

7. ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES

Reporting of Aboriginality

Maternal Aboriginality is under-reported on the MDC. One method of assessing the extent of under-reporting and monitoring changes over time is to compare the reporting of maternal Aboriginality to the MDC with reporting of maternal Aboriginality on birth registrations held by the NSW Registry of Births, Deaths and Marriages. Using capture–recapture methods, an estimate of the total number of babies born to Aboriginal mothers was obtained and compared with the number of babies born to Aboriginal mothers as reported to the MDC (Table 65). An estimate of the total number of babies born to Aboriginal mothers or fathers was also obtained and compared with the number of babies born to Aboriginal mothers as reported to the MDC

(Table 67). The method used here is described in Chapter 3 (page 14).

For NSW overall, the percentage of births to Aboriginal and Torres Strait Islander mothers reported to the MDC rose from 65.5 per cent to 69.3 per cent between 2002 and 2005. In 2005, reporting varied markedly between area health services, ranging from 39.3 per cent in the Sydney South West Area to 86.8 per cent in the Greater Southern Area (Table 65, Figure 2). Under-reporting of Aboriginality on the MDC means that numbers of births presented in this chapter should be interpreted with caution. The total number of babies born to Aboriginal mothers in 2005 is estimated to be 3,614, about one-and-a half times higher than the number reported to the MDC.

TABLE 65

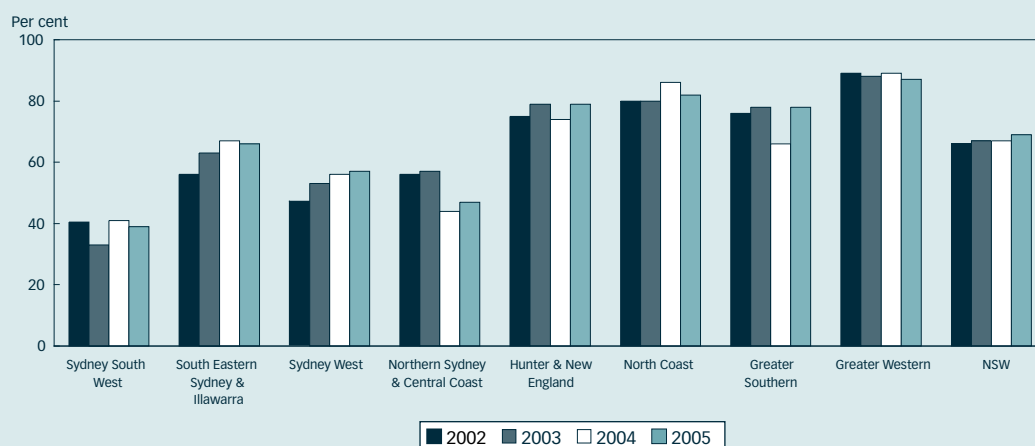
BIRTHS TO ABORIGINAL MOTHERS BY SOURCE OF BIRTH REPORT, YEAR OF BIRTH AND HEALTH AREA OF RESIDENCE, NSW 2002–2005

