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# Australia's Mothers and Babies 1993

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# Australia's Mothers and Babies 1993

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#### Abbreviations

NSW	-	New South Wales
Vic	-	Victoria
Qld	-	Queensland
WA	-	Western Australia
SA	-	South Australia
Tas	-	Tasmania
ACT	-	Australian Capital Territory
NT	-	Northern Territory
ABS	-	Australian Bureau of Statistics
AIHW	-	Australian Institute of Health and Welfare

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#### **Explanatory notes**

- The term 'indigenous' is used to refer to mothers and babies of Aboriginal or Torres Strait Islander descent.
- 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%.
- 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 400g. Fetal, neonatal and perinatal deaths in the tables based on data from the Australian Bureau of Statistics have a birthweight of at least 500g or, when birthweight was not available, a gestational age of at least 22 weeks.
- 3 duplicated records in New South Wales were deleted from the national data.
- In the tables on multiple births, 94 confinements for which plurality was not stated in New South Wales were counted as singleton pregnancies.
- Due to data editing, the figures in this report for Queensland (and some other States) may differ slightly from those in reports published by the States.

- In 1993, 260,578 babies born to 256,956 mothers were notified to perinatal data collections in the States and Territories, 0.8% fewer than in 1992. More mothers had their babies in birth centres than in previous years and home births declined slightly in 1993.
- The average age of all mothers in 1993 was 28.2 years, and 26.2 years for those having their first baby, continuing the upward trend in recent years. There were 13,622 teenage mothers (5.3% of all mothers), of whom 4,171 were aged 17 years or younger.
- There were 7,255 indigenous mothers (2.8% of all mothers), of whom 2,234 gave birth in Queensland, 1,456 in New South Wales, 1,442 in Western Australia, 1,221 in the Northern Territory, and smaller numbers in the other States and the Australian Capital Territory. Their average age was 23.9 years.
- The proportion of mothers who were born in other countries increased slightly from 22.4% in 1991 to 22.7% in 1992 and 23.1% in 1993. In 1993, 6.9% of all mothers had been born in Asia, including increasing numbers from Vietnam (4,117), the Philippines (2,729), China (2,278), Malaysia (1,383), India (1,256), and Hong Kong (1,088).
- Multiple pregnancies accounted for 1.4% of all confinements and included 3,420 twin pregnancies, 99 triplet pregnancies, and 1 quintuplet pregnancy.
- In 1993, almost 1 in 5 (19.0%) deliveries was by caesarean section, continuing the rising trend from 18.0% in 1991 and 18.3% in 1992. South Australia (22.5%) had the highest caesarean rate in 1993 and Tasmania (16.6%) the lowest. Caesarean rates were higher among older mothers, those having their first baby, and those in private accommodation in hospital. Mothers aged 35-39 years in private accommodation for their first baby had a caesarean rate of 40.4%.
- More mothers had relatively short postnatal stays in hospital in 1993 than in previous years. The proportion who stayed less than 4 days increased from 20.2% in 1991 to 24.1% in 1992 and 29.0% in 1993.
- Low birthweight (less than 2,500g) occurred in 16,374 (6.3%) infants in 1993. The mean birthweight of infants of indigenous mothers was 3,154g, 204g less than for all births; 11.8% of indigenous infants had a low birthweight, almost twice the national proportion.
- Fetal, neonatal and perinatal death rates continued their downward trend of the last two decades, declining to 4.8, 3.4 and 8.2 per 1,000 births, respectively, in 1993, the lowest rates yet achieved. Early neonatal deaths and fetal deaths during labour have shown the greatest declines. The perinatal death rate of twins was 4.1 times higher, and of other multiple births 8.7 times higher, than the death rate of singleton babies.
- In 1993, the survival up to 28 days of low birthweight infants varied from 68.6% for infants of 500-999g to 93.2% for those weighing 1000-1499g, and 97.6% for infants of 1500-1999g.

# **1** Introduction

This report contains national data on births in Australia in 1993, based on notifications to the groups responsible for the perinatal data collection in each State and Territory.

The major purposes of these perinatal collections are:

- to describe for all births the demographic, medical and pregnancy characteristics of mothers, and the characteristics and outcomes of their infants;
- to identify risk factors contributing to adverse outcomes of mothers, their pregnancies, and the health status of their infants;
- to plan, implement and evaluate health services for pregnant women and their infants;
- 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 infants.

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. Notification forms for each birth are usually completed by midwives, and sometimes by medical practitioners, who obtain information from the records of each mother and baby. 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 computerised records for each mother and baby on floppy disks to the Australian Institute of Health and Welfare National Perinatal Statistics Unit at the University of Sydney.

The Australian Bureau of Statistics (ABS) compiles statistics and publishes reports on live births and perinatal deaths from data made available by the Registrar of Births, Deaths and Marriages in each State and Territory. Data obtained from ABS and its published reports were used to analyse trends and variations in perinatal deaths in the period from 1973 to 1993.

#### 1.2 Perinatal minimum data set and definitions

The national perinatal minimum data set has data items on socio-demographic characteristics of the mother; previous pregnancies; the current pregnancy; labour, delivery and the puerperium; and the infant, including birth status, sex, birthweight, Apgar scores, resuscitation, neonatal morbidity, and congenital malformations (Appendix 1). The National Perinatal Data Advisory Committee has recommended definitions for these data items, which have been approved by the National Health Data Committee and the National Health Information Management Group. These definitions will be included

in the National Health Data Dictionary (Australian Institute of Health and Welfare 1993) in version 5.0 to be released in mid-1996.

# 1.3 Criteria

Tabulated data in this report are based on births that occurred in each State and Territory in 1993. 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 400g or more.

# 1.4 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 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 check lists of the more common diagnoses. Further consultation and validation of diagnoses included in specific codes are required.

### 1.5 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. Additional tables based on linkage of perinatal deaths to birth records in some States provide information on perinatal mortality by birthweight.

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.

The AIHW National Perinatal Statistics Unit welcomes any comments on the content of this report and on suggestions for data that might be included in future 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 (Ascroft 1992; Chan, Scott, McCaul & Keane 1994; Consultative Council on Obstetric and Paediatric Mortality and Morbidity 1994; Gee 1994; Marsden & Correy 1989; McComb, Condon & Woods 1994; Pym, Nguyen, Taylor & Delpech 1994; Queensland Health 1995).

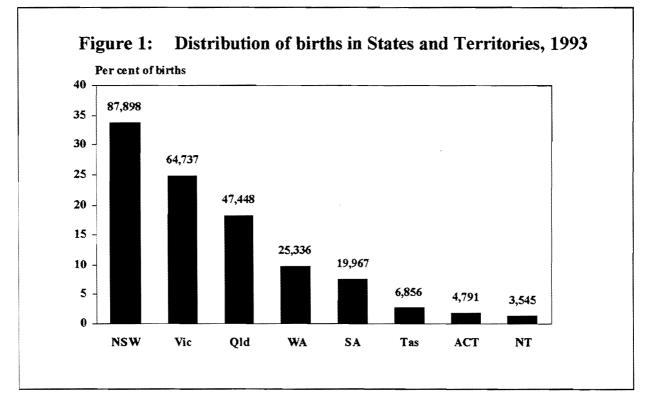
# 2.1 Introductory notes

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

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 are therefore based on the State or Territory of occurrence of births rather than on the area of usual residence of the mother.

### 2.2 Confinements and births

There were 256,956 confinements notified to State and Territory perinatal data groups in Australia in 1993, resulting in a total of 260,578 live births and fetal deaths (Table 1). Compared to the number of births notified in 1992, this was a decrease of 2,148 births, or 0.8%. 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 by year of occurrence published by the Australian Bureau of Statistics (ABS 1994). In the registration system, there were 257,417 live births in Australia in 1993 (ABS 1995), less than the 258,913 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 small 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 perinatal collections. Birth registrations include information on paternal age, Aboriginality (except in Queensland), country of birth and occupation, so enhanced analysis is possible by linking the two data systems.

### 2.3 Place of birth

Most births in Australia occur in hospitals, either in conventional labour-ward settings or in hospital birth centres. In 1993, New South Wales, Western Australia, South Australia and the Australian Capital Territory designated birth centres separately on notification forms. The 3,400 confinements in birth centres in 1993 (Table 2) were considerably more than the total of 2,405 confinements in 1992 and increased in each State and Territory. 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 79 'other' confinements were mainly births in bush clinics.

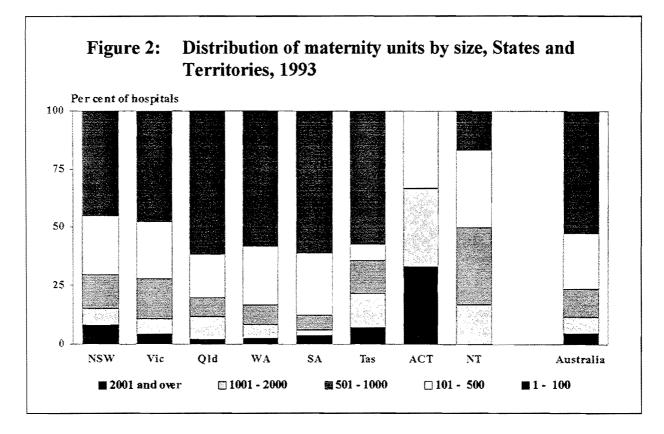
Planned home births are underascertained in some State and Territory perinatal collections. In the report on home births in Australia in 1988-1990 (Bastian & Lancaster 1992), data from multiple sources indicated that more than 1,100 home births occurred each year. In 1993, 813 planned home births, representing 0.3% of all births, were notified nationally (Table 2).

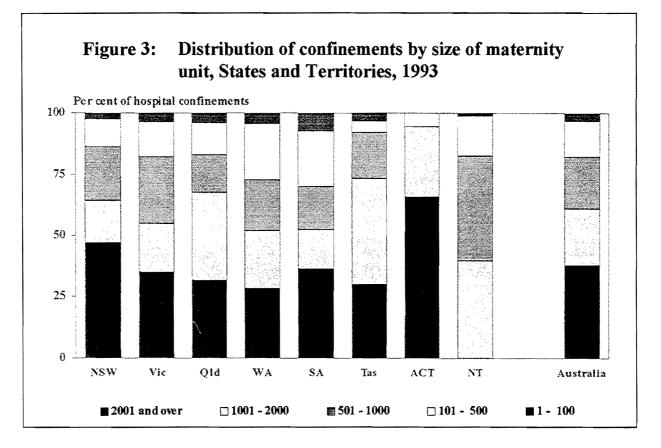
### 2.4 Size of maternity unit

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 1993, more than half (52.8%) of the maternity units in Australia had fewer than 100 confinements (Table 3, Figure 2). Another third (35.6%) had between 100 and 1,000 confinements, and 11.7% had more than 1,000 confinements.

Although most maternity units are relatively small in size, the majority of hospital confinements (60.9%) occurred in the larger maternity units that had more than 1,000 confinements annually (Table 4, Figure 3). More than one-third (37.8%) were in units with more than 2,000 confinements annually.





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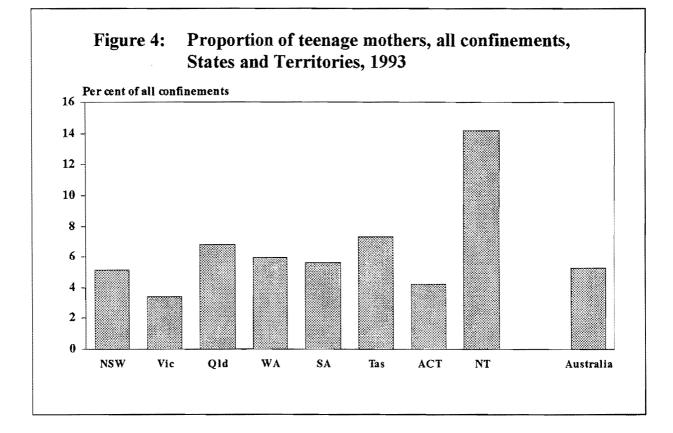
## 2.5 Maternal age

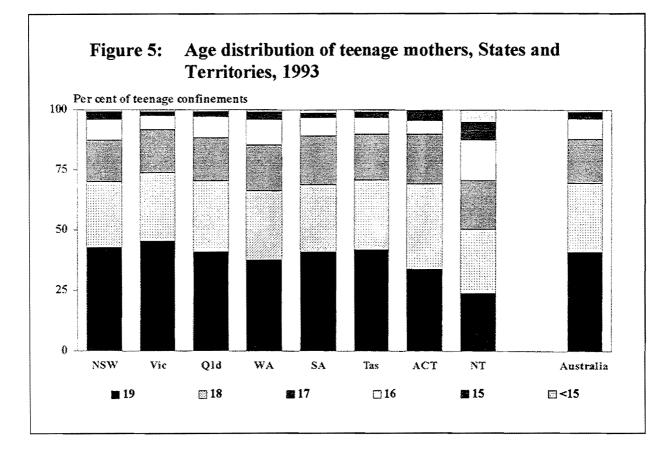
Maternal age is an important risk factor for perinatal outcome. Adverse outcomes are more likely towards each extreme of the reproductive age group. The average age of women giving birth in Australia has increased gradually in recent years. The mean age in 1993 was 28.2 years, slightly higher than the average ages of 27.9 and 28.1 years in 1991 and 1992, respectively. 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 1993 was 26.2 years compared with 25.8 years in 1991 and 26.0 years in 1992.

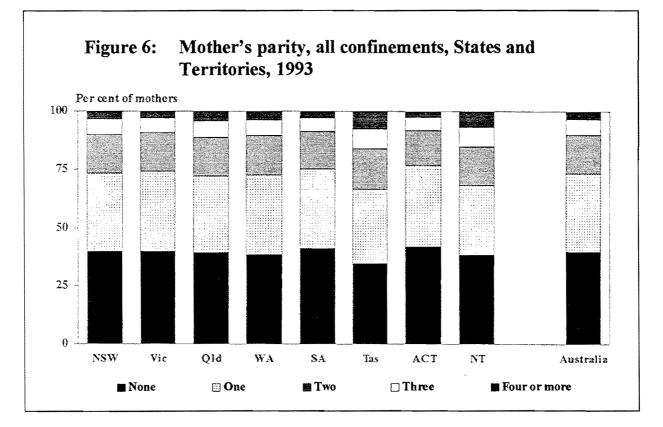
There were 13,622 teenage confinements in 1993, a decrease of 5.4% from the 14,396 teenage confinements in 1992. The proportion of teenage confinements was 5.3% nationally and ranged from a low of 3.4% in Victoria to 14.1% in the Northern Territory (Table 5, Figure 4). There were relatively more young teenage mothers in the Northern Territory (Figure 5).

The national age-specific birth rate for teenagers declined from a peak of 55.5 per 1,000 females in 1971 to 20.2 per 1,000 in 1988, rose slightly to 22.1 per 1,000 in 1991 and 1992, then declined again to 21.9 per 1,000 in 1992 and 20.9 per 1,000 in 1993 (ABS 1994). Teenage birth rates varied considerably in 1993 from relatively low rates of 13.8 per 1,000 females in Victoria and 14.5 per 1,000 in the Australian Capital Territory to the highest rate of 81.1 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 1993, there were 1,043 induced abortions among teenagers (Chan et al 1994) and 1,103 confinements, so it seems likely that there were about 27,000 teenage pregnancies nationally in that year. Lack of data on induced abortions in most States considerably hampers analysis of trends in teenage pregnancies.

In 1993, the age-specific birth rates of women aged 20 to 24 and 25 to 29 years were slightly lower than in 1992, whereas the rates for women in their 30s and early 40s were slightly higher (ABS 1994).







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# 2.6 Maternal parity

Parity is the number of previous pregnancies that resulted in live births or stillbirths. In 1993, 39.7% of mothers were having their first baby and another 33.4% already had one child (Table 6, Figure 6). One in six mothers (16.9%) had given birth twice previously and 10.0% had three or more children. More than half (55.6%) of the mothers aged 40 years and over had previously given birth at least twice (Table 7).

# 2.7 Marital status

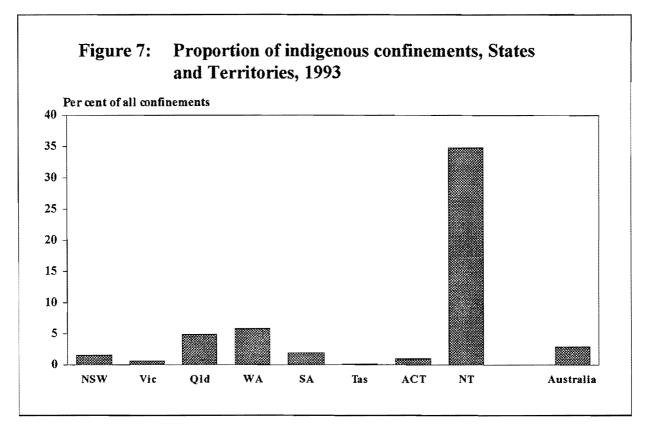
Married mothers and those living in de facto relationships have been grouped together, except in Tasmania where de facto and single were given the same code. Single mothers accounted for 11.4% of all confinements in Australia in 1993 and another 1.2% were widowed, divorced, or separated (Table 8). There were relatively fewer single mothers in the Australian Capital Territory and relatively more in the Northern Territory. More than half (51.4%) of all teenage mothers were single and the proportion of single mothers was higher as maternal age decreased, except for slightly more married mothers in the group aged less than 15 years (Table 9).

# 2.8 Aboriginality

The National Health Data Dictionary (AIHW 1993) uses the definition of Aboriginality recommended by the Commonwealth Department of Aboriginal Affairs:

'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.'

All States and Territories except Tasmania have a data item on Aboriginality on their perinatal form. In Tasmania, confinements of indigenous mothers are given a specific code if Aboriginality is recorded on the form. Only Queensland records Aboriginal and Torres Strait Islander women separately. The term 'indigenous' is used in this report to refer to mothers and babies of Aboriginal or Torres Strait Islander descent.



In 1993, 7,255 indigenous women gave birth in Australia; this was 2.8% of all confinements (Table 10), similar to the proportion of 2.9% in 1991 and 1992. Indigenous mothers accounted for a much larger proportion of all confinements in the Northern Territory (34.8%) than elsewhere in Australia (Figure 7).

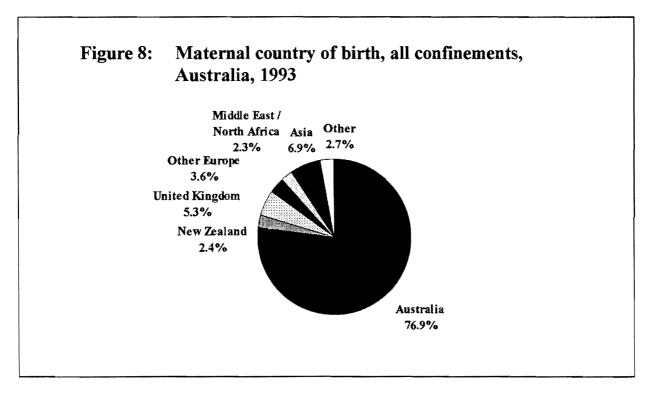
There were also relatively high proportions of confinements to indigenous women in Western Australia (5.8%) and Queensland (4.8%). Because of their larger populations, there were actually more confinements of indigenous mothers in Queensland (2,234), New South Wales (1,456) and Western Australia (1,442) than in the Northern Territory (1,221).

Indigenous mothers are more likely to have their babies at younger ages, and to have more babies, than other mothers (Tables 11,12). In 1993, their average age was 23.9 years compared with 28.2 years for all confinements. Almost a quarter (23.4%) of all indigenous mothers were teenagers, a lower proportion than the 25.2% in 1992. The proportion of teenagers among indigenous mothers was higher in the Northern Territory (29.2%) than in the other States and the Australian Capital Territory.

# 2.9 Maternal country of birth

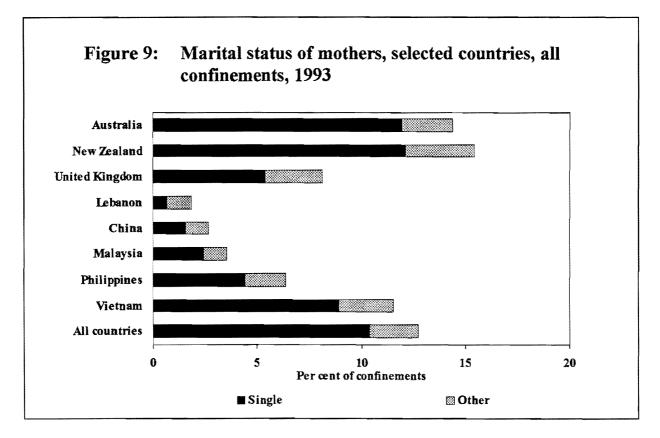
The mother's country of birth may be an important risk factor for outcomes such as low birthweight and perinatal mortality. In 1993, most States and Territories were using the 2-digit ABS classification but Western Australia and Tasmania used other modified classifications.

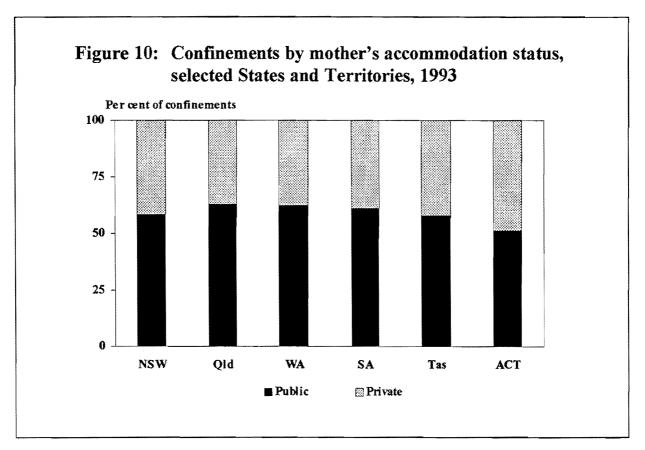
A high proportion (23.1%) of women giving birth in Australia in 1993 were born in other countries (Figure 8), slightly more than the 22.7% in 1992. Because of the large number of countries, only those countries with more than 1,000 confinements are reported separately (Table 13). Mothers born in the United Kingdom comprised 5.3% of all confinements and accounted for relatively higher proportions of all mothers in Western Australia and South Australia. New Zealand-born mothers comprised 2.4% of all confinements. Mothers born in Asia have increased markedly in the last decade, reflecting recent trends in migration to Australia. In 1993, 6.9% of mothers had been born in Asia. The largest numbers of confinements were to mothers born in Vietnam, the Philippines, China, Malaysia and India.



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 13). This pattern is evident for countries such as Lebanon and several Asian countries, particularly Vietnam, the Philippines, and China. Teenage confinements were relatively less common among mothers born in Asian countries, but more of these mothers were aged 35 years and over (Table 14). 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 and New Zealand were single than those born in most other countries (Table 15, Figure 9).





# 2.10 Accommodation status in hospital

The proportion of the Australian population with private hospital insurance declined from about 68% in 1982 to 40.4% in December 1992 (AIHW 1994). Patients admitted to hospitals may elect to have public or private accommodation; this is usually determined by whether or not they have private health insurance. Victoria and the Northern Territory did not collect information on accommodation status in their perinatal collections in 1993. The proportion of mothers with private accommodation in hospital ranged from 37.3% in Queensland to 48.6% in the Australian Capital Territory (Table 16, Figure 10).

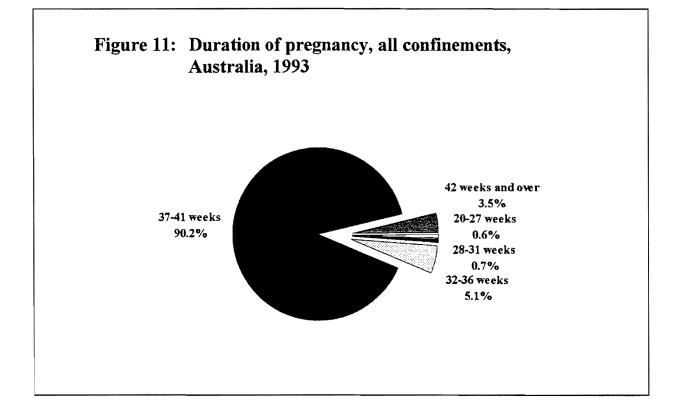
## 2.11 Duration of pregnancy

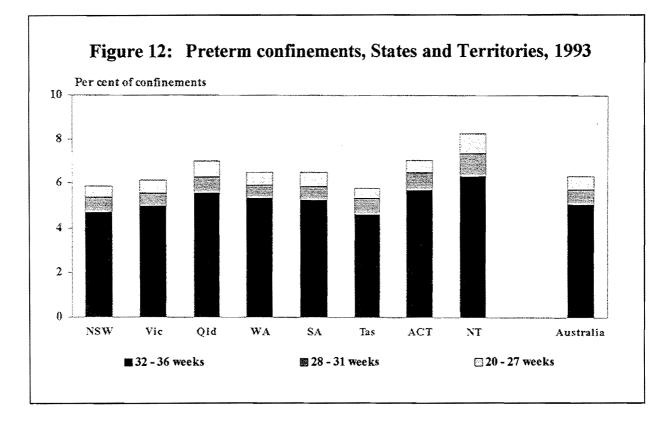
Accurate population data on gestational age are difficult to obtain. Estimations based on the calculated interval between the first day of the last menstrual period (LMP) and the infant's date of birth may be imprecise for some women because of uncertainty about the date of the LMP, irregular cycles, 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.

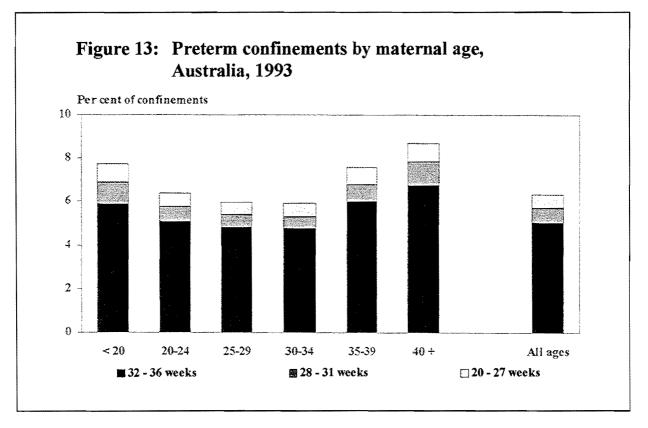
Not all States and Territories recorded the date of the last menstrual period in their perinatal collections in 1993 but they have estimates of gestational age based on prenatal or postnatal assessment. The different practices for recording and estimating gestational age in the States and Territories 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 completed weeks' gestation) occurred in 6.3% of all confinements (Table 17, Figure 11). The average duration of pregnancy in Australia was 39.2 weeks. Mothers gave birth at 20-27 weeks in 0.6% of confinements, at 28-31 weeks in 0.7%, and at 32-36 weeks in 5.1%. There was a higher incidence of preterm birth in the Northern Territory (8.3%) than elsewhere (Figure 12).

Preterm birth varied with maternal age and was more likely among the youngest and oldest mothers than among those in their 20s or early 30s (Table 18, Figure 13).







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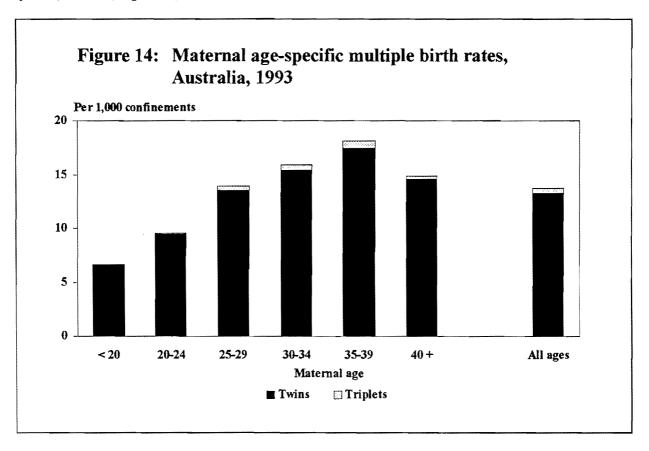
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# 2.12 Multiple pregnancy

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 400g 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.

