

Australian Government

Australian Institute of
Health and Welfare

Australia's babies: their health and wellbeing

Bulletin

Highlights

- In 2001, the estimated birth prevalence of neural tube defects was 0.5 per 1,000 births and for Down syndrome it was 1.2 per 1,000 births.
- Sudden infant death syndrome (SIDS) was the leading cause of infant deaths for the first four years of the period 1997–2001, but was no longer so by the fifth year. Deaths from SIDS have decreased from 11.4% of infant deaths in 1997 to 7.5% in 2001.
- The proportion of low birthweight (less than 2,500 grams) liveborn babies has remained relatively stable over the period from 1997 to 2001, but there has been an increase in the proportion of liveborn babies weighing 4,500 grams or more.
- The proportion of preterm (less than 37 weeks gestation) babies ranged from 7.3% to 7.9% over the period 1997–2001, and the proportion of term (37–41 weeks gestation) babies has remained stable. There was a decrease in the proportion of post-term (42–45 weeks gestation) babies over this period, from 2.1% to 1.7%.

Introduction

The AIHW has been reporting on the health and wellbeing of Australia's children since 1998. This bulletin complements the Institute's four comprehensive national reports in this area—*Australia's Children* (Moon et al. 1998; Al-Yaman et al. 2002) and *Australia's Young People* (Moon et al. 1999; Al-Yaman et al. 2003). These reports have covered childhood health conditions and injuries, major risk factors and determinants of health, child development and wellbeing.

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This bulletin on the health and wellbeing of Australia's babies is the first in a series to be published as part of a key national indicators project being undertaken by the AIHW. Three further bulletins and a major national report, *A Picture of Australia's Children 2005*, will be published over the next year.

This bulletin has been collated by the National Perinatal Statistics Unit, a collaborating unit of the AIHW. A broadly based advisory committee is providing advice to the Institute on the indicators and reporting framework. This work has been sponsored by the Australian Government Department of Health and Ageing.

This bulletin focuses on four selected topics—birthweight, gestational age, birth anomalies and infant mortality—and presents data for the 5-year period from 1997 to 2001.

Data sources

National Perinatal Data Collection

The National Perinatal Data Collection (NPDC) contains data provided by the states and territories on mothers and their babies. Data are collected on women having babies in hospitals, birth centres and the community. The data set includes information on both live births and stillbirths of at least 20 weeks gestation or 400 grams birthweight. NPDC data are presented in this bulletin in the sections on birthweight and gestational age.

Australian Bureau of Statistics mortality data

The Australian Bureau of Statistics (ABS) compiles and publishes reports on death registrations from data made available by the Registrar of Births, Deaths and Marriages in each state and territory. Data are presented on infant deaths, defined as liveborn infants dying at less than 1 year of age. The data are presented by year of death rather than by year of registration. The year of death may differ from the year of registration if, for example, the death occurred at the end of December, or if there has been a delay in the registration of the death. The causes of death are classified using the 10th Revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10).

Assisted conception data

The Assisted Conception Data Collection was compiled from data provided by all in-vitro fertilisation (IVF) and gamete intra-fallopian transfer (GIFT) units in Australia and New Zealand. Each IVF/GIFT unit reported summary data on treatment cycles for each year and notified pregnancies on a standard form to the National Perinatal Statistics Unit. The data set includes information on pregnancies of at least 20 weeks gestation. Only data provided by Australian IVF and GIFT units for births during 1997–2001 were used for this bulletin. A new collection was implemented in 2002, known as the Australian and New Zealand Assisted Reproduction Database.

Birth anomalies

The data presented on birth anomalies were provided by the states and the Australian Capital Territory from their birth defect registers and birth anomalies data collections. Data for the Northern Territory were not included because of concerns about data quality and case ascertainment. For Victoria, Western Australia and South Australia, data are for births and terminations of pregnancy occurring in 2001, with birth anomalies notified by 31 December 2002. This means that children up to 2 years of age are included. For New South Wales, the data are for births occurring in 2001 with birth anomalies notified by 1 year of age. For the other jurisdictions, the data are for births occurring in 2001 with birth anomalies notified during the perinatal period.

Data are presented for selected birth anomalies classified using the British Paediatric Association (BPA) Classification of Diseases which is compatible at the 4-digit level with the International Classification of Diseases, 9th Revision. For cases with more than one of the specified birth anomalies each birth anomaly was counted separately, so the number of birth anomalies is greater than the number of cases.

There is variability among the states and territories in the data sources used to identify birth anomalies and in the institutional structures and systems set up to manage birth anomalies notifications which results in variability in case ascertainment.