Year of birth – Health area of residence	MDC births	RBDM births	Births reported to both MDC/RBDM	Total estimated Aboriginal births	Estimated Aboriginal births reported to MDC %	95% confidence interval of estimated births reported
	No.	No.	No.	No.	%	
2002						
Sydney South West	166	295	119	411	40.4	35.7 – 45.1
South Eastern Sydney & Illawarra	175	187	105	311	56.2	50.7 – 61.8
Sydney West	208	301	141	443	46.9	42.3 – 51.5
Northern Sydney & Central Coast	87	95	53	155	56.0	48.2 – 63.8
Hunter & New England	520	421	317	690	75.3	72.1 – 78.5
North Coast	330	197	158	411	80.3	76.4 – 84.1
Greater Southern	160	114	87	209	76.4	70.7 – 82.2
Greater Western	524	335	297	591	88.7	86.1 – 91.2
Other-not stated	13	10	4	30	43.6	25.8 – 61.4
NSW	2183	1955	1281	3331	65.5	63.9 – 67.1
2003						
Sydney South West	161	285	95	482	33.4	29.2 – 37.6
South Eastern Sydney & Illawarra	180	177	112	284	63.4	57.8 – 69.0
Sydney West	240	282	148	457	52.5	48.0 – 57.1
Northern Sydney & Central Coast	83	108	61	147	56.6	48.6 – 64.6
Hunter & New England	522	425	334	664	78.6	75.5 – 81.7
North Coast	311	175	139	391	79.5	75.5 – 83.5
Greater Southern	174	121	94	224	77.8	72.3 – 83.2
Greater Western	495	319	281	562	88.1	85.4 – 90.8
Other-not stated	23	16	13	28	81.7	67.4 – 96.0
NSW	2189	1908	1277	3270	66.9	65.3 – 68.5
2004						
Sydney South West	164	260	105	405	40.5	35.7 – 45.2
South Eastern Sydney & Illawarra	224	203	136	334	67.1	62.0 – 72.1
Sydney West	242	271	151	434	55.8	51.1 – 60.5
Northern Sydney & Central Coast	94	111	49	212	44.4	37.7 – 51.1
Hunter & New England	514	416	306	699	73.6	70.3 – 76.9
North Coast	398	233	201	461	86.3	83.2 – 89.4
Greater Southern	175	142	94	264	66.3	60.6 – 72.0
Greater Western	506	274	245	566	89.4	86.9 – 92.0
Other-not stated	16	16	11	23	69.3	50.5 – 88.1
NSW	2333	1926	1298	3461	67.4	65.8 – 69.0

TABLE 65 (continued)**BIRTHS TO ABORIGINAL MOTHERS BY SOURCE OF BIRTH REPORT, YEAR OF BIRTH AND HEALTH AREA OF RESIDENCE, NSW 2002–2005**

Year of birth – Health area of residence	MDC births	RBDM births	Births reported to both MDC/RBDM	Total estimated Aboriginal births	Estimated Aboriginal births reported to MDC	95% confidence interval of estimated births reported
	No.	No.	No.	No.	%	
2005						
Sydney South West	163	189	74	414	39.3	34.6 – 44.0
South Eastern Sydney & Illawarra	201	143	94	305	65.9	60.5 – 71.2
Sydney West	270	224	128	472	57.2	52.8 – 61.7
Northern Sydney & Central Coast	88	93	43	189	46.5	39.4 – 53.6
Hunter & New England	611	354	278	778	78.6	75.7 – 81.4
North Coast	357	152	124	437	81.7	78.0 – 85.3
Greater Southern	212	116	90	273	77.7	72.8 – 82.6
Greater Western	565	265	230	651	86.8	84.2 – 89.4
Other-not stated	39	26	22	46	84.9	74.5 – 95.2
NSW	2506	1562	1083	3614	69.3	67.8 – 70.8

Source: Linked NSW Midwives Data Collection and Registry of Births, Deaths and Marriages birth registration data.

FIGURE 2**LEVEL OF REPORTING OF ABORIGINALITY TO THE NSW MIDWIVES DATA COLLECTION BY YEAR OF BIRTH AND HEALTH AREA OF HOSPITAL, NSW 2002–2005**

Source: Linked NSW Midwives Data Collection and Registry of Births, Deaths and Marriages birth registration data.

Information on paternal Aboriginality is not collected by the MDC, but is reported to the NSW Registry of Births, Deaths and Marriages. Of the 86,277 births registered for residents of NSW in 2005, 3,130 (3.6 per cent) were reported to have

an Aboriginal or Torres Strait Islander mother or father (Table 66). For 1,182 babies, the mother was reported to be non-Aboriginal or Torres Strait Islander and the father was reported to be Aboriginal or Torres Strait Islander.

TABLE 66**BIRTH REGISTRATIONS BY MATERNAL AND PATERNAL INDIGENOUS STATUS, NSW 2005**

Mother	Father	No.	%
Aboriginal or Torres Strait Islander	Aboriginal or Torres Strait Islander	581	0.7
Aboriginal or Torres Strait Islander	Non-Aboriginal	1367	1.6
Non-Aboriginal	Aboriginal or Torres Strait Islander	1182	1.4
Non-Aboriginal	Non-Aboriginal	83147	96.4
TOTAL		86277	100.0

Source: Australian Bureau of Statistics birth registration data (HOIST), Centre for Epidemiology and Research, NSW Department of Health. Births registered among NSW residents. Births where indigenous status was not stated were classified as non-Aboriginal.

