

4. TRENDS IN NEW SOUTH WALES

Confinements and births by plurality

There were 90,610 births to 89,140 women reported in 2005 (Table 1). This represents a 5.8 per cent increase in births compared to 2004. The number of twin pregnancies rose slightly compared to 2004, while the number of triplet pregnancies has remained fairly stable since 2001.

TABLE 1

PLURALITY, NSW 2001–2005

Plurality	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Confinements										
Singleton	82926	98.3	83190	98.3	83677	98.4	82983	98.5	87699	98.4
Twins	1428	1.7	1375	1.6	1330	1.6	1274	1.5	1413	1.6
Triplets	24	0.0	22	0.0	23	0.0	30	0.0	27	0.0
Quadruplets	1	0.0	0	0.0	2	0.0	1	0.0	1	0.0
Total	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0
Births										
Singleton	82926	96.6	83190	96.7	83677	96.8	82983	96.9	87699	96.8
Twins	2856	3.3	2749	3.2	2660	3.1	2549	3.0	2826	3.1
Triplets	72	0.1	66	0.1	69	0.1	90	0.1	81	0.1
Quadruplets	4	0.0	0	0.0	8	0.0	4	0.0	4	0.0
Total	85858	100.0	86005	100.0	86414	100.0	85626	100.0	90610	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Health area of residence

In 2005, the largest number of births occurred in the Sydney South West Area, followed by Sydney West and South Eastern Sydney & Illawarra Areas (Table 2). Compared to 2004, there were increases in the numbers of births in all health areas.

TABLE 2

MATERNAL HEALTH AREA OF RESIDENCE, NSW 2001–2005

Health Area	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney South West	18775	22.3	19105	22.6	19485	22.9	18720	22.2	19713	22.1
South Eastern Sydney & Illawarra	13590	16.1	13699	16.2	13898	16.3	14121	16.8	14619	16.4
Sydney West	15763	18.7	15883	18.8	15942	18.7	15834	18.8	17019	19.1
Northern Sydney & Central Coast	12856	15.2	12818	15.2	13142	15.5	13032	15.5	13697	15.4
Hunter & New England	9753	11.6	10004	11.8	9694	11.4	9672	11.5	10381	11.6
North Coast	4762	5.6	4656	5.5	4587	5.4	4690	5.6	4973	5.6
Greater Southern	4209	5.0	3969	4.7	3834	4.5	3838	4.6	3993	4.5
Greater Western	4110	4.9	3855	4.6	3898	4.6	3784	4.5	3985	4.5
Other—not stated	561	0.7	598	0.7	552	0.6	597	0.7	760	0.9
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

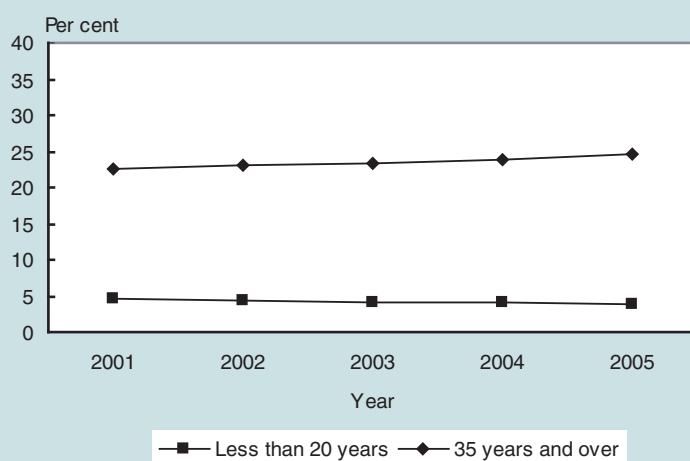
Maternal age

The number of teenage mothers increased from 3,387 in 2004 to 3,440 in 2005. The rate of increase was less than other maternal age groups, and the percentage of births to teenage mothers fell slightly from 4.0 to 3.9 per cent. The number of mothers 35 years of age or over increased from 16,769 in 2004 to 18,441 in 2005, an increase from 19.9 to 20.7 per cent of all confinements (Figure 1, Table 3).