The birth prevalence of selected birth anomalies is presented for all states and territories (except as noted above, the Northern Territory). Birth prevalence refers to the prevalence of birth anomalies among babies born in 2001, regardless of when the birth anomaly was notified (e.g. 1 January to 31 December 2002). For the birth anomalies presented here, it is expected that case ascertainment would be similar among the states and territories as these birth anomalies are very apparent at birth. The numerator is live births and stillbirths with the specified birth anomaly. The denominator is all live births and stillbirths.

The total prevalence of selected birth anomalies is presented separately for Victoria, South Australia and Western Australia. These states have extended notification periods and similar processes and case ascertainment. The numerator for this measure is live births, stillbirths and terminations of pregnancy (<20 weeks gestation or <400g birthweight) with the specified birth anomaly. The denominator is live births and stillbirths. This denominator excludes terminations of pregnancy because accurate statistics on all terminations of pregnancy are not available for all jurisdictions and because fetuses from terminations in early pregnancy may not be examined for birth anomalies (South Australian Birth Defects Register 2003). This denominator would therefore lead to marginal overestimation of the total prevalence rate for birth anomalies.

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Birthweight

Birthweight is a key indicator of a baby's health status and also of their future health as adults. For babies, low birthweight is defined as a birthweight less than 2,500 grams, and very low birthweight as less than 1,500 grams. Low birthweight babies have a greater risk of poor health and dying, often require a longer period of hospitalisation after birth and are more likely to develop significant disabilities (Mick et al. 2002; Leeson et al. 2001). A baby may be small due to being born early (preterm), or it may be small for its gestational age (intrauterine growth retardation (IUGR)). The factors contributing to low birthweight include socioeconomic status, size of parents and age of mother, number of babies previously born, mother's nutritional status, smoking and alcohol intake and illness during pregnancy (Chan et al. 2001; Horter et al. 1997; Kramer 1998).

Over the period 1997–2001, 6.5% of all liveborn and stillborn babies were of low birthweight. A much greater proportion of stillborn babies than liveborn babies were of low birthweight—55.4% compared with 6.1%.

Table 1 shows that the proportion of liveborn low and very low birthweight babies has remained stable over this period. There has been an 11.8% increase in the proportion of liveborn babies weighing 4,500 grams or more over this period. In 2001, the most recent year that data are available, 6.1% of liveborn babies were low birthweight (less than 2,500 grams), 91.9% weighed 2,500–4,499 grams, and 1.9% weighed 4,500 grams or more.

Table 1: Proportion of liveborn babies, by birthweight category, 1997–2001

Birthweight (grams)	1997	1998	1999	2000	2001
Less than 1,500	1.0	1.0	1.0	1.1	1.0
1,500–2,499	5.1	5.1	5.1	5.2	5.1
2,500–4,499	92.1	92.0	91.9	91.7	91.9
4,500 and over	1.7	1.8	1.8	1.9	1.9
Not stated	0.1	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0

In 2001, the mean birthweight of all liveborn and stillborn babies was 3,367 grams. For live births, the mean birthweight was 3,378 grams and for stillbirths 1,645 grams. Over the period 1997–2001, the mean birthweight for all births was 3,366 grams. For live births, the mean birthweight was 3,376 grams. Overall, male babies remained heavier than female babies, with mean birthweights of 3,436 grams and 3,312 grams respectively for live births.

The mean birthweights of liveborn babies of mothers identified as Aboriginal or Torres Strait Islander (3,177 grams) were lower than those reported for babies of mothers identified as non-Indigenous (3,381 grams) during 1997–2001. The proportion of

liveborn, low birthweight babies born to mothers identified as Aboriginal or Torres Strait Islander was 12.1% in 1997–2001, compared with 6.0% for babies of non-Indigenous mothers.¹

Over the period 1997–2001, liveborn babies born after assisted reproductive technology (ART) had a lower mean birthweight compared to all liveborn babies (2,934 grams compared with 3,376 grams). This is partly due to the higher proportion of multiple births in ART mothers than in all mothers (35.0% compared with 3.0%).

Table 2 details characteristics of liveborn singletons by birthweight category. Mothers aged less than 20 years were more likely than mothers in the older age groups to have singleton babies of low birthweight (7.5% compared to 4.5% and 5.0%, respectively). Mothers aged 35 years and over were most likely to have singletons of 4,500 grams or more (2.1%). Mothers who had given birth previously were less likely to have a low birthweight baby (4.1%) compared with primiparous women (5.6%).