Table 67 shows the number of babies born to Aboriginal mothers as reported to the MDC and the number of babies born to Aboriginal mothers or fathers as reported to the NSW Registry of Births, Deaths and Marriages between 2002 and 2005. Using capture–recapture methods, an estimate of the total number of babies born to Aboriginal mothers or fathers was obtained from both data sources. For NSW overall, the percentage of births to Aboriginal and

Torres Strait Islander mothers or fathers that are reported to the MDC rose slightly from 42.2 per cent to 43.7 per cent between 2002 and 2005. In 2005, this percentage ranged from 25.0 per cent in the Sydney South West Area to 57.3 per cent in the Greater Southern Area (Table 67).

There are therefore a substantial number of babies with non-indigenous mothers and indigenous fathers who are not represented in the numbers reported in this chapter.

TABLE 67

BIRTHS TO ABORIGINAL MOTHERS AND FATHERS BY SOURCE OF BIRTH REPORT, YEAR OF BIRTH AND HEALTH AREA OF RESIDENCE, NSW 2002–2005

Year of birth – Health area of residence	MDC births No.	RBDM births No.	Births reported to both MDC/RBDM No.	Total estimated Aboriginal births	Estimated Aboriginal births reported to MDC %	95% confidence interval of estimated births reported
2002						
Sydney South West	166	442	120	610	27.2	23.7 – 30.7
South Eastern Sydney & Illawarra	175	327	110	519	33.7	29.6 – 37.8
Sydney West	208	469	143	681	30.5	27.1 – 34.0
Northern Sydney & Central Coast	87	175	57	266	32.7	27.1 – 38.3
Hunter & New England	520	663	326	1057	49.2	46.2 – 52.2
North Coast	330	342	163	691	47.7	44.0 – 51.5
Greater Southern	160	213	92	369	43.3	38.3 – 48.4
Greater Western	524	485	307	827	63.3	60.0 – 66.6
Other–not stated	13	17	4	49	26.3	14.0 – 38.6
NSW	2183	3133	1322	5173	42.2	40.9 – 43.5
2003						
Sydney South West	161	428	97	708	22.7	19.6 – 25.8
South Eastern Sydney & Illawarra	180	312	115	487	36.9	32.6 – 41.2
Sydney West	240	466	152	735	32.7	29.3 – 36.1
Northern Sydney & Central Coast	83	183	64	237	35.1	29.0 – 41.1
Hunter & New England	522	664	339	1022	51.1	48.0 – 54.1
North Coast	311	291	145	623	49.9	46.0 – 53.8
Greater Southern	174	211	97	378	46.1	41.1 – 51.1
Greater Western	495	491	288	843	58.7	55.4 – 62.0
Other–not stated	23	28	14	45	50.7	36.1 – 65.2
NSW	2189	3074	1311	5132	42.7	41.3 – 44.0
2004						
Sydney South West	164	395	109	593	27.7	24.1 – 31.3
South Eastern Sydney & Illawarra	224	344	139	553	40.5	36.4 – 44.6
Sydney West	242	454	151	726	33.3	29.9 – 36.7
Northern Sydney & Central Coast	94	214	51	392	24.0	19.8 – 28.2
Hunter & New England	514	653	310	1082	47.5	44.5 – 50.5
North Coast	398	353	212	662	60.1	56.4 – 63.8
Greater Southern	175	231	97	416	42.1	37.4 – 46.8
Greater Western	506	418	255	829	61.1	57.7 – 64.4
Other–not stated	16	25	11	36	44.7	28.4 – 60.9
NSW	2333	3087	1335	5394	43.3	41.9 – 44.6
2005						
Sydney South West	163	310	77	653	25.0	21.6 – 28.3
South Eastern Sydney & Illawarra	201	268	97	553	36.3	32.3 – 40.3
Sydney West	270	372	133	753	35.8	32.4 – 39.3
Northern Sydney & Central Coast	88	162	44	321	27.4	22.5 – 32.3
Hunter & New England	611	584	289	1234	49.5	46.7 – 52.3
North Coast	357	257	132	693	51.5	47.8 – 55.2
Greater Southern	212	180	96	396	53.5	48.6 – 58.4
Greater Western	565	412	236	985	57.3	54.3 – 60.4
Other–not stated	39	33	22	58	67.1	55.0 – 79.2
NSW	2506	2578	1126	5736	43.7	42.4 – 45.0

Source: Linked NSW Midwives Data Collection and Registry of Births, Deaths and Marriages birth registration data.

