CHAPTER 6 MOTHERS AND CHILDREN

INTRODUCTION

Aboriginal and Torres Strait Islander females have higher fertility rates than other Australian females and are more likely to give birth at younger ages. Indigenous maternal mortality rates and the proportion of low birthweight babies born to Indigenous females are higher than for non-Indigenous females. The perinatal death rate for Indigenous babies is also higher than for non-Indigenous babies, but this rate has declined since the early 1990s. Mortality rates for Indigenous infants and children have also fallen in some jurisdictions over a similar period of time.

This chapter includes some background information on the circumstances of Indigenous families and communities to provide the broader context in which the health and welfare of Indigenous mothers and children is determined. The relatively poor socioeconomic status and social disadvantage experienced by many Indigenous families contributes to the generally poorer health and wellbeing of Indigenous children.

The data on Indigenous mothers and babies focus on the periods of pregnancy, childbirth and infancy. As well as data on fertility, the chapter includes information on the risk factors during pregnancy, and perinatal and child health outcomes. These outcomes include maternal mortality, gestational age, low birthweight and perinatal mortality. Data are also included on some of the factors that impact on healthy child development—breastfeeding, diet and nutrition, immunisation, and exposure to passive smoking and risky/high risk drinker(s) in the household. The health status of Indigenous children is then examined through data on the prevalence of long-term health conditions, burden of disease, hospitalisations and mortality.

The focus of the chapter is Indigenous mothers and Indigenous children aged 0–14 years, except where information for these ages was not available. For the first time, data on trends over time are provided for some of the measures.

INDIGENOUS FAMILIES AND COMMUNITIES

Indigenous household and family structures

Data from the 2006 Census show that the majority of both Indigenous and other Australian households are single family households (76% and 70% respectively), however a larger proportion of Indigenous households are multi-family households (5% compared with 1%) and a smaller proportion are lone person households (14% compared with 25%). Indigenous households are more likely to be larger, with an average of 3.4 people compared with 2.6 for other Australian households.

In 2006, Indigenous single family households were three times more likely than other single family households to be one-parent families with dependent children or students (30% compared with 10%), but less likely to be families without dependents (33% compared with 54%). Indigenous and non-Indigenous single family households were equally likely to be couples with dependent children (around 37%).

The classifications used to describe Indigenous households and family structures in the ABS five-yearly Census do not fully capture the complexity of many Indigenous families

Indigenous household and family structures continued

and their living arrangements (Morphy 2006). The characteristics of Indigenous households differ from the majority of Australian households—they tend to be larger, non-nuclear and more fluid in composition. Indigenous families have overlapping and extensive kinship networks, with both adults and children commonly moving between different households (Smith 2001; Morphy 2006). These extensive and fluid family structures are more common in remote communities, but are also found in more settled areas of Australia (Smith 2000).

Socioeconomic status

The relatively poor socioeconomic status of Indigenous people and families has been well documented. Chapter 2, for example, outlines the lower employment rates, income levels and education attainment of Indigenous Australians when compared with non-Indigenous Australians. Indigenous people in remote areas have limited access to services and mainstream labour markets. This has important implications for Indigenous children born and raised in these environments, and impacts on their health and other life outcomes.

Daly and Smith (2005) identified a key set of statistical variables that they regarded as indicators of exclusion from mainstream social and economic opportunities. They analysed the 2001 Census and other data on these indicators of risk for Indigenous and non-Indigenous children and concluded that Indigenous children were among the most socially disadvantaged in Australia. Compared with other Australian children, children living in Indigenous households were:

- less likely to be living with a parent (88% of Indigenous children compared with 98% of non-Indigenous children);
- had lower weekly household incomes (median weekly incomes of households with Indigenous children were 67% of the median weekly incomes of households with other children (i.e. no Indigenous children));
- more reliant on income support (33% of Indigenous families with dependants were receiving Parenting Payment compared with 16% of non-Indigenous families);
- more likely to have parents who left school early (57% of children in Indigenous households were living with parents who had not completed Year 10 compared with 25% of children in other households); and
- less likely to have a parent in paid employment (47% of Indigenous families had no parent working compared with 20% of other families).

On a number of the indicators examined, Indigenous children living in very remote areas were more disadvantaged than those in less remote areas. Many Indigenous children experienced multiple risk factors and there was evidence that the damage caused by these compounded with each additional risk factor (Daly & Smith 2005).

Family and community functioning

Family functioning has been shown to have strong associations with the social, economic and psychological environment of the family and wider community (Silburn et al 2006). It is important because good family functioning is associated with positive child outcomes, while poor family functioning leads to poor emotional and behavioural outcomes for children. The impact of poor family functioning on child outcomes can be ameliorated by the level of community functioning. Recent data on Indigenous family and community functioning should be viewed in the context of the social disadvantage experienced by many Indigenous families and the life stresses they experience.

Family and community functioning continued

The 2001–02 Western Australian Aboriginal Child Health Survey (WAACHS) examined life stresses, family functioning and community characteristics across geographical areas. WAACHS asked primary carers if any of 14 major life stressors had occurred in the family in the previous 12 months (see box 6.1). Families with Aboriginal children reported very high levels of life stresses, with 22% of children living in families in which 7–14 life stress events had occurred in the last 12 months. The survey found that similar levels of stress were reported across all levels of geographic isolation. Carers of Aboriginal children experienced an average of 3.9 life stress events, over three times the average experienced by carers of non-Aboriginal children (1.2 life stressors) (Silburn et al 2006).

The survey found that most Aboriginal families were functioning well, based on measures of family functioning developed for the survey (see box 6.1). Those in the lowest quarter of the measure of functioning were classified as having poor family functioning. Carers living in areas of extreme isolation were more likely to be living in families classified as having poor family functioning. Two of the major factors associated with poor family functioning in areas of extreme isolation were family financial strain and the quality of children's diets.

6.1 WESTERN AUSTRALIAN ABORIGINAL CHILD HEALTH SURVEY (WAACHS)

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

Level of Relative Isolation (LORI)

LORI is a new classification of remoteness indicating the relative distance of localities from population centres of various sizes. The LORI is based on an extension of the ARIA (Accessibility/Remoteness Index of Australia) called ARIA++ which has an 18 point remoteness scale and gives a more detailed description of more remote areas by including more service centres in calculating remoteness scores. Based on the ARIA++ scores, five categories of isolation have been defined. These categories are referred to as LORIs and range from None (the Perth metropolitan area) to Low (e.g. Albany), Moderate (e.g. Broome), High (e.g. Kalumburu) and Extreme (e.g. Yiyili).

Life stresses

Primary carers were asked if any of 14 major life stress events had occurred in their family in the preceding 12 months. These events included: a close family member had a medical problem and was in hospital; a close family member was in prison; your child/children was involved in or upset by family arguments; a parent/caregiver lost his or her job; a close family member had an alcohol or drug problem; an important family member passed away; and/or parents or carers had left because of a family split up.

Family and community functioning continued

Family functioning

Family functioning was measured in the WAACHS using a nine-item scale based on key family recovery and family protective factors identified in international research and modified for Aboriginal families. The family protective factors include accord, communication, hardiness and acceptance. Based on these indicators, the authors concluded that the majority of families with Aboriginal children scored highly on the family functioning scale. But in order to produce a single measure of family functioning, responses were summed to produce an overall score and then split into quartiles, each representing one-quarter of the population. These quartiles were labelled Poor, Fair, Good and Very Good.

Source: Silburn et al 2006

The WAACHS also explored the characteristics of communities with Aboriginal children and found that there were significant differences across the spectrum of geographical isolation (Silburn et al 2006). The maintenance of Aboriginal languages and traditional cultures were much more common in areas of extreme isolation. Neighbourhood and community problems, such as being bothered by drug and alcohol abuse, break-ins and car stealing were most common in areas of moderate isolation.

