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Number 9

# **Australia's mothers and babies 1997**

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# Abbreviations

ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AIHW	Australian Institute of Health and Welfare
g	gram
ICD-9	International Classification of Diseases, 9th Revision
ICD-10	International Classification of Diseases, 10th Revision
IPPR	Intermittent Positive Pressure Respiration
LMP	last menstrual period
na	not available
NPSU	National Perinatal Statistics Unit
NSW	New South Wales
NT	Northern Territory
Qld	Queensland
SA	South Australia
Tas	Tasmania
UNSW	University of New South Wales
Vic	Victoria
WA	Western Australia
WHO	World Health Organization

# Highlights

- In 1997, 256,198 babies born to 252,370 mothers were notified to perinatal data collections in the States and Territories. More mothers had their babies in birth centres than in previous years and home births decreased compared to 1996.
- The average age of all mothers in 1997 was 28.7 years, and 26.8 years for those having their first baby, continuing the upward trend in recent years. There were 13,137 teenage mothers (5.2% of all mothers), of whom 4,101 were aged 17 years or younger.
- Although some women are deferring childbearing, in 1997 only 1 in 12 mothers had their first baby at age 35 years or older. Nearly one in 7 mothers with private health insurance were in this group, compared with only 1 in 18 mothers who did not have private health insurance.
- There were 8,066 Indigenous mothers (3.2% of all mothers), of whom 2,486 gave birth in Queensland, 1,842 in New South Wales, 1,539 in Western Australia, 1,197 in the Northern Territory, with smaller numbers in the other States and the Australian Capital Territory. The average age of Indigenous mothers was 24.3 years and there was a high proportion of teenage mothers (22.9%).
- The proportion of mothers who were born in a country other than Australia was 22.8% in 1997.
- Multiple pregnancies accounted for 1.4% of all confinements and included 3,598 twin pregnancies, 102 triplet pregnancies, and 9 higher order pregnancies.
- In 1997, more than 1 in 5 (20.3%) births was by caesarean section. South Australia (23.5%) had the highest caesarean rate in 1997 and New South Wales (18.2%) the lowest. Caesarean rates were higher among older mothers, those having their first baby, and those with private health insurance. Mothers aged 35–39 years who were privately insured and having their first baby had a caesarean rate of 40.7%.
- More mothers had relatively short postnatal stays in hospital in 1997 than in previous years. The proportion who stayed less than 2 days increased from 3.2% in 1991 to 9.8% in 1997, while the proportion of those staying between two and four days increased from 35% to 51.6% in the same period. Mothers without private health insurance had shorter postnatal stays than those with private health insurance.
- Low birthweight (less than 2,500 g) occurred in 16,800 (6.6%) babies in 1997, slightly higher than in other recent years. The mean birthweight of babies of Indigenous mothers was 3,146 g, 210 g less than the mean for all births; 13.1% of Indigenous babies had a low birthweight, almost twice the national proportion.
- Fetal, neonatal and perinatal death rates were 6.0, 3.2 and 9.2 per 1,000 births, respectively, in 1997. Rates remain low, having steadily declined for the past two decades. The perinatal death rate of twins was 4.4 times higher, and of other multiple births 8.5 times higher, than the death rate of singleton babies.
- The main causes of perinatal deaths based on the Whitfield classification were spontaneous preterm birth, unexplained intrauterine fetal death, and fetal abnormality. These three groups of causes accounted for at least half of all perinatal deaths in 1997 in the States where data were available (Queensland, Western Australia, South Australia).

# 1 Introduction

This report has been prepared by the Australian Institute of Health and Welfare's National Perinatal Statistics Unit in conjunction with the State and Territory Health Departments. The 1997 national data on births is based upon notifications to the perinatal data collection in each State and Territory.

The major purposes of these perinatal collections are:

- to describe for all births the demographic and pregnancy characteristics of mothers, and the characteristics and outcomes of their babies;
- to identify risk factors contributing to adverse outcomes of mothers, their pregnancies, and the health status of their babies;
- to assist in the planning, implementation and evaluation of health services for pregnant women and their babies;
- to enable analysis of national data, and comparison of characteristics and outcomes between States and Territories;
- to analyse perinatal and infant deaths and other outcomes, by linking perinatal data to other relevant data;
- to monitor specific outcomes such as congenital malformations;
- to conduct epidemiological studies of health problems among pregnant women and babies.

The report also contains national data on trends in perinatal deaths.

## 1.1 Data sources

The perinatal collections are based on a national perinatal minimum data set which has been revised on several occasions since it was first introduced in 1979. Each State and Territory has a perinatal data collection in which midwives and other staff, using information obtained from mothers and from hospital or other records, complete notification forms for each birth. The information collected includes characteristics of the mother; previous pregnancies, the current pregnancy; labour, delivery and the puerperium; and the baby's birth status (live birth or stillbirth), sex, birthweight, Apgar scores and outcome. Data processing, analysis, and publication of reports are undertaken by each State and Territory health authority. In Tasmania, the Department of Obstetrics and Gynaecology at the University of Tasmania has run the perinatal collection since 1974 and a revised perinatal collection started there in 1995. Each State and Territory provided data in an electronic format to the Australian Institute of Health and Welfare (AIHW) National Perinatal Statistics Unit at the University of New South Wales.

Due to data editing and subsequent updates of State and Territory databases, the figures in this report may differ slightly from those in reports published by the States and Territories.

The Australian Bureau of Statistics (ABS) compiles statistics and publishes reports on registrations of live births and perinatal deaths from data made available by the Registrar of Births, Deaths and Marriages in each State and Territory. The ABS now reports the perinatal



deaths of babies of at least 400 g or 20 weeks gestation where birthweight is unknown. This inclusion criteria differs from the World Health Organisation (WHO) definition of 500 g, or 22 weeks gestation where birthweight is unknown, as reported previously. Data obtained from ABS and its published reports were used to analyse trends and variations in perinatal deaths at the lower 400 g or 20 weeks gestation where birthweight unknown criteria, in the period from 1973 to 1997.

## **1.2 Tasmanian perinatal data collection**

The Tasmanian perinatal collection data for 1997 was incomplete at the time of data submission. This was due to one tertiary-level hospital's data not being fully available to the Tasmanian perinatal collection. The NPSU Management Advisory Committee, in consultation with the Tasmanian Department of Health and Human Services, decided to proceed with the inclusion of the incomplete Tasmanian data in the 1997 Australia's mothers and babies report. Therefore, Tasmanian and Australian totals are underreported by approximately 800 confinements in the 1997 report. This represents approximately 13% of all Tasmanian, and 0.3% of all Australian, confinements in 1997. Although the absolute levels of data aggregates are underreported, the relative proportions have been minimally effected.

## **1.3 Perinatal minimum data set and definitions**

The national perinatal minimum data set has data items on demographic characteristics of the mother; previous pregnancies; the current pregnancy; labour, delivery and the puerperium; and the baby, including birth status, sex, birthweight, Apgar scores, resuscitation, neonatal morbidity, and congenital malformations. The National Perinatal Data Development Committee, which replaced the National Perinatal Data Advisory Committee in 1998, recommends definitions for perinatal data items to the National Health Data Committee and the National Health Information Management Group. Current definitions are included in the National Health Data Dictionary version 8.0 (National Health Data Committee 1999).

## **1.4 Criteria**

Tabulated data in this report are based on births that occurred in each State and Territory in 1997. Because of differences in data items, and varying practices for coding the mother's place of residence if she lived in a State or Territory other than that in which the birth occurred, it is presently not possible to analyse the perinatal data according to region of residence. Notification forms are completed for all births of 20 weeks or more gestation, or a birthweight of 400 g or more.

## **1.5 Data quality**

Each State and Territory perinatal data group constantly requests further information on missing or doubtful data items from hospitals and homebirth practitioners. Edit checks, and summaries of data provided in reports to individual hospitals, enable additional review of

data quality. Most States and Territories have also conducted validation studies of the accuracy of their data.

The main limitations of the perinatal collections are for data items on maternal medical conditions, obstetric complications, and neonatal morbidity. In some instances, clinical diagnoses may be recorded without reference to specific definitions. States and Territories also have different practices in collecting these clinical diagnoses, either by recording each specified diagnosis or by including checklists of the more common diagnoses.

## **1.6 Scope of report**

Until all State and Territory perinatal collections are linked to registrations of perinatal deaths, these collections cannot provide national data on perinatal mortality. Annual reports based on registrations of perinatal deaths are published by the Australian Bureau of Statistics. These data have been used to examine trends in perinatal mortality (Tables A55–A69). Cause of perinatal death data for selected States using a modified Whitfield are also presented (Table A77).

Notifications of congenital malformations from the perinatal collections are supplemented by other information from perinatal death certificates, autopsy reports, cytogenetic laboratories, children's hospitals and notifications of induced abortions. Separate reports on congenital malformations are published by the AIHW National Perinatal Statistics Unit.

## **1.7 State and Territory perinatal reports**

Reports based on each State or Territory perinatal collection are published by State and Territory health authorities and by the Department of Obstetrics and Gynaecology of the University of Tasmania (Bourne & Kee 1998; Chan et al. 1999; Gee 1998; Marsden 1998; d'Espaignet et al. 1997; The Consultative Council on Obstetric and Paediatric Mortality and Morbidity 1998; Taylor et al. 1998; Queensland Health 1999).

## 2 International comparisons

### 2.1 Introduction

Perinatal and infant mortality rates are often used internationally as indicators of social and economic wellbeing. Although such figures are useful for general comparisons, it must be noted that definitions of perinatal and infant mortality may vary between countries, as may the extent of ascertainment. The lack of available comparable data, particularly in developing countries, limits the extent of international reporting. The following two tables compare Australia in terms of the international reporting of perinatal and infant mortality. These rates are estimates reported by the World Health Organisation (WHO 1999). This information should not be compared to data from within Australia since, with the exception of infant mortality, *differing definitions* are in use. International comparisons of mortality tend to focus upon infant mortality rather than neonatal or perinatal mortality.

### 2.2 Perinatal mortality rates

The perinatal mortality rates presented in Table 1 are based on babies dying between 28 weeks gestation and 1 week of age. This time frame is based upon a definition of perinatal as "the period of prenatal existence after viability is reached, the duration of labour, and the early part of extra-uterine life", which was the definition endorsed by the conference for the eighth revision of the International Classification of Diseases (United Nations, 1996, p.76). The conference of the ninth revision recommended different definitions for national versus international reporting of perinatal statistics. The Australian national data definition in use between 1992 and 1995 includes babies of at least 500 g birthweight or, where birthweight is unknown, 22 weeks gestation, and up to 28 days after liveborn delivery. The perinatal mortality rate in Australia (6.9 per 1,000 live births) is similar to the rates in other developed countries such as Germany, Spain, Canada and the United Kingdom.

### 2.3 Infant mortality rates

Infant mortality refers to the death of a liveborn infant during the first year of life and does not include stillbirths or fetal deaths. There is generally better ascertainment of infant deaths than perinatal deaths. The Australian infant mortality rate in 1998 was estimated to be 6 per 1,000 live births, comparable to that of most developed countries. It is similar to Canada, France, Netherlands and Sweden (Table 2).

**Table 1: Perinatal mortality rates, selected countries, 1992–1995**

Perinatal mortality rate (per 1,000 births)					
Country	Year	Rate	Country	Year	Rate
Australia	1995	6.9	Malaysia	1994	10.9
Canada	1994	7.2	Mexico	1995	14.6
China	-	-	Netherlands	1995	8.9
France	1993	7.5	New Zealand	-	-
Germany	1995	6.9	Philippines	1993	13.1
Greece	1993	10.2	Spain	1994	6.6
Italy	1992	9.0	United Kingdom	1995	7.5
Japan	1995	4.7	USA	1993	8.9

Source: United Nations (1998).

**Table 2: Infant mortality rates, selected countries, 1998**

Infant mortality rate (per 1,000 live births)					
Country	Population (000)	Rate	Country	Population (000)	Rate
Australia	18,850	6	Malaysia	5,984	11
Canada	30,563	6	Netherlands	15,678	6
China	1,255,698	41	New Zealand	3,796	7
Denmark	5,270	7	Singapore	3,476	5
France	58,683	6	Spain	39,628	7
Germany	82,133	5	Sweden	8,875	5
Greece	10,600	8	Switzerland	7,299	6
Indonesia	206,338	48	United Kingdom	58,649	7
Ireland	3,681	7	USA	274,028	7

Source: World Health Report (1999).

# 3 Mothers

## 3.1 Introductory notes

This chapter provides data on demographic and pregnancy characteristics of mothers and some characteristics and outcomes of their babies. The number of babies slightly exceeds the number of mothers because of multiple pregnancies and births. The term 'confinements' has been used in the headings of tables and figures to indicate maternal characteristics, whereas 'births' refer to babies.

As outlined in section 1.2, Tasmanian and therefore Australian totals are under-reported by approximately 800 confinements in 1997.

Each State and Territory has developed its own forms for collecting perinatal data, often to maintain compatibility with its other data collections. While the perinatal collections are based on a national minimum data set, there may be differences in the options recorded for individual data items. The data in this report relate to the State or Territory of occurrence of births rather than to the area of usual residence of the mother.

## 3.2 Confinements and births

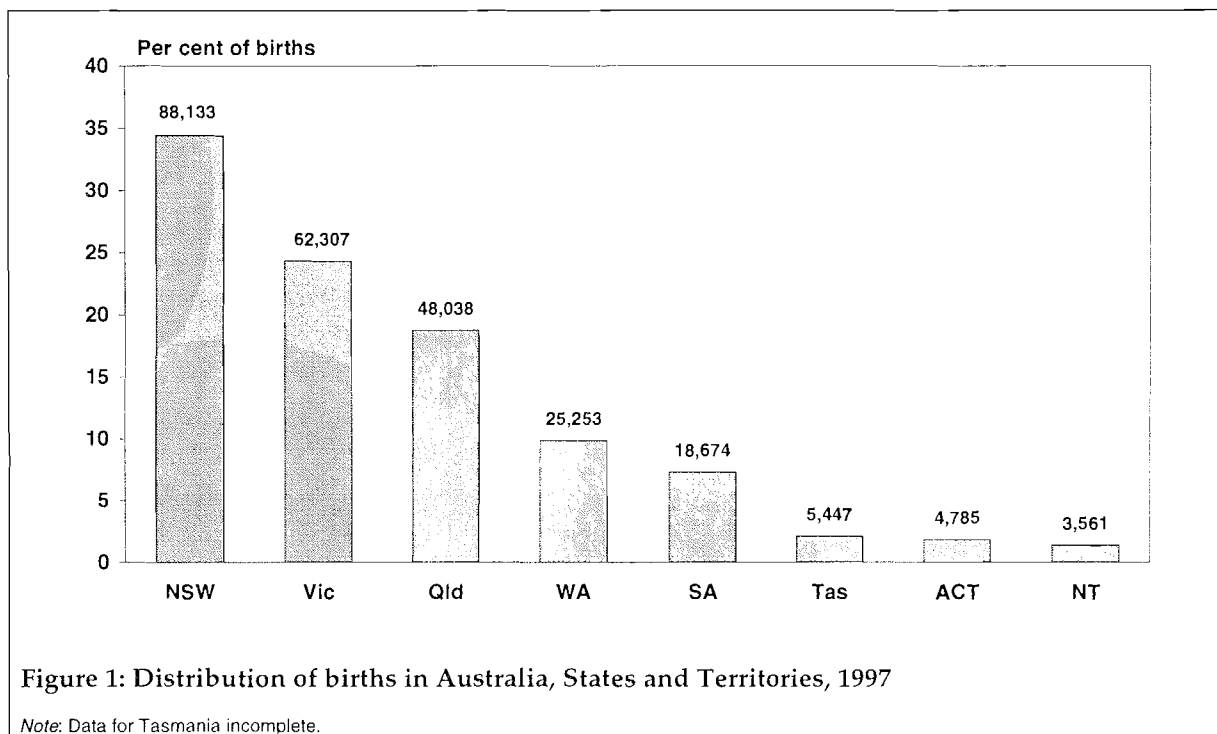
There were 252,370 confinements notified to State and Territory perinatal data groups in Australia in 1997, resulting in a total of 256,198 live births and fetal deaths (Table A1). Although birth rates in the States and Territories differ, the distribution of births generally reflects that of the population and of women in the reproductive age group (Figure 1).

To evaluate the completeness of notifications of births in the perinatal collections, these births can be compared with birth registrations published by the Australian Bureau of Statistics (ABS 1998). In the registration system, 251,842 live births were registered in Australia in 1997 (ABS 1998), 2,548 fewer than the 254,390 live births notified to the perinatal collections. As the States and Territories sometimes differ in the conventions used for coding the residence of mothers living interstate, it is not readily possible to compare the numbers in the two data systems by State and Territory. These differences in the national figures on live births are due to significant delays in the registration of some live births. It is also likely that some home births are not notified to the perinatal collections but are still registered by the parents.

Some States are already linking notifications from the perinatal collections to registrations of births and perinatal deaths. Once this is achieved in all States and Territories, with the assistance of Registrars and the Australian Bureau of Statistics, it will be possible to explain the discrepancies between the two perinatal data systems and to implement measures for ensuring complete notification and registration of births and perinatal deaths.

Linking data in the perinatal collections to birth registrations also has the advantage of enabling analysis of associations between paternal characteristics, various maternal characteristics and risk factors, and pregnancy outcome. Except for paternal occupation recorded in South Australia and Tasmania, there are no paternal data in the 1997 perinatal

collections. Birth registrations include information on paternal age, Indigenous status, country of birth and occupation, so enhanced analysis would be possible by linking the two data systems.



### 3.3 Place of birth

Most births in Australia occur in hospitals, either in conventional labour-ward settings or in hospital birth centres. In 1997, nearly all States and Territories designated birth centres separately on notification forms. There were 4,773 confinements in birth centres in 1997 (Table A2), continuing the rising trend from 2,405 confinements in 1992. In 1997, confinements in birth centres accounted for 1.9% of all confinements in the States and Territories. Planned home births, and births occurring unexpectedly before arrival in hospital for planned hospital births, are the other two groups and have relatively small numbers. In the Northern Territory, the 85 'other' confinements were mainly births in bush clinics.

Planned home births are underascertained in some State and Territory perinatal collections. In 1997, 736 planned home births, representing 0.3% of all confinements, were notified nationally (Table A2).

### 3.4 Size of maternity unit

The size of maternity units, based on the annual number of confinements, varied from those with just a few births each year to those with more than 2,000 births. The actual number of maternity units in a region depends on its geographical location, the population of the region, and policies regarding maternity services. In 1997 approximately half (48.2%) of the maternity units in Australia had fewer than 100 confinements (Table A3). More than one-

third (39.0%) had between 100 and 1,000 confinements, and 12.9% had more than 1,000 confinements. Although most maternity units are relatively small in size, the majority of hospital confinements (62.8%) occurred in the larger maternity units that had more than 1,000 confinements annually (Table A4). Over two-fifths (42.7%) of hospital confinements were in units with more than 2,000 confinements annually.

### **3.5 Maternal age**

Maternal age is an important risk factor for perinatal outcome. Adverse outcomes are more likely to occur in younger and older mothers. The average age of women giving birth in Australia has increased gradually in recent years. The estimated mean age in 1997 was 28.7 years, continuing the rise from 27.9 years in 1991. Mothers in Victoria and the Australian Capital Territory were slightly older, and those in the Northern Territory slightly younger, than average. The mean age of mothers having their first baby in 1997 was 26.8 years compared with 25.8 in 1991. The proportion of teenage mothers (5.2%) in 1997 was slightly lower than in 1996. The proportion of mothers aged 20 to 24 years has fallen from 20.2% in 1991 to 17.1% in 1997 but older mothers aged 35 years and over have continued to increase from 10.6% in 1991 to 15.0% in 1997 (Figure 2).

The actual number of teenage confinements declined from 13,373 in 1996 to 13,137 in 1997. The proportion of teenage confinements was 5.2% nationally and ranged from a low of 3.3% in Victoria to 14.7% in the Northern Territory (Table A5, Figure 3). There were relatively more younger teenage mothers in the Northern Territory.

The national age-specific birth rate for teenagers declined from a peak of 55.5 per 1,000 females in 1971 to a low of 19.5 per 1,000 females in 1997 (ABS 1998). Birth rates in teenagers varied considerably in 1997 from a low of 12.4 per 1,000 females in Victoria to a high of 76.5 per 1,000 in the Northern Territory. The age-specific birth rate understates teenage pregnancy as it does not include induced abortions of unwanted pregnancies. Only South Australia and the Northern Territory collect population-based data on induced abortions. In South Australia in 1997, there were 1,191 induced abortions among teenagers (Chan et al. 1999) and 998 confinements. Based on these South Australian figures it seems likely that there were approximately 29,000 teenage pregnancies nationally in that year. Lack of data on induced abortions in most States and Territories considerably hampers analysis of trends in teenage pregnancies.

The five-year trend of decreasing age-specific birth rates of women aged 20 to 29 years continued in 1997, whereas the rates for women over 35 years were higher (ABS 1998).

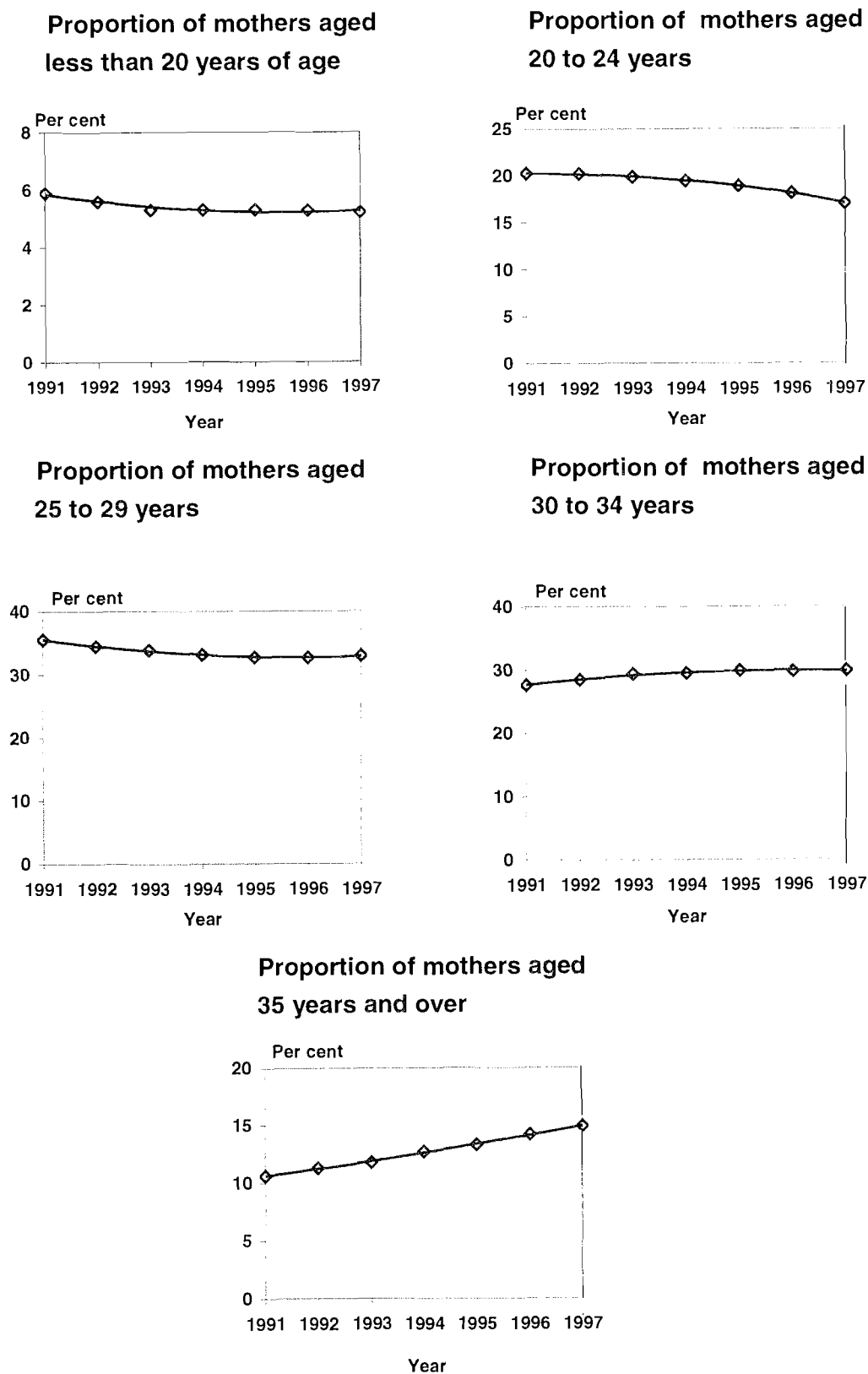
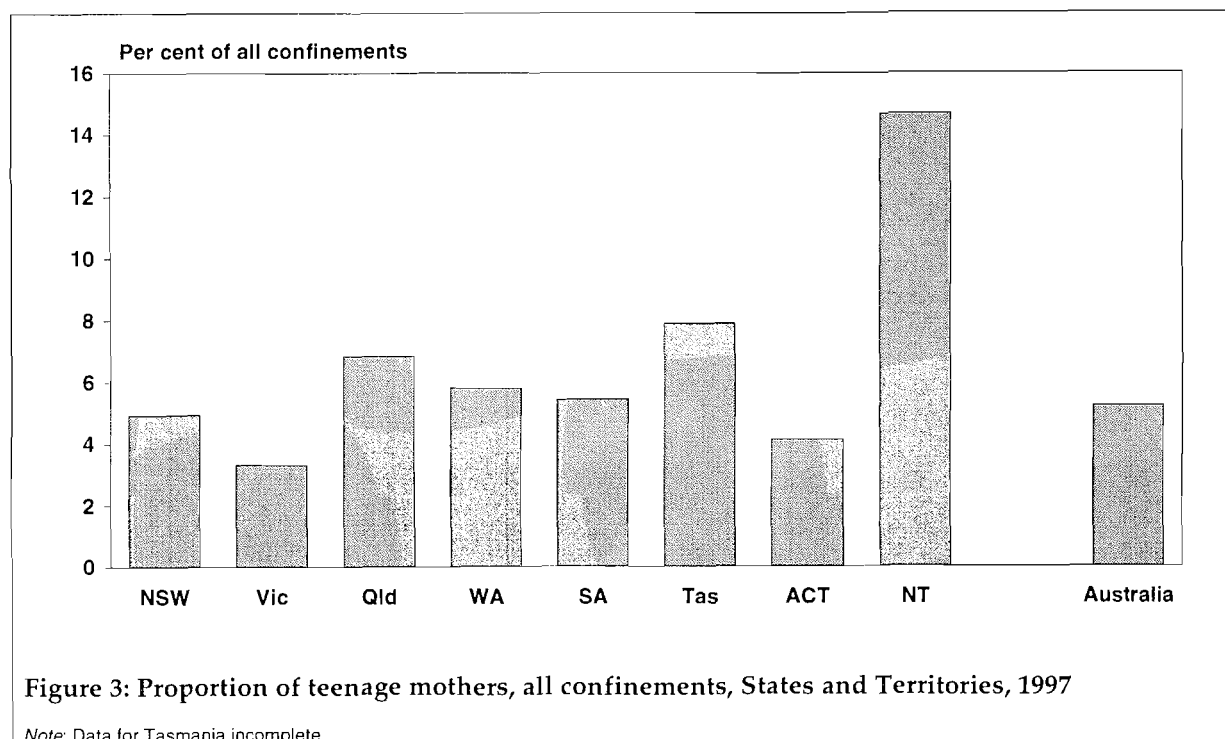


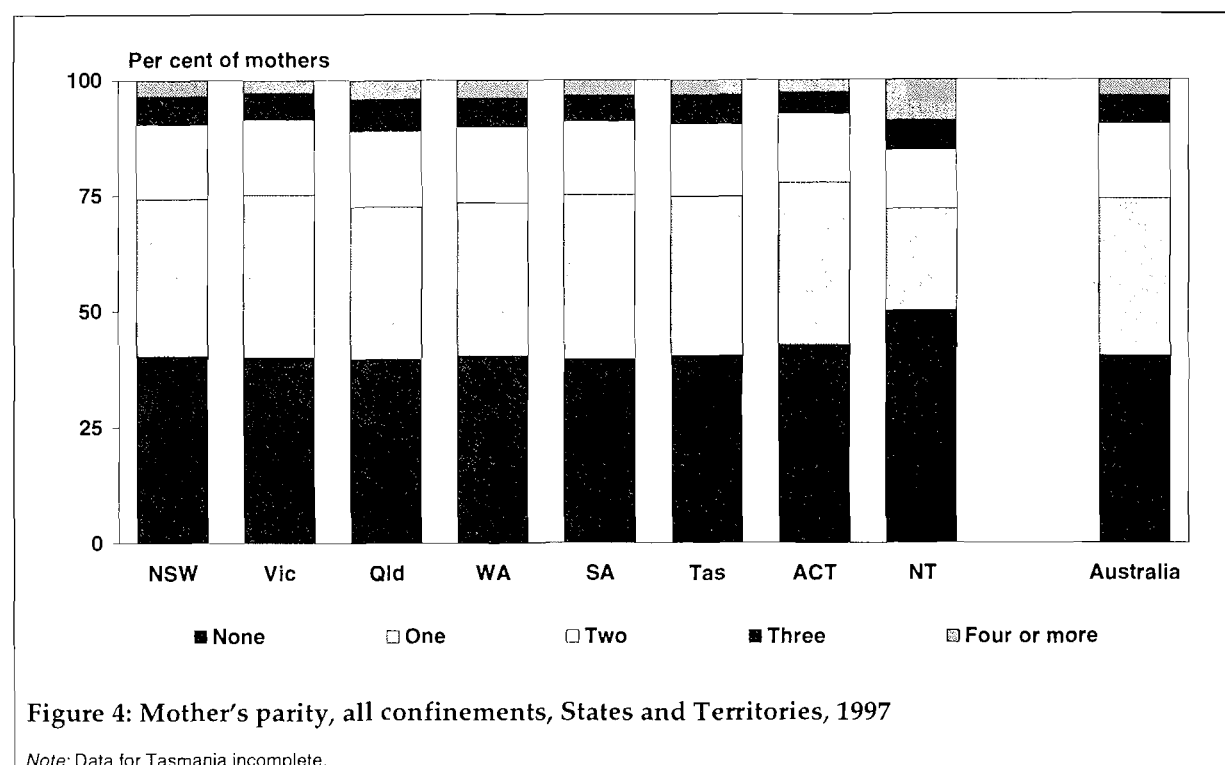
Figure 2: Trends in maternal age, Australia, 1991-1997





### 3.6 Maternal parity

Parity is the number of previous pregnancies that resulted in live births or stillbirths. In 1997, 40.2% of mothers were having their first baby and another 34.0% already had one child (Table A6, Figure 4).



One in six mothers (16.1%) had given birth twice previously and 9.6% had three or more children. The proportion of mothers who had given birth at least twice previously increased with maternal age from 2.4% for teenagers to 51.4% for mothers aged 40 years and over (Table A7).

As indicated in Section 3.5, the average age at which women are having their first baby is gradually increasing. Nevertheless, the majority (69.1%) of these women are aged less than 30 years (Table A7). While the proportion of first-time mothers who are 35 years or older is also increasing, only 1 in 12 (8.4%) of all primiparous women were in this age group.

## **3.7 Marital status**

Married mothers and those living in de facto relationships have been grouped together, except in Tasmania where de facto and single were given the same code. Single mothers accounted for 11.2% of all confinements in Australia in 1997 and another 1.2% were widowed, divorced, or separated (Table A8). There were relatively fewer single mothers in the Australian Capital Territory and relatively more in the Northern Territory. More than half (54.1%) of all teenage mothers were single, ranging from 83.1% for mothers aged less than 15 years to 44.3% for mothers aged 19 years (Table A9).

## **3.8 Indigenous status**

The National Health Data Dictionary (National Health Data Committee 1998) defines Indigenous status as:

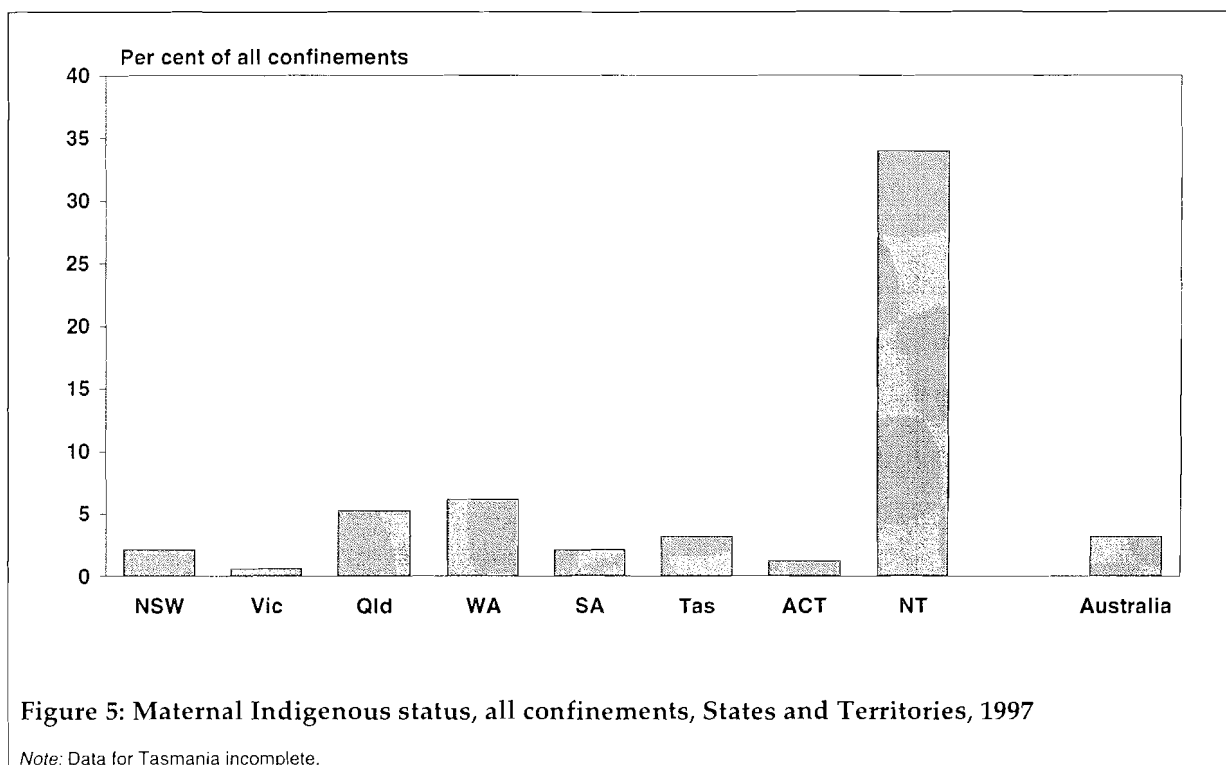
An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community with which he or she lives.

All States and Territories have a separate data item on Indigenous status on their perinatal form. Some States and Territories separately identify Indigenous mothers as those of Aboriginal or Torres Strait Islander descent. Up until 1996, confinements of Indigenous mothers in Tasmania were given a specific code if Aboriginality was recorded on the form in the item for maternal country of birth. This change to a separate data item on Indigenous status has meant that the number of Indigenous mothers identified by the Tasmanian perinatal data collection in 1997 has significantly increased compared to earlier years. There has been ongoing validation work on the ascertainment of Indigenous mothers and their babies by the perinatal data collections (Day et al. 1999). The term 'Indigenous' is used in this report to refer to mothers and babies of Aboriginal or Torres Strait Islander descent.

In 1997, 8,066 Indigenous women gave birth in Australia; this was 3.2% of all confinements (Table A10). Indigenous mothers accounted for a much greater proportion of all confinements in the Northern Territory (34.0%) than elsewhere in Australia (Figure 5). There were also significant proportions of confinements to Indigenous women in Western Australia (6.2%) and Queensland (5.3%). Because of their larger populations, there were actually more confinements of Indigenous mothers in Queensland (2,486), New South Wales (1,842) and Western Australia (1,539) than in the Northern Territory (1,197).

Indigenous mothers are more likely to have their babies at a younger age, and to have more babies, than other mothers (Tables A11, A12). In 1997, the average age of an Indigenous mother at confinement was 24.3 years compared with 28.7 years for all mothers at confinement. More than one in five (22.9%) Indigenous mothers were teenagers. The

proportion of teenagers among Indigenous mothers was higher in the Northern Territory (30.9%) than in the other States and the Australian Capital Territory.



### 3.9 Maternal country of birth

The country of birth of the mother may be an important risk factor for outcomes such as low birthweight and perinatal mortality. In 1997, the States and Territories were using the four-digit ABS country of birth classification.

A high proportion (22.8%) of women giving birth in Australia in 1997 were born in other countries (Figure 6). Because of the large number of countries, generally only those countries with more than 1,000 confinements are reported separately (Table A13). Mothers born in the United Kingdom comprised 4.2% of all confinements and accounted for relatively higher proportions of all mothers in Western Australia (10.9%) and South Australia (6.3%). New Zealand-born mothers comprised 2.3% of all confinements. The proportion of mothers who were born in Asia has increased considerably in the last decade, reflecting recent trends in migration to Australia. In 1997, 7.9% of mothers had been born in Asia, compared with 5.2% in 1991.

Mothers born in countries where English is not the first language are more likely to reside in the more populous States, New South Wales and Victoria (Table A13). This pattern is evident for countries such as Lebanon and several Asian countries, particularly Vietnam, the Philippines and China. Teenage confinements were more common among mothers born in New Zealand, Lebanon and the Philippines; while births to mothers aged 35 years and over were more common to women born in Italy, Malaysia and Hong Kong (Table A14). These variations in geographical distribution and maternal age need to be recognised in planning culturally acceptable maternity and postnatal community health services, including prenatal diagnosis and interpreter services.