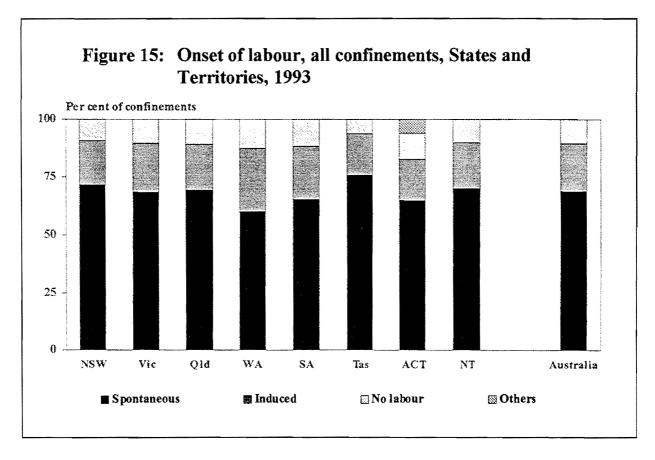
In 1993, there were 3,520 multiple pregnancies (1.4% of all confinements), consisting of 3,420 twin pregnancies, 99 triplet pregnancies, and 1 quintuplet pregnancy (Table 19). The twinning rate of 13.31 per 1,000 confinements in 1993 was higher than the rate of 12.91 per 1,000 in 1992 and continued the upward trend since its low point of 9.01 per 1,000 confinements in 1977 (Doherty & Lancaster 1986). The increasing trend in multiple pregnancies in recent years is mainly attributable to fertility drugs and assisted conception.

Multiple pregnancy increases with advancing maternal age up to the late 30s, and then declines among older mothers. In 1993, the highest rate of twin confinements (1.7%) was among mothers aged 35 to 39 years (Table 20, Figure 14).



#### 2.13 Onset of labour

The onset of labour was spontaneous in 68.6% of all confinements (Table 21, Figure 15); this proportion was highest in Tasmania (75.7%) and lowest in Western Australia (60.1%) and there was considerable variation in whether labour was augmented. Labour was induced in 21.1% of pregnancies and induction was more likely in Western Australia (27.5%) 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.

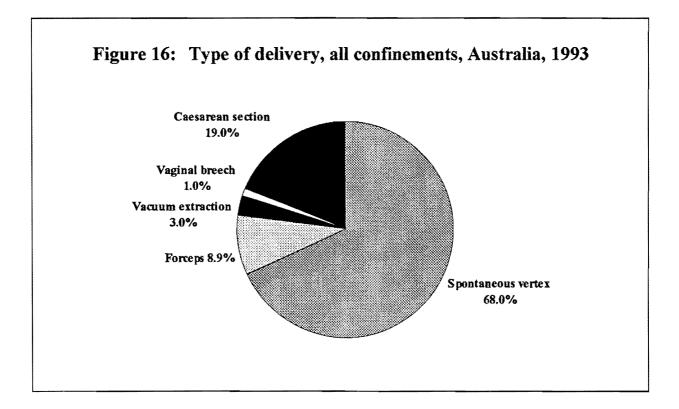


### 2.14 Presentation in labour

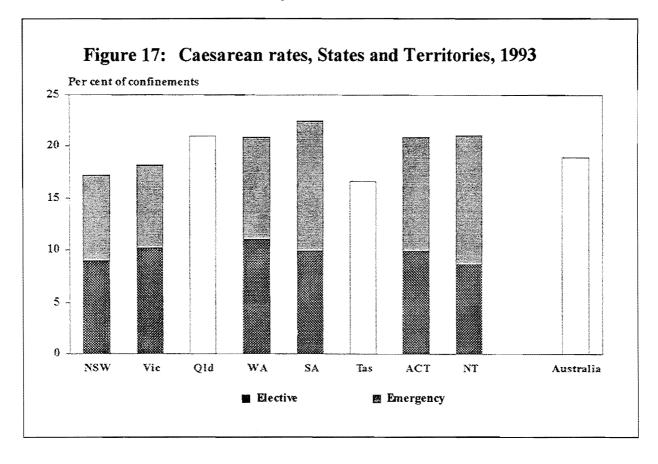
Breech presentation occurred in 4.3% of all confinements and other presentations in 0.6% (Table 22). In Tasmania, vaginal breech deliveries, but not all breech presentations in labour, were recorded, so this State was excluded from the national data on presentation in labour. In multiple pregnancies, the presentation and type of delivery of the first-born infant was used to classify each confinement.

# 2.15 Type of delivery

More than two-thirds (68.0%) of all confinements were spontaneous vertex deliveries (Table 23, Figure 16). Forceps delivery occurred in 8.9%, vacuum extraction in 3.0%, and vaginal breech delivery in 1.0%.

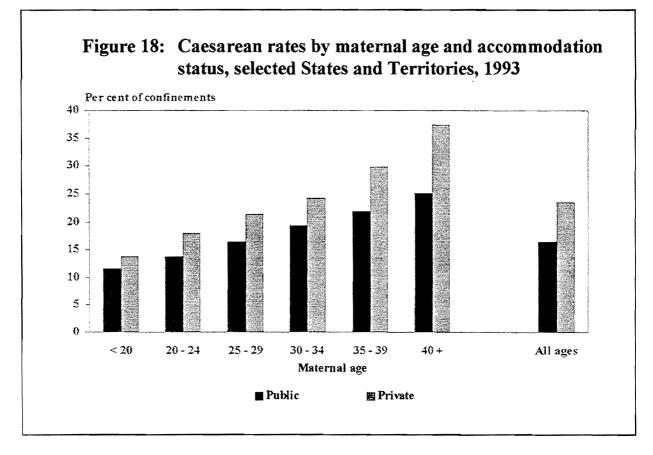


There were 48,778 caesarean sections performed in 1993 and the rate of 19.0% was higher than in 1991 (18.0%) and 1992 (18.3%). This continued the upward trend that has occurred in recent decades (Lancaster & Pedisich 1993). South Australia (22.5%) had the highest caesarean rate in 1993 and Tasmania (16.6%) the lowest (Table 23, Figure 17).



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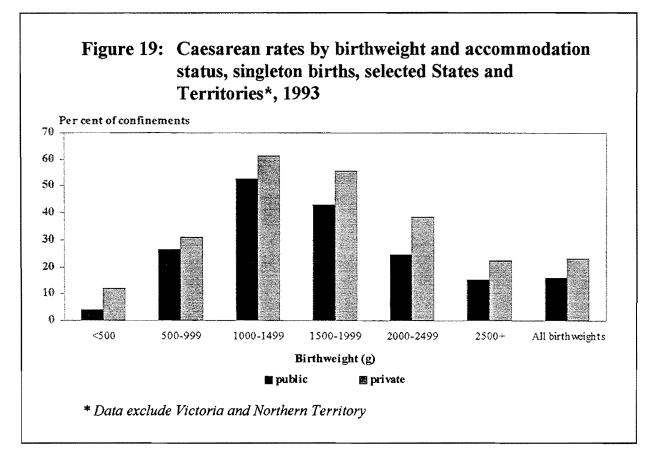
Caesarean rates for each State and Territory were compared in categories of maternal age and hospital accommodation status, parity, singleton and multiple pregnancies, breech presentation in singleton confinements, and birthweight in singleton births (Tables 24, 25, 26 and 28). Excluding Victoria and the Northern Territory which did not have data on hospital accommodation status, the caesarean rate of 23.6% for women who had private accommodation in hospital was 44% higher than the rate of 16.4% for those in public accommodation (Table 24, Figure 18). This difference was partly attributable to a higher proportion of older women among those with private accommodation. The difference in caesarean rates for mothers with and without private accommodation in hospital was more pronounced for older than for younger mothers. More than one in four mothers with private accommodation in South Australia (27.8%), Queensland (27.4%) and Western Australia (26.4%) had their babies by caesarean section.



The independent association of maternal age, parity and accommodation status with caesarean rates was examined by analysing national caesarean rates by single year of maternal age, number of previous births, and public and private accommodation in hospital (Tables 25, 26). 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 most maternal age and parity groups for mothers in private accommodation in hospital were higher than for those in public accommodation. Mothers aged 35 to 39 years in private accommodation in hospital and having their first baby had a caesarean rate of 40.4% compared with 31.6% for those in public accommodation. For mothers aged 40 to 44 years, the comparable caesarean rates were 50.7% and 39.1%, respectively.

The caesarean rate of 17.8% for indigenous mothers (Table 27) was less than that for all mothers (19.0%), but indigenous mothers were younger and less likely to have private accommodation in hospital. Indigenous mothers in public accommodation had a caesarean rate of 16.7%, slightly higher than the rate of 16.4% for all mothers. The caesarean rates for indigenous mothers were slightly higher in all age groups (Tables 24, 27). Indigenous mothers in the Northern Territory had a higher caesarean rate (22.4%) than did all mothers (21.1%).

Various other factors that influence caesarean rates include multiple pregnancy, breech presentation and the infant's birthweight (Table 28, Figure 19). The caesarean rate of 42.2% for twins was more than twice that for singleton births (18.6%); for other multiple births, the caesarean rate was 81.0%. Most infants (76.0%) presenting in the breech position in singleton pregnancies were born by caesarean section.



Caesarean rates were high for mothers of low birthweight infants in singleton pregnancies, particularly for infants weighing 1000-1499g (54.7%) and 1500-1999g (47.3%). For singleton births of 2500g and over, mothers who had private accommodation in hospital had a caesarean rate of 22.4%, 46% higher than the rate of 15.3% for those in public accommodation.

### 2.16 Perineal repair after delivery

Several States collected information on perineal repair after delivery, performed either following episiotomy or for suturing of a perineal laceration. Repair of an episiotomy was notified in 19.2% of confinements in Victoria, 23.7% in Western Australia, 22.3% in South Australia, and 31.5% in the Australian Capital Territory. Suturing of perineal lacerations was performed in 18.0% of confinements in New South Wales, 21.6% in Victoria, 25.2% in Western Australia, and 17.1% in South Australia.

## 2.17 Mother's length of stay in hospital

Most women gave birth either on the day of admission to hospital (59.9%) or on the following day (32.4%) (Table 29). About 1 in 50 women were hospitalised for at least 7 days immediately before delivery and those in the Northern Territory were more likely to be in hospital for longer periods.

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. As the final date of discharge of women transferred to other hospitals was not known, these women were excluded. Data for New South Wales were not available for 1993. The mean duration of postnatal stay in the other States and Territories was 4.8 days, which was less than the average of 5.1 days in 1992. Postnatal stay in hospital was slightly longer than average in South Australia (5.2 days) and shorter in Queensland (4.5 days) and the Australian Capital Territory (4.4 days) (Table 30).

Relatively more mothers had a postnatal stay in hospital of less than 4 days in 1993 (29.0%) than in 1991 (20.2%) and in 1992 (24.1%). Reflecting differences in the average length of stay, a higher proportion of mothers in Queensland and the Australian Capital Territory were in hospital for less than 4 days and fewer had postnatal stays of 7 days or more (Figures 20, 21).

In selected States with available data, mothers with private accommodation in hospital had an average postnatal stay of 5.8 days, compared with 4.1 days for those with public accommodation (Table 31) and were less likely to have short postnatal stays (Figure 22). Data for New South Wales, Victoria and the Northern Territory were not available for these comparisons.

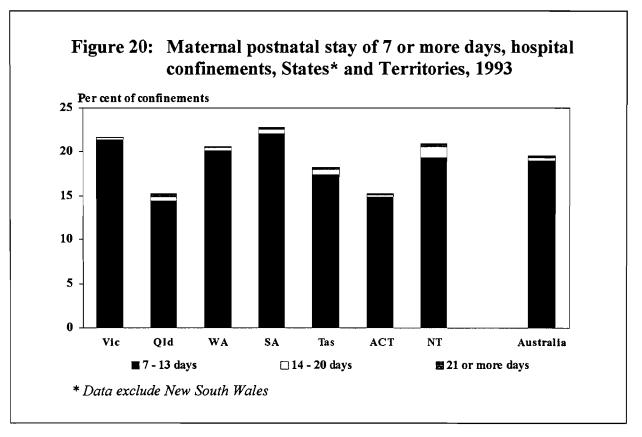
Factors associated with periods of postnatal hospitalisation of less than 5 days were younger maternal age, higher parity, Aboriginality, spontaneous delivery, and giving birth in maternity units of medium size (Table 32).

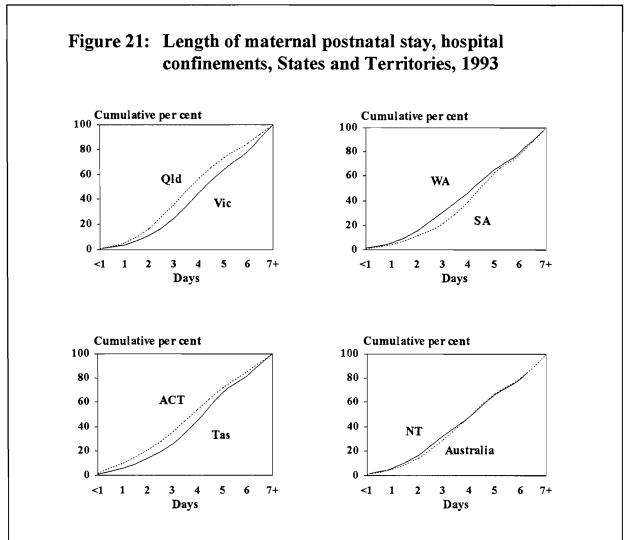
#### 2.18 Mother's mode of separation from hospital

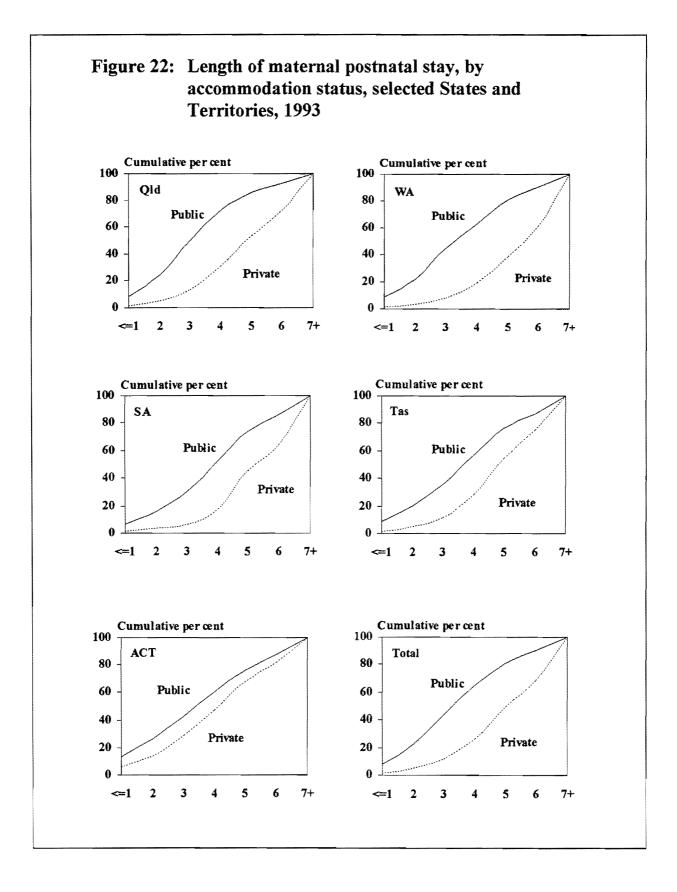
Most mothers who gave birth in hospitals were discharged to their homes but 3.1% of mothers were transferred to other hospitals (Table 33), usually for continuing care in a hospital located nearer to their place of residence or sometimes for further treatment of complications. These transfers between hospitals were more likely in New South Wales than in the other States and Territories.

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. Nineteen maternal deaths were reported through the perinatal collections in 1993.

The most recent triennial report on maternal deaths occurring in Australia in 1988 to 1990 included 96 deaths, of which 37 were directly attributable to pregnancy and childbirth and 59 were associated with pregnancy and childbirth (NHMRC 1993). This report drew particular attention to the disproportionate number of direct maternal deaths in indigenous women, the lack of complete information on Aboriginality in the available records, and the paucity of information on other possible maternal risk factors such as country of birth. By linking every maternal death associated with childbirth with the record in the State or Territory perinatal collection, an enhanced analysis of maternal deaths in Australia would be possible. This could be achieved without compromising the confidential information provided by medical practitioners and midwives to State and Territory committees.







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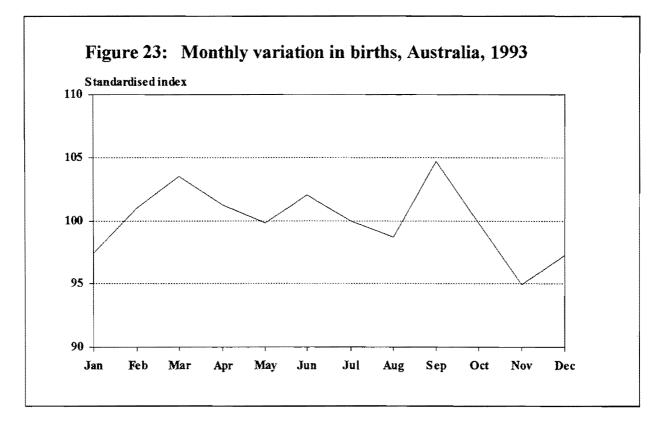
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#### 2.19 Infant's birth status

Infants are recorded as liveborn or stillborn (fetal deaths) on perinatal notification forms. There is a separate requirement for legal registration of stillbirths and liveborn infants dying within 28 days of birth. The Australian Bureau of Statistics has published annual reports on perinatal deaths according to criteria recommended by the World Health Organization (WHO). The criteria for legal registration of births, and for notification in the perinatal collections, differ slightly from the WHO definitions and include additional stillbirths that are less than 500g birthweight but at least 20 weeks' gestation or at least 400g.

#### 2.20 Infant's month of birth

Changing seasonal patterns of birth have been evident in Australia in recent decades (Mathers and Harris 1983). A bimodal pattern with peaks in the autumn and spring has occurred in recent years. In 1993, there were 260,578 births in Australia and more than 22,000 births in the months of March, May, July, September and October (Table 34). When adjustment is made for the number of days in the month by deriving a standardised index, the peak months for births were March and September (Figure 23). The September peak represented an increase of 4.6% above the number expected for that month.



#### 2.21 Infant's sex

Male births exceeded female births in all States and Territories (Table 35). The national sex ratio was 106.3 male births per 100 female births; for singleton births it was 106.4, for twins, 101.4, and for other multiple births, 111.3.

#### 2.22 Infant's birthweight

The infant's birthweight is a key indicator of health status and inequalities in health. Infants are defined as low birthweight if their birthweight is less than 2500g. Within this category, those weighing less than 1500g are designated as very low birthweight and those less than 1000g as extremely low birthweight.

In 1993, there were 16,374 (6.3%) infants of low birthweight, the same proportion as in 1991 and 1992. Very low birthweight infants comprised 1.4% of all births and extremely low birthweight infants, 0.7% (Table 36, Figure 24).

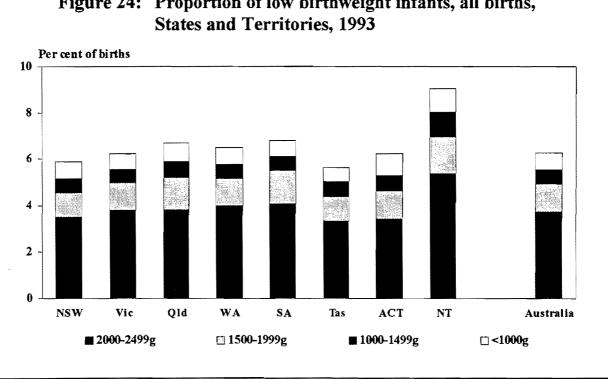


Figure 24: Proportion of low birthweight infants, all births,

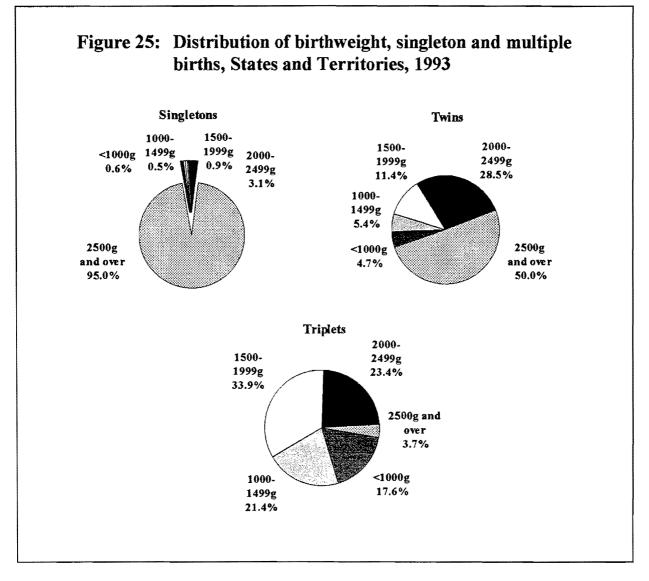
The mean birthweight of all liveborn and stillborn infants in Australia in 1993 was 3,358g and showed little variation among the different States, except for a lower average of 3,215g in the Northern Territory where there was also the highest proportion of low birthweight infants (9.1%).

The mean birthweight of liveborn infants was 3,370g (Table 37). Low birthweight occurred in 5.9% of liveborn infants and in 75.3% of stillborn infants. Almost half (49.4%) of the stillborn infants had a birthweight of less than 1000g.

In twins, the proportion of low birthweight was 50.0%, ten times higher than in singleton births (5.0%); in triplets, this proportion was 96.3% and, in other multiple births, 100% (Table 38, Figure 25). The mean birthweight was 3,386g in singletons, 2,398g in twins, 1,589g in triplets, and 632g in one set of quintuplets.

Male infants were less likely to be low birthweight (5.8%) than were females (6.8%) (Table 39). In the higher birthweight categories, there were relatively more males in the groups with birthweights of 3500-3999g and over. The mean birthweight of males was 3,420g, which was 127g higher than that of females (3,293g).

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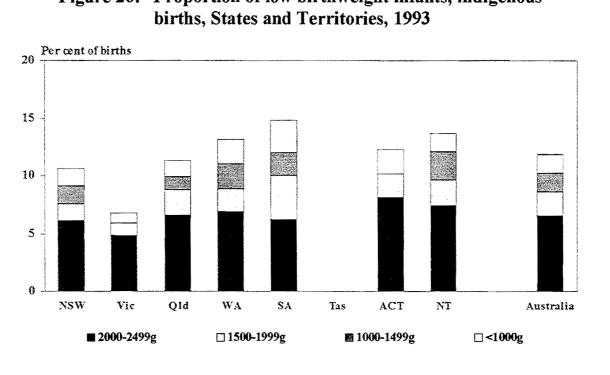


The mean birthweight of indigenous infants was 3,154g; this was 204g less than the national average of 3,358g for all births. The proportion of low birthweight in indigenous infants was 11.8% (Table 40), almost twice that of 6.3% in all infants. The mean birthweight of indigenous infants, and the proportion with low birthweight, varied markedly among the States and Territories. Low birthweight was more likely in South Australia (14.8%), the Northern Territory (13.7%) and Western Australia (13.1%) than in the other States (Figure 26).

There were relatively small differences in the proportion of low birthweight infants according to the mother's country of birth. Compared with the proportion of 6.1% in the infants of Australian-born non-indigenous mothers, low birthweight was more common in infants whose mothers were born in the United Kingdom, India, Malaysia, the Philippines, and Vietnam (Table 41, Figure 27). Mothers born in China, Hong Kong, Lebanon and New Zealand were less likely to have infants of low birthweight.

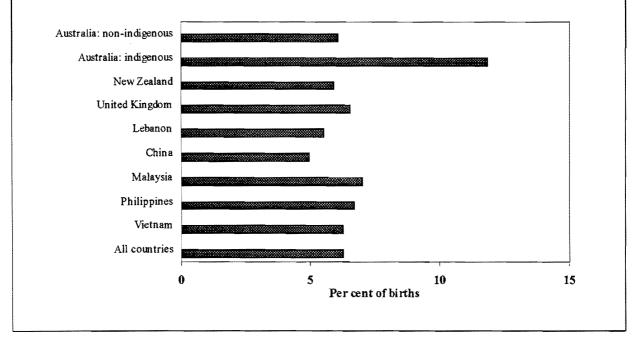
Mothers aged 30-34 years had the lowest proportion of low birthweight infants (5.9%); this proportion was higher as maternal age increased or decreased (Table 41).

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 infant, while those giving birth for the second time were least likely to do so (Table 41).



# Figure 26: Proportion of low birthweight infants, indigenous

# Figure 27: Low birthweight rates, selected maternal countries of birth, Australia, 1993



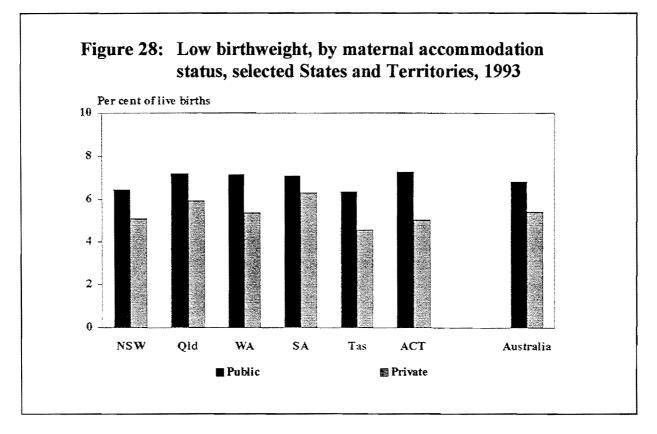
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The proportion of low birthweight infants born to single mothers (8.6%), and to mothers who were divorced, widowed or separated (9.1%), was considerably higher than for married mothers (5.9%) (Table 41).

Mothers in public accommodation in hospital had a higher rate of low birthweight infants (6.8%) than those in private accommodation (5.4%) (Table 41, Figure 28).



Women giving birth at home and in birth centres have usually been selected to exclude those with major risk factors for low birthweight. This is reflected in the lower proportion of low birthweight in home births (0.7%), and in birth centres (1.3%), than in hospital births (6.3%) (Table 41). On the other hand, there was a high proportion of low birthweight infants among those born before arrival in hospital (12.1%) and elsewhere (35.8%).

The proportion of various categories of low birthweight infants, especially those weighing less than 1500g, who were born in larger hospitals that have adequate staffing and facilities provides an indicator of the effectiveness of regionalization 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 indigenous births in remote locations (Table 42).

More than three-quarters (77.9%) of the highest risk infants weighing 500-999g were born in hospitals that had more than 2,000 confinements annually, and another 12.1% were born in hospitals with 1,001-2,000 confinements annually. In New South Wales, 13.8% of infants weighing 500-999g were born in hospitals with up to 1,000 confinements. Of infants weighing 1000-1499g, 91.3% were born in hospitals with more than 1,000 confinements annually, most in hospitals with more than 2,000 confinements. Of infants weighing 1500-1999g, 82.8% were born in hospitals with more than 1,000 confinements annually.

#### 2.23 Apgar scores

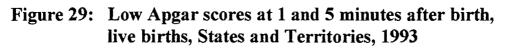
Apgar scores are clinical indicators of the infant's condition shortly after birth, based on assessment of the heart rate, breathing, colour, muscle tone, and reflex irritability. Between 0 and 2 points are given for each of these five characteristics and the total score may vary between 0 and 10. The 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.

