor	Major Cities	Inner Regional	Outer Regional	Remote or Very Remote	Australia
	Per cent				
Serious illness or disability	30.0	28.4	25.8	28.7	28.4
Serious accident	9.9	7.5	6.8	12.1	9.4
Death of a family member or close friend	41.8	39.2	40.5	45.6	42.1
Divorce or separation	12.4	14.2	11.2	7.3	11.1
Not able to get a job	20.2	15.8	16.4	14.6	16.9
Involuntary loss of job	12.4	7.6	5.0	3.7	7.4
Alcohol-related problems	20.9	15.3	18.1	24.1	20.1
Drug-related problems	19.2	14.5	15.9	15.2	16.4
Witness to violence	11.2	10.8	9.5	23.5	14.2
Abuse or violent crime	11.3	10.1	10.1	13.2	11.4
Trouble with the police	15.6	12.9	17.1	19.0	16.3
Gambling problem	12.6	8.8	11.4	19.4	13.5
Member of family sent to jail/currently in jail	17.2	13.6	17.7	24.7	18.7
Overcrowding at home	11.3	8.9	16.1	29.2	16.9
Discrimination/racism	11.7	11.0	10.4	13.1	11.6
None of the above	22.5	22.6	23.8	20.9	22.4
<i>Average number of stressors</i>	2.6	2.2	2.3	3.0	2.6
<b>Total no. of Indigenous people<sup>(a)</sup></b>	<b>78,705</b>	<b>51,445</b>	<b>55,364</b>	<b>72,783</b>	<b>258,297</b>

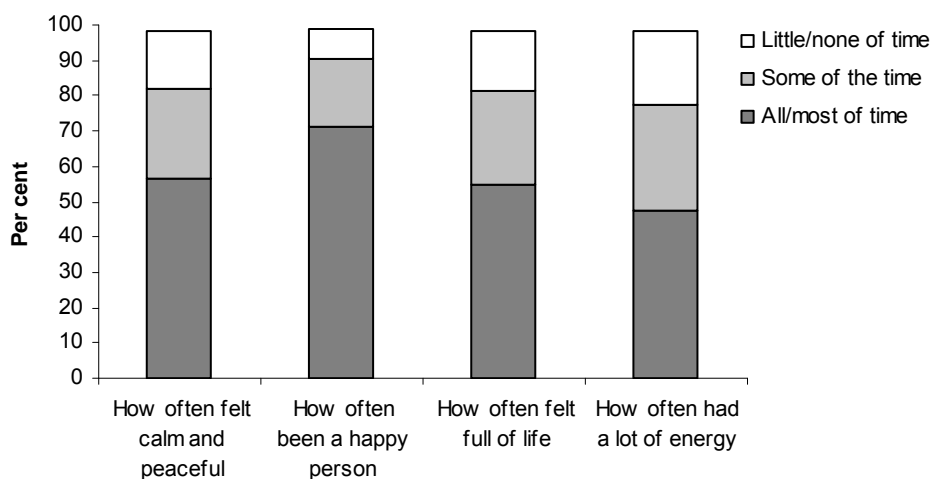
(a) Includes missing responses.

Source: AIHW analysis of the 2004–05 NATSIHS.

## Positive wellbeing

Four items were selected from the mental health and vitality scales of the Medical Outcome Short Form Health Survey (SF-36) to provide a measure of positive wellbeing in the NATSIHS. These items measured the extent to which respondents felt calm/peaceful, happy, full of life, and had lots of energy. More than half of the adult Indigenous population reported being happy (71%), calm and peaceful (56%) and/or full of life (55%) all or most of the time, and just under half (47%) said they had a lot of energy all or most of the time. Only a relatively small proportion (between 2% and 7%) of Indigenous Australians said they experienced these feelings of positive wellbeing ‘none of the time’ (Figure 1.16.2).

Indigenous people aged 55 years and over were more likely than those in the younger age groups to report feeling happy and calm/peaceful all or most of the time, but the only significant difference was between this older group and those aged 25–34 years. Indigenous people aged 55 years and over were least likely to report feeling full of life or having a lot of energy all or most of the time (AIHW 2007b).



Note: Percentages exclude missing responses.

Source: AIHW analysis of the 2004-05 NATSIHS.

**Figure 1.16.2: Positive wellbeing of Indigenous Australians aged 18 years and over, 2004-05**

### Cultural, family and community attachments

The 2004-05 NATSIHS and the 2002 NATSISS collected information on a range of social issues relevant to the social and emotional wellbeing of Indigenous Australians including cultural, family and community attachments.

- In 2004-05, approximately 44% of Indigenous people aged 18 years and over reported that they or a relative had been removed from their natural family (Table 1.16.7).
- In 2002, 54% of Indigenous Australians reported they identified with a clan or tribal group, 22% currently lived in traditional lands, 68% had attended cultural events in the last 12 months and 14% did not speak English as a primary language.

**Table 1.16.7: Removal from natural family by psychological distress, Indigenous persons aged 18 years and over, 2004–05**

	Low	Moderate	High	Very high	Total <sup>(a)</sup>
	Per cent				
Respondent removed (with or without removal of relative)	6.8	7.3	9.4	13.7	8.2
Relative only removed	31.5	39.4	38.6	39.6	35.9
Neither self nor relative removed	61.7	53.3	52.0	46.7	55.9
<i>Total<sup>(b)</sup></i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>	<i>100.0</i>
<b>Total no. of Indigenous people<sup>(a)(b)</sup></b>	<b>85,444</b>	<b>70,783</b>	<b>28,157</b>	<b>30,672</b>	<b>218,353</b>

(a) Includes missing responses on variable psychological distress.

(b) Excludes missing responses on variable removal from family (17%).

Note: Percentages calculated with the inclusion of missing responses on variable psychological distress.

Source: AIHW 2008 (forthcoming); AIHW analysis of the 2004–05 NATSIHS.

- In 2002, approximately 90% of Indigenous people aged 15 years and over reported that they had been involved in social activities in the last 3 months (such as religious activities, sporting activities, going out to a café, restaurant or bar) and 28% had undertaken voluntary work in the last 12 months. The large majority of Indigenous people (90%) reported that, in a time of crisis, they could get support from outside the household.

### Alcohol and other substance use

The 2004–05 NATSIHS, the 2004 National Drug Strategy Household Survey and the 2002 NATSISS collected information on the alcohol consumption and substance use of Aboriginal and Torres Strait Islander peoples. These data are summarised below.

- The 2004–05 NATSIHS found that approximately 50% of Indigenous Australians aged 18 years and over reported having consumed alcohol in the week before the survey, of whom one-third (16%) reported drinking at long-term risky/high-risk levels. Approximately 55% of Indigenous adults drank at short-term risky/high-risk levels in the last 12 months and 19% drank at short-term risky/high-risk levels at least once a week in the last 12 months.
- In 2004–05, after adjusting for differences in age structure, Indigenous Australians were twice as likely as non-Indigenous Australians to drink at short-term risky/high-risk levels at least once a week in the last 12 months, but equally as likely to drink at long-term risky/high-risk levels in the week before the survey (15% and 14% respectively). Indigenous adults were twice as likely as non-Indigenous Australians to have abstained from alcohol consumption in the last 12 months.
- In 2004–05, approximately 28% of Indigenous people aged 18 years and over reported rates of illicit substance use in the 12 months before the survey. In addition, around 50% of Indigenous Australians aged 18 years and over reported illicit substance use at least once in their lifetime. The substances most commonly used in the last 12 months were marijuana (23%), amphetamines (6%) and analgesics/sedatives (for non-medicinal use) (6%).
- The 2004 National Drug Strategy Household Survey found that illicit drug use among Aboriginal and Torres Strait Islander peoples was higher than for other Australians. For example, 27% of Aboriginal and Torres Strait Islander peoples aged 14 years and over had

used drugs or other substances in the last 12 months compared with 15% of other Australians.

- The 2002 NATSISS reported that in non-remote areas of Australia approximately 4% of Indigenous Australians aged 15 years and over reported they had ever used heroin, 4% had ever used cocaine, 6% had ever used LSD or other synthetic hallucinogens, 5% had ever used ecstasy or designer drugs, 4% had sniffed petrol and 4% had used other inhalants.
- Additional data and information on the consumption of alcohol and the use of illicit drugs can be found in Measures 2.20 and 2.21.

### **Financial stress**

The 2004–05 NATSIHS also collected data on financial stress.

- In 2004–05, about half (49%) of all Indigenous persons aged 15 years and over reported they were living in households in which they could not raise \$2,000 within a week in a time of crisis.

### **Law and justice**

- Approximately 20% of Indigenous people aged 15 years and over reported they had used legal services in the last 12 months, 16% had been arrested by the police, 7% had been incarcerated in the last 5 years, and 24% had been a victim of physical or threatened violence in the last 12 months. After adjusting for age differences between the Indigenous and non-Indigenous populations, Indigenous Australians aged 18 years and over experienced double the victimisation rate of non-Indigenous persons.
- The National Inquiry into the Human Rights of People with Mental Illness (HREOC 1993) found that anti-social and self-destructive behaviour – often the result of lack of acceptance, choice and opportunity, the history of dispossession, assimilation, cultural and community genocide and/or undiagnosed mental and social distress – brought Indigenous people into frequent contact with the criminal justice system. Not only may mental illness and/or emotional distress cause Indigenous and other Australians to come into contact with the criminal justice system, but also incarceration may be a risk factor for mental illness (HREOC 1993). Incarceration separates Indigenous people and other nationalities from their communities and culture. However, removal from extended family or community tends to have a significant impact on Indigenous detainees. Indigenous prisoners frequently experience depressive symptoms associated with unresolved anger which can result in suicide attempts. The number of Indigenous deaths in custody is also relatively high. Of the 68 deaths in custody in Australia in 2003, 17 (25%) were Indigenous people (McCall 2004). Indigenous Australians are imprisoned at much higher rates than non-Indigenous Australians. In 2005, the incarceration rate for Indigenous people aged 18 years and over was 1,561 per 100,000 compared with 129 per 100,000 for non-Indigenous people.

### **Hospitalisations**

Mental health related conditions include mental and behavioural disorders (such as schizophrenia and psychoactive substance use) and other mental health conditions (such as Alzheimer's disease and postnatal depression).

