C Health preface

Part C: Health preface

Health services are concerned with promoting, restoring and maintaining a healthy society. They involve illness prevention, health promotion, the detection and treatment of illness and injury, and the rehabilitation and palliative care of individuals who experience illness and injury. Broadly defined, the health system also includes a range of activities that raise awareness of health issues, thereby reducing the risk and onset of illness and injury.

Health services in Australia are delivered by a variety of government and non-government providers in a range of service settings (box HP.1). The *Report on Government Services 2008* (2008 Report) primarily concentrates on the performance of public hospitals (chapter 10), primary and community health services (including general practice) (chapter 11) and the interactions among different service mechanisms for dealing with two health management issues: mental health and breast cancer (chapter 12). These services are selected for reporting as they:

- make an important contribution to the health of the community
- are a priority of governments, for example, they fall within the National Health Priority Areas
- represent significant components of government recurrent expenditure on health care
- have common objectives across jurisdictions.

High level residential aged care services and patient transport services (ambulance services including pre-hospital care, treatment and transport services) are not covered in the health chapters of the 2008 Report, but are reported separately in chapter 9 (‘Emergency management’) and chapter 13 (‘Aged care’).

Box HP.1 Some common health terms

Community health services: health services for individuals and groups delivered in a community setting, rather than via hospitals or private facilities.

General practitioners: medical practitioners who, for the purposes of Medicare, are vocationally registered under s. 3F of the *Health Insurance Act 1973* (Cwlth), hold fellowship of the Royal Australian College of General Practitioners or equivalent, or hold a recognised training placement.

Medicare: covers Australian Government funding of private medical and optometrical services (the Medicare Benefits Schedule (MBS)); selected pharmaceuticals (under the Pharmaceutical Benefits Scheme (PBS)); and public hospital funding (under the Australian Health Care Agreements (AHCAs)), aimed at providing public hospital services free of charge to public patients.

Primary health care: services that:

- provide the first point of contact with the health system
- have a particular focus on prevention of illness and/or early intervention
- are intended to maintain people's independence and maximise their quality of life through care and support at home or in local community settings.

Public health: an organised social response to protect and promote health, and to prevent illness, injury and disability. The starting point for identifying public health issues, problems and priorities, and for designing and implementing medical interventions, is the population (or subgroups). Public health is characterised by a focus on the health of the population (and particular at-risk groups) and complements clinical provision of health care services.

Public hospital: a hospital that provides free treatment and accommodation to eligible admitted people who elect to be treated as public patients. It also provides free services to eligible non-admitted patients and may provide (and charge for) treatment and accommodation services to private patients. Charges to non-admitted patients and admitted patients on discharge may be levied in accordance with the AHCAs (for example, charges for aids and appliances).

Other major areas of government involvement in health provision not covered in the health chapters, or elsewhere in the 2008 Report, include:

- public health programs, other than those for breast cancer and mental health
- funding for specialist medical practitioners.

Other government services — such as education, public housing, sanitation and water supply — also influence health outcomes. These are not formally part of Australia's health system and are not the subject of the health chapters. Education (chapters 4 and 5) and public housing (chapter 16) are included in other chapters of the Report.

Indigenous people and people in rural and remote areas often have different health care needs and may experience poorer health outcomes than those of the general community. It is a priority of the Review to improve reporting on the performance of government provided health care services for Indigenous people and for residents in regional Australia.

Indigenous data in the health preface

The health preface in the 2008 Report contains the following information on Indigenous people:

- an overview of Indigenous health, including information on government policy and programs, expenditure on health services in 2001-02, and data quality
- Indigenous health workforce, 2006
- mortality rates, 2001–2005
- infant mortality rates, 2003–2005
- causes of death, 2001–2005
- life expectancy, 1996–2001
- median age at death, 2005
- birthweight of babies, 2004.

Attachment tables

Attachment tables for data within the ‘Health preface’ of this compendium are contained in attachment HPA of the compendium. These tables are identified in references throughout this chapter by an ‘A’ suffix (for example, table HPA.3 is table 3 in the ‘Health preface’ attachment). As the data are directly sourced from the 2008 Report, the compendium also notes where the original table, figure or text in the 2008 Report can be found. For example, where the compendium refers to ‘2008 Report, p. E.15’ this is page 15 of the ‘Health preface’ of the 2008 Report, and ‘2008 Report, table EA.2’ is attachment table 2 of the ‘Health preface’ attachment of the 2008 Report.

Overview of Indigenous health

The Steering Committee has placed a high priority on reporting on government services to Indigenous people. Data on health outcomes and the provision of health services for Indigenous people are included where possible in this Report. This overview is designed to assist interpretation of these data and provide a broader understanding of Indigenous health issues.

Data are reported against several of these indicators for Indigenous Australians as well as for all Australians. The completeness of Indigenous identification in hospital admitted patient data varies across states and territories. The AIHW (2005b) report *Improving the Quality of Indigenous Identification in Hospital Separations Data* found that Indigenous patient data was of acceptable quality for analytical purposes only for Queensland, WA, SA, and public hospitals in the NT. Following new assessments of the quality of Indigenous identification in 2007, the National Health Information Management Principal Committee (NHIMPC) has recently approved NSW Indigenous patient data as acceptable in quality for analytical purposes, from the 2004-05 reference year. A proposal to accept Victorian data as acceptable was being considered by the NHIMPC in late 2007. Efforts to improve Indigenous identification across states and territories are ongoing.