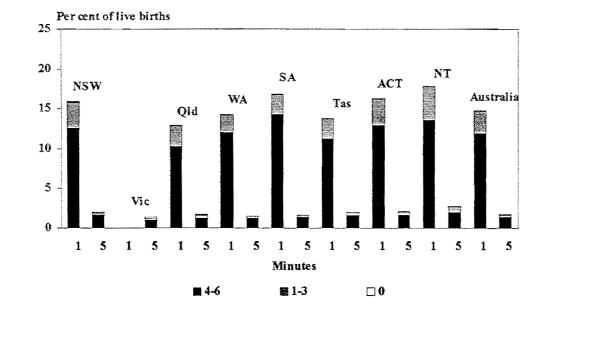
While reporting of grouped Apgar scores is usually sufficient for most purposes, data are given for each score from 0 to 10 to enable other groupings and also comparison of the distribution in each State and Territory (Tables 43, 44; Figure 29). The Apgar score at 1 minute was not recorded in the perinatal collection in Victoria in 1993. 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 2.8% of live births and at 5 minutes in 0.3%.

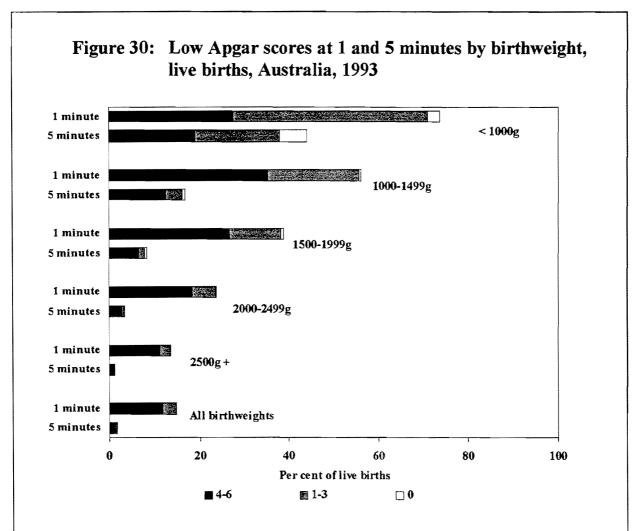
Low Apgar scores of less than 4 were strongly associated with the infant's birthweight (Table 45, Figure 30). Almost half (46.2%) of all liveborn infants weighing less than 1,000g had low scores at 1 minute, compared with 2.3% of infants weighing 2500g or more. About one quarter (24.9%) of the extremely low birthweight infants had low Apgar scores at 5 minutes compared with 0.2% of those weighing 2500g or more. Indigenous infants in the extremely low birthweight group had a relatively higher risk of low Apgar scores at 1 and 5 minutes. Infants from singleton and multiple births within the same birthweight categories had similar Apgar scores (Table 46).

#### 2.24 Resuscitation at birth

Recording the type of resuscitation given to infants immediately after birth varies markedly among the States and Territories. Ventilatory assistance by intermittent positive pressure respiration (IPPR) through a bag and mask, or after intubation was recorded for 2.9% of infants in New South Wales, 13.6% in Victoria, 7.4% in Queensland, 5.9% in Western Australia, 2.6% in Tasmania, 13.1% in the Australian Capital Territory, and 2.6% in the Northern Territory. Excluding Tasmania where this information was not available, IPPR was given to 6.9% of all births. Endotracheal intubation was recorded in 1.1% of births in Victoria, 2.8% in Queensland, 2.6% in Western Australia, 0.4% in South Australia, 0.8% in Tasmania, and 7.0% in the Australian Capital Territory. Because of differences in the methods of data collection, these figures should be interpreted cautiously. Narcotic antagonists that were administered to 2.3% of infants born in Victoria, 1.0% in Western Australia, 4.2% in South Australia, and 2.3% in the Australian Capital Territory.







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#### 2.25 Infant's length of stay in hospital

Infants who died or were transferred to another hospital were excluded from the data on length of stay. Also, this information for New South Wales was available only for births occurring in the second half of the year. The majority of infants (79.1%) remained in their hospital of birth for less than 7 days (Table 47). More infants had relatively short stays of less than 4 days in hospital in 1993 than in the previous two years. In 1993, 28.8% of infants stayed in hospital for this period compared with 23.0% in 1992 and 19.2% 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 1993, a higher proportion of infants born in Queensland (35.0%) and in the Australian Capital Territory (34.9%) was in the short-stay group whereas those born in South Australia (20.1%) had short stays.

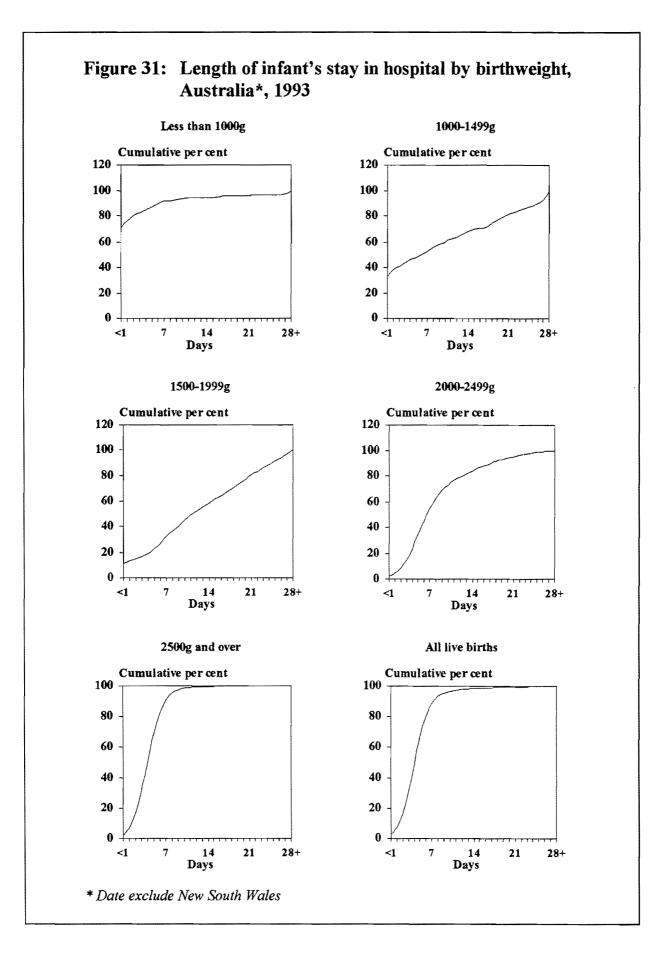
The duration of hospitalisation was 28 or more days for 1.1% of infants. As the period of hospitalisation of infants transferred from their hospital of birth to another hospital is not included here, these figures underestimate the proportion of infants staying in hospital for long periods.

The infant's gestational age and birthweight are usually the main factors influencing the duration of hospitalisation (Table 48, Figure 31). Twins and other infants from multiple births thus had longer stays than singleton infants. Indigenous infants were more likely to be discharged relatively early from hospital but also were 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 infants. Infants with a gestational age of less than 32 weeks, or a birthweight less than 1500g, 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.

#### 2.26 Infant's mode of separation from hospital

A total of 4.3% of infants were transferred to another hospital from their hospital of birth (Table 49). Although the States and Territories record the hospital to which the infant 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 infants transferred for further treatment of neonatal conditions and the proportion of those transferred with their mothers to hospitals closer to where they live.

If an infant 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 infant is therefore an incomplete source of information on neonatal deaths and cannot be used to determine national neonatal death rates.



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# **3** Perinatal mortality

### 3.1 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 400g birthweight are registered. The Australian Bureau of Statistics (ABS) publishes annual data on perinatal deaths based on recommendations of the World Health Organization (WHO) for reporting national perinatal statistics. Fetal deaths are included if the birthweight is at least 500g 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 data for neonatal deaths include liveborn infants dying within 28 days of birth and are based on the same criteria of birthweight or gestational age as for fetal deaths. However, the WHO recommendations 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 1,000g 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.

There are major differences in perinatal death rates according to which definition is used (Table 50). For example, in the combined years of 1991 to 1993, the perinatal death rate based on the legal lower limit of 20 weeks or 400g was 11.2 per 1,000 births, just over double the rate of 5.5 per 1,000 based on the WHO definition for international comparisons. The rate calculated using the ABS criteria for national data, 9.1 per 1,000 births, was 65% higher than the rate using the international WHO criteria.

Unless otherwise specified, fetal, neonatal and perinatal death rates in this report are based on the ABS definition using a lower limit of 500g, or 22 weeks when birthweight was unknown, and including neonatal deaths within 28 days of birth. Annual data are based on the year of registration.

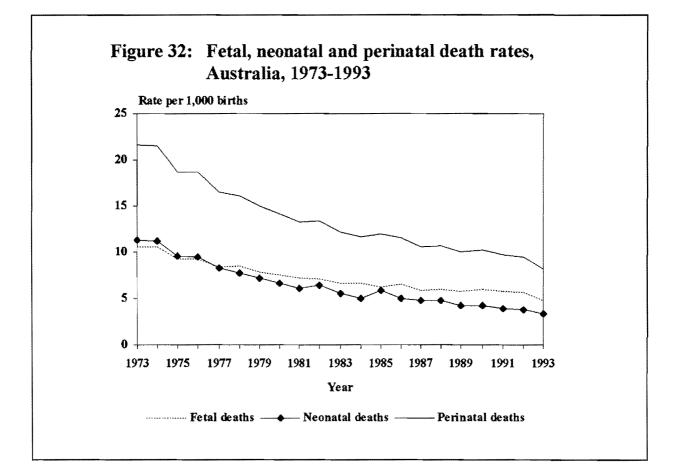
#### 3.2 Trends in fetal, neonatal and perinatal deaths

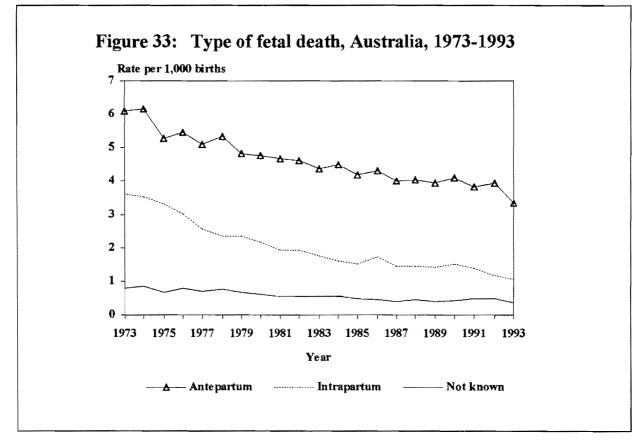
Depending on when the fetal heart stopped beating, fetal deaths can be grouped as antepartum deaths, when the heartbeat ceased before labour commenced; intrapartum deaths, when the heartbeat ceased during labour; and unknown deaths, when it was not known whether the heartbeat ceased before or during labour. There is another small group of registered perinatal deaths for which it was not known whether the heartbeat ceased before or after birth. 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 1993, the fetal death rate declined by 54% from 10.5 to 4.8 per 1,000 births (Table 51, Figure 32). There was a more substantial fall of 72% for intrapartum fetal deaths than the decline of 44% and 50%, respectively, for antepartum and unknown fetal deaths (Figure 33). As a result, antepartum fetal deaths increased as a proportion of all fetal deaths from 57.9% in 1973 to 70.4% in 1993, and intrapartum fetal deaths decreased from 34.5% in 1973 to 22.0% in 1993 (Figure 34).

The neonatal death rate declined even more sharply than the fetal death rate, falling by 70% from 11.3 per 1,000 live births in 1973 to 3.4 per 1,000 live births in 1993 (Table 52, Figure 32). Early neonatal deaths within 7 days of birth fell more rapidly than late neonatal deaths occurring in the second, third and fourth weeks after birth.

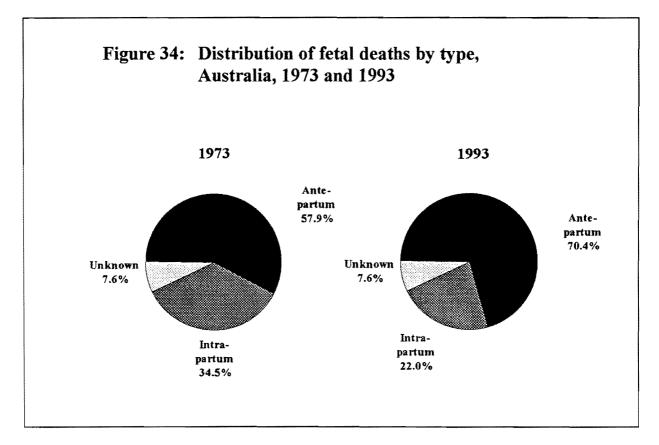
Based on the ABS definitions, the national perinatal mortality rate declined by 62% from 21.7 per 1,000 births in 1973 to 8.2 per 1,000 births in 1993 (Table 53, Figure 32).





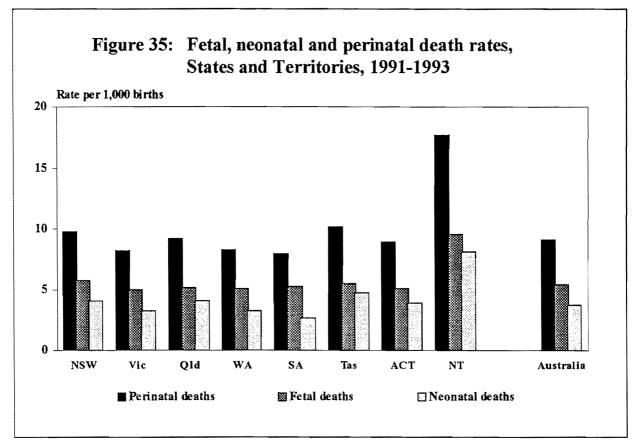
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# 3.3 Perinatal deaths by State and Territory of residence

Except for a higher rate in the Northern Territory, there were relatively small differences in perinatal death rates among the States and Territories (Table 54, Figure 35). In the three-year period from 1991 to 1993, South Australia, Western Australia and Victoria had the lowest perinatal death rates. Neonatal death rates varied more than did fetal death rates.



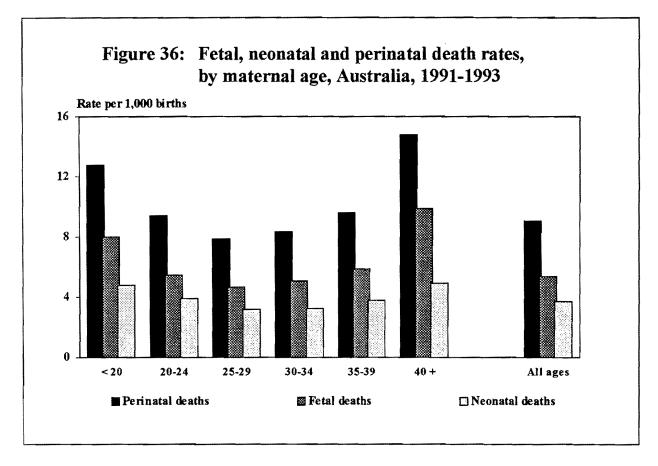
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#### 3.4 Perinatal deaths by maternal age

The perinatal death rate was higher for infants of younger and older mothers than for those in the 25-29 years age group, which had the lowest rate of 7.9 per 1,000 births in the period from 1991 to 1993 (Table 55, Figure 36). Infants of mothers aged 30-34 years had slightly lower perinatal death rates than those of mothers aged 20-24 years. Infants of mothers aged 40 years and over had a perinatal death rate almost twice that of infants whose mothers were in the lowest-risk age group.



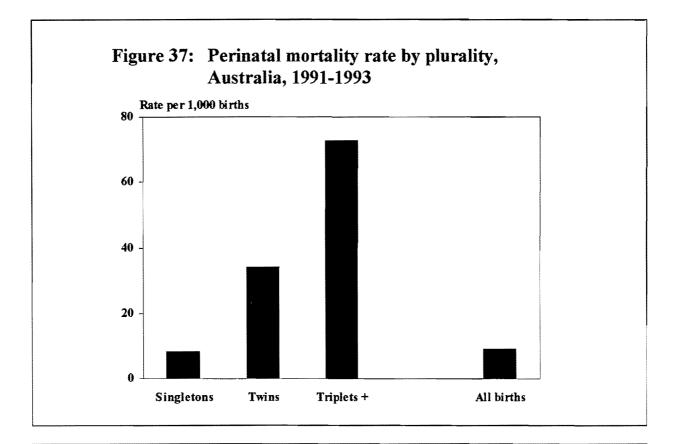
## 3.5 Perinatal deaths by plurality

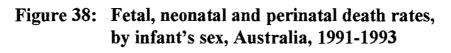
Perinatal death rates are higher for multiple than for singleton births. The number of perinatal deaths among triplet and higher order multiple births is relatively small each year so data were analysed for the three-year period of 1991 to 1993.

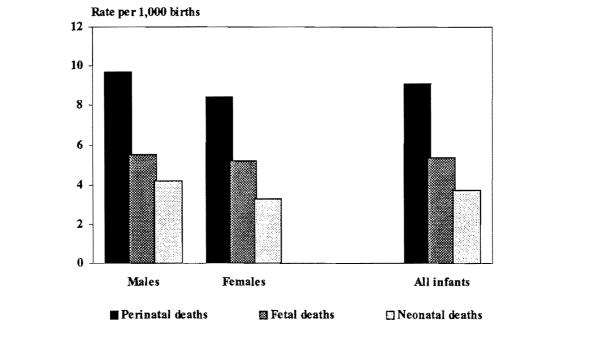
Of the 7,128 perinatal deaths in 1991-1993, 686 (9.6%) occurred in twins and 66 (0.9%) in other multiple births, so multiple births accounted for 10.5% of all perinatal deaths (Table 56). The perinatal death rate of twins was 4.1 times higher, and of other multiple births 8.7 times higher, than that of singleton births (Figure 37).

## 3.6 Perinatal deaths by infant's sex

Perinatal death rates for males are consistently higher than for females. In 1991-1993, the rate for males was 15% above that for females (Table 57, Figure 38). The difference in rates between the sexes was greater for neonatal deaths than for fetal deaths. The neonatal death rate for males was 31% higher than for females; the fetal death rate was 6% higher for males.



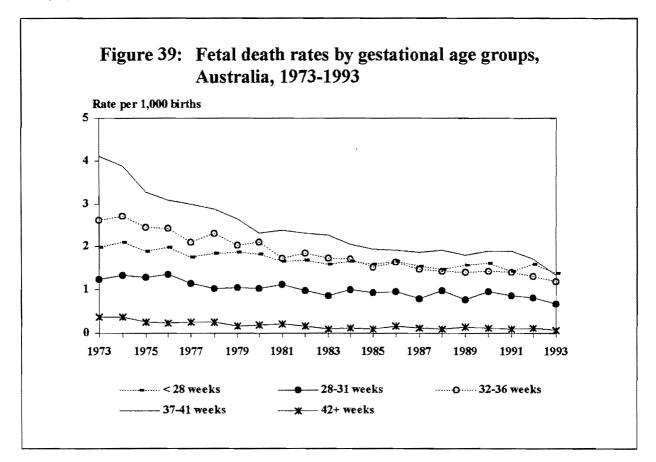




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#### 3.7 Perinatal deaths by gestational age

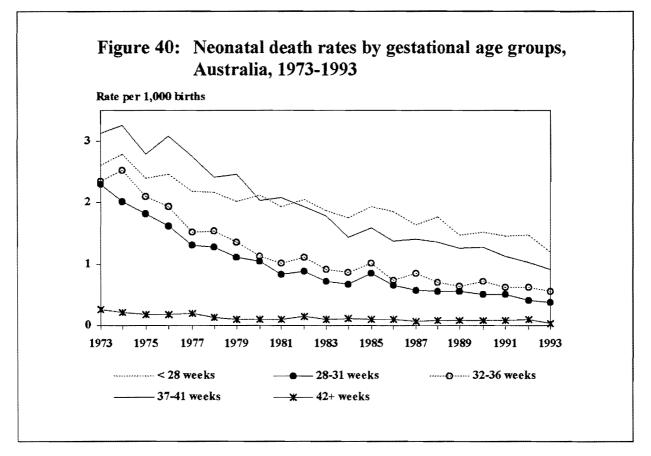
The duration of pregnancy is recorded in completed weeks on perinatal death certificates, based either on the gestational age calculated from the dates of the first day of the last menstrual period and birth, or on clinical assessment. As information about the gestational age of all births between 1973 and 1993 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.

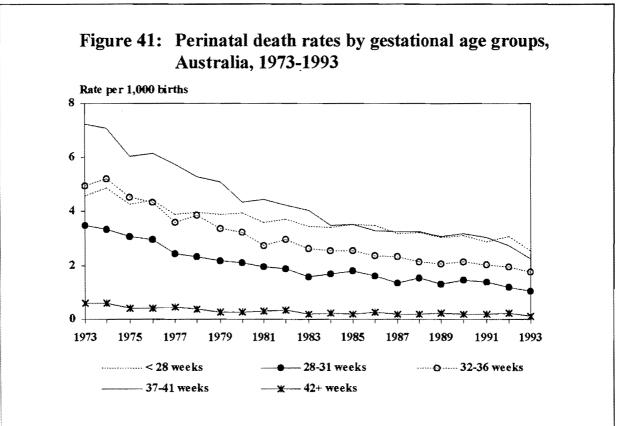


In 1973, preterm births of less than 37 weeks accounted for 57% of fetal deaths with stated gestational ages and those less than 28 weeks for 19% (Table 58, Figure 39). In 1993, these proportions had increased to 70% and 30%, respectively. Many countries that still have a lower limit of 28 weeks for registering fetal deaths thus exclude almost one-third of the 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 1993 than in 1973 (Table 59, Figure 40). The proportion in this group increased from 25% in 1973 to 39% in 1993 while the proportion of all neonatal deaths of known gestational age that were preterm was 68% in 1973 and 69% in 1993.

Between 1973 and 1993, 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 (Table 60, Figure 41).

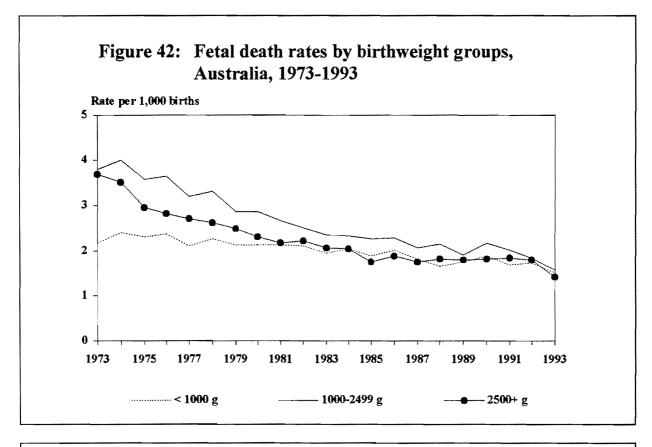


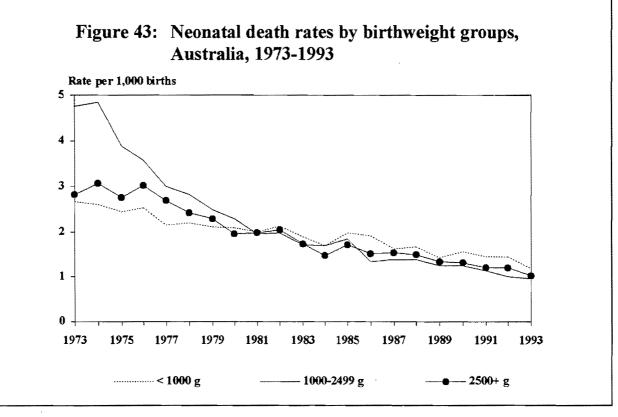


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#### 3.8 Perinatal deaths by birthweight

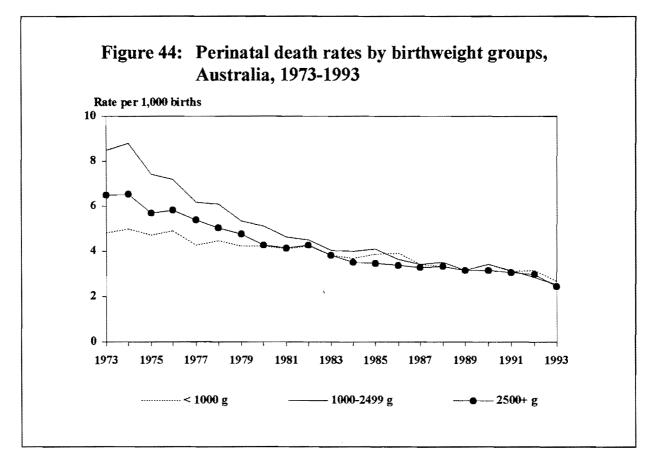
As for the deaths tabulated in gestational age groups, the fetal, neonatal and perinatal death rates by birthweight for the period 1973 to 1993 are expressed as proportionate death rates. In 1973, low birthweight infants of less than 2500g accounted for 61.8% of fetal deaths with stated birthweights and those weighing 500-999g for 22.5% (Table 61, Figure 42). In 1993, these proportions had increased to 68.5% and 33.6%, respectively.





The decline in the proportionate neonatal death rate was much greater for infants weighing 1000-2499g than for those in lighter or heavier birthweight groups (Table 62, Figure 43). The rate for infants of 1000-2499g fell from 4.7 per 1,000 live births in 1973 to 1.0 per 1,000 live births in 1993. For infants weighing 500-999g, the rate declined from 2.7 to 1.2 per 1,000 live births in the same period, while for those weighing 2500g and over, it declined from 2.8 per 1,000 in 1973 to 1.0 per 1,000 live births in 1993.

Although there were substantial falls in the proportionate perinatal death rates in all birthweight groups, the greatest decline of 71% was for infants weighing 1000-2499g, particularly reflecting the decline in neonatal deaths in this birthweight group (Table 63, Figure 44).



#### 3.9 Birthweight-specific fetal, neonatal and perinatal deaths in Australia

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 infants and by the quality of care during pregnancy and labour and in 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 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 those neonatal deaths that do not occur in the hospital of birth. This deficiency can be overcome by linking registered perinatal deaths 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 reports on perinatal deaths published by the Australian Bureau of Statistics are based on the year of registration rather than on the year of birth. When analysing perinatal death rates by birthweight, it is preferable that both the deaths and the births should include only those infants 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 complete data 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.

Missing information on the birthweight of some infants is an additional problem in analysing birthweight-specific death rates. Based on comparisons of data from the State and Territory perinatal collections (Table 64, see NPSU: year of birth) and from perinatal death registrations, there were more fetal deaths with known birthweights of 500g and over in the NPSU data, slightly more fetal deaths with a birthweight of less than 500g in the ABS data and, in contrast to the results for 1992 (Lancaster, Huang & Pedisich 1995), more fetal deaths with unstated birthweights in the ABS data (Table 64). Accordingly, fetal, neonatal and perinatal death rates for births of 500g and over in 1993 were calculated using NPSU data on live births (Table 37) and ABS data on fetal and neonatal deaths. Birthweight was not recorded in only 0.1% of live births.

Fetal birthweight-specific death rates varied markedly, ranging from 303.4 per 1,000 births for infants of 500-999g to 0.8 per 1,000 for those weighing 3500-3999g (Table 64).

Neonatal death rates varied from 313.6 per 1,000 live births for infants of 500-999g to 0.6 per 1,000 for those in the 3500-3999g and 4000-4499g birthweight groups. Survival up to 28 days of various groups of low birthweight infants was 68.6% for those weighing 500-999g, 93.2% for infants of 1000-1499g, and 97.6% for infants of 1500-1999g.

#### 3.10 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 gestational age is 20 weeks and over or the birthweight is at least 400g. Thus, there are more fetal deaths included in these perinatal collections than in the national data on perinatal deaths published by the Australian Bureau of Statistics, which are based on a lower limit of 500g. Also, factors such as parity, Aboriginality and accommodation status in hospital that are associated with varying fetal death rates are collected for most births in the perinatal collections.

In 1993, there were 1,665 fetal deaths notified to the perinatal collections, a fetal death rate of 6.4 per 1,000 births and 33% higher than the rate of 4.8 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 3.4), ranging from 5.7 per 1,000 births for infants of mothers aged 25 to 29 years to 11.6 per 1,000 for infants of mothers aged 40 years and over (Table 65).

