

Why is this important?

A caesarean section is a surgical procedure used to deliver a baby. It may be planned before labour starts (elective) or at any time during labour (emergency) if complications develop. It is usually performed when it is safer for mother or baby than a vaginal birth.

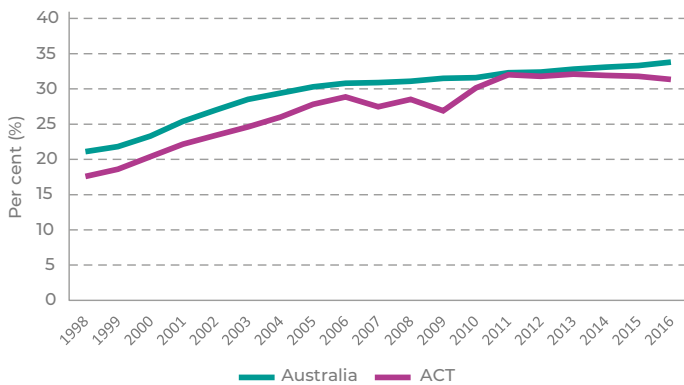
As with any surgery, caesarean sections are associated with short and long term risks which can extend beyond the current birth and affect both mother and baby.¹

Caesarean section rates

Caesarean section rates in the ACT and Australia have risen over the past two decades.² This has coincided with factors such as increasing maternal age, increasing use of assisted reproductive technology² and increasing prevalence of diabetes and obesity.³

In 2016, caesarean section rates in the ACT were similar to Australia, at 31.3% and 33.8% respectively (Figure 1).

Figure 1. Caesarean section births as a proportion of all births, ACT and Australia, 1998–2016



Source: Australian Institute of Health and Welfare, Perinatal Data, dynamic data display. Module: Labour and Birth. 2018. <http://www.aihw.gov.au/perinatal-data/>

The percentage of mothers having a caesarean section is increasing for both types of caesarean section, with and without labour (Figure 2). More ACT women are having caesarean sections without labour than with. In 2016, 19% of all births were caesarean sections without labour, 12.4% were caesarean sections with labour and 68.1% were all types of vaginal births.

Figure 2: Births by mode of birth and type of caesarean section, ACT, 1998–2016



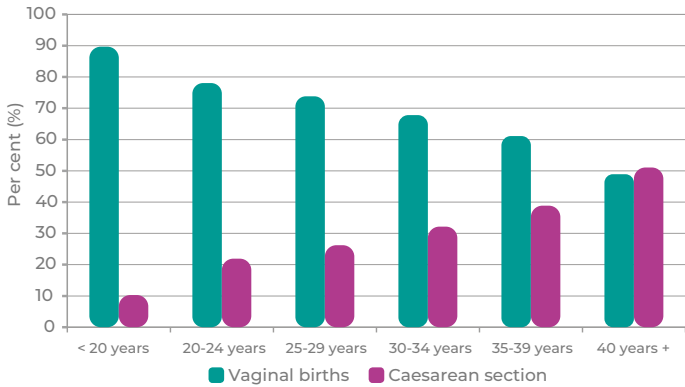
Source: ACT maternal and perinatal data collection



Who is having caesarean sections?

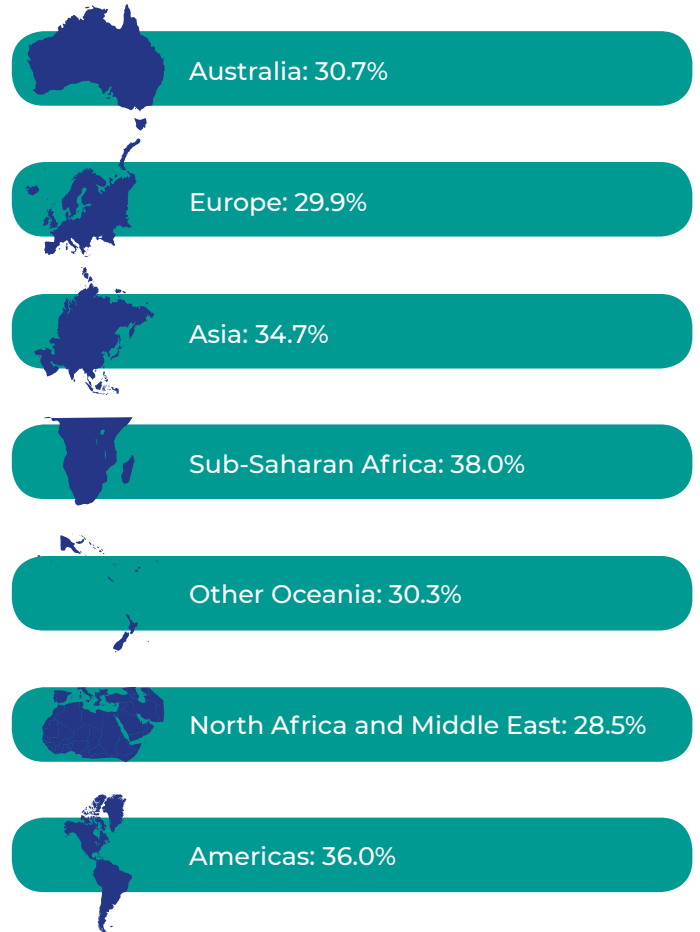
Mothers who gave birth by caesarean section in 2014–2016 were generally older than mothers who had other types of births. Around half (51.1%) of women aged 40 years and over gave birth via caesarean section compared with 21.9% of women aged 20–24 years (Figure 3).

