## **Outcomes for people**

**Indicator 37** Notification rates for selected vaccine-preventable diseases

**Indicator 38** Notification rates for meningococcal disease

**Indicator 39** Notification rates for sexually transmissible diseases

**Indicator 40** Ratios for all hospitalisations

**Indicator 41** Hospitalisation ratios for circulatory diseases

**Indicator 42** Hospitalisation ratios for injury and poisoning

Indicator 43 Hospitalisation ratios for respiratory diseases and lung cancer

**Indicator 44** Hospitalisation ratios for diabetes

Indicator 45 Hospitalisation ratios for tympanoplasty associated with otitis media

**Indicator 46** Hospitalisation ratios for mental health conditions

Indicator 47 Children's hearing loss

Indicator 48 Still-births to Aboriginal and Torres Strait Islander mothers

**Indicator 49** Early adult death **Indicator 50** Age- and sex-specific all cause death rates and ratios

**Indicator 51** Standardised mortality ratios for all causes

Indicator 52 Standardised mortality ratios for circulatory diseases

**Indicator 53** Standardised mortality ratios for injury and poisoning

Indicator 54 Standardised mortality ratios for respiratory diseases and lung cancer

Indicator 55 Standardised mortality ratios for diabetes

**Indicator 56** Standardised mortality ratios for cervical cancer

The following indicator could not be reported on:

**Indicator 36** Prevalence of anxiety and depression

## Introduction

The domain 'Outcomes for people' has 21 indicators and data were provided for 20 of these indicators. The indicators measure a range of different health outcomes for Indigenous people. There are three indicators on notifications for communicable diseases, seven indicators on hospitalisations, one indicator on hearing loss and nine indicators on mortality. Many of the hospitalisations and mortality indicators include a number of sub-indicators.

Indicator 36 – prevalence of anxiety and depression – was not reported on as at present there are no national data sources that provide information about the incidence or prevalence of mental disorders among Aboriginal and Torres Strait Islander people. The forthcoming 2004–05 National Aboriginal and Torres Strait Islander Health Survey will, for the first time, include a module to assess various aspects of social and emotional wellbeing of Aboriginal and Torres Strait Islander mental disorders and illnesses are the main sources of information that provide an indication of the burden of mental health conditions in the Indigenous population.

Information on the quality of data for notifiable diseases, hospitalisations and mortality, and on efforts to improve the Indigenous identification in these datasets, was provided by the states and territories and national data custodians and is described under Indicator 1 in the domain 'Government inputs'.

Data for the three indicators on communicable disease notifications – for selected vaccine preventable diseases, meningococcal disease and sexually transmissible diseases – were provided by the Department of Health and Ageing – National Notifiable Disease Surveillance System. The coverage of Indigenous people in the notifiable disease registers is incomplete in most jurisdictions. Data from Western Australia, South Australia and the Northern Territory are considered to be sufficient to calculate rates.

The hospitalisation data were extracted from the AIHW National Hospital Morbidity Database. The under identification of Indigenous people in all states and territories affects the counts and the calculations of rates of hospitalisations for Indigenous people. The data from Queensland, Western Australia, South Australia and the Northern Territory were considered – as assessed by the relevant jurisdiction – to be sufficient to calculate rates (AIHW 2005c). Therefore data from only these four states and territories were used to describe details of hospitalisations. It should be noted that data from these jurisdictions may not be representative of Australia as a whole.

For each indicator, data are presented on the number of hospitalisations for each condition (for the years 2002–03 and 2003–04 combined), the average age-standardised rates for 2002–03 to 2003–04 and the average standardised hospital separation ratios for 2002–03 to 2003–04. The indirect standardisation method was used for all hospitalisation data.

The mortality data for six of the indicators were extracted from the AIHW's National Mortality Database. The under-identification of Indigenous people in all states and territories affects the counts and the calculations of death rates for Indigenous people. Data on numbers of deaths were extracted for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Queensland, Western Australia, South Australia and the Northern Territory have more complete coverage of Indigenous deaths than the other states and territories. New South Wales has the largest Indigenous population in Australia – 29% of Aboriginal and Torres Strait Islander people live in New South Wales. Given the recent efforts by New South Wales to improve coverage of Indigenous deaths, it was important to present the number of deaths in this jurisdiction despite the fact that they are still considered incomplete. Consequently, rates have not been calculated for New South Wales. Rates were calculated for four states and territories – Queensland, Western Australia, South Australia and the Northern Territory. Even within the coverage of Indigenous deaths from Queensland, the Northern Territory, South Australia and Western Australia, the data varies in its completeness from jurisdiction to jurisdiction. For this reason, no attempt has been made to establish the statistical significance of the differences between death rates of Indigenous populations in these states and territories and with the non-Indigenous population. Care should be taken with the interpretation of these data.

For each indicator, data are presented on the total number of deaths from each condition (for 2002, 2003 and 2004 combined), age-standardised rates and standardised mortality ratios. The indirect standardisation method was used to standardise all mortality data. As the standardised mortality ratio reflects health status and the standardised hospital separation ratio can reflect both health status and health service utilisation, comparing these two provides an indication of the access to service, relative to need.

# Indicator 37. Notification rates for selected vaccine-preventable diseases

**Indicator:** The notification rate for Aboriginal and Torres Strait Islander people per 100,000 population for pertussis, measles and Hib.

## Purpose

The indicator provides information on the incidence of pertussis, measles and *Haemophilus influenzae* type b (Hib disease). This reflects uptake of and access to immunisations to prevent these conditions.

## Data

Data on notifications were provided by the Department of Health and Ageing – National Notifiable Disease Surveillance System (NNDSS). Queensland noted that currently Indigenous status is not supplied in notifications from private laboratories, nor generally in notifications from Queensland Health laboratories where the source of sample is a private provider. Indigenous status is generally well recorded for those conditions where individual cases are followed up by Public Health staff with enhanced surveillance.

There were very few cases of pertussis, measles or Hib in Queensland in 2003 or 2004. Pertussis notifications are not followed up routinely, except for (i) children less than 5 years old and (ii) all cases in the Northern zone. It is hence Queensland Health's view that the Indigenous identification is not of adequate completeness and Indigenous pertussis data should not be reported for Queensland. Measles and Hib disease are generally followed up for all cases; however, given the very low number of notifications, it is not useful to attempt to calculate rates for these conditions.

Three states and territories – Western Australia, South Australia and the Northern Territory – have been assessed by the NNDSS to have adequate coverage of Indigenous notifications and therefore considered to be sufficient to calculate rates. Data from other jurisdictions are likely to be an under-estimate of the true number of notifications in the Indigenous population and therefore should be interpreted with caution.

During 2003 there were 4 notifications of measles and 7 notifications of Hib in the Australian Indigenous population. In 2004 there were 8 notifications of measles and 3 notifications of Hib among Indigenous Australians.

The numbers and rates of notifications for pertussis are shown in Table 37.1. Rates were not provided by sex because the numbers of notifications were too low to produce useful rates.

	2003		2004	
	No.	Rate	No.	Rate
Western Australia	10	14.6	44	63.2
South Australia	n.p.	n.p.	6	22.2
Northern Territory	n.p.	n.p.	n.p.	n.p.
New South Wales	65	46.7	46	32.5
Victoria	5	17.2	n.p.	n.p.
Queensland	22	16.8	20	14.9
Tasmania	n.p	n.p.	0	0.0
Australian Capital Territory	n.p.	n.p.	0	0.0
Australia	110	23.1	120	24.8

## Table 37.1: Number and rate per 100,000 of notifications for pertussis among Indigenous Australians, by state and territory, 2003 and 2004

n.p. Not published where numbers were less than 5.

Note: Shading indicates that the Indigenous identification for these data is in need of improvement.

Source: Data provided by the Department of Health and Ageing-NNDSS.

- There were a total of 110 notifications for pertussis among Aboriginal and Torres Strait Islander Australians in 2003 and 120 notifications in 2004.
- In 2003, pertussis was notified among Indigenous Australians at a rate of 14.6 per 100,000 population in Western Australia.
- In 2004, pertussis was notified at a rate of 22.2 per 100,000 in South Australia and 63.2 per 100,000 in Western Australia.

## Indicator 38. Notification rates for meningococcal disease

**Indicator:** Notification rates per 100,000 for meningococcal disease in Aboriginal and Torres Strait Islander people.

### Purpose

The indicator provides information on the incidence of meningococcal disease. This can reflect crowded housing conditions that facilitate person-to-person spread of the infection and access to vaccination.

#### Data

Data for this indicator were provided by the Department of Health and Ageing, National Notifiable Disease Surveillance System (NNDSS). Four states and territories – Queensland, Western Australia, South Australia and the Northern Territory – are considered to have adequate coverage of Indigenous notifications for meningococcal disease and were considered to be sufficient to calculate rates. Queensland Health advised that Indigenous status is generally well recorded for invasive meningococcal disease due to follow-up of all cases by Public Health Unit staff.

Numbers and rates from other jurisdictions should therefore be interpreted with caution.

	2003		2004	
	No.	Rate	No.	Rate
Western Australia	7	10.2	6	8.6
South Australia	n.p.	n.p.	n.p.	n.p.
Northern Territory	11	18.8	8	13.4
Queensland	n.p.	n.p.	11	8.2
New South Wales	9	6.5	11	7.8
Victoria	n.p.	n.p.	0	0.0
Tasmania	n.p.	n.p.	n.p.	n.p.
Australian Capital Territory	0	0.0	n.p.	n.p.
Australia	35	7.4	39	8.1

Table 38.1: Number and rate per 100,000 of notifications for meningococcal disease among Indigenous Australians, by state and territory, 2003 and 2004

n.p. Not published where numbers were less than 5.

Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement.

2. ABS 2003 and 2004 Indigenous population projections based on the 2001 Census were used in the calculation of crude rates.

• In 2003 and 2004, there were 35 and 39 respective notifications of meningococcal disease among Aboriginal and Torres Strait Islander people in Australia.

- In 2003, the notification rate for meningococcal disease for Indigenous people in Western Australia was 10.2 per 100,000 and in the Northern Territory the rate was 18.8 per 100,000.
- In 2004, the notification rate for meningococcal disease for Indigenous people in Western Australia was 8.6 per 100,000. In the Northern Territory, the notification rate was 13.4 per 100,000 and in Queensland, the rate was 8.2 per 100,000.

# Indicator 39. Notification rates for sexually transmissible diseases

**Indicator:** The notification rate for Aboriginal and Torres Strait Islander people per 100,000 population for gonorrhoea, syphilis and chlamydia, by sex.

## Purpose

The indicator provides information on the incidence of gonorrhoea, syphilis and chlamydia, the most common notifiable sexually transmissible diseases. It reflects community knowledge of and practices in relation to safe sex.

## Data

Data for this indicator were provided by the Department of Health and Ageing, National Notifiable Disease Surveillance System (NNDSS). The numbers provided are likely to represent only a proportion of all infections with the organisms that cause these diseases, as asymptomatic and milder cases are less likely to be diagnosed and/or notified. Queensland Health advised that neither chlamydia nor gonorrhoea notifications are generally followed up through enhanced surveillance. Syphilis notifications are routinely followed up in Queensland through a state-wide process where staging is determined and treatment information provided.