The data are not necessarily representative of other jurisdictions. Indigenous patients are underidentified, to an extent that varies across jurisdictions. Because of improvements in data quality over time, caution also should be used in time series analysis of the data.

Australian Indigenous people are more likely to experience disability and significantly lower quality of life due to poorer health, and to have shorter life expectancies than the rest of the Australian population (SCRGSP 2007). These patterns are reflected in Australian data on: mortality, life expectancy and birthweights (later in this preface); hospital separation rates; hospitalisation rates for diabetes, assault and infectious pneumonia; fetal, neonatal and perinatal death rates (chapter 10); and suicide (chapter 12).

A number of recent publications include more comprehensive data on the health status of Indigenous people and Indigenous health-related factors. These include *Aboriginal and Torres Strait Islander Health Performance Framework 2006 Report: Detailed Analysis* (AIHW 2007), *Overcoming Indigenous Disadvantage: Key Indicators 2007* (SCRGSP 2007), *Australia's Health* (AIHW 2006a), *Aboriginal and Torres Islander People with Coronary Health Disease* (AIHW 2006b) and *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* (ABS and AIHW 2005).

Contributing factors

The physical and social environments in which Indigenous people live affect their opportunities to live productive lives relatively free of serious illness. Many

Indigenous people live today in conditions of clear social and economic disadvantage, which contributes to poor health in many groups of Indigenous people, along with other geographic, environmental and cultural factors.

There are relatively low education levels among Indigenous people. Nationally, Indigenous students were around half as likely to continue to year 12 as non-Indigenous students in 2006 (SCRGSP 2007).

Indigenous people have relatively low employment and income levels that may create financial barriers to accessing health services. In 2004-05 the full time employment rate for Indigenous people was much lower than that for non-Indigenous people for both males and females. Both household and individual incomes were lower on average for Indigenous people than for non-Indigenous people (SCRGSP 2007).

There are high imprisonment rates among Indigenous people. After adjusting for age differences, Indigenous people were 13 times more likely than other Australians to be imprisoned at 30 June 2006 (SCRGSP 2007).

Indigenous people have relatively high rates for health risk factors such as obesity, smoking, substance abuse and violence. In 2004-05, 50 per cent of Indigenous people aged 18 years and over were daily cigarette smokers.

In 2004-05, while Indigenous adults were twice as likely to have abstained from alcohol consumption in the last 12 months, as compared with the non-Indigenous population, over half of Indigenous adults (55 per cent) reported drinking alcohol at short term risky to high risk levels at least once in the last 12 months.[1] Around 16 per cent (similar to the proportion of non-Indigenous people) reported long term risky to high risk alcohol consumption in the week prior to interview (where long term risky to high risk alcohol consumption equates to average daily consumption of more than 50 millilitres per day for males and more than 25 millilitres per day for females for the previous seven days prior to interview). During 2004-05, Indigenous people were more than four times as likely to be in hospital for alcohol-related mental and behavioural disorders as other people (SCRGSP 2007).[2] The National Health and Medical Research Council (NHMRC) Australian Alcohol Guidelines (2001) on which the definitions of risky and high risk drinking are based, are currently under revision.

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[1] Short term risky to high risk alcohol consumption is mainly associated with ‘binge’ drinking.

[2] Short term risk is the risk of harm in short term associated with given levels of alcohol consumption on any one occasion. Long term risk is associated with regular daily patterns of alcohol consumption and defined by the average daily intake of alcohol over the seven days of the reference week.

Geographic distance to health services, particularly in remote and very remote areas contributes to health disadvantage of Indigenous people. In 2006, a total of 417 (35 per cent) discrete Indigenous communities[3] were located 100 kilometres or more from the nearest Aboriginal Primary Health Care Centre and of those, 92 (22 per cent) were larger communities. A total of 372 discrete Indigenous communities (31 per cent) were located 100 kilometres or more from the nearest community health centre and of these, 90 (24 per cent) were larger communities with a population of 50 or more people. A total of 755 (64 per cent) discrete Indigenous communities were located 100 kilometres or more from the nearest hospital. On a population basis, 25 per cent of Aboriginal and Torres Strait Islander people living in communities were 100 kilometres or more from the nearest hospital (ABS 2007b).

Indigenous people live in inadequate and overcrowded housing, particularly in remote and very remote areas. In 2004-05, 25 per cent of Indigenous people aged 15 years and over lived in overcrowded households (SCRGSP 2007).

Indigenous people have language barriers to accessing health and health-related services. In 2002 approximately 11 per cent of Indigenous people aged 18 years and over reported difficulties understanding or being understood by service providers. Indigenous people living in remote areas were more likely to report experiencing difficulties than those in non-remote areas (ABS and AIHW 2005).

These influences on the health status of Indigenous people vary across urban, rural and remote areas. Geographic and environmental health factors, for example, may be less relevant in urban areas (ABS and AIHW 2005). The extent to which jurisdictional differences in the reported health outcomes for Indigenous people can be attributed to the performance of government funded health services alone is limited. The limitation is due to the complexity of other influences on Indigenous health and ongoing data quality problems (discussed elsewhere in this preface).

