

# **National summary of the 2001 and 2002 jurisdictional reports against the Aboriginal and Torres Strait Islander health performance indicators**

Australian Institute of Health and Welfare  
Canberra

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# Foreword

This report is the first report against the refined set of indicators endorsed by the Australian Health Ministers' Advisory Council (AHMAC) in 2000, and the fourth time that all jurisdictions have reported against a set of national performance indicators for Aboriginal and Torres Strait Islander health. AHMAC produces these reports in order to inform policy makers and senior government officials on aspects of, and trends in, Aboriginal and Torres Strait Islander health. The Australian Institute of Health and Welfare compiled this report for the Statistical Information Management Group on behalf of AHMAC.

The report demonstrates the need for ongoing, significant and concerted action on factors that contribute to the general health and wellbeing of Aboriginal and Torres Strait Islander peoples. It also shows that, while data quality has improved, further work remains to be done in this area before reports of this kind can include information on time trends and comparisons between jurisdictions.

AHMAC, through the Standing Committee on Aboriginal and Torres Strait Islander Health (SCATSIH) and the National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data, is actively supporting data development work to improve the quality of key health performance indicators. Work is also underway to improve the way we monitor health system performance for Aboriginal and Torres Strait Islander Australians. SCATSIH is advising AHMAC on the policy context and implications of this report.

I am pleased to present this report on behalf of SCATSIH, and would like to take this opportunity to commend the many people involved in preparing the information provided.

Jim Birch  
Chair  
Standing Committee on Aboriginal and Torres Strait Islander Health

June 2004

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# Executive summary

This is the first national summary report on the refined set of 56 health performance indicators for Aboriginal and Torres Strait Islander peoples. The indicators are designed to provide an assessment of whether the health of Indigenous people is improving and to highlight problem areas that Australia's health system should address as high priorities.

This report, like many previous reports, draws attention to the relatively poor quality of the data on the health of Aboriginal and Torres Strait Islander peoples. This means that comprehensive comparisons between states and territories are not yet possible. In the report, the indicators are presented according to different domains of the Aboriginal and Torres Strait Islander Health Performance Framework; this executive summary is intended to highlight particular areas that warrant further attention.

## Areas of concern

Life expectancy at birth is significantly lower for Aboriginal and Torres Strait Islander people than all Australians (Indicator 5). Also, the probability of a 20-year-old person dying before his or her 55th birthday is 3 to 5 times higher for Indigenous Australians than for all Australians (Indicator 49). The proportion of births to Indigenous mothers that are low birthweight – a risk factor for ill health and mortality – is twice the rate observed in the non-Indigenous population (Indicator 28).

## Chronic diseases

The major causes of early adult deaths in the Aboriginal and Torres Strait Islander population are chronic diseases such as diabetes and circulatory diseases (including rheumatic heart disease) and respiratory system diseases. Death rates from diabetes were between 9 and 16 times higher than the rates in the non-Indigenous population (Indicator 55). Death rates from circulatory system diseases in the Indigenous population were 4 to 5 times higher than in the non-Indigenous population (Indicator 52). Death rates from respiratory diseases were between 5 and 8 times higher (Indicator 54).

A large proportion of Indigenous people participate in behaviours that place their health at risk in the short and long term. Approximately 48% of Indigenous adults are overweight or obese (Indicator 31), 53% are current smokers (Indicator 29), and 46% consumed alcohol. Of those who consumed alcohol, 28% consumed it at risky or high-risk levels (Indicator 30).

## Injury and assaults

Across the states and territories, Indigenous people were hospitalised for injury at between 3 and 4 times the rates of non-Indigenous people, and died from injury at between 2 and 4 times the rates of non-Indigenous people (Indicators 42 and 53). Prominent among injuries leading to hospitalisation or death was assault – hospitalisations for Indigenous people were between 14 and 24 times the rate for non-Indigenous people, while death rates for Indigenous people were between 5 and 13 times the rate for non-Indigenous people (Indicators 42 and 53). For injury resulting from assault, just over half of Indigenous

hospitalisations were female, compared with only one-quarter of non-Indigenous hospitalisations.

## **Sexually transmitted diseases**

Another area of concern is sexually transmissible diseases (Indicator 39). Rates of infection with chlamydia, gonococcus and syphilis in the Indigenous population are high. Sexually transmitted diseases are avoidable, and untreated sexually transmitted diseases can lead to serious complications and the continued spread of the diseases.

## **Mental health, self-harm and substance use**

Mortality from self-harm is 3 to 4 times higher in the Indigenous population than in the non-Indigenous population, and morbidity is around 3 times higher (Indicators 53 and 42). The rate of hospitalisation for substance use disorders was between 6 and 10 times higher in the Indigenous population. Hospitalisation rates for depressive and anxiety disorders were between 1 and 4 times the rates in the non-Indigenous population (Indicator 46).

## **Health system capacity**

A number of the indicators provide measures of the current capacity of the Australian health system to provide health promotion and primary health care for Indigenous Australians (Indicators 2, 4 and 20).

In relation to expenditure on health promotion programs for Aboriginal and Torres Strait Islander people, there was considerable variation across states and territories. Expenditure in 2001–02 ranged from nil in Tasmania to \$4.8 million in the Northern Territory. In relation to overall expenditure on health care, the ratio of expenditure on Indigenous to non-Indigenous Australians under the Medical Benefits Scheme and the Pharmaceutical Benefits Scheme was just 0.39 (Indicator 2). These programs are a principal route for the delivery of primary health care to both Indigenous and non-Indigenous Australians. The ratio of Indigenous to non-Indigenous expenditure for all programs funded and administered by the Australian Government was 0.82.

With regard to workforce capacity of Indigenous people, in 2001, only 0.3% of doctors and 0.5% of nurses were Indigenous (Indicator 20), although the numbers are increasing. Another way to improve access to services is to reduce the cultural barriers that confront Indigenous people seeking treatment in mainstream health services. A considerable amount of variation exists between states and territories in the cultural awareness training that is provided to professional staff (Indicator 24).

## **Data limitations**

A common problem highlighted in the report is the poor quality of information, especially in the identification of Indigenous people, with Indigenous status being not recorded or wrongly recorded in many datasets. The identification of Indigenous people in birth and death registrations, primary health care service records (including general practitioners' records) and hospital records remains a significant data quality problem (Indicator 1). While progress is being made, continued effort is needed in states and territories to improve and maintain Indigenous identification in the different data collections.

# Introduction

This is the first report against the refined set of health performance indicators endorsed by the Australian Health Ministers' Advisory Council (AHMAC) in 2000. This report for 2001 and 2002 covers activity in the 2001 and 2002 calendar years and the 2000–01 and 2001–02 financial years.

## Background

In 1996 AHMAC directed state and federal health departments to develop a set of national performance indicators for Aboriginal and Torres Strait Islander health. In 1997 the Australian Health Ministers' Conference endorsed an interim set of 58 national performance indicators to be reported against annually by all states and territories. Annual reports against these interim indicators were prepared for 1998, 1999 and 2000 (published in 2003).

A number of problems existed with the interim set of performance indicators:

- some indicator definitions were difficult to interpret;
- the data provided by states and territories was often of poor quality and for different time periods;
- data was not provided at all by some states and territories for a number of important indicators;
- no indicators addressed measures of social and emotional wellbeing;
- no conceptual framework accompanied the indicator set.

In 1998 AHMAC requested that the national performance indicators be refined. The Co-operative Research Centre for Aboriginal and Tropical Health was engaged by the Australian Institute of Health and Welfare (AIHW) to conduct a technical refinement of the indicators. In October 2000 AHMAC endorsed the refined set of 56 indicators, which included a conceptual framework for the indicators, indicator definitions, potential data sources and reporting responsibilities.

This set of 56 national performance indicators for Aboriginal and Torres Strait Islander health is a heterogeneous set which describes population health status, the incidence and prevalence of selected conditions, death rates, social and economic wellbeing, and factors pertaining to the organisation and delivery of health services. They include measures of health service delivery performance, broader government service accountability, state of health of the population, health outcomes and key health determinants including risk factors.

Rather than relying on states and territories to provide data for all indicators, the responsibility for reporting on the indicators is shared among the states and territories and a number of agencies. National data is used to report on the indicators whenever possible.

## The conceptual framework

The refined set of 56 indicators is mapped within the conceptual framework that groups them according to three main domains:

- Government inputs.
- Determinants of health
  - Social equity
  - Access to services
  - Risk markers.
- Outcomes for people.

The conceptual framework used for the national Aboriginal and Torres Strait Islander health indicators is a composite of several existing frameworks and contains the same basic ideas as the National Health Performance Framework. Table 1 shows the links between these two frameworks.

**Table 1: Links between the Aboriginal and Torres Strait Islander Health Performance Indicators Framework and the National Health Performance Framework**

<b>National Aboriginal and Torres Strait Islander Health Performance Indicators Framework</b>		
<b>Domains</b>	<b>Indicator numbers and description</b>	<b>National Health Performance Framework domains</b>
Government inputs	<i>4 indicators (numbered 1–4)</i> Health system inputs such as government expenditure, data development efforts	Health system performance (Tier 3)
Determinants of health	<i>10 indicators (numbered 5–14)</i> Life expectancy and the contribution of non-health factors such as education, employment, income poverty, housing Capacity building and governance	Determinants of health (Tier 2)
Social equity	<i>10 indicators (numbered 5–14)</i> Life expectancy and the contribution of non-health factors such as education, employment, income poverty, housing Capacity building and governance	Determinants of health (Tier 2)
Access to services	<i>10 indicators (numbered 15–24)</i> Access to community health care and hospitals, workforce availability and training	Determinants of health (Tier 2)
Risk markers	<i>9 indicators (numbered 25–35)</i> Low birthweight, immunisation rates, Pap smear screening, smoking prevalence, alcohol consumption, injury	Determinants of health (Tier 2)
Outcomes for people	<i>21 indicators (numbered 36–56)</i> Notification rates for selected diseases, hospitalisations and death rates	Health outcomes (Tier 1)

## Quality and limitations of the indicators

A number of limitations remain in the health performance indicators in the current report. To achieve comparable and high-quality reporting of indicators, further work is needed to refine and clarify the indicator’s objectives and technical specifications.

In November 2003, the AIHW held a workshop with representatives from the states and territories, the Australian Government’s Office for Aboriginal and Torres Strait Islander Health (OATSIH) and the Australian Bureau of Statistics (ABS). The indicators’ definitions,

interpretation, data availability and data quality were discussed, with a focus on indicators that had proved to be problematic. For some of these indicators – such as workforce availability, smoking prevalence, alcohol consumption, and overweight and obesity – it was agreed to use national data sources. For a number of other indicators, the workshop refined the definitions and reference periods for reporting.

Despite this work to refine and clarify indicators, some limitations in reporting remain. First, technical specifications for a number of indicators are quite restrictive and limit the ability to report according to the specification. For example, for a number of indicators (16, 17 and 18) which require the use of data from the Community Housing and Infrastructure Needs Survey (CHINS), the CHINS data specifications do not fully match the technical specifications of the indicator.

Second, definitions for some of the refined set of indicators were problematic. For example, the definition of a primary health care centre or an acute care hospital in the specifications is extremely restrictive, and few actual centres and hospitals meet them. In addition, conceptual difficulties were experienced when reporting some indicators. The concept of a catchment population for a health service is an example that proved problematic in application (Indicator 22).

Third, some indicators have little relevance for states and territories with a small population of Indigenous people. Therefore the capture of comparable data across states and territories might not be achievable.

The collection and reporting of measures used as indicators vary between the states and territories. While all states and territories are committed to reporting against the indicators, it is recognised that establishing comparable information systems will take a number of years.

Various data issues that were discussed at the AIHW workshop are presented in boxes throughout this report.

## **Structure of the report**

The report is structured according to the National Aboriginal and Torres Strait Islander Health Performance Indicators Framework and its main domains or sub-domains. Section 1 covers indicators 1–4, which form the first domain, Government inputs. Section 2 covers indicators 5–14, which form the sub-domain Determinants of health – social equity. Section 3 covers indicators 15–24, which form the sub-domain Determinants of health – access to services. Section 4 covers indicators 25–35, which forms the sub-domain Determinants of health – risk markers. Section 5 reports indicators 36–56 under the domain Outcomes for people. An executive summary is provided at the front of the report.

The layout for each indicator includes a definition according to the technical specifications, a statement of purpose that explains the importance of the indicator and what it is measuring or describing, and a data section. The data section includes information on the data sources and whether the data presented differ from those specified in the technical specifications. Recommendations from the November 2003 workshop for improvements to these indicators are outlined in a box under the relevant indicator.

The report concludes with an appendix that contains a summary table of the quantitative indicators and a mapping from the refined set of indicators to the interim set of indicators reported in the three previous reports (NHIMG 2000, 2001, 2003).

# Government inputs

## **Indicator 1**

Efforts to improve identification of Aboriginal and Torres Strait Islander people in data collections.

## **Indicator 2**

Government expenditure on health services for Aboriginal and Torres Strait Islander people.

## **Indicator 4**

Government expenditure on, and description of, selected health promotion programs.

The following indicator currently cannot be reported on:

## **Indicator 3**

Government expenditure on health services for Aboriginal and Torres Strait Islander people living in small homeland communities and outstations.

## Introduction

The domain 'Government inputs' has four indicators – one on efforts to improve Indigenous identification in data collection and three on government expenditure on health services for Aboriginal and Torres Strait Islander people. These provide a broad indication of state and territory government inputs in relation to expenditure and data development in the Indigenous health area.

No data were provided for Indicator 3 – government expenditure on health services for Aboriginal and Torres Strait Islander people in small homeland communities and outstations. This was because states and territories do not record data in a way that isolates expenditure on small communities from other health expenditure. Nor is it possible to isolate expenditures incurred through some mainstream programs funded by the Australian Government, such as Medicare and the Pharmaceutical Benefits Scheme (PBS).

The states and territories provided the data for two of the indicators: Indicator 1 on the efforts to improve Indigenous identification and Indicator 4 on government expenditure on health promotion programs. For Indicator 1, only descriptive information is provided, but Indicator 4 includes both quantitative and descriptive data. There were problems associated with the data for Indicator 4 as it was difficult to apply a consistent definition of health promotion programs across states and territories and the Australian Government. It is recommended that the data for this indicator is aligned with data collected through the National Public Health Expenditure project as this would facilitate consistent reporting.

The data for Indicator 2 on government expenditure on health services came from a previous AIHW publication on expenditure on health services for Aboriginal and Torres Strait Islander people (AIHW 2001). There are some issues with the data for this indicator including the under identification of Indigenous people in health databases and the distinction between government funding and expenditure.

# Indicator 1. Efforts to improve identification of Aboriginal and Torres Strait Islander people in data collections

**Indicator:** A description of actions undertaken by the states and territories to improve the identification of Aboriginal and Torres Strait Islander people in the datasets used for reporting on the indicators.

## Purpose

The indicator provides information about the adequacy of recording Aboriginal and Torres Strait Islander health status in health-related datasets, identifies datasets that are considered reliable sources of information about Indigenous health and describes action taken to improve the identification of Indigenous peoples in health-related data.

## Data

The technical specifications for this indicator request that information be provided on progress towards Indigenous identification in eight administrative data sources – birth registrations, death registrations, hospital separation statistics, Pap smear registries (which is included under Indicator 25), Equal Employment Opportunity (EEO) and other workplace surveys, notifiable disease registries and pathology forms. Information for this indicator was provided by the states and territories, though information on the role of the national advisory group is provided below.

## National efforts

The National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data (NAGATSIHID) plays a very important role in improving the quality of Indigenous data. The group was established in October 2000 to provide broad strategic advice to the National Health Information Management Group (NHIMG) on the quality and availability of data and information on Aboriginal and Torres Strait Islander health and health service delivery. The advisory group was established to draw together the range of existing activities already underway into a coordinated and strategic process.

The advisory group is responsible for:

- advising the Aboriginal and Torres Strait Islander Health and Welfare Information Unit on priorities in its work plan;
- providing advice to NHIMG and the Standing Committee on Aboriginal and Torres Strait Islander Health (SCATSIH) on the national performance Indicators and targets for Aboriginal and Torres Strait Islander Health jurisdictional reporting and associated activities; and
- continuing the implementation of the National Indigenous Health Information Plan. This includes monitoring and improving Indigenous identification in a range of administrative data sets that include information on Indigenous health and service use.

In 2003, new governance arrangements for health information were set up and NAGATSIHID was re-established as a direct committee of the National Health Information Group. NHIMG became the Statistical Information Management Committee (SIMC).



The NAGATSIHID work program encompasses a broader range of datasets than those specified for this indicator, including population enumeration, national community mental health care, general practice, and alcohol and other drug treatment services. The datasets reported below are those specified by Indicator 1.

## **Birth registrations**

Birth registrations, from the Registrar of Births, Deaths and Marriages in each state and territory, provide information about both parents' Indigenous status. It is a legal requirement that all births are registered, but this does not always occur and in some cases the registration is incomplete, late or missing. Indigenous status may also be incorrectly recorded. Indigenous status is therefore underreported in birth registrations. The data on Indigenous births from all states and territories combined, however, are considered to be of sufficient coverage for statistical reporting.

The ABS is responsible for coordinating efforts to improve the national data on Births, Deaths and Marriages and continues to work with state and territory registrars to improve the quality of the data in all states and territories. There is also an interdepartmental working party with representatives from all states and territories and the Australian Government, whose purpose is to improve Indigenous identification in birth and death registrations.

## **New South Wales**

Indigenous births in New South Wales are likely to be underreported, according to the New South Wales Registrar. The report 'Mothers and Babies 2002' examines the potential underreporting of Indigenous births through an analysis of the Midwives Data Collection, the Neonatal Intensive Care Units Data Collection and the Birth Defects Register (NSW Department of Health 2002). The report found that, in 2001, the total number of babies born to Indigenous mothers was estimated to be approximately one and a half times higher than the number recorded in the Midwives Data Collection. For the same year it was estimated that 51.8% of births to Aboriginal mothers in urban hospitals were correctly reported as Aboriginal and 81.9% of births to Aboriginal mothers in rural hospitals were correctly reported as Aboriginal.

## **Victoria**

There are five datasets recording Indigenous births in Victoria, which when combined provide the most complete picture of Indigenous births. Two datasets record the Indigenous status of both parents: the Registrar of Births, Deaths and Marriages and Maternal and Child Health Service. There are also 18 Koori Hospital Liaison Officers (KHLOs) employed in Victorian hospitals, 16 of whom are employed in hospitals with maternity services. KHLOs record all births to Indigenous mothers or fathers and report directly to the Department of Human Services. Despite its limitations, the KHLO database is used as a reference set because within it Indigenous identification is considered to be accurate.

In 2001-02 the Mercy Hospital for Women undertook an audit of its admission procedures in order to check the number of women who were correctly recorded as Indigenous. The sample included all patients identified as Indigenous and a random selection of those identified as non-Indigenous based on availability at time of interview. The audit revealed a number of issues with admissions procedures relating to Indigenous identification and patient details in medical records. As a result of the audit, the hospital has instituted procedures to improve the identification of Indigenous women and their babies.

Two projects conducted within the Koori Human Services Unit in 2000 and 2001 compared the data collected by KHLOs with that recorded by the Perinatal Data Collection using births data

for 1998 and 2000 for Indigenous mothers from hospitals with a KHLO. Both projects revealed that approximately 80% of all births were recorded in both datasets. It was not possible to determine how many of the other 20% of births were Indigenous.

## **Queensland**

A variety of promotional and data quality exercises have been undertaken by Queensland Health in conjunction with the Registrar-General's Office and in association with national efforts to improve identification of Indigenous people in birth registrations. One significant exercise involved the follow-up by staff from Queensland Health and the Registrar-General's Office of unregistered births in a small town with a high Indigenous population. This resulted in the registration of 60% of births that had previously not been registered.

## **Western Australia**

During 2000-01 the ABS and the Registrar of Births, Deaths and Marriages continued to work together to improve Indigenous identification in both birth and death registrations in Western Australia. One significant area of work over this period was consultation on questionnaire and form design. This was conducted as part of the Registry's preparations for moving to a new processing system.

## **Australian Capital Territory**

In response to the issues raised in the Australian Capital Territory's 2000 Indigenous Health Performance Indicator Report in May 2002, the Registrar-General's Office implemented a new computer system that addressed data integrity issues from the data input perspective. New birth and death registration forms and medical certificate cause of death forms have been designed to ensure provision of required data. All records are now verified before registration. The new forms have been provided to hospitals, doctors and funeral directors.

The Australian Capital Territory Maternal and Perinatal Data Collection (MPDC) has improved the identification of Aboriginal and Torres Strait Islander people by using the Australian Capital Territory Admitted Patient Care data collection to update records where Aboriginal status is 'not stated'. After the update, any entries that remained 'not stated' for Aboriginal status in the MPDC were checked against the hospital medical records. In the 2000 data before data cleaning, 9.5% were 'not stated' for Indigenous status in the Australian Capital Territory. Following data cleaning, only 0.1% remained 'not stated' for Aboriginal status.

The quality of Aboriginal and Torres Strait Islander data in the Australian Capital Territory MPDC was verified through a comparison between the ABS census projections and the number of Aboriginal women who had given birth in the Australian Capital Territory. It was found that during the 1994 to 2000 period (with the exception of 1996 when there were problems with data due to the changing of Aboriginal status codes) the number of Aboriginal women identified were within five of the ABS projected number.

## **Northern Territory**

Most datasets in the Northern Territory are considered to have reliable identification of Indigenous status. This has been demonstrated by both direct and indirect assessments of Indigenous identification.

Two data audit reports of Indigenous identification on birth and death registrations were undertaken by the ABS in 1999 and 2001. The audits showed a high rate of consistency in Indigenous status across all available sources.

## **Death registrations**

Like births, all deaths are required by law to be registered with the Registrar of Births, Deaths and Marriages. There is incomplete identification of Indigenous deaths in all states and territories; however, the data from Queensland, South Australia, Western Australia and the Northern Territory are currently considered to be of sufficient quality to enable statistics to be produced. For longer term analysis of Indigenous mortality, the data from South Australia, Western Australia and the Northern Territory are considered to be of sufficient quality for data analysis for the past 10 years.

The ABS continues to work with state and territory Registrars of Births, Deaths and Marriages to improve the quality of the data in all states and territories. This includes ongoing publicity campaigns, which explain to the funeral industry the importance of accurate Indigenous identification. The various funeral directors' associations and individual members are also provided with literature promoting the ABS's standard Indigenous question and best practice in recording Indigenous status.

## **New South Wales**

In January 2002, the Department of Commerce's, Office of Information Technology provided funding for the Birth and Death Information Transfer Project. This project will deliver on-line medical certificate cause of death and medical certificate cause of perinatal death forms for use in public hospitals, as well as electronic notification of births that occur in public hospitals. The Department of Health's Aboriginal Health Information Strategy Unit is managing this project in collaboration with the New South Wales Registrar of Births, Deaths and Marriages. Outcomes of this project will provide more timely and better quality cause of death information and birth information for events that occur in New South Wales public hospitals. More timely access to better quality birth and death data will help the Department of Health improve the quality of health services across the state. It is anticipated that this project will also improve the quality of Aboriginal and Torres Strait Islander origin information on birth and death registrations. Indigenous status data collected at hospital patient registration will be used to populate the birth and death information electronically transferred to the Registrar of Births, Deaths and Marriages.

## **Victoria**

In addition to the Registrar of Births, Deaths and Marriages, information on deaths of Indigenous people is reported by KHLOs to the Koori Human Services Unit. These deaths are reported on the basis of community knowledge and do not necessarily take place in hospitals. This information is then provided via the ABS to the Registrar for cross-checking.

## **Queensland**

To formally register a death in Queensland, three different forms must be completed. Joint investigation with the Queensland Registrar-General of Births, Deaths and Marriages shows that many of the deaths that are 'partially registered' are of Indigenous people. Queensland Health is currently working with the Registrar-General to investigate options to use the partial death registrations to report on deaths in the Indigenous population.

## **Western Australia**

The ABS audit of death information was undertaken to assess the degree of error or omission made by funeral directors in completing the Indigenous identifier. The ABS has continued to provide the Registry with promotional material, and has developed information and training sessions that can be conducted for both Registry staff and providers of information.

## **Australian Capital Territory**

See section on birth registrations.

## **Northern Territory**

See section on birth registrations. As noted for the births data, audits show a high level of consistency in relation to Indigenous identification in death registrations.

## **Hospital separation statistics**

The quality of the data on Indigenous status in hospital separation statistics has continued to improve due to the use of the *National Health Data Dictionary* definitions by all states and territories. However, further improvement is needed, with Indigenous data being considered of acceptable quality for only three states and territories in 2001–2002 – South Australia, Western Australia and the Northern Territory.

## **New South Wales**

In 2000–01, a pilot study to improve Aboriginal and Torres Strait Islander identification was conducted by the Department of Health. The study showed that the accuracy and completeness of the recording of Aboriginal and Torres Strait Islander status and patient registration details were affecting the consistency and quality of the data.

New South Wales has implemented a number of initiatives to improve the quality of the data. Departmental publications and circulars continue to be used to encourage a uniform approach to the identification of Indigenous status. The Department of Health has developed and implemented its Collecting Patient Registration Information Training Program. This program reviews strategies that may assist in the collection of complete and accurate patient registration information, particularly for those data items, such as Indigenous status, that patients or staff may consider to be sensitive information.

Indigenous identification in hospital separations will be closely monitored to assess the impact of the training, and feedback will be provided to each area health service.

## **Victoria**

The number of separations recorded as those of Aboriginal and Torres Strait Islander people has continued to increase each year, due both to natural increase and to the increased number of hospitals identifying Indigenous patients correctly. Victoria is currently undertaking an Aboriginal and Torres Strait Islander Hospital Services Accreditation Project that aims to improve patient identification and the provision of more culturally appropriate services.

In 2002 and 2003, several exercises were carried out using data from 2001 and 2002. Data collected through the Victorian Admitted Episodes Dataset (VAED) was matched with data collected by KHLOs and reported to the Koori Human Services Unit. The exercises found that the quality of identification in data collected through the VAED varied greatly, even between hospitals with liaison officers. Hospitals in which the liaison officer had access to medical records and participated actively in patient services identified more Indigenous patients. As a result of the data-matching exercises a more accurate picture of admissions of Indigenous people was developed. Results will be followed up with individual hospitals.

## **Queensland**

The available evidence in Queensland suggests that the number of Indigenous separations is still significantly understated. Five patient data audits were conducted between 1999 and 2001 to determine the degree of under identification of Indigenous people admitted to hospital.

These audits involved interviewing patients, asking if they identify as being of Aboriginal or Torres Strait Islander origin and then comparing their responses with the data maintained on hospital records. The results showed that approximately 30% of those patients at those hospitals who identified as being Indigenous at interview were not recorded as such on hospital records.

Activities undertaken by Queensland Health to improve the quality of Indigenous identification on hospital separation records include training hospital staff on the importance of identification, providing feedback to hospital staff with regard to performance in correctly recording patients' Indigenous status, and identifying a key contact within each health service district to take on the responsibility of promoting the need to accurately record Indigenous status.

### **Western Australia**

The Health Information Centre of the Department of Health completed a study in May 2001 to assess the quality of identification of Aboriginal and Torres Strait Islander people in Western Australian hospital data. Data collection was conducted from August to December 2000 in 26 hospitals throughout Western Australia. The final report has been completed and findings are similar to those from the National Pilot study (AHMAC, AIHW & ABS 1999): the areas with the highest proportion of Aboriginal and Torres Strait Islander people had the highest level of accuracy in the recording of Indigenous status.

The Western Australian study found that, state-wide, the number of Aboriginal and Torres Strait Islander people recorded in hospital admitted data was an understatement of the actual number of Aboriginal and Torres Strait Islander people admitted as patients, and that the level of accuracy varied between health regions. A correction factor has been developed for the recording of Indigenous status for Aboriginal and Torres Strait Islander patients in different regions and for the state as a whole. This will improve the reliability of hospital admitted data collected before the study.

### **South Australia**

The Department of Human Services conducts training courses in data collection every year, and the course in 2001-02 included training on how to ask about and record Indigenous status, based on a training package produced by the ABS. A 30% loading for casemix payments is applied to Indigenous separations in South Australian public hospitals and this acts as an incentive for improved identification.

### **Northern Territory**

The ABS continued to provide training sessions to hospital staff on how to ask the question on Indigenous status. The ABS has also prepared pamphlets for patients and staff on the 'why and how' of Indigenous status. In November 1998, the ABS surveyed 250 inpatients in Alice Springs Hospital and found only one error in Indigenous status in the hospital records.

### **Perinatal collections**

Perinatal or midwives statistics include details of antenatal care, complications of pregnancy and labour, and neonatal health. The Indigenous status of the mother is identified in the National Perinatal Data Collection, and in the perinatal collections in all states and territories, but most states and territories do not record any information about the father.

The question of whether the Indigenous status of the father should be collected has been discussed by the National Perinatal Data Development Committee and was not supported.

The committee considered it unlikely that reliable information on paternal Indigenous status could be captured through the state perinatal or midwives collections. Fathers may not be present at the birth and the data should not be collected from the mother (as the basis for collection is the individual identifying as Aboriginal).

### **Victoria**

Mercy Hospital for Women now asks about the Indigenous status of both parents on the pre-admission form. If the question is not answered on the form, the mother will be asked orally at the time of admission. The focus is on the identification of the baby rather than the father. There has been no adverse reaction to these procedures.

As Victoria has a high percentage of babies with only one Indigenous parent, collecting only maternal identification leaves this collection inconsistent with other birth collections that collect the identification of the baby. Liaison officers have reported that unless the baby's identification is recorded separately, they have no way of knowing about births of Indigenous children to non-Indigenous mothers.

### **Australian Capital Territory**

The willingness of each birth facility in the Australian Capital Territory to collect paternal Indigenous status data from the mother at the time of birth was assessed in September 1999. However, facilities were not prepared to collect such data unless they were required through inclusion of the data item in the National Minimum Perinatal Dataset.

### **Northern Territory**

The Indigenous status of mothers is identified in the perinatal data; however, no information is recorded about the father.

### **Notifiable disease registries**

Communicable diseases of particular public health importance are, under legislation, notifiable to state and territory health authorities. Notifications are received from hospitals, general practitioners (GPs) and diagnostic laboratories. The proportions of notifications, however, vary.

In only three states and territories is the reporting of Indigenous status considered to be sufficient for most notifiable diseases – Western Australia, South Australia and the Northern Territory. Data on notifiable diseases was not available for the Australian Capital Territory, New South Wales or Tasmania. A national steering committee – Improving Indigenous Status in Communicable Diseases Reporting Project – has been set up by NAGATSIHID to improve the quality of the Indigenous data in notifiable disease registries.

### **Victoria**

The Health (Infectious Diseases) Regulations were revised to include Indigenous status in May 2001. Before that there was no provision for recording Indigenous status on notifications or laboratory report forms. Measles and acute hepatitis B notifications were followed up by departmental staff, who checked the patient's Indigenous status with the doctor or patient. The accuracy of identification of Indigenous status cannot be ascertained at present but is considered less reliable than hospital-based identification.

The use of data collected by KHLOs to check accuracy of Indigenous identification in notifications was under consideration in 2003.

## **Queensland**

Data for notifications are dependent on an Indigenous status field being recorded on pathology request forms. Routinely, GPs and private pathology laboratories do not record this information. Queensland Health uses a single pathology information system in all facilities and laboratories across the state. Patient details, such as Indigenous status, are derived electronically from the hospital registration systems and so, as completeness of Indigenous status recording is improved within the hospitals, this will automatically improve data quality within the pathology information system. While Queensland Health facilities are improving their recording, only a third or less of disease notifications are received from these Queensland Health facilities.

Although there are ongoing awareness activities to encourage service providers to record Indigenous status and a brochure has been distributed to GPs, there have not been sufficient improvements to provide reliable rates for notifiable diseases among Indigenous people.

An exception is when 'enhanced surveillance' is performed, usually for public health or outbreak control purposes. Public health unit staff follow up individually on notifiable cases and collect more information than is obtained through the normal notification process. For these cases, the recording of Indigenous status information is significantly improved.

## **Western Australia**

Notification forms request data on Aboriginal identification but in many cases Indigenous status is not recorded – only 70% of notifications relating to sexually transmissible infections and only 36% of blood borne diseases notified had Indigenous status recorded. There is an opportunity to increase the level of compliance through the education of the groups of people responsible for completing notification forms.

## **South Australia**

Notification forms request data on Aboriginal and Torres Strait Islander identification. Work is continuing in order to improve the response rate to this question. The proportion of forms with missing identifiers increased marginally from 16% to 18% in the 2001–02 financial year. The quality of the data being recorded will be reviewed in the coming year.

## **Northern Territory**

The Northern Territory currently reports on Indigenous status for communicable diseases. Pathology referral forms include a field for Indigenous status; however, the field is inconsistently completed by medical practitioners. One result is that Indigenous status in Pap smear data is not available for the Northern Territory, and can only be estimated for those areas or health services where there is a high proportion of Aboriginal and Torres Strait Islander women. Education and information are available for health providers to encourage completion of Indigenous status information.

## **Workforce surveys**

### **New South Wales**

The Premier's Workforce Profile Collection Data (EEO Section) is compiled on an annual basis from all Government agencies. It identifies an extensive range of data including Indigenous status. Each area health service is required to report to the Department of Health on their progress against the requirements of the New South Wales Health Aboriginal Employment Strategy.

## **Victoria**

The Indigenous status of health service delivery staff is only known for a small number of job categories. With the exception of nurses, all of these positions are Indigenous-specific. The Nurses Board of Victoria included Indigenous status in its annual survey for the first time in 2002. There is no record of the number of Aboriginal Health Workers employed in Victoria.

There are 18 KHLOs funded by the Department of Human Services and employed in Victorian hospitals. In 2000-01 and 2001-02, three equivalent positions were funded by the employing hospitals at Wodonga, Royal Women's Hospital and Royal Children's Hospital. In 2002-03, one-and-a-half additional hospital-funded positions were created at Mercy Hospital for Women and Northern Hospital.

The Koori Mental Health Liaison Officers are funded by the Department of Human Services to improve access to, and effectiveness of, mental health services for Aboriginal communities. These positions are generally located in the Area Mental Health Service.

## **Queensland**

Queensland Health conducts statistical surveys for most health professions in which practitioners are required to be registered. Indigenous status is one of the data elements collected within the surveys.

Employees of Queensland Health voluntarily complete a questionnaire when they start work. Indigenous status is one of the data elements collected. Data are collected and collated centrally and then sent to the Office of the Public Sector Merit and Equity.

## **Western Australia**

Employees of the Department of Health are required to complete an EEO questionnaire when they start work. This asks them to identify if they are Aboriginal and/or Torres Strait Islander. The ABS definition is used to record Indigenous status.

## **South Australia**

The collection of information for all new employees includes an Indigenous identifier. Discussions are ongoing within the Department of Human Services about how to get similar information for existing employees. There is an Aboriginal Recruitment and Retention Committee that is currently working on the issue of uniformity of employee Indigenous identification.

## **Australian Capital Territory**

Employees of Australian Capital Territory Health complete an EEO questionnaire upon commencement. However, it is voluntary for new employees to identify if they are Aboriginal or Torres Strait Islander.

## **Northern Territory**

Employees of the Department of Health are required to complete an EEO questionnaire when they commence work. This self-completed questionnaire has an optional part which identifies Indigenous status.



## **Indicator 2. Government expenditure on health services for Aboriginal and Torres Strait Islander people**

**Indicator:** Overall per capita annual expenditure by governments on primary and secondary/tertiary care for Aboriginal and Torres Strait Islander health compared to the total population.

### **Purpose**

This indicator is designed to reflect resource allocation by governments on Aboriginal and Torres Strait Islander people relative to the total population.

### **Data**

Information for this indicator was prepared by the AIHW.

Figures for 1998–99 published by the AIHW were used for this indicator (AIHW 2001). Estimates of expenditure on health services for Aboriginal and Torres Strait Islander people are produced triennially. A third report, covering 2001–02, is currently being prepared, with a likely publication date in late 2004.

There are a number of difficulties in reporting on this indicator, including the issue of under identification of Indigenous Australians in health databases (such as for hospital separations). In some areas, such as expenditure on medical and pharmaceutical services, surveys have been used to estimate service use by Aboriginal and Torres Strait Islander people, and this, in turn, is used in the estimates of expenditure. Consequently, the reliability of the expenditure estimates is affected by sampling error. The surveys used in producing these estimates are also affected by under identification.

This indicator reports government health expenditure on the basis of where the responsibility for incurring the expenditure lies. It does not necessarily reflect the ultimate source of the funds that are used to pay for that expenditure. To this extent it does not necessarily give an accurate reflection of the level of responsiveness of a particular level of government to specific health needs of a population. For example, Australian Government transfers to the states and territories for health purposes are not recorded as Australian Government expenditure but are subsumed into the estimates of state and territory expenditure since it is the states and territories that have actually incurred the related expenditure.

Total recurrent expenditures on health services for Aboriginal and Torres Strait Islander people in 1998–99 were estimated at \$1,245 million, or 2.6% of expenditure for the whole population (AIHW 2001).

Funding, on the other hand, is reported on the basis of who ultimately provides the funds that are used for the expenditure. In the case of public hospitals, for example, although the states and territories incur the expenditure involved in providing such care, both the Australian Government and the states and territories are major funders, each contributing over 45% of the funding. In addition, some funding comes from private health insurers (for insured patients), individuals who choose to be treated as private patients and meet the fees charged from their own resources, and other sources.

The figures included in this report attempt to show funding by governments of both government and non-government health services for Aboriginal and Torres Strait Islander

people. Health services may be administered by governments, the private sector or non-government organisations, and may be funded by a mixture of government and non-government money. For example, many government-administered programs include some funding from patients in the form of patient fees. Similarly, private sector programs may receive funding from government sources.

Total government funding on services administered in 1998–99 by the states and territories was \$17,843 million. The Australian Government provided funding of \$6,447 million for these services (Table 2.1). Because the sources of funding for local government programs were not known, these programs were not included in Table 2.1.

**Table 2.1: Australian Government, state and territory funding of health services for Aboriginal and Torres Strait Islander people, 1998–99**

Area of expenditure	Funding by state/territories (\$m)	Funding by Australian Government (\$m)	Total government funding (\$m) <sup>(a)</sup>	Indigenous (\$m)	Indigenous share (%)
<b>State-and-territory administered health services</b>					
Acute-care institutions	7,290	5,947	13,237	577.9	4.4
Admitted patient services	6,089	4,460	10,549	453.0	4.3
Non-admitted patient services	1,200	1,487	2,687	124.9	4.6
Mental health institutions	491	—	491	26.0	5.3
High-care residential aged care	134	198	332	7.9	2.4
Patient transport	576	—	576	35.3	6.1
Community and public health	2,558	229	2,787	227.9	8.2
Health research	196	—	196	5.7	2.9
Administration	153	72	225	15.3	6.8
<i>Total (through state-and-territory administered health services)</i>	<i>11,397</i>	<i>6,447</i>	<i>17,843</i>	<i>896.0</i>	<i>5.0</i>
<b>Other health services</b>					
Medicare <sup>(b)</sup>	n.a.	6,612	6,612	59.4	0.9
Pharmaceutical Benefits Scheme	n.a.	2,796	2,796	20.4	0.7
Indigenous-specific health services	n.a.	132	132	121.2	92.0
Other health services including general administration <sup>(c)</sup>	n.a.	5,397	5,397	63.6	1.0
<i>Australian Government funding of Australian Government health services<sup>(d)</sup></i>	<i>n.a.</i>	<i>14,936</i>	<i>14,936</i>	<i>264.5</i>	<i>1.8</i>
Private sector programs <sup>(d)</sup>	n.a.	1,415	1,415	2.7	0.2
<i>Australian Government funding of health expenditure (excl. payments to states)<sup>(d)</sup></i>	<i>n.a.</i>	<i>16,351</i>	<i>16,351</i>	<i>267.3</i>	<i>1.6</i>
<b>Total</b>	<b>11,397</b>	<b>22,798</b>	<b>34,194</b>	<b>1,163.3</b>	<b>3.4</b>

(a) Excludes funding of local government services.

(b) Includes benefits paid through Medicare for optometrical and dental services as well as medical services.

(c) Most of this expenditure is private health insurance subsidies. For the non-Indigenous population it also includes \$27.32 per person of Department of Veterans' Affairs' expenditure.

(d) Australian Government funding of health expenditure for Aboriginal and Torres Strait Islander people (\$267.3m) includes some funding of private sector programs through private health insurance subsidies (\$2.7m). This funding is deducted in order to arrive at Australian Government funding of Australian Government programs (\$264.5m).

Source: AIHW 2001.

The average expenditure per person was \$3,065 per Indigenous person, compared with \$2,518 per person for other Australians, giving a ratio (Indigenous people to other Australians) of 1.22:1 (Table 2.2). This includes government and private expenditure.

- The government proportion of expenditure on Aboriginal and Torres Strait Islander people was estimated at \$2,783 per person, compared with \$1,700 per person for other Australians.

**Table 2.2: Estimated expenditures per person, by source of funds and Indigenous status, 1998–99**

Source of funds	Aboriginal & Torres Strait Islanders		Other Australians		Ratio Aboriginal & Torres Strait Islanders/ other Australians
	\$	%	\$	%	\$
<b>State and territory government funding (of state-and territory- administered health services)</b>	1,376	44.9	484	19.2	2.84
<b>Australian Government funding</b>					
Indigenous-specific programs	298	9.7	1	—	..
Medicare/PBS	196	6.4	506	20.1	0.39
Other Australian Government programs	163	5.3	366	14.5	0.45
Payments to states for state-and territory-administered health services	735	24.0	334	13.2	2.20
<i>Total Australian Government funding</i>	<i>1,393</i>	<i>45.5</i>	<i>1,206</i>	<i>47.9</i>	<i>1.15</i>
Local government funding	15	0.5	9	0.4	1.67
<i>Total government funding</i>	<i>2,783</i>	<i>90.8</i>	<i>1,700</i>	<i>67.5</i>	<i>1.64</i>
<b>Patient fees and other private payments</b>					
State-and territory-administered health services	94	3.1	101	4.0	0.93
Australian Government programs	40	1.3	141	5.6	0.29
Local government programs	5	0.2	2	0.1	2.21
Private sector programs	141	4.6	574	22.8	0.25
<i>Total private funding<sup>(a)</sup></i>	<i>281</i>	<i>9.2</i>	<i>819</i>	<i>32.5</i>	<i>0.34</i>
<b>Total health funding</b>	<b>3,065</b>	<b>100.0</b>	<b>2,518</b>	<b>100.0</b>	<b>1.22</b>

(a) 'Private funding' includes funding from out-of-pocket payments by patients, health insurance funding and other funding sources such as workers' compensation.

Source: AIHW 2001.

A jurisdictional split of estimates of expenditures on Aboriginal and Torres Strait Islander people through state- and territory-administered programs is shown in Table 2.3. These expenditures are partially funded by the Australian Government.

- The Indigenous share of expenditure on state or territory health services was highest in the Northern Territory (52.6%) followed by Western Australia (9.0%). It was lowest in Victoria (0.9%).
- Per person expenditure followed a similar pattern – ranging from an estimated \$1,444 per Indigenous Australian in Victoria, to \$3,208 in the Northern Territory. Care should be taken in the interpretation of per person expenditure estimates (refer to Box 2.1).

**Table 2.3: Estimated annual expenditure on state-and territory-administered health services, by state and territory<sup>(a)</sup>, 1998–99**

Area of expenditure	Expenditure (\$m)		Indigenous share (%)	Expenditure per person (\$)	
	Indigenous	Total		Indigenous	Non-Indigenous
<b>New South Wales</b>					
Acute-care institutions	138.3	4,900.9	2.8	1,197	762
Admitted patient services	109.1	3,982.6	2.7	945	620
Non-admitted patient services	29.2	918.2	3.2	253	142
Mental health institutions	8.6	208.1	4.1	74	32
High-care residential aged care	1.4	75.4	1.9	12	12
Patient transport	8.1	256.7	3.2	70	40
Community and public health	52.2	973.5	5.4	452	147
Health research	1.3	66.6	1.9	11	10
Administration	1.3	50.5	2.5	11	8
<b>Total</b>	<b>211.3</b>	<b>6,531.8</b>	<b>3.2</b>	<b>1,829</b>	<b>1,011</b>
<b>Victoria</b>					
Acute-care institutions	23.7	3,072.8	0.8	1,003	654
Admitted patient services	18.7	2,429.5	0.8	793	517
Non-admitted patient services	5.0	643.3	0.8	210	137
Mental health institutions <sup>(b)</sup>	..	..	..	..	..
High-care residential aged care	0.1	40.3	0.2	3	9
Patient transport	1.0	96.6	1.0	40	21
Community and public health	9.2	654.6	1.4	391	139
Health research	0.1	28.5	0.5	6	6
Administration <sup>(c)</sup>	..	..	..	..	..
<b>Total</b>	<b>34.1</b>	<b>3,892.7</b>	<b>0.9</b>	<b>1,444</b>	<b>828</b>
<b>Queensland</b>					
Acute-care institutions	157.6	2,194.5	7.2	1,410	605
Admitted patient services	119.4	1,766.1	6.8	1,068	489
Non-admitted patient services	38.2	428.4	8.9	342	116
Mental health institutions	8.2	95.2	8.7	74	26
High-care residential aged care	1.3	101.1	1.3	12	30
Patient transport	8.4	124.7	6.7	75	35
Community and public health	47.3	561.1	8.4	424	153
Health research	0.5	14.8	3.2	4	4
Administration	1.7	32.6	5.2	15	9
<b>Total</b>	<b>225.0</b>	<b>3,123.9</b>	<b>7.2</b>	<b>2,014</b>	<b>861</b>

(continued)

**Table 2.3 (continued): Estimated annual expenditure on state-and territory-administered health services, by state and territory<sup>(a)</sup>, 1998–99**

Area of expenditure	Expenditure (\$m)		Indigenous share %	Expenditure per person (\$)	
	Indigenous	Total		Indigenous	Non-Indigenous
<b>Western Australia</b>					
Acute-care institutions	113.5	1,343.9	8.4	1,929	689
Admitted patient services	89.2	1,048.2	8.5	1,516	537
Non-admitted patient services	24.3	295.7	8.2	414	152
Mental health institutions	4.7	111.9	4.2	79	60
High-care residential aged care	4.9	78.5	6.3	84	41
Patient transport	3.6	24.1	15.1	62	11
Community and public health	33.7	215.4	15.7	573	102
Health research	0.2	7.9	2.7	4	4
Administration	2.4	41.0	6.0	42	22
<b>Total</b>	<b>163.2</b>	<b>1,822.7</b>	<b>9.0</b>	<b>2,772</b>	<b>929</b>
<b>South Australia</b>					
Acute-care institutions	40.0	1,053.1	3.8	1,725	691
Admitted patient services	33.2	842.5	3.9	1,434	552
Non-admitted patient services	6.7	210.6	3.2	291	139
Mental health institutions	4.5	75.5	5.9	193	48
High-care residential aged care	0.1	36.3	0.4	6	25
Patient transport	1.3	32.3	3.9	55	21
Community and public health	5.7	91.5	6.2	246	59
Health research	1.1	69.7	1.6	47	47
Administration	1.8	66.7	2.7	79	44
<b>Total</b>	<b>54.5</b>	<b>1,425.2</b>	<b>3.8</b>	<b>2,350</b>	<b>935</b>
<b>Tasmania</b>					
Acute-care institutions	18.0	254.0	7.1	1,129	518
Admitted patient services	13.3	188.0	7.1	836	383
Non-admitted patient services	4.7	66.0	7.1	294	135
Mental health institutions	..	..	..	..	..
High-care residential aged care	0	0	0	0	0
Patient transport	1.1	15.7	7.1	70	32
Community and public health	6.7	139.8	4.8	417	292
Health research	0.3	6.0	5.3	20	12
Administration	0.1	2.8	4.8	8	6
<b>Total</b>	<b>26.3</b>	<b>418.4</b>	<b>6.3</b>	<b>1,644</b>	<b>861</b>

(continued)

**Table 2.3 (continued): Estimated annual expenditure on state-and territory-administered health services, by state and territory<sup>(a)</sup>, 1998–99**

Area of expenditure	Expenditure (\$m)		Indigenous share %	Expenditure per person (\$)	
	Indigenous	Total		Indigenous	Non-Indigenous
<b>Australian Capital Territory</b>					
Acute-care institutions	6.9	239.7	2.9	2,090	763
Admitted patient services	4.0	149.3	2.7	1,206	476
Non-admitted patient services	2.9	90.3	3.2	885	286
Mental health institutions	n.a.	n.a.	n.a.	n.a.	n.a.
High-care residential aged care	..	..	..	..	..
Patient transport	0.1	7.5	1.1	25	24
Community and public health	0.8	38.8	2.1	247	124
Health research	..	..	..	..	..
Administration	0.2	12.2	1.9	69	39
<b>Total</b>	<b>8.1</b>	<b>298.1</b>	<b>2.7</b>	<b>2,431</b>	<b>950</b>
<b>Northern Territory</b>					
Acute-care institutions	79.8	177.9	44.9	1,475	714
Admitted patient services	66.0	143.0	46.1	1,219	561
Non-admitted patient services	13.8	34.8	39.7	256	153
Mental health institutions	n.a.	n.a.	n.a.	n.a.	n.a.
High-care residential aged care	0.0	0.1	41.0	1	0
Patient transport	11.7	18.6	63.0	216	50
Community and public health	72.1	111.9	64.4	1,332	290
Health research	2.3	2.7	85.0	42	3
Administration	7.7	18.8	40.8	142	81
<b>Total</b>	<b>173.7</b>	<b>329.9</b>	<b>52.6</b>	<b>3,208</b>	<b>1,139</b>

(a) This expenditure was partly funded by the Australian Government.