Three states and territories – Western Australia, South Australia and the Northern Territory – are considered to have adequate coverage of Indigenous notifications and were considered to be sufficient to calculate rates. Numbers and rates from other jurisdictions should therefore be interpreted with caution. Numbers and rates are provided for those aged 15 to 54 years as the numbers in other age groups were too low to produce useful or accurate rates.

- In 2004, there were 1,128 notifications of gonorrhoea, 1,064 notifications of chlamydia and 52 notifications of syphilis among Indigenous males aged 15–54 years (Table 39.1).
- In the same period there were 1,792 notifications of chlamydia, 1,186 notifications of gonorrhoea, and 52 notifications of syphilis among Indigenous females aged 15–54 years.

	WA	SA	NT	NSW	Vic	Qld	Aust <sup>(a)</sup>
Males				2003			
Gonorrhoea	429	47	486	23	n.p.	123	1,111
Syphilis	30	0	127	0	0	0	158
Chlamydia	307	47	354	59	11	309	1,087
Females							
Gonorrhoea	405	48	614	19	n.p.	139	1,227
Syphilis	32	0	133	0	0	0	165
Chlamydia	490	111	633	99	25	620	1,978
Males				2004			
Gonorrhoea	394	72	511	10	n.p.	147	1,128
Syphilis	0	0	52	0	0	0	52
Chlamydia	272	74	323	54	14	327	1,064
Females							
Gonorrhoea	353	84	618	11	n.p.	175	1,186
Syphilis	0	0	52	0	0	0	52
Chlamydia	444	115	549	76	36	570	1,792

Table 39.1: Number of sexually transmissible diseases among Aboriginal and Torres Strait Islander people aged 15–54 years, by sex, for selected states and territories, 2003 and 2004

n.p. Not published where numbers were less than 5.

(a) Includes Tasmania and the Australian Capital Territory for which numbers were too small to present separately.

Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement.

2. ABS 2003 and 2004 Indigenous population projections based on the 2001 Census were used in the calculation of rates.

Source: Data provided by the Department of Health and Ageing-NNDSS.

- Of the three sexually transmitted diseases for which data were provided, notification rates in 2004 for Aboriginal and Torres Strait Islander males aged 15 to 54 years were highest for gonorrhoea in Western Australia (2,062 per 100,000) and the Northern Territory (2,969 per 100,000), and highest for chlamydia in South Australia (991 per 100,000) (Table 39.2).
- For Aboriginal and Torres Strait Islander females aged 15 to 54 years, notification rates in 2004 were highest for chlamydia in Western Australia (2,235 per 100,000) and South Australia (1,485 per 100,000), and highest for gonorrhoea in the Northern Territory (3,529 per 100,000).
- Notification rates for chlamydia were significantly higher among Indigenous females than among Indigenous males for both years.
- In 2003 and 2004, the Northern Territory had the highest rate of notifications for all three conditions among both Indigenous males and females.

	WA	SA	NT	NSW	Vic	Qld	Aust <sup>(a)</sup>
Males				2003			
Gonorrhoea	2,303.2	644.4	2,881.2	62.5	n.p.	361.5	870.5
Syphilis	161.1	0.0	752.9	0.0	0.0	0.0	123.8
Chlamydia	1,648.2	644.4	2,098.6	160.4	137.9	908.2	851.7
Females							
Gonorrhoea	2,095.2	636.4	3,571.0	49.9	n.p.	375.5	918.9
Syphilis	165.5	0.0	366.9	0.0	0.0	0.0	123.6
Chlamydia	2,534.9	1,1471.6	3,681.5	260.2	307.7	1,674.7	1,481.4
Males				2004			
Gonorrhoea	2062.2	964.4	2,968.9	26.6	n.p.	419.4	861.7
Syphilis	0.0	0.0	302.1	0.0	0.0	0.0	39.7
Chlamydia	1423.6	991.2	1,876.6	143.5	170.0	932.8	812.8
Females							
Gonorrhoea	1,776.7	1,084.4	3,528.8	28.2	n.p.	461.0	866.7
Syphilis	0.0	0.0	296.9	0.0	0.0	0.0	38.0
Chlamydia	2,234.7	1,484.6	3,134.8	195.1	427.9	1,501.6	1,309.6

Table 39.2: Rate per 100,000 of sexually transmissible diseases among Aboriginal and Torres Strait Islander people aged 15–54 years, by sex, for selected states and territories, 2003 and 2004

n.p. Not published where numbers were less than 5.

(a) Includes Tasmania and the Australian Capital Territory.

Notes:

1. Shading indicates that the Indigenous identification for these data is in need of improvement.

2. ABS 2003 and 2004 Indigenous population projections based on the 2001 Census were used in the calculation of rates.

Source: Data provided by the Department of Health and Ageing-NNDSS.

## Indicator 40. Ratios for all hospitalisations

**Indicator:** Standardised hospital separation ratios for all hospitalisations in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

## Purpose

Hospitalisation rates are a widely used surrogate measure of morbidity. All-cause hospitalisation rates and rate ratios also provide a measure of the extent of the relative magnitude of heath problems in the Indigenous population compared with the non-Indigenous population.

## Data

Data for this indicator come from the AIHW's National Hospital Morbidity Database. Because hospitalisation data do not distinguish between people being hospitalised once and the same person being hospitalised a number of times, hospitalisations are not a direct measure of the incidence or prevalence of a disease.

Data in four states and territories – Queensland, Western Australia, South Australia and the Northern Territory – have been assessed by the AIHW as having the more complete coverage of Indigenous hospitalisations (AIHW 2005c). This quality assessment is based on the state or territory of the hospital. Hospitalisation data in this report are based on the state or territory of usual residence of the patient hospitalised, rather than the state or territories, it is reasonable to use the assessments in an approximate way. Data from only Queensland, Western Australia, South Australia and the Northern Territory were therefore used to describe details of hospitalisations. Data from these states and territories are not necessarily representative of the other states and territories.

Hospitalisations for which Indigenous status was 'not stated' have not been included in the calculation of rates in this report. This is to be consistent with previous reports in this series. It should be noted however, that the current recommendation is to combine hospitalisations for which Indigenous status was not reported with hospitalisation data for non-Indigenous people. This is to enable consistency across jurisdictions as Western Australia and Victoria do not have a category for the reporting of 'not stated' Indigenous status. In these states, separations with unidentified Indigenous status become grouped with separations of non-Indigenous people.

The incompleteness of Indigenous identification means the number of hospital separations recorded as Indigenous is an underestimate of Aboriginal and Torres Strait Islander hospitalisations.

	Qld	WA	SA	NT <sup>(a)</sup>	Total <sup>(b)</sup>	NSW	Vic	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	Aust <sup>(c)</sup>
Indigenous										
Males	47,727	34,053	13,119	33,553	128,452	37,512	6,729	1,301	902	175,040
Females	60,467	51,358	16,151	48,454	176,430	44,037	9,080	2,255	1,136	233,251
Persons	108,194	85,411	29,270	82,007	304,882	81,549	15,809	3,556	2,038	408,291
Non-Indigenous										
Males	830,677	469,154	401,868	24,327	1,726,026	1,494,976	1,332,015	60,046	41,883	4,690,002
Females	953,574	530,914	457,232	24,319	1,966,039	1,693,385	1,575,627	62,409	42,725	5,390,475
Persons	1,784,251	1,000,068	859,100	48,646	3,692,065	3,188,361	2,907,642	122,455	84,608	10,080,477
Subtotal	1,892,445	1,085,479	888,370	130,653	3,996,947	3,269,910	2,923,451	126,011	86,646	10,488,768
Not stated	257,421	332	22,606	279	280,638	21,569	1,136	8,425	2,674	394,949
Total	2,149,866	1,085,811	910,976	130,932	4,277,585	3,291,479	2,924,587	134,436	89,320	10,883,717
Proportion not stated (%)	12.0	_	2.5	0.2	6.6	0.7	0.0	6.3	3.0	3.6

Table 40.1: Hospitalisations for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) Excludes data for private hospitals.

(b) Queensland, Western Australia, South Australia and Northern Territory combined.

(c) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 10,883,717 hospitalisations in Australia among persons aged less than 75 years. Of these, 408,291 hospitalisations (3.8%) were Indigenous people and for 3.6% of hospitalisations, Indigenous status was 'not stated'.
- Females made up 57% of hospitalisations among Indigenous people compared with 53% of hospitalisations among non-Indigenous people.
- In Queensland, Western Australia, South Australia and the Northern Territory, where the recording of Indigenous status in hospitalisation data is more complete, there were 4,277,585 hospitalisations among persons aged less than 75 years. Of these, 304,882, or 7.1%, were Indigenous people and for 6.6% of hospitalisations, Indigenous status was not stated.

Table 40.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for
persons aged 0-74 years, by Indigenous status and sex, by state and territory, 2002-03 to 2003-04.

	Qld	WA	SA	NT <sup>(a)</sup>	Total <sup>(b)</sup>	NSW	Vic	Tas <sup>(a)</sup>	ACT <sup>(a)</sup>	Aust <sup>(c)</sup>
					Rate per	r 1,000				
Indigenous males	516.2	694.9	694.3	795.5	633.5	366.1	319.3	98.4	313.6	513.5
Non-Indigenous males	235.6	261.0	277.0	179.4	249.8	239.2	289.2	132.7	146.2	254.2
Indigenous females	579.8	948.4	761.7	1,027.1	664.5	406.5	395.7	164.9	361.0	624.4
Non-Indigenous females	277.7	302.8	322.8	204.8	250.1	275.7	339.9	142.8	142.4	296.3
Indigenous persons	551.1	826.1	726.9	913.8	653.8	387.2	358.1	132.8	337.1	571.3
Non-Indigenous persons	256.7	281.5	299.2	191.2	249.9	257.3	314.5	137.9	144.0	275.1
				Standardis	ed hospita	al separatior	n ratio <sup>(d)</sup>			
Males	1.9	2.6	2.6	3.0	2.4	1.4	1.2	0.4	1.2	1.9
Females	1.9	3.1	2.5	3.3	2.5	1.3	1.3	0.5	1.2	2.0
Persons	1.9	2.9	2.5	3.2	2.5	1.3	1.2	0.5	1.2	2.0

(a) Excludes data for private hospitals.

(b) Queensland, Western Australia, South Australia and Northern Territory combined.

(c) Does not include 'Other Territories'.

(d) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04, in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised at between 2 and 3 times the rate of non-Indigenous people.
- The standardised hospital separation ratios for males and females were similar in most states and territories.

# Indicator 41. Hospitalisation ratios for circulatory diseases

#### Indicator:

- (a) Standardised hospital separation ratios for circulatory diseases as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous Australian population, by sex, for ages 0–74 years.
- (b) Standardised hospital separation ratios for coronary heart disease as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous Australian population, by sex, for ages 0–74 years.
- (c) Standardised hospital separation ratios for rheumatic fever and rheumatic heart disease as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared with the non-Indigenous Australian population, by sex, for ages 0–74 years.

### Purpose

A significant proportion of Aboriginal and Torres Strait Islander people suffer from diseases of the circulatory system. The indicator provides a broad measure of the occurrence of all circulatory diseases and access to hospital admitted patient services for Aboriginal and Torres Strait Islander people, relative to the non-Indigenous population.