A wide range of government provided or funded services (other than health services) seek to address the environmental, socioeconomic and other factors that affect Indigenous health. These services include government schools, housing, justice and correctional services, which are discussed elsewhere in this Report. The Steering Committee publication, *Overcoming Indigenous Disadvantage: Key Indicators 2007* (SCRGSP 2007), examines these and other multiple contributors (and their complex cross-links) to outcomes for Indigenous people.

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[3] A geographic location, bounded by physical or cadastral (legal) boundaries, and inhabited or intended to be inhabited predominantly (i.e. greater than 50 per cent of usual residents) by Aboriginal or Torres Strait Islander peoples, with housing or infrastructure that is managed on a community basis.

Government policy and programs

The majority of government expenditure on Indigenous health is made through mainstream health programs (AIHW 2005a). In addition, the Australian, State and Territory governments fund Indigenous-specific health programs and undertake coordination and research activities. Most Australian Government expenditure on Indigenous-specific health programs is directed to Indigenous-specific primary health. State and Territory governments fund a range of community and public health programs that specifically target Indigenous people within their jurisdictions (see chapter 11).

At the national level, the National Aboriginal and Torres Strait Islander Health Council provides policy advice to the Australian Government Minister for Health and Ageing on Indigenous health issues. The Council has overseen the development of the National Strategic Framework for Aboriginal and Torres Strait Islander Health, which all health ministers endorsed at the July 2003 Australian Health Ministers Conference. This framework outlines agreed principles and the following nine key result areas for Indigenous-specific primary health:

- community controlled primary health care
- a health system delivery framework to improve the responsiveness of both mainstream and Indigenous-specific health services to Indigenous health needs
- a competent health workforce with appropriate skills and training in both mainstream and Indigenous-specific health services
- emotional and social wellbeing, focusing on mental health, suicide, family violence, substance misuse and male health
- environmental health, including safe housing, water, sewerage and waste disposal
- wider strategies that have an impact on health in portfolios outside the health sector, such as education, employment and transport
- data, research and evidence to improve information on health service effectiveness in meeting the needs of Indigenous Australians
- resources and finances commensurate with Indigenous health needs, the cost of delivering services and community capacity to deliver health outcomes
- accountability of health services to communities and governments.

The National Strategic Framework is complemented by a National Strategic Framework for Aboriginal and Torres Strait Islander Mental Health and Social and Emotional Wellbeing 2004–2009 (SEWB Framework), which was agreed by the Australian Health Ministers Advisory Council in March 2004. The

SEWB Framework sits within the context of the National Strategic Framework for Aboriginal and Torres Strait Islander Health and the Third National Mental Health Plan. (For a discussion of the Third National Mental Health Plan see chapter 12).

Agreements on Aboriginal and Torres Strait Islander Health (framework agreements) have been established in each State and Territory between the Australian, State and Territory governments and the community sector. The agreements promote a partnership approach and commit signatories to work together to:

- increase the level of resources allocated to reflect the level of need
- plan jointly
- improve access to both mainstream and Indigenous-specific health and health related services
- improve Indigenous health data collection and evaluation.

Each State and Territory and the Australian Government is developing an implementation plan under the National Strategic Framework. Taking a whole of government approach, these plans detail information on existing and planned action by each government to improve health outcomes for Indigenous people. They outline programs and policy approaches which are the primary responsibility of each government both within the health department and in other portfolios. Each jurisdiction reports to health ministers on health portfolio progress under the plan every year and on the whole of government contribution every two years.

The Aboriginal and Torres Strait Islander Health Performance Framework has been developed under the auspices of the Australian Health Minister's Advisory Council to support the implementation of the National Strategic Framework for Aboriginal and Torres Strait Islander Health (NSFATSIH). The Health Performance Framework is designed to measure the impact of the NSFATSIH and inform policy analysis, planning and program implementation. The first Aboriginal and Torres Strait Islander Health Performance Framework Report was released in late 2006 and preparation for the 2008 Health Performance Framework Report is currently underway.

Expenditure

It is not always possible to make accurate estimates of health expenditure for Indigenous people and their corresponding service use. For example, Indigenous status is not always clearly stated or recorded. Data on Indigenous status are often unavailable for privately funded services (although they are available for many publicly funded health services). The scope and definition of health expenditures also have some limitations. Other (non-health) agency contributions to health expenditure, such as those incurred within education departments and prisons are not included. There may also be some inconsistencies across data providers resulting from limitations of financial reporting systems and different reporting mechanisms (AIHW 2005a).

The most recent estimates of health services expenditure for Aboriginal and Torres Strait Islander peoples are for 2001-02 (AIHW 2005a). Total recurrent government and non-government expenditure on health services for Indigenous people was estimated at $1788.6 million in 2001-02. This was equivalent to $3901 per Indigenous person compared with $3308 per non-Indigenous person. Because Indigenous people relied heavily on publicly funded health care providers, government expenditures were much higher for them than for other people — $3614 per person compared with $2225 (AIHW 2005a).

The higher levels of health expenditure on Indigenous people are a reflection of their average higher levels of morbidity and the much larger proportion who live in remote Australia where the cost of service provision is higher.