Marital status also varies according to the mother's country of birth. A higher proportion of mothers born in Australia, New Zealand and Vietnam was single than those born in most other countries (Table A15, Figure 7).

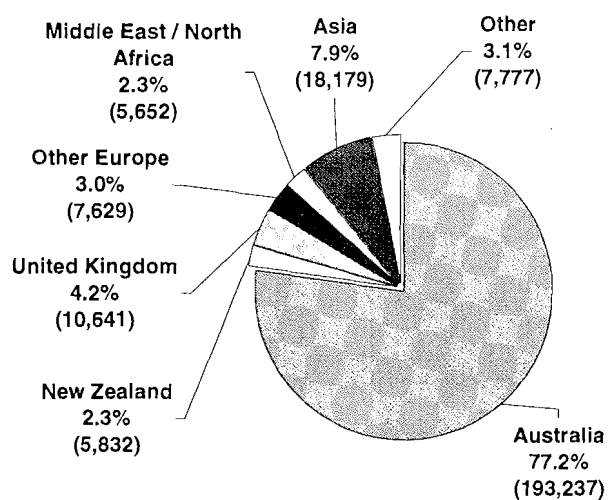


Figure 6: Maternal country of birth, all confinements, Australia, 1997

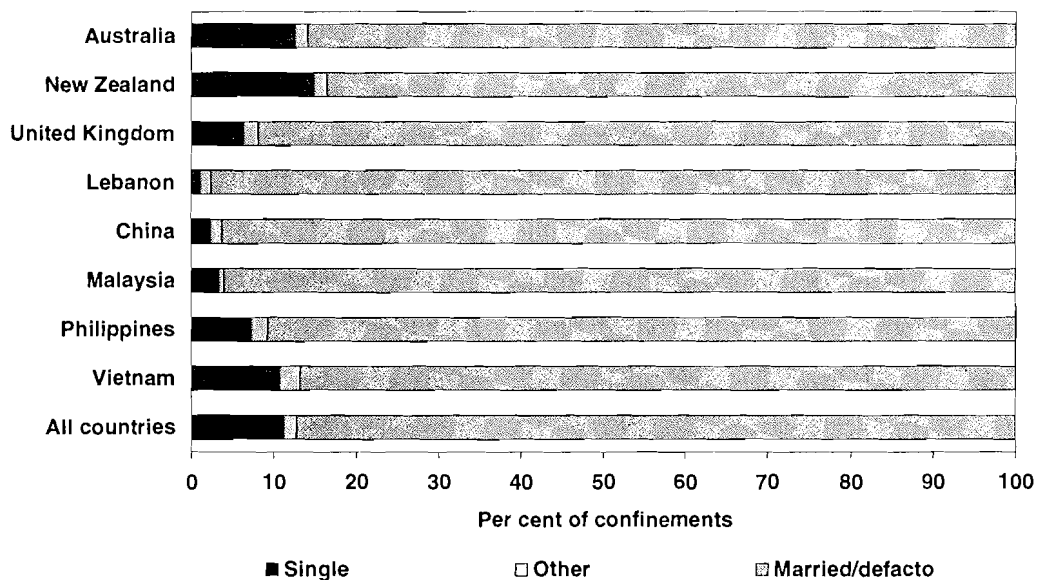


Figure 7: Marital status of mothers, selected countries, all confinements, 1997

### 3.10 Status in hospital

The proportion of the Australian population with private health insurance declined from about 50.0% in 1984 to 31.6% in December 1997 (AIHW 1998). Patients admitted to hospitals may elect to have public or private status; this is usually determined by whether or not they have private health insurance. Victoria and the Northern Territory did not collect information on health insurance status in hospital in their perinatal collections in 1997. The proportion of mothers with private status in hospital in the other States and the Australian Capital Territory was 31.6% and ranged from 29.5% in Western Australia to 33.7% in Queensland (Table A16).

The mother's health insurance status can be used as an indicator of socioeconomic status. Excluding confinements in Victoria and Northern Territory where this information was not recorded, mothers who had private status in hospital (13.3%) were more likely than those who had public status (5.5%) to have their first baby at 35 years or older, but clearly the proportion in this age group is still relatively small.

### 3.11 Duration of pregnancy

Accurate population data on gestational age are difficult to obtain. Estimations based on the calculated interval between the first day of the last menstrual period (LMP) and the baby's date of birth may be imprecise for some women because of uncertainty about the date of the LMP, irregular cycles, or delayed ovulation after use of oral contraceptives. Nevertheless, in the majority of pregnancies the gestational age derived from the dates provides an appropriate estimate of the duration of pregnancy.

Not all States and Territories recorded the date of the last menstrual period in their perinatal collections in 1997, but they have estimates of gestational age based on prenatal or postnatal assessment. As most pregnant women have at least one ultrasound examination during pregnancy, this may provide useful information on gestational age if performed in early pregnancy. The different practices for recording and estimating gestational age in the States and Territories are likely to result in variable estimates of the distribution of gestational age. This should be kept in mind when comparing State and Territory data on gestational age.

Preterm birth (less than 37 weeks gestation) occurred in 6.7% of all confinements (Table A17, Figure 8). The average duration of pregnancy in Australia was 39.0 weeks. Mothers gave birth at 20–27 weeks in 0.7% of confinements, at 28–31 weeks in 0.7%, and at 32–36 weeks in 5.3%. There was a higher incidence of preterm birth in the Northern Territory (10.3%) than elsewhere (Figure 9).

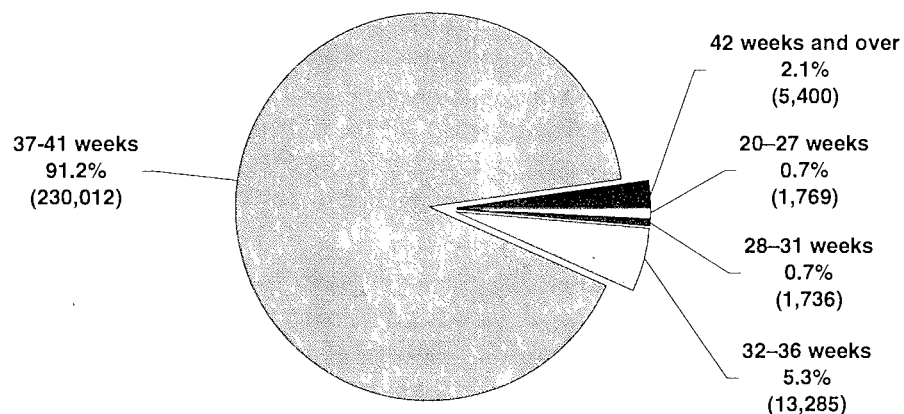


Figure 8: Duration of pregnancy, all confinements, Australia, 1997

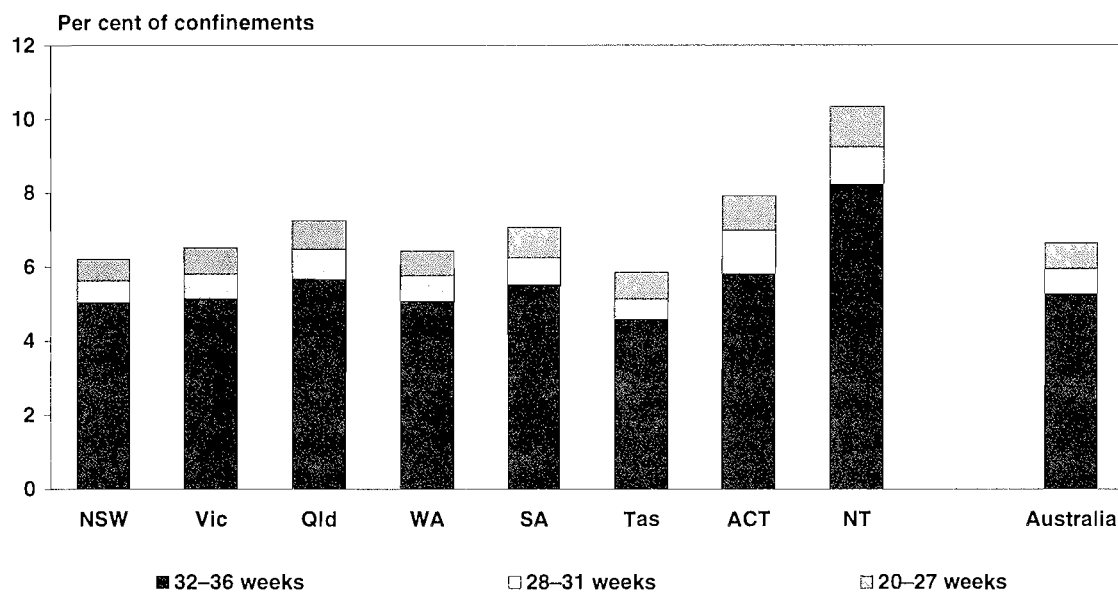
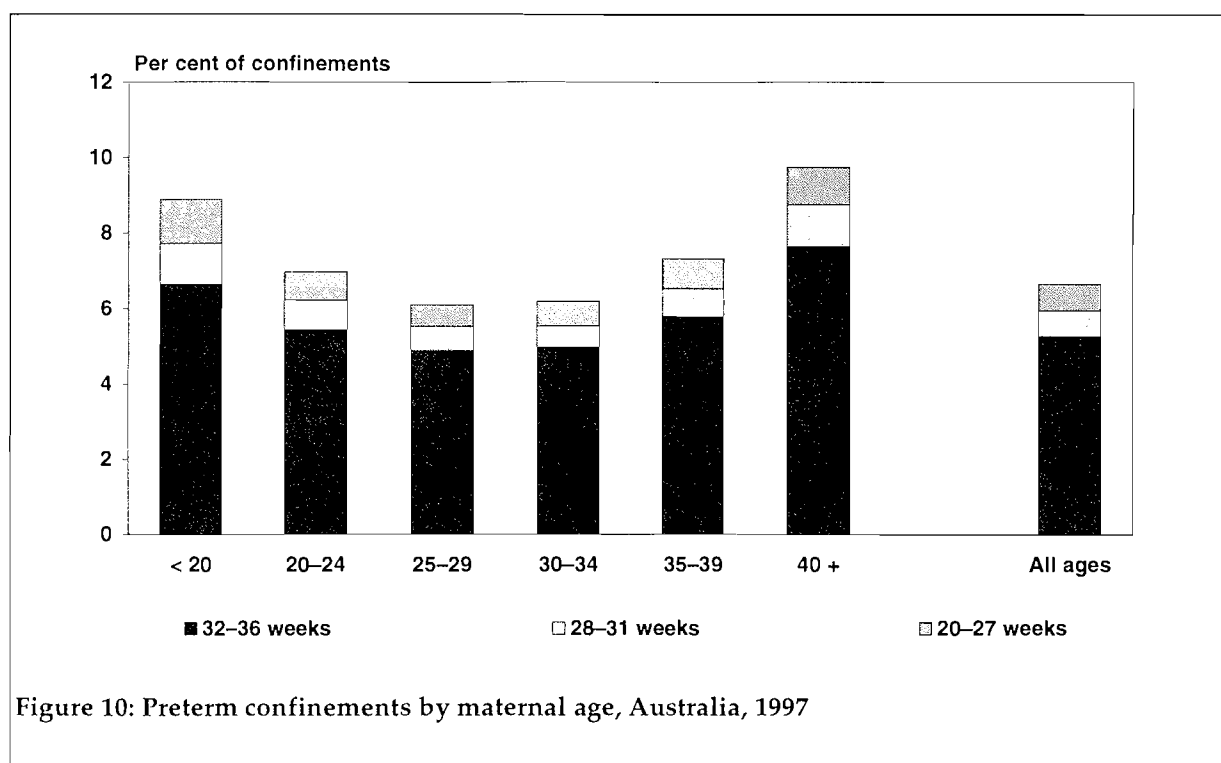


Figure 9: Preterm confinements, States and Territories, 1997

Note: Data for Tasmania incomplete.

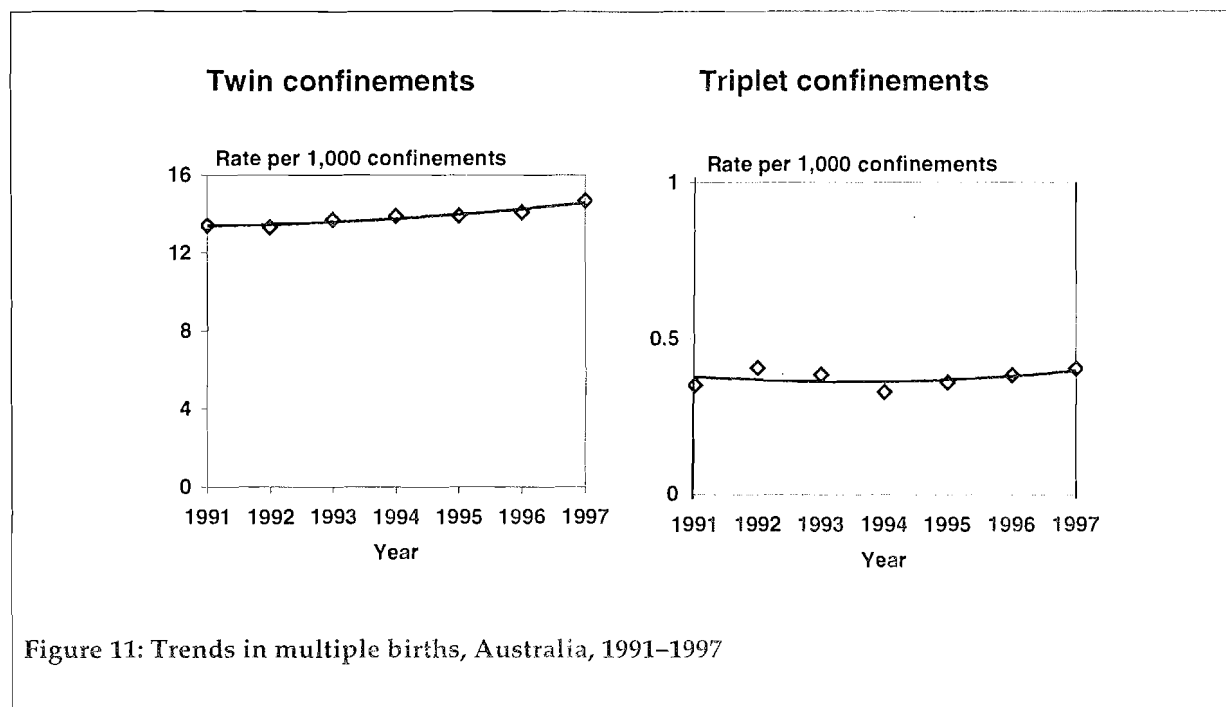
Preterm birth varied with maternal age and was more likely among the youngest and oldest mothers than among those aged 20 to 34 years (Table A18, Figure 10).



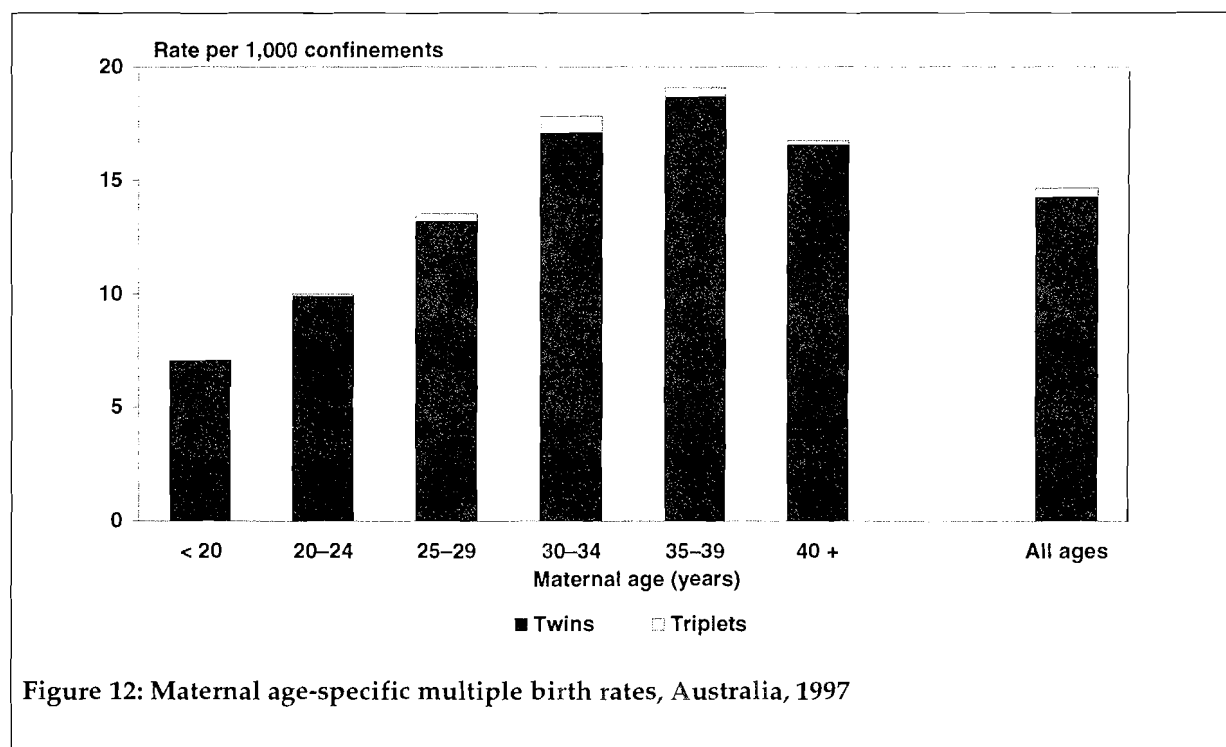
### 3.12 Multiple pregnancy

In the perinatal collections, multiple pregnancies are based on the number of fetuses that remain in utero at 20 weeks gestation and are subsequently delivered as separate births. This definition excludes fetuses aborted before 20 completed weeks or fetuses compressed in the placenta at 20 weeks or more. If gestational age is unknown, only fetuses weighing 400 g or more are taken into account in determining whether it is a singleton or multiple pregnancy. As the perinatal collections include both live births and stillbirths, there are slightly more multiple pregnancies in these figures than in the data on registrations of live births published by the Australian Bureau of statistics.

In 1997, there were 3,709 multiple pregnancies (1.4% of all confinements), consisting of 3,598 twin pregnancies, 102 triplet pregnancies, and 9 quadruplet pregnancies (Table A19). The twinning rate was 14.7 per 1,000 confinements in 1997 (Figure 11), substantially higher than the low point of 9.0 per 1,000 confinements in 1977 (Doherty & Lancaster 1986). The number of triplet pregnancies increased from 85 in 1994 to 92 in 1995, 97 in 1996 and 102 in 1997. The increasing trend in multiple pregnancies in the last two decades is mainly attributable to fertility drugs and assisted conception.



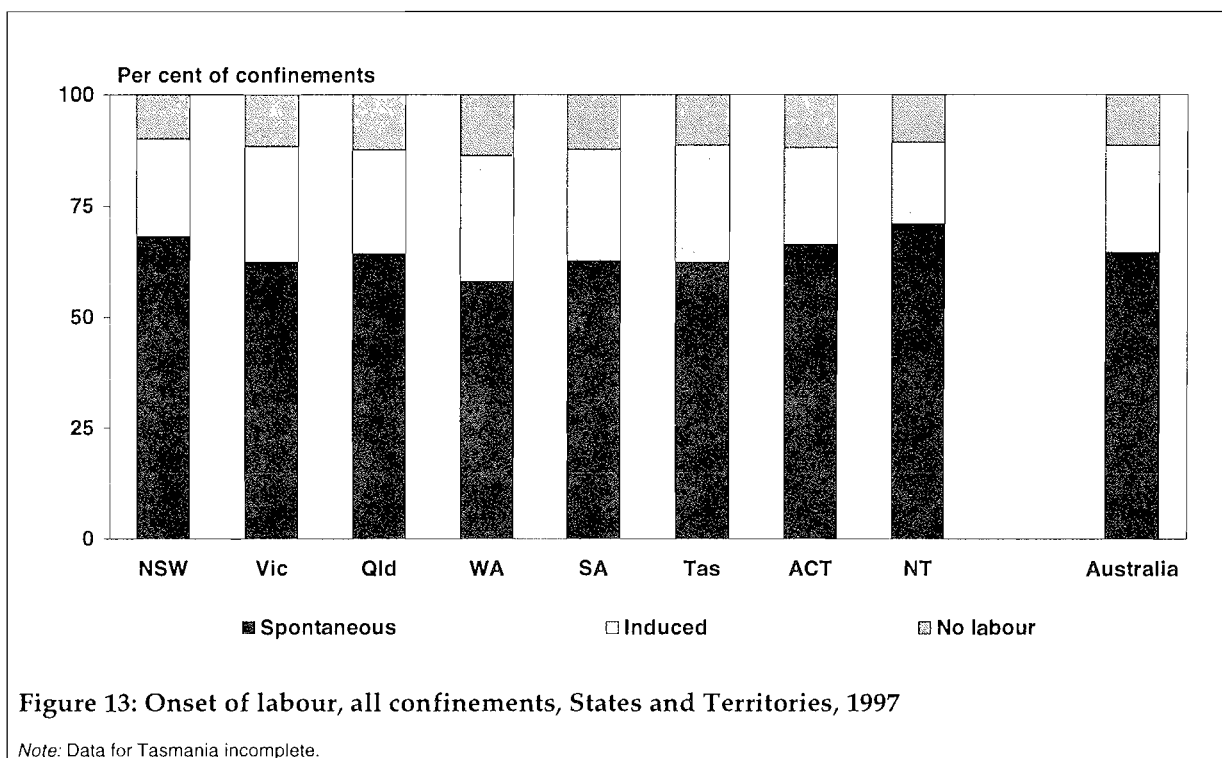
Multiple pregnancy increases with advancing maternal age, peaking in women aged in the 35–39 year age group followed by a decline in women aged 40 years and older. In 1997, the highest proportion of twin confinements (1.9%) was among mothers aged 35 to 39 years (Table A20, Figure 12).





### 3.13 Onset of labour

The onset of labour was spontaneous in 64.5% of all confinements (Table A21, Figure 13); this proportion was highest in the Northern Territory (70.9%) and lowest in Western Australia (58.0%); there was considerable variation in whether labour was augmented.



Labour was induced in 24.0% of pregnancies and induction was more likely in Western Australia (28.3%) than in the other States and Territories. Combined medical and surgical induction of labour was more likely than either type alone. Most confinements with no labour were elective caesarean sections.

### 3.14 Presentation at birth

Breech presentation occurred in 4.3% of all confinements and other presentations in 0.6% (Table 22). In multiple pregnancies, the presentation and type of delivery of the first-born baby was used to classify each confinement.

### 3.15 Type of delivery

More than two-thirds (67.6%) of all confinements were spontaneous vertex deliveries (Table A23, Figure 14). Forceps delivery occurred in 6.8%, vacuum extraction in 4.5%, and vaginal breech delivery in 0.8%.

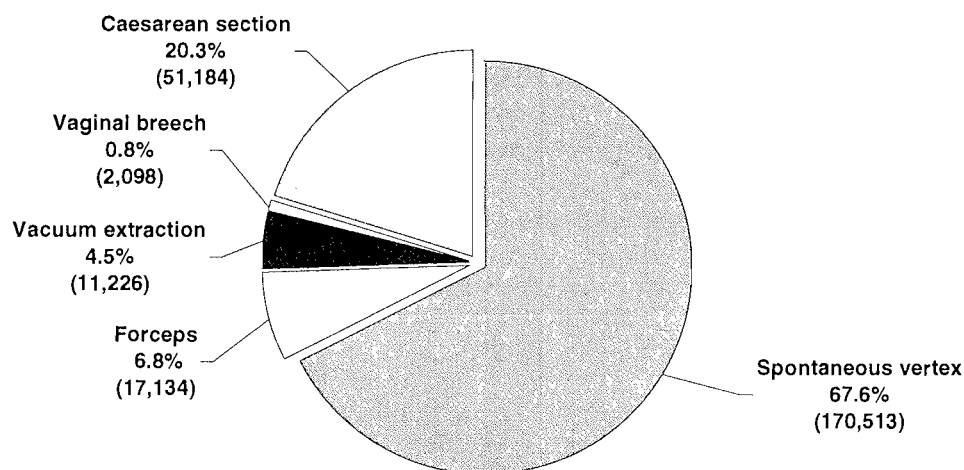


Figure 14: Type of delivery, all confinements, Australia, 1997

There were 51,184 caesarean sections performed in 1997, accounting for 20.3% of all confinements (Figure 14). The caesarean rate (per cent) continues to show an overall upward trend in recent decades (Lancaster & Pedisich 1993). South Australia (23.5%) had the highest caesarean rate in 1997 and New South Wales (18.2%) the lowest (Table A24, Figure 16).

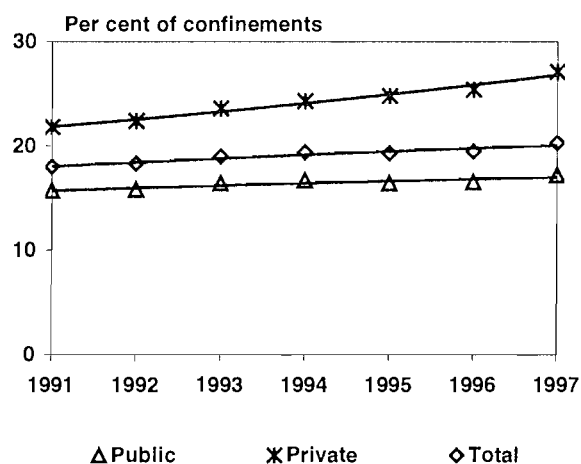
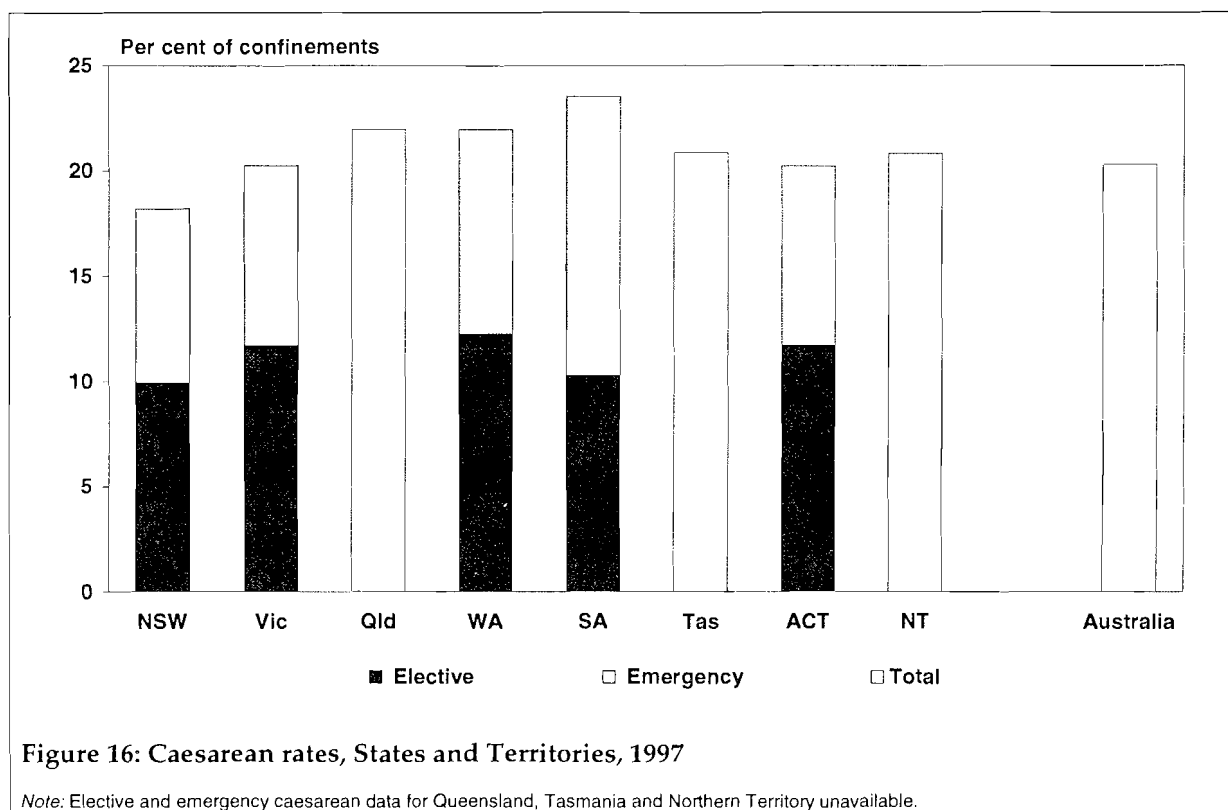


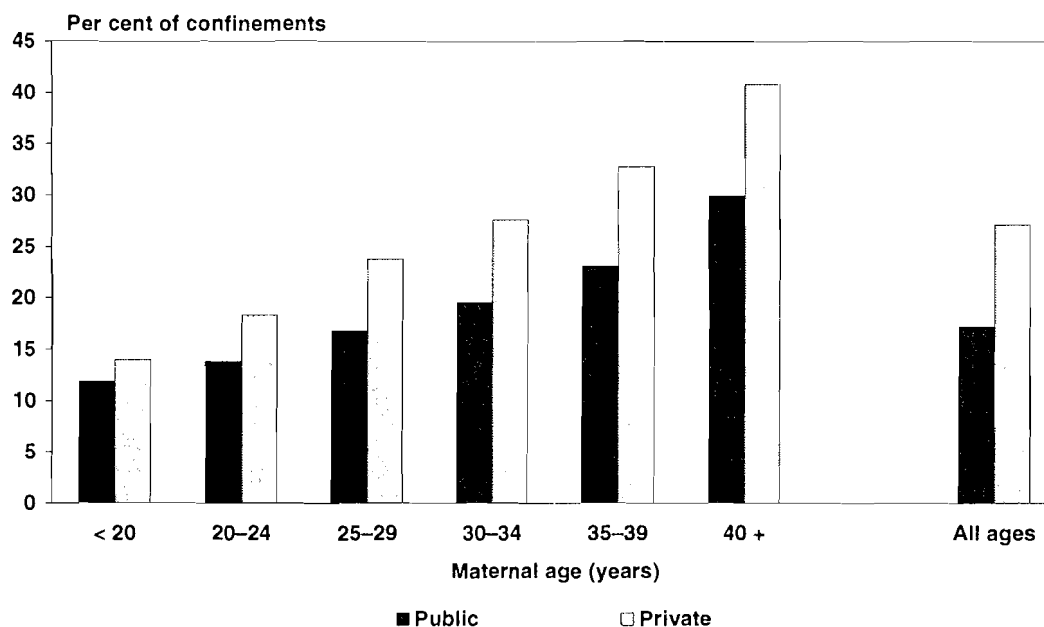
Figure 15: Trends in caesarean section rates by accommodation status in hospital, Australia, 1991–1997

Note: Data exclude Victoria and Northern Territory.



Caesarean rates for each State and Territory were compared in categories of maternal age, status in hospital, parity, singleton and multiple pregnancies, breech presentation in singleton confinements, and birthweight in singleton births (Tables A24, A25, A26 and A27). Excluding Victoria and the Northern Territory which did not have data on status in hospital, the caesarean rate of 27.1% for women who had private status in hospital was 58% higher than the rate of 17.2% for those who had public status (Table A24, Figure 17). This difference was partly attributable to a higher proportion of older women among those with private status. More than one in four mothers with private status in hospital in Queensland (30.0%), South Australia (29.8%), Western Australia (29.4%) and the Australian Capital Territory (26.1%) had their babies by caesarean section.

Analysis of national caesarean rates by five-year maternal age group, public and private status in hospital and number of previous births (Tables A25, A26) showed these factors were independently associated with higher rates of caesarean section. Caesarean rates were generally higher as maternal age increased. Mothers having their first baby had higher caesarean rates than those who had given birth previously. Caesarean rates in all maternal age and parity groups for mothers with private status in hospital were higher than for those with public status. Mothers aged 35 to 39 years who had private status in hospital and who were having their first baby had a caesarean rate of 40.7% compared with 31.1% for those who had public status. For mothers aged 40 to 44 years, the trend continued with caesarean rates of 54.7% for those who had private status in hospital compared with 48.1% for those who had public status.



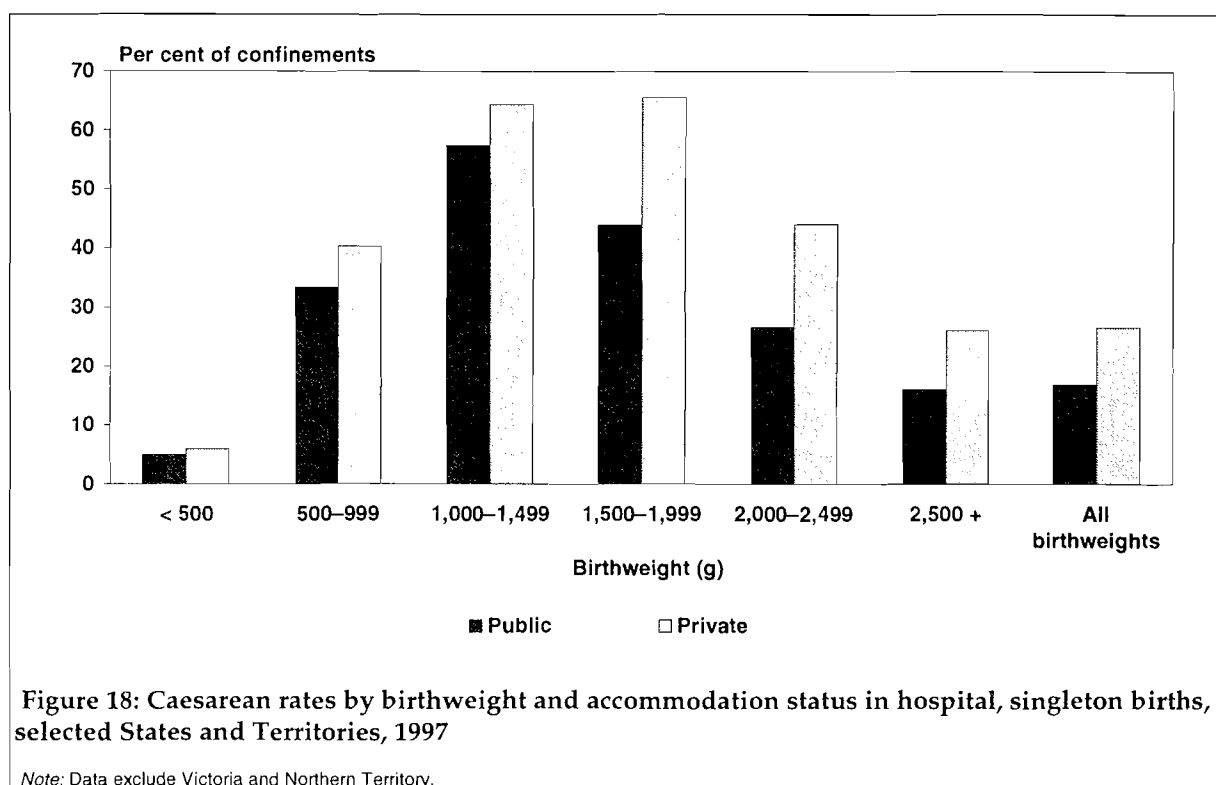
**Figure 17: Caesarean rates by maternal age and accommodation status in hospital, selected States and Territories, 1997**

*Note: Data exclude Victoria and Northern Territory.*

The caesarean rate of 18.2% for Indigenous mothers was less than that for all mothers (20.3%). For the 6,223 Indigenous mothers who had public and 174 mothers who had private status, the caesarean rates were 17.0% and 28.4%, respectively. These are comparable with the overall rate of 17.2% for public status, but slightly higher than the 27.1% for private status among all mothers.

Various other factors that influence caesarean rates include multiple pregnancy, breech presentation and the baby's gestational age (Table A27, Figure 18). The caesarean rate of 45.3% for twins was more than twice that for singleton births (19.9%); for other multiple births, the caesarean rate was 82.0%. Most babies (79.7%) presenting in the breech position in singleton pregnancies were born by caesarean section.

Caesarean rates were high for mothers of low birthweight babies in singleton pregnancies, particularly for babies weighing 1,000–1,499 g (59.5%) and 1,500–1,999 g (46.4%). For singleton births of 2,500 g and over, mothers who had private status in hospital had a caesarean rate of 25.9%, 61.9% higher than the rate of 16.0% for those who were not insured.