(b) Victorian institutional mental health care expenditure was included in admitted patient services of acute care institutions.

(c) Administration expenses in Victoria are allocated across the functional categories and are not reported separately.

Source: AIHW 2001.

The total combined funding by the Australian Government and state and territory governments for health programs (including state-and-territory administered and other health programs) for Aboriginal and Torres Strait Islander people through is shown in Tables 2.1 and 2.4.

- There were significant differences in the patterns of expenditure between Aboriginal and Torres Strait Islander peoples and other Australians. The former were much higher users of state-and territory-administered health services, in particular admitted patient services in public hospitals and community health services. This is reflected in the Indigenous percentage share – Indigenous Australians received 4.3% and 8.2% of expenditures through these programs.
- The per person ratio of Aboriginal and Torres Strait Islanders to other Australians for government expenditure through state-and territory-administered health services was 2.4, compared with 0.82 through the Australian Government-administered health services.
- Aboriginal and Torres Strait Islander peoples were lower users of the two major Australian Government-administered health services, Medicare and the PBS – Indigenous

Australians received 0.9% and 0.7% respectively of government expenditures through these programs.

**Table 2.4: Estimated per person funding by the Australian Government, state and territory health services, by Indigenous status, 1998–99**

Level of government funding/ administration	Indigenous (\$m)	Per person Indigenous (\$)	Total government funding (\$m) <sup>(a)</sup>	Per person non- Indigenous (\$)	Per person ratio Indigenous: non- Indigenous
Combined states and territories and Australian Government funding of state- and territory-administered health services	896.0	2,205	16,947	920	2.40
Australian Government funding of Australian Government-administered health services programs	264.5	651	14,672	796	0.82
<b>Total government funding<sup>(a),(b)</sup></b>	<b>1,163.3</b>	<b>2,863</b>	<b>33,031</b>	<b>1,792</b>	<b>1.60</b>

(a) Excludes funding of local government services.

(b) Includes Australian Government funding of private sector programs.

Source: AIHW 2001.

### Box 2.1: Data issues

*There were some difficulties estimating government expenditures on health services for Aboriginal and Torres Strait Islander people because such services often include some funding from patients and the private sector and it is difficult to isolate government expenditures only (AIHW 2001). Attempts will be made to more clearly present government expenditures in the AIHW's third report on expenditures on health services for Aboriginal and Torres Strait Islander people, which will cover 2001–02 period.*

*The per person expenditure data should be interpreted with care. They are an indication of the expenditure per head of the reference population and do not reflect actual per person expenditure on those who access the service concerned. To calculate per person expenditure on a service, the total expenditure on the service is divided by the total population. This means that the average costs of programs that target specific population subgroups (such as cervical screening programs or aged care programs) are calculated across the total population. Furthermore, readers should bear in mind that the average cost of providing health services is likely to vary quite considerably from one jurisdiction to the next for a variety of demographic, economic, geographic and other reason such as differences in the health status of the population.*



## **Indicator 4. Government expenditure on, and description of, selected health promotion programs**

### **Indicator:**

- (a) A brief description of health promotion programs targeting social and emotional wellbeing and mental health for Aboriginal and Torres Strait Islander people and an estimate of total expenditure on them.
- (b) A brief description of health promotion programs targeting risk factors except social and emotional wellbeing and mental health for Aboriginal and Torres Strait Islander people and estimate of total expenditure on them.

### **Purpose**

Information for this indicator was provided by the states and territories and the Australian Government.

This indicator describes the commitment to health promotion programs for Aboriginal and Torres Strait Islander people by the state and territory governments and the Australian Government. Expenditure on health promotion programs targeting social and emotional wellbeing and mental health for Aboriginal and Torres Strait Islander people are separately identified from all other expenditures on health promotion.

### **Data**

- The Australian Government spent \$15.3 million in 2000–01 and \$17.6 million in 2001–02 on programs to promote social and emotional wellbeing and mental health, and \$3.1 million in 2000–01 and \$2.6 million in 2001–02 on other health promotion programs.
- Among the states and territories, expenditure on health programs for social and emotional well-being was highest in the Northern Territory (\$1.1 million) in 2000–01 and in Victoria (\$1.7 million) in 2001–02.
- Expenditure on other health promotion programs was highest in the Northern Territory in both years (\$3.6 million in 2000–01 and \$3.8 million in 2001–02).

**Table 4.1: Expenditure on health promotion programs targeting Aboriginal and Torres Strait Islander people, 2000–01 and 2001–02 (\$'000)**

	NSW <sup>(a)</sup>	Vic	Qld	WA	SA	Tas	ACT	NT <sup>(b)</sup>	Aust Govt <sup>(c)</sup>
<b>2000–01</b>									
Social/emotional wellbeing	..	868.1	218.0	847.0		—	91.6	1,078.0	15,263.0
Other health promotion	827.0	1,989.4	1,416.1	2,342.7	461.4	—	41.0	3,639.0	3,093.0
<b>Total</b>	<b>827.0</b>	<b>2,857.5</b>	<b>1,634.1</b>	<b>3,189.7</b>	<b>461.4</b>	<b>—</b>	<b>132.6</b>	<b>4,717.0</b>	<b>18,356.0</b>
<b>2001–02</b>									
Social/emotional wellbeing	..	1,741.0	254.0	1,542.3		—	136.6	1,086.0	17,637.0
Other health promotion	2,190.2	2,450.0	1,391.1	3,036.9	311.5	—	160.0	3,757.8	2,616.0
<b>Total</b>	<b>2,190.2</b>	<b>4,191.0</b>	<b>1,645.1</b>	<b>4,579.2</b>	<b>311.5</b>	<b>—</b>	<b>296.6</b>	<b>4,843.8</b>	<b>20,253.0</b>

(a) Accurate data on social and emotional wellbeing health promotion expenditure in NSW was not available for these periods and thus was not presented.

(b) Some health promotion initiatives were shifted to other Government departments and are not included in the data for 2001–02.

(c) The Australian Government also provides funding to the states and territories through the Public Health Outcome Funding Agreements. Those funds used for health promotion activities by states and territories are shown here as expenditures by the states and territories.

Source: Data provided by states and territories, the Office of Aboriginal and Torres Strait Islander Health and the Australian Government Department of Health and Ageing.

The differences in data provided by the states and territories suggest that ‘health promotion activities’ may have been interpreted differently in different states and territories. For example, some jurisdictions may have included all Indigenous health promotions funding in ‘other health promotion’, as the distinction between social/emotional wellbeing and other health is difficult to make. Also, expenditure details for programs that have been identified as ‘health promotion’ are likely to have included some components for the treatment of pre-existing illnesses. Furthermore, other programs that are mainly service delivery oriented (and therefore have been excluded from the current expenditure estimate) may also have a ‘health promotion’ component. As a result, the actual expenditure on ‘health promotion’ may be misrepresented.

## Australian Government

### Emotional and social wellbeing programs

The Office for Aboriginal and Torres Strait Islander Health (OATSIH) of the Australian Government Department of Health and Ageing (DoHA) maintained an Emotional and Social Wellbeing Program targeting Aboriginal and Torres Strait Islanders, with an expenditure of \$5.738 million in 2000–01 and \$5.615 million in 2001–02. DoHA continued funding 19 emotional and social wellbeing services and a range of related projects around Australia, including the ongoing development of 12 regional centres that provide training and workforce support.

The regional centres help build effective infrastructure for the delivery of emotional and social wellbeing programs through developing curricula, supporting training, and providing supervision to Aboriginal and Torres Strait Islander mental health and counselling staff and programs.

As part of the Australian Government's response to the Bringing Them Home report, DoHA developed an agreement with the Department of Family and Community Services regarding administration of parenting and family support programs. In addition, DoHA approved funding for over 100 Bringing Them Home counselling positions around Australia to provide personal support for individuals, families and communities affected by past policies of the forced removal of children. Bringing Them Home Program expenditure was \$9.32 million in 2000-01 and \$11.82 million in 2001-02.

Increased funding enabled the number of regional centres to be increased by three, to 15 in all, and allowed a number of educational and training initiatives to be instigated. One such initiative was the first round of Innovative Grants, which provides funding for innovative, culturally appropriate approaches to healing, other than counselling. Examples of projects supported under this program are community healing workshops, traditional healing, return to country, return to institutions, arts and oral history healing projects. Another initiative was the establishment of the Marumali Program of Winangali, a training program aimed at improving the quality of support available to individuals and communities affected by the past removal of children.

MindMatters is a broader program which includes Aboriginal and Torres Strait Islander peoples as a specific target group. The program is a comprehensive, whole-school approach that acknowledges secondary schools as important settings for promoting mental health and wellbeing. MindMatters provides a range of resources supported by professional development activities and a dedicated website.

There are two specific elements that target Aboriginal and Torres Strait Islander peoples. The first is the Aboriginal and Torres Strait Islander subcommittee that provides ongoing advice on new developments and implementation of the work (approximately \$30,000 per year). The second has funding of \$350,000 over 2000-01 and 2001-02 to ensure that the resources were readily usable by Indigenous communities. As well, the evaluation includes 15 case study schools, one of which is a community school.

### **Other health promotion programs**

The Aboriginal and Torres Strait Islander Women's Forum was established in 2000 by the National Advisory Committee to the National Cervical Screening Program. The National Advisory Committee recognised cancer of the cervix as a major issue for Indigenous women. The death rate from cervical cancer among Indigenous women is much higher than in the non-Indigenous population. The Forum meets two times per year and comprises Aboriginal and Torres Strait Islander women from around Australia, with the Australian Government providing an adviser and the secretariat. The Forum's terms of reference are both advisory and project-based.

In 2000-01, the Australian Government provided \$60,000 to support its aim of reducing the incidence of cancer of the cervix among Indigenous women by increasing the rate of regular screening. A further \$50,000 was provided in 2001-02. A project started in early 2001 was the production of a document for health professionals titled *Principles of Practice, Standards and Guidelines for Providers of Cervical Screening Services for Indigenous Women*.

Funding of \$5,885 and \$37,696 was expended in 2000-01 and 2001-02 respectively, under the National Drug Strategic Framework to support the National Drug Strategy Reference Group for Aboriginal and Torres Strait Islander Peoples in the development of a National Drug Strategy Aboriginal and Torres Strait Islander Peoples' Complementary Action Plan.

The National Drug Strategy Reference Group for Aboriginal and Torres Strait Islander Peoples provides advice and expertise to the various groups under the National Drug Strategic Framework on the priorities and strategies to address specific drug issues related to

Aboriginal and Torres Strait Islander people. The Reference Group provides a focused source of advice on Aboriginal and Torres Strait Islander issues to the Ministerial Council on Drug Strategy and the Intergovernmental Committee on Drugs, and has links to the Australian National Council on Drugs through its membership. The Reference Group provides a mechanism which ensures that Indigenous issues are considered under the Framework and that the appropriate peak organisations are consulted and involved in the development of strategies and policies to address Indigenous drug issues.

Under the broader National Illicit Drug Strategy, funding of more than \$2.310 million was allocated on programs targeting Aboriginal and Torres Strait Islander peoples in 2000–01. In 2001–02 this figure exceeded \$2.236 million. The two components of this Strategy are described below:

- The Non-Government Organisation Treatment Grants Program aims to provide funding to non-government organisations to establish and operate new treatment services as well as to expand or enhance existing services for treating illicit drug problems. Particular emphasis is placed on filling the geographical and target group gaps in the coverage of existing treatment services (including Aboriginal and Torres Strait Islander peoples, youth and women with children).
- The Community Partnerships Initiative is a community grants program that aims to encourage quality practice in community action to prevent illicit drug use and to build on existing activity occurring across Australia.

The three-year National Child Nutrition Program is a community grants program targeting the nutrition and long-term eating patterns of children aged 0–12 years and pregnant women. A high priority was given to projects in Aboriginal and Torres Strait Islander communities, rural and remote communities, and lower socioeconomic communities. Approximately \$13 million has been allocated through two rounds of funding to 110 projects across Australia for up to three years duration. The first round of funding (announced in November 2000) included over \$2.1 million for projects targeting Aboriginal and Torres Strait Islander communities. The second round of funding (announced in November 2001) had a specific focus on high-need Indigenous communities and included around \$2.0 million in grants. These Indigenous targeted projects represent 32% of total funding across both funding rounds.

Total program expenditure in 2000–01 was \$3,505,442, including \$716,519 on Indigenous specific projects (representing approximately 20% of the program expenditure in 2000–01). In 2001–02 total program expenditure was \$3,941,341, including \$292,035 on Indigenous-specific projects (representing approximately 8% of the program expenditure in 2001–02).

## **New South Wales**

The Aboriginal Health Branch allocation for health promotion in 2000–01 was \$1,193,845; however, only \$826,992 was spent during this period. In 2001–02 the allocation was \$2,520,566, with \$2,190,216 of this allocation spent.

Accurate information on the specific social and emotional wellbeing health promotion expenditure for these periods is not available for the following reasons:

- Under the 1997 New South Wales Aboriginal Mental Health Policy, the responsibility for Aboriginal mental health and social and emotional wellbeing health promotion falls to area health services.
- Funding for Aboriginal mental health and social and emotional wellbeing provided by the Centre for Mental Health to area health services, is not specifically broken down into service delivery and health promotion components. Thus it is unclear what proportion of

Centre for Mental Health funding provided to area health services may be allocated to Aboriginal social and emotional wellbeing health promotion.

- It is also expected that area health services utilise core funding to support Aboriginal mental health. The Centre for Mental Health does not receive reports of area health service expenditure on Aboriginal mental health and social and emotional wellbeing health promotion.

### **Aboriginal and Torres Strait Islander tobacco prevention project**

A forum of Aboriginal Health Workers and those with expertise in tobacco control was held in February 2002. At the meeting it was determined that the first priority is to increase the capacity and skills of Indigenous Health Workers to deliver best practice smoking cessation interventions and to help them to address their own smoking.

The majority (at least 75%) of Aboriginal Health Workers in New South Wales will be trained over the three years of the project in best practice brief intervention for smoking cessation, including prevalence statistics, health effects of active and passive smoking, motivational interviewing, making a quit plan, assessment of nicotine dependence, and appropriate use of pharmacotherapies.

In December 2000, area health services reported on the range of health promotion activities undertaken. The Aboriginal Health Strategic Plan contains the key priority areas – health promotion projects and minimising injury in Aboriginal communities. Area health services reported a total of 57 programs addressing these priority areas. The majority of programs were in the areas of injury, alcohol and domestic violence, tobacco smoking cessation, nutrition, diabetes and physical activity.

Some specific strategies included:

- support for Aboriginal communities to develop appropriate health promotion projects;
- the joint development of educational strategies for Aboriginal Health Workers aimed at minimising injury in Aboriginal communities; and
- work with communities to develop and implement appropriate strategies to address alcohol.

### **Victoria**

The Department of Human Services funds health services to provide specific Indigenous health promotion programs. Indigenous people are also involved in mainstream health promotion programs; however, their involvement cannot be quantified.

The Primary Care Partnership strategy aims to improve the overall health and wellbeing of Victorians by:

- improving the experience and outcomes for people who use primary care services; and
- reducing the use of hospital, medical and residential services through a greater emphasis on health promotion programs and by responding to the early signs of disease and/or people's need for support.

There are 32 Primary Care Partnerships across Victoria, of which 4 had projects with a specific Indigenous focus in 2000–01 and 2001–02.

The Public Health Branch of the Rural and Regional Health and Aged Care Division funded a number of health promotion activities.

Public Health provides \$100,000 annual recurrent funding to Victorian Aboriginal Health Services for education programs on bloodborne viruses and sexually transmitted infections.

The training is directed at both workforce development and persons at risk. There are no data available on the numbers of people involved.

Other health promotion initiatives funded by Public Health include the Regional Koori Injury Prevention grants, the Victorian Oral Health Promotion grant (\$50,000 in 2000–01), the Nutrition Needs Assessment Tool Pilot Project, the Koori Diabetes Service (\$30,000 in 2001–02) and the Rumbalara Diabetes Project (\$20,000 in 2001–02).

Health promotion initiatives are also delivered through the Victorian Health Promotion Foundation (VicHealth). The mission of VicHealth is to build the capabilities of organisations, communities and individuals in ways that:

- change social, economic and physical environments so that they improve health for all Victorians;
- strengthen the understanding and the skills of individuals in ways that support their efforts to achieve and maintain good health.

The strategic outcomes desired by VicHealth are to foster greater awareness of health promotion issues, contribute to population health improvements, identify groups experiencing disadvantage and work with other organisations to maximise health promotion opportunities. In order to achieve this, projects are funded in the following categories: amelioration of chronicity and disablement, communicable disease prevention, health services evaluation and health economics, healthy eating, injury prevention, mental health, physical activity, prevention of cancer, reproductive and sexual health, substance misuse, sun protection, tobacco control and multiple focus.

Thirty-one projects with a specific Indigenous focus were funded in 2000–01 and 23 in 2001–02. A range of agencies, both mainstream and Indigenous, deliver the projects.

## **Queensland**

The expenditure shown for Queensland in Table 4.1 relates only to expenditure by Public Health Services of Queensland Health. The collection scope did not include a significant amount of expenditure on targeted health promotion activities by health service districts, which manage community health services including child and maternal health, alcohol and drug, and sexual health services.

It should also be noted that a significant component of Public Health Services' mainstream work incorporates strategies for the Aboriginal and Torres Strait Islander population. As these were not considered to 'specifically target' the Indigenous population, they have been excluded from the information provided. Also, Public Health Services develops, funds and delivers many health promotion programs for the general population that have significant and direct benefit for all subgroups of the general population, including Indigenous people. For these health promotion programs, it is extremely difficult to quantify the proportion of expenditure that can be considered 'Indigenous specific'. Therefore, the value quoted for this indicator is not necessarily a true representation of the expenditure allocated to health promotion programs targeting Indigenous people, but it is a best estimate of the amount allocated through distinct programs.

Queensland Health has spent nearly \$3 million on Indigenous health promotion during the period 2000–01 to 2001–02. Positions have been established in each health zone to address major public health concerns such as environmental issues, communicable diseases, injury, nutrition and mental health.

Specific programs include injury prevention projects focused on domestic violence and football-related violence, programs on nutrition and obesity, personal hygiene training in childcare settings, suicide prevention, and an Indigenous smoking cessation program.

## **Western Australia**

Current health promotion programs target priority health problems to improve the health of Aboriginal people in Western Australia. Diseases that affect Aboriginal and Torres Strait Islander people are caused by poor nutrition, alcohol and substance abuse, low levels of physical activity, substandard living conditions, high levels of psychosocial stress, violence and underutilisation and/or inappropriate use of health services. A number of health promotion programs are delivered across the state, including:

- men's health and youth health
- maternal, foetal and child health
- diabetes and renal disease
- heart disease
- injury and violence
- drug, tobacco and alcohol abuse.

In addition to these programs, a number of programs were delivered in some of the Aboriginal and Torres Strait Islander Commission (ATSIC) regions. These included child health and heart health. There was also a poison prevention program in the South West region.

Social and emotional wellbeing programs include a mental health program and the Building Solid Families program. It was not possible to separate out suicide prevention strategies which may be a component of some general health promotion programs promoting youth or men's health. Some of the general health promotion programs may also contain some mental health and /or suicide prevention material.

Healthway funds a range of health promotion activities targeting the health and wellbeing of the Aboriginal and Torres Strait Islander peoples of Western Australia. Aboriginal and Torres Strait Islander health is identified in their 2000-03 strategic plan as an area requiring special focus and high priority.

Activities addressing Indigenous health and involving Aboriginal and Torres Strait Islander people are funded through the health promotion projects and research areas as well as sports and arts sponsorships, which promote a range of health messages including the 'Respect Yourself, Respect Your Culture' message. Healthway's commitment to this important target group is supported by initiatives such as specific research and health promotion scholarships for Indigenous people, special weightings when assessing relevant research grants and specific funding programs which are designed to increase access by Indigenous groups.

In the years 2000-2001 they funded 34 Aboriginal and Torres Strait Islander specific projects to a value of \$1,088,674 and in 2001-2002 funded 51 projects to a value of \$1,266,380.

## **South Australia**

In 2000-01, around \$400,000 was spent on tobacco control programs in remote Aboriginal communities. In 2001-02, a further \$270,000 was spent on tobacco control programs in remote Aboriginal communities, a breastfeeding promotion specifically aimed at Aboriginal people, and the production of a quit smoking video targeted at Aboriginal peoples.

Spending on Health Promotion from the Aboriginal Services Division was \$61,400 in 2000–01 and \$41,500 in 2001–02.

The Healthy Ways project, a nutrition promotion project, accounted for \$200,000 in 2000–01 and \$310,000 in 2001–02. This project aimed to reduce tobacco use and promote healthy eating among Aboriginal families in South Australia. The project focused particularly on pregnant women, young women of childbearing age, infants and pre-school-aged children, and primary and secondary schools students. Selected remote communities in South Australia have been targeted.

Health promotions funding in South Australia experienced a significant decline from 2000–01 to 2001–02. After 2000–01, a number of special grant programs came to an end. In addition, The Healthy Ways program experienced significant financial difficulties and some funds could not be spent in 2001–02.

Indigenous funding inside mainstream programs (for example for cervical screening) was not included in the health expenditure data for South Australia.

## **Tasmania**

Tasmania reported that no specific health promotion programs for Aboriginal and Torres Strait Islander people were funded in 2000–01 or 2001–02.

## **Australian Capital Territory**

The Australian Capital Territory funded programs in 2000–01 and 2001–02 which provided information and education services focusing on healthy nutrition, lifestyle and physical exercise programs, dental health, drug and alcohol issues for young Aboriginal people, and sexual violence.

Funding allocations were both recurrent and non-recurrent. Some of the funding was allocated under the Public Health Outcomes Funding Agreement.

## **Northern Territory**

Territory health services fund a variety of health promotion programs. Health promotion teams, primarily Aboriginal Health Promotion Officers, use health promotion processes to strengthen the capacity of rural and remote Aboriginal communities to take greater control of decisions that affect their health. Teams also provide training and support for health services staff to work in health-promoting ways, utilising the *Public Health Bush Book* as a standard text. The Life Promotion Project is a broad approach to suicide prevention by using strategies to boost existing structures and resources for the identification of people at risk and developing a support network for them.

The Mental Health Program seeks to provide effective mental health services and support, including assessment, treatment and crisis intervention in culturally appropriate ways. Aboriginal Mental Health Workers, usually from the same language group, provide help in negotiating any proposed interventions. Staff attempt to create an environment where Aboriginal protocols and processes are acknowledged and where mental, emotional, physical and spiritual healing can take place.

A number of health promotion programs in the Northern Territory are outlined below.

## **Growth Assessment and Action**

This program aims to improve the growth of Aboriginal children aged 0–5 years, through regular monitoring of growth and early intervention if growth falters. The three components



are: growth monitoring of children, growth promotion or growth-promoting action, and growth surveillance at six-monthly intervals.

### **Community Nutrition Worker Program**

Community Nutrition Workers have a range of projects such as store projects, skinny/well babies projects and school-based projects which operate in 10 territory communities. The Stores Project promotes the quality, quantity and accessibility of food in remote stores by assisting the development of store nutrition policies and encourages greater community control of the store through the adoption of a store manager's contract. An annual survey of remote community stores provides information on the cost, quality, variety and availability of foods in remote stores.

### **Strong Women's Strong Babies, Strong Culture Program**

Strong Women and grandmothers provide support and traditional, culturally appropriate information to young pregnant women and mothers of children who are not growing well. They also encourage attendance at the health centre. Programs have been established in seven communities in the Top End and seven communities in Central Australia.

### **Alcohol and Other Drugs Program**

Community Support Officers are employed in each Northern Territory region to provide alcohol and other drug expertise. Primary drugs include alcohol, petrol, cannabis and kava. The Tobacco Action Project Officers are available to help implement smoke-free policies. Resources are available to schools. Brokerage programs are funded to address petrol-sniffing in the Top End and in urban Alice Springs.

Consultation with Aboriginal people was undertaken to develop a graphic-based cannabis resource, which was distributed to schools, health centres, community councils, police, alcohol and other drug treatment agencies and correctional services. The program also funded an educative resource, to address alcohol and other drug issues during pregnancy. Additional contributions include support for a resource, titled *Petrol Sniffing and Other Solvents* developed by the Aboriginal Drug and Alcohol Council of South Australia, Inc.

#### **Box 4.1: Data issues**

*In supplying the data for this indicator, some states and territories had difficulties in identifying some expenditure on health promotion programs and in isolating expenditure on social and emotional wellbeing and mental health. This was particularly the case where programs were funded holistically. As there was no detailed definition of 'health promotion' and 'mental health and social and emotional wellbeing', states and territories are likely to have interpreted these concepts in different ways, affecting the comparability of expenditure estimates provided. The workshop recommended that more work needs to be done on the definitions for this indicator through examining existing definitions of health promotion programs used for national data collections such as the National Public Health Expenditure Project.*

# Determinants of health—social equity

## **Indicator 5**

Life expectancy at birth

## **Indicator 6**

Infant mortality rate

## **Indicator 7**

Income poverty

## **Indicator 8**

Completed secondary school education

## **Indicator 9**

Employment status

## **Indicator 10**

Housing with utilities

## **Indicator 11**

People in prison custody

## **Indicator 12**

The development of governance capacity

## **Indicator 13**

Aboriginal and Torres Strait Islander representation on health/hospital boards

## **Indicator 14**

Reporting of complaints in hospitals

## Introduction

The subdomain Determinants of health – social equity comprises 10 indicators. The first two indicators are accepted health measures of social equity – life expectancy and infant mortality. These are followed by indicators that measure different aspects of social equity and government inputs in these areas: income poverty, secondary school education completion, employment status, housing with utilities, and imprisonment rates. The final three indicators relate to governance and capacity building for Indigenous people – the development of governance capacity, Indigenous representation on hospital boards and reporting of complaints. These three indicators measure government efforts to enable Indigenous people to contribute to the management and development of the health system.

The AIHW provided data for infant mortality. Like the other mortality data included in this report, coverage of Indigenous deaths is only complete enough for statistical reporting in four states and territories – Queensland, Western Australia, South Australia and the Northern Territory. This is also the case for the data on life expectancy that was provided by the ABS.

The ABS also provided the data for five of the other indicators in this subdomain: income, education and employment are from the 2001 Census of Population and Housing. The tables provided here are based on actual counts from the 2001 Census of Population and Housing and as such are not adjusted for under-enumeration. The data on imprisonment rates comes from the ABS Prisoners Census. The data on housing utilities comes from the ABS CHINS survey, 2001. This survey is limited in scope as it only captures data from discrete Indigenous communities and therefore does not include all Indigenous housing. The data for this survey are provided by key community informants and not by individual householders.

The data for the indicators on governance and capacity building were provided by the states and territories. The information provided for these three indicators is descriptive data only. There were no consistent quantitative data available on Indigenous representation on hospital boards or on the reporting of complaints in hospitals.

## Indicator 5. Life expectancy at birth

**Indicator:** Life expectancy at birth for the Aboriginal and Torres Strait Islander population compared to the total Australian population, by sex.

### Purpose

Life expectancy at birth is an internationally used summary measure of the health and wellbeing of populations. Life expectancy is determined by a range of different factors including socioeconomic status, biomedical risk factors, quality and access to the health system, and genetics.

### Data

Information for this indicator was obtained from the ABS.

Life expectancy at birth is the number of years a person born in the reference year can expect to live if they experience the current age-specific death rates. Given the problems experienced in accurately measuring the death rates for the Aboriginal and Torres Strait Islander population, life expectancy indicators are difficult to calculate, so care should be taken when interpreting these data.

**Table 5.1: Experimental estimates of life expectancy at birth (years), by Indigenous status and sex, selected states and territories, 1999–01**

	Qld	WA	SA	NT
<b>Males</b>				
Indigenous males	57	56	55	56
All males	77	77	77	71
<b>Females</b>				
Indigenous females	63	63	61	62
All females	82	83	83	77

#### Notes

1. Data are presented for those states and territories with more complete coverage of Indigenous deaths.
2. Indigenous life expectancy estimates are experimental and actual life expectancy is expected to be within four years of the estimates provided.
3. The experimental life tables used to estimate life expectancy at birth are based on the 1996 Census.

Source: Tables 6.30, 6.31 from the Australian life table; Table 6.44 from the experimental life table of Indigenous people: ABS *Deaths, Australia 2002*.

- Over the period 1999–01, the life expectancy at birth for Indigenous people was estimated to be around 56 years for males and 63 years for females. This was some 19 to 21 years lower than life expectancy estimates for the total Australian population (77 years for males and 82 years for females).
- The life expectancy estimates reported in Table 5.1 are based on experimental population estimates based on the 1996 Census of Population and Housing. The Preston-Hill method was used by the ABS to construct an experimental model life table for the Indigenous population which gives an estimation of life expectancy at birth. The ABS is currently reviewing the appropriateness of this method and the assumptions involved.

- The estimated life expectancy of Aboriginal and Torres Strait Islander males and females was also much lower than that of Indigenous people in New Zealand and Canada. The life expectancy of Maoris for 1995–97 was 67.2 years for males and 71.6 years for females, while the life expectancy of Canadian First Nations people in 2000 was 68.9 years for males and 70.2 years for females (Statistics New Zealand 2003; Health Canada 2002).

# Indicator 6. Infant mortality rate

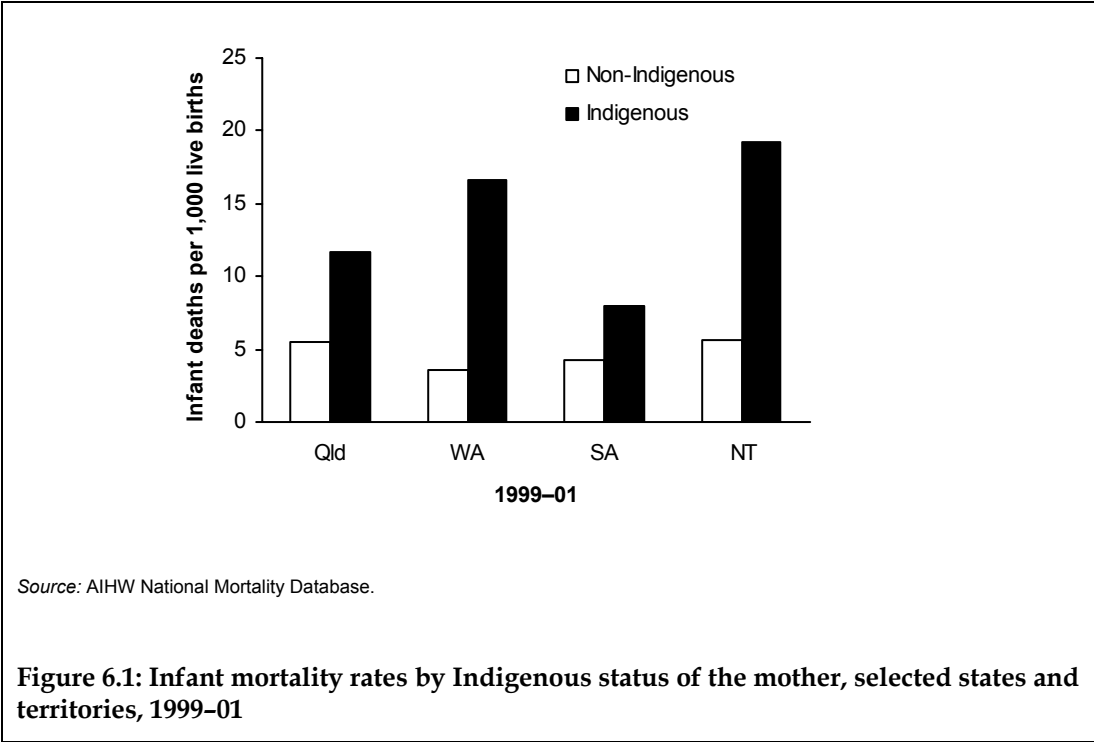
**Indicator:** The number of deaths of infants (children less than one year old) born to Aboriginal and Torres Strait Islander mothers, per 1,000 live births to Aboriginal and Torres Strait Islander mothers.

## Purpose

This indicator is an internationally recognised measure of population health and is regarded as an important measure of general health and wellbeing. Infant mortality is an indicator of the quality of antenatal care, the effectiveness of obstetric services and the quality of infant care in the hospital and in the community. Infant mortality is also an indicator of maternal health, and a high infant mortality rate is associated with poor socioeconomic conditions.

## Data

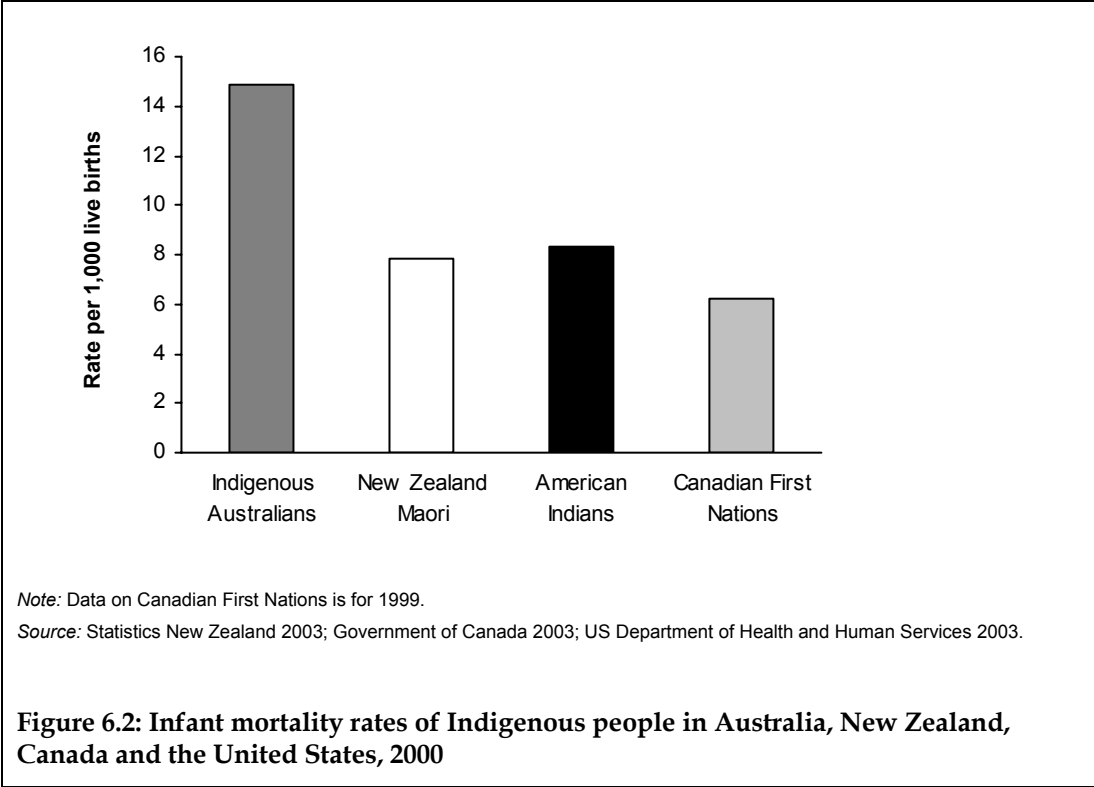
Information for this indicator was obtained from the AIHW National Mortality Database. The quality of the data on deaths of infants varies across states and territories and only data for Queensland, South Australia, Western Australia and the Northern Territory were considered to be sufficient to calculate rates. Three years of data (1999–2001) were combined in order to smooth out yearly fluctuations in the number of infant deaths, which can cause variability in rates.



- In 1999–2001, of the four states and territories with reliable data, the infant mortality rate ranged from 8.0 per 1,000 in South Australia to 19.2 per 1,000 in the Northern Territory. In Western Australia the rate was 16.6 per 1,000 and in Queensland 11.7 per 1,000.

**International comparisons**

- The overall mortality rate for Aboriginal and Torres Strait Islanders infants, in 2000 in the four states and territories with reliable data, was 14.9 per 1,000. (The three-year average infant mortality rate for 1999–2001 in the four states and territories was 14.2 per 1,000.)
- In comparison in 2000, the infant mortality rate was 7.8 per 1,000 for New Zealand Maori, 8.3 per 1,000 for American Indians and in 1999 was 6.2 per 1,000 for First Nations people in Canada (Statistics New Zealand 2003; Government of Canada 2003; US Department of Health and Human Services 2003).



## Indicator 7. Income poverty

### Indicator:

- The proportion of Aboriginal and Torres Strait Islander households where household size-adjusted weekly income is less than the 20th percentile of all Australian household size-adjusted weekly income.
- The proportion of Aboriginal and Torres Strait Islander households where household size-adjusted weekly income is less than the 50th percentile of all Australian household size-adjusted weekly income.

### Purpose

The measures provide an indication of the level of relative economic disadvantage of Aboriginal and Torres Strait islander people compared to two national income measures for all Australians. The expected proportions, if there is no relative economic disadvantage, is that 20% will fall below the 20th percentile and 50% will fall below the 50th percentile.

### Data

Information for this indicator was obtained from the ABS Census of Population and Housing. Data provided is for average weekly equivalised household income on a person basis, not on a household basis as specified in the indicator. Equivalence scales were used to adjust the incomes of people in a way that enabled the analysis of the relative wellbeing of people living in households of different size and composition.

**Table 7.1: Proportion of persons with household size-adjusted weekly incomes below the Australian 20th and 50th percentiles, by Indigenous status and state and territory, 2001**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia <sup>(a)</sup>
<b>Less than 20th percentile<sup>(b)</sup></b>									
Indigenous	42	38	41	49	46	40	25	63	45
Non-Indigenous	19	19	20	19	22	25	10	11	19
<b>Total<sup>(c)</sup></b>	<b>20</b>	<b>19</b>	<b>21</b>	<b>20</b>	<b>22</b>	<b>26</b>	<b>11</b>	<b>25</b>	<b>20</b>
<b>Less than 50th percentile<sup>(d)</sup></b>									
Indigenous	76	72	79	83	82	77	52	90	80
Non-Indigenous	47	49	53	49	55	61	30	32	49
<b>Total<sup>(c)</sup></b>	<b>48</b>	<b>49</b>	<b>54</b>	<b>50</b>	<b>55</b>	<b>62</b>	<b>31</b>	<b>49</b>	<b>50</b>

(a) Total for Australia includes other territories.

(b) Adjusted weekly income threshold for 20th percentile of the total Australian population—\$265.

(c) Total includes persons for whom Indigenous status was not determined.

(d) Adjusted weekly income threshold for 50th percentile of the total Australian population—\$495.

Note: Based on residents in occupied private dwellings where individual income was stated by all household members.

Source: ABS Census of Population and Housing 2001.

- In all states and territories a higher proportion of Indigenous persons than of non-Indigenous persons had household size-adjusted weekly incomes less than the 20th percentile—45% of Indigenous persons were below this point compared to 19% of non-Indigenous households.



- The extent of the economic disadvantage varied by state and territory but was most marked in the Northern Territory where 63% of Indigenous persons fell below the 20th percentile compared with 11% of non-Indigenous persons. By contrast, in the Australian Capital Territory only 25% of Indigenous persons fell below this mark, compared to 10% of non-Indigenous persons.
- Australia-wide, 80% of Indigenous persons had an adjusted weekly income below the 50th percentile, compared to 49% of non-Indigenous persons.
- The distribution by state and territory was similar to the 20% pattern described above. The proportion of Indigenous persons with a household size-adjusted weekly income that fell below the 50th percentile was highest in the Northern Territory (90%), followed by Western Australia (83%) and South Australia (82%).
- In the Australian Capital Territory, the proportion of Indigenous persons with a household size-adjusted weekly income below the 50th percentile was close to the overall Australian proportion (52% compared with 50%), whereas only 30% of non-Indigenous persons were below the 50th percentile.

## Indicator 8. Completed secondary school education

**Indicator:** The proportion of Aboriginal and Torres Strait Islander people aged 20–24 years who have completed secondary school (or equivalent level of education), by sex.

### Purpose

Education is important for the overall wellbeing of people. The completion of secondary school education helps young people to obtain gainful employment. Education increases an understanding of the determinants of good health.

### Data

Information for this indicator was obtained from the ABS Census of Population and Housing.

**Table 8.1: Number and proportion of people aged 20–24 years who completed Year 12 or equivalent, by sex, Indigenous status and state and territory, 2001**

	Number				%			
	Indigen. males	Non-Indigen. males	Indigen. females	Non-Indigen. females	Indigen. males	Non-Indigen. males	Indigen. females	Non-Indigen. females
NSW	1,242	121,373	1,553	136,332	27.4	63.5	35.9	73.2
Vic	318	96,602	395	111,958	32.4	66.1	41.0	78.4
Qld	1,882	72,706	1,991	81,035	41.7	66.5	43.7	74.9
WA	514	34,777	606	38,703	22.4	60.2	24.9	69.7
SA	179	25,716	242	29,442	19.5	58.7	26.4	70.3
Tas	172	6,234	198	6,888	30.1	50.6	32.4	56.6
ACT	84	9,847	92	10,145	56.4	82.4	58.2	85.9
NT	192	2,756	250	2,899	7.9	55.4	10.5	66.1
<b>Aust</b>	<b>4,588</b>	<b>370,047</b>	<b>5,330</b>	<b>417,438</b>	<b>28.0</b>	<b>64.1</b>	<b>32.6</b>	<b>74.2</b>

*Note:* Totals used to calculate percentages include cases where Indigenous status was not stated.

*Source:* ABS Census of Population and Housing 2001.

- In 2001, the proportion of Indigenous males aged 20–24 years who had completed Year 12 or equivalent was less than half the non-Indigenous proportion (28% compared with 64%).
- The highest secondary school completion rate for Indigenous males was in the Australian Capital Territory where 56% had completed Year 12, and was lowest in the Northern Territory where only 8% had completed Year 12. The proportion of Indigenous males who completed Year 12 or equivalent was also low in South Australia (20%) and Western Australia (22%).
- The difference in the proportion of Year 12 completions between Indigenous and non-Indigenous males was greatest in the Northern Territory, South Australia and Western Australia.
- In 2001, the proportion of Indigenous females aged 20–24 years who had completed Year 12 or equivalent was less than half that for non-Indigenous females (33% compared with 74%).
- The Year 12 completion rate for Indigenous females was highest in the Australian Capital Territory (58%) and lowest in the Northern Territory (11%). The proportion of females

who completed Year 12 or equivalent was also low in Western Australia (25%) and South Australia (26%).

- The difference in the proportion of Year 12 completions between Indigenous and non-Indigenous females was greatest in the Northern Territory, Western Australia and South Australia.

## Indicator 9. Employment status

**Indicator:** The proportions of Aboriginal and Torres Strait Islander people aged 20–64 years who were employed, unemployed or not in the labour force, by full-time and part-time status.

### Purpose

The proportion of people of working age who are not in employment is an indicator of socioeconomic disadvantage for a population. Poor health is strongly associated with low socioeconomic status.

### Data

Information for this indicator was obtained from the ABS Census of Population and Housing.

**Table 9.1: Labour force status of Indigenous persons aged 20–64 years, by state and territory, 2001**

Labour force status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust <sup>(a)</sup>
	Per cent								
Employed part-time <sup>(b)</sup>	14.2	14.0	17.6	20.1	17.5	17.5	14.4	17.6	16.7
Employed full-time <sup>(c)</sup>	26.6	33.3	27.6	21.6	21.8	31.3	45.1	16.3	25.3
Employed but did not work any hours	2.3	2.4	2.0	2.0	2.1	2.4	3.3	1.6	2.1
<i>Employed total<sup>(d)</sup></i>	<i>45.3</i>	<i>52.2</i>	<i>49.9</i>	<i>46.6</i>	<i>44.3</i>	<i>52.8</i>	<i>65.1</i>	<i>37.7</i>	<i>46.6</i>
Unemployed looking for full-time work	9.6	8.1	9.0	8.2	8.6	9.3	6.0	4.3	8.4
Unemployed looking for part-time work	2.6	1.9	2.2	2.0	1.8	2.3	1.8	1.2	2.1
<i>Unemployed total</i>	<i>12.2</i>	<i>9.9</i>	<i>11.2</i>	<i>10.2</i>	<i>10.5</i>	<i>11.6</i>	<i>7.8</i>	<i>5.4</i>	<i>10.5</i>
<b>Total in the labour force</b>	<b>57.5</b>	<b>62.1</b>	<b>61.1</b>	<b>56.7</b>	<b>54.7</b>	<b>64.5</b>	<b>72.9</b>	<b>43.2</b>	<b>57.1</b>
Not in the labour force	42.5	37.9	38.9	43.3	45.3	35.5	27.1	56.8	42.9
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Total number<sup>(e)</sup></b>	<b>55,084</b>	<b>11,689</b>	<b>51,480</b>	<b>26,928</b>	<b>10,951</b>	<b>7,260</b>	<b>1,737</b>	<b>24,166</b>	<b>189,423</b>

(a) Total for Australia includes other territories.