The mean maternal age rose from 29.9 to 30.4 years over the 5 years 2001 to 2005. The trend towards later childbirth is evident among both primiparous and multiparous mothers: the proportion of mothers giving birth for the first time who were aged 35 years or more increased from 11.6 to 13.6 per cent over the 5 year period, and the proportion of multiparous mothers who were aged 35 years or more increased from 22.7 to 25.7 per cent. The mean maternal age rose from 28.3 to 28.8 years for primiparous mothers and from 31.1 to 31.5 years for multiparous mothers.

FIGURE 1

MOTHERS AGED LESS THAN 20 YEARS AND 35 YEARS AND OVER, NSW 2001–2005



Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

TABLE 3

MATERNAL AGE, NSW 2001–2005

Maternal age (years)	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Under 15	19	0.0	28	0.0	23	0.0	22	0.0	30	0.0
15–19	3778	4.5	3624	4.3	3363	4.0	3365	4.0	3410	3.8
20–24	13036	15.4	12674	15.0	12529	14.7	12095	14.3	12739	14.3
25–29	25528	30.3	24523	29.0	24138	28.4	23113	27.4	24006	26.9
30–34	26707	31.7	27810	32.9	28522	33.5	28906	34.3	30502	34.2
35–39	12640	15.0	13107	15.5	13582	16.0	13808	16.4	15275	17.1
40–44	2488	2.9	2645	3.1	2752	3.2	2819	3.3	3017	3.4
45+	122	0.1	120	0.1	113	0.1	142	0.2	149	0.2
Not stated	61	0.1	56	0.1	10	0.0	18	0.0	12	0.0
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Maternal country of birth

In the period 2001–2005, about 72 per cent of mothers were born in Australia. In 2005, mothers born in the United Kingdom, New Zealand, China, Vietnam and Lebanon together accounted for 10.6 per cent of all mothers (Table 4). Further information on maternal country of birth is shown in Chapter 7.

TABLE 4

MATERNAL COUNTRY OF BIRTH, NSW 2001–2005*

Country of birth	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Australia	61655	73.1	61640	72.9	61432	72.2	60961	72.3	64246	72.1
United Kingdom	2331	2.8	2344	2.8	2368	2.8	2229	2.6	2367	2.7
New Zealand	2009	2.4	1998	2.4	2121	2.5	1989	2.4	2233	2.5
China	1791	2.1	1830	2.2	1586	1.9	1672	2.0	1767	2.0
Vietnam	1691	2.0	1773	2.1	1863	2.2	1684	2.0	1652	1.9
Lebanon	1667	2.0	1663	2.0	1696	2.0	1594	1.9	1608	1.8
Philippines	1243	1.5	1156	1.4	1192	1.4	1083	1.3	1160	1.3
India	612	0.7	747	0.9	810	1.0	888	1.1	1094	1.2
Iraq	577	0.7	545	0.6	648	0.8	621	0.7	681	0.8
Fiji	652	0.8	655	0.8	691	0.8	686	0.8	670	0.8
South Africa	450	0.5	486	0.6	486	0.6	547	0.6	579	0.6
Indonesia	494	0.6	494	0.6	489	0.6	519	0.6	541	0.6
South Korea	358	0.4	301	0.4	328	0.4	389	0.5	419	0.5
United States of America	332	0.4	346	0.4	355	0.4	372	0.4	359	0.4
Pakistan	276	0.3	266	0.3	260	0.3	291	0.3	345	0.4
Malaysia	251	0.3	262	0.3	271	0.3	283	0.3	339	0.4
Japan	293	0.3	283	0.3	293	0.3	260	0.3	339	0.4
Hong Kong	332	0.4	307	0.4	301	0.4	314	0.4	332	0.4
Ireland	291	0.3	267	0.3	333	0.4	281	0.3	325	0.4
Sri Lanka	291	0.3	324	0.4	299	0.4	310	0.4	320	0.4
Western Samoa	319	0.4	310	0.4	303	0.4	289	0.3	306	0.3
Bangladesh	183	0.2	212	0.3	198	0.2	233	0.3	293	0.3
Thailand	221	0.3	268	0.3	253	0.3	277	0.3	290	0.3
Cambodia	285	0.3	279	0.3	295	0.3	274	0.3	268	0.3
Afghanistan	147	0.2	133	0.2	143	0.2	159	0.2	263	0.3
Turkey	317	0.4	266	0.3	265	0.3	268	0.3	251	0.3
Canada	203	0.2	192	0.2	225	0.3	237	0.3	227	0.3
Sudan	65	0.1	69	0.1	117	0.1	154	0.2	226	0.3
Tonga	278	0.3	271	0.3	219	0.3	246	0.3	222	0.2
Germany	192	0.2	188	0.2	237	0.3	205	0.2	211	0.2
Chile	206	0.2	250	0.3	187	0.2	172	0.2	194	0.2
Egypt	176	0.2	160	0.2	173	0.2	159	0.2	177	0.2
Iran	169	0.2	137	0.2	192	0.2	159	0.2	176	0.2
Serbia and Montenegro	–	–	–	–	–	–	–	–	168	0.2
Russian Federation	63	0.1	105	0.1	106	0.1	115	0.1	151	0.2
Syria	150	0.2	151	0.2	154	0.2	159	0.2	147	0.2
Singapore	119	0.1	117	0.1	129	0.2	119	0.1	146	0.2
North Korea	102	0.1	151	0.2	206	0.2	153	0.2	140	0.2
Former Yugoslavia	607	0.7	531	0.6	571	0.7	464	0.6	135	0.2
Poland	92	0.1	106	0.1	116	0.1	130	0.2	127	0.1
France	99	0.1	109	0.1	96	0.1	119	0.1	122	0.1
Italy	139	0.2	70	0.1	106	0.1	107	0.1	119	0.1
Laos	118	0.1	128	0.2	114	0.1	124	0.1	108	0.1
Taiwan	85	0.1	78	0.1	96	0.1	80	0.1	107	0.1
Papua New Guinea	133	0.2	135	0.2	148	0.2	156	0.2	106	0.1
Macedonia	–	–	–	–	–	–	–	–	106	0.1
Portugal	101	0.1	105	0.1	92	0.1	93	0.1	100	0.1
Other—not stated	2214	2.6	2379	2.8	2469	2.9	2664	3.2	2878	3.2
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