### 3.16 Perineal repair after delivery

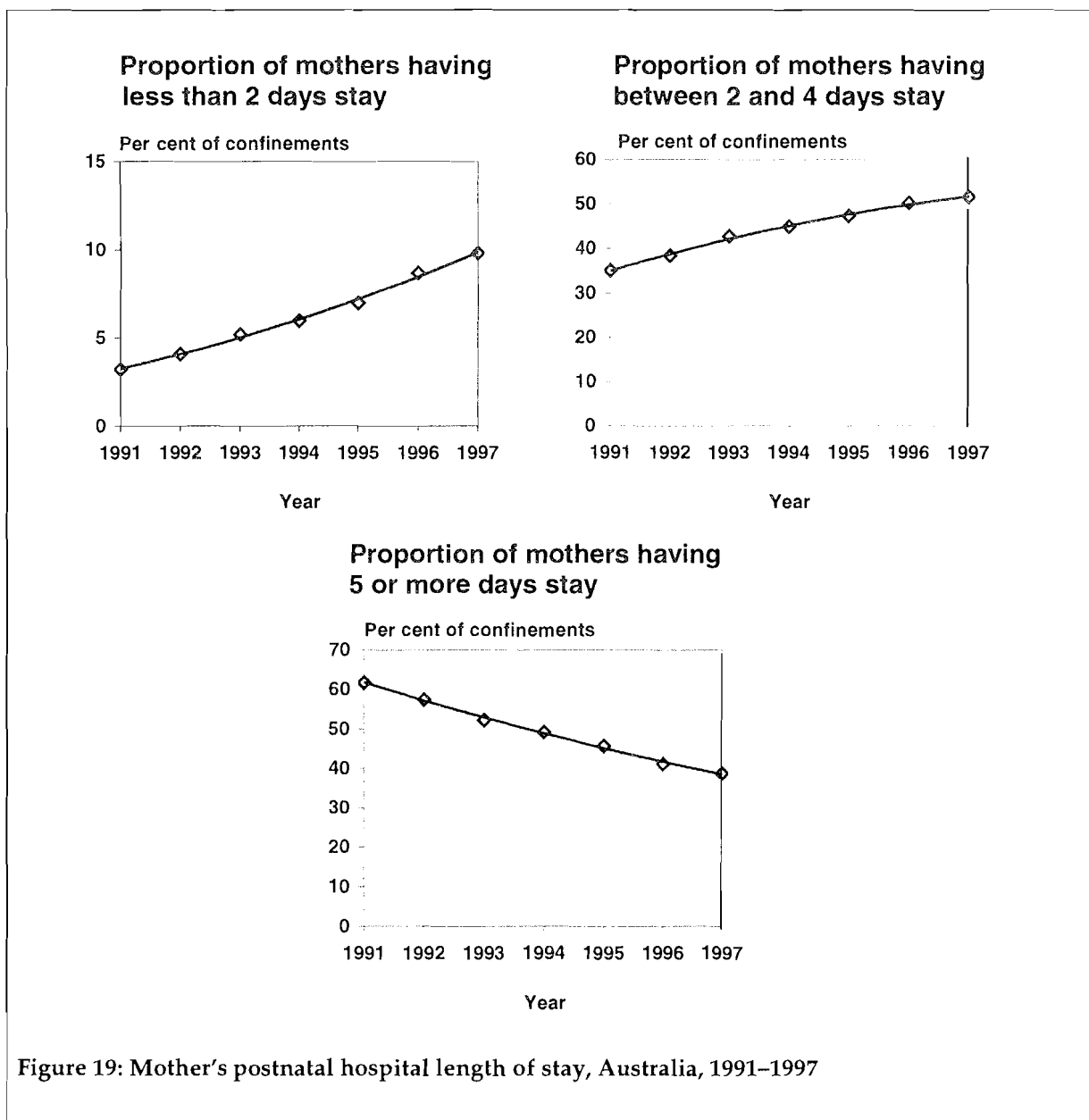
Most States and Territories collected information on perineal repair after delivery, performed either following episiotomy or for suturing of a perineal laceration. Because of differences in the methods of data collection, these figures should be interpreted cautiously. Repair of an episiotomy was notified in 15.8% of confinements in New South Wales, 17.3% in Victoria, 14.0% in Queensland, 19.3% in Western Australia, 18.9% in South Australia, 17.3% in the Australian Capital Territory and 5.9% in Northern Territory. Suturing of perineal lacerations was performed in 22.1% of confinements in Victoria, 25.4% in Queensland, 26.8% in Western Australia, 22.0% in South Australia, 28.7% in the Australian Capital Territory and 32.7% in the Northern Territory (Table A28).

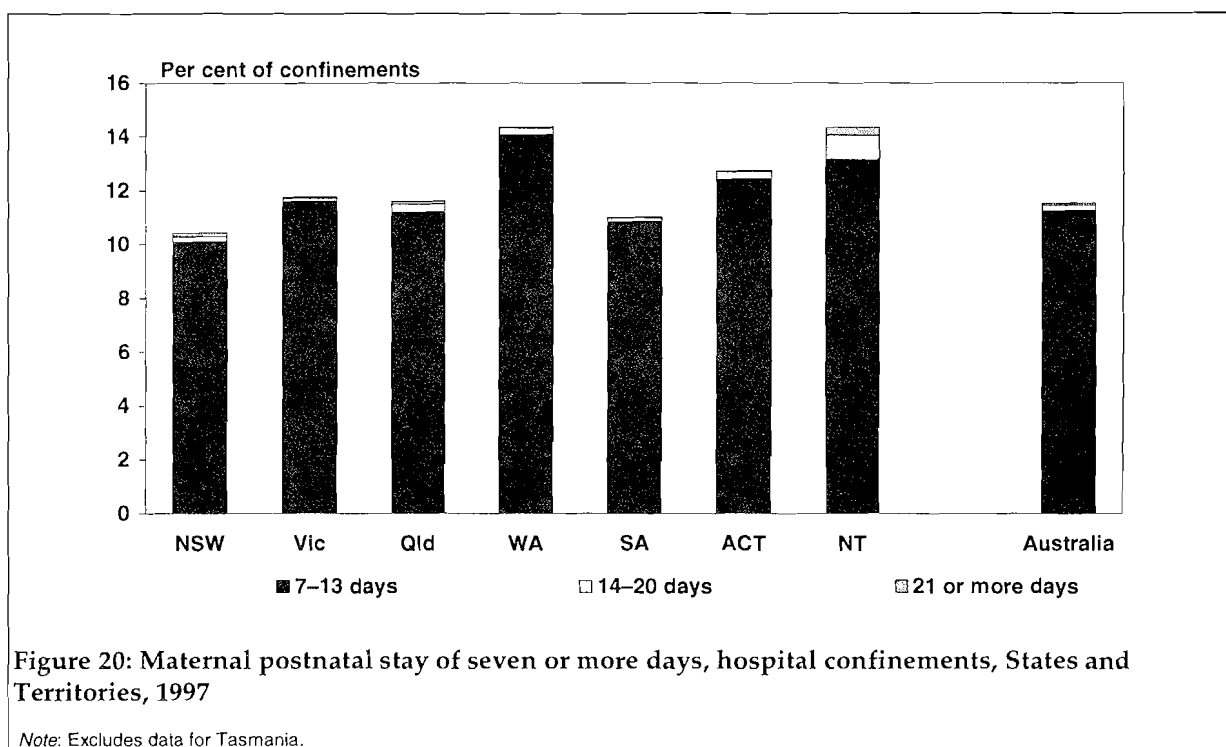
### 3.17 Mother's length of stay in hospital

Most women gave birth either on the day of admission to hospital (61.7%) or on the following day (31.0%) (Table A29). About 1 in 68 women were hospitalised for at least 7 days immediately before delivery.

The length of the mother's postnatal stay in hospital may be influenced by factors such as the type of delivery, maternal medical and obstetric complications, neonatal morbidity, and specific hospital policies of early discharge. The final date of discharge of women transferred to other hospitals was not known, so these women were excluded from the calculation of length of postnatal stay. The average duration of postnatal stay was 4.1 days, having steadily declined from the average of 5.3 days in 1991. Postnatal stay in hospital was slightly longer on average in Victoria (4.3 days) and the Northern Territory (4.4 days) than in New South Wales (4.0 days), Queensland (4.0 days) (Table A30).

The trend towards shorter postnatal stays in hospital is reflected by the higher proportion of mothers who were discharged less than 5 days after giving birth. In 1997, 9.8% of mothers were discharged less than 2 days after delivery while 51.5% of mothers were discharged between 2 and 4 days after delivery. This compares respectively with 3.2% and 35.0% in 1991 (Figure 19). Relatively more mothers in New South Wales (64.2%), Queensland (64.2%) and the Australian Capital Territory (62.3%) had stays of less than 5 days in 1997. Longer lengths of stay of 7 or more days were relatively more common in Western Australia (14.3%) and the Northern Territory (14.3%) (Table A30, Figure 20).





In selected States and Territories with available data, mothers who had private status in hospital had an average postnatal stay of 5.3 days, compared with 3.5 days for those who had public status (Table A31). Data for Victoria and the Northern Territory were not available for these comparisons.

Factors associated with periods of postnatal hospitalisation of less than 5 days were younger maternal age, higher parity, Indigenous status, spontaneous delivery, and giving birth in maternity units of medium size (Table A32). Data on both the duration of postnatal stay and accommodation status in hospital were not available for Victoria and the Northern Territory, but there were marked differences in postnatal stays between public and private categories in the other States. The proportion of hospitalised mothers with a postnatal stay of less than 5 days was 33.0% for those with private status in hospital compared to 75.8% for mothers with public status (Table A32). The differences between public and private categories were apparent for all maternal ages, parity, Indigenous status, type of delivery and size of hospital groups (Tables A33, A34). For mothers having their first baby, 66.2% in the public category stayed for less than 5 days compared with only 20.5% in the private category.

### 3.18 Mother's mode of separation from hospital

Most mothers who gave birth in hospitals were discharged to their homes but 3.4% of mothers were transferred to other hospitals (Table A35), usually for continuing care in a hospital located nearer to their place of residence or sometimes for further treatment of complications. These transfers between hospitals were more likely to occur in New South Wales and the Australian Capital Territory than in the other States and Territories.

### 3.19 Maternal mortality

The perinatal collections are incomplete sources of maternal deaths as any deaths occurring after discharge from the hospital where the birth occurred are not recorded in these data systems. The few maternal deaths associated with spontaneous or induced abortion or with ectopic pregnancy are also excluded from the perinatal collections. Eight maternal deaths were reported through the State and Territory perinatal collections in 1997.

An alternative reporting of maternal deaths occurs through the triennial NH&MRC report on maternal deaths in Australia. The NH&MRC triennial report for 1991 to 1993 classifies maternal deaths into three groups – a) direct maternal deaths which result from obstetric complications of the pregnant state, b) indirect obstetric deaths resulting from pre-existing disease that developed during, and may have been exacerbated by, pregnancy, and c) incidental deaths which occurred during pregnancy, but where the pregnancy is unlikely to have contributed significantly to the death. Any death which occurs up to 42 days from the termination of pregnancy is included as a maternal death, as well as deaths from direct or indirect causes which occur between 42 and 365 days post-pregnancy.

The overall maternal mortality rate in the 1991–1993 triennium was 10.9 per 100,000 confinements, the lowest recorded rate in any triennium. The primary causes of direct maternal deaths in this period were pulmonary embolism (5), amniotic fluid embolism (5) and HELLP syndrome (5), whilst indirect maternal deaths occurred most often in association with cardiovascular disease (8). The primary cause of incidental maternal deaths was motor vehicle injury (10). Twenty-four of the 84 maternal deaths occurred in women aged 35 years and older. Avoidable factors, where there was some departure from the accepted standard of satisfactory care, were considered to be associated with seven of the 27 direct obstetric deaths, two of the 21 indirect deaths and three of the 36 incidental deaths (Table 3).

**Table 3: Maternal mortality in Australia, 1991–1993**

	<b>Total</b>	<b>Direct</b>	<b>Indirect</b>	<b>Incidental</b>
Maternal deaths (number)	84	27	21	36
Maternal mortality (rate*)	10.9	3.5	2.7	4.7

\* Rates are maternal deaths per 100,000 total confinements.

Source: Report on Maternal Deaths in Australia, 1991-1993, AusInfo, Canberra.



# 4 Babies

## 4.1 Introduction

This chapter provides data on the characteristics of the 256,198 total births reported in 1997 to the perinatal collections; and includes birth status, sex, gestational age, birthweight, length of hospital stay and separation mode from hospital.

## 4.2 Baby's birth status

Babies are recorded as liveborn or stillborn (fetal deaths) on perinatal notification forms. There is a separate requirement for legal registration of stillbirths and liveborn babies dying within 28 days of birth. The Australian Bureau of Statistics now publishes annual data on perinatal deaths (ABS 1999) using the 400 g birthweight or at least 20 week gestation criteria for legal registration of births. The legal criteria for registration of births and notification in the perinatal collections differ slightly from the World Health Organization (WHO) definitions and include additional babies whose birthweight is less than 500 g but who meet the criteria of at least 20 weeks gestation or 400 g or more birthweight. As noted previously, there were an estimated 254,390 live births and 1,808 fetal deaths in 1997, giving a total of 256,198 births (Table A1).

## 4.3 Baby's month of birth

A changing seasonal pattern of births was evident in Australia up to the 1970s, the earlier peak of births in September being replaced by a bimodal pattern of peaks in February/March and September (Mathers & Harris 1983). The bimodal pattern of peaks in late summer and spring has continued in recent years. In 1997, of the estimated 256,198 births in Australia, most births occurred in the months of March, May and July to October (Table A36). When adjustment is made for the number of days in the month by deriving a standardised index, the bimodal pattern seen in recent years is not so evident, with the peak months for births being September/October and the low months November and December (Figure 21).

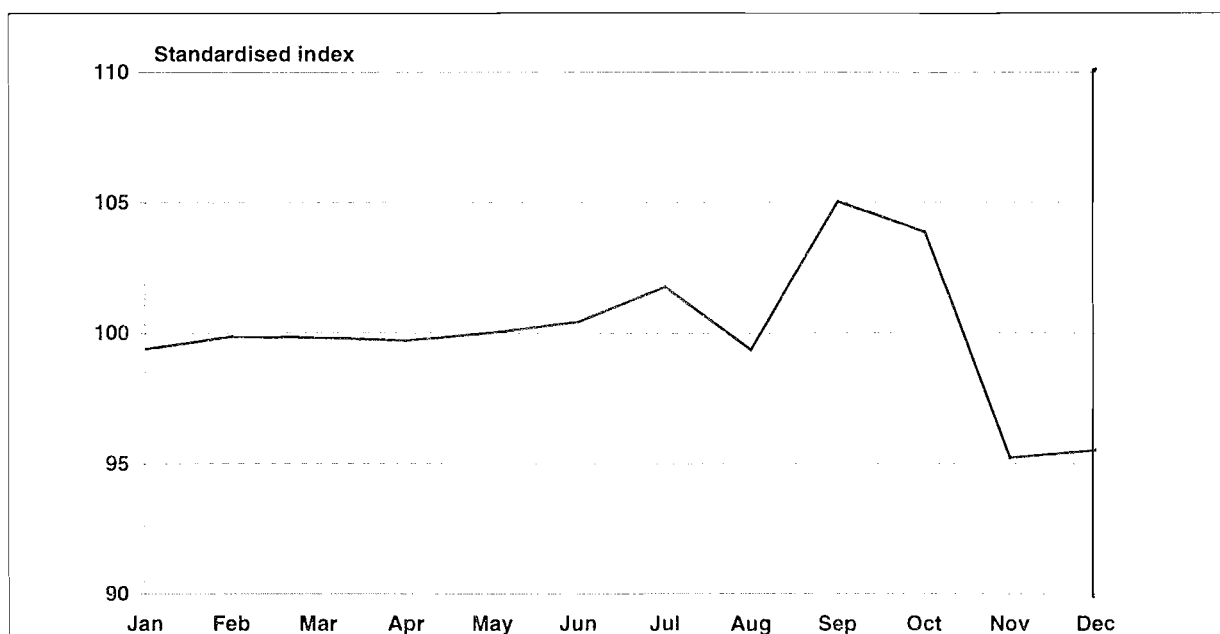


Figure 21: Monthly variation in births, Australia, 1997

## 4.4 Baby's sex

Male births exceeded female births in all States and Territories (Table A37). The national sex ratio was 105.7 male births per 100 female births; for singleton births it was 105.8, for twins, 103.1 and for other multiple births, 107.3.

## 4.5 Baby's gestational age

Preterm birth before 37 weeks gestation accounts for a high proportion of perinatal deaths. It is associated with many neonatal problems that cause significant morbidity in newborn babies and may sometimes be associated with long-term disabilities (National Health and Medical Research Council 1996). The number of births in Australia for each week of gestational age increased from 198 at 20 weeks to 90,002 at 40 weeks (Table A38, Figure 22). Preterm births were classified according to the criteria of the WHO into groups at 20–27 weeks, 28–31 weeks, and 32–36 weeks. Among all births, 7.3% were preterm; most of the preterm births were at 32–36 weeks; approximately 1 in 5 preterm births were at earlier gestational ages (Figure 23).

Preterm birth occurred in 49.3% of twins and in 98.0% of triplet births, much higher than the proportion of 6.0% among singleton births (Table A39). The difference in gestational age distribution between singleton and multiple births is even more pronounced when babies of less than 32 weeks gestation are considered. More than 1 in 10 (10.4%) twin births and nearly 2 in 5 (39.3%) triplet births were in this high-risk group compared with only 1 in 100 (1.2%) singleton births.

Differences in the manner in which gestational age was estimated may have been a factor contributing to variations in preterm births among the States and Territories. The highest proportion of preterm births was 10.6% in the Northern Territory (Table A40).

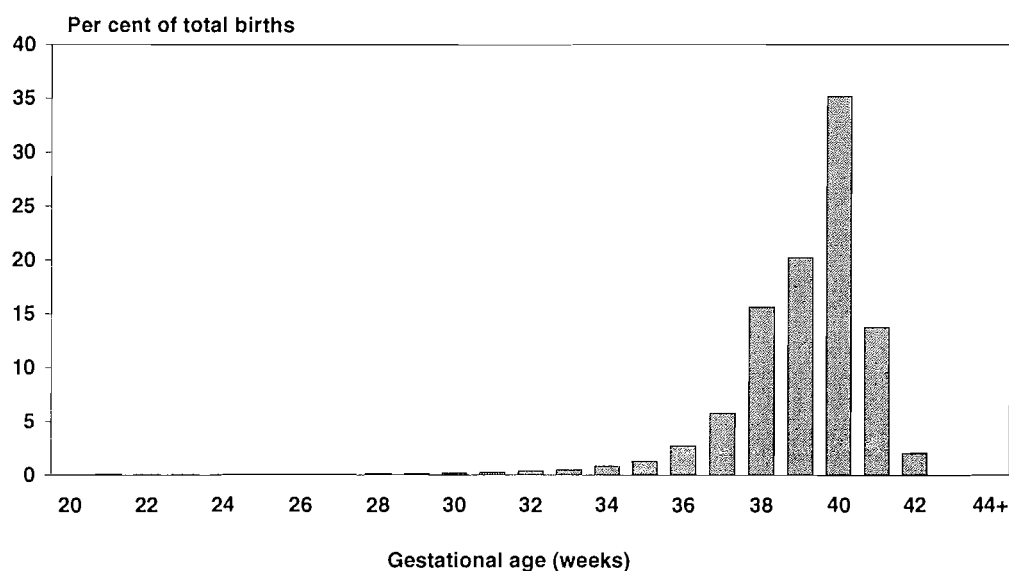


Figure 22: Distribution of births by gestational age, Australia, 1997

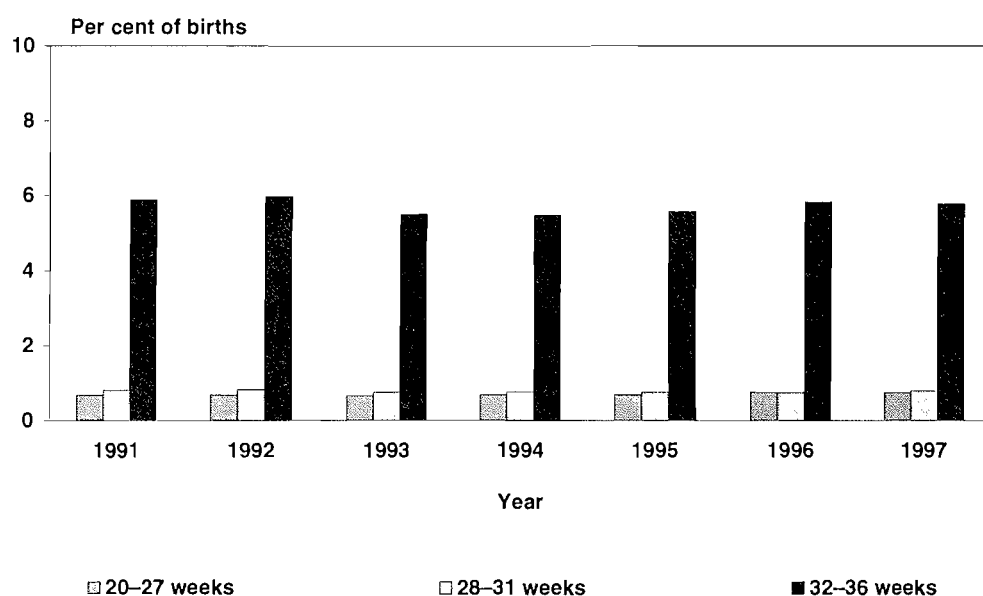
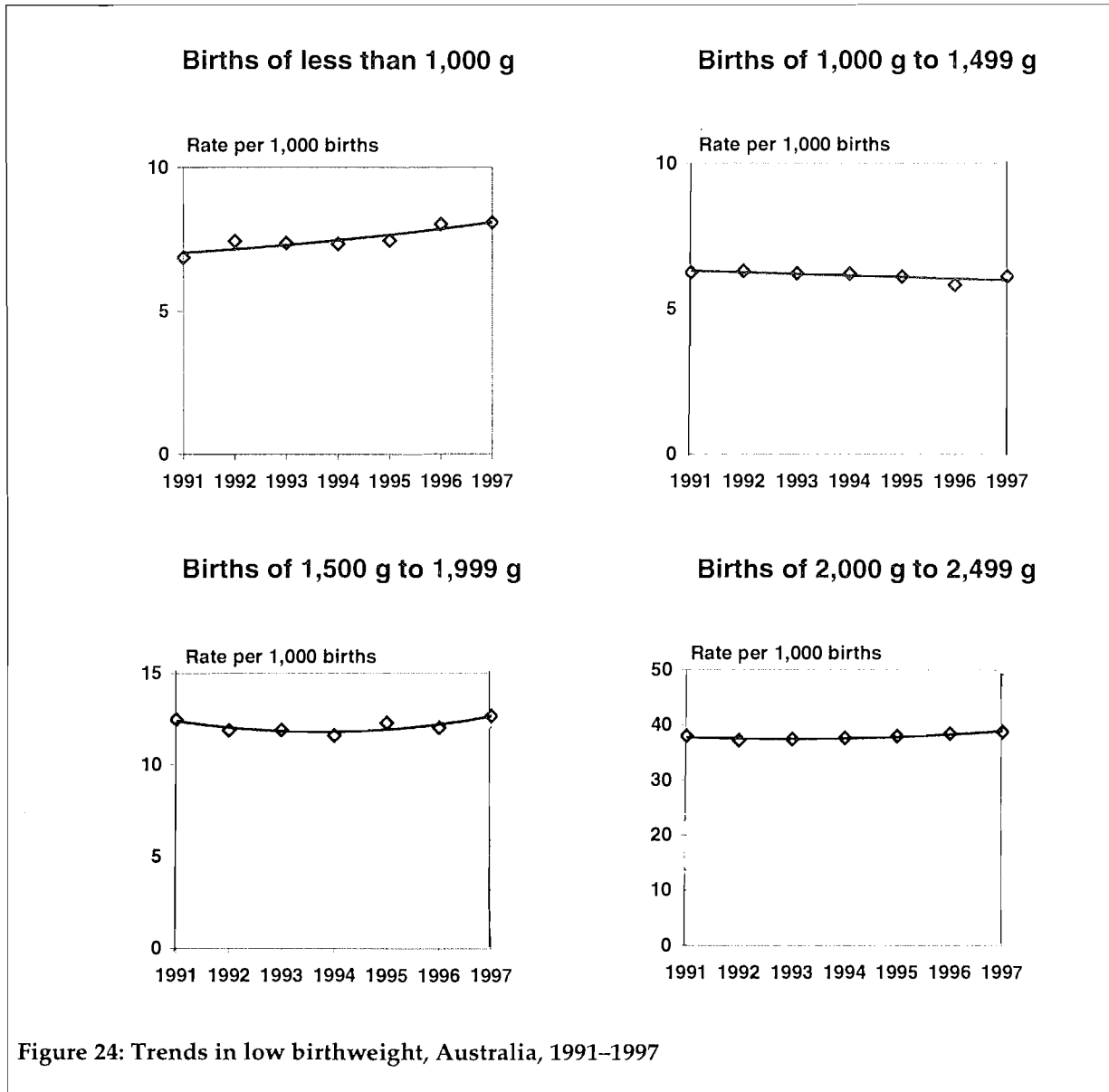


Figure 23: Preterm births, Australia, 1991-1997

## 4.6 Baby's birthweight

The baby's birthweight is a key indicator of health status. Babies are defined as low birthweight if their birthweight is less than 2,500 g. Within this category, those weighing less than 1,500 g are designated as very low birthweight and those less than 1,000 g as extremely low birthweight.

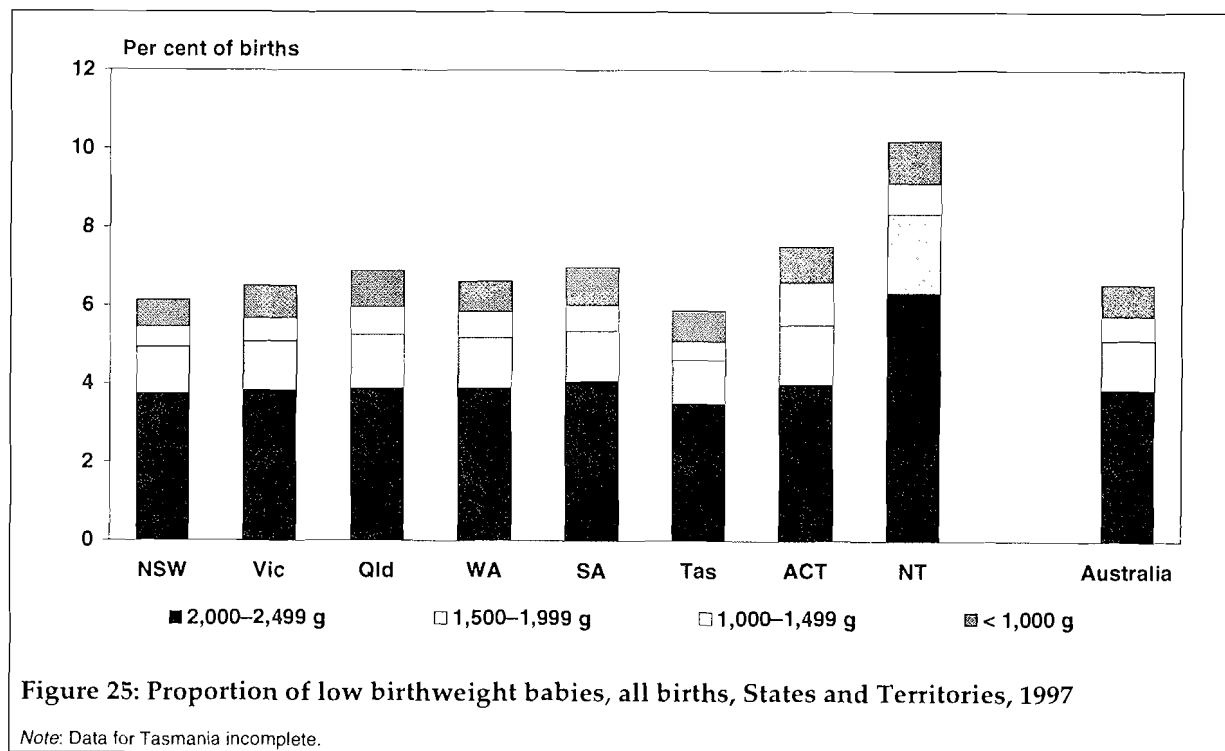
In 1997, there were 16,800 (6.6%) babies of low birthweight, increasing from 16,525 (6.4%) in 1996. Very low birthweight babies comprised 1.4% of all births in 1997 and extremely low birthweight babies, 0.8% (Table A41). There was some increase in the proportion of extremely low (less than 1,000 g) birthweight babies between 1991 and 1997, but little change in the proportion of babies in the other categories of low birthweight (Figure 24).



The mean birthweight of all liveborn and stillborn babies in Australia in 1997 was 3,356 g and showed relatively little variation among the different States and Territories, except for a lower average of 3,248 g in the Northern Territory where there was also the highest proportion of low birthweight babies (10.2%) (Table A41, Figure 25).

The mean birthweight of liveborn babies was 3,369 g (Table A42). Low birthweight occurred in 6.1% of liveborn babies and in 75.4% of stillborn babies. More than half (53.0%) of the stillborn babies had a birthweight of less than 1,000 g.

In twins, the proportion of low birthweight was 50.4%, almost ten times higher than in singleton births (5.2%); in triplets, this proportion was 96.4% and, in other multiple births, 100% (Table A43, Figure 26). The mean birthweight was 3,387 g in singletons, 2,389 g in twins, 1,584 g in triplets, and other multiple births, 1,111 g.



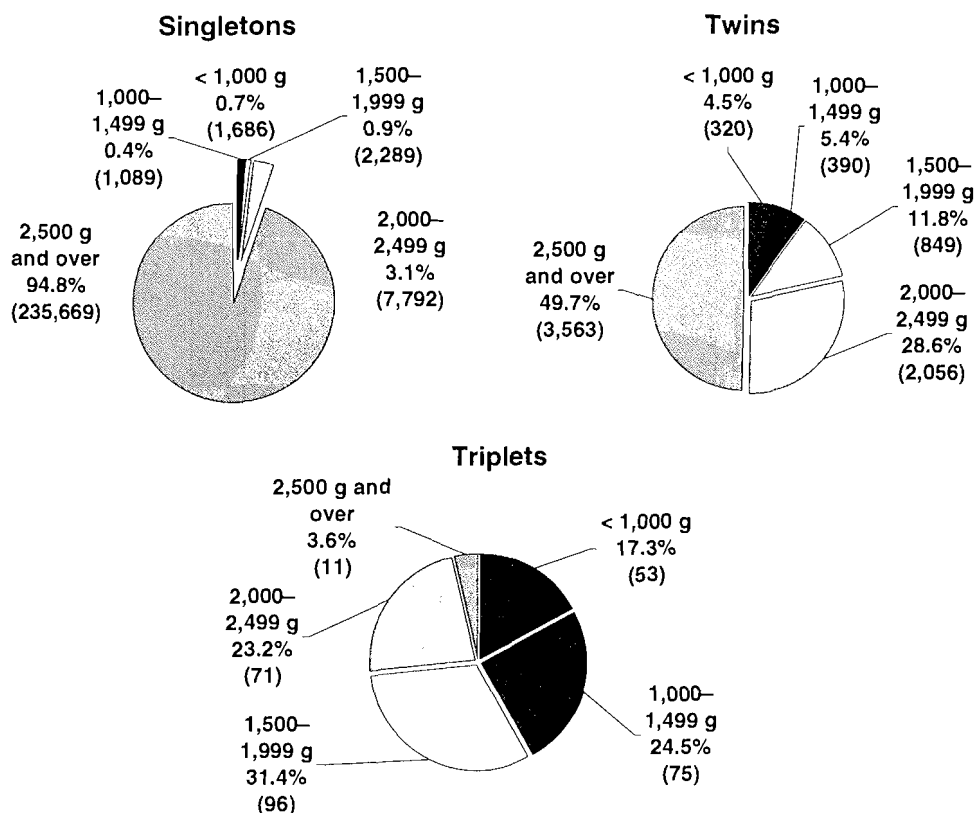
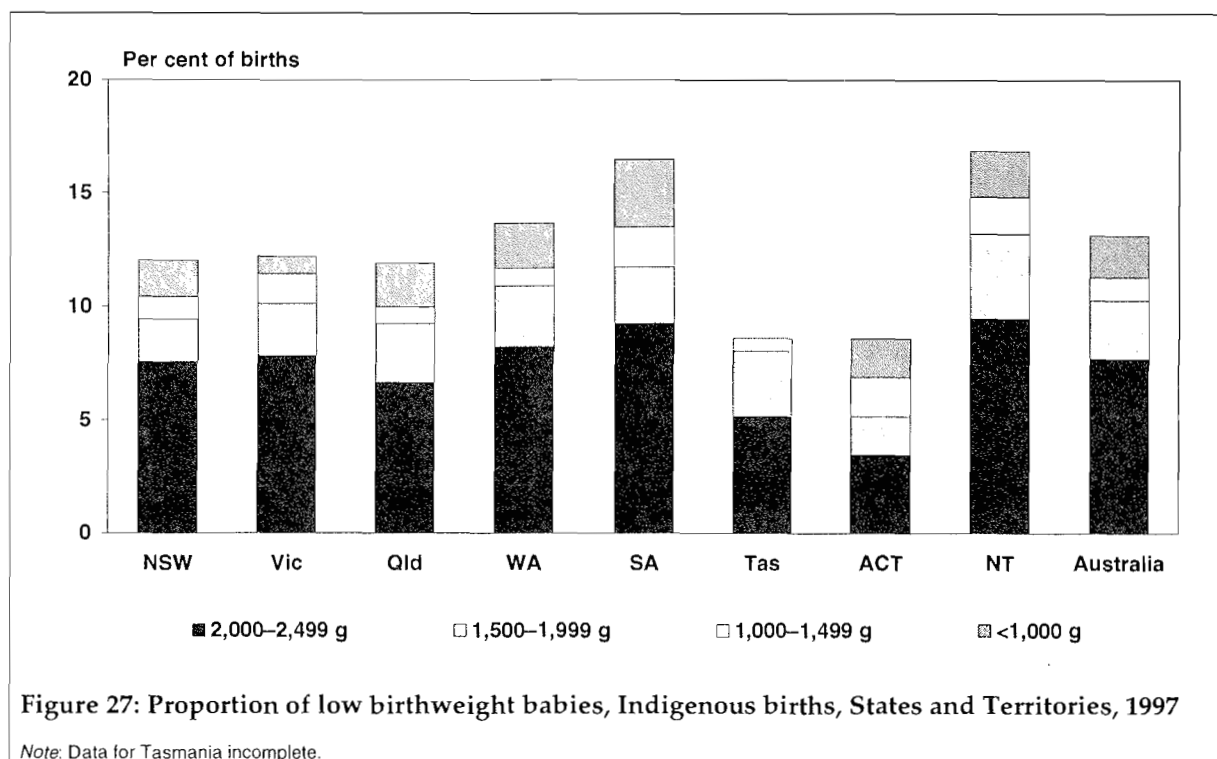


Figure 26: Distribution of birthweight, singleton and multiple births, Australia, 1997

Male babies were less likely to be low birthweight (6.1%) than were females (7.1%) (Table A44). In the higher birthweight categories, there were relatively more males in the groups with birthweights of 3,500–3,999 g and over. The mean birthweight of males was 3,417 g, which was 124 g higher than that of females (3,293 g).

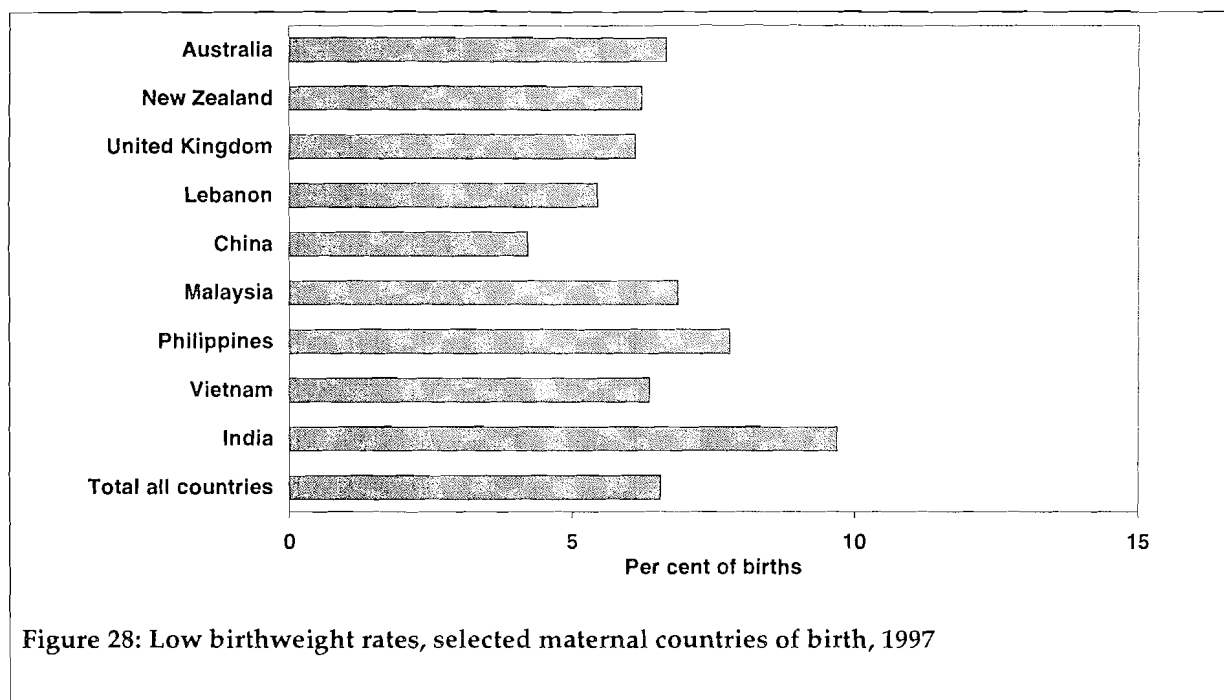
The mean birthweight of live and stillborn babies of Indigenous mothers in 1997 was 3,146 g. This was 210 g less than the national average of 3,356 g for all births. The proportion of low birthweight in babies of Indigenous mothers was 13.1% (Table A45), nearly twice that of 6.6% in all babies. The mean birthweight of babies of Indigenous mothers, and the proportion with low birthweight, varied markedly among the States and Territories. Low birthweight was more likely among babies of Indigenous mothers in the Northern Territory (16.9%), South Australia (16.5%) and Western Australia (13.7%) than in the other States (Figure 27).