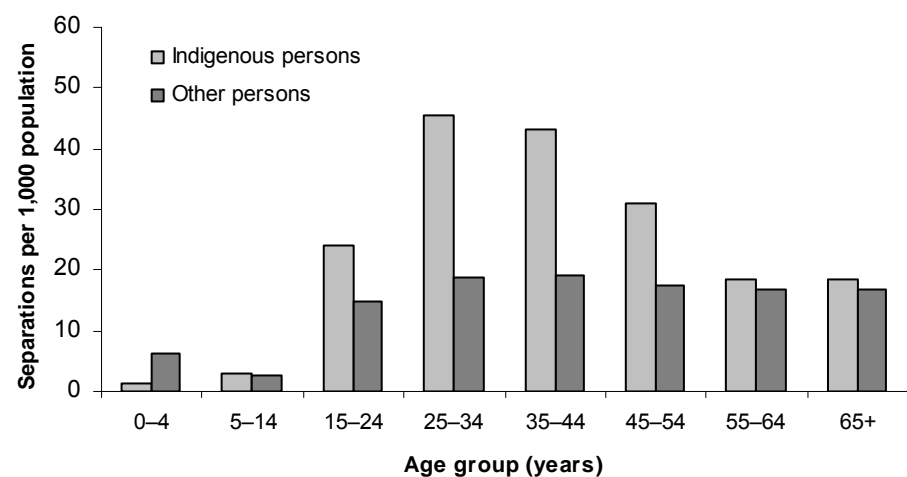
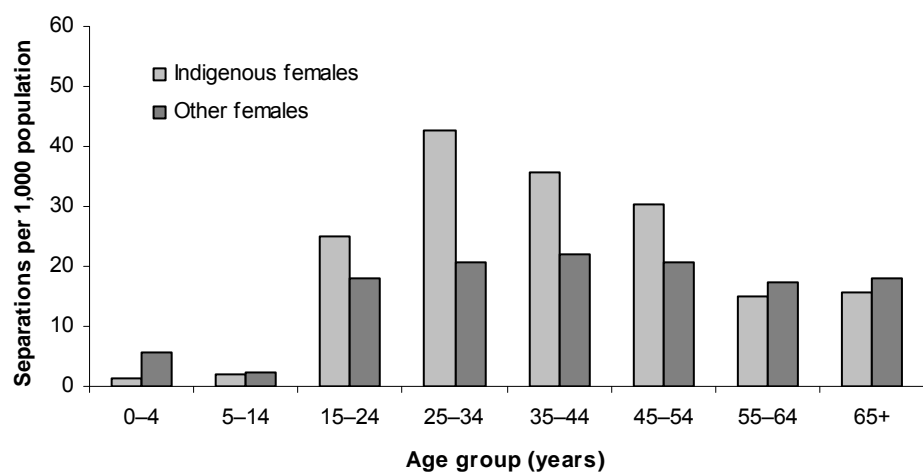
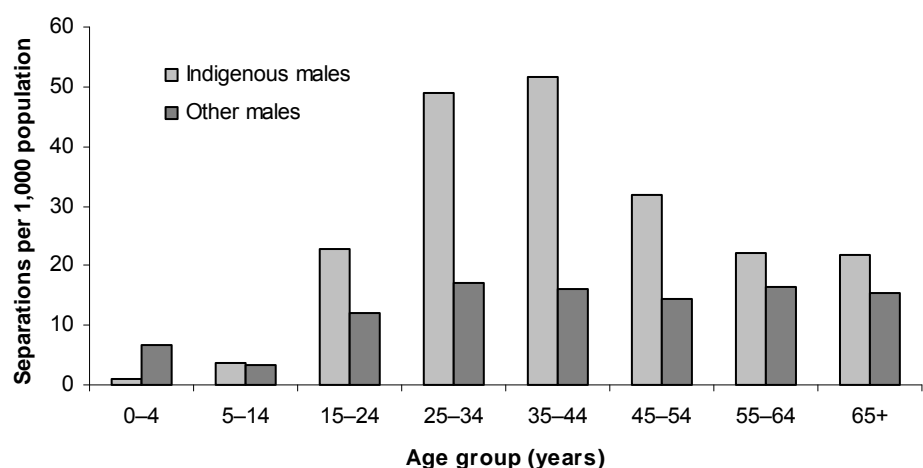
- For the 2-year period July 2004 to June 2006, there were 587,180 hospitalisations from mental health related conditions in New South Wales, Victoria, Queensland, Western

Australia, South Australia and the Northern Territory combined, 20,463 (3.5%) of which were hospitalisations of Aboriginal and Torres Strait Islander peoples.

- Mental health related conditions were responsible for 4.4% of all hospitalisations of Aboriginal and Torres Strait Islander Australians.
- Mental and behavioural disorders were the seventh most common group of principal diagnosis for Aboriginal and Torres Strait Islander Australians admitted to hospital, behind care involving dialysis; injury and poisoning; complications of pregnancy and childbirth; diseases of the respiratory system; diseases of the digestive system; symptoms, signs and ill-defined conditions; and abnormal clinical and laboratory findings.

### **Hospitalisations by age and sex**

- For the 2-year period July 2004 to June 2006, in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males had higher hospitalisation rates for mental health related conditions than other males across all age groups from 5–14 years and over. Indigenous females had higher hospitalisation rates for mental health related conditions than other females across all age groups from 15–24 years to 45–54 years (Figure 1.16.3).
- The greatest difference in rates occurred in the 25–34 years and 35–44 years age groups where Indigenous males were hospitalised for mental health related conditions at around three times the rate of other males and Indigenous females were hospitalised at twice the rate of other females in these age groups.
- For Indigenous females and other Australian males, hospitalisation rates for mental health related conditions were highest among those aged 25–34 years. For Indigenous males and other Australian females, hospitalisation rates were highest among those aged 35–44 years.
- Approximately 53% of Indigenous Australians hospitalised for mental health related conditions were males (10,760) and 47% were females (9,703).



Source: AIHW analysis of National Hospital Morbidity Database.

**Figure 1.16.3: Age-specific hospitalisation rates for a principal diagnosis of mental health related conditions, by Indigenous status and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006**

## Hospitalisations by state/territory

Table 1.16.8 presents hospitalisations for a principal diagnosis of mental health related conditions for the 2-year period July 2004 to June 2006 in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. As well as rates and ratios for the six jurisdictions which have been assessed as having adequate identification of Indigenous hospitalisations in 2004–05, unadjusted and adjusted national level data are included in the table. The Australia data are adjusted by applying a completeness factor of 89.4%, which is an estimate of the level of Indigenous under-identification in hospital separations data.

- Over the period July 2004 to June 2006, in New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined, Indigenous males were hospitalised for mental health related conditions at twice the rate of other males and Indigenous females were hospitalised for mental health related conditions at 1.4 times the rate of other females.
- When hospital rates are adjusted at the national level for Indigenous under-identification, Indigenous persons were hospitalised for mental health related conditions at 1.9 times the rate of other Australians.
- In South Australia Indigenous Australians were hospitalised for mental health related conditions at around four times the rate of other Australians, and in New South Wales, Western Australia and the Northern Territory Indigenous Australians were hospitalised at around twice the rate of other Australians in these states and territories. In Queensland and Victoria the rate ratios were 1.3.

**Table 1.16.8: Hospitalisations for principal diagnosis of mental health related conditions, by Indigenous status and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)</sup>**

	Indigenous				Other <sup>(d)</sup>				Ratio <sup>(h)</sup>
	Number	No. per 1,000 <sup>(e)</sup>	LCL 95% <sup>(f)</sup>	UCL 95% <sup>(g)</sup>	Number	No. per 1,000 <sup>(e)</sup>	LCL 95% <sup>(f)</sup>	UCL 95% <sup>(g)</sup>	
<b>NSW</b>									
Males	4,392	38.2	36.8	39.6	92,746	14.1	14.0	14.2	2.7*
Females	3,357	26.8	25.7	27.8	91,694	13.5	13.5	13.6	2.0*
Persons	7,749	32.2	31.3	33.0	184,442	13.8	13.7	13.8	2.3*
<b>Vic</b>									
Males	521	18.9	17.2	20.6	68,791	13.8	13.7	13.9	1.4*
Females	686	27.3	25.1	29.6	113,619	21.9	21.7	22.0	1.3*
Persons	1,207	23.0	21.6	24.4	182,410	17.9	17.8	18.0	1.3*
<b>Qld</b>									
Males	2,253	21.1	20.1	22.2	47,753	12.2	12.1	12.4	1.7*
Females	1,976	17.0	16.1	17.9	62,074	15.8	15.7	16.0	1.1*
Persons	4,229	19.0	18.3	19.6	109,827	14.1	14.0	14.1	1.3*
<b>WA</b>									
Males	1,847	32.0	30.3	33.7	22,217	11.4	11.2	11.5	2.8*
Females	1,934	29.0	27.6	30.5	31,200	16.0	15.8	16.2	1.8*
Persons	3,781	30.3	29.2	31.4	53,417	13.6	13.5	13.8	2.2*
<b>SA</b>									
Males	926	40.5	37.5	43.5	16,512	10.9	10.7	11.1	3.7*
Females	1,145	45.0	42.1	47.9	18,425	11.5	11.3	11.7	3.9*
Persons	2,071	42.7	40.6	44.8	34,937	11.2	11.1	11.3	3.8*
<b>NT</b>									
Males	821	14.4	13.3	15.6	1,041	7.1	6.6	7.6	2.0*
Females	605	10.4	9.5	11.4	643	4.8	4.3	5.2	2.2*
Persons	1,426	12.4	11.7	13.1	1,684	6.0	5.7	6.3	2.1*
<b>NSW, Vic, Qld, WA, SA &amp; NT<sup>(i)</sup></b>									
<b>Males</b>	<b>10,760</b>	<b>28.0</b>	<b>27.4</b>	<b>28.7</b>	<b>249,060</b>	<b>13.1</b>	<b>13.0</b>	<b>13.1</b>	<b>2.1*</b>
<b>Females</b>	<b>9,703</b>	<b>23.2</b>	<b>22.6</b>	<b>23.7</b>	<b>317,655</b>	<b>16.2</b>	<b>16.2</b>	<b>16.3</b>	<b>1.4*</b>
<b>Persons</b>	<b>20,463</b>	<b>25.5</b>	<b>25.1</b>	<b>25.9</b>	<b>566,717</b>	<b>14.6</b>	<b>14.6</b>	<b>14.7</b>	<b>1.7*</b>
<b>Australia unadjusted<sup>(j)</sup></b>									
Males	11,310	28.1	27.5	28.7	264,076	13.3	13.3	13.4	2.1*
Females	10,106	23.1	22.6	23.6	333,997	16.4	16.3	16.4	1.4*
Persons	21,416	25.5	25.1	25.9	598,095	14.8	14.8	14.9	1.7*
<b>Australia adjusted<sup>(j)(k)</sup></b>									
<b>Males</b>	<b>12,639</b>	<b>31.4</b>	<b>30.8</b>	<b>32.1</b>	<b>262,747</b>	<b>13.2</b>	<b>13.2</b>	<b>13.3</b>	<b>2.4*</b>
<b>Females</b>	<b>11,293</b>	<b>25.8</b>	<b>25.3</b>	<b>26.3</b>	<b>332,810</b>	<b>16.3</b>	<b>16.3</b>	<b>16.4</b>	<b>1.6*</b>
<b>Persons</b>	<b>23,932</b>	<b>28.5</b>	<b>28.0</b>	<b>28.9</b>	<b>595,579</b>	<b>14.8</b>	<b>14.7</b>	<b>14.8</b>	<b>1.9*</b>

(continued)

**Table 1.16.8 (continued): Hospitalisations for principal diagnosis of mental health related conditions, by Indigenous status and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)</sup>**

\* Represents results with statistically significant differences in the Indigenous/other comparisons at the  $p < 0.05$  level.