## Data

The data provided are for hospitalisations for all circulatory diseases, as well as for the two subgroups of coronary heart disease and rheumatic heart disease. 'Principal diagnosis' refers to 'the diagnosis established after study to be chiefly responsible for occasioning the patient's episode of care in a hospital'.

#### **Circulatory diseases**

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	2,025	1,312	513	1,060	4,910	1,809	268	71	30	7,100
Females	1,843	1,138	431	869	4,281	1,454	261	48	15	6,065
Persons	3,868	2,450	944	1,929	9,191	3,263	529	119	45	13,165
Non-Indigenous										
Males	55,938	28,861	27,507	1,635	113,941	118,237	88,196	4,906	2,892	330,645
Females	34,321	16,842	16,844	692	68,699	70,943	55,609	2,705	1,490	201,221
Persons	90,259	45,703	44,351	2,327	182,640	189,180	143,805	7,611	4,382	531,866
Subtotal	94,127	48,153	45,295	4,256	191,831	192,443	144,334	7,730	4,427	545,031
Not stated	14,887	33	927	35	15,882	1,249	146	541	97	22,022
Total	109,014	48,186	46,222	4,291	207,713	193,692	144,480	8,271	4,524	567,053
Proportion not stated (%)	13.7	0.1	2.0	0.8	7.6	0.6	0.1	6.5	2.1	3.9

Table 41.1: Hospitalisations for circulatory disease<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes I00–I99.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 567,053 hospitalisations due to circulatory diseases in Australia among people aged 0–74 years. Of these, 13,165 hospitalisations or 2.3% were of Indigenous people and for 3.9% of hospitalisations, Indigenous status was not stated.
- Males made up 62% of the non-Indigenous hospitalisations for circulatory diseases, compared with only 54% of the Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, where the recording of Indigenous status in hospitalisation data is most complete, there were 207,713 hospitalisations for circulatory diseases. Of these, 9,191, or 4.4%, were Indigenous people and for 7.6% of hospitalisations, Indigenous status was 'not stated.'

Table 41.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for circulatory disease<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002-03 to 2003-04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
				I	Rate per 1	,000				
Indigenous males	37.2	44.6	44.7	42.2	40.8	28.3	20.3	8.4	19.0	34.3
Non-Indigenous males	15.8	16.1	18.3	13.3	16.4	18.7	19.1	10.3	10.7	17.8
Indigenous females	28.8	33.1	31.6	29.6	49.0	20.8	17.9	5.6	8.8	25.8
Non-Indigenous females	10.1	9.7	11.2	7.3	16.5	11.4	11.9	5.8	5.4	11.0
Indigenous persons	32.9	38.6	37.8	35.6	43.6	24.5	19.1	7.0	13.9	30.0
Non-Indigenous persons	13.0	13.0	14.7	10.8	16.4	15.1	15.5	8.1	8.0	14.4
			Sta	ndardised	hospital s	separation ra	atio <sup>(e)</sup>			
Males	2.0	2.4	2.4	2.3	2.2	1.5	1.1	0.5	1.0	1.8
Females	2.5	2.9	2.8	2.6	2.7	1.8	1.6	0.5	0.8	2.2
Persons	2.2	2.6	2.5	2.4	2.4	1.6	1.3	0.5	0.9	2.0

(a) ICD-10-AM codes I00-I99.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.
(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002-03 to 2003-04, in Queensland, Western Australia, South Australia and the . Northern Territory, Indigenous people were hospitalised for circulatory disease at between 2 and 3 times the rate for non-Indigenous people.
- In these four states and territories, hospitalisation rates for circulatory disease for • Indigenous females were around 3 times those for non-Indigenous females. Rates for Indigenous males were around twice those for non-Indigenous males.

#### Coronary heart disease

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	1,048	576	241	462	2,327	894	145	35	21	3,425
Females	803	451	173	303	1,730	687	119	24	6	2,567
Persons	1,851	1,027	414	765	4,057	1,581	264	59	27	5,992
Non-Indigenous										
Males	25,411	11,857	11,562	721	49,551	53,588	38,258	2,177	1,290	145,846
Females	10,587	4,256	4,520	233	19,596	21,003	14,666	926	398	56,929
Persons	35,998	16,113	16,082	954	69,147	74,591	52,924	3,103	1,688	202,775
Subtotal	37,849	17,140	16,496	1,719	73,204	76,172	53,188	3,162	1,715	208,767
Not stated	6,295	22	359	29	6,705	513	88	306	7	9,135
Total	44,144	17,162	16,855	1,748	79,909	76,685	53,276	3,468	1,722	217,902
Proportion not stated (%)	14.3	0.1	2.1	1.7	8.4	0.7	0.2	8.8	0.4	4.2

Table 41.3: Hospitalisations for coronary heart disease<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes I20–I25.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04 there were 217,902 hospitalisations for coronary heart disease in Australia among people aged less than 75 years. Of these, 5,992 hospitalisations (2.7%) were of Indigenous people and for 4.2% of hospitalisations, Indigenous status was not stated.
- Males made up 57% of the Indigenous hospitalisations for coronary heart disease compared with 72% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 79,909 hospitalisations for coronary heart disease. Of these, 4,057, or 5.0%, were of Indigenous people and for 8.4% of hospitalisations, Indigenous status was not stated.

Table 41.4: Age-standardised hospitalisation rates and standardised hospital separation ratios for
coronary heart disease <sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and
territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>		
	Rate per 1,000											
Indigenous males	22.1	22.5	24.1	21.4	22.3	15.6	12.4	4.6	16.1	18.9		
Non-Indigenous males	7.1	6.6	7.6	6.0	7.1	8.5	8.3	4.5	4.8	7.8		
Indigenous females	16.3	16.6	15.9	13.2	38.9	12.2	10.3	3.5	5.3	13.9		
Non-Indigenous females	3.1	2.5	2.9	2.9	7.2	3.3	3.1	1.9	1.5	3.1		
Indigenous persons	18.8	19.2	19.5	16.9	26.4	13.7	11.2	4.0	10.8	16.1		
Non-Indigenous persons	5.2	4.6	5.3	4.7	7.2	5.9	5.7	3.2	3.2	5.5		
			:	Standardis	ed hospit	al separatio	on ratio <sup>(e)</sup>					
Males	2.7	2.7	2.9	2.6	2.7	1.9	1.5	0.6	2.0	2.3		
Females	4.9	5.0	4.8	4.0	4.8	3.7	3.1	1.1	1.6	4.2		
Persons	3.3	3.3	3.4	2.9	3.2	2.4	1.9	0.7	1.9	2.8		

(a) ICD-10-AM codes I20–I25.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04, in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for coronary heart disease at around 3 times the rate for non-Indigenous people.
- The differences in rates are particularly marked in females, with Indigenous females hospitalised at between 4 and 5 times the rates for non-Indigenous females. Indigenous males were hospitalised at around 3 times the rate for non-Indigenous males.

#### **Rheumatic heart disease**

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Aust <sup>(d)</sup>
Indigenous								
Males	47	39	n.p.	115	203	14	n.p.	219
Females	98	73	n.p.	179	363	26	n.p.	394
Persons	145	112	15	294	566	40	7	613
Non-Indigenous								
Males	201	115	57	16	389	360	266	1,040
Females	287	166	89	10	552	556	374	1,537
Persons	488	281	146	26	941	916	640	2,577
Subtotal	633	393	161	320	1,507	956	647	3,190
Not stated	194	0	6	2	202	2	0	241
Total	827	393	167	322	1,709	958	647	3,431
Proportion not stated (%)	23.5	0.0	3.6	0.6	11.8	0.2	0.0	7.0

Table 41.5: Hospitalisations for rheumatic fever and heart disease<sup>(a)</sup> for persons aged 0–74 years by Indigenous status and by sex, by state and territory, 2002–03 to 2003–04

n.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes I00-I09.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for rheumatic heart disease in the Australian Capital Territory and Tasmania, data from these states and territories were not included in the table separately but are included in the Australian total. Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 3,431 hospitalisations for rheumatic heart disease in Australia among those aged 0–74 years. Of these, 613 hospitalisations or 18% were of Indigenous people and for 7.0%, Indigenous status was not stated.
- Males made up 36% of the hospitalisations for rheumatic heart disease among Indigenous people, and 40% of the hospitalisations among non-Indigenous people.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 1,709 hospitalisations for rheumatic heart disease. Of these, 566 or 33% were Indigenous people and for 11.8% Indigenous status was not stated.

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Aust <sup>(d)</sup>
				Rate per 1,	000			
Indigenous males	0.6	1.0	n.p.	3.3	1.2	0.2	n.p.	0.8
Non-Indigenous males	0.1	0.1	n.p.	0.1	0.1	0.1	n.p.	0.1
Indigenous females	1.2	1.7	0.8	4.9	1.4	0.3	0.3	1.3
Non-Indigenous females	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Indigenous persons	0.9	1.3	0.5	4.1	1.3	0.2	0.2	1.1
Non-Indigenous persons	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1
			Standardise	d hospital s	eparation rat	io <sup>(e)</sup>		
Males	8.5	13.2	n.p.	46.1	16.7	2.2	n.p.	10.4
Females	11.1	15.7	n.p.	45.3	18.8	2.7	n.p.	12.1
Persons	10.2	14.8	5.1	45.9	18.1	2.5	2.1	11.5

Table 41.6: Age-standardised hospitalisation rates and standardised hospital separation ratios for rheumatic fever and heart disease<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status, sex and state and territory, 2002–03 to 2003–04.

n.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes I00-I09.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for rheumatic heart disease in the Australian Capital Territory and Tasmania, data for these states and territories were not included separately in the table but are included in the Australian total. Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- The low numbers of cases of rheumatic heart disease in both populations make the agestandardised rates less stable than they are for the other heart diseases. Nevertheless, it is clear that there was a significantly higher rate of hospitalisation for Indigenous people with rheumatic heart disease than for non-Indigenous people.
- In 2002–03 to 2003–04 in the Northern Territory, Indigenous people were hospitalised at 46 times the rate of non-Indigenous people, and in Western Australia Indigenous people were hospitalised at 15 times the rate of non-Indigenous people. These large differences are to some extent determined by very low rates of hospitalisations in the non-Indigenous population.
- The high rates of rheumatic heart disease hospitalisations in the Indigenous population are closely related to high rates of infection with rheumatic fever. This in turn reflects high levels of exposure to group A streptococci (the cause of rheumatic fever) from skin sores and throat infections. These conditions are related to overcrowding and poor living conditions.

# Indicator 42. Hospitalisation ratios for injury and poisoning

#### Indicator:

- (a) Standardised hospital separation ratio for injury and poisoning as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for ages 0–74 years.
- (b) Standardised hospital separation ratio for transport accidents as an external cause of hospitalisation in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for ages 0–74 years.
- (c) Standardised hospital separation ratio for other accidents as an external cause of hospitalisation in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for ages 0–74 years.
- (d) Standardised hospital separation ratio for self-harm as an external cause of hospitalisation in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for ages 0–74 years.
- (e) Standardised hospital separation ratio for assault as an external cause of hospitalisation in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for ages 0–74 years.

### Purpose

Injury is a leading cause of hospitalisation for Aboriginal and Torres Strait Islander people. The indicators provide a broad measure of the incidence of injuries resulting in hospitalisation, as well as the major causes of injury and access to hospital admitted patient services for Aboriginal and Torres Strait Islander people compared to non-Indigenous people.