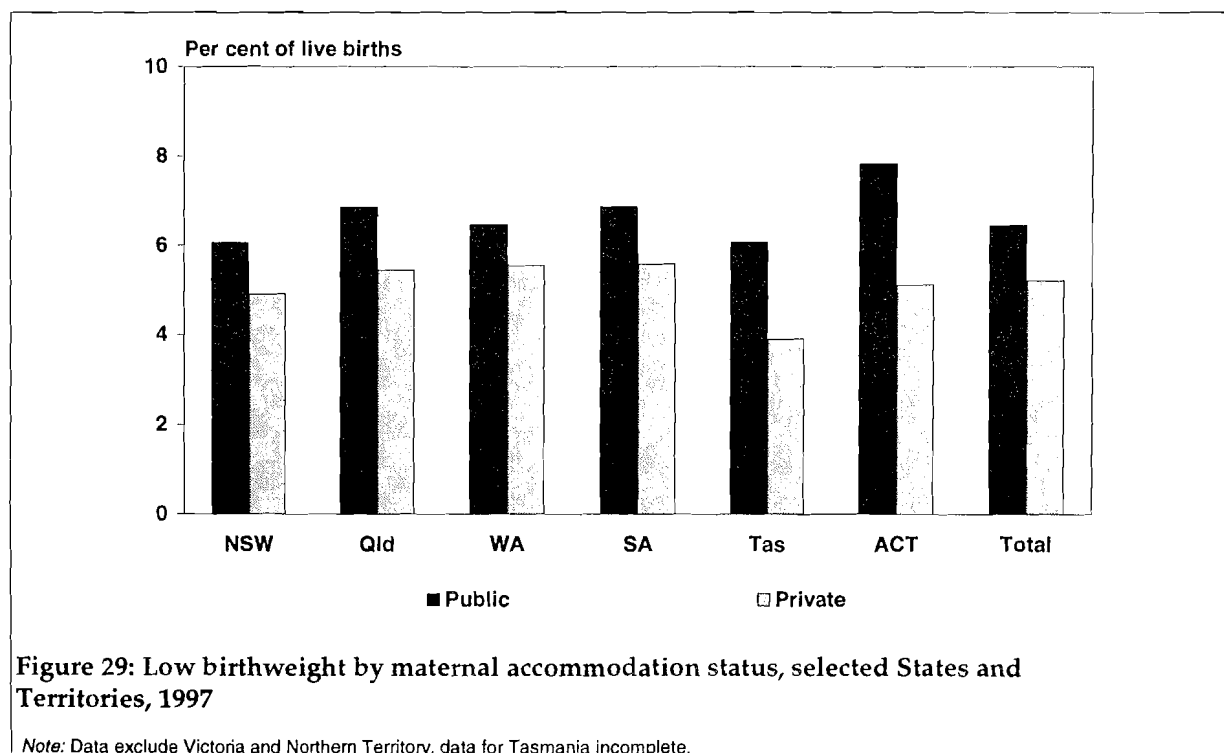
There were relatively small differences in the proportion of low birthweight babies according to the mother's country of birth. Compared with the proportion of 6.4% in the babies of Australian-born non-Indigenous mothers, low birthweight was slightly more common in babies whose mothers were born in India, Malaysia and the Philippines (Table A46, Figure 28). Mothers born in China, the Former Yugoslavia and Lebanon were less likely to have babies of low birthweight.

Mothers aged 25–29 years had the lowest proportion of low birthweight babies (6.0%); this proportion was higher among babies of younger and older mothers (Table A46).

Women having their first baby, and those with four or more previous children, were more likely than other parity groups to have a low birthweight baby, while those giving birth for the second or third time were least likely to do so (Table A46).



The proportion of low birthweight among babies born to single mothers (9.9%) was considerably higher than for babies born to married or de facto mothers (6.1%) (Table A46). Mothers who were not insured had a higher rate of low birthweight babies (7.0%) than those who were insured (5.6%) (Table A46, Figure 29).





Women giving birth at home and in birth centres have usually been selected to exclude those with major risk factors for low birthweight. This appears to be reflected in the lower proportion of low birthweight babies in home births (2.5%), and in birth centres (1.1%), than in hospital births (6.6%) (Table A46). On the other hand, there was a high proportion of low birthweight babies among those born before arrival in hospital (14.4%) and elsewhere (24.3%).

The proportion of various categories of low birthweight babies, especially those weighing less than 1,500 g, who were born in larger hospitals that have adequate staffing and facilities provides an indicator of the effectiveness of regionalisation of perinatal care. This proportion was high in all regions except the Northern Territory which has relatively few births, only one large maternity unit, and a relatively high proportion of births to Indigenous mothers in remote locations (Table A47).

More than four-fifths (83.7%) of the highest risk babies weighing 500–999 g were born in hospitals that had more than 2,000 confinements annually, and another 8.2% were born in hospitals with 1,001–2,000 confinements annually. Victoria (9.6%) and Northern Territory (27.3%) had relatively more babies in this birthweight group born in hospitals with fewer than 1,000 confinements annually. In Victoria and the Northern Territory, a relatively higher proportion of babies weighing 1,500–1,999 g were born in hospitals with less than 1,000 confinements annually.

## 4.7 Apgar scores

Apgar scores are clinical indicators of the baby's condition shortly after birth, based on assessment of the heart rate, breathing, colour, muscle tone, and reflex irritability. Between 0 and 2 points are given for each of these five characteristics and the total score may vary between 0 and 10. The Apgar score is routinely assessed at 1 and 5 minutes after birth, and subsequently at 5-minute intervals if it is still low at 5 minutes.

Consistent with the usual convention for grouping Apgar scores, the distribution in each State and Territory was compared (Tables A48, A49, Figure 30). The Apgar score at 1 minute was not recorded in the perinatal collection in Victoria in 1997. In the other States and Territories, the distribution of 1-minute and 5-minute Apgar scores was similar. Low Apgar scores of 1–3 were recorded at 1 minute in 2.4% of live births and at 5 minutes in 0.3%.

Low Apgar scores of less than 4 were strongly associated with the baby's birthweight. Babies from singleton and multiple births within the same birthweight categories had similar Apgar scores (Table A50).

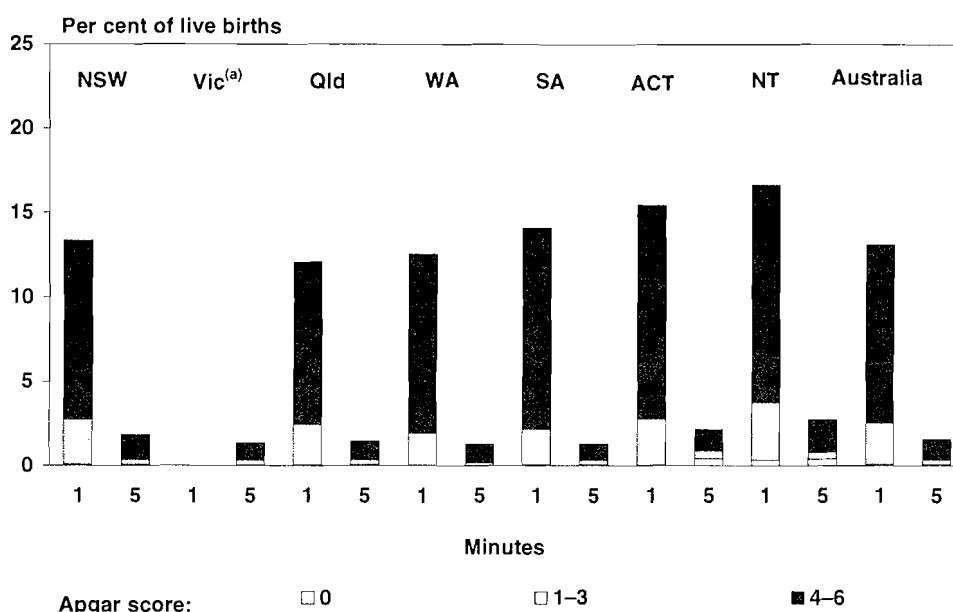


Figure 30: Low Apgar scores at 1 and 5 minutes after birth, live births, States and Territories, 1997

(a) Apgar score at 1 minute unavailable for Victoria.

Note: Data for Tasmania incomplete and excluded from figure.

## 4.8 Resuscitation at birth

Recording the type of resuscitation given to babies immediately after birth varies markedly among the States and Territories. A breakdown of this information was not available for New South Wales in 1997. Ventilatory assistance by intermittent positive pressure respiration (IPPR) through a bag and mask, or after intubation was recorded for 8.6% of liveborn babies in Queensland, 9.6% in Western Australia, increasing to 14.7% in Victoria and 19.2% in South Australia. Excluding New South Wales where this information was not available, IPPR was given to 12.6% of all live births (Table A51). Endotracheal intubation was recorded for 0.8% of liveborn babies in Queensland, 1.0% in Victoria, 1.5% in South Australia, 1.6% in the Australian Capital Territory and 2.9% of liveborn babies in Western Australia. Because of differences in the methods of data collection, these figures should be interpreted cautiously. Narcotic antagonists that were administered to counteract respiratory depression due to maternal narcotic analgesics were administered to 4.2% of liveborn babies born in Victoria and 3.5% in South Australia.

## 4.9 Baby's length of stay in hospital

Babies who died or were transferred to another hospital after birth were excluded from the data used to calculate length of stay. The majority of babies (85.4%) remained in their hospital of birth for less than 7 days (Table A52). More babies had relatively short stays of less than 5 days in hospital in 1997 than in the previous five years. In 1997, 58.9% of babies stayed in hospital for period of less than 5 days compared with only 37.0% in 1991. This trend occurred in all States and Territories but the national data did not include New South

Wales in 1991 and 1992. In 1997, relatively more babies born in New South Wales (60.7%) and Queensland (62.1%) were in the short-stay group.

The duration of hospitalisation was 28 or more days for 1.1% of babies. As the period of hospitalisation of babies transferred from their hospital of birth to another hospital is not included here, except for South Australia, these figures underestimate the proportion of babies staying in hospital for long periods.

The baby's gestational age and birthweight are usually the main factors influencing the duration of hospitalisation (Table A53). Twins and other babies from multiple births usually have longer stays than singleton babies. Babies born to Indigenous mothers were more likely to be discharged relatively early from hospital but were also more likely to have stays of 2 weeks or more. These findings are consistent with the preference of Indigenous mothers for early discharge from hospital and also with their higher risk of having low birthweight babies. Babies with a gestational age of less than 32 weeks, or a birthweight less than 1,500 g, were more likely to have short periods of stay of less than 3 days in their hospital of birth because of higher risks of neonatal death or transfer to other hospitals.

## **4.10 Baby's mode of separation from hospital**

A total of 4.5% of babies were transferred to another hospital from their hospital of birth (Table A54). Although the States and Territories record the hospital to which the baby is transferred on their perinatal forms, the type of hospital is not presently included in the data provided for the national report. Therefore it is not possible to compare the proportion of babies transferred for further treatment of neonatal conditions with other reasons for transfer.

If a baby dies at home within 28 days of birth, or dies after being transferred to another hospital, this death may not be included in the perinatal collection unless a registered neonatal death has been linked with its perinatal form. The data on mode of separation of the baby are therefore an incomplete source of information on neonatal deaths and cannot be used to determine national neonatal death rates.

# 5 Perinatal mortality

## 5.1 Definitions

There are different legal and statistical definitions in Australia for registering and reporting perinatal deaths. For legal purposes, all fetal and neonatal deaths of at least 20 weeks gestation or at least 400 g birthweight are registered. The Australian Bureau of Statistics (ABS) published annual data on perinatal deaths in its *Causes of Death 1996* and previous publications, based on recommendations of the World Health Organization (WHO) for reporting national perinatal statistics. These were that fetal deaths are included if the birthweight is at least 500 g or, when birthweight is not available, if the gestational age is at least 22 weeks, and there is no evidence of life after birth. The ABS in *Causes of Death 1997* and future publications now also publishes data on perinatal deaths at the lower inclusion criteria of 400 g, or when birthweight is unavailable, a gestational age of at least 20 weeks. The ABS data for neonatal deaths include liveborn babies dying within 28 days of birth and are based on the same criteria of birthweight or gestational age as for fetal deaths.

The lower limit inclusion criteria has been adopted because this recognises the availability of reliable 400 g/20 weeks data from all State and Territory Registrars of Births, Deaths and Marriages and recommendations from major users that the ABS adopt the legal requirement for registration of perinatal deaths as the statistical standard (ABS 1999).

WHO recommendations differ from this standard and include only early neonatal deaths occurring in the first 7 days and not all neonatal deaths up to 28 days, as reported by ABS. WHO has also recommended that for international comparisons, countries should report data based on lower limits of 1,000 g or, when birthweight is not available, a gestational age of at least 28 weeks, excluding births and fetal and neonatal deaths that do not meet these criteria (Table A55).

Perinatal death rates vary markedly according to which definition is used (Table A55). In the period from 1995 to 1997, the perinatal death rate for deaths of at least 20 weeks or 400 g (9.5 per 1,000 births) was nearly double the estimated rate of 4.9 per 1,000 births based on the WHO definition for international comparisons. Using the criteria of 400 g/20 weeks for national data, the 1997 perinatal death rate of 9.2 per 1,000 births was 91.7% higher than the estimated rate of 4.8 per 1,000 births based on the WHO criteria for international comparisons.

Unless otherwise specified, fetal, neonatal and perinatal death rates in this report are based on the ABS definition using a lower limit of 400 g, or 20 weeks when birthweight was unknown, and include neonatal deaths within 28 days of birth. Annual data are based on the year of registration. Data for the years prior to 1992 were given in the report for 1993 (Lancaster et al. 1996).

## 5.2 Trends in fetal, neonatal and perinatal deaths

Depending on when the fetal heart stopped beating, fetal deaths can be grouped as antepartum deaths, when the heartbeat ceased before labour commenced; intrapartum deaths, when the heartbeat ceased during labour; and unknown deaths, when it was not known whether the heartbeat ceased before or during labour. There is another small group of registered perinatal deaths for which it was not known whether the heartbeat ceased before or after birth. The ABS includes this group with the fetal deaths and that practice has been followed in this report, including them with the intrapartum fetal deaths.

In the period between 1973 and 1997, the fetal death rate has approximately halved from 11.1 to 6.0 per 1,000 births (Table A56, Figure 31). The fall during this period of 69.4% in intrapartum fetal death rates was greater than the decline of 41.2% for antepartum fetal death rates (Figure 32). Unknown time of fetal death rates declined 27.2% between 1973 and 1996, but then jumped from 0.8 per 1,000 births in 1996 to 1.2 per 1,000 births in 1997. As a result of these decreasing rates, antepartum fetal deaths increased as a proportion of all fetal deaths from 63.8% in 1973 to 77.7% in 1997, and intrapartum fetal deaths decreased from 36.2% in 1973 to 22.3% of all fetal deaths in 1997.

The neonatal death rate declined even more sharply than the fetal death rate, falling by 72.4% from 11.6 per 1,000 live births in 1973 to 3.2 per 1,000 live births in 1997 (Table A57, Figure 33). The early neonatal death rate for deaths within 7 days of birth fell more rapidly than the rate of late neonatal deaths that occurred in the second, third and fourth weeks after birth.

Based on the lower legal and now ABS definitions, the national perinatal mortality rate declined by 60.8%, from 22.6 per 1,000 births in 1973 to 9.2 per 1,000 births in 1997 (Table A58, Figure 31).

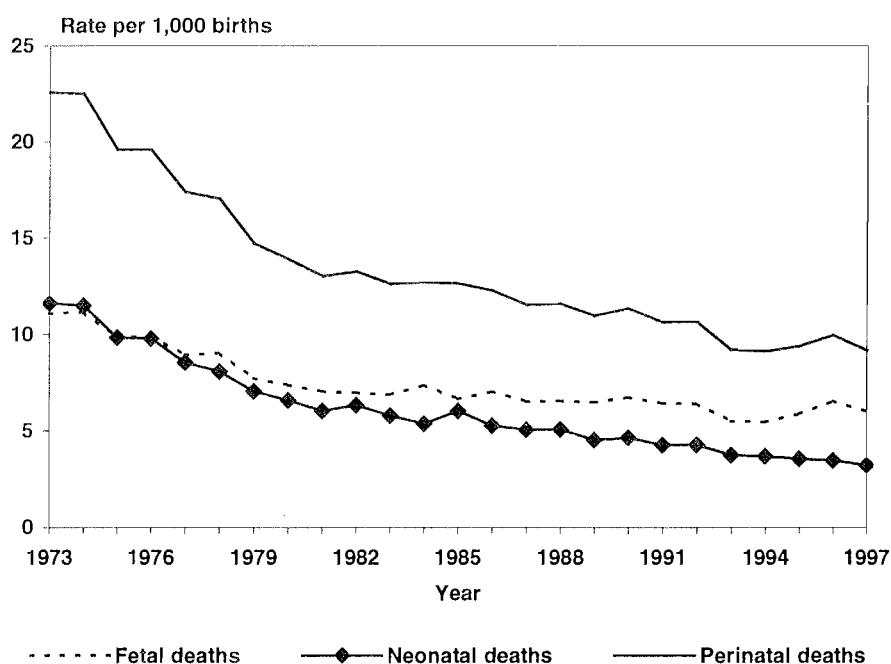


Figure 31: Fetal, neonatal and perinatal death rates, Australia, 1973–1997

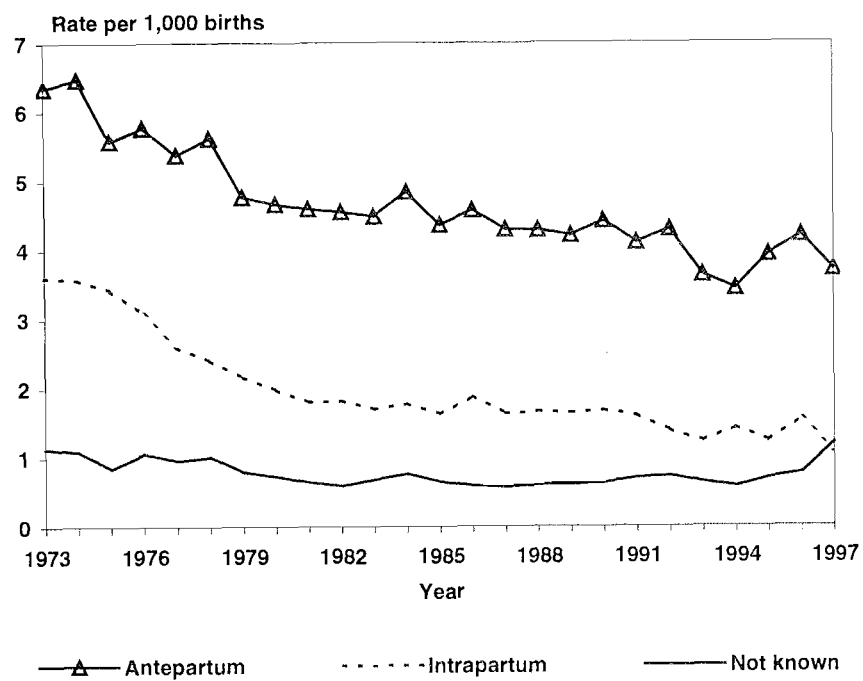


Figure 32: Type of fetal death, Australia, 1973–1997

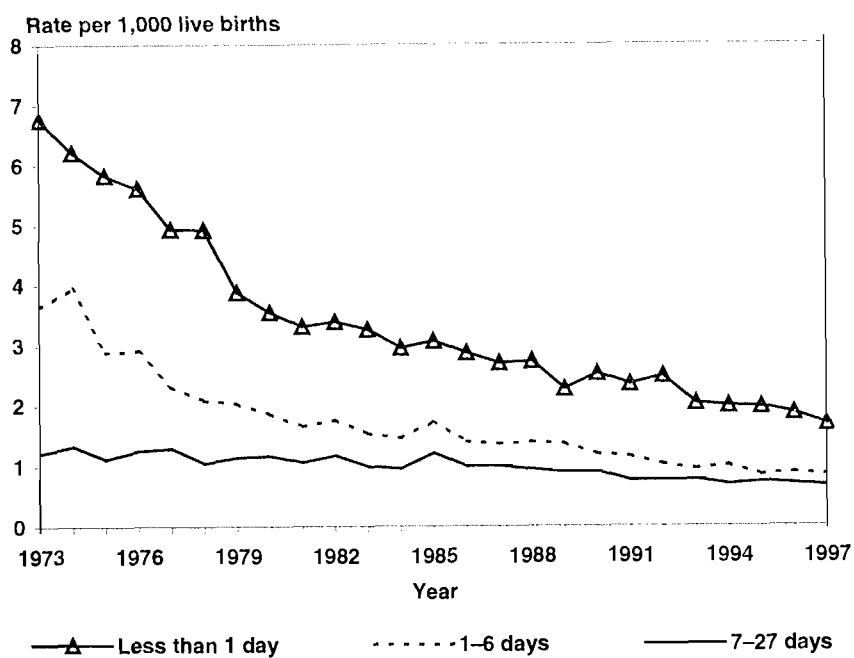
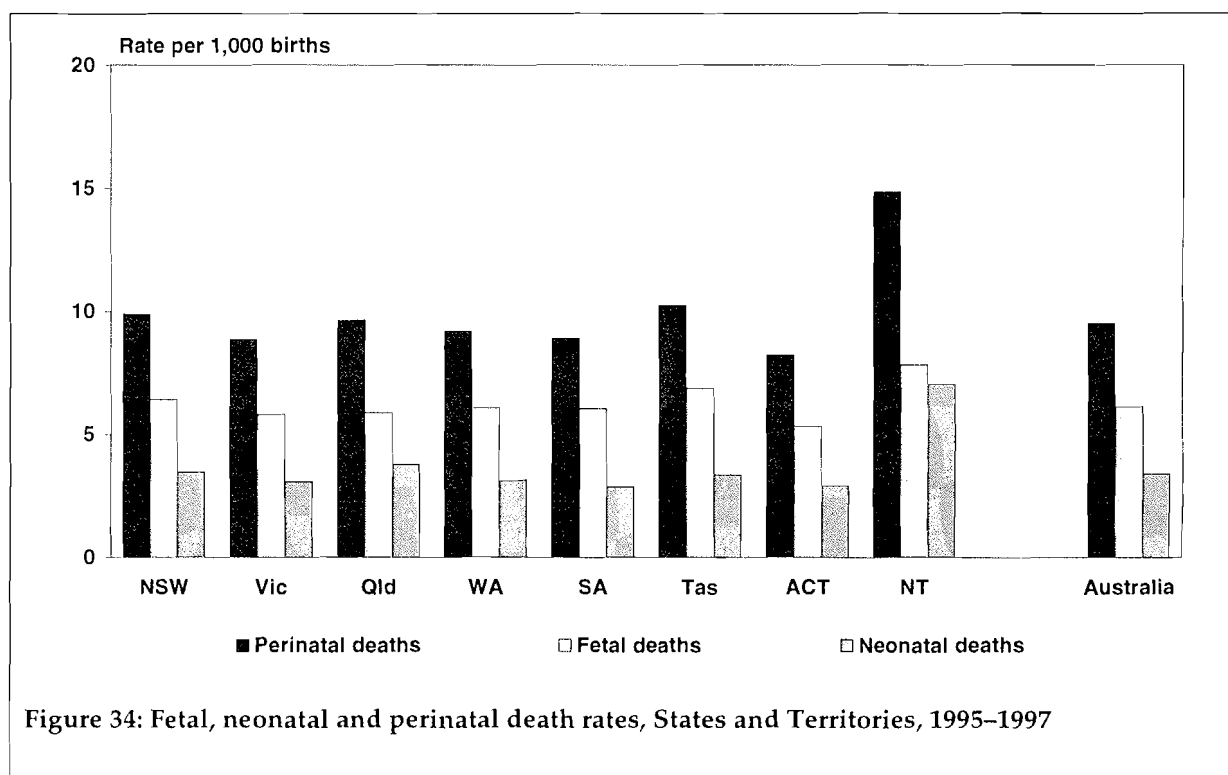


Figure 33: Neonatal deaths by age at death, Australia, 1973–1997

## 5.3 Perinatal deaths by State and Territory of residence

Except for a higher rate in the Northern Territory, there were relatively small differences in perinatal death rates among the States and Territories (Table A59, Figure 34). In the three-year period from 1995 to 1997, the Australian Capital Territory, Victoria and South Australia had the lowest perinatal death rates. In this three-year period, at least 95% of perinatal deaths were registered in the State and Territory of mothers' usual residence except in the Northern Territory (Table A60).



## 5.4 Perinatal deaths by maternal age

The perinatal death rate was almost double for babies of younger mothers aged less than 20 years and older mothers aged 40 years or more than for mothers aged 25–34 years, which had the lowest rate of 8.1 per 1,000 births in the period from 1995 to 1997 (Table A61, Figure 35).

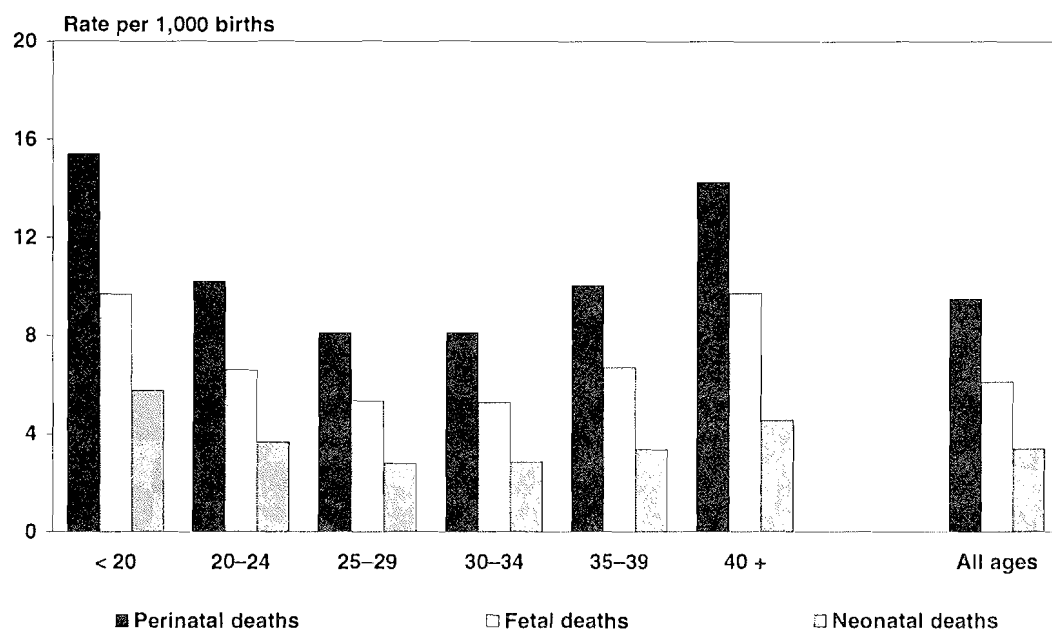


Figure 35: Fetal, neonatal and perinatal death rates by maternal age, Australia, 1995–1997

## 5.5 Perinatal deaths by plurality

Perinatal death rates are higher for multiple than for singleton births. The number of perinatal deaths among triplet and higher order multiple births is relatively small each year so data were analysed for the three-year period of 1995 to 1997.

There were 7,288 perinatal deaths in 1995–1997; 760 (10.4%) occurred in twins and 69 (0.9%) in other multiple births, so multiple births accounted for 11.3% of all perinatal deaths (Table A62). The perinatal death rate of twins for the period 1995–1997 was 4.4 times higher, and of other multiple births 8.5 times higher, than that of singleton births (Table A62), mainly due to their increased occurrence of preterm birth and low birthweight.

## 5.6 Perinatal deaths by baby's sex

Perinatal death rates for males are consistently higher than for females. In 1995–1997, the rate for males was 15.9% above that for females (Table A63). The difference in rates between the sexes was greater for neonatal deaths than for fetal deaths. The neonatal death rate for males was 23.3% higher than for females; the fetal death rate was 10.3% higher for males.

## 5.7 Proportionate perinatal death rates by gestational age

The duration of pregnancy is recorded in completed weeks on perinatal death certificates, based either on the gestational age (calculated using the date of the first day of the last menstrual period and the baby's date of birth), or on clinical assessment. As information



about the gestational age distribution of all births between 1973 and 1997 was lacking, fetal, neonatal and perinatal deaths in categories of gestational age are expressed as proportionate death rates. The denominator for calculating proportionate death rates is the total number of births rather than the number of births in a particular gestational age (or, see below, birthweight) category.

In 1973, preterm births of less than 37 weeks accounted for 58.9% of fetal deaths with stated gestational ages and those less than 28 weeks for 23.1%. In 1997, these proportions had increased to 69.6% and 37.1%, respectively (Table A64, Figure 36). Many countries still have a lower limit of 28 weeks for registering fetal deaths, thereby excluding about one third of fetal deaths included in the Australian data.

The distribution of neonatal deaths by gestational age was similar to that for fetal deaths but there were relatively more neonatal deaths of less than 28 weeks in 1997 than in 1973. The proportion in this group increased from 26.8% in 1973 to 46.8% in 1997 while the proportion of all neonatal deaths of known gestational age that were preterm was 69.2% in 1973 and 71.4% in 1997 (Table A65, Figure 37).

Between 1973 and 1997, there were substantial falls in the proportionate perinatal death rates in all gestational age groups, but the decline for deaths of less than 28 weeks was not as marked as for deaths in the other gestational age groups. In 1997, 40.4% of perinatal deaths were less than 28 weeks gestation (Table A66, Figure 38).

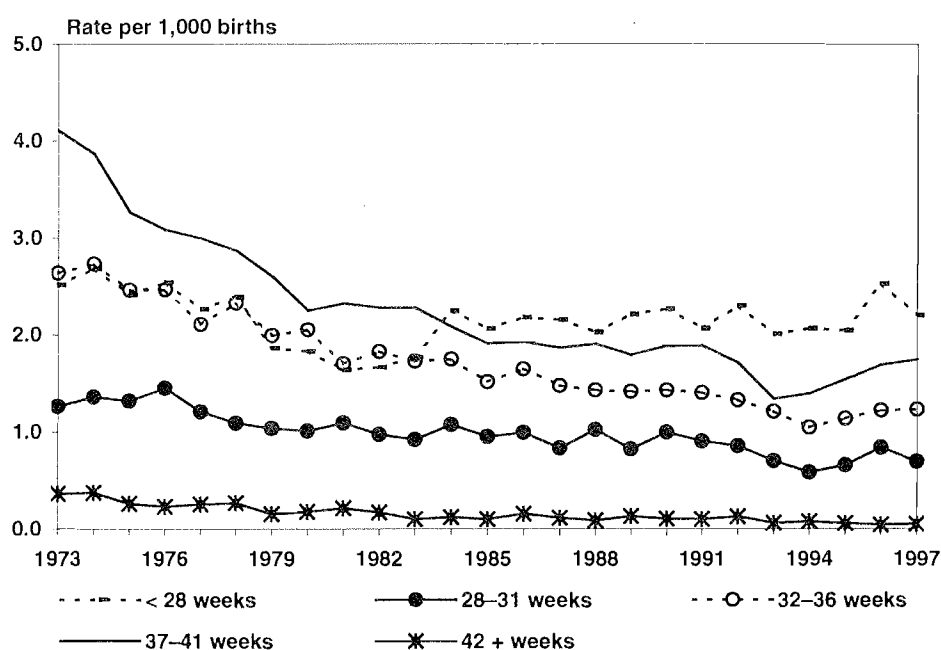


Figure 36: Proportionate fetal death rates by gestational age, Australia, 1973–1997

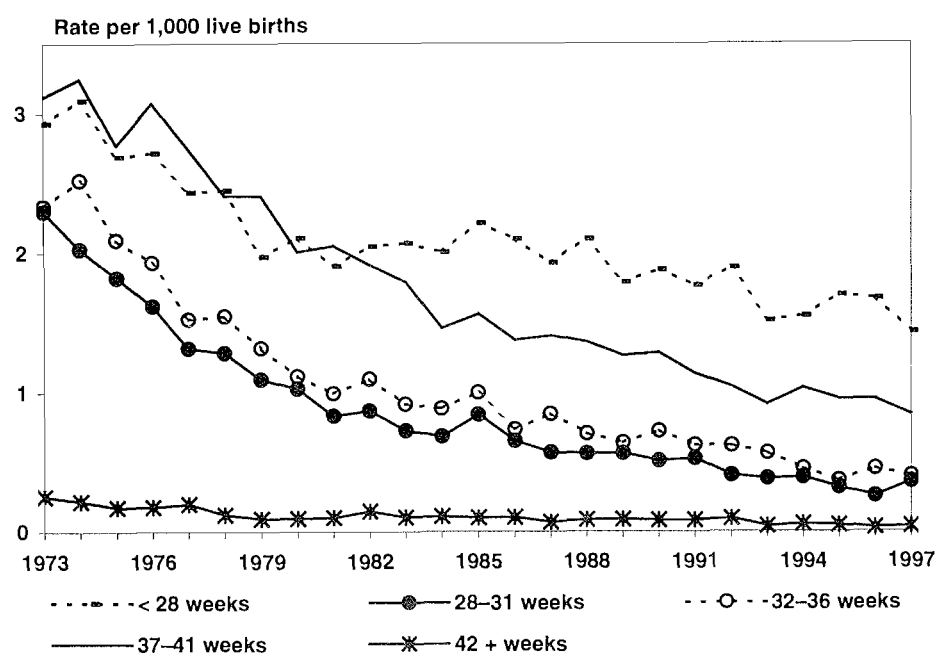


Figure 37: Proportionate neonatal death rates by gestational age, Australia, 1973-1997

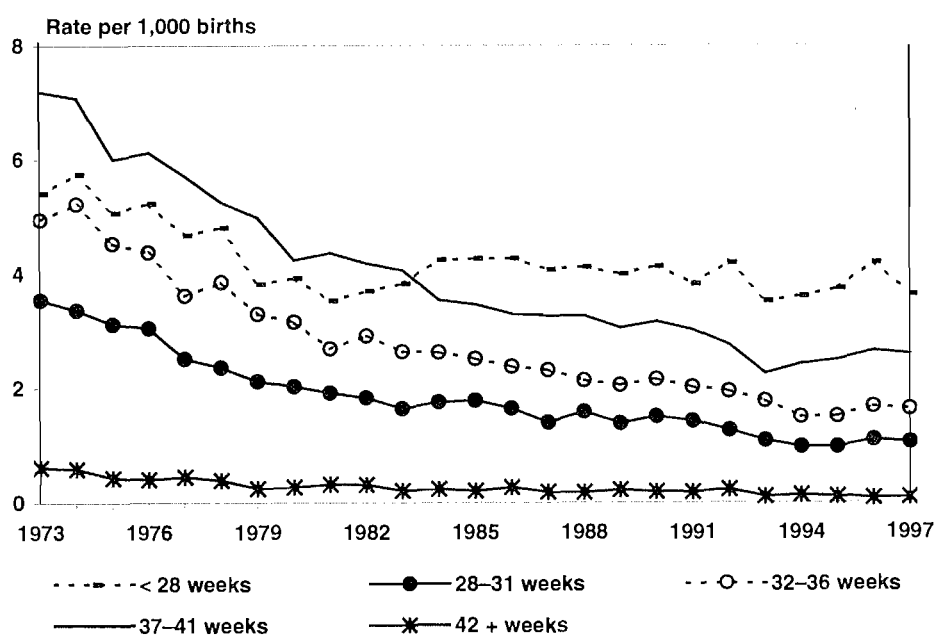


Figure 38: Proportionate perinatal death rates by gestational age, Australia, 1973-1997

## 5.8 Proportionate perinatal death rates by birthweight

As for those deaths tabulated in gestational age groups, the fetal, neonatal and perinatal death rates by birthweight for the period 1973 to 1997 are expressed as proportionate death rates. In 1973, low birthweight babies of less than 2,500 g accounted for 64.1% of fetal deaths with stated birthweights and those weighing less than 1,000 g for 27.1% (Table A67, Figure 39). In 1997, these proportions had increased to 69.4% and 40.9%, respectively.

The decline in the proportionate neonatal death rate was much greater for babies weighing 1,000–2,499 g than for those in lighter or heavier birthweight groups (Table A68, Figure 40). The rate for babies of 1,000–2,499 g fell from 4.7 per 1,000 live births in 1973 to 0.7 per 1,000 live births in 1997. For babies weighing less than 1,000 g the proportionate death rate declined from 3.0 to 1.5 per 1,000 live births in the same period, while for those weighing 2,500 g and over, it declined from 2.8 per 1,000 in 1973 to 0.9 per 1,000 live births in 1997.

Although there were substantial falls in the proportionate perinatal death rates in all birthweight groups, the greatest decline of 71.9% was for babies weighing 1,000–2,499 g, particularly reflecting the decline in neonatal deaths in this birthweight group (Table A69, Figure 41).

