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

The percentage of births to Aboriginal and Torres Strait Islander mothers reported to the MDC rose from 58.7 to 65.7 per cent in the period 1994 to 1999, and has remained at about 65.0 per cent in 2000 and 2001. Reporting was better in rural hospitals than urban hospitals: it is estimated that in 2001 51.8 per cent of births to Aboriginal mothers in urban hospitals were correctly reported as Aboriginal compared to 81.9 per cent in rural hospitals (Table 34, 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 2001 is estimated to be 3256, about one and a half times higher than the number reported to the MDC. For urban area health services the true number of babies born to Aboriginal mothers is estimated to be 1,574, about twice that reported to the MDC. For rural area health services the true number is estimated to be 1,612, about 1.2 times higher than reported to the MDC.

TABLE 34

BIRTHS TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY SOURCE OF BIRTH REPORT, YEAR OF BIRTH AND URBAN-RURAL HEALTH AREA OF HOSPITAL, NSW 1994–2001

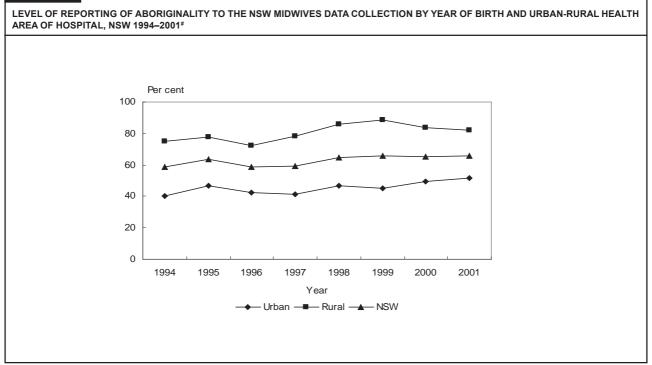
Urban–Rural locality of hospital– Year [#]	MDC births	RBDM births	Births reported to both MDC–RBDM	Total estimated Aboriginal births	Estimated Aboriginal births reported to MDC	95% confidence interval of estimated births reported
	No.	No.	No.	No.	%	
Urban						
1994	553	665	268	1371	40.3	37.7-42.9
1995	642	742	345	1380	46.5	43.9-49.2
1996	593	794	338	1392	42.6	40.0-45.2
1997	658	1066	441	1590	41.4	39.0-43.8
1998	785	1053	495	1669	47.0	44.6-49.4
1999	706	995	447	1571	44.9	42.5-47.4
2000	823	1093	541	1662	49.5	47.1–51.9
2001	816	1046	542	1574	51.8	49.4-54.3
Rural						
1994	990	747	561	1318	75.1	72.8–77.4
1995	1117	887	689	1438	77.7	75.5–79.8
1996	1131	941	679	1567	72.2	70.0-74.4
1997	1196	1011	789	1532	78.0	76.0-80.1
1998	1280	901	771	1496	85.6	83.8-87.4
1999	1372	906	802	1550	88.5	86.9-90.1
2000	1299	902	756	1550	83.8	82.0-85.7
2001	1320	884	724	1612	81.9	80.0-83.8
NSW						
1994	1543	1412	829	2628	58.7	56.8-60.6
1995	1759	1629	1034	2771	63.5	61.7–65.3
1996	1724	1735	1017	2941	58.6	56.8-60.4
1997	1854	2077	1230	3130	59.2	57.5-60.9
1998	2065	1954	1266	3187	64.8	63.1–66.5
1999	2078	1901	1249	3162	65.7	64.1-67.4
2000	2122	1995	1297	3264	65.0	63.4-66.7
2001	2136	1930	1266	3256	65.6	64.0-67.2

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

'Urban' and 'Rural' refer to urban or rural Health Area of Hospital as reported to the MDC. Urban hospitals include those in the following health areas: Central Sydney, Northern Sydney, Western Sydney, Wentworth, South Western Sydney, Central Coast, Hunter and Illawarra. NSW totals exclude homebirths, and births for which the hospital of birth is not stated.