* Countries of birth for which 100 or more mothers gave birth in 2005.

Maternal Aboriginality

The reported number of Aboriginal or Torres Strait Islander mothers giving birth increased from 2,110 in 2001 to 2,474

in 2005, an increase from 2.5 to 2.8 per cent of all mothers (Table 5). Further information on maternal Aboriginality and reporting of Aboriginality is shown in Chapter 6.

TABLE 5

MATERNAL ABORIGINALITY, NSW 2001–2005

Aboriginality	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Aboriginal or Torres Strait Islander	2110	2.5	2155	2.5	2161	2.5	2308	2.7	2474	2.8
Non-Aboriginal or Torres Strait Islander	82223	97.4	82383	97.4	82831	97.4	81948	97.2	86570	97.1
Not stated	46	0.1	49	0.1	40	0.0	32	0.0	96	0.1
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Previous pregnancies

In recent years there were no substantial changes in the reported number of previous pregnancies greater than 20 weeks gestation (Table 6). The proportion of mothers giving birth for the first time has been stable at 41 to 42

per cent, while the proportion of mothers giving birth to a second to fifth baby has been stable at about 56 to 57 per cent. Less than 2 per cent of mothers have previously given birth 5 times or more.

TABLE 6

PREVIOUS PREGNANCIES, NSW 2001–2005

Number of previous pregnancies (>20 weeks gestation)	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	35153	41.7	35035	41.4	35879	42.2	35796	42.5	37073	41.6
1–4	47850	56.7	48169	56.9	47847	56.3	47136	55.9	50566	56.7
5+	1329	1.6	1290	1.5	1258	1.5	1312	1.6	1441	1.6
Not stated	47	0.1	93	0.1	48	0.1	44	0.1	60	0.1
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Duration of pregnancy at first antenatal visit

Since 2001, the proportion of mothers starting antenatal care at 20-plus weeks gestation has declined slightly from 12.9 to 11.4 per cent (Table 7).

