7.14 Labour, birth and outcomes

The health of a baby at birth is a key determinant of their health and wellbeing throughout life. Data on most births in Australia are collected by health professionals and included in the National Perinatal Data Collection. This snapshot uses these data to explore aspects of labour, birth and baby outcomes.

In 2015, about 304,300 women in Australia gave birth to around 309,000 babies, an increase in both the number of mothers who gave birth and babies born since 2005 (around 13%).

Of births in 2015:



Mother's remoteness area of usual residence:

73% Major cities

16% Inner regional

8.4% Outer regional

2.5% Remote/Very remote



Baby boys slightly outnumbered baby girls:

51% Boys

49% Girls



Place of birth:

97% were in a hospital

Public—73%

Private—27%



Aboriginal and Torres Strait Islander status:

4.3% of mothers

5.4% of babies



How labour started:

50% spontaneous labour

29% induced labour

21% no labour onset



Pain relief:

77% mothers in labour received pain relief

Method of birth

Vaginal birth was the most common method of delivery of all mothers who gave birth in 2015 (2 in 3 women, or 67%). One in 3 (33%) women underwent a caesarean section, including women who:

- had no labour onset
- required a caesarean section after labour onset, and/or
- had decided to have a caesarean section during pregnancy.







In 2015, Aboriginal and Torres Strait Islander mothers were slightly less likely to have a caesarean section than non-Indigenous mothers (32% and 34%, respectively). They were also 7 times as likely as non-Indigenous mothers to be aged under 20 (15% compared with 2.1%).

Overall, vaginal birth rates have decreased while caesarean section rates have increased. In 2015, rates of spontaneous labour onset were higher among younger mothers.

Once labour starts, it may be necessary to intervene to speed up or augment the labour. Labour augmentation occurred for 16% of mothers in 2015; this rate was higher for first-time mothers (43% of women with spontaneous labour onset). See Chapter 7.15 'Caesarean sections' for more information.

Gestational age of babies

The average gestational age for all babies was 38.6 weeks. This varied in relation to birth status (for example, liveborn or stillbirth) and multiple pregnancies (for example, twins and triplets). Babies of multiple pregnancies were more likely to be born preterm (64%) as were babies born to Indigenous mothers (14%).

Gestational age of live births:

Preterm (20–36 weeks) **8.7%** Term (37–41 weeks) **91%** Post-term (42+ weeks) **<1%**

Birthweight

Birthweight is a key indicator of infant health and a determinant of a baby's chance of survival and health later in life. Incidence of babies born both small for gestational age and of a low birthweight was more common among babies born to mothers who smoked during pregnancy, Indigenous mothers and multiple births (twins, triplets). For all births in 2015, the average birth weight was 3,327 grams.

Birthweight categories:

High: 4,500 grams and over **Normal:** 2,500–4,499 grams

Low: <2,500 grams

Extremely low: <1,000 grams



Babies born at a low birthweight:

1 in 16 (6.5%) liveborn



Admission to special care nurseries (SCNs) and neonatal intensive care units (NICUs):

74% of preterm births **60%** of twin births

94% of other multiple births

Apgar Scores

Apgar scores are clinical indicators that determine a baby's condition shortly after birth. These scores are measured on a 10-point scale for several characteristics. An Apgar score of 7 or more at 5 minutes after birth indicates the baby is adapting well to the environment. In 2015, 98% of liveborn babies had an Apgar score of 7 or more at 5 minutes.







Resuscitation and admission to special care nurseries and neonatal intensive care units

In 2015, 1 in 5 (19%) liveborn babies needed some form of active resuscitation immediately after birth. Resuscitation methods are undertaken to establish a baby's independent respiration and heartbeat or to treat respiratory effect and correct metabolic disturbances. These methods range from least severe (suction) to severe (external cardiac massage and ventilation). Admission to an SCN or NICU was required for 16% of liveborn babies, with preterm, multiple births and babies born to Indigenous mothers more likely to be admitted.

Perinatal Mortality

Perinatal mortality is the death of a baby during the period immediately before birth (fetal death) and up to 28 days after birth (neonatal death). In 2015, there were 9 perinatal deaths for every 1,000 births (2,849 total). The most common cause of perinatal death was congenital abnormalities. Factors associated with higher rates of perinatal death were maternal age, maternal Indigenous status and multiple pregnancy. Perinatal mortality rates decreased dramatically as gestational age and birthweight increased. In 2015, perinatal death rates in relation to gestational age were highest among babies born at 20–27 weeks' gestation (693 deaths per 1,000 births) and were lower among babies born at term (37–41 weeks) (2 deaths per 1,000 births). In relation to birthweight, perinatal death rates were highest among extremely low birthweight babies (691 per 1,000 births) and lowest among babies with a birthweight of 2,500 grams or higher (2 deaths per 1,000 births). The perinatal death rate increased among babies with a birthweight over 5,000 grams (10.3 per 1,000 births).

What is missing from the picture?

Australia's maternal and perinatal mortality rates are among the lowest in the world. However, efforts to develop national data standards and to improve data availability and consistency will allow specific areas of concern to be better monitored and targeted by health services. The AIHW is currently working and consulting with jurisdictions to improve data availability and quality on maternal health conditions (hypertensive disorders, diabetes, overweight and obesity, and primary postpartum haemorrhage), baby resuscitation and induction of labour. Currently, data on these indicators are either inconsistent or require national data standards to be developed for mandatory data supply. More recent and consistent data on birth anomalies would also help to develop a better picture about labour, birth and baby outcomes.

Where do I go for more information?

More information on Australia's mothers and babies, are available at www.aihw.gov.au/reports-statistics/population-groups/mothers-babies/overview. The reports *Australia's mothers and babies 2015—in brief* and *Perinatal deaths in Australia 2013–2014* are available for free download.