Table 2: Selected characteristics of liveborn singletons by birthweight category, 1997–2001

	400–1,499 grams		1,500–2,499 grams		2,500–4,499 grams		4,500 grams and over		Not stated		Total No.
	No.	%	No.	%	No.	%	No.	%	No.	%	
Maternal age (years)											
Less than 20	753	1.2	3,898	6.3	56,492	91.3	651	1.1	47	0.1	61,841
20–34	6,656	0.7	36,936	3.8	903,361	93.5	18,210	1.9	608	0.1	965,771
35 and over	1,728	0.9	8,253	4.1	186,666	92.8	4,365	2.1	153	0.1	201,165
Not stated	3	0.9	7	2.1	314	92.9	2	0.6	12	3.5	338
Parity^(a)											
Primiparous	4,379	0.9	23,682	4.7	463,947	93.0	6,437	1.3	361	0.0	498,806
Multiparous	4,761	0.6	25,412	3.5	682,884	93.5	16,791	2.3	459	0.0	730,307
Not stated	0	0.0	0	0.0	2	100.0	0	0.0	0	0.0	2
Baby's sex											
Males	4,764	0.8	22,711	3.6	587,293	93.0	16,039	2.5	403	0.1	631,210
Females	4,369	0.7	26,369	4.4	559,366	93.6	7,186	1.2	405	0.1	597,695
Indeterminate/ not stated	7	3.3	14	6.7	174	82.9	3	1.4	12	5.7	210
Total	9,140	0.7	49,094	4.0	1,146,833	93.3	23,228	1.9	820	0.1	1,229,115

(a) Parity refers to the number of previous pregnancies resulting in live births or stillbirths. A primiparous woman has had no previous pregnancies resulting in a live birth or stillbirth; a multiparous woman has had at least one pregnancy resulting in a live birth or stillbirth.

1. Note that Indigenous figures exclude Tasmania. Please see *Australia's Mothers and Babies 2001* (Laws & Sullivan 2004) for further details.

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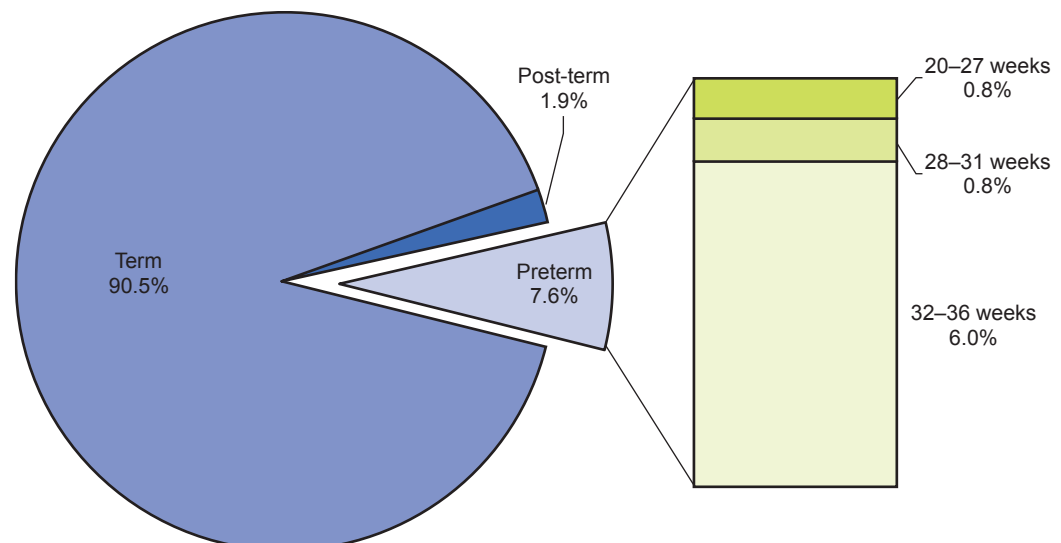
There was also a higher proportion of male liveborn singletons in the 4,500 grams or more birthweight category (2.5%), compared with female singletons (1.2%) in the 1997–2001 period (Table 2).

The most favourable pregnancy outcome is to have a liveborn term singleton baby of normal birthweight. The mean birthweight of liveborn term singleton babies (37 weeks gestation or more) was 3,465 grams in 1997–2001, compared with 3,376 grams for all liveborn babies. Male term singleton babies were heavier than female babies, with mean birthweights of 3,531 grams and 3,396 grams respectively. Male preterm singleton babies were heavier than female babies, with mean birthweights of 2,381 grams and 2,293 grams respectively. The proportion of low birthweight was higher for liveborn ART singletons than for all liveborn singletons (9.1% compared with 4.7%).