TABLE 7

DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT, NSW 2001–2005

Duration of pregnancy (weeks)	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–19	72704	86.2	73116	86.4	73615	86.6	73775	87.5	78456	88.0
20-plus	10878	12.9	10614	12.5	10929	12.9	9934	11.8	10169	11.4
Not stated	797	0.9	857	1.0	488	0.6	579	0.7	515	0.6
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Smoking in pregnancy

The proportion of mothers reporting any smoking during pregnancy declined between 2001 and 2005: in 2001, 14,424 (17.1 per cent) mothers reported smoking in pregnancy, compared to 13,829 (16.3 per cent) in 2002, 12,875 (15.1 per cent) in 2003, 12,472 (14.8 per cent) in 2004 and 12,738 (14.3 per cent) in 2005.

Of mothers who smoked during pregnancy in 2005, 4.3 per cent stopped smoking before the second half of pregnancy. Over the 5-year period, among those who smoked in the second half of pregnancy, there was a trend towards smoking fewer cigarettes per day (Table 8).

TABLE 8

MOTHERS WHO SMOKED AT ALL DURING PREGNANCY BY NUMBER OF CIGARETTES SMOKED IN THE SECOND HALF OF PREGNANCY, NSW 2001–2005

Cigarettes smoked in the second half of pregnancy	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	576	4.0	556	4.0	427	3.3	485	3.9	552	4.3
1–10 per day	6834	47.4	6639	48.0	6451	50.1	6303	50.5	6483	50.9
More than ten per day	6725	46.6	6347	45.9	5680	44.1	5378	43.1	5129	40.3
Smoked, amount not stated	289	2.0	279	2.0	317	2.5	297	2.4	572	4.5
Not stated	0	0.0	8	0.1	0	0.0	9	0.1	2	0.0
TOTAL	14424	100.0	13829	100.0	12875	100.0	12472	100.0	12738	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Place of birth

In 2005, the majority of mothers planned to give birth in a hospital labour ward, and 3.3 per cent of mothers planned to give birth in a birth centre (Table 9). About 60 per cent of mothers who planned to give birth in a birth centre actually did so. The total number of reported planned homebirths declined from 182 in 2001 to 152 in 2005, while the reported number of planned homebirths that occurred at home fell from 144 in 2001 to 112 in 2005.

TABLE 9

MATERNAL PLACE OF BIRTH, NSW 2001–2005

Place of birth	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	80984	96.0	81230	96.0	81441	95.8	80701	95.7	85660	96.1
Birth centre	2038	2.4	2030	2.4	2075	2.4	2003	2.4	1830	2.1
Planned birth centre– hospital admission	822	1.0	881	1.0	1029	1.2	1126	1.3	1128	1.3
Planned homebirth	144	0.2	99	0.1	109	0.1	93	0.1	112	0.1
Planned homebirth– hospital admission	38	0.0	31	0.0	23	0.0	21	0.0	40	0.0
Born before arrival	353	0.4	316	0.4	355	0.4	344	0.4	369	0.4
Not stated	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Hypertension and diabetes

In 2005, pre-eclampsia was reported in 5.1 per cent of mothers, a slight fall from 6.4 per cent in 2001. Essential hypertension was reported in about one per cent of mothers, a rate that has not changed substantially over the last 5 years (Table 10).

In 2005, gestational diabetes was reported in 4.7 per cent of mothers, rising from 3.8 per cent reported in 2001, while rates of diabetes mellitus have remained stable at about 0.6 per cent over the 5-year period.

TABLE 10

MATERNAL HYPERTENSION OR DIABETES, NSW 2001–2005

Condition	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Diabetes mellitus	404	0.5	462	0.5	505	0.6	464	0.6	503	0.6
Gestational diabetes	3213	3.8	3693	4.4	3792	4.5	3592	4.3	4165	4.7
Essential hypertension	823	1.0	940	1.1	879	1.0	940	1.1	842	0.9
Pre-eclampsia	5360	6.4	4839	5.7	4645	5.5	4606	5.5	4553	5.1
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Labour

The rate of spontaneous onset of labour fell from 62.2 per cent in 2001 to 58.3 per cent in 2005 (Table 11). Nine per cent of spontaneous labours were augmented with oxytocics or prostaglandins in 2005. The rate of induction of labour was 25.4 per cent in 2005, similar to previous

years. The most common reported reason for induction of labour in 2004 was prolonged pregnancy (41 or more weeks) (32.3 per cent), followed by prelabour rupture of membranes (10.9 per cent), hypertensive disease (10.1 per cent), diabetes (4.4 per cent), suspected intrauterine growth retardation (3.9 per cent), and fetal death (0.9 per cent).