(b) Part-time employed includes people who worked for 1–34 hours in the week preceding the Census.

(c) Full-time employed includes those who worked for 35 hours or more in the week preceding the Census.

(d) Total employed included those who did not state hours worked.

(e) Totals exclude those whose labour force status was not stated.

Note: Only those who identified as Indigenous were included in the table.

Source: ABS Census of Population and Housing 2001.

- In 2001, 46.6% of Indigenous people were employed in part-time or full-time work, 10.5% were unemployed and 42.9% were not in the labour force.
- The proportion of Indigenous people who were employed ranged from 37.7% in the Northern Territory to 65.1% in the Australian Capital Territory.
- The majority of Indigenous people who were employed were working full-time in all states and territories except in the Northern Territory where there was a similar proportion of people in part-time and full-time employment (17.6% compared to 16.3%). This probably reflects high rates of participation in the Community Development Employment Projects scheme that operates in regional and remote areas where there is a limited labour market.

- The proportion of Indigenous people who were unemployed ranged from 5.4% in the Northern Territory to 12.2% in New South Wales.
- While the Northern Territory had the lowest proportion of Indigenous people who were unemployed, it also had the highest proportion not in the labour force (56.8%).
- The Australian Capital Territory (27.1%) followed by Tasmania (35.5%) had the lowest proportions of Indigenous people not in the labour force.

## Indicator 10. Housing with utilities

**Indicator:** The proportion of permanent dwellings in discrete Aboriginal and Torres Strait Islander communities that had sewerage system, water, electricity or gas supply.

### Purpose

Inadequate housing and water, electricity sewerage provision are associated with poor health and higher rates of infectious and parasitic diseases, respiratory diseases, diarrhoeal diseases and rheumatic fever.

### Data

Information for this indicator was obtained from the ABS CHINS survey, 2001. The survey did not collect information on gas supply and therefore this is not reported.

**Table 10.1: Number and proportion of permanent dwellings in discrete Indigenous communities by type of connection to water and electricity supply and sewerage systems, by state and territory, 2001**

	NSW	Vic	Qld	WA	SA	Tas	NT	Aust <sup>(a)</sup>
<b>Sewerage</b>								
Connected	1,325	42	4,021	2,947	1,071	30	6,912	16,348
Not connected	—	—	9	31	—	—	261	301
<i>% connected</i>	<i>100.0</i>	<i>100.0</i>	<i>99.8</i>	<i>98.9</i>	<i>100.0</i>	<i>100.0</i>	<i>96.4</i>	<i>98.2</i>
<b>Water</b>								
Connected	1,325	42	4,011	2,958	1,064	30	7,014	16,444
Not connected	—	—	18	11	7	—	98	134
No supply	—	—	—	9	—	—	4	13
<i>% connected</i>	<i>100.0</i>	<i>100.0</i>	<i>99.5</i>	<i>99.3</i>	<i>99.3</i>	<i>100.0</i>	<i>97.8</i>	<i>98.8</i>
<b>Electricity</b>								
Connected	1,325	42	4,019	2,948	1,049	30	6,910	16,323
Not connected	—	—	7	27	18	—	125	177
No supply	—	—	3	3	4	—	70	80
<i>% connected</i>	<i>100.0</i>	<i>100.0</i>	<i>99.7</i>	<i>99.0</i>	<i>97.9</i>	<i>100.0</i>	<i>96.3</i>	<i>98.0</i>
<b>Total<sup>(b)</sup></b>	<b>1,325</b>	<b>42</b>	<b>4,030</b>	<b>2,978</b>	<b>1,071</b>	<b>30</b>	<b>7,173</b>	<b>16,649</b>

(a) Includes the Australian Capital Territory (no Indigenous communities recorded).

(b) Includes not stated responses for 'Whether connected to community water supply' and 'Whether connected to community electricity supply'.

Source: ABS Community Housing and Infrastructure Needs Survey, 2001.

- In 2001, 16,348 or 98% of permanent dwellings in discrete Indigenous communities were connected to a sewerage system. There were 301 permanent dwellings which had no organised sewerage system.
- The majority of permanent dwellings in discrete Indigenous communities were connected to a community water supply (16,444 or 99%) and to a community electricity supply (16,323 or 98%).
- In communities where a water supply was available, 134 dwellings were not connected. Thirteen permanent dwellings were in places where no organised water supply existed.

- In communities where an electricity supply was available, 177 dwellings were not connected. Eighty permanent dwellings were in places where no organised electricity supply existed.
- In New South Wales, Victoria and Tasmania all permanent dwellings had sewerage, water or electricity supply.

## Indicator 11. People in prison custody

**Indicator:** The imprisonment rate of Aboriginal and Torres Strait Islander adults aged 17 years and older.

### Purpose

Imprisonment has a significant impact on the social and emotional wellbeing of individuals, their families and their communities. Indigenous people – males in particular – are overrepresented in the prison system. This impacts adversely on their health and wellbeing.

### Data

Information for this indicator was obtained from the ABS.

**Table 11.1: Rate of Indigenous imprisonment per 100,000, by state and territory, 30 June 2002**

Age	NSW <sup>(a)</sup>	Vic	Qld	WA	SA	Tas	ACT <sup>(b)</sup>	NT	Australia
17	—	—	557	—	—	259	—	—	165
18	671	203	1,372	1,454	359	539	—	565	904
19	2,217	988	1,907	2,212	1,141	1,005	3,371	1,081	1,812
20–24	3,493	1,913	2,847	3,980	2,733	1,442	2,762	1,773	2,923
25–29	3,749	1,679	2,747	4,553	3,298	1,135	1,344	1,860	3,039
30–34	3,325	1,812	2,216	3,062	2,572	615	932	2,085	2,549
35–39	2,669	1,354	1,709	2,596	2,388	486	357	2,095	2,116
40–44	1,550	896	1,223	1,715	1,266	184	389	1,127	1,304
45–49	672	366	951	793	92	243	645	795	712
50–54	528	367	575	666	—	—	—	281	463
55–59	369	—	155	446	178	—	2,381	71	243
60–64	95	—	232	112	—	—	—	—	105
65 & over	97	—	202	61	—	—	—	—	90
<b>Total</b>	<b>2,146</b>	<b>1,110</b>	<b>1,734</b>	<b>2,414</b>	<b>1,703</b>	<b>622</b>	<b>1,134</b>	<b>1,340</b>	<b>1,806</b>

(a) Data for New South Wales excludes Australian Capital Territory prisoners held in New South Wales prisons.

(b) Data for the Australian Capital Territory includes Australian Capital Territory prisoners held in the Australian Capital Territory as well as Australian Capital Territory prisoners held in New South Wales.

Note: Rate per 100,000 adult Indigenous population.

Source: ABS *Prisoners in Australia 2002*.

- At 30 June 2002 there were 4,494 Aboriginal and Torres Strait Islander people in prison, the majority (92%) of whom were males. Imprisonment rates for Indigenous people were highest in the age groups between 20 and 34 years.
- The overall imprisonment rate for Aboriginal and Torres Strait Islanders in 2002 was 1,806 per 100,000. Western Australia had the highest imprisonment rate (2,414 per 100,000), followed by New South Wales (2,146), Queensland (1,734), South Australia (1,703) and the Northern Territory (1,340).



## Indicator 12. The development of governance capacity in health

**Indicator:** The strategies used by the Australian Government and state and territory governments to develop community capacity in health planning, management and evaluation, including forms of governance for primary health care services that involve Aboriginal and Torres Strait Islander people, and the proportion of funding allocated to these.

### Purpose

The indicator demonstrates the commitment by governments to invest resources and time to ensure that Aboriginal and Torres Strait Islander people are supported to develop governance skills in health and facilitate communities to take greater control over their health.

### Data

Information for this indicator was obtained from the states, territories and the Australian Government. No quantitative data is provided for this indicator as jurisdictions had difficulties identifying expenditure on governance.

### Australian Government

The Australian Government provides funding for management and governance support to Aboriginal Community Controlled Health Organisations (ACCHOs) through the state and territory offices of OATSIH in DoHA. Annual funding of around \$1.6 million per year is provided from a Management Support and Development funds pool. The main areas of support include the following:

- governance training for boards
- financial training for both boards and CEOs
- support for services in difficulty.

Service Activity Reporting (SAR) is an annual data collection project jointly supported by OATSIH and the National Aboriginal Community Controlled Health Organisation (NACCHO). Service-level data on health care and health-related activities covering a twelve-month period are collected from Aboriginal and Torres Strait Islander primary health care services. The results of the data collection are reported to individual contributing services along with de-identified information on similar services. OATSIH and NACCHO use SAR data for formulating policy and in planning, as well as to profile the work of Aboriginal and Torres Strait Islander primary health care services. SAR data is used by OATSIH, along with other information, to identify services with the highest need for additional recurrent funding. In 2000-01, 17 services received a total of \$1.5 million additional funding through this process. In this period an estimated total of 1,340,000 episodes of health care were provided to Indigenous and non-Indigenous clients by the 124 respondent Aboriginal and Torres Strait Islander primary health care services (DoHA & NACCHO 2003).

OATSIH also provides funds for an Aboriginal Health Management Training Program. This program supports 15 students to gain a certificate of management from the Australian College of Health Service Executives and/or a graduate diploma from the University of New England. In 2000-01 and 2001-02, \$114,584 and \$238,616, respectively, were spent on this Program.

The Primary Health Care Access Program (PHCAP) was introduced in the 1999–00 Budget to increase access to primary health care services for Aboriginal and Torres Strait Islander people. This is achieved through the objectives of the Program, which are to empower individuals and communities to take greater responsibility for their own health, to reform and strengthen the existing local health system to better meet the needs of Aboriginal and Torres Strait Islander people, and to increase the availability of appropriate primary health care services where these are currently inadequate. Under PHCAP, a high priority is given to funding capacity development for community-controlled organisations, including training and other management support activities.

During 2000–01, around \$100,000, and in 2001–02 around \$300,000, were spent in South Australia, Queensland and the Northern Territory for capacity-building activities, including the development of community representative steering groups and information provision, as well as training and support mechanisms. In addition, the former Aboriginal Coordinated Care Trials in the Northern Territory, New South Wales and Western Australia were provided with funding of \$981,000 in 2000–01 and \$688,659 in 2001–02 to provide support and sponsorship, for capacity-building activities, infrastructure and broad training.

## **New South Wales**

The government's Aboriginal Health Strategic Plan was released in September 1999. It is an initiative under the Aboriginal Health Partnership and the Aboriginal and Torres Strait Islander Health Agreement (1996). Its purpose is to present strategies to improve health outcomes for Aboriginal and Torres Strait Islander peoples and to address the issues raised by the Indigenous health planning process in New South Wales.

The Aboriginal Health Strategic Plan has a conceptual framework which includes five supportive strategies – effective partnerships and cultural awareness, improved Australian Government and state coordination, support and development of the Aboriginal health workforce, effective monitoring of progress against agreed performance indicators, and improved collection of health information and informed decision making supported by a needs-based resource allocation model.

The New South Wales Aboriginal Health Partnership has been replicated in a number of area health services throughout the state with the establishment of local or area Aboriginal Health Partnerships. These partnerships play an important role in the organisation and coordination of resources to address Indigenous health issues identified in the Local Aboriginal Health Plans and the area health service Aboriginal Health Strategic Plans. While the partnerships are between the area health services and the local Aboriginal community controlled health services, the involvement of other service providers (for example GPs and other relevant organisations), through working groups, will enhance the effective coordination and delivery of health services.

## **Victoria**

The Koori Services Improvement Strategy (1998–2001) provided a set of principles and objectives to direct the Department of Human Services' programs and regions in assessing and, if required redeveloping, policy, programs and services, in partnership with the Aboriginal community. Central to the strategy was the establishment of state-wide, regional and local reference groups to assist in the development of, and provide feedback on the implementation of, agreed Regional Aboriginal Services Action Plans.

The draft three-year Aboriginal Services Plan (effective from 2002) builds on and strengthens activities under the Koori Services Improvement Strategy at regional and program level. The

plan was developed in consultation with Aboriginal people, representatives of Aboriginal communities, peak Aboriginal organisations and ATSIC commissioners.

Through the plan the department is committed to empowering Aboriginal communities to collaborate as partners and to provide support to build the capacity of Aboriginal-managed community and health services across Victoria.

In the area of primary health care, the department is committed to using the Primary Care Partnership Strategy and Community Health Plans to encourage the development of services in partnership with Indigenous communities and agencies to meet the health needs of Aboriginal and Torres Strait Islander people. By 2003 seven Primary Care Partnerships had developed such strategies and a Koori Liaison Worker had been employed to support the process.

## **Queensland**

Queensland Health informs and negotiates with three major Indigenous forums: the Queensland Aboriginal and Torres Strait Islander Health Partnership, the Torres Strait Health Partnership and the Queensland Aboriginal and Torres Strait Islander Health Alliance. All three forums include representatives of peak Aboriginal and Torres Strait Islander bodies and organisations. In addition to these, there is engagement at a more local level in each of the three zones in the state.

The Northern Zone has developed the Northern Zone Aboriginal and Torres Strait Islander Health Plan (2002–05). The plan outlines the establishment of regional and local forums as the mechanisms for community engagement. In areas where there is an ACCHO, they will be the community focal point.

The Central Zone has developed the Aboriginal and Torres Strait Islander Services Development Framework 2001–03. This document provides strategic direction and support in the planning, development and provision of appropriate and effective health services for Indigenous peoples.

The Southern Zone maintains ongoing consultation with Aboriginal and Torres Strait Islander Health Reference Groups. These consultations provide the opportunity for representatives to contribute to the development of policies that address Indigenous health. The Health Reference Groups will oversee the implementation of the Southern Zone Aboriginal and Torres Strait Islander Health Services Plan. Underpinning this plan are the principles of the Aboriginal and Torres Strait Islander Health Policy 1994.

## **Western Australia**

The promotion of partnership building between mainstream and Aboriginal health services has resulted in the establishment of the South West Aboriginal Medical Service and subsequent collocation on the South West Health Campus. Support was given by the Department of Health during the negotiation phase with the Bunbury Health Service.

The Western Australian Aboriginal Coordinated Care Trial continued in 2001 and 2002. An evaluation of the trial identified a number of community development-related outcomes, including improved individual empowerment, through client involvement in the development and delivery of their care plan and greater understanding of the importance of community empowerment as a means of driving health service reform.

In 2000–01, the Department of Health provided technical support to the design and implementation of an IT system to meet both coordinated care trials and other organisational requirements. This will result in the establishment of a potentially uniform data collection and

reporting system from those organisations who receive the majority of their funding from the state, thus providing an improved picture of the morbidity and mortality rates for Indigenous people.

In 2001–03 the Joint Planning Forum continued to develop the implementation strategy for the state’s six regional health plans.

## **South Australia**

The South Australian Aboriginal Health Partnership, established in 1996, is a high-level coordination mechanism for supporting reforms in health care and community service provision in public, private and community-controlled health and community sectors. The South Australian Aboriginal Health Partnership through its structure (executive committee, management committee and secretariat team) approves the major commitments contained within the current framework agreement. These commitments are to undertake joint regional planning, increase resourcing to match need, increase access to public sector and community-controlled health and community services, and improve data collection, evaluation and accountability.

The South Australian government is planning a major review of health policy and delivery during the next reporting period (the Generational Health Review). Initial consultations regarding the focus of the review have ensured that the key directions articulated in the Generational Health Review reform agenda will support the focus of the South Australian Aboriginal Health Partnership in its aim to improve Aboriginal and Torres Strait Islander health status as a major priority. It is anticipated that the Reform Agenda will consider the needs of Aboriginal communities by recognising the need to improve the coordination between public, community-controlled and private health care service providers, and to focus on shared action that strengthens the capacity of Aboriginal and Torres Strait Islander individuals, families, organisations and communities to work in partnership with these organisations.

The Department of Human Services is currently developing an Aboriginal health framework which recognises the nine principles consistent with the National Strategic Framework for Aboriginal and Torres Strait Islander Health and acknowledges the South Australian Statement of Reconciliation.

## **Australian Capital Territory**

In 2001–02, the Australian Capital Territory Aboriginal Health Service was funded by the Australian Capital Territory Government to develop a comprehensive strategic and operational plan. The object of the plan was to improve the capacity of the service to meet the demands of existing and future clients, strengthen links with other stakeholders, and improve access for Aboriginal peoples and Torres Strait Islanders within the Australian Capital Territory and region to health-related services.

Over the two years, the portfolio also contributed significant staff resources to work in partnership with Aboriginal community agencies. Staff assisted agencies through the provision of advice on the content and availability of Australian Capital Territory Government-funded governance training opportunities and provided assistance and support to agencies with regard to performance and financial accountability requirements and other contractual matters.

## Northern Territory

The Northern Territory Aboriginal Health Forum is a state-level organisation formed to address Aboriginal and Torres Strait Islander health issues. It aims to facilitate improved community capacity in health planning and Indigenous involvement in health management and evaluation. The forum aims to improve health outcomes for Aboriginal and Torres Strait Islanders through improving access to health and health-related programs and increased health service resources that reflect the higher level of need for services among Aboriginal and Torres Strait Islander peoples. Joint planning processes allow for Indigenous participation in health decision making and priority setting, improved cooperation and coordination of service delivery, increased clarity with respect to roles and responsibilities, and enhanced service effectiveness and efficiency.

The forum operates by a formal agreement and brings together representatives from a number of agencies including DoHA, ATSIC, the Northern Territory Department of Health and Community Services, and the Aboriginal Medical Services Alliance of the Northern Territory.

In the Northern Territory, Aboriginal and Torres Strait Islander residents access primary care services through a variety of service delivery models. The Department of Health and Community Services funds primary health care through 90 health clinics. Included within these 90 services are 21 community-based, Aboriginal primary health care services. Of these, 14 organisations (around two-thirds) provide a range of general community services as well as health-specific services. Some 25 community-based services are funded by the Australian Government to provide health services to the local population. Of these, 14 funded organisations provide general community services as well as health specific services.

Aboriginal community-based services in the Northern Territory are controlled by management boards elected from among local residents. The majority of these boards are composed entirely of Indigenous persons.

Program initiatives by the Australian Government to improve Indigenous access to the Medical Benefits Scheme and PBS have allowed the development of jointly funded arrangements which also promote increased Indigenous control over primary health care services. Coordinated Care Trials were initially trialled at two Northern Territory sites (Tiwi Islands and Katherine West), and joint Australian Government-Northern Territory funding initiatives are being extended under both the Coordinated Care Trials initiative (in Katherine East) and the new PHCAP. Under PHCAP, plans are advancing to develop services in five Central Australian health zones and two Top End health zones.

### **Box 12.1: Data issues**

*It was agreed that no quantitative data be reported for this indicator as it was not clear what resources should be included under governance. States and territories and the Australian Government also found it difficult to separate out expenditure for governance from broader expenditure provided to Aboriginal and Torres Strait Islander people.*

*The definition of what is required for this indicator and the specifications need to be clarified.*

## Indicator 13. Aboriginal and Torres Strait Islander representation on health/hospital boards

### Indicator:

- (a) The number of health/hospital boards that have Aboriginal and Torres Strait Islander representation.
- (b) The proportion of boards that have Aboriginal and Torres Strait Islander representation mandated by terms of reference or legislation.

### Purpose

This indicator reflects commitment to mechanisms for Aboriginal and Torres Strait Islander representation in health system management at regional and/or institutional levels. The poor health status of Aboriginal and Torres Strait Islander people is reflected in a high level of need for mainstream hospital and health services. Accordingly, representation on hospital boards is needed to ensure Indigenous participation in decision-making processes and the determination of priorities.

### Data

Information for this indicator was provided by the states and territories.

#### New South Wales

In New South Wales, health service boards have the overall responsibility for the strategic direction and operational efficiency of the organisation, the protection of its assets and the quality of its services. The boards guide and direct, establish policies, chart the course of their respective organisations and act as advocates for their organisations in the local communities. The boards are subject to the direction and control of the Minister except in relation to the context of a report or recommendation.

The 17 area health services provide the framework for the provision of public health services within their respective areas. Two health corporations – Corrections Health Service and The Children’s Hospital at Westmead – together with the Ambulance Service, provide health support services across the whole state.

In 2000–01, 16 out of the 20 Health Service Boards in New South Wales had at least one Aboriginal and Torres Strait Islander member. In 2001–02, this fell to 14 out of 20.

The *Health Services Act 1997* and the *Ambulance Service Act 1990* do not make provision for the makeup of membership on Health Service Boards, so Aboriginal and Torres Strait Islander membership is not mandated. However, the New South Wales Government has a commitment to increasing the number of women, Aboriginal and Torres Strait Islander people, people from culturally diverse backgrounds and young people on boards and committees under the Health portfolio.

#### Victoria

There are five classifications or schedules for Victorian hospitals. The functions of their boards vary, depending on their classification. Arrangements governing appointment and representation on the boards of hospitals also vary according to the classification. Arrangements generally stipulate that board representation should reflect the users of health

services with adequate representation of males and females on the board. Individual hospital boards no longer exist in the Melbourne metropolitan regions.

In no case is Indigenous membership mandatory on hospital boards, although some hospitals seek a representative from the local Aboriginal cooperative/community organisation and some encourage members of minority groups when advertising opportunities for Board appointments.

Information on the structure of health/hospital boards is not routinely collected by the Department of Human Services in Victoria and there is no requirement to record the Indigenous status of board members. Available data show that 5 of the 91 health boards in Victoria reported Aboriginal and Torres Strait Islander representation in 2000-01 and 6 of the 91 in 2001-02.

## **Queensland**

Queensland Health is divided into three zones containing 37 health service districts. Each district has a district health service council. The role of the district health council is to work in cooperation with the relevant health service district to ensure that the needs of the community are represented and reflected in the health services provided, and to monitor the performance of the district against a service agreement. The council should act as a direct link between the public and Queensland Health. District health councils are to facilitate community input into the planning, delivery, monitoring and evaluation of hospital and community-based health services.

District health councils are established in legislation, with a direct reporting relationship to the Minister, and consist of up to 10 members with equitable community representation. Members of the district health council are not elected, but are appointed by the Governor-in-Council. A term as member of the district health council is for three to four years.

All district health service councillors are ministerial appointments. There is no requirement mandated by the terms of reference for Indigenous representation, nor is there a requirement for district health council appointees to record Indigenous status.

## **Western Australia**

Health service boards are established under the *Hospital and Health Services Act 1927* and derive their functions and responsibilities from the Act. The boards are responsible for the control, management and maintenance of the hospital and for providing health services as approved by the Minister under a Australian Government-state agreement. There were 34 hospital boards in 2001-02.

During most of the 2000-01 financial year there were 41 Western Australian hospital boards with members and seven 'departmental' boards with no members. During this period the highest representation of Aboriginal and Torres Strait Islander people was 11 Indigenous board members out of a total of 356 positions, with seven of the 41 boards having Indigenous representatives (17%).

During 2002-03, it is expected that regional advisory mechanisms involving Indigenous representation will be implemented.

## **South Australia**

There were 73 incorporated hospitals and health centres under the South Australian Health Commission, at 30 June 2003. Information is available on 38 boards that have provision within

the hospital's constitution for a ministerial nomination. Twelve of these 38 boards (32%) reported Aboriginal and Torres Strait Islander membership in 2003.

## **Tasmania**

Tasmania does not have regional health or hospital boards. Services are administered by the Department of Health and Human Services.

## **Australian Capital Territory**

All board/committee members are asked if they wish to identify their Aboriginal or Torres Strait Islander status at the time of initial appointment. However, some members may choose not to do so. The representation may, therefore, be higher than recorded. In 2000–01, two members of the 22 health boards and committees identified as Aboriginals and/or Torres Strait Islanders. In 2001–02, three members of the 24 boards and committees identified as Indigenous Australians.

Throughout 2001 and 2002 the Health portfolio encompassed Disability and Housing Services and their associated boards and ministerial advisory groups. Aboriginal and Torres Strait Islander representation is indicated in mental health, and drug and alcohol advisory forums.

## **Northern Territory**

The Hospital Management Boards Act has established that each public hospital in the Northern Territory will have a board of eight members, five of whom are appointed by the Minister. Although the Act does not require hospitals to have Indigenous people on the hospital boards, all Northern Territory hospitals make every effort to include Aboriginal members. In 2001, three of the five public hospitals had a total of six Indigenous board members out of 40 total board members.

The Northern Territory has a wide array of representative health groups, many of which include Aboriginal representation and some of which require a majority of Aboriginal members. Examples of this latter group are the Northern Territory Aboriginal Ear Health Committee and the Northern Territory Aboriginal Eye Health Committee.

### **Box 13.1: Data issues**

*Responses to this indicator revealed different interpretations of 'hospital/health' boards. It was therefore agreed to only report descriptive data for this indicator.*

*Most states and territories indicated that there was no legislation governing appointments to hospital boards, and as a consequence the Indigenous status of members was not routinely collected. A number of states and territories stated that the composition of boards was intended to represent the users of the health service. Accordingly, the makeup of boards of hospitals with a high proportion of Aboriginal and Torres Strait Islander separations was recognised as particularly important to the provision of culturally appropriate services.*



## Indicator 14. Reporting of complaints in hospitals

### Indicator:

- (a) The ratio of complaints to hospital separations in the Aboriginal and Torres Strait Islander population compared to the Australian population.
- (b) The structures and mechanisms available to assist Aboriginal and Torres Strait Islander people who want to make a complaint.

### Purpose

Indigenous Australians may have undesired experiences in hospital and may also experience difficulties in making complaints or formal notifications. Because Aboriginal and Torres Strait Islander people have a high use of hospitals, it is important to assess Indigenous access to complaint mechanisms.

### Data

Information for this indicator was obtained from the states and territories; however, many states and territories could not provide quantitative data.

### New South Wales

New South Wales Health collects information about resolved complaints managed by the area health services. The Indigenous status of the complainant is not currently collected. A new complaints management system, to be implemented in 2004, will include this information.

The number of complaints reported to the collection during 2000–01 was 12,045 and during 2001–02 was 11,986. The complaint-to-patient ratio for 2000–01 was 1:272 and for 2001–02 was 1:274.

From February 1998, the State Continuous Improvement Steering Committee released the *Better Practice Guidelines for Frontline Complaints Handling*, based on comprehensive better practice models, to improve the level of customer satisfaction and frontline complaint-handling procedures.

Within New South Wales, each area health service appoints a complaints manager to handle complaints. Complaints which are resolved are recorded and submitted to the Department of Health quarterly. The Department of Health's Executive Support Unit coordinates the handling – receipt, logging, tracking and ultimately the resolution of complaints. The health service responsible for providing the service that is the subject of complaint will investigate and prepare a response on behalf of the Minister or Director General.

Complainants may choose to log their complaints direct to the Health Care Complaints Commission or Anti-Discrimination Commission and other Government bodies.

### Victoria

In 2000–01, 14 complaints by Aboriginal and Torres Strait Islander people (1.1% of all complaints made in writing) were managed by the Health Services Commission. In the same period 80 enquiries were made by Aboriginal and Torres Strait Islander people, representing 1.5% of all enquiries received in 2000–01. The Commission managed substantially more complaints by Aboriginal and Torres Strait Islander people during 2001–02; 62 or 4.7% of complaints were made by Indigenous Australians. Indigenous enquiries of the Commission

represented 2.1% of all enquiries in 2001–02, which is higher than the 0.6% of hospital separations that were of Aboriginal and Torres Strait Islanders. Hospitals also have their own internal complaints systems, but there is no central record of Indigenous complaints handled by hospitals.

In Victoria, the Office of the Health Services Commissioner assists people making their concerns known to health service providers. The office manages disputes that arise between users and providers of health services in Victoria.

The office has an Aboriginal Liaison Officer who is employed to create awareness within Indigenous communities of its services and to deal with complaints and enquiries that it receives from Aboriginal and Torres Strait Islander people. Enquiries are complaints that are made verbally, either in person or on the telephone, and are not confirmed in writing. Formal complaints must be confirmed in writing.

The Aboriginal Liaison Officer is available to help an Indigenous person to formalise a complaint in writing. Complaints that have been confirmed in writing have tended to relate to issues of a serious nature that have required a certain amount of investigation in the form of obtaining medical records, medical reports and opinions, and ongoing negotiations between the parties.

Complaints of a less serious nature can generally be dealt with informally, on the basis of a person simply making an enquiry without having to confirm the matter in writing. The Aboriginal Liaison Officer is able to follow the matter up on the same day and, if possible, tries to obtain a resolution informally within a matter of days at most.

It has been the experience of the Aboriginal Liaison Officer that Aboriginal and Torres Strait Islander people find confirming complaints in writing, even with assistance, to be a difficult and bureaucratic process and much prefer to deal with complaints as informally as possible. This has therefore dictated changes to the office's standard procedures in dealing with complaints, to be more culturally appropriate to the needs of Aboriginal and Torres Strait Islander people.

## **Queensland**

The Queensland Health Quality Improvement and Enhancement Program has developed a Queensland Health Complaints Management Policy that provides a complaint handling model, performance standards and criteria, and responsibility and specific accountability. This policy was effective from August 2002. Each health service district is responsible in setting up a complaints system within their area. While some health service districts have the capacity for recording Indigenous status on their complaints system, the majority do not collect this information.

Individuals have the right to independently complain to external agencies at any time. Relevant statutory agencies include, but are not limited to, the Official Visitors, the Health Rights Commission, police, Ombudsman, Crime and Misconduct Commission, and professional registration boards.

## **Mechanisms to assist Indigenous people**

Queensland Health Hospital Liaison Officers provide advice and support to Aboriginal and Torres Strait Islander clients and their families in negotiations with medical staff in hospital and clinical settings. The Hospital Liaison Officers also have access to skilled interpreters through networks within the community. It is the responsibility of all Queensland Health employees to assist any client with documenting a complaint.

## **Western Australia**

In Western Australia, the complaints procedure varies from hospital to hospital. Many hospitals accept verbal complaints and have Aboriginal Liaison Officers or social workers to assist Aboriginal and Torres Strait Islander people if they wish to make a complaint. Complaint data recorded at the hospital level do not identify if complainants are Indigenous Australians. Anecdotal information suggests that very few Aboriginal people make complaints. In the 2001-02 financial year, data from the metropolitan hospitals were collated by the Office of Safety and Quality in Health Care to provide information regarding types of complaints. The data system does not contain Aboriginal identification. There were 4,165 complaints from metropolitan hospitals.

The Office of Health Review is a state government body that provides a means of having complaints about health and disability services reviewed, conciliated and dealt with. It provides a free service to all users of health and disability services in Western Australia. However, it encourages complainants to make a direct approach to the service provider first and therefore represents only those complaints that were not resolved through the hospital complaints system.

Complaints must be lodged in writing to the office, although staff can assist consumers to submit a complaint, and there are also interpreters available if needed. The complaint form includes a question regarding Indigenous identification. In the 2000-01 financial year there were 404 complaints about public hospitals and none were recorded as being from Aboriginal people. In the 2001-02 financial year there were 196 complaints about public hospitals and two were from Aboriginal people.

## **South Australia**

There is currently no uniform complaints system within hospitals for Aboriginal and Torres Strait Islander peoples. However, South Australia is currently drafting a Health Complaints Bill which will aim to ensure that complaints by Aboriginal and Torres Strait Islander peoples will be dealt with in an appropriate way.

## **Tasmania**

The Health Complaints Commission was established in 1997 in Tasmania to investigate complaints against providers of health services. The commission covers all aspects of health services that are provided in the public and private sector. Indigenous status is not collected when patients make a complaint. Structures and mechanisms to support all patients making a complaint have been developed, but none of these are specific to ethnic background.

Two of the three major hospitals in Tasmania employ Aboriginal Liaison Officers to assist in the promotion of cultural awareness and to facilitate the reporting of complaints.

## **Australian Capital Territory**

Data could not be provided for this indicator as acute hospital service facilities in the Australian Capital Territory did not incorporate an Aboriginal and Torres Strait Islander identifier within their complaints database. The Commission for Health Complaints received nil complaints in 2001-02. The fact that all complaints to the Commission are required to be written may be a determining factor.

Two Aboriginal Liaison Officers were located in the larger hospitals. The officers were in a position to address patient complaints.

## Northern Territory

Public hospitals have established formal processes for complaint handling. These processes are monitored within the Northern Territory by the Complaints Handling Group and are a requirement for national hospital accreditation. Information on complaints is available for all public hospitals and in all cases the rate of complaints per hospital separation is much higher for Indigenous patients than for non-Indigenous patients. At the Royal Darwin Hospital in 2000, the non-Indigenous to Indigenous rate ratio for complaints was 10 to one, while at Alice Springs Hospital it was 14 to one.

A range of hospital initiatives is helping to improve communication with Aboriginal clients. These include Aboriginal Liaison Officers, hospital-based Aboriginal Health Workers, the Aboriginal Interpreter Service and cross-cultural training for hospital staff. While Aboriginal staff help communication with Aboriginal clients in matters such as informed consent and improved treatment, they also resolve difficulties that arise outside the formal complaints system.

### **Box 14.1: Data issues**

*Most states and territories could not provide quantitative data for this indicator and it was agreed to report descriptive and quantitative information. There were no consistent processes for managing and recording Aboriginal and Torres Strait Islander complaints about hospital services across states and territories. A number of states and territories reported progress towards developing systems for reporting and managing complaints. These systems may relate solely to hospitals, or the broader health services sector. Most states and territories reported the employment of Aboriginal Liaison Officers to help Indigenous people who wanted to make a complaint.*

# Determinants of health—access to services

## **Indicator 15**

Aboriginal and Torres Strait Islander community-controlled health services

## **Indicator 16**

Distance to a primary health care centre

## **Indicator 17**

Distance to a hospital

## **Indicator 18**

Access to primary health care services – small homeland communities and outstations

## **Indicator 19**

Management of key conditions

## **Indicator 20**

Aboriginal and Torres Strait Islander people in the health workforce

## **Indicator 21**

Higher education and training in key health professions

## **Indicator 22**

Workforce availability in primary health care services

## **Indicator 23**

Workforce availability in hospitals

## **Indicator 24**

Cross-cultural training for hospital staff

## Introduction

There are 10 indicators in this subdomain. The first five indicators relate to Indigenous access to health services – Aboriginal and Torres Strait Islander community-controlled health services, community health centres, hospitals, health services for small homeland communities and services for key health conditions. These indicators provide a measure of the extent to which Aboriginal and Torres Strait Islander people have access to the range of different health services that most non-Indigenous people can access.

The next four indicators relate to health services workforce availability and training. Indicators on the number of Indigenous people in the health workforce and the numbers of Indigenous people with higher education and training in key health professions are being developed to assess the extent of the capacity of Indigenous people to deliver health services to Indigenous people. There are two indicators on workforce availability in services providing health care to a significant proportion of Indigenous people – one for primary health care services and one for hospitals. These provide measures of these services to provide care for a large population of Indigenous people. The last indicator in this subdomain is the extent to which hospital staff are trained to provide culturally appropriate services to Indigenous people.

## Indicator 15. Aboriginal and Torres Strait Islander community-controlled health services

### Indicator:

- (a) The number of primary health care services that are community-controlled
- (b) The per person funding for primary health care services provided by government to Aboriginal and Torres Strait Islander Community Controlled Health Organisations (ACCHOs).

### Purpose

This indicator is intended to measure the extent to which primary health care for Aboriginal and Torres Strait Islander people is community-controlled, and the capacity of such services to provide comprehensive primary health care. The Australian Government has joint responsibility with state and territory governments for funding and/or direct provision of Aboriginal and Torres Strait Islander primary health care services. The indicator allows monitoring of state, territory and Australian Government allocation to these services.

### Data

Data are provided on the funding for Aboriginal and Torres Strait Islander primary health care services (ATSIPHCS). This includes ACCHOs, as well as other Indigenous primary health care services. Most of the data relates to community-controlled services but it was not possible to provide data only on these services.

The table includes Australian Government expenditure from OATSIH and state government expenditure on Aboriginal and Torres Strait Islander primary health care services. Australian Government data are from the SAR annual data collection project. State government numbers and expenditure data were provided separately by each jurisdiction.

- The number of ATSIHCS in Australia increased from 159 in 2000–01 to 162 in 2001–02.
- The Northern Territory (34 in 2000–01 and 38 in 2001–02) and Victoria (34 in 2000–01 and 33 in 2001–02) had the largest number of ATSIHCS.
- Most expenditure on ATSIHCS services came from the Australian Government. In 2000–01, 73% of total expenditure and in 2001–02, 77% of expenditure on these services was from the Australian Government.
- Australian Government expenditure across Australia increased by \$19 million between 2000–01 and 2001–02. Expenditure by state governments decreased by \$1.37 million over the same period.
- In 2000–01, the highest per capita expenditure on ATSIHCS was in the Northern Territory (\$653) and South Australia (\$651), and in 2001–02 the highest per capita expenditure was in the Northern Territory (\$755). The lowest per capita expenditure was in Tasmania, where there was no expenditure by the state government on these organisations (\$164 in 2000–01 and \$171 in 2001–02).

**Table 15.1: Number of and expenditure on Aboriginal and Torres Strait Islander primary health care services, 2000–01 and 2001–02**

	NSW & ACT <sup>(a)</sup>	Vic	Qld	WA	SA	Tas	NT	Australia
<b>2000–01</b>								
<b>No. of ATSIPHCS</b>	28	34	29	21	8	5	34	159
<b>Expenditure (\$'000)</b>								
- Australian Govt <sup>(b)</sup>	20,367.1	10,640.2	19,505.3	24,469.2	13,157.1	2,847.0	26,825.5	117,811.4
- State/territory	4,641.8	6,760.2	4,199.5	13,737.1	3,470.6	—	10,328.7	43,137.9
<i>Total</i>	<i>25,008.9</i>	<i>17,400.4</i>	<i>23,704.7</i>	<i>38,206.4</i>	<i>16,627.7</i>	<i>2,847.0</i>	<i>37,154.1</i>	<i>160,949.3</i>
<b>Estimated population<sup>(c)</sup></b>	138,797	27,846	125,910	65,931	25,544	17,384	56,875	458,287
<b>Per person expenditure (\$)</b>	<b>180</b>	<b>625</b>	<b>188</b>	<b>579</b>	<b>651</b>	<b>164</b>	<b>653</b>	<b>351</b>
<b>2001–02</b>								
<b>No. of ATSIPHCS</b>	27	33	30	21	8	5	38	162
<b>Expenditure \$'000</b>								
- Australian Govt <sup>(b)</sup>	25,864.4	11,563.7	20,630.4	28,179.0	15,043.7	2,974.1	32,418.3	137,097.0
- State/territory	5,229.3	7,141.8	3,711.4	11,898.4	3,251.0	—	10,540.6	41,772.5
<i>Total</i>	<i>31,093.7</i>	<i>18,705.5</i>	<i>24,341.8</i>	<i>40,077.5</i>	<i>18,294.7</i>	<i>2,974.1</i>	<i>42,958.9</i>	<i>178,869.4</i>
<b>Estimated population<sup>(c)</sup></b>	138,797	27,846	125,910	65,931	25,544	17,384	56,875	458,287
<b>Per person expenditure (\$)</b>	<b>224</b>	<b>672</b>	<b>193</b>	<b>607</b>	<b>716</b>	<b>171</b>	<b>755</b>	<b>390</b>

ATSIPHCS Aboriginal and Torres Strait Islander primary health care services.

- (a) New South Wales and Australian Capital Territory data have been combined to avoid the identification of a single service's data.
- (b) Australian Government data are from the SAR data collection. The Australia total figure includes a service not allocated to a particular state. The expenditure figures are an underestimate as two services did not have data available.
- (c) At the time of publication, Indigenous population projections were not available. The population estimate for 30 June 2001, excluding the Other Territories, has been used for both financial years to calculate per capita expenditure. This estimate is based on the final results of the 2001 Census.

Source: Australian Government data provided by OATSIH. State data provided by each jurisdiction.

### **Box 15.1: Data issues**

*The data provided included all Aboriginal and Torres Strait primary health care services, not just those that were community-controlled, as it was not possible to obtain data only for community-controlled organisations. It is suggested that the indicator specifications be changed to include all Indigenous primary health care services.*



## Indicator 16. Distance to a primary health care centre

**Indicator:** The proportion of Aboriginal and Torres Strait Islander communities that are more than 25 kilometres from a primary health care centre.

### Purpose

This indicator reveals geographic access to primary health care services. A primary health care centre is the first point of contact with a health service for most Aboriginal and Torres Strait Islander people living in discrete Indigenous communities. Distance to a primary health care centre is an important determinant of whether people are able to seek treatment. Delayed diagnosis and treatment can lead to poor health outcomes.

### Data

The data for this indicator come from the ABS 2001 CHINS. This CHINS collected data on a total of 1,216 discrete Indigenous communities. A complete description of the collection method is available in the principal publication outlining the 2001 CHINS – *Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia 2001* (ABS 2002).

The survey collected information on discrete Indigenous communities (not all communities as specified in the indicator) 25 kilometres or more from a community health clinic. This information was only collected for those communities that were 10 kilometres or more from the nearest hospital.

The CHINS definition of a community health clinic differs somewhat from a primary health care centre, which is the specified facility identified for this indicator. A community health clinic is defined as a facility which provides a range of health services, such as nursing, medical, dental and nutritional services. In remote areas not all of these services may be available; however, generally the centre would have nurses, health workers and/or doctors in regular attendance (ABS 2002).

**Table 16.1: Discrete Indigenous communities<sup>(a)</sup> by distance to nearest community health clinic, for selected states and territories, 2001**

Distance to nearest community health clinic	NSW	Qld	WA	SA	NT	Australia <sup>(b)</sup>
	<b>Number</b>					
Less than 25 km	17	48	117	43	254	481
25 km	10	72	139	42	342	606
<b>Total<sup>(c)</sup></b>	<b>60</b>	<b>142</b>	<b>283</b>	<b>96</b>	<b>632</b>	<b>1,216</b>
	<b>Per cent</b>					
<b>Proportion of communities 25 km or more from the nearest community centre and 10 km or more from the nearest hospital</b>	<b>17</b>	<b>51</b>	<b>49</b>	<b>44</b>	<b>54</b>	<b>50</b>

(a) Data applicable to communities that were 10 kilometres or more from the nearest hospital.

(b) The Australian Capital Territory has no discrete Indigenous communities, Tasmania and Victoria are included in the Australian total.

(c) Includes communities located within 10 kilometres of a hospital.

Source: ABS Community Housing and Infrastructure Needs Survey, 2001.

- In 2001, approximately half (606 or 50%) of all discrete Indigenous communities were located 10 kilometres or more from the nearest hospital and 25 kilometres or more from the nearest community health clinic.

- State and territories with the highest proportion of Indigenous communities located 25 kilometres or more from the nearest community health clinic were the Northern Territory (342 or 54%), Queensland (72 or 51%) and Western Australia (139 or 49%). These communities were also located 10 kilometres or more from the nearest hospital.

## Indicator 17. Distance to a hospital

**Indicator:** The proportion of Aboriginal and Torres Strait Islander communities which are more than 50 kilometres from the nearest acute hospital.

### Purpose

Indigenous people have more chronic illness, including diabetes, kidney disease and coronary heart disease, than the overall population. People with these conditions need to travel frequently to the nearest hospital. People who live at a distance from a hospital often need to move residence in order to receive regular treatment, or must find alternative means of care in their current residence, or must travel large distances to receive treatment. Improving the access of Aboriginal and Torres Strait Islander communities to acute hospital care is a goal for all states and territories.

### Data

The data for this indicator come from the ABS 2001 CHINS. The 2001 CHINS collected data concerning a total of 1,216 discrete communities. A complete description of the collection method is available in the principal publication outlining the 2001 CHINS—*Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia 2001* (ABS 2002).

This survey collected information on discrete Indigenous communities (not all communities as specified in the indicator specification) 50 kilometres or more from the nearest hospital.

**Table 17.1: Discrete Indigenous communities by distance to the nearest acute hospital, for selected states and territories, 2001**

Distance to nearest hospital	NSW	Qld	WA	SA	NT	Australia <sup>(a)</sup>
	<b>Number</b>					
Less than 50 km	52	46	73	24	74	271
50 km or more	8	96	210	72	556	943
<b>Total<sup>(b)</sup></b>	<b>60</b>	<b>142</b>	<b>283</b>	<b>96</b>	<b>632</b>	<b>1,216</b>
	<b>Per cent</b>					
<b>Proportion of communities 50 km or more from the nearest hospital</b>	<b>13</b>	<b>68</b>	<b>75</b>	<b>74</b>	<b>88</b>	<b>78</b>

a) The Australian Capital Territory had no discrete Indigenous communities. Tasmania and Victoria are included in the Australian total.

b) Includes 'Distance to nearest hospital' not stated.

Source: ABS Community Housing and Infrastructure Needs Survey, 2001.

- In 2001, 943 or 78% of discrete Indigenous communities were located 50 kilometres or more from the nearest hospital.
- Northern Territory (88%), Western Australia (75%), South Australia (74%) and Queensland (68%) were the states and territories with the highest proportion of communities located 50 kilometres or more from the nearest hospital.

## **Indicator 18. Access to primary health care services—small homeland communities and outstations**

**Indicator:** The proportion of Aboriginal and Torres Strait Islander homeland communities/outstations, with an usual population of less than 50 people and that are more than 50 kilometres from a primary health care service, that have access to various types of health services on a regular basis.

### **Purpose**

Small and isolated communities create special health service delivery challenges. Improving the access of Aboriginal and Torres Strait Islander communities to primary health services in general is a goal for all states and territories. The indicators examined here combine isolation and size of communities.

### **Data**

The data for this indicator comes from the ABS 2001 CHINS. The survey collected information on discrete Indigenous communities with less than 50 people (not small homeland communities/outstations) which were more than 50 kilometres from a community health clinic. The survey collected data on access to health professionals, not health services as specified in the indicator.

The defined health professionals for this indicator were an Aboriginal Health Worker working in the community every day, a nurse visiting at least every fortnight and a doctor visiting at least every month. There were, however, no data available on the number of health professionals visiting these communities more frequently than at least once a month.

- There were a total of 374 communities in Australia with less than 50 people that were more than 50 kilometres from a community health clinic. Most of these were in the Northern Territory (239) and Western Australia (83).
- Over three-quarters (77%) of all such communities did not have any health professionals visiting at least once a month.
- In the Northern Territory, 27% of these communities were visited by health professionals at least once a month, while in Western Australia (24%) and Queensland (3%) were visited at least once a month. In South Australia, there were only 11 of these types of communities and none of these were visited by health professionals at least once a month.
- The most common health professional visiting these communities at least once a month was a registered nurse (18%), followed by a doctor (15%).