Trends in births

In 2006, 2,463 babies were born to Aboriginal mothers, 51 babies were born to Torres Strait Islander mothers and

135 babies were born to mothers of both Aboriginal and Torres Strait Islander background (Table 68).

TABLE 68

ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY INDIGENOUS STATUS, NSW 2002–2006#

Indigenous status	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Confinements										
Aboriginal but not Torres Strait Islander	2041	94.7	2014	93.2	2161	93.6	2347	94.9	2429	93.0
Torres Strait Islander but not Aboriginal	25	1.2	35	1.6	48	2.1	30	1.2	50	1.9
Both Aboriginal and Torres Strait Islander	89	4.1	112	5.2	99	4.3	97	3.9	132	5.1
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0
Births										
Aboriginal but not Torres Strait Islander	2069	94.8	2039	93.1	2184	93.6	2376	94.8	2463	93.0
Torres Strait Islander but not Aboriginal	25	1.1	37	1.7	48	2.1	31	1.2	51	1.9
Both Aboriginal and Torres Strait Islander	89	4.1	114	5.2	101	4.3	100	4.0	135	5.1
TOTAL	2183	100.0	2190	100.0	2333	100.0	2507	100.0	2649	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers of confinements are about one-and-a-half times higher than shown, and the numbers of births are about two times higher than shown.

Plurality

Between 2002 and 2006, the reported number of babies born to Aboriginal and Torres Strait Islander mothers increased from 2,183 to 2,649 (Table 69), representing 2.5

and 2.9 per cent respectively of all babies born in NSW. Multiple pregnancies (twins, triplets etc.) were reported for about one per cent of mothers.

TABLE 69

ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY PLURALITY, NSW 2002–2006#

Plurality	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Confinements										
Singleton	2127	98.7	2134	98.8	2283	98.9	2443	98.7	2574	98.6
Twins	28	1.3	26	1.2	25	1.1	29	1.2	36	1.4
Triplets	0	0.0	1	0.0	0	0.0	2	0.1	1	0.0
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0
Births										
Singleton	2127	97.4	2134	97.4	2283	97.9	2443	97.4	2574	97.2
Twins	56	2.6	53	2.4	50	2.1	58	2.3	72	2.7
TOTAL	2183	100.0	2190	100.0	2333	100.0	2507	100.0	2649	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers of confinements are about one-and-a-half times higher than shown, and the numbers of births are about two times higher than shown.

Previous pregnancies

In 2006, about one-third of Aboriginal and Torres Strait Islander mothers gave birth for the first time (Table 70), about 60 per cent of mothers reported between one and 4

previous births and 7.6 per cent of mothers had given birth to 5 or more babies. This pattern has not changed substantially since 2002.

TABLE 70

PREVIOUS PREGANCIAS AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

No. previous pregnancies (>20 weeks)	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	664	30.8	668	30.9	759	32.9	787	31.8	844	32.3
1–4	1302	60.4	1316	60.9	1327	57.5	1472	59.5	1551	59.4
5+	183	8.5	177	8.2	221	9.6	214	8.6	199	7.6
Not stated	6	0.3	0	0.0	1	0.0	1	0.0	17	0.7
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one-and-a-half times higher than shown.

Maternal age

The reported number of babies born to Aboriginal and Torres Strait Islander mothers has increased at all ages. About one in 5 Aboriginal and Torres Strait Islander mothers were teenagers in 2006. Following state-wide trends, the

number of mothers giving birth at 35 years of age or more has increased over the last 5 years — from 6.8 per cent in 2002 to 8.5 per cent in 2006 (Table 71).

TABLE 71

AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

Maternal age (years)	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
12–19	481	22.3	455	21.1	493	21.4	504	20.4	534	20.5
20–34	1524	70.7	1553	71.9	1594	69.1	1739	70.3	1851	70.9
35+	146	6.8	153	7.1	221	9.6	231	9.3	222	8.5
Not stated	4	0.2	0	0.0	0	0.0	0	0.0	4	0.2
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one-and-a-half times higher than shown.

Health area of residence

The reported number of Aboriginal and Torres Strait Islander mothers who gave birth in 2006 ranged from 105 in the Northern Sydney and Central Coast Area to 594 in the Hunter and New England Area (Table 72).