Gestational age

Gestational age is a measure of the duration of pregnancy in completed weeks. Gestational age is recorded on the mother's record; therefore, all babies of a multiple pregnancy are recorded as having the same gestational age as the first born baby. Data are reported here for babies rather than mothers, which means that the gestational age of the first born baby of a multiple birth is reported for each baby of the multiple birth. Babies are categorised as either preterm (less than 37 weeks gestation), term (37–41 weeks) or post-term (42–45 weeks). Babies born at less than 32 weeks gestation are considered to be very preterm, and this category is a subset of the preterm category. Preterm birth is a major risk factor for perinatal mortality and disability, and results in increased hospital inpatient admissions and costs (Joseph et al. 1998; Petrou et al. 2003; Theunissen et al. 2000). Factors contributing to preterm birth include twin and higher order multiple pregnancies and obstetrical intervention (Joseph et al. 1998).

Figure 1: Baby's gestational age, 1997–2001



Over the period 1997–2001, 90.5% of babies were born at term, 7.6% were preterm and 1.9% post-term (Figure 1). The proportion of term babies remained stable between 1997 and 2001, and the proportion of preterm babies ranged from 7.3% in 1997 to 7.9% in 2000. There was a decrease in the proportion of post-term babies over this period, from 2.1% in 1997, to 1.7% in 2001 (Table 3).

The proportions of preterm and very preterm births of all liveborn and stillborn babies of mothers identified as Aboriginal or Torres Strait Islander (13.4% and 3.3% respectively) were markedly higher than those reported for babies of mothers identified as non-Indigenous (7.4% and 1.5% respectively) during 1997–2001. The proportion of liveborn preterm births to mothers identified as Aboriginal or Torres Strait Islander was 12.5% in 1997–2001.

In 2001, 7.7% of all babies were born preterm, 90.6% were born at term and 1.7% were born post-term (Table 3).

The overall proportions of liveborn preterm and very preterm babies were 7.1% and 1.1% respectively, in the period 1997–2001 (Table 4). The proportion of liveborn preterm babies was 5.7% for singletons compared to 49.9% for twins and 97.7% for higher order multiples.

Table 3: Baby's gestational age, by year, 1997–2001

Gestational age (weeks)	1997		1998		1999		2000		2001	
	No.	%	No.	%	No.	%	No.	%	No.	%
20–27	1,957	0.7	1,870	0.7	2,017	0.8	2,064	0.8	2,085	0.8
28–31	2,044	0.8	2,071	0.8	2,074	0.8	2,191	0.9	2,051	0.8
32–36	14,848	5.8	15,226	6.0	15,677	6.1	15,991	6.2	15,592	6.1
37–41	232,579	90.5	231,142	90.5	232,950	90.5	232,286	90.3	230,384	90.6
42–45	5,435	2.1	4,899	1.9	4,536	1.7	4,642	1.8	4,184	1.7
Other/not stated	169	0.1	117	0.1	190	0.1	64	0.0	30	0.0
Total	257,032	100.0	255,325	100.0	257,444	100.0	257,238	100.0	254,326	100.0

Note: Very preterm=20–31 weeks, Preterm=20–36 weeks, Term=37–41 weeks and Post-term=42–45 weeks. Babies with a gestational age of less than 20 weeks or greater than 45 weeks were classified as 'Other'.

Table 4: Baby's gestational age by birth outcome, 1997–2001

Birth outcome	20–27 weeks		28–31 weeks		32–36 weeks		37–41 weeks		42–45 weeks		Other/not stated		Total
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Liveborn	5,559	0.4	9,469	0.7	75,466	6.0	1,153,490	91.0	23,562	1.9	444	0	1,267,990
Stillborn	4,392	49.4	897	10.1	1,460	16.4	2,040	23.0	59	0.7	35	0.4	8,883
Not stated	42	0.9	65	1.5	408	9.1	3,811	84.8	75	1.7	91	2.0	4,492
Total	9,993	0.8	10,431	0.8	77,334	6.0	1,159,341	90.5	23,696	1.8	570	0.1	1,281,365

Note: Very preterm=20–31 weeks, Preterm=20–36 weeks, Term=37–41 weeks and Post-term=42–45 weeks. Babies with a gestational age of less than 20 weeks or greater than 45 weeks were classified as 'Other'.



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Duration of pregnancy

Duration of pregnancy is the length of the pregnancy in completed weeks. It is recorded on the mother's record and is for each confinement, rather than for each baby.