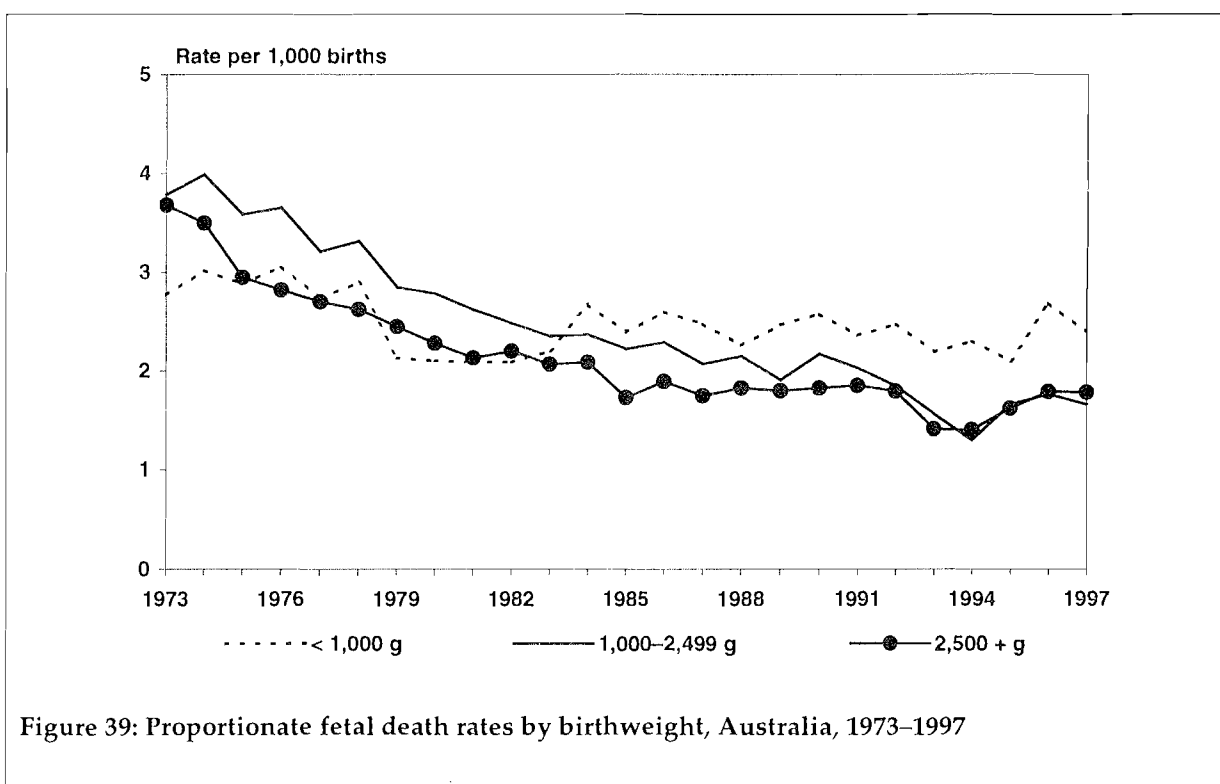


Figure 39: Proportionate fetal death rates by birthweight, Australia, 1973–1997

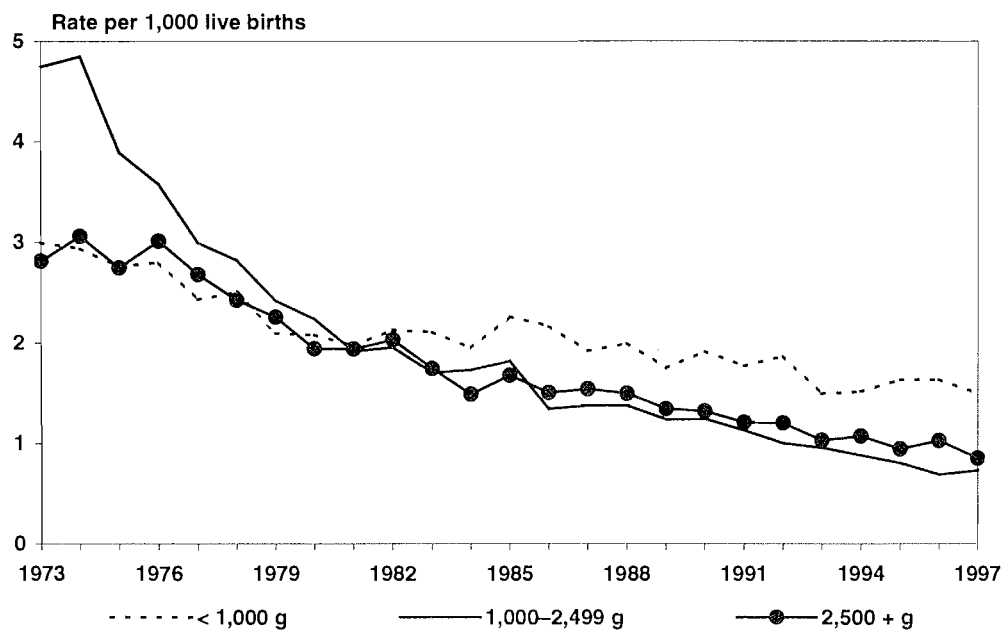


Figure 40: Proportionate neonatal death rates by birthweight, Australia, 1973–1997

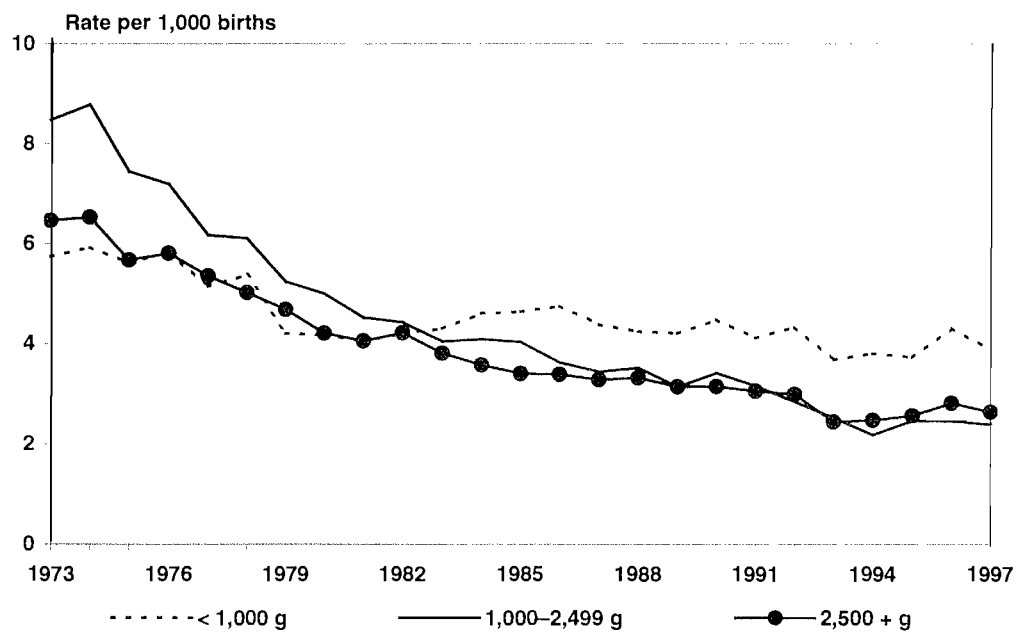


Figure 41: Proportionate perinatal death rates by birthweight, Australia, 1973–1997

## 5.9 Fetal deaths in State and Territory perinatal data collections

As noted in previous sections, fetal deaths are included in the State and Territory perinatal collections if the birthweight is at least 400 g or the gestational age is 20 weeks and over. Unlike perinatal death registration data collected by ABS, factors such as parity, Indigenous and health insurance status that are associated with varying fetal death rates are collected for most births in the perinatal collections.

In 1997, there were 1,808 fetal deaths notified to the perinatal collections, resulting in a fetal death rate of 7.1 per 1,000 births, slightly higher than the rate of 6.0 per 1,000 in the ABS registration data. The variations in fetal death rate with maternal age showed a pattern similar to that for perinatal deaths (see Section 5.4), ranging from 6.4 per 1,000 births for babies of mothers aged 25 to 34 years to 10.9 per 1,000 for babies of mothers aged 40 years and over (Table A70).

The fetal death rate of babies born to Indigenous mothers was 14.8 per 1,000 births, more than twice the rate of 6.8 per 1,000 in the non-Indigenous population (Table A71).

Fetal death was more likely among first-born babies (7.5 per 1,000 births) than among babies whose mothers already had one child (5.8 per 1,000 births) (Table A72). With higher parity, the fetal death rate increased to a maximum of 13.5 per 1,000 births for those with four or more previous children.

The fetal death rate of twins (25.2 per 1,000 births) and of babies born in other multiple births (43.9 per 1,000 births) was much higher than that of singleton babies (6.5 per 1,000 births) (Table A73).

Babies of single mothers (10.8 per 1,000 births) and of mothers who were widowed, divorced or separated (7.4 per 1,000 births) had higher fetal death rates than babies of mothers who were married or living in a de facto relationship (6.5 per 1,000 births) (Table A74).

Fetal death rates were higher for mothers who were not insured (7.6 per 1,000 births) than for those who had private status in hospital (5.6 per 1,000 births) (Table A75).

## 5.10 Neonatal and perinatal deaths in State and Territory perinatal data collections

The continuing decline in fetal, neonatal and perinatal death rates noted in previous sections has been influenced by changes in the characteristics of pregnant women and their babies and by the quality of care during pregnancy, labour and the postnatal period. As the increased risk of perinatal death associated with maternal factors and complications arising during pregnancy is often mediated through higher rates of preterm birth and low birthweight, it is important to take account of these variables in analysing perinatal outcomes such as fetal and neonatal death. It may be difficult to obtain sufficiently accurate information on gestational age for population-based analyses, so most studies have concentrated on birthweight-specific outcomes.

Birthweight is not recorded on birth registration forms in most States and Territories but this information is obtained from the forms completed by midwives and other staff for the perinatal data collections. These collections should also have complete data on fetal deaths, but ascertainment of neonatal deaths is likely to be incomplete for neonatal deaths occurring among babies transferred to another hospital, readmitted to hospital, or dying at home. This

deficiency can be overcome by linking perinatal death registrations to their birth records in the perinatal collections, but this linkage has not yet been achieved in all States and Territories. An advantage of the perinatal death certificates is that they enable more reliable distinction between fetal and neonatal deaths because the certifier is required to specify when the heartbeat ceased in relation to the onset of labour or to birth.

The data on perinatal deaths published by the ABS are based on the year of registration rather than on the year of birth. When analysing perinatal death rates it is preferable that both the deaths and the births should include only those babies born in a particular year so that the numerator and denominator have the same year of birth. By merging data files on perinatal death registrations for two successive years, it is possible to obtain near complete perinatal deaths by year of birth for the first of those two years. The disadvantage of such analyses is that publication of reports based on year-of-birth cohorts is delayed and some late registrations of deaths are not included. Missing information on the birthweight of some babies is an additional problem in analysing birthweight-specific death rates. As mentioned earlier the baby's outcome is recorded only from the hospital of birth in the State and Territory data collections. Thus some neonatal deaths within 28 days of birth of babies transferred to another hospital, those readmitted to hospital, and those dying at home are excluded in the perinatal data collections but covered in the ABS data based on registrations of all perinatal deaths.

No meaningful comparison of perinatal death rates between the two collections could be done for this 1997 report, as perinatal death registration data for 1998 were not available at the time of publication.

Neonatal and perinatal death rates based upon State and Territory perinatal collection data, though incompletely reported, varied between States and Territories (Table A76). Low neonatal death rates were reported for Northern Territory, Western Australia and Tasmania while higher rates were reported for Queensland and the Australian Capital Territory. Total perinatal death rates were lowest in New South Wales and Western Australia and highest in Queensland, the Australian Capital Territory and the Northern Territory.

## **5.11 Causes of perinatal deaths**

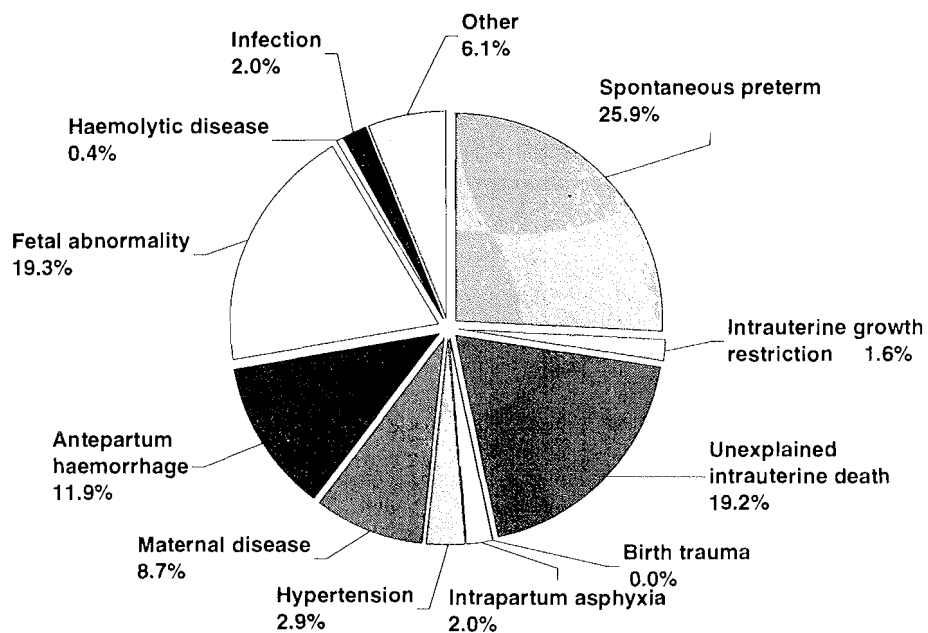
It is widely recognised that the International Classification of Diseases (ICD-9 and ICD-10) does not adequately emphasise those causes of perinatal death that may be preventable. As a result, other classifications that specify various antecedent maternal conditions, pregnancy complications and fetal abnormalities have been developed (Whitfield et al. 1986). In Australia there is no national consensus on a standard classification system. Several States (New South Wales from 1998, Queensland, Western Australia, South Australia and Tasmania) have used the Whitfield classification, or local modifications, in their reports on the causes of perinatal deaths. The main categories in the Whitfield classification are: spontaneous preterm; intrauterine growth restriction; unexplained intrauterine death; birth trauma; intrapartum asphyxia; hypertension; maternal disease; antepartum haemorrhage; fetal abnormality; haemolytic disease; infection; and other. Queensland and South Australia provided data on these categories separately for babies born preterm (less than 37 weeks gestation) and at term.

In an effort to gain national consensus on classifying the causes of perinatal deaths, this report includes data for those States that have used the Whitfield classification. Data from Queensland, Western Australia and South Australia were available for 1997 (Table A77).

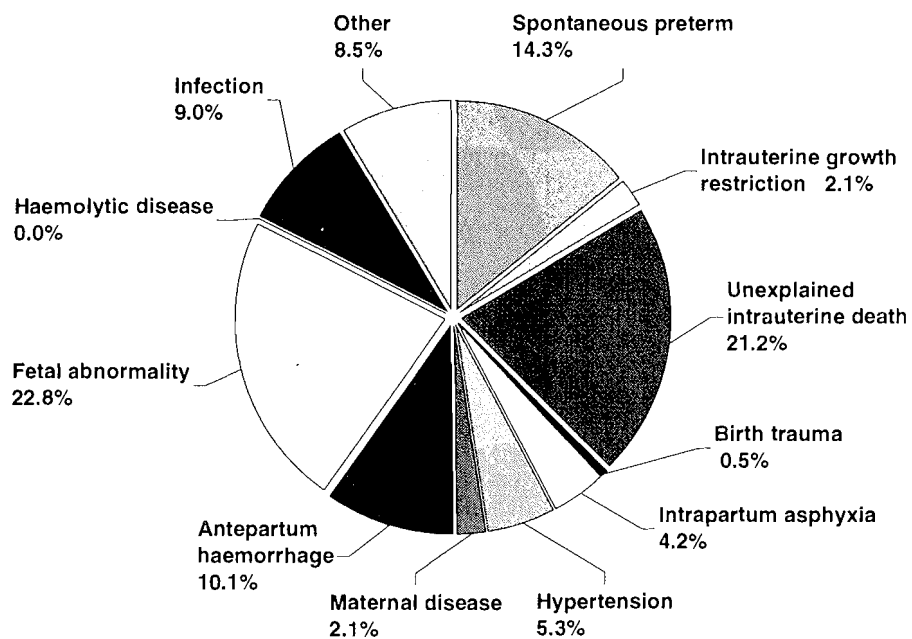
The main causes of perinatal deaths based on the Whitfield classification were spontaneous preterm birth, unexplained intrauterine fetal death, and fetal abnormality. These three groups of causes accounted for at least half of all perinatal deaths in each State in 1997 (Figures 42, 43). Antepartum haemorrhage was the underlying cause for about another 10% of perinatal deaths and other causes were usually less frequent. In Western Australia and South Australia, the proportion of deaths attributed to each causal group was remarkably similar.

Multiple pregnancy is included in the spontaneous preterm category of the Whitfield classification, but other perinatal deaths associated with multiple pregnancy may be classified as intrauterine growth restriction, or as twin-to-twin transfusion in the 'other' category.

**Queensland (n=553)**



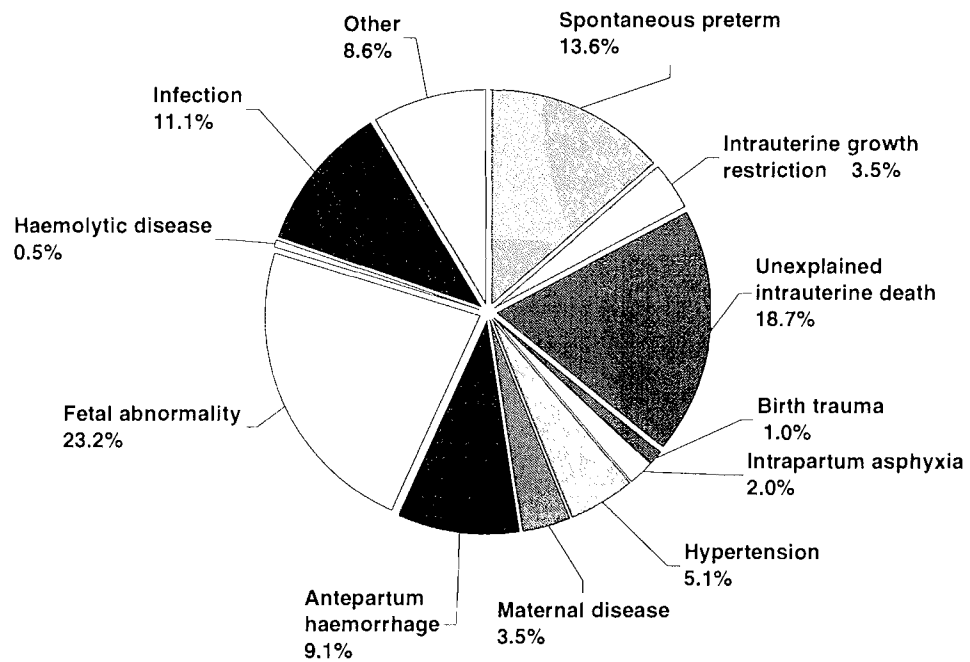
**Western Australia (n=189)**



**Figure 42: Causes of perinatal deaths, Queensland and Western Australia, 1997**



**South Australia (n=198)**



**Figure 43: Causes of perinatal deaths, South Australia, 1997**

# Appendix: tables

**Table A1: Confinements and births, States and Territories, 1997**

	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Confinements	86,920	61,311	47,278	24,856	18,394	5,378	4,708	3,525	252,370
Fetal deaths	587	440	353	168	139	45	42	34	1,808
Live births	87,546*	61,867	47,685	25,085	18,535	5,402	4,743	3,527*	254,390
<b>All births</b>	<b>88,133</b>	<b>62,307</b>	<b>48,038</b>	<b>25,253</b>	<b>18,674</b>	<b>5,447</b>	<b>4,785</b>	<b>3,561</b>	<b>256,198</b>

\* Includes 84 births in NSW and 1 birth in NT with 'not stated' birth status.

Note: Data for Tasmania incomplete.

**Table A2: Place of birth, all confinements, States and Territories, 1997**

Place of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
Hospital	83,641	60,992	46,570	24,278	17,494	5,159	4,287	3,386	245,807
Birth centre	2,795	-	317	406	798	82	372	3	4,773
Home	159	98	212	113	44	19	46	45	736
Born before arrival	297	221	178	59	58	41	-	-	854
Other	-	-	-	-	-	8	3	85	96
Not stated	28	-	1	-	-	69	-	6	104
<b>All places of birth</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
Hospital	96.3	99.5	98.5	97.7	95.1	97.2	91.1	96.2	97.4
Birth centre	3.2	-	0.7	1.6	4.3	1.5	7.9	0.1	1.9
Home	0.2	0.2	0.4	0.5	0.2	0.4	1.0	1.3	0.3
Born before arrival	0.3	0.4	0.4	0.2	0.3	0.8	-	-	0.3
Other	-	-	-	-	-	0.2	0.1	2.4	0.0
<b>All places of birth</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A3: Distribution of maternity units by size, States and Territories, 1997

Number of confinements annually	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
1–100	56	55	68	36	38	12	-	2	267
101– 500	43	35	28	16	24	-	1	2	149
501–1,000	28	15	9	7	2	3	1	2	67
1,001–2,000	8	12	10	1	3	2	1	1	38
2,001 and over	15	7	6	2	2	-	1	-	33
<b>All hospitals</b>	<b>150</b>	<b>124</b>	<b>121</b>	<b>62</b>	<b>69</b>	<b>17</b>	<b>4</b>	<b>7</b>	<b>554</b>
<b>Per cent</b>									
1–100	37.3	44.4	56.2	58.1	55.1	70.6	-	28.6	48.2
101– 500	28.7	28.2	23.1	25.8	34.8	-	25.0	28.6	26.9
501–1,000	18.7	12.1	7.4	11.3	2.9	17.6	25.0	28.6	12.1
1,001–2,000	5.3	9.7	8.3	1.6	4.3	11.8	25.0	14.3	6.9
2,001 and over	10.0	5.6	5.0	3.2	2.9	-	25.0	-	6.0
<b>All hospitals</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes one tertiary level hospital of less than 2,000 confinements.

Note: Data for Tasmania incomplete.

Table A4: Distribution of confinements by size of maternity unit, States and Territories, 1997

Number of confinements annually	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
1–100	1,264	1,633	1,386	776	1,103	242	-	58	6,462
101– 500	9,195	9,344	7,560	4,048	5,928	-	308	520	36,903
501–1,000	21,456	10,699	6,492	5,641	1,317	2,314	943	1,373	50,235
1,001–2,000	10,496	15,609	13,432	1,520	4,196	2,726	1,038	1,438	50,455
2,001 and over	44,322	23,928	18,194	12,758	5,806	-	2,370	-	107,378
<b>All hospitals</b>	<b>86,733</b>	<b>61,213</b>	<b>47,064</b>	<b>24,743</b>	<b>18,350</b>	<b>5,282</b>	<b>4,659</b>	<b>3,389</b>	<b>251,433</b>
<b>Per cent</b>									
1–100	1.5	2.7	2.9	3.1	6.0	4.6	-	1.7	2.6
101– 500	10.6	15.3	16.1	16.4	32.3	-	6.6	15.3	14.7
501–1,000	24.7	17.5	13.8	22.8	7.2	43.8	20.2	40.5	20.0
1,001–2,000	12.1	25.5	28.5	6.1	22.9	51.6	22.3	42.4	20.1
2,001 and over	51.1	39.1	38.7	51.6	31.6	-	50.9	-	42.7
<b>All hospitals</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes one tertiary level hospital of less than 2,000 confinements.

Note: Data for Tasmania incomplete.

Table A5: Maternal age, all confinements, States and Territories, 1997

Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Mean age (years)</b>	28.8	29.4	28.1	28.5	28.6	27.7	29.2	26.6	28.7
<b>Number</b>									
Less than 15	29	5	30	16	8	3	2	25	118
15	112	50	94	41	36	12	4	39	388
16	365	173	273	131	94	46	11	69	1,162
17	828	333	567	277	195	84	41	108	2,433
18	1,192	578	990	433	284	126	52	104	3,759
19	1,766	896	1,281	546	381	152	84	171	5,277
<b>Less than 20</b>	<b>4,292</b>	<b>2,035</b>	<b>3,235</b>	<b>1,444</b>	<b>998</b>	<b>423</b>	<b>194</b>	<b>516</b>	<b>13,137</b>
20–24	14,913	8,735	9,318	4,450	3,035	1,094	685	815	43,045
25–29	28,345	20,115	15,601	8,124	6,296	1,828	1,556	1,085	82,950
30–34	25,856	20,268	12,786	7,317	5,449	1,428	1,525	709	75,338
35–39	11,572	8,730	5,472	3,055	2,262	517	646	330	32,584
40–44	1,829	1,380	844	446	342	81	95	60	5,077
45 and over	64	48	22	20	12	2	5	1	174
Not stated	49	-	-	-	-	5	2	9	65
<b>All ages</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
Less than 15	0.0	0.0	0.1	0.1	0.0	0.1	0.0	0.7	0.0
15	0.1	0.1	0.2	0.2	0.2	0.2	0.1	1.1	0.2
16	0.4	0.3	0.6	0.5	0.5	0.9	0.2	2.0	0.5
17	1.0	0.5	1.2	1.1	1.1	1.6	0.9	3.1	1.0
18	1.4	0.9	2.1	1.7	1.5	2.3	1.1	3.0	1.5
19	2.0	1.5	2.7	2.2	2.1	2.8	1.8	4.9	2.1
<b>Less than 20</b>	<b>4.9</b>	<b>3.3</b>	<b>6.8</b>	<b>5.8</b>	<b>5.4</b>	<b>7.9</b>	<b>4.1</b>	<b>14.7</b>	<b>5.2</b>
20–24	17.2	14.2	19.7	17.9	16.5	20.4	14.6	23.2	17.1
25–29	32.6	32.8	33.0	32.7	34.2	34.0	33.1	30.9	32.9
30–34	29.8	33.1	27.0	29.4	29.6	26.6	32.4	20.2	29.9
35–39	13.3	14.2	11.6	12.3	12.3	9.6	13.7	9.4	12.9
40–44	2.1	2.3	1.8	1.8	1.9	1.5	2.0	1.7	2.0
45 and over	0.1	0.1	0.0	0.1	0.1	0.0	0.1	0.0	0.1
<b>All ages</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A6: Mother's parity, all confinements, States and Territories, 1997

Parity	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
None	34,984	24,461	18,718	10,004	7,284	2,166	2,006	1,763	101,386
One	29,488	21,690	15,580	8,249	6,539	1,856	1,652	778	85,832
Two	13,876	9,952	7,795	4,075	2,934	839	705	445	40,621
Three	5,286	3,453	3,175	1,529	1,010	338	212	225	15,228
Four or more	3,068	1,754	2,010	999	627	179	133	314	9,084
Not stated	218	1	-	-	-	-	-	-	219
<b>All parities</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
Per cent									
None	40.3	39.9	39.6	40.2	39.6	40.3	42.6	50.0	40.2
One	34.0	35.4	33.0	33.2	35.5	34.5	35.1	22.1	34.0
Two	16.0	16.2	16.5	16.4	16.0	15.6	15.0	12.6	16.1
Three	6.1	5.6	6.7	6.2	5.5	6.3	4.5	6.4	6.0
Four or more	3.5	2.9	4.3	4.0	3.4	3.3	2.8	8.9	3.6
<b>All parities</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A7: Distribution of confinements by maternal age and parity, States and Territories, 1997

Parity	Maternal age (years)							All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over	Not stated	
Number								
None	10,737	23,439	35,866	22,842	7,381	1,094	27	101,386
One	2,079	13,572	29,243	28,466	10,993	1,457	22	85,832
Two	266	4,465	11,894	15,141	7,745	1,103	7	40,621
Three	28	1,161	4,023	5,673	3,665	675	3	15,228
Four or more	23	382	1,865	3,132	2,761	916	5	9,084
Not stated	4	26	59	84	39	6	1	219
All parities	13,137	43,045	82,950	75,338	32,584	5,251	65	252,370
Per cent								
None	81.8	54.5	43.3	30.4	22.7	20.9	42.2	40.2
One	15.8	31.5	35.3	37.8	33.8	27.8	34.4	34.0
Two	2.0	10.4	14.3	20.1	23.8	21.0	10.9	16.1
Three	0.2	2.7	4.9	7.5	11.3	12.9	4.7	6.0
Four or more	0.2	0.9	2.2	4.2	8.5	17.5	7.8	3.6
All parities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Table A8: Marital status, all confinements, States and Territories, 1997**

Marital status	NSW	Vic	Qld	WA	SA	Tas <sup>(a)</sup>	ACT	NT	Australia
<b>Number</b>									
Married/de facto	76,593	53,818	40,829	22,052	15,848	4,411	4,202	2,464	220,217
Single	8,991	6,688	5,915	2,416	2,256	761	434	816	28,277
Widowed, divorced, or separated	1,026	697	534	367	289	101	64	61	3,139
Not stated/other	310	108	-	21	1	105	8	184	737
<b>All marital status</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
Married/de facto	88.4	87.9	86.4	88.8	86.2	83.7	89.4	73.8	87.5
Single	10.4	10.9	12.5	9.7	12.3	14.4	9.2	24.4	11.2
Widowed, divorced, or separated	1.2	1.1	1.1	1.5	1.6	1.9	1.4	1.8	1.2
<b>All marital status</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) De facto coded with single marital status.

Note: Data for Tasmania incomplete.

**Table A9: Marital status of teenage mothers, Australia, 1997**

Maternal age (years)	All confinements (n)	Married/de facto		Single <sup>(a)</sup>		Other	
		Number	Per cent	Number	Per cent	Number	Per cent
Less than 15	118	15	12.7	98	83.1	5	4.2
15	388	59	15.2	325	83.8	4	1.0
16	1,162	286	24.6	861	74.1	15	1.3
17	2,433	885	36.4	1,526	62.7	22	0.9
18	3,759	1,755	46.7	1,962	52.2	42	1.1
19	5,277	2,886	54.7	2,338	44.3	53	1.0
<b>Less than 20</b>	<b>13,137</b>	<b>5,886</b>	<b>44.8</b>	<b>7,110</b>	<b>54.1</b>	<b>141</b>	<b>1.1</b>

(a) Data for Tasmania includes de facto status

Table A10: Indigenous status of mothers, all confinements, States and Territories, 1997

Indigenous status	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
Non-Indigenous	84,854	60,932	44,790	23,317	18,001	5,206	4,650	2,328	244,078
Aboriginal or Torres Strait Islander	1,842	379	2,486	1,539	393	172	58	1,197	8,066
Not stated	224	-	2	-	-	-	-	-	226
<b>All confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
Per cent									
Non-Indigenous	97.9	99.4	94.7	93.8	97.9	96.8	98.8	66.0	96.8
Aboriginal or Torres Strait Islander	2.1	0.6	5.3	6.2	2.1	3.2	1.2	34.0	3.2
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A11: Distribution of confinements of Indigenous mothers by maternal age and parity, Australia, 1997

Parity	Maternal age (years)							All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over	Not stated	
Number								
None	1,300	758	279	107	34	2		2,482
One	431	829	444	175	41	4	-	1,924
Two	98	626	479	172	66	8	-	1,449
Three	9	293	411	210	75	8	-	1,006
Four or more	10	152	472	378	158	33	-	1,203
Not stated	0	0	1	1	0	-	-	2
All parities	1,848	2,658	2,086	1,043	374	55	-	8,066
Per cent								
None	70.3	28.5	13.4	10.3	9.1	3.6	-	30.8
One	23.3	31.2	21.3	16.8	11.0	7.3	-	23.9
Two	5.3	23.6	23.0	16.5	17.6	14.5	-	18.0
Three	0.5	11.0	19.7	20.2	20.1	14.5	-	12.5
Four or more	0.5	5.7	22.6	36.3	42.2	60.0	-	14.9
All parities	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0

Table A12: Confinements of Indigenous mothers by maternal age, States and Territories, 1997

Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mean age (years)	24.4	26.2	24.5	24.0	24.2	25.3	26.7	23.1	24.3
Number									
Less than 20	398	49	517	381	92	33	9	369	1,848
20–24	613	112	846	510	128	49	16	384	2,658
25–29	501	108	654	385	104	46	11	277	2,086
30–34	238	79	315	200	50	33	16	112	1,043
35–39	79	27	135	56	17	10	6	44	374
40 and over	13	4	19	7	2	1	-	9	55
Not stated	-	-	-	-	-	-	-	2	2
All confinements	1,842	379	2,486	1,539	393	172	58	1,197	8,066
Per cent									
Less than 20	21.6	12.9	20.8	24.8	23.4	19.2	15.5	30.9	22.9
20–24	33.3	29.6	34.0	33.1	32.6	28.5	27.6	32.1	33.0
25–29	27.2	28.5	26.3	25.0	26.5	26.7	19.0	23.2	25.9
30–34	12.9	20.8	12.7	13.0	12.7	19.2	27.6	9.4	12.9
35–39	4.3	7.1	5.4	3.6	4.3	5.8	10.3	3.7	4.6
40 and over	0.7	1.1	0.8	0.5	0.5	0.6	-	0.8	0.7
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Note: Data for Tasmania incomplete.



Table A13: Maternal country of birth, all confinements, States and Territories, 1997

Country of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
Australia	63,292	46,099	39,665	16,910	15,446	5,019	3,792	3,014	193,237
New Zealand	1,826	937	1,876	840	181	47	56	69	5,832
United Kingdom	2,593	2,296	1,646	2,537	1,160	141	171	97	10,641
Italy	272	326	39	81	64	2	16	4	804
Former Yugoslavia	714	709	113	113	10	4	-	-	1,663
Other Europe and former USSR	1,825	1,669	543	588	338	37	112	50	5,162
Lebanon	1,983	645	28	29	30	1	9	1	2,726
Other Middle East and North Africa	1,500	1,045	107	181	53	10	18	12	2,926
China	2,111	907	196	142	71	6	43	4	3,480
Hong Kong	531	176	76	31	10	-	16	-	840
India	673	479	88	146	60	5	29	3	1,483
Malaysia	307	346	132	196	44	7	24	4	1,060
Philippines	1,275	540	452	129	113	17	35	36	2,597
Vietnam	1,853	1,771	325	274	305	1	62	18	4,609
Other Asia	2,581	1,532	600	427	192	21	129	111	5,593
Northern America	488	307	250	140	81	18	40	21	1,345
South and Central America, and the Caribbean	678	333	120	61	42	6	42	8	1,290
Africa (excluding North Africa)	634	608	237	305	57	9	30	11	1,891
Other countries	1,587	473	785	142	137	20	74	33	3,251
Not stated	197	113	-	1,584	-	7	10	29	1,940
<b>All countries</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
Per cent									
Australia	73.0	75.3	83.9	72.7	84.0	93.4	80.7	86.2	77.2
New Zealand	2.1	1.5	4.0	3.6	1.0	0.9	1.2	2.0	2.3
United Kingdom	3.0	3.8	3.5	10.9	6.3	2.6	3.6	2.8	4.2
Italy	0.3	0.5	0.1	0.3	0.3	0.0	0.3	0.1	0.3
Former Yugoslavia	0.8	1.2	0.2	0.5	0.1	0.1	-	-	0.7
Other Europe and former USSR	2.1	2.7	1.1	2.5	1.8	0.7	2.4	1.4	2.1
Lebanon	2.3	1.1	0.1	0.1	0.2	0.0	0.2	0.0	1.1
Other Middle East and North Africa	1.7	1.7	0.2	0.8	0.3	0.2	0.4	0.3	1.2
China	2.4	1.5	0.4	0.6	0.4	0.1	0.9	0.1	1.4
Hong Kong	0.6	0.3	0.2	0.1	0.1	-	0.3	-	0.3
India	0.8	0.8	0.2	0.6	0.3	0.1	0.6	0.1	0.6
Malaysia	0.4	0.6	0.3	0.8	0.2	0.1	0.5	0.1	0.4
Philippines	1.5	0.9	1.0	0.6	0.6	0.3	0.7	1.0	1.0
Vietnam	2.1	2.9	0.7	1.2	1.7	0.0	1.3	0.5	1.8
Other Asia	3.0	2.5	1.3	1.8	1.0	0.4	2.7	3.2	2.2
Northern America	0.6	0.5	0.5	0.6	0.4	0.3	0.9	0.6	0.5
South and Central America, and the Caribbean	0.8	0.5	0.3	0.3	0.2	0.1	0.9	0.2	0.5
Africa (excluding North Africa)	0.7	1.0	0.5	1.3	0.3	0.2	0.6	0.3	0.8
Other countries	1.8	0.8	1.7	0.6	0.7	0.4	1.6	0.9	1.3
<b>All countries</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

**Table A14: Maternal age distribution by selected country of birth, all confinements, Australia, 1997**

Country of birth	Maternal age (years)						Not stated	All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over		
Number								
Australia	11,793	35,564	65,654	54,738	22,135	3,305	48	193,237
New Zealand	313	1,082	1,707	1,783	819	128	0	5,832
United Kingdom	162	669	2,653	4,609	2,175	372	1	10,641
Italy	4	31	163	354	210	42	0	804
Former Yugoslavia	37	243	558	565	215	45	0	1,663
Lebanon	93	752	887	616	319	56	3	2,726
China	3	156	896	1,432	822	171	0	3,480
Hong Kong	6	26	141	389	250	28	0	840
India	5	162	517	551	213	35	0	1,483
Malaysia	9	53	233	430	281	54	0	1,060
Philippines	85	320	615	881	572	123	1	2,597
Vietnam	99	785	1,609	1,217	728	171	0	4,609
Other countries	427	2,888	6,695	7,171	3,586	690	1	21,458
Not stated	101	314	622	602	259	31	11	1,940
All countries	13,137	43,045	82,950	75,338	32,584	5,251	65	252,370
Per cent								
Australia	6.1	18.4	34.0	28.3	11.5	1.7	-	100.0
New Zealand	5.4	18.6	29.3	30.6	14.0	2.2	-	100.0
United Kingdom	1.5	6.3	24.9	43.3	20.4	3.5	-	100.0
Italy	0.5	3.9	20.3	44.0	26.1	5.2	-	100.0
Former Yugoslavia	2.2	14.6	33.6	34.0	12.9	2.7	-	100.0
Lebanon	3.4	27.6	32.5	22.6	11.7	2.1	-	100.0
China	0.1	4.5	25.7	41.1	23.6	4.9	-	100.0
Hong Kong	0.7	3.1	16.8	46.3	29.8	3.3	-	100.0
India	0.3	10.9	34.9	37.2	14.4	2.4	-	100.0
Malaysia	0.8	5.0	22.0	40.6	26.5	5.1	-	100.0
Philippines	3.3	12.3	23.7	33.9	22.0	4.7	-	100.0
Vietnam	2.1	17.0	34.9	26.4	15.8	3.7	-	100.0
Other countries	2.0	13.5	31.2	33.4	16.7	3.2	-	100.0
All countries	5.2	17.1	32.9	29.9	12.9	2.1	-	100.0

Table A15: Marital status of mother by selected country of birth, all confinements, Australia, 1997

Country of birth	All confinements (n)	Married /de facto		Single		Other	
		Number	Per cent	Number	Per cent	Number	Per cent
Australia	193,237	165,963	85.9	24,434	12.6	2,840	1.5
New Zealand	5,832	4,870	83.5	869	14.9	93	1.6
United Kingdom	10,641	9,773	91.8	676	6.4	192	1.8
Italy	804	777	96.6	14	1.7	13	1.6
Former Yugoslavia	1,663	1,583	95.2	58	3.5	22	1.3
Lebanon	2,726	2,661	97.6	30	1.1	35	1.3
China	3,480	3,350	96.3	81	2.3	49	1.4
Hong Kong	840	820	97.6	16	1.9	4	0.5
India	1,483	1,455	98.1	20	1.3	8	0.5
Malaysia	1,060	1,018	96.0	35	3.3	7	0.7
Philippines	2,597	2,356	90.7	188	7.2	53	2.0
Vietnam	4,609	3,999	86.8	496	10.8	114	2.5
Other countries	21,458	19,905	92.8	1,202	5.6	351	1.6
Not stated	1,940	1,687	87.0	158	8.1	95	4.9
<b>All countries</b>	<b>252,370</b>	<b>220,217</b>	<b>87.3</b>	<b>28,277</b>	<b>11.2</b>	<b>3,876</b>	<b>1.5</b>

Table A16: Mother's accommodation status, all confinements, selected States and Territories, 1997

Status in hospital	NSW	Qld	WA	SA	Tas	ACT	Total <sup>(a)</sup>
Number							
Public	60,193	31,203	16,608	12,597	3,585	3,196	127,382
Private	26,645	15,860	6,955	5,797	1,771	1,478	58,506
Not stated/other	82	215	1,293	-	22	34	1,646
<b>All classifications</b>	<b>86,920</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,356</b>	<b>4,708</b>	<b>187,512</b>
Per cent							
Public	69.3	66.3	70.5	68.5	66.9	68.4	68.5
Private	30.7	33.7	29.5	31.5	33.1	31.6	31.5
<b>All classifications</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Data exclude Victoria and Northern Territory.