The fetal death rate of infants born to indigenous mothers was 15.5 per 1,000 births, more than two and a half times higher than the rate of 6.1 per 1,000 in the non-indigenous population (Table 66).

Fetal death was slightly more likely among firstborn infants (6.5 per 1,000 births) than among infants whose mothers already had one child (5.6 per 1,000 births) (Table 67). With higher parity, the fetal death rate increased to a maximum of 11.0 per 1,000 births for those with four or more previous children.

The fetal death rate of twins (23.1 per 1,000 births) and of infants born in other multiple births (49.7 per 1,000 births) was much higher than that of singleton infants (5.9 per 1,000 births) (Table 68).

Infants of single mothers (7.8 per 1,000 births) and of mothers who were widowed, divorced or separated (8.4 per 1,000 births) had higher fetal death rates than infants of mothers who were married or living in a de facto relationship (6.1 per 1,000 births) (Table 69).

Fetal death rates were higher among infants whose mothers had public accommodation in hospital (7.1 per 1,000 births) than among those in private accommodation (5.0 per 1,000 births) (Table 70).

Several factors make it difficult to compare differences in birthweight-specific fetal and neonatal death rates among the States and Territories (Tables 71-78). Although birthweight was missing for only a small proportion of fetal deaths, comparisons are affected by this missing information. More importantly, data on neonatal deaths for New South Wales, Western Australia, Tasmania and the Australian Capital Territory are incomplete because data in which perinatal death registrations had been linked to the perinatal collections were not available.

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Table 1 :	Confinements	and births, States	and Territories, 1	993
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	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Confinements	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
Fetal deaths Live births	536 87,362*	414 64,323	292 47,156	176 25,160	123 19,844	47 6,809	37 4,754**	40 3,505	1,665 258,913
All births	87,898	64,737	47,448	25,336	19,967	6,856	4,791	3,545	260,578

\* Includes 190 births in NSW with 'not stated' birth status

\*\* Includes 49 births in ACT with 'not stated' or 'other' birth status

Place of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Hospital	83,601	63,434	46,424	24,558	19,258	6,691	4,411	3,420	251,797
Birth centre	2,593	na	na	232	320	na	255	na	3,400
Home	218	147	163	102	46	92	37	8	813
Born before arrival	251	210	169	81	55	-	-	-	766
Other	-	-	8	-	-	-	-	79	87
Not stated	80	4	-	-	-	-	9	-	93
All places of birth	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	ıt			
Hospital	96.5	99.4	99. <b>3</b>	98.3	97.9	98.6	93.8	97.5	98.0
Birth centre	3.0	na	na	0.9	1.6	na	5.4	na	1.3
Home	0.3	0.2	0.3	0.4	0.2	1.4	0.8	0.2	0.3
Born before arrival	0.3	0.3	0.4	0.3	0.3	-	-	-	0.3
Other	-	-	0.0	-	-	-	-	2.3	0.0
All places of birth	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 2 :
 Place of birth, all confinements, States and Territories, 1993

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Number of confinements annually	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
1 - 100	76	67	80	49	49	8	-	1	330
101 - 500	42	34	24	21	21	1	1	2	146
501 - 1000	25	24	11	7	5	2	-	2	76
1001 - 2000	11	9	12	5	2	2	1	1	43
2001 and over	14	6	3	2	3	1	1	-	30
All hospitals	168	140	130	84	80	14	3	6	625
					Per cen	t			
1 - 100	45.2	47.9	61.5	58.3	61.3	57.1	-	16.7	52.8
101 - 500	25.0	24.3	18.5	25.0	26.3	7.1	33,3	33.3	23.4
501 - 1000	14.9	17.1	8.5	8.3	6.3	14.3	-	33.3	12.2
1001 - 2000	6.5	6.4	9.2	6.0	2.5	14.3	33,3	16.7	6.9
2001 and over	8.3	4.3	2.3	2.4	3.8	7.1	33.3	-	4.8
All hospitals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 3 : Distribution of maternity units by size, States and Territories, 1993

 Table 4 : Distribution of confinements by size of maternity unit, States and Territories, 1993

Number of confinements annually	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Australia
					Numbe	r			
1 - 100	1,970	2,230	1,878	1,085	1,468	209	-	48	8,888
101 - 500	9,808	9,119	6,065	5,717	4,423	307	255	537	36,231
501 - 1000	19,044	17,365	7,157	5,154	3,479	1,284	-	1,485	54,968
1001 - 2000	14,969	12,768	16,720	5,832	3,180	2,875	1,342	1,350	59,036
2001 and over	40,654	22,162	14,773	7,083	7,083	2,016	3,069	-	96,840
All hospitals	86,445	63,644	46,593	24,871	19,633	6,691	4,666	3,420	255,963
					Per cen	t			
1 - 100	2.3	3.5	4.0	4.4	7.5	3.1	-	1.4	3.5
101 - 500	11.3	14.3	13.0	23.0	22.5	4.6	5.5	15.7	14.2
501 - 1000	22.0	27.3	15.4	20.7	17.7	19.2	-	43.4	21.5
1001 - 2000	17.3	20.1	35.9	23.4	16.2	43.0	28.8	39.5	23.1
2001 and over	47.0	34.8	31.7	28.5	36.1	30.1	65.8	-	37.8
All hospitals	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mean age (years)	28.2	28.8	27.6	28.1	28.0	27.4	28.6	26.3	28.2
					Numbe	r			
Less than 15	42	15	24	13	13	4	1	24	136
15	137	35	75	52	25	12	8	37	381
16	383	131	272	151	83	33	11	84	1,148
17	794	392	573	286	224	95	41	101	2,506
18	1,218	610	915	425	305	143	70	131	3,817
19	1,919	988	1,315	562	453	210	68	119	5,634
Less than 20	4,493	2,171	3,174	1,489	1,103	497	199	496	13,622
20 - 24	17,447	10,757	10,589	5,016	3,966	1,555	838	921	51,089
25 - 29	28,736	22,299	15,455	8,404	6,931	2,332	1,629	1,023	86,809
30 - 34	25,323	20,288	12,740	7,233	5,555	1,787	1,429	759	75,114
35 - 39	9,065	7,130	4,140	2,468	1,839	529	518	267	25,956
40 - 44	1,432	1,114	647	355	278	76	89	37	4,028
45 and over	69	36	19	8	7	2	6	3	150
Not stated	178	-	-	-	-	5	4	1	188
All ages	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cer	it			
Less than 15	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.7	0.1
15	0.2	0.1	0.2	0.2	0.1	0.2	0.2	1.1	0.1
16	0.4	0.2	0.6	0.6	0.4	0.5	0.2	2.4	0.4
17	0.9	0.6	1.2	1.1	1.1	1.4	0.9	2.9	1.0
18	1.4	1.0	2.0	1.7	1.5	2.1	1.5	3.7	1.5
19	2.2	1.5	2.8	2.3	2.3	3.1	1.4	3.4	2.2
Less than 20	5.2	3.4	6.8	6.0	5.6	7.3	4.2	14.1	5.3
20 - 24	20.2	16.9	22.6	20.1	20.2	22.9	17.8	26.3	19.9
25 - 29	33.2	35.0	33.0	33.7	35.2	34.4	34.6	29.2	33.8
30 - 34	29.3	31.8	27.2	29.0	28.2	26.4	30.4	21.6	29,3
35 - 39	10.5	11.2	8.9	9.9	9.3	7.8	11.0	7.6	10.1
40 - 44	1.7	1.7	1.4	1.4	1.4	1.1	1.9	1.1	1.6
45 and over	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
All ages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 5 :
 Maternal age, all confinements, States and Territories, 1993

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Parity	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
None	34,508	25,441	18,294	9,667	8,054	2,350	1,930	1,346	101,590
One	28,869	21,917	14,966	8,357	6,722	2,116	1,608	1,041	85,596
Two	14,546	10,710	7,977	4,342	3,213	1,194	710	591	43,283
Three	5,453	3,833	3,211	1,687	1,086	575	257	286	16,388
Four or more	3,044	1,894	1,952	920	604	516	113	243	9,286
Not stated	323	-	364	-	-	32	94	-	813
All parities	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	ıt			
None	39.9	39.9	39,4	38.7	40.9	34.8	41.8	38.4	39.7
One	33.4	34.4	32.3	33.5	34.2	31.3	34.8	29.7	33.4
Two	16.8	16.8	17.2	17.4	16.3	17.7	15.4	16.9	16.9
Three	6.3	6.0	6.9	6.8	5.5	8.5	5.6	8.2	6.4
Four or more	3.5	3.0	4.2	3.7	3.1	7.6	2.4	6.9	3.6
All parities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 6 : Mother's parity, all confinements, States and Territories, 1993

Table 7 :	Distribution of	f confinements b	v maternal age an	d parity, Australia,	1993
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Parity				Matern	al age (ye	ears)		
	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages
				r	lumber			
None	11,111	27,783	36,030	20,620	5,197	768	81	101,590
One	2,158	16,321	30,591	27,241	8,150	1,081	54	85,596
Two	289	5,209	13,488	16,971	6,440	860	26	43,283
Three	24	1,267	4,471	6,587	3,408	617	14	16,388
Four or more	9	367	1,985	3,436	2,646	837	6	9,286
Not stated	31	142	244	259	115	15	7	813
All parities	13,622	51,089	86,809	75,114	25,956	4,178	188	256,956
				F	er cent			
None	81.8	54.5	41.6	27.5	20.1	18.4	44.8	39.7
One	15.9	32.0	35.3	36.4	31.5	26.0	29.8	33.4
Two	2.1	10.2	15.6	22.7	24.9	20.7	14.4	16.9
Three	0.2	2.5	5.2	8.8	13.2	14.8	7.7	6.4
Four or more	0.1	0.7	2.3	4.6	10.2	20.1	3.3	3.6
All parities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Marital status	NSW	Vic	Qld	WA	SA	Tas*	ACT	NT	Australia
					Numbe	r			
Married/de facto	75,545	56,687	41,017	22,270	16,950	4,931	4,237	2,482	224,119
Single	9,679	6,230	5,247	2,492	2,397	1,741	404	986	29,176
Widowed, divorced, or separated	1,037	800	488	211	326	111	57	35	3,065
Not stated / other	482	78	12	-	6	-	14	4	596
All marital status	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	t			
Married/de facto	87.6	89.0	87.7	89.2	86.2	72.7	90. <b>2</b>	70.9	87.4
Single	11.2	9.8	11.2	10.0	12.2	25.7	8.6	28.1	11.4
Widowed, divorced, or separated	1.2	1.3	1.0	0.8	1.7	1.6	1.2	1.0	1.2
All marital status	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Table 8 : Marital status, all confinements, States and Territories, 1993

\* De facto coded with single marital status

Table 9 :	Marital status of	<sup>r</sup> teenage mothers,	Australia, 1993

Maternal age (year)	All confinements (n)	Married/de facto		Sin	gle	Ot	her
		Number	Per cent	Number	Per cent	Number	Per cent
Less than 15	136	27	19.9	99	72.8	10	7.4
15	381	58	15.2	274	71.9	49	12.9
16	1,148	292	25,4	735	64.0	121	10.5
17	2,506	802	32.0	1,516	60.5	188	7.5
18	3,817	1,617	42.4	1,974	51.7	226	5.9
19	5,634	2,951	52.4	2,407	42.7	276	4.9
Less than 20	13,622	5,747	42.2	7,005	51.4	870	6.4

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Aboriginality	NSW	Vic	Qid	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Non-indigenous	84,952	63,343	44,523	23,531	19,283	6,777	4,657	2,286	249,352
Aboriginal or Torres Strait Islander	1,456	452	2,234	1,442	396	6	48	1,221	7,255
Not stated	335	-	7	-	-	-	7	-	349
All confinements	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	it			
Non-indigenous	98.3	99.3	95.2	94.2	9 <b>8</b> .0	99.9	99.0	65.2	97.2
Aboriginal or Torres Strait Islander	1.7	0.7	4.8	5.8	2.0	0.1	1.0	34.8	2.8
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Table 10 : Indigenous mothers, all confinements, States and Territories, 1993

Table 11 :	Distribution of confinements of indigenous mothers by maternal age and parity,
	Australia, 1993

Parity				Matern	al age (ye	ears)		
- 	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages
				N	umber			
None	1,143	645	223	72	12	1	2	2,098
One	449	846	320	156	35	6	1	1,813
Two	91	678	389	169	44	2	-	1,373
Three	7	309	371	162	53	8	-	910
Four or more	2	122	436	327	137	19	-	1,043
Not stated	5	6	4	3	-	-	-	18
All parities	1,697	2,606	1,743	889	281	36	3	7,255
				Р	er cent			
None	67.6	24.8	12.8	8.1	4.3	2.8	66.7	29.0
One	26.5	32.5	18.4	17.6	12.5	16.7	33.3	25.1
Two	5.4	26.1	22.4	19.1	15.7	5.6	-	19.0
Three	0.4	11.9	21.3	18.3	18.9	22.2	-	12.6
Four or more	0.1	4.7	25.1	36.9	48.8	52.8	-	14.4
All parities	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mean age (years)	23.8	26.2	24.1	23.3	23.9	24.7	26.9	23.3	23.9
					Numbe	r			
Less than 15	4	1	11	9	4	-	_	22	51
15	14	2	24	30	5	-	-	32	107
16	46	4	56	62	6	-	-	70	244
17	66	9	88	88	28	1	2	74	356
18	99	13	122	100	23	-	-	87	444
19	98	14	162	111	37	1	1	71	495
Less than 20	327	43	463	400	103	2	3	356	1,697
20 - 24	543	140	818	538	130	2	13	422	2,606
25 - 29	359	147	583	293	88	-	17	256	1,743
30 - 34	171	94	268	159	57	1	11	128	889
35 - 39	49	25	93	43	14	1	4	52	281
40 - 44	5	3	9	9	4	-	-	4	34
45 and over	-	-	-	-	-	-	-	2	2
Not stated	2	-	-	-	-	-	-	1	3
All confinements	1,456	452	2,234	1,442	396	6	48	1,221	7,255
					Per cen	ıt			
Less than 15	0.3	0.2	0.5	0.6	1.0	-	-	1.8	0.7
15	1.0	0.4	1.1	2.1	1.3	-	-	2.6	1.5
16	3.2	0.9	2.5	4.3	1.5	-	-	5.7	3.4
17	4.5	2.0	3.9	6.1	7.1	16.7	4.2	6.1	4.9
18	6.8	2.9	5.5	6.9	5.8	-	-	7.1	6.1
19	6.7	3.1	7.3	7.7	9.3	16.7	2.1	5.8	6.8
Less than 20	22.5	9.5	20.7	27.7	26.0	33.3	6.3	29.2	23.4
20 - 24	37.3	31.0	36.6	37.3	32.8	33.3	27.1	34.6	35.9
25 - 29	24.7	32.5	26.1	20.3	22.2	-	35.4	21.0	24.0
30 - 34	11.8	20.8	12.0	11.0	14.4	16.7	22.9	10.5	12.3
35 - 39	3.4	5.5	4.2	3.0	3.5	16.7	8.3	4.3	3.9
40 - 44	0.3	0.7	0.4	0.6	1.0	-	-	0.3	0.5
45 and over	-	-	-	-	-	-	-	0.2	0.0
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 12 : Confinements of indigenous mothers by maternal age, States and Territories, 1993

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Country of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Australia	63,485	47,773	38,922	17,150	15,928	6,226	3,640	2,977	196,101
New Zealand	1,859	1,040	1,981	863	215	61	101	89	6,209
United Kingdom	3,296	2,781	2,007	2,990	1,796	237	233	108	13,448
Italy	415	527	51	105	102	2	16	3	1,221
Former Yugoslavia	635	668	86	110	70	3	44	1	1,617
Other Europe and former USSR	2,076	2,172	739	526	437	81	136	50	6,217
Lebanon	2,334	756	39	26	46	6	11	2	3,220
Other Middle East and North Africa	1,220	1,135	129	56	52	10	29	7	2,638
China	1,328	620	127	98	64	2	28	11	2,278
Hong Kong	646	254	114	32	14	3	21	4	1,088
India	475	444	75	167	44	5	37	9	1,256
Malaysia	357	472	150	248	60	11	34	51	1,383
Philippines	1,309	608	455	135	135	29	32	26	2,729
Vietnam	1,625	1,639	283	209	282	4	61	14	4,117
Other Asia	2,014	-1,284	459	463	175	40	118	70	4,623
Northern America	462	306	246	161	74	23	52	33	1,357
South and Central America, and the Caribbean	648	306	65	49	53	8	21	4	1,154
Africa (excluding North Africa)	332	349	155	205	64	13	17	7	1,142
Other countries	1,600	541	664	125	52	19	70	36	3,107
Not stated	627	120	17	1,255	16	-	11	5	2,051
All countries	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	t			
Australia	73.7	75.0	83.3	72.3	81.0	91.8	77.4	85.0	76.9
New Zealand	2.2	1.6	4.2	3.6	1.1	0.9	2.1	2.5	2.4
United Kingdom	3.8	4.4	4.3	12.6	9.1	3.5	5.0	3.1	5.3
Italy	0.5	0.8	0.1	0.4	0.5	0.0	0.3	0.1	0.5
Former Yugoslavia	0.7	1.0	0.2	0.5	0.4	0.0	0.9	0.0	0.6
Other Europe and former USSR	2.4	3.4	1.6	2.2	2.2	1.2	2.9	1.4	2.4
Lebanon	2.7	1.2	0.1	0,1	0.2	0.1	0.2	0.1	1.3
Other Middle East and North Africa	1.4	1.8	0.3	0.2	0.3	0.1	0.6	0.2	1.0
China	1.5	1.0	0.3	0.4	0.3	0.0	0.6	0.3	0.9
Hong Kong	0.8	0.4	0.2	0.1	0.1	0.0	0.4	0.1	0.4
India	0.6	0.7	0.2	0.7	0.2	0.1	0.8	0,3	0.5
Malaysia	0.4	0.7	0.3	1.0	0.3	0.2	0.7	1.5	0.5
Philippines	1.5	1.0	1.0	0.6	0.7	0.4	0.7	0,7	1.1
Vietnam	1.9	2.6	0.6	0.9	1.4	0.1	1.3	0.4	1.6
Other Asia	2.3	2.0	1.0	2.0	0.9	0.6	2.5	2.0	1.8
Northern America	0.5	0.5	0.5	0.7	0.4	0.3	1.1	0.9	0.5
South and Central America, and the Caribbean	0.8	0.5	0.1	0.2	0.3	0.1	0.4	0.1	0.5
Africa (excluding North Africa)	0.4	0.5	0.3	0.9	0.3	0.2	0.4	0.2	0.4
Other countries	1.9	0.8	1.4	0.5	0.3	0.3	1.5	1.0	1.2

 Table 13: Maternal country of birth, all confinements, States and Territories, 1993

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Country of birth			Maternal age (years)										
-	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages					
				N	lumber		~						
Australia	12,150	42,204	66,555	54,934	17,532	2,595	131	196,101					
New Zealand	349	1,158	1,991	1,912	700	93	б	6,209					
United Kingdom	180	1,433	4,770	4,951	1,772	334	8	13,448					
Italy	4	61	406	475	219	56	-	1,221					
Former Yugoslavia	30	331	645	416	162	31	2	1,617					
Lebanon	199	964	1,007	716	266	62	6	3,220					
China	4	142	741	916	414	57	4	2,278					
Hong Kong	6	41	255	568	194	23	1	1,088					
India	10	142	498	446	134	25	1	1,256					
Malaysia	14	91	353	561	315	48	1	1,383					
Philippines	62	310	806	900	522	129	-	2,729					
Vietnam	116	761	1,277	1,203	616	143	1	4,117					
Other countries	429	3,077	6,805	6,498	2,866	543	20	20,238					
Not stated	69	374	700	618	244	39	7	2,051					
All countries	13,622	51,089	86,809	75,114	25,956	4,178	188	256,956					
				P	er cent								
Australia	6.2	21.5	33.9	28.0	8.9	1.3	-	100.0					
New Zealand	5.6	18.7	32.1	30.8	11.3	1.5	-	100.0					
United Kingdom	1.3	10.7	35.5	36.8	13.2	2.5	-	100.0					
Italy	0.3	5.0	33.3	38.9	17.9	4.6	-	100.0					
Former Yugoslavia	1.9	20.5	39.9	25.7	10.0	1.9	-	100.0					
Lebanon	6.2	29.9	31.3	22.2	8.3	1.9	-	100.0					
China	0.2	6.2	32.5	40.2	18.2	2.5	-	100.0					
Hong Kong	0.6	3.8	23.4	52.2	17.8	2.1	-	100.0					
India	0.8	11.3	39.6	35.5	10.7	2.0	-	100.0					
Malaysia	1.0	6.6	25.5	40.6	22.8	3,5	-	100.0					
Philippines	2.3	11.4	29.5	33.0	19.1	4.7	-	100.0					
Vietnam	2.8	18.5	31.0	29.2	15.0		-	100.0					
Other countries	2.0	15.2	33.6	32.1	14.2	2.7	-	100.0					
All countries	5.3	19.9	33.8	29.2	10.1	1.6	-	100.0					

 Table 14 : Maternal age distribution by selected country of birth, all confinements, Australia, 1993

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Country of birth	All confinements*	Married	/de facto	Sin	gle	Ot	her
	(n)	Number	Per cent	Number	Per cent	Number	Per cent
Australia	196,101	167,848	85.6	23,552	12.0	4,701	2.4
New Zealand	6,209	5,250	84.6	754	12.1	205	3.3
United Kingdom	13,448	12,353	91.9	728	5.4	367	2.7
Italy	1,221	1,191	97.5	17	1.4	13	1.1
Former Yugoslavia	1,617	1,530	94.6	54	3.3	33	2.0
Lebanon	3,220	3,160	98.1	22	0.7	38	1.2
China	2,278	2,217	97.3	36	1.6	25	1.1
Hong Kong	1,088	1,070	98.3	14	1.3	4	0.4
India	1,256	1,234	98.2	8	0.6	14	1.1
Malaysia	1,383	1,334	96.5	34	2.5	15	1.1
Philippines	2,729	2,555	93.6	121	4.4	53	1.9
Vietnam	4,117	3,642	88.5	368	8.9	107	2.6
Other countries	20,238	18,931	93.5	908	4.5	399	2.0
Not stated	2,051	1,804	88.0	68	3.3	179	8.7
All countries	256,956	224,119	87.2	26,684	10.4	6,153	2.4

 Table 15 : Marital status of mother by selected country of birth, all confinements, Australia, 1993

 Table 16 : Maternal accommodation status in hospital, all confinements, selected States and Territories, 1993

Accommodation status	NSW	Qld	WA	SA	Tas	АСТ
			Numbe	r		
Public	50,834	29,225	15,083	11,992	3,933	2,373
Private	35,834	17,362	9,082	7,687	2,850	2,246
Not stated/other	75	177	808	-	-	93
All classifications	86,743	46,764	24,973	19,679	6,783	4,712
			Per cen	t		
Public	58.7	62.7	62.4	60.9	58.0	51.4
Private	41.3	37.3	37.6	39.1	42.0	48.6
All classifications	100.0	100.0	100.0	100.0	100.0	100.0

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Duration of pregnancy (weeks)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mean (weeks)	39.2	39.2	39.1	39.1	39.1	39.4	39.2	39.0	39.2
					Numbe	r			
20 - 27	462	392	335	149	119	31	26	32	1,546
28 - 31	573	376	353	145	126	48	38	35	1,694
32 - 36	4,073	3,137	2,592	1,335	1,035	314	261	220	12,967
37 - 41	78,426	56,942	41,678	22,740	18,064	6,074	3,932	3,102	230,958
42 and over	3,020	2,441	1,786	604	335	316	334	72	8,908
Not stated	189	507	20	-	-	-	121	46	883
All confinements	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cer	t			
20 - 27	0.5	0.6	0.7	0.6	0,6	0.5	0.6	0.9	0.6
28 - 31	0.7	0.6	0.8	0.6	0.6	0.7	0.8	1.0	0.7
32 - 36	4.7	5.0	5.5	5.3	5.3	4.6	5.7	6.4	5.1
37 - 41	90.6	90.0	89.2	91.1	91.8	89.5	85.6	89.6	90.2
42 and over	3.5	3.9	3.8	2.4	1.7	4.7	7.3	2.1	3.5
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 17: Duration of pregnancy, all confinements, States and Territories, 1993

 Table 18: Duration of pregnancy by maternal age, all confinements, Australia, 1993

Duration of				Matern	al age (ye	ears)		
pregnancy (weeks)	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages
Confinements				N	lumber			
20 - 27	111	312	442	439	206	36	-	1,546
28 - 31	137	355	548	407	200	45	2	1,694
32 - 36	799	2,582	4,160	3,582	1,559	281	4	12,967
37 - 41	11,911	45,489	78,357	68,130	23,198	3,703	170	230,958
42 and over	579	2,098	3,059	2,368	712	87	5	8,908
Not stated	85	253	243	188	81	26	7	883
All confinements	13,622	51,089	86,809	75,114	25,956	4,178	188	256,956
				F	er cent			
20 - 27	0.8	0.6	0.5	0.6	0.8	0.9	-	0.6
28 - 31	1.0	0.7	0.6	0.5	0.8	1.1	-	0.7
32 - 36	5.9	5.1	4.8	4.8	6.0	6.8	-	5.1
37 - 41	88.0	89.5	90.5	90.9	89.7	89.2	-	90.2
42 and over	4.3	4.1	3.5	3.2	2.8	2.1	-	3.5
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	-	100.0

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Plurality	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Singleton	85,613	62,877	46,110	24,624	19,398	6,712	4,633	3,469	253,436
Twin	1,105	894	626	335	274	69	79	38	3,420
Triplet	25	24	27	14	7	2	-	-	99
Quadruplet	-	-	-	-	-	-	-	-	-
Quintuplet	-	-	1	-	-	-	-	-	1
All confinements	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	it			
Singleton	98.7	98.6	98.6	98.6	98.6	99.0	98.3	98.9	98.6
Twin	1.3	1.4	1.3	1.3	1.4	1.0	1.7	1.1	1.3
Triplet	0.0	0.0	0.1	0.1	0.0	0,0	-	-	0.0
Quadruplet	-	-	-	-	-	-	-	-	-
Quintuplet	-	-	0.0	-	-	-	-	-	0.0
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100,0	100.0	100.0

#### Table 19 : Plurality, all confinements, States and Territories, 1993

 Table 20 : Multiple confinements by maternal age, Australia, 1993

Plurality				Matern	al age (ye	ears)		
	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages
				r	łumber			
Singleton	13,531	50,600	85,598	73,918	25,486	4,116	187	253,436
Twin	91	483	1,173	1,157	454	61	· 1	3,420
Triplet*	-	6	38	39	16	1	-	100
All confinements	13,622	51,089	86,809	75,114	25,956	4,178	188	256,956
				F	er cent			
Singleton	99.3	99.0	98.6	98.4	98.2	98.5	99.5	98.6
Twin	0.7	0.9	1.4	1.5	1.7	1.5	0.5	1.3
Triplet*	~	0.0	0.0	0.1	0.1	0.0	-	0.0
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

\* Includes 1 quintuplet pregnancy

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Onset of labour	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia	
					Numbe	r				
Spontaneous	61,652	43,590	32,377	14,997	12,847	5,132	3,046	2,447	176,088	
- no augmentation	39,396	35,395	20,903	8,998	8,130	4,057	2,215	2,277	121,371	
- augmentation	22,256	8,195	11,474	5,999	4,717	1,075	831	170	54,717	
Induced	17,055	13,668	9,233	6,872	4,545	1,240	837	697	54,147	
- medical only	5,171	4,733	3,345	na	1,873	606	na	na	15,728*	
- surgical only	892	1,778	2,316	na	497	288	na	na	5,771*	
- combined	10,919	7,157	3,572	na	2,174	346	na	na	24,168*	
- other	73	-	-	na	1	-	na	na	74*	
No labour	7,750	6,537	5,141	3,104	2,287	411	551	355	26,136	
Others	-	· _	5,142	-	· -	-	278	-	5,420	
Not stated	286	-	13	-	-	-	-	8	307	
All confinements	86,743	63,795	51,906	24,973	19,679	6,783	4,712	3,507	262,098	
	Per cent									
Spontaneous	71.3	68.3	69.3	60.1	65.3	75.7	64.6	69.9	68.6	
- no augmentation	45.6	55.5	44.7	36.0	41.3	59.8	47.0	65.1	47.3	
- augmentation	25.7	12.8	24.5	24.0	24.0	15.8	17.6	4.9	21.3	
Induced	19.7	21.4	19.7	27.5	23.1	18.3	17.8	19.9	21.1	
- medical only	6.0	7.4	7.2	na	9.5	8,9	na	na	6.1	
- surgical only	1.0	2.8	5.0	na	2.5	4.2	na	na	2.2	
- combined	12.6	11.2	7.6	na	11.0	5.1	na	па	9.4	
- other	0.1	-	-	па	0.0	-	na	па	0.0	
No labour	9.0	10.2	11.0	12.4	11.6	6.1	11.7	10.1	10.2	
Others	-	-	11.0	-	-	-	5.9	-	2.1	
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	102.0	