In 2001-02, governments are estimated to have provided 92.7 per cent of the funding for expenditure on health goods and services for Indigenous people. States and territories contributed 49.5 per cent and the Australian Government an estimated 43.1 per cent. Non-government sources such as injury compensation insurers, private health insurers and out-of-pocket payments supported the remaining funding by users of services (AIHW 2005a).

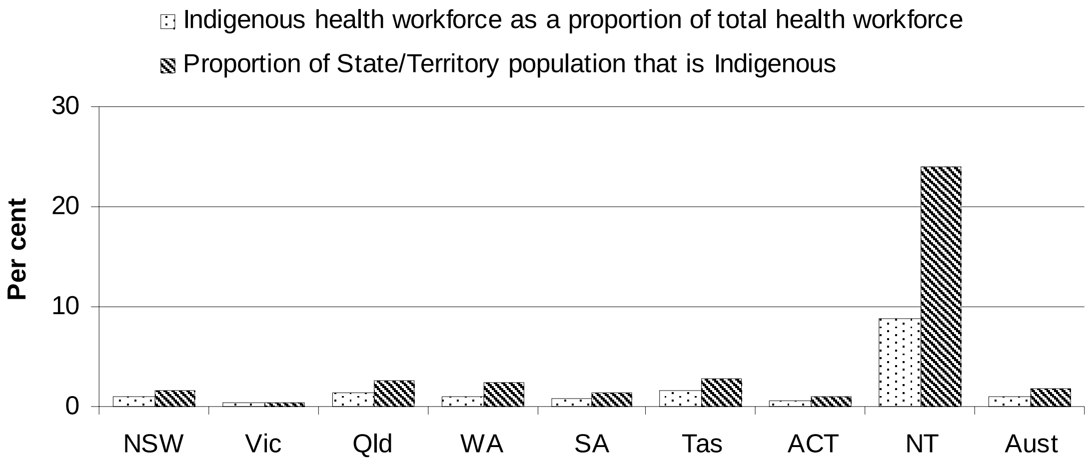
The majority of health expenditure on Indigenous people was allocated through mainstream health programs — admitted and non-admitted patient services, community health services, medical and medications health services, and public health services. A small proportion of health expenditure was allocated through programs directly targeting Indigenous people, the most significant being the Aboriginal and Torres Strait Islander Health Care Services (AIHW 2005a). More detailed Indigenous health expenditure data were reported in the 2002 Report (SCRGSP 2002). Information about expenditure on primary health care for Indigenous people was reported under the ‘access to primary health’ indicator in the *Overcoming Indigenous Disadvantage: Key Indicators 2007* report (SCRGSP 2007). In 2001-02, expenditure on primary health care (medical, community health and dental services) for Indigenous people was $1224 per person compared with $932 per non-Indigenous person.

Indigenous health workforce

Compared with non-Indigenous people, Indigenous people are significantly under-represented in the health workforce. This can potentially contribute to Indigenous peoples' reduced access to health services. One patient satisfaction survey found that the presence of an Indigenous doctor at a community health centre was a main reason for Indigenous people attending the clinic. In addition, the number of Indigenous patients attending the clinic increased markedly following the arrival of the Indigenous doctor and other changes in the service designed to make it more welcoming. Patients reported that an Indigenous doctor was 'more understanding of their needs' (DoHA 2006).

In 2006, Indigenous people accounted for 1.0 per cent of the health workforce, but were 1.8 per cent of the total population. Indigenous health workers are still under-represented in each State and Territory (figure HP.1).

Figure HP.1 **Indigenous health workforce as a proportion of total health workforce, by jurisdiction, 2006**[a, b, c]

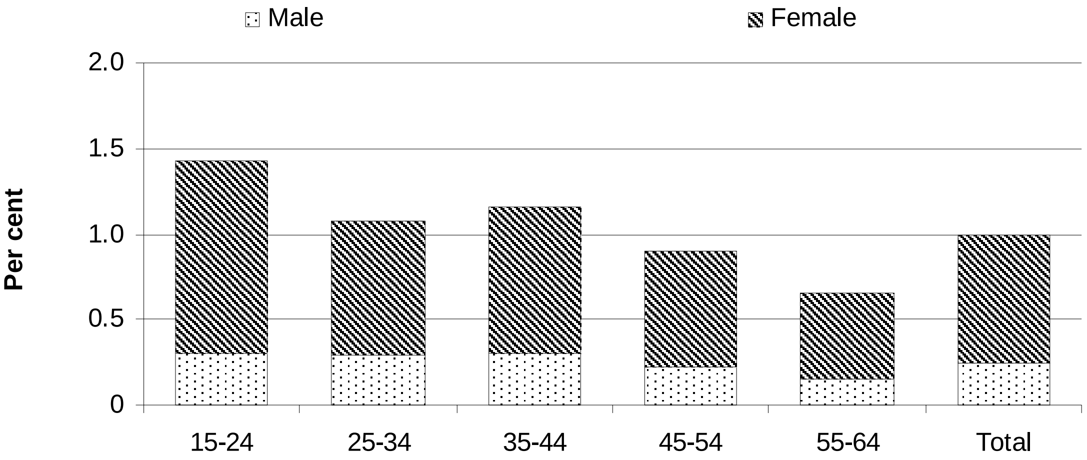


a Aged 15 years and over. **b** Cells in this table have been randomly adjusted to avoid the release of confidential data. **c** Australian total data includes other territories.