**Table 18.1: Number and proportion of communities with less than 50 people and more than 50 km from a community health clinic<sup>(a)</sup>, by access to selected health professionals, for selected states and territories, 2001**

Visited at least once a month	Qld	WA	SA	NT	Australia
<b>Number</b>					
Indigenous health worker	—	9	—	33	42
Registered nurse	1	14	—	52	68
Doctor	1	5	—	50	56
<i>By any selected health professionals<sup>(b)(c)</sup></i>	<i>1</i>	<i>20</i>	<i>—</i>	<i>65</i>	<i>87</i>
Not visited by selected health professionals	38	63	11	174	287
<b>Total</b>	<b>39</b>	<b>83</b>	<b>11</b>	<b>239</b>	<b>374</b>
<b>Percentage of communities with less than 50 people and more than 50 km from a community health centre</b>					
Indigenous health worker	—	10.8	—	13.8	11.2
Registered nurse	2.6	16.9	—	21.8	18.2
Doctor	2.6	6.0	—	20.9	15.0
<i>By any selected health professionals<sup>(b)(c)</sup></i>	<i>2.6</i>	<i>24.1</i>	<i>—</i>	<i>27.2</i>	<i>23.3</i>
Not visited by selected health professionals	97.4	75.9	100.0	72.8	76.7
<b>Total</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Percentage of all communities with less than 50 people</b>					
Indigenous health worker	0.0	4.5	0.0	6.5	4.7
Registered nurse	1.0	6.9	0.0	10.2	7.6
Doctor	1.0	2.5	0.0	9.8	6.3
<i>By any selected health professionals<sup>(b)(c)</sup></i>	<i>1.0</i>	<i>9.9</i>	<i>0.0</i>	<i>12.8</i>	<i>9.8</i>
Not visited by a medical service	38.8	31.2	15.7	34.3	32.3
<b>Total</b>	<b>39.8</b>	<b>41.1</b>	<b>15.7</b>	<b>47.0</b>	<b>42.1</b>

(a) Excludes communities within 10 km of a hospital.

(b) Including environmental health worker.

(c) Components may not add to total as communities may have access to more than one type of health profession.

Note: Australia includes New South Wales, Victoria, the Australian Capital Territory and Tasmania.

Source: ABS Community Housing and Infrastructure Needs Survey, 2001.

- Of all communities with less than 50 people, 32% were not visited by a health professional at least once a month. This percentage ranged from 15.7% in South Australia to 38.8% in Queensland.

## Indicator 19. Management of key conditions

**Indicator:** The extent to which there is systematic support for:

- (a) the development and implementation of evidence-based treatment protocols
- (b) presence of early detection programs
- (c) chronic disease management systems in Aboriginal and Torres Strait Islander people, using recommendations specifically developed for Aboriginal and Torres Strait Islander people (where appropriate).

### Purpose

Early detection and management of chronic conditions are recognised components of health care systems. This indicator is designed to reflect jurisdictional commitment to the dissemination and implementation of best practice recommendations for conditions that cause high levels of morbidity and mortality in Aboriginal and Torres Strait Islander populations.

### Data

Data for this indicator was provided by state and territory governments and the Australian Government.

### Australian Government

#### Patient Information and Recall System

The Patient Information and Recall (PIR) System program funded and administered by the OATSIH is intended to support the delivery of best practice and holistic primary health care to Aboriginal and Torres Strait Islander Communities throughout Australia. Custom-designed software is employed in the program and is built on the evidence-based concept of health care delivery. The funding provided under the program is non-recurrent and is designed to enable Australian Government-funded Aboriginal and Torres Strait Islander primary health care organisations to acquire and implement computer-based PIR systems.

PIR systems software includes a patient recall capacity that is designed to assist services in the implementation and maintenance of whole-of-life care plans. Initiatives that are enabled by this functionality include immunisation, diabetes screening and management, and cardiovascular disease detection and management. PIR systems also include the means of recording clinical summaries necessary for the effective tracking and control of chronic disease states.

Funding provided to organisations in 2000–01 amounted to \$1.93 million and, in 2001–02, \$2.77 million. The funding provided covers the costs of hardware, software, staff training and data management.

#### Otitis Media

The Australian Government spent approximately \$195,000 during 2000–01 for the publication and implementation of *Recommendations for Clinical Care Guidelines for the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations* and a package of supporting information. The Recommendations are based on the Systematic Review of Existing Evidence and Clinical Guidelines conducted by NACCHO. The package, including the Systematic Review, was made available to primary health care providers as a means of promoting greater

consistency in the management of otitis media by primary health care providers. In 2001–02, approximately \$40,000 was spent on reprinting the *Recommendations for Clinical Care Guidelines for the Management of Otitis Media in Aboriginal and Torres Strait Islander Populations* and the package of supporting information, subsequent to sector demand.

### **Hearing health**

Approximately \$95,000 was spent on commissioning a review of the hearing health services provided to Aboriginal and Torres Strait Islander peoples under two Australian Government funded programs: the National Aboriginal and Torres Strait Islander Hearing Strategy, and the Australian Government Hearing Services Program. The review commenced in September 2000 and the final report was received in June 2001.

### **Central Australian Rural Practitioners Association Standard Treatment Manual**

The Central Australian Rural Practitioners Association (CARPA) is a multidisciplinary group supporting practice in remote and rural communities in Central Australia. The Standard Treatment Manual is a collection of standard protocols for the management of common conditions seen in remote localities (primarily Aboriginal health). The manual is intended for use by trained health professionals including Aboriginal Health Workers, nurses and doctors. It is primarily intended to be used in remote Indigenous communities, rural and urban Aboriginal health services, and for non-Indigenous people living in these communities.

During 2000–01, \$88,000 was spent for coordination, editing and initial printing of the fourth edition of the manual. A further \$55,000 was spent on the manual in 2001–02. These funds were provided by OATSIH in DoHA, in addition to funding by the Northern Territory Department of Health and Community Services.

### **Rheumatic heart disease program, Alice Springs, Northern Territory**

The Australian Government Department of Health and Ageing provided funding to meet the expenses for setting up this program in Alice Springs. This condition is highly prevalent in the Aboriginal and Torres Strait Islander population so is targeted to this population group. Expenditure in 2001–02 was \$187,000.

The main aims of the program are to:

- establish a computerised register of all known or suspected cases of acute rheumatic fever or rheumatic heart disease within the region;
- use the register to improve patient care, particularly secondary prevention, by establishing a reminder system for monthly penicillin injections and other clinical follow-up by the primary care system;
- organise and conduct education programs; and
- integrate these services into the existing primary care network.

### **New South Wales**

In the period 2000–01 to 2001–02 a range of initiatives were established centrally in New South Wales through the Chronic and Complex Care Program and the New South Wales Aboriginal Vascular Health Program.

There were also regional initiatives in area health services. A number of areas focused on local chronic and complex care activities to specifically target Aboriginal community members, for example the Greater Murray Aboriginal Diabetes Project, South Eastern Sydney Aboriginal

Chronic Disease Outreach Clinic in La Perouse, and Far West Chronic Care Network (with a very large Aboriginal population in the region).

In addition, numerous local initiatives have been undertaken through local area Aboriginal health plans, such as the New England Area Cardiovascular Screening Program. Other local collaborative initiatives were also undertaken between various service providers, including the Aboriginal Diabetes Project of the Shoalhaven Division of General Practice with South Coast Aboriginal Medical Service, Illawarra Area Health Service.

The New South Wales Aboriginal Vascular Health Program was established in July 2000 to address priority areas of the New South Wales Aboriginal Health Strategic Plan related to cardiovascular health. This includes heart disease, diabetes, hypertension, stroke and renal disease. A combined vascular approach has been adopted because of the shared risk factors, risk conditions and common lifestyle changes required to prevent and manage these conditions. A one-off allocation of \$1.4 million was made for initiatives under the program.

A central program focus is on close monitoring and evaluation to build the evidence base for effective interventions in the prevention and management of chronic disease in Aboriginal communities and disseminating examples and principles of best practice.

A series of demonstration site projects has been funded in area health services to work collaboratively with local services and organisations to develop improved models of prevention, early detection and care for Aboriginal people with or at risk of vascular diseases. Building the capacity of the Aboriginal health workforce is a core strategy.

In 2000–01, demonstration site projects were funded in eight area health services and Corrections Health Services to cover three correctional centres. A further four demonstration site projects were established in four areas in 2001–02, and four additional correctional sites.

All projects have been developed according to local priorities, resources and needs, and vary considerably across sites. The projects aim to increase access to care, improve service coordination and support improved disease self-management. Development of evidence-based assessment tools, clinical protocols, early detection and improved continuity of care and self-management in 2000–01 have featured in all projects.

State-wide initiatives to support project implementation include six-monthly networking and capacity-building forums for workers and a state-wide Vascular Health Network, and training programs in renal disease.

## **Victoria**

There are no overall plans for the management of key conditions and no Aboriginal-specific plans.

## **Queensland**

### **Health outcomes plans**

Health outcomes plans have been developed in the following National Health Priority Areas: cardiovascular health (coronary heart disease and stroke), diabetes, asthma, cancer control and injury prevention and control. The plans identify evidence-based strategies to address health issues for the general population as well specific population groups such as the Indigenous population where appropriate.



## **Enhanced model of primary health care**

The enhanced model of primary care is an initiative to improve the primary health care systems to manage major health conditions in the remote areas of the Northern Zone. This model includes a Chronic Disease Strategy comprising the prevention, early detection and management of chronic illness. The model is based on a collaborative approach, where Queensland Health works with community groups and other health organisations to identify barriers to access and ways of improving the delivery of primary health care services.

## **Patient Recall and Reminder System**

To enable better treatment for people with chronic conditions, audits in all health centres in the far northern area of the Northern Zone have been conducted to identify people in remote Indigenous communities with chronic disease. The system enables health professionals to identify when patients require routine follow-up care as defined in their care plans to ensure that health problems are prevented or minimised by identifying them at an early stage.

## **Queensland Health HIV/AIDS Strategy 1999-02**

This strategy aims to provide an integrated approach to the delivery of sexual health care services to Aboriginal and Torres Strait Islander peoples. Ongoing support through the Queensland and Torres Strait Health Partnership Forums under the Framework Agreements, and collaboration with the Community Controlled Health Services has ensured the effective implementation of the strategy. Successful implementation of this program is further assured by the establishment of Zonal Indigenous Health Coordinator positions.

## **The Adult Health Check**

As a follow-on from the Well Persons Health Check initiative, the Adult Health Check continues to enhance community understanding of disease processes through screening and brief interventions, and by providing information on community health status back to the community to facilitate planning and joint priority setting.

## **Renal service plans**

Each of the three Queensland Health Zones has developed renal service plans that recognise Aboriginal and Torres Strait Islander peoples as a priority population. The Northern and Central Zone Renal Services plans include specific strategies to address renal disease in Aboriginal and Torres Strait Islander peoples including health promotion, early detection, clinic management, renal replacement services, workforce management and information support actions. Queensland Health recognises that many rural remote areas of the state do not have ready access to a hospital renal unit or satellite unit and is working towards ensuring that high-quality home dialysis is available.

## **Rheumatic heart disease**

Queensland Health is working collaboratively with key health research bodies to develop clinical audits to examine how rheumatic heart disease is currently managed within the different Aboriginal and Torres Strait Islander communities as well as identifying the problems and barriers in coordinating management.

## **Better Health Outcomes Project**

An important component of this project is the patient information and recall system known as Ferret. Ferret is centred on clients and population-based, providing for opportunistic and planned service delivery. Ferret implementation supports the Chronic Disease Strategy and

model of service delivery for remote and rural Indigenous communities. A pilot project has been successfully completed and followed up at three sites in northern Queensland. The use of this system has been well accepted by the communities who see it as increasing accessibility to services. Post-pilot implementation in 10 other health services demonstrates this.

## **Western Australia**

### **Chronic disease prevention**

Western Australia's chronic disease prevention program recognises the importance of controlling risk factors in the health of the population. Some risk factors may be more prevalent in Indigenous people and prevention may target specific sections of the community as well as using a more broad-based approach to the health problems. Some of the strategies include:

- public education programs for health professionals as well as the general public;
- creating supportive environments in public places to promote good health;
- strengthening communities by giving them skills and resources to improve their own health;
- developing partnerships between government, non-government agencies and industry; and
- using the concept of 'capacity building' to ensure programs are sustainable in the long term by strengthening infrastructure.

## **South Australia**

South Australia has been actively involved in developing and implementing evidence-based treatment protocols for chronic disease as well as early detection programs for risk factors. A key factor in this work has been the facilitation of cultural awareness programs for medical practitioners involved in the diagnoses and treatment of chronic disease, and the active participation in ensuring that services and policy responses are inclusive of Aboriginal and Torres Strait Islander peoples.

During this reporting period the Standing Committee on Aboriginal and Torres Strait Islander Health has developed a cultural competency framework for all medical and allied health professionals. The framework, which has also been supported by AHMAC, is a resource which ensures that appropriate protocols are in place to ensure that responses to chronic disease is managed in an appropriate manner.

## **Tasmania**

Separate protocols on the management of key conditions are not developed for Aboriginal or Torres Strait Islander patients.

## **Australian Capital Territory**

Due to the geographic size of the Australian Capital Territory, and relatively small Aboriginal population, it is reasonable to assume that the majority of Aboriginal people in the Australian Capital Territory have access to the community-controlled Aboriginal Health Service, facilitating early detection of chronic disease.

## **Asthma**

The Australian Capital Territory Health government service provider utilises data obtained from the School Health Screening dataset to determine issues affecting the health of children. Comparisons are made between Aboriginal and Torres Strait Islander kindergarten children and other children entering school, with a particular focus on respiratory health and asthma. The data show that there is an excess of respiratory morbidity among Aboriginal kindergarten children and suggests that the prevalence of household smoking is greater in this community. However, evidence-based treatment protocols for respiratory health and for chronic disease management systems specific to Aboriginal and Torres Strait Islander community members are not in operation.

## **Diabetes**

Diabetes Service commenced the provision of monthly sessional multidisciplinary care for clients with, or at risk of, diabetes at the non-government Aboriginal Health Service in 2000. The sessions included basic clinical assessments for complications such as blood pressure, urinary microalbumin, HbA1c, foot screening and periodic eye screening. Comprehensive reviews were also provided which included advice on self-management, nutritional assessment and counselling, and podiatry foot treatment. Clients were referred to specialist services where indicated.

Services provided were based on the evidence-based recommendations for Early Detection and Primary Prevention and Management of Type 2 Diabetes. Multidisciplinary clinical pathways and standards were used, which incorporated best practice and information principles. All data was entered in the health service data system. The Australian Capital Territory Cancer Council supported the Diabetes Clinic with the Quit Coordinator attending each clinic to provide advice and support to those stopping smoking.

## **Northern Territory**

The Northern Territory has a well-established and comprehensive process of developing and implementing evidence-based treatment protocols, which are used by all Aboriginal health services. The fourth edition of CARPA Standard Treatment Manual was in development during this period. The new edition incorporates detailed chronic disease guidelines that were developed for the two Northern Territory Coordinated Care Trial sites. Implementation of the Standard Treatment Manual includes policy support by health services, introduction to the manual at the start of employment, inclusion of the manual in training, and provision of copies to all clinical staff.

All primary health care services have programs for 'Well persons' screening. These are holistic programs that aim to detect risk factors, chronic diseases, sexually transmitted infections and women's cancers. The extent of coverage and effective program delivery across the Northern Territory is currently not known, although individual services have some data. The program is provided both opportunistically by primary health care staff, and as part of organised screening weeks supported by visiting public health staff. Health assessments for Aboriginal people aged 50 years and older is encouraged through use of the enhanced primary care items, and by the use of a standard screening form.

All Northern Territory primary health care services have management systems including chronic disease registers and recall systems, either paper or computerised care plans, training programs and regular specialist visits to both remote and urban services.

## Indicator 20. Aboriginal and Torres Strait Islander people in the health workforce

**Indicator:** The proportion of the health workforce employed by states and territories that identify as Aboriginal or Torres Strait Islander.

### Purpose

This indicator monitors the proportion of Indigenous people employed as professional health care workers in order to assess the extent to which the capacity of Indigenous people to deliver health services to Indigenous people is being developed.

### Data

States and territories reported difficulties obtaining information on the proportion of doctors and nurses who were Indigenous, because ethnic identification was not required by the relevant registration boards and because identification may be understated. For several states and territories it was possible to gain some idea of these proportions from various staff surveys. However, in many cases the completion of such surveys is voluntary, as is the collection of Indigenous status information within these surveys.

Data from the ABS 2001 Census of Population and Housing is thought to be most reliable and was used for this indicator. These data are not restricted to the public sector employed health workforce, as stipulated in the definitions for this indicator.

- Aboriginal and Torres Strait Islander people are underrepresented in the Australian professional health workforce, representing 1.3% of the Australian health workforce.
- The states with the greatest proportion of Aboriginal and Torres Strait Islanders in their professional health workforce were the Northern Territory (9.0%) and Queensland (2.2%).
- Nursing was the most common profession for Aboriginal and Torres Strait Islander people working in the health services delivery sector.
- Queensland and the Northern Territory had the largest numbers of Aboriginal and Torres Strait Islander health workers.
- In the category of management and support staff, most Aboriginal and Torres Strait Islander people were employed as policy officers, project officers or administrative workers.

**Table 20.1: Aboriginal and Torres Strait Islander employment in the health workforce<sup>(a)</sup>, by state and territory, 2001**

	No. of Indigenous people employed	Total no. of people employed	Proportion of people employed, who were Indigenous (%)
<b>New South Wales and Australian Capital Territory</b>			
Health services delivery staff			
Medical staff	19	5,335	0.4
Nursing staff <sup>(b)</sup>	205	33,579	0.6
Aboriginal and Torres Strait Islander health worker	42	42	100.0
Welfare and community workers	149	1,837	8.1
Allied health	108	8,636	1.3
Dental practitioners	3	202	1.5
Pharmacists	0	457	0.0
Other	94	4,810	2.0
Management and support staff			
Program/service/unit managers	56	4,922	1.1
Policy/project officers and administrative workers <sup>(c)</sup>	455	23,296	2.0
Operational staff <sup>(d)</sup>	114	5,195	2.2
<b>Total</b>	<b>1,245</b>	<b>88,311</b>	<b>1.4</b>
<b>Victoria</b>			
Health services delivery staff			
Medical staff	6	3,771	0.2
Nursing staff <sup>(b)</sup>	57	24,557	0.2
Aboriginal and Torres Strait Islander health worker	11	14	78.6
Welfare and community workers	25	1,805	1.4
Allied health	20	6,048	0.3
Dental practitioners	0	173	0.0
Pharmacists	0	395	0.0
Other	9	2,979	0.3
Management and support staff			
Program/service/unit managers	10	3,197	0.3
Policy/project officers and administrative workers <sup>(c)</sup>	66	18,095	0.4
Operational staff <sup>(d)</sup>	19	3,322	0.6
<b>Total</b>	<b>223</b>	<b>64,356</b>	<b>0.3</b>

*(continued)*

**Table 20.1 (continued): Aboriginal and Torres Strait Islander employment in the health workforce<sup>(a)</sup>, by state and territory, 2001**

	No. of Indigenous people employed	Total no. of people employed	Proportion of people employed, who were Indigenous (%)
<b>Queensland</b>			
Health services delivery staff			
Medical staff	15	2,670	0.6
Nursing staff <sup>(b)</sup>	129	17,298	0.7
Aboriginal and Torres Strait Islander health worker	109	117	93.2
Welfare and community workers	74	764	9.7
Allied health	72	4,053	1.8
Dental practitioners	0	241	0.0
Pharmacists	0	202	0.0
Other	58	3,269	1.8
Management and support staff			
Program/service/unit managers	92	3,235	2.8
Policy/project officers and administrative workers <sup>(c)</sup>	351	11,075	3.2
Operational staff <sup>(d)</sup>	91	2,247	4.0
<b>Total</b>	<b>991</b>	<b>45,171</b>	<b>2.2</b>
<b>Western Australia</b>			
Health services delivery staff			
Medical staff	3	1,346	0.2
Nursing staff <sup>(b)</sup>	28	7,242	0.4
Aboriginal and Torres Strait Islander health worker	31	31	100.0
Welfare and community workers	29	393	7.4
Allied health	15	2,318	0.6
Dental practitioners	0	28	0.0
Pharmacists	0	117	0.0
Other	16	821	1.9
Management and support staff			
Program/service/unit managers	24	943	2.5
Policy/project officers and administrative workers <sup>(c)</sup>	94	5,834	1.6
Operational staff <sup>(d)</sup>	31	893	3.5
<b>Total</b>	<b>271</b>	<b>19,966</b>	<b>1.4</b>

(continued)

**Table 20.1 (continued): Aboriginal and Torres Strait Islander employment in the health workforce<sup>(a)</sup>, by state and territory, 2001**

	No. of Indigenous people employed	Total no. of people employed	Proportion of people employed, who were Indigenous (%)
<b>South Australia</b>			
Health services delivery staff			
Medical staff	0	1,326	0.0
Nursing staff <sup>(b)</sup>	24	8,206	0.3
Aboriginal and Torres Strait Islander health worker	43	49	87.8
Welfare and community workers	22	386	5.7
Allied health	3	1,736	0.2
Dental practitioners	0	87	0.0
Pharmacists	0	101	0.0
Other	9	1,307	0.7
Management and support staff			
Program/service/unit managers	18	1,289	1.4
Policy/project officers and administrative workers <sup>(c)</sup>	63	5,421	1.2
Operational staff <sup>(d)</sup>	17	1,124	1.5
<b>Total</b>	<b>199</b>	<b>21,032</b>	<b>0.9</b>
<b>Tasmania</b>			
Health services delivery staff			
Medical staff	3	317	0.9
Nursing staff <sup>(b)</sup>	20	2,198	0.9
Aboriginal and Torres Strait Islander health worker	3	3	100.0
Welfare and community workers	6	83	7.2
Allied health	9	485	1.9
Dental practitioners	0	11	0.0
Pharmacists	0	43	0.0
Other	3	237	1.3
Management and support staff			
Program/service/unit managers	12	253	4.7
Policy/project officers and administrative workers <sup>(c)</sup>	44	1,374	3.2
Operational staff <sup>(d)</sup>	6	369	1.6
<b>Total</b>	<b>106</b>	<b>5,373</b>	<b>2.0</b>

(continued)

**Table 20.1 (continued): Aboriginal and Torres Strait Islander employment in the health workforce<sup>(a)</sup>, by state and territory, 2001**

	No. of Indigenous people employed	Total no. of people employed	Proportion of people employed, who were Indigenous (%)
<b>Northern Territory</b>			
Health services delivery staff			
Medical staff	3	235	1.3
Nursing staff <sup>(b)</sup>	24	1,284	1.9
Aboriginal and Torres Strait Islander health worker	73	73	100.0
Welfare and community workers	21	91	23.1
Allied health	16	234	6.8
Dental practitioners	0	13	0.0
Pharmacists	0	8	0.0
Other	22	157	14.0
Management and support staff			
Program/service/unit managers	25	260	9.6
Policy/project officers and administrative workers <sup>(c)</sup>	88	789	11.2
Operational staff <sup>(d)</sup>	23	142	16.2
<b>Total</b>	<b>295</b>	<b>3,286</b>	<b>9.0</b>

(a) Includes health, community services, and health and community services undefined.

(b) Includes registered and enrolled nurses.

(c) Includes business and information professionals; accountants, auditors and corporate treasurers; sales, marketing and advertising professionals; computing professionals; miscellaneous business and information professionals; advanced clerical and service workers; intermediate clerical, sales and service workers; intermediate production and transport workers; and elementary clerical, sales and service workers.

(d) Includes labourers and related workers; cleaners; other labourers and related workers; and food tradespersons (includes cooks).

Source: ABS Census of Population and Housing 2001.

### **Box 20.1: Data issues**

*Specifications for this indicator stipulate EEO, affirmative action or workforce surveys conducted by state and territory health departments as the sources of data for this indicator. Most states and territories had limited information available to report against this indicator; surveys are often limited to the government-employed workforce and may not cover all professions listed above.*

*Census data covering the health and community services sectors was therefore used for this indicator. The distinction between the health and community service sectors in these data was not clear enough to allow for health services reporting only. Professional categories stipulated for reporting against this indicator were not neatly identifiable within Census data. Furthermore, the employment categories to be reported under 'management and support staff' were not defined in the technical specifications for this report.*



## Indicator 21. Higher education and training in key health professions

### Indicator:

- (a) The number of Aboriginal and Torres Strait Islander people who gained a health qualification in the previous academic year.
- (b) The number of Aboriginal and Torres Strait Islander people who are training in key health-related fields in the vocational education sector or the higher education sector.

### Purpose

This indicator measures vocational education and training, and entry into the health professional workforce. The numbers of Indigenous people training in key health professions, or who have recently qualified, are important measures of the participation of Indigenous people in delivering health services. These measures assist in assessing the extent to which the capacity of Indigenous people to deliver health services to Indigenous people is being developed.

### Data

The data are likely to understate the number of Aboriginal and Torres Strait Islanders enrolled and qualified. Data are presented for the 2002 calendar year only.

- The majority of Aboriginal and Torres Strait Islander students (57%) who qualified as Aboriginal Health Workers in 2002 completed the Certificate II course.
- Of the professions presented, enrolments in Aboriginal health work attracted the highest numbers of Indigenous students in 2002 (1,653). Allied health and university nursing studies also attracted larger numbers of students.
- The majority of Aboriginal and Torres Strait Islander people who held a health qualification (822) were Aboriginal Health Workers. This was also the case for the 1,653 Aboriginal and Torres Strait Islander people training.
- Queensland had the highest number of Aboriginal Health Workers (468 qualified and 306 enrolled), followed by New South Wales (301 qualified and 330 enrolled).
- There were 96 Aboriginal and Torres Strait Islander people who qualified as nurses in 2002, including university and non-university trained, and a further 586 were in training.
- There were 40 Aboriginal and Torres Strait Islander people who qualified as allied health workers in 2002, and a further 394 were in training.
- No Aboriginal and Torres Strait Islander people were qualified in dental health, and only two were enrolled in training.
- One Aboriginal and Torres Strait Islander was qualified as a pharmacist, and 10 were enrolled in training.

**Table 21.1: Number of Aboriginal and Torres Strait Islanders qualifying<sup>(a)</sup> or currently enrolled in training and higher education, 2002**

Profession	Certificate II	Certificate III	Certificate IV	Diploma	Adv.Diplom /Ass. degree	Bachelor	Masters
<b>Aboriginal Health Worker</b>							
Qualified	468	260	30	39	2	20	3
Enrolled	369	731	257	163	40	81	12
<b>Nursing</b>							
Qualified	7	16	16	3	0	2	6
Enrolled	11	35	167	51	3	14	6
<b>Nursing (university)</b>							
Qualified						46	0
Enrolled						299	0
<b>Medicine</b>							
Qualified						6	0
Enrolled						104	0
<b>Allied health</b>							
Qualified					0	34	6
Enrolled				39	9	329	17
<b>Health management</b>							
Qualified					0	10	6
Enrolled				0	1	104	14
<b>Pharmacy</b>							
Qualified					0	1	0
Enrolled				0	0	10	0
<b>Dental</b>							
Qualified					0	0	0
Enrolled				0	0	2	0
<b>Public health</b>							
Qualified					14	0	2
Enrolled				57	92	28	13
<b>Total</b>							
<b>Qualified</b>	<b>475</b>	<b>276</b>	<b>46</b>	<b>42</b>	<b>16</b>	<b>119</b>	<b>23</b>
<b>Enrolled</b>	<b>380</b>	<b>766</b>	<b>424</b>	<b>310</b>	<b>145</b>	<b>971</b>	<b>62</b>

*Note:* Shading indicates that data quality is affected by some Indigenous students' decision not to identify as such. Therefore, these figures are likely to be an underestimate.

*Sources:* Higher Education Student Collection of the Department of Education, Science and Training; National Centre for Vocational Educational Research Ltd.

**Table 21.2: Number of Aboriginal and Torres Strait Islanders qualifying<sup>(a)</sup> or currently in training and higher education, by state and territory, 2002**

	Aborigin. Health Worker	Nurs. <sup>(b)</sup>	Nurs. (uni)	Medicine	Allied health	Health managemt	Pharmacy	Dental	Public health
<b>NSW</b>									
Qualified	301	34	13	3	18	7	—	—	1
Enrolled	330	84	80	46	70	41	—	—	4
<b>Vic</b>									
Qualified	10	6	5	—	6	—	—	—	—
Enrolled	67	69	33	5	77	9	2	—	6
<b>Qld</b>									
Qualified	468	5	16	1	6	5	1	—	—
Enrolled	306	50	89	20	95	46	6	2	9
<b>WA</b>									
Qualified	7	2	3	1	6	—	—	—	13
Enrolled	299	18	22	16	51	4	—	—	97
<b>SA</b>									
Qualified	2	—	3	1	1	—	—	—	1
Enrolled	249	8	30	14	29	12	—	—	4
<b>Tas</b>									
Qualified	4	3	3	—	2	—	—	—	—
Enrolled	4	8	14	3	3	1	2	—	—
<b>ACT</b>									
Qualified	4	—	1	—	—	3	—	—	1
Enrolled	12	—	2	—	5	3	—	—	—
<b>NT</b>									
Qualified	24	0	—	—	1	0	—	—	—
Enrolled	328	28	17	—	62	0	—	—	70
<b>Aust<sup>(c)</sup></b>									
<b>Qualified</b>	<b>822</b>	<b>50</b>	<b>46</b>	<b>6</b>	<b>40</b>	<b>16</b>	<b>1</b>	<b>—</b>	<b>16</b>
<b>Enrolled</b>	<b>1,653</b>	<b>287</b>	<b>299</b>	<b>104</b>	<b>394</b>	<b>119</b>	<b>10</b>	<b>2</b>	<b>190</b>

(a) 'Qualified' students are those who completed studies in 2002.

(b) These nursing students include enrolled nurses, nursing assistants and dental nurses.

(c) Includes multijurisdictional data and students whose residential postcode is unknown.

Sources: AVETMISS database for vocational education and training sector courses; Department of Employment, Science and Training for higher education courses.

## Quality of the data

Higher education institutions are autonomous, and the Australian Government exercises no control over their activities. However, institutions that receive funding from the Australian Government are responsible under the *Higher Education Funding Act 1988* for ensuring equity of access. The Australian Government monitors the achievement of equity objectives through the annual educational profiles process, for which institutions are required to provide an Indigenous education strategy. These strategies detail the approach adopted by institutions to

increase participation of Aboriginal and Torres Strait Islander students and to advance the goals of the National Aboriginal and Torres Strait Islander Education Policy.

Base operating grants to higher education institutions include allocations from the Indigenous Support Funding Program to meet the specific needs of Indigenous students. The program supports activities such as the establishment of Indigenous education and/or support units, assistance with study skills, counselling and cultural awareness activities. The allocation of funding is calculated on the basis of participation (Equivalent Full Time Student Units), student progress and completion of award courses. While encouraging Indigenous students to identify as such is the responsibility of individual higher education institutions, the Australian Government provides directions and incentives to the institutions to do so.

### **Australian Government programs**

The Australian Government has encouraged increased participation of Indigenous Australians in higher education, particularly through Indigenous Support Funding and the requirement for reporting Indigenous education strategies for the annual education profiles process.

Indigenous Support Funding assists institutions to meet the specific needs of Indigenous students and advance the goals of the Aboriginal and Torres Strait Islander Education Policy.

In addition, the Australian Government provides financial assistance to Indigenous students in the form of ABSTUDY to target benefits to those students most in need of assistance.

ABSTUDY represents a major component of the Government's commitment to Indigenous education to:

- ensure Aboriginal and Torres Strait Islander involvement in educational decision making;
- provide equality of access for Aboriginal and Torres Strait Islander peoples to education services;
- raise the rates of Aboriginal and Torres Strait Islander participation in education to those for all Australians; and
- achieve equitable and appropriate educational outcomes for Aboriginal and Torres Strait Islander people.

The Aboriginal Tutorial Assistance Scheme is targeted at students requiring supplementary tutorial assistance. Under the scheme, 36 universities are funded to provide additional tutorial assistance to help students stay at university and complete award courses. Indigenous students who are assessed as requiring additional assistance with their studies may receive assistance from a tutor, either individually or in a small group.

The Vocational Education Guidance Assistance Scheme provides grants to sponsoring organisations to conduct projects for Indigenous students to foster positive attitudes towards participation in education and provide information to help students to consider their options for further study and career.

## Indicator 22. Workforce availability in primary health care services

**Indicator:** The number of health professionals working in primary health care centres that provide care in populations where more than 60% of the catchment population are Aboriginal and Torres Strait Islander people.

### Purpose

Providing adequate care to meet the needs of Aboriginal and Torres Strait Islander people is an important goal for all states and territories. This indicator measures the number and professional expertise of health workers employed in primary health care services that serve a majority of Aboriginal and Torres Strait Islander people.

### Data

Information for this indicator was obtained from OATSIH.

The concept of a 'catchment population', defined as the number of people resident within the catchment area of a service, was difficult to apply. A number of states and territories reported an inability to determine the catchment populations of primary health care services.

'Catchment population' should probably be redefined as 'service population', that is, the number of Aboriginal and Torres Strait Islander people attending a primary care service.

Therefore, instead of using data from the states and territories, data from the Australian Government's SAR annual data collection is used for this indicator. The SAR collects data on full-time equivalent positions in Australian Government-funded Aboriginal and Torres Strait Islander primary health care services. It also measures the number of people using these services. SAR does not record catchment proportions, nor is this able to be derived from the data. However, many of these services are in areas with a high proportion of Indigenous people.

- At 30 June 2001, 2,314 full-time equivalent positions were reported to exist in Australian Government-funded Aboriginal and Torres Strait Islander primary health care services.
- Western Australia reported the highest number of full-time equivalent positions (529), followed by the Northern Territory (494).
- Aboriginal Health Workers comprised 27% of this workforce, while Indigenous nursing staff and GPs represented 9.4% and 7.0% of the full-time equivalent positions in these services.

**Table 22.1: Full-time equivalent positions employed by Australian Government-funded Aboriginal and Torres Strait Islander primary health care services<sup>(a)</sup>, 30 June 2001**

	NSW & ACT	Vic	Qld	WA	SA	Tas	NT	Australia
<b>Aboriginal Health Workers</b>	106.9	57.6	94.1	147.6	84.3	11.1	122.2	623.8
<b>Medical staff</b>								
GPs	30.3	9.1	33.6	38.4	14.5	2.1	34.2	162.1
Specialists	1.3	—	0.1	0.6	—	—	—	2.0
Nursing staff	28.5	16.8	27.1	62.3	33.5	2.5	47.4	218.0
Allied health <sup>(b)</sup>	15.7	7.5	28.1	19.9	12.1	4.0	19.5	106.7
<b>Dental</b>								
Dentists	15.4	4.0	6.8	1.8	3.0	0.4	2.1	33.5
Dental assistants	21.3	5.0	12.0	1.6	2.0	0.5	2.1	44.5
Orthodontists	0.2	—	—	—	—	—	—	0.2
<b>Pharmacy</b>	—	0.5	—	—	—	—	0.4	0.9
<b>Other health</b>								
Traditional healers	—	1.0	—	—	3.8	—	3.6	8.4
Substance misuse workers	13.2	12.5	5.6	21.2	8.8	0.7	10.0	71.9
Environmental health workers	0.6	1.0	—	18.2	3.0	—	3.0	25.8
Drivers/field officers	29.9	11.9	20.8	15.2	6.5	0.4	25.0	109.7
Other health staff	2.5	4.3	16.0	10.0	15.0	0.5	21.5	69.8
<b>Management/administrative staff</b>								
CEO/administrator/managers	37.0	28.1	43.0	44.6	28.5	4.8	56.8	242.7
Secretaries/receptionists	41.9	13.4	51.1	49.5	26.5	8.0	54.0	244.4
Accountants/bookkeepers	22.9	11.6	16.3	25.2	11.0	2.0	17.6	106.7
Information systems/data staff	1.9	—	3.0	11.5	4.0	0.4	14.0	34.8
Trainers/educators	0.5	1.0	1.0	12.5	8.0	—	25.8	48.8
Cleaners/cooks/gardeners	20.2	4.3	11.6	36.1	12.2	2.8	20.1	107.3
Other	6.7	3.1	6.9	13.0	7.4	—	15.0	52.0
<b>Total</b>	<b>396.8</b>	<b>192.6</b>	<b>376.9</b>	<b>529.0</b>	<b>284.1</b>	<b>40.1</b>	<b>494.4</b>	<b>2,313.9</b>

(a) Only respondent Australian Government-funded SAR services are included.

(b) Includes qualified counsellor, audiologist, chiropractor, dietitian, naturopath, nutritionist, optometrist, physiotherapist, podiatrist, remedial therapist and speech therapist.

Source: Department of Health and Ageing Service Activity Reporting 2000–01.

**Box 22.1: Data issues**

*The concept of a catchment area where more than 60% of the population are Aboriginal and Torres Strait Islander people was difficult for states and territories to measure. It was agreed to use Australian Government SAR data on Aboriginal and Torres Strait Islander community-controlled health services. These organisations provide services to mainly to the Indigenous population, yet some of these services may be located in areas where Indigenous people make up only a small proportion of the total population.*

*The provision of culturally appropriate health services and the employment of Indigenous staff in these services may affect the access of Aboriginal and Torres Strait Islander people. Therefore, it is important to report information on the proportion of this workforce who are Aboriginal and Torres Strait Islander people..*

*The definition of a 'Primary health care service' in the indicator specifications says that these services must include all of the following: 24 hour service, treatment, access to registered health worker, access to a doctor, immunisation services, antenatal care, screening and early interventions services, women's and men's health programs, sexually transmitted infection and communicable disease control. If applied strictly, this definition would have seriously limited the number of services for which data were reported.*

## Indicator 23. Workforce availability in hospitals

**Indicator:** The number of positions for medical officers, nurses, Aboriginal Health Workers and Aboriginal liaison officers in acute care hospitals where more than 25% of the separations are for Aboriginal and Torres Strait Islander people.

### Purpose

Providing adequate care for Aboriginal and Torres Strait Islander people in hospitals dealing with a high proportion of Indigenous people is important in addressing their needs for health care. This indicator describes the medical and nursing capacity and the availability of special support services in hospitals that provide care for Aboriginal and Torres Strait Islander peoples.

### Data

Data was provided by the states and territories. Victoria, Tasmania and the Australian Capital Territory do not have any acute care hospitals that reported more than 25% of separations for Aboriginal and Torres Strait Islander people.

- In 2001–02, 76 hospitals in Australia reported that more than one-quarter of their separations were for Aboriginal and Torres Strait Islander people.
- Queensland had 33 hospitals with 598 full-time and 439 part-time nurses; 160 full-time and 35 part-time medical staff, 91 full-time and 9 part-time Aboriginal Health Workers and 17 full-time Aboriginal Liaison Workers.
- In Western Australia there were 18 hospitals with more than 25% Indigenous separations. These employed 416 full-time and 237 part-time nursing staff, 43 full-time and 1 part-time medical staff, 32 full-time and 1 part-time Aboriginal Health Workers, and 11 full-time and 2 part-time Aboriginal Liaison Workers.
- In the Northern Territory there were 5 such hospitals, with 716 full-time and 255 part-time nursing staff, 238 full-time and 25 part-time medical staff, 18 full-time and 1 part-time Aboriginal Health Workers, and 16 full-time and 1 part-time Aboriginal Liaison Officers.
- In New South Wales there were 14 hospitals reporting more than 25% Indigenous separations, but data were only provided for four of these. This was because some hospitals did not meet the definition of an 'acute care hospital' and some hospitals/area health services did not respond to requests for information on workforce availability. In the four hospitals for which data was provided, there were 94 full-time and 41 part-time nurses, 2 full-time and 2 part-time medical staff, 4 full-time Aboriginal Health Workers and 2 part-time Aboriginal Liaison Officers.
- In South Australia there were 6 hospitals reporting more than 25% Indigenous separations, but no data on the workforce were available.



**Table 23.1: Medical workforce numbers in acute care hospitals where more than 25% of separations are for Aboriginal and Torres Strait Islander people<sup>(a)</sup>, for selected states and territories, 2002**

	NSW <sup>(b)</sup>	Qld <sup>(c)</sup>	WA	NT
<b>Aboriginal Liaison Officers</b>				
Full-time	—	17	11	16
Part-time	2	—	2	1
<b>Aboriginal Health Workers</b>				
Full-time	4	91	32	18
Part-time	—	9	7	1
<b>Medical staff</b>				
Full-time	2	160	43	238
Part-time	2	35	1	25
<b>Nursing staff</b>				
Full-time	94	598	416	716
Part-time	41	439	237	255
<b>Total</b>	<b>145</b>	<b>1,349</b>	<b>749</b>	<b>1,270</b>
<b>Total number of hospitals</b>	<b>4</b>	<b>33</b>	<b>18</b>	<b>5</b>

(a) Victoria, Tasmania and the Australian Capital Territory do not have any acute care hospitals that report more than 25% of separations for Aboriginal and Torres Strait Islander people. South Australia has 6 hospitals that report more than 25% of separations for Aboriginal and Torres Strait Islander people, but no data were available.

(b) Data for New South Wales was only provided for 4 of the 14 hospitals.

(c) The data provided for Queensland relate to 30 June 2003 workforce data. The number of casual positions within these hospitals was also provided; however, for consistency, these have not been reported. Queensland numbers presented are for 'Welfare and community workers'. This is the category to which Aboriginal and Torres Strait Islander Hospital Liaison Officers are assigned. It is unknown what proportion of this category comprises Aboriginal and Torres Strait Hospital Liaison Officers.

Source: Data provided by the states and territories.

## Recruitment of health workers

In New South Wales one hospital reported that recruitment of medical staff has not been an issue as GP staff have been complemented by GP registrars. Recruitment of nursing staff to vacant positions has at times been difficult, but agency nurses were used until recruitment took place. Specific reasons include limited numbers of suitably qualified people, both Aboriginal and non-Aboriginal, to fill advertised positions; difficulty in providing inducements for people to relocate for jobs (this is influenced by the current economic climate); and problems holding Aboriginal staff in rural areas after they have completed their training because they wish to live in larger towns. Some health services use various recruitment strategies and devote additional resources to identifying potential staff and recruiting them to the service.

**Box 23.1: Data issues**

*The definition of 'Acute care hospital' included in the specifications for this indicator was problematic. 'Acute care hospital services' are defined as having a 24-hour staffed emergency department, 24-hour medical supervision or on-call roster, round-the-clock comprehensive nursing and other necessary professional services, and a referral network to specialist services to promote continuity of care. It is recommended that the National Health Data Dictionary definition of an 'acute care episode for admitted patients' be used for this indicator. Throughout this report the definition of a hospital in the National Health Data Dictionary was used.*

*The specifications called for workforce data in even-numbered calendar years. Information on workforce provided generally related to a point in time, usually 30 June 2002. As separations data are normally calculated on a financial year basis, the data were requested for hospitals reporting more than 25% Indigenous separations in 2001-02.*

## Indicator 24. Cross-cultural training for hospital staff

### Indicator:

- (a) The proportion of acute care hospitals where staff receive information about Aboriginal and Torres Strait Islander values and cross-cultural issues, as part of orientation.
- (b) The proportion of new staff in acute care hospitals who have completed appropriate orientation training in the past year.

### Purpose

This indicator provides a measure of the commitment of acute care hospitals to provide staff with cross-cultural training and orientation for working with Aboriginal and Torres Strait Islander people. Such training will assist in improving Indigenous access to services, through the delivery of culturally sensitive services.

### Data

Information for this indicator was obtained from the states and territories. States and territories could not provide quantitative data for this indicator and only written responses are provided.

#### New South Wales

New South Wales reported difficulty collecting this information given the lack of defined curricula regarding the content and delivery of orientation programs in area health services.

A review was held in New South Wales Health in 1999 to examine 'The effectiveness of cultural awareness training in the New South Wales public health system'. It found these programs did not always include skills and knowledge needed for staff to become competent to work in cross-cultural situations. Recommendations from this review have not been implemented to date.

In consideration of the draft Cultural Respect National Framework 2003–08 being developed by SCATSIH, New South Wales Health is currently undertaking a comprehensive survey throughout all Health Services to determine numbers of staff who have attended courses, and the duration, content and assumed effectiveness of cultural awareness programs. Information from the survey will not be available until late August 2003.

In some area health services orientation is limited to between 5 and 15 minutes for Aboriginal health, and some orientation programs have no Aboriginal health content at all. Specific cultural issues are seldom addressed. New South Wales Health and many health services do not have a policy of mandatory or compulsory training for additional cultural awareness.

The New South Wales Health Department has identified the need for a shift in emphasis from shaping attitudes to changing behaviour in order to deliver effective services. A program is being devised in a twelve-month project. This will include a framework of principles and protocols and be linked to the Australian National Training Authority competency standards Health Unit HLTHIR4A 'Work in a cross-cultural setting with Aboriginal and Torres Strait Islander people and organisations'.

A review was commissioned to investigate the effectiveness of cultural awareness training in New South Wales Health. In commissioning the review, it was recognised that there had been no agreement about the goals of cultural awareness training and inconsistent approaches to evaluation.

The report from the review, entitled 'Regarding the effectiveness of cultural awareness training' (1999), by Dench McClean for New South Wales Health, includes the following key recommendations:

- agreeing common goals for the training;
- providing this type of training for all managers and frontline staff;
- developing consistent evaluation procedures;
- linking it more closely to recruitment, induction, performance management and other Departmental initiatives (such as the Aboriginal Employment Strategy);
- providing support and qualified resources for current CAT trainers; and
- developing a flexible 'toolkit' for trainers which provides content or references to nationally and internationally available materials, techniques and ideas.

## **Victoria**

Victoria reported cross-cultural training in only 14 out of 112 hospitals during 2000-01, and 15 of 112 hospitals in 2001-02. Cross-cultural training was not necessarily provided as part of the orientation program. Some hospitals use external providers to train all staff, not just new starters. A number of hospitals had elements of cross-cultural training in their regular training program but did not know how many staff received training. In smaller hospitals with low staff turnover training programs are conducted as needed. Liaison officers provide formal training as part of the orientation or staff development program and also informal training as required.

## **Queensland**

There were no accreditation systems utilised by Queensland public hospitals that require mandatory cross-cultural awareness programs for hospital staff. All existing accreditation systems would support hospitals implementing such programs.

While individual hospitals are not required to have cross-cultural awareness programs in place, Queensland Health requires all Queensland Health staff to participate in the Queensland Health Aboriginal and Torres Strait Islander Cultural Awareness Training Program under the revised Minimum Standards for Cultural Awareness.

The Rural Health Training Units in each of Queensland Health's three zones facilitate the training program. Over 6,000 staff have completed the Queensland Health Aboriginal and Torres Strait Islander Cultural Awareness Training Program across all health service districts and corporate offices. In addition to cross-cultural awareness, Queensland Health has trained 178 facilitators to conduct the Reconciliation Learning Circle Program throughout the state. Currently 800 Queensland Health staff have participated in this program.

Two other initiatives support increased accessibility and appropriateness of health services for Aboriginal and Torres Strait Islander peoples. The first of these is the development of a Queensland Health Aboriginal and Torres Strait Islander Cultural Respect Implementation Plan. This plan will effect systemic change within the health system. The second is the 'One Talk' Aboriginal and Torres Strait Islander Community Participation Manual. This manual outlines protocols for effective engagement between Queensland Health staff and Aboriginal and Torres Strait Islander peoples and communities.