A range of studies have found that the incidence of violence in Indigenous families and communities is significantly higher than in the Australian community as a whole, and this has particularly adverse impacts on the health and wellbeing of Aboriginal and Torres Strait Islander children (AIHW: Al-Yaman et. al. 2006; Gordon et. al. 2002). In 2002, some 41% of Indigenous people in remote areas and 14% of those in non-remote areas reported that family violence was a neighbourhood problem. In 2003–04 Indigenous females were hospitalised for family violence-related assaults at 35 times the rate of non-Indigenous females, while 7,950 Indigenous females and 350 Indigenous males sought assistance through the Supported Accommodation Assistance Program (SAAP) to escape domestic violence (AIHW: Al-Yaman et al 2006). In 2005–06 there were 11,600 Indigenous children who attended a SAAP service with their parent or guardian. Among Indigenous children aged four years or less, one in every 11 attended a SAAP service in 2005–06 (see Chapter 4). Chapter 11 provides data on the relatively high rates of Indigenous children in the child protection system.

INDIGENOUS MOTHERS

This section includes data on Indigenous mothers, mainly during the period of pregnancy. Data on female contraceptive practices are provided, followed by information on fertility rates, maternal age, risk factors during pregnancy and maternal mortality.

Female contraceptive practices

The 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) provides information on the contraceptive practices of Indigenous women aged 18–49 years. Overall, the most common forms of contraception used by Indigenous women were condoms (20%) followed by the contraceptive pill (14%) (ABS 2006e). Forms of contraceptive use differed according to remoteness. While 24% of Indigenous women living in non-remote areas reported using condoms and 17% were taking the contraceptive pill, only 9% of women in remote areas used condoms and less than 5% were taking the contraceptive pill. In contrast, Indigenous women in remote areas

Female contraceptive practices continued

were more than twice as likely as those in non-remote areas to report using contraceptive injections (14% compared with 5%) or implants (13% compared with 5%)

Mothers

During 2001–2004, Indigenous mothers comprised nearly 4% of all females who gave birth in Australia. The proportion of Indigenous mothers ranged from less than 1% of females who gave birth in Victoria to 39% in the Northern Territory. The number of Indigenous mothers was highest in Queensland (11,041), followed by New South Wales (8,734), Western Australia (6,164) and the Northern Territory (5,622) (table 6.2).

6.2 INDIGENOUS MOTHERS, by state/territory—2001–2004

	Number	*Proportion of all mothers*(a)
	no.	%
New South Wales	8 734	2.6
Victoria	1 633	0.7
Queensland	11 041	5.6
South Australia	1 793	2.6
Western Australia	6 164	6.3
Tasmania(b)	na	na
Northern Territory	5 622	38.9
Australian Capital Territory(c)	277	1.5
Australia	**35 264**	**3.5**

na not available
(a) Indigenous mothers as a proportion of all mothers in each jurisdiction.
(b) Data for Tasmania are unavailable.
(c) Data includes ACT and non-ACT residents who gave birth in the ACT.
Source: AIHW National Perinatal Data Collection

Fertility

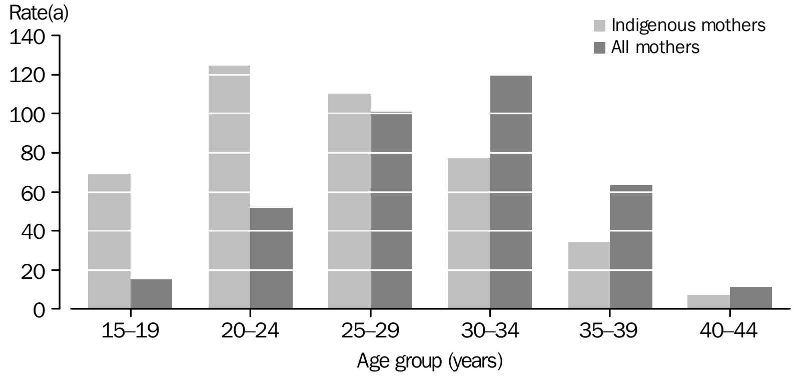
The total fertility rate (TFR) represents the number of children a woman would have during her lifetime if she were to experience current age-specific fertility rates at each stage of her reproductive life. Measures of the fertility of Indigenous females account for only part of the impact of births on measures of the growth of the Indigenous population. This is because the Indigenous TFR is based on the Indigenous status of the mother, and about one-third of Indigenous babies have an Indigenous father and non-Indigenous mother. In addition, the fertility rate of Indigenous females is likely to be underestimated because the Indigenous status of the mother is not always recorded in birth registrations that are used to calculate fertility rates. The TFR for 2006 was derived using the numbers of births registered to Indigenous mothers in 2006 and the 30 June 2006 preliminary estimated resident population of Aboriginal and Torres Strait Islander females.

In 2006, the TFR for Indigenous females was estimated to be 2.1 babies, compared with 1.8 babies for all Australian females. Indigenous TFRs vary across the states and territories. The highest Indigenous TFR in 2006 occurred in South Australia (2.5 babies per female), followed by the Northern Territory (2.4) and Western Australia (2.3) (ABS 2007a).

Fertility continued

High fertility at younger ages contributes to the relatively high fertility of Indigenous females. Teenage births (i.e. births to females less than 20 years of age) are more common among Indigenous than non-Indigenous females. In 2006, the teenage birth rate for Indigenous females (69 babies per 1,000 females) was more than five times the teenage birth rate for non-Indigenous females (13 babies per 1,000 females). The peak age group for births to Indigenous females in 2006 was 20–24 years (125 babies per 1,000), followed by women aged 25–29 years (110 babies per 1,000 females). In contrast, the peak age group for births to non-Indigenous females was 30–34 years (120 babies per 1,000 females) (graph 6.3) (ABS 2007a).

6.3 AGE-SPECIFIC FERTILITY RATES, by Indigenous status of mother—2006



(a) Number of babies per 1,000 females.

Source: ABS 2007a

Maternal age

The age of the mother can affect the development of the foetus, with the risk of foetal complications being higher for pregnancies that occur in the teenage years or among women over the age of about 35 years. Maternal age is also associated with perinatal health, with adverse outcomes more likely among younger and older mothers (Laws et al 2006a). The median age of Indigenous mothers in the period 2001–2004 was 25 years, some five years lower than the median age of non-Indigenous mothers (30 years) (AIHW: Leeds et al 2007).

In the period 2001–2004, approximately 23% of Indigenous females who gave birth were aged less than 20 years, compared with 4% of non-Indigenous females. The jurisdiction with the largest proportion of Indigenous females aged less than 20 years who gave birth during this period was the Northern Territory (29%), followed by Western Australia (24%), Victoria (22%) and South Australia (22%). The corresponding proportions for non-Indigenous females were 5% in the Northern Territory, 5% in Western Australia, 3% in Victoria and 5% in South Australia. Around 7% of Indigenous females who gave birth in the period 2001–2004 were aged 35 years or over compared with 19% of non-Indigenous females (table 6.4).