The proportion of mothers who were teenagers varied from 14.6 cent in the Sydney South West Area to 24.4 per cent in the Greater Western Area (Table 73).

TABLE 72

HEALTH AREA OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

Health Area	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney South West	165	7.7	160	7.4	164	7.1	181	7.3	213	8.2
South Eastern Sydney & Illawarra	173	8.0	178	8.2	221	9.6	198	8.0	228	8.7
Sydney West	204	9.5	237	11.0	238	10.3	269	10.9	284	10.9
Northern Sydney & Central Coast	85	3.9	82	3.8	93	4.0	88	3.6	105	4.0
Hunter & New England	513	23.8	514	23.8	508	22.0	600	24.3	594	22.7
North Coast	327	15.2	304	14.1	390	16.9	350	14.1	406	15.5
Greater Southern	158	7.3	170	7.9	173	7.5	209	8.4	193	7.4
Greater Western	517	24.0	493	22.8	505	21.9	560	22.6	561	21.5
Other/Not stated	13	0.6	23	1.1	16	0.7	19	0.8	27	1.0
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for the total are about one-and-a-half times higher than shown. The level of under-reporting varies between health areas (Table 65).

TABLE 73

HEALTH AREA OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AGE, NSW 2006#

Health Area	Maternal age (years)								TOTAL	
	Under 20		20-plus		Not stated				No.	%
	No.	%	No.	%	No.	%	No.	%		
Sydney South West	31	14.6	182	85.4	0	0.0			213	100.0
South Eastern Sydney & Illawarra	38	16.7	189	82.9	1	0.4			228	100.0
Sydney West	51	18.0	233	82.0	0	0.0			284	100.0
Northern Sydney & Central Coast	23	21.9	82	78.1	0	0.0			105	100.0
Hunter & New England	127	21.4	467	78.6	0	0.0			594	100.0
North Coast	79	19.5	327	80.5	0	0.0			406	100.0
Greater Southern	42	21.8	151	78.2	0	0.0			193	100.0
Greater Western	137	24.4	421	75.0	3	0.5			561	100.0
Other/Not stated	6	22.2	21	77.8	0	0.0			27	100.0
TOTAL	534	20.5	2073	79.4	4	0.2			2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for the total are about one-and-a-half times higher than shown. The level of under-reporting varies between health areas (Table 65).

Booking status

In 2006, 89.1 per cent of Aboriginal and Torres Strait Islander mothers were booked into the hospital of birth, a rise from 87.3 per cent in 2002. In 2006, 94.8 per cent of non-Aboriginal or Torres Strait Islander mothers were booked into the hospital of birth.

Duration of pregnancy at first antenatal visit

Between 2002 and 2006, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation rose from 67.2 to 74.8 per cent (Table 74). This compares with 87.9 per cent of non-Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation in 2006.

In 2006, the proportion of Aboriginal and Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation varied from 63.4 per cent in the Sydney South West Area to 84.8 per cent in the Northern Sydney and Central Coast Area (Table 75).

TABLE 74

DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

Duration of pregnancy (weeks)	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–19	1448	67.2	1526	70.6	1618	70.1	1854	74.9	1952	74.8
20+	560	26.0	547	25.3	573	24.8	561	22.7	550	21.1
Not stated	147	6.8	88	4.1	117	5.1	59	2.4	109	4.2
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one-and-a-half times higher than shown.

TABLE 75

DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY HEALTH AREA OF RESIDENCE, NSW 2006#

Health Area	Duration of pregnancy (weeks)									
	0–19		20-plus		Not stated		TOTAL			
	No.	%	No.	%	No.	%	No.	%		
Sydney South West	135	63.4	64	30.0	14	6.6	213	100.0		
South Eastern Sydney & Illawarra	179	78.5	45	19.7	4	1.8	228	100.0		
Sydney West	217	76.4	65	22.9	2	0.7	284	100.0		
Northern Sydney & Central Coast	89	84.8	16	15.2	0	0.0	105	100.0		
Hunter & New England	437	73.6	140	23.6	17	2.9	594	100.0		
North Coast	311	76.6	76	18.7	19	4.7	406	100.0		
Greater Southern	148	76.7	37	19.2	8	4.1	193	100.0		
Greater Western	412	73.4	105	18.7	44	7.8	561	100.0		
Other/Not stated	24	88.9	2	7.4	1	3.7	27	100.0		
TOTAL	1952	74.8	550	21.1	109	4.2	2611	100.0		

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

Information not shown for Health Areas where the number of mothers is less than 5 in a group.