Figure 3. Maternal age by mode of birth, ACT, 2012–2015



Source: ACT maternal and perinatal data collection

In the ACT, mothers born in sub-Saharan Africa, Asia and the Americas had significantly higher rates of caesarean sections than Australian born mothers.



For the period **2014–16**

- 82.9% of mothers with a history of caesarean section had a repeat caesarean section
- 12.1% had a normal vaginal birth
- 4.9% had an assisted birth (instrumental assistance)

Caesarean section
Average BMI: 26.6

BMI

Vaginal birth
Average BMI: 24.5

Women who had a caesarean section had a higher body mass index (BMI) than those that gave birth by other methods. The average BMI was 26.6 (in the overweight range) for women who had a caesarean section and 24.5 (in the normal weight range) for women who gave birth vaginally during the period 2014–2016. This difference was statistically significant.



Women with either a pre-existing medical condition or a medical condition that developed during pregnancy were more likely to give birth via caesarean section than women with less complex pregnancies.

Compared to women who do not have the following conditions:

- » Women who had **pre-existing diabetes** were **1.9 times** more likely to have a caesarean section.
- » Women who had **gestational diabetes** were **1.3 times** more likely to have a caesarean section.
- » Women who had **hypertension (pre-existing)** were **1.4 times** more likely to have a caesarean section.
- » Women who had **preeclampsia** were **1.6 times** more likely to have a caesarean section.

Where are women having caesarean sections?

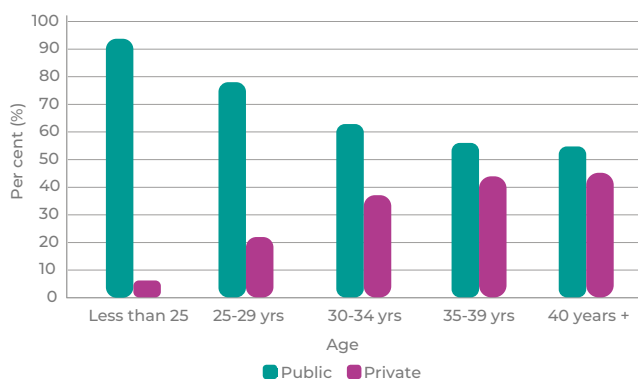
For the period **2014–16**

PRIVATE **PUBLIC**

Women giving birth as a private patient in the ACT were more likely to have had a caesarean section (48.5%) than women who gave birth as a public patient (26.9%).

Among women who gave birth by caesarean section in the ACT in 2014–2016, the proportion of these procedures performed as a private patient increased with the age of the mother. Younger women were more likely to have a caesarean section as a public patient than older women, 45.2% of women aged 40 years or older were private patients, compared to 6.3% of women aged less than 25 years (Figure 4).

Figure 4: Caesarean section births only by maternal age and patient type, ACT, 2014–2016

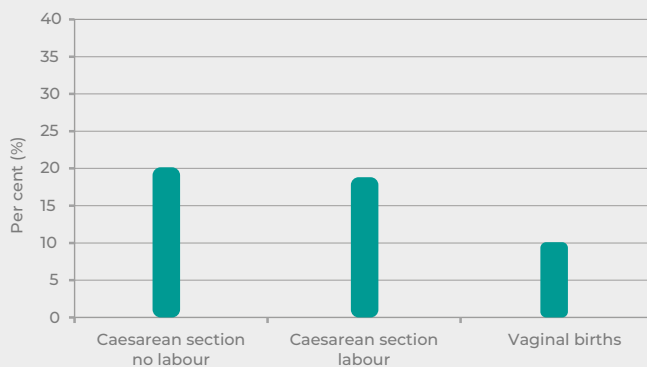


Source: ACT maternal and perinatal data collection

What are the outcomes for the baby?

More babies born by caesarean section (19.6%) were admitted to the Neonatal Intensive Care Unit (NICU) than those born by other means (10.1%) for the period 2014–2016. Those born by caesarean section with no labour were more likely to be admitted to the NICU (21.7%) than those babies born by caesarean section with labour (19.2%) (Figure 5). Low birthweight (less than 2,500 grams) was more common among babies born by caesarean section (10.3%), than those born via vaginal birth (5.1%).

Figure 5. Babies admitted to ACT hospital Neonatal Intensive Care Units by mode of birth, ACT and non-ACT residents, 2014–2016



Source: ACT maternal and perinatal data collection



Putting it all together

In the ACT (after adjusting for all other variables) women who are **older, were a private patient, had a previous caesarean section birth, had higher body mass index, had a pre-existing or medical condition during pregnancy or were born in Asia, America or sub-Saharan Africa**, were more likely to have a caesarean section.

References

1. Lauer Jeremy A, et al., *Determinants of caesarean section rates in developed countries: supply, demand and opportunities for control*. *World Health Report (2010) Background Paper, 29*, World Health Organization, Editor 2010: Geneva.
2. Australian Institute of Health and Welfare 2014, *Australia's health 2014*. Australia's health series no.14. Cat. No. AUS 178. Canberra, AIHW
3. Australian Institute of Health and Welfare, *Perinatal Data, dynamic data display*. Module: Labour and Birth. 2014. <http://www.aihw.gov.au/perinatal-data/> Date accessed: 8/12/2016