6.4 MOTHERS(a), by maternal age and Indigenous status—2001–2004

	Less than 20 years		*20–34 years*		*35 years or over*		*Total*(b)	
	no.	%	no.	%	no.	%	no.	%
New South Wales								
Indigenous	1 868	21.4	6 186	70.9	672	7.7	8 734	100.0
Non-Indigenous	12 349	3.7	253 284	76.9	63 627	19.3	329 386	100.0
Victoria								
Indigenous	360	22.0	1 139	69.7	133	8.1	1 633	100.0
Non-Indigenous	7 191	2.9	187 560	76.1	51 645	21.0	246 418	100.0
Queensland								
Indigenous	2 161	19.6	8 020	72.7	860	7.8	11 041	100.0
Non-Indigenous	10 111	5.4	144 929	78.0	30 683	16.5	185 723	100.0
South Australia								
Indigenous	391	21.8	1 269	70.8	133	7.4	1 793	100.0
Non-Indigenous	3 349	4.9	52 584	77.6	11 867	17.5	67 800	100.0
Western Australia								
Indigenous	1 467	23.8	4 309	69.9	388	6.3	6 164	100.0
Non-Indigenous	4 120	4.5	71 223	77.3	16 773	18.2	92 116	100.0
Northern Territory								
Indigenous	1 636	29.1	3 652	65.0	329	5.9	5 622	100.0
Non-Indigenous	460	5.2	6 787	77.4	1 519	17.3	8 773	100.0
Australian Capital Territory								
Indigenous	41	14.8	210	75.8	26	9.4	277	100.0
Non-Indigenous	540	2.9	13 921	75.8	3 896	21.2	18 357	100.0
Australia(c)								
Indigenous	**7 924**	**22.5**	**24 785**	**70.3**	**2 541**	**7.2**	**35 264**	**100.0**
Non-Indigenous	**38 120**	**4.0**	**730 288**	**77.0**	**180 010**	**19.0**	**948 573**	**100.0**

(a) Excludes mothers whose Indigenous status was not stated.

(b) Includes mothers for whom age was not stated.

(c) Excludes Tasmania.

Source: AIHW National Perinatal Data Collection

Risk factors during pregnancy

Smoking and alcohol use during pregnancy are both major risk factors for poor perinatal and child health.

SMOKING

Smoking during pregnancy increases the risk of complications and is associated with poorer perinatal outcomes, such as low birthweight, preterm birth and perinatal death (Graham et al 2007). Maternal factors that have been found to be associated with smoking during pregnancy include maternal age, marital status, socioeconomic status and number of children (Ventura et al 2003; Kahn et al 2002).

The National Perinatal Data Collection (NPDC) contains data on smoking during pregnancy from New South Wales, Western Australia, South Australia, the Australian Capital Territory and the Northern Territory for the period 2001–2004. During this period, half (51%) of Indigenous females in these states and territories reported smoking during pregnancy. Indigenous mothers were around three times as likely to smoke during pregnancy as non-Indigenous mothers (Laws et al 2006b).

ALCOHOL CONSUMPTION

Excessive alcohol intake during pregnancy is associated with an increased risk of alcohol withdrawal symptoms in the baby, Foetal Alcohol Syndrome, and perinatal mortality (Walker, Rosenberg & Balaban-Gil 1999 in Zubrick et al 2004). In the 2001–02 WAACHS,

Risk factors during pregnancy continued

the mothers of an estimated 23% of Aboriginal children in Western Australia reported that they had consumed alcohol during pregnancy (Zubrick et al 2004).

Maternal mortality

Maternal mortality is defined as the death of a woman while pregnant or within 42 days of the termination of pregnancy, irrespective of the duration and the site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management, but not from accidental or incidental causes (Sullivan & King 2006). For the period 2000–2002 there were 13 maternal deaths of Aboriginal and Torres Strait Islander females (Sullivan & King 2006). For 2000–02, the maternal mortality rate for Indigenous females (45.9 per 100,000 females who gave birth) was five times the rate for non-Indigenous females (8.7 per 100,000 females who gave birth). The Indigenous maternal mortality rate is likely to be an underestimate because of incomplete ascertainment of Indigenous status in deaths data.

BABIES AND CHILDREN

This section provides the latest data on Indigenous babies and children. It begins with data on the length of pregnancy and births, including birthweight and perinatal mortality. This is followed by data on some of the factors that impact on child development—breastfeeding, diet and nutrition, immunisation and passive smoking. The final section provides information on the health status of Indigenous children, that is, the prevalence of long-term health conditions, hospitalisation and deaths.

Births

Information on births is published annually by the ABS from birth registration data and through the National Perinatal Data Collection (NPDC). The number of Indigenous births in both data collections is likely to be an underestimate as the Indigenous status of the parents is not always recorded, or recorded correctly.

In 2006, there were around 12,300 live births registered in Australia where at least one parent was of Indigenous origin, accounting for around 5% of total births (ABS 2007a). Around one-third (30%) of these babies had both an Indigenous mother and an Indigenous father, and 41% had an Indigenous mother and a non-Indigenous father—a total of 8,735 babies (71%) born to Indigenous mothers. The remaining 29% of babies had a non-Indigenous mother and an Indigenous father.

In the 2004 NPDC there were 9,004 births to Aboriginal and Torres Strait Islander mothers (8,905 live births and 99 foetal deaths). This represented 4% of all births in Australia in 2004 where maternal Indigenous status was known (251,597) (Laws et al 2006b). Over the period 2001–2004, the number of live births to Indigenous mothers increased and the number of foetal deaths decreased (table 6.5).

Births continued

6.5 BIRTHS TO INDIGENOUS FEMALES, by birth status—2001–2004

Birth status	*2001*	*2002*	*2003*	*2004*
Live births	8 675	8 827	8 851	8 905
Foetal deaths	116	102	107	99
All births	**8 791**	**8 929**	**8 958**	**9 004**

Source: AIHW National Perinatal Data Collection

The main reason for the difference in the number of Indigenous births identified in the ABS Births Registration Collection and the NPDC is that the latter does not collect paternal information and therefore only births to Indigenous mothers are identified as Indigenous births. Other differences between the two collections include the different methodologies used to collect information, and delays in the registration of, or failure to register, some live births (AIHW: Leeds et al 2007).

Gestational age

Gestational age is the length of a pregnancy in completed weeks. The gestational age at birth for term pregnancies is between 37 and 41 weeks; for preterm births it is less than 37 weeks. Preterm birth is associated with neonatal problems that cause significant morbidity and mortality in newborn babies. In the period 2001–2004, there were 4,962 preterm babies born to Indigenous mothers, representing 14% of all births to Indigenous mothers. This was almost double the rate of preterm births among non-Indigenous mothers (8%) in the same period (AIHW: Leeds et al 2007).

Birthweight

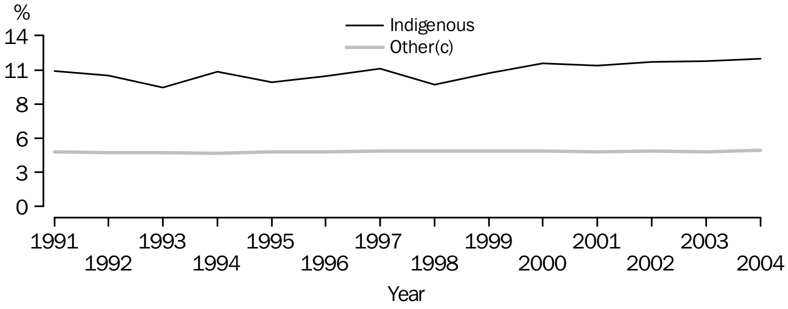
A baby's birthweight is a key indicator of health status. Babies born with a birthweight of less than 2,500 grams are classified as 'low birthweight'. Low birthweight may be a result of preterm birth, foetal growth restriction, or a combination of the two. Low birthweight babies are at greater risk of poor health and death, require longer periods of hospitalisation after birth, and are more likely to develop significant disabilities (Goldenberg & Culhane 2007). Some factors that contribute to low birthweight are socioeconomic disadvantage, size of parents, age of the mother, number of babies previously born, mother's nutritional status, smoking and alcohol intake, and illness during pregnancy (Ashdown-Lambert 2005; Moshin et al 2003).

In 2001–04 there were 4,578 low birthweight babies born to Indigenous mothers, representing 13% of liveborn babies to Indigenous mothers. This was more than double the proportion of low birthweight live born babies with non-Indigenous mothers (6%) (AIHW: Leeds et al 2007).