Note: Data for Tasmania incomplete.

Table A17: Duration of pregnancy, all confinements, States and Territories, 1997

Duration of pregnancy (weeks)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Mean (weeks)</b>	39.1	39.0	39.0	39.0	39.0	39.3	38.9	38.7	39.0
<b>Number</b>									
20–27	516	437	374	168	153	39	44	38	1,769
28–31	517	409	382	174	134	30	55	35	1,736
32–36	4,371	3,155	2,681	1,259	1,016	246	271	286	13,285
37–41	79,381	56,088	42,784	22,888	16,779	4,884	4,165	3,043	230,012
42 and over	2,090	1,206	1,057	366	312	174	128	67	5,400
Not stated	45	16	-	1	-	5	45	56	168
<b>All confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
20–27	0.6	0.7	0.8	0.7	0.8	0.7	0.9	1.1	0.7
28–31	0.6	0.7	0.8	0.7	0.7	0.6	1.2	1.0	0.7
32–36	5.0	5.1	5.7	5.1	5.5	4.6	5.8	8.2	5.3
37–41	91.4	91.5	90.5	92.1	91.2	90.9	89.3	87.7	91.2
42 and over	2.4	2.0	2.2	1.5	1.7	3.2	2.7	1.9	2.1
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A18: Duration of pregnancy by maternal age, all confinements, Australia, 1997

Duration of pregnancy (weeks)	Maternal age (years)							All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over	Not stated	
<b>Confinements</b>	<b>Number</b>							
20–27	154	328	479	495	261	52	0	1,769
28–31	143	336	529	427	242	58	1	1,736
32–36	870	2,337	4,049	3,742	1,884	402	1	13,285
37–41	11,600	38,954	76,031	69,175	29,544	4,656	52	230,012
42 and over	352	1,062	1,808	1,467	627	83	-	5,400
Not stated	18	28	54	32	26	0	10	168
<b>All confinements</b>	<b>13,137</b>	<b>43,045</b>	<b>82,950</b>	<b>75,338</b>	<b>32,584</b>	<b>5,251</b>	<b>65</b>	<b>252,370</b>
<b>Per cent</b>								
20–27	1.2	0.8	0.6	0.7	0.8	1.0	0.0	0.7
28–31	1.1	0.8	0.6	0.6	0.7	1.1	1.8	0.7
32–36	6.6	5.4	4.9	5.0	5.8	7.7	1.8	5.3
37–41	88.4	90.6	91.7	91.9	90.7	88.7	94.5	91.2
42 and over	2.7	2.5	2.2	1.9	1.9	1.6	1.8	2.1
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Table A19: Plurality, all confinements, Australia, 1997

Plurality	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
Singleton	85,740	60,341	46,554	24,475	18,122	5,309	4,631	3,489	248,661
Twin	1,147	947	690	368	264	69	77	36	3,598
Triplet	32	20	32	10	8	-	-	-	102
Quadruplet	1	3	2	3	-	-	-	-	9
<b>All confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
Singleton	98.6	98.4	98.5	98.5	98.5	98.7	98.4	99.0	98.5
Twin	1.3	1.5	1.5	1.5	1.4	1.3	1.6	1.0	1.4
Triplet	0.0	0.0	0.1	0.0	0.0	-	-	-	0.0
Quadruplet	0.0	0.0	0.0	0.0	-	-	-	-	0.0
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A20: Multiple confinements by maternal age, Australia, 1997

Plurality	Maternal age (years)						Not stated	All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over		
Number								
Singleton	13,044	42,612	81,823	73,992	31,962	5,163	65	248,661
Twin	93	426	1,095	1,289	608	87	-	3,598
Triplet	-	5	28	54	14	1	-	102
Quadruplet	-	2	4	3	-	-	-	9
All confinements	13,137	43,045	82,950	75,338	32,584	5,251	65	252,370
Per cent								
Singleton	99.3	99.0	98.6	98.2	98.1	98.3	100.0	98.5
Twin	0.7	1.0	1.3	1.7	1.9	1.7	-	1.4
Triplet	-	0.0	0.0	0.1	0.0	0.0	-	0.0
Quadruplet	-	0.0	0.0	0.0	-	-	-	0.0
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A21: Onset of labour, all confinements, States and Territories, 1997

Onset of labour	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
Spontaneous	59,225	38,257	30,363	14,418	11,527	3,351	3,101	2,496	162,738
—no augmentation	39,839	30,958	17,126	8,818	7,273	2,387	2,452	1,838	110,691
—augmentation	19,386	7,299	13,237	5,600	4,254	964	649	658	52,047
Induced	18,981	15,877	11,038	7,041	4,601	1,415	1,015	644	60,612
—medical only	5,934	6,130	4,570	na	1,755	544	365	295	19,593*
—surgical only	1,238	1,931	1,542	na	461	172	80	59	5,483*
—combined	11,722	7,816	4,873	na	2,385	561	533	276	28,166*
—other	87	-	53	na	-	138	37	14	315*
No labour	8,616	7,177	5,877	3,397	2,266	612	558	379	28,882
Not stated	98	-	-	-	-	-	34	6	138
<b>All confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
Per cent									
Spontaneous	68.2	62.4	64.2	58.0	62.7	62.3	66.3	70.9	64.5
—no augmentation	45.9	50.5	36.2	35.5	39.5	44.4	52.5	52.2	43.9
—augmentation	22.3	11.9	28.0	22.5	23.1	17.9	13.9	18.7	20.6
Induced	21.9	25.9	23.3	28.3	25.0	26.3	21.7	18.3	24.0
—medical only	6.8	10.0	9.7	na	9.5	10.1	7.8	8.4	8.6*
—surgical only	1.4	3.1	3.3	na	2.5	3.2	1.7	1.7	2.4*
—combined	13.5	12.7	10.3	na	13.0	10.4	11.4	7.8	12.4*
—other	0.1	-	0.1	na	-	2.6	0.8	0.4	0.1*
No labour	9.9	11.7	12.4	13.7	12.3	11.4	11.9	10.8	11.5
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* Data exclude WA.

Note: Data for Tasmania incomplete.

Table A22: Presentation at delivery, all confinements, States and Territories, 1997

Presentation	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
Vertex	82,251	57,958	45,006	23,656	17,439	5,030	4,444	3,263	239,047
Breech	3,670	2,603	2,107	1,042	764	242	205	132	10,765
Other	552	475	164	158	165	30	22	37	1,603
Not stated	447	275	1	-	26	76	37	93	955
<b>All confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
Per cent									
Vertex	95.1	95.0	95.2	95.2	94.9	94.9	95.1	95.1	95.1
Breech	4.2	4.3	4.5	4.2	4.2	4.6	4.4	3.8	4.3
Other	0.6	0.8	0.3	0.6	0.9	0.6	0.5	1.1	0.6
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A23: Type of delivery, all confinements, States and Territories, 1997

Type of delivery	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
Spontaneous vertex	61,175	40,644	32,177	15,746	11,488	3,661	3,078	2,544	170,513
Forceps	5,014	5,963	2,328	1,200	1,703	391	370	165	17,134
Vacuum extraction	3,919	1,768	2,070	2,334	740	158	237	-	11,226
Vaginal breech	921	523	272	120	133	34	48	47	2,098
Caesarean section	15,811	12,412	10,381	5,456	4,330	1,118	952	724	51,184
—elective	8,616	7,177	na	3,042	1,888	534	551	na	21,808*
—emergency	7,195	5,235	na	2,414	2,442	578	401	na	18,265*
—other	-	-	na	-	-	6	-	na	6*
Other	-	1	50	-	-	-	21	-	72
Not stated	80	-	-	-	-	16	2	45	143
<b>All types of delivery</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Per cent</b>									
Spontaneous vertex	70.4	66.3	68.1	63.3	62.5	68.3	65.4	73.1	67.6
Forceps	5.8	9.7	4.9	4.8	9.3	7.3	7.9	4.7	6.8
Vacuum extraction	4.5	2.9	4.4	9.4	4.0	2.9	5.0	-	4.5
Vaginal breech	1.1	0.9	0.6	0.5	0.7	0.6	1.0	1.4	0.8
Caesarean section	18.2	20.2	22.0	22.0	23.5	20.9	20.2	20.8	20.3
—elective	9.9	11.7	na	12.2	10.3	10.0	11.7	na	10.8*
—emergency	8.3	8.5	na	9.7	13.3	10.8	8.5	na	9.1*
—other	-	-	na	-	-	0.1	-	na	0.0*
Other	-	0.0	0.1	-	-	-	0.4	-	0.0
<b>All types of delivery</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

\* Elective and emergency caesarean section data exclude Queensland and the Northern Territory. The total caesarean section rate includes all States and Territories.

Note: Data for Tasmania incomplete.

**Table A24: Caesarean rates by maternal age and accommodation status in hospital, States and Territories, 1997**

Hospital status/ Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Public<sup>(a)</sup></b>									
					<b>Number</b>				
Less than 20	417	na	399	160	155	56	23	na	1,210
20–24	1,602	na	1,198	584	488	166	85	na	4,123
25–29	2,987	na	1,803	1,024	897	230	184	na	7,125
30–34	2,610	na	1,399	885	703	161	177	na	5,935
35–39	1,371	na	681	439	305	51	78	na	2,925
40 and over	297	na	140	79	53	8	20	na	597
Not stated	10	na	-	-	-	-	-	na	10
<b>All ages</b>	<b>9,294</b>	<b>na</b>	<b>5,620</b>	<b>3,171</b>	<b>2,601</b>	<b>672</b>	<b>567</b>	<b>na</b>	<b>21,925</b>
<b>Private<sup>(a)</sup></b>									
Less than 20	13	na	21	3	10	1	1	na	49
20–24	238	na	231	70	58	22	13	na	632
25–29	1,716	na	1,463	582	489	140	87	na	4,477
30–34	2,646	na	1,912	841	723	188	181	na	6,491
35–39	1,554	na	954	470	377	73	81	na	3,509
40 and over	339	na	180	82	72	13	22	na	708
Not stated	2	na	-	-	-	-	-	na	2
<b>All ages</b>	<b>6,508</b>	<b>na</b>	<b>4,761</b>	<b>2,048</b>	<b>1,729</b>	<b>437</b>	<b>385</b>	<b>na</b>	<b>15,868</b>
<b>Public<sup>(a)</sup></b>					<b>Caesarean rate (per cent)</b>				
Less than 20	10.0	na	12.9	11.9	16.2	13.9	12.4	na	11.9
20–24	11.9	na	14.7	15.0	17.7	17.5	14.0	na	13.8
25–29	14.9	na	17.8	18.9	20.2	19.5	16.5	na	16.8
30–34	17.3	na	21.2	21.8	23.2	21.2	20.1	na	19.5
35–39	21.4	na	24.9	26.4	25.1	21.0	22.2	na	23.2
40 and over	29.7	na	30.4	31.7	28.8	17.4	38.5	na	30.0
<b>All ages</b>	<b>15.4</b>	<b>na</b>	<b>18.0</b>	<b>19.1</b>	<b>20.6</b>	<b>18.8</b>	<b>17.7</b>	<b>na</b>	<b>17.2</b>
<b>Private<sup>(a)</sup></b>									
Less than 20	10.7	na	16.5	8.8	24.4	5.0	16.7	na	14.0
20–24	16.4	na	20.4	18.9	21.2	15.3	18.1	na	18.3
25–29	20.9	na	27.2	25.6	26.5	21.9	20.2	na	23.8
30–34	24.5	na	31.2	29.5	29.9	28.4	28.6	na	27.7
35–39	30.2	na	35.3	38.3	35.9	27.0	28.0	na	32.8
40 and over	38.0	na	45.6	42.5	42.4	36.1	45.8	na	40.8
<b>All ages</b>	<b>24.4</b>	<b>na</b>	<b>30.0</b>	<b>29.4</b>	<b>29.8</b>	<b>24.7</b>	<b>26.1</b>	<b>na</b>	<b>27.1</b>
<b>All confinements</b>									
Less than 20	10.0	10.4	13.0	11.5	16.5	13.7	12.4	16.3	11.9
20–24	12.4	13.7	15.3	15.2	18.0	17.3	14.3	18.4	14.2
25–29	16.6	18.1	20.9	20.8	22.0	20.5	17.4	21.3	18.8
30–34	20.4	22.2	25.9	24.8	26.2	24.7	23.5	23.1	22.8
35–39	25.3	27.3	29.9	30.9	30.2	24.3	24.6	26.9	27.5
40 and over	33.6	34.0	37.0	36.7	35.3	25.3	42.0	24.6	34.6
<b>All ages</b>	<b>18.2</b>	<b>20.2</b>	<b>22.0</b>	<b>22.0</b>	<b>23.5</b>	<b>20.9</b>	<b>20.2</b>	<b>20.9</b>	<b>20.3</b>

(a) Data exclude Victoria and Northern Territory.

Note: Data for Tasmania incomplete.



**Table A25: Caesarean rates by maternal age, parity and public accommodation status in hospital, Australia, 1997**

Maternal age (years)	Parity				Parity			
	None	One	Two +	Total <sup>(a)</sup>	None	One	Two +	Total <sup>(a)</sup>
	Number				Rate (per cent)			
Less than 20	1,018	168	24	1,210	12.3	10.1	10.0	11.9
20–24	2,356	1,166	601	4,122	15.3	12.0	12.9	13.8
25–29	3,030	2,342	1,753	7,124	19.0	15.6	15.3	16.8
30–34	2,010	1,966	1,959	5,935	25.5	18.7	16.3	19.5
35–39	763	927	1,235	2,925	31.1	24.9	19.2	23.2
40 and over	151	152	294	597	48.1	34.0	23.9	30.0
Not stated	4	3	3	10	26.7	27.3	33.3	28.6
<b>Total<sup>(a)</sup></b>	<b>9,331</b>	<b>6,724</b>	<b>5,868</b>	<b>21,923</b>	<b>18.6</b>	<b>16.4</b>	<b>16.3</b>	<b>17.2</b>

(a) Data exclude Victoria and Northern Territory.

**Table A26: Caesarean rates by maternal age, parity and private accommodation status in hospital, Australia, 1997**

Maternal age (years)	Parity				Parity			
	None	One	Two +	Total <sup>(a)</sup>	None	One	Two +	Total <sup>(a)</sup>
	Number				Rate (per cent)			
Less than 20	43	6	-	49	13.9	16.7	-	14.0
20–24	438	157	37	632	17.9	18.9	21.4	18.3
25–29	2,561	1,468	448	4,477	25.4	22.2	21.6	23.8
30–34	2,551	2,580	1,360	6,491	31.2	26.7	24.2	27.7
35–39	1,117	1,379	1,013	3,509	40.7	33.8	26.2	32.8
40 and over	257	229	222	708	54.7	41.6	31.1	40.8
Not stated	-	2	-	2	-	20.0	-	10.5
<b>Total<sup>(a)</sup></b>	<b>6,967</b>	<b>5,821</b>	<b>3,080</b>	<b>15,868</b>	<b>28.7</b>	<b>26.7</b>	<b>24.7</b>	<b>27.1</b>

(a) Data exclude Victoria and Northern Territory.

**Table A27: Caesarean rates by parity, plurality, breech presentation, and birthweight, States and Territories, 1997**

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Parity</b>	<b>Number</b>								
Primipara	6,981	5,294	4,426	2,258	1,858	495	394	422	22,128
Multipara	8,764	7,117	5,955	3,198	2,472	623	558	302	28,989
Not stated	66	1	-	-	-	-	-	-	67
<b>All parity</b>	<b>15,811</b>	<b>12,412</b>	<b>10,381</b>	<b>5,456</b>	<b>4,330</b>	<b>1,118</b>	<b>952</b>	<b>724</b>	<b>51,184</b>
<b>Plurality</b>									
Singleton	15,324	11,967	9,989	5,271	4,196	1,088	916	712	49,463
Twin	462	425	364	174	127	30	36	12	1,630
Other multiple	25	20	28	11	7	-	-	-	91
<b>All confinements</b>	<b>15,811</b>	<b>12,412</b>	<b>10,381</b>	<b>5,456</b>	<b>4,330</b>	<b>1,118</b>	<b>952</b>	<b>724</b>	<b>51,184</b>
<b>Breech presentation in singleton births</b>	<b>2,567</b>	<b>1,893</b>	<b>1,673</b>	<b>831</b>	<b>594</b>	<b>193</b>	<b>127</b>	<b>93</b>	<b>7,971</b>
<b>Birthweight (singleton births)</b>									
Less than 500 g	11	8	3	4	1	2	-	-	29
500–999 g	96	92	83	37	35	7	6	6	362
1,000–1,499 g	185	157	136	62	61	15	21	11	648
1,500–1,999 g	335	236	220	100	89	29	29	24	1,062
2,000–2,499 g	698	513	448	233	196	50	45	52	2,235
2,500 g and over <sup>(a)</sup>	13,997	10,954	9,099	4,835	3,814	984	815	617	45,115
—public	8,123	na	4,795	2,785	2,249	572	480	na	19,004
—private	5,867	na	4,304	1,832	1,565	404	335	na	14,307
—other	-	na	-	15	-	1	-	na	16
Not stated	2	7	-	-	-	1	-	2	12
<b>All singleton births</b>	<b>15,324</b>	<b>11,967</b>	<b>9,989</b>	<b>5,271</b>	<b>4,196</b>	<b>1,088</b>	<b>916</b>	<b>712</b>	<b>49,463</b>
<b>Parity</b>	<b>Caesarean rate (per cent)</b>								
Primipara	20.0	21.6	23.6	22.6	25.5	22.9	19.6	23.9	21.8
Multipara	16.9	19.3	20.9	21.5	22.3	19.4	20.7	17.1	19.2
<b>All parity</b>	<b>18.2</b>	<b>20.2</b>	<b>22.0</b>	<b>22.0</b>	<b>23.5</b>	<b>20.8</b>	<b>20.2</b>	<b>20.5</b>	<b>20.3</b>
<b>Plurality</b>									
Singleton	17.9	19.8	21.5	21.5	23.2	20.5	19.8	20.4	19.9
Twin	40.3	44.9	52.8	47.3	48.1	43.5	46.8	33.3	45.3
Other multiple	75.8	87.0	82.4	84.6	87.5	-	-	-	82.0
<b>All confinements</b>	<b>18.2</b>	<b>20.2</b>	<b>22.0</b>	<b>22.0</b>	<b>23.5</b>	<b>20.8</b>	<b>20.2</b>	<b>20.5</b>	<b>20.3</b>
<b>Breech presentation in singleton births</b>	<b>75.3</b>	<b>79.0</b>	<b>85.3</b>	<b>85.2</b>	<b>82.5</b>	<b>na</b>	<b>69.4</b>	<b>72.7</b>	<b>79.7</b>
<b>Birthweight (singleton births)</b>									
Less than 500 g	7.0	4.4	2.3	6.5	1.6	9.5	-	-	4.5
500–999 g	28.0	38.5	37.1	39.4	41.7	41.2	25.0	27.3	34.6
1,000–1,499 g	58.4	62.1	59.6	53.9	68.5	71.4	52.5	42.3	59.5
1,500–1,999 g	43.5	44.9	48.9	45.7	54.9	65.9	51.8	38.7	46.4
2,000–2,499 g	26.3	28.1	30.6	30.7	32.8	34.0	31.3	25.7	28.7
2,500 g and over <sup>(a)</sup>	17.2	19.1	20.7	20.8	22.3	19.5	18.7	19.9	19.1
—public	14.5	na	16.6	18.0	19.3	17.1	16.4	na	16.0
—private	23.3	na	28.8	27.8	28.6	23.9	24.0	na	25.9
<b>All singleton births</b>	<b>17.9</b>	<b>19.8</b>	<b>21.5</b>	<b>21.5</b>	<b>23.2</b>	<b>20.5</b>	<b>19.8</b>	<b>20.4</b>	<b>19.9</b>

(a) Data include hospital status 'not stated' and 'other'.

Note: Data for Tasmania incomplete.

Table A28: Perineal repair after delivery, States and Territories, 1997

Perineal repair	NSW <sup>(a)</sup>	Vic	Qld	WA	SA <sup>(b)</sup>	Tas	ACT	NT	Australia
<b>Type</b>	<b>Number</b>								
None	73,145	37,128	25,807	12,460	11,121	1,791	2,542	1,972	165,966
Sutured laceration	-	13,571	12,026	6,660	4,038	1,143	1,351	1,050	39,839
Episiotomy	13,775	10,612	6,603	4,805	3,474	861	815	189	41,134
Other	-	-	2,842	931	-	1,583	-	-	5,356
Not stated	-	-	-	-	-	-	-	314	314
<b>Total confinements</b>	<b>86,920</b>	<b>61,311</b>	<b>47,278</b>	<b>24,856</b>	<b>18,394</b>	<b>5,378</b>	<b>4,708</b>	<b>3,525</b>	<b>252,370</b>
<b>Type</b>	<b>Per cent</b>								
None	84.2	60.6	54.6	50.1	60.5	33.3	54.0	61.4	65.8
Sutured laceration	-	22.1	25.4	26.8	22.0	21.3	28.7	32.7	15.8
Episiotomy	15.8	17.3	14.0	19.3	18.9	16.0	17.3	5.9	16.3
Other	-	-	6.0	3.7	-	29.4	-	-	2.1
<b>Total confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) New South Wales data identifies episiotomy only.

(b) The total methods will exceed the total number of confinements. More than one method of perineal repair may have been used for each mother.

Note: Data for Tasmania incomplete.

Table A29: Length of mother's antenatal stay in hospital, selected States and Territories, 1997

Length of stay	NSW	Vic	Qld	WA	SA	ACT	NT	Total <sup>(a)</sup>
<b>Mean length of stay (days)</b>	<b>0.7</b>	<b>0.6</b>	<b>0.7</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.8</b>	<b>0.7</b>
	<b>Number</b>							
Less than 1 day	51,598	39,642	29,206	13,651	11,154	2,804	2,020	150,075
1 day	26,761	17,852	14,296	8,256	5,761	1,459	1,028	75,413
2-6 days	5,599	2,721	2,727	1,332	1,051	307	275	14,012
7-13 days	780	436	399	268	195	54	49	2,181
14-20 days	239	155	133	70	62	17	10	686
21-27 days	101	68	64	42	22	9	5	311
28 or more days	133	118	63	50	47	9	2	422
Not stated	1,225	-	-	1,015	-	-	-	2,240
<b>All confinements</b>	<b>86,436</b>	<b>60,992</b>	<b>46,888</b>	<b>24,684</b>	<b>18,292</b>	<b>4,659</b>	<b>3,389</b>	<b>245,340</b>
	<b>Per cent</b>							
Less than 1 day	60.6	65.0	62.3	57.7	61.0	60.2	59.6	61.7
1 day	31.4	29.3	30.5	34.9	31.5	31.3	30.3	31.0
2-6 days	6.6	4.5	5.8	5.6	5.7	6.6	8.1	5.8
7-13 days	0.9	0.7	0.9	1.1	1.1	1.2	1.4	0.9
14-20 days	0.3	0.3	0.3	0.3	0.3	0.4	0.3	0.3
21-27 days	0.1	0.1	0.1	0.2	0.1	0.2	0.1	0.1
28 or more days	0.2	0.2	0.1	0.2	0.3	0.2	0.1	0.2
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Data exclude Tasmania.

**Table A30: Length of mother's postnatal stay in hospital, all confinements, selected States and Territories, 1997**

Length of stay <sup>(a)</sup>	NSW	Vic	Qld	WA	SA <sup>(b)</sup>	ACT	NT	Total <sup>(c)</sup>
<b>Mean length of stay (days)</b>	4.0	4.3	4.0	4.2	4.1	4.0	4.4	4.1
<b>Number</b>								
Less than 1 day	1,957	622	858	603	268	141	58	4,507
1 day	7,564	3,077	4,418	1,780	1,181	446	261	18,727
2 days	12,351	6,367	7,287	3,256	2,419	601	437	32,718
3 days	14,983	12,751	8,674	4,259	3,253	816	616	45,352
4 days	15,287	11,821	8,199	4,103	3,479	656	629	44,174
5 days	12,660	11,351	6,701	3,763	3,968	612	575	39,630
6 days	7,995	7,045	4,381	2,502	1,761	454	324	24,462
7–13 days	8,202	6,971	5,136	3,332	1,991	531	445	26,608
14–20 days	164	77	139	59	25	12	31	507
21–27 days	39	10	39	9	4	1	9	111
28 or more days	74	6	8	3	1	-	1	93
Not stated	1,091	-	-	1,074	-	-	-	2,165
<b>All hospital confinements</b>	<b>82,367</b>	<b>60,098</b>	<b>45,840</b>	<b>24,743</b>	<b>18,350</b>	<b>4,270</b>	<b>3,386</b>	<b>239,054</b>
<b>Per cent</b>								
Less than 1 day	2.4	1.0	1.9	2.5	1.5	3.3	1.7	1.9
1 day	9.3	5.1	9.6	7.5	6.4	10.4	7.7	7.9
2 days	15.2	10.6	15.9	13.8	13.2	14.1	12.9	13.8
3 days	18.4	21.2	18.9	18.0	17.7	19.1	18.2	19.1
4 days	18.8	19.7	17.9	17.3	19.0	15.4	18.6	18.6
5 days	15.6	18.9	14.6	15.9	21.6	14.3	17.0	16.7
6 days	9.8	11.7	9.6	10.6	9.6	10.6	9.6	10.3
7–13 days	10.1	11.6	11.2	14.1	10.9	12.4	13.1	11.2
14–20 days	0.2	0.1	0.3	0.2	0.1	0.3	0.9	0.2
21–27 days	0.0	0.0	0.1	0.0	0.0	0.0	0.3	0.0
28 or more days	0.1	0.0	0.0	0.0	0.0	-	0.0	0.0
<b>All hospital confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Length of mother's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

(b) South Australia data includes entire postnatal length of stay under care.

(c) Data exclude Tasmania.

**Table A31: Mother's length of postnatal stay by accommodation status, hospital confinements, selected States and Territories, 1997**

Status in hospital/ Length of postnatal stay <sup>(a)</sup>	NSW	Qld	WA	SA <sup>(c)</sup>	ACT	Total
<b>Public<sup>(b)</sup> (n)</b>	57,905	30,270	16,608	12,597	2,821	120,201
Mean length of stay (days)	3.5	3.2	3.5	3.6	3.1	3.5
<b>Per cent</b>						
1 day or less	14.2	16.3	13.6	10.8	19.2	14.4
2 days	19.2	22.2	18.3	18.2	19.3	19.7
3 days	21.6	24.4	22.8	23.4	25.2	22.7
4 days	19.2	18.3	19.1	20.2	16.4	19.0
5 days	12.8	10.1	13.9	14.6	10.8	12.4
6 days	6.8	4.2	6.5	7.0	5.7	6.1
7 or more days	6.2	4.6	5.8	5.9	3.3	5.6
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Private<sup>(b)</sup> (n)</b>	23,293	15,570	6,955	5,753	1,436	53,007
Mean length of stay (days)	5.1	5.4	5.9	5.3	5.6	5.3
<b>Per cent</b>						
1 day or less	5.6	2.2	1.4	1.6	2.7	3.5
2 days	5.2	3.6	2.9	2.2	3.8	4.1
3 days	10.6	8.4	6.5	5.3	7.1	8.7
4 days	17.8	17.2	13.2	16.2	13.4	16.7
5 days	22.5	23.4	20.6	37.1	21.2	24.1
6 days	17.4	20.0	20.4	15.3	20.4	18.4
7 or more days	21.0	25.2	35.0	22.3	31.3	24.5
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Length of mother's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

(b) Data exclude Victoria, Tasmania and Northern Territory.

(c) South Australia data includes entire postnatal length of stay under care.

**Table A32: Mother's length of postnatal stay in hospital by age, parity, Indigenous status, accommodation status, type of delivery, and size of hospital, Australia, 1997**

Characteristic	Confinements <sup>(a)</sup> (n)	0–2 days	3–4 days	5–6 days	7–8 days	9–10 days	11–13 days	14 or more days
Per cent								
<b>All confinements</b>	236,889	23.6	37.8	27.1	8.8	1.8	0.6	0.3
<b>Maternal age</b>								
Less than 20	12,209	31.5	45.7	17.2	3.5	1.2	0.6	0.4
20–24	40,473	33.1	43.3	18.2	4.0	0.8	0.3	0.2
25–29	77,909	24.2	38.8	26.9	8.1	1.4	0.5	0.3
30–34	70,702	18.9	35.1	31.4	11.2	2.3	0.6	0.3
35–39	30,620	18.5	32.2	32.4	12.7	2.9	1.0	0.4
40 and over	4,939	16.9	30.9	31.5	14.7	4.2	1.4	0.5
Not stated	37	29.7	35.1	32.4	2.7	-	-	-
<b>Parity</b>								
None	95,093	13.6	37.0	33.0	12.3	2.7	0.8	0.4
One	80,725	27.6	38.4	25.0	7.1	1.3	0.4	0.2
Two or three	52,373	32.6	38.7	21.2	5.7	1.2	0.4	0.2
Four or more	8,516	42.2	34.9	16.0	4.7	1.3	0.6	0.3
Not stated	182	20.9	35.7	29.7	8.8	3.3	1.1	0.5
<b>Indigenous status</b>								
Indigenous	7,377	36.5	35.1	18.1	5.6	2.5	1.2	0.9
Non-Indigenous	229,512	23.2	37.9	27.3	8.9	1.8	0.6	0.3
<b>Hospital accommodation status<sup>(b)</sup></b>								
Public	120,201	34.1	41.7	18.5	4.0	1.0	0.4	0.3
Private	53,007	7.6	25.4	42.5	18.9	4.0	1.1	0.5
Other	197	41.1	30.5	20.3	6.1	2.0	-	-
<b>Type of delivery</b>								
Spontaneous cephalic	160,034	31.9	42.5	20.6	3.8	0.7	0.3	0.2
Caesarean section	47,994	2.7	22.6	43.3	23.9	5.2	1.6	0.8
Other	28,861	12.8	36.9	35.7	11.2	2.3	0.7	0.3
<b>Size of hospital</b>								
1–100	5,866	21.9	41.5	27.4	7.2	1.3	0.4	0.2
101–500	35,615	16.3	37.9	32.3	10.6	1.9	0.7	0.2
501–1,000	45,555	18.7	34.2	32.4	11.5	2.3	0.6	0.4
1,001–2,000	46,120	24.2	37.8	27.3	8.6	1.5	0.4	0.3
2,001 and over	103,733	28.2	39.1	22.8	7.2	1.8	0.6	0.3

(a) Length of mother's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

(b) Data exclude Victoria and Northern Territory.

Note: Data exclude Tasmania.

**Table A33: Length of mother's postnatal stay for public accommodation status in hospital by age, parity, Indigenous status, type of delivery, and size of hospital, Australia 1997**

Characteristic <sup>(a)</sup>	Confinements <sup>(b)</sup> (n)	0-2 days	3-4 days	5-6 days	7-8 days	9-10 days	11-13 days	14 or more days
Per cent								
<b>Confinements</b>	120,201	34.1	41.7	18.5	4.0	1.0	0.4	0.3
<b>Maternal age</b>								
Less than 20	9,423	34.3	44.4	15.9	3.3	1.1	0.6	0.4
20-24	28,022	38.1	42.3	15.5	3.0	0.7	0.3	0.2
25-29	40,061	34.4	42.0	18.4	3.7	0.8	0.3	0.3
30-34	28,765	31.7	41.3	20.4	4.6	1.1	0.5	0.3
35-39	12,012	30.7	38.8	22.3	5.7	1.3	0.7	0.3
40 and over	1,889	26.7	38.5	24.0	6.6	3.0	0.7	0.5
Not stated	29	34.5	37.9	27.6	-	-	-	-
<b>Parity</b>								
None	47,357	20.6	45.6	25.7	5.8	1.4	0.6	0.4
One	38,871	41.4	40.5	14.2	2.8	0.7	0.3	0.2
Two or three	28,337	43.9	38.7	13.4	2.7	0.7	0.3	0.2
Four or more	5,540	49.2	33.2	12.6	3.3	0.9	0.5	0.3
Not stated	96	26.0	44.8	20.8	6.3	1.0	-	1.0
<b>Indigenous Status</b>								
Indigenous	5,750	41.3	34.9	15.6	4.6	2.0	1.0	0.7
Non-Indigenous	114,451	33.8	42.1	18.6	3.9	0.9	0.4	0.3
<b>Type of delivery</b>								
Spontaneous cephalic	88,171	42.7	42.8	11.5	2.1	0.5	0.2	0.2
Caesarean section	20,452	4.4	34.1	45.5	11.3	2.7	1.2	0.7
Other	11,578	21.0	47.4	23.7	5.6	1.3	0.6	0.3
<b>Size of hospital</b>								
1-100	3,518	28.5	43.6	22.1	4.7	0.7	0.3	0.2
101-500	16,734	25.2	43.5	24.0	5.5	1.1	0.5	0.2
501-1,000	21,892	30.0	43.0	21.3	4.2	0.8	0.3	0.2
1,001-2,000	19,147	38.4	41.7	15.4	3.0	0.9	0.3	0.3
2,001 and over	58,910	37.1	40.7	16.6	3.7	1.1	0.5	0.3

(a) Data exclude Victoria and Northern Territory.

(b) Length of mother's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

Note: Data exclude Tasmania.