#

FIGURE 2



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

'Urban' and 'Rural' refer to urban or rural Health Area of Hospital as reported to the MDC. Urban hospitals include those in the following health areas: Central Sydney, Northern Sydney, Western Sydney, Wentworth, South Western Sydney, Central Coast, Hunter and Illawarra. NSW totals exclude homebirths and births for which area health service of hospital is not stated.

Information on paternal Aboriginality is not collected by the MDC, but is reported to the Registry of Births, Deaths and Marriages. Of the 84,247 births registered for residents of NSW in 2001, 3,111 (3.7 per cent) were reported to have an Aboriginal or Torres Strait Islander mother or father (Table 35). For 1,102 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. 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 35

BIRTH REGISTRATIONS BY MATERNAL AND PATERNAL INDIGENOUS STATUS, NSW 2001#

Mother#	Father	No.	%	
Aboriginal or Torres Strait Islander	Aboriginal or Torres Strait Islander	629	0.8	
Aboriginal or Torres Strait Islander	Non-Aboriginal orTorres Strait Islander	1380	1.6	
Non-Aboriginal or Torres Strait Islander	Aboriginal or Torres Strait Islander	1102	1.3	
Non-Aboriginal or Torres Strait Islander	Non-Aboriginal orTorres Strait Islander	81136	96.3	
TOTAL	TOTAL	84247	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 or Torres Strait Islander.

Trends in births

In 2002, 2,069 babies were born to Aboriginal mothers, 25 babies were born to Torres Strait Islander mothers and 89 babies were born to mothers of both Aboriginal and Torres Strait Islander background (Table 36).

TABLE 36

ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY INDIGENOUS STATUS, NSW 1998–2002#

Plurality					'ear					
	1	1998 1999		999	2	2000	20	001	20	002
	No.	%	No.	%	No.	%	No.	%	No.	%
Confinements										
Aboriginal	1951	95.5	1984	96.4	1990	94.5	1988	94.2	2041	94.7
Torres Strait Islander	35	1.7	38	1.8	25	1.2	40	1.9	25	1.2
Aboriginal and Torres Strait Islander	57	2.8	37	1.8	90	4.3	82	3.9	89	4.1
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0
Births										
Aboriginal	1975	95.5	2003	96.4	2006	94.5	2014	94.2	2069	94.8
Torres Strait Islander	36	1.7	38	1.8	25	1.2	42	2.0	25	1.1
Aboriginal and Torres Strait Islander	57	2.8	37	1.8	91	4.3	82	3.8	89	4.1
TOTAL	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0

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 are about one and a half fimes higher than shown.

Plurality

Between 1998 and 2002, the reported number of babies born to Aboriginal and Torres Strait Islander mothers increased from 2,068 to 2,183 (Table 37), repesenting 2.4 and 2.5 per cent respectively of all babies born in NSW. Multiple pregnancies (twins, triplets etc.) were reported for about one per cent of mothers.

TABLE 37

ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY PLURALITY, NSW 1998-2002#

Plurality				١	'ear						
	1	998	1	999	2	000	20	001	20	2002	
	No.	%									
Confinements											
Singleton	2017	98.7	2040	99.1	2089	99.2	2082	98.7	2127	98.7	
Multiple	26	1.3	18	0.9	16	0.8	28	1.3	28	1.3	
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0	
Births											
Singleton	2017	97.5	2040	98.2	2089	98.4	2082	97.4	2127	97.4	
Multiple	51	2.5	35	1.8	33	1.6	56	2.6	56	2.6	
TOTAL	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0	

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 are about one and a half fimes higher than shown.

Previous pregnancies

In 2002, 31 per cent of Aboriginal and Torres Strait Islander mothers gave birth for the first time, and 69 per cent gave birth to their second to fourth baby (Table 38). About eight per cent of mothers had given birth to five or more babies. This pattern has not changed substantially since 1998.