Data from 1991 to 2004 show a significant increase in the rate of low birthweight babies among singleton live births to Indigenous mothers, from 11.1 to 12.1 per 100 live births (graph 6.6). There was also a significant, but much smaller increase in the proportion of low birthweight babies born to non-Indigenous mothers over this period from 4.5 to 4.6 per 100 live births (AIHW Leeds et al 2007). Some of the increase in the proportion of low birthweight babies born to Indigenous mothers may be the result of improved identification of Indigenous mothers over time.

Birthweight continued

6.6 RATE OF LOW BIRTHWEIGHT BABIES(a)(b), by Indigenous status of mother—1991–2004



(a) Excludes data for Tasmania and the Australian Capital Territory.
(b) Rates have been directly age standardised using all Australian mothers who gave birth in 2001 as the standard population.
(c) Comprises non-Indigenous mothers and mothers for whom Indigenous status was not stated.

Source: AIHW National Perinatal Data Collection

Perinatal mortality

Perinatal deaths include both foetal deaths (stillbirths) and deaths of liveborn babies within the first 28 days after birth. These deaths are almost all due to factors during pregnancy and childbirth. Perinatal mortality reflects the health status of the population as well as their access to quality health care.

Data on perinatal deaths are available from the ABS Deaths Registration Collection and the NPDC. Data from the ABS Deaths Registration Collection have been presented here, as babies born to both Indigenous mothers and fathers are identified in this dataset. The identification of Indigenous status in deaths registration data has been assessed by the ABS and AIHW as having a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced in four jurisdictions—Queensland, Western Australia, South Australia and the Northern Territory (ABS & AIHW 2005). Long-term mortality trend data are limited to three jurisdictions—Western Australia, South Australia and the Northern Territory, which have over 10 years of adequate identification of Indigenous deaths in their recording systems.

Over the period 2003–2005, there were 350 perinatal deaths of Indigenous infants in the four jurisdictions. The 2003–2005 rate of perinatal deaths in the four jurisdictions was 15.7 per 1,000 births for Indigenous babies compared with 10.3 per 1,000 births for non-Indigenous babies.

There was a significant decline in the perinatal death rate for Aboriginal and Torres Strait Islander babies in Western Australia from 20 per 1,000 births in the period 1991–1993 to 13 per 1,000 births in 2003–2005 (table 6.7).

Perinatal mortality continued

6.7 PERINATAL MORTALITY RATES(a), by Indigenous status—1991–1993 to 2003–2005

	1991–1993	*1994–1996*	*1997–1999*	*2000–2002*	*2003–2005*
Indigenous rate					
Western Australia	20.2	20.2	19.8	12.3	12.6
South Australia	23.3	14.3	12.2	16.1	14.4
Northern Territory	28.5	24.5	27.5	15.3	21.2
Other rate(b)					
Western Australia	9.2	8.8	7.2	7.4	9.0
South Australia	9.0	9.0	7.3	7.9	8.9
Northern Territory	13.3	11.3	8.5	8.3	9.9
Ratio(c)					
Western Australia	2.2	2.3	2.7	1.7	1.4
South Australia	2.6	1.6	1.7	2.1	1.6
Northern Territory	2.1	2.2	3.2	1.8	2.1

(a) Rate per 1,000 births.

(b) Other includes deaths of non-Indigenous people and those for whom Indigenous status was not stated.

(c) Mortality rate for Indigenous Australians divided by the mortality rate for other Australians.

Source: ABS Deaths Registration Collection

HEALTHY CHILD DEVELOPMENT

Breastfeeding

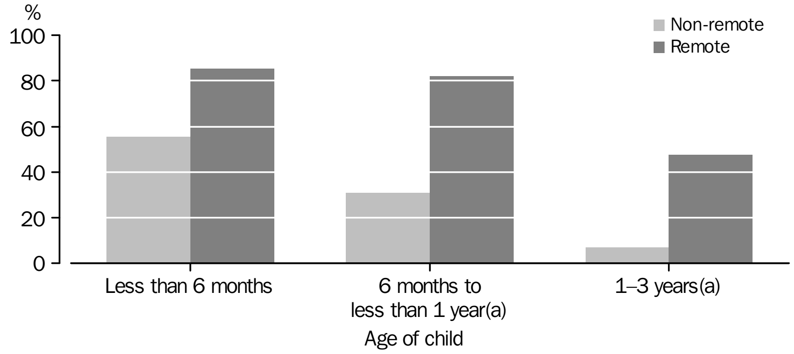
Breastfeeding has many positive effects on the survival, growth, development and health of infants. Many studies have shown that breastfeeding has a protective effect against conditions such as diarrhoea and respiratory infections and has benefits for children's growth, cognitive development and immunological functioning (Kramer 2001; Oddy et al. 2003 ; Lawton & Shortridge 1997: all cited in Zubrick et al 2004). Other studies have shown a protective effect against sudden infant death syndrome, asthma and other allergic diseases (Hoffman 1988; Oddy et al 1999; Merrett 1988).

The 2004–05 NATSIHS provides information on the breastfeeding status of infants and young children. In 2004–05, approximately 79% of Indigenous children aged 0–3 years in non-remote areas had been breastfed compared with 88% of non-Indigenous children. A higher proportion of non-Indigenous children (aged 0–3 years) than Indigenous children had been breastfed for 12 months or more (14% compared with 11%) (ABS 2006c).

Among Aboriginal and Torres Strait Islander children aged 0–3 years, 85% of those in remote areas and 79% of those in non-remote areas were currently breastfeeding or had previously been breastfed in 2004–05 (AIHW 2007a). The proportions of Indigenous infants aged less than 12 months who were breastfeeding in 2004–05 were particularly high in remote areas (85% of those aged less than six months and 82% of those aged 6–12 months (graph 6.8).

Breastfeeding continued

6.8 CURRENTLY BREASTFEEDING BY REMOTENESS, Indigenous children aged 0–3 years—2004–05



(a) Non-remote estimate has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS 2004–05 NATSIHS

Diet and nutrition

Poor diet and nutrition in the early years of life can affect childhood development, growth, functioning and health (Tomkins 2001). It is also a principal cause of many of the health conditions suffered by Aboriginal and Torres Strait Islander people. A diet high in carbohydrates and saturated fats, for example, is associated with high levels of obesity, Type 2 diabetes and renal disease, while consumption of fresh fruit and vegetables can be a protective factor against many of these diseases (NPHP 2001). Aboriginal and Torres Strait Islander families living in isolated areas, however, face particular challenges in providing their children with fresh, affordable food on a regular basis.

The National Health and Medical Research Council Dietary Guidelines recommend consuming a wide variety of nutritious foods, including a high intake of plant food such as fruit and vegetables, while also recommending moderating total fat and saturated fat intake (NHMRC 2003b). The daily food consumption guidelines for fruit and vegetable intake recommend:

- one serve of fruit and two serves of vegetables for children aged 4–7 years
- one serve of fruit and three serves of vegetables for children aged 8–11 years
- three serves of fruit and three serves of vegetables for adolescents aged 12–18 years.

The 2004–05 NATSIHS collected information on the dietary behaviour of Indigenous people aged 12 years and over, including the number of daily serves of fruit and vegetables usually eaten by those living in non-remote areas. Among Indigenous children aged 12–14 years in non-remote areas, 24% met the recommended daily fruit intake of three or more serves, and 59% met the recommended daily vegetable intake of three or more serves. Among teenagers aged 15–17 years, 20% met the daily fruit consumption guidelines and 61% met the daily vegetable consumption guidelines (table 6.9). There were no significant differences between the proportion of Indigenous and non-Indigenous children whose fruit and vegetable consumption met the recommended daily guidelines.