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one-and-a-half times higher than shown. The level of under-reporting varies between health areas (Table 65).

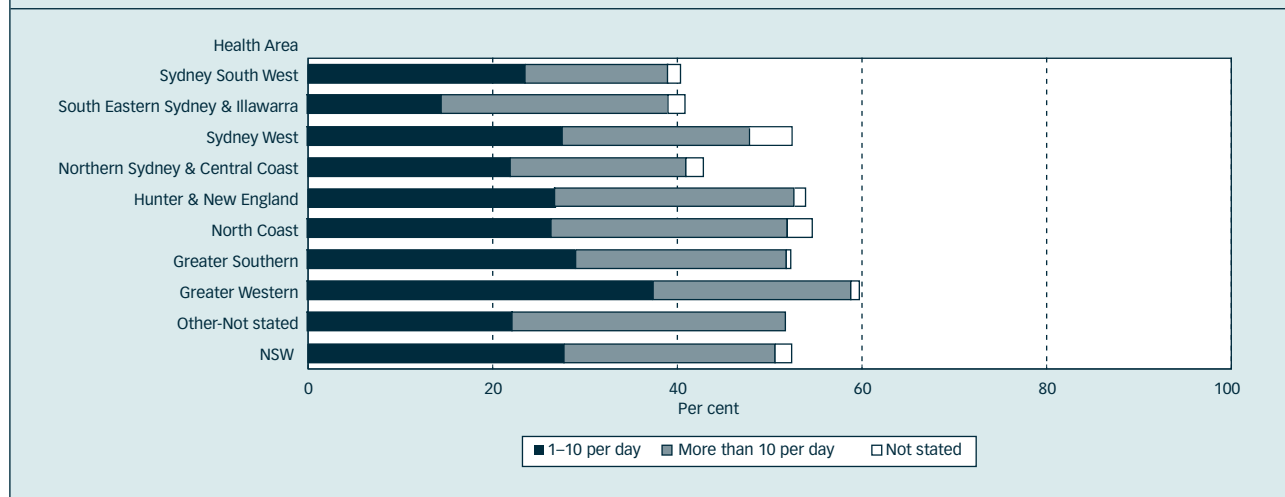
Smoking in pregnancy

In 2006, 53.6 per cent of Aboriginal and Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 58.0 per cent in 2002. This compares with 12.3 per cent of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2006.

Smoking in the second half of pregnancy poses the greatest risk to the health of both mother and baby. In 2006, 52.3 per cent of Aboriginal and Torres Strait Islander mothers reported smoking in the second half of pregnancy. This percentage varied from 40.4 per cent in the Sydney South West Area to 59.7 per cent in the Greater Western Area (Figure 3).

FIGURE 3

SMOKING IN THE SECOND HALF OF PREGNANCY AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AMOUNT SMOKED AND HEALTH AREA OF RESIDENCE, NSW 2006#



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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for NSW are about one and a half times higher than shown. The level of reporting varies between areas (Table 65).

Medical conditions and obstetric complications

In 2006, there was a slightly lower rate of gestational diabetes reported among Aboriginal and Torres Strait Islander mothers compared with non-Aboriginal or Torres Strait Islander mothers (Table 76). The number of Aboriginal and Torres Strait Islander mothers with medical

conditions and obstetric complications reported to the MDC is low, even after taking into account under-reporting of maternal Aboriginality. This is particularly the case for diabetes. The low numbers may be due to under-detection and/or under-reporting.

TABLE 76

MATERNAL MEDICAL CONDITIONS AND OBSTETRIC COMPLICATIONS BY ABORIGINALITY, NSW 2006#

Condition	Aboriginality							
	Aboriginal/ Torres Strait islander		Non-Aboriginal/ Torres Strait islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Diabetes mellitus	29	1.1	508	0.6	4	0.8	541	0.6
Gestational diabetes	102	3.9	4255	4.8	18	3.4	4375	4.8
Essential hypertension	17	0.7	785	0.9	2	0.4	804	0.9
Pre-eclampsia	137	5.2	4287	4.9	12	2.3	4436	4.9
TOTAL CONFINEMENTS	2611	100.0	88176	100.0	528	100.0	91315	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one and a half times higher than shown.