Source: ABS (unpublished), ABS (2007a); table HP.1; 2008 Report, figure E.7, p. E.18.

For younger age-groups, Indigenous people make up a higher proportion of the health workforce — 1.4 per cent of the workforce aged 15–24 years and 1.1 per cent of the workforce aged 25–34 years. Indigenous females represented a higher proportion of the health workforce than Indigenous males across all age-groups (figure HP.2).

Figure HP.2 **Indigenous health workforce as a proportion of total health workforce, by age-group and sex, 2006**



Source: ABS (unpublished), *Census of Population and Housing*; table HP.2; 2008 Report, figure E.8, p. E.19.

Indigenous health workforce by occupation

In 2006, there were 100 Indigenous people working as medical practitioners and 1223 Indigenous people working as midwifery and nursing professionals (table HP.1).

After nursing, Indigenous people in the health workforce were most commonly employed as Aboriginal and Torres Strait Islander health workers (965 people). Aboriginal and Torres Islander health workers may be employed as specialists in areas such as alcohol, mental health, diabetes, eye and ear health, sexual health, or they may work as generalist members of primary care team, or as hospital liaison officers (table HPA.3).

Table HP.1 **Indigenous persons employed in selected health-related occupations, 2006**[a, b]

	Indigenous people	*All persons*	*Percent of Indigenous people in selected health-related occupations*
			Per cent
Health and Welfare Services Managers	141	10 807	1.3
Psychologists	39	13 437	0.3
Health diagnostic and promotion professionals	648	48 079	1.3
Health therapy professionals	321	64 597	0.5
Medical practitioners	100	55 075	0.2
Midwifery and nursing professionals	1 223	200 400	0.6
Health and welfare support workers	2 413	99 957	2.4
Total aged 15 years and over	**4 891**	**492 342**	**1.0**

a Aged 15 years and over. **b** Further information to the data included in this table and/or its interpretation is provided in table EA.3.

Source: ABS (unpublished), *Census of Population and Housing*; table EA.3; 2008 Report, table E.1, p. E.20.

Self-assessed health

The results from the 2006 General Social Survey indicate that the majority of Australians (84 per cent) aged 18 years or over reported their health as either, good, very good or excellent. The proportion of persons reporting fair or poor health generally increased with age, from 7 per cent of those aged 18 to 24 years to 39 per cent of those aged 75 years or over (ABS 2007c). Taking into account differences in age structure between the Indigenous and non-Indigenous populations, Indigenous people overall were almost twice as likely to report their health as fair or poor (29 per cent), than non-Indigenous Australians (15 per cent) in 2004-05 (ABS 2006d).

Data quality

Good quality data are needed to assess the effectiveness of programs and to evaluate policies designed to improve health services and outcomes for Indigenous people. Despite recent improvements, the quality of estimates of Indigenous health information is limited by problems with the underlying data and the calculation methodology. Some of the problems associated with Indigenous health data are outlined in (ABS 2006a), and (ABS and AIHW 2006) including:

- Indigenous people are not always accurately or consistently identified in administrative health data collections (such as hospital records and birth and death registrations), given variation in definitions, different data collection methods and inaccurate or incomplete recording of Indigenous status.

- The ABS has introduced a program of three yearly Indigenous household surveys with sample sizes designed to support the production of reliable State and Territory level data, so every three years, some health status and health risk factors are measured. Every six years, and in parallel with the National Health Survey, more detailed Indigenous health status information is collected, together with health service use, health actions, health related aspects of lifestyle and other health risks. This also enables Indigenous to non-Indigenous comparisons for relevant variables. Other health related surveys, which may include an Indigenous identifier, do not necessarily provide reliable data on Indigenous people, because of small sample size, limited geographic coverage or survey design.
- Inconsistent data definitions and differences in the accuracy of identifying Indigenous status have lead to problems making comparisons between jurisdictions, and comparisons over time.
- Experimental estimates of the Indigenous population are re-based by the ABS every five years following availability of new Census data. Once new Indigenous population estimates and projections have been produced by ABS, revisions may be required to various rates and rate ratios used in previous editions of the Report where those rates data are to be carried forward in new reports.

As part of the development of the Aboriginal and Torres Strait Islander Health Performance Framework, key priorities for data development will be identified to support an ongoing work program of data improvements.

Selected indicators of health outcomes

It is difficult to isolate the effect of health care services on the general health of the population. Socioeconomic factors (such as residential location, income levels and employment rates) and the provision of non-health care government services (such as clean water, sewerage, nutrition, education and public housing) each contribute to overall health outcomes. The outcomes and effectiveness of health services are also influenced by population factors external to governments' control, including geographic dispersion, age and ethnicity profiles, and socioeconomic status. Appendix A summarises some of the demographic and socioeconomic factors that can influence health outcomes and government expenditure.

Data on health outcomes presented in this preface include self-assessed health status, mortality rates (for infants and all people), causes of death, life expectancy at birth, median age at death and birthweight. Where possible, data are presented for Indigenous people as well as the Australian population as a whole.

Mortality rates

Most components of the health system can influence mortality rates, although there may be a lag of decades between the action and the effect. A public health campaign to reduce smoking by young people, for example, may reduce premature deaths due to smoking-related conditions some years in the future. Factors external to the health system also have a strong influence on mortality rates.