- (a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.
- (b) Categories are based on the ICD-10-AM fifth edition (National Centre for Classification in Health 2006); ICD-10-AM codes F00–F99, G30, G47.0, G47.1, G47.2, G47.8, G47.9, 099.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.
- (c) Financial year reporting.
- (d) 'Other' includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.
- (e) Directly age-standardised using the Australian 2001 standard population.
- (f) LCL = lower confidence limit.
- (g) UCL = upper confidence limit.
- (h) Rate ratio Indigenous:other.
- (i) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Hospitalisation data for these six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.
- (j) Includes all eight states and territories, including the Australian Capital Territory and Tasmania; Other Territories and Residence State not applicable (e.g. overseas, at sea, no fixed address).
- (k) Australian hospitalisation numbers and rates have been adjusted for Indigenous under-identification using a national adjustment factor of 0.89. This factor was derived from a study undertaken by the AIHW in 2007 which assessed the level of Indigenous under-identification in hospital data in all states and territories by comparing information gathered from face-to face interviews in public hospitals with results from hospital records. By applying this factor, the number of Indigenous hospitalisations was increased by 11% and these additional hospitalisations then subtracted from the number of hospitalisations for Other Australians.

Note: Person numbers and rates include hospitalisations for which sex was not stated.

Source: AIHW analysis of National Hospital Morbidity Database.

## Hospitalisations by principal diagnosis

### Mental health related conditions

Table 1.16.9 presents hospitalisations for a principal diagnosis of mental health related conditions for the 2-year period July 2004 to June 2006 for New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory combined.

- Mental and behavioural disorders due to psychoactive substance use was the most common mental health related condition for which Aboriginal and Torres Strait Islander people were hospitalised (36%), followed by schizophrenia, schizotypal and delusional disorders (25%).
- Based on the hospitalisation rates of other males and females, in the six jurisdictions there were three to five times as many hospitalisations for mental and behavioural disorders due to psychoactive substance use among Indigenous males and females as would be expected.
- Indigenous males and females were hospitalised for schizophrenia, schizotypal and delusional disorders at around two to three times the rate of other males and females.

### Self-harm and assault

- Although self-harm and assault are not included among the mental health related conditions presented in this indicator, hospitalisations for these conditions may be mental health related. In 2004–05 to 2005–06 in the six jurisdictions, Indigenous males and females were hospitalised for injuries related to assault at 8 and 35 times the rate, and for injuries related to self-harm at 3 times and twice the rate of other males and females respectively (Table 1.16.10).

For more information on assault and self-harm, see Measures 1.03 (Hospitalisation for injury and poisoning) and 2.13 (Community safety).

**Table 1.16.9: Hospitalisations of Indigenous persons for principal diagnosis of mental health related conditions, by type of condition and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)(d)</sup>**

Principal diagnosis	Males						Females						Persons <sup>(e)</sup>					
	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>
Mental & behavioural disorders due to psychoactive substance use (F10–F19)	4,708	43.8	12.8	12.4	13.3	4.6*	2,603	26.8	6.2	5.9	6.4	3.3*	7,311	35.7	9.3	9.1	9.6	4.0*
Schizophrenia, schizotypal and delusional disorders (F20–F29)	2,962	27.5	6.7	6.4	7.0	2.5*	2,130	22.0	4.8	4.6	5.1	2.3*	5,092	24.9	5.7	5.6	5.9	2.4*
Mood disorders (F30–F39)	1,075	10.0	3.0	2.8	3.2	0.8*	2,073	21.4	5.3	5.1	5.6	0.8*	3,148	15.4	4.2	4.0	4.4	0.8*
Neurotic, stress-related disorders (F40–F49)	1,060	9.9	3.0	2.8	3.2	1.5*	1,617	16.7	3.8	3.6	4.0	1.4*	2,677	13.1	3.4	3.2	3.5	1.5*
Disorders of adult personality and behaviour (F60–F69)	177	1.6	0.4	0.3	0.5	1.7*	303	3.1	0.6	0.6	0.7	0.9*	480	2.3	0.5	0.5	0.6	1.1*
Behavioural and emotional disorders (F90–F98)	307	2.9	0.4	0.3	0.4	1.2*	136	1.4	0.2	0.2	0.2	1.9*	443	2.2	0.3	0.3	0.3	1.3*
Organic, including symptomatic, mental disorders (F00–F09)	158	1.5	1.0	0.7	1.2	1.7*	138	1.4	0.8	0.6	1.0	1.7*	296	1.4	0.9	0.7	1.0	1.7*

(continued)

**Table 1.16.9 (continued): Hospitalisations of Indigenous persons for principal diagnosis of mental health related conditions, by type of condition and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)(d)</sup>**

Principal diagnosis	Males						Females						Persons <sup>(e)</sup>					
	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>
Behavioural syndromes assoc. with physiological disturbances (F50–F59)	15	0.1	—	—	0.1	0.6	84	0.9	0.1	0.1	0.2	0.2*	99	0.5	0.1	0.1	0.1	0.2*
Unspecified mental disorder (F99)	46	0.4	0.1	0.1	0.2	2.7*	32	0.3	0.1	—	0.1	1.4	78	0.4	0.1	0.1	0.1	2.0*
Mental retardation (F70–F79)	25	0.2	—	—	0.1	2.1*	19	0.2	—	—	—	1.7*	44	0.2	—	—	—	2.0*
Disorders of psych. development (F80–F89)	26	0.2	—	—	—	0.4*	15	0.2	—	—	—	0.6	41	0.2	—	—	—	0.5*
Other <sup>(k)</sup>	201	1.9	0.5	0.4	0.7	0.8*	553	5.7	1.1	1.0	1.3	1.4*	754	3.7	0.8	0.8	0.9	1.1
<b>Total</b>	<b>10,760</b>	<b>100.0</b>	<b>28.0</b>	<b>27.4</b>	<b>28.7</b>	<b>2.1*</b>	<b>9,703</b>	<b>100.0</b>	<b>23.2</b>	<b>22.6</b>	<b>23.7</b>	<b>1.4*</b>	<b>20,463</b>	<b>100.0</b>	<b>25.5</b>	<b>25.1</b>	<b>25.9</b>	<b>1.7*</b>

\* Represents results with statistically significant differences in the Indigenous/other comparisons at the p < 0.05 level.

(a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(b) Categories are based on the ICD-10-AM fifth edition (National Centre for Classification in Health 2006).

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Hospitalisation data for these six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Includes hospitalisations for which sex was indeterminate or not stated.

(f) Proportion of male, female and total hospitalisations of Indigenous people in the period 2004–05 to 2005–06.

(g) Directly age-standardised using the Australian 2001 standard population.

(h) LCL = lower confidence limit.

(i) UCL = upper confidence limit.

(j) Rate ratio Indigenous:other.

(k) Other includes ICD-10-AM codes relating to mental health: G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.

Source: AIHW analysis of National Hospital Morbidity Database.

**Table 1.16.10: Hospitalisations of Indigenous people with principal diagnosis of injury and poisoning and other consequences of external causes and a first reported external cause of assault and self-harm, by sex, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)(d)</sup>**

External cause	Males						Females						Persons <sup>(e)</sup>					
	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>	No.	% <sup>(f)</sup>	No. per 1,000 <sup>(g)</sup>	LCL 95% <sup>(h)</sup>	UCL 95% <sup>(i)</sup>	Ratio <sup>(j)</sup>
Assault (X85–Y09)	4,603	22.4	10.7	10.4	11.1	7.5*	5,074	31.7	10.9	10.6	11.3	35.3*	9,677	26.5	10.8	10.6	11.1	12.3*
Intentional self-harm (X60–X84)	993	4.8	2.3	2.1	2.4	2.5*	1,323	8.3	2.8	2.7	3.0	1.9*	2,316	6.3	2.5	2.4	2.7	2.2*

\* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the  $p < 0.05$  level.

(a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(b) Categories are based on the ICD-10-AM fifth edition (National Centre for Classification in Health 2006). Cause of injury is based on the first reported external causes where the principle diagnosis was 'injury, poisoning and certain other consequences of external causes'.

(c) Financial year reporting.

(d) Indigenous data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital. Hospitalisation data for these six jurisdictions should not be assumed to represent the hospitalisation experience in the other jurisdictions.

(e) Includes hospitalisations for which sex was indeterminate or not stated.

(f) Proportion of male, female and total hospitalisations of Indigenous people in the period 2004–05 to 2005–06.

(g) Directly age-standardised using the Australian 2001 standard population.

(h) LCL = lower confidence limit.

(i) UCL = upper confidence limit.

(j) Rate ratio Indigenous:other.

Source: AIHW analysis of National Hospital Morbidity Database.

### **Average length of stay in hospital (days)**

- For the 2-year period July 2004 to June 2006, the average length of stay in hospital due to mental health related conditions was 8 days for Indigenous patients and 9 days for other patients (Table 1.16.11).
- On average, Indigenous males stayed in hospital for longer than Indigenous females for most types of mental and behavioural disorders.
- Mental retardation (disability characterised by significant limitations both in intellectual functioning and adaptive skills) was responsible for the highest number of bed-days of all mental health related conditions (19 days for Indigenous patients and 105 days for other patients). Organic mental disorders (which include dementia, delirium and other mental disorders due to brain damage and dysfunction) and schizophrenia, schizotypal and delusional disorders were also responsible for a high number of days spent in hospital.
- Other mental health related conditions, including Alzheimer's disease and postnatal depression, were responsible for an average of 4 bed-days for Indigenous patients and an average of 8 bed-days for other patients.