TABLE 11

ONSET AND AUGMENTATION OF LABOUR, NSW 2001–2005

Onset of labour	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	37492	44.4	37615	44.5	38110	44.8	37137	44.1	38027	42.7
Spontaneous augmented with ARM	6684	7.9	6422	7.6	5992	7.0	6090	7.2	6152	6.9
Spontaneous augmented with oxytocics–prostaglandins	8297	9.8	7644	9.0	7258	8.5	7580	9.0	7812	8.8
No labour	10986	13.0	11720	13.9	12820	15.1	12930	15.3	14467	16.2
Induced–oxytocics–prostaglandins	7422	8.8	7414	8.8	7265	8.5	7049	8.4	7417	8.3
Induced–ARM only	1181	1.4	1193	1.4	1331	1.6	1267	1.5	1595	1.8
Induced–ARM+oxytocics–prostaglandins	12033	14.3	12262	14.5	11965	14.1	11912	14.1	13273	14.9
Induced–other#	277	0.3	305	0.4	289	0.3	322	0.4	384	0.4
Not stated	7	0.0	12	0.0	2	0.0	1	0.0	13	0.0
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

This category includes other forms of induction such as Foley's catheter.

Delivery

Among NSW mothers, the rate of normal vaginal birth decreased from 65.4 per cent in 2001 to 61.2 per cent in 2005 (Table 12). The caesarean section rate increased from 23.6 to 28.1 per cent. The rate of instrumental delivery remained steady at 10 to 11 per cent, accompanied by a change in the pattern of instrumental delivery: the rate of vacuum extraction rose from 6.5 to 7.1 per cent and the rate of forceps delivery declined from 4.0 to 3.1 per cent.

Operative and instrumental deliveries are more common among privately than publicly insured mothers (Table 13). Among privately insured mothers the rate of normal vaginal birth fell from 55.0 in 2000 to 50.3 per cent in 2004 and the caesarean section rate increased from 28.2 to 35.0 per cent. Among publicly insured mothers the rate of normal vaginal birth fell from 71.8 to 67.8 per cent and the caesarean section rate rose from 18.5 to 23.4 per cent.

TABLE 12

TYPE OF DELIVERY, NSW 2001–2005

Type of delivery	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	55206	65.4	54271	64.2	53424	62.8	52366	62.1	54568	61.2
Forceps	3398	4.0	3034	3.6	2875	3.4	2762	3.3	2801	3.1
Vacuum extraction	5499	6.5	5855	6.9	5788	6.8	5902	7.0	6372	7.1
Vaginal breech	383	0.5	353	0.4	371	0.4	347	0.4	322	0.4
Elective caesarean section	10986	13.0	11720	13.9	12820	15.1	12930	15.3	14467	16.2
Emergency caesarean section#	8894	10.5	9335	11.0	9744	11.5	9974	11.8	10610	11.9
Not stated	13	0.0	19	0.0	10	0.0	7	0.0	0	0.0
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.
Emergency caesarean section includes caesarean sections where the onset of labour was not stated.

