

2. Executive summary

This is the eleventh annual report on mothers and babies in New South Wales (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. 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 g birth weight are also carried out by the Committee.

Trends in NSW

In 2003 and 2004, the numbers of births in NSW remained stable at about 86 000 per annum. In 2005, the number of births increased to 90 610, a rise of 5.8% compared with 2004; in 2006, the number of births increased to 92 781, a rise of 7.9% compared with 2004; and in 2007, the number of births increased to 96 030, a rise of 12.2% compared with 2004.

The increase in births occurred mainly in the metropolitan areas, with the Sydney South West and Sydney West Areas reporting over 2000 more births in 2007 than in 2004; and Northern Sydney and Central Coast and South Eastern Sydney and Illawarra Areas reporting over 1000 more births in 2007 than in 2004.

The largest increase in births occurred among mothers aged 35–39 years. Although the number of births to teenage mothers has remained stable, the overall percentage of births to teenage mothers followed the trend of previous years, falling from 4.0% of all births in 2003 to 3.6% in 2007.

The increase in births in 2007 occurred evenly among mothers who were giving birth for the first time and mothers who had given birth previously. The number of women giving birth for the fifth or subsequent time rose by 17.9%, from 1258 in 2003 to 1483 in 2007 – however, these mothers comprised only 1.6% of all mothers in 2007.

Between 2003 and 2007, 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 slightly from 132 in 2003 to 175 in 2007, whereas the reported number of planned homebirths that occurred at home rose from 109 in 2003 to 144 in 2007.

The rate of normal vaginal birth fell from 62.8% in 2003 to 59.9% in 2007. Over the 5 years, the caesarean section rate increased from 26.5 to 29.0% and the rate of instrumental birth remained steady at 10–11%. Caesarean section birth continues to be more common among privately than publicly-insured mothers. The changing pattern in type of birth is evident in both groups between 2003 and 2007. Among privately-insured mothers, the rate of normal vaginal birth decreased from 52.1% in 2003 to 47.7% in 2007 and the caesarean section rate increased from 32.4 to 37.9%. Among publicly insured mothers the rate of normal vaginal birth decreased from 69.5 to 66.5% and the caesarean section rate increased from 21.5 to 24.6%.

Since 2003, the rate of low birth weight (less than 2500 g) has been just over 6%. The rate was 6.1% in 2007. The percentage of babies born prematurely (less than 37 weeks gestation) has remained stable at about 7% and was 7.4% in 2007. The perinatal mortality rate varied from 8.6 to 9.0 per 1000 births over the 5-year period, and was 9.0 in 2007.

In the period 1990–2006, 177 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. Of these, 55 (31.1%) died of incidental causes not related to the pregnancy or its management, 76 (42.9%) deaths were found to be directly due to pregnancy or its management, and 43 (24.3%) deaths were found to result from pre-existing disease or disease that developed during pregnancy (not due to direct obstetric causes, but which may have been aggravated by the physiological effects of pregnancy).

Aboriginal and Torres Strait Islander mothers and babies

Between 2003 and 2007, the reported number of babies born to Aboriginal and Torres Strait Islander mothers increased from 2190 to 2926, representing 2.5 and 3.0%, respectively, of all babies born in NSW.

Births to teenage mothers followed the same pattern as for non-Aboriginal mothers. The percentage of births to teenage mothers followed the downward trend of previous years, from 21.1% in 2003 to 18.8% in 2007; whereas the percentage of births to mothers aged 35 years and over rose from 7.1% to 9.1% over the same period.

Between 2003 and 2007, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation rose from 70.6 to 79.5%. This compares with 91.1% of non-Aboriginal or

Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation in 2007.

In 2007, 50.1% of Aboriginal and Torres Strait Islander mothers reported smoking at some time during pregnancy, compared with 56.8% in 2003. This compares with 11.2% of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2007.

Since 2003, the rates of low birth weight (less than 2500 g) and prematurity (less than 37 weeks gestation) in Aboriginal and Torres Strait Islander babies have been over 10%. These rates are about one and a half times higher than those among babies born to non-Aboriginal or Torres Strait Islander mothers. The perinatal mortality rate among babies born to Aboriginal and Torres Strait Islander mothers was 22.6 per 1000 in 2007, compared with a rate of 8.6 per 1000 experienced by babies born to non-Aboriginal or Torres Strait Islander mothers.

Country of birth

Following the pattern of previous years, about 30% of mothers were born overseas in 2007, most commonly in the United Kingdom (2.6%), New Zealand (2.6%), China (2.5%) and Vietnam (1.9%).

Between 2003 and 2007, the percentage of mothers who were born in non-English speaking countries rose slightly from 20.6 to 22.5%. 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. The proportion of mothers born in non-English speaking countries was highest in the Sydney South West Area (38.8%), followed by the Sydney West Area (32.7%).

In 2007, 90.7% of all mothers commenced antenatal care before 20 weeks gestation. There was some variation among country-of-birth groups, with 91.7% of mothers born in English speaking countries commencing antenatal care before 20 weeks gestation, compared with 78.0% of mothers born in Melanesia, Micronesia and Polynesia, and 84.9% of mothers born in the Middle East and Africa.

In 2007, 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 six mothers born in English speaking countries smoked at some time during pregnancy, compared with fewer than 1 in 10 mothers born in other country-of-birth groups.

The highest rates of low birth weight were in babies of mothers born in Southern Asia (9.1%) and Melanesia, Micronesia and Polynesia (7.4%). Babies of mothers born in Eastern Europe, Russia, Central Asian and Baltic States were least likely to be of low birth weight. The highest rate of prematurity was among babies of mothers born in Melanesia, Micronesia and Polynesia (8.3%). 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 Middle Eastern and African countries (11.3 per 1000) and lowest among babies of mothers born in North-East Asia (5.7 per 1000).

Congenital conditions

About 2% of infants are born with congenital conditions each year in NSW. In 2001–2007, 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 with full-term infants, and among male infants compared with female infants. The rate of congenital conditions increases with increasing maternal age, especially after age 35 years. 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 827 perinatal deaths in 2007 were reviewed. Overall, 204 (24.7%) of these deaths were unexplained stillbirths. The next most common obstetric antecedents of death were congenital abnormality (20.7%), spontaneous preterm labour (18.4%) and antepartum haemorrhage (8.5%). The most common cause of neonatal death was extreme prematurity (45.3%), followed by congenital abnormalities (24.1%). Post-mortem examinations were carried out in 34.2% of all perinatal deaths.