Data on Indigenous mortality are collected through State and Territory death registrations. The completeness of the identification of Indigenous Australians in these collections varies significantly across states and territories. Because of this variation, care is required in making comparisons on the data.

Due to the relatively small number of Indigenous deaths and the consequent volatility in annual mortality rates, the data are presented for the five year period 2001–2005. To improve the comparability of age-related mortality rates, indirect age standardisation methods have been used for both the Indigenous and total population rates.

The NT, WA, SA and Queensland in that order are generally considered to have the best coverage of death registrations for Indigenous people.[4] For these four jurisdictions combined, the overall rates of mortality for Indigenous people were around twice as high as mortality rates for non-Indigenous people in 2001–2005 (figure HP.3 and table HPA.4). The exact magnitude of this difference cannot be established at this time due to variable identification of Indigenous Australians in death records. Reported mortality rates under-estimate the true mortality of Indigenous Australians (ABS and AIHW 2005).

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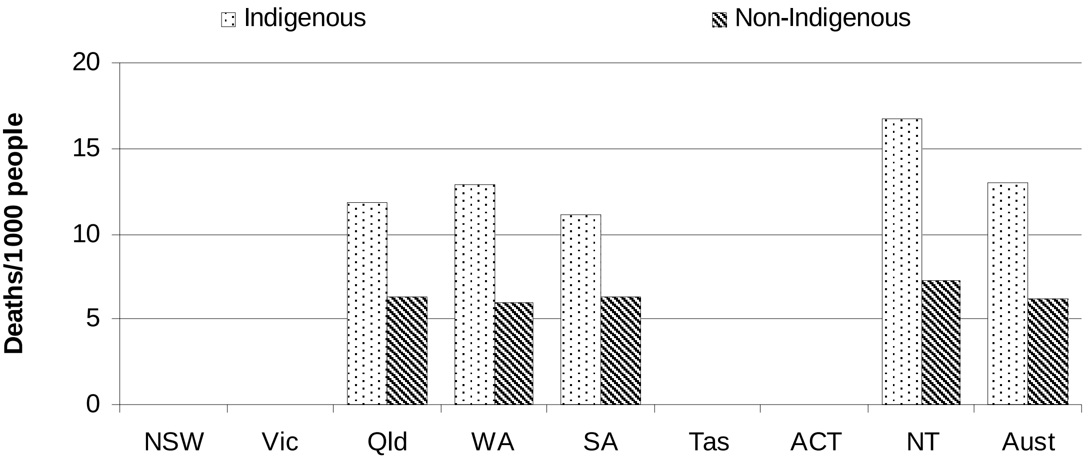
[4] The term ‘coverage’ refers to the number of Indigenous deaths registered as a percentage of the number of expected deaths based on the 2001 Census based experimental Indigenous population estimates and projections.

Figure HP.3 **Mortality rates, age standardised, by Indigenous status, five year average, 2001–2005**[a, b]



[a] Standardised death rates use the 2001 Australian population standard. [b] For Australia, Indigenous and non-Indigenous mortality rates are for Qld, WA, SA and NT combined.

Source: ABS Deaths Australia (unpublished); table HPA.4; 2008 Report, figure E.11, p. E.27.

Infant mortality rates

The infant mortality rate is defined as the number of deaths of children under 1 year of age in a calendar year per 1000 live births in the same year. Infant mortality rates are presented in this Report as an average over three years to reduce the volatility inherent in the annual rates due to small numbers and annual fluctuations. The infant mortality rate in Australia declined from 5.4 deaths per 1000 live births over the period 1999–2001 to an average of 4.8 deaths per 1000 live births over the period 2003–2005 (table HPA.5).

For the period 2003–2005, the average infant mortality rate for Indigenous children is publishable for NSW, Queensland, WA, SA and the NT. Although the small numbers involved affect the ability to detect significant changes in Indigenous infant mortality, it is clear that Indigenous infant mortality rates are markedly higher than the average for all Australians (tables HPA.5 and HPA.6).

Causes of death

In the jurisdictions for which age standardised death rates are available by Indigenous status (Queensland, WA, SA and the NT), death rates were far higher for Indigenous people than for non-Indigenous people during the period 2001–2005. In particular, Indigenous people died from diabetes at a rate that was up to 13.7 times that for non-Indigenous people; from kidney disease at a rate that was up to 6.7 times that for non-Indigenous people; and from digestive disease at a rate that was up to 6.4 times that for non-Indigenous people. The standardised death rate per 100 000 for all causes was over 3 times higher for Indigenous people than for non-Indigenous people (tables HP.3 and HPA.7).