 Table 21: Onset of labour, all confinements, States and Territories, 1993

\* Data exclude WA, ACT, and NT

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 Table 22 : Presentation at delivery, all confinements, States and Territories, 1993

Presentation	NSW	Vic	Qid	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Vertex	82,204	59,992	44,283	23,754	18,650	5,620	4,488	3,270	242,261
Breech	3,586	2,668	2,255	1,069	832	65	192	159	10,826
Other	589	416	212	-	177	12	17	-	1,423
Not stated	364	719	14	150	20	1,086	15	78	2,446
All confinements	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cen	ıt			
Vertex	95.2	95.1	94.7	95.7	94.9	98.6	95.6	95.4	95.2
Breech	4.2	4.2	4.8	4.3	4.2	1.1	4.1	4.6	4.3
Other	0.7	0.7	0.5	-	0.9	0.2	0.4	-	0.6
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

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Type of delivery	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Spontaneous vertex	60,966	43,203	31,596	15,873	12,526	4,830	2,975	2,507	174,476
Forceps	7,076	7,592	3,188	1,581	2,154	706	494	160	22,951
Vacuum extraction	2,570	698	1,619	2,147	455	54	205	59	7,807
Vaginal breech	982	685	519	150	119	65	38	29	2,587
Caesarean section	14,852	11,607	9,824	5,222	4,425	1,127	982	739	48,778
- elective	7,750	6,538	na	2,763	1,944	192	468	302	19,957*
- emergency	7,102	5,069	na	2,459	2,481	506	514	437	18,568*
- other	-	10	na	-	-	-	4	8	22
Other	-	10	12	-	-	-	4	8	34
Not stated	297	-	6	-	-	l	14	5	323
All types of delivery	86,743	63,795	46,764	24,973	19,679	6,783	4,712	3,507	256,956
					Per cer	it			
Spontaneous vertex	70.5	67.7	67.6	63.6	63.7	71.2	63.3	71.6	68.0
Forceps	8.2	11.9	6.8	6.3	10.9	10.4	10.5	4.6	8.9
Vacuum extraction	3.0	1.1	3.5	8.6	2.3	0.8	4.4	1.7	3.0
Vaginal breech	1.1	1.1	1.1	0.6	0.6	1.0	0.8	0.8	1.0
Caesarean section	17.2	18.2	21.0	20.9	22.5	16.6	20.9	21.1	19.0
- elective	9.0	10.2	na	11.1	9.9	2.8	10.0	8.6	9.5*
- emergency	8.2	7.9	na	9.8	12.6	7.5	10.9	12.5	8.8*
- other	-	0.0	na	-	-	-	0.1	0.2	0.0
Other	-	0.0	0.0	-	-	-	0.1	0.2	0.0
All types of delivery	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 23: Type of delivery, all confinements, States and Territories, 1993

\* Data exclude Queensland

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Accommodation status/ Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Public*					Number	•			
Less than 20	439	na	378	162	139	41	27	na	1,186
20 - 24	1,655	na	1,310	637	558	138	110	na	4,408
25 - 29	2,389	na	1,611	883	755	185	175	na	5,998
30 - 34	2,076	na	1,245	675	597	119	119	na	4,831
35 - 39	809	na	432	275	204	48	43	na	1,811
40 and over	160	na	86	52	38	9	8	na	353
Not stated	13	na	-	-	-	1	-	na	14
All ages	7,541	na	5,062	2,684	2,291	541	482	na	18,601
Private*									
Less than 20	32	na	32	5	10	6	-	na	85
20 - 24	533	na	373	137	161	60	31	na	1,295
25 - 29	2,247	na	1,564	789	739	218	155	na	5,712
30 - 34	2,851	na	1,898	980	819	205	186	na	6,939
35 - 39	1,329	na	774	412	342	86	92	na	3,035
40 and over	294	na	119	72	63	11	21	na	580
Not stated	10	na	-	-	-	-	2	na	12
All ages	7,296	na	4,760	2,395	2,134	586	487	na	17,658
Public*				Caesar	ean rate (	per cent)			
Less than 20	10.4	na	12.7	11.6	13.5	8.8	15.3	na	11.5
20 - 24	11.9	na	14.8	15.7	17.0	11.4	18.2	na	13.8
25 - 29	14.6	na	17.7	18.5	18.5	15.4	21.4	na	16.5
30 - 34	18.1	na	20.5	19.5	22.3	15.2	22.0	na	19.3
35 - 39	20.4	na	23.1	23.2	25.4	21.0	23.0	na	22.0
40 and over	24.0	na	24.0	28.6	29.5	24.3	23.5	na	25.1
All ages	14.9	na	17.3	17.8	19.1	13.8	20.4	na	16.4
Private*									
Less than 20	12.1	na	17.4	10.4	14.1	20.0	-	na	13.8
20 - 24	15.4	na	21.7	17.5	23.3	17.5	14.3	na	17.9
25 - 29	18.3	na	24.8	23,5	25.8	19.3	20.0	na	21.4
30 - 34	20.7	na	28.8	27.7	28.5	20.4	21.8	na	24.2
35 - 39	26.3	na	34.6	34.9	33.0	28.7	28.8	na	30.0
40 and over	35.7	na	39.1	43.4	40.4	26.8	35.6	na	37.4
All ages	20.4	na	27.4	26.4	27.8	20.6	21.7	na	23.6
All confinements									
Less than 20	10.5	9.4	12.9	11.5	13.5	9.5	13.6	24.4	11.7
20 - 24	12.6	13.3	15.9	16.0	18.1	12.7	17.1	18.8	14.4
25 - 29	16.1	17.3	20.5	20.4	21.6	17.3	20.5	18.8	18.2
30 - 34	19.5	20.0	24.7	23.5	25.5	18.1	21.6	24.2	21.4
35 - 39	23.6	23.9	29.2	28.7	29.7	25.3	26.6	22.1	25.6
40 and over	30.2	30.9	30.8	35.3	35.4	25.6	31.6	25.0	31.2
All ages	17.1	18.2	21.0	20.9	22.5	16.6	20.8	21.1	19.0

\* Data exclude Victoria and Northern Territory

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Maternal age		Par	ity		Parity					
(years)	None	One	Two +	Total	None	One	Two +	Total		
		Num	iber		Rate (per cent)					
Less than 15	11	-	-	11	13.4	-	-	12.2		
15	37	-	-	37	13.3	-	-	12.7		
16	95	4	-	99	11.6	9.3	-	11.4		
17	197	23	6	226	11.6	11.5	22.2	11.7		
18	278	42	3	323	11.8	9.2	4.7	11.2		
19	370	98	22	490	12.1	10.0	12.1	11.6		
15 - 19	977	167	31	1,175	11.9	9.9	10.9	11.5		
20	453	159	46	658	13.6	10.2	11.2	12.4		
21	462	205	109	776	14.0	10.7	15.0	13.0		
22	524	285	123	932	15.8	12.5	12.1	14.1		
23	473	318	177	968	15.4	12.8	13.7	14.1		
24	525	302	247	1,074	17.5	12.1	14.4	14.9		
20- 24	2,437	1,269	702	4,408	15.2	11.8	13.6	13.8		
25	513	360	273	1,146	17.7	14.0	14.1	15.5		
26	482	378	304	1,164	18.4	14.9	14.4	16.0		
27	494	401	338	1,233	19.4	15.9	15.0	16.8		
28	460	384	375	1,219	20.2	15.4	14.9	16.7		
29	454	423	359	1,236	22.3	17.2	14.2	17.6		
25 - 29	2,403	1,946	1,649	5,998	19.4	15.5	14.5	16.5		
30	404	407	401	1,212	22.9	18.2	15.3	18.3		
31	383	309	426	1,118	26.0	16.1	16.6	18.8		
32	304	281	387	972	27.4	17.8	16.6	19.3		
33	227	260	312	799	28.4	20.8	15.4	19.6		
34	198	232	300	730	31.2	24.0	17.2	21.8		
30 - 34	1,516	1,489	1,826	4,831	26.2	18.7	16.2	19.3		
35	115	159	254	528	26.3	21.5	17.8	20.3		
36	120	135	216	471	33.2	23.8	19.0	22.8		
37	87	80	158	325	32.8	21.0	17.2	20.8		
38	64	73	133	270	35.2	26.2	19.1	23.3		
39	45	65	107	217	37.5	34.0	20.0	25.6		
35 - 39	431	512	868	1,811	31.6	23.7	18.4	22.0		
40	21	41	74	136	29.6	32.3	19.1	23.2		
41	20	22	65	107	37.0	26.8	27.1	28.5		
42	16	13	32	61	66.7	22.8	21.3	26.4		
43	5	4	16	25	45.5	40.0	20.3	25.0		
44	4	3	8	15	44.4	42.9	17.0	23.8		
40 - 44	66	83	195	344	39.1	29.3	21.6	25.4		
45 and over	3	2	4	9	33.3	25.0	12.1	18.0		
Not stated	10	3	1	14	22.7	10.0	2.9	13.0		
Total	7,854	5,471	5,276	18,601	17.8	15.4	15.6	16.4		

#### Table 25: Caesarean rates by maternal age, parity and public accommodation in hospital, Australia, 1993

Data exclude Victoria and Northern Territory

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Maternal age (years)		Par	ity			Par	ity			
	None	One	Two +	Total	None	One	Two +	Total		
		Num	ber		Rate (per cent)					
Less than 15	-	-		-	-	-	-	-		
15	4	-	-	4	26.7	-	~	26.7		
16	6	-	-	6	11.1	-	-	10.7		
17	9	-	~	9	12.0	-	-	11.3		
18	24	2	-	26	15.4	14.3	-	15.2		
19	33	7	-	40	13.4	18.4	-	13.9		
15 - 19	76	9	-	85	13,9	15.8	-	13.9		
20	78	14	2	94	20.4	16.3	18.2	19.6		
21	96	15	5	116	15.7	9.9	18.5	14.7		
22	192	36	7	235	19.8	12.9	12.1	18.0		
23	213	79	16	308	16.7	14.8	17.0	16.2		
24	388	118	36	542	21.8	15.9	15.8	19.7		
20-24	967	262	66	1,295	19.3	14.6	15.8	17.9		
25	466	219	62	747	20.7	19.4	18.1	20.1		
26	569	294	82 87	950	21.7	19.5	16.3	20.1		
20 27	614	358	134	1,106	22.0	19.7	19.0	20.4		
28	676	467	199	1,342	23.9	20.1	19.5	20.3		
29	709	580	278	1,567	26.0	21.2	20.3	22.9		
25 - 29	3,034	1,918	760	5,712	23.0	20.1	19.1	21.4		
30	654	593	300	1,547	25.4	21.6	18.6	22.3		
31	606	583	350	1,539	27.7	22.3	20,1	23.5		
32	468	589	373	1,430	27.9	24.0	20.0	23.9		
33	401	502	354	1,257	30.9	25.5	20.8	25.3		
34	368	422	376	1,166	35.4	27.3	23.3	27.8		
30 - 34	2,497	2,689	1,753	6,939	28.4	23.8	20.6	24.2		
35	304	366	281	951	38.2	29.8	21.6	28.6		
36	209	274	255	738	38.6	30.3	22.9	28.9		
37	166	205	207	578	41.5	33.1	25.7	31.7		
38	135	149	153	437	42.6	32.7	24.6	31.3		
39	111	119	101	331	47.0	32.9	23.2	32.0		
35 - 39	925	1,113	997	3,035	40.4	31.2	23.3	30.0		
40	73	75	79	227	44.0	35.9	26.4	33.7		
41	43	47	55	145	48.3	43.9	32.0	39.4		
42	33	30	37	100	63.5	37.5	31.4	40.0		
43	21	17	25	63	63.6	45.9	37.3	46.0		
44	8	2	16	26	72.7	18.2	38.1	40.6		
40 - 44	178	171	212	561	50.7	38.5	30.4	37.6		
45 and over	3	3	13	19	33.3	37.5	32.5	33.3		
Not stated	6	4	2	12	19.4	16.7	14.3	17.4		
Total	7,686	6,169	3,803	17,658	25.4	23.1	21.2	23.6		

#### Table 26: Caesarean rates by maternal age, parity and private accommodation in hospital, Australia, 1993

Data exclude Victoria and Northern Territory

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Accommodation status/ Maternal age (years)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Public*					Numbe	r			
Less than 20	42	na	63	52	13	-	-	na	170
20 - 24	79	na	126	89	23	-	2	na	319
25 - 29	53	na	104	42	16	-	2	na	217
30 - 34	33	na	48	25	17	1	-	na	124
35 - 39	14	na	19	12	2	-	-	na	47
40 and over	3	na	5	2	3	-	-	na	13
Not stated	-	na	-	-	-	-	-	na	-
All ages	224	na	365	222	74	1	4	na	890
Private*									
Less than 20	-	na	1	-	-	-	_	na	1
20 - 24	1	na	5	1	1	-	-	na	8
25 - 29	1	na	5	2	-	-	1	na	9
30 - 34	3	na	8	2	2	-	-	na	15
35 - 39	-	na	2	2	-	-	-	na	4
40 and over	-	na	1	-	-	-	-	na	1
Not stated	-	na	-	-	-	-	-	na	-
All ages	5	na	22	7	3	-	1	na	38
Public*				Саекат	ean rate	(ner cent)	1		
	12.0		13.0						
Less than 20	13.2	na	13.8	13.8	12.9	-	•	na	13.5
20 - 24	14.8	na	15.7	17.7	18.1	-	16.7	na	16.1
25 - 29	15.3	na	18.8	15.3	19.0	-	16.7	na	17.1
30 - 34	20.6	na	20.1	17.4	32.7	100.0	-	na	20.5
35 - 39 40 and aver	30.4	na	23.2	30.8	16.7	-	-	na	25.7
40 and over	60.0	na	62.5	28.6	100.0	-	-	na	56.5
All ages	15.9	na	17.0	16.5	19.5	16.7	10.5	na	16.7
Private*									
Less than 20	-	na	16.7	-	-	-	-	na	5.6
20 - 24	20.0	na	41.7	50.0	33.3	-	-	na	34.8
25 - 29	8.3	na	16.1	33.3	-	-	20.0	na	15.5
30 - 34	33.3	na	27.6	40.0	40.0	-	-	na	29.4
35 - 39	-	na	18.2	100.0	-	-	-	na	21.1
40 and over All ages	- 14.7	na na	100.0 <b>24.4</b>	- 33.3	- 17.6	-	- 10.0	na na	33.3 22.1
-	14.7	114	24.4	55.5	17.0	-	10.0	114	22.1
All confinements									
Less than 20	12.9	16.3	13.8	13.3	12.6	-	-	26.3	16.1
20 - 24	15.0	16.4	16.0	17.7	18.5	-	15.4	20.9	17.1
25 - 29	15.1	15.0	18.7	15.7	18.2	•	17.6	18.8	17.1
30 - 34	21.3	19.1	20.9	18.2	33.3	100.0	-	24.6	21.5
35 - 39	28.6	28.0	22.6	32.6	14.3	-	-	21.2	24.6
40 and over	60.0	33.3	66.7	22.2	75.0	-	-	16.7	44.4
All ages	15.9	17.3	17.3	16.6	19.4	16.7	10.4	22.4	17.8

# Table 27 : Caesarean rates by maternal age and accommodation status, indigenous mothers, States and Territories, 1993

\* Data exclude Victoria and Northern Territory

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Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Parity					Numbe	r			
Primipara	6,449	5,021	4,187	2,146	1,986	389	447	351	20,976
Multipara	8,330	6,586	5,547	3,076	2,439	729	515	388	27,610
Not stated	73	-	90		-	9	20	-	192
All parity	14,852	11,607	9,824	5,222	4,425	1,127	982	739	48,778
Plurality	1,002	11,007	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	-,	1, 120	.,			40,770
·	14 407	11 200	0.511	5.040	4 201	1.000	051	70.7	17 064
Singleton	14,427	11,200	9,511	5,048	4,291	1,098	956	723	47,254
Twin	405	386	293	163	127	27	26	16	1,443
Other multiple	20	21	20	11	7	2	-	-	81
All confinements	14,852	11,607	9,824	5,222	4,425	1,127	982	739	48,778
Breech presentation in singleton births	2,464	1,817	1,542	813	676	na	141	111	7,564
Birthweight (singleton bir		1,017	1,272	015	070	114	141	111	7,004
		_	-		-		-		
Less than 500 g	8	7	3	-	2	-	7	-	27
500 - 999 g	109	65	64	18	31	2	2	I	292
1000 - 1499 g	203	137	144	63	60	15	12	14	648
1500 - 1999 g	275	253	242	95	107	28	21	28	1,049
2000 - 2499 g	639	530	462	244	196	47	42	54	2,214
2500 g and over *	13,180	10,205	8,573	4,628	3,895	1,006	860	625	42,972
- public	6,595	na	4,329	2,346	1,990	475	407	na	16,142
- private	6,571	na	4,244	2,152	1,905	531	441	na	15,844
- other	14	na	-	130	-	-	12	na	10,986
Not stated	13	3	23	-	-	-	12	1	52
All singleton births	14,427	11,200	9,511	5,048	4,291	1,098	956	723	47,254
Parity				Caesar	ean rate	(per cent)			
Primipara	18.7	19.7	22.9	22.2	24.7	16.6	23.2	26.1	20.6
Multipara	16.0	17.2	19.7	20.1	21.0	16.6	19.2	18.0	17.9
All parity	17.1	18.2	21.0	20.9	22.5	16.6	20.8	21.1	19.0
Plurality	1771	10.2	#1.0	20.7	<b></b>	10.0	20.0	21,1	19.0
Singleton	16.9	17.8	20.6	20.5	22.1	16.4	20.6	20.8	18.6
Twin	36.7	43.2	46.8	48.7	46.4	39.1	33.3	42.1	42.2
Other multiple	80.0	87.5	71.4	78.6	100.0	100.0		-	81.0
All confinements	17.1	18.2	21.0	20.9	22.5	16.6	20.8	21.1	19.0
Breech presentation in	70 7	72.2	70.0	00.0	86.0		00.7	72.0	76.0
singleton births	72.7	73.3	79.8	82.3	86.0	na	80.6	73.0	76.0
Birthweight (singleton bir									
Less than 500 g	6.6	5.2	3.3	-	5.9	-	25.0	-	5.7
500 - 999 g	26.7	28.3	33.2	20.5	37.3	9.1	15.4	4.0	27.5
1000 - 1499 g	50.5	53.3	62.6	53.8	66.7	42.9	54.5	45.2	54.7
1500 - 1999 g	41.9	47.1	51.4	45.5	53.2	51.9	47.7	59.6	47.3
2000 - 2499 g	25.8	28.0	32.5	30.1	30.9	24.1	33.3	31.4	28.6
2500 g and over *	16.2	17.1	19.7	19.8	21.2	15.7	19.8	19.6	17.9
- public	13.9	na	16.0	16.7	17.9	12.9	18.8	na	15.3
- private	19.4	na	26.0	25.1	26.4	19.6	21.1	na	22.4
	16.9	17.8	20.6	20.5	22.1	16.4	20.6	20.8	18.6

# Table 28 : Caesarean rates by parity, plurality, breech presentation, and birthweight, States and Territories, 1993

\* Data include accommodation status 'not stated' and 'other'

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Length of stay	Vic	Qld	WA	SA	Tas	ACT	NT	Australia*
Mean length of stay (days)	0.8	0.8	0.9	0.9	0.8	0.9	1.0	0.8
					Number			
Less than 1 day	39,601	27,675	13,233	11,297	4,015	2,897	2,143	100,861
1 day	19,404	14,857	9,086	6,730	2,104	1,439	872	54,492
2 - 6 days	3,331	2,955	1,410	1,092	449	210	282	9,729
7 - 13 days	600	510	295	246	63	45	75	1,834
14 - 20 days	198	194	91	108	20	38	24	673
21 - 27 days	91	102	34	42	10	15	13	307
28 or more days	206	117	61	63	30	21	10	508
Not stated	3	14	580	-	-	1	1	599
All confinements	63,434	46,424	24,790	19,578	6,691	4,666	3,420	169,003
					Per cent			
Less than 1 day	62.4	59.6	54.7	57.7	60.0	62.1	62.7	59.9
l day	30.6	32.0	37.5	34.4	31.4	30.8	25.5	32.4
2 - 6 days	5.3	6.4	5.8	5.6	6.7	4.5	8.2	5.8
7 - 13 days	0.9	1.1	1.2	1.3	0.9	1.0	2.2	1.1
14 - 20 days	0.3	0.4	0.4	0.6	0.3	0.8	0.7	0.4
21 - 27 days	0.1	0.2	0.1	0.2	0.1	0.3	0.4	0.2
28 or more days	0.3	0.3	0.3	0.3	0.4	0.5	0.3	0.3
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Table 29 : Length of antenatal stay in hospital, selected States and Territories, 1993

\* Data exclude New South Wales

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Length of stay	Vic	Qld	WA	SA	Tas	ACT	NT	Australia*
Mean length of stay (days)	4.9	4.5	4.8	5.2	4.9	4.4	5.0	4.8
				Nu	mber			
Less than 1 day	473	299	295	170	71	85	38	1,431
l day	2,188	2,241	1,123	709	296	353	153	7,063
2 days	4,355	5,325	2,214	1,329	546	501	370	14,640
3 days	8,816	8,541	3,634	2,009	788	698	517	25,003
4 days	12,202	9,296	3,633	3,437	1,266	832	535	31,201
5 days	11,667	7,815	4,362	4,643	1,494	831	637	31,449
6 days	9,300	5,103	3,431	2,883	960	602	427	22,706
7 - 13 days	13,319	6,541	4,719	4,320	1,145	682	652	31,378
14 - 20 days	169	234	88	105	43	12	42	693
21 - 27 days	24	60	9	16	9	-	10	128
28 or more days	13	63	6	11	1	2	5	101
Not stated	2	26	661	1	-	-	-	690
All hospital confinements	62,528	45,544	24,175	19,633	6,619	4,598	3,386	166,483
				Pe	r cent			
Less than 1 day	0.8	0.7	1.3	0.9	1.1	1.8	1.1	0.9
l day	3.5	4.9	4.8	3.6	4.5	7.7	4.5	4.3
2 days	7.0	11.7	9.4	6.8	8.2	10.9	10.9	8.8
3 days	14.1	18.8	15.5	10.2	11.9	15.2	15.3	15.1
4 days	19.5	20.4	15.5	17.5	19.1	18.1	15.8	18.8
5 days	18.7	17.2	18.6	23.7	22.6	18.1	18.8	19.0
6 days	14.9	11.2	14.6	14.7	14.5	13.1	12.6	13.7
7 - 13 days	21.3	14.4	20.1	22.0	17.3	14.8	19.3	18.9
14 - 20 days	0.3	0.5	0,4	0.5	0.6	0.3	1.2	0.4
21 - 27 days	0.0	0.1	0.0	0.1	0.1	-	0.3	0.1
28 or more days	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.1
All hospital confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 30 :	Length of postnatal sta	y, hospital confinements	, selected States and Territories, 1993
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\* Data exclude New South Wales

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Accommodation status/ Length of postnatal stay	Qld	WA	SA	Tas	ACT	Total
Public (n)	28,418	14,545	11,969	3,812	2,332	61,076
Mean length of stay (days)	3.9	4.0	4.5	4.4	4.0	4.1
			Per cent	:		
l day or less	7.9	8.9	6.3	8.4	13.0	8.1
2 days	16.6	13.8	9.9	11.8	13.4	14.2
3 days	24.8	22.0	14.6	15.6	16.1	21.2
4 days	22.6	18.2	21.7	21.0	17.9	21.1
5 days	13.9	17.7	21.1	19.7	15.5	16.6
6 days	6.5	9.9	12.3	10.1	12.0	8.9
7 or more days	7.6	9.4	14.1	13.4	12.2	9.8
All confinements	100.0	100.0	100.0	100.0	100.0	100.0
Private (n)	17,096	8,924	7,663	2,807	2,192	38,682
Mean length of stay (days)	5.6	6.1	6.1	5.5	4.7	5.8
			Per cen	t		
l day or less	1.7	1.2	1.6	1.7	5.6	1.8
2 days	3.5	2.3	1.8	3.4	8.3	3.2
3 days	8.7	4.7	3.4	6.9	14.4	6.9
4 days	16.7	11.0	10.9	16.6	18.5	14.4
5 days	22.6	19.9	27.7	26.5	20.6	23.1
6 days	19.0	22.2	18.5	20.5	14.4	19.5
7 or more days	27.7	38.6	36.0	24.5	18.2	31.1
All confinements	100.0	100.0	100.0	100.0	100.0	100.0

#### Table 31 : Length of postnatal stay by accommodation status, hospital confinements, selected States and Territories, 1993

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Characteristic	Confinements (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			
All confinements	165,793	14.0	33.9	32.7	14.2	3.6	1.1	0.6
Maternal age								
Less than 20	8,822	18.6	45.4	26.0	6.2	1.9	1.1	0.8
20-24	32,711	19.5	41.8	27.6	8.3	1.7	0.6	0.4
25-29	56,680	13.2	33.4	34.0	14.7	3.4	0.9	0.5
30-34	48,543	11.4	29.7	35.3	17.2	4.5	1.3	0.6
35-39	16,434	11.2	27.2	33.7	18.9	6.3	1.9	0.8
40 and over	2,596	10.7	26.7	32.8	19.2	7.0	2.5	1.1
Not stated	-,	-	28.6	57.1	14.3	-		-
Parity								
None	65,399	7.0	28.9	37.2	19.4	5.1	1.6	0.7
One	55,380	16.4	36.9	31.4	11.5	2.7	0.7	0.4
Two or three	38,542	20.0	37.7	28.4	10.1	2.6	0.8	0.5
Four or more	5,994	27.3	36.4	23.1	8.7	2.6	1.2	0.8
Not stated	478	14.2	34.9	30.8	13.2	3.8	1.9	1.3
Aboriginality								
Indigenous	5,353	24.7	38.0	21.0	9.3	3.3	1.9	1.8
Non-indigenous	160,440	13.6	33.8	33.1	14.4	3.6	1.1	0.5
Accommodation stat	tus							
Public	61,076	22.3	42.4	25.5	7.0	1.6	0.7	0.6
Private	38,682	5.0	21.3	42.6	22.5	6.1	1.7	0.8
Other	123	23.6	22.8	35.0	15.4	2.4	0.8	-
Type of delivery								
Spontaneous cephal	ic 110,703	19.2	41.5	29.3	7.8	1.4	0.5	0.3
Caesarean section	32,851	0.9	12.7	38.8	32.6	10.6	3.0	1.4
Other	22,239	7.1	27.6	40.3	18.7	4.4	1.3	0.6
Size of hospital								
1-100	6,577	11.1	36.2	37.5	11.9	2.3	0.6	0.3
101-500	25,413	10.8	32.7	36.7	15.0	3.4	1.0	0.3
501-1000	35,202	8.3	26.1	38.1	20.0	5.5	1.4	0.6
1001-2000	44,969	18.0	37.7	29.5	10.9	2.6	0.8	0.6
2001 and over	53,632	16.2	36.1	29.3	13.0	3.5	1.3	0.7