During the period 1997–2001, preterm births occurred in 6.9% of all confinements. Confinements with a duration of pregnancy of less than 37 weeks at delivery were more likely to occur in teenage mothers (9.1%) than in mothers aged 20–34 years (6.6%), and 35 years and over (7.8%). Mothers aged 35 years and over were least likely to have a post-term delivery (1.7%). Mothers who had not given birth previously were more likely to have a preterm delivery than multiparous women (7.8% compared with 6.3%).

Prevalence of birth anomalies

The estimated birth prevalence of selected birth anomalies is presented in Table 5 and the estimated total prevalence in Table 6 (see Box 1 for definitions of the selected birth anomalies). In 2001, the prevalence of neural tube defects among liveborn and stillborn babies was 0.5 per 1,000 births. Of the neural tube defects, spina bifida had the highest birth prevalence of 0.3 per 1,000 births. Abdominal wall defects had a birth prevalence of 0.5 per 1,000 births. The highest rate was for gastroschisis (0.3 per 1,000 births). The birth prevalence of Down syndrome was 1.2 per 1,000 births (Table 5).

Box 1: Definitions of selected birth anomalies

Anencephalus: Total or partial absence of the cranial vault, the covering skin and the brain tissue.

Diaphragmatic hernia : Herniation of the abdominal organs into the thorax through a defect in the diaphragm.

Spina bifida: Non-closure of the spine resulting in herniation or exposure of the spinal cord and/or meninges.

Encephalocele: Cystic expansion (herniation) of meninges and brain tissue outside the cranium, covered by normal or atrophic skin.

Renal agenesis or dysgenesis: Bilateral or unilateral absence of the kidneys or severe dysplasia.

Exomphalos: Herniation of the abdominal contents through umbilical insertion and covered by membrane which may or may not remain intact.

Gastroschisis: Visceral herniation through an abdominal wall defect, lateral to an intact umbilical cord.

Down syndrome: Trisomy 21—additional chromosome 21.

Source: Riley & Halliday (2004).

Table 6 presents data for selected states (Victoria, Western Australia and South Australia). The estimated birth prevalence of selected birth anomalies is presented as in Table 5 as well as the estimated total prevalence of these birth anomalies. This measure is useful for evaluating the effectiveness of primary prevention and prenatal screening strategies over time.

In 2001, the estimated birth prevalence of neural tube defects was 0.6 per 1,000 births. The estimated total prevalence was markedly higher at 1.4 per 1,000 births. Of the neural tube defects, spina bifida had the highest birth prevalence—0.4 per 1,000 births. Spina bifida and anencephalus had the highest total prevalence (0.6 per 1,000 births respectively) (Table 6).

Table 5: Estimated birth prevalence of selected birth anomalies, Australia, 2001^(a)

ICD-9-BPA code ^(c)	Birth prevalence (live births and stillbirths) ^(b)		
	Birth anomaly	Number of birth anomalies	Rate per 1,000 births
Neural tube defects			
740.00–742.09	Neural tube defects	115	0.5
740.00–740.29 ^(d)	Anencephalus	24	0.1
741.00–741.99	Spina bifida	72	0.3
742.00–742.09	Encephalocoele	19	0.1
Renal agenesis or dysgenesis			
753.00–753.01	Renal agenesis or dysgenesis	126	0.5
Anomalies of the abdominal wall			
756.70–756.79	Anomalies of abdominal wall	130	0.5
756.70	Exomphalos	45	0.2
756.71	Gastroschisis	77	0.3
Diaphragmatic hernia			
756.61	Diaphragmatic hernia	70	0.3
Down syndrome			
758.00–758.09	Down syndrome	289	1.2

(a) Data for all states and the Australian Capital Territory are included. Data for the Northern Territory are not included because of concerns about data quality and case ascertainment. For Victoria, Western Australia and South Australia, births occurring in 2001 with birth anomalies notified by 31 December 2002 are included. For New South Wales births occurring in 2001 with birth anomalies notified before 1 year of age are included. For the other jurisdictions births occurring in 2001 with birth anomalies notified in the perinatal period are included.

(b) Numerator: Live births and stillbirths ≥ 20 weeks gestation or ≥ 400 g birthweight with the specified birth anomaly.
Denominator: Live births and stillbirths ≥ 20 weeks gestation or ≥ 400 g birthweight.

(c) Classified using the British Paediatric Association Classification of Diseases (British Paediatric Association 1979).

(d) Includes 740.1 Craniorachischisis and 740.20–740.29 Iniencephaly.