Diet and nutrition continued

6.9 CHILDREN'S USUAL DAILY INTAKE OF FRUIT AND VEGETABLES IN NON-REMOTE AREAS, by Indigenous status—2004–05

	12–14 YEARS		15–17 YEARS	
	Indigenous	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*
	%	%	%	%
Number of serves of fruit				
Does not eat fruit	5.4	4.7	12.5	7.8
1 serve or less	40.8	39.1	41.8	40.4
2 serves	30.0	29.8	25.4	25.3
3 serves	15.9	15.3	12.9	15.6
4 or more serves	8.0	11.1	7.4	11.0
Total	**100.0**	**100.0**	**100.0**	**100.0**
Number of serves of vegetables				
Does not eat vegetables	1.7	1.2	1.0	1.1
1 serve or less	20.4	22.6	25.2	23.9
2 serves	18.6	21.5	(a) 12.8	(a) 19.5
3 serves	29.0	27.9	34.4	30.0
4 or more serves	30.2	26.9	26.6	25.5
Total	**100.0**	**100.0**	**100.0**	**100.0**

(a) Difference between Indigenous and non-Indigenous data is statistically significant.

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

Immunisation

The Australian Childhood Immunisation Register (ACIR), managed by the Health Insurance Commission, holds information on childhood immunisation coverage. All children under seven years of age, enrolled in Medicare, are automatically included on the ACIR. Children who are not eligible to enrol in Medicare can be added to the ACIR when details of a vaccination are received from a doctor or immunisation provider. It should be noted that coverage estimates for Aboriginal and Torres Strait Islander children include only those who are identified as such and are registered on the ACIR. Children identified as Indigenous on the ACIR may not be representative of all Aboriginal and Torres Strait Islander children, and thus coverage estimates should be interpreted with caution.

Vaccination coverage rates for children aged one year, two years and six years at 31 December 2005 for New South Wales, Victoria, Western Australia, South Australia and the Northern Territory combined are shown in table 6.10. Aboriginal and Torres Strait Islander children had lower coverage compared with non-Indigenous children for all vaccines at 12 months of age (82% compared with 91%), while at two years of age the difference in vaccination coverage between Indigenous and non-Indigenous children was not as large (90% and 92% respectively). Immunisation rates at six years of age were similar for Indigenous and non-Indigenous children. This suggests that there may be a delay in the receipt of vaccines by Indigenous children, or in the transfer of data for Indigenous children to ACIR (AIHW 2007a).

6.10 VACCINATION COVERAGE ESTIMATES FOR CHILDREN AT 1, 2 AND 6 YEARS OF AGE, by Indigenous status—31 December 2005(a)(b)

	ONE YEAR OLD		TWO YEARS OLD		SIX YEARS OLD	
	Indigenous	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*
	%	%	%	%	%	%
Hepatitis B	93.9	94.8	97.9	95.9	. .	. .
DTP (diphtheria, tetanus and pertussis)	86.0	92.6	94.9	95.2	85.3	85.5
OPV (oral polio vaccine)	85.6	92.5	94.7	95.2	85.6	85.7
Hib (Haemophilius influenzae type b)	93.1	94.5	91.6	93.6	. .	. .
MMR (measles, mumps and rubella)	. .	. .	93.1	93.8	85.4	85.7
Total	**82.2**	**91.1**	**89.9**	**92.1**	**84.3**	**84.6**

. . not applicable

(a) Three-month cohorts, for cohorts born between 1 July and 30 September 2004, 1 July and 30 September 2003, and 1 July and 30 September 1999 respectively.

(b) Data for NSW, Vic., WA, SA and NT only as data on Indigenous status from other jurisdictions were incomplete.

Source: AIHW 2007a

Immunisation continued

The 2004–05 NATSIHS also provides information on the immunisation status of Indigenous children aged 0–6 years in non-remote areas of Australia. Among Indigenous children for whom immunisation records were available, 93% were fully immunised according to the recommended course of vaccinations at a specific age. In particular, 78% of Indigenous children in non-remote areas were fully immunised against diphtheria/tetanus, 74% against whooping cough, 82% against Hepatitis B, 78% against polio, 72% against Hib and 84% against measles, mumps and rubella (AIHW 2007a).

Selected environmental risk factors

PASSIVE SMOKING

Exposure to environmental tobacco smoke, commonly referred to as passive smoking, has been shown to be a significant cause of morbidity and mortality, and children are the most vulnerable to its effects. For babies, passive smoking is one of the significant risk factors for sudden infant death syndrome (AMA 1999). Exposure to second hand smoking also increases children's risk of ear infections and respiratory illnesses, such as asthma (Strachan & Cook 1997). Children living with parents and relatives who smoke indoors are particularly at risk.

In 2004–05, an estimated 119,000 Aboriginal and Torres Strait Islander children lived with a regular smoker. This represents two-thirds (66%) of all Indigenous children aged 0–14 years. In comparison, around one-third (35%) of non-Indigenous children aged 0–14 years lived with a regular smoker. Regular smokers may or may not smoke at home indoors. Some 28% of Aboriginal and Torres Strait Islander children were living in households with a regular smoker who smoked at home indoors, three times the comparable rate for non-Indigenous children (9%) (table 6.11).

Selected environmental risk factors continued

PASSIVE SMOKING *continued*

6.11 WHETHER LIVING WITH REGULAR SMOKER(S), by Indigenous status—Children aged 0–14 years—2004–05

	REGULAR SMOKERS IN HOUSEHOLD			
	Smokes indoors at home	*Does not smoke indoors at home*	*No regular smokers in household*	*Total*(a)
	%	%	%	%
Indigenous	28.5	37.6	31.4	100.0
Non-Indigenous	9.2	26.2	64.6	100.0

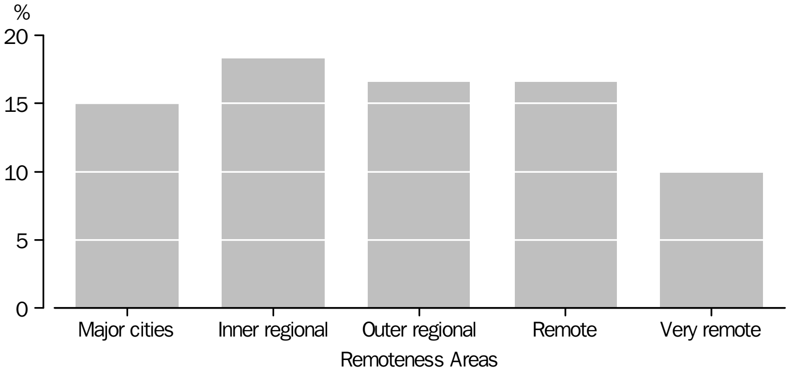
(a) Includes children in households in which the smoker status of the resident adults was not known.

Source: ABS 2004–05 NATSIHS, AIHW 2007a

EXPOSURE TO RISKY/HIGH RISK DRINKER(S)

According to the 2004–05 NATSIHS, an estimated 27,900 Indigenous children (15%) were living in a household in which there was at least one risky/high risk drinker, compared with 11% of non-Indigenous children aged 0–14 years. The proportion of Indigenous children exposed to risky/high risk drinking within their household ranged from 10% of those in very remote areas to 18% of those in inner regional areas (graph 6.12).

6.12 LIVING IN A HOUSEHOLD WITH RISKY/HIGH RISK DRINKER(a), Indigenous children aged 0–14 years—2004–05



(a) Risk level based on Australian Alcohol Guidelines 2000 for risk of harm in the long-term.