**Table 1.16.11: Average length of stay in hospital (days), mental health related conditions, by Indigenous status and sex, NSW, Vic, Qld, WA, SA and NT, July 2004 to June 2006<sup>(a)(b)(c)(d)</sup>**

Mental health related condition	Indigenous			Other <sup>(e)</sup>		
	Males	Females	Persons	Males	Females	Persons
Mental retardation	30.1	3.5	18.6	95.1	117.5	105.2
Schizophrenia, schizotypal and delusional disorders	18.3	14.8	16.8	20.3	15.9	18.3
Organic mental disorders	15.6	15.5	15.6	20.8	19.5	20.1
Behavioural syndromes associated with psychological disturbances and physical factors	2.1	10.4	9.1	6.3	9.1	8.9
Unspecified mental disorder	9.8	5.7	8.1	11.1	7.2	8.9
Mood disorders	8.1	7.1	7.5	7.4	6.8	7.0
Disorders of adult personality & behaviour	4.8	5.6	5.3	4.7	4.7	4.7
Mental disorders due to psychoactive substance use	4.8	3.4	4.3	4.7	4.0	4.5
Disorders of psychological development	3.9	2.8	3.5	5.0	18.8	8.9
Neurotic, stress-related and somatoform disorders	3.4	3.5	3.5	4.1	4.3	4.2
Behavioural & emotional disorders with onset usually occurring in childhood & adolescence	2.1	2.4	2.2	2.9	3.8	3.1
<i>Total mental &amp; behavioural disorders (F00-F99)</i>	<i>8.9</i>	<i>7.2</i>	<i>8.1</i>	<i>9.6</i>	<i>7.9</i>	<i>8.6</i>
Other mental health conditions	4.2	4.4	4.4	8.2	7.4	7.8
<b>Total</b>	<b>8.8</b>	<b>7.1</b>	<b>8.0</b>	<b>9.5</b>	<b>7.9</b>	<b>8.6</b>

(a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(b) Categories are based on the ICD-10-AM fifth edition (National Centre in Health Classification 2006); ICD-10-AM codes F70–F79; F20–F29; F00–F09; F99; F50–F59; F30–F39; F60–F69; F10–F19; F80–F89; F40–F49; F90–F98; F00–F99; G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48, Z00.4, Z03.2, Z04.6, Z09.3, Z13.3, Z50.2, Z50.3, Z54.3, Z61.9, Z63.1, Z63.8, Z63.9, Z65.8, Z65.9, Z71.4, Z71.5, Z76.0.

(c) Financial year reporting.

(d) Data are reported by state/territory of usual residence of the patient hospitalised and are for New South Wales, Victoria, Western Australia, South Australia, the Northern Territory and Queensland only. These six jurisdictions are considered to have adequate levels of Indigenous identification, although the level of accuracy varies by jurisdiction and hospital.

(e) 'Other' includes hospitalisations of non-Indigenous people and those for whom Indigenous status was not stated.

Source: AIHW analysis of National Hospital Morbidity Database.

## Time series analysis

Time series data are presented for the four jurisdictions that have been assessed as having adequate identification of Indigenous hospitalisations for all years from 1998–99 to 2005–06 – Queensland, Western Australia, South Australia and the Northern Territory. These four jurisdictions represent approximately 60% of the Indigenous Australian population. New South Wales and Victoria were identified as having adequate identification of Indigenous hospitalisations from 2004–05 onwards, therefore they were included as part of the current period analysis (2004–05 to 2005–06) but not as part of the time series analyses.

Hospitalisation rates, rate ratios and rate differences between Indigenous and other Australians for mental health related conditions over the 7-year period 1998–99 to 2005–06 are presented in Table 1.16.12 and Figure 1.16.4.

- In Queensland, Western Australia, South Australia and the Northern Territory, there were significant increases in hospitalisation rates for mental health related conditions among Indigenous females during the period 1998–99 to 2005–06. The fitted trend implies an average yearly increase in the rate of around 0.4 per 1,000, which is equivalent to a 16% increase in the rate over the period.
- There were significant declines in hospitalisation rates for mental health related conditions among other Australians over the same period with an average yearly decline in the rate of around 0.1 per 1,000 (equivalent to a 7% reduction in the rate over the period). The declines in hospitalisation rates were significant for males but not for females.
- There were significant increases in both the hospitalisation rate ratios and rate differences between Indigenous and other Australians during the period 1998–99 to 2005–06. There was a 14% increase in the rate ratio and a 30% increase in the rate difference for persons over the period. This reflects both a relative and absolute increase in the gap between hospitalisation rates of Indigenous and other Australians for mental health related conditions over the period 1998–99 to 2005–06.

Note that changes in the level of accuracy of Indigenous identification in hospital records over this period will result in changes in the level of reported hospital separations for Indigenous Australians. Also, changes in access, hospital policies and practices all affect the level of hospitalisation over time. Caution should be used in interpreting changes over time, as it is not possible to ascertain whether a change in reported hospitalisation is due to changes in the accuracy of Indigenous identification or to real changes in the rates at which Indigenous people are hospitalised. An increase in hospitalisation rates may reflect better hospital access rather than a worsening of health.

**Table 1.16.12: Age-standardised hospitalisation rates, rate ratios and rate differences from mental health related conditions, Qld, WA, SA and NT, 1998–99 to 2005–06<sup>(a)</sup>**

	1998–99	1999–00	2000–01	2001–02	2002–03	2003–04	2004–05	2005–06	Annual change <sup>(b)</sup>	% change over period <sup>(c)</sup>
<b>Indigenous rate (no. per 1,000)</b>										
Males	24.4	24.4	26.0	24.9	24.5	24.1	23.7	24.7	–0.1	–2.8
Females	19.2	17.0	20.5	20.4	21.3	21.2	21.4	20.8	0.4*	15.9
Persons	21.7	20.5	23.1	22.5	22.8	22.6	22.4	22.6	0.2	5.7
<b>Other Australian<sup>(d)</sup> rate (no. per 1,000)</b>										
Males	13.6	12.9	13.2	13.0	12.4	12.3	11.8	11.5	–0.3*	–14.7
Females	14.9	14.8	15.0	14.6	15.1	15.1	15.1	14.5	–0.01	0.0
Persons	14.2	13.9	14.1	13.9	13.7	13.7	13.5	13.0	–0.1*	–7.1
<b>Rate ratio<sup>(e)</sup></b>										
Males	1.8	1.9	2.0	1.9	2.0	2.0	2.0	2.2	0.04*	14.6
Females	1.3	1.1	1.4	1.4	1.4	1.4	1.4	1.4	0.03*	16.3
Persons	1.5	1.5	1.6	1.6	1.7	1.6	1.7	1.7	0.03*	13.8
<b>Rate difference<sup>(f)</sup></b>										
Males	10.8	11.5	12.8	11.9	12.1	11.8	11.9	13.2	0.2	12.4
Females	4.3	2.1	5.5	5.8	6.3	6.1	6.2	6.3	0.4*	72.4
Persons	7.5	6.6	9.0	8.7	9.1	8.8	9.0	9.6	0.3*	30.0

\* Represents results with statistically significant increases or decreases at the  $p < 0.05$  level over the period 1998–99 to 2005–06.

(a) Data are from public and most private hospitals. Data exclude private hospitals in the Northern Territory.

(b) Average annual change in rates, rate ratios and rate differences determined using linear regression analysis.

(c) Per cent change between 1998–99 and 2005–06 based on the average annual change over the period.

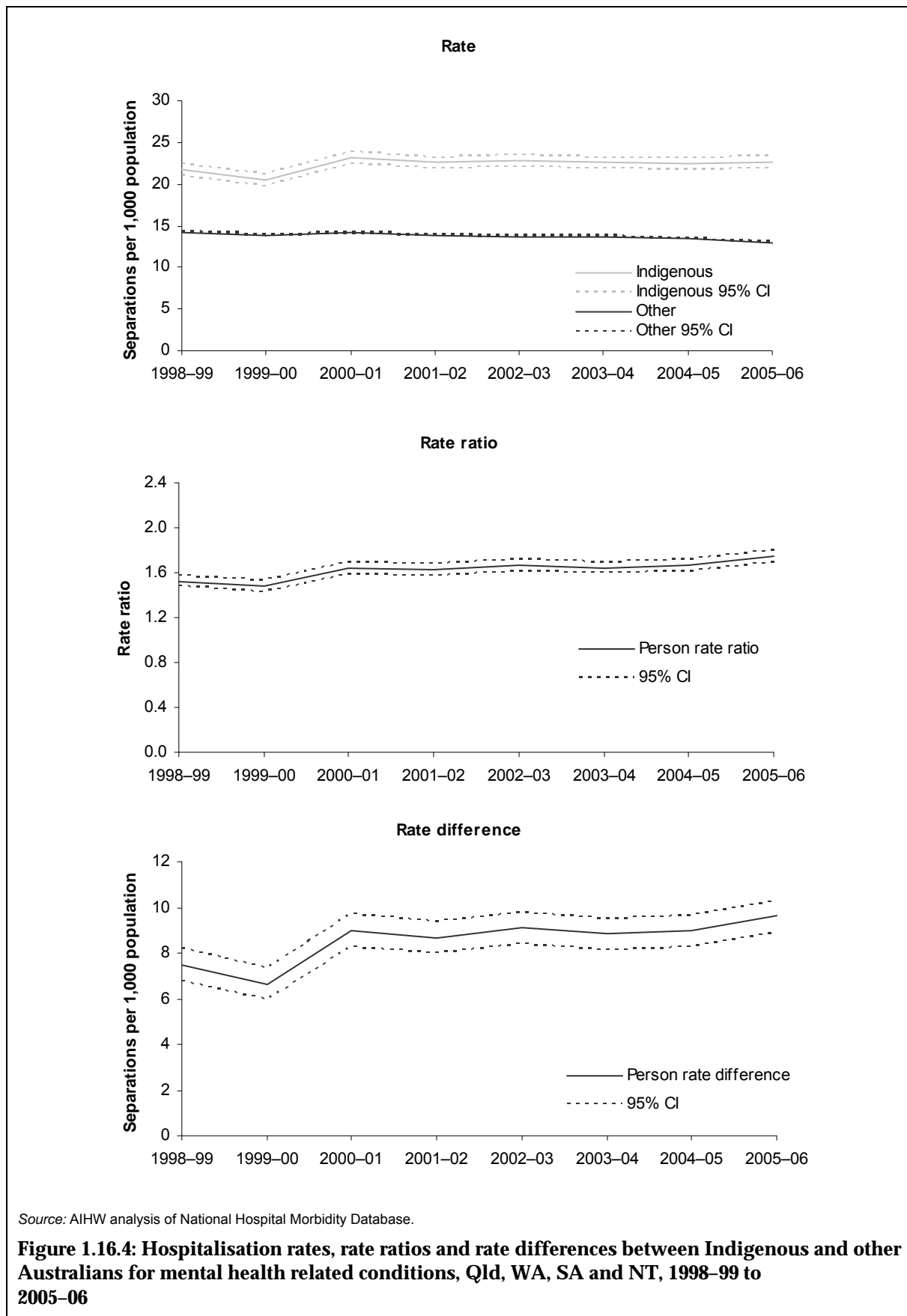
(d) Includes hospitalisations of non-Indigenous Australians and those for whom Indigenous status was not stated.

