Australia's babies: their health and wellbeing

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

This bulletin on

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

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

liveborn, low birthweight babies born to mothers identified as Aboriginal

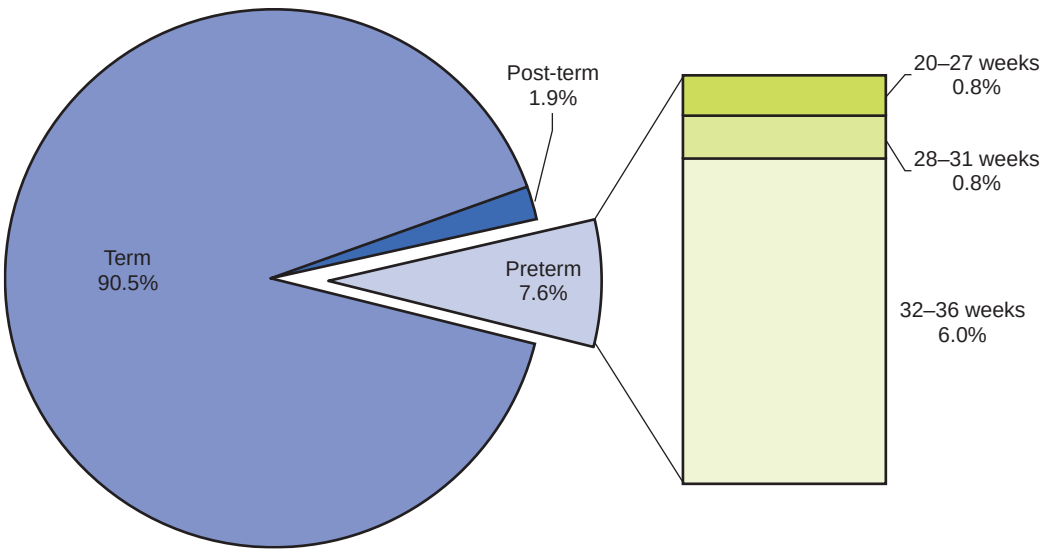
There was also a higher proportion of male liveborn singletons in the 4,500 grams or more birthweight category (2.5%), compared with female singletons (1.2%) in the 1997–2001 period (Table 2).

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%).

Dbpq^qflk^ig^db

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).

Cfdrobg.7g?^_vspgdbpq^qflk^ig^db)g.664¬/---.



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

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]

		Birth prevalence (live births and stillbirths)[b]	
ICD-9-BPA code[c]	**Birth anomaly**	**Number of birth anomalies**	**Rate per 1,000**

Australia's babies: their health and wellbeing

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).

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

Praabkêfkc^kqêab^qeêpvkaol j bê%PFAP&

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 hear* ך *gM* *cause*

po Ğ ؞ *ǩ da* غجـ يي *c* ӂ *ṙ*

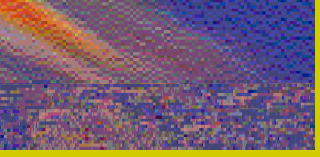
by other forms of placental separation and haemorrhage (6.8%), followed by *fetus and newborn affected by multiple pregnancy* (6.0%) and *fetus and newborn affected by premature rupture of membranes* (ICD-10 code P011) (5.5%).

The leading cause of death for both Aboriginal or Torres Strait Islander and other infants was SIDS; however, a higher proportion of Aboriginal

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



This publication is part of the Australian Institute of Health and Welfare's Bulletin series. A complete list of the Institute's publications is available from the Media and Publishing Unit, Australian Institute of Health and Welfare, GPO Box 570, Canberra ACT 2601, or via the Institute's web site (http://www.aihw.gov.au).

AIHW Cat. No. AUS 54

ISSN 1446-9820

ISBN 1 74024 430 3

Suggested citation

AIHW National Perinatal Statistics Unit 2004. Australia's babies: Their health and wellbeing. Bulletin no. 21. AIHW cat. no. AUS 54. Canberra: AIHW NPSU.

Australian Institute of Health and Welfare

Any enquiries about or comments on this publication should be directed to:

AIHW National Perinatal Statisics Unit
Sydney Children's Hospital
Level