Table HP.2 **Cause of death by Indigenous status, Queensland, WA, SA and the NT, 2001–2005[a]**

	Indigenous age standardized rate per 100 000	*Non-Indigenous age standardized rate per 100 000*	*Ratio*
Underlying causes of death			
Circulatory disease	783.9	228.9	3.4
Accidents, poisonings and violence	123.5	39.3	3.1
Cancer	306.9	179.8	1.7
Lung cancer	79.3	34.9	2.3
Cervical cancer	5.8	1.1	5.3
Endocrine, metabolic and nutritional disorders	204.3	21.6	9.5
Diabetes	202.8	14.8	13.7
Respiratory diseases	243.2	54.1	4.5
Digestive diseases	131.0	20.6	6.4
Conditions originating in the perinatal period	7.9	2.9	2.7
Nervous system diseases	50.4	20.7	2.4
Infectious and parasitic diseases	39.1	7.3	5.4
Kidney disease	64.0	9.6	6.7
Other causes	143.7	37.1	3.9
All causes	**2043.7**	**621.7**	**3.3**

[a] Calculations of rates for the Indigenous population are based on ABS Experimental Projections, Aboriginal and Torres Strait Islander Australians (low series, 2001 base). There are not comparable population data for the non-Indigenous population. Calculations of rates for the non-Indigenous population are based on data derived by subtracting Indigenous population projections from total population estimates and should be used with care.

Source: ABS (2006b); table HPA.7.; 2008 Report, table E.3, p. E.30.

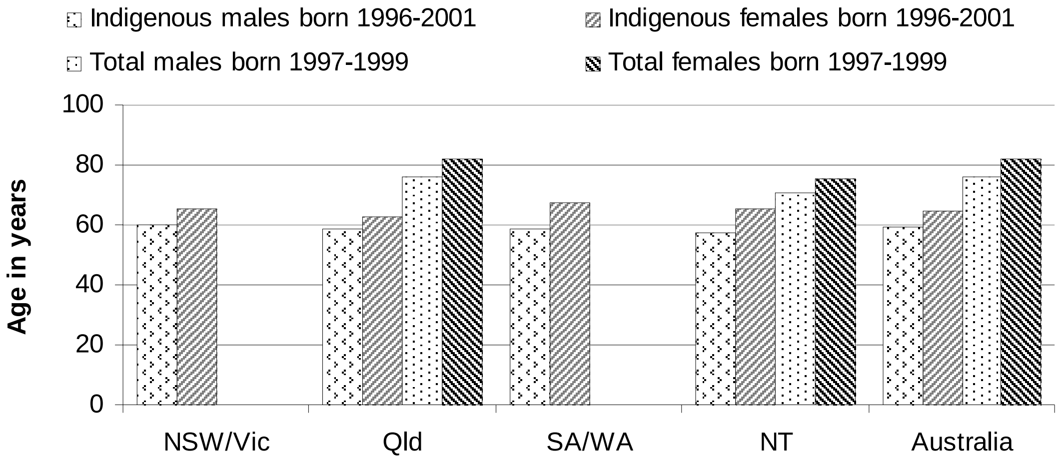
Life expectancy

The life expectancy of Australians improved dramatically during the twentieth century and so far during twenty first century. The average life expectancy at birth in the period 1901–1910 was 55.2 years for males and 58.8 years for females (ABS 2006c). It has risen steadily in each decade since, reaching 78.5 years for males and 83.3 years for females in 2003–2005 (table HPA.8).

The ABS noted that, due to incomplete identification of Indigenous deaths in the underlying source data, changes over time in mortality rates for Indigenous people cannot be determined. ABS Indigenous population estimates and projections assume, for each jurisdiction, constant age specific mortality rates across the period 1991–2009. These data are not comparable to — and replace — life expectancy estimates for Indigenous people previously published by the ABS. They should not be subjected to 'over-precise analysis … as measures of Indigenous health outcomes' (ABS 2004).

The life expectancies of Indigenous Australians are considerably lower than those of non-Indigenous Australians. ABS experimental population estimates indicate a life expectancy at birth of 59.4 years for Indigenous males and 64.8 years for Indigenous females born from 1996 to 2001 (table HPA.9). In a similar, but not directly comparable time period (1997–1999) the rates for all Australians were 76.2 years for all males and 81.8 years for females. Variations in life expectancy between Indigenous males and females and for Indigenous Australians in different states and territories should be interpreted with care as they are sensitive to the demographic assumptions and differences in data quality across jurisdictions.

Figure HP.4 **Life expectancy at birth, Indigenous 1996–2001, total population 1997–1999[a, b, c]**



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[a] Indigenous data are for the Australian Aboriginal and Torres Strait Islander population, and include an adjustment for undercoverage of Indigenous deaths. [b] Indigenous life expectancy excludes Tasmania and the ACT. For Tasmania and the ACT, use data for Victoria and NSW, respectively. [c] Life expectancy data for Indigenous males and Indigenous females are for the period 1996–2001. Data for total males and females cover the period 1997–1999, the approximate mid-point of the Indigenous data.