TABLE 13

MATERNAL HEALTH INSURANCE STATUS BY TYPE OF DELIVERY, NSW 2000–2004

Insurance status– type of delivery	2000		2001		Year 2002		2003		2004	
	No.	%	No.	%	No.	%	No.	%	No.	%
Public										
Normal vaginal	43462	71.8	39541	71.3	38228	70.4	38976	68.7	37004	67.8
Forceps	2191	3.6	1673	3.0	1430	2.6	1464	2.6	1378	2.5
Vacuum extraction	3100	5.1	2868	5.2	2995	5.5	3205	5.7	3137	5.8
Vaginal breech	505	0.8	286	0.5	253	0.5	283	0.5	257	0.5
Elective caesarean section	5594	9.2	5658	10.2	5854	10.8	6630	11.7	6561	12.0
Emergency caesarean section#	5627	9.3	5438	9.8	5512	10.2	6143	10.8	6218	11.4
Not stated	12	0.0	3	0.0	7	0.0	0	0.0	0	0.0
TOTAL	60491	100.0	55467	100.0	54279	100.0	56701	100.0	54555	100.0
Private										
Normal vaginal	13652	55.5	14715	53.6	15261	52.4	14172	50.8	13739	50.3
Forceps	1669	6.8	1684	6.1	1578	5.4	1405	5.0	1334	4.9
Vacuum extraction	2199	8.9	2558	9.3	2801	9.6	2570	9.2	2628	9.6
Vaginal breech	135	0.5	76	0.3	82	0.3	70	0.3	60	0.2
Elective caesarean section	4159	16.9	5114	18.6	5689	19.5	6128	21.9	6044	22.1
Emergency caesarean section#	2762	11.2	3300	12.0	3683	12.7	3565	12.8	3511	12.8
Not stated	3	0.0	10	0.0	12	0.0	10	0.0	7	0.0
TOTAL##	24579	100.0	27457	100.0	29106	100.0	27920	100.0	27323	100.0
TOTAL##										
Normal vaginal	58049	67.1	55206	65.4	54271	64.2	53424	62.8	52366	62.1
Forceps	3904	4.5	3398	4.0	3034	3.6	2875	3.4	2762	3.3
Vacuum extraction	5367	6.2	5499	6.5	5855	6.9	5788	6.8	5902	7.0
Vaginal breech	669	0.8	383	0.5	353	0.4	371	0.4	347	0.4
Elective caesarean section	9926	11.5	10986	13.0	11720	13.9	12820	15.1	12930	15.3
Emergency caesarean section#	8530	9.9	8894	10.5	9335	11.0	9744	11.5	9974	11.8
Not stated	15	0.0	13	0.0	19	0.0	10	0.0	7	0.0
TOTAL	86460	100.0	84379	100.0	84587	100.0	85032	100.0	84288	100.0

Source: Linked data of the NSW Midwives Data Collection and NSW Inpatient Statistics Collection. Centre for Epidemiology and Research, NSW Department of Health.

Emergency caesarean section includes caesarean sections where the onset of labour was not stated.

Total includes confinements where type of health insurance was not stated.

Pain relief

There has been a trend towards increased use of spinal anaesthetics, from 7.9 per cent in 2001 to 16.9 per cent in 2005. The proportion of mothers having no pain relief during labour or delivery decreased slightly from 11.5 per cent in 2001 to 10.3 per cent in 2005 (Table 14). In 2005, 45.0 per cent of mothers used nitrous oxide for pain relief, 21.6 per cent had an epidural anaesthetic, and 19.2 per cent received intramuscular narcotics.

TABLE 14

MATERNAL PAIN RELIEF, NSW 2001–2005

Type of pain relief [#]	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Epidural	24572	29.1	23543	27.8	23569	27.7	23487	27.9	19278	21.6
General anaesthetic	4866	5.8	4811	5.7	4636	5.5	4213	5.0	3997	4.5
IM Narcotics	21451	25.4	21038	24.9	21083	24.8	18587	22.1	17159	19.2
Nitrous Oxide	40964	48.5	40729	48.2	39504	46.5	38518	45.7	40087	45.0
Spinal	6677	7.9	8672	10.3	10698	12.6	12336	14.6	15094	16.9
Nil	9674	11.5	9163	10.8	8896	10.5	8584	10.2	9161	10.3
TOTAL	84379	100.0	84587	100.0	85032	100.0	84288	100.0	89140	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.
More than one type of pain relief may be used.

Baby sex

There were no significant changes in the pattern of baby sex since 2001, with slightly more male babies born than females in each year. In 2005, 46,580 (51.4 per cent) of babies were male, 43,932 (48.5 per cent) were female, 18 were of indeterminate sex, and sex was not reported for 80 babies. This compares with babies born in 2001, when 44,168 (51.4 per cent) of 85,858 babies were male, 41,625 (48.5 per cent) were female, 10 were of indeterminate sex, and sex was not reported for 55 babies.

Gestational age

In 2005, 7.2 per cent of babies were born prematurely (less than 37 weeks gestation), the same rate as for 2001 (Table 15). Over the 5 year period, about 90 per cent of babies were born at term (37–41 weeks gestation), and about 2 per cent were postmature (41–plus weeks gestation).