Labour and birth

The rate of spontaneous onset of labour fell from 69.9 per cent in 2002 to 66.2 per cent in 2006 (Table 77), while the rate of induction of labour among Aboriginal and Torres Strait Islander mothers increased marginally from about 19 to 21 per cent. The rate of induction of labour among Aboriginal and Torres Strait Islander mothers was slightly lower than the rate of 24.8 per cent reported among non-Aboriginal and Torres Strait Islander mothers in 2006.

Between 2002 and 2006, the rate of normal vaginal birth fell from 74.2 to 71.5 per cent. The caesarean section rate rose from 20.6 to 22.5 per cent (Table 78). The rate of forceps delivery remained stable at about 2 per cent, and vaginal breech birth was about 1 per cent.

TABLE 77

LABOUR ONSET FOR ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

Labour onset	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	1507	69.9	1469	68.0	1581	68.5	1613	65.2	1728	66.2
No labour##	223	10.3	250	11.6	260	11.3	277	11.2	329	12.6
Induced	423	19.6	442	20.5	467	20.2	584	23.6	552	21.1
Not stated	2	0.1	0	0.0	0	0.0	0	0.0	2	0.1
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one-and-a-half times higher than shown.

No labour indicates elective caesarean section.

TABLE 78

TYPE OF BIRTH AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2002–2006#

Type of birth	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	1598	74.2	1585	73.3	1647	71.4	1741	70.4	1868	71.5
Forceps	30	1.4	35	1.6	60	2.6	42	1.7	46	1.8
Vacuum extraction	68	3.2	67	3.1	74	3.2	91	3.7	84	3.2
Vaginal breech	14	0.6	9	0.4	16	0.7	24	1.0	17	0.7
Elective caesarean section	223	10.3	250	11.6	260	11.3	277	11.2	329	12.6
Emergency caesarean section##	222	10.3	215	9.9	251	10.9	299	12.1	259	9.9
Not stated	0	0.0	0	0.0	0	0.0	0	0.0	8	0.3
TOTAL	2155	100.0	2161	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for the total are about one-and-a-half times higher than shown.

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

Birth weight

Since 2002, the rate of low birth weight (less than 2,500 grams) in Aboriginal and Torres Strait Islander babies has been over 10 per cent and was 12.4 per cent in 2006 (Table 79). This is about one and a half times the rate for babies

born to non-Aboriginal or Torres Strait Islander mothers, which was 6.2 per cent in 2006. In 2006, the largest number of low birth weight babies was born in the Hunter and New England Area (Table 80).

TABLE 79

WEIGHT OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 2002–2006#

Birth weight (grams)	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 1000	21	1.0	31	1.4	23	1.0	36	1.4	26	1.0
1000 – 1499	230	10.5	221	10.1	244	10.5	257	10.3	273	10.3
1500 – 2499	1900	87.0	1917	87.5	2032	87.1	2193	87.5	2318	87.5
2500+	4	0.2	2	0.1	0	0.0	1	0.0	3	0.1
Not stated	2183	100.0	2190	100.0	2333	100.0	2507	100.0	2649	100.0
TOTAL	2183	100.0	2190	100.0	2308	100.0	2474	100.0	2611	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about two times higher than shown.

TABLE 80

WEIGHT OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES BY HEALTH AREA OF RESIDENCE, NSW 2006#

Health Area	Birth weight (grams)							
	Less than 2500		2500-plus		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney South West	34	15.7	182	84.3	0	0.0	216	100.0
South Eastern Sydney & Illawarra	35	15.0	198	85.0	0	0.0	233	100.0
Sydney West	25	8.8	260	91.2	0	0.0	285	100.0
Northern Sydney & Central Coast	14	13.1	93	86.9	0	0.0	107	100.0
Hunter & New England	82	13.6	519	86.1	2	0.3	603	100.0
North Coast	41	10.0	371	90.0	0	0.0	412	100.0
Greater Southern	20	10.2	177	89.8	0	0.0	197	100.0
Greater Western	74	13.0	494	86.8	1	0.2	569	100.0
Other/Not stated	3	11.1	24	88.9	0	0.0	27	100.0
TOTAL	328	12.4	2318	87.5	3	0.1	2649	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for the total are about two times higher than shown. The level of under-reporting varies between health areas (Table 67).