(e) Hospitalisation rates for Indigenous Australians divided by hospitalisation rates for other Australians.

(f) Hospitalisation rates for Indigenous Australians minus hospitalisation rates for other Australians.

Note: Rates have been directly age-standardised using the 2001 Australian standard population.

Source: AIHW analysis of National Hospital Morbidity Database.



## Community mental health care services

Community mental health care is defined as care which is provided by specialised public mental health services dedicated to the assessment, treatment, rehabilitation and care of non-admitted clients. This excludes specialised mental health care services for admitted patients, support services that are not provided by specialised mental health care organisations, services provided by non-government organisations, and residential care services.

The number and rate of service contacts per 1,000 population for Aboriginal and Torres Strait Islander peoples varies among the states and territories. This may reflect variations in completeness of Indigenous identification among patients, varying coverage of service contacts for Aboriginal and Torres Strait Islander peoples or for the total population, or different patterns of service use by Indigenous and non-Indigenous persons.

- In 2005–06, the proportion of service contacts for clients of community mental health services who identified themselves as being of Aboriginal and/or Torres Strait Islander origin ranged from 1.4% for Victoria to 30.4% for the Northern Territory.
- There were more service contacts per 1,000 population for Aboriginal and Torres Strait Islander peoples (531.7) than for other Australians (270.3). This was true in all jurisdictions. These rates should be interpreted with caution as there is likely to be an underestimate of the actual number of service contacts for Indigenous clients.
- In 2005–06, Aboriginal and Torres Strait Islander peoples had higher proportions of mental health service contacts for the younger age groups than did other Australians, but lower proportions in the older age groups. For example, 26% and 23% of service contacts for Indigenous Australian males and females respectively were for clients aged between 15 and 24 years compared with 16% and 18% of service contacts for other Australian males and females
- In the older age groups, there were lower proportions of service contacts for Indigenous Australian males and females aged 65 years or more (1% and 2% respectively) than for other Australian males (8%) and females (15%).
- In 2005–06, Indigenous males and females had higher rates of community mental health care service contacts across all age groups except those aged less than 15 years. Differences were most marked in the 25–34 and 35–44 year age groups where Indigenous males and females were between two and three times as likely to be clients of community mental health care services as other Australians in these age groups.

For more information on community mental health services see Measure 3.09 (Access to mental health services).

## **Residential mental health care services**

Residential mental health care refers to care provided by a specialised mental health service that:

- employs mental health trained staff on-site
- provides rehabilitation, treatment or extended care to residents for whom the care is intended to be on an overnight basis and in a domestic-like environment
- encourages residents to take responsibility for their daily living activities.

This excludes non-government-operated services and services that are staffed less than 24 hours a day. There are no residential mental health care services in Queensland or the Northern Territory.

- In 2005–06, there were 2,345 clients of residential mental health care services, of which 64 service contacts (2.7%) were for Aboriginal and Torres Strait Islander peoples.
- The proportion of service contacts for clients of community mental health services who identified themselves as being of Aboriginal and/or Torres Strait Islander origin ranged from 1.4% for Victoria to 5.7% for South Australia.
- There were more service contacts per 1,000 population for Aboriginal and Torres Strait Islander peoples than for other Australians (1.9 and 1.1 respectively). This was true in all jurisdictions except Western Australia. These rates should be interpreted with caution as there is likely to be an underestimate of the actual number of service contacts for Indigenous clients.

For more information on residential mental health services see Measure 3.09 (Access to mental health services).

## Mortality

- During the period 2002–2006, there were 9,588 deaths from mental health related conditions in Queensland, Western Australia, South Australia and the Northern Territory combined, 193 (2.0%) of which were deaths of Aboriginal and Torres Strait Islander peoples; for 1.5% of deaths, Indigenous status was not stated.
- Mental health related conditions (such as mental and behavioural disorders due to psychoactive substance use and organic mental disorders) were responsible for approximately 2.5% of all deaths of Aboriginal and Torres Strait Islander peoples.
- Mental and behavioural disorders are the eleventh most common cause of death among Aboriginal and Torres Strait Islander peoples, behind diseases of the circulatory system; external causes; cancer; endocrine, metabolic and nutritional disorders; diseases of the respiratory system; diseases of the digestive system; symptoms, signs and ill-defined conditions; diseases of the genitourinary system; certain conditions originating in the perinatal period; and diseases of the nervous system.

## Mortality by age and sex

Table 1.16.13 presents age-specific mortality rates for mental health related conditions for the period 2002–2006 for Queensland, Western Australia, South Australia and the Northern Territory combined.

- Between 2002 and 2006, Indigenous Australians had twice the mortality rates as non-Indigenous Australians for mental health related conditions. Mortality rates for Indigenous males and females were higher across most age groups. Mortality rates were higher for males than for females across most age groups in both the Indigenous and non-Indigenous population.
- Differences were most marked in the 25–34, 35–44 and 45–54 year age groups where Indigenous males died at between 10 and 13 times the rates of non-Indigenous males and Indigenous females died at between 13 and 15 times the rates of non-Indigenous females. These differences in mortality rates are mainly the result of the high number of deaths from mental and behavioural disorders due to psychoactive substance use among the Indigenous population in these age groups.
- Approximately 49% of Indigenous Australians who died from mental health related conditions were males (94 deaths) and 51% (99 deaths) were females.

**Table 1.16.13: Mental health related mortality rates per 100,000, by Indigenous status, age group and sex, Qld, WA, SA and NT, 2002–2006<sup>(a)(b)(c)(d)(e)(f)</sup>**

Age group (years)	Males			Females		
	Indigenous rate <sup>(g)</sup>	Non-Indigenous rate <sup>(g)</sup>	Rate ratio <sup>(h)</sup>	Indigenous rate <sup>(g)</sup>	Non-Indigenous rate <sup>(g)</sup>	Rate ratio <sup>(h)</sup>
Less than 1	0.0	0.0	..	0.0	0.0	..
1–4	1.4	0.0	..	0.0	0.1	..
5–14	0.0	0.0	..	0.6	0.0	..
15–24	1.4	0.3	5.2*	1.4	0.4	3.5
25–34	10.0	1.0	10.4*	7.7	0.6	13.1*
35–44	22.0	1.7	13.3*	9.4	0.6	15.4*
45–54	27.1	2.7	9.9*	16.4	1.2	14.2*
55–64	43.1	7.1	6.1*	15.7	3.9	4.1*
65–74	114.9	29.9	3.8*	77.9	23.2	3.4*
75 and over	381.0	285.2	1.3	667.5	445.1	1.5*
<b>Total<sup>(i)</sup></b>	<b>42.1</b>	<b>20.0</b>	<b>2.1*</b>	<b>50.6</b>	<b>27.9</b>	<b>1.8*</b>

\* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the  $p < 0.05$  level.

(a) ICD-10 codes: F00–F99, G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48.

(b) Data are reported for Queensland, Western Australia, South Australia and the Northern Territory only. These four states and territories are considered to have adequate levels of Indigenous identification in mortality data. Data for these four jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Mortality data for the four jurisdictions should not be assumed to represent the experience in the other jurisdictions.

(c) Data are presented in 5-year groupings because of small numbers each year.

(d) These data exclude 148 registered deaths where the Indigenous status is not stated.

(e) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.

(f) Deaths are by year of registration and state/territory of usual residence.

(g) Age-specific death rates per 100,000 using the average December populations for the relevant years.

(h) Rate ratio Indigenous:other.

(i) Total includes age not stated. Total rates have been directly age-standardised using the Australian 2001 standard population.

Note: The completeness of identification of Indigenous deaths can vary by age.

Source: AIHW analysis of National Mortality Database.

## **Mortality by cause of death**

### **Mental health related conditions**

Deaths for the period 2002–2006 among Aboriginal and Torres Strait Islander peoples in Queensland, Western Australia, South Australia and the Northern Territory combined are presented in Table 1.16.14 by type of mental health related condition.

- For Indigenous males, the most common cause of death was from mental and behavioural disorders due to psychoactive substance (68 deaths or 72%). For Indigenous females it was organic mental disorders, which include dementia, delirium and other mental disorders due to brain damage and dysfunction (52 deaths or 53%).
- In the four jurisdictions combined, Indigenous males and females died from mental health related conditions at around twice the rate of other males and females.
- Indigenous males and females died from mental and behavioural disorders due to psychoactive substance use at 9 and 10 times the rate of other males and females respectively.
- Indigenous females died from organic mental disorders, which include dementia, delirium and other mental disorders due to brain damage and dysfunction, at over twice the rate of non-Indigenous females.

### **Assault and self-harm**

- In addition to the mental health related conditions presented here, there were 359 deaths of Aboriginal and Torres Strait Islander peoples due to self-harm (suicide) (4.7%) and 118 deaths of Aboriginal and Torres Strait Islander peoples due to assault (1.5%) in Queensland, Western Australia, South Australia and the Northern Territory between 2002 and 2006.
- Indigenous Australians died from self-harm and assault at 2 and 10 times the rate of non-Indigenous Australians for these causes of death respectively.
- Mental health related conditions, assault and self-harm together were responsible for 8.7% of all deaths of Indigenous Australians.

**Table 1.16.14: Deaths from mental health related conditions for Indigenous Australians, by sex, Qld, WA, SA and NT, 2002–2006<sup>(a)(b)(c)(d)(e)</sup>**

Cause of death	Males					Females					Persons				
	No.	No. per 100,000 <sup>(f)</sup>	LCL 95% <sup>(g)</sup>	UCL 95% <sup>(h)</sup>	Ratio <sup>(i)</sup>	No.	No. per 100,000 <sup>(f)</sup>	LCL 95% <sup>(g)</sup>	UCL 95% <sup>(h)</sup>	Ratio <sup>(i)</sup>	No.	No. per 100,000 <sup>(f)</sup>	LCL 95% <sup>(g)</sup>	UCL 95% <sup>(h)</sup>	Ratio <sup>(i)</sup>
Mental and behavioural disorders due to psychoactive substances use (F10–F19)	68	21.9	15.2	28.6	9.2*	34	6.8	4.1	9.6	10.0*	102	13.5	10.3	16.8	9.1*
Organic, including symptomatic mental disorders (F00–F09)	17	15.7	7.9	23.5	1.4	52	34.9	25.1	44.6	2.2*	69	26.9	20.4	33.5	1.9*
Other <sup>(j)</sup>	9	4.5	0.6	8.4	0.7	13	8.9	4.0	13.9	0.8	22	7.2	3.8	10.5	0.8
<b>Total</b>	<b>94</b>	<b>42.1</b>	<b>31.2</b>	<b>53.1</b>	<b>2.1*</b>	<b>99</b>	<b>50.6</b>	<b>39.4</b>	<b>61.9</b>	<b>1.8*</b>	<b>193</b>	<b>47.6</b>	<b>39.6</b>	<b>55.7</b>	<b>1.9*</b>

\* Represents results with statistically significant differences in the Indigenous/non-Indigenous comparisons at the  $p < 0.05$  level.