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A decline of 35–45% in the prevalence of neural tube defects since 1996 has been reported by the Victorian, Western Australian and South Australian birth defect registers. Before this, the rate was steady at about 1.6–2.0 per 1,000 births (Bower 2003). This decline has been associated with increased peri-conceptional folic acid intake through the fortification of selected foods and through health promotion campaigns aimed at encouraging women to take folate supplements before and during early pregnancy (Owen et al. 2000; Chan et al. 2001; Bower et al. 2002).

For Down syndrome, the total prevalence was markedly higher than the birth prevalence (2.5 per 1,000 births compared with 1.1 per 1,000 births) (Table 6).

Table 6: Estimated total prevalence of selected birth anomalies (including terminations of pregnancy), Victoria, Western Australia and South Australia, 2001^(a)

ICD-9-BPA code ^(c)	Birth anomaly	Birth prevalence (live births and stillbirths) ^(b)		Total prevalence (live births, stillbirths and terminations of pregnancy) ^(b)	
		Number of birth anomalies	Rate per 1,000 births	Number of birth anomalies	Rate per 1,000 births
Neural tube defects					
740.00–742.09	Neural tube defects	58	0.6	142	1.4
740.00–740.29 ^(d)	Anencephalus	9	0.1	61	0.6
741.00–741.99	Spina bifida	39	0.4	66	0.6
742.00–742.09	Encephalocele	10	0.1	15	0.1
Renal agenesis or dysgenesis					
753.00–753.01	Renal agenesis or dysgenesis	51	0.5	59	0.6
Anomalies of the abdominal wall					
756.70–756.79	Anomalies of abdominal wall	56	0.5	72	0.7
756.70	Exomphalos	22	0.2	35	0.3
756.71	Gastroschisis	32	0.3	33	0.3
Diaphragmatic hernia					
756.61	Diaphragmatic hernia	24	0.2	29	0.3
Down syndrome					
758.00–758.09	Down syndrome	119	1.1	266	2.5

(a) Data for Victoria, Western Australia and South Australia are included. Births and terminations of pregnancy occurring in 2001 with birth anomalies notified by 31 December 2002 are included.

(b) Numerator: Prevalence (births)—live births and stillbirths ≥ 20 weeks gestation or ≥ 400 g birthweight with the specified birth anomaly. Prevalence (births and terminations of pregnancy)—live births and stillbirths ≥ 20 weeks gestation or ≥ 400 g birthweight and terminations of pregnancy < 20 weeks gestation or < 400 g birthweight with the specified birth anomaly.

Denominator: live births and stillbirths ≥ 20 weeks gestation or ≥ 400 g birthweight.

(c) Classified using the British Paediatric Association Classification of Diseases (British Paediatric Association 1979).

(d) Includes 740.1 Craniorachischisis and 740.20–740.29 Iniencephaly.

Infant mortality

Infant mortality is an important indicator for monitoring the health status of children as most childhood deaths occur in the first year of life. It is defined as the number of liveborn babies dying in the first year of life over the population of liveborn babies in the same year (ABS 2003).

Data presented here are for registered deaths of liveborn babies dying within the first year of life. The data are presented by year of death from 1997 to 2001. Table 7 details the ten leading causes of the 6,564 reported infant deaths over this period. The ten leading causes of death accounted for only 35.6% of all infant deaths, showing the variability in causes of infant deaths.

During the period 1997–2001, the leading cause of death for infants was *sudden infant death syndrome (SIDS)* (ICD-10 code R95) (10.0%), followed by *fetus and newborn affected by other forms of placental separation and haemorrhage* (ICD-10 code P021) (4.6%) and *fetus and newborn affected by multiple pregnancy* (twin and higher order multiple births) (ICD-10 code P015) (4.1%) (Table 7). Of the 6,564 infant deaths reported during the period, 670 (10.2%) were deaths of Aboriginal or Torres Strait Islander infants. Extremely low birthweight accounted for 3.1% of all deaths in Aboriginal or Torres Strait Islander infants.

The leading cause of death in 2001 was *fetus and newborn affected by multiple pregnancy*. The proportion of deaths in this category has increased from 2.6% in 1997 to 9.1% in 2001.