Source: ABS 2004–05 NATSIHS

Health status of children

LONG-TERM HEALTH CONDITIONS

The 2004–05 NATSIHS and 2004–05 NHS collected data on the prevalence of long-term health conditions among children 0–14 years of age, based on information provided by the person with main caring responsibility for the child. Similar proportions of Indigenous and non-Indigenous children had at least one long-term condition (44% compared with 42%) in 2004–05. The most common long-term health conditions reported for Indigenous children were respiratory diseases (19%), diseases of the ear (10%) and diseases of the eye (8%) (ABS 2006c).

While the same proportion of Indigenous and non-Indigenous children had respiratory disease(s) in 2004–05, Indigenous children were more likely than non-Indigenous children to have asthma (14% compared with 11%) and/or bronchitis (2% compared with 1%). Indigenous children were also more likely than non-Indigenous children to have ear/hearing problems, especially partial deafness (5% compared with 1%) and/or otitis media (4% compared with 2%) (table 6.13).

6.13 CHILDREN AGED 0–14 YEARS WITH A LONG-TERM HEALTH CONDITION, by Indigenous status and type of condition—2004–05

	Indigenous	*Non-Indigenous*
Type of condition	%	%
Diseases of the respiratory system	19.1	19.4
Asthma	(a)13.9	(a)11.4
Bronchitis	(a)2.2	(a)1.2
Chronic sinusitus	(a)2.2	(a)3.2
Diseases of the ear and mastoid	(a)9.5	(a)3.0
Deafness (complete/partial)	(a)4.5	(a)1.2
Otitis media	(a)4.4	(a)1.5
Diseases of the eye and adnexa	8.5	10.5
Short-sighted	(a)1.9	(a)3.5
Long-sighted	3.9	3.7
Diseases of the skin and subcutaneous tissue	2.8	3.1
Diseases of the nervous system	2.2	2.1
Diseases of the musculoskeletal system and connective tissue	1.9	1.8
Congenital malformations, deformations and chromosomal abnormalities	1.6	1.1
Diseases of the heart and circulatory system	1.5	1.3
Other(b)	(a)13.0	(a)9.7
Conditions not elsewhere classified	7.7	8.4
Total with a long-term condition(c)	**44.0**	**41.2**

(a) Difference between Indigenous and non-Indigenous data is statistically significant.

(b) Includes diseases of the digestive system, infectious and parasitic diseases, diseases of the blood and blood forming organs, diseases of the genitourinary system, neoplasms/cancer, mental and behavioural disorders and endocrine, nutritional and metabolic diseases.

(c) Sum of components may be more than total as persons may have reported more than one type of condition.

Source: ABS 2006c

Health status of children continued

BURDEN OF DISEASE AND INJURY

The burden of disease and injury among Indigenous Australians was assessed using Disability Adjusted Life Years (DALYS)—the sum of years of life lost due to premature death and years lived with disability (Vos et al 2007). In 2003 it was estimated that the burden of disease and injury for Indigenous Australians aged 0–14 years was 20,187 DALYS, representing 21% of the total burden of disease and injury for all Indigenous Australians (95,976 DALYS). The leading causes of this burden were neonatal (20%), mental disorders (19%), acute and chronic respiratory infections (18%) and congenital anomalies (12%).

Four major risk factors (tobacco, alcohol, illicit drugs and unsafe sex) attributed around 5% of the total burden of disease among Aboriginal and Torres Strait Islander children in this age group. Tobacco was by far the largest contributor to the disease burden in this age group due to the association between smoking during pregnancy and the increased risk of having a low birthweight baby (Vos et al 2007).

HOSPITALISATIONS OF INFANTS AND CHILDREN

Hospitalisations data provide a measure of a population's use of health services, but are not a direct measure of health status (see box 7.7 in Chapter 7). The quality of Indigenous identification in hospitalisations data varies across jurisdictions, with 2005–06 data presented for the six jurisdictions with adequate Indigenous identification—New South Wales, Victoria, Queensland, Western Australia, South Australia and the Northern Territory (see box 7.9 in Chapter 7).

In 2005–06, Aboriginal and Torres Strait Islander infants (aged less than one year) were hospitalised at a rate 1.4 times that of other Australian infants. Conditions originating in the perinatal period were the leading cause of hospitalisation of Indigenous infants, followed by diseases of the respiratory system and infectious and parasitic diseases. For skin diseases, diseases of the respiratory system and infectious and parasitic diseases, Indigenous infant hospitalisation rates were around three to four times the rates for other infants (table 6.14).

6.14 REASONS FOR HOSPITALISATIONS OF INFANTS(a), by Indigenous status—2005–06

	NUMBER		RATE(b)		
	Indigenous	*Other*(d)	*Indigenous*	*Other*(d)	*Rate ratio*(c)
Conditions originating in the perinatal period (P00–P96)	2 584	49 141	215.7	204.2	1.1
Diseases of the respiratory system (J00–J99)	2 416	15 056	201.7	62.6	3.2
Infectious and parasitic diseases (A00–B99)	1 174	8 344	98.0	34.7	2.8
Contact with health services (Z00–Z99)	622	13 197	51.9	54.8	0.9
Symptoms not elsewhere classified (R00–R99)	524	11 953	43.7	49.7	0.9
Congenital malformations (Q00–Q99)	427	7 731	35.6	32.1	1.1
Diseases of the skin (L00–L99)	227	1 144	18.9	4.8	4.0
Injury and poisoning (S00–T98)	219	2 636	18.3	11.0	1.7
Diseases of the digestive system (K00–K93)	172	4 382	14.4	18.2	0.8
Diseases of the genitourinary system (N00–N99)	121	2 560	10.1	10.6	0.9
Subtotal	***8 486***	***116 144***	***708.4***	***482.6***	***1.5***
Other(e)	343	9 568	28.6	39.8	0.7
Total(f)	**8 838**	**125 813**	**737.8**	**522.7**	**1.4**

(a) Data for NSW, Vic., Qld, WA, SA and NT combined. Excludes private hospitals in NT. Hospitalisations are based on state of usual residence.

(b) Per 1,000 population aged less than one year.

(c) Rate for Indigenous persons divided by the rate for other persons.

(d) Comprises hospitalisations of non-Indigenous infants and hospitalisations of infants whose Indigenous status was not stated.

(e) Includes diseases of the ear and mastoid process, endocrine, nutritional and metabolic diseases, diseases of the nervous system, diseases of the eye and adnexa, diseases of the circulatory system, diseases of the blood and blood forming organs, diseases of the musculoskeletal system, neoplasms, and mental and behavioural disorders.

(f) Includes hospitalisations for which no principal diagnosis was recorded.

Source: AIHW National Hospital Morbidity Database

Health status of children continued

HOSPITALISATIONS OF INFANTS AND CHILDREN *continued*

In 2005–06, Aboriginal and Torres Strait Islander children aged 1–14 years were hospitalised at a rate 1.3 times that of other children of the same age. Diseases of the respiratory system were the leading cause of hospitalisation among Indigenous children, followed by injury and poisoning and infectious and parasitic diseases. Aboriginal and Torres Strait Islander children were hospitalised for skin diseases at more than three times the rate of other Australian children, and were hospitalised for infectious and parasitic diseases at around twice the rate of other children (table 6.15).