- (a) Data are reported for Queensland, Western Australia, South Australia and the Northern Territory only. These four states and territories are considered to have adequate levels of Indigenous identification in mortality data. Data for these four jurisdictions over-represent Indigenous populations in less urbanised and more remote locations. Mortality data for the four jurisdictions should not be assumed to represent the experience in the other jurisdictions.
- (b) Data are presented in 5-year groupings because of small numbers each year.
- (c) These data exclude 148 registered deaths where the Indigenous status is not stated.
- (d) Although most deaths of Indigenous Australians are registered, it is likely that some are not accurately identified as Indigenous. Therefore, these statistics are likely to underestimate the Indigenous all-causes mortality rate. It is also difficult to exactly identify the difference between the Indigenous and non-Indigenous mortality rates because of these data quality issues.
- (e) Deaths are by year of registration.
- (f) Directly age-standardised using the Australian 2001 standard population.
- (g) LCL = lower confidence limit.
- (h) UCL = upper confidence limit.
- (i) Rate ratio Indigenous:non-Indigenous.
- (j) Includes ICD-10 codes: F20–F99, G30, G47.0, G47.1, G47.2, G47.8, G47.9, O99.3, R44, R45.0, R45.1, R45.4, R48.

*Note:* Different causes of death may have levels of completeness of identification of Indigenous deaths that differ from the all-cause under-identification (coverage) estimates.

*Source:* AIHW analysis of National Mortality Database

## General practitioner encounters

Information about general practitioner (GP) encounters is available from the BEACH survey. Data for the 5-year period 2002–03 to 2006–07 are presented below. Mental health related problems (psychological problems) were the sixth most common type of problems managed at GP encounters with Aboriginal and Torres Strait Islander patients during this period. The other five most common types of problems were respiratory conditions, circulatory conditions, endocrine and metabolic problems, musculoskeletal conditions and skin problems.

- In the period 2002–03 to 2006–07 there were 7,542 GP encounters with Aboriginal and Torres Strait Islander patients recorded in the survey, at which 11,219 problems were managed. Of these, 9.7% (1,088) were mental health related problems (Table 1.16.15).
- Depression was the most common mental health related problem managed at GP encounters with Indigenous patients, followed by drug abuse (licit or illicit), anxiety and sleep disturbance.
- Mental health related problems were managed at a rate of 14.4 per 100 GP encounters with Indigenous patients compared to a rate of 11.7 per 100 GP encounters with other patients.
- After adjusting for differences in age distribution, mental health related problems were managed at GP encounters with Indigenous patients at a similar rate to encounters with other patients.
- Alcohol, drug and tobacco abuse were managed at GP encounters with Indigenous patients at around three times the rate at encounters with other patients.
- Schizophrenia was also more commonly managed at GP encounters with Indigenous patients than with other patients (at around twice the rate).

**Table 1.16.15: Most frequently reported mental health related problems<sup>(a)</sup> managed by general practitioners, by Indigenous status of patient, 2002–03 to 2006–07<sup>(b)(c)(d)</sup>**

Problem managed	Number		% of total problems		Crude rate (no. per 100 encounters)						Age-standardised rate (no. per 100 encounters) <sup>(e)</sup>		
	Indigenous	Other <sup>(f)</sup>	Indigenous	Other <sup>(f)</sup>	Indigenous	95% LCL <sup>(g)</sup>	95% UCL <sup>(h)</sup>	Other	95% LCL <sup>(g)</sup>	95% UCL <sup>(h)</sup>	Indigenous	Other <sup>(f)</sup>	Ratio <sup>(i)</sup>
Depression (P03, P76)	272	19,216	2.4	2.7	3.6	2.9	4.3	4.0	3.9	4.1	3.3	3.9	0.8
Drug abuse (P19)	148	2,354	1.3	0.3	2.0	1.1	2.8	0.5	0.4	0.6	1.5	0.5	3.0
Anxiety (P01, P74)	115	8,600	1.0	1.2	1.5	1.0	2.0	1.8	1.7	1.8	1.4	1.8	0.8
Sleep disturbance (P06)	97	7,847	0.9	1.1	1.3	1.0	1.6	1.6	1.6	1.7	1.3	1.6	0.8
Alcohol abuse (P15, P16)	83	1,685	0.7	0.2	1.1	0.7	1.5	0.3	0.3	0.4	0.9	0.3	2.7
Schizophrenia (P72)	75	2,203	0.7	0.3	1.0	0.6	1.4	0.5	0.4	0.5	0.8	0.5	1.9
Tobacco abuse (P17)	65	1,618	0.6	0.2	0.9	0.5	1.2	0.3	0.3	0.4	0.8	0.3	2.5
Acute stress reaction (P02)	58	2,932	0.5	0.4	0.8	0.5	1.1	0.6	0.6	0.6	0.8	0.6	1.3
Affective psychosis (P73)	20	892	0.2	0.1	0.3	0.1	0.4	0.2	0.2	0.2	0.2	0.2	1.1
Dementia (P70)	14	2,439	0.1	0.3	0.2	0.1	0.3	0.5	0.5	0.5	0.7	0.5	1.5
Other <sup>(j)</sup>	141	6,694	1.3	0.9	1.9	1.4	2.3	1.4	1.3	1.5	1.6	1.4	1.2
<b>Total mental health</b>	<b>1,088</b>	<b>56,480</b>	<b>9.7</b>	<b>7.8</b>	<b>14.4</b>	<b>11.9</b>	<b>16.9</b>	<b>11.7</b>	<b>11.4</b>	<b>12.0</b>	<b>13.5</b>	<b>11.6</b>	<b>1.2</b>

(a) Classified according to ICPC-2 codes (Classification Committee of the World Organization of Family Doctors (WICC) 1998).

(b) These survey results are likely to undercount the number of Indigenous Australians visiting doctors.

(c) Combined financial year data for 5 years.

(d) Data for Indigenous and other Australians have not been weighted.

(e) Directly age-standardised rate (no. per 100 encounters). Figures do not add to 100 as more than one problem can be managed at each encounter.

(f) Includes non-Indigenous patients and patients for whom Indigenous status was not stated.

(g) LCL = lower confidence interval.

(h) UCL = upper confidence interval.

(i) Rate ratio Indigenous:other.

(j) ICPC-2 codes: P04–P05, P07–P13, P18, P20, P22–P25, P27–P29, P71, P75, P77–P82, P85–P86, P98–P99.

Source: AIHW analysis of BEACH survey of general practice, AGPSCC.

## **Additional information**

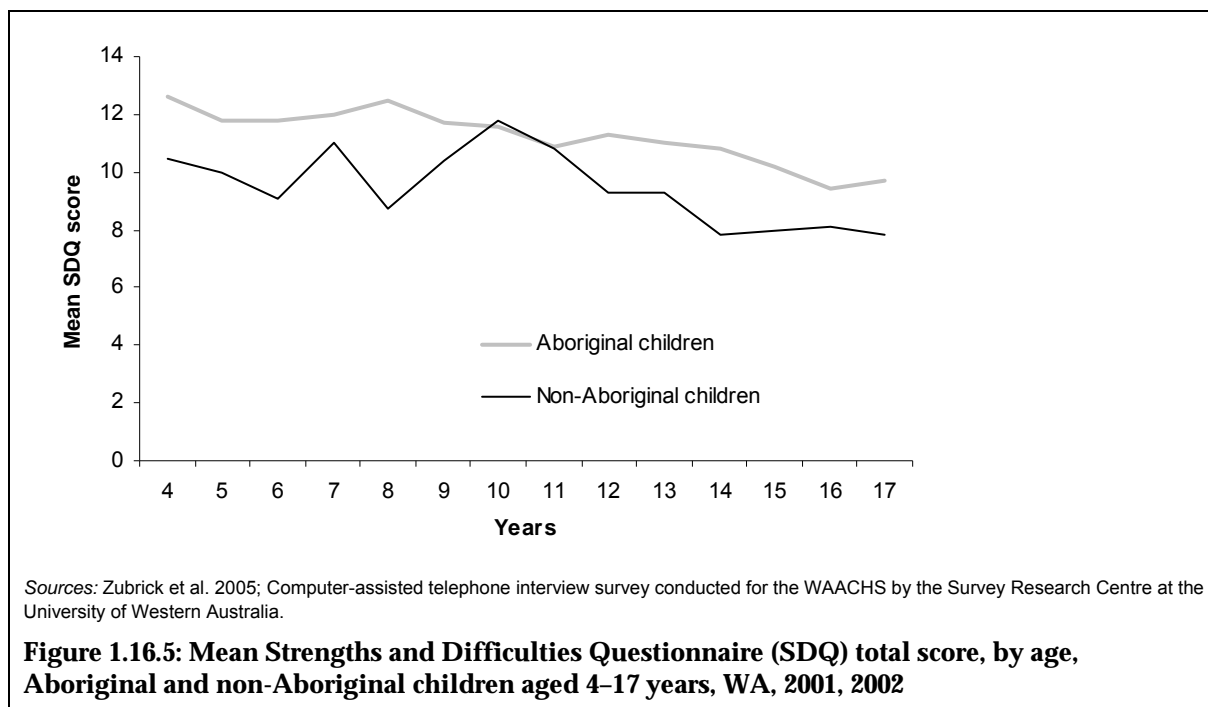
### **Social and emotional wellbeing of Aboriginal children**

The Western Australian Aboriginal Child Health Survey (WAACHS) collected information on the social and emotional wellbeing of Aboriginal children and a small number of Torres Strait Islander children over 2001 and 2002. It found that a variety of health conditions, social circumstances and behaviours experienced by individuals, their carers and families can have an impact on the social and emotional wellbeing of Indigenous children (Zubrick et al. 2005). Some of the findings from the survey are presented below. Note that the term 'Aboriginal' is used here and in the survey but refers to both Aboriginal and Torres Strait Islander children.

### **Emotional and behavioural difficulties**

The Strengths and Difficulties Questionnaire (SDQ), used throughout the world to measure emotional and behavioural difficulties in children, was modified for Aboriginal children in the WAACHS. The SDQ contains questions that explore emotional symptoms, conduct problems, hyperactivity, peer problems and social behaviour.

