

2. Executive Summary

This is the twelfth annual report on mothers and babies in NSW. The report draws information from a variety of sources, including the NSW Midwives Data Collection, the NSW Register of Congenital Conditions, and the NSW Admitted Patient Data Collection; as well as birth registration data from the NSW Registry of Births, Deaths and Marriages. Information on causes of maternal deaths in NSW was obtained through the work of the NSW Maternal and Perinatal Committee. From 1 January 2006, confidential reviews of perinatal deaths among all live born babies, and stillbirths of at least 20 weeks gestation or 400 grams birth weight are also carried out by the Committee.

Trends in NSW

The number of births in NSW rose from 85,626 in 2004 to 96,030 in 2007, a rise of 12.2%. In 2008, the number of births stabilised with 96,343 births occurring to 94,864 mothers.

The increase in births occurred mainly in the metropolitan areas, with the Sydney South West and Sydney West Areas reporting over 2,000 more births in 2007 compared to 2004; and Northern Sydney and Central Coast and South Eastern Sydney and Illawarra Areas reporting over 1,000 more births in 2007 compared to 2004. In 2008, similar to previous years, over 40% of births in NSW occurred to mothers resident in Sydney South West and Sydney West Areas.

The percentage of mothers who were teenagers fell from 4.0% in 2004 to 3.5% in 2008. Over the same period the percentage of mothers aged 35 years increased from 19.9% to 22.8% of all mothers giving birth. The mean maternal age rose from 30.3 to 30.6 years, rising from 28.7 to 29.0 years among mothers giving birth for the first time, and from 31.5 to 31.8 years for mothers who had given birth previously.

Between 2004 and 2008, the proportion of mothers starting antenatal care at 20-plus weeks gestation declined from 11.8% to 5.7%, and the proportion of mothers starting antenatal care at less than 14 weeks gestation rose from 65.2% to 81.9%.

Between 2004 and 2008, the vast majority of women gave birth in a hospital labour ward. The proportion of mothers planning to give birth in a birth centre remained stable at 3–4%. The total number of reported planned homebirths rose from 114 in 2004 to 243 in 2008, while the reported number of planned homebirths that occurred at home rose from 93 in 2004 to 200 in 2008.

The rate of normal vaginal birth decreased from 62.1% in 2004 to 59.2% in 2008. The caesarean section rate increased from 27.2% to 29.5% and the rate of instrumental birth remained steady at 10% to 11%. Operative births are more common among privately than publicly insured mothers. Among privately insured mothers the rate of normal vaginal birth fell from 50.3% in 2003 to 47.1% in 2007 and the caesarean section rate increased from 34.9% to 38.2%. Among publicly insured mothers the rate of normal vaginal birth fell from 67.2% to 66.0% and the caesarean section rate rose from 23.4% to 24.7%.

Since 2004, the pattern of birth weight has remained stable, with the rate of low birth weight (less than 2,500 grams) at just over 6% each year. The rate of low birth weight was 6.2% in 2008. The percentage of babies born prematurely (less than 37 weeks gestation) has remained stable at about 7% and was 7.5% in 2008. The perinatal mortality rate varied from 8.7 to 9.0 per 1,000 births over the 5 year period, and was 8.7 per 1,000 births in 2008.

In the period 1990–2007, 178 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. Of these, 55 (30.9%) died of incidental causes not related to the pregnancy or its management, 77 (43.3%) deaths were found to be directly due to pregnancy or its management, and 43 (24.2%) deaths were found to result from pre-existing disease or disease which developed during pregnancy (not due to direct obstetric causes), but which may have been aggravated by the physiologic effects of pregnancy.

Aboriginal and Torres Strait Islander mothers and babies

Between 2004 and 2008, the number of reported births to Aboriginal or Torres Strait Islander mothers rose from 2,333 to 3,015, representing 2.7% and 3.1% respectively of all babies born in NSW.