#### Data

The specifications for this indicator state that data on injury and poisoning as the principal diagnosis be provided, but the ICD codes provided for the indicator relate to external causes of morbidity and mortality. Thus data presented here are for hospitalisations with a principal diagnosis of injury and poisoning, and for external causes of hospitalisation including transport accidents, other accidents, self-harm and assault which are not restricted to having a principal diagnosis of injury and poisoning.

#### Injury and poisoning

This category includes all injury and poisoning.

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										_
Males	5,252	4,264	1,182	2,980	13,678	4,391	755	160	56	19,048
Females	3,719	3,874	1,073	2,616	11,282	2,835	507	118	49	14,798
Persons	8,971	8,138	2,255	5,596	24,960	7,226	1,262	278	105	33,846
Non-Indigenous										
Males	83,400	39,547	31,712	3,494	158,153	143,688	105,080	6,752	4,093	419,621
Females	46,986	23,433	20,402	1,404	92,225	84,043	67,775	3,967	2,439	251,806
Persons	130,386	62,980	52,114	4,898	250,378	227,731	172,855	10,719	6,532	671,427
Subtotal	139,357	71,118	54,369	10,494	275,338	234,957	174,117	10,997	6,637	705,273
Not stated	10,001	25	1,470	28	11,524	2,135	165	812	80	18,245
Total	149,358	71,143	55,839	10,522	286,862	237,092	174,282	11,809	6,717	723,518
Proportion not stated (%)	6.7	0.0	2.6	0.3	4.0	0.9	0.1	6.9	1.2	2.5

Table 42.1: Hospitalisations for injury and poisoning<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes S00–T98.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04 there were 723,518 hospitalisations among people aged 0–74 years due to injury and poisoning. Of these 33,846 hospitalisations (4.7%) were of Indigenous people and for 2.5%, Indigenous status was not stated.
- Males made up 56% of the Indigenous hospitalisations from injury and poisoning, compared with 62% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 286,862 hospitalisations for injury and poisoning. Of these, 24,960 or 8.7% were of Indigenous people and for 4.0% of hospitalisations Indigenous status was not stated.

Table 42.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for
injury and poisoning <sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and
territory, 2002–03 to 2003–04

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>		
	Rate per 1,000											
Indigenous males	40.3	61.7	44.3	49.4	47.8	31.4	25.7	8.8	13.4	40.0		
Non-Indigenous males	23.8	21.9	22.7	23.8	23.0	23.3	22.9	15.9	13.3	22.9		
Indigenous females	29.9	60.4	42.7	48.0	68.4	21.9	18.6	7.1	12.9	33.4		
Non-Indigenous females	13.7	13.3	14.6	11.6	22.3	13.8	14.7	9.1	8.1	13.9		
Indigenous persons	34.8	60.4	43.1	48.2	55.0	26.5	22.1	7.9	12.9	36.4		
Non-Indigenous persons	18.7	17.6	18.7	18.2	22.8	18.6	18.8	12.5	10.7	18.4		
			5	Standardis	ed hospita	al separation	ratio <sup>(e)</sup>					
Males	1.7	2.6	1.9	2.1	2.0	1.3	1.1	0.4	0.6	1.7		
Females	2.0	4.1	2.9	3.3	2.9	1.5	1.3	0.5	0.9	2.3		
Persons	1.8	3.1	2.2	2.5	2.3	1.4	1.1	0.4	0.7	1.9		

(a) ICD-10-AM codes S00–T98.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for injury and poisoning at 2 to 3 times the rate of non-Indigenous people.
- In these four states and territories, the hospitalisation rates of Indigenous females for injury and poisoning were approximately 2 to 4 times those of non-Indigenous females.

#### **Transport accidents**

This category includes injuries caused by accidents involving cars, buses, trucks, motorcycles, bicycles and pedestrians. It excludes other land transport accidents, water transport accidents, air and space transport accidents and other and unspecified transport accidents.

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	554	513	117	330	1,514	533	85	30	n.p.	2,172
Females	252	279	75	149	755	232	44	13	n.p.	1,047
Persons	806	792	192	479	2,269	765	129	43	13	3,219
Non-Indigenous										
Males	13,070	6,080	4,817	601	24,568	21,352	15,910	988	728	63,656
Females	4,770	2,177	2,072	209	9,228	9,281	7,555	422	288	26,831
Persons	17,840	8,257	6,889	810	33,796	30,633	23,465	1,410	1,016	90,487
Subtotal	18,646	9,049	7,081	1,289	36,065	31,398	23,594	1,453	1,029	93,706
Not stated	835	6	305	4	1,150	434	53	190	16	2,085
Total	19,481	9,055	7,386	1,293	37,215	31,832	23,647	1,643	1,045	95,791
Proportion not stated (%)	4.3	0.1	4.1	0.3	3.1	1.4	0.2	11.6	1.5	2.2

Table 42.3: Hospitalisations for transport accidents<sup>(a)</sup> for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

n.p. Not publishable where numbers were less than 5.

(a) ICD-10-AM codes V01-V79.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 there were 95,791 hospitalisations among people aged 0–74 years due to transport accidents. Of these 3,219 hospitalisations (3.4%) were of Indigenous people, and for 2.2%, Indigenous status was not stated.
- Females made up 33% of hospitalisations among Indigenous people as a result of motor vehicle accidents, compared with 30% of hospitalisations among non-Indigenous people.
- In the four states and territories where the recording of Indigenous status in hospitalisation data is considered most complete, 2.0% of hospitalisations for transport accidents were of Indigenous people, and for 3.1%, Indigenous status was not stated.

Table 42.4: Age-standardised hospitalisation rates and standardised hospital separation ratios for
transport accidents <sup>(a)</sup> for persons aged 0-74 years, by Indigenous status and sex, by state and
territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>	
	Rate per 1,000										
Indigenous males	4.0	6.9	4.0	5.0	4.9	3.6	2.7	1.5	n.p.	4.2	
Non-Indigenous males	3.7	3.3	3.5	4.0	3.6	3.5	3.5	2.4	2.3	3.5	
Indigenous females	1.9	4.0	2.8	2.5	6.0	1.7	1.5	0.7	n.p.	2.2	
Non-Indigenous females	1.4	1.2	1.5	1.7	3.2	1.5	1.6	1.0	0.9	1.5	
Indigenous persons	2.9	5.4	3.4	3.8	5.2	2.6	2.1	1.1	1.5	3.2	
Non-Indigenous persons	2.6	2.3	2.5	2.9	3.5	2.5	2.6	1.7	1.6	2.5	
			S	tandardis	ed hospita	l separation	ratio <sup>(e)</sup>				
Males	1.1	1.9	1.1	1.4	1.4	1.0	0.8	0.4	n.p.	1.2	
Females	1.2	2.6	1.8	1.6	1.7	1.1	1.0	0.5	n.p.	1.4	
Persons	1.1	2.1	1.3	1.5	1.5	1.0	0.8	0.4	0.6	1.2	

n.p. Not publishable where numbers were less than 5.

(a) ICD-10-AM codes V01-V79.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Western Australia and the Northern Territory, Indigenous people were hospitalised for transport accidents at up to twice the rate of non-Indigenous people.
- In Queensland and South Australia, the hospitalisation rates for transport accidents were similar for Indigenous and non-Indigenous people.
- The standardised hospital separation ratios were higher for females than males in all four jurisdictions with the most complete coverage of Indigenous hospitalisations.

#### **Other accidents**

This category includes other land transport accidents, water transport accidents, falls, drowning and poisoning.

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	3,504	2,585	732	1,820	8,641	2,893	515	97	31	12,195
Females	1,991	1,720	492	1,120	5,323	1,617	305	73	23	7,350
Persons	5,495	4,305	1,224	2,940	13,964	4,510	820	170	54	19,545
Non-Indigenous										
Males	63,006	28,283	22,202	2,412	115,903	103,586	73,674	4,377	2,830	301,707
Females	34,496	15,364	13,355	954	64,169	59,475	44,019	2,420	1,682	172,544
Persons	97,502	43,647	35,557	3,366	180,072	163,061	117,693	6,797	4,512	474,251
Subtotal	102,997	47,952	36,781	6,306	194,036	167,571	118,513	6,967	4,566	493,796
Not stated	7,114	19	926	18	8,077	1,276	114	502	46	12,525
Total	110,111	47,971	37,707	6,324	202,113	168,847	118,627	7,469	4,612	506,321
Proportion not stated (%)	6.5	0.0	2.5	0.3	4.0	0.8	0.1	6.7	1.0	2.5

Table 42.5: Hospitalisations for other accidents <sup>(a)</sup> for persons aged 0–74 years, by Indigenous status
and sex, by state and territory, 2002–03 and 2003–04

(a) ICD-10-AM codes V80-X59.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 506,321 hospitalisations among people aged 0–74 years due to other accidents. Of these 19,545 hospitalisations (3.9%) were for people identified as Indigenous and for 2.5% of hospitalisations, Indigenous status was not stated.
- Females made up 38% of the Indigenous hospitalisations as a result of other accidents, compared with 36% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 202,113 hospitalisations for other accidents. Of these, 13,964 or 6.9% were Indigenous people and for 4.0% Indigenous status was not stated.

Table 42.6: Age-standardised hospitalisation rates and standardised hospital separation ratios for other accidents<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>		
	Rate per 1,000											
Indigenous males	26.4	36.9	27.1	30.0	29.8	20.3	17.4	5.3	7.3	25.2		
Non-Indigenous males	17.9	15.7	15.9	16.5	16.9	16.8	16.1	10.2	9.2	16.5		
Indigenous females	15.7	26.5	19.4	20.5	33.8	12.3	11.0	4.4	6.0	16.3		
Non-Indigenous females	10.1	8.8	9.5	8.1	16.5	9.7	9.6	5.5	5.7	9.5		
Indigenous persons	20.9	31.5	23.1	25.2	31.0	16.2	14.1	4.8	6.6	20.7		
Non-Indigenous persons	14.0	12.3	12.7	12.7	16.8	13.3	12.8	7.9	7.5	13.0		
			9	Standardis	ed hospit	al separatio	on ratio <sup>(e)</sup>					
Males	1.6	2.2	1.6	1.8	1.8	1.2	1.0	0.3	0.4	1.5		
Females	1.6	2.7	2.0	2.1	2.0	1.2	1.1	0.4	0.6	1.6		
Persons	1.6	2.3	1.7	1.9	1.8	1.2	1.1	0.4	0.5	1.5		

(a) ICD-10-AM codes V80–X59.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, South Australia, Western Australia and the Northern Territory, Indigenous persons were hospitalised for other accidents at around twice the rate for non-Indigenous persons.
- The standardised hospital separation ratios were slightly higher for females than for males in most jurisdictions.