Table 7: Top ten leading causes of infant mortality, 1997–2001

ICD-10 code	Cause of death	Number of deaths	Per cent
R95	Sudden infant death syndrome	658	10.0
P021	Fetus and newborn affected by other forms of placental separation and haemorrhage	304	4.6
P015	Fetus and newborn affected by multiple pregnancy	269	4.1
P011	Fetus and newborn affected by premature rupture of membranes	248	3.8
P027	Fetus and newborn affected by chorioamnionitis	187	2.9
P010	Fetus and newborn affected by incompetent cervix	165	2.5
P220	Respiratory distress syndrome of newborn	142	2.2
Q249	Congenital malformation of the heart, unspecified	127	1.9
Q336	Hypoplasia and dysplasia of lung	127	1.9
P219	Birth asphyxia, unspecified	108	1.7

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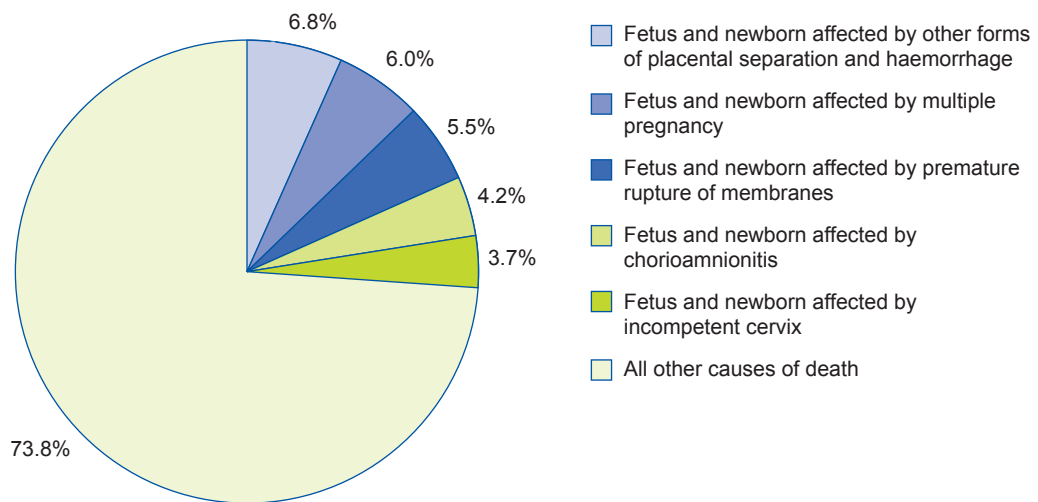
Sudden infant death syndrome (SIDS)

There was a decrease in the proportion of infant deaths from SIDS over the 5-year period, from 11.4% in 1997, to 7.5% in 2001. In 2001, SIDS was no longer the overall leading cause of death for infants. However, SIDS remained the leading cause of postneonatal deaths (infants aged 28 days to 1 year).

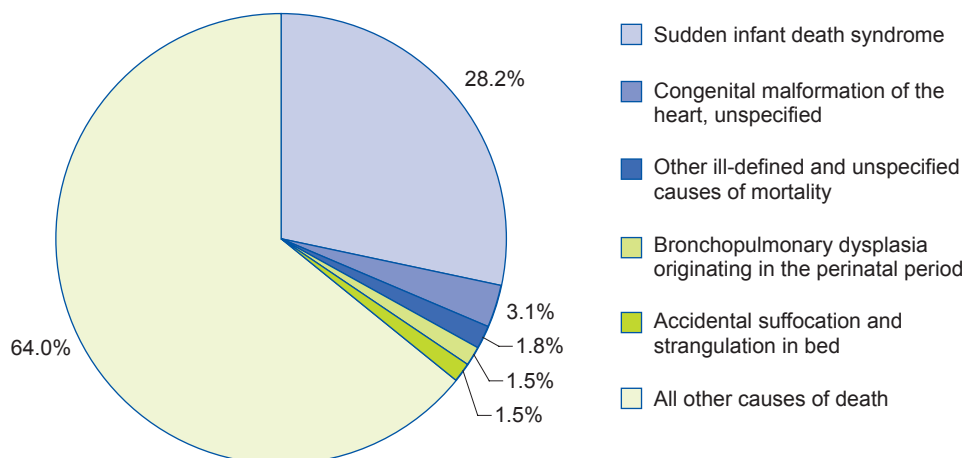
Over the period 1997–2001, the leading cause of postneonatal deaths was SIDS, accounting for 28.2% of all deaths (Figure 2). This was followed by *congenital malformations of the heart, unspecified* (ICD-10 code Q249) (3.1%). For neonatal deaths (babies less than 28 days old), the leading cause of death was *fetus and newborn affected*

Figure 2: Leading causes of neonatal and postneonatal deaths, 1997–2001

Neonatal deaths



Postneonatal deaths



by other forms of placental separation and haemorrhage (6.8%), followed by fetus and newborn affected by multiple pregnancy (6.0%) and fetus and newborn affected by premature rupture of membranes (ICD-10 code P011) (5.5%).