**Table A34: Length of mother's postnatal stay for private accommodation status in hospital by age, parity, Indigenous status, type of delivery, and size of hospital, Australia 1997**

Characteristic <sup>(a)</sup>	Confinements <sup>(b)</sup> (n)	0–2 days	3–4 days	5–6 days	7–8 days	9–10 days	11–13 days	14 or more days
Per cent								
<b>Confinements</b>	53,007	7.6	25.4	42.5	18.9	4.0	1.1	0.5
<b>Maternal age</b>								
Less than 20	307	19.2	32.9	38.4	8.5	0.7	0.3	-
20–24	3,079	11.4	34.7	38.3	12.3	2.2	0.9	0.2
25–29	17,004	7.9	26.3	43.3	18.0	3.2	0.8	0.4
30–34	21,308	6.8	24.6	43.0	19.6	4.3	1.1	0.5
35–39	9,713	7.3	23.3	41.9	20.7	4.8	1.5	0.5
40 and over	1,589	7.7	20.5	39.1	23.5	6.2	2.1	0.8
Not stated	7	14.3	28.6	57.1	-	-	-	-
<b>Parity</b>								
None	21,993	4.5	16.0	45.6	25.7	6.0	1.6	0.6
One	19,720	8.6	31.2	41.9	14.8	2.5	0.7	0.3
Two or three	10,262	11.5	33.8	38.1	13.1	2.5	0.7	0.3
Four or more	948	18.1	33.5	32.0	12.7	2.3	1.3	0.1
Not stated	84	14.3	26.2	40.5	11.9	6.0	1.2	-
<b>Indigenous status</b>								
Indigenous	149	12.8	29.5	34.2	20.1	2.0	1.3	-
Non-Indigenous	52,858	7.6	25.4	42.5	18.9	4.0	1.1	0.5
<b>Type of delivery</b>								
Spontaneous cephalic	29,342	11.3	35.1	42.1	9.3	1.6	0.4	0.2
Caesarean section	14,738	1.5	9.0	39.5	38.0	8.7	2.4	0.9
Other	8,927	5.5	20.8	48.9	19.3	4.0	1.2	0.4
<b>Size of hospital</b>								
1–100	710	13.1	32.7	36.8	14.6	1.8	0.6	0.4
101–500	9,331	5.3	29.0	44.7	16.9	2.9	0.9	0.3
501–1,000	12,009	5.9	24.1	42.2	21.4	4.7	1.1	0.6
1,001–2,000	10,112	4.6	23.0	47.8	20.4	3.1	0.7	0.3
2,001 and over	20,845	10.9	25.5	39.3	17.9	4.5	1.4	0.5

(a) Data exclude Victoria and Northern Territory.

(b) Length of mother's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

Note: Data exclude Tasmania.



**Table A35: Mode of separation of mother, hospital confinements, selected States and Territories, 1997**

Mode of separation	NSW	Vic	Qld	Tas	ACT	NT	Total <sup>(a)</sup>
<b>Number</b>							
Discharge home	82,289	60,095	45,840	4,913	4,265	3,386	200,788
Transfer to another hospital	4,366	1,115	1,226	-	389	3	7,099
Died	5	3	-	-	-	-	8
Other	-	-	-	54	-	-	54
Not stated	73	-	-	315	5	-	393
<b>All confinements</b>	<b>86,733</b>	<b>61,213</b>	<b>47,066</b>	<b>5,282</b>	<b>4,659</b>	<b>3,389</b>	<b>208,342</b>
<b>Per cent</b>							
Discharge home	95.0	98.2	97.4	98.9	91.6	99.9	96.6
Transfer to another hospital	5.0	1.8	2.6	-	8.4	0.1	3.4
Died	0.0	0.0	-	-	-	-	0.0
Other	-	-	-	1.1	-	-	0.0
<b>All confinements</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Data exclude Western Australia and South Australia.

Table A36: Baby's month of birth, all births, States and Territories, 1997

Month of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
January	7,585	5,277	3,873	2,208	1,558	412	416	298	21,627
February	6,709	4,793	3,612	1,994	1,475	411	345	290	19,629
March	7,411	5,274	4,083	2,206	1,593	459	397	297	21,720
April	7,093	5,081	4,055	2,055	1,532	463	403	313	20,995
May	7,374	5,344	4,174	2,088	1,625	452	421	285	21,763
June	7,329	5,018	4,096	2,055	1,494	446	388	322	21,148
July	7,544	5,297	4,285	2,166	1,627	480	435	311	22,145
August	7,399	5,219	4,139	2,124	1,569	470	403	297	21,620
September	7,747	5,310	4,105	2,206	1,589	491	379	292	22,119
October	7,850	5,593	4,123	2,190	1,655	463	437	287	22,598
November	6,985	4,953	3,636	1,920	1,475	446	371	264	20,050
December	7,107	5,148	3,857	2,041	1,482	454	390	305	20,784
<b>All births</b>	<b>88,133</b>	<b>62,307</b>	<b>48,038</b>	<b>25,253</b>	<b>18,674</b>	<b>5,447</b>	<b>4,785</b>	<b>3,561</b>	<b>256,198</b>
Per cent									
January	8.6	8.5	8.1	8.7	8.3	7.6	8.7	8.4	8.4
February	7.6	7.7	7.5	7.9	7.9	7.5	7.2	8.1	7.7
March	8.4	8.5	8.5	8.7	8.5	8.4	8.3	8.3	8.5
April	8.0	8.2	8.4	8.1	8.2	8.5	8.4	8.8	8.2
May	8.4	8.6	8.7	8.3	8.7	8.3	8.8	8.0	8.5
June	8.3	8.1	8.5	8.1	8.0	8.2	8.1	9.0	8.3
July	8.6	8.5	8.9	8.6	8.7	8.8	9.1	8.7	8.6
August	8.4	8.4	8.6	8.4	8.4	8.6	8.4	8.3	8.4
September	8.8	8.5	8.5	8.7	8.5	9.0	7.9	8.2	8.6
October	8.9	9.0	8.6	8.7	8.9	8.5	9.1	8.1	8.8
November	7.9	7.9	7.6	7.6	7.9	8.2	7.8	7.4	7.8
December	8.1	8.3	8.0	8.1	7.9	8.3	8.2	8.6	8.1
<b>All births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Note: Data for Tasmania incomplete.

Table A37: Baby's sex by plurality, all births, States and Territories, 1997

Baby's sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
<b>All births</b>									
Male	45,204	32,112	24,656	13,028	9,539	2,855	2,402	1,811	131,607
Female	42,889	30,177	23,379	12,224	9,135	2,591	2,381	1,747	124,523
Indeterminate	14	18	3	1	-	1	2	3	42
Not stated	26	-	-	-	-	-	-	-	26
<b>All births</b>	<b>88,133</b>	<b>62,307</b>	<b>48,038</b>	<b>25,253</b>	<b>18,674</b>	<b>5,447</b>	<b>4,785</b>	<b>3,561</b>	<b>256,198</b>
Sex ratio	105.4	106.4	105.5	106.6	104.4	110.2	100.9	103.7	105.7
<b>Singletons</b>									
Male	43,962	31,105	23,919	12,623	9,279	2,782	2,336	1,775	127,781
Female	41,740	29,223	22,633	11,851	8,843	2,526	2,293	1,711	120,820
Indeterminate	12	13	2	1	-	1	2	3	34
Not stated	26	-	-	-	-	-	-	-	26
Sex ratio	105.3	106.4	105.7	106.5	104.9	110.1	101.9	103.7	105.8
<b>Twins</b>									
Male	1,183	975	681	384	251	73	66	36	3,649
Female	1,108	914	698	352	277	65	88	36	3,538
Indeterminate	2	5	1	-	-	-	-	-	8
Not stated	-	-	-	-	-	-	-	-	-
Sex ratio	106.8	106.7	97.6	109.1	90.6	112.3	75.0	100.0	103.1
<b>Other multiple births</b>									
Male	59	32	56	21	9	-	-	-	177
Female	41	40	48	21	15	-	-	-	165
Indeterminate	-	-	-	-	-	-	-	-	-
Not stated	-	-	-	-	-	-	-	-	-
Sex ratio	143.9	80.0	116.7	100.0	60.0	-	-	-	107.3
Per cent									
<b>All births</b>									
Male	51.3	51.5	51.3	51.6	51.1	52.4	50.2	50.9	51.4
Female	48.7	48.4	48.7	48.4	48.9	47.6	49.8	49.1	48.6
Indeterminate	0.0	0.0	0.0	0.0	-	0.0	0.0	0.1	0.0
<b>All births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Singletons</b>									
Male	51.3	51.5	51.4	51.6	51.2	52.4	50.4	50.9	51.4
Female	48.7	48.4	48.6	48.4	48.8	47.6	49.5	49.0	48.6
<b>Twins</b>									
Male	51.6	51.5	49.3	52.2	47.5	52.9	42.9	50.0	50.7
Female	48.3	48.3	50.6	47.8	52.5	47.1	57.1	50.0	49.2
<b>Other multiple births</b>									
Male	59.0	44.4	53.8	50.0	37.5	-	-	-	51.8
Female	41.0	55.6	46.2	50.0	62.5	-	-	-	48.2

Note: Data for Tasmania incomplete.

Table A38: Baby's gestational age, live births and fetal deaths, Australia, 1997

Gestational age (weeks)	Live births		Fetal deaths		All births	
	Number	Per cent	Number	Per cent	Number	Per cent
20	47	0.0	151	8.4	198	0.1
21	76	0.0	200	11.1	276	0.1
22	74	0.0	160	8.9	234	0.1
23	104	0.0	111	6.2	215	0.1
24	146	0.1	94	5.2	240	0.1
25	185	0.1	71	3.9	256	0.1
26	206	0.1	53	2.9	259	0.1
27	231	0.1	37	2.1	268	0.1
28	328	0.1	58	3.2	386	0.2
29	407	0.2	32	1.8	439	0.2
30	509	0.2	46	2.6	555	0.2
31	612	0.2	41	2.3	653	0.3
32	938	0.4	50	2.8	988	0.4
33	1,246	0.5	57	3.2	1,303	0.5
34	2,162	0.9	52	2.9	2,214	0.9
35	3,252	1.3	76	4.2	3,328	1.3
36	6,897	2.7	81	4.5	6,978	2.7
37	14,769	5.8	75	4.2	14,844	5.8
38	39,906	15.7	93	5.2	39,999	15.6
39	51,653	20.3	82	4.5	51,735	20.2
40	89,869	35.4	133	7.4	90,002	35.2
41	35,220	13.9	34	1.9	35,254	13.8
42	5,236	2.1	15	0.8	5,251	2.1
43	141	0.1	1	0.1	142	0.1
44 and over	9	0.0	-	-	9	0.0
Not stated	167		5		172	
<b>All births</b>	<b>254,390</b>	<b>100.0</b>	<b>1,808</b>	<b>100.0</b>	<b>256,198</b>	<b>100.0</b>
<b>Preterm Births</b>						
20-27	1,069	0.4	877	48.6	1,946	0.8
28-31	1,856	0.7	177	9.8	2,033	0.8
32-36	14,495	5.7	316	17.5	14,811	5.8
<b>All preterm births</b>	<b>17,420</b>	<b>6.9</b>	<b>1,370</b>	<b>76.0</b>	<b>18,790</b>	<b>7.3</b>

Table A39: Baby's gestational age by plurality, all births, Australia, 1997

Gestational age (weeks)	Singletons		Twins		Triplets		All births	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
20–27	1,610	0.6	288	4.0	36	11.8	1,946	0.8
28–31	1,475	0.6	462	6.4	84	27.5	2,033	0.8
32–36	11,828	4.8	2,791	38.8	180	58.8	14,811	5.8
37–41	228,186	91.8	3,642	50.7	6	2.0	231,834	90.6
42 and over	5,398	2.2	4	0.1	-	-	5,402	2.1
Not stated	164	-	8	-	-	-	172	-
<b>All births</b>	<b>248,661</b>	<b>100.0</b>	<b>7,195</b>	<b>100.0</b>	<b>306</b>	<b>100.0</b>	<b>256,198</b>	<b>100.0</b>
20–36 weeks	14,913	6.0	3,541	49.3	300	98.0	18,790	7.3
<b>Mean gestational age (weeks)</b>								
20+ weeks	<b>39.1</b>		<b>35.5</b>		<b>31.6</b>		<b>39.0</b>	

Table A40: Duration of pregnancy, preterm births, States and Territories, 1997

Duration of pregnancy (weeks)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Mean (weeks)</b>	33.4	33.2	33.1	33.2	33.0	33.2	32.6	33.2	33.2
<b>Number</b>									
20–27	562	482	412	188	170	42	51	39	1,946
28–31	596	487	459	204	161	31	60	35	2,033
32–36	4,852	3,548	3,002	1,407	1,130	273	296	303	14,811
<b>All preterm births</b>	<b>6,010</b>	<b>4,517</b>	<b>3,873</b>	<b>1,799</b>	<b>1,461</b>	<b>346</b>	<b>407</b>	<b>377</b>	<b>18,790</b>
<b>Per cent of total births</b>									
20–27	0.6	0.8	0.9	0.7	0.9	0.8	1.1	1.1	0.8
28–31	0.7	0.8	1.0	0.8	0.9	0.6	1.3	1.0	0.8
32–36	5.5	5.7	6.2	5.6	6.1	5.0	6.2	8.5	5.8
<b>All preterm births</b>	<b>6.8</b>	<b>7.2</b>	<b>8.1</b>	<b>7.1</b>	<b>7.8</b>	<b>6.4</b>	<b>8.5</b>	<b>10.6</b>	<b>7.3</b>

Note: Data for Tasmania incomplete.

**Table A41: Baby's birthweight, all births, States and Territories, 1997**

Birthweight (g)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Mean birthweight (g)</b>	3,364	3,351	3,361	3,337	3,354	3,408	3,360	3,248	3,356
<b>Number</b>									
Less than 500	182	214	163	80	76	23	10	14	762
500–999	414	309	284	120	106	20	34	24	1,311
1,000–1,499	467	369	336	165	124	25	52	27	1,565
1,500–1,999	1,033	777	661	325	241	61	73	71	3,242
2,000–2,499	3,318	2,387	1,866	985	760	191	191	222	9,920
2,500–2,999	13,487	9,666	6,995	4,114	2,752	727	641	639	39,021
3,000–3,499	31,863	22,624	17,081	9,188	6,634	1,813	1,680	1,244	92,127
3,500–3,999	26,957	18,810	14,748	7,565	5,780	1,843	1,531	950	78,184
4,000–4,499	8,816	6,035	5,012	2,356	1,874	613	478	268	25,452
4,500 and over	1,535	1,094	888	355	327	121	93	46	4,459
Not stated	61	22	4	-	-	10	2	56	155
<b>All births</b>	<b>88,133</b>	<b>62,307</b>	<b>48,038</b>	<b>25,253</b>	<b>18,674</b>	<b>5,447</b>	<b>4,785</b>	<b>3,561</b>	<b>256,198</b>
Less than 1,000	596	523	447	200	182	43	44	38	2,073
Less than 1,500	1,063	892	783	365	306	68	96	65	3,638
Less than 2,500	5,414	4,056	3,310	1,675	1,307	320	360	358	16,800
<b>Per cent</b>									
Less than 500	0.2	0.3	0.3	0.3	0.4	0.4	0.2	0.4	0.3
500–999	0.5	0.5	0.6	0.5	0.6	0.4	0.7	0.7	0.5
1,000–1,499	0.5	0.6	0.7	0.7	0.7	0.5	1.1	0.8	0.6
1,500–1,999	1.2	1.2	1.4	1.3	1.3	1.1	1.5	2.0	1.3
2,000–2,499	3.8	3.8	3.9	3.9	4.1	3.5	4.0	6.3	3.9
2,500–2,999	15.3	15.5	14.6	16.3	14.7	13.4	13.4	18.2	15.2
3,000–3,499	36.2	36.3	35.6	36.4	35.5	33.3	35.1	35.5	36.0
3,500–3,999	30.6	30.2	30.7	30.0	31.0	33.9	32.0	27.1	30.5
4,000–4,499	10.0	9.7	10.4	9.3	10.0	11.3	10.0	7.6	9.9
4,500 and over	1.7	1.8	1.8	1.4	1.8	2.2	1.9	1.3	1.7
<b>All births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Less than 1,000	0.7	0.8	0.9	0.8	1.0	0.8	0.9	1.1	0.8
Less than 1,500	1.2	1.4	1.6	1.4	1.6	1.3	2.0	1.9	1.4
Less than 2,500	6.1	6.5	6.9	6.6	7.0	5.9	7.5	10.2	6.6

*Note:* Data for Tasmania incomplete.

Table A42: Baby's birthweight, live births and fetal deaths, Australia, 1997

Birthweight (g)	Live births		Fetal deaths		All births	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	192	0.1	570	32.3	762	0.3
500–999	946	0.4	365	20.7	1,311	0.5
1,000–1,499	1,451	0.6	114	6.5	1,565	0.6
1,500–1,999	3,099	1.2	143	8.1	3,242	1.3
2,000–2,499	9,781	3.8	139	7.9	9,920	3.9
2,500–2,999	38,870	15.3	151	8.6	39,021	15.2
3,000–3,499	91,974	36.2	153	8.7	92,127	36.0
3,500–3,999	78,102	30.7	82	4.6	78,184	30.5
4,000–4,499	25,413	10.0	39	2.2	25,452	9.9
4,500 and over	4,450	1.8	9	0.5	4,459	1.7
Not stated	112		43		155	
<b>All births</b>	<b>254,390</b>	<b>100.0</b>	<b>1,808</b>	<b>100.0</b>	<b>256,198</b>	<b>100.0</b>
Less than 1,000	1,138	0.4	935	53.0	2,073	0.8
Less than 1,500	2,589	1.0	1,049	59.4	3,638	1.4
Less than 2,500	15,469	6.1	1,331	75.4	16,800	6.6
<b>Mean birthweight (g)</b>						
All birthweights	3,369		1,460		3,356	

Table A43: Baby's birthweight by plurality, all births, Australia, 1997

Birthweight (g)	Singletons		Twins		Triplets		Other multiple births	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	639	0.3	106	1.5	13	4.2	4	11.8
500–999	1,047	0.4	214	3.0	40	13.1	10	29.4
1,000–1,499	1,089	0.4	390	5.4	75	24.5	11	32.4
1,500–1,999	2,289	0.9	849	11.8	96	31.4	8	23.5
2,000–2,499	7,792	3.1	2,056	28.6	71	23.2	1	2.9
2,500–2,999	36,506	14.7	2,505	34.9	10	3.3	-	-
3,000–3,499	91,188	36.7	938	13.1	1	0.3	-	-
3,500–3,999	78,072	31.4	112	1.6	-	-	-	-
4,000–4,499	25,445	10.2	7	0.1	-	-	-	-
4,500 and over	4,458	1.8	1	0.0	-	-	-	-
Not stated	136	-	17	-	-	-	2	-
<b>All births</b>	<b>248,661</b>	<b>100.0</b>	<b>7,195</b>	<b>100.0</b>	<b>306</b>	<b>100.0</b>	<b>36</b>	<b>100.0</b>
Less than 1,000	1,686	0.7	320	4.5	53	17.3	14	41.2
Less than 1,500	2,775	1.1	710	9.9	128	41.8	25	73.5
Less than 2,500	12,856	5.2	3,615	50.4	295	96.4	34	100.0
<b>Mean birthweight (g)</b>								
All birthweights	3,387		2,389		1,584		1,111	

**Table A44: Baby's birthweight by sex, all births, Australia, 1997**

Birthweight (g)	Male		Female		Indeterminate / Not stated	
	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	377	0.3	373	0.3	12	21.1
500–999	688	0.5	622	0.5	1	1.8
1,000–1,499	780	0.6	782	0.6	3	5.3
1,500–1,999	1,601	1.2	1,638	1.3	3	5.3
2,000–2,499	4,533	3.4	5,387	4.3	-	-
2,500–2,999	17,092	13.0	21,924	17.6	5	8.8
3,000–3,499	44,153	33.6	47,955	38.5	19	33.3
3,500–3,999	43,245	32.9	34,929	28.1	10	17.5
4,000–4,499	15,938	12.1	9,511	7.6	3	5.3
4,500 and over	3,127	2.4	1,331	1.1	1	1.8
Not stated	73	-	71	-	11	-
<b>All births</b>	<b>131,607</b>	<b>100.0</b>	<b>124,523</b>	<b>100.0</b>	<b>68</b>	<b>100.0</b>
Less than 1,000	1,065	0.8	995	0.8	13	22.8
Less than 1,500	1,845	1.4	1,777	1.4	16	28.1
Less than 2,500	7,979	6.1	8,802	7.1	19	33.3
<b>Mean birthweight (g)</b>						
All birthweights	3,417		3,293		2,476	



Table A45: Baby's birthweight, Indigenous births, States and Territories, 1997

Birthweight (g)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Mean birthweight (g)</b>	3,166	3,186	3,171	3,130	3,093	3,328	3,286	3,049	3,146
<b>Number</b>									
Less than 500	9	1	16	14	3	-	-	9	52
500–999	21	2	33	17	9	-	1	15	98
1,000–1,499	18	5	18	12	7	1	1	19	81
1,500–1,999	35	9	66	42	10	5	1	44	212
2,000–2,499	140	30	167	128	37	9	2	111	624
2,500–2,999	420	74	536	380	98	26	8	289	1,831
3,000–3,499	659	138	900	508	113	60	21	395	2,794
3,500–3,999	402	94	568	344	83	57	18	219	1,785
4,000–4,499	121	26	182	85	29	12	4	59	518
4,500 and over	29	6	31	27	11	4	2	13	123
Not stated	-	-	-	-	-	-	-	33	33
<b>All births</b>	<b>1,854</b>	<b>385</b>	<b>2,517</b>	<b>1,557</b>	<b>400</b>	<b>174</b>	<b>58</b>	<b>1,206</b>	<b>8,151</b>
Less than 1,000	30	3	49	31	12	-	1	24	150
Less than 1,500	48	8	67	43	19	1	2	43	231
Less than 2,500	223	47	300	213	66	15	5	198	1,067
<b>Per cent</b>									
Less than 500	0.5	0.3	0.6	0.9	0.8	-	-	0.8	0.6
500–999	1.1	0.5	1.3	1.1	2.3	-	1.7	1.3	1.2
1,000–1,499	1.0	1.3	0.7	0.8	1.8	0.6	1.7	1.6	1.0
1,500–1,999	1.9	2.3	2.6	2.7	2.5	2.9	1.7	3.8	2.6
2,000–2,499	7.6	7.8	6.6	8.2	9.3	5.2	3.4	9.5	7.7
2,500–2,999	22.7	19.2	21.3	24.4	24.5	14.9	13.8	24.6	22.6
3,000–3,499	35.5	35.8	35.8	32.6	28.3	34.5	36.2	33.7	34.4
3,500–3,999	21.7	24.4	22.6	22.1	20.8	32.8	31.0	18.7	22.0
4,000–4,499	6.5	6.8	7.2	5.5	7.3	6.9	6.9	5.0	6.4
4,500 and over	1.6	1.6	1.2	1.7	2.8	2.3	3.4	1.1	1.5
<b>All births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Less than 1,000	1.6	0.8	1.9	2.0	3.0	-	1.7	2.0	1.8
Less than 1,500	2.6	2.1	2.7	2.8	4.8	0.6	3.4	3.7	2.8
Less than 2,500	12.0	12.2	11.9	13.7	16.5	8.6	8.6	16.9	13.1

Note: Data for Tasmania incomplete.

**Table A46: Distribution of birthweight by mother's Indigenous status, country of birth, age, parity, marital status, public and private accommodation status, and place of birth, Australia, 1997**

Characteristic	Less than 1,000 g		Less than 1,500 g		Less than 2,500 g		2,500 g and over	
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
<b>Indigenous status</b>								
Indigenous	146	1.8	225	2.8	1,042	13.0	6,951	87.0
Non-Indigenous	1,504	0.8	2,662	1.4	12,016	6.4	176,129	93.6
<b>Maternal country of birth</b>								
Australia	1,650	0.8	2,887	1.5	13,058	6.7	183,080	93.3
New Zealand	36	0.6	72	1.2	369	6.2	5,558	93.8
United Kingdom	65	0.6	128	1.2	661	6.1	10,149	93.9
Italy	7	0.9	10	1.2	43	5.3	773	94.7
Former Yugoslavia	6	0.4	15	0.9	83	4.9	1,604	95.1
Lebanon	22	0.8	27	1.0	151	5.5	2,618	94.5
China	19	0.5	31	0.9	148	4.2	3,357	95.8
Hong Kong	3	0.4	7	0.8	43	5.1	804	94.9
India	16	1.1	37	2.5	145	9.7	1,350	90.3
Malaysia	9	0.8	16	1.5	74	6.9	1,004	93.1
Philippines	23	0.9	44	1.7	204	7.8	2,415	92.2
Vietnam	41	0.9	61	1.3	296	6.4	4,357	93.6
Other countries	150	0.7	267	1.2	1,378	6.3	20,367	93.7
Not stated	26	1.3	36	1.8	147	7.5	1,807	92.5
<b>Maternal age</b>								
Less than 15	4	3.4	6	5.0	20	16.8	99	83.2
15–19	165	1.3	288	2.2	1,204	9.2	11,895	90.8
20–24	371	0.9	644	1.5	3,059	7.0	40,397	93.0
25–29	582	0.7	1,019	1.2	5,019	6.0	79,040	94.0
30–34	596	0.8	1,051	1.4	4,753	6.2	71,960	93.8
35–39	295	0.9	521	1.6	2,287	6.9	30,915	93.1
40 and over	60	1.1	108	2.0	456	8.5	4,883	91.5
Not stated	-	-	1	1.8	2	3.6	54	96.4
<b>Parity</b>								
None	961	0.9	1,713	1.7	8,038	7.8	94,860	92.2
One	556	0.6	964	1.1	4,599	5.3	82,466	94.7
Two	271	0.7	482	1.2	2,294	5.6	38,884	94.4
Three	148	1.0	256	1.7	1,025	6.6	14,428	93.4
Four or more	134	1.5	220	2.4	834	9.0	8,399	91.0
Not stated	3	1.4	3	1.4	10	4.6	206	95.4
<b>Marital status</b>								
Married/de facto	1,630	0.7	2,876	1.3	13,608	6.1	209,942	93.9
Single	402	1.4	673	2.4	2,824	9.9	25,753	90.1
Other	41	1.0	89	2.3	368	9.4	3,548	90.6
<b>Hospital status<sup>(a)</sup></b>								
Public	1,119	0.9	1,972	1.5	8,963	7.0	119,988	93.0
Private	374	0.6	684	1.1	3,319	5.6	56,317	94.4
<b>Place of birth</b>								
Hospital	2,040	0.8	3,584	1.4	16,584	6.6	232,943	93.4
Birth centre	3	0.1	4	0.1	52	1.1	4,720	98.9
Home	2	0.3	3	0.4	18	2.5	702	97.5
Born before arrival	26	3.0	44	5.1	123	14.4	733	85.6
Other	2	2.9	2	2.9	17	24.3	53	75.7
Not stated	-	-	1	1.0	6	6.1	92	93.9

(a) Data exclude Victoria and Northern Territory.

**Table A47: Proportion of liveborn low birthweight babies born in hospitals of different sizes, States and Territories, 1997**

Low birthweight category/Hospital size	NSW	Vic	Qld <sup>(a)</sup>	WA	SA	Tas	ACT	NT	Australia
<b>Birthweight: 500–999 g</b>									
Number of births	285	230	207	92	83	13	23	11	944
	<b>Per cent</b>								
1–100 confinements	0.4	0.4	0.5	1.1	2.4	-	-	9.1	0.7
101–500 confinements	1.8	0.9	2.9	4.3	1.2	-	-	-	1.9
501–1,000 confinements	6.7	8.3	4.8	1.1	1.2	-	-	18.2	5.5
1,001–2,000 confinements	3.2	3.0	18.4	-	2.4	100.0	-	72.7	8.2
2,001 and over confinements	88.1	87.4	73.4	93.5	92.8	-	100.0	-	83.7
<b>All births: 500–999 g</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Birthweight: 1,000–1,499 g</b>									
Number of births	434	340	311	158	112	22	46	25	1,448
	<b>Per cent</b>								
1–100 confinements	0.2	-	0.3	1.3	-	4.5	-	-	0.3
101–500 confinements	1.6	1.5	2.6	2.5	1.8	-	4.3	4.0	2.0
501–1,000 confinements	7.8	10.3	5.8	2.5	4.5	13.6	2.2	20.0	7.3
1,001–2,000 confinements	2.5	4.4	20.6	-	3.6	81.8	-	76.0	9.0
2,001 and over confinements	87.8	83.8	70.7	93.7	90.2	-	93.5	-	81.4
<b>All births: 1,000–1,499 g</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Birthweight: 1,500–1,999 g</b>									
Number of births	976	744	636	312	229	53	71	68	3,089
	<b>Per cent</b>								
1–100 confinements	0.2	0.5	0.5	1.3	1.3	-	-	-	0.5
101–500 confinements	3.0	6.3	6.1	2.9	3.1	-	1.4	5.9	4.4
501–1,000 confinements	13.4	14.9	11.3	7.7	6.1	18.9	2.8	35.3	12.6
1,001–2,000 confinements	8.1	13.2	26.4	1.0	21.8	81.1	9.9	58.8	15.8
2,001 and over confinements	75.3	65.1	55.7	87.2	67.7	-	85.9	-	66.7
<b>All births: 1,500–1,999 g</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Includes one tertiary level hospital of less than 2,000 confinements.

Note: Data for Tasmania incomplete.

**Table A48: Baby's Apgar score at 1 minute, live births, selected States and Territories, 1997**

Apgar score	NSW	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
All live births (n)	87,462	47,685	25,085	18,535	5,402	4,743	3,526	192,438
	Per cent							
0	0.1	0.0	0.0	0.0	0.4	0.0	0.3	0.1
1-3	2.6	2.4	1.9	2.1	2.4	2.7	3.4	2.4
4-6	10.6	9.7	10.6	11.9	10.3	12.7	12.9	10.6
7-10	86.6	87.9	87.4	85.9	86.9	84.6	83.4	86.9
All live births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

(a) Data exclude Victoria.

**Table A49: Baby's Apgar score at 5 minutes, live births, States and Territories, 1997**

Apgar score	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Total <sup>(a)</sup>
All live births (n)	87,462	61,867	47,685	25,085	18,535	5,402	4,743	3,526	254,305
	Per cent								
0	0.1	0.0	0.1	0.0	0.1	0.4	0.0	0.4	0.1
1–3	0.3	0.3	0.3	0.1	0.2	0.3	0.5	0.4	0.3
4–6	1.5	1.1	1.1	1.1	1.0	1.2	1.3	2.0	1.2
7–10	98.2	98.6	98.5	98.7	98.7	98.1	98.2	97.2	98.4
All live births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table A50: Apgar scores at 1 and 5 minutes by birthweight and plurality, live births, Australia, 1997

Apgar score <sup>(a)</sup>	Less than 1,000 g	1,000–1,499 g	1,500–1,999 g	2,000–2,499 g	2,500 g and over	Not stated
<b>Singleton live births</b>						
<b>Apgar score: 1 minute<sup>(b)</sup></b>						
Live births (n)	661	758	1,663	5,859	177,979	89
	<b>Per cent</b>					
0	2.1	0.4	0.4	0.3	0.1	2.7
1–3	46.6	14.6	9.4	4.8	2.0	16.2
4–6	32.0	35.0	24.4	15.4	9.9	18.9
7–10	19.3	50.0	65.7	79.5	88.0	62.2
<b>Apgar score: 5 minutes</b>						
Live births (n)	879	988	2,161	7,663	235,174	102
	<b>Per cent</b>					
0	8.0	0.2	0.3	0.1	0.0	4.1
1–3	22.3	2.1	1.5	0.5	0.1	12.2
4–6	16.9	8.9	5.1	2.9	1.0	12.2
7–10	52.8	88.8	93.1	96.5	98.8	71.4
<b>Multiple live births</b>						
<b>Apgar score: 1 minute<sup>(b)</sup></b>						
Live births (n)	195	352	689	1,550	2,635	8
	<b>Per cent</b>					
0	2.1	0.3	0.3	0.1	0.0	42.9
1–3	34.9	11.2	4.2	2.5	2.9	28.6
4–6	35.4	30.5	23.8	16.3	12.1	28.6
7–10	27.6	58.0	71.7	81.2	85.0	-
<b>Apgar score: 5 minutes</b>						
Live births (n)	259	462	935	2,109	3,565	8
	<b>Per cent</b>					
0	4.7	-	0.1	0.0	0.0	71.4
1–3	15.2	1.5	0.6	0.1	0.1	28.6
4–6	13.3	6.1	3.0	1.5	1.2	-
7–10	66.8	92.4	96.3	98.3	98.6	-

(a) Table excludes Apgar scores 'not stated'.

(b) Data exclude Victoria.

**Table A51: Resuscitation at birth, active measures, live births, States and Territories, 1997**

Resuscitation at birth	Vic	Qld	WA	SA <sup>(a)</sup>	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Type</b>	<b>Number</b>							
None	52,117	43,204	15,778	14,998	4,617	4,066	3,156	137,936
Bag and Mask/IPPR	9,106	3,772	1,736	3,415	735	581	371	19,716
Intubation	644	381	522	272	38	75	-	1,932
Bag/mask/IPPR & Intubation	-	324	-	150	12	21	-	507
Other	-	-	-	-	-	-	-	-
Not stated	-	4	7,049	-	-	-	-	7,053
<b>Total live births</b>	<b>61,867</b>	<b>47,685</b>	<b>25,085</b>	<b>18,535</b>	<b>5,402</b>	<b>4,743</b>	<b>3,527</b>	<b>167,144</b>
<b>Type</b>	<b>Per cent</b>							
None	84.2	90.6	87.5	80.9	85.5	85.7	89.5	86.2
Bag and Mask/IPPR	14.7	7.9	9.6	18.4	13.6	12.2	10.5	12.3
Intubation	1.0	0.8	2.9	1.5	0.7	1.6	-	1.2
Bag/mask/IPPR & Intubation	-	0.7	-	0.8	0.2	0.4	-	0.3
Other	-	-	-	-	-	-	-	-
<b>Total live births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) The total methods will exceed the total number of live births. More than one method of resuscitation may have been used for each baby.

(b) Data exclude New South Wales.

Note: Data for Tasmania incomplete.

Table A52: Length of baby's stay in hospital, live births, States and Territories, 1997

Length of stay <sup>(a)</sup>	NSW	Vic	Qld	WA	SA <sup>(b)</sup>	ACT	NT	Total <sup>(c)</sup>
<b>Mean length of stay (days)</b>	4.7	4.9	4.7	5.0	5.6	4.9	5.8	4.9
<b>Number</b>								
Less than 1 day	3,204	980	712	731	248	185	124	6,184
1 day	7,456	3,180	4,109	1,785	1,059	472	333	18,394
2 days	11,575	6,402	7,078	3,252	2,312	623	457	31,699
3 days	14,906	12,485	8,417	4,245	3,135	849	581	44,618
4 days	15,830	11,514	7,964	4,197	3,348	696	551	44,100
5 days	13,677	11,119	6,499	3,873	3,823	653	496	40,140
6 days	8,820	6,906	4,295	2,642	1,690	474	279	25,106
7–13 days	9,704	7,593	5,281	3,681	2,063	595	361	29,278
14–20 days	856	673	444	211	257	53	91	2,585
21–27 days	401	341	271	92	189	32	40	1,366
28 or more days	805	577	470	263	367	59	79	2,620
Not stated	45	-	1,930	-	-	2	3	1,980
<b>All live births</b>	<b>87,279</b>	<b>61,770</b>	<b>47,470</b>	<b>24,972</b>	<b>18,491</b>	<b>4,693</b>	<b>3,395</b>	<b>248,070</b>
<b>Per cent</b>								
Less than 1 day	3.7	1.6	1.6	2.9	1.3	3.9	3.7	2.5
1 day	8.5	5.1	9.0	7.1	5.7	10.1	9.8	7.5
2 days	13.3	10.4	15.5	13.0	12.5	13.3	13.5	12.9
3 days	17.1	20.2	18.5	17.0	17.0	18.1	17.1	18.1
4 days	18.1	18.6	17.5	16.8	18.1	14.8	16.2	17.9
5 days	15.7	18.0	14.3	15.5	20.7	13.9	14.6	16.3
6 days	10.1	11.2	9.4	10.6	9.1	10.1	8.2	10.2
7–13 days	11.1	12.3	11.6	14.7	11.2	12.7	10.6	11.9
14–20 days	1.0	1.1	1.0	0.8	1.4	1.1	2.7	1.1
21–27 days	0.5	0.6	0.6	0.4	1.0	0.7	1.2	0.6
28 or more days	0.9	0.9	1.0	1.1	2.0	1.3	2.3	1.1
<b>All live births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) Length of stay for live births in hospital or birth centre of birth only, transfers are excluded.

(b) South Australia data includes entire postnatal length of stay under care.

(c) Data exclude Tasmania.

**Table A53: Length of baby's stay in hospital, by plurality, Indigenous status, gestational age, and birthweight, live births, Australia, 1997**

Characteristic	Babies <sup>(a)</sup> (n)	0–2 days	3–4 days	5–6 days	7–13 days	14–20 days	21–27 days	28 or more days
<b>Plurality</b>		<b>Per cent</b>						
Singleton	239,134	23.4	36.8	26.7	11.1	0.8	0.4	0.8
Twin	6,667	5.8	10.6	20.1	40.0	9.3	5.7	8.5
Other multiple birth	289	5.9	0.7	2.8	17.6	13.5	11.1	48.4
<b>Indigenous status</b>								
Indigenous	7,545	36.1	33.2	16.6	9.4	1.9	0.9	1.9
Non-Indigenous	238,545	22.4	36.1	26.8	12.0	1.0	0.5	1.0
<b>Gestational age</b>								
20–27 weeks	876	36.4	1.4	1.3	3.3	1.9	0.9	54.8
28–31 weeks	1,587	11.0	2.2	2.1	7.6	7.5	9.4	60.2
32–36 weeks	13,808	9.8	14.2	17.2	32.0	13.1	7.5	6.2
37–41 weeks	224,580	23.6	37.7	27.4	10.8	0.3	0.1	0.1
42 or more weeks	5,133	25.6	40.4	25.1	8.5	0.3	0.1	0.1
Not stated	106	22.6	36.8	20.8	19.8	-	-	-
<b>Birthweight</b>								
Less than 1,000 g	935	34.2	1.4	0.6	3.1	2.7	1.7	56.3
1,000–1,499 g	1,253	9.6	1.4	1.8	6.6	7.5	10.4	62.6
1,500–1,999 g	2,841	7.1	4.0	6.1	22.5	18.3	16.8	25.2
2,000–2,499 g	9,354	10.2	19.0	20.2	31.9	11.0	5.3	2.4
2,500 g and over	231,659	23.6	37.5	27.3	11.0	0.4	0.1	0.2
Not stated	48	58.3	22.9	14.6	4.2	-	-	-

(a) Length of baby's stay in hospital or birth centre of birth only. Transfers, home births and length of stay 'not stated' are excluded.