TABLE 15

BIRTHS BY GESTATIONAL AGE, NSW 2001–2005

Gestational age (weeks)	2001		Year 2002		2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
20–27	628	0.7	594	0.7	585	0.7	605	0.7	622	0.7
28–31	667	0.8	612	0.7	639	0.7	667	0.8	654	0.7
32–36	4890	5.7	4865	5.7	4810	5.6	4975	5.8	5248	5.8
37–41	77566	90.3	77865	90.5	78241	90.5	77614	90.6	82367	90.9
42 +	2093	2.4	2047	2.4	2128	2.5	1761	2.1	1709	1.9
<20	0	0.0	1	0.0	1	0.0	0	0.0	0	0.0
Not stated	14	0.0	21	0.0	10	0.0	4	0.0	10	0.0
TOTAL	85858	100.0	86005	100.0	86414	100.0	85626	100.0	90610	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Birth weight

Since 2001, the rate of low birth weight (less than 2,500 grams) has been about just over 6 per cent (Table 16). The rate was 6.3 per cent in 2005.

TABLE 16

BIRTHS BY BIRTH WEIGHT, NSW 2001–2005

Birth weight (grams)	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 500	243	0.3	212	0.2	223	0.3	214	0.2	227	0.3
500–999	416	0.5	399	0.5	393	0.5	395	0.5	392	0.4
1000–1499	526	0.6	469	0.5	497	0.6	558	0.7	513	0.6
1500–1999	1043	1.2	1083	1.3	1049	1.2	1059	1.2	1100	1.2
2000–2499	3283	3.8	3344	3.9	3221	3.7	3231	3.8	3452	3.8
2500–2999	12783	14.9	12838	14.9	12877	14.9	12797	14.9	13675	15.1
3000–3499	30312	35.3	30504	35.5	30803	35.6	30238	35.3	32451	35.8
3500–3999	26542	30.9	26676	31.0	26982	31.2	26570	31.0	27822	30.7
4000–4499	9060	10.6	8921	10.4	8810	10.2	8931	10.4	9298	10.3
4500+	1607	1.9	1509	1.8	1507	1.7	1584	1.8	1613	1.8
Not stated	43	0.1	50	0.1	52	0.1	49	0.1	67	0.1
TOTAL	85858	100.0	86005	100.0	86414	100.0	85626	100.0	90610	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

Apgar score

In 2005, 2.0 per cent of babies were born with an Apgar score of less than 7 at 5 minutes and 1.1 per cent were born with a score less than 4 (Table 17). These rates are similar to those of previous years.

TABLE 17

BIRTHS BY APGAR SCORE AT 5 MINUTES, NSW 2001–2005[#]

Apgar score	2001		2002		Year 2003		2004		2005	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–4	922	1.1	902	1.0	899	1.0	921	1.1	963	1.1
5–6	938	1.1	893	1.0	865	1.0	844	1.0	833	0.9
7+	83797	97.6	84033	97.7	84473	97.8	83653	97.7	88621	97.8
Not stated	201	0.2	177	0.2	177	0.2	208	0.2	193	0.2
TOTAL	85858	100.0	86005	100.0	86414	100.0	85626	100.0	90610	100.0

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

[#] Includes stillbirths and live births.

Perinatal outcome

In the period 2001–2005 the perinatal mortality rate varied from 8.6 to 9.6 per 1,000 (Table 18). In 2005, 67.6 per cent of all reported perinatal deaths were stillbirths and 32.4 per cent were neonatal deaths.

In 2005, of the 792 perinatal deaths in NSW, 772 (97.5 per cent) were reported among planned hospital births, 5 (0.6 per cent) among planned birth centre births, 1 occurred in a planned home birth, and 14 were among babies born before arrival at hospital.

TABLE 18

BIRTHS BY PERINATAL OUTCOME, NSW 2001–2005[#]

Year	Liveborn surviving		Stillborn		Perinatal Outcome Neonatal death		Not stated		Total births		Perinatal mortality rate/1,000 births
	No.	%	No.	%	No.	%	No.	%	No.	%	
2001	85063	99.1	538	0.6	251	0.3	6	0.0	85858	100.0	9.2
2002	85222	99.1	515	0.6	233	0.3	35	0.0	86005	100.0	8.7
2003	85669	99.1	523	0.6	221	0.3	1	0.0	86414	100.0	8.6
2004	84849	99.1	561	0.7	212	0.2	4	0.0	85626	100.0	9.0
2005	89786	99.1	535	0.6	257	0.3	32	0.0	90610	100.0	8.7

Source: NSW Midwives Data Collection (HOIST). Centre for Epidemiology and Research, NSW Department of Health.

