

2. Executive Summary

This is the thirteenth annual report on mothers and babies in NSW. The report draws information from a variety of sources, including the NSW Perinatal Data Collection (formerly known as the Midwives Data Collection), the NSW Register of Congenital Conditions, the NSW Admitted Patient Data Collection and 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 90,610 in 2005 to 96,030 in 2007 and 96,439 in 2009, an overall rise of 6.4%. The increase in births occurred mainly in the metropolitan areas. The largest increase occurred in the Western Sydney Local Health District, where the number of births increased from 12,037 to 13,573 between 2005 and 2009.

The percentage of mothers who were teenagers fell from 3.9% in 2005 to 3.5% in 2009. Over the same period the percentage of mothers aged 35 years increased from 20.7% to 23.8% of all mothers giving birth. The mean maternal age rose from 30.4 to 30.7 years, rising from 28.8 to 29.1 years among mothers giving birth for the first time, and from 31.5 to 32.0 years for mothers who had given birth previously.

Between 2005 and 2009, the proportion of mothers starting antenatal care at 20-plus weeks gestation declined from 11.4% to 7.1%, and the proportion of mothers starting antenatal care at less than 14 weeks gestation rose from 68.1% to 78.9%.

Between 2005 and 2009, 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 152 in 2005 to 266 in 2009, while the reported number of planned homebirths that occurred at home rose from 112 in 2005 to 231 in 2009.

The rate of normal vaginal birth decreased from 61.2% in 2005 to 58.2% in 2009. The caesarean section rate increased from 28.1% to 30.2% 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 49.8% in 2004 to 46.7% in 2008 and the

caesarean section rate increased from 35.2% to 38.4%. Among publicly insured mothers the rate of normal vaginal birth fell from 66.0% to 65.6% and the caesarean section rate rose from 24.4% to 25.0%.

Since 2004, the pattern of birth weight has remained stable, with the rate of low birth weight (less than 2,500 grams) at about 6% each year. The rate of low birth weight was 6.0% in 2009. The percentage of babies born prematurely (less than 37 weeks gestation) has remained stable at about 7% and was 7.3% in 2009. 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 in 2009.

In the period 1990–2008, 183 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. Of these, 56 (30.6%) died of incidental causes not related to the pregnancy or its management, 77 (42.1%) deaths were found to be directly due to pregnancy or its management, and 47 (25.7%) 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 2005 and 2009, the number of reported births to Aboriginal or Torres Strait Islander mothers rose from 2,507 to 2,931, representing 2.8% 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 Aboriginal or Torres Strait Islander mothers who were teenagers fell from 20.4% in 2005 to 18.9% in 2009. The percentage of mothers giving birth at 35 years of age or more has been stable at about 9%.

Between 2005 and 2009, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation rose from 56.4% to 69.2%, and the proportion who commenced antenatal care at less than 20 weeks gestation rose from 74.9% to 83.4%.

In 2009, 50.5% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 55.3% in 2005. This compares with 10.5% of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2009.

Since 2005, the rate of low birth weight (less than 2,500 grams) in Aboriginal or Torres Strait Islander babies has been over 10% and was 10.8% in 2009. This is about twice the rate for babies born to non-Aboriginal or Torres Strait Islander mothers, which was 5.8% in 2009. 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 10.5% in 2009—compared with a rate of 7.2% for babies born to non-Aboriginal or Torres Strait Islander mothers.

Since 2005, the perinatal mortality rate among Aboriginal or Torres Strait Islander babies has varied from 12.1 to 22.6 per 1,000 births. The rate of 12.6 per 1,000 in 2009 is substantially higher than the rate of 8.5 per 1,000 experienced by babies born to non-Aboriginal or Torres Strait Islander mothers.

Aboriginal mothers and babies are under-reported to the NSW Perinatal Data Collection (PDC). Between 2006 and 2008 the estimated percentage of births to Aboriginal or Torres Strait Islander mothers that were reported to the PDC ranged from 63% to 68%. In 2008, reporting varied markedly between Local Health Districts, ranging from 14% in the Northern Sydney Local Health District to 93% in the Mid North Coast Local Health District, with reporting generally better in rural compared to urban areas.

Country of birth

Between 2005 and 2009, the percentage of mothers who were born in non-English speaking countries rose from 20.8% to 24.3%. The increase was mainly among mothers born in Asian countries and the Middle East and Africa. There was a decline in the percentage of mothers born in Southern European countries and Melanesia, Micronesia and Polynesia.

In 2009, 91.9% of all mothers commenced antenatal care before 20 weeks gestation and 78.9% commenced antenatal care before 14 weeks gestation. There was some variation between country of birth groups, with 93.2% of mothers born in English speaking countries commencing antenatal care before 20 weeks gestation, compared with 79.6% of mothers born in Melanesia, Micronesia, and Polynesia, and 85.5% of mothers born in North East Asia.

In 2009, 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 seven mothers born in English speaking countries smoked at some time during pregnancy, compared to fewer than one in nine mothers born in other country of birth groups.

The highest rates of low birth weight were in babies of mothers born in Southern Asia (9.6%) and South East Asia (6.2%). Babies of mothers born in Western and Northern Europe were least likely to be low birth weight. The highest rate of prematurity was among babies of mothers born in English-speaking countries (7.5%). Babies of mothers born in Western and Northern Europe were least likely to be premature. The perinatal mortality rate was highest among babies of mothers born in Southern Asia (14.5 per 1,000) and lowest among babies of mothers born in Central and South America (5.7 per 1,000).

Congenital conditions

About 2% of infants are born with congenital conditions each year in NSW. In 2003–2009, 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 827 perinatal deaths in 2009 were reviewed. Overall, 185 (22.4%) of these deaths were unexplained stillbirths. The most common obstetric antecedent of perinatal death was congenital anomaly (23.9%). The other major obstetric antecedents of perinatal death were spontaneous preterm labour (16.2%) and perinatal infection (10.8%). The most common cause of neonatal death was extreme prematurity (51.4%), followed by congenital anomalies (18.6%). Post-mortem examinations were carried out in 30.1% of all perinatal deaths.