# Table 32 : Length of postnatal stay in hospital by mother's age, parity, Aboriginality, accommodation status, type of delivery, and size of hospital, Australia, 1993

Table excludes confinements in New South Wales

\* Data exclude length of stay 'not stated'

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Mode of separation	NSW	Vic	Qld	WA	Tas	ACT	NT	Australia*
					Numbe	r		
Discharge home	81,919	62,524	45,533	23,515	6,619	4,583	3,386	228,079
Transfer to another hospital	4,380	1,116	1,049	696	72	68	34	7,415
Died	12	4	3	-	6	-	-	19
Other	-	-	-	~	-	-	-	-
Not stated	134	-	8	660	-	15	-	817
All confinements	86,445	63,644	46,593	24,871	6,691	4,666	3,420	236,330
				Pe	r cent			
Discharge home	94.9	98.2	97,7	97.1	98.9	98.5	99.0	96.8
Transfer to another hospital	5.1	1.8	2.3	2.9	1.1	1.5	1.0	3.1
Died	0.0	0.0	0.0	-	0.0	-	-	0.0
Other	-	-	-	-	-	-	-	-
All confinements	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

#### Table 33 : Mode of separation of mother, hospital confinements, selected States and Territories, 1993

\* Data exclude South Australia

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Month of birth	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
January	7,301	5,406	3,830	2,100	1,672	545	437	274	21,565
February	6,828	5,097	3,589	1,936	1,588	519	360	270	20,187
March	7,746	5,599	4,275	2,177	1,731	584	420	369	22,901
April	7,268	5,323	3,936	2,147	1,710	575	409	312	21,680
May	7,440	5,454	4,115	2,087	1,685	565	435	304	22,085
June	7,402	5,381	3,993	2,187	1,693	525	373	296	21,850
July	7,473	5,425	4,041	2,158	1,748	579	391	305	22,120
August	7,368	5,398	4,098	2,031	1,687	610	351	294	21,837
September	7,549	5,540	3,999	2,324	1,716	587	432	261	22,408
October	7,362	5,557	4,085	2,148	1,616	636	402	280	22,086
November	6,823	5,134	3,631	1,987	1,508	604	356	290	20,333
December	7,338	5,423	3,856	2,054	1,613	527	425	289	21,525
All births	87,898	64,737	47,448	25,336	19,967	6,856	4,791	3,545*	260,578
					Per cen	t			
January	8.3	8.4	8.1	8.3	8.4	7.9	9.1	7.7	8.3
February	7.8	7.9	7.6	7.6	8.0	7.6	7.5	7.6	7.7
March	8.8	8.6	9.0	8.6	8.7	8.5	8.8	10.4	8.8
April	8.3	8.2	8.3	8.5	8.6	8.4	8.5	8.8	8.3
May	8.5	8.4	8.7	8.2	8.4	8.2	9.1	8.6	8.5
June	8.4	8.3	8.4	8.6	8.5	7.7	7.8	8.4	8.4
July	8.5	8.4	8.5	8.5	8.8	8.4	8.2	8.6	8.5
August	8.4	8.3	8.6	8.0	8.4	8.9	7.3	8.3	8.4
September	8.6	8.6	8.4	9.2	8.6	8.6	9.0	7.4	8.6
October	8.4	8.6	8.6	8.5	8.1	9.3	8.4	7.9	8.5
November	7.8	7.9	7.7	7.8	7.6	8.8	7.4	8.2	7.8
December	8.3	8.4	8.1	8.1	8.1	7.7	8.9	8.2	8.3
All births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 34 : Infant's month of birth, all births, States and Territories, 1993

\* Data include 1 baby's date of birth 'not stated'

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Infant's sex	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
All births									
Male	45,088	33,260	24,593	13,101	10,296	3,534	2,406	1,818	134,096
Female	42,566	31,464	22,849	12,233	9,669	3,322	2,377	1,719	126,199
Indeterminate	17	13	6	2	2	-	2	1	43
Not stated	227	-	-	-	-	-	6	7	240
All births	<b>87,898</b>	64,737	47,448	25,336	19,967	6,856	4,791	3,545	260,578
Sex ratio	105.9	105,7	107.6	107.1	106.5	106.4	101.2	105.8	106.3
Singletons									
Male	43,946	32,307	23,917	12,741	10,008	3,463	2,337	1,785	130,504
Female	41,431	30,559	22,190	11,881	9,389	3,249	2,290	1,683	122,672
Indeterminate	14	11	3	2	1	-	2	1	34
Not stated	222	-	-	-	-	-	6	-	228
Sex ratio	106.1	105.7	107.8	107.2	106.6	106.6	102.1	106.1	106.4
Twins									
Male	1,103	917	629	335	279	69	69	33	3,434
Female	1,101	869	620	335	268	69	87	36	3,385
Indeterminate	3	2	3	-	1	-	-	-	9
Not stated	n,	-	-	-	-	•	-	7	10
Sex ratio	100.2	105.5	101.5	100.0	104.1	100.0	79.3	91.7	101.4
Other multiple births									
Male	39	36	47	25	9	2	-	-	158
Female	34	36	39	17	12	4	-	-	142
Indeterminate	-	-	-	-	-	-	-	-	-
Not stated	2	-	-	-	-	-	-	-	2
Sex ratio	114.7	100.0	120.5	147.1	75.0	50.0	-	-	111.3
					Per cen	it			
All births									
Male	51.4	51.4	51.8	51.7	51.6	51.5	50.3	51.4	51.5
Female	48.6	48.6	48.2	48.3	48.4	48.5	49.7	48.6	48.5
Indeterminate	0.0	0.0	0.0	0.0	0.0	-	0.0	0.0	0.0
All births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Singletons									
Male	51.5	51.4	51.9	51.7	51.6	51.6	50.5	51.5	51.5
Female	48.5	48.6	48.1	48.2	48.4	48.4	49.5	48.5	48.4
Twins									
Male	50.0	51.3	50.2	50.0	50.9	50.0	44.2	47.8	50.3
Female	49.9	48.6	49.5	50.0	48.9	50,0	55,8	52.2	49.6
Other multiple births									
Male	53.4	50.0	54.7	59.5	42.9	33.3	-	-	52.7
Female	46.6	50.0	45.3	40.5	57.1	66.7	-	-	47.3

## Table 35 : Infant's sex by plurality, all births, States and Territories, 1993

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Birthweight (g)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
Mean birthweight (g)	3,364	3,362	3,360	3,346	3,346	3,390	3,366	3,215	3,358
					Numbe	r			
Less than 500	150	161	123	70	41	10	30	8	593
500 - 999	485	283	274	114	97	30	15	27	1,325
1000 - 1499	538	355	324	159	124	46	31	39	1,616
1500 - 1999	912	759	659	296	287	70	57	57	3,097
2000 - 2499	3,082	2,466	1,799	1,008	809	229	161	189	9,743
2500 - 2999	13,369	9,877	6,866	3,933	3,108	1,020	705	758	39,636
3000 - 3499	32,209	23,541	17,064	9,410	7,256	2,405	1,670	1,315	94,870
3500 - 3999	26,927	19,779	14,539	7,550	5,990	2,156	1,473	872	79,286
4000 - 4499	8,724	6,347	4,840	2,407	1,941	737	510	229	25,735
4500 and over	1,398	1,127	845	389	314	153	76	38	4,340
Not stated	104	42	115	-	-	-	63	13	337
All births	87,898	64,737	47,448	25,336	19,967	6,856	4,791	3,545	260,578
Less than 1000	635	444	397	184	138	40	45	35	1,918
Less than 1500	1,173	799	721	343	262	86	76	74	3,534
Less than 2500	5,167	4,024	3,179	1,647	1,358	385	294	320	16,374
					Per cen	t			
Less than 500	0.2	0.2	0.3	0.3	0.2	0.1	0.6	0.2	0.2
500 - 999	0.6	0.4	0.6	0.4	0.5	0.4	0.3	0.8	0.5
1000 - 1499	0.6	0.5	0.7	0.6	0.6	0.7	0.7	1.1	0.6
1500 - 1999	1.0	1.2	1.4	1.2	1.4	1.0	1.2	1.6	1.2
2000 - 2499	3.5	3.8	3.8	4.0	4.1	3.3	3.4	5.4	3.7
2500 - 2999	15.2	15.3	14.5	15.5	15.6	14.9	14.9	21.5	15.2
3000 - 3499	36.7	36.4	36.1	37,1	36.3	35.1	35.3	37.2	36.5
3500 - 3999	30.7	30.6	30.7	29.8	30.0	31.4	31.2	24.7	30.5
4000 - 4499	9.9	9.8	10.2	9.5	9.7	10.7	10.8	6,5	9.9
4500 and over	1.6	1.7	1.8	1.5	1.6	2.2	1.6	1.1	1.7
All births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 1000	0.7	0.7	0.8	0.7	0.7	0.6	1.0	1.0	0.7
Less than 1500	1.3	1.2	1.5	1.4	1.3	1.3	1.6	2.1	1.4
Less than 2500	5.9	6.2	6.7	6.5	6,8	5.6	6.2	9.1	6.3

 Table 36 : Infant's birthweight, all births, States and Territories, 1993

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Birthweight (g)	Live bir	ths	Fetal de	aths
-	Number	Per cent	Number	Per cent
Less than 500	199	0.1	394	24.1
500 - 999	912	0.4	413	25.3
1000 - 1499	1,458	0.6	158	9.7
1500 - 1999	2,963	1.1	134	8.2
2000 - 2499	9,612	3.7	131	8.0
2500 - 2999	39,467	15.3	169	10.3
3000 - 2499	94,739	36.6	131	8.0
3500 - 3999	79,213	30.6	73	4.5
4000 - 4499	25,712	9.9	23	1.4
4500 and over	4,332	1.7	8	0.5
Not stated	306		31	
All births	258,913	100.0	1,665	100.0
Less than 1000	1,111	0.4	807	49.4
Less than 1500	2,569	1.0	965	59.1
Less than 2500	15,144	5.9	1,230	75.3
Mean birthweight (g)	3,370		1,499	

 Table 37: Infant's birthweight, live births and fetal deaths, Australia, 1993

 Table 38 : Infant's birthweight by plurality, all births, Australia, 1993

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Birthweight (g)	Sing	letons	Tv	vins	Tri	plets	Other mult	iple births
	Number	Per cent	Number	Per cent	Number	Per cent	Number	Per cent
Less than 500	476	0.2	103	1.5	13	4.4	1	20.0
500 - 999	1,062	0.4	220	3.2	39	13.2	4	80.0
1000 - 1499	1,184	0.5	369	5.4	63	21.4	-	-
1500 - 1999	2,219	0.9	778	11.4	100	33.9	-	-
2000 - 2499	7,733	3.1	1,941	28.5	69	23.4	-	-
2500 - 2999	37,315	14.7	2,310	33.9	11	3.7	-	-
3000 - 3499	93,922	37.1	948	13.9	-	-	-	-
3500 - 3999	79,152	31.3	134	2.0	-	-	-	-
4000 - 4499	25,722	10.2	13	0.2	~	-	-	-
4500 and over	4,339	1.7	1	0.0	-	-	-	-
Not stated	312	-	23	-	2	-	-	-
All births	253,436	100.0	6,840	100.0	297	100.0	5	100.0
Less than 1000	1,538	0.6	323	4,7	52	17.6	5	100.0
Less than 1500	2,722	1.1	692	10.2	115	<b>3</b> 9.0	5	100.0
Less than 2500	12,674	5.0	3,411	50.0	284	96.3	5	100.0
Mean birthweight (g)	3,	386	2,	398	1,	589	63	32

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Birthweight (g)	М	ale	Fei	nale	Indetermina	te / Not stated	
	Number	Per cent	Number	Per cent	Number	Per cent	
Less than 500	299	0.2	276	0.2	18	7.0	
500 - 999	682	0.5	637	0.5	6	2.3	
1000 - 1499	865	0.6	749	0.6	2	0.8	
1500 - 1999	1,534	1.1	1,558	1.2	5	1.9	
2000 - 2499	4,420	3.3	5,314	4.2	9	3.5	
2500 - 2999	17,171	12.8	22,432	17.8	33	12.8	
3000 - 3499	45,481	34.0	49,312	39.1	77	30.0	
3500 - 3999	44,155	33.0	35,060	27.8	71	27.6	
4000 - 4499	16,304	12.2	9,399	7.5	32	12.5	
4500 and over	3,019	2.3	1,317	1.0	4	1.6	
Not stated	166	-	145	-	26	-	
All births	134,096	100.0	126,199	100.0	283	100.0	
Less than 1000	981	0.7	913	0.7	24	9.3	
Less than 1500	1,846	1.4	1,662	1.3	26	10.1	
Less than 2500	7,800	5.8	8,534	6.8	40	15.6	
Mean birthweight (g)	3,420		3,2	293	3,119		

## Table 39 : Infant's birthweight by sex, all births, Australia, 1993

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Birthweight (g)	NSW	Vic	Qid	WA	SA	Tas	ACT	NT	Australia
Mean birthweight (g)	3,169	3,321	3,201	3,111	3,087	3,176	3,162	3,059	3,154
					Numbe	r			
Less than 500	9	-	9	12	1	-	-	7	38
500 - 999	13	4	22	18	10	-	1	12	80
1000 - 1499	23	-	25	32	8	-	-	30	118
1500 - 1999	20	5	50	28	15	-	1	27	146
2000 - 2499	91	22	149	101	25	-	4	92	484
2500 - 2999	336	73	470	338	98	3	16	340	1,674
3000 - 3499	532	171	809	516	127	2	10	424	2,591
3500 - 3999	325	141	524	305	79	-	10	228	1,614
4000 - 4499	98	34	169	91	34	1	5	59	491
	19	5	30	15	3	-	-	11	83
4500 and over Not stated	3	-	30 7	-	-	-	-	6	16
All births	1,469	455	2,264	1,456	400	6	49	1,236	7,335
Less than 1000	22	4	31	30	11	-	1	19	118
Less than 1500	45	4	56	62	19	-	1	49	236
Less than 2500	156	31	255	191	59	-	6	168	866
					Per cen	t			
Lass than 500	0.6		0.4	0.8	0.3	-		0.6	0.5
Less than 500 500 - 999	0.0	0.9	1.0	1.2	2,5		2.0	1.0	1.1
1000 - 1499	1.6		1.1	2.2	2.0			2.4	1.6
		- 1 1			3.8	-	20	2.4	
1500 - 1999	1.4	1.1	2.2 6.6	1.9		-	2.0 8.2	2.2 7.5	2.0
2000 - 2499	6.2	4.8		6.9	6.3	-			6.6
2500 - 2999	22.9	16.0	20.8	23.2	24.5	50.0	32.7	27.6	22.9
3000 - 3499	36.3	37.6	35.8	35.4	31.8	33,3	20.4	34.5	35.4
3500 - 3999	22.2	31.0	23.2	20.9	19.8		24.5	18.5	22.1
4000 - 4499	6.7	7.5	7.5	6.3	8.5	16.7	10.2	4.8	6.7
4500 and over	1.3	1.1	1.3	1.0	0.8	-	-	0.9	1.1
All births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Less than 1000	1.5	0.9	1.4	2.1	2.8	-	2.0	1.5	1.6
Less than 1500	3.1	0.9	2.5	4.3	4.8	-	2.0	4.0	3.2
Less than 2500	10.6	6.8	11,3	13.1	14.8	-	12.2	13.7	11.8

 Table 40 : Infant's birthweight, indigenous births, States and Territories, 1993

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Characteristic	Less the	an 1000g	Less than	1500g	Less tha	n 2500g	2500g a	and over
	Number	Per cent	Number P	er cent	Number	Per cent	Number	Per cent
Maternal country of birth/ Aboriginality								
Australia: non-indigenous	1,332	0.7	2,477	1.3	11,663	6.1	179,685	93.9
Australia: indigenous	118	1.6	236	3.2	866	11.8	6,453	88.2
New Zealand	24	0.4	65	1.0	374	5.9	5,913	94.1
United Kingdom	111	0.8	188	1.4	896	6.6	12,775	93.4
Italy	10	0.8	15	1.2	78	6.3	1,158	93.7
Former Yugoslavia	14	0.9	24	1.5	107	6.5	1,536	93.5
Lebanon	26	0.8	42	1.3	181	5.5	3,083	94.5
China	17	0.7	26	1.1	114	5.0	2,181	95.0
Hong Kong	5	0.5	. 9	0.8	51	4.7	1,044	95.3
India	13	1.0	18	1.4	123	9.7	1,144	90.3
Malaysia	15	1.1	23	1.6	98	7.0	1,300	93.0
Philippines	19	0.7	52	1.9	184	6.7	2,566	93.3
Vietnam	22	0.5	40	1.0	260	6.3	3,880	93.7
Other countries	160	0.8	265	1.3	1,220	6.0	19,233	94.0
Not stated	32	-	54	-	159	-	1,916	-
Maternal age								
Less than 15	2	1.5	2	1.5	14	10.4	121	89.6
15-19	124	0.9	242	1.8	1,107	8.2	12,453	91.8
20-24	384	0.7	726	1.4	3,335	6.5	48,193	93.5
25-29	585	0.7	1,094	1.2	5,268	6.0	82,689	94.0
30-34	533	0.7	949	1.2	4,462	5.9	71,772	94,1
35-39	242	0.9	435	1.6	1,850	7.0	24,557	93.0
40 and over	48	1.1	85	2.0	330	7.8	3,906	92.2
Not stated	-		1		8	-	176	-
Parity								
None	841	0.8	1,654	1.6	7,782	7.6	95,118	92.4
One	526	0.6	930	1.1	4,445	5.1	82,244	94.9
Two	281	0.6	493	1.1	2,309	5.3	41,513	94.7
Three	147	0.9	240	1.4	1,047	6.3	15,541	93.7
Four or more	111	1.2	196	2.1	728	7.7	8,697	92.3
Not stated	12	-	21	-	63	-	754	-
Marital status								
Married / de facto	1,586	0.7	2,905	1.3	13,506	5.9	213,630	94.1
Single	263	1.0	486	1.8	2,305	8.6	24,591	91.4
Other	69	1.1	143	2.3	563	9.1	5,646	90.9
Accommodation status*								
Public	932	0.8	1,736	1.5	7,825	6.8	106,807	93.2
Private	485	0.6	895	1.2	4,130	5.4	72,100	94.6
Place of birth								
Hospital	1,875		3,478	1.4	16,198	6.3	238,900	93.7
Birth centre	7	0.2	7	0.2	43	1.3	3,357	98.7
Home	-	-	-	-	6	0.7	801	99.3
Born before arrival	23	3.0	33	4.3	93	12.1	675	87.9
Other	10	12.3	13	16.0	29	35.8	52	64.2
Not stated	3	~	3	-	5	-	82	-

# Table 41 : Distribution of birthweight by mother's Aboriginality, country of birth, age, parity, marital status, accommodation status, and place of birth, Australia, 1993

\* Data exclude Victoria and Northern Territory

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Low birthweight category/Hospital size	NSW	Vic	Qld	WA	SA	Tas	АСТ	NT	Australia
Birthweight: 500 - 999g									
Number of births	324	196	203	82	62	19	11	15	912
					Per cen	t			
1-100 confinements	1.2	-	-	6.1	1.6	-	-	-	1.1
101-500 confinements	4.6	2.0	3.0	-	4.8	-	-	6.7	3.2
501-1000 confinements	8.0	6.1	3.0	2,4	1.6	5.3	-	20.0	5.6
1001-2000 confinements	11.1	3.6	25.6	-	4.8	5.3	-	66.7	12.1
2001 and over confinements	74.7	88.3	68.5	91.5	87.1	89.5	100.0	-	77.9
Other births	0.3	-	-	-	-	-	-	6.7	0.2
All births: 500 - 999g	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Birthweight: 1000 - 1499g									
Number of births	487	319	292	143	118	39	27	33	1,458
					Per cen	t			
1-100 confinements	0.4	-	0.3	1.4	-	-	-	-	0.3
101-500 confinements	1.4	2.2	1.4	2.8	3.4	-	-	3.0	1.9
501-1000 confinements	8.2	8.5	4.5	2.1	1.7	7.7	-	12.1	6.3
1001-2000 confinements	4.5	6.9	17.5	3.5	7.6	15.4	3.7	78.8	10.0
2001 and over confinements	85.4	82.4	76.4	90.2	87.3	76.9	96.3	-	81.3
Other births	-	-	-	-	-	-	-	6.1	0.1
All births: 1000 - 1499g	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Birthweight: 1500 - 1999g									
Number of births	881	715	638	281	271	. 68	53	56	2,963
					Per cen	t			
1-100 confinements	0.8	0.4	1.1	0.4	1.1	-	-	1.8	0.7
101-500 confinements	5.6	3.4	3.4	5.0	7.0	2.9	1.9	3.6	4.5
501-1000 confinements	13.4	16.9	9.6	4.6	4.4	13.2	-	30.4	11.8
1001-2000 confinements	9.3	15.7	32.1	4.6	9.6	25.0	9.4	60.7	17.7
2001 and over confinements	70.8	63.6	53.6	85.1	77.9	58.8	88.7	-	65.1
Home births	0.1	-	0.2	0.4	-	-	-	-	0.1
Other births	-	-	-	-	-	-	-	3.6	0.1
All births: 1500 - 1999g	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

# Table 42 : Proportion of liveborn low birthweight infants born in hospitals of different sizes, States and Territories, 1993

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Apgar score	NSW	Qld	WA	SA	Tas	ACT	NT	Australia*
				Numbe	r			
0	55	31	-	8	2	_	1	97
1	309	263	113	95	29	30	39	878
2	507	383	168	164	48	52	47	1,369
3	736	571	303	244	98	80	60	2,092
4	1,022	898	477	485	132	94	82	3,190
5	1,756	1,520	.924	798	209	165	156	5,528
6	2,935	2,416	1,600	1,534	421	338	232	9,476
7	4,674	4,510	3,199	2,761	700	480	396	16,720
8	10,713	9,908	6,642	5,402	1,578	913	720	35,876
9	22,328	24,705	11,347	8,036	3,282	2,446	1,704	73,848
10	859	1,841	344	272	310	53	31	3,710
Not stated	41,278	110	43	45	-	54	30	41,560
All live births	87,172	47,156	25,160	19,844	6,809	4,705	3,498	194,344
				Per cen	t			
0	0.1	0.1	-	0.0	0.0	-	0.0	0.1
1	0.7	0.6	0.4	0.5	0.4	0.6	1.1	0.6
2	1.1	0.8	0.7	0.8	0.7	1.1	1.4	0.9
3	1.6	1.2	1.2	1.2	1.4	1,7	1.7	1.4
4	2.2	1.9	1.9	2.4	1.9	2.0	2.4	2.1
5	3.8	3.2	3.7	4.0	3.1	3.5	4.5	3.6
6	6.4	5.1	6.4	7.7	6.2	7.3	6.7	6.2
7	10.2	9.6	12.7	13.9	10.3	10.3	11.4	10.9
8	23.3	21.1	26.4	27.3	23.2	19.6	20.8	23.5
9	48.7	52.5	45.2	40.6	48.2	52.6	49.1	48.3
10	1.9	3.9	1.4	1.4	4.6	1.1	0.9	2.4
All live births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 - 3	3.4	2.6	2.3	2.5	2.6	3.5	4.2	2.8
4 - 6	12.4	10.3	11.9	14.2	11.2	12.8	13.6	11.9
7 - 10	84.1	87.1	85.7	83.2	86.2	83.7	82.2	85.2

Table 43 :	Infant's Apgar score at 1	minute, live births,	selected States and	Territories, 1993
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\* Data exclude Victoria

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Apgar score	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
0	81	18	37	8	10	1	-	1	156
1	74	60	81	14	22	7	8	6	272
2	65	32	46	14	8	6	5	9	185
3	92	59	57	19	24	6	11	9	277
4	192	95	98	32	45	19	7	8	496
5	402	208	197	73	76	41	22	22	1,041
6	829	381	299	216	152	55	45	42	2,019
7	1,847	978	692	507	452	117	104	111	4,808
8	5,328	2,993	2,319	1,698	1,437	345	328	243	14,691
9	53,674	32,506	23,794	16,598	12,144	3,315	3,488	2,417	147,936
10	23,528	26,908	19,405	5,942	5,441	2,897	643	600	85,364
Not stated	1,060	85	131	39	33	-	44	30	1,422
All live births	87,172	64,323	47,156	25,160	19,844	6,809	4,705	3,498	258,667
					Per cen	t			
0	0.1	0.0	0.1	0.0	0.1	0.0	-	0.0	0.1
1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	0.1
2	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.3	0.1
3	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	0.1
4	0.2	0.1	0.2	0.1	0.2	0.3	0.2	0.2	0.2
5	0.5	0.3	0.4	0.3	0.4	0.6	0.5	0.6	0.4
6	1.0	0.6	0.6	0.9	0.8	0.8	1.0	1.2	0.8
7	2.1	1.5	1.5	2.0	2.3	1.7	2.2	3.2	1.9
8	6.2	4.7	4.9	6.8	7.3	5.1	7.0	7,0	5.7
9	62.3	50.6	50.6	66.1	61.3	48.7	74.8	69.7	57.5
10	27.3	41.9	41.3	23.7	27.5	42.5	13.8	17.3	33.2
All live births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 -3	0.3	0.2	0.4	0.2	0.3	0.3	0.5	0.7	0.3
4 - 6	1.7	1.1	1.3	1.3	1.4	1.7	1.6	2.1	1.4
7 - 10	98.0	98.7	98.3	98.5	98.3	98.0	97.9	97. <b>2</b>	98.3

 Table 44 : Infant's Apgar score at 5 minutes, live births, States and Territories, 1993

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Apgar score	Less than 1000g	1000-1499g	1500-1999g	2000-2499g	2500g and over	Not stated
All live births						
Apgar score: 1 min	ute *					
Live births (n)	859	1,138	2,240	7,168	182,688	251
			Per co	ent		
0	2.6	0.5	0.6	0.1	0.0	1.1
1-3	43.6	20.2	11.6	5.3	2.3	11.6
4-6	27.5	35.3	26.5	18,3	11.2	20.0
<b>7-</b> 10	26.3	44.0	61.2	76.4	86.5	67.4
Apgar score: 5 min	utes					
Live births (n)	1,095	1,457	2,955	9,602	243,273	285
			Per co	ent		
0	6.1	0.6	0.3	0.1	0.0	1.6
1-3	18.8	3.6	1.4	0.5	0.0	6.8
4-6	19.0	12.5	6.7	2.9	1.1	10.0
7-10	56.0	83.4	91.5	96.5	98.7	81.7
Indigenous live birth Apgar score: 1 min						
Live births (n)	65	100	132	455	5,998	13
	0.5	100	Per ce		5,770	15
			1010			
0	1.7	-	-	0.2	0.1	-
1-3	55.2	23.1	8.9	5.2	3.4	
4-6	22.4	40.7	25.0	20.7	13.6	12.5
7-10	20.7	36.3	66.1	73.9	83.0	87.5
Apgar score: 5 min	utes					
Live births (n)	66	100	137	477	6,422	13
			Per ce	ent		
0	9.8	2.1	-	0.2	0.0	-
1-3	27.9	8.2	0.7	0.4	0.3	-
4-6	19.7	9.3	3.7	3.4	2.0	-
7-10	42.6	80.4	95.6	96.0	97.6	100.0

### Table 45: Apgar scores at 1 and 5 minutes, by birthweight and Aboriginality, live births, Australia, 1993

Table excludes Apgar scores 'not stated'