#### Self-harm

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	271	308	109	149	837	341	65	13	n.p.	1,261
Females	366	320	162	135	983	513	102	32	n.p.	1,644
Persons	637	628	271	284	1,820	854	167	45	17	2,905
Non-Indigenous										
Males	4,112	2,255	1,802	138	8,307	7,166	4,583	584	187	20,866
Females	6,345	3,478	2,895	136	12,854	10,904	7,906	842	430	33,041
Persons	10,457	5,733	4,697	274	21,161	18,070	12,489	1,426	617	53,907
Subtotal	11,094	6,361	4,968	558	22,981	18,924	12,656	1,471	634	56,812
Not stated	329	0	170	1	500	199	7	142	5	926
Total	11,423	6,361	5,138	559	23,481	19,123	12,663	1,613	639	57,738
Proportion not stated (%)	2.9	0.0	3.3	0.2	2.1	1.0	0.1	8.8	0.8	1.6

Table 42.7: Hospitalisations for self-harm<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

N.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes X60-X84.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 there were 57,738 hospitalisations for which self harm was reported as a cause of injury among people aged 0–74. Of these 2,905 hospitalisations (5.0%) were for people identified as Indigenous, and for 1.6% of hospitalisations, Indigenous status was not stated.
- Females made up 57% of hospitalisations among Indigenous people as a result of self-harm, and 61% of hospitalisations among non-Indigenous females.
- In Queensland, Western Australia, South Australia and the Northern Territory, where recording of Indigenous status in hospitalisation data is more complete, there were 23,481 hospitalisations for which self harm was reported as a cause of injury. Of these, 1,820 or 7.8% were of Indigenous people and for 2.1% Indigenous status was not stated.

Table 42.8: Age-standardised hospitalisation rates and standardised hospital separation ratios for self-harm<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>			
	Rate per 1,000												
Indigenous males	2.4	5.0	4.5	2.7	3.3	2.8	2.5	0.8	n.p.	3.0			
Non-Indigenous males	1.2	1.2	1.3	0.9	1.2	1.2	1.0	1.4	0.6	1.1			
Indigenous females	2.8	4.7	6.1	2.3	2.2	3.8	3.6	1.8	n.p.	3.5			
Non-Indigenous females	1.8	1.9	2.1	1.0	1.2	1.8	1.7	2.0	1.3	1.8			
Indigenous persons	2.6	4.8	5.3	2.4	2.6	3.3	3.0	1.3	2.1	3.2			
Non-Indigenous persons	1.5	1.6	1.7	0.9	1.2	1.5	1.4	1.7	1.0	1.5			
			S	tandardis	ed hospita	I separation	ratio <sup>(e)</sup>						
Males	2.0	4.2	3.8	2.2	2.8	2.4	2.1	0.7	n.p.	2.5			
Females	1.5	2.5	3.2	1.2	1.8	2.0	1.9	1.0	n.p.	1.9			
Persons	1.7	3.1	3.4	1.6	2.2	2.2	2.0	0.9	1.4	2.1			

(a) ICD-10-AM codes X60–X84.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for self-harm as a cause of injury at 2 to 3 times the rate for non-Indigenous persons.
- Standardised hospital separation ratios were higher for males than females in the four jurisdictions with the most complete coverage of Indigenous hospitalisations.

#### Assault

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	1,047	1,403	310	944	3,704	671	118	26	6	4,525
Females	925	1,847	400	1,337	4,509	587	71	15	6	5,188
Persons	1,972	3,250	710	2,281	8,213	1,258	189	41	12	9,713
Non-Indigenous										
Males	4,739	2,269	1,648	375	9,031	8,176	5,374	519	223	23,359
Females	1,256	743	535	78	2,612	2,313	1,563	126	42	6,663
Persons	5,995	3,012	2,183	453	11,643	10,489	6,937	645	265	30,022
Subtotal	7,967	6,262	2,893	2,734	19,856	11,747	7,126	686	277	39,735
Not stated	251	2	103	5	361	183	4	54	3	659
Total	8,218	6,264	2,996	2,739	20,217	11,930	7,130	740	280	40,394
Proportion not stated (%)	3.1	0.0	3.4	0.2	1.8	1.5	0.1	7.3	1.1	1.6

Table 42.9: Hospitalisations for assault<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes X85–Y09.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04 there were 40,394 hospitalisations in Australia among people aged 0–74 years for which assault was a cause of injury. Of these 9,713 hospitalisations (24%) were of Indigenous people, and for 1.6% of hospitalisations, Indigenous status was not stated.
- Females made up 53% of the Indigenous hospitalisations due to assault, compared to only 22% of the non-Indigenous hospitalisations.
- In the four states and territories where the recording of Indigenous status in hospitalisation records is most complete, there were 8,213 hospitalisations of Indigenous people for which assault was reported as a cause of injury, which represented 41% of total hospitalisations related to assault in these states and territories.

Table 42.10: Age-standardised hospitalisation rates and standardised hospital separation ratios for assault<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>			
	Rate per 1,000												
Indigenous males	8.1	20.1	11.4	14.8	12.8	4.9	4.0	1.5	1.4	9.5			
Non-Indigenous males	1.4	1.2	1.2	2.4	1.3	1.3	1.2	1.3	0.7	1.3			
Indigenous females	6.7	25.9	14.4	21.1	35.1	4.2	2.4	0.8	1.4	10.6			
Non-Indigenous females	0.4	0.4	0.4	0.6	0.9	0.4	0.3	0.3	0.1	0.4			
Indigenous persons	7.4	23.0	12.9	17.9	19.4	4.6	3.2	1.1	1.4	10.0			
Non-Indigenous persons	0.9	0.8	0.8	1.5	1.2	0.9	0.8	0.8	0.4	0.8			
			5	Standardis	ed hospita	al separation	n ratio <sup>(e)</sup>						
Males	5.4	13.3	7.5	9.8	8.5	3.3	2.6	1.0	0.9	6.3			
Females	10.4	40.2	22.4	32.8	23.3	6.5	3.7	1.3	2.1	16.4			
Persons	6.9	21.3	11.9	16.6	12.9	4.2	2.9	1.1	1.3	9.3			

(a) ICD-10-AM codes X85–Y09.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for assault at between 7 and 21 times the rate for non-Indigenous people.
- Indigenous females had substantially higher rates of hospitalisations from assaults compared to non-Indigenous females in Queensland, Western Australia, South Australia and the Northern Territory (ratios of 10, 40, 22 and 33 respectively).

# Indicator 43. Hospitalisation ratios for respiratory diseases and lung cancer

#### Indicator:

- (a) Standardised hospital separation ratio for all respiratory diseases as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised hospital separation ratio for pneumonia as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised hospital separation ratio for lung cancer as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

### Purpose

The indicator provides a measure of the occurrence of respiratory disease and lung cancer and use of admitted patient services for Aboriginal and Torres Strait Islander people compared to non-Indigenous people. A considerable proportion of respiratory diseases and lung cancers may be preventable if risk behaviours such as smoking are avoided.

## Data

Data are provided for all respiratory diseases, and separately for pneumonia and for lung cancer.

#### **Respiratory diseases**

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	3,721	3,315	946	2,938	10,920	3,384	540	90	32	14,977
Females	3,369	3,571	1,084	2,813	10,837	3,379	511	125	33	14,891
Persons	7,090	6,886	2,030	5,751	21,757	6,763	1,051	215	65	29,868
Non-Indigenous										
Males	42,748	24,425	23,943	1,635	92,751	89,652	62,963	3,141	1,913	252,020
Females	36,257	20,791	21,023	1,034	79,105	73,415	55,914	2,906	1,823	214,616
Persons	79,005	45,216	44,966	2,669	171,856	163,067	118,877	6,047	3,736	466,636
Subtotal	86,095	52,102	46,996	8,420	193,613	169,830	119,928	6,262	3,801	496,504
Not stated	10,021	21	888	13	10,943	884	58	468	54	14,642
Total	96,116	52,123	47,884	8,433	204,556	170,714	119,986	6,730	3,855	511,146
Proportion not stated (%)	10.4	0.0	1.9	0.2	5.3	0.5	0.0	7.0	1.4	2.9

Table 43.1: Hospitalisations for respiratory diseases<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes J00–J99.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- From 2002–03 to 2003–04, there were 511,146 hospitalisations for respiratory diseases in Australia where Indigenous status was recorded (Table 43.1). Of these, 29,868 hospitalisations (5.8%) were of Indigenous people and for 2.9% of hospitalisations, Indigenous status was not stated.
- An equal proportion of all Indigenous hospitalisations were of males (50%) and females (50%), compared with the non-Indigenous population where 54% of hospitalisations were of males and only 46% were of females.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 204,556 hospitalisations for respiratory diseases, 21,757 or 10.6% of which were of Indigenous people. For 5.3% of hospitalisations in these states and territories, Indigenous status was not stated.

Table 43.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for
respiratory diseases <sup>(a)</sup> for persons aged 0-74 years, by Indigenous status and sex, by state and
territory, 2002–03 to 2003–04

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>d)</sup>			
	Rate per 1,000												
Indigenous males	25.4	43.9	33.1	46.5	34.8	21.4	17.3	4.5	7.1	28.5			
Non-Indigenous males	12.2	13.8	17.2	11.8	13.6	14.5	13.8	7.1	6.6	13.8			
Indigenous females	23.5	48.6	37.9	46.0	40.6	22.6	16.5	6.6	7.6	29.2			
Non-Indigenous females	10.6	11.9	15.1	8.6	13.6	12.0	12.2	6.7	6.2	11.9			
Indigenous persons	24.4	46.1	35.4	46.2	37.4	21.9	16.8	5.5	7.3	28.8			
Non-Indigenous persons	11.4	12.9	16.1	10.3	13.6	13.3	13.0	6.9	6.4	12.8			
	Standardised hospital separation ratio <sup>(e)</sup>												
Males	1.8	3.0	2.3	3.2	2.4	1.5	1.2	0.3	0.5	1.9			
Females	1.9	3.9	3.0	3.7	2.8	1.8	1.3	0.5	0.6	2.3			
Persons	1.8	3.4	2.6	3.4	2.6	1.6	1.2	0.4	0.5	2.1			

(a) ICD-10-AM codes J00–J99.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

Source: AIHW National Hospital Morbidity Database.

• The largest differences in age-standardised hospitalisation rates for respiratory diseases were in the Northern Territory and Western Australia, where rates for Indigenous males were 3 times those for non-Indigenous males, and rates for Indigenous females were up to 4 times those for non-Indigenous females.