Gestational age

Since 2002, over 10 per cent of Aboriginal and Torres Strait Islander babies have been premature (less than 37 weeks gestation) (Table 81). The rate of prematurity was 10.8 per cent in 2006 – compared with a rate of 7.3 per

cent for babies born to non-Aboriginal or Torres Strait Islander mothers. In 2006, the largest number of premature babies was born in the Hunter and New England Area (Table 82).

TABLE 81

GESTATIONAL AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 2002–2006#

Gestational age (weeks)	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
20–27	21	1.0	29	1.3	31	1.3	30	1.2	24	0.9
28–31	34	1.6	30	1.4	29	1.2	27	1.1	26	1.0
32–36	212	9.7	206	9.4	212	9.1	244	9.7	235	8.9
37–41	1868	85.6	1878	85.8	2038	87.4	2180	87.0	2330	88.0
42 +	45	2.1	47	2.1	23	1.0	26	1.0	31	1.2
Not stated	3	0.1	0	0.0	0	0.0	0	0.0	2	0.1
<20	0	0.0	0	0.0	0	0.0	0	0.0	1	0.0
TOTAL	2183	100.0	2190	100.0	2333	100.0	2507	100.0	2649	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about two times higher than shown.

TABLE 82

GESTATIONAL AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES BY HEALTH AREA OF RESIDENCE, NSW 2006#

Health Area	Gestational age (weeks)									
	Less than 37		37-plus		Not stated		TOTAL			
	No.	%	No.	%	No.	%	No.	%		
Sydney South West	36	16.7	180	83.3	0	0.0	216	100.0		
South Eastern Sydney & Illawarra	32	13.7	201	86.3	0	0.0	233	100.0		
Sydney West	28	9.8	257	90.2	0	0.0	285	100.0		
Northern Sydney & Central Coast	11	10.3	96	89.7	0	0.0	107	100.0		
Hunter & New England	79	13.1	524	86.9	0	0.0	603	100.0		
North Coast	28	6.8	383	93.0	1	0.2	412	100.0		
Greater Southern	10	5.1	187	94.9	0	0.0	197	100.0		
Greater Western	59	10.4	509	89.5	1	0.2	569	100.0		
Other/Not stated	3	11.1	24	88.9	0	0.0	27	100.0		
TOTAL	286	10.8	2361	89.1	2	0.1	2649	100.0		

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers for the total are about two times higher than shown. The level of under-reporting varies between health areas (Table 67).

Apgar score

In 2006, 2.3 per cent of Aboriginal and Torres Strait Islander babies had an Apgar score less than seven (Table 50), slightly higher than the rate of 2.0 per cent for babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 83

APGAR SCORE OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 2002–2006#

Apgar score at 5 minutes	Year									
	2002		2003		2004		2005		2006	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–4	38	1.7	42	1.9	34	1.5	42	1.7	36	1.4
5–6	31	1.4	30	1.4	34	1.5	33	1.3	24	0.9
7+	2104	96.4	2109	96.3	2256	96.7	2416	96.4	2571	97.1
Not stated	10	0.5	9	0.4	9	0.4	16	0.6	18	0.7
TOTAL	2183	100.0	2190	100.0	2333	100.0	2507	100.0	2649	100.0

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

Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about two times higher than shown.

Perinatal mortality

Since 2006, the perinatal mortality rate among Aboriginal and Torres Strait Islander babies has varied from 11.0 to 15.2 per 1,000 births (Table 84). The rate of 12.1 per 1,000

in 2006 is substantially higher than the rate of 8.7 per 1,000 experienced by babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 84

PERINATAL DEATHS AMONG ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 2002–2006#

Perinatal deaths	Year									
	2002		2003		2004		2005		2006	
	No.	Rate/ 1000	No.	Rate/ 1000	No.	Rate/ 1000	No.	Rate/ 1000	No.	Rate/ 1000
Stillbirth	18	8.2	24	11.0	20	8.6	22	8.8	16	6.0
Neonatal death	6	2.7	9	4.1	7	3.0	16	6.4	16	6.0
TOTAL PERINATAL DEATHS	24	11.0	33	15.1	27	11.6	38	15.2	32	12.1

Source: NSW Midwives Data Collection, 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. Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about two times higher than shown. The level of under-reporting varies between health areas.