## **Western Australia**

Of the 77 acute care hospitals in Western Australia, 65 reported cross-cultural aspects within training programs in 2000-01, and 67 in 2001-02. In 2000-01, a total of 2,748 (53% of the total

5,191) new staff completed orientation in the previous year. The proportion was the same in 2001–02, with 2,852 (53% of the total 5,378) of the new staff undergoing orientation.

Western Australia noted some difficulties in providing this information, and suggests caution in the interpretation. Furthermore, they highlighted inconsistencies between hospitals in their interpretation of ‘cross-cultural aspects’ in training programs.

### **South Australia**

Cross-cultural awareness training is undertaken in South Australia by hospitals and health services on an ad hoc basis. During the reporting periods there was no uniform cultural-awareness training strategy. However, a Cross Cultural Awareness Training Tool is being developed and will be used in hospitals and health services from 2003.

### **Tasmania**

Tasmania could not provide data for this indicator. It was noted that formal cross cultural-training was not provided to hospital staff in 2000–01 and 2001–02. However, Aboriginal Liaison Officers in two major public hospitals assist in raising cultural awareness with hospital staff.

### **Australian Capital Territory**

The Australian Capital Territory’s two acute care facilities did not provide specific Aboriginal and Torres Strait Islander values and cross cultural issues in their workplace diversity modules of their orientation programs. However, in 2001 the health portfolio conducted cultural awareness training for portfolio staff including acute care facility staff.

### **Northern Territory**

Cross-cultural training is provided at all five Northern Territory public hospitals through the Aboriginal Cultural Awareness Program (ACAP). This course was developed by the department in collaboration with the Northern Territory University’s Faculty of Indigenous Research and Education. There are various ACAP programs to accommodate the needs of staff. One-day courses are compulsory for all staff and are usually included as part of formal staff orientation. Hospital staff may choose to attend other programs, such as a two-day course that focuses on remote communities.

High staff turnover is a problem for extended courses, which are run in Darwin every month, and less often in other locations. There are plans to trial a two hour program.

#### **Box 24.2: Data issues**

*States and territories generally did not collect quantitative data for this indicator and it was agreed to report descriptive data.*

*A variety of interpretations of ‘cross-cultural training’ resulted in inconsistencies in reporting both across states and territories and within states and territories. For example, some hospitals may report training that includes a brief mention of cross-cultural issues, whereas other hospitals report half-day workshops about Aboriginal cultural issues. There were also difficulties about whether to include agency staff or short-term staff when reporting on cross-cultural training.*

# Determinants of health—risk markers

**Indicator 25**

Pap smear screening

**Indicator 26**

Childhood immunisation rates

**Indicator 28**

Low-birthweight infants

**Indicator 29**

Smoking prevalence

**Indicator 30**

Alcohol consumption

**Indicator 31**

Overweight and obesity

**Indicator 32**

Child abuse and neglect

**Indicator 35**

Injuries presenting to hospital accident and emergency facilities

Indicators that currently cannot be reported on:

**Indicator 27**

Coverage of adult pneumococcal vaccine

**Indicator 33**

Problem gambling

**Indicator 34**

Community grief

## Introduction

This subdomain includes 11 indicators, 8 of which were reported on.

Problem gambling and community grief cannot be reported on because there are no relevant data. Data for Indicator 27 – coverage of adult pneumococcal vaccine – is not available by jurisdiction. National data is provided in the 2001 National Health Survey which reports that in 2001, 25% of Indigenous persons aged 50 years and over were vaccinated for pneumonia in the last 5 years compared with 14% of non-Indigenous Australians, and 51% were vaccinated for influenza over the last 12 months compared to 47% of non-Indigenous people aged 50 years and over.

The indicators in this subdomain cover the major risk factors for disease. They include low birthweight, immunisation rates, Pap smear screening, smoking prevalence, alcohol consumption, injury, overweight and obesity, and child abuse and neglect.

The ABS provided data for three of these indicators. Data for the indicators on smoking prevalence, alcohol consumption and overweight and obesity were from the 2001 National Health Survey. These data were provided at the national level due to the small number of Indigenous people in the survey.

The AIHW provided data for two of the indicators. Data on low-birthweight infants comes from the AIHW National Perinatal Statistics Unit. The AIHW also provided data on child protection substantiations, a broad measure of child abuse and neglect.

The data on childhood immunisation rates were provided by the Health Insurance Commission from the Australian Childhood Immunisation Register. Children must have at least one immunisation to be included on this register.

The states and territories provided the data for two of the indicators – Pap smear screening and injuries presenting to hospital emergency facilities. No jurisdiction could provide quantitative data on the proportion of Indigenous women who have had a Pap smear, as Indigenous status is generally not recorded on pathology forms. Only four states and territories could provide quantitative data on the presentation of acute injuries at hospital accident and emergency facilities and the data are not strictly comparable because of differences in coding systems used.

## Indicator 25. Pap smear screening

**Indicator:** The proportion of Aboriginal and Torres Strait Islander women within each eligible age group who have had a Pap smear within a 24-month period.

### Purpose

Pap smear screening enables the early detection of cancer of the cervix, and most deaths due to cervical cancer are potentially avoidable. This indicator measures the success of government efforts to encourage Aboriginal and Torres Strait Islander women to have Pap smears, and their access to and utilisation of Pap smear services.

### Data

No states and territories could provide quantitative data for this indicator, as Indigenous status is generally not recorded on pathology forms, and in some states and territories not recorded on Pap smear registers. Therefore only written responses were provided.

### New South Wales

In 2000–01 and 2001–02, the Cervical Screening Program sponsored a range of activities to help Aboriginal and Torres Strait Islander women to participate in cervical screening. These included the development of a video for Aboriginal women, which encouraged and explained the importance of having a Pap test; the development of an accredited Aboriginal women's education program; the development of a comprehensive training program to provide Aboriginal Health Workers with the knowledge and skills that would enable them to conduct focus groups and interviews with their communities on the factors affecting the use of cervical screening services by Aboriginal women; the development of a resource for staff working with Aboriginal women aimed at providing information about Pap tests and issues related to cervical screening; and a series of educational sessions which were held around New South Wales to enable Aboriginal Health Workers to promote cervical screening within their communities and also included training sessions for Aboriginal women elders to act as catalysts within their communities.

The program also began a state-wide study into issues and strategies designed to improve cervical and breast screening services for Aboriginal and Torres Strait Islander women. This two-year project was commissioned to an Indigenous group of researchers in keeping with a culturally safe and appropriate approach to seeking and reporting on information from Indigenous communities.

### Victoria

PapScreen Victoria does not record Indigenous status. There is also no Indigenous identifier in either the Victorian Cervical Cytology Register or on pathology request forms.

The Victorian Aboriginal Health Service has cooperated with PapScreen and BreastScreen to increase screening of Indigenous women through workshops for Koori women and health workers. PapScreen Victoria is committed to working with the Koori community to develop culturally appropriate and community-owned strategies to promote cervical screening. PapScreen funds a Koori health worker position based at the Victorian Aboriginal Health Service.



In addition, in 2000–01 and 2001–02, the department funded community-based cervical screening projects within the Koori community. Grants were offered to Aboriginal and Torres Strait Islander Community Controlled Health Organisations (ACCHOs) or organisations working collaboratively with ACCHOs. Evaluation showed that projects directly funded to ACCHOs were more effective at reaching Koori women than those given to mainstream organisations.

## **Queensland**

Queensland Health has developed and implemented a range of strategies to reduce morbidity and mortality from cervical cancers. One such strategy is the Queensland Indigenous Women's Cervical Screening Strategy. This strategy has been in place since 2000 and during that time a number of key action areas to address participation in cervical screening by Indigenous women have been identified. These include community education, developing culturally appropriate models of service, cultural training for mainstream health workers, ongoing training and education of Indigenous Health Workers, and monitoring and evaluation of services to identify barriers to screening.

Indigenous status can be recorded on the Queensland Health Pap Smear Registry. However, data for Pap smear rates for Indigenous women are dependent on Indigenous status field being recorded on pathology request forms and in the vast majority of cases it is not recorded. Queensland Health is committed to addressing identification issues. The department has undertaken analysis on data from women living in 13 discrete rural and remote Indigenous communities. The identity of individual communities was concealed in this analysis. Women were identified, based on their reported place of usual residence, for any Pap smear taken during the 24-month period. Identifying Indigenous women in this way, rather than by 'Indigenous status' as reported on pathology forms, presents information on cervical screening participation rates for a large number of Indigenous women living in several different communities.

## **Western Australia**

Indigenous identification is not collected or recorded on the Cervical Cytology Register, but its inclusion has been identified as a high priority for the Department of Health.

The Western Australian Cervical Cancer Prevention Program is committed to improving participation of Aboriginal and Torres Strait Islander women in cervical screening. This requires raising awareness among Indigenous women as well as the sharing of cultural information to program and service provision staff that will enhance their capacity to deal with Indigenous women. A range of measures have been implemented to address these issues including the development of specific health promotion resources, community education and enhanced partnerships with ACCHOs.

## **South Australia**

The Aboriginal Services Division within the Department of Human Services manages the Indigenous Cervix Cancer Prevention program with funding directed from the Population Health Branch through Cervix Screening South Australia. Located with the Aboriginal Services Division is a Senior Indigenous Cervical Screening Project Officer who has been instrumental in developing promotional materials regarding the importance of Pap smear screening for Indigenous women across the state. It is anticipated that a promotional video and poster will be finalised within the next reporting period.

Strategies are also being developed within South Australia to encourage all health services who provide Pap smear screening to record Indigenous status when clients present at the services. The Aboriginal Services Division has also identified strategic planning for Indigenous Cervix Screening and additional health promotion emphasis in key locations in the state. It is anticipated that by the next reporting period an Indigenous cervical screening program will be operating in a number of locations.

## **Tasmania**

Data are not currently collected in Tasmania.

## **Australian Capital Territory**

Australian Capital Territory legislation for the Pap Smear Registry prevents the collection of Indigenous status in the Australian Capital Territory.

The Australian Capital Territory Aboriginal Health Service provided an Aboriginal Midwifery Access Program. Clients accessing the program are encouraged to have regular Pap smear tests.

## **Northern Territory**

In the Northern Territory there is a centralised Pap Smear Register, which records results for all participating women across the territory. In 2001, 70% of women aged 20 to 69 years had had a registered Pap smear in the previous 24 months.

Indigenous status is not reliably recorded on pathology forms and is also not included as a data field in the Pap Smear Register. Estimates of rates of Pap smear screening for those areas with a high proportion of Aboriginal women are generally consistent with rates over the Northern Territory. Efforts are in progress to increase the number of women included on the Pap Smear Register and to increase the recording of Indigenous status on pathology forms.

Aboriginal Women's Health Workers and Women's Health Educators have been active in providing information to Aboriginal women in remote areas about the need for Pap smear screening. Special initiatives include the implementation of the Well Women's Screening Program that aims to:

- decrease preventable illness and preventable deaths
- promote early detection of disease, especially breast and cervical cancer
- be delivered in a culturally appropriate way on a twice-yearly basis.

Community-based 'Women's Health Days' are designed to encourage women to access basic health screening. Resources such as videos, flipcharts and pamphlets are available.

## Indicator 26. Childhood immunisation rates

**Indicator:** The proportion of Aboriginal and Torres Strait Islander children who are fully immunised against vaccine-preventable diseases, according to the National Health and Medical Research Council's (NHMRC) recommendations at 12 months, 2 years and 6 years of age.

### Purpose

Immunisation against childhood diseases that are preventable by vaccination is important to ensure the health and wellbeing of Indigenous children. The indicator provides a measure of access to and utilisation of immunisation services.

### Data

Information for this indicator was obtained from the Australian Childhood Immunisation Register, which is managed by the Health Insurance Commission. 'Fully immunised' means a child has received all age-appropriate vaccines on the Australian Childhood Immunisation Schedule.

Children are added to the Australian Childhood Immunisation Register at their first immunisation. The rates reported here are the number immunised as a proportion of children on the register, not as a proportion of children in that age group as specified in the indicator.

Data were not provided for Queensland, Tasmania, the Australian Capital Territory and the Northern Territory because the coverage of Indigenous children on the register in these states and territories was not sufficient to calculate rates. Indigenous coverage on the register has improved over the last few years, therefore data were provided for children aged 6 years of age in 2002 but were not available for 2001.

**Table 26.1: The proportion of Indigenous children who were fully immunised at 1, 2 and 6 years of age, for selected states and territories, 30 June 2001 and 30 June 2002 (per cent)**

Age	NSW	Vic	WA	SA
		<b>2001</b>		
1 year	90	90	79	100
2 years	88	91	81	87
		<b>2002</b>		
1 year	87	89	79	88
2 years	86	85	73	84
6 years	79	87	74	70

*Note:* Data were not provided for Queensland, Tasmania, the Australian Capital Territory and the Northern Territory because the coverage of Indigenous children was not complete enough to calculate rates.

*Source:* Health Insurance Commission Australian Childhood Immunisation Register.

- In 2001, the proportion of Indigenous children on the register who were fully immunised at 1 year ranged from 79% in Western Australia to 100% in South Australia. In 2002, the proportion of Indigenous children on the register who were fully immunised at 1 year of age ranged from 79% in Western Australia to 89% in Victoria.

- In 2001, the proportion of Indigenous children on the register who were fully immunised at 2 years of age ranged from 81% in Western Australia to 91% in Victoria. In 2002, the proportion of Indigenous children on the register who were fully immunised at 2 years of age ranged from 73% in Western Australia to 86% in New South Wales.
- In 2002, the proportion of Indigenous children on the register who were fully immunised at 6 years of age was highest in Victoria (87%) and the lowest South Australia (70%).

## Indicator 28. Low-birthweight infants

**Indicator:** The prevalence of low birthweight in live-born babies of Aboriginal and Torres Strait Islander women.

### Purpose

The indicator reflects the health of Aboriginal and Torres Strait Islander women, their access to and utilisation of antenatal care, and the quality of antenatal care. It also indicates the health and development of Aboriginal and Torres Strait Islander babies, as low-birthweight babies are more prone to ill health during childhood, and may be more vulnerable to illness in adulthood (Alberman 1994; Barker & Clark 1997).

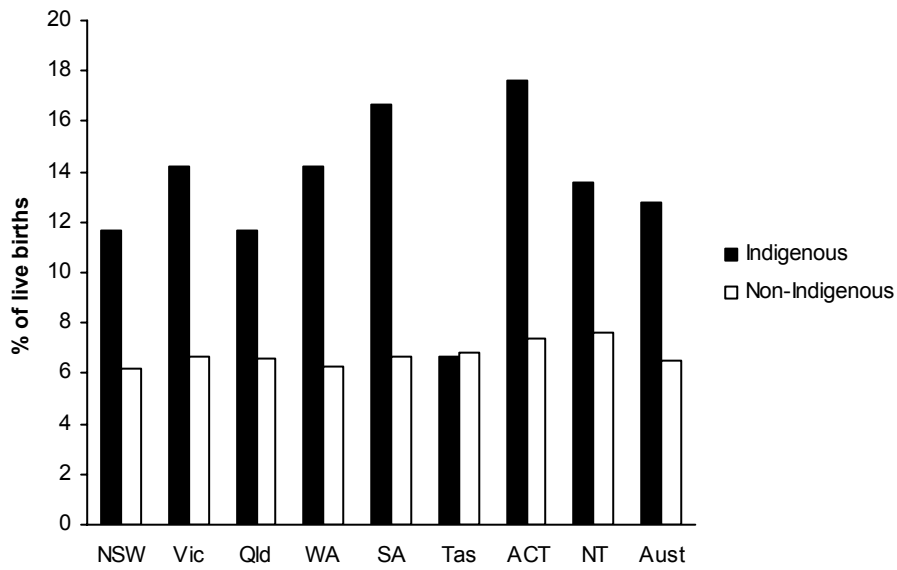
Babies born with a birthweight of less than 2,500 grams are classified as being of 'low birthweight'. Low birthweight may be a result of pre-term birth, foetal growth retardation, or a combination of the two (Alberman 1994). There are a range of factors that can affect a baby's birthweight, including socioeconomic disadvantage, the size and age of the mother, the number of babies previously born to the mother, the mother's nutritional status, smoking and other risk behaviours, illness during pregnancy, presence of a multiple birth and the duration of pregnancy.

### Data

The data on the birthweight of babies are collected by the AIHW National Perinatal Statistics Unit. The data are likely to underestimate the number of births to Indigenous mothers, because Indigenous status is not always recorded in these data collections.

Three years of data were combined in order to smooth out yearly fluctuations in the number of births to Indigenous mothers, which can cause volatility in rates. Care should be taken in interpreting data from Tasmania and the Australia Capital Territory due to the small numbers.

- In the period 1998–00, the proportion of low-birthweight babies born to Indigenous mothers in Australia (12.8%) was almost twice as high as the proportion born to other Australian mothers (6.5%).
- The proportion of low-birthweight Indigenous babies ranged from 6.7% in Tasmania and 11.7% in New South Wales and Queensland to 16.7% in South Australia and 17.6% in the Australian Capital Territory.



*Note:* Data from the Australian Capital Territory and Tasmania should be treated with caution due to small numbers.

*Source:* AIHW National Perinatal Statistics Unit.

**Figure 28.1: Proportion of low birthweight babies by mother's Indigenous status and state and territory, 1998-00**

## Indicator 29. Smoking prevalence

### Indicator:

- (a) The proportion of Aboriginal and Torres Strait Islander adults aged 18 years and over who reported they were current smokers, by age and sex.
- (b) The proportion of Aboriginal and Torres Strait Islander adults who formerly smoked regularly (ex-smokers), by age and sex.

### Purpose

Tobacco smoking increases the risk of coronary heart disease, stroke and peripheral vascular disease. Tobacco smoking also increases the risk to a range of cancers including lung, oesophagus, kidney, pancreas and the cervix. Tobacco smoking during pregnancy can lead to spontaneous abortion, low birth weight and sudden infant death syndrome. Exposure to tobacco smoke (passive smoking) can also lead to serious health conditions such as heart diseases in adults and respiratory diseases in children.

### Data

States and territories were originally asked to provide data for this indicator but there were no consistent data available and data from the ABS was therefore used. These data come from the 2001 National Health Survey. Due to small numbers of Indigenous people in the survey only national totals can be provided.

- In 2001, 53% of Indigenous adults aged 18 years and over reported they were current smokers, a further 17% were ex-smokers and 30% reported they had never smoked.
- The proportion of current smokers was higher in males than females (56% compared with 52%).
- Among females the highest proportion of current smokers was among those aged 18-24 years (56% compared with 50% among those older than 24 years). Among males there was no observed aged difference in the proportion of current smokers (around 55%).
- In 2001, 17% of Indigenous adults reported that they were ex-smokers – with equal proportions among males and females.
- Among males, the highest proportion of ex-smokers was reported among those aged 35 years and over 34 where almost one-quarter (24%) reported that they were ex-smokers.
- Among females, the highest proportion of ex-smokers (22%) was among those aged 35 years and over.

**Table 29.1: Smoking status of Indigenous adults aged 18 years and over, by age and sex, 2001**

	Indigenous males		Indigenous females		Total	
	%	RSE (%)	%	RSE (%)	%	RSE (%)
<b>Smoker status<sup>(a)</sup></b>			<b>18–24 years</b>			
Current smoker	55	16	56	12	56	10
Ex-smoker	<sup>(b)</sup> 7	32	<sup>(b)</sup> 9	39	<sup>(b)</sup> 8	27
Never smoked	38	18	34	19	36	11
<b>Total</b>	<b>100</b>	<b>7</b>	<b>100</b>	<b>4</b>	<b>100</b>	<b>4</b>
<b>Smoker status<sup>(a)</sup></b>			<b>25–34 years</b>			
Current smoker	55	9	50	9	52	8
Ex-smoker	<sup>(b)</sup> 13	30	14	20	14	18
Never smoked	32	16	36	12	34	11
<b>Total</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>
<b>Smoker status<sup>(a)</sup></b>			<b>35 years and over</b>			
Current smoker	56	6	50	6	53	4
Ex-smoker	24	13	22	14	23	10
Never smoked	20	16	28	11	24	8
<b>Total</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>	<b>100</b>	<b>0</b>
<b>Smoker status<sup>(a)</sup></b>			<b>Total</b>			
Current smoker	56	5	52	5	53	4
Ex-smoker	17	12	17	13	17	9
Never smoked	28	11	31	8	30	6
<b>Total<sup>(c)</sup></b>	<b>100</b>	<b>2</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>1</b>

(a) Smoking status refers to regular smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes but excludes chewing tobacco and smoking of non-tobacco products. Current smokers include daily and non-daily smokers.

(b) Estimate has a relative standard error of between 25% to 50% and should be used with caution. Data are subject to sampling variability too high for most practical purposes.

(c) Includes 'Smoker status unknown'.

Note: RSE refers to the relative standard error of the estimates.

Source: ABS National Health Survey 2001.



## **Indicator 30. Alcohol consumption**

### **Indicator:**

- (a) The proportion of Aboriginal and Torres Strait Islanders people aged 18 years and over who consumed alcohol in the week before the survey, by age and sex.
- (b) The proportion of Aboriginal and Torres Strait Islander drinkers aged 18 years and over who reported drinking at levels of medium or high risk in the week before the survey.

### **Purpose**

While low levels of alcohol consumption appear to protect against some illness in adulthood, including coronary heart disease, stroke and hypertension, excessive use of alcohol can lead to harm both in the short and long term. Binge drinking can increase the risk of injury due to falls, assault, road accidents, fights and violence. Long-term excessive alcohol use can lead to alcohol addiction, poor diet, and stomach and liver problems as well as emotional and financial problems.

### **Data**

States and territories were originally asked to provide data for this indicator but there were no consistent data available, and data from the ABS were therefore used. These data come from the 2001 National Health Survey. Due to small numbers of Indigenous people in the survey only national totals can be provided.

## Proportion who consume alcohol

**Table 30.1: Indigenous persons aged 18 years and over: by whether consumed alcohol, by age and sex, 2001**

	Males		Females		Total	
	%	RSE (%)	%	RSE (%)	%	RSE (%)
<b>18–24 years</b>						
Consumed alcohol	61	14	40	15	51	11
Did not consume alcohol <sup>(a)</sup>	39	24	60	11	49	13
<b>25–34 years</b>						
Consumed alcohol	52	10	40	10	46	8
Did not consume alcohol <sup>(a)</sup>	48	11	60	7	54	6
<b>35 years and over</b>						
Consumed alcohol	52	7	37	9	44	6
Did not consume alcohol <sup>(a)</sup>	48	8	63	5	56	5
<b>Total</b>						
Consumed alcohol	54	4	39	7	46	3
Did not consume alcohol <sup>(a)</sup>	46	6	61	4	54	3
<b>Total<sup>(b)</sup></b>	<b>100</b>	<b>2</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>1</b>

(a) Includes those who had not consumed alcohol in the week before interview, and those who cannot remember when last consumed alcohol.

(b) Includes alcohol consumption unknown.

Note: RSE refers to the relative standard error of the estimates.

Source: ABS National Health Survey 2001.

- In 2001, 46% of Indigenous adults aged 18 years and over reported having consumed alcohol over the 7 days before the interview.
- Among Indigenous people, 54% of males compared to 39% of females consumed alcohol in the week before the interview.

## Proportion who consumed alcohol at risky levels

Part b of the indicator relates to those drinkers who consume alcohol at risky levels. Table 30.2 shows the number of drinks for each alcohol risk level for the data reported in Table 30.3.

**Table 30.2: Alcohol risk level: estimated average daily consumption of alcohol during the previous week**

Relative risk	Male drinkers	Female drinkers
<b>Number of standard drinks</b>		
Low risk	0–4	0–2
Risky	5–6	3–4
High risk	7 or more	7 or more

### Notes

1. Risk levels were based on the levels for long-term harm.
2. One standard drink = 12.5 ml of alcohol.

- In 2001, of the Indigenous people who consumed alcohol, most did so at a low risk (72%). The remaining 28% consumed alcohol at risky or high-risk levels.

- Among Indigenous people who consumed alcohol, the proportion of males and females who consumed alcohol at risky or high-risk levels were similar (29% males, 27% females).

**Table 30.3: Indigenous people aged 18 years and over who consumed alcohol: alcohol risk levels<sup>(a)</sup> by age and sex, 2001**

	Males		Females		Total	
	%	RSE (%)	%	RSE (%)	%	RSE (%)
<b>18–24 years</b>						
<b>Alcohol risk level—7 day average</b>						
Low risk	91	16	67	20	81	13
Risky/high risk	9	36	33	28	19	22
<i>Total consuming alcohol</i>	100	14	100	15	100	11
<b>25–34 years</b>						
<b>Alcohol risk level—7 day average</b>						
Low risk	64	17	77	14	70	12
Risky/high risk	36	20	23	21	30	15
<i>Total consuming alcohol</i>	100	10	100	10	100	8
<b>35 years and over</b>						
<b>Alcohol risk level—7 day average</b>						
Low risk	65	14	73	12	68	9
Risky/high risk	36	14	27	23	32	12
<i>Total consuming alcohol</i>	100	7	100	9	100	6
<b>Total</b>						
<b>Alcohol risk level—7 day average</b>						
Low risk	71	8	73	7	72	5
Risky/high risk	29	11	27	18	28	9
<i>Total consuming alcohol</i>	100	4	100	7	100	3

(a) These levels were calculated based on a 7-day average. Risk level as defined by the NHMRC is based on regular consumption levels of alcohol. The indicators derived from the 2001 National Health Survey assumed that the reported level of alcohol consumption in the reference week was typical.

Note: RSE refers to the relative standard error of the estimates.

Source: ABS National Health Survey 2001.

## Indicator 31. Overweight and obesity

**Indicator:** The proportion of Aboriginal and Torres Strait Islander adults aged 18 years and over with a body mass index (BMI) in the overweight and obese category, by sex.

### Purpose

Being overweight or obese is a risk for a number of chronic diseases including Type 2 diabetes, coronary heart disease, high blood pressure, stroke and certain types of cancer. Obesity can lead to premature deaths from certain chronic conditions.

### Data

States and territories were originally asked to provide data for this indicator but there were no consistent data available, and data from the ABS were therefore used. These data come from the 2001 National Health Survey. Due to small numbers of Indigenous people in the survey only national totals can be provided.

BMI is weight (kg)/height (metres) squared. Overweight is a BMI of 25 to less than 30, and obese is a BMI of 30 and over.

**Table 31.1: Weight status<sup>(a)</sup>: Indigenous adults aged 18 years and over based on body mass index<sup>(b)</sup>, Australia 2001**

Weight status	Males		Females		Total	
	%	RSE (%)	%	RSE (%)	%	RSE (%)
Normal range or less	35	7	31	7	33	5
Overweight	30	9	22	9	26	7
Obese	22	10	22	7	22	6
Unknown	13	..	25	..	19	..
<b>Total</b>	<b>100</b>	<b>2</b>	<b>100</b>	<b>1</b>	<b>100</b>	<b>1</b>

(a) These data are based on self-reported height and weight.

(b) Overweight and obesity are measured by the body mass index (BMI), a measure of the person's weight relative to their height (weight in kilograms divided by height in meters squared: kg/m<sup>2</sup>). A BMI of between  $\geq 25$  and  $< 30$  defines overweight while a BMI of  $\geq 30$  defines obesity.

Note: RSE refers to the relative standard error of the estimates.

Source: ABS National Health Survey 2001.

- Almost one in two Indigenous people (48%) aged 18 years and over were reported to be overweight or obese.
- A higher proportion of Indigenous adult males than females was reported to be overweight or obese (52% compared with 44%).

## Indicator 32. Child abuse and neglect

**Indicator:** The number and rate of Aboriginal and Torres Strait Islander children aged 0–16 years who are subject to a substantiation of child abuse or neglect, compared to non-Indigenous children.

### Purpose

This indicator provides a broad measure of the rates of Indigenous children who were abused, neglected or otherwise harmed, relative to the non-Indigenous population. This is a risk factor for poor health and wellbeing.

### Data

A 'substantiation' is a report of child abuse or neglect or harm to a child that is investigated and formally confirmed by a legally recognised child protection agency.

Major differences exist in child protection policies and practices across states and territories and these are reflected in the child protection data. The data from the states and territories are therefore not strictly comparable and should not be used to compare jurisdictions. In addition, the practices used to identify and record the Indigenous status of children varies across states and territories, with some states and territories recording a large number of unknowns. The quality of the data on Indigenous status has, however, improved over the last few years (see Box 32.1).

While data on Indigenous children in substantiations are available for 2000–01, the published data used population data from the 1996 Census and are not comparable with the data provided here. Data for 2001–02 is presented for this indicator.

**Table 32.1: Children in child protection substantiations: number and rates per 1,000 children, by Indigenous status, by state and territory, 2001–02**

State/territory	Number of children			Rate per 1,000 children			Indig. non-Indig. rate ratio
	Indigen.	Other	Total	Indigen.	Other	Total	
NSW	913	6,361	7,274	15.3	4.3	4.8	3.6
Vic	579	6,569	7,148	48.1	6.1	6.5	7.9
Qld	795	6,553	7,348	14.3	7.9	8.3	1.8
WA	386	718	1,104	13.5	1.7	2.4	7.9
SA	346	1,407	1,753	31.6	4.4	5.3	7.2
Tas	2	151	153	0.3	1.4	1.4	0.2
ACT	11	191	202	6.5	2.6	2.7	2.5
NT	222	109	331	9.7	3.2	5.8	3.0

Source: AIHW.

- Aboriginal and Torres Strait Islander children were much more likely to be the subject of child protection substantiations than other Australian children.
- In 2001–02, in all states and territories except Tasmania the substantiation rate for Indigenous children was higher than the rate for other children.

- In Victoria and Western Australia the rate of Indigenous children in substantiations was nearly eight times higher than the rate for other children, while in South Australia it was 7.2 times higher. These higher rates may in part be related to the quality of the data on Indigenous status (see Box 32.1).
- In New South Wales the rate for Indigenous children was 3.6 times higher than the rate for other Australian children and in the Northern Territory it was 3 times higher.

### **Box 32.1: Data issues**

*The variation in the rate ratios across states and territories may in part reflect differences in the quality of the data on Indigenous status due to differences in practices adopted to identify and record Indigenous status. Some states and territories are using the standard ABS question (for example Queensland have just introduced this as a requirement for all child protection workers) but in others the information appears to be acquired in a more ad hoc way. Although the Indigenous status field is mandatory in all states and territories, there is a 'not known' option when entering the information onto the data system in all jurisdictions except Victoria. The proportion of 'unknowns' varies considerably across states and territories.*

*The quality of the child protection data on Indigenous status has improved in recent years as states and territories have introduced measures to improve the identification of Indigenous children in the child protection system. For example in New South Wales in 1998–99 and in Western Australia in 2001–02 practices were introduced to improve the identification of Indigenous children and this resulted in an increase in the number of children who were identified as Indigenous in both states and territories.*

*A number of states and territories are currently undertaking work to improve the quality of the Indigenous child protection data such as through the adoption of the standard ABS question to identify Indigenous status.*

## Indicator 35. Injuries presenting to hospital accident and emergency facilities

**Indicator:** The proportion of consultations at accident and emergency facilities by Aboriginal and Torres Strait Islander people that are for acute injury conditions.

### Purpose

The indicator provides an estimate of the frequency of injury of sufficient severity to seek hospital care and reflects access of Aboriginal and Torres Strait Islander peoples to hospital.

### Data

Information for this indicator was obtained from the states and territories; however, only four states and territories could provide data for this indicator. The Queensland data are from only 14 hospitals. Western Australia was only able to report total injury attendances and not the cause of the injury. The Northern Territory also does not report the cause of the injury. The data provided are not comparable across states and territories because of differences in the coding systems that were used.

- Around one-quarter of presentations at hospital and emergency facilities by Aboriginal and Torres Strait Islander people were due to acute injuries – in Victoria they represented 26% of presentations in 2000–01 and 24% in 2001–02; in Western Australia they represented 22% and 21% for the two years, and in the Northern Territory they represented 22% and 18% respectively (Table 35.1).
- Almost three-quarters of Indigenous presentations to hospital emergency and accident facilities were therefore not due to injury. This is consistent with other findings that suggest that Indigenous people frequently use accident and emergency facilities as an initial point of contact for their health concerns, rather than GPs.
- The large variation between states and territories in the cause of injury presentations may reflect differences in methods used for the coding of injuries.
- In Victoria about half of injury presentations by Indigenous people were for assaults (51% in 2000–01, 49% in 2001–02).
- In Queensland most injury presentations were for ‘other accidents’ (71% in 2000–01, 67% in 2001–02).
- New South Wales Health collects data from 54 emergency departments across the state. While this represents just over one-third of all emergency departments, it covers around two-thirds of total presentations. Rural emergency departments are underrepresented in the collection. This incomplete and unequal coverage invalidates reporting on this indicator at a state level. In addition, a number of studies have shown that Aboriginal people are under identified in emergency department injury data.

**Table 35.1: Aboriginal and Torres Strait Islander presentations at hospital accident and emergency facilities, for selected states and territories, by injury type, 2000–01 and 2001–02**

Injury type	Vic <sup>(a)</sup>		Qld <sup>(b)</sup>		WA <sup>(c)</sup>		NT <sup>(d)</sup>	
	No.	%	No.	%	No.	%	No	%
<b>2000–01</b>								
Road vehicle-related injury	106	5.4	n.a.	5.6	n.a.	n.a.	n.a.	n.a.
Other accidents	793	40.1	n.a.	70.9	n.a.	n.a.	n.a.	n.a.
Self-harm	78	3.9	n.a.	1.5	n.a.	n.a.	n.a.	n.a.
Assault	1,000	50.6	n.a.	22.0	n.a.	n.a.	n.a.	n.a.
<b>Total injury presentations</b>	<b>1,977</b>	<b>100</b>	<b>n.a</b>	<b>100</b>	<b>2,109</b>	<b>100.0</b>	<b>8,162</b>	<b>100</b>
<b>All accident and emergency presentations</b>	<b>7,587</b>	<b>26.1</b>	<b>n.a.</b>	<b>n.a.</b>	<b>9,807</b>	<b>21.5</b>	<b>37,100</b> <sup>(d)</sup>	<b>22</b>
<b>2001–02</b>								
Road vehicle-related injury	122	6.1	n.a.	5.4	n.a.	n.a.	n.a.	n.a.
Other accident	832	41.6	n.a.	67.2	n.a.	n.a.	n.a.	n.a.
Self-harm	76	3.8	n.a.	3.2	n.a.	n.a.	n.a.	n.a.
Assault	970	48.5	n.a.	24.2	n.a.	n.a.	n.a.	n.a.
<b>Total injury presentations</b>	<b>2,000</b>	<b>100</b>	<b>n.a.</b>	<b>100</b>	<b>2,521</b>	<b>100</b>	<b>7,091</b>	<b>100</b>
<b>All accident and emergency presentations</b>	<b>8,290</b>	<b>24.1</b>	<b>n.a.</b>	<b>n.a.</b>	<b>11,871</b>	<b>21.2</b>	<b>39,400</b> <sup>(d)</sup>	<b>18</b>

(a) Data collected through the Victorian Emergency Minimum Dataset is coded by a combination of ICD-10 and injury codes.

(b) Data from the Queensland Injury Surveillance and refer to calendar years 2001 and 2002, not financial year. Data are from 14 hospitals which comprise three sample regions: metropolitan (South Brisbane); regional (Mackay and Moranbah Health Districts) and remote (Mt Isa).

(c) Western Australia was not able to provide data by cause of injury.

(d) Injury presentations are classified on the basis of 'body part' and not by cause of the injury. Data on the total number of accident and emergency presentations for Aboriginal and Torres Strait Islanders were not provided and were estimated.

Note: There were problems with the reliability of the data from the Australian Capital Territory and these were not included.

Source: Data provided by the jurisdictions.

### **Box 35.1: Data issues**

*The data provided by some of the states and territories were not comparable as different classification systems were used and a number of states and territories could not provide quantitative data for this indicator.*

*The purpose of this indicator is to measure frequency of injury and access of Indigenous people to hospitals, but there is no comparison group specified for the indicator. A more useful measure would be injury presentations in hospital emergency sections per 100,000 populations for Indigenous Australians and other Australians, classed by severity.*



# 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 was 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 subindicators.

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 Indigenous 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 people. At present, data on hospitalisation and mortality due to serious mental disorders and illnesses are the main sources of information that provide an indication 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 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 disease – were provided by the states and territories. The coverage of Indigenous people in the notifiable disease registers is incomplete and only data from Western Australia, South Australia and the Northern Territory were used. For meningococcal disease, data on notifications from Queensland were also included.

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 Western Australia, South Australia and the Northern Territory were considered – as assessed by the relevant jurisdiction – to be sufficient to calculate rates. Therefore data from only these three states and territories were used to describe details of hospitalisations.

For each indicator, data are presented on the number of hospitalisations for each condition (for the years 2000–01 and 2001–02), Age-standardised rates for 2001–02 and the standardised hospital separation ratios for 2001–02. 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. These states and territories have more complete coverage of Indigenous deaths than the other three 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, data on Indigenous deaths 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 1999, 2000 and 2001 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 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 notification were provided by the states and territories. Queensland noted that data for notification rates were dependent on Indigenous status field being recorded on pathology request forms. While Queensland Health facilities were improving their recording, only a third or less of notifications were received from these facilities. Although there are ongoing awareness activities to encourage service providers to record Indigenous status and a brochure targeting GPs has been distributed, there has been insufficient improvement to be able to provide reliable rates for notifiable diseases among Indigenous people.

There were very few cases of measles or Hib in Queensland in 2000 or 2001. Indigenous identification for notifications for pertussis was not complete enough for data to be presented.

Data were only presented for three states and territories with the most complete identification of Indigenous people – Western Australia, South Australia and the Northern Territory. During 2000 and 2001 there were no notifications of measles in these states and territories. There were also no notifications of Hib in Western Australia and South Australia, while in the Northern Territory there were 2 notifications for Hib in 2000 and 2 in 2001.

The numbers and rates of notifications for pertussis are shown in Table 37.1. Rates were not provided by age group because the number of notifications was too low to produce useful or accurate rates.

**Table 37.1: Number and rates per 100,000 for pertussis, for selected states and territories, 2000 and 2001**

Year	WA		SA		NT		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
2000	n.p.	n.p.	n.p.	n.p.	6	10.5	12	8.1
2001	5	7.6	38	153.2	42	73.8	85	57.3

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

Note: For the calculation of rates, the estimated resident population was used.

Source: Data provided by each jurisdiction.

- In 2000 there were a total of 12 notifications for pertussis for Aboriginal and Torres Strait Islanders in Western Australia, South Australia and the Northern Territory, giving a rate of 8.1 per 100,000.
- In 2001 there were 85 notifications for pertussis in these three states and territories, giving a rate of 57.3 per 100,000.

## 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.

### Data

Data for this indicator were provided by the states and territories. The data from four states and territories – Queensland (where there is enhanced surveillance for meningococcal disease), Western Australia, South Australia and the Northern Territory – were considered to be sufficient to calculate rates.

The rates were not provided by age group, because the number of notifications was too low to produce useful or accurate rates.

**Table 38.1: Number and rates per 100,000 for meningococcal disease, for selected states and territories, 2000 and 2001**

Year	Qld		WA		SA		NT		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate	No.	Rate
2000	6	4.8	9	13.7	6	24.2	6	10.5	27	9.9
2001	8	6.4	13	19.7	n.p.	n.p.	9	15.8	31	11.3

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

Source: Data provided by each jurisdiction.

- In 2001, there were 31 notifications of meningococcal disease for Aboriginal and Torres Strait Islanders in Queensland, Western Australia, South Australia and the Northern Territory, giving a rate of 11.3 per 100,000.
- The notification rate in 2001 was highest in the Northern Territory (15.8 per 100,000) and lowest in Queensland (6.4 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 genital 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 states and territories. 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. Data were provided for only three states and territories where the reporting of Indigenous status is likely to be relatively complete – Western Australia, South Australia and the Northern Territory. Rates are provided for those aged 15 to 55 years as the numbers in other age groups were too low to produce useful or accurate rates.

- Of the three sexually transmitted diseases for which data were provided, the rate of notifications for those aged 15 to 55 years was highest for gonorrhoea (2,545 per 100,000 for males and 2,633 per 100,000 for females in 2001), followed by chlamydia (1,364 per 100,000 for males and 2,259 per 100,000 for females (Table 39.1).
- Rates of notifications for gonorrhoea and chlamydia were higher in females than males, while rates of notifications for syphilis were higher in males.
- In 2001 the Northern Territory had the highest rate of notifications for all three conditions among both males and females.

**Table 39.1: Rates per 100,000 of sexually transmissible diseases for Aboriginal and Torres Strait Islanders aged 15–55 years, by sex, for selected states and territories, 2000 and 2001**

	WA		SA		NT		Total	
	No.	Rate	No.	Rate	No.	Rate	No.	Rate
<b>Males</b>								
				<b>2000</b>				
Gonorrhoea	421	2,501	75	1,136	418	6,688	914	2,343
Syphilis	29	172	8	121	111	714	148	379
Chlamydia	243	1,444	66	1,000	200	1,286	509	1,305
<b>Females</b>								
Gonorrhoea	358	2,056	90	1,328	514	3,245	962	2,403
Syphilis	24	138	n.p.	n.p.	90	568	117	292
Chlamydia	378	2,171	107	1,578	2,645	419	904	2,259
<b>Males</b>								
				<b>2001</b>				
Gonorrhoea	416	2,472	75	1,136	502	3,228	993	2,545
Syphilis	42	250	11	167	174	1,119	227	582
Chlamydia	218	1,295	50	758	264	1,698	532	1,364
<b>Females</b>								
Gonorrhoea	358	2,056	90	1,328	606	3,826	1,054	2,633
Syphilis	45	259	10	148	138	871	193	482
Chlamydia	310	1,781	86	1,269	508	3,208	904	2,259

*Note:* For the calculation of rates, the estimated resident population was used.

*Source:* Data provided by each jurisdiction.



## Indicator 40. Ratios for all hospitalisations

**Indicator:** Standardised hospital separation ratio 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 health problems in the Indigenous population compared with the non-Indigenous population.

### Data

Data for this indicator comes from the AIHWs National Hospital Morbidity Database. Because hospitalisation data does 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.

In the hospitalisation data the principal diagnosis is the diagnosis established to be the problem that was chiefly responsible for the patient's episode of care in hospital. The additional diagnosis is a condition or complaint either coexisting with the principal diagnosis or arising during the episode of care. Hospitalisation rates are presented per 1,000 people.

**Table 40.1: Hospitalisations for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	29,347	11,915	31,329	30,090	6,461	43,377	854	1,487	154,860
Females	43,241	12,791	41,726	36,967	9,115	58,524	2,030	1,022	205,416
Persons	72,588	24,706	73,055	67,057	15,576	101,901	2,884	2,509	360,276
<b>Non-Indigenous</b>									
Males	457,642	386,377	21,730	1,403,280	1,224,403	829,772	72,316	70,562	4,466,082
Females	519,366	450,568	23,468	1,620,350	1,433,863	926,894	81,747	74,915	5,131,171
Persons	977,008	836,945	451,98	3,023,630	2,658,266	1,756,666	154,063	145,477	9,597,253
<b>Subtotal</b>	<b>1,049,596</b>	<b>861,651</b>	<b>118,253</b>	<b>3,090,687</b>	<b>2,673,842</b>	<b>1,858,567</b>	<b>156,947</b>	<b>147,986</b>	<b>9,957,529</b>
Not stated	—	26,133	457	9,226	—	230,902	75,825	4,834	347,377
<b>Total</b>	<b>1,049,596</b>	<b>887,784</b>	<b>118,710</b>	<b>3,099,913</b>	<b>2,673,842</b>	<b>2,089,469</b>	<b>232,772</b>	<b>152,820</b>	<b>10,304,906</b>
Proportion not stated (%)	—	2.9	0.4	0.3	—	11.1	32.6	3.2	3.4

*Note:* Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.

*Source:* AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02, there were 9,957,529 hospitalisations in Australia where Indigenous status was recorded. Of these, 360,276 or 3.6%, were Indigenous people.

- Indigenous status was not stated for 347,377 (3.4%) of all hospitalisations. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.9% of all hospitalisations in South Australia. A high proportion was 'not stated' in Tasmania (32.6%) and Queensland (11.1%).
- Females made up 57% of the Indigenous hospitalisations compared with 53% of the non-Indigenous hospitalisations.

### Age-standardised rates and rate ratios

**Table 40.2: Age-standardised hospitalisation rates and rate ratios for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02.**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Rate per 1,000</b>									
Indigenous males	594.9	646.0	776.2	304.7	322.6	494.3	67.7	544.0	468.0
Non-Indigenous males	266.1	278.2	159.4	234.1	278.2	255.1	171.6	248.0	254.0
Indigenous females	867.8	648.1	998.2	365.6	447.8	615.0	181.0	420.0	599.8
Non-Indigenous females	306.1	317.9	198.1	267.7	317.6	288.9	191.3	254.8	289.6
Indigenous persons	733.8	647.1	889.0	335.4	386.4	557.0	124.5	482.2	535.3
Non-Indigenous persons	286.0	298.2	177.1	250.9	298.1	271.9	181.5	251.4	271.8
<b>Standardised hospital separation ratio</b>									
Males	2.2	2.3	4.9	1.3	1.2	1.9	0.4	2.2	1.8
Females	2.8	2.0	5.0	1.4	1.4	2.1	0.9	1.6	2.1
Persons	2.6	2.2	5.0	1.3	1.3	2.0	0.7	1.9	2.0

#### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02, in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised at between 2 and 5 times the rate of non-Indigenous people.
- The standardised hospitalisation ratios for males and females were similar in these three 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 is 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

**Table 41.1: Hospitalisations for circulatory disease for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	1,164	552	844	1,579	284	1,921	53	60	6,457
Females	1,060	484	762	1,334	265	1,885	46	32	5,868
Persons	2,224	1,036	1,606	2,913	549	3,806	99	92	12,325
<b>Non-Indigenous</b>									
Males	29,734	27,784	1,494	115,661	83,587	59,461	6,395	5,750	329,866
Females	17,580	17,599	640	72,101	54,088	35,920	3,732	3,145	204,805
Persons	47,314	45,383	2,134	187,762	137,675	95,381	10,127	8,895	534,671
<b>Subtotal</b>	<b>49,538</b>	<b>46,419</b>	<b>3,740</b>	<b>190,675</b>	<b>138,224</b>	<b>99,187</b>	<b>10,226</b>	<b>8,987</b>	<b>546,996</b>
Not stated	—	1,319	15	556	—	12,455	3,606	143	18,094
<b>Total</b>	<b>49,538</b>	<b>47,738</b>	<b>3,755</b>	<b>191,231</b>	<b>138,224</b>	<b>111,642</b>	<b>13,832</b>	<b>9,130</b>	<b>565,090</b>
Proportion not stated (%)	—	2.8	0.4	0.3	—	11.2	26.1	1.6	3.2

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes I00–I99.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02, there were 546,996 hospitalisations due to circulatory diseases in Australia where Indigenous status was recorded. Of these, 12,325 or 2.3% were of Indigenous people.
- Males made up 62% of the non-Indigenous hospitalisations for circulatory diseases, compared with only 52% of the Indigenous hospitalisations.
- The Indigenous status was not stated for 18,094 (3.2%) of all hospitalisations for circulatory disease. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.8% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (26.1%) and Queensland (11.2%).