#### Pneumonia

Table 43.3: Hospitalisations for a principal diagnosis of pneumonia <sup>(a)</sup> for persons aged 0–74 years, by
Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	951	1,046	273	1,311	3,581	688	88	10	9	4,377
Females	837	972	302	1,157	3,268	630	99	15	7	4,019
Persons	1,788	2,018	575	2,468	6,849	1,318	187	25	16	8,396
Non-Indigenous										
Males	7,444	3,523	3,378	301	14,646	14,822	10,904	633	494	41,638
Females	6,546	2,973	2,830	213	12,562	12,102	9,049	531	460	34,845
Persons	13,990	6,496	6,208	514	27,208	26,924	19,953	1,164	954	76,483
Subtotal	15,778	8,514	6,783	2,982	34,057	28,242	20,140	1,189	970	84,879
Not stated	1,085	1	120	3	1,209	156	13	85	4	1,764
Total	16,863	8,515	6,903	2,985	35,266	28,398	20,153	1,274	974	86,643
Proportion not stated (%)	6.4	_	1.7	0.1	3.4	0.5	0.1	6.7	0.4	2.0

(a) ICD-10-AM codes J10–J18.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 there were 86,643 hospitalisations due to pneumonia in Australia among people aged less than 75 years. Of these, 8,396 hospitalisations (9.7%) were of Indigenous people and for 2.0% of hospitalisations Indigenous status was not stated.
- Males made up 52% of the Indigenous hospitalisations for pneumonia, and 54% of the non-Indigenous hospitalisations.
- In the four states and territories with the more complete coverage of Indigenous hospitalisations, there were 35,266 hospitalisations for respiratory diseases, 19.4% of which were of Indigenous people. For 3.4% of hospitalisations, Indigenous status was not stated.

for a principal diagno by state and territory,	-		-	ons agec	l 0-74 ye	ars, by Indi	igenous	status an	d sex,	
	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate pe	r 1,000				
Indigenous males	7.7	16.3	11.2	24.3	13.4	5.1	3.3	0.6	2.4	9.8
Non-Indigenous males	2.1	2.0	2.4	2.2	2.1	2.4	2.4	1.4	1.8	2.3

21.0

1.8

22.6

2.0

9.8

9.9

9.8

13.8

2.2

13.6

2.2

5.4

5.6

5.5

Standardised hospital separation ratio<sup>(d)</sup>

4.7

2.0

4.9

2.2

2.1

2.2

2.1

3.5

2.0

3.4

2.2

1.3

1.7

1.5

0.9

1.2

0.7

1.3

0.2

0.4

0.3

1.8

1.6

2.1

1.7

1.0

0.9

0.9

8.8

1.9

9.3

2.1

3.9

4.1

4.0

Table 43.4: Age-standardised hospital separation rates and standardised hospital separation ratios

ICD-10-AM codes J10-J18 (a)

Indigenous females

Indigenous persons

Non-Indigenous females

Non-Indigenous persons

(b) Excludes data for private hospitals.

Queensland, Western Australia, South Australia and Northern Territory combined. (C)

6.5

1.9

7.1

20

3.1

3.1

3.1

14.7

1.7

15.5

1.9

6.6

6.9

6.7

11.7

2.0

11.5

22

4.5

5.5

5.0

(d) Does not include 'Other Territories'

Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates (e) for the total Australian population.

### Notes

Males

Females

Persons

Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an 1. analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates. 2.

Data are for state and territory of usual residence. 3.

- In 2002-03 to 2003-04 in Queensland, Western Australia, South Australia and the • Northern Territory, Indigenous people were hospitalised for pneumonia at between 3 and 10 times the rate of non-Indigenous people.
- Standardised hospital separation ratios for pneumonia were around 7 for males and • females in Western Australia and around 10 for males and females in the Northern Territory.

## Lung cancer

Table 43.5: Hospitalisations for lung cancer <sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and	
sex, by state and territory, 2002–03 to 2003–04	

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Aust <sup>(d)</sup>
Indigenous								
Males	42	33	14	33	122	51	6	180
Females	44	31	13	26	114	43	11	175
Persons	86	64	27	59	236	94	17	355
Non-Indigenous								
Males	2,747	1,385	1,444	67	5,643	4,424	3,631	14,121
Females	1,532	838	833	11	3,214	2,524	2,112	8,128
Persons	4,279	2,223	2,277	78	8,857	6,948	5,743	22,249
Subtotal	4,365	2,287	2,304	137	9,093	7,042	5,760	22,604
Not stated	592	0	48	0	640	49	2	868
Total	4,957	2,287	2,352	137	9,733	7,091	5,762	23,472
Proportion not stated (%)	11.9	0.0	2.0	0.0	6.6	0.7	0.0	3.7

(a) ICD-10-AM codes C33-C34.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for rheumatic heart disease in the Australian Capital Territory and Tasmania, these states and territories were not included in the table but were included in the Australian total. Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, in Australia, 23,472 hospitalisations were recorded for lung cancer among people aged less than 75 years. Of these, 355 hospitalisations (1.5%) were of Indigenous people. However, it is likely that this disease is under-diagnosed in people living in remote areas.
- Males made up 61% of the Indigenous hospitalisations from lung cancer, compared with 63% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 9,733 hospitalisations due to lung cancer, of which 2.4% were of Indigenous people. For 6.6% of hospitalisations in these states and territories, Indigenous status was not stated.

Table 43.6: Age-standardised hospital separation rates and standardised hospital separation ratios for lung cancer<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Aust <sup>(d)</sup>
				Rate per 1,0	00			
Indigenous males	1.0	1.5	1.6	1.8	1.3	1.0	0.6	1.1
Non-Indigenous males	0.8	0.8	0.9	0.6	0.8	0.7	0.8	0.8
Indigenous females	0.9	1.1	1.2	1.1	1.7	0.8	0.9	0.9
Non-Indigenous females	0.4	0.5	0.5	0.1	0.8	0.4	0.5	0.4
Indigenous persons	1.0	1.3	1.4	1.4	1.5	0.9	0.8	1.0
Non-Indigenous persons	0.6	0.6	0.7	0.4	0.8	0.5	0.6	0.6
		9	Standardised	hospital se	paration ratio	(e)		
Males	1.3	1.9	2.1	2.3	1.7	1.3	0.8	1.4
Females	1.9	2.5	2.6	2.4	2.2	1.7	2.1	2.0
Persons	1.5	2.1	2.2	2.3	1.9	1.4	1.3	1.7

(a) ICD-10-AM codes C33–C34.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for lung cancer in the Australian Capital Territory and Tasmania, data for these states and territories were not included in the table separately but are included in the Australian total. Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

- 2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.
- 3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04, Indigenous people in Queensland, Western Australia, South Australia and the Northern Territory were hospitalised for lung cancer at around twice the rate for non-Indigenous people in these states and territories.
- Standardised hospital separation ratios were higher for females than for males in these four jurisdictions.

# Indicator 44. Hospitalisation ratios for diabetes

# Indicator:

- (a) Standardised hospital separation ratio for diabetes as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised hospital separation ratio for diabetes as an associated diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised hospital separation ratio for diabetes as a principal or an associated diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

# **Purpose**

Diabetes is a significant contributor to morbidity and mortality in the Aboriginal and Torres Strait Islander population. The indicator provides a broad measure of the occurrence of diabetes and access to hospital admitted patient services for Aboriginal and Torres Strait Islander people compared to non-Indigenous people.

Diabetes is often reported as an associated diagnosis, in particular in association with principal diagnoses of coronary heart disease, stroke and kidney disease. To assess the impact of diabetes on the Indigenous population, diabetes as both a principal and an associated diagnosis needs to be considered.

# Data

Data were provided for hospitalisations where diabetes was the principal diagnosis, and where diabetes was an associated diagnosis, and the total of these two categories. 'Associated diagnosis' refers to 'a condition or complaint either coexisting with the principal diagnosis or arising during the episode of care or attendance at a health care facility'.

## Diabetes as the principal diagnosis

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	785	503	243	564	2,095	476	91	39	5	2,706
Females	1,281	860	351	743	3,235	630	150	13	7	4,035
Persons	2,066	1,363	594	1,307	5,330	1,106	241	52	12	6,741
Non-Indigenous										
Males	6,859	3,829	4,670	808	16,166	11,195	11,624	708	240	40,169
Females	6,858	3,591	5,246	236	15,931	12,565	12,559	789	314	42,457
Persons	13,717	7,420	9,916	1,044	32,097	23,760	24,183	1,497	554	82,626
Subtotal	15,783	8,783	10,510	2,351	37,427	24,866	24,424	1,549	566	89,367
Not stated	1,003	1	220	2	1,226	96	4	235	53	2,205
Total	16,786	8,784	10,730	2,353	38,653	24,962	24,428	1,784	619	91,572
Proportion not stated (%)	6.0	_	2.1	0.1	3.2	0.4	_	13.2	8.6	2.4

Table 44.1: Hospitalisations for diabetes<sup>(a)</sup> as the principal diagnosis for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04.

(a) ICD-10-AM codes E10–E14, O24.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04 there were 91,572 hospitalisations among people aged 0–74 years with a principal diagnosis of diabetes. Of these 6,741 hospitalisations (7.4%) were for people identified as Indigenous and 2.4% of hospitalisations had a 'not stated' Indigenous status.
- Females made up 60% of the hospitalisations from diabetes among Indigenous people, compared to only 49% of hospitalisations among non-Indigenous people.
- In Queensland, Western Australia, South Australia and the Northern Territory, where the recording of Indigenous status in hospital records is most complete, 13.8% of hospitalisations for diabetes were among Indigenous people. For 3.2% of hospitalisations in these jurisdictions Indigenous status was not stated.

Table 44.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for
diabetes <sup>(a)</sup> as the principal diagnosis for persons aged 0–74 years, by Indigenous status and sex, by
state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate per	r 1,000				
Indigenous males	11.6	13.8	17.2	18.2	14.0	6.2	5.7	3.8	2.5	10.7
Non-Indigenous males	1.9	2.1	3.1	6.6	2.3	1.8	2.5	1.5	0.9	2.2
Indigenous females	13.3	17.2	17.9	16.9	14.0	6.3	7.0	1.0	2.5	11.7
Non-Indigenous females	2.0	2.1	3.7	2.1	2.2	2.0	2.7	1.8	1.1	2.3
Indigenous persons	12.6	15.7	17.4	17.2	14.1	6.2	6.4	2.3	2.5	11.2
Non-Indigenous persons	2.0	2.1	3.4	4.5	2.2	1.9	2.6	1.7	1.0	2.2
			ę	Standardis	ed hospita	al separation	n ratio <sup>(e)</sup>			
Males	5.0	6.0	7.5	7.9	6.1	2.7	2.5	1.7	1.1	4.6
Females	5.3	6.8	7.0	6.7	6.1	2.5	2.8	0.4	1.0	4.6
Persons	5.2	6.5	7.2	7.1	6.1	2.6	2.7	1.0	1.0	4.6

(a) ICD-10-AM codes E10–E14, O24.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

Source: AIHW National Hospital Morbidity Database.

• In 2002–03 to 2003–04, in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous persons were hospitalised for diabetes as a principal diagnosis at between 5 and 7 times the rate for non-Indigenous persons.

## Diabetes as an associated diagnosis

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	3,140	3,030	1,111	2,132	9,413	2,270	480	69	40	12,282
Females	4,445	4,118	1,549	3,475	13,587	2,767	536	88	37	17,027
Persons	7,585	7,148	2,660	5,607	23,000	5,037	1,016	157	77	29,309
Non-Indigenous										
Males	41,130	17,345	21,423	1,379	81,277	82,933	66,942	3,341	1,703	237,724
Females	31,922	14,624	18,429	748	65,723	63,055	54,092	2,729	1,331	188,239
Persons	73,052	31,969	39,852	2,127	147,000	145,988	121,034	6,070	3,034	425,963
Subtotal	80,637	39,117	42,512	7,734	170,000	151,025	122,050	6,227	3,111	455,272
Not stated	8,875	10	619	16	9,520	685	54	329	108	13,647
Total	89,512	39,127	43,131	7,750	179,520	151,710	122,104	6,556	3,219	468,919
Proportion not stated (%)	9.9	0.0	1.4	0.2	5.3	0.5	0.0	5.0	3.4	2.9

Table 44.3: Hospitalisations for diabetes<sup>(a)</sup> as an associated diagnosis for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes E10–E14, O24. Excludes separations where principal diagnosis was routine dialysis (Z49.1 and Z49.2).

