



Australia's babies: their health and wellbeing

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