6.15 REASONS FOR HOSPITALISATIONS OF CHILDREN AGED 1–14 YEARS(a), by Indigenous status—2005–06

	NUMBER		RATE(b)		
	Indigenous	*Other*(d)	*Indigenous*	*Other*(d)	*Rate ratio*(c)
	no.	no.	%	%	%
Diseases of the respiratory system (J00–J99)	4 412	68 505	27.1	19.8	1.4
Injury and poisoning (S00–T98)	3 583	58 799	22.0	17.0	1.3
Infectious and parasitic diseases (A00–B99)	2 229	28 097	13.7	8.1	1.7
Diseases of the digestive system (K00–K93)	2 081	45 306	12.8	13.1	1.0
Diseases of the skin (L00–L99)	1 526	9 583	9.4	2.8	3.4
Symptoms not elsewhere classified (R00–R99)	1 349	22 554	8.3	6.5	1.3
Diseases of the ear and mastoid process (H60–H95)	1 204	25 026	7.4	7.2	1.0
Contact with health services (Z00–Z99)	1 099	20 410	6.8	5.9	1.1
Diseases of the genitourinary system (N00–N99)	661	11 367	4.1	3.3	1.2
Diseases of the nervous system (G00–G99)	577	12 910	3.5	3.7	1.0
Subtotal	***18 721***	***302 557***	***115.1***	***87.4***	***1.3***
Other(e)	2 593	59 350	15.9	17.1	0.9
Total(f)	**21 321**	**362 008**	**131.1**	**104.5**	**1.3**

(a) Data for NSW, Vic., Qld, WA, SA and NT combined. Excludes private hospitals in NT. Hospitalisations are based on state of usual residence.

(b) Per 1,000 population aged 1–14 years.

(c) Rate for Indigenous persons divided by the rate for other persons.

(d) Comprises both hospitalisations of non-Indigenous children and hospitalisations of children whose Indigenous status was not stated.

(e) Includes diseases of the nervous system, congenital malformations and deformations, diseases of the circulatory system, endocrine, nutritional and metabolic diseases, neoplasms, mental and behavioural disorders, diseases of the blood and blood forming organs, diseases of the eye and adnexa, pregnancy, childbirth and the puerperium and conditions originating in the perinatal period.

(f) Includes hospitalisations for which no principal diagnosis was recorded.

Source: AIHW National Hospital Morbidity Database

Infant and child mortality

Identification of Indigenous Australians is incomplete in all states and territories however current mortality data are considered to have a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced for four jurisdictions—Queensland, Western Australia, South Australia and the Northern Territory (see Chapter 9).

For analysis of trends over time in Indigenous and child mortality from 1991–2005, only three jurisdictions have a sufficient level of coverage to enable statistics on Aboriginal and Torres Strait Islander mortality to be produced—Western Australia, South Australia and the Northern Territory. Ideally, the trends data would compare rates for Indigenous and non-Indigenous infant and child mortality. The 'not stated' category for Indigenous status, however, was only included from 1998 onwards (before which, deaths with Indigenous status 'not stated' were included with non-Indigenous deaths). Indigenous mortality rates have therefore been compared with the mortality rates for 'other' Australians (i.e. deaths of both non-Indigenous people as well as those for whom Indigenous status was not stated).

Due to the incompleteness of Indigenous identification in mortality data, the number of deaths registered as Indigenous is an underestimate of the actual number of deaths that occur in the Indigenous population. Identification of Indigenous Australians may also differ between death registrations, birth registrations and the Census. Identification may also vary over time, and at different rates in states and territories. Therefore trends in

Infant and child mortality continued

infant and child mortality rates for Aboriginal and Torres Strait Islander children should be treated with caution.

INFANT MORTALITY

Infant deaths are deaths of live-born babies who die before reaching their first birthday. For the period 2001–2005, the infant mortality rate for Aboriginal and Torres Strait Islander infants living in Queensland, Western Australia, South Australia and the Northern Territory combined was almost three times that of non-Indigenous infants (table 6.16). The leading causes of death for Indigenous infants were conditions originating in the perinatal period (mainly foetus and newborn babies affected by complications of placenta, cord and membrane, and foetus and newborn babies affected by maternal complications of pregnancy), symptoms, signs and ill-defined conditions (mainly sudden infant death syndrome), congenital malformations, respiratory diseases (mainly pneumonia), injury and poisoning (mainly accidental suffocation and strangulation in bed) and infectious and parasitic diseases (such as septicaemia, meningococcal infection and congenital syphilis).

Mortality rates for respiratory diseases and infectious and parasitic diseases were particularly high for Aboriginal and Torres Strait Islander infants. For these two conditions, mortality rates were 11 and 5 times the rates for non-Indigenous infants.

6.16 MAIN CAUSES OF INFANT DEATHS(a), by Indigenous status—2001–2005

	NUMBER		RATE(b)		
	Indigenous	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*	*Rate ratio*(c)
Conditions originating in the perinatal period (P00–P96)	204	955	562.9	218.8	2.6
Symptoms, signs and ill-defined conditions (R00–R99)	99	213	273.2	48.8	5.6
Congenital malformations (Q00–Q99)	57	451	157.3	103.3	1.5
Respiratory diseases (J00–J99)	36	38	99.3	8.7	11.4
External causes (Injury/poisoning) (V01–Y98)	20	67	55.2	15.4	3.6
Infectious and parasitic diseases (A00–B99)	16	36	44.2	8.2	5.4
All other causes(d)	28	144	77.3	33.0	2.3
Total	**460**	**1 904**	**1 269.3**	**436.2**	**2.9**

(a) Data for Qld, WA, SA and NT. Deaths are based on state of usual residence and year of registration of death. Excludes a total of 61 deaths for which Indigenous status was not stated.

(b) Per 100,000 population aged less than one year.

(c) Rate for Indigenous persons divided by the rate for non-Indigenous persons.

(d) Includes neoplasms, endocrine, nutritional and metabolic diseases, mental and behavioural disorders, diseases of the musculoskeletal system, diseases of the ear and mastoid process, diseases of the eye and adnexa, diseases of the circulatory system, diseases of the skin and subcutaneous tissues, diseases of the genitourinary system, diseases of the nervous system, diseases of the digestive system, diseases of the blood and blood forming organs.

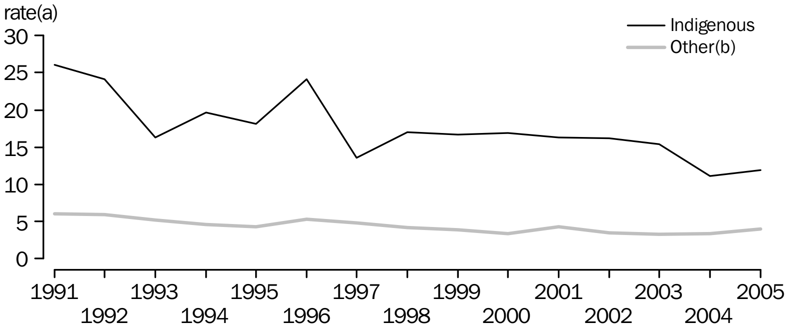
Source: AIHW National Mortality Database

Infant and child mortality continued

Trends in infant mortality

Infant mortality rates for Aboriginal and Torres Strait Islander infants decreased significantly in Western Australia, South Australia and the Northern Territory over the period 1991 to 2005. In Western Australia the infant mortality rate fell from 26 per 1,000 live births in 1991 to 12 per 1,000 live births in 2005, with corresponding decreases for South Australia (from 20 to 10 per 1,000 live births) and for the Northern Territory (from 25 to 16 per 1,000 live births). The mortality rate for other Australian infants also declined over this period, but to a lesser extent, so the difference between the two has decreased significantly (graphs 6.17, 6.18 and 6.19). Infant mortality rates in single years for each of these jurisdictions are presented in Chapter 9.