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 there were 468,919 hospitalisations in Australia where diabetes was recorded as an associated diagnosis among people aged 0–74 years. Of these 29,309 hospitalisations (6.3%) were for people identified as Indigenous.
- Females made up 58% of the Indigenous hospitalisations from diabetes as an associated cause, compared to only 44% of the non-Indigenous hospitalisations.
- In the four states and territories with the most complete coverage of Indigenous hospitalisations, there were 23,000 hospitalisations of Indigenous people where diabetes was recorded as an associated diagnosis. For 5.3% of hospitalisations, Indigenous status was not stated.

Table 44.4: Age-standardised hospitalisation rates and standardised hospital separation ratios for
diabetes <sup>(a)</sup> as an associated diagnosis for persons aged 0–74 years, by Indigenous status and sex, by
state and territory, 2002-03 to 2003-04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate per	r 1,000				
Indigenous males	64.5	115.2	108.4	95.5	87.5	39.1	40.5	9.0	29.9	66.2
Non-Indigenous males	11.6	9.7	14.1	11.9	11.7	13.1	14.4	6.9	6.5	12.8
Indigenous females	71.4	122.9	116.6	120.6	118.8	40.6	37.7	10.5	22.8	74.3
Non-Indigenous females	9.4	8.5	12.2	8.2	11.8	10.1	11.6	5.8	4.9	10.3
Indigenous persons	69.0	120.0	113.5	110.1	103.0	40.2	39.2	9.9	26.3	71.1
Non-Indigenous persons	10.5	9.1	13.1	10.3	11.7	11.6	13.0	6.4	5.7	11.5
				Standardis	ed hospita	al separatio	on ratio <sup>(e)</sup>			
Males	4.8	8.5	8.0	7.1	6.5	2.9	3.0	0.7	2.2	4.8
Females	6.4	10.9	10.4	10.7	8.8	3.6	3.4	0.9	2.0	6.5
Persons	5.6	9.7	9.2	8.9	7.6	3.2	3.2	0.8	2.1	5.7

(a) ICD-10-AM codes E10–E14, O24. Excludes separations where principal diagnosis was routine dialysis (Z49.1 and Z49.2).

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04, in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for diabetes as an associated diagnosis at between 6 and 10 times the rate for non-Indigenous people.
- Indigenous females were hospitalised at up to 11 times the rate of non-Indigenous females in Western Australia and the Northern Territory.

## Diabetes as a principal or an associated diagnosis

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	3,617	3,299	1,272	2,477	10,665	2,622	530	102	41	13,970
Females	5,220	4,569	1,762	3,857	15,408	3,197	651	94	42	19,404
Persons	8,837	7,868	3,034	6,334	26,073	5,819	1,181	196	83	33,374
Non-Indigenous										
Males	46,171	20,264	24,873	2,097	93,405	91,579	74,879	3,761	1,877	267,226
Females	36,582	17,263	21,852	920	76,617	71,977	62,667	3,160	1,554	217,498
Persons	82,753	37,527	46,725	3,017	170,022	163,556	137,546	6,921	3,431	484,724
Subtotal	91,590	45,395	49,759	9,351	196,095	169,375	138,727	7,117	3,514	518,098
Not stated	9,542	11	785	18	10,356	766	57	444	155	15,174
Total	101,132	45,406	50,544	9,369	206,451	170,141	138,784	7,561	3,669	533,272
Proportion not stated (%)	9.4	_	1.6	0.2	5.0	0.5	_	5.9	4.2	2.8

Table 44.5: Hospitalisations for diabetes<sup>(a)</sup> as a principal or an associated diagnosis for persons aged 0-74 years, by Indigenous status and sex, by state and territory, 2002–03 and 2003–04

(a) ICD-10-AM codes E10–E14, O24. Excludes separations where principal diagnosis was routine dialysis (Z49.1 and Z49.2).

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04, there were 533,272 hospitalisations in Australia where diabetes was recorded as a principal or an associated diagnosis mong those aged 0–74 years. Of these, 33,374 hospitalisations (6.3%) were for people identified as Indigenous. For 2.8% of hospitalisations Indigenous status was not stated.
- Females made up 58% of the Indigenous hospitalisations with diabetes as a principal or associated diagnosis, compared to only 45% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 26,073 hospitalisations among Indigenous people where diabetes was recorded as a principal of associated diagnosis. This represented 12.6% of hospitalisations in these 4 states and territories. For 5.0% of hospitalisations, Indigenous status was not stated.

Table 44.6: Age-standardised hospitalisation rates and standardised hospital separation ratios for
diabetes <sup>(a)</sup> as a principal or associated cause for persons aged 0–74 years, by Indigenous status and sex,
by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate pe	r 1,000				
Indigenous males	70.6	119.4	118.3	105.6	94.3	43.3	42.7	12.7	28.9	71.8
Non-Indigenous males	13.0	11.4	16.4	18.0	13.4	14.5	16.2	7.8	7.1	14.4
Indigenous females	78.5	128.4	125.1	125.9	123.2	44.3	43.1	10.6	23.7	79.6
Non-Indigenous females	10.7	10.0	14.6	9.8	13.4	11.5	13.4	6.8	5.7	11.9
Indigenous persons	75.8	125.0	122.6	117.5	109.0	44.1	43.2	11.7	26.3	76.7
Non-Indigenous persons	11.9	10.7	15.5	14.5	13.4	13.0	14.8	7.3	6.4	13.1
				Standardis	ed hospita	al separatio	on ratio <sup>(e)</sup>			
Males	4.6	7.8	7.8	6.9	6.2	2.8	2.8	0.8	1.9	4.7
Females	6.1	9.9	9.7	9.7	8.1	3.4	3.3	0.8	1.8	6.1
Persons	5.4	8.9	8.7	8.3	7.2	3.1	3.1	0.8	1.9	5.4

(a) ICD-10-AM codes E10–E14, O24. Excludes separations where primary diagnosis was routine dialysis (Z49.1 and Z49.2).

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised with diabetes as a principal or an associated diagnosis at between 5 and 9 times the rate for non-Indigenous people.
- Indigenous females were hospitalised at around 10 times the rate of non-Indigenous females in Western Australia, South Australia and the Northern Territory. Indigenous males were hospitalised at round 8 times the rate of other males in Western Australia and South Australia.

# Indicator 45. Hospitalisation ratios for tympanoplasty associated with otitis media

**Indicator:** The standardised hospital separation ratios for tympanoplasty for otitis media as a procedure in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–14 years.

# Purpose

Tympanoplasty is a surgical procedure to repair the tympany, or eardrum, perforated as a result of chronic otitis media (infections of the middle ear). The procedure restores the hearing of children affected by a perforated eardrum. The indicator therefore provides a measure of the occurrence of chronic ear infection and perforations of the eardrum, as well as access to hospital treatment, in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population.

# Data

While the indicator specifies separations for tympanoplasty for otitis media, the codes specified were for tympanoplasty and otitis media.

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Aust <sup>(d)</sup>
Indigenous							
Males	30	94	7	43	174	15	194
Females	25	109	5	44	183	17	204
Persons	55	203	12	87	357	32	398
Non-Indigenous							
Males	155	216	124	5	500	315	1,032
Females	123	137	119	2	381	244	787
Persons	278	353	243	7	881	559	1,819
Subtotal	333	556	255	94	1,238	591	2,217
Not stated	107	0	3	0	110	2	127
Total	440	556	258	94	1,348	593	2,344
Proportion not stated (%)	24.3	0.0	1.2	0.0	8.2	0.3	5.4

Table 45.1: Hospitalisations for tympanoplasty and otitis media<sup>(a)</sup> for children aged 0–14 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

(a) ICD-10-AM codes H65, H66, H72, [313] 41635–01, 41527–00, 41530–00, 41533–01, [315] 41542–00, 41638–01, [316] 90114–00, [325] 41551–00, 41560–00, 41560–01, 41563–00, 41563–01.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for tympanoplasty in Victoria, the Australian Capital Territory and Tasmania, data for these states and territories were not included separately in the table but are included in the Australian total. Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 2,344 hospitalisations in Australia of children aged 0–14 years with otitis media and tympanoplasty. Of these hospitalisations, 398 or 17.0% were identified as being Indigenous children and for 5.4% of hospitalisations Indigenous status was not stated.
- Males made up 49% of the Indigenous hospitalisations for tympanoplasty, compared to 57% of the non-Indigenous hospitalisations.
- In the four states and territories with the most complete coverage of Indigenous hospitalisations, there were 357 hospitalisations among Indigenous children aged 0–14 years, which represented 26% of hospitalisations for tympanoplasty in these jurisdictions.

Table 45.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for tympanoplasty and otitis media<sup>(a)</sup>, for children aged 0–14 years, by Indigenous status and sex, by state and territory, 2002–03 and 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Aust <sup>(d)</sup>
			Rate	per 1,000			
Indigenous males	0.1	0.8	0.2	0.4	0.3	0.1	0.2
Non-Indigenous males	0.0	0.1	0.1	0.0	0.1	0.1	0.1
Indigenous females	0.1	0.9	0.1	0.5	0.5	0.1	0.2
Non-Indigenous females	0.0	0.1	0.1	0.0	0.1	0.0	0.0
Indigenous person	0.4	0.0	0.4	0.5	0.4	0.1	0.0
Non-Indigenous person	0.1 0.0	0.9 0.1	0.1 0.1	0.5 0.0	0.4 0.1	0.1 0.0	0.2 0.1
		Sta	ndardised hos	pital separatio	on ratio <sup>(e)</sup>		
Males	1.8	11.5	2.3	6.6	5.1	0.9	3.3
Females	1.9	17.0	2.0	8.7	6.7	1.2	4.4
Persons	1.9	13.9	2.1	7.5	5.8	1.0	3.8

(a) ICD-10-AM codes H65, H66, H72, [313] 41635–01, 41527–00, 41530–00, 41533–01, [315] 41542–00, 41638–01, [316] 90114–00, [325] 41551–00, 41560–00, 41560–00, 41563–00, 41563–01.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Due to low numbers for tympanoplasty in Victoria, the Australian Capital Territory and Tasmania, data for these states and territories were not included in the table separately but are included in the Australian total. Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence

Source: AIHW National Hospital Morbidity Database.

• In 2002–03 to 2003–04 in Western Australia and the Northern Territory, Indigenous children were hospitalised for tympanoplasty and otitis media at 14 and 8 times the rate for non-Indigenous children respectively. This indicates a much higher rate of chronic ear infections and perforations of the eardrum among Indigenous children.

# Indicator 46. Hospitalisation ratios for mental health conditions

# Indicator:

- (a) Standardised hospital separation ratio for depressive disorders as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised hospital separation ratio for anxiety disorders as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised hospital separation ratio for substance use disorders as the principal diagnosis in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

# Purpose

There are limited data available on the mental health of Aboriginal and Torres Strait Islander people compared to the non-Indigenous population. A number of studies have shown an association between poor socio-economic status and living conditions and mental health problems (Turrell et al. 1999). This indicator only picks up a proportion of the mental health conditions that require hospitalisation. The indicator reflects access to hospital admitted patient services for mental health conditions for Aboriginal and Torres Strait Islander people compared to the non-Indigenous population.

# Data

Data were provided for three major mental health conditions – depressive disorders, anxiety disorders and substance use disorders. The technical specifications only included selected codes for these conditions, while the data provided include a broader range of codes for the different mental health conditions. For example, the codes specified for substance use disorders did not include codes for use of alcohol or volatile substances, but data are provided for these. Data for psychotic disorders, as included in the technical specifications, were not provided due to small numbers of hospitalisations.