Note: Data exclude Tasmania.



Table A54: Mode of separation of babies born in hospitals, States and Territories, 1997

Mode of separation	NSW	Vic <sup>(a)</sup>	Qld	WA	Tas	ACT	NT	Total <sup>(b)</sup>
<b>Number</b>								
Discharge home	81,659	59,545	45,540	23,969	5,012	4,472	3,424	223,621
Transfer to another hospital	5,400	1,955	1,753	942	354	200	1	10,605
Fetal death	587	439	353	168	44	42	34	1,667
Liveborn/Died	248	210	179	53	12	21	7	730
Other	-	60	-	8	-	1	-	69
Not stated	80	-	-	-	5	2	50	137
<b>All births</b>	<b>87,974</b>	<b>62,209</b>	<b>47,825</b>	<b>25,140</b>	<b>5,427</b>	<b>4,738</b>	<b>3,516</b>	<b>236,829</b>
<b>Per cent</b>								
Discharge home	92.9	95.7	95.2	95.3	92.4	94.4	98.8	94.5
Transfer to another hospital	6.1	3.1	3.7	3.7	6.5	4.2	0.0	4.5
Fetal death	0.7	0.7	0.7	0.7	0.8	0.9	1.0	0.7
Liveborn/Died	0.3	0.3	0.4	0.2	0.2	0.4	0.2	0.3
Other	-	0.1	-	0.0	-	0.0	-	0.0
<b>All births</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

(a) 'Other' includes 60 babies whose discharge status was recorded as infant death.

(b) Data exclude South Australia.

Note: Data for Tasmania incomplete.

Table A55: Fetal, neonatal and perinatal deaths and rates, various definitions, Australia, 1995–1997

Definition/Outcome	Number				Rate per 1,000 births			
	1995	1996	1997	1995–1997	1995	1996	1997	1995–1997
<b>400 g/20 weeks</b>								
Fetal deaths	1,512	1,668	1,516	4,696	5.9	6.5	6.0	6.1
Early neonatal deaths	908	879	805	2,592	3.5	3.5	3.2	3.4
Perinatal deaths (ABS)	2,420	2,547	2,321	7,288	9.4	10.0	9.2	9.5
Live births	256,190	253,834	251,745	761,769				
<b>500 g/22 weeks</b>								
Fetal deaths	1,283	1,411	1,280	2,694	5.0	5.5	5.1	3.5
Early neonatal deaths	629	582	557	1,211	2.5	2.3	2.2	1.6
Neonatal deaths	811	759	718	1,570	3.2	3.0	2.9	2.1
Perinatal deaths (WHO)	1,912	1,993	1,837	5,742	7.4	7.8	7.3	7.5
Perinatal deaths (ABS)	2,094	2,170	1,998	6,262	8.1	8.5	7.9	8.2
Live births	256,004	253,567	251,658	761,229				
<b>1,000 g/28 weeks</b>								
Fetal deaths	903	958	891	2,752	3.5	3.8	3.5	3.6
Early neonatal deaths	340	334	307	981	1.3	1.3	1.2	1.3
Perinatal deaths (WHO)	1,243	1,292	1,198	3,733	4.9	5.1	4.8	4.9
Live births <sup>(a)</sup>	255,228	253,098	250,509	758,835				

(a) Estimated live births.

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration.

Table A56: Type of fetal death, Australia, 1992–1997

Year	Antepartum		Intrapartum <sup>(a)</sup>		Not known <sup>(b)</sup>		All fetal deaths	
	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births
1992	1,141	4.3	366	1.4	194	0.7	1,701	6.4
1993	951	3.6	322	1.2	166	0.6	1,439	5.5
1994	893	3.4	370	1.4	149	0.6	1,412	5.4
1995	1,013	3.9	318	1.2	181	0.7	1,512	5.9
1996	1,074	4.2	397	1.6	197	0.8	1,668	6.5
1997	941	3.7	270	1.1	305	1.2	1,516	6.0

(a) Includes fetal deaths where it was not known whether heartbeat ceased before or after delivery.

(b) Not known whether heartbeat ceased before or during labour.

Note: Fetal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A57: Neonatal deaths by age at death, Australia, 1992–1997

Year	Less than 1 day		1–6 days		7–27 days		All neonatal deaths <sup>(a)</sup>	
	Number	Rate per 1,000 live births	Number	Rate per 1,000 live births	Number	Rate per 1,000 live births	Number	Rate per 1,000 live births
1992	657	2.5	271	1.0	200	0.8	1,130	4.3
1993	528	2.0	245	0.9	198	0.8	972	3.7
1994	513	2.0	259	1.0	177	0.7	949	3.7
1995	505	2.0	216	0.8	186	0.7	908	3.5
1996	474	1.9	224	0.9	177	0.7	879	3.5
1997	425	1.7	213	0.8	167	0.7	805	3.2

(a) Includes 'not stated' age at death.

Note: Neonatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A58: Fetal, neonatal and perinatal deaths, Australia, 1992–1997

Year	Fetal deaths		Neonatal deaths		Perinatal deaths	
	Number	Rate per 1,000 births	Number	Rate per 1,000 live births	Number	Rate per 1,000 births
1992	1,701	6.4	1,128	4.3	2,829	10.6
1993	1,439	5.5	971	3.7	2,410	9.2
1994	1,412	5.4	949	3.7	2,361	9.1
1995	1,512	5.9	907	3.5	2,419	9.4
1996	1,668	6.5	875	3.4	2,543	10.0
1997	1,516	6.0	805	3.2	2,321	9.2

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

**Table A59: Fetal, neonatal and perinatal deaths by maternal State or Territory of usual residence, 1992–1997**

Outcome/Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
<b>Number</b>									
<b>Fetal deaths</b>									
1992	652	399	275	142	135	35	20	43	1,701
1993	512	335	236	133	117	43	23	40	1,439
1994	433	399	259	131	111	29	17	33	1,412
1995	467	381	278	162	127	40	26	31	1,512
1996	656	364	287	161	109	44	25	22	1,668
1997	568	333	271	135	109	48	19	33	1,516
1995–1997	1,691	1,078	836	458	345	132	70	86	4,696
<b>Neonatal deaths</b>									
1992	445	226	216	104	58	29	22	30	1,130
1993	340	214	208	75	61	26	11	37	972
1994	382	202	160	79	54	29	14	29	949
1995	318	201	181	73	65	24	15	31	908
1996	303	178	193	94	56	18	14	23	879
1997	293	189	159	67	43	22	9	23	805
1995–1997	914	568	533	234	164	64	38	77	2,592
<b>Perinatal deaths</b>									
1992	1,097	625	491	246	193	64	42	73	2,831
1993	852	549	444	208	178	69	34	77	2,411
1994	815	601	419	210	165	58	31	62	2,361
1995	785	582	459	235	192	64	41	62	2,420
1996	959	542	480	255	165	62	39	45	2,547
1997	861	522	430	202	152	70	28	56	2,321
1995–1997	2,605	1,646	1,369	692	509	196	108	163	7,288

*Note:* Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A59: Fetal, neonatal and perinatal deaths by maternal State or Territory of usual residence, 1992–1997 (cont.)

Outcome/Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Rate per 1,000 births									
<b>Fetal deaths</b>									
1992	7.0	6.0	5.9	5.6	7.0	5.0	4.5	11.4	6.4
1993	5.7	5.2	5.0	5.3	5.8	6.3	5.2	11.0	5.5
1994	4.9	6.2	5.5	5.2	5.7	4.2	3.8	9.0	5.5
1995	5.3	6.1	6.0	6.4	6.5	6.1	5.9	8.2	5.9
1996	7.5	5.9	6.0	6.5	5.7	6.8	5.7	6.2	6.5
1997	6.5	5.5	5.7	5.4	5.9	7.9	4.5	9.1	6.0
1995–1997	6.4	5.8	5.9	6.1	6.1	6.9	5.4	7.8	6.1
<b>Neonatal deaths</b>									
1992	4.8	3.4	4.7	4.2	3.0	4.2	4.9	8.0	4.3
1993	3.8	3.3	4.5	3.0	3.0	3.8	2.5	10.3	3.7
1994	4.3	3.2	3.4	3.1	2.8	4.2	3.1	8.0	3.7
1995	3.6	3.2	3.9	2.9	3.4	3.7	3.4	8.2	3.5
1996	3.5	2.9	4.0	3.8	2.9	2.8	3.2	6.5	3.5
1997	3.4	3.1	3.4	2.7	2.3	3.7	2.1	6.4	3.2
1995–1997	3.5	3.1	3.8	3.1	2.9	3.4	2.9	7.1	3.4
<b>Perinatal deaths</b>									
1992	11.8	9.5	10.6	9.8	9.9	9.1	9.4	19.3	10.7
1993	9.5	8.5	9.5	8.3	8.8	10.0	7.7	21.2	9.2
1994	9.2	9.4	9.0	8.3	8.5	8.4	6.9	17.0	9.1
1995	8.9	9.3	9.8	9.3	9.9	9.7	9.2	16.4	9.4
1996	11.0	8.8	10.0	10.2	8.6	9.5	8.8	12.6	10.0
1997	9.8	8.6	9.1	8.1	8.2	11.6	6.6	15.5	9.2
1995–1997	9.9	8.9	9.6	9.2	8.9	10.2	8.3	14.8	9.5

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

**Table A60: Interstate perinatal deaths, State or Territory of registration and usual residence, 1995–1997**

State of usual residence	State of Registration								Australia
	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	
	Number								
NSW	2,483	26	58	-	4	-	34	-	2,605
Vic	5	1,611	24	-	4	-	2	-	1,646
Qld	18	2	1,349	-	-	-	-	-	1,369
WA	1	1	6	678	-	-	-	6	692
SA	-	-	11	-	497	-	-	1	509
Tas	-	7	2	1	-	186	-	-	196
ACT	2	-	1	-	-	-	105	-	108
NT	1	-	2	3	12	-	-	145	163
<b>Australia</b>	<b>2,510</b>	<b>1,647</b>	<b>1,453</b>	<b>682</b>	<b>517</b>	<b>186</b>	<b>141</b>	<b>152</b>	<b>7,288</b>
	Per cent of usual residence								
NSW	95.3	1.0	2.2	-	0.2	-	1.3	-	100.0
Vic	0.3	97.9	1.5	-	0.2	-	0.1	-	100.0
Qld	1.3	0.1	98.5	-	-	-	-	-	100.0
WA	0.1	0.1	0.9	98.0	-	-	-	0.9	100.0
SA	-	-	2.2	-	97.6	-	-	0.2	100.0
Tas	-	3.6	1.0	0.5	-	94.9	-	-	100.0
ACT	1.9	-	0.9	-	-	-	97.2	-	100.0
NT	0.6	-	1.2	1.8	7.4	-	-	89.0	100.0
<b>Australia</b>	<b>34.4</b>	<b>22.6</b>	<b>19.9</b>	<b>9.4</b>	<b>7.1</b>	<b>2.6</b>	<b>1.9</b>	<b>2.1</b>	<b>100.0</b>

Note: Perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A61: Fetal, neonatal and perinatal deaths by maternal age, Australia, 1992–1997

Outcome/Year	Maternal age (years)							All ages
	Less than 20	20–24	25–29	30–34	35–39	40 and over	Not stated	
Number								
Fetal deaths								
1992	133	333	517	458	193	49	18	1,701
1993	108	294	441	367	179	39	11	1,439
1994	89	268	381	423	196	40	15	1,412
1995	131	294	427	395	187	47	31	1,512
1996	131	329	449	446	221	66	26	1,668
1997	105	270	462	382	236	40	21	1,516
1995–1997	367	893	1,338	1,223	644	153	78	4,696
Neonatal deaths								
1992	69	258	326	286	109	26	56	1,130
1993	64	194	277	260	102	17	58	972
1994	66	193	270	228	115	28	49	949
1995	77	193	243	219	102	20	54	908
1996	58	161	250	238	98	26	48	879
1997	81	138	204	201	121	25	35	805
1995–1997	216	492	697	658	321	71	137	2,592
Perinatal deaths								
1992	202	591	843	744	302	75	74	2,831
1993	172	488	718	627	281	56	69	2,411
1994	155	461	651	651	311	68	64	2,361
1995	208	487	670	614	289	67	85	2,420
1996	189	490	699	684	319	92	74	2,547
1997	186	408	666	583	357	65	56	2,321
1995–1997	583	1,385	2,035	1,881	965	224	215	7,288

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A61: Fetal, neonatal and perinatal deaths by maternal age, Australia, 1992–1997 (cont.)

Outcome / Year	Maternal age (years)						All ages
	Less than 20	20-24	25-29	30-34	35-39	40 and over	
Rate per 1,000 births							
Fetal deaths							
1992	9.3	6.3	5.6	6.0	7.4	11.8	6.4
1993	8.1	5.8	5.0	4.7	6.7	9.1	5.5
1994	6.9	5.4	4.4	5.5	6.8	8.7	5.4
1995	10.3	6.2	5.1	5.1	6.2	9.4	5.9
1996	10.4	7.3	5.4	5.8	6.9	12.4	6.5
1997	8.5	6.4	5.6	5.0	7.0	7.4	6.0
1995–1997	9.7	6.6	5.3	5.3	6.7	9.7	6.1
Neonatal deaths							
1992	4.9	4.9	3.6	3.8	4.2	6.3	4.3
1993	4.9	3.8	3.1	3.4	3.8	4.0	3.7
1994	5.1	3.9	3.2	3.0	4.0	6.2	3.7
1995	6.1	4.1	2.9	2.8	3.4	4.0	3.5
1996	4.6	3.6	3.0	3.1	3.1	5.0	3.5
1997	6.6	3.3	2.5	2.6	3.6	4.7	3.2
1995–1997	5.8	3.7	2.8	2.9	3.4	4.6	3.4
Perinatal deaths							
1992	14.1	11.1	9.2	9.8	11.6	18.0	10.6
1993	12.9	9.6	8.1	8.1	10.4	13.1	9.2
1994	12.0	9.3	7.6	8.4	10.8	14.8	9.1
1995	16.3	10.2	8.0	7.9	9.5	13.4	9.4
1996	15.0	10.8	8.4	8.9	9.9	17.3	10.0
1997	15.0	9.6	8.0	7.6	10.7	12.1	9.2
1995–1997	15.4	10.3	8.1	8.1	10.1	14.3	9.5

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.



Table A62: Fetal, neonatal and perinatal deaths, singleton and multiple births, Australia, 1992–1997

Outcome/ Year	Singletons		Twins		Other multiple births		All babies	
	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births
<b>Fetal deaths</b>								
1992	1,578	6.1	113	16.9	10	29.4	1,701	6.4
1993	1,300	5.1	126	18.4	13	42.9	1,439	5.5
1994	1,292	5.1	117	17.0	3	12.0	1,412	5.4
1995	1,371	5.5	133	19.6	8	26.7	1,512	5.9
1996	1,507	6.1	153	22.6	8	25.0	1,668	6.5
1997	1,375	5.6	128	18.4	13	39.2	1,516	6.0
1995–1997	4,253	5.7	414	20.2	29	30.5	4,696	6.1
<b>Neonatal deaths</b>								
1992	954	3.7	171	26.0	5	15.2	1,130	4.3
1993	808	3.2	129	19.2	35	120.7	972	3.7
1994	805	3.2	135	20.0	9	36.6	949	3.7
1995	743	3.0	152	22.9	13	44.5	908	3.5
1996	738	3.0	123	18.6	18	57.7	879	3.5
1997	700	2.9	89	13.0	16	50.2	805	3.2
1995–1997	2,181	2.9	364	18.1	47	50.9	2,592	3.4
<b>Perinatal deaths</b>								
1992	2,532	9.8	284	42.4	15	44.1	2,831	10.6
1993	2,108	8.3	255	37.2	48	158.4	2,411	9.2
1994	2,097	8.3	252	36.7	12	48.2	2,361	9.1
1995	2,114	8.4	285	42.0	21	70.0	2,420	9.4
1996	2,245	9.0	276	40.8	26	81.3	2,547	10.0
1997	1,949	7.9	199	28.6	22	66.3	2,321	9.2
1995–1997	6,308	8.5	760	37.1	69	72.5	7,288	9.5

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A63: Fetal, neonatal and perinatal deaths by baby's sex, Australia, 1992–1997

Outcome/Year	Number			Rate per 1,000 births		
	Males	Females	All infants	Males	Females	All infants
<b>Fetal deaths</b>						
1992	889	812	1,701	6.5	6.3	6.4
1993	765	674	1,439	5.7	5.3	5.5
1994	798	614	1,412	6.0	4.9	5.4
1995	805	707	1,512	6.1	5.6	5.9
1996	900	768	1,668	6.8	6.2	6.5
1997	829	687	1,516	6.4	5.6	6.0
1995–1997	2,534	2,162	4,696	6.4	5.8	6.1
<b>Neonatal deaths</b>						
1992	664	466	1,130	4.9	3.6	4.3
1993	563	409	972	4.2	3.2	3.7
1994	561	388	949	4.2	3.1	3.7
1995	514	394	908	3.9	3.2	3.5
1996	509	370	879	3.9	3.0	3.5
1997	443	362	805	3.4	3.0	3.2
1995–1997	1,466	1,126	2,592	3.7	3.0	3.4
<b>Perinatal deaths</b>						
1992	1,553	1,278	2,831	11.4	9.9	10.7
1993	1,328	1,083	2,411	9.9	8.5	9.2
1994	1,359	1,002	2,361	10.2	8.0	9.1
1995	1,319	1,101	2,420	10.0	8.8	9.4
1996	1,409	1,138	2,547	10.7	9.2	10.0
1997	1,272	1,049	2,321	9.8	8.5	9.2
1995–1997	4,000	3,288	7,288	10.2	8.8	9.5

Note: Fetal, neonatal and perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A64: Fetal deaths by gestational age, Australia, 1992–1997

Year	Gestational age (weeks)						Total
	Less than 28	28–31	32–36	37–41	42 and over	Not stated	
Number							
1992	611	227	353	455	34	21	1,701
1993	525	183	316	351	16	48	1,439
1994	535	151	271	361	20	74	1,412
1995	527	169	293	398	15	110	1,512
1996	645	214	313	433	11	52	1,668
1997	557	176	313	443	13	14	1,516
Proportionate death rate per 1,000 births							
1992	2.3	0.9	1.3	1.7	0.1	0.1	6.4
1993	2.0	0.7	1.2	1.3	0.1	0.2	5.5
1994	2.1	0.6	1.0	1.4	0.1	0.3	5.4
1995	2.0	0.7	1.1	1.5	0.1	0.4	5.9
1996	2.5	0.8	1.2	1.7	0.0	0.2	6.5
1997	2.2	0.7	1.2	1.7	0.1	0.1	6.0

Note: Fetal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A65: Neonatal deaths by gestational age, Australia, 1992–1997

Year	Gestational age (weeks)						Total
	Less than 28	28–31	32–36	37–41	42 and over	Not stated	
Number							
1992	500	107	163	275	25	60	1,130
1993	394	99	147	238	10	84	972
1994	399	101	117	266	14	52	949
1995	435	81	94	244	12	42	908
1996	424	64	114	241	7	29	879
1997	360	90	100	211	9	35	805
Proportionate death rate per 1,000 births							
1992	1.9	0.4	0.6	1.0	0.1	0.2	4.3
1993	1.5	0.4	0.6	0.9	0.0	0.3	3.7
1994	1.5	0.4	0.5	1.0	0.1	0.2	3.7
1995	1.7	0.3	0.4	1.0	0.0	0.2	3.5
1996	1.7	0.3	0.4	0.9	0.0	0.1	3.5
1997	1.4	0.4	0.4	0.8	0.0	0.1	3.2

Note: Neonatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

**Table A66: Perinatal deaths by gestational age, Australia, 1992–1997**

Year	Gestational age (weeks)						Total
	Less than 28	28–31	32–36	37–41	42 and over	Not stated	
Number							
1992	1,111	334	516	730	59	81	2,831
1993	919	282	463	589	26	132	2,411
1994	934	252	388	627	34	126	2,361
1995	962	250	387	642	27	152	2,420
1996	1,069	278	427	674	18	81	2,547
1997	917	266	413	654	22	49	2,321
Proportionate death rate per 1,000 births							
1992	4.2	1.3	1.9	2.7	0.2	0.3	10.7
1993	3.5	1.1	1.8	2.3	0.1	0.5	9.2
1994	3.6	1.0	1.5	2.4	0.1	0.5	9.1
1995	3.7	1.0	1.5	2.5	0.1	0.6	9.4
1996	4.2	1.1	1.7	2.6	0.1	0.3	10.0
1997	3.6	1.1	1.6	2.6	0.1	0.2	9.2

Note: Perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

**Table A67: Fetal deaths by birthweight, Australia, 1992–1997**

Year	Birthweight (g)				Total
	less than 1,000	1,000–2,499	2,500 and over	Not stated	
Number					
1992	659	491	477	74	1,701
1993	574	411	371	83	1,439
1994	597	338	365	112	1,412
1995	541	428	418	125	1,512
1996	685	451	457	75	1,668
1997	604	420	451	41	1,516
Proportionate death rate per 1,000 births					
1992	2.5	1.8	1.8	0.3	6.4
1993	2.2	1.6	1.4	0.3	5.5
1994	2.3	1.3	1.4	0.4	5.4
1995	2.1	1.7	1.6	0.5	5.9
1996	2.7	1.8	1.8	0.3	6.5
1997	2.4	1.7	1.8	0.2	6.0

Note: Fetal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A68: Neonatal deaths by birthweight, Australia, 1992–1997

Year	Birthweight (g)				Total
	less than 1,000	1,000–2,499	2,500 and over	Not stated	
Number					
1992	494	265	318	53	1,130
1993	389	249	268	66	972
1994	391	227	277	54	949
1995	419	206	242	41	908
1996	415	175	261	28	879
1997	376	184	215	30	805
Proportionate death rate per 1,000 live births					
1992	1.9	1.0	1.2	0.2	4.3
1993	1.5	1.0	1.0	0.3	3.7
1994	1.5	0.9	1.1	0.2	3.7
1995	1.6	0.8	0.9	0.2	3.5
1996	1.6	0.7	1.0	0.1	3.5
1997	1.5	0.7	0.9	0.1	3.2

Note: Neonatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A69: Perinatal deaths by birthweight, Australia, 1992–1997

Year	Birthweight (g)				Total
	less than 1,000	1,000–2,499	2,500 and over	Not stated	
Number					
1992	1,153	756	795	127	2,831
1993	963	660	639	149	2,411
1994	988	565	642	166	2,361
1995	960	634	660	166	2,420
1996	1,100	626	718	103	2,547
1997	980	604	666	71	2,321
Proportionate death rate per 1,000 births					
1992	4.3	2.8	3.0	0.5	10.7
1993	3.7	2.5	2.4	0.6	9.2
1994	3.8	2.2	2.5	0.6	9.1
1995	3.7	2.5	2.6	0.6	9.4
1996	4.3	2.5	2.8	0.4	10.0
1997	3.9	2.4	2.6	0.3	9.2

Note: Perinatal deaths from ABS based on year of registration with 400 grams/20 weeks gestation definition.

Table A70: Fetal deaths by maternal age, Australia, 1997

Maternal age (years)	Fetal deaths	Live births	Total births	Fetal death rate
	Number			(per 1,000 births)
Less than 20	129	13,099	13,228	9.8
20–24	326	43,161	43,487	7.5
25–29	535	83,578	84,113	6.4
30–34	494	76,249	76,743	6.4
35–39	265	32,957	33,222	8.0
40 and over	58	5,282	5,340	10.9
Not stated	1	64	65	15.4
<b>All ages</b>	<b>1,808</b>	<b>254,390</b>	<b>256,198</b>	<b>7.1</b>

Note: Data include fetuses and infants of at least 20 weeks gestation or 400 g birthweight.

Table A71: Fetal deaths by maternal age and Indigenous status, Australia, 1997

Maternal age (years)	Fetal deaths		Live births		Total births		Fetal death rate	
	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous	Non-Indigenous	Indigenous
	Number				(per 1,000 births)			
Less than 20	33	96	1,828	11,271	1,861	11,367	17.7	8.4
20–24	33	293	2,654	40,507	2,687	40,800	12.3	7.2
25–29	28	507	2,078	81,500	2,106	82,007	13.3	6.2
30–34	16	478	1,046	75,203	1,062	75,681	15.1	6.3
35–39	11	254	367	32,590	378	32,844	29.1	7.7
40 and over	-	58	55	5,227	55	5,285	-	11.0
Not stated	-	1	2	62	2	63	-	15.9
<b>All ages</b>	<b>121</b>	<b>1,687</b>	<b>8,030</b>	<b>246,360</b>	<b>8,151</b>	<b>248,047</b>	<b>14.8</b>	<b>6.8</b>

Note: Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight.

Table A72: Fetal deaths by maternal parity, Australia, 1997

Parity	Fetal deaths	Live births	Total births	Fetal death rate
	Number			(per 1,000 births)
None	776	102,220	102,996	7.5
One	504	86,585	87,089	5.8
Two	261	40,932	41,193	6.3
Three	137	15,324	15,461	8.9
Four or more	125	9,115	9,240	13.5
Not stated	5	214	219	22.8
<b>All parities</b>	<b>1,808</b>	<b>254,390</b>	<b>256,198</b>	<b>7.1</b>

Note: Data include fetuses and infants of at least 20 weeks gestation or 400 g birthweight.

Table A73: Fetal deaths by plurality, Australia, 1997

Plurality	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Singletons	1,612	247,049	248,661	6.5
Twins	181	7,014	7,195	25.2
Other multiple births	15	327	342	43.9
<b>All births</b>	<b>1,808</b>	<b>254,390</b>	<b>256,198</b>	<b>7.1</b>

Note: Data include fetuses and infants of at least 20 weeks gestation or 400g birthweight.

Table A74: Fetal deaths by maternal marital status, Australia, 1997

Marital status	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Married/de facto	1,464	222,173	223,637	6.5
Single	310	28,282	28,592	10.8
Widowed, divorced separated or other	24	3,226	3,250	7.4
Not stated	10	709	719	13.9
<b>All marital status</b>	<b>1,808</b>	<b>254,390</b>	<b>256,198</b>	<b>7.1</b>

Note: Data include fetuses and infants of at least 20 weeks gestation or 400 g birthweight.

Table A75: Fetal deaths by mother's accommodation status in hospital, selected States and Territories, 1997

Hospital status <sup>(a)</sup>	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Public	981	128,014	128,995	7.6
Private	334	59,330	59,664	5.6
Not stated	19	1,652	1,671	11.4
<b>All births</b>	<b>1,334</b>	<b>188,996</b>	<b>190,330</b>	<b>7.0</b>

(a) Data exclude Victoria and Northern Territory.

Note: Data include fetuses and infants of at least 20 weeks gestation or 400 g birthweight.

**Table A76: Fetal, neonatal and perinatal deaths, States and Territories, 1997**

Outcome	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Number									
Live births	87,546	61,867	47,685	25,085	18,535	5,402	4,743	3,527	254,390
Fetal deaths	587	440	353	168	139	45	42	34	1,808
Neonatal deaths <sup>(a)</sup>	239	210	200	53	59	12	19	7	799
Total perinatal deaths	826	650	553	221	198	57	61	41	2,607
<b>Total births</b>	<b>88,133</b>	<b>62,307</b>	<b>48,038</b>	<b>25,253</b>	<b>18,674</b>	<b>5,447</b>	<b>4,785</b>	<b>3,561</b>	<b>256,198</b>
Rate per 1,000 births									
Fetal deaths	6.7	7.1	7.3	6.7	7.4	8.3	8.8	9.5	7.1
Neonatal deaths <sup>(a)</sup>	2.7	3.4	4.2	2.1	3.2	2.2	4.0	2.0	3.1
Total perinatal deaths	9.4	10.4	11.5	8.8	10.6	10.5	12.7	11.5	10.2

(a) May exclude neonatal deaths within 28 days of birth for baby's transferred or readmitted to hospital and those dying at home.

Note: Data for Tasmania incomplete.

**Table A77: Causes of perinatal deaths, selected States, 1997**

Causes <sup>(a)</sup>	Queensland		Western Australia		South Australia	
	Number	Per cent	Number	Per cent	Number	Per cent
Spontaneous preterm	143	25.9	27	14.3	27	13.6
Intrauterine growth restriction	9	1.6	4	2.1	7	3.5
Unexplained intrauterine death	106	19.2	40	21.2	37	18.7
Birth trauma	-	-	1	0.5	2	1.0
Intrapartum asphyxia	11	2.0	8	4.2	4	2.0
Hypertension	16	2.9	10	5.3	10	5.1
Maternal disease	48	8.7	4	2.1	7	3.5
Antepartum haemorrhage	66	11.9	19	10.1	18	9.1
Fetal abnormality	107	19.3	43	22.8	46	23.2
Haemolytic disease	2	0.4	-	-	1	0.5
Infection	11	2.0	17	9.0	22	11.1
Other	34	6.1	16	8.5	17	8.6
<b>All causes</b>	<b>553</b>	<b>100.0</b>	<b>189</b>	<b>100.0</b>	<b>198</b>	<b>100.0</b>

(a) Causes of perinatal death based upon a modified Whitfield classification system.

Note: Data for Western Australia exclude births less than 500 g birthweight.



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# Explanatory notes

- The term 'Indigenous' is used to refer to mothers of Aboriginal or Torres Strait Islander descent and their babies.
- Tabulated data in this report are based on births that occurred in each State and Territory in 1997. Because of differences in data items, and varying practices for coding the mother's place of residence if she lived in a State or Territory other than that in which the birth occurred, it is presently not possible to analyse the perinatal data according to region of residence.
- Confinements and births in 'not stated' categories are excluded from calculation of percentages. Due to rounding, percentages may not always add up to exactly 100.0%.
- Trend lines have been fitted using a second order polynomial regression model to approximate a line of best fit (Kleinbaum et al. 1988).
- Maternal age in this report is calculated as an integer function of the difference in days between the baby's and mother's dates of birth divided by 365.25. Slight differences in maternal age may exist compared to those in State and Territory reports.
- All mean values are arithmetically derived excluding unknowns and may differ from those derived by the States and Territories in their reports.
- Length of stay in this report is calculated as a function of the difference in days between the baby's date of birth and the mother's or baby's date of separation, and only accounts for stays at the hospital or birth centre of initial confinement. Those babies born before arrival are also included. Mothers or babies who are transferred and home births are excluded from length of stay statistics. Three States (Victoria, South Australia, Tasmania) collect information for the entire period under care, that is for the period up until final separation, including transfers to facilities after the hospital of birth.
- Data for New South Wales on mother's date of admission, discharge and length of antenatal and postnatal stay were obtained from linked Midwives Data Collection-NSW Inpatient Statistics Collection data.
- Perinatal data for Tasmania in 1997 were incomplete in this report. Approximately 800 confinements were under-reported from one tertiary hospital.
- If data items such as presentation or type of delivery differed for twins or other multiple births, the confinement was arbitrarily included in the category of the first multiple birth.
- Fetal deaths (stillbirths) from the State and Territory perinatal collections have a gestational age of at least 20 weeks or a birthweight of at least 400 g and relate to year of birth. Fetal, neonatal and perinatal deaths in the tables and figures based on data from the Australian Bureau of Statistics have for the first time been reported using a birthweight of at least 400 g or, when birthweight was not available, a gestational age of at least 20 weeks and relate to year of registration.
- Information on Australian Bureau of Statistics births denominators for gestational age and birthweight breakdowns for fetal, neonatal and perinatal death rates are not available. These categories of gestational age and birthweight are expressed as proportionate death rates. The denominator used for calculating proportionate death

rates is the total number of births rather than the number of births in a particular gestational age or birthweight group.

- The National Health Data Dictionary version 8.0 definition defines the scope of perinatal data collection as mortality and morbidity occurring at the hospital of birth from the period of 20 completed weeks gestation and up to 28 days post live born delivery.
- Due to data editing and subsequent updates of State and Territory databases, the figures in this report may differ slightly from those in reports published by the States and Territories.

# Glossary

**Aboriginality (Indigenous status):** An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identifies as an Aboriginal or Torres Strait Islander and is accepted as such by the community with which he or she is associated (Department of Aboriginal Affairs, Constitutional Section 1981). Aboriginality is determined by the person's self-identification.

**Admission date:** date on which a pregnant woman commences an episode of care as an admitted patient, resulting in confinement (delivery).

**Antepartum fetal death:** fetal death occurring before the onset of labour.

**Apgar score:** numerical score to evaluate the baby's condition at 1 minute and 5 minutes after birth.

**Birth status:** status of the baby immediately after birth.

**Birthweight:** the first weight of the baby (stillborn or liveborn) obtained after birth (usually measured to the nearest five grams and obtained within one hour of birth).

**Caesarean section:** operative birth through an abdominal incision.

**Complications of labour and delivery:** medical and obstetric problems arising after the onset of labour and before the completed delivery of the baby and placenta.

**Complications of puerperium:** medical and obstetric problems of the mother occurring during the postnatal period (up to 6 weeks after giving birth).

**Confinement:** pregnancy resulting in at least one birth.

**Congenital malformations:** structural or anatomical abnormalities that are present at birth, usually resulting from abnormal development in the first trimester of pregnancy.

**Discharge date:** date on which a woman completes an episode of care as an admitted patient after giving birth.

**Early neonatal death:** death of a liveborn baby within 7 days of birth.

**Elective caesarean section:** operative birth through an abdominal incision performed before the onset of labour.

**Emergency caesarean section:** operative birth through an abdominal incision performed after the onset of labour.

**Extremely low birthweight:** birthweight of less than 1,000 g.

**Fetal death (stillbirth):** death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 g or more birthweight. The death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.

**Forceps:** assisted birth using a metallic obstetric instrument.

**Gestational age:** the duration of pregnancy in completed weeks calculated from the date of the first day of a woman's last menstrual period and her baby's date of birth, or derived from clinical assessment during pregnancy or from examination of the baby after birth.

**Hospital size:** number of confinements occurring annually in a hospital.

**Indigenous:** a person of Aboriginal and/or Torres Strait Islander descent who identifies as an Aboriginal and/or Torres Strait Islander and is accepted as such by the community with which he or she is associated.

**Baby's discharge date:** date on which a newborn baby completes an episode of care after birth.

**Baby's length of stay:** number of days between date of birth and date of discharge from the hospital of birth (calculated by subtracting the date of birth from the date of discharge).

**International Classification of Diseases:** WHO's internationally accepted classification of death and disease. The 9th Revision (ICD-9) is referred to in this report.

**Intrapartum fetal death:** fetal death occurring during labour.

**Late neonatal death:** death of a liveborn baby after 7 completed days and before 28 completed days.

**Live birth:** live birth is the complete expulsion or extraction from its mother of a product of conception, irrespective of the duration of the pregnancy, which, after such separation, breathes or shows any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles, whether or not the umbilical cord has been cut or the placenta is attached; each product of such a birth is considered liveborn (WHO definition).

**Low birthweight:** birthweight of less than 2,500 g.

**Marital status:** current marital status of a woman at the time of confinement. Married and de facto are coded together.

**Maternal age:** mother's age at her child's birth.

**Maternal medical conditions:** pre-existing maternal diseases and conditions, and other diseases, illnesses or conditions arising during pregnancy, that are not directly attributable to pregnancy but may significantly affect care during pregnancy and/or pregnancy outcome. Examples include essential hypertension, diabetes mellitus, epilepsy, cardiac disease, and chronic renal disease.

**Mode of separation of mother:** status at separation of patient (discharge/transfer/death) and place to which patient is released (where applicable).

**Mother's length of stay:** number of days between admission date (during the admission resulting in delivery) and discharge date (from the hospital where delivery occurred). The interval is calculated by subtracting the date of admission from the date of discharge.

**Multipara:** pregnant woman who has had at least one previous pregnancy resulting in a live birth or stillbirth.

**Neonatal death:** death of a liveborn baby within 28 days of birth.

**Neonatal morbidity:** any condition or disease of the baby diagnosed after birth and before separation from care.

**Obstetric complications:** Obstetric complications are conditions arising during pregnancy that are directly attributable to pregnancy and may significantly affect care during pregnancy and/or pregnancy outcome. Examples include threatened abortion, antepartum haemorrhage, pregnancy-induced hypertension and gestational diabetes.

**Parity:** number of previous pregnancies resulting in live births or stillbirths.

**Perinatal death:** A perinatal death is a fetal or neonatal death.

**Plurality:** the number of births resulting from a pregnancy.

**Presentation at delivery:** presenting part of the fetus (that is, at lower segment of uterus) at delivery.

**Preterm birth:** birth before 37 completed weeks of gestation.

**Primipara:** pregnant woman who has had no previous pregnancy resulting in a live birth or stillbirth.

**Repair following delivery:** surgical suturing of perineal laceration or episiotomy incision.

**Resuscitation of baby:** active measures taken shortly after birth to assist baby's ventilation and heartbeat; or to treat depressed respiratory effort and to correct metabolic disturbances.

**Spontaneous vertex:** birth without intervention in which the baby's head is the presenting part.

**Stillbirth:** See 'fetal death'.

**Vacuum extraction:** assisted birth using a suction cap applied to the baby's head.

**Vaginal breech:** birth in which the baby's buttocks or lower limbs are the presenting parts.

**Very low birthweight:** birthweight of less than 1,500 g.

**Whitfield:** a classification system for perinatal deaths.

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