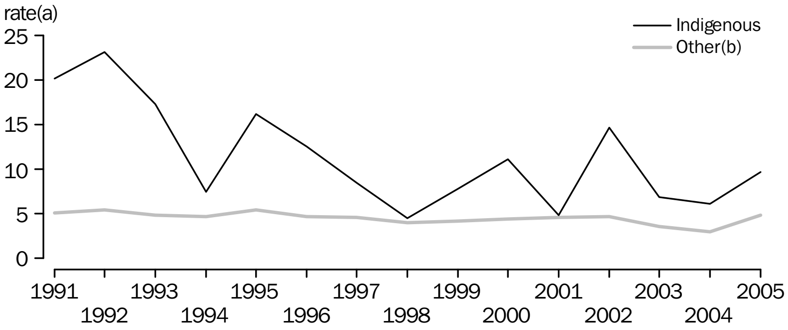
6.17 INFANT MORTALITY RATES—WESTERN AUSTRALIA, by Indigenous status—1991–2005



(a) Infant deaths per 1,000 live births.
(b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

6.18 INFANT MORTALITY RATES—SOUTH AUSTRALIA, by Indigenous status—1991–2005



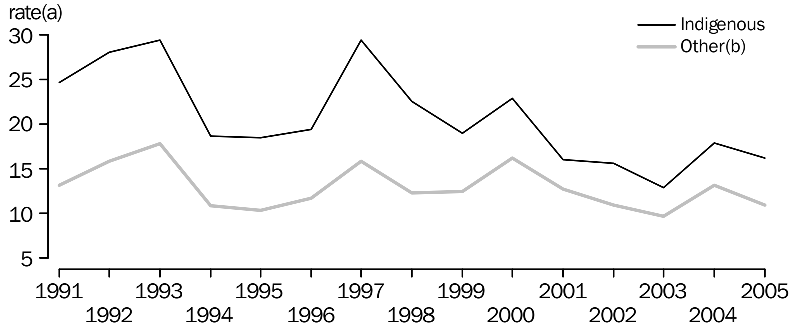
(a) Infant deaths per 1,000 live births.
(b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

Infant and child mortality continued

Trends in infant mortality continued

6.19 INFANT MORTALITY RATES—NORTHERN TERRITORY, by Indigenous status—1991–2005



(a) Infant deaths per 1,000 live births
(b) Comprises deaths of non-Indigenous infants and those for whom Indigenous status was not stated.

Source: AIHW National Mortality Database

CHILD MORTALITY

In the period 2001–2005, the mortality rate for Aboriginal and Torres Strait Islander children aged 1–14 years in Queensland, Western Australia, South Australia and the Northern Territory combined, was almost three times the mortality rate for non-Indigenous children in these jurisdictions (table 6.20).

6.20 MAIN CAUSES OF DEATH FOR CHILDREN AGED 1–14 YEARS(a), by Indigenous status—2001–2005

	NUMBER		RATE(b)		
	Indigenous	*Non-Indigenous*	*Indigenous*	*Non-Indigenous*	*Rate ratio*(c)
External causes (V01–Y98)	90	417	17.9	6.3	2.9
Diseases of the nervous system (G00–G99)	20	102	4.0	1.5	2.6
Diseases of the circulatory system (I00–I99)	18	43	3.6	0.6	5.6
Neoplasms (C00–D48)	16	194	3.2	2.9	1.1
Congenital malformations (Q00–Q99)	12	64	2.4	1.0	2.5
Symptoms, signs and abnormal findings (R00–R99)	12	45	2.4	0.7	3.5
Infectious and parasitic diseases (A00–B99)	10	39	2.0	0.6	3.4
Diseases of the respiratory system (J00–J99)	10	38	2.0	0.6	3.5
All other causes(d)	10	75	2.0	1.1	1.8
Total	**198**	**1 017**	**39.5**	**15.3**	**2.6**

(a) Data from Qld, WA, SA and NT. Data based on state of usual residence and year of registration of death. Excludes a total of 29 deaths of children for whom Indigenous status was not stated.
(b) Per 100,000 population aged 1–14 years.
(c) Rate for Indigenous children divided by the rate for non-Indigenous children.
(d) Includes endocrine, nutritional and metabolic diseases, mental and behavioural disorders, diseases of the musculoskeletal system, diseases of the ear and mastoid process, diseases of the eye and adnexa, diseases of the skin and subcutaneous tissues, diseases of the genitourinary system, diseases of the digestive system, diseases of the blood and blood forming organs, certain conditions originating in the perinatal period.

Source: AIHW National Mortality Database

External causes (such as transport accidents, assault and intentional self-harm) were the leading cause of death among Aboriginal and Torres Strait Islander children, and occurred at three times the rate for non-Indigenous children. Indigenous children died

Infant and child mortality *continued*

CHILD MORTALITY *continued*

from infectious and parasitic diseases, diseases of the respiratory system and circulatory diseases at three to six times the rate of non-Indigenous children.

Trends in child mortality

Childhood mortality rates should be interpreted with caution due to the small number of deaths each year for Indigenous and other Australian children. The data indicate that the child mortality rate for Aboriginal and Torres Strait Islander children decreased significantly in the Northern Territory from 86 per 100,000 children in the period 1991–1993 to 52 per 100,000 children in the period 2003–2005. The child mortality rate for other Australian children decreased significantly in Western Australia and South Australia over this period—from 19 to 15 per 100,000 children in Western Australia—and from 19 to 13 per 100,000 children in South Australia (table 6.21).

6.21 CHILD MORTALITY RATES(a)(b), by Indigenous status—1991–1993 to 2003–2005

	1991–1993	*1994–1996*	*1997–1999*	*2000–2002*	*2003–2005*
Indigenous rate					
WA	71.7	74.6	46.6	49.0	54.1
SA	40.0	32.0	33.8	36.5	28.8
NT	86.4	69.1	74.2	60.2	51.9
Other Australian rate(c)					
WA	18.8	19.0	17.0	16.2	15.0
SA	19.2	18.7	16.8	14.6	13.2
NT	33.1	29.6	17.7	16.4	24.2
Rate ratio(d)					
WA	3.8	3.9	2.7	3.0	3.6
SA	2.1	1.7	2.0	2.5	2.2
NT	2.6	2.3	4.2	3.7	2.1

(a) Deaths are based on year of registration of death.
(b) Per 100,000 population aged 1–14 years.
(c) Comprises deaths of non-Indigenous children and those for whom Indigenous status was not stated.
(d) Mortality rate for Indigenous children divided by the mortality rate for other Australian children.

Source: AIHW National Mortality Database

SUMMARY

Many Indigenous mothers and children live in environments of relative socioeconomic disadvantage and this has adverse impacts on their health and wellbeing. Overall, Indigenous mothers and babies have poorer outcomes in relation to pregnancy and childbirth compared with other Australian mothers and babies. The maternal mortality rate for Indigenous females was five times the corresponding rate for non-Indigenous females, the proportion of low birthweight babies born to Indigenous mothers was double the rate for non-Indigenous mothers, and the perinatal death rate for Indigenous babies was 1.5 times the rate for other babies. The perinatal death rate for Indigenous babies has, however, decreased significantly in Western Australia since the early 1990s, falling from 20 per 1,000 births in 1991–1993 to 13 per 1,000 births in 2003–2005.

SUMMARY *continued*

There were some positive findings in relation to the factors affecting childhood development. The proportion of Indigenous children aged less than 12 months who were breastfeeding in 2004–05 was particularly high in remote areas (85% of those aged less than six months and 82% of those aged six to 12 months). A much higher proportion of Indigenous children (28%), however, lived in households with regular smokers who smoked indoors compared with non-Indigenous children (9%).

The prevalence of at least one long-term health condition was similar among Indigenous and non-Indigenous children (44% compared with 41%). Indigenous children had, however, higher rates of asthma, partial deafness and otitis media. Among Aboriginal and Torres Strait Islander infants, conditions originating in the perinatal period were the leading cause of both hospitalisation and death. Diseases of the respiratory system were the leading cause of hospitalisations for Indigenous children aged 1–14 years, while external causes, such as injury and poisoning, were the leading causes of death.

Indigenous mortality rates for infants have fallen in Western Australia, South Australia and the Northern Territory, and for children, have fallen in the Northern Territory. There has been a narrowing of the gap between Indigenous and non-Indigenous infant mortality rates in South Australia and the Northern Territory.