Births to teenage mothers followed the same pattern as for non-Aboriginal mothers. The percentage of Aboriginal or Torres Strait Islander mothers who were teenagers fell from 21.4% in 2004 to 19.8% in 2008. The percentage of mothers giving birth at 35 years of age or more has been stable at about 9%.

Between 2004 and 2008, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation rose from 50.4% to 68.7%, and the proportion who commenced antenatal care at less than 20 weeks gestation rose from 70.1% to 83.4%.

In 2008, 50.2% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 56.6% in 2004. This compares with 11.5% of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2008.

Between 2004 and 2008, the rate of low birth weight (less than 2,500 grams) in Aboriginal or Torres Strait Islander babies has been over 10% and was 11.5% in 2008. This is about twice the rate for babies born to non-Aboriginal or Torres Strait Islander mothers, which was 6.0% in 2008. Over the same period, over 10% of Aboriginal or Torres Strait Islander babies have been premature (less than 37 weeks gestation). The rate of prematurity was 12.2% in 2008—compared with a rate of 7.3% for babies born to non-Aboriginal or Torres Strait Islander mothers.

Since 2004, the perinatal mortality rate among Aboriginal or Torres Strait Islander babies has varied from 11.6 to 22.6 per 1,000 births. The rate of 15.3 per 1,000 in 2008 is substantially higher than the rate of 8.5 per 1,000 experienced by babies born to non-Aboriginal or Torres Strait Islander mothers.

Country of birth

Between 2004 and 2008, the percentage of mothers who were born in non-English speaking countries rose slightly from 20.7% to 23.5%. The increase was mainly among mothers born in North East Asian and Southern Asian countries. There was a decline in the percentage of mothers born in Southern European countries.

In 2008, 93.3% of all mothers commenced antenatal care before 20 weeks gestation and 81.9% commenced antenatal care before 14 weeks gestation. There was some variation between country of birth groups, with 94.0% of mothers born in English speaking countries commencing antenatal care before 20 weeks gestation, compared with 82.2% of mothers born in Melanesia, Micronesia, and Polynesia, and 89.7% of mothers born in North East Asia.

In 2008, smoking at any time during pregnancy was more common among mothers born in English speaking countries than mothers born in non-English speaking countries. About one in 6 mothers born in English speaking countries smoked at some time during pregnancy, compared to fewer than one in 9 mothers born in other country of birth groups.

The highest rates of low birth weight were in babies of mothers born in Southern Asia (8.9%) and Melanesia, Micronesia and Polynesia (8.0%). Babies of mothers born in Eastern Europe, Russia, Central Asian and Baltic States were least likely to be low birth weight.

The highest rate of prematurity was among babies of mothers born in Melanesia, Micronesia and Polynesia (8.8%). Babies of mothers born in North East Asia were least likely to be premature. The perinatal mortality rate was highest among babies of mothers born in Melanesia, Micronesia and Polynesia (12.5 per 1,000) and lowest among babies of mothers born in North East Asia (7.4 per 1,000).

Congenital conditions

About 2% of infants are born with congenital conditions each year in NSW. In 2002–2008, anomalies of the cardiovascular system were most commonly reported, followed by anomalies of the musculoskeletal system and the genito-urinary system. This is a similar pattern to previous years.

Congenital conditions were more common among premature infants compared to full term infants, and among male infants compared to female infants. The rate of congenital conditions increases with increasing maternal age, especially after age 35. However, as most babies are born to mothers aged less than 35 years, the majority of babies with congenital conditions were born to younger mothers.

Perinatal deaths

Confidential reports on 713 perinatal deaths in 2008 were reviewed. Overall, 172 (24.1%) of these deaths were unexplained stillbirths. The next most common obstetric antecedents of perinatal death were congenital abnormality (22.6%), spontaneous preterm labour (15.0%) and antepartum haemorrhage (9.3%). The most common cause of neonatal death was extreme prematurity (47.3%), followed by congenital abnormalities (20.4%). Post-mortem examinations were carried out in 33.0% of all perinatal deaths.