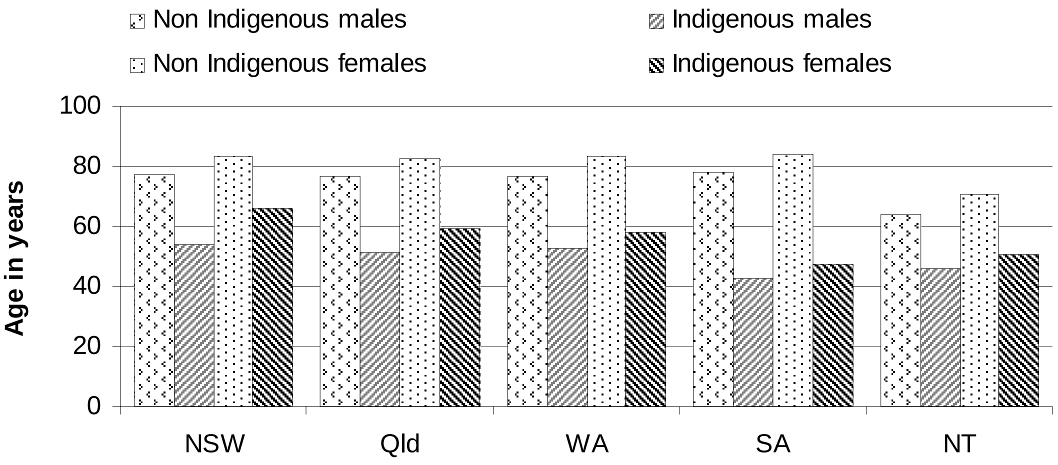
Source: ABS (2006a); table HPA.9; 2008 Report, figure E.14, p. E.32.

Median age at death

The median age at death represents the age at which exactly half the deaths registered (or occurring) in a given time period were deaths of people above that age and half were deaths below that age. Comparisons of the median age at death for Indigenous and non-Indigenous people are affected by different age structures in the populations and by differences in the extent of identification of Indigenous deaths across jurisdictions and across age groups. Identification of Indigenous status for infant deaths is high, but it falls significantly in older age groups. The median age of death for Indigenous people is therefore likely to be an underestimate.

For all Australian males and females in 2005, the median age at death was 76.8 years and 82.9 years respectively (figure HP.5 and table EA.10). In the jurisdictions for which the data were available for Indigenous people in 2005 the median age at death for male Indigenous Australians varied between 42.4 and 54.3 years. The median age at death for female Indigenous Australians varied between 47.5 and 65.8 years (figure HP.5 and table HPA.10).

Figure HP.5 **Median age at death, by sex and Indigenous status, 2005**[a]



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[a] Median age at death by Indigenous status is available in NSW, Queensland, WA, SA and the NT only. The accuracy of Indigenous mortality data are variable as a result of varying rates of coverage across jurisdictions and age groups, and of changes in the estimated Indigenous population caused by changing rates of identification in the Census and births data.

Source: ABS (2006a); table HPA.10; 2008 Report, figure E.15, p. E.33.

Birthweight of babies

The birthweight of a baby is an important indicator of its health status and future wellbeing. In 2004, 91.7 per cent of liveborn babies in Australia weighed between

2500 and 4499 grams (Laws and Sullivan 2006). The average birthweight for all live births was 3374 grams. In 2004, the average birthweight of liveborn babies of Indigenous mothers was 3158 grams (table HPA.11). This was 224 grams lighter than the average of 3382 grams for liveborn babies of non-Indigenous mothers (Laws and Sullivan 2006).[5]

Babies are defined as low birthweight if they weigh less than 2500 grams, very low birthweight if they weigh less than 1500 grams and extremely low birthweight if they weigh less than 1000 grams (Laws and Sullivan 2006). In 2004, 6.4 per cent of all liveborn babies in Australia weighed less than 2500 grams (figure HP.6). This included 1.1 per cent of babies who weighed less than 1500 grams (2008 Report, table EA.21).

Among live babies born to Indigenous mothers in 2004, the proportions with low and very low birthweights were around twice the proportions born to all Australian mothers, with 13.2 per cent weighing less than 2500 grams and 2.5 per cent weighing less than 1500 grams (figure E.16 and table EA.11).

Figure HP.6 **Babies with birthweights under 2500 grams, by Indigenous status, 2004**[a, b, c]

[a] Proportion of live births with birthweights under 2500 grams. [b] In the ACT, 16.3 per cent of women who gave birth were non-ACT residents. Care must be taken when interpreting percentages. For example, the proportion of liveborn low birthweight babies for ACT Aboriginal or Torres Strait Islander residents was 17.9 per cent in 2004. [c] Data for Indigenous mothers for Tasmania were not available because the 'Not stated' category for Indigenous status was not able to be distinguished from the 'Neither Aboriginal nor Torres Strait Islander origin' category.

Source: Laws and Sullivan (2006); table HPA.11 and 2008 Report EA.21; 2008 Report, figure E.16, p. E.34.

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[5] Figures for births to Indigenous mothers exclude Tasmania.

Future directions

New features and developments in this Report are listed in chapter 2. Each of the health chapters has a section that covers the future directions for reporting.

Improving reporting on Indigenous health is a priority across all of the health chapters. Performance indicators for health services used by Indigenous Australians were first published in the 2000 Report. A strategy to improve reporting on Indigenous health was developed in 2003, and improvements have since been made where possible. This work is being informed by the new Aboriginal and Torres Strait Islander Health Performance Framework.

Attachment tables

Attachment tables for data within the 'Health preface' of this compendium are contained in attachment HPA of the compendium. These tables are identified in references throughout this chapter by an 'A' suffix (for example, table HPA.3 is table 3 in the 'Health preface' attachment). As the data are directly sourced from the 2008 Report, the compendium also notes where the original table, figure or text in the 2008 Report can be found. For example, where the compendium refers to '2008 Report, p. E.15' this is page 15 of the 'Health preface' of the 2008 Report, and '2008 Report, table EA.2' is attachment table 2 of the 'Health preface' attachment of the 2008 Report.

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