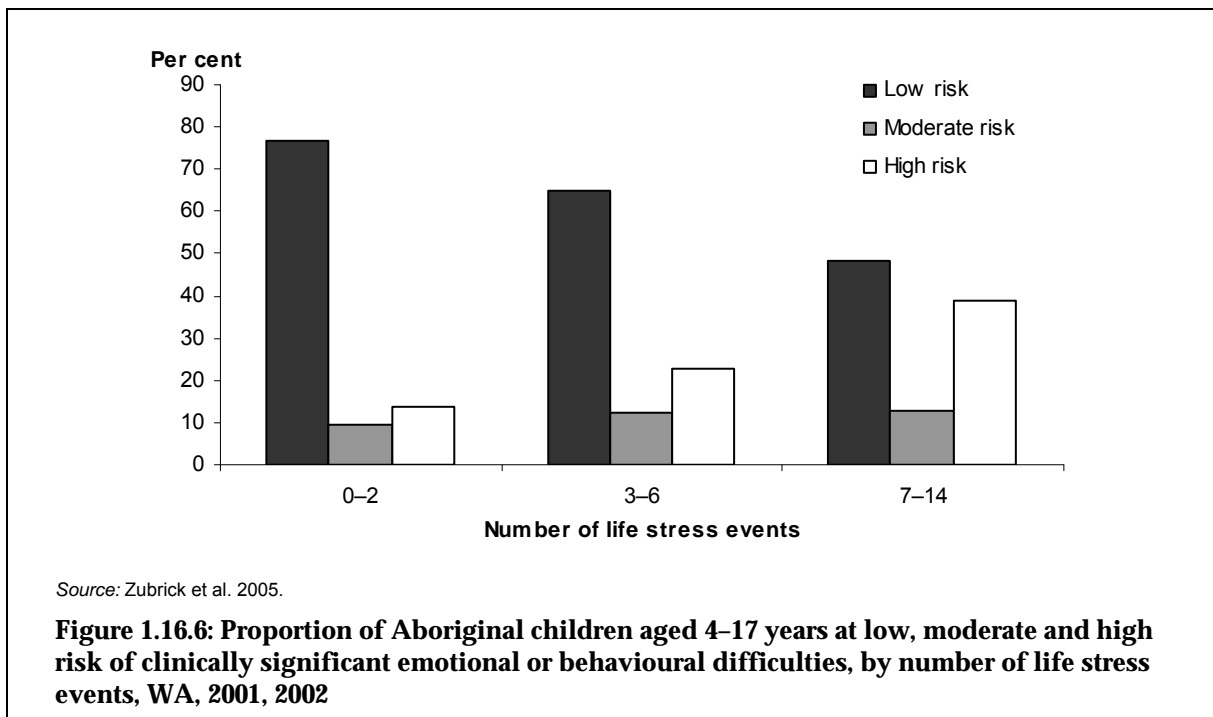
- Approximately 24% of Aboriginal children aged 4–17 years surveyed were assessed from the SDQ completed by their carers as being at high risk of clinically significant emotional or behavioural difficulties compared with 15% of other children (Zubrick et al. 2005).
- Aboriginal children had higher mean SDQ scores than other children at all ages between 4 and 17 years except for ages 10 and 11 where mean scores were similar (Figure 1.16.5).
- Male Aboriginal children were twice as likely as female Aboriginal children to be at high risk of clinically significant emotional or behavioural difficulties.
- Those children living in areas of extreme isolation were less at risk than those living in urban areas.



### Family and household factors

The WAACHS looked at a range of family and household factors which could affect the social and emotional wellbeing of children. Factors which were found to be associated with high risk of clinically significant emotional or behavioural difficulties in Aboriginal children included the number of stress events experienced by the family in the 12 months before the survey (such as illness, hospitalisation, death of a close family member, family break-up, arrests, job loss, financial difficulties), quality of parenting, family functioning and family care arrangements. Residential mobility, the physical health of the child (speech, hearing and vision problems), the physical health of the carer and the carer’s use of mental health services were also associated with an increased risk of clinically significant emotional or behavioural difficulties in children.

- For example, around 22% of children aged 4–17 years in Western Australia were living in families where seven or more life stress events had occurred over the preceding 12 months. Of these children, 39% were at high risk of clinically significant emotional or behavioural difficulties compared with 14% of children in families where two or fewer life stress events had occurred (Figure 1.16.6).



- Around one-quarter of Aboriginal children were living in families with poor quality of parenting (measured by how often carers praised their children, hit or smacked their children and laughed together with their children) and one-fifth of children were living in families that functioned poorly (families with poor communication and decision making, poor emotional support, limited time spent together and poor family cooperation). These children were over twice as likely to be at high risk of emotional and behavioural difficulties as children living in families with very good quality of parenting or very good family functioning (Zubrick et al. 2005).

## Health risk factors

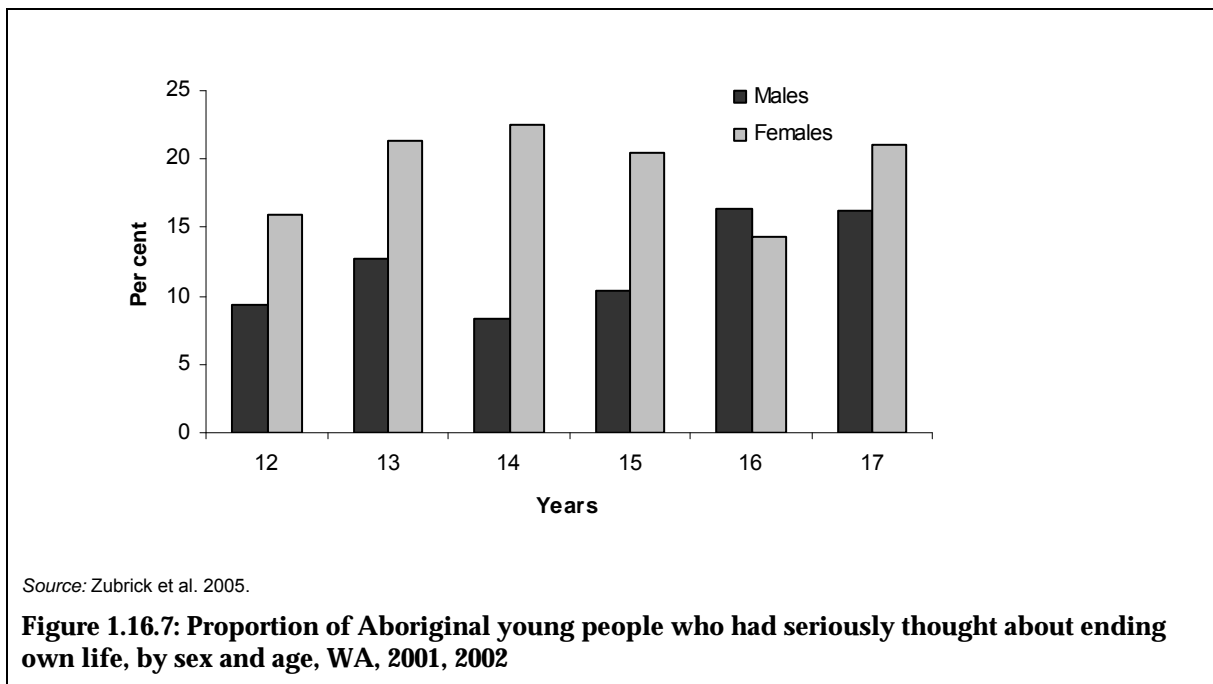
A number of health risk factors were also found to be associated with a high risk of clinically significant emotional and behavioural difficulties.

- An estimated 18% of Western Australian Aboriginal young people aged 12–17 years who smoked regularly were at high risk of emotional and behavioural difficulties compared with 7% of non-smokers.
- Approximately 29% of young people aged 12–17 years who used marijuana/cannabis daily were at risk of clinically significant emotional or behavioural difficulties compared with 9% of young people who had never used marijuana/cannabis. Although Indigenous males were more likely to use marijuana than Indigenous females, particularly at age 17 (45% compared with 21%), Indigenous females who used marijuana/cannabis were more likely to be at risk of clinically significant emotional or behavioural difficulties than Indigenous males.
- Young people who did not participate in organised sport were twice as likely to be at high risk of emotional and behaviour difficulties compared with young people who did participate in sport (16% and 8% respectively).
- Those who had been subject to racism in the preceding 6 months were more than twice as likely to be at high risk of emotional and behavioural difficulties than those who had not experienced racism.

## Suicidal behaviour

An additional survey was administered by the Telethon Institute to Aboriginal young people aged 12–17 years to measure rates of suicidal thoughts and suicide attempts.

- Suicidal thoughts were reported by around one in six (16%) Western Australian Aboriginal people aged 12–17 years in the 12 months before the survey.
- Overall, a higher proportion of Aboriginal females reported they had seriously thought about ending their own life than Aboriginal males (20% compared with 12%). This was true for all ages from 12 to 17 years except for those aged 16 where Indigenous males were more likely than females to report having thought about ending their own life (Figure 1.16.7).
- Of those who had suicidal thoughts in the 12 months before the survey, 39% reported they had attempted suicide in the same period. This finding is similar to the proportion of the general young population aged 12–16 years who reported suicide attempts in the 1993 Western Australian Child Health Survey (Zubrick et al 2005).
- Aboriginal young people who had been exposed to family violence were more than twice as likely to have thought about ending their own life (22%) as Aboriginal young people who had not been exposed to family violence (9%).
- A higher proportion of Aboriginal males reported they had thought about ending their own life if they had low self-esteem (21%) than if they had high self-esteem (5%).
- Suicidal thoughts were associated with a number of health risk behaviours. The proportion of Aboriginal young people who reported suicidal thoughts was significantly higher among those who smoked regularly, used marijuana, drank to excess in the 6 months before the survey, were exposed to some form of family violence and who had a friend who had attempted suicide.



### Effects of forced separation

- Children of Aboriginal carers who had been forcibly separated from their natural family by past removal policies and practices or removed from country to a welfare institution or a mission were twice as likely to be at high risk of clinically significant emotional or behavioural difficulties as children whose primary carer had not been forcibly separated from their natural family. These children also had higher rates of conduct and hyperactivity problems.
- Children whose primary carers had been forcibly separated from their natural families were over 1.5 times as likely to be at high risk of clinically significant conduct problems and 2.5 times as likely to be at high risk of clinically significant hyperactivity problems (Zubrick et al. 2005).