## Age-standardised rates and rate ratios

**Table 41.2: Age-standardised hospitalisation rates and rate ratios for circulatory disease for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	38.5	46.5	37.4	27.0	20.6	38.9	5.6	50.3	32.9
Non-Indigenous males	17.4	18.8	13.0	18.9	18.8	18.2	14.4	22.0	18.5
Indigenous females	34.4	42.1	29.8	21.0	19.7	32.9	6.7	33.3	27.8
Non-Indigenous females	10.2	11.4	7.3	11.6	11.7	11.0	8.1	11.7	11.3
Indigenous persons	36.3	44.2	33.4	23.9	20.1	35.7	6.2	41.9	30.2
Non-Indigenous persons	13.8	15.0	10.5	15.2	15.2	14.6	11.2	16.8	14.9
	<b>Standardised hospital separation ratio</b>								
Males	2.2	2.5	2.9	1.4	1.1	2.1	0.4	2.3	1.8
Females	3.4	3.7	4.1	1.8	1.7	3.0	0.8	2.8	2.5
Persons	2.6	2.9	3.2	1.6	1.3	2.4	0.6	2.5	2.0

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02, in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for circulatory disease at around 3 times the rate of non-Indigenous people.
- In these three states and territories, hospitalisation rates for circulatory disease for Indigenous females were between 3 and 4 times those for non-Indigenous females. Rates for Indigenous males were between 2 and 3 times those for non-Indigenous males.

## Coronary heart disease

**Table 41.3: Hospitalisations for coronary heart disease for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	492	284	258	780	145	845	25	27	2,856
Females	342	200	229	540	108	743	16	18	2,196
Persons	834	484	487	1,320	253	1,588	41	45	5,052
<b>Non-Indigenous</b>									
Males	12,778	12,269	659	52,009	36,132	27,150	3,068	2,902	146,967
Females	4,409	4,735	204	20,922	14,141	11,241	1,242	1,029	57,923
Persons	17,187	17,004	863	72,931	50,273	38,391	4,310	3,931	204,890
<b>Subtotal</b>	<b>18,021</b>	<b>17,488</b>	<b>1,350</b>	<b>74,251</b>	<b>50,526</b>	<b>39,979</b>	<b>4,351</b>	<b>3,976</b>	<b>209,942</b>
Not stated	—	472	4	225	—	5,540	1,217	11	7,469
<b>Total</b>	<b>18,021</b>	<b>17,960</b>	<b>1,354</b>	<b>74,476</b>	<b>50,526</b>	<b>45,519</b>	<b>5,568</b>	<b>3,987</b>	<b>217,411</b>
Proportion not stated (%)	—	2.6	0.3	0.3	—	12.2	21.9	0.3	3.4

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes I20–I25.

Source: AIHW National Hospital Morbidity Database.

- In the period 2000–01 to 2001–02 there were 209,942 hospitalisations for coronary heart disease in Australia where Indigenous status was recorded. Of these, 5,052 or 2.4% were of Indigenous people.
- Males made up 57% of the Indigenous hospitalisations for coronary heart disease compared with 72% of the non-Indigenous hospitalisations.
- For 7,469 or 3.4% of hospitalisations from coronary heart disease, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.6% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (21.9%) and Queensland (12.2%).

## Age-standardised rates and rate ratios

**Table 41.4: Age-standardised hospitalisation rates and rate ratios for coronary heart disease for persons aged 0–74 years, by Indigenous status and by sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	20.6	27.9	13.8	15.4	13.3	22.3	3.1	34.1	17.8
Non-Indigenous males	7.4	8.2	5.7	8.4	8.0	8.3	6.7	11.3	8.2
Indigenous females	13.0	19.5	11.1	10.2	8.3	15.5	3.2	26.0	12.3
Non-Indigenous females	2.5	2.9	2.5	3.3	3.0	3.4	2.6	3.9	3.1
Indigenous persons	16.6	23.4	12.4	12.7	10.7	18.6	3.2	30.1	14.9
Non-Indigenous persons	5.0	5.5	4.3	5.8	5.5	5.9	4.6	7.6	5.6
	<b>Standardised hospital separation ratio</b>								
Males	2.8	3.4	2.4	1.8	1.7	2.7	0.5	3.0	2.2
Females	5.1	6.6	4.4	3.1	2.8	4.5	1.3	6.6	3.9
Persons	3.3	4.3	2.8	2.2	2.0	3.2	0.7	4.0	2.7

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02, in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for coronary heart disease at between 3 and 4 times the age-standardised rate of non-Indigenous people.
- The differences in rates are particularly marked in females, with Indigenous females hospitalised at between 4 and 7 times the rates for non-Indigenous females. Indigenous males were hospitalised at 2 to 3 times the rate of non-Indigenous males.

## Rheumatic heart disease

**Table 41.5: Hospitalisations for rheumatic fever and heart disease for persons aged 0–74 years by Indigenous status and by sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Australia <sup>(a)</sup>
<b>Indigenous</b>							
Males	50	15	84	7	n.p.	74	234
Females	83	33	111	18	15	132	394
Persons	133	48	195	25	19	206	628
<b>Non-Indigenous</b>							
Males	80	57	n.p.	361	270	246	1,058
Females	169	90	n.p.	570	384	340	1,617
Persons	249	147	8	931	654	586	2,675
<b>Subtotal</b>	<b>382</b>	<b>195</b>	<b>203</b>	<b>956</b>	<b>673</b>	<b>792</b>	<b>3,303</b>
Not stated	—	4	—	1	—	97	112
<b>Total</b>	<b>382</b>	<b>199</b>	<b>203</b>	<b>7</b>	<b>673</b>	<b>889</b>	<b>3,415</b>
Proportion not stated (%)	—	2.0	—	0.1	—	10.9	3.3

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

(a) 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.

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes I00–I09.

Source: AIHW National Hospital Morbidity Database.

- In the period 2000–01 to 2001–02, there were 3,303 hospitalisations for rheumatic heart disease in Australia where Indigenous status was recorded. Of these, 628 or 19% were of Indigenous people.
- Males made up 37% of the Indigenous hospitalisations for rheumatic heart disease, and 40% of the non-Indigenous hospitalisations.
- Indigenous status was not stated for 112 (3.3%) of all hospitalisations for rheumatic heart disease. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia and the Northern Territory to 2% of all hospitalisations in South Australia. A high proportion was not stated in Queensland (10.9%).



## Age-standardised rates and rate ratios

**Table 41.6: Age-standardised hospitalisation rates and rate ratios for rheumatic fever and heart disease for persons aged 0–74 years, by Indigenous status, sex and state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Australia
	<b>Rate per 1,000</b>						
Indigenous males	0.8	1.1	2.9	—	n.p.	1.1	0.9
Non-Indigenous males	0.1	—	n.p.	0.1	0.1	0.1	0.1
Indigenous females	2.1	1.8	3.4	0.2	1.2	1.7	1.4
Non-Indigenous females	0.1	0.1	n.p.	0.1	0.1	0.1	0.1
Indigenous persons	1.5	1.5	3.2	0.1	0.8	1.4	1.2
Non-Indigenous persons	0.1	—	—	0.1	0.1	0.1	0.1
	<b>Standardised hospital separation ratio</b>						
Males	15.8	31.8	n.p.	0.7	n.p.	12.9	14.2
Females	23.1	32.9	n.p.	2.1	14.2	15.9	15.9
Persons	20.6	32.6	87.5	1.6	11.6	14.8	15.3

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. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- The low numbers of cases of rheumatic heart disease in both populations make the age-standardised 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 2001–02 in the Northern Territory, Indigenous people were hospitalised at 88 times the rate of non-Indigenous people, and in South Australia Indigenous people were hospitalised at 33 times the rate of non-Indigenous people. These large differences are to some extent determined by very low numbers 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 road vehicle-related injury 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.
- (c) Standardised hospital separation ratio for other accidents 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.
- (d) Standardised hospital separation ratio for self-harm 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.
- (e) Standardised hospital separation ratio for assault 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.

### 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 all injuries, as well as the major types 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 injury and poisoning. The data presented here are for external causes of injury and poisoning.

Data are presented for the category all injury and poisoning, as well as for the four major injury subgroups – injury caused by road vehicle accidents, other accidents, self-harm and assault.

## Injury and poisoning

This category includes all injury and poisoning. The codes specified for all injury and poisoning did not include assault, but data on assault is included in tables 42.1 and 42.2.

**Table 42.1: Hospitalisations for injury and poisoning for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	4,382	1,232	3,070	3,783	752	6,384	139	70	19,812
Females	3,745	1,081	2,689	2,760	493	4,172	86	48	15,074
Persons	8,127	2,313	5,759	6,543	1,245	10,556	225	118	34,886
<b>Non-Indigenous</b>									
Males	38,886	30,275	3,427	134,808	95,749	92,635	7,003	5,044	407,827
Females	21,788	18,432	1,571	81,418	57,004	48,869	4,095	2,795	235,972
Persons	60,674	48,707	4,998	216,226	152,753	141,504	11,098	7,839	643,799
<b>Subtotal</b>	<b>68,801</b>	<b>51,020</b>	<b>10,757</b>	<b>222,769</b>	<b>153,998</b>	<b>152,060</b>	<b>11,323</b>	<b>7,957</b>	<b>678,685</b>
Not stated	—	1,581	63	839	—	8,870	2,959	54	14,366
<b>Total</b>	<b>68,801</b>	<b>52,601</b>	<b>10,820</b>	<b>223,608</b>	<b>153,998</b>	<b>160,930</b>	<b>14,282</b>	<b>8,011</b>	<b>693051</b>
Proportion not stated (%)	—	3.0	0.6	0.4	—	5.5	20.7	0.7	2.1

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes V01–Y09.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 678,685 hospitalisations among people aged 0–74 years due to injury and poisoning where Indigenous status was recorded. Of these 34,886 or 5.1% were of Indigenous people.
- Males made up 57% of the Indigenous hospitalisations from injury and poisoning, compared with 63% of the non-Indigenous hospitalisations.
- For 14,366 or 2.1% of hospitalisations from injury and poisoning, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 3% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (20.7%).

## Age-standardised rates and rate ratios

**Table 42.2: Age-standardised hospitalisation rates and rate ratios for injury and poisoning for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02.**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	68.2	46.6	58.5	30.8	27.5	53.9	8.5	17.7	45.7
Non-Indigenous males	21.8	21.8	23.5	23.0	21.6	27.6	16.6	17.8	23.4
Indigenous females	56.7	42.4	51.7	21.7	17.5	32.1	5.0	13.2	33.5
Non-Indigenous females	12.4	13.4	12.4	13.5	12.9	14.9	10.1	9.6	13.5
Indigenous persons	62.4	44.5	55.1	26.3	22.5	42.7	6.7	15.4	39.5
Non-Indigenous persons	17.2	17.6	18.3	18.3	17.2	21.2	13.3	13.7	18.4
	<b>Standardised hospital separation ratio</b>								
Males	3.1	2.1	2.5	1.3	1.3	2.0	0.5	1.0	2.0
Females	4.6	3.2	4.2	1.6	1.4	2.2	0.5	1.4	2.5
Persons	3.6	2.5	3.0	1.4	1.3	2.0	0.5	1.1	2.1

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory Indigenous people were hospitalised for injury and poisoning around 3 and 4 times the rate of non-Indigenous people.
- In these three states and territories, hospitalisation rates of Indigenous females for injury and poisoning were approximately 3 to 5 times those of non-Indigenous females.

## Road vehicle accidents

This category includes injuries caused by accidents involving cars, buses, trucks, motorcycles, bicycles and pedestrians.

**Table 42.3: Hospitalisations for road vehicle accidents for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	515	144	281	503	87	631	14	14	2,189
Females	253	93	131	286	40	291	12	5	1,111
Persons	768	237	412	789	127	922	26	19	3,300
<b>Non-Indigenous</b>									
Males	6,170	4,783	700	18,860	16,003	13,808	1,188	914	62,426
Females	2,416	2,220	271	9,706	7,700	4,913	506	328	28,060
Persons	8,586	7,003	971	28,566	123,703	18,721	1,694	1,242	90,486
<b>Subtotal</b>	<b>9,354</b>	<b>7,240</b>	<b>1,383</b>	<b>29,355</b>	<b>23,830</b>	<b>19,643</b>	<b>1,720</b>	<b>1,261</b>	<b>93,786</b>
Not stated	—	334	13	218	—	938	346	2	1,851
<b>Total</b>	<b>9,354</b>	<b>7,574</b>	<b>1,396</b>	<b>29,573</b>	<b>23,830</b>	<b>20,581</b>	<b>2,066</b>	<b>1,263</b>	<b>95,637</b>
Proportion not stated (%)	—	4.4	0.9	0.7	—	4.6	16.7	0.2	1.9

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes V01–V79.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 93,786 hospitalisations among people aged 0–74 years due to road vehicle accidents where Indigenous status was recorded. Of these 3,300 or 3.5% were of Indigenous people.
- Females made up 34% of the Indigenous hospitalisations as a result of motor vehicle accidents, compared with 31% of the non-Indigenous hospitalisations.
- The Indigenous status was not stated for 1,851 (1.9%) of all hospitalisations for injuries resulting from motor vehicle accidents. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 4.4% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (16.7%).

## Age-standardised rates and rate ratios

**Table 42.4: Age-standardised hospitalisation rates and rate ratios for road vehicle accidents for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	8.1	5.8	4.4	4.9	3.2	5.3	1.0	5.7	4.9
Non-Indigenous males	3.5	3.5	4.7	3.7	3.7	4.2	2.8	3.3	3.7
Indigenous females	3.8	3.9	2.4	2.3	1.4	2.2	0.5	1.4	2.3
Non-Indigenous females	1.3	1.6	2.2	1.6	1.8	1.5	1.1	1.2	1.6
Indigenous persons	5.9	4.9	3.4	3.6	2.3	3.7	0.8	3.6	3.6
Non-Indigenous persons	2.4	2.6	3.5	2.7	2.7	2.9	2.0	2.3	2.7
	<b>Standardised hospital separation ratio</b>								
Males	2.3	1.7	1.0	1.3	0.9	1.3	0.4	1.7	1.3
Females	2.8	2.5	1.1	1.4	0.8	1.4	0.5	1.2	1.4
Persons	2.4	1.9	1.0	1.4	0.8	1.3	0.4	1.6	1.4

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia and South Australia, Indigenous people were hospitalised for road vehicle accidents at twice the rate for non-Indigenous persons. In the Northern Territory the hospitalisation rates for road accidents were similar for Indigenous and non-Indigenous people.
- The standardised hospital separation ratios were similar for males and females in the Northern Territory.

## Other accidents

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

**Table 42.5: Hospitalisations for other accidents for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 and 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	2,353	663	1,549	2,446	470	3,893	75	40	11,489
Females	1,564	460	1,060	1,663	263	2,012	46	31	7,099
Persons	3,917	1,123	2,609	4,109	733	5,905	121	71	18,588
<b>Non-Indigenous</b>									
Males	27,924	21,873	2,323	98,859	68,408	68,340	4,780	3,654	296,161
Females	15,018	13,093	1,061	59,468	40,206	36,381	2,691	1,979	169,897
Persons	42,942	34,966	3,384	158,237	108,614	104,721	7,471	5,633	466,058
<b>Subtotal</b>	<b>46,859</b>	<b>36,089</b>	<b>5,993</b>	<b>162,436</b>	<b>109,347</b>	<b>110,626</b>	<b>7,592</b>	<b>5,704</b>	<b>484,646</b>
Not stated	—	959	40	463	—	7116	2,369	49	10,996
<b>Total</b>	<b>46,859</b>	<b>37,048</b>	<b>6,033</b>	<b>162,899</b>	<b>109,347</b>	<b>117,742</b>	<b>9,961</b>	<b>5,753</b>	<b>495,642</b>
Proportion not stated (%)	—	2.6	0.7	0.3	—	6.0	23.8	0.9	2.2

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes V80–X59.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 484,646 hospitalisations among people aged 0–74 years due to other accidents where Indigenous status was recorded. Of these 18,588 or 3.8% were for people identified as Indigenous.
- Females made up 38% of the Indigenous hospitalisations as a result of other accidents, compared with 36% of the non-Indigenous hospitalisations.
- For 10,996 or 2.2% of hospitalisations from other accidents, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.6% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (23.8%).

## Age-standardised rates and rate ratios

**Table 42.6: Age-standardised hospitalisation rates and rate ratios for other accidents for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	37.2	25.7	29.6	18.5	16.8	32.6	4.1	10.3	26.1
Non-Indigenous males	15.6	15.6	16.4	16.5	15.4	20.2	11.3	13.1	16.8
Indigenous females	22.2	17.8	20.1	11.5	9.4	15.8	2.4	8.2	15.2
Non-Indigenous females	8.7	9.4	8.6	9.7	9.0	11.0	6.6	6.9	9.6
Indigenous persons	29.7	21.7	24.9	15.0	13.1	24.1	3.3	9.3	20.6
Non-Indigenous persons	12.2	12.5	12.7	13.1	12.2	15.7	8.9	10.0	13.2
	<b>Standardised hospital separation ratio</b>								
Males	2.4	1.6	1.8	1.1	1.1	1.6	0.4	0.8	1.6
Females	2.6	1.9	2.3	1.2	1.0	1.4	0.4	1.2	1.6
Persons	2.4	1.7	2.0	1.1	1.1	1.5	0.4	0.9	1.6

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South 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 similar for males and females.



## Self-harm

**Table 42.7: Hospitalisations for self-harm for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000-01 to 2001-02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	234	128	148	270	58	263	25	6	1,132
Females	297	178	102	324	89	361	22	n.p.	1,377
Persons	531	306	250	594	147	624	47	10	2,509
<b>Non-Indigenous</b>									
Males	2,408	1,797	101	8,212	4,801	4,613	562	265	22,759
Females	3,688	2,580	164	8,944	7,625	6,297	778	459	30,535
Persons	6,096	4,377	265	17,156	12,426	10,910	1,340	724	53,294
<b>Subtotal</b>	<b>6,627</b>	<b>4,683</b>	<b>515</b>	<b>17,750</b>	<b>12,573</b>	<b>11,534</b>	<b>1,387</b>	<b>734</b>	<b>55,803</b>
Not stated	—	182	3	80	—	472	138	3	878
<b>Total</b>	<b>6,627</b>	<b>4,865</b>	<b>518</b>	<b>17,830</b>	<b>12,573</b>	<b>12,006</b>	<b>1,525</b>	<b>737</b>	<b>56,681</b>
Proportion not stated (%)	—	3.7	0.6	0.4	—	3.9	9.0	0.4	1.5

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

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes X60–X84.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 55,803 hospitalisations among people aged 0–74 years due to self-harm where Indigenous status was recorded. Of these 2,509 or 4.5% were for people identified as Indigenous.
- Females made up 55% of Indigenous hospitalisations as a result of self-harm, and 57% of non-Indigenous hospitalisations.
- The Indigenous status was not stated for 878 (1.5%) of hospitalisations that were a result of self-harm. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 3.7% of all hospitalisations in South Australia. A high proportion of not stated was reported in Tasmania (9%).

## Age-standardised rates and rate ratios

**Table 42.8: Age-standardised hospitalisation rates and rate ratios for self-harm for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	3.9	3.8	3.1	2.3	2.8	2.5	1.6	—	2.7
Non-Indigenous males	1.3	1.3	0.5	1.2	1.1	1.4	1.4	0.8	1.2
Indigenous females	5.2	6.2	2.2	3.4	3.5	2.7	1.6	n.p.	3.3
Non-Indigenous females	2.1	1.9	1.1	1.8	1.7	1.9	2.1	1.4	1.8
Indigenous persons	4.5	5.0	2.7	2.8	3.2	2.6	1.6	0.8	3.0
Non-Indigenous persons	1.7	1.6	0.8	1.5	1.4	1.6	1.8	1.1	1.5
	<b>Standardised hospital separation ratio</b>								
Males	3.1	2.8	5.8	1.9	2.6	1.8	1.1	—	2.2
Females	2.5	3.2	1.9	1.9	2.0	1.4	0.8	n.p.	1.8
Persons	2.7	3.1	3.3	1.9	2.2	1.6	0.9	0.7	2.0

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. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for self-harm at around 3 times the rate for non-Indigenous persons.
- Hospitalisations for self-harm in Indigenous males were 6 times the rate for non-Indigenous males in the Northern Territory.

## Assault

**Table 42.9: Hospitalisations for assault for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 and 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	1,335	315	1,122	576	143	1,626	25	11	5,153
Females	1,686	361	1,425	498	104	1,532	6	8	5,620
Persons	3,021	676	2,547	1,074	247	3,158	13	19	10,773
<b>Non-Indigenous</b>									
Males	2,590	1,898	320	9,163	6,994	6,199	525	228	27,917
Females	828	595	77	3,505	1,771	1,519	144	45	8,484
Persons	3,418	2,493	397	12,668	8,765	7,718	669	273	36,401
<b>Subtotal</b>	<b>6,439</b>	<b>3,169</b>	<b>2,944</b>	<b>13,742</b>	<b>9,012</b>	<b>10,876</b>	<b>700</b>	<b>292</b>	<b>47,174</b>
Not stated	—	116	8	119	—	381	120	1	745
<b>Total</b>	<b>6,439</b>	<b>3,285</b>	<b>2,952</b>	<b>13,861</b>	<b>9,012</b>	<b>11,257</b>	<b>820</b>	<b>293</b>	<b>47,919</b>
Proportion not stated (%)	—	3.5	0.3	0.9	—	3.4	14.6	0.3	1.6

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes X85–Y09.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 47,174 hospitalisations among people aged 0–74 years due to assault where Indigenous status was recorded. Of these 10,773 or 23% were of Indigenous people.
- Females made up 52% of the Indigenous hospitalisations due to assault, compared to only 23% of the non-Indigenous hospitalisations.
- For 745 or 1.6% of hospitalisations for assault, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 3.5% of all hospitalisations in South Australia. A high proportion of not stated was reported in Tasmania (14.6%).

## Age-standardised rates and rate ratios

**Table 42.10: Age-standardised hospitalisation rates and rate ratios for assault for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	20.1	11.3	21.0	6.3	4.9	13.8	2.0	1.9	12.3
Non-Indigenous males	1.6	1.4	2.1	1.8	1.6	1.8	1.2	0.8	1.7
Indigenous females	26.1	14.6	26.0	5.2	3.5	11.5	0.5	1.9	12.9
Non-Indigenous females	0.4	0.4	0.5	0.5	0.4	0.5	0.3	0.2	0.5
Indigenous persons	23.1	13.0	23.5	5.8	4.2	12.6	1.2	1.9	12.6
Non-Indigenous persons	1.0	0.9	1.4	1.2	1.0	1.2	0.8	0.5	1.1
	<b>Standardised hospital separation ratio</b>								
Males	13.0	8.3	9.9	3.5	3.1	7.5	1.6	2.4	7.3
Females	64.7	33.3	47.8	10.6	8.6	23.1	1.5	12.4	28.6
Persons	23.5	14.4	17.1	5.0	4.2	10.8	1.6	4.1	11.8

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for assault at between 14 and 24 times the rate for non-Indigenous people.
- Indigenous females had substantially higher rates of hospitalisations for assaults compared to non-Indigenous females in Western Australia (65), the Northern Territory (48) and South Australia (33).

## **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 incidence 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. Higher rates of hospitalisation for respiratory disease and lung cancer in Indigenous people compared to non-Indigenous people suggest greater efforts are needed in health promotion campaigns targeting Indigenous people.

### **Data**

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

## Respiratory diseases

**Table 43.1: Hospitalisations for respiratory diseases for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	3,291	940	2,665	3,519	538	4,192	73	37	15,255
Females	3,535	954	2,557	3,237	522	3,596	98	65	14,564
Persons	6,826	1,894	5,222	6,756	1,060	7,788	171	102	29,819
<b>Non-Indigenous</b>									
Males	25,705	26,249	1,645	92,560	63,362	43,720	3,951	3,291	260,483
Females	21,696	22,694	1,080	75,561	55,068	36,994	3,512	2,820	219,425
Persons	47,401	48,943	2,725	168,121	118,430	80,714	7,463	6,111	479,908
<b>Subtotal</b>	<b>54,227</b>	<b>50,837</b>	<b>7,947</b>	<b>174,877</b>	<b>119,490</b>	<b>88,502</b>	<b>7,634</b>	<b>6,213</b>	<b>509,727</b>
Not stated	—	1,243	30	321	—	10,025	2,430	95	14,144
<b>Total</b>	<b>54,227</b>	<b>52,080</b>	<b>7,977</b>	<b>175,198</b>	<b>119,490</b>	<b>98,527</b>	<b>10,064</b>	<b>6,308</b>	<b>523,871</b>
Proportion not stated (%)	—	2.4	0.4	0.2	—	10.2	24.1	1.5	2.7

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes J00–J99.

Source: AIHW National Hospital Morbidity Database.

- From 2000–01 to 2001–02, there were 509,727 hospitalisations for respiratory diseases in Australia where Indigenous status was recorded (Table 43.1). Of these, 29,819 or 5.8% were of Indigenous people.
- Males made up 51% of the Indigenous hospitalisations for respiratory disease, compared with 54% of non-Indigenous hospitalisations.
- The Indigenous hospitalisations were almost equally of males (51%) and females (49%), compared with the non-Indigenous population where 54% of hospitalisations were males and only 46% of females.
- The Indigenous status was not stated for 14,144 (2.7%) of all hospitalisations with a principal diagnosis of respiratory diseases. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.4% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (24.1%) and Queensland (10.2%).

## Age-standardised rates and rate ratios

**Table 43.2: Age-standardised hospital separation rates and rate ratios for respiratory diseases for persons aged 0-74 years, by Indigenous status and sex, by state and territory, 2001-02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	42.6	34.0	43.5	21.9	18.4	29.8	3.5	11.0	29.3
Non-Indigenous males	14.8	19.3	11.9	15.3	14.3	13.3	9.5	11.2	14.7
Indigenous females	47.3	35.0	42.6	20.7	16.2	23.9	4.7	17.0	27.9
Non-Indigenous females	13.0	16.7	8.2	12.4	12.4	11.4	8.6	9.4	12.5
Indigenous persons	44.9	34.5	43.1	21.3	17.3	26.8	4.1	14.0	28.6
Non-Indigenous persons	13.9	18.0	10.2	13.9	13.3	12.4	9.0	10.3	13.6
	<b>Standardised hospital separation ratio</b>								
Males	2.9	1.8	3.7	1.4	1.3	2.2	0.4	1.0	2.0
Females	3.6	2.1	5.2	1.7	1.3	2.1	0.5	1.8	2.2
Persons	3.2	1.9	4.2	1.5	1.3	2.2	0.5	1.4	2.1

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- The largest differences in age-standardised rates of hospitalisation for respiratory diseases were in the Northern Territory, where rates for Indigenous people were 4 times as high as those for non-Indigenous people. In Western Australia they were 3 times as high.
- The rate ratio was more than 5 for females in the Northern Territory, even though more males than females were hospitalised for respiratory disease. In the Northern Territory the ratios are influenced by the relatively low numbers of non-Indigenous females hospitalised for respiratory diseases.

## Pneumonia

**Table 43.3: Hospitalisations for pneumonia for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	1,051	219	1,317	705	97	1,155	13	6	4,563
Females	926	204	1,091	615	103	959	18	9	3,925
Persons	1,977	423	2,408	1,320	200	2,114	31	15	8,488
<b>Non-Indigenous</b>									
Males	3,460	3,644	329	14,107	10,251	6,614	709	543	39,657
Females	2,904	3,144	216	11,243	8,347	5,766	606	499	32,725
Persons	6,364	6,788	545	25,350	18,598	12,380	1,315	1,042	72,382
<b>Subtotal</b>	<b>8,341</b>	<b>7,211</b>	<b>2,953</b>	<b>26,670</b>	<b>18,798</b>	<b>14,494</b>	<b>1,346</b>	<b>1,057</b>	<b>80,870</b>
Not stated	—	115	10	52	—	916	336	11	1,440
<b>Total</b>	<b>8,341</b>	<b>7,326</b>	<b>2,963</b>	<b>26,722</b>	<b>18,798</b>	<b>15,410</b>	<b>1,682</b>	<b>1,068</b>	<b>82,310</b>
Proportion not stated (%)	—	1.6	0.3	0.2	—	5.9	20.0	1.0	1.7

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes J10–J18.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 80,870 hospitalisations due to pneumonia in Australia where Indigenous status was recorded. Of these, 8,488 or 10.5% were of Indigenous people.
- Males made up 54% of the Indigenous hospitalisations for pneumonia, and 55% of the non-Indigenous hospitalisations.
- The Indigenous status was not stated for 1,440 (1.7%) of all hospitalisations for respiratory diseases. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 1.6% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (20%).



## Age-standardised rates and rate ratios

**Table 43.4: Age-standardised hospital separation rates and rate ratios for pneumonia for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	16.8	8.6	24.3	4.7	3.8	9.6	0.7	1.7	10.1
Non-Indigenous males	2.1	2.7	2.9	2.3	2.3	2.1	1.8	2.0	2.3
Indigenous females	14.3	7.5	20.0	4.6	3.9	7.2	1.0	2.2	8.5
Non-Indigenous females	1.9	2.4	1.8	1.8	1.9	1.8	1.5	1.7	1.9
Indigenous persons	15.6	8.0	22.1	4.6	3.8	8.4	0.9	2.0	9.3
Non-Indigenous persons	2.0	2.6	2.4	2.1	2.1	2.0	1.6	1.9	2.1
	<b>Standardised hospital separation ratio</b>								
Males	7.9	3.1	8.3	2.0	1.6	4.7	0.4	0.8	4.4
Females	7.6	3.2	11.2	2.5	2.1	3.9	0.7	1.3	4.5
Persons	7.8	3.1	9.2	2.2	1.8	4.3	0.5	1.0	4.5

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for pneumonia at between 3 and 9 times the rate of non-Indigenous people.
- Rate ratios of Indigenous to non-Indigenous hospitalisations for pneumonia were over 7 for males and females in Western Australia and around 11 for females in the Northern Territory.

## Lung cancer

**Table 43.5: Hospitalisations for lung cancer for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Australia <sup>(a)</sup>
<b>Indigenous</b>							
Males	20	5	29	60	7	98	220
Females	19	13	16	31	17	49	148
Persons	39	18	45	91	24	147	368
<b>Non-Indigenous</b>							
Males	1,457	1,455	55	4,394	3,869	3,188	14,891
Females	684	864	12	2,355	2,354	1,504	8,080
Persons	2,141	2,319	67	6,749	6,223	4,692	22,971
<b>Subtotal</b>	<b>2,180</b>	<b>2,337</b>	<b>112</b>	<b>6,840</b>	<b>6,247</b>	<b>4,839</b>	<b>23,339</b>
Not stated	—	51	—	22	—	548	748
<b>Total</b>	<b>2,180</b>	<b>2,388</b>	<b>112</b>	<b>6,862</b>	<b>6,247</b>	<b>5,387</b>	<b>24,087</b>
Proportion not stated (%)	—	2.1	—	0.3	—	10.2	3.1

(a) Due to low numbers for lung cancer in the Australian Capital Territory and Tasmania, these states and territories are not included in the table, but are included in the Australian total.

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes C33–C34.

Source: AIHW National Hospital Morbidity Database.

- In the period 2000–01 to 2001–2002, in Australia, 23,339 hospitalisations were recorded for lung cancer. Of these, 368 or 1.6% were of Indigenous people. However, it is likely that this disease is underdiagnosed in people living in remote areas.
- Males made up 60% of the Indigenous hospitalisations from lung cancer, compared with 65% of the non-Indigenous hospitalisations.
- For 748 or 3.1% of hospitalisations from lung cancer, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.1% of all hospitalisations in South Australia. A high proportion was not stated in Queensland (10.2%).

## Age-standardised rates and rate ratios

**Table 43.6: Age-standardised hospital separation rates and rate ratios for lung cancer for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Australia
	<b>Rate per 1,000</b>						
Indigenous males	0.8	0.7	1.8	1.0	0.4	2.7	1.4
Non-Indigenous males	0.9	0.9	0.7	0.7	0.8	1.0	0.8
Indigenous females	0.5	2.0	0.9	0.7	3.0	1.2	1.1
Non-Indigenous females	0.4	0.6	0.1	0.4	0.5	0.5	0.4
Indigenous persons	0.6	1.4	1.3	0.9	1.8	1.9	1.2
Non-Indigenous persons	0.7	0.7	0.5	0.5	0.6	0.7	0.6
	<b>Standardised hospital separation ratio</b>						
Males	0.9	0.8	2.5	1.5	0.5	2.8	1.7
Females	1.1	3.5	6.6	1.9	6.4	2.6	2.4
Persons	0.9	1.9	2.7	1.6	2.8	2.7	2.0

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 Indigenous peoples were hospitalised for lung cancer between 2 and 3 times the rate for non-Indigenous people in South Australia and the Northern Territory.
- Rate ratios were higher for females than for males in South Australia and the Northern Territory.
- A situation occurred in Western Australia where hospitalisation rates for lung cancer were higher in the non-Indigenous population than the Indigenous population, whereas mortality rates for lung cancer were higher in the Indigenous population compared to the non-Indigenous population. This suggests that some other factor is influencing the lower rate of hospitalisations for Indigenous people, such as an under diagnosis of lung cancer in some Indigenous populations.

## 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 additional 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 additional 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 additional diagnosis needs to be considered.

### Data

Data were provided for hospitalisations where diabetes was the primary cause (principal diagnosis), where diabetes was an additional cause and the total of these two categories where diabetes was either cause. 'Additional 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

**Table 44.1: Hospitalisations for diabetes as the principal diagnosis for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02.**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	489	226	288	305	75	767	7	11	2,168
Females	730	335	665	476	123	1,149	51	12	3,541
Persons	1,219	561	953	781	198	1,916	58	23	5,709
<b>Non-Indigenous</b>									
Males	3,523	4,405	391	10,113	11,142	5,609	872	592	36,647
Females	3,335	4,348	203	10,688	12,039	5,725	780	516	37,634
Persons	6,858	8,753	594	20,801	23,181	11,334	1,652	1,108	74,281
<b>Subtotal</b>	<b>8,077</b>	<b>9,314</b>	<b>1,547</b>	<b>21,582</b>	<b>23,379</b>	<b>13,250</b>	<b>1,710</b>	<b>1,131</b>	<b>79,990</b>
Not stated	—	274	1	48	—	844	496	40	1,703
<b>Total</b>	<b>8,077</b>	<b>9,588</b>	<b>1,548</b>	<b>21,630</b>	<b>23,379</b>	<b>14,094</b>	<b>2,206</b>	<b>1,171</b>	<b>81,693</b>
Proportion not stated (%)	—	2.9	0.1	0.2	—	6.0	22.5	3.4	2.1

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes E10–E14, O24.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 79,990 hospitalisations among people aged 0–74 years due to diabetes where Indigenous status was recorded. Of these 5,709 or 7% were for people identified as Indigenous.
- Females made up 62% of the Indigenous hospitalisations from diabetes, compared to only 51% of the non-Indigenous hospitalisations.
- The Indigenous status was not stated for 1,703 (2.1%) of all hospitalisations with a principal diagnosis of diabetes. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.9% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (22.5%).

## Age-standardised rates and rate ratios

**Table 44.2: Age-standardised hospitalisation rates and rate ratios for diabetes as the principal diagnosis for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	11.6	13.4	7.2	3.7	4.8	11.7	0.6	3.6	7.9
Non-Indigenous males	2.0	3.4	3.1	1.8	2.7	1.9	2.3	2.0	2.2
Indigenous females	16.7	19.2	19.0	5.8	7.2	15.0	4.8	6.4	12.3
Non-Indigenous females	2.1	3.2	1.9	1.8	2.7	1.9	1.7	1.6	2.2
Indigenous persons	14.2	16.4	13.3	4.8	6.1	13.4	2.7	5.0	10.2
Non-Indigenous persons	2.0	3.3	2.6	1.8	2.7	1.9	2.0	1.8	2.2
	<b>Standardised hospital separation ratio</b>								
Males	5.7	4.0	2.3	2.1	1.8	6.2	0.2	1.8	3.6
Females	8.1	5.9	10.1	3.2	2.7	7.9	2.9	3.9	5.6
Persons	7.0	5.0	5.2	2.7	2.3	7.1	1.3	2.7	4.6

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02, in 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.
- In these states and territories, the rate ratios for Indigenous females compared to non-Indigenous females were much higher than for the rate ratios for Indigenous males compared to non-Indigenous males. For example in the Northern Territory the rate ratio for females was 10.1 compared to 2.3 for males.

## Diabetes as an additional diagnosis

**Table 44.3: Hospitalisations for diabetes as an additional diagnosis for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	2,739	1,015	1,624	1,825	408	2,939	50	62	10,662
Females	4,142	1,600	2,899	2,328	573	4,563	90	53	16,248
Persons	6,881	2,615	4,523	4,153	981	7,502	140	115	26,910
<b>Non-Indigenous</b>									
Males	16,789	18,859	1,018	67,888	60,731	38,574	3,916	3,075	210,850
Females	15,339	16,921	701	55,542	50,433	31,413	3,248	2,368	175,965
Persons	32,128	35,780	1,719	123,430	111,164	69,987	7,164	5,443	386,815
<b>Subtotal</b>	<b>39,009</b>	<b>38,395</b>	<b>6,242</b>	<b>127,583</b>	<b>112,145</b>	<b>77,489</b>	<b>7,304</b>	<b>5,558</b>	<b>413,725</b>
Not stated	—	959	8	170	—	6,709	2,359	193	10,398
<b>Total</b>	<b>39,009</b>	<b>39,354</b>	<b>6,250</b>	<b>127,753</b>	<b>112,145</b>	<b>84,198</b>	<b>9,663</b>	<b>5,751</b>	<b>424,123</b>
Proportion not stated (%)	—	2.4	0.1	0.1	—	8.0	24.4	3.4	2.4

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes E10–E14 & O24. Excludes separations where primary diagnosis was routine dialysis (Z49.1 and Z49.2).

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 413,725 hospitalisations among people aged 0–74 years due to diabetes as an additional cause where Indigenous status was recorded. Of these 26,910 or 6.5% were for people identified as Indigenous.
- Females made up 60% of the Indigenous hospitalisations from diabetes as an additional cause, compared to only 45% of the non-Indigenous hospitalisations.
- The Indigenous status was not stated for 10,398 (2.4%) of all hospitalisations with diabetes as an additional diagnosis. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.4% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (24.4%).

## Age-standardised rates and rate ratios

**Table 44.4: Age-standardised hospitalisation rates and rate ratios for diabetes as an additional diagnosis for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	104.6	90.7	76.4	35.6	35.6	62.1	6.2	45.6	59.5
Non-Indigenous males	10.2	13.0	9.4	11.5	14.3	12.2	9.4	12.0	12.4
Indigenous females	132.0	135.3	117.3	38.9	42.5	78.5	14.4	47.0	77.8
Non-Indigenous females	9.4	11.2	8.3	9.1	11.3	10.0	6.9	9.3	10.0
Indigenous persons	119.0	114.5	98.2	37.3	39.2	70.9	10.3	46.3	69.1
Non-Indigenous persons	9.8	12.1	8.9	10.3	12.8	11.1	8.1	10.6	11.2
	<b>Standardised hospital separation ratio</b>								
Males	10.3	7.0	8.1	3.1	2.5	5.1	0.7	3.8	4.8
Females	14.1	12.1	14.1	4.3	3.8	7.9	2.1	5.1	7.8
Persons	12.2	9.5	11.0	3.6	3.1	6.4	1.3	4.4	6.2

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02, in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for diabetes as an additional diagnosis at between 9 and 12 times the rate for non-Indigenous people.
- The rate ratios for females were substantially higher than for males. For example, the rate ratios in Western Australia were 14.1 for females and 10.3 for males and in the Northern Territory they were 14.1 for females and 8.1 for males.



## Diabetes as a principal or an additional diagnosis

Table 44.5: Hospitalisations for diabetes as a principal or an additional diagnosis for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2000–01 and 2001–02

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	3,092	1,201	1,813	2,077	462	3,479	55	67	12,246
Females	4,705	1,858	3,437	2,752	667	5,432	129	61	19,041
Persons	7,797	3,059	5,250	4,829	1,129	8,911	184	128	31,287
<b>Non-Indigenous</b>									
Males	19,577	22,245	1,373	76,140	68,813	43,016	4,379	3,473	239,016
Females	18,247	20,459	885	64,958	60,549	36,086	3,743	2,775	207,702
Persons	37,824	42,704	2,258	141,098	129,362	79,102	8,122	6,248	446,718
<b>Subtotal</b>	<b>45,621</b>	<b>45,763</b>	<b>7,508</b>	<b>145,927</b>	<b>130,491</b>	<b>88,013</b>	<b>8,306</b>	<b>6,376</b>	<b>478,005</b>
Not stated	—	1,159	8	217	—	7,428	2,724	230	11,766
<b>Total</b>	<b>45,621</b>	<b>46,922</b>	<b>7,516</b>	<b>146,144</b>	<b>130,491</b>	<b>95,441</b>	<b>11,030</b>	<b>6,606</b>	<b>489,771</b>
Proportion not stated (%)	—	2.5	0.1	0.1	—	7.8	24.7	3.5	2.4

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.

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

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 478,005 hospitalisations among people aged 0–74 years due to diabetes as a principal or an additional cause where Indigenous status was recorded. Of these 31,287 or 6.5% were for people identified as Indigenous.
- Females made up 61% of the Indigenous hospitalisations from diabetes as a principal or additional cause, compared to only 46% of the non-Indigenous hospitalisations.
- For 11,766 or 2.4% of hospitalisations with diabetes as a principal or additional diagnosis, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.5% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (24.7%) and Queensland (7.8%).

## Age-standardised rates and rate ratios

**Table 44.6: Age-standardised hospitalisation rates and rate ratios for diabetes as a principal or an additional cause for persons aged 0-74 years, by Indigenous status and sex, by state and territory, 2001-02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	108.0	99.8	76.5	37.6	37.7	69.2	6.1	45.2	63.2
Non-Indigenous males	11.8	15.7	12.3	13.0	16.3	13.7	10.5	13.4	14.1
Indigenous females	140.7	146.6	130.8	43.4	47.3	88.7	18.6	50.6	86.0
Non-Indigenous females	11.2	13.8	10.0	10.7	13.6	11.6	8.0	10.6	11.9
Indigenous persons	125.2	124.6	105.2	40.6	42.7	79.6	12.4	47.9	75.1
Non-Indigenous persons	11.5	14.7	11.3	11.8	14.9	12.7	9.2	12.0	13.0
	<b>Standardised hospital separation ratio</b>								
Males	9.2	6.4	6.2	2.9	2.3	5.0	0.6	3.4	4.5
Females	12.6	10.6	13.1	4.1	3.5	7.7	2.3	4.8	7.2
Persons	10.9	8.5	9.3	3.4	2.9	6.3	1.3	4.0	5.8

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001-02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for diabetes as a principal or additional diagnosis at between 8 and 11 times the rate for non-Indigenous people.
- In these three states and territories, the standardised hospital separation ratios were much higher for females than males.

## 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 both tympanoplasty and otitis media.

**Table 45.1: Hospitalisations for tympanoplasty for otitis media for children aged 0–14 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Qld	Australia <sup>(a)</sup>
<b>Indigenous</b>						
Males	69	9	21	14	38	156
Females	79	11	25	13	55	185
Persons	148	20	46	27	93	341
<b>Non-Indigenous</b>						
Males	147	105	6	257	193	922
Females	151	113	6	168	132	746
Persons	298	218	12	425	325	1,668
<b>Subtotal</b>	<b>446</b>	<b>238</b>	<b>58</b>	<b>452</b>	<b>418</b>	<b>2,009</b>
Not stated	—	5	—	2	79	95
<b>Total</b>	<b>446</b>	<b>243</b>	<b>58</b>	<b>454</b>	<b>497</b>	<b>2,104</b>
Proportion not stated (%)	—	2.1	—	0.4	15.9	4.5

(a) Due to low numbers for tympanoplasty in Victoria, the Australian Capital Territory and Tasmania, these states and territories were not included in the table but were included in the Australian total.

#### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states and territories' own assessments.
2. 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, 41554–00, 41563–00, 41563–01.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02, there were 2,009 hospitalisations of children aged 0–14 years with otitis media and tympanoplasty where Indigenous status was recorded. Of these hospitalisations, 341 or 17% were identified as being Indigenous children.

- Males made up 46% of the Indigenous hospitalisations for tympanoplasty, compared to 55% of the non-Indigenous hospitalisations.
- For 95 or 4.5% of hospitalisations from tympanoplasty, Indigenous status was not stated.

### Age-standardised rates and rate ratios

**Table 45.2: Age-standardised hospitalisation rates and rate ratios for tympanoplasty for otitis media, for children aged 0–14 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Qld	Australia
	<b>Rate per 1,000</b>					
Indigenous males	2.0	0.6	1.1	0.3	0.4	0.7
Non-Indigenous males	0.4	0.4	0.1	0.2	0.2	0.2
Indigenous females	3.4	1.1	1.2	0.3	1.1	1.1
Non-Indigenous females	0.4	0.4	0.3	0.2	0.2	0.2
Indigenous person	2.7	0.8	1.2	0.3	0.7	0.9
Non-Indigenous person	0.4	0.4	0.2	0.2	0.2	0.2
	<b>Standardised hospital separation ratio</b>					
Males	5.0	1.6	8.8	1.3	1.6	2.9
Females	8.1	2.6	4.2	1.7	6.5	5.3
Persons	6.5	2.1	5.7	1.5	3.6	4.0

#### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardized hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous children were hospitalised for tympanoplasty between 2 and 7 times the rate for non-Indigenous children. This indicates a much higher rate of chronic ear infections and perforations of the eardrum among Indigenous children.
- The standardised hospital separation ratio was much higher for males than for females in the Northern Territory.

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

### **Indicator:**

- (a) Standardised hospital separation ratio for depressive disorders as the primary 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 primary 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 primary 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. Indigenous people are more likely to have poorer mental health than 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 more serious 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 includes a broader range of codes for the different mental health conditions. For example, the codes specified for substance misuse disorders did not include codes for misuse 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 insufficient data quality.