The leading cause of death for both Aboriginal or Torres Strait Islander and other infants was SIDS; however, a higher proportion of Aboriginal or Torres Strait Islander infants died from SIDS (16.6%) compared with other infants (9.3%).

References

- Al-Yaman F, Bryant M, Sargeant H 2002. Australia's children: their health and wellbeing 2002. Cat. no. PHE 36. Canberra: AIHW.
- Al-Yaman F, Sargeant H, Bryant M 2003. Australia's young people: their health and wellbeing 2003. AIHW Cat. no. PHE 50. Canberra: AIHW.
- ABS (Australian Bureau of Statistics) 2003. Causes of death Australia 2002. Cat. no. 3303.0. Canberra: ABS.
- Bower C, Ryan A, Rudy E, Miller M 2002. Trends in neural tube defects in Western Australia. *Australian and New Zealand Journal of Public Health* 26:150–1.
- Bower C 2003. Fortification of food with folic acid and the prevention of neural tube defects. *The New Zealand Medical Journal* 116. Viewed 15 September 2004, <<http://www.nzma.org.nz/journal/113-1168/292/>>.
- British Paediatric Association 1979. *British Paediatric Association Classification of Diseases*. London: British Paediatric Association.
- Chan A, Keane RJ & Robinson JS 2001. The contribution of maternal smoking to preterm birth, small for gestational age and low birthweight among Aboriginal and non-Aboriginal births in South Australia. *Medical Journal of Australia* 174(8):389-93.
- Chan A, Pickering J, Haan EA, et al. 2001. Folate before pregnancy: the impact on women and health professionals of a population-based health promotion campaign in South Australia. *Medical Journal of Australia* 174:631–6.
- Horter BL, Victoria CG, Menezes AM, Halpern R & Barros FC 1997. Low birthweight, preterm births and intrauterine growth retardation in relation to maternal smoking. *Paediatric and Perinatal Epidemiology* 11:140–151.
- Joseph KS, Kramer MS, Marcoux S, Ohlsson A, Wen SW, Allen A, Platt R 1998. Determinants of preterm birth rates in Canada from 1981 through 1983 and from 1992 through 1994. *New England Journal of Medicine* 339(20):1434–1439.
- Kramer MS 1998. Socioeconomic determinants of intrauterine growth retardation. *European Journal of Clinical Nutrition* 52(S1):S29–S33.
- Laws PJ & Sullivan EA 2004. Australia's mothers and babies 2001. AIHW cat. no. PER 25. Sydney: AIHW National Perinatal Statistics Unit (Perinatal Statistics Series No. 13).



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Leeson CP, Kattenhorn M, Morley R, Lucas A, Deanfield JE 2001. Impact of low birth weight and cardiovascular risk factors on endothelial function in early adult life. *Circulation* 103(9):1264–1268.

Mick E, Biederman J, Prince J, Fischer MJ, Faraone SV 2002. Impact of low birth weight on attention-deficit hyperactivity disorder. *Journal of Developmental & Behavioral Pediatrics* 23(1):16-22.

Moon L, Meyer P, Grau J 1999. Australia's young people: their health and wellbeing 2003. Cat. no. PHW 19. Canberra: AIHW.

Moon L, Rahman N, Bhatia K 1998. Australia's children: their health and wellbeing 1998. AIHW Cat. no. PHE 7. Canberra: AIHW.

Owen TJ, Halliday JL, Stone CA 2000. Neural tube defects in Victoria, Australia: potential contributing factors and public health implications. *Australian and New Zealand Journal of Public Health* 24:584–589.

Petrou S, Mehta Z, Hockley C, Cook-Mozaffari P, Henderson J, Goldacre M 2003. The impact of preterm birth on hospital inpatient admissions and costs during the first 5 years of life. *Pediatrics* 112(6 Pt 1):1290–1297.

Riley M & Halliday J 2004. Birth defects in Victoria 2001–2002. Victorian Perinatal Data Collection Unit. Victorian Government Department of Human Services. Melbourne.

South Australian Birth Defects Register 2003. 2001 annual report. Adelaide: Women's and Children's Hospital.

Theunissen NC, den-Ouden AL, Meulman JJ, Koopman HM, Verloove-Vanhorick SP, Wit JM 2000. Health status development in a cohort of preterm children. *Journal of Pediatrics*. 137(4):534–539.



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