[#] Perinatal deaths include deaths reported to the MDC only. As the MDC form is completed at discharge or transfer of the baby, deaths occurring after this time may not be reported to the MDC.

Maternal deaths

In the period 1990–2004, 155 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. The number of maternal deaths per year has gradually declined with less than 10 deaths reported per year since 2001. These reductions have occurred across all three categories of cause of death: deaths that are directly

related to pregnancy or its management; deaths that 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 physiologic effects of pregnancy; and deaths due to incidental causes (Table 19). Table 20 shows maternal deaths by cause in NSW for 2004.

TABLE 19

MATERNAL DEATHS BY YEAR, NSW 1990–2004[#]

Year	Direct		Indirect		Classification Total Direct & Indirect		Incidental		TOTAL	
	No.	Ratio/ 100,000	No.	Ratio/ 100,000	No.	Ratio/ 100,000	No.	Ratio/ 100,000	No.	Ratio/ 100,000
1990	4	4.6	6	6.9	10	11.6	2	2.3	12	13.9
1991	4	4.7	1	1.2	5	5.8	1	1.2	6	7.0
1992	5	5.7	1	1.1	6	6.8	5	5.7	11	12.5
1993	6	6.9	1	1.2	7	8.1	6	6.9	13	15.0
1994	8	9.2	1	1.2	9	10.4	3	3.5	12	13.8
1995	7	8.1	2	2.3	9	10.4	6	7.0	15	17.4
1996	6	7.0	1	1.2	7	8.2	5	5.9	12	14.1
1997	7	8.1	2	2.3	9	10.5	5	5.8	14	16.1
1998	4	4.7	4	4.7	8	9.4	3	3.5	11	12.9
1999 ^{##}	4	4.7	1	1.2	5	5.8	6	7.0	12	14.0
2000	4	4.7	5	5.9	9	10.7	1	1.2	10	11.9
2001	4	4.7	4	4.7	8	9.5	1	1.2	9	10.7
2002	2	2.4	2	2.4	4	4.7	1	1.2	5	5.9
2003	1	1.2	3	3.5	4	4.7	3	3.5	7	8.2
2004 ^{###}	2	2.3	2	2.3	4	4.7	2	2.3	7	8.2

Source: NSW Maternal and Perinatal Committee.

[#] Includes all deaths of women who were pregnant at the time of death, or who died within 42 days of childbirth. Direct deaths include those resulting from obstetric complications of the pregnant state, including its management. Indirect deaths include those resulting from preexisting disease or disease which developed during pregnancy and was not due to direct obstetric causes but which may have been aggravated by the physiological effects of pregnancy. Incidental deaths are those where the pregnancy is unlikely to have contributed significantly to the death.¹

^{##} Total for 1999 includes one death of undetermined cause.

^{###} Total for 2004 includes one open coronial case

TABLE 20

MATERNAL DEATHS BY CAUSE, NSW 2004[#]

Year–Classification	Cause	No.
Direct	Pulmonary thromboembolism	1
Direct	Amniotic fluid embolism	1
Indirect	Arrhythmia	1
Indirect	Retroperitoneal haemorrhage	1
Incidental	Motor vehicle accident	1
Incidental	Laryngeal obstruction due to saccular cyst of the larynx	1
	Undetermined ^{##}	1
TOTAL		7

Source: NSW Maternal and Perinatal Committee.

[#] Includes all deaths of women who were pregnant at the time of death, or who died within 42 days of childbirth. Direct deaths include those resulting from obstetric complications of the pregnant state, including its management. Indirect deaths include those resulting from preexisting disease or disease which developed during pregnancy and was not due to direct obstetric causes but which may have been aggravated by the physiological effects of pregnancy. Incidental deaths are those where the pregnancy is unlikely to have contributed significantly to the death.¹

^{##} Open coronial case

Reference

1. Sullivan EA, King JF (eds). *Maternal deaths in Australia 2000–2002*. AIHW Catalogue no. PER 32. Sydney: AIHW National Perinatal Statistics Unit, 2006.