## Depressive disorders

**Table 46.1: Hospitalisations for depressive disorders for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 and 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	148	92	28	180	72	183	n.p.	n.p.	710
Females	313	244	38	435	208	283	41	7	1,569
Persons	461	336	66	615	280	466	44	11	2,275
<b>Non-Indigenous</b>									
Males	5,702	2,808	94	10,599	11,116	8,440	1,250	249	40,258
Females	9,461	4,536	75	17,074	25,415	14,399	2,306	447	73,713
Persons	15,163	7,344	169	27,673	36,531	22,839	3,556	696	113,971
<b>Subtotal</b>	<b>15,624</b>	<b>7,680</b>	<b>235</b>	<b>28,288</b>	<b>36,811</b>	<b>23,305</b>	<b>3,600</b>	<b>707</b>	<b>116,250</b>
Not stated	—	161	1	173	—	941	392	13	1,681
<b>Total</b>	<b>15,624</b>	<b>7,841</b>	<b>236</b>	<b>28,461</b>	<b>36,811</b>	<b>24,246</b>	<b>3,992</b>	<b>20</b>	<b>117,931</b>
Proportion not stated (%)	—	2.1	0.4	0.6	—	3.9	9.8	1.8	1.4

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. This is based on states' and territories' own assessments.
2. ICD-10-AM codes F32–F33.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 116,250 hospitalisations among people aged 0–74 years due to depressive disorders where Indigenous status was recorded. Of these 2,275 or 2% were of Indigenous people.
- Females made up 69% of the Indigenous hospitalisations for depressive disorders and 65% of the non-Indigenous hospitalisations.
- For 1,681 or 1.4% of hospitalisations from depressive disorders, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 2.1% of all hospitalisations in South Australia. A high proportion was not stated in Tasmania (9.8%).

## Age-standardised rates and rate ratios

**Table 46.2: Age-standardised hospitalisation rates and rate ratios for depressive disorders for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	3.2	3.5	0.6	1.9	2.2	2.2	n.p.	n.p.	2.1
Non-Indigenous males	2.7	2.0	0.6	1.8	2.4	3.0	3.2	0.8	2.3
Indigenous females	6.3	13.3	0.8	5.0	9.6	3.3	3.4	2.8	4.9
Non-Indigenous females	5.0	3.1	0.4	3.0	5.6	4.8	6.7	1.5	4.2
Indigenous persons	4.8	8.5	0.7	3.5	6.0	2.8	1.9	2.1	3.5
Non-Indigenous persons	3.9	2.5	0.5	2.4	4.0	3.9	5.0	1.2	3.3
	<b>Standardised hospital separation ratio</b>								
Males	1.2	1.8	1.1	1.0	0.9	0.8	n.p.	n.p.	0.9
Females	1.3	4.3	2.0	1.7	1.7	0.7	0.5	1.9	1.1
Persons	1.2	3.4	1.5	1.5	1.5	0.7	0.4	1.8	1.1

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. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for depressive episodes at between 1 and 3 times the rate for non-Indigenous people.
- The standardised hospital separation ratios were higher for females than for males.

## Anxiety disorders

**Table 46.3: Hospitalisations for anxiety disorders for persons aged 0–74 years by Indigenous status and sex, by state and territory, 2000–01 to 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
<b>Indigenous</b>									
Males	183	101	49	191	41	289	15	n.p.	873
Females	344	197	35	309	84	316	69	9	1,363
Persons	527	298	84	500	125	605	84	13	2,236
<b>Non-Indigenous</b>									
Males	4,677	2,405	122	13,545	7,913	11,210	1,043	221	41,136
Females	6,347	2,885	73	9,434	11,196	8,474	1,472	259	40,140
Persons	11,024	5,290	195	22,979	19,109	19,684	2,515	480	81,276
<b>Subtotal</b>	<b>11,551</b>	<b>5,588</b>	<b>279</b>	<b>23,701</b>	<b>19,234</b>	<b>20,289</b>	<b>2,599</b>	<b>493</b>	<b>83,734</b>
Not stated	—	200	7	95	—	646	206	7	1,144
<b>Total</b>	<b>11,551</b>	<b>5,788</b>	<b>286</b>	<b>23,574</b>	<b>19,234</b>	<b>20,935</b>	<b>2,805</b>	<b>500</b>	<b>84,673</b>
Proportion not stated (%)	—	3.5	2.4	0.4	—	3.1	7.3	1.4	1.4

### Notes

1. Shading indicates that the Indigenous identification for these data is in need of improvement. This is based on states' and territories' own assessments.
2. ICD-10-AM codes F40–F43
3. n.p. = not published where numbers less than 5.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 83,734 hospitalisations among people aged 0–74 years due to anxiety disorders where Indigenous status was recorded. Of these 2,236 or 2.7% were of Indigenous people.
- Females made up 61% of the Indigenous hospitalisations for anxiety disorders, compared with only 49% of the non-Indigenous hospitalisations.
- For 1,144 or 1.4% of hospitalisations from anxiety disorders, Indigenous status was not stated. Among hospitalisations in the states and territories with the most reliable data, the proportion of not stated ranged from none in Western Australia to 3.5% of all hospitalisations in South Australia.



## Age-standardised rates and rate ratios

**Table 46.4: Age-standardised hospitalisation rates and rate ratios for anxiety disorders for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02.**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	3.0	5.0	1.1	1.9	2.0	3.0	1.4	n.p.	2.4
Non-Indigenous males	2.5	1.8	0.8	2.3	1.7	3.4	2.3	0.7	2.3
Indigenous females	6.4	10.1	0.9	2.8	4.3	3.4	3.8	5.2	3.8
Non-Indigenous females	3.5	2.0	0.6	1.7	2.4	2.7	3.8	0.9	2.3
Indigenous persons	4.7	7.6	1.0	2.3	3.1	3.2	2.6	2.9	3.1
Non-Indigenous persons	3.0	1.9	0.7	2.0	2.0	3.1	3.0	0.8	2.3
	<b>Standardised hospital separation ratio</b>								
Males	1.2	2.8	1.3	0.9	1.2	0.9	0.6	n.p.	1.1
Females	1.9	5.1	1.4	1.6	1.8	1.2	1.0	5.8	1.7
Persons	1.6	4.0	1.3	1.2	1.5	1.0	0.9	3.7	1.4

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. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardized hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia and South Australia Indigenous people were hospitalised for anxiety disorders at between 2 and 4 times the rate of non-Indigenous people. In the Northern Territory the rates were similar for Indigenous and non-Indigenous people.

## Substance use disorders

**Table 46.5: Hospitalisations for substance use disorders for persons aged 0–74 years, by Indigenous status, sex and state and territory, 2000-01 to 2001-02.**

	WA	SA	NT	NSW	Vic	Qld	TAS	ACT	Australia
<b>Indigenous</b>									
Males	931	356	259	1,353	189	1,059	20	12	4,179
Females	521	208	76	721	117	484	9	n.p.	2,137
Persons	1,452	564	335	2,074	306	1,543	29	13	6,316
<b>Non-Indigenous</b>									
Males	4,630	2,409	138	19,680	9,421	9,727	909	178	47,092
Females	2,523	1,292	29	10,993	6,201	4,569	569	118	26,294
Persons	7,153	3,701	167	30,673	15,622	14,296	1,478	296	73,386
<b>Subtotal</b>	<b>8,605</b>	<b>4,265</b>	<b>502</b>	<b>32,747</b>	<b>15,928</b>	<b>15,839</b>	<b>1,507</b>	<b>309</b>	<b>79,702</b>
Not stated	—	153	8	272	—	2,635	125	5	3,198
<b>Total</b>	<b>8,605</b>	<b>4,418</b>	<b>510</b>	<b>33,019</b>	<b>15,928</b>	<b>18,474</b>	<b>1,632</b>	<b>314</b>	<b>82,900</b>
Proportion not stated (%)	—	3.5	1.6	0.8	—	14.3	7.7	1.6	3.9

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. This is based on states' and territories' own assessments.
2. ICD-10-AM codes F10–F19.

Source: AIHW National Hospital Morbidity Database.

- In the two years 2000–01 to 2001–02 there were 79,702 hospitalisations among people aged 0–74 years due to substance use disorders where Indigenous status was recorded. Of these 6,316 or 7.9% were of Indigenous people.
- Females made up 34% of the Indigenous hospitalisations from substance use disorders, compared with 36% of the non-Indigenous hospitalisations.
- For 3,198 or 3.9% of hospitalisations from substance use disorders, Indigenous status was not stated. Among hospitalisations in Western Australia, South Australia and the Northern Territory, the proportion of not stated ranged from none in Western Australia to 3.5% of all hospitalisations in South Australia. A high proportion of not stated was reported in Queensland (14.3%).
- In Western Australia, South Australia and the Northern Territory, the majority of Indigenous hospitalisations for substance use disorders were from alcohol use (73%) followed by multiple drug use (11%) and cannabis use (8%).

## Age-standardised rates and rate ratios

**Table 46.6: Age-standardised hospitalisation rates and rate ratios for substance use disorders for persons aged 0–74 years, by Indigenous status and sex, by state and territory, 2001–02**

	WA	SA	NT	NSW	Vic	Qld	Tas	ACT	Australia
	<b>Rate per 1,000</b>								
Indigenous males	18.2	16.4	5.8	11.5	6.0	10.8	1.5	3.6	11.5
Non-Indigenous males	2.6	1.8	0.9	2.6	2.2	2.8	2.6	0.6	2.6
Indigenous females	10.2	9.7	1.7	6.0	5.9	4.6	0.6	n.p.	6.0
Non-Indigenous females	1.3	0.9	0.3	1.5	1.4	1.2	1.5	0.4	1.5
Indigenous persons	14.1	13.0	3.7	8.7	5.9	7.6	1.0	2.1	8.7
Non-Indigenous persons	2.0	1.3	0.6	2.0	1.8	2.0	2.0	0.5	2.0
	<b>Standardised hospital separation ratio</b>								
Males	6.9	9.3	6.7	4.4	2.8	3.8	0.6	6.1	4.4
Females	7.6	10.5	5.9	4.1	4.2	3.8	0.4	n.p.	4.1
Persons	7.1	9.7	6.3	4.2	3.3	3.7	0.5	4.3	4.2

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. This is based on states' and territories' own assessments.
2. Standardised hospital separation ratio is the standardised hospitalisation rate for Indigenous people divided by the standardised hospitalisation rate for non-Indigenous people.
3. Hospitalisations for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Hospital Morbidity Database.

- In 2001–02 in Western Australia, South Australia and the Northern Territory, Indigenous people were hospitalised for substance use disorders at between 6 and 10 times the rate for non-Indigenous people.
- In Western Australia and South Australia, rate ratios were higher for females than for males.

## Indicator 47. Children's hearing loss

**Indicator:** The proportion of Aboriginal and Torres Strait Islanders at school entry having >25 db hearing loss at either 1 or 4 KHz in either ear.

### Purpose

The indicator gives information on the prevalence of hearing deficit in children at school entry. It predicts the occurrence of learning difficulties and behavioural problems in children and young people.

### Data

Hearing loss among Aboriginal and Torres Strait Islander children is widespread. It can be the result of repeated bouts of otitis media, and is thought to be more severe among Indigenous children due to crowded housing conditions and lack of access to primary health care.

Hearing loss often leads to increased learning difficulties and behavioural problems in school, adding to existing social disadvantage experienced by Indigenous people.

The Australian Capital Territory, Queensland and Western Australia reported that there were no data available.

South Australia reported that while there were no specific data available for this indicator, the South Australia Education Department advised that 'in 2003, the prevalence of otitis media leading to hearing loss and contributing to communication problems and long-term disability was 11.1% for Aboriginal children compared to 4.7% for the general community'.

Victoria reported that children are screened for hearing through two universal programs – Maternal and Child Health, and School Nursing. Maternal and Child Health screens at 2 weeks and 8 months and refers children to audiology services. School Nursing screens most children in Prep school (5-6 years). Screening relies on a consent form being completed by the parent. The form is still valid if Indigenous status is not completed and the data is not cross-matched routinely with other records. All Indigenous children are screened for hearing loss at 500 Hz at 30 dB and 1000, 2000 and 4000 Hz at 20 dB. There is no systematic surveillance and follow-up of hearing loss. School Nursing has made efforts to improve the quality of the data but the level of accurate identification is uncertain.

Tasmanian enrolment cards are completed by parents or nurses; asking for Indigenous status is compulsory but responding is voluntary. Children whose hearing loss has been detected and who attend the Australian Hearing Service have their Indigenous status collected.

# Indicator 48. Stillbirths to Aboriginal and Torres Strait Islander mothers

**Indicator:** The proportion of all births to Aboriginal and Torres Strait Islander women that are stillborn.

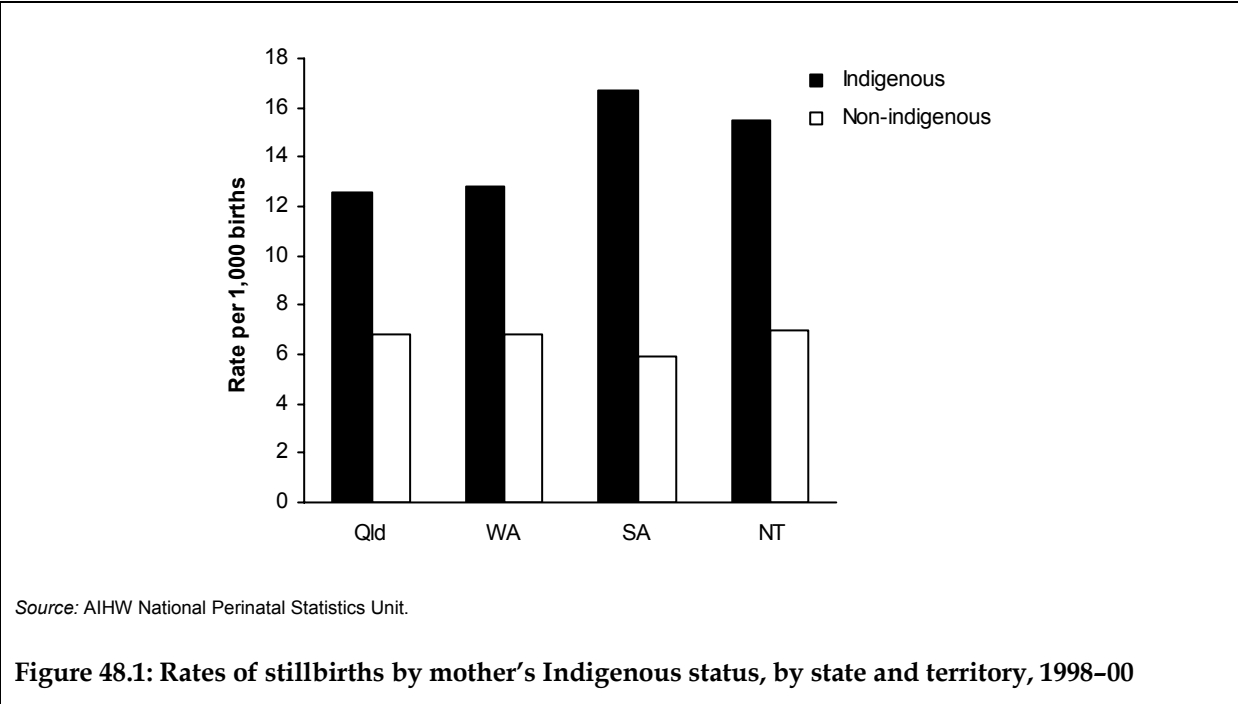
## Purpose

The indicator reflects the health of pregnant Aboriginal and Torres Strait Islander women, their access to and utilisation of antenatal care, and the quality of antenatal care.

## Data

The data on stillbirths comes from the AIHW National Perinatal Statistics Unit (Midwives' Collection). While the data is likely to capture most stillbirths, it is likely to underestimate the number of stillbirths to Indigenous mothers because Indigenous status is not always recorded. In addition, the Indigenous status of the father is not recorded in the Midwives' data collection and therefore it is not possible to report information on stillbirths of babies born to Indigenous fathers and non-Indigenous mothers.

Three years of data were combined in the following figure in order to smooth out yearly fluctuations in the number of stillbirths to Indigenous mothers, which can cause volatility in rates.



- The rate of stillbirths to Aboriginal and Torres Strait Islander mothers was around twice the rate for non-Indigenous mothers in Queensland, Western Australia and the Northern Territory, and almost three times the rate in South Australia.
- The rate of stillbirths for Indigenous mothers ranged from 12.6 per 1,000 in Queensland to 16.7 per 1,000 in South Australia.

## Indicator 49. Early adult death

**Indicator:** The probability of person aged 20–24 years dying before reaching the age of 55 years in the Aboriginal and Torres Strait Islander population compared to the all-Australian population, by sex.

### Purpose

This indicator is designed to capture early adult mortality. If linked to adult mortality data it can be used to identify the causes of death that should be a priority area for prevention.

### Data

Data for this indicator were provided by the ABS. Data is presented only for the four states and territories where the coverage of deaths is considered more complete. Given the problems experienced in accurately measuring life expectancy and the death rates for the Aboriginal and Torres Strait Islander population, early adult mortality indicators are difficult to calculate and should be interpreted with care.

**Table 49.1: Experimental estimates of the probability of a person aged 20 years dying before age 55 years, for the Indigenous and total Australian populations, by sex, 1999–01**

	Qld	WA	SA	NT
Indigenous males	0.36	0.37	0.40	0.39
All Australian males	0.07	0.06	0.07	0.14
Indigenous females	0.22	0.22	0.27	0.24
All Australian females	0.04	0.04	0.04	0.08

*Note:* Table excludes states and territories with less complete coverage of Indigenous deaths.

*Source:* Tables 6.30 and 6.31 for the Australian life table and Table 6.44 for the experimental life table of Indigenous people, ABS *Deaths Australia 2002*.

- Based on estimates over the period 1999–01, an Indigenous male had between 36% and 40% chance of dying before the age of 55. The comparable percentages for the all-Australian males were between 7% and 14%.
- The early adult mortality estimates reported in Table 49.1 are based on experimental population estimates based on the 1996 Census of Population and Housing. The Preston-Hill method was used by the ABS to construct an experimental model life table for the Indigenous population which gives an estimation of the probability of a person aged 20 years dying before aged 55 years. The ABS is currently reviewing the appropriateness of this method and the assumptions involved.
- Indigenous females had between a 22% and a 27% chance of dying before the age of 55 years. The comparable percentages for the all-Australian females were between 4% and 8%.
- The probability of a person aged 20 dying before age 55 was similar in Queensland, Western Australia and South Australia for both males and females.

## **Indicator 50. Age- and sex- specific all cause death rates and ratios**

**Indicator:** Age- and sex- specific death rates from all causes for Aboriginal and Torres Strait Islander people and Indigenous to non-Indigenous rate ratios.

### **Purpose**

The indicator provides a measure of mortality for different age and sex groups for the Indigenous and non-Indigenous populations. Groups where there are major differences in death rates between the Indigenous and non-Indigenous populations can be identified.

### **Data**

The data provided comes from the AIHW National Mortality Database. Number of deaths is presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

### **Number of deaths**

- Over the three-year period 1999–01, the number of deaths among people who identified as Indigenous was 1,350 in New South Wales, 1,646 in Queensland, 1,086 in Western Australia, 426 in South Australia and 1,238 in the Northern Territory. In all these states and territories the highest proportion of deaths was among those aged 45–64 and 65 years and over (Table 50.1).
- Over the three-year period 1999–01, the number of deaths for which Indigenous status was not recorded was 5,873 in New South Wales, 433 in Queensland, 444 in Western Australia, 872 in South Australia and 35 in the Northern Territory. The proportion of deaths for which Indigenous status was not stated was 4.4 in New South Wales, 2.5 in South Australia, 1.4 in Western Australia, 1.4 in the Northern Territory and 0.6 in Queensland.

### **Age- and sex- specific rates and rate ratios**

- In all four states and territories, the death rates for Indigenous males and females were considerably higher than for other Australian males and females for all age groups (Table 50.2).
- In the four states and territories, the highest death rates were among those aged 45–64 years and 65 years and over, whereas the highest death rate among the non-Indigenous population was among those aged 65 years and over.

Table 50.1: Number of deaths by age and sex, for selected states and territories, 1999–01

	Males		Females		Total		Not stated	Total deaths	Proportion not stated (%)
	Indig.	Non-indig.	Indig.	Non-indig.	Indig.	Non-indig.			
<b>New South Wales</b>									
0–4 yrs	56	774	51	606	107	1,380	140	1,627	8.6
5–24	39	1,251	24	519	63	1,770	109	1,942	5.6
25–44	181	3,817	83	1,658	264	5,475	307	6,046	5.1
45–64	255	11,039	180	6,293	435	17,332	833	18,600	4.5
65+	238	49,163	243	51,644	481	100,807	4,484	105,772	4.2
<b>Total</b>	<b>769</b>	<b>66,044</b>	<b>581</b>	<b>60,720</b>	<b>1,350</b>	<b>126,764</b>	<b>5,873</b>	<b>133,987</b>	<b>4.4</b>
<b>Queensland</b>									
0–4 yrs	81	484	52	400	133	884	9	1,026	0.9
5–24	83	809	35	312	118	1,121	5	1,244	0.4
25–44	194	2,109	117	1,035	311	3,144	20	3,475	0.6
45–64	300	6,427	232	3,461	532	9,888	59	10,479	0.6
65+	275	25,865	277	25,718	552	51,583	340	52,475	0.6
<b>Total</b>	<b>933</b>	<b>35,694</b>	<b>713</b>	<b>30,926</b>	<b>1,646</b>	<b>66,620</b>	<b>433</b>	<b>68,699</b>	<b>0.6</b>
<b>Western Australia</b>									
0–4 yrs	53	214	45	119	98	333	19	450	4.2
5–24	57	433	24	154	81	587	31	699	4.4
25–44	168	1,065	85	524	253	1,589	72	1,914	3.8
45–64	201	2,754	135	1,598	336	4,352	98	4,786	2.0
65+	170	11,878	148	12,071	318	23,949	224	24,491	0.9
<b>Total</b>	<b>649</b>	<b>16,344</b>	<b>437</b>	<b>14,466</b>	<b>1,086</b>	<b>30,810</b>	<b>444</b>	<b>32,340</b>	<b>1.4</b>
<b>South Australia</b>									
0–4 yrs	16	157	9	111	25	268	6	299	2.0
5–24	19	281	13	106	32	387	23	422	5.5
25–44	69	913	47	450	116	1,363	69	1,548	4.5
45–64	86	2,571	68	1,600	154	4,171	107	4,432	2.4
65+	44	13,486	55	14,161	99	27,647	667	28,413	2.3
<b>Total</b>	<b>234</b>	<b>17,408</b>	<b>192</b>	<b>16,428</b>	<b>426</b>	<b>33,836</b>	<b>872</b>	<b>35,134</b>	<b>2.5</b>

(continued)



Table 50.1 continued: Number of deaths by age and sex, for selected states and territories, 1999–01

	Males		Females		Total		Not stated	Total deaths	Proportion not stated (%)
	Indig.	Non-indig.	Indig.	Non-indig.	Indig.	Non-indig.			
<b>Northern Territory</b>									
0–4 yrs	51	29	46	9	97	38	—	135	0
5–24	67	53	31	16	98	69	—	167	0
25–44	224	148	110	35	334	183	8	525	1.5
45–64	215	281	164	117	379	398	8	785	1.0
65+	148	381	182	237	330	618	19	967	2.0
<b>Total<sup>(a)</sup></b>	<b>705</b>	<b>892</b>	<b>533</b>	<b>414</b>	<b>1,238</b>	<b>1,306</b>	<b>35</b>	<b>2,579</b>	<b>1.4</b>

(a) Total does not include deaths where Indigenous status was not stated.

Note: Table includes deaths data from states and territories where coverage of Indigenous status is more complete.

Source: AIHW National Mortality Database.

Table 50.2: Age- and sex- specific death rates per 1,000 and rate ratios for all causes, for selected states and territories, 1999–01

	Males			Females		
	Indigenous	Non-indig.	Rate ratio	Indigenous	Non-indig.	Rate ratio
<b>Queensland</b>						
0–4 yrs	3.1	1.4	2.3	2.0	1.2	1.7
5–24	1.0	0.5	1.8	0.4	0.2	1.9
25–44	3.9	1.4	2.9	2.1	0.7	3.2
45–64	15.0	5.1	2.9	10.2	2.8	3.6
65+	59.6	45.4	1.3	48.1	37.5	1.3
<b>Western Australia</b>						
0–4 yrs	4.4	1.2	3.6	3.6	0.7	5.2
5–24	1.3	0.5	2.3	0.6	0.2	2.8
25–44	6.1	1.3	4.9	3.0	0.6	4.7
45–64	18.4	4.2	4.4	11.3	2.5	4.5
65+	64.8	42.8	1.5	43.4	35.1	1.2
<b>South Australia</b>						
0–4 yrs	3.4	1.2	2.9	1.8	0.9	2.2
5–24	1.1	0.5	2.4	0.8	0.2	4.2
25–44	6.4	1.4	4.6	4.2	0.7	5.9
45–64	19.8	4.8	4.1	14.4	2.9	4.9
65+	49.7	46.9	1.1	44.3	38.0	1.2

(continued)

**Table 50.2 continued: Age- and sex- specific death rates per 1,000 and rate ratios for all causes, for selected states and territories, 1999-01**

	Males			Females		
	Indigenous	Non-indig.	Rate ratio	Indigenous	Non-indig.	Rate ratio
<b>Northern Territory</b>						
0-4 yrs	4.9	1.8	2.8	4.5	0.6	7.9
5-24	1.7	0.9	2.0	0.9	0.3	3.0
25-44	9.0	1.8	5.0	4.2	0.5	9.1
45-64	23.0	5.2	4.4	16.0	2.8	5.8
65+	73.9	39.5	1.9	63.9	30.8	2.1

*Notes*

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Rate ratio is the mortality rate for Indigenous people divided by the mortality rate for non-Indigenous people.
3. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Mortality Database.

## Indicator 51. Standardised mortality ratios for all causes

**Indicator:** Standardised mortality ratio for deaths from all causes in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population.

### Purpose

The indicator provides a comparative measure of overall mortality rates for Aboriginal and Torres Strait Islander males and females with rates for other Australians, taking into account differences in the age structure of the populations. It provides a summary measure of the differences between the two populations.

### Data

The data provided comes from the AIHW National Mortality Database. Data on numbers of deaths is presented by five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

**Table 51.1: Number of deaths among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	769	933	649	234	705	3,290
Females	581	713	437	192	533	2,456
Persons	1,350	1,646	1,086	426	1,238	5,746
<b>Non-Indigenous</b>						
Males	66,044	35,694	16,344	17,408	892	136,382
Females	60,720	30,926	14,466	16,428	414	122,954
Persons	126,764	66,620	30,810	33,836	1,306	259,336
<b>Subtotal</b>	<b>128,114</b>	<b>68,266</b>	<b>31,896</b>	<b>34,262</b>	<b>2,544</b>	<b>265,082</b>
Not stated	5,870	433	444	872	40	7,659
<b>Total</b>	<b>133,984</b>	<b>68,699</b>	<b>32,340</b>	<b>35,134</b>	<b>2,584</b>	<b>272,741</b>
Proportion not stated (%)	4.4	0.6	1.4	2.5	1.5	2.8

Source: AIHW National Mortality Database.

- In the period 1999–01, in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory there was a total of 265,082 deaths among people aged 0–74 years where Indigenous status was recorded. Of these deaths, 5,746 (2.2%) were of Indigenous people.
- For 7,659 deaths (2.8%), Indigenous status was not stated. This ranged from 0.6% in Queensland to 4.4% in New South Wales.
- Of all Indigenous deaths, 57% were males compared with 53% of deaths among non-Indigenous people.

## Age-standardised rates and rate ratios

**Table 51.2: Age-standardised mortality rates and rate ratios, by Indigenous status and sex, for selected states and territories, 1999-01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	1,589.9	1,999.6	1,987.2	2,668.2
Non-Indigenous males	755.6	695.6	761.9	789.8
Indigenous females	1,042.5	1,151.7	1,341.6	1,657.8
Non-Indigenous females	569.6	526.8	582.9	449.3
Indigenous persons	1,295.3	1,542.6	1,633.1	2,113.6
Non-Indigenous persons	656.1	604.7	663.0	636.8
	<b>Standardised mortality ratio</b>			
Males	2.1	2.9	2.6	3.4
Females	1.8	2.2	2.3	3.7
Persons	2.0	2.6	2.5	3.3

### Notes

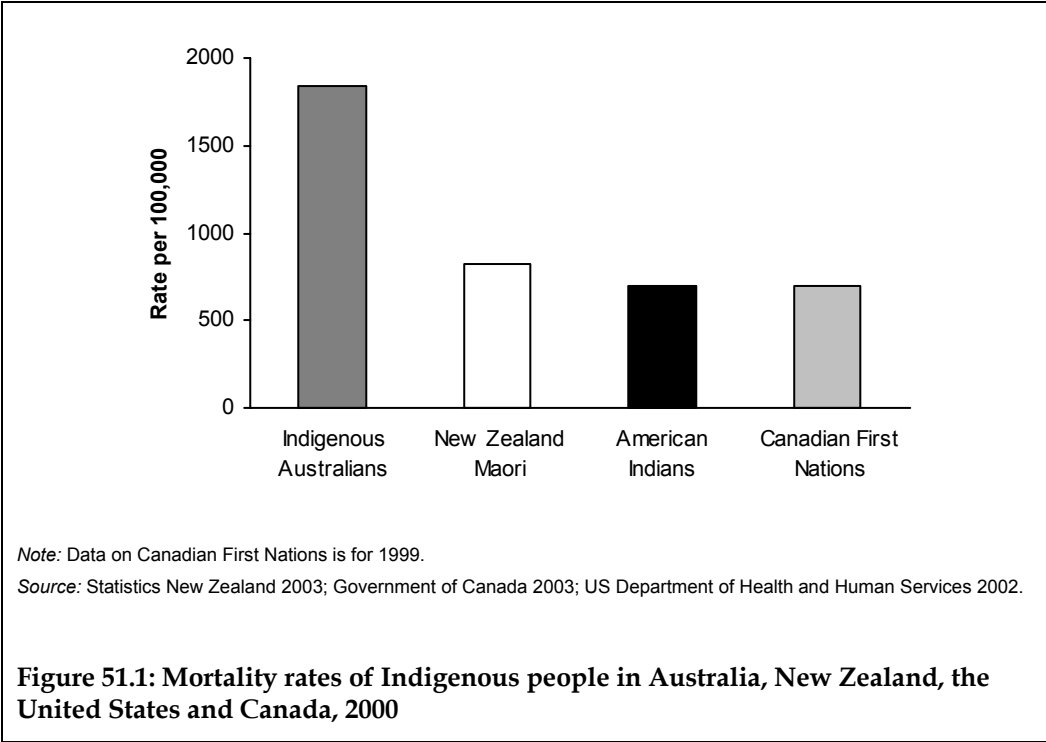
1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.
3. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.

Source: AIHW National Mortality Database.

- In 1999-01 in Queensland, Western Australia, South Australia and the Northern Territory, death rates ranged from 449 in the Northern Territory to 583 in South Australia.
- The ratio of Indigenous to non-Indigenous deaths ranged from 2.0 in Queensland to 3.3 in the Northern Territory.

**International comparisons**

- The overall age-standardised death rates in 2000 for all Aboriginal and Torres Strait Islander people in the four states and territories with reliable data were 1,845 per 100,000. (The three-year average death rate for Aboriginal and Torres Strait Islanders for 1999-01 was 1,751 per 100,000.)
- Death rates among Indigenous Australians were more than twice the rate in New Zealand Maori, Indian Americans and Canadian First Nations.
- In 2000 the age-standardised death rate was 821 per 100,000, 697 per 100,000 and 662 per 100,000 (in 1999) for New Zealand Maoris, American Indians and First Nations in Canada respectively (Statistics New Zealand 2003; Government of Canada 2003; US Department of Health and Human Services 2002).
- Although some methodological differences – such as variation in the method used for standardisation and the age structure or death rates of the population used for standardisation – have probably influenced the observed death rates, these are unlikely to account for the differences observed in the death rates between Indigenous Australians and the other Indigenous groups.



## **Indicator 52. Standardised mortality ratios for circulatory diseases**

### **Indicator:**

- (a) Standardised mortality ratio for deaths from circulatory diseases as the underlying cause of death in the Aboriginal and Torres Strait Islander population, compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised mortality ratio for deaths from coronary heart disease as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised mortality ratio for deaths from rheumatic heart disease as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

### **Purpose**

Circulatory diseases are a significant leading cause of death in the Aboriginal and Torres Strait Islander population. Many deaths from circulatory disease are preventable. It is therefore important to monitor changes in the rates of death from circulatory diseases in the Indigenous population with that of the non-Indigenous population.

### **Data**

The data provided comes from the AIHW National Mortality Database. Number of deaths are presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

The data provided is for deaths from all circulatory diseases, as well as for the subgroups of circulatory diseases – coronary heart disease, and rheumatic fever and rheumatic heart disease.

## Circulatory diseases

Table 52.1: Number of deaths from circulatory disease among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	237	218	133	56	166	810
Females	129	163	88	38	99	517
Persons	366	381	221	94	265	1,327
<b>Non-Indigenous</b>						
Males	9,366	4,862	2,018	2,296	176	18,718
Females	4,280	2,263	904	1,060	44	8,551
Persons	13,646	7,125	2,922	3,356	220	27,269
<b>Subtotal</b>	<b>14,012</b>	<b>7,506</b>	<b>3,143</b>	<b>3,450</b>	<b>485</b>	<b>28,596</b>
Not stated	665	43	58	78	8	852
<b>Total</b>	<b>14,677</b>	<b>7,549</b>	<b>3,201</b>	<b>3,528</b>	<b>493</b>	<b>29,448</b>
Proportion not stated (%)	4.5	0.6	1.8	2.2	1.6	2.9

Note: ICD-10 codes I00–I99.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 28,596 deaths due to circulatory disease where Indigenous status was recorded. Of these, 1,327 or 4.6% were deaths of Indigenous people.
- For 852 deaths (2.9%), the Indigenous status was not recorded. The proportion of 'not stated' varied by jurisdiction and ranged from 0.6% of all deaths in Queensland to 4.5% of all deaths in New South Wales.
- Males made up 61% of the Indigenous deaths from circulatory disease, compared with 69% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 52.2: Age-standardised mortality rates and rate ratios for death from circulatory diseases, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	368.1	412.6	446.3	616.2
Non-Indigenous males	100.4	82.4	102.0	124.5
Indigenous females	235.2	235.2	253.5	305.2
Non-Indigenous females	46.3	36.3	44.3	42.7
Indigenous persons	296.5	317.3	341.4	446.3
Non-Indigenous persons	73.2	59.1	72.3	90.1
	<b>Standardised mortality ratio</b>			
Males	3.7	5.0	4.4	4.9
Females	5.1	6.5	5.7	7.1
Persons	4.1	5.4	4.7	5.0

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete than other states and territories, death rates for the Indigenous population ranged from 297 per 100,000 in Queensland to 446 per 100,000 in the Northern Territory.
- The age-standardised mortality rates for deaths caused by circulatory diseases were between 4 and 5 times higher in the Indigenous population than in the non-Indigenous population.
- The standardised mortality ratios were higher for females than for males in all four states and territories.



## Coronary heart disease

Table 52.3: Number of deaths from coronary heart disease among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	172	156	78	37	101	544
Females	72	94	44	21	43	274
Persons	244	250	122	58	144	818
<b>Non-Indigenous</b>						
Males	6,180	3,363	1,379	1,520	133	12,575
Females	2,165	1,245	456	538	21	4,425
Persons	8,345	4,608	1,835	2,058	154	17,000
<b>Subtotal</b>	<b>8,589</b>	<b>4,858</b>	<b>1,957</b>	<b>2,116</b>	<b>298</b>	<b>17,818</b>
Not stated	403	30	42	46	3	524
<b>Total</b>	<b>8,992</b>	<b>4,888</b>	<b>1,999</b>	<b>2,162</b>	<b>301</b>	<b>18,342</b>
Proportion not stated (%)	4.5	0.6	2.1	2.1	1.0	2.9

Note: ICD-10 codes I20–I25.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory there were 17,818 deaths from coronary heart disease where Indigenous status was recorded. Of these deaths, 818 or 4.6% were of Indigenous people.
- For 524 deaths (2.9%), Indigenous status was not stated. The proportion of 'not stated' varied by jurisdiction and ranged from 0.6% all deaths in Queensland to 4.5% of all deaths in New South Wales.
- Females made up 33% of Indigenous deaths from coronary heart disease, compared to only 26% of non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 52.4: Age-standardised mortality rates and rate ratios for death from coronary heart disease, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	273.4	251.1	305.8	390.3
Non-Indigenous males	69.3	56.3	67.4	94.5
Indigenous females	140.1	121.2	144.2	136.6
Non-Indigenous females	25.5	18.3	22.5	20.7
Indigenous persons	201.4	181.1	217.5	251.0
Non-Indigenous persons	47.3	37.1	44.3	63.5
	<b>Standardised mortality ratio</b>			
Males	3.9	4.5	4.5	4.1
Females	5.5	6.6	6.4	6.6
Persons	4.3	4.9	4.9	4.0

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In the period 1999–01 in the four states and territories where the Indigenous identification was more complete than other states and territories, death rates for the Indigenous population ranged from 181 per 100,000 in Western Australia to 251 per 100,000 in the Northern Territory.
- Age-standardised mortality rates for deaths caused by coronary heart disease were between 4 and 5 times higher in the Indigenous population than in the non-Indigenous population.
- The standardised mortality ratios were higher for females in all states and territories.

## Rheumatic heart disease

**Table 52.5: Number of deaths from rheumatic heart disease among those aged less than 75 years, by Indigenous status and state and territory, 1999–01**

	NSW	Qld	WA	SA	NT	Total
Indigenous persons	6	19	5	n.p.	23	55
Non-Indigenous persons	103	60	28	31	n.p.	224
<b>Subtotal</b>	<b>109</b>	<b>79</b>	<b>33</b>	<b>33</b>	<b>25</b>	<b>279</b>
Not stated	10	—	—	1	—	11
<b>Total</b>	<b>119</b>	<b>179</b>	<b>33</b>	<b>34</b>	<b>25</b>	<b>290</b>
Proportion not stated (%)	8.4	—	—	2.9	—	3.8

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

### Notes

1. Numbers for males and females were not published because of low numbers.
2. ICD-10 codes I00–I09.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 279 deaths recorded as being caused by rheumatic heart disease. Of these 55 or 19.7% of these were deaths of Indigenous people.

## Age-standardised rates and rate ratios

**Table 52.6: Age-standardised mortality rates and rate ratios for death from rheumatic heart disease, by Indigenous status and state and territory, 1999–01**

	Qld	WA	SA	NT
<b>Rate per 100,000</b>				
Indigenous persons	11.9	5.8	n.p.	30.8
Non-Indigenous persons	0.6	0.6	0.7	n.p.
<b>Standardised mortality ratio</b>				
Persons	19.4	10.4	n.p.	n.p.

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

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- Death rates from rheumatic heart disease should be interpreted with care because of low numbers of deaths.
- The standardised mortality ratio was 19 in Queensland and 10 in Western Australia.

## Indicator 53. Standardised mortality ratios for injury and poisoning

### Indicator:

- (a) Standardised mortality ratio for deaths from injury and poisoning as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised mortality ratio for deaths from road vehicle-related injury as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised mortality ratio for deaths from other accidents as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (d) Standardised mortality ratio for deaths from suicide as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 15–24 years.
- (e) Standardised mortality ratio for deaths from assault as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

### Purpose

Injury is a significant cause of death among Aboriginal and Torres Strait Islander people. The indicators provide a measure of the rate of deaths for all injuries, as well as the main causes of injury for Aboriginal and Torres Strait Islander people compared to non-Indigenous people.

### Data

The data provided comes from the AIHW National Mortality Database. Number of deaths are presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

The data provided were for the category all injuries and poisoning, as well as for the four major injury subgroups – road vehicle accidents, other accidents, self-harm and assault.

## Injury and poisoning

**Table 53.1: Number of deaths from injury and poisoning among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	126	169	140	52	121	608
Females	62	57	55	25	53	252
Persons	188	226	195	77	174	860
<b>Non-Indigenous</b>						
Males	4,196	2,735	1,308	997	186	9,422
Females	1,324	827	411	316	37	2,915
Persons	5,520	3,562	1,719	1,313	223	12,337
<b>Subtotal</b>	<b>5,708</b>	<b>3,788</b>	<b>1,914</b>	<b>1,390</b>	<b>397</b>	<b>13,197</b>
Not stated	308	21	94	86	6	515
<b>Total</b>	<b>6,016</b>	<b>3,809</b>	<b>2,008</b>	<b>1,476</b>	<b>403</b>	<b>13,712</b>
Proportion not stated (%)	5.1	0.6	4.7	5.8	1.5	3.8

Note: ICD-10 codes V01–Y09.

Source: AIHW National Mortality Database.

- In the period 1999 to 2001 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 13,197 deaths due to all types of injury and poisoning where Indigenous status was recorded. Of these, 860 or 6.5% were Indigenous people.
- Indigenous status was not stated for 515 deaths (3.8%). This ranged from 0.6% of all deaths in Queensland to 5.8% of all deaths in South Australia.
- Males made up 71% of the Indigenous deaths from injury and poisoning, compared with 76% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 53.2: Age-standardised mortality rates and rate ratios for death from injury and poisoning, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	110.6	168.4	160.5	160.1
Non-Indigenous males	55.1	49.5	47.8	82.0
Indigenous females	34.1	64.0	74.4	68.7
Non-Indigenous females	16.7	15.8	15.2	18.7
Indigenous persons	70.6	115.3	116.6	113.9
Non-Indigenous persons	35.9	32.8	31.5	52.5
	<b>Standardised mortality ratio</b>			
Males	2.0	3.4	3.4	2.0
Females	2.0	4.0	4.9	3.7
Persons	2.0	3.5	3.7	2.2

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete, death rates for the Indigenous population ranged from 71 per 100,000 in Queensland to 117 per 100,000 in South Australia.
- Indigenous people died from injury and poisoning at between 2 and 4 times the rate for non-Indigenous people.
- The mortality rate ratios from injury and poisoning between Indigenous and non-Indigenous people were greatest in South Australia and Western Australia.

## Road vehicle accidents

This category includes injuries caused by accidents involving cars, buses, trucks, motorcycles, bicycles and pedestrians.

**Table 53.3: Number of deaths from road vehicle accidents among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	37	26	37	17	34	151
Females	11	9	18	6	16	60
Persons	48	35	55	23	50	211
<b>Non-Indigenous</b>						
Males	1,044	656	342	264	58	2,364
Females	391	224	101	103	20	839
Persons	1,435	880	443	367	78	3,203
<b>Subtotal</b>	<b>1,483</b>	<b>915</b>	<b>498</b>	<b>390</b>	<b>128</b>	<b>3,414</b>
Not stated	84	6	30	34	4	158
<b>Total</b>	<b>1,567</b>	<b>921</b>	<b>528</b>	<b>424</b>	<b>132</b>	<b>3,572</b>
Proportion not stated (%)	5.4	0.7	5.7	8.0	3.0	4.4

Note: ICD-10 codes V01–V79.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 3,414 deaths due to road vehicle accidents where Indigenous status was recorded. Of these, 211 or 6.2% were Indigenous people.
- For 158 deaths (4.4%), Indigenous status was not stated. This ranged from 0.7% of all deaths in Queensland to 8% of all deaths in South Australia.
- Males made up 72% of the Indigenous deaths from motor vehicle accidents, and 74% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 53.4: Age-standardised mortality rates and rate ratios for death from road vehicle accidents, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	15.3	40.2	47.4	40.5
Non-Indigenous males	13.2	12.9	12.7	26.0
Indigenous females	4.9	19.2	16.4	18.9
Non-Indigenous females	4.5	3.9	5.0	10.2
Indigenous persons	9.9	29.6	31.7	29.7
Non-Indigenous persons	8.9	8.4	8.9	18.7
	<b>Standardised mortality ratio</b>			
Males	1.2	3.1	3.7	1.6
Females	1.1	4.9	3.3	1.8
Persons	1.1	3.5	3.6	1.6

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In the period 1999–01 in the four states and territories where the Indigenous identification was acceptable, death rates for the Indigenous population ranged from 10 per 100,000 in Queensland to 32 per 100,000 in South Australia.
- Indigenous people died from road vehicle accidents at between 1 and 4 times the rate at which non-Indigenous people died.
- The mortality ratios for Indigenous to non-Indigenous people for road accidents were greatest in South Australia (3.6) and Western Australia (3.5). In Queensland they were very similar (1.1).



## Other accidents

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

**Table 53.5: Number of deaths from other accidents among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	40	54	49	20	26	189
Females	29	18	22	13	14	96
Persons	69	72	71	33	40	285
<b>Non-Indigenous</b>						
Males	1,314	910	411	265	58	2,958
Females	413	282	153	91	7	946
Persons	1,727	1,192	564	356	65	3,904
<b>Subtotal</b>	<b>1,796</b>	<b>1,264</b>	<b>635</b>	<b>389</b>	<b>105</b>	<b>4,189</b>
Not stated	99	9	30	16	1	155
<b>Total</b>	<b>1,895</b>	<b>1,273</b>	<b>665</b>	<b>405</b>	<b>106</b>	<b>4,344</b>
Proportion not stated (%)	5.2	0.7	4.5	4.0	0.9	3.6

Note: ICD-10 codes V80–X59.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 4,189 deaths caused by other accidents where Indigenous status was recorded. Of these, 285 or 6.8% were Indigenous people.
- Indigenous status was not stated for 155 deaths (3.6%). This ranged from 0.7% of all deaths in Queensland to 5.2% of all deaths in New South Wales.
- Males made up 66% of the Indigenous deaths from other accidents, compared to 76% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 53.6: Age-standardised mortality rates and rate ratios for death from other accidents, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	35.6	59.6	62.8	35.2
Non-Indigenous males	18.4	15.7	12.7	26.0
Indigenous females	10.9	25.9	39.2	18.6
Non-Indigenous females	5.7	5.9	4.4	3.6
Indigenous persons	22.7	42.5	50.7	26.8
Non-Indigenous persons	12.0	10.8	8.5	15.6
	<b>Standardised mortality ratio</b>			
Males	1.9	3.8	5.0	1.4
Females	1.9	4.4	9.0	5.2
Persons	1.9	3.9	6.0	1.7

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete, death rates for the Indigenous population ranged from 23 per 100,000 in Queensland to 51 per 100,000 in South Australia.
- Indigenous people died from other accidents at between 2 and 6 times the rate at which non-Indigenous people died.
- The rate ratios were higher in females compared to males, largely reflecting the very low death rates from other accidents among non-Indigenous women.

## Self-harm

**Table 53.7: Number of deaths from self-harm among those aged 15–24 years, by Indigenous status, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
Indigenous persons	6	37	17	7	19	86
Non-Indigenous persons	294	205	115	69	11	694
<b>Subtotal</b>	<b>300</b>	<b>242</b>	<b>132</b>	<b>76</b>	<b>30</b>	<b>780</b>
Not stated	19	1	2	2	—	24
<b>Total</b>	<b>319</b>	<b>243</b>	<b>134</b>	<b>78</b>	<b>30</b>	<b>804</b>
Proportion not stated (%)	6.0	0.4	1.5	2.6	—	3.0

### Notes

1. Numbers for males and females were not published because of low numbers.
2. ICD-10 codes X60–X84.

Source: AIHW National Mortality Database.

- In the period 1999 to 2001 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 780 deaths caused by self-harm where Indigenous status was recorded. Of these, 86 or 11% were Indigenous people.
- For 24 deaths (3%), Indigenous status was not stated. The proportions not stated varied by jurisdiction and ranged from none in the Northern Territory to 6% of all deaths in New South Wales.