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\* Data exclude Victoria

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Apgar score	Less than 1000g	1000-1499g	1500-1999g	2000-2499g	2500g and over	Not stated
Singleton live births						
Apgar score: 1 minu	ite *					
Live births (n)	669	820	1,599	5,745	180,351	257
			Per ce	ent		
0	3.1	0.7	0.7	0.1	0.0	1.0
1-3	42.5	23.4	13.5	5.6	2.3	11.0
4-6	26.0	35.6	27.0	18.4	11.2	19.9
7-10	28.4	40.4	58.8	75.9	86.5	68.1
Apgar score: 5 minu	ites					
Live births (n)	850	1,046	2,097	7,612	240,055	286
			Per ce	ent		
0	5.3	0.5	0.4	0.1	0.0	1.6
1-3	19.2	4.2	1.8	0.6	0.2	7.3
4-6	17.9	13.6	8.0	3.2	1.1	8.9
7-10	57.6	81.7	89.8	96.1	98.7	82.1
Multiple live births						
Apgar score: 1 minu	ite *					
Live births (n)	206	319	649	1,433	2,527	15
			Per ce	ent		
0	1.1	-	0.4	-	-	-
1-3	46.2	11.9	6.9	3.9	2.7	25.0
4-6	30.6	34.7	25.4	18.0	13.6	-
7-10	22.0	53.4	67.4	78.2	83.7	75.0
Apgar score: 5 minu	ites					
Live births (n)	261	412	866	2,000	3,408	20
			Per ce	ent		
0	8.6	0.7	0.1	-	-	-
1-3	18.0	2.0	0.5	0.1	0.2	10.0
4-6	22.7	9.8	3.6	2.1	1.1	30.0
7-10	50.8	87.5	95.8	97.8	98.7	60.0

#### Table 46 : Apgar scores at 1 and 5 minutes by birthweight and plurality, live births, Australia, 1993

Table excludes Apgar scores 'not stated'

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\* Data exclude Victoria

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Length of stay	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Numbe	r			
Less than 1 day	823	443	335	269	164	67	74	41	2,216
1 day	2,280	1,905	2,036	1,031	611	262	321	139	8,585
2 days	4,337	4,150	5,121	2,158	1,257	529	477	361	18,390
3 days	6,319	8,605	8,377	3,569	1,957	761	684	508	30,780
4 days	7,476	11,958	9,120	3,660	3,351	1,246	803	524	38,138
5 days	7,554	11,432	7,614	4,405	4,555	1,473	792	615	38,440
6 days	5,826	9,091	5,000	3,495	2,804	949	564	415	28,144
7 - 13 days	6,517	13,334	6,494	4,886	4,232	1,136	646	626	37,871
14 - 20 days	395	612	512	199	287	71	44	54	2,174
21 - 27 days	173	294	247	55	176	44	23	29	1,041
28 or more days	505	490	531	177	404	76	45	44	2,272
Not stated	39,259	1	127	-	-	-	1	-	39,388
All live births	81,464	62,315	45,514	23,904	19,798	6,614	4,474	3,356	247,439
					Per cen	t			
Less than 1 day	2.0	0.7	0.7	1.1	0.8	1.0	1.7	1.2	1.1
1 day	5.4	3.1	4.5	4.3	3.1	4.0	7.2	4.1	4.1
2 days	10.3	6.7	11.3	9.0	6.3	8.0	10.7	10.8	8.8
3 days	15.0	13.8	18.5	14.9	9.9	11.5	15.3	15.1	14.8
4 days	17.7	19.2	20.1	15.3	16.9	18.8	18.0	15.6	18.3
5 days	17.9	18.3	16.8	18.4	23.0	22.3	17.7	18.3	18.5
6 days	13.8	14.6	11.0	14.6	14.2	14.3	12.6	12.4	13.5
7 - 13 days	15.4	21.4	14.3	20.4	21.4	17.2	14.4	18.7	18.2
14 - 20 days	0.9	1.0	1.1	0.8	1.4	1.1	1.0	1.6	1.0
21 - 27 days	0.4	0.5	0.5	0.2	0.9	0.7	0.5	0.9	0,5
28 or more days	1.2	0.8	1.2	0.7	2.0	1.1	1.0	1.3	1.1
All live births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

 Table 47 : Length of infant's stay in hospital, live births, States and Territories, 1993

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Characteristic	Infants (n)*	0-2 days	3-4 days	5-6 days	7-13 days	14-20 days	21-27 days	28 or more days
Plurality					Per cent			
Singleton	166,637	14.9	33.3	31.7	17.9	0.9	0.4	0.9
Twin	4,566	6.2	6.3	14.2	45.8	11.1	5.7	10.7
Other multiple birth	226	12.4	2.2	3.1	17.3	13.3	8.4	43.4
Aboriginality								
Indigenous	5,772	26.4	35.0	19.5	13.9	2.1	0.9	2.3
Non-indigenous	165,657	14.3	32.5	31.6	18.8	1.1	0.6	1.1
Gestational age								
20-27 weeks	992	61.3	1.8	0.9	2.6	1.0	0.8	31.6
28-31 weeks	1,245	17.3	2.2	3.5	7.9	5.7	7.5	56.0
32-36 weeks	9,767	9.2	11.5	17.0	33.4	13.4	7.4	8.1
37-41 weeks	152,906	14.6	34.2	32.6	18.0	0.4	0.1	0.1
42 or more weeks	5,832	17.1	36.8	30.8	15.1	0.1	0.1	0.1
Not stated	687	24.2	32.3	22.9	14.1	2.2	0.7	3.6
Birthweight								
Less than 1000g	1,057	59.0	1.6	1.7	2.7	1.1	1.1	32.6
1000-1499g	1,028	18.9	2.1	2.2	5.6	4.6	6.6	59.9
1500-1999g	2,131	10.6	3.2	6.5	19.4	16.1	15.7	28.5
2000-2499g	6,602	7.8	14.0	20.7	35.7	12.9	5.5	3.5
2500g and over	160,409	14.7	34.1	32.4	18.1	0.5	0.1	0.1
Not stated	202	31.2	25.7	23.8	15.8	1.5	0.5	1.5

# Table 48 : Length of infant's stay in hospital by plurality, Aboriginality, gestational age, and birthweight,live births, Australia, 1993

Table excludes New South Wales

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\* Data exclude length of stay 'not stated'

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Mode of separation	NSW	Vic	Qld	WA	Tas	ACT	NT	Australia*
				Numbe	r			
Discharge home	81,295	62,083	45,220	23,861	6,414	4,495	3,400	226,768
Transfer to another hospital	5,426	1,815	1,478	1,100	103	187	66	10,175
Fetal death	534	414	291	176	47	37	40	1,539
Liveborn / Died	236	207	190	54	-	19	24	730
Other	-	71	-	43	-	1	-	115
Not stated	186	-	106	-	200	14	7	513
All births	87,677	64,590	47,285	25,234	6,764	4,753	3,537	239,840
				Per cen	t			
Discharge home	92.9	96.1	95.8	94.6	97.7	94.9	96.3	94.8
Transfer to another	6.2	2.8	3.1	4.4	1.6	3.9	1.9	4,3
Fetal death	0.6	0.6	0.6	0.7	0.7	0.8	1.1	0.6
Liveborn / Died	0.3	0.3	0.4	0.2	-	0.4	0.7	0.3
Other	-	0.1	-	0.2	-	0.0	-	0.0
All births	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Table 49 :	Mode of separation	of infants born in	hospitals or birth	centres, States and	Territories, 1993
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\* Data exclude South Australia

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Definition/Outcome		Nun	ıber			Rate per 1,0	00 births	
	1991	1992**	1993	1991-1993	1991	1992**	1993	1991-1993
400g/20 weeks								
Fetal deaths	1,933	1,943	1,656	5,532	7.5	7.3	6.3	7.0
Early neonatal deaths	1,141	1,203	1,017	3,361	4.4	4.6	3.9	4.3
Perinatal deaths	3,074	3,146	2,673	8,893	11.8	11.8	10.2	11.2
Live births	257,247	264,151	260,229	781,627				
500g/22 weeks								
Fetal deaths	1,478	1,493	1,245	4,216	5.7	5.6	4.8	5.4
Early neonatal deaths	818	813	687	2,318	3.2	3.1	2.6	3.0
Neonatal deaths	1,012	1,015	886	2,913	3.9	3.8	3.4	3.7
Perinatal deaths (WHO)	2,296	2,306	1,932	6,534	8.9	8.7	7.4	8.3
Perinatal deaths (ABS)	2,490	2,508	2,131	7,129	9.6	9.4	8.2	9.1
Live births	257,194	263,963	260,061	781,218				
1000g/28 weeks								
Fetal deaths	1,029	1,012	823	2,864	4.0	3.8	3.2	3.7
Early neonatal deaths	481	466	409	1,356	1.9	1.8	1.6	1.7
Perinatal deaths	1,510	1,478	1,232	4,220	5.9	5.6	4.7	5.4
Live births*	256,263	263,140	259,453	778,856				

Table 50: Fetal, neonatal and perinatal deaths and rates, various definitions, Australia, 1991-1993

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\* Estimated live births.
\*\* The figures were adjusted by excluding postneonatal deaths which coded as '0' for cessation of heartbeat, but age at death > 28 days.

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Year	Ante	epartum	Intra	Intrapartum* Not known**		All fet	al 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
1973	1,521	6.1	906	3.6	200	0.8	2,627	10.5
1974	1,525	6.2	872	3.5	209	0.8	2,606	10.5
1975	1,244	5.3	781	3.3	159	0.7	2,184	9.3
1976	1,253	5.5	692	3.0	180	0.8	2,125	9.2
1977	1,160	5.1	583	2.6	156	0,7	1,899	8.3
1978	1,204	5.3	532	2.4	169	0.7	1,905	8.4
1979	1,082	4.8	529	2.4	146	0.6	1,757	7.8
1980	1,081	4.8	492	2.2	135	0.6	1,708	7.5
1981	1,114	4.7	461	1.9	131	0.6	1,706	7.2
1982	1,114	4.6	463	1.9	128	0.5	1,705	7.1
1983	1,065	4.4	424	1.7	130	0.5	1,619	6.6
1984	1,079	4.5	387	1.6	127	0.5	1,593	6.6
1985	1,028	4.2	370	1.5	120	0.5	1,518	6.2
1986	1,055	4.3	419	1.7	111	0.5	1,585	6.5
1987	981	4.0	352	1.4	99	0.4	1,432	5.8
1988	1,002	4.0	362	1.5	109	0.4	1,473	6.0
1989	995	3.9	354	1.4	102	0.4	1,451	5.8
1990	1,087	4.1	395	1.5	108	0.4	1,590	6.0
1991	993	3.8	359	1.4	126	0.5	1,478	5.7
1992	1,052	4.0	312	1.2	129	0.5	1,493	5.6
1993	877	3.4	274	1.0	94	0.4	1,245	4.8

 Table 51:
 Type of fetal death, Australia, 1973-1993

\* Includes fetal deaths where it was not known whether heartbeat ceased before or after delivery. \*\* Not known whether heartbeat ceased before or during labour.

Year	Less th	ian 1 day	1-6	days	7-27	7 days	All neona	ital deaths*
	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
1973	1,592	6.4	899	3.6	301	1.2	2,792	11.3
1974	1,441	5.9	967	3.9	326	1.3	2,734	11.2
1975	1,287	5.5	669	2.9	261	1.1	2,217	9.5
1976	1,216	5.3	662	2.9	287	1.3	2,165	9.5
1977	1,054	4.7	524	2.3	293	1.3	1,871	8.3
1978	1,036	4.6	466	2.1	236	1.1	1,738	7.8
1979	883	4.0	462	2.1	260	1.2	1,605	7.2
1980	812	3.6	424	1.9	267	1.2	1,503	6.7
1981	800	3.4	387	1.6	253	1.1	1,440	6.1
1982	829	3.5	419	1.7	281	1.2	1,529	6.4
1983	766	3.2	350	1.4	233	1.0	1,349	5.6
1984	641	2.7	339	1.4	223	0.9	1,204	5.1
1985	691	2.8	423	1.7	298	1.2	1,416	5.8
1986	639	2.6	337	1.4	241	1.0	1,227	5.0
1987	588	2.4	329	1.3	242	1.0	1,159	4.8
1988	599	2.4	337	1.4	228	0.9	1,164	4.7
1989	499	2.0	333	1.3	222	0.9	1,058	4.2
1990	576	2.2	310	1.2	235	0.9	1,122	4.3
1991	529	2.1	289	1.1	192	0.7	1,012	3.9
1992	545	2.1	268	1.0	200	0.8	1,015	3,8
1993	449	1.7	238	0.9	198	0.8	886	3.4

 Table 52:
 Neonatal deaths by age at death, Australia, 1973-1993

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\* Includes 'not stated' age at death.

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Year	Feta	l deaths	Neonat	al deaths	Perin	natal deaths
	Number	Rate per 1,000 births	Number	Rate per 1,000 live births	Number	Rate per 1,000 births
1973	2,627	10.5	2,792	11.3	5,419	21.7
1974	2,606	10.5	2,734	11.2	5,340	21.6
1975	2,184	9.3	2,217	9.5	4,401	18.7
1976	2,125	9.2	2,165	9.5	4,290	18.7
1977	1,899	8.3	1,871	8.3	3,770	16.5
1978	1,905	8.4	1,738	7.8	3,643	16.1
1979	1,757	7.8	1,605	7.2	3,362	15.0
1980	1,708	7.5	1,503	6.7	3,211	14.1
1981	1,706	7.2	1,440	6.1	3,146	13.2
1982	1,705	7.1	1,529	6.4	3,234	13.4
1983	1,619	6.6	1,349	5.6	2,968	12.2
1984	1,593	6.6	1,204	5.1	2,797	11.7
1985	1,518	6.2	1,416	5.8	2,934	12.0
1986	1,585	6.5	1,227	5.0	2,812	11.5
1987	1,432	5.8	1,159	4,8	2,591	10.6
1988	1,473	6.0	1,164	4.7	2,637	10.7
1989	1,451	5.8	1,058	4.2	2,509	9.9
1990	1,590	6.0	1,122	4.3	2,712	10.3
1991	1,478	5.7	1,012	3.9	2,490	9.6
1992	1,493	5.6	1,015	3.8	2,508	9.4
1993	1,245	4.8	886	3.4	2,131	8.2

 Table 53:
 Fetal, neonatal and perinatal deaths, Australia, 1973-1993

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Outcome / Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
					Number				
Fetal deaths									
1987	504	362	227	143	89	32	31	44	1,432
1988	538	356	234	120	109	55	27	34	1,473
1989	476	406	221	111	127	35	28	47	1,451
1990	584	403	246	133	115	45	33	31	1,590
1991	521	340	269	143	104	38	29	34	1,478
1992	582	345	242	121	111	35	19	38	1,493
1993	451	288	197	117	96	41	21	34	1,245
1991-1993	1,554	973	708	381	311	114	69	106	4,216
Neonatal deaths									
1987	429	267	207	105	81	32	14	24	1,159
1988	408	276	198	108	84	34	21	35	1,164
1989	416	194	189	110	72	40	12	25	1,058
1990	376	302	173	105	89	26	21	30	1,122
1991	359	238	188	81	54	44	21	27	1,012
1992	409	196	191	97	46	29	21	26	1,015
1993	315	194	181	67	58	24	11	36	<b>88</b> 6
1991-1993	1,083	628	560	245	158	97	53	89	2,913
Perinatal deaths									
1987	933	629	434	248	170	64	45	68	2,591
1988	946	632	432	228	193	89	48	69	2,637
1989	892	600	410	221	199	75	40	72	2,509
1990	960	705	419	238	204	71	54	61	2,712
1991	880	578	457	224	158	82	50	61	2,490
1992	991	541	433	218	157	64	40	64	2,508
1993	766	482	378	184	154	65	32	70	2,131
1990-1993	2,637	1,601	1,268	626	469	211	122	195	7,129

#### Table 54: Fetal, neonatal and perinatal deaths by maternal State or Territory of usual residence, 1987-1993

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Outcome / Year	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
				Rate	per 1,000	births			
Fetal deaths					. ,				
1987	5.8	5.9	5.7	6.1	4.6	4.7	7.5	12.3	5.8
1988	6.3	5.7	5.7	4.8	5.7	8.1	6.2	9.8	6.0
1989	5.5	6.3	5.2	4.4	6.4	5.1	6.7	13.7	5.8
1990	6.4	6.0	5.5	5.2	5.8	6.4	7.4	8.6	6.0
1991	5.9	5.2	6.1	5.6	5.3	5.5	6.1	9.4	5.7
1992	6.3	5.2	5.2	4.8	5.7	5.0	4.3	10.1	5.6
1993	5.0	4.5	4.2	4.6	4.8	6.0	4.7	9.4	4.8
1991-1993	5.7	5.0	5.1	5.0	5.2	5.5	5.0	9.6	5.4
Neonatal deaths									
1987	5.0	4.3	5.3	4.5	4.2	4.7	3.4	6.8	4.8
1988	4.8	4.4	4.9	4.3	4.4	5.0	4.8	10.2	4.7
1989	4.9	3.0	4.5	4.4	3.7	5.9	2.9	7.4	4.2
1990	4.2	4.5	3,9	4.1	4.5	3.7	4.7	8.4	4.3
1991	4.1	3.6	4.3	3.2	2.7	6.4	4.4	7.5	3.9
1992	4.4	3.0	4.1	3.9	2.4	4.2	4.7	7.0	3.8
1993	3.5	3.0	3.9	2.7	2.9	3.5	2.5	10.0	3.4
1991-1993	4.0	3.2	4.1	3.2	2.7	4.7	3.9	8.1	3.7
Perinatal deaths									
1987	10.8	10.2	11.0	10.6	8.8	9.4	10.9	19.0	10.6
1988	11.1	10.1	10.6	9.0	10.0	13.0	11.0	19.9	10.7
1989	10.3	9.3	9.7	8.8	10.1	11.0	9.6	21.1	9.9
1990	10.5	10.5	9.3	9.3	10.2	10.0	12.0	17.0	10.3
1991	10.0	8.8	10.3	8.8	8.0	11.9	10.5	16.8	9.6
1992	10.6	8.2	9.3	8.7	8.1	9.1	9.0	17.0	9.4
1993	8.5	7.5	8.1	7.3	7.6	9.5	7.2	19.3	8.2
1991-1993	9.7	8.2	9.2	8.2	7.9	10.1	8.9	17.7	9. I

#### Table 54: Fetal, neonatal and perinatal death rates by maternal State or Territory of usual residence, 1987-1993 (cont.)

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Outcome / Year				Matern	al age (ye	ears)		
	Less than 20	20-24	25-29	30-34	35-39	40 and over	Not stated	All ages
				N	umber			
Fetal deaths								
1987	114	312	476	354	131	35	10	1,432
1988	118	330	492	335	149	32	17	1,473
1989	104	334	462	363	142	33	13	1,451
1990	119	340	525	413	152	35	6	1,590
1991	128	310	443	412	135	45	5	1,478
1992	118	288	458	410	161	41	17	1,493
1993	94	253	380	320	154	33	11	1,245
1991-1993	340	851	1,281	1,142	450	119	33	4,216
Neonatal deaths								
1987	84	269	397	256	89	13	51	1,159
1988	86	258	390	257	102	17	54	1,164
1989	86	196	357	265	90	19	45	1,058
1990	94	214	373	278	113	25	25	1,122
1991	80	210	309	252	101	24	36	1,012
1992	66	226	295	251	100	23	54	1,015
1993	56	178	259	232	90	12	59	886
1991-1993	202	614	863	735	291	59	149	2,913
Perinatal deaths								
1987	198	581	873	610	220	48	61	2,591
1988	204	588	882	592	251	49	71	2,637
1989	190	530	819	628	232	52	58	2,509
1990	213	554	898	691	265	60	31	2,712
1991	208	520	752	664	236	69	41	2,490
1992	184	514	753	661	261	64	71	2,508
1993	150	431	639	552	244	45	70	2,131
1991-1993	542	1,465	2,144	1,877	741	178	182	7,129

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Outcome / Year				Matern	al age (ye	ears)	
	Less than 20	20-24	25-29	30-34	35-39	40 and over	Ail age
				Rate pe	r 1,000 bi	rths	
Fetal deaths				•	,		
1987	8.1	5.6	5.0	6.0	7.2	12.8	5.8
1988	8.4	6.2	5.1	5,4	7.6	11.6	6.0
1989	7.2	6.4	4.8	5.5	6.7	10.5	5,8
1990	7.8	6.4	5.4	5.8	6.6	9.9	6.0
1991	8.6	6.0	4.8	5.7	5.6	12.4	5.7
1992	8.3	5.4	5.0	5.4	6.2	9.9	5.6
1993	7.1	5.0	4.3	4.1	5.7	7.7	4.8
1991-1993	8.0	5.5	4.7	5.1	5.8	9.9	5.4
Neonatal deaths							
1987	6.0	4.9	4.2	4.4	4.9	4.8	4.8
1988	6.2	4.9	4.1	4.2	5.3	6.2	4.7
1989	6.0	3.8	3.7	4.1	4.3	6.1	4.2
1990	6.2	4.0	3.8	3.9	5.0	7.1	4.3
1991	5.4	4.1	3.4	3.5	4.2	6.7	3.9
1992	4.7	4.3	3.2	3.3	3.9	5.6	3.8
1993	4.3	3.5	2.9	3.0	3.4	2.8	3.4
1991-1993	4.8	4.0	3.2	3.3	3.8	4.9	3.7
Perinatal deaths							
1987	14.0	10.4	9.1	10.4	12.1	17.6	10.6
1988	14.5	11.0	9.2	9.6	12.9	17.8	10.7
1989	13.2	10.2	8.5	9.6	11.0	16.6	9.9
1990	14.0	10.4	9.2	9.7	11.6	17.0	10.3
1991	14.0	10.0	8.1	9.3	9.8	18.9	9.6
1992	12.9	9.7	8.2	8.7	10.0	15.4	9,4
1993	11.3	8.5	7.2	7.1	9.1	10.6	8.2
1991-1993	12.8	9.4	7.9	8.3	9.6	14.8	9.1

### Table 55: Fetal, neonatal and perinatal death rates by maternal age, Australia, 1987-1993 (cont.)

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Outcome /	Sin	gletons	т	wins	Other m	ultiple births	A	ll infants
Year	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births	Number	Rate per 1,000 births
Fetal deaths	ì							
1991	1,349	5.4	122	18.6	7	25.8	1,478	5.7
1992	1,393	5.4	92	13.9	7	21.4	1,492	5.6
1993	1,136	4.5	101	14.8	8	26.8	1,245	4.8
1991-1993	3,878	5.1	315	15.7	22	24.2	4,215	5.4
Neonatal de	aths							
1991	<b>87</b> 0	3.5	124	19.3	18	68.2	1,012	3.9
1992	876	3.4	135	20.7	4	12.5	1,015	3.8
1993	752	3.0	112	16.6	22	75.9	886	3.4
1991-1993	2,498	3.3	371	18.8	44	49.5	2,913	3.7
Perinatal de	eaths							
1991	2,219	8.8	246	37,5	25	92.3	2,490	9.6
1992	2,269		227	34,3	11	33.6	2,507	9.4
1993	1,888		213	31.2	30	100.7	2,131	8.2
1991-1993	6,376	8.3	686	34.1	66	72.5	7,128	9.1

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Outcome / Year		Numbe	r	Ra	te per 1,000 bi	rths
	Males	Females	All infants	Males	Females	All infants
Fetal deaths						
1987	762	670	1,432	6.0	5.6	5.8
1988	822	651	1,473	6.5	5.4	6.0
1989	769	682	1,451	6.0	5.5	5.8
1990	888	702	1,590	6.5	5.5	6.0
1991	777	701	1,478	5.9	5,6	5.7
1992	779	714	1,493	5.7	5.5	5.6
1993	668	× 577	1,245	5.0	4.5	4.8
1991-1993	2,224	1,992	4,216	5.5	5.2	5.4
Neonatal deaths						
1987	676	483	1,159	5.4	4.1	4.8
1988	669	495	1,164	5.3	4.1	4.7
1989	595	463	1,058	4,6	3.8	4.2
1990	660	462	1,122	4.9	3.6	4.3
1991	571	44 1	1,012	4.3	3.5	3.9
1992	596	419	1,015	4,4	3.3	3.8
1993	511	375	886	3.8	3.0	3.4
1991-1993	1,678	1,235	2,913	4.2	3.2	3.7
Perinatal deaths						
1987	1,438	1,153	2,591	11.4	9.7	10.6
1988	1,491	1,146	2,637	11.7	9.5	10.7
1989	1,364	1,145	2,509	10.6	9.3	9.9
1990	1,548	1,164	2,712	11.4	9.1	10.3
1991	1,348	1,142	2,490	10.2	9.1	9.6
1992	1,375	1,133	2,508	10.1	8.8	9,4
1993	1,179	952	2,131	8.8	7.5	8.2
1991-1993	3,902	3,227	7,129	9.7	8.4	9.1

### Table 57: Fetal, neonatal and perinatal deaths by infant's sex, Australia, 1987-1993

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Year	Gestational age (weeks)								
	Less than 28	28-31	32-36	37-41	42 and over	Not stated	Total		
				Number					
1973	494	308	656	1,029	91	49	2,627		
1974	523	329	672	958	93	31	2,606		
1975	445	302	575	768	60	34	2,184		
1976	458	311	560	708	53	35	2,125		
1977	398	259	477	683	58	24	1,899		
1978	417	234	521	647	60	26	1,905		
1979	421	235	455	592	36	18	1,757		
1980	415	235	476	525	41	16	1,708		
1981	395	264	413	564	51	19	1,706		
1982	406	238	447	557	42	15	1,705		
1983	386	213	421	556	25	18	1,619		
1984	400	243	408	491	29	22	1,593		
1985	390	228	373	475	25	27	1,518		
1985	405	235	402	471	39	33	1,585		
	378	195	360	458	28	13			
1987				438	28		1,432		
1988	363	245	352			19	1,473		
1989	394	193	355	453	33	23	1,451		
1990	425	251	376	498	28	12	1,590		
1991	368	223	362	489	26	10	1,478		
1992	421	216	350	453	34	19	1,493		
1993	358	176	312	351	16	32	1,245		
			Proportionat	e death rate j	per 1,000 births				
1973	2.0	1.2	2.6	4.1	0.4	0.2	10.5		
1974	2.1	1.3	2.7	3.9	0.4	0.1	10.5		
1975	1.9	1.3	2.4	3.3	0.3	0.1	9.3		
1976	2.0	1.4	2.4	3.1	0.2	0.2	9.2		
1977	1.7	1.1	2.1	3.0	0.3	0.1	8.3		
1978	1.8	1.0	2.3	2.9	0.3	0.1	8.4		
1979	1.9	1.0	2.0	2.6	0.2	0.1	7.8		
1980	1.8	1.0	2.1	2.3	0.2	0.1	7.5		
1981	1.7	1.1	1.7	2.4	0.2	0.1	7.2		
1982	1.7	1.0	1.9	2.3	0.2	0.1	7.1		
1983	1.6	0.9	1.7	2.3	0.1	0.1	6.6		
1984	1.7	1.0	1.7	2,0	0.1	0.1	6.6		
1985	1.6	0.9	1.5	1.9	0.1	0.1	6.2		
1986	1.7	1.0	1.6	1.9	0.2	0.1	6.5		
1987	1.5	0.8	1.5	1.9	0.1	0.1	5.8		
1988	1.5	1.0	1.4	1.9	0.1	0.1	5.8 6.0		
1988	1.5	0.8	1.4	1.9	0.1	0.1	5.8		
1990	1.6	1.0	1.4	1.9	0.1	0.0	6.0		
1991	1.4	0.9	1.4	1.9	0.1	0.0	5.7		
1992	1.6	0.8	1.3	1.7	0.1	0.1	5.6		
1993	1.4	0.7	1.2	1.3	0.1	0.1	4.8		