## **Depressive disorders**

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	166	151	100	40	457	299	49	n.p.	n.p.	811
Females	334	345	274	57	1,010	572	115	n.p.	n.p.	1,797
Persons	500	496	374	97	1,467	871	164	40	13	2,608
Non-Indigenous										
Males	8,857	4,414	2,794	135	16,200	12,095	12,990	551	170	42,634
Females	17,154	9,172	5,416	96	31,838	19,894	36,348	978	247	91,329
Persons	26,011	13,586	8,210	231	48,038	31,989	49,338	1,529	417	133,963
Subtotal	26,511	14,082	8,584	328	49,505	32,860	49,502	1,569	430	136,571
Not stated	1,256	1	162	2	1,421	262	3	90	21	2,144
Total	27,767	14,083	8,746	330	50,926	33,122	49,505	1,659	451	138,715
Proportion not stated (%)	4.5	_	1.9	0.6	2.8	0.8	_	5.4	4.7	1.5

# Table 46.1: Hospitalisations for depressive disorders<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 and 2003–04

n.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes F32-F33.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 there were 138,715 hospitalisations in Australia among people aged 0–74 years for which depressive disorders were the principal diagnosis. Of these, 2,608 hospitalisations (1.9%) were of Indigenous people.
- Females made up 69% of the Indigenous hospitalisations for depressive disorders and 68% of the non-Indigenous hospitalisations.
- In Queensland, Western Australia, South Australia and the Northern Territory, where the recording of Indigenous status in hospital records is considered most complete, there were 50,926 hospitalisations due to depressive disorders, 2.9% of which were of Indigenous people. For 2.8% of hospitalisations, Indigenous status was not stated.

Table 46.2: Age-standardised hospitalisation rates and standardised hospital separation ratios for depressive disorders<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate per	<sup>.</sup> 1,000				
Indigenous males	1.9	3.2	5.4	1.0	2.4	3.1	2.4	n.p.	n.p.	2.5
Non-Indigenous males	2.5	2.4	1.9	0.9	2.3	1.9	2.8	1.3	0.6	2.3
Indigenous females	3.4	6.6	13.4	1.3	2.2	5.5	5.2	n.p.	n.p.	5.0
Non-Indigenous females	5.0	5.2	3.8	0.8	2.2	3.3	7.8	2.2	0.8	5.0
Indigenous persons	2.7	5.0	9.5	1.1	2.3	4.3	3.8	1.5	2.2	3.8
Non-Indigenous persons	3.7	3.8	2.9	0.8	2.2	2.6	5.3	1.8	0.7	3.7
			S	tandardise	ed hospita	al separatio	n ratio <sup>(e)</sup>			
Males	0.8	1.4	2.3	0.4	1.0	1.4	1.0	n.p.	n.p.	1.1
Females	0.7	1.3	2.7	0.3	0.9	1.1	1.1	n.p.	n.p.	1.0
Persons	0.7	1.4	2.6	0.3	1.0	1.2	1.1	0.4	0.6	1.0

n.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes F32-F33.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

Source: AIHW National Hospital Morbidity Database.

• In 2002–03 to 2003–04 in South Australia, Indigenous people were hospitalised for depressive disorders at higher rates than non-Indigenous people. In Queensland, and Western Australia, Indigenous people were hospitalised at similar rates to non-Indigenous people and in the Northern Territory, non-Indigenous people were hospitalised at higher rates than Indigenous people.

# **Anxiety disorders**

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	212	146	88	34	480	257	50	23	n.p.	814
Females	284	369	223	49	925	386	69	34	n.p.	1,432
Persons	496	515	311	83	1,405	643	119	57	10	2,246
Non-Indigenous										
Males	9,462	3,609	2,437	126	15,634	12,252	8,495	543	111	37,763
Females	9,679	6,668	3,069	81	19,497	10,083	13,065	661	164	45,014
Persons	19,141	10,277	5,506	207	35,131	22,335	21,560	1,204	275	82,777
Subtotal	19,637	10,792	5,817	290	36,536	22,978	21,679	1,261	285	85,023
Not stated	719	1	162	2	884	361	2	85	4	1,740
Total	20,356	10,793	5,979	292	37,420	23,339	21,681	1,346	289	86,763
Proportion not stated (%)	3.5	_	2.7	0.7	2.4	1.5	_	6.3	1.4	2.0

Table 46.3: Hospitalisations for anxiety disorders<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

n.p. Not published where numbers were less than 5 and calculable.

(a) ICD-10-AM codes F40-F43.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the two years 2002–03 to 2003–04 there were 86,763 hospitalisations in Australia where anxiety disorders were recorded as the principal diagnosis among people aged 0–74 years. Of these, 2,246 hospitalisations (2.6%) were of Indigenous people.
- Females made up 64% of hospitalisations among Indigenous people for anxiety disorders, compared with only 54% of hospitalisations among non-Indigenous people.
- In Queensland, Western Australia, South Australia and the Northern Territory, there were 37,420 hospitalisations due to depressive disorders. Of these, 3.7% were of Indigenous people and for 2.4%, Indigenous status was not stated.

Table 46.4: Age-standardised hospitalisation rates and standardised hospital separation ratios for anxiety disorders<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04.

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate pe	r 1,000				
Indigenous males	2.3	3.0	4.6	0.8	2.4	2.6	2.3	1.8	n.p.	2.4
Non-Indigenous males	2.7	2.0	1.7	0.8	2.2	2.0	1.8	1.2	0.4	2.0
Indigenous females	2.5	6.2	9.6	0.9	3.1	3.3	2.7	2.3	n.p.	3.7
Non-Indigenous females	2.8	3.8	2.2	0.6	2.4	1.7	2.8	1.6	0.5	2.5
Indigenous persons	2.4	4.7	7.3	0.9	2.8	3.0	2.5	2.0	1.5	3.1
Non-Indigenous persons	2.7	2.9	2.0	0.7	2.3	1.8	2.3	1.4	0.4	2.3
				Standardi	ised hospita	al separatio	n ratio <sup>(e)</sup>			
Males	1.1	1.5	2.2	0.4	1.2	1.3	1.1	0.9	n.p.	1.1
Females	1.0	2.5	3.9	0.4	1.5	1.3	1.1	0.9	n.p.	1.4
Persons	1.1	2.1	3.2	0.4	1.4	1.3	1.1	0.9	0.7	1.3

n.p. Not published where numbers were less than 5.

(a) ICD-10-AM codes F40-F43

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Western Australia and South Australia, Indigenous people were hospitalised for anxiety disorders at around 2–3 times the rate of non-Indigenous people.
- In Queensland, hospitalisation rates were similar for Indigenous and non-Indigenous people.

## Substance use disorders

	Qld	WA	SA	NT <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
Indigenous										
Males	916	907	318	166	2,307	1,664	219	34	11	4,369
Females	474	564	194	82	1,314	836	96	20	8	2,319
Persons	1,390	1,471	512	248	3,621	2,500	315	54	19	6,688
Non-Indigenous										
Males	8,892	4,040	2,702	159	15,793	20,464	10,493	723	132	48,263
Females	5,547	2,347	1,350	65	9,309	12,135	8,035	507	142	30,336
Persons	14,439	6,387	4,052	224	25,102	32,599	18,528	1,230	274	78,599
Subtotal	15,829	7,858	4,564	472	28,723	35,099	18,843	1,284	293	85,287
Not stated	2,427	1	174	5	2,607	393	12	114	3	3,318
Total	18,256	7,859	4,738	477	31,330	35,492	18,855	1,398	296	88,605
Proportion not stated (%)	13.3	_	3.7	1.0	8.3	1.1	0.1	8.2	1.0	3.7

Table 46.5: Hospitalisations for substance use disorders<sup>(a)</sup> for persons aged 0–74 years, by Indigenous status, sex and state and territory, 2002–03 to 2003–04.

(a) ICD-10-AM codes F10–F19.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Data are for state and territory of usual residence.

- In the period 2002–03 to 2003–04, there were 88,605 hospitalisations in Australia due to substance use disorders among people aged less than 75 years. Of these, 6,688 hospitalisations (7.5%) were of Indigenous people and for 3.7% of hospitalisations, Indigenous status was not stated.
- Females made up 35% of the Indigenous hospitalisations from substance use disorders, compared with 39% of the non-Indigenous hospitalisations.
- In the four states and territories with the most complete coverage of Indigenous hospitalisations, there were 3,621 hospitalisations among Indigenous people where substance use disorders was recorded as the principal diagnosis. This represented 11.6% of hospitalisations for substance use disorders in these jurisdictions.
- In Queensland, Western Australia, South Australia and the Northern Territory, the majority of Indigenous hospitalisations for substance use disorders were for, or related to, alcohol use (75%) followed by cannabis use (8%) and multiple drug use (7%).

Table 46.6: Age-standardised hospitalisation rates and standardised hospital separation ratios for substance use disorders for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2002–03 to 2003–04

	Qld	WA	SA	<b>NT</b> <sup>(b)</sup>	Total <sup>(c)</sup>	NSW	Vic	Tas <sup>(b)</sup>	ACT <sup>(b)</sup>	Aust <sup>(d)</sup>
					Rate per	1,000				
Indigenous males	9.3	16.9	15.1	3.4	10.4	15.5	9.4	2.5	3.3	11.9
Non-Indigenous males	2.5	2.2	1.9	1.0	2.3	3.3	2.3	1.7	0.4	2.6
Indigenous females	4.4	9.9	8.7	1.6	8.6	7.4	4.0	1.4	2.3	5.9
Non-Indigenous females	1.6	1.3	1.0	0.5	2.2	2.0	1.7	1.2	0.4	1.7
Indigenous persons	6.7	13.3	11.8	2.5	9.6	11.4	6.7	1.9	2.8	8.8
Non-Indigenous persons	2.1	1.8	1.4	0.8	2.2	2.7	2.0	1.4	0.4	2.1
			S	Standardis	ed hospita	I separation	ratio <sup>(e)</sup>			
Males	3.3	5.9	5.3	1.2	3.6	5.4	3.3	0.9	1.1	4.1
Females	2.4	5.5	4.8	0.9	3.0	4.1	2.2	0.8	1.3	3.2
Persons	2.9	5.7	5.1	1.1	3.4	4.9	2.8	0.8	1.2	3.7

(a) ICD-10-AM codes F10–F19.

(b) Excludes data for private hospitals.

(c) Queensland, Western Australia, South Australia and Northern Territory combined.

(d) Does not include 'Other Territories'.

(e) Observed number of hospitalisations for Indigenous people divided by the expected number of hospitalisations based on the age-specific rates for the total Australian population.

#### Notes

1. Shading indicates that the Indigenous identification for hospital data in these jurisdictions is in need of improvement. This is based on an analysis of Indigenous identification in hospital records by the AIHW (AIHW 2005c).

2. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

3. Data are for state and territory of usual residence.

- In 2002–03 to 2003–04 in Queensland, Western Australia and South Australia, Indigenous people were hospitalised for substance use disorders at between 3 and 6 times the rate for non-Indigenous people.
- In the Northern Territory, Indigenous people were hospitalised for substance use disorders at similar rates of non-Indigenous people.