## Age-standardised rates and rate ratios

**Table 53.8: Age-standardised mortality rates and rate ratios for death from self-harm, by Indigenous status, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous persons	55.1	48.2	51.2	56.1
Non-Indigenous persons	14.1	14.9	11.9	18.2
	<b>Standardised mortality ratio</b>			
Persons	3.9	3.2	4.3	3.1

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete, death rates for the Indigenous population ranged from 48 per 100,000 in Western Australia to 56 per 100,000 in the Northern Territory.
- Indigenous people die from self-harm at between 3 and 4 times the rate at which non-Indigenous people die.
- The rate ratios were highest in South Australia (4.3) and Queensland (3.9).

## Assault

**Table 53.9: Number of deaths from assault among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	20	12	15	n.p.	21	72
Females	12	16	9	n.p.	17	55
Persons	32	28	24	5	38	127
<b>Non-Indigenous</b>						
Males	191	97	36	41	8	373
Females	89	53	19	17	n.p.	180
Persons	280	150	55	58	10	553
<b>Subtotal</b>	<b>312</b>	<b>178</b>	<b>79</b>	<b>63</b>	<b>48</b>	<b>680</b>
Not stated	11	1	7	6	—	25
<b>Total</b>	<b>323</b>	<b>179</b>	<b>86</b>	<b>69</b>	<b>48</b>	<b>705</b>
Proportion not stated (%)	3.4	0.6	8.1	8.7	—	3.5

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

Note: ICD-10 codes X85–Y09.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory there were 680 deaths caused by assault where Indigenous status was recorded. Of these, 127 or 19% were Indigenous people.
- For 25 deaths (3.5%), Indigenous status was not stated. This ranged from none in the Northern Territory to 8.7% of all deaths in South Australia.
- Females made up 43% of the Indigenous deaths from assault, compared with only 33% of non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 53.10: Age-standardised mortality rates and rate ratios for death from assault, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	7.2	16.7	n.p.	26.0
Non-Indigenous males	2.0	1.4	2.0	3.4
Indigenous females	8.9	9.8	n.p.	20.8
Non-Indigenous females	1.1	0.7	0.8	n.p.
Indigenous persons	8.1	13.2	7.1	23.4
Non-Indigenous persons	1.5	1.0	1.4	2.3
	<b>Standardised mortality ratio</b>			
Males	3.7	12.3	n.p.	7.6
Females	8.3	13.3	n.p.	n.p.
Persons	5.4	12.6	5.0	10.3

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

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete, death rates for the Indigenous population ranged from 7 per 100,000 in South Australia to 23 per 100,000 in the Northern Territory.
- The standardised mortality ratios show that Indigenous people died from assault between 5 and 13 times the rate at which non-Indigenous people died.

## **Indicator 54. Standardised mortality ratios for respiratory diseases and lung cancer**

### **Indicator:**

- (a) Standardised mortality ratio for deaths from respiratory diseases as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised mortality ratio for deaths from pneumonia as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised mortality ratio for deaths from cancer of the lung, trachea and bronchus as the underlying cause in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.

### **Purpose**

The indicators provide a measure of the rate of deaths from respiratory disease and lung cancer for Aboriginal and Torres Strait Islander people compared to non-Indigenous people.

### **Data**

The data provided comes from the AIHW National Mortality Database. Number of deaths are presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

Data are presented for the category of all respiratory diseases as well as two of the sub-groups – pneumonia and lung cancer.

## Respiratory diseases

Table 54.1: Number of deaths from respiratory disease among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	48	60	36	19	53	216
Females	34	47	20	15	31	147
Persons	82	107	56	34	84	363
<b>Non-Indigenous</b>						
Males	2,001	1,022	423	443	37	3,926
Females	1,292	634	255	299	15	2,495
Persons	3,293	1,656	678	742	52	6,421
<b>Subtotal</b>	<b>3,375</b>	<b>1,763</b>	<b>734</b>	<b>776</b>	<b>136</b>	<b>6,784</b>
Not stated	184	8	14	26	4	236
<b>Total</b>	<b>3,559</b>	<b>1,771</b>	<b>748</b>	<b>802</b>	<b>140</b>	<b>7,020</b>
Proportion not stated (%)	5.2	0.5	1.9	3.2	2.9	3.4

Note: ICD-10 codes J00–J99.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 6,784 deaths caused by respiratory diseases where Indigenous status was recorded. Of these, 363 or 5.4% were Indigenous people.
- There were a total of 236 deaths (3.4%) for which Indigenous status was not stated. This ranged from 0.5% in Queensland to 5.2% in New South Wales.
- Males made up 60% of the Indigenous deaths from respiratory disease, and 61% of the non-Indigenous deaths.



## Age-standardised rates and rate ratios

**Table 54.2: Age-standardised mortality rates and rate ratios for death from respiratory diseases, by Indigenous status and sex, for selected states and territories, 1999-01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	100.3	111.0	151.9	196.7
Non-Indigenous males	21.2	17.4	19.6	27.9
Indigenous females	67.6	53.3	99.9	95.5
Non-Indigenous females	13.0	10.3	12.4	15.7
Indigenous persons	82.7	80.0	123.5	141.4
Non-Indigenous persons	17.1	13.8	15.9	22.8
	<b>Standardised mortality ratio</b>			
Males	4.7	6.4	7.7	7.0
Females	5.2	5.2	8.0	6.1
Persons	4.8	5.8	7.8	6.2

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999-01 in the four states and territories where the Indigenous identification was acceptable, death rates for the Indigenous population ranged from 80 per 100,000 in Western Australia to 141 per 100,000 in the Northern Territory.
- The standardised mortality ratios indicate that Indigenous people die from respiratory diseases at between 5 and 8 times the rate at which non-Indigenous people die.

## Pneumonia

**Table 54.3: Number of deaths from pneumonia among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	7	20	15	8	13	63
Females	7	12	8	n.p.	8	38
Persons	14	32	23	11	21	101
<b>Non-Indigenous</b>						
Males	244	120	60	62	6	492
Females	161	79	39	39	n.p.	319
Persons	405	199	99	101	7	811
<b>Subtotal</b>	<b>419</b>	<b>231</b>	<b>122</b>	<b>112</b>	<b>28</b>	<b>912</b>
Not stated	19	1	5	3	1	29
<b>Total</b>	<b>438</b>	<b>232</b>	<b>127</b>	<b>115</b>	<b>29</b>	<b>941</b>
Proportion not stated (%)	4.3	0.4	3.9	2.6	3.4	3.1

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

Note: ICD-10 codes J10–J18.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 912 deaths caused by pneumonia where Indigenous status was recorded. Of these, 101 or 11.1% were Indigenous people.
- For 29 deaths due to pneumonia, Indigenous status was not stated (3.1%). This ranged from 0.4% in Queensland to 4.3% in New South Wales.
- Males made up 62% of the Indigenous deaths from pneumonia, and 61% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 54.4: Age-standardised mortality rates and rate ratios for death from pneumonia, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	25.5	35.6	49.3	36.8
Non-Indigenous males	2.5	2.4	2.8	4.0
Indigenous females	13.6	17.2	n.p.	20.0
Non-Indigenous females	1.6	1.6	1.7	n.p.
Indigenous persons	19.2	25.9	31.6	27.9
Non-Indigenous persons	2.0	2.0	2.2	2.7
	<b>Standardised mortality ratio</b>			
Males	10.3	14.6	17.7	9.1
Females	8.4	11.0	n.p.	n.p.
Persons	9.4	13.0	14.3	10.4

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

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was acceptable, death rates for the Indigenous population ranged from 19 per 100,000 in Queensland to 32 per 100,000 in South Australia.
- The standardised mortality ratios for pneumonia indicate that Indigenous people die from pneumonia at between 9 and 14 times the rate at which non-Indigenous people die.
- The rate ratios were highest in South Australia (14.3) followed by Western Australia (13.0).

## Lung cancer

**Table 54.5: Number of deaths from lung cancer among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	26	55	11	5	20	117
Females	26	25	6	6	10	73
Persons	52	80	17	11	30	190
<b>Non-Indigenous</b>						
Males	2,757	1,671	754	686	54	5,922
Females	1,284	727	356	302	20	2,689
Persons	4,041	2,398	1,110	988	74	8,611
<b>Subtotal</b>	<b>4,093</b>	<b>2,478</b>	<b>1,127</b>	<b>999</b>	<b>104</b>	<b>8,801</b>
Not stated	190	15	10	18	1	234
<b>Total</b>	<b>4,283</b>	<b>2,493</b>	<b>1,137</b>	<b>1,017</b>	<b>105</b>	<b>9,035</b>
Proportion not stated (%)	4.4	0.6	0.9	1.8	1.0	2.6

Note: ICD-10 codes C33–C34.9.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 8,801 deaths caused by lung cancer where Indigenous status was recorded. Of these 190 or 2.2% were Indigenous people.
- There were a total of 234 deaths for which Indigenous status was not stated (2.6%). This ranged from 0.6% in Queensland to 4.4% in New South Wales.
- Females made up 38% of the Indigenous deaths from lung cancer, compared with 31% of the non-Indigenous deaths.

## Age-standardised rate and rate ratios

**Table 54.6: Age-standardised mortality rates and rate ratios for death from lung cancer, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	98.3	36.2	42.4	79.0
Non-Indigenous males	34.2	30.6	30.4	38.1
Indigenous females	37.9	16.8	42.0	32.2
Non-Indigenous females	14.9	14.3	12.7	19.9
Indigenous persons	65.6	25.7	42.1	53.2
Non-Indigenous persons	24.5	22.4	21.3	30.5
	<b>Standardised mortality ratio</b>			
Males	2.9	1.2	1.4	2.1
Females	2.5	1.2	3.3	1.6
Persons	2.7	1.1	2.0	1.7

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was acceptable, death rates for the Indigenous population ranged from 26 per 100,000 in Western Australia to 66 per 100,000 in Queensland.
- The standardised mortality ratios for lung cancer indicate that Indigenous people die from lung cancer at between 1 and 3 times the rate at which non-Indigenous people die.
- The rate ratios of Indigenous to non-Indigenous persons were highest in Queensland (2.7) followed by South Australia (2.0).

## **Indicator 55. Standardised mortality ratios for diabetes**

### **Indicator:**

- (a) Standardised mortality ratio for diabetes as the underlying cause of death in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (b) Standardised mortality ratio for diabetes as a multiple but not underlying cause of death in the Aboriginal and Torres Strait Islander population compared to the non-Indigenous population, by sex, for those aged 0–74 years.
- (c) Standardised mortality ratio for diabetes as the underlying or as a multiple cause of death 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 measure of the rate of death from diabetes in the Aboriginal and Torres Strait Islander people compared to the non-Indigenous population.

Diabetes is often reported as a multiple cause of death, in particular in association with death with a primary cause of coronary heart disease, stroke and kidney disease. To assess the impact of diabetes on the Indigenous population, diabetes as both an underlying and a multiple cause needs to be considered.

### **Data**

The data provided comes from the AIHW National Mortality Database. Number of deaths are presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

Data were presented for deaths where diabetes was an underlying cause, where diabetes was a multiple cause and the total of these two categories, where diabetes was either an underlying or a multiple cause of death.

## Diabetes as an underlying cause

Table 55.1: Number of deaths from diabetes as an underlying cause among those aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	26	55	42	11	35	169
Females	20	69	53	16	46	204
Persons	46	124	95	27	81	373
<b>Non-Indigenous</b>						
Males	599	375	195	180	12	1,361
Females	327	181	85	121	8	722
Persons	926	556	280	301	20	2,083
<b>Subtotal</b>	<b>972</b>	<b>680</b>	<b>375</b>	<b>328</b>	<b>101</b>	<b>2,456</b>
Not stated	35	4	4	2	—	45
<b>Total</b>	<b>1,007</b>	<b>684</b>	<b>379</b>	<b>330</b>	<b>101</b>	<b>2,501</b>
Proportion not stated (%)	3.5	0.6	1.1	0.6	—	1.8

Note: ICD-10 codes E10–E14.

Source: AIHW National Mortality Database.

- In the period from 1999 to 2001 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 2,456 deaths caused by diabetes where Indigenous status was recorded. Of these, 373 or 15.2% were Indigenous people.
- There were a total of 45 deaths for which Indigenous status was not stated (1.8%). This ranged from none in the Northern Territory to 3.5% in New South Wales.
- Females made up 55% the Indigenous deaths from diabetes as an underlying cause, compared with only 35% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 55.2: Age-standardised mortality rates and rate ratios for death from diabetes as an underlying cause, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	94.1	132.2	89.0	131.6
Non-Indigenous males	7.7	7.9	8.0	8.4
Indigenous females	100.7	143.1	107.9	142.9
Non-Indigenous females	3.7	3.4	5.1	7.8
Indigenous persons	97.7	138.1	99.3	137.8
Non-Indigenous persons	5.7	5.7	6.5	8.1
	<b>Standardised mortality ratio</b>			
Males	12.2	16.7	11.1	15.6
Females	27.2	42.0	21.3	18.4
Persons	17.1	24.4	15.3	16.9

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was more complete, death rates for the Indigenous population ranged from 98 per 100,000 in Queensland to 138 per 100,000 in Western Australia and the Northern Territory.
- The standardised mortality ratio for diabetes as an underlying cause indicates that Indigenous people die from diabetes at between 15 and 24 times the rate at which non-Indigenous people die.
- The rate ratio for Indigenous females compared with non-Indigenous females was higher than for Indigenous males compared with non-Indigenous males in all four states and territories.



## Diabetes as a multiple cause

**Table 55.3: The number of deaths from diabetes as a multiple cause for people aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01**

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	53	82	39	25	41	240
Females	49	89	41	22	34	235
Persons	102	171	80	47	75	475
<b>Non-Indigenous</b>						
Males	1,942	843	360	499	42	3,686
Females	1,026	398	182	287	9	1,902
Persons	2,968	1,241	542	786	51	5,588
<b>Subtotal</b>	<b>3,070</b>	<b>1,412</b>	<b>622</b>	<b>833</b>	<b>126</b>	<b>6,063</b>
Not stated	125	15	9	13	—	162
<b>Total</b>	<b>3,195</b>	<b>1,427</b>	<b>631</b>	<b>846</b>	<b>126</b>	<b>6,225</b>
Proportion not stated (%)	3.9	1.1	1.4	1.5	—	2.6

Note: ICD-10 codes E10–E14.

Source: AIHW National Mortality Database.

- In the period 1999–01 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 6,063 deaths caused by diabetes as a multiple cause where Indigenous status was recorded. Of these, 475 or 7.8% were Indigenous people.
- Indigenous status was not stated for 162 deaths (2.6%) caused by diabetes. This ranged from none in the Northern Territory to 3.9% in New South Wales.
- Females made up 49% of the Indigenous deaths from diabetes as a multiple cause, compared with only 34% of the non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 55.4: Age-standardised mortality rates and rate ratios for diabetes as a multiple cause, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	150.9	131.9	218.3	166.9
Non-Indigenous males	17.4	14.8	22.1	31.4
Indigenous females	138.5	117.3	156.8	111.9
Non-Indigenous females	8.2	7.3	11.9	9.5
Indigenous persons	144.2	124.0	184.4	136.5
Non-Indigenous persons	12.8	11.0	16.8	22.3
	<b>Standardised mortality ratio</b>			
Males	8.7	8.9	9.9	5.3
Females	17.0	16.0	13.2	11.8
Persons	11.3	11.2	11.0	6.1

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was acceptable, death rates for diabetes as a multiple cause for the Indigenous population ranged from 124 per 100,000 in Western Australia to 184 per 100,000 in South Australia.
- The standardised mortality ratio for diabetes as a multiple cause indicates that Indigenous people die from diabetes at between 6 and 11 times the rate at which non-Indigenous people die.
- The rate ratios were similar in Queensland (11.3), Western Australia (11.2) and South Australia (11.0), but in the Northern Territory the rate ratio was much lower (6.1).
- The rate ratio for females was higher than for males in all four states and territories.

## Diabetes as an underlying or as a multiple cause

Table 55.5: The number of deaths from diabetes as an underlying or a multiple cause for people aged less than 75 years, by Indigenous status and sex, for selected states and territories, 1999–01

	NSW	Qld	WA	SA	NT	Total
<b>Indigenous</b>						
Males	79	137	81	36	76	409
Females	69	158	94	38	80	439
Persons	148	295	175	74	156	848
<b>Non-Indigenous</b>						
Males	2,541	1,218	555	679	54	5,047
Females	1,353	579	267	408	17	2,624
Persons	3,894	1,797	822	1,087	71	7,671
<b>Subtotal</b>	<b>4,042</b>	<b>2,092</b>	<b>997</b>	<b>1,161</b>	<b>227</b>	<b>8,519</b>
Not stated	160	19	13	15	—	207
<b>Total</b>	<b>4,202</b>	<b>2,111</b>	<b>1,010</b>	<b>1,176</b>	<b>227</b>	<b>8,726</b>
Proportion not stated (%)	3.8	0.9	1.3	1.3	—	2.4

Note: ICD-10 codes E10–E14.

Source: AIHW National Mortality Database.

- In the period 1999 to 2001 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 8,519 deaths caused by diabetes as an underlying or a multiple cause where Indigenous status was recorded. Of these, 848 or 10% were Indigenous people.
- For 207 deaths (2.4%), Indigenous status was not stated. This ranged from none in the Northern Territory to 3.8% in New South Wales.
- Females made up 52% of the Indigenous deaths from diabetes as an underlying or multiple cause, compared with only 34% of non-Indigenous deaths.

## Age-standardised rates and rate ratios

**Table 55.6: Age-standardised mortality rates and rate ratios for diabetes as an underlying or a multiple cause, by Indigenous status and sex, for selected states and territories, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous males	246.3	267.7	306.7	301.5
Non-Indigenous males	25.1	22.7	30.1	39.5
Indigenous females	240.8	264.0	266.1	258.5
Non-Indigenous females	11.9	10.7	17.0	17.5
Indigenous persons	243.3	265.7	284.4	277.8
Non-Indigenous persons	18.5	16.7	23.3	30.3
	<b>Standardised mortality ratio</b>			
Males	9.8	11.8	10.2	7.6
Females	20.3	24.6	15.7	14.8
Persons	13.2	15.9	12.2	9.2

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- In 1999–01 in the four states and territories where the Indigenous identification was acceptable, death rates for the Indigenous population ranged from 243 per 100,000 in Queensland to 284 per 100,000 in South Australia.
- The standardised mortality ratios indicate that Indigenous people die from diabetes at between 9 and 16 times the rate at which non-Indigenous people die.
- The rate ratio for females was higher than for males in all four states and territories.

## Indicator 56. Standardised mortality ratios for cervical cancer

**Indicator:** The standardised mortality ratios for deaths from cervical cancer among Aboriginal and Torres Strait Islander women and non-Indigenous women, for those aged 0-74 years.

### Purpose

Death from cervical cancer can be prevented through pap-smear screening. The indicator provides a measure of the death rates of Aboriginal and Torres Strait Islander women from cervical cancer compared to the death rates for non-Indigenous women.

### Data

The data provided comes from the AIHW National Mortality Database. Number of deaths are presented for five states and territories – New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. Rates were only calculated for Queensland, Western Australia, South Australia and the Northern Territory (refer to Introduction – Outcomes for people).

**Table 56.1: Number of deaths from cervical cancer among females aged less than 75 years, by Indigenous status and state and territory, 1999–01**

	NSW	Qld	WA	SA	NT	Total
Indigenous females	7	15	n.p.	n.p.	n.p.	29
Non-Indigenous females	158	103	61	37	5	364
<b>Subtotal</b>	<b>165</b>	<b>118</b>	<b>63</b>	<b>38</b>	<b>9</b>	<b>393</b>
Not stated	9	—	—	—	—	9
<b>Total</b>	<b>174</b>	<b>118</b>	<b>63</b>	<b>38</b>	<b>9</b>	<b>402</b>
Proportion not stated (%)	5.2	—	—	—	—	2.2

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

Note: ICD-10 code C53.

Source: AIHW National Mortality Database.

- In the period from 1999 to 2001 in New South Wales, Queensland, Western Australia, South Australia and the Northern Territory, there were 393 deaths caused by cervical cancer where Indigenous status was recorded. Of these, 29 or 7.4% were Indigenous females.
- There was a total of 9 deaths for which Indigenous status was not stated (2.2%). All of these occurred in New South Wales.

## Age-standardised rates and rate ratios

**Table 56.2: Age-standardised mortality rates and rate ratios for death from cervical cancer, by Indigenous status and state and territory, 1999–01**

	Qld	WA	SA	NT
	<b>Rate per 100,000</b>			
Indigenous females	22.5	n.p.	n.p.	n.p.
Non-Indigenous females	2.9	3.4	2.3	4.7
	<b>Standardised mortality ratio</b>			
Females	7.6	n.p.	n.p.	n.p.

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

### Notes

1. In New South Wales, Victoria, the Australian Capital Territory and Tasmania, the coverage of Indigenous deaths is not sufficient to calculate rates.
2. Deaths for which Indigenous status was not stated were excluded from the calculation of rates.
3. Standardised mortality ratio is the standardised mortality rate for Indigenous people divided by the standardised mortality rate for non-Indigenous people.

Source: AIHW National Mortality Database.

- The standardised mortality ratios for cervical cancer were only provided for Queensland as there were fewer than 5 Indigenous deaths from cervical cancer in the three other states and territories.
- In Queensland the rate ratio for cervical cancer was 8 times the number of Indigenous deaths compared to non-Indigenous deaths.

# Appendix 1

*The following table summarises data for the quantitative indicators in this report. This table should be read in conjunction with each relevant indicator in order to get a better understanding of issues surrounding the data.*

**Table A.1: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
<b>Government inputs</b>													
2	Per person government expenditure on state-administered health services for Indigenous people (\$)	16	AIHW	98–99	1,829	1,444	2,014	2,772	2,350	1,644	2,431	3,208	2,863
4	Total government expenditure on selected health promotion programs (\$'000)	24	states	01–02	2,190	4,191	1,645	4,579	312	—	297	4,844	20,253
<b>Determinants of health—social equity</b>													
5	Life expectancy at birth (years)	35	ABS	99–01									
	Males				n.p.	n.p.	57	56	55	n.p.	n.p.	56	n.p.
	Females				n.p.	n.p.	63	63	61	n.p.	n.p.	62	n.p.
6	Infant mortality rate per 1,000 live births	37	AIHW	99–01	n.p.	n.p.	11.7	16.6	8.0	n.p.	n.p.	19.2	n.p.
7	Income poverty—proportion of persons with incomes:	39	ABS	2001									
	Less than Australian 20th percentile				42	38	41	49	46	40	25	63	45
	Less than Australian 50th percentile				76	72	79	83	82	77	52	90	80
8	Proportion completed secondary school education	41	ABS	2001									
	Males				27.4	32.4	41.7	22.4	19.5	30.1	56.4	7.9	28.0
	Females				35.9	41.0	43.7	24.9	26.4	32.4	58.2	10.5	32.6

(continued)

**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
9	Employment status—proportion aged 20–64 who were:	43	ABS	2001									
	Employed				45.3	52.2	49.9	46.6	44.3	52.8	65.1	37.7	46.6
	Unemployed				12.2	9.9	11.2	10.2	10.5	11.6	7.8	5.4	10.5
	Not in the labour force				42.5	37.9	38.9	43.3	45.3	35.5	27.1	56.8	42.9
10	Housing utilities—proportion of dwellings in communities connected to:	45	ABS	2001									
	Sewerage system				100.0	100.0	99.8	98.9	100.0	100.0	n.a.	96.4	98.2
	Water supply				100.0	100.0	99.5	99.3	99.3	100.0	n.a.	97.8	98.8
	Electricity supply				100.0	100.0	99.7	99.0	97.9	100.0	n.a.	96.3	98.0
11	Imprisonment rate per 100,000	47	ABS	2002	2,146	1,110	1,734	2,414	1,703	622	1,134	1,340	1,806
	<b>Determinants of health—access to services</b>												
15	Aboriginal and Torres Strait Islander community controlled health services	62	OATSIH / states	01–02									
	Number				27 <sup>(a)</sup>	33	30	21	8	5	n.a.	38	162
	Per person expenditure				224 <sup>(a)</sup>	672	193	607	716	171	n.a.	755	390
16	Proportion of communities 25 km or more to a community health clinic	64	ABS	2001	17	n.a.	51	49	44	n.a.	n.a.	54	50
17	Proportion of communities 50 km or more to an acute care hospital	66	ABS	2001	13	n.a.	68	75	74	n.a.	n.a.	88	78
18	Proportion of communities of less than 50 people and more than 50 km from a community health clinic not visited by health professionals at least once a month	67	ABS	2001	n.p.	n.p.	97.4	75.9	100	n.p.	n.p.	72.8	76.7
20	The proportion of Aboriginal and Torres Strait Islander people in the health workforce	75	ABS	2001	1.4 <sup>(a)</sup>	0.3	2.2	1.4	0.9	2.0	n.a.	9.0	n.a.

(continued)



**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
21	Higher education—the number of Aboriginal and Torres Strait Islander people who:	80	DEST	2002									
	(a) had gained a health qualification				377	27	502	32	8	12	9	25	997
	(b) were enrolled to gain a health qualification				655	268	623	507	346	35	22	505	3,058
22	Number of health professionals working in primary health care centres for Indigenous people	84	OATSIH	2002	396.8 <sup>(a)</sup>	192.6	376.9	529.0	284.1	40.1	n.a.	494.4	2,313.9
23	Workforce availability in hospitals that provide services to Aboriginal and Torres Strait Islander people	87	states		145	n.a.	1,349	749	n.a.	n.a.	n.a.	1,270	n.a.
<b>Determinants of health—risk markers</b>													
26	Childhood immunisation rates—proportion of children fully immunised at:	98	HIC	June 02									
	1 year				87	89	n.p.	79	88	n.p.	n.p.	n.p.	n.p.
	2 years				86	85	n.p.	73	84	n.p.	n.p.	n.p.	n.p.
28	Proportion of low-birthweight infants	100	AIHW	98–00	11.7	14.2	11.7	14.2	16.7	6.7	17.6	13.6	12.8
29	Smoking prevalence—proportion of adults who were:	102	ABS	2001									
	Current smokers				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	53
	Ex-smokers				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17
30	Alcohol consumption—proportion of adults who:	104	ABS	2001									
	Consumed alcohol in survey week				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	46
	Drank at risky levels in survey week				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	28
31	Overweight and obesity—proportion of adults who were:	107	ABS	2001									
	Overweight				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	26
	Obese				n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	22
32	Child protection substantiations rate per 1,000	108	AIHW	01–02	15.3	48.1	14.3	13.5	31.6	0.3	6.5	9.7	n.a.

(continued)

**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
35	Number of injuries presenting to hospital accident and emergency facilities	110	states	01-02	n.a.	2,000	n.a.	2,521	n.a.	n.a.	n.a.	7,091	n.a.
<b>Outcomes for people</b>													
37	Notification rates per 100,000 for vaccine preventable diseases	116	states	2001									
	Pertussis				n.p.	n.p.	n.p.	7.6	153.2	n.p.	n.p.	73.8	n.a.
	Measles				n.p.	n.p.	n.p.	0	0	n.p.	n.p.	0	
	<i>Haemophilus influenzae</i> type b				n.p.	n.p.	n.p.	0	0	n.p.	n.p.	—	
38	Notification rates per 100,000 for meningococcal disease	118	states	2001	n.p.	n.p.	6.4	19.7	n.p.	n.p.	n.p.	15.8	n.a.
39	Notification rates per 100,000 for sexually transmitted diseases	119	states	2001									
	Males												
	Gonorrhoea				n.p.	n.p.	n.p.	2,472	1,136	n.p.	n.p.	3,228	n.a.
	Syphilis				n.p.	n.p.	n.p.	250	167	n.p.	n.p.	1,119	n.a.
	Chlamydia				n.p.	n.p.	n.p.	1,295	758	n.p.	n.p.	1,698	n.a.
	Females												
	Gonorrhoea				n.p.	n.p.	n.p.	2,056	1,328	n.p.	n.p.	3,826	n.a.
	Syphilis				n.p.	n.p.	n.p.	259	148	n.p.	n.p.	871	n.a.
	Chlamydia				n.p.	n.p.	n.p.	1,781	1,269	n.p.	n.p.	3,208	n.a.
40	Standardised hospital separation ratios for all hospitalisations by sex	121	AIHW	01-02									
	Males				1.3	1.2	1.9	2.2	2.3	0.4	2.2	4.9	2.8
	Females				1.4	1.4	2.1	2.8	2.0	0.9	1.6	5.0	2.1

(continued)

**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
41	Standardised hospital separations ratios for:	123	AIHW	01–02									
	(a) Circulatory diseases				1.6	1.3	2.4	2.6	2.9	0.6	2.5	3.2	2.0
	(b) Coronary heart disease				2.2	2.0	3.2	3.3	4.3	0.7	4.0	2.8	2.7
	(c) Rheumatic fever and rheumatic heart disease				1.6	11.6	14.8	20.6	32.6	n.p.	n.p.	87.5	15.3
42	Standardised hospital separations ratios for:	130	AIHW	01–02									
	(a) Injury and poisoning				1.4	1.3	2.0	3.6	2.5	0.5	1.1	3.0	2.1
	(b) Road vehicle-related injury				1.1	0.8	1.3	2.4	1.9	0.4	1.6	1.0	1.4
	(c) Other accidents				1.1	1.1	1.5	2.4	1.7	0.4	0.9	2.0	1.6
	(d) Self-harm				1.8	2.2	1.6	2.7	3.1	0.9	0.7	3.3	2.0
	(e) Assault				4.9	4.2	10.8	23.5	14.4	1.6	4.1	17.1	11.8
43	Standardised hospital separations ratios for:	141	AIHW	01–02									
	(a) Respiratory disease				1.5	1.3	2.2	3.2	1.9	0.5	1.4	4.2	2.1
	(b) Pneumonia				2.2	1.8	4.3	7.8	3.1	0.5	1.0	9.2	4.5
	(c) Lung cancer				1.6	2.8	2.7	0.9	1.9	n.p.	n.p.	2.7	2.0
44	Standardised hospital separations ratios for:	148	AIHW	01–02									
	(a) Diabetes as a principal diagnosis				2.6	2.3	7.1	7.0	5.0	1.3	2.7	5.2	4.6
	(b) Diabetes as an additional diagnosis				3.6	3.1	6.4	12.2	9.5	1.3	4.4	11.0	6.2
	(c) Diabetes as a principal or an additional diagnosis				3.4	2.9	6.3	10.9	8.5	0.9	4.0	9.3	5.8
45	Standardised hospital separation ratios for tympanoplasty for otitis media	155	AIHW	01–02	1.5	n.p.	3.6	6.5	2.1	n.p.	n.p.	5.7	4.0
46	Standardised hospital separations ratios for:	157	AIHW	01–02									
	(a) Depressive disorders				1.4	1.5	0.7	1.2	3.4	0.4	1.8	1.5	1.1
	(b) Anxiety disorders				1.2	1.5	1.0	1.6	4.0	0.9	3.7	1.3	1.4
	(c) Substance use disorders				4.0	3.3	3.7	7.1	9.7	0.5	4.3	6.3	4.2
	(d) Psychotic disorders				n.p.	n.p.	n.p.			n.p.	n.p.		n.p.

(continued)

**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
48	Stillbirths to Aboriginal and Torres Strait Islander mothers per 1,000 births	165		98–00	10.5	10.9	12.6	12.8	16.7	n.p.	n.p.	15.5	12.8
49	Probability of dying before age 55 years:	166	ABS	99–01									
	Males				n.p.	n.p.	0.36	0.37	0.40	n.p.	n.p.	0.39	n.p.
	Females				n.p.	n.p.	0.22	0.22	0.27	n.p.	n.p.	0.24	n.p.
50	Age-specific all cause death rates per 1,000	167	AIHW	99–01									
	Males												
	0–4 years				n.p.	n.p.	3.1	4.4	3.4	n.p.	n.p.	4.9	n.p.
	5–24 years				n.p.	n.p.	1.0	1.3	1.1	n.p.	n.p.	1.7	n.p.
	25–44 years				n.p.	n.p.	3.9	6.1	6.4	n.p.	n.p.	9.0	n.p.
	45–64 years				n.p.	n.p.	15.0	18.4	19.8	n.p.	n.p.	23.0	n.p.
	65 years and over				n.p.	n.p.	59.6	64.8	49.7	n.p.	n.p.	73.9	n.p.
	Females												
	0–4 years				n.p.	n.p.	2.0	3.6	1.8	n.p.	n.p.	4.5	n.p.
	5–24 years				n.p.	n.p.	0.4	0.6	0.8	n.p.	n.p.	0.9	n.p.
	25–44 years				n.p.	n.p.	2.1	3.0	4.2	n.p.	n.p.	4.2	n.p.
	45–64 years				n.p.	n.p.	10.2	11.3	14.4	n.p.	n.p.	16.0	n.p.
	65 years and over				n.p.	n.p.	48.1	43.4	44.3	n.p.	n.p.	63.9	n.p.
51	Standardised mortality ratios for all causes by sex	171	AIHW	99–01									
	Males				n.p.	n.p.	2.1	2.9	2.6	n.p.	n.p.	3.4	n.p.
	Females				n.p.	n.p.	1.8	2.2	2.3	n.p.	n.p.	3.7	n.p.
52	Standardised mortality ratios for:	174	AIHW	99–01									
	(a) Circulatory diseases				n.p.	n.p.	4.1	5.4	4.7	n.p.	n.p.	5.0	n.p.
	(b) Coronary heart disease				n.p.	n.p.	4.3	4.9	4.9	n.p.	n.p.	4.0	n.p.
	(c) Rheumatic fever and rheumatic heart disease				n.p.	n.p.	19.4	10.4	n.p.	n.p.	n.p.	n.p.	n.p.

(continued)

**Table A.1 continued: Summary of quantitative indicators**

No.	Performance indicator	Page	Source	Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Aust
53	Standardised mortality ratios for:	180	AIHW	99–01									
	(a) Injury and poisoning				n.p.	n.p.	2.0	3.5	3.7	n.p.	n.p.	2.2	n.p.
	(b) Road vehicle-related injury				n.p.	n.p.	1.1	3.5	3.6	n.p.	n.p.	1.6	n.p.
	(c) Other accidents				n.p.	n.p.	1.9	3.9	6.0	n.p.	n.p.	1.7	n.p.
	(d) Self-harm				n.p.	n.p.	3.9	3.2	4.3	n.p.	n.p.	3.1	n.p.
	(e) Assault				n.p.	n.p.	5.4	12.6	5.0	n.p.	n.p.	10.3	n.p.
54	Standardised mortality ratios for:	191	AIHW	99–01									
	(a) Respiratory disease				n.p.	n.p.	4.8	5.8	7.8	n.p.	n.p.	6.2	n.p.
	(b) Pneumonia				n.p.	n.p.	9.4	13.0	14.3	n.p.	n.p.	10.4	n.p.
	(c) Cancer of the lung, trachea and bronchus				n.p.	n.p.	2.7	1.1	2.0	n.p.	n.p.	1.7	n.p.
55	Standardised mortality ratios for:	198	AIHW	99–01									
	(a) Diabetes as the underlying cause				n.p.	n.p.	17.1	24.4	15.3	n.p.	n.p.	16.9	n.p.
	(b) Diabetes as a multiple cause				n.p.	n.p.	11.3	11.2	11.0	n.p.	n.p.	6.1	n.p.
	(c) Diabetes as an underlying or multiple cause				n.p.	n.p.	13.2	15.9	12.2	n.p.	n.p.	9.2	n.p.
56	Standardised mortality ratios for cervical cancer	205	AIHW	99–01	n.p.	n.p.	7.6	n.p.	n.p.	n.p.	n.p.	n.p.	n.p.

(a) New South Wales and Australian Capital Territory data were combined to avoid identification of a single service's data.

**Notes**

1. There were no data or information included in the report for indicator numbers 3, 27, 33, 34 and 36.
2. There were no data included in this table for indicator numbers 1, 12, 13, 14, 19, 24 and 25 as the data provided in the report was mainly qualitative.

**Symbols used in the table:**

n.p.(shaded) Not published because of data quality issues  
 — Rounded to zero  
 0 Zero  
 .. Not applicable  
 n.a. Not available

**Table A.2: Mapping of 2001 and 2002 performance indicators for Aboriginal and Torres Strait Islander health to indicators used in earlier reports<sup>(a)</sup>**

<b>No.</b>	<b>2001 and 2002 health performance indicators</b>	<b>No.</b>	<b>Health performance indicators reported in 1998, 1999 and 2000</b>
1	Efforts to improve identification of Aboriginal and Torres Strait Islander people in data collections		No similar indicator
2	Government expenditure on health services for Aboriginal and Torres Strait Islander people	3.3	Overall per capita annual expenditure by governments on primary, secondary and tertiary health care services for Aboriginal and Torres Strait Islander peoples compared with expenditure for the total population
3	Government expenditure on health services for Aboriginal and Torres Strait Islander people living in small homeland communities and outstations	3.9	Per capita recurrent expenditure by governments on health care services to communities with populations < 100 as compared with expenditure on the general population
4	Government expenditure on, and description of, selected health promotion programs	4.1	The expenditure on, and description of, health promotion programs specifically targeting Aboriginal and Torres Strait Islander peoples
5	Life expectancy at birth	1.1	Life expectancy at birth by sex
6	Infant mortality rate	1.6	Death rate of Aboriginal and Torres Strait Islanders from birth to one year of age
7	Income poverty	7.1	The proportion of households where after-tax income available to the household after paying the mortgage or rent is less than the amount specified by the poverty line
8	Completed secondary school education		No similar indicator
9	Employment status		No similar indicator
10	Housing with utilities	7.2	The proportion of dwellings where one or more Aboriginal and Torres Strait Islander adults is the usual resident, and over the last four weeks had reliable electricity or gas supplies, reliable water supplies and reliable sewerage or adequate alternatives
11	People in prison custody		No similar indicator
12	The development of governance capacity	8.1	Establishment of a forum representing the Aboriginal health sector, ATSIC and state jurisdiction in each state and territory
		8.2	Cooperative community planning with the implementation of the regional planning processes
		3.6	The extent of community participation in health services
13	Aboriginal and Torres Strait Islander representation on health/hospital boards	3.7	The number of local or regional health/hospital boards that have Aboriginal and Torres Strait Islander members
14	Reporting of complaints in hospitals	9.1	Critical incident reporting and complaints mechanisms at all levels of health services
15	Aboriginal and Torres Strait Islander community controlled health services	3.5	Proportion of primary care services and the resources allocated to these services
16	Distance to a primary health care centre	3.1	Proportion of Aboriginal and Torres Strait Islander peoples whose ordinary residence is < 30 minute's routine travel time from a full-time permanent primary care service by usual means of transport
17	Distance to a hospital	3.2	Proportion of Aboriginal and Torres Strait Islander peoples whose ordinary residence is < one hour's routine travel time from a hospital that provides acute inpatient care with the continuous availability of medical supervision

*(continued)*

**Table A.2 continued: Mapping of 2001 and 2002 performance indicators for Aboriginal and Torres Strait Islander health to indicators used in earlier reports<sup>(a)</sup>**

No.	2001 and 2002 health performance indicators	No.	Health performance indicators reported in 1998, 1999 and 2000
18	Access to primary health care services—small homeland communities and outstations	3.8	Proportion of communities with usual populations of < 100 and < one hour's usual travel time to primary health care services
19	Management of key conditions	4.6	Extent of support for the development and implementation of protocols and effective detection and management systems for conditions such as asthma, diabetes, cardiovascular disease, chronic renal disease, chronic respiratory conditions and hypertension
20	Aboriginal and Torres Strait Islander people in the health workforce	5.6	Proportion of doctors and nurses who identify as Aboriginal and/or Torres Strait Islander
21	Higher education and training in key health professions	5.1	Number of Aboriginal and Torres Strait Islander peoples who (a) have graduated in the previous year and (b) are in training in key health-related fields
22	Workforce availability in primary health care services	5.3	The proportion of vacant funded FTE positions for doctors, nurses and Aboriginal Health Workers in (a) Aboriginal health services and (b) other organisations providing primary care for Aboriginal and Torres Strait Islander people
23	Workforce availability in hospitals	5.4 (partially)	Number of vacant funded FTE positions for doctors, nurses and Aboriginal Health Workers where > 25% of separations are Aboriginal and Torres Strait Islander people
24	Cross-cultural training for hospital staff	5.7	The proportion of accredited hospitals for which the accreditation process required Aboriginal cross-cultural awareness programs for staff to be in place
25	Pap smear screening	4.2	Number of Pap smears among Aboriginal and Torres Strait Islander females aged 18–70 years as a proportion of the female Aboriginal and Torres Strait Islander population in that age group
26	Childhood immunisation rates	4.3	Proportion of Aboriginal and Torres Strait Islander children aged two years and six years old that are fully immunised as recorded on the ACIR
27	Coverage of adult pneumococcal vaccine	NR	4.4 The proportion of Aboriginal and Torres Strait Islander people aged > 50 years who have received pneumococcal vaccine in the last 6 years compared with the non Aboriginal and Torres Strait Island population in that age group
28	Low-birthweight infants	2.4	Proportion of Aboriginal and Torres Strait Islander newborns with birth weight < 2500 g per 1000 live births
29	Smoking prevalence	6.1	The proportion of Aboriginal and Torres Strait Islander people aged > 13 years who currently smoke by age and sex
30	Alcohol consumption	6.3	The proportion of Aboriginal and Torres Strait Islander people who reported usually consuming >4 drinks on the occasions when they drank alcohol in the last two weeks relative to the total numbers who 'reported on' consumption
31	Overweight and obesity	6.2	The proportion of Aboriginal and Torres Strait Islander people aged > 13 years with a body mass index > 25, by sex and age

(continued)

**Table A.2 continued: Mapping of 2001 and 2002 performance indicators for Aboriginal and Torres Strait Islander health to indicators used in earlier reports<sup>(a)</sup>**

2001 and 2002 health performance indicators		Health performance indicators reported in 1998, 1999 and 2000	
No.		No.	
32	Child protection substantiations		No similar indicator
33	Problem gambling	NR	No similar indicator
34	Community grief	NR	No similar indicator
35	Injuries presenting to hospital accident and emergency facilities		No similar indicator
36	Prevalence of anxiety and depression		No similar indicator
37	Notification rates for selected vaccine-preventable diseases	2.1a	Notification rates for selected vaccine preventable diseases: pertussis, measles, hepatitis B
38	Notification rates for meningococcal disease	2.1b	Notification rates for meningococcal infection
39	Notification rates for sexually transmissible diseases	2.2	Crude notification rates for gonorrhoea and syphilis by sex
40	Ratios for all hospitalisations	2.5	Age-standardised all-causes hospital separation rate ratio by sex
41	Hospitalisation ratios for circulatory diseases	2.6a	Age-standardised all-causes hospital separation rate ratio by sex for myocardial infarction
42	Hospitalisation rate ratios for injury and poisoning	2.6b	Age-standardised all-causes hospital separation rate ratio by sex for injury and poisoning
43	Hospitalisation rate ratios for respiratory diseases and lung cancer	2.6c	Age-standardised all-causes hospital separation rate ratio by sex for respiratory diseases
44	Hospitalisation rate ratios for diabetes	2.6d	Age-standardised all-causes hospital separation rate ratio by sex for diabetes
45	Hospitalisation rate ratios for tympanoplasty associated with otitis media	2.6e	Age-standardised all-causes hospital separation rate ratio by sex for tympanoplasty
46	Hospitalisation rate ratios for mental health conditions		No similar indicator
47	Children's hearing loss	NR 2.3	Percentage of Aboriginal and Torres Strait Islander children at school entry having > 25 dB hearing loss averaged over three frequencies
48	Stillbirths to Aboriginal and Torres Strait Islander mothers	1.5	Number of stillbirths to Aboriginal and Torres Strait Islander mothers per 1000 total births to Aboriginal and Torres Strait Islander mothers
49	Early adult death	1.4	The chance of dying between 20 and 54 years by sex
50	Age- and sex- specific all cause death rates and ratios	1.2b	Age-specific mortality by sex
51	Standardised mortality ratios for all causes	1.2a	Age-standardised all-causes mortality rates by sex
52	Standardised mortality ratios for circulatory diseases	1.7a	Age-standardised mortality rates for ischaemic heart disease and rheumatic heart disease by sex
53	Standardised mortality ratios for injury and poisoning	1.7b	Age-standardised mortality rates for injury and poisoning by sex
54	Standardised mortality ratios for respiratory diseases and lung cancer		No similar indicator
55	Standardised mortality ratios for diabetes	1.7d	Age-standardised mortality rates for diabetes by sex
56	Standardised mortality ratios for cervical cancer	1.7e	Age-standardised mortality rates for cancer of the cervix

NR Not reported.

(a) Three earlier reports on national performance indicators for Aboriginal and Torres Strait Islander health covering 1998, 1999 and 2000 have been published by the NHIMG the AHMAC (NHIMG 2000, 2001 & 2003).

Note: Shaded areas indicate that no similar indicator previously existed, or that there were significant differences in reporting requirements between the current and the earlier indicator for which it has been mapped.



# Abbreviations

ABS	Australian Bureau of Statistics
ACAP	Aboriginal Cultural Awareness Program
ACCHO	Aboriginal and Torres Strait Islander Community Controlled Health Organisations
AHMAC	Australian Health Ministers Advisory Council
AIHW	Australian Institute of Health and Welfare
ATSI	Aboriginal and Torres Strait Islanders
ATSIC	Aboriginal and Torres Strait Islander Commission
ATSIPHCS	Aboriginal and Torres Strait Islander Primary Health Care Services
BMI	Body mass index
CARPA	Central Australia Rural Practitioners Association
CAT	Cultural Awareness Training
CEO	Chief executive officer
CHINS	Community Housing Infrastructure Needs Survey
DEST	Department of Education, Science and Training
DoHA	Australian Government Department of Health and Ageing
EEO	Equal Employment Opportunity
FTE	Full-Time Employment
GP	General Practitioner
Hib	<i>Haemophilus influenzae</i> type b
HIC	Health Insurance Commission
ICD	International Classification of Diseases
ICD-10-AM	International Statistical Classification of Diseases and Related Health Problems, 10 <sup>th</sup> Revision, Australian Modification
IT	Information Technology
KHLO	Koori Hospital Liaison Officer
MPDC	Maternity Perinatal Data Collection
NACCHO	National Aboriginal Community Controlled Health Organisations
NAGATSIHID	National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
NHIMG	National Health Information Management Group
NHMRC	National Health and Medical Research Council
OATSIH	Office for Aboriginal and Torres Strait Islander Health
Pap	Papanicolaou (cervical test)

PBS	Pharmaceutical Benefits Scheme
PHCAP	Primary Health Care Access Program
PIR	Patient Information and Recall (System)
RSE	Relative Standard Error
SAR	Service Activity Reporting
SCATSIH	Standing Committee on Aboriginal and Torres Strait Islander Health
VAED	Victorian Admitted Episodes Data
VicHealth	Victorian Health Promotion Foundation

## Symbols

\$	Australian dollars, unless otherwise specified
\$m	million dollars
dB	decibel
kg	kilogram
Hz	hertz
kHz	kilohertz
km	kilometre
n.a.	not available
n.p	not published due to data quality issues
..	not applicable
–	nil or rounded to zero

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