Table 58:	Fetal deaths by	gestational age,	Australia,	1973-1993
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Year	Gestational age (weeks)								
	Less than 28	28-31	32-36	37-41	42 and over	Not stated	Total		
				Number					
1973	645	566	578	772	63	168	2,792		
1974	680	492	618	796	54	94	2,734		
1975	556	422	488	646	41	64	2,217		
1976	559	368	438	700	41	59	2,165		
1977	493	296	344	621	45	72	1,871		
1978	482	286	346	540	28	56	1,738		
1979	449	249	301	548	21	37	1,605		
1980	475	237	255	457	22	57	1,503		
1981	454	197	239	491	24	35	1,440		
1982	492	212	266	462	36	61	1,529		
1983	451	174	222	433	25	44	1,349		
1984	417	160	206	342	26	53	1,204		
1985	470	206	247	386	25	82	1,416		
1986	449	158	179	335	25	81	1,227		
1987	397	138	206	343	17	58	1,159		
1988	436	136	173	335	21	63	1,159		
1989	369	140	160	317	21	50	1,058		
1989	399	133	190	337	22	41			
1990	374	133	150	292	22	35	1,122		
1991	388	106	159	292	25	59	1,012		
1992	300	98	103	274	10	83	1,015 886		
1995	511	20	140	290	10	65	000		
			Proportionat	e death rate j	per 1,000 births				
1973	2.6	2.3	2.3	3,1	0.3	0.7	11.3		
1974	2.8	2.0	2.5	3.2	0.2	0.4	11.2		
1975	2.4	1.8	2.1	2.8	0.2	0.3	9.5		
1976	2.5	1.6	1.9	3,1	0.2	0.3	9.5		
1977	2.2	1.3	1.5	2.7	0.2	0.3	8.3		
1978	2.2	1.3	1.5	2.4	0.1	0.2	7.8		
1979	2.0	1.1	1.3	2.5	0.1	0.2	7.2		
1980	2.1	1.1	1.1	2.0	0.1	0.3	6.7		
1981	1.9	0.8	1.0	2.1	0.1	0.1	6.1		
1982	2.1	0.9	1.1	1.9	0.2	0.3	6.4		
1983	1.9	0.7	0.9	1.8	0.1	0.2	5.6		
1985	1.7	0.7	0.9	1.4	0.1	0.2	5.1		
1985	1.9	0.8	1.0	1.4	0.1	0.2	5.8		
1985	1.8	0.6	0.7	1.4	0.1	0.3	5.0		
1980	1.6	0.6	0.7	1.4	0.1	0.3	5.0 4.8		
1987	1.0	0.6	0.8	1.4	0.1	0.2	4.8		
	1.8	0.6	0.7	1.4					
1989					0.1	0.2	4.2		
1990	1.5	0.5	0.7	1.3	0.1	0.2	4.3		
1991	1.5	0.5	0.6	1.1	0.1	0.1	3.9		
1992	1.5	0.4	0,6	1.0	0.1	0.2	3.8		
1993	1.2	0.4	0.6	0.9	0.0	0.3	3.4		

#### Table 59: Neonatal deaths by gestational age, Australia, 1973-1993

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Year	Gestational age (weeks)								
	Less than 28	28-31	32-36	37-41	42 and over	Not stated	Tota		
				Number					
1973	1,139	874	1,234	1,801	154	217	5,419		
1974	1,203	821	1,290	1,754	147	125	5,340		
1975	1,001	724	1,063	1,414	101	98	4,401		
1976	1,017	679	998	1,408	94	94	4,290		
1977	891	555	821	1,304	103	96	3,770		
1978	899	520	867	1,187	88	82	3,643		
1979	870	484	756	1,140	57	55	3,362		
1980	890	472	731	982	63	73	3,211		
1981	849	461	652	1,055	75	54	3,146		
1982	898	450	713	1,019	78	76	3,234		
1983	837	387	643	989	50	62	2,968		
1984	817	403	614	833	55	75	2,797		
1985	860	434	620	861	50	109	2,934		
1986	854	393	581	806	64	114	2,812		
1987	775	333	566	801	45	71	2,591		
1988	799	381	525	807	43	82	2,637		
1989	763	333	515	770	55	73	2,509		
1990	824	384	566	835	50	53	2,712		
1991	742	354	521	781	47	45	2,490		
1992	809	322	513	727	59	78	2,508		
1993	669	274	458	589	26	115	2,131		
			Proportionat	e death rate	per 1,000 births				
1973	4.6	3.5	4.9	7.2	0.6	0.9	21.7		
1974	4.9	3.3	5.2	7.1	0.6	0.5	21.6		
1975	4.3	3.1	4.5	6.0	0.4	0.4	18.7		
1976	4.4	3.0	4.3	6.1	0.4	0.4	18.7		
1977	3.9	2.4	3.6	5.7	0.5	0.4	16.5		
1978	4.0	2.3	3.8	5.3	0.4	0.4	16.1		
1979	3.9	2.2	3.4	5.1	0.3	0.2	15.0		
1980	3.9	2.1	3.2	4.3	0.3	0.3	14.1		
1981	3.6	1.9	2.7	4.4	0.3	0.2	13.2		
1981	3.7	1.9	3.0	4.2	0.3	0.2	13.2		
1983	3.4	1.6	2.6	4.1	0.2	0.3	[2.2		
1984	3.4	1.7	2.6	3.5	0.2	0.3	11.7		
1985	3.5	1.8	2.5	3.5	0.2	0.4	12.0		
1986	3.5	1.6	2.4	3.3	0.3	0.5	11.5		
1987	3.2	1.4	2.3	3.3	0.2	0.3	10.6		
1988	3.2	1.5	2.1	3.3	0.2	0.3	10.7		
1989	3.0	1.3	2.0	3.1	0.2	0.3	9.9		
1990	3.1	1.5	2.1	3.2	0.2	0.2	10.3		
1991	2.9	1.4	2.0	3.0	0.2	0.2	9.6		
1992	3.0	1.2	1.9	2.7	0.2	0.3	9.4		
1993	2.6	1.0	1.8	2.3	0.1	0.4	8.2		

### Table 60: Perinatal deaths by gestational age, Australia, 1973-1993

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Year	Birthweight (g)							
	500-999	1000-2499	2500 and over	Not stated	Total			
			Number					
1973	543	948	922	214	2,627			
1974	593	989	868	156	2,606			
1975	543	843	694	104	2,184			
1976	546	840	649	90	2,125			
1977	482	732	616	69	1,899			
1978	514	749	- 593	49	1,905			
1979	481	646	559	71	1,757			
1980	483	650	527	48	1,708			
1981	505	634	517	50	1,706			
1982	509	608	537	51	1,705			
1983	479	575	506	59	1,619			
1984	488	559	493	53	1,593			
1985	463	554	431	70	1,518			
1986	495	561	464	65	1,585			
1987	446	508	429	49	1,432			
1988	415	532	452	74	1,473			
1989	442	481	454	74	1,451			
1990	497	574	483	36	1,590			
1991	435	525	479	39	1,478			
1992	459	491	477	66	1,493			
1993	396	411	371	67	1,245			
		Proportio	nate death rate per 1,00	)0 births				
1973	2.2	3.8	3.7	0.9	10.5			
1974	2.4	4.0	3.5	0.6	10.5			
1975	2.3	3.6	3.0	0.4	9.3			
1976	2.4	3.7	2.8	0.4	9.2			
1977	2.1	3.2	2.7	0.3	8.3			
1978	2.3	3.3	2.6	0.2	8.4			
1979	2.1	2.9	2.5	0.3	7.8			
1980	2.1	2.9	2.3	0.2	7.5			
1981	2.1	2.7	2.2	0.2	7,2			
1982	2.1	2.5	2.2	0.2	7.1			
1983	2.0	2.4	2.1	0.2	6.6			
1984	2.0	2.3	2.1	0.2	6.6			
1985	1.9	2.3	1.8	0.3	6.2			
1986	2.0	2.3	1.9	0.3	6.5			
1987	1.8	2.1	1.7	0.2	5.8			
1988	1.7	2.1	1.8	0.3	6.0			
1989	1.8	1.9	1.8	0.3	5.8			
1990	1.9	2.2	1.8	0,1	6.0			
1991	1.7	2.0	1.9	0.2	5.7			
1992	1.7	1.8	1.8	0.2	5.6			
1993	1.5	1.6	1.4	0.3	4.8			

### Table 61: Fetal deaths by birthweight, Australia, 1973-1993

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Year	Birthweight (g)								
	500-999	1000-2499	2500 and over	Not stated	Total				
	Number								
1973	659	1,175	697	261	2,792				
1974	636	1,188	750	160	2,734				
1975	569	907	640	101	2,217				
1976	575	815	686	89	2,165				
1977	489	677	606	99	1,871				
1978	491	632	543	72	1,738				
1979	473	556	512	64	1,605				
1980	472	515	440	76	1,503				
1981	469	460	464	47	1,440				
1982	512	476	491	50	1,529				
1983	457	413	422	50	1,349				
1985	402	405	348	49	1,349				
1985	402	405	415	74	1,204				
1985	464	327	366	74					
					1,227				
1987	395	336	376	52	1,159				
1988	412	339	369	44	1,164				
1989	358	311	337	52	1,058				
1990	408	327	347	40	1,122				
1991	373	291	311	37	1,012				
1992	381	265	318	51	1,015				
1993	305	249	268	64	886				
	Proportionate death rate per 1,000 live births								
1973	2.7	4.7	2.8	1.1	11.3				
1974	2.6	4.8	3.1	0.7	11.2				
1975	2.4	3.9	2.7	0.4	9.5				
1976	2.5	3.6	3.0	0.4	9.5				
1977	2.2	3.0	2.7	0.4	8.3				
1978	2.2	2.8	2.4	0.3	7.8				
1979	2.1	2.5	2.3	0.3	7.2				
1980	2.1	2.3	2.0	0.3	6.7				
1981	2.0	2.0	2.0	0.2	6.1				
1982	2.1	2.0	2.0	0.2	6.4				
1983	1.9	1.7	1.7	0.2	5.6				
1984	1.7	1.7	1.5	0.2	5.1				
1985	2.0	1.8	1.7	0.2					
1985	1.9	1.8	1.5		5.8				
				0.3	5.0				
1987	1.6	1.4	1.5	0.2	4.8				
1988	1.7	1.4	1.5	0.2	4.7				
1989	1.4	1.2	1.3	0.2	4.2				
1990	1.6	1.2	1.3	0.2	4.3				
1991	1.5	1.1	1.2	0.1	3.9				
1992	1.4	1.0	1.2	0.2	3.8				
1993	1.2	1.0	1.0	0.2	3.4				

### Table 62: Neonatal deaths by birthweight, Australia, 1973-1993

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Year	Birthweight (g)								
	500-999	1000-2499	2500 and over	Not stated	Total				
			Number						
1973	1,202	2,123	1,619	475	5,419				
1974	1,229	2,177	1,618	316	5,340				
1975	1,112	1,750	1,334	205	4,401				
1976	1,121	1,655	1,335	179	4,290				
1977	971	1,409	1,222	168	3,770				
1978	1,005	1,381	1,136	121	3,643				
1979	954	1,202	1,071	135	3,362				
1980	955	1,165	967	124	3,211				
1981	974	1,094	981	97	3,146				
1982	1,021	1,084	1,028	101	3,234				
1983	936	988	928	116	2,968				
1984	890	964	841	102	2,797				
1985	941	1,003	846	144	2,934				
1985	959	888	840	135	2,934 2,812				
1980	841	844	805						
	827	871	803	101	2,591				
1988				118	2,637				
1989	800	792	791	126	2,509				
1990	905	901	830	76	2,712				
1991	808	816	790	76	2,490				
1992	840	756	795	117	2,508				
1993	701	660	639	131	2,131				
		Proportio	nate death rate per 1,00	00 births					
1973	4.8	8.5	6.5	1.9	21.7				
1974	5.0	8.8	6.5	1.3	21.6				
1975	4.7	7.4	5.7	0.9	18.7				
1976	4.9	7.2	5.8	0.8	18.7				
1977	4.3	6.2	5.4	0.7	16.5				
1978	4.4	6.J	5.0	0.5	16.1				
1979	4.2	5.3	4.8	0.6	15.0				
1980	4.2	5.1	4.3	0.5	14.1				
1981	4.1	4.6	4.1	0.4	13.2				
1982	4.2	4.5	4.3	0.4	13.4				
1983	3.8	4.0	3.8	0.5	12.2				
1984	3.7	4.0	3.5	0.4	11.7				
1985	3.9	4.1	3.5	0.6	12.0				
1986	3.9	3.6	3.4	0.6	12.0				
1980	3.4	3.4	3.3	0.4	10.6				
	3.3	3.4 3.5	3.3						
1988				0.5	10.7				
1989	3.2	3.1	3.1	0.5	9.9				
1990	3.4	3.4	3.1	0.3	10.3				
1991	3.1	3.2	3.1	0.3	9.6				
1992	3.2	2.8	3.0	0.4	9.4				
1993	2.7	2.5	2.4	0.5	8.2				

### Table 63: Perinatal deaths by birthweight, Australia, 1973-1993

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Outcome/ Birthweight (g)	NPSU: year of birth	ABS: year of registration	ABS: year of birth	ABS: year of birth
				Rate per
		Number		1,000 birth:
Fetal deaths				
Less than 500	394	399	381	
500 - 999	413	396	402	303.4
1000 - 1499	158	163	147	91.0
1500 - 1999	134	124	124	40.0
2000 - 2499	131	124	114	11.7
2500 - 2999	169	147	143	3.6
3000 - 3499	131	124	102	1.1
3500 - 3999	73	68	62	0.8
4000 - 4499	23	24	23	0.9
4500 and over	8	8	8	1.8
Not stated	31	83	81	
All deaths: 500g and over	1,271	1,261	1,206	4.6
Neonatal deaths				
Less than 500	na	129	127	
500 - 999	na	305	286	313.6
1000 - 1499	na	105	99	67.9
1500 - 1999	na	72	72	24.3
2000 - 2499	na	72	69	7.2
2500 - 2999	na	79	75	1.9
3000 - 3499	na	117	121	1.3
3500 - 3999	na	52	50	0.6
4000 - 4499	na	18	15	0.6
4500 and over	na	2	3	0.7
Not stated		66	70	
All deaths: 500g and over	na	888	860	3.3
Perinatal deaths				
Less than 500	na	528	508	
500 - 999	na	701	688	519.2
1000 - 1499	na	268	246	152.2
1500 - 1999	na	196	196	63.3
2000 - 2499	na	196	183	18.8
2500 - 2999	na	226	218	5.5
3000 - 3499	na	241	223	2.4
3500 - 3999	na	120	112	1.4
4000 - 4499	na	42	38	1.5
4500 and over	na	10	11	2.5
Not stated		149	151	
All deaths: 500g and over	na	2,149	2,066	7.9

### Table 64: Fetal, neonatal and perinatal deaths according to various criteria, and birthweight-specific death rates, Australia, 1993

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Maternal age (years)	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Less than 20	107	13,606	13,713	7.8
20 - 24	346	51,238	51,584	6.7
25 - 29	502	87,556	88,058	5.7
30 - 34	444	75,907	76,351	5.8
35 - 39	215	26,227	26,442	8.1
40 and over	49	4,192	4,241	11.6
Not stated	2	187	189	10.6
All ages	1,665	258,913	260,578	6.4

#### Table 65: Fetal deaths by maternal age, Australia, 1993

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

Maternal age	Fetal deaths		Live	Live births		Total births		Fetal death rate	
(years)	Indigenous	Non- indigenous	Indigenous	Non- indigenous	Indigenous	Non- indigenous	Indigenous	Non- indigenous	
			Nur	Number				00 births)	
Less than 20	26	81	1,685	11,921	1,711	12,002	15.2	6.7	
20 - 24	42	304	2,594	48,644	2,636	48,948	15.9	6.2	
25 - 29	24	478	1,737	85,819	1,761	86,297	13.6	5.5	
30 - 34	16	428	887	75,020	903	75,448	17.7	5.7	
35 - 39	6	209	279	25,948	285	26,157	21.1	8.0	
40 and over	*	49	36	4,156	36	4,205	-	11.7	
Not stated	-	2	3	184	3	186	-	10.8	
All ages	114	1,551	7,221	251,692	7,335	253,243	15.5	6.1	

 Table 66: Fetal deaths by maternal age and Aboriginality, Australia, 1993

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

Parity	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
None	670	102,378	103,048	6.5
One	489	86,284	86,773	5.6
Two	271	43,605	43,876	6.2
Three	123	16,495	16,618	7.4
Four or more	104	9,337	9,441	11.0
Not stated	8	814	822	9.7
All parities	1,665	258,913	260,578	6.4

 Table 67: Fetal deaths by parity, Australia, 1993

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

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Table 68:	Fetal deaths	by plurality,	Australia, 1993
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Plurality	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Singletons	1,492	251,946	253,438	5.9
Twins	158	6,680	6,838	23.1
Other multiple births	15	287	302	49.7
All births	1,665	258,913	260,578	6.4

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

Table 69:	Fetal deaths by marital status, Australia	ı, 1993
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Marital status	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Married / de factor	1,395	226,031	227,426	6.1
Single	211	26,722	26,933	7.8
Widowed, divorced or separated	47	5,577	5,624	8.4
Not stated	12	583	595	20.2
All marital status	1,665	258,913	260,578	6.4

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

#### Table 70: Fetal deaths by accommodation status in hospital, selected States and Territories, 1993

Accommodation status	Fetal deaths	Live births	Total births	Fetal death rate
		Number		(per 1,000 births)
Public	810	113,845	114,655	7.1
Private	380	75,721	76,101	5.0
Not stated	18	860	878	20.5
All births	1,208	190,426	191,634	6.3

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

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Birthweight (g)	Fetal de	aths	Neonatal	Neonatal deaths		deaths	Live births
	Number	Rate	Number	Rate	Number	Rate	Number
Less than 500	87	580.0	29	460.3	116	773.3	63
500-999	161	332.0	79	243.8	240	494.8	324
1000-1499	51	94.8	26	53.4	77	143.1	487
1500-1999	31	34.0	13	14.8	44	48.2	881
2000-2499	47	15.2	12	4.0	59	19.1	3,035
2500-2999	60	4.5	14	1.1	74	5.5	13,309
3000-3499	53	1.6	19	0.6	72	2.2	32,156
3500-3999	21	0.8	13	0.5	34	1.3	26,906
4000-4499	9	1.0	3	0.3	12	1.4	8,715
4500 and over	-	-	-	-	-	-	1,398
Not stated	16	153.8	2	22.7	18	173.1	88
Total births	536	6.1	210	2.4	746	8.5	87,362

 Table 71:
 Infant's outcome by birthweight, New South Wales, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

Birthweight (g)	Fetal de	aths	Neonatal	deaths	Perinatal	deaths	Live births
	Number	Rate	Number	Rate	Number	Rate	Number
Less than 500	121	751.6	36	900.0	157	975.2	40
500-999	87	307.4	56	285.7	143	505.3	196
1000-1499	36	101.4	19	59.6	55	154.9	319
1500-1999	44	58.0	18	25.2	62	81.7	715
2000-2499	32	13.0	11	4.5	43	17.4	2,434
2500-2999	39	3.9	19	1.9	58	5.9	9,838
3000-3499	23	1.0	20	0.9	43	1.8	23,518
3500-3999	18	0.9	10	0.5	28	1.4	19,761
4000-4499	4	0.6	3	0.5	7	1.1	6,343
4500 and over	2	1.8	1	0.9	3	2.7	1,125
Not stated	8	190.5	13	382.4	21	500.0	34
Total births	414	6.4	206	3.2	620	9.6	64,323

Table 72: Infant's outcome by birthweight, Victoria, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

Table 73:	Infant's outcome by birthweight, Queensland, 1993
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Birthweight (g)	Fetal de	aths	Neonatal	deaths	Perinatal deaths		Live births	
	Number	Rate	Number	Rate	Number	Rate	Number	
Less than 500	77	626.0	41	891.3	118	959.3	46	
500-999	71	259.1	70	344.8	141	514.6	203	
1000-1499	32	98.8	20	68.5	52	160.5	292	
1500-1999	21	31.9	18	28.2	39	59.2	638	
2000-2499	18	10.0	16	9.0	34	18.9	1,781	
2500-2999	27	3.9	16	2.3	43	6.3	6,839	
3000-3499	21	1.2	30	1.8	51	3.0	17,043	
3500-3999	14	1.0	8	0.6	22	1.5	14,525	
4000-4499	3	0.6	2	0.4	5	1.0	4,837	
4500 and over	3	3.6	1	1.2	4	4.7	842	
Not stated	5	43.5	6	54.5	11	95.7	110	
Total births	292	6.2	228	4.8	520	11.0	47,156	

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

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Birthweight (g)	Fetal de	eaths	Neonatal	deaths	Perinatal deaths		Perinatal deaths Live		Live births
	Number	Rate	Number	Rate	Number	Rate	Number		
Less than 500	53	757.1	16	941.2	69	985.7	17		
500-999	32	280.7	26	317.1	58	508.8	82		
1000-1499	16	100.6	2	14.0	18	113.2	143		
1500-1999	15	50.7	4	14.2	19	64.2	281		
2000-2499	16	15.9	5	5.0	21	20.8	992		
2500-2999	18	4.6	-	-	18	4.6	3,915		
3000-3499	13	1.4	1	0.1	14	1.5	9,397		
3500-3999	9	1.2	-	-	9	1.2	7,541		
4000-4499	2	0.8	-	-	2	0.8	2,405		
4500 and over	2	5.1	-	-	2	5.1	387		
Total births	176	6.9	54	2.1	230	9.1	25,160		

 Table 74:
 Infant's outcome by birthweight, Western Australia, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

Birthweight (g)	Fetal de	aths	Neonatal	deaths	Perinatal deaths		Live births	
	Number	Rate	Number	Rate	Number	Rate	Number	
Less than 500	32	780.5	9	1000.0	41	1000.0	9	
500-999	35	360.8	21	338.7	56	577.3	62	
1000-1499	6	48.4	9	76.3	15	121.0	118	
1500-1999	16	55.7	4	14.8	20	69.7	271	
2000-2499	12	14.8	12	15.1	24	29.7	797	
2500-2999	6	1.9	5	1.6	11	3.5	3,102	
3000-3499	8	1.1	7	1.0	15	2.1	7,248	
3500-3999	6	1.0	3	0.5	9	1.5	5,984	
4000-4499	2	1.0	-	-	2	1.0	1,939	
4500 and over	-	-	2	6.4	2	6.4	314	
Total births	123	6.2	72	3.6	195	9.8	19,844	

 Table 75:
 Infant's outcome by birthweight, South Australia, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

Birthweight (g)	Fetal de	aths	Neonatal	deaths	Perinatal deaths		Live births	
	Number	Rate	Number	Rate	Number	Rate	Number	
Less than 500	7	700.0	1	333.3	8	800.0	3	
500-999	11	366.7	5	263.2	16	533.3	19	
1000-1499	7	152.2	5	128.2	12	260.9	39	
1500-1999	2	28.6	3	44.1	5	71.4	68	
2000-2499	1	4.4	-	-	1	4.4	228	
2500-2999	7	6.9	1	1.0	8	7.8	1,013	
3000-3499	7	2.9	2	0.8	9	3.7	2,398	
3500-3999	3	1.4	2	0.9	5	2.3	2,153	
4000-4499	1	1.4	-	-	1	1.4	736	
4500 and over	1	6.5	-	-	1	6.5	152	
Total births	47	6.9	19	2.8	66	9.6	6,809	

 Table 76:
 Infant's outcome by birthweight, Tasmania, 1993

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Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

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Birthweight (g)	Fetal de	aths	Neonatal d	eaths*	* Perinatal deaths*		Live births
	Number	Rate	Number	Rate	Number	Rate	Number
Less than 500	9	300.0	-	-	-	-	21
500-999	4	266.7	-	-	-	-	11
1000-1499	4	129.0	-	-	-	-	27
1500-1999	4	70.2	-	-	-	-	53
2000-2499	3	18.6	-	-	-	-	158
2500-2999	7	9.9	-	-	-	-	698
3000-3499	4	2.4	-	-	-	-	1,666
3500-3999	1	0.7	-	-	-	-	1,472
4000-4499	-	-	-	-	-	-	510
4500 and over	-	-	-	-	-	-	76
Not stated	1	15.9	-	-	~	-	62
Total births	37	7.7	-	-	-	-	4,754

 Table 77:
 Infant's outcome by birthweight, ACT, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births. \* Not available in 1993

Birthweight (g)	Fetal de	eaths	Neonatal	deaths	Perinatal deaths		Live births	
	Number	Rate	Number	Rate	Number	Rate	Number	
Less than 500	8	1000.0	-	-	8	1000.0	-	
500-999	12	444.4	10	666.7	22	814.8	15	
1000-1499	6	153.8	5	151.5	11	282.1	33	
1500-1999	1	17.5	2	35.7	3	52.6	56	
2000-2499	2	10.6	-	-	2	10.6	187	
2500-2999	5	6.6	6	8.0	11	14.5	753	
3000-3499	2	1.5	4	3.0	6	4.6	1,313	
3500-3999	1	1.1	1	L.1	2	2.3	871	
4000-4499	2	8.7	2	8.8	4	17.5	227	
4500 and over	-	-	-	-	-	-	38	
Not stated	1	76.9	1	83.3	2	153.8	12	
Total births	40	11.3	31	8.8	71	20.0	3,505	

Table 78: Infant's outcome by birthweight, Northern Territory, 1993

Data include fetuses and infants of at least 20 weeks' gestation or 400g birthweight. Rates expressed per 1,000 births.

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# Appendix 1 Perinatal minimum data set

The data items recommended by the National Perinatal Data Advisory Committee for the perinatal minimum data set, and submitted to the National Health Data Committee in June 1995, are:

#### Identifying information

- State/Territory of birth
- Maternity patient identifier

#### Place of birth

- Intended place of birth
- Actual place of birth
- Establishment identifier

#### Sociodemographic characteristics of mother

- Area of usual residence
- Date of birth (derived maternal age)
- Patient accommodation status
- Marital status
- Country of birth
- Aboriginality

#### **Previous pregnancies**

• Previous pregnancies

#### Current pregnancy

- · First day of last menstrual period
- Gestational age
- Maternal medical conditions

### Labour delivery and puerperium

- Onset of labour
- Type of induction
- Type of augmentation
- Analgesia administered
- Anaesthesia administered
- Presentation at delivery
- Method of birth
- Perineal status
- Complications of labour and birth
- Postpartum complications
- Length of antenatal stay
- Length of postnatal stay
- Plurality

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• Mode of separation

#### Infant

- Date of birth
- Birth order
- Status of the baby
- Sex
- Birthweight
- Apgar score (at 1 and 5 minutes after birth)
- Resuscitation of newborn baby
- Admission to special/neonatal intensive care
- Length of stay
- Mode of separation of infant
- Neonatal morbidity
- Congenital malformations

#### National Perinatal Data Advisory Committee

The following organizations are represented on the National Perinatal Data Advisory Committee:

- Each State and Territory health authority
- Commonwealth Department of Human Services and Health
- Australian Institute of Health and Welfare
- Australian Institute of Health and Welfare National Perinatal Statistics Unit
- Australian Bureau of Statistics
- Royal Australian College of Obstetricians and Gynaecologists
- Australian College of Midwives
- Australian College of Paediatrics

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- Australian Perinatal Society
- Maternity Alliance (peak consumer organization)
- Royal College of Pathologists of Australia
- NHMRC Working Parties/Expert Panels

## **Appendix 2 Definitions**

Aboriginality: An Aboriginal or Torres Strait Islander is a person of Aboriginal or Torres Strait Islander descent who identified 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 women 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 infant's condition at 1 minute and 5 minutes after birth.

Birth status: Status of the infant 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 infant 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 or care as an admitted patient after giving birth.

Early neonatal death: Death of a liveborn infant 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 1000g.

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 400g 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 (Tables based on ABS data have a lower limit of 500g or, when birthweight is not available, of 22 weeks' gestation).

Forceps: Assisted birth using a metallic obstetric instrument.

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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 infant's date of birth, or derived from clinical assessment during pregnancy or from examination of the infant after birth.

Hospital size: Number of confinements occurring annually in a hospital.

Infant's discharge date: Date on which a newborn infant completes an episode of care after birth.

**Infant'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).

Intrapartum fetal death: Fetal death occurring during labour.

Late neonatal death: Death of a liveborn infant 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 2500g.

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 women who has had at least one previous pregnancy resulting in a live birth or stillbirth.

Neonatal death: Death of a liveborn infant within 28 days of birth.

**Neonatal morbidity**: Any condition or disease of the infant 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.

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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 infant**: Active measures taken shortly after birth to assist infant's ventilation and heart beat; 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 1500g.