## **Data quality issues**

### **National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) and National Aboriginal and Torres Strait Islander Social Survey (NATSISS)**

*The NATSIHS and NATSISS both use the standard Indigenous status question. The survey samples were specifically designed to select a representative sample of Aboriginal and Torres Strait Islander Australians and thus overcome the problem inherent in most national surveys with small and unrepresentative Indigenous samples. As with other surveys, the NATSIHS and NATSISS are subject to sampling and non-sampling errors. Calculations of standard errors and significance testing help to identify the accuracy of the estimates and differences.*

*Information recorded in these surveys is essentially 'as reported' by respondents. The ABS makes every effort to collect accurate information from respondents, particularly through careful questionnaire design, pre-testing of questionnaires, use of trained interviewers and assistance from Indigenous facilitators. Nevertheless, some responses may be affected by imperfect recall or individual interpretation of survey questions.*

*Non-Indigenous comparisons are available through the National Health Survey (NHS) and the 2002 General Social Survey. The NHS was conducted in major cities and regional and remote areas, but very remote areas were excluded from the sample. Time series comparisons are available through the 1995 and 2001 National Health Surveys and the 1994 National Aboriginal and Torres Strait Islander Survey.*

*In remote communities there were some modifications to the NATSIHS and NATSISS content in order to accommodate language and cultural appropriateness in traditional communities and help respondents understand the concepts. Some questions were excluded and some reworded. Also, paper forms were used in communities in remote areas and computer-assisted interview (CAI) instruments were used in non-remote areas. The CAI process included built-in edit checks and sequencing.*

*Further information on NATSIHS and NATSISS data quality issues can be found in the NATSIHS 2004-05 (ABS 2006a) and NATSISS 2002 (ABS 2004a) publications.*

### **Western Australian Aboriginal Child Health Survey**

*Survey data are subject to sampling and non-sampling errors. Confidence intervals are published with the data to provide a guide to the reliability of the estimates. Non-sampling errors can occur in surveys because of questionnaire design problems, respondent difficulty recalling information/lack of appropriate records, and errors made in the recording and processing of the data. Every effort was made to minimise non-sample errors in this survey.*

### **General practitioner data (BEACH)**

*Information about general practitioner encounters is available from the Bettering the Evaluation and Care of Health (BEACH) survey. The BEACH data on Indigenous Australians should be treated with care. First, the sample frame has not been designed to produce statistically significant results for population subgroups such as Indigenous Australians. Second, the identification of Indigenous Australians is not complete. In the BEACH survey, 'not stated' responses to the Indigenous identification question are often higher than the 'yes' responses. It can be assumed, therefore, that the survey consistently undercounts the number of Indigenous Australians visiting general practitioners, but the extent of this undercount is not measurable.*

*(continued)*

## **Data quality issues (continued)**

### **Hospital separations data**

#### ***Separations***

*The number and pattern of hospitalisations can be affected by differing admission practices among the jurisdictions and from year to year, and differing levels and patterns of service delivery. In terms of mental health service delivery, there are a number of different service delivery models ranging from ambulatory care in community mental health services and hospitals and non-ambulatory care in hospitals and residential services.*

#### ***Indigenous status question***

*Some jurisdictions have slightly different approaches to the collection and storage of the standard Indigenous status question and categories in their hospital collections. The 'not stated' category is missing from several collections. It is recommended that the standard wording and categories be used in all jurisdictions (AIHW 2005).*

#### ***Under-identification***

*The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of hospitalisations involving Aboriginal and Torres Strait Islander peoples. For several years, Queensland, South Australia, Western Australia and the Northern Territory reported that Indigenous status in their hospital separations data was of acceptable quality (AIHW 2007). The AIHW, however, has recently completed an assessment of the level of Indigenous under-identification in hospital data in all states and territories. Results from this assessment indicate that New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory have adequate Indigenous identification (20% or less overall under-identification of Indigenous patients) in their hospital separations data (AIHW unpublished data). It has therefore been recommended that reporting of Indigenous hospital separations data be limited to aggregated information from New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory. The proportion of the Indigenous population covered by these six jurisdictions is 96%. The following caveats have also been recommended for analysis of hospitalisation data from selected jurisdictions (ABS & AIHW 2005):*

- *Interpretation of results should take into account the relative quality of the data from the jurisdictions included (currently a small degree of Indigenous under-identification in data from Western Australia and the Northern Territory and relatively marked Indigenous under-identification in data from South Australia and Victoria).*
- *Data for these six jurisdictions over-represent Indigenous populations in less urbanised and more remote locations.*
- *Hospitalisation data for these six jurisdictions are not necessarily representative of the jurisdictions not included.*

*From the AIHW study it was possible to produce correction factors for the level of Indigenous under-identification in hospital data for each jurisdiction and at the national level.*

#### ***Numerator and denominator***

*Rate and ratio calculations rely on good numerator and denominator data. The changes in the completeness of identification of Indigenous people in hospital records may take place at different rates from changes in the identification of Indigenous people in other administrative collections and population censuses. Denominators used here are sourced from Experimental estimates and projections: Aboriginal and Torres Strait Islander Australians 1991 to 2009 (ABS 2004b).*

*(continued)*

## **Data quality issues (continued)**

### **National Community Mental Health Care Database (NCMHCD)**

*The quality of the Indigenous identification in this database varies by jurisdiction.*

*The number and rate of service contacts per 1,000 population for Aboriginal and Torres Strait Islander peoples vary among the states and territories. This may reflect variations in completeness of Indigenous identification among patients or different patterns of service use by Indigenous and non-Indigenous persons.*

*All states and territories use the standard ABS question of Indigenous status. For a number of jurisdictions, the NCMHCD data reported for the 'Both Aboriginal and Torres Strait Islander' category are suspected to be affected by misinterpretation of the category to include non-Aboriginal and Torres Strait Islander peoples (for example, Maoris and South Sea Islanders) and use of the category as 'Indigenous, not further specified'.*

*All state and territory health authorities provided information on the quality of the data for the NCMHCD 2005–06. New South Wales stated that the quality of Indigenous data has not been evaluated. Victoria considered the quality of Indigenous data was not acceptable because of lack of consistency in data entry across its services. Queensland reported that the quality of Indigenous data is acceptable at the broad level, that is, in distinguishing Indigenous Australians and other Australians, but that there are quality issues regarding the coding of more specific details (that is, 'Aboriginal', 'Torres Strait Islander', 'Both Aboriginal and Torres Strait Islander'). Queensland also reported that several strategies have been implemented to improve the quality of Indigenous data and noted that a replacement for the existing collection system with in-built validation checks would further improve the quality of these data. Western Australia reported that the quality of Indigenous status data for 2005–06 was acceptable; however, the data could be improved with the appropriate resources, training and reporting standards. South Australia indicated that there has been limited analysis of the quality of Indigenous status data; therefore, the quality of the data is uncertain at this stage. Tasmania reported the quality of its data to be acceptable; the Australian Capital Territory considered the quality of its Indigenous status data to be acceptable, noting that there is some room for improvement regarding the reporting of the 'not stated' category. The Northern Territory indicated its Indigenous status data to be of acceptable quality*

### **National Residential Mental Health Care Database (NRMHCD)**

*The quality of the Indigenous identification in this database varies by jurisdiction.*

*The number and rate of service contacts per 1,000 population for Aboriginal and Torres Strait Islander peoples varies among the states and territories. This may reflect variations in completeness of Indigenous identification among patients or different patterns of service use by Indigenous and non-Indigenous persons.*

*Data from the NRMHCD on Indigenous status should be interpreted with caution because of the varying quality and completeness of Indigenous identification across all jurisdictions. Only Western Australia, Tasmania and the Australian Capital Territory considered their Indigenous status data of acceptable quality. New South Wales has not evaluated the quality of its Indigenous data. Likewise, limited analysis was done on indigenous data in South Australia. Victoria considered the quality of Indigenous data not acceptable because of the lack of consistency in data entry across its services.*

### **Mortality data**

#### **Deaths**

*The mortality rate for Indigenous Australians can be influenced by identification of Indigenous deaths, late registration of deaths, and changes to death forms and/or processing systems. Because of the small size of the Indigenous population, these factors can significantly affect trends over time and between jurisdictions.*

*(continued)*

## **Data Quality issues (continued)**

### ***Indigenous status question***

*All jurisdictions comply with the standard wording for the Indigenous status question and categories for their death registration forms. However, New South Wales, Victoria, South Australia, the Northern Territory and the Australian Capital Territory all have slightly different wording from the national standard for the instruction on those with both Aboriginal and Torres Strait Islander origin (ABS & AIHW 2005). Although the wording is only slightly different, it would be ideal to have all jurisdictions asking the question in exactly the same way.*

### ***Under-identification***

*Almost all deaths in Australia are registered. However the Indigenous status of the deceased is not always recorded or recorded correctly. The incompleteness of Indigenous identification means the number of deaths registered as Indigenous is an underestimate of deaths occurring in the Aboriginal and Torres Strait Islander population (ABS 1997). As a result, the observed differences between Indigenous and non-Indigenous mortality are underestimates of the true differences.*

*Although the identification of Indigenous deaths is incomplete in all state and territory registration systems, four jurisdictions (Queensland, Western Australia, South Australia and the Northern Territory) have been assessed by the ABS and the AIHW as having adequate identification.*

*Longer term mortality trend data are limited to three jurisdictions (Western Australia, South Australia and the Northern Territory) with 10 years of adequate identification of Indigenous deaths in their recording systems. The quality of the time series data is also influenced by the late inclusion of a 'not stated' category for Indigenous status in 1998. Before this time, the 'not stated' responses were probably included with the non-Indigenous. The ABS calculated the implied coverage (identification) of Indigenous deaths for the period 2002–2006 using population estimates: New South Wales 45%, Victoria 32%, Queensland 51%, South Australia 62%, Western Australia 72%, Northern Territory 90%, Tasmania and the Australian Capital Territory were not calculated because of small numbers, Australia 55% (ABS 2007).*

*Note that different causes may have levels of under-identification that differ from the all-cause coverage estimates. Note also that the quality of the cause of death data depends on every step of the process of recording and registering deaths (including the documentation available at each step of the process) from certification to coding of cause of death*

*There are also current concerns about data quality for causes of death especially relating to external causes of death of all Australians (not just Indigenous) (ABS 2006b).*

### ***Numerator and denominator***

*Rate and ratio calculations rely on good numerator and denominator data. The changes in the completeness of identification of Indigenous people in death records may take place at different rates from changes in the identification of Indigenous people in other administrative collections and population censuses. Denominators used here are sourced from Experimental estimates and projections: Aboriginal and Torres Strait Islander Australians 1991 to 2009 (ABS 2004b).*

### ***Cause of death coding***

*Causes of death are based on the 10th revision of the ICD-10. Mortality coding using ICD-10 was introduced into Australia on 1 January 1997.*

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