TABLE 38

NUMBER OF PREVIOUS PREGNANCIES AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998-2002#

No. previous pregnancies (>20 weeks)		1998		1999		Year 2000	2	2001		2002
	No.	%	No.	%	No.	%	No.	%	No.	%
0	599	29.3	613	29.8	645	30.6	634	30.0	664	30.8
1–4	1280	62.7	1301	63.2	1285	61.0	1309	62.0	1302	60.4
5+	161	7.9	144	7.0	174	8.3	164	7.8	183	8.5
Not stated	3	0.1	1	0.0	1	0.0	3	0.1	6	0.3
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0

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 are about one and a half fimes 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 five Aboriginal and Torres Strait Islander mothers were teenagers in 2002.

Following statewide trends, the number of mothers giving birth at 35 years of age or more has increased over the last five years. The proportion of mothers aged 35-plus years increased from 5.5 per cent in 1998 to 6.8 per cent in 2002 (Table 39).

TABLE 39

AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998-2002#

Maternal age (years)		1998		1999	Year 2000 2001						
	No.	%	No.	%	No.	%	No.	%	No.	%	
12–19	389	19.0	443	21.5	459	21.8	439	20.8	481	22.3	
20–34	1536	75.2	1492	72.5	1491	70.8	1515	71.8	1524	70.7	
35+	113	5.5	124	6.0	155	7.4	152	7.2	146	6.8	
Not stated	5	0.2	0	0.0	0	0.0	4	0.2	4	0.2	
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0	

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 are about one and a half fimes higher than shown.

Health area of residence

The reported number of Aboriginal and Torres Strait Islander mothers who gave birth in 2002 ranged from 14 in the Northern Sydney Area to 289 in the New England Area (Table 40). Over one-third (36.5 per cent) of mothers were resident in urban health areas and about two-thirds were resident in rural health areas (62.9 per cent). In 2002, over one quarter of Aboriginal and Torres Strait Islander mothers in the Hunter and Far West Areas were teenagers (Table 41).

TABLE 40

HEALTH AREA OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998-2002#

Health Area						Year				
		1998		1999		2000		2001	2	002
	No.	%								
Central Sydney	71	3.5	61	3.0	69	3.3	62	2.9	73	3.4
Northern Sydney	10	0.5	9	0.4	9	0.4	8	0.4	14	0.6
Western Sydney	172	8.4	139	6.8	134	6.4	141	6.7	128	5.9
Wentworth	77	3.8	74	3.6	64	3.0	64	3.0	71	3.3
South Western Sydney	108	5.3	91	4.4	99	4.7	112	5.3	92	4.3
Central Coast	42	2.1	50	2.4	72	3.4	66	3.1	71	3.3
Hunter	103	5.0	98	4.8	156	7.4	165	7.8	165	7.7
Illawarra	119	5.8	104	5.1	138	6.6	117	5.5	131	6.1
South Eastern Sydney	47	2.3	45	2.2	35	1.7	36	1.7	42	1.9
Northern Rivers	161	7.9	162	7.9	175	8.3	183	8.7	155	7.2
Mid North Coast	167	8.2	230	11.2	218	10.4	200	9.5	231	10.7
New England	267	13.1	273	13.3	255	12.1	259	12.3	289	13.4
Macquarie	212	10.4	230	11.2	222	10.5	216	10.2	243	11.3
Mid Western	113	5.5	123	6.0	124	5.9	136	6.4	121	5.6
Far West	169	8.3	162	7.9	143	6.8	166	7.9	158	7.3
Greater Murray	120	5.9	116	5.6	107	5.1	107	5.1	104	4.8
Southern	64	3.1	68	3.3	69	3.3	55	2.6	54	2.5
Other/Not stated	21	1.0	24	1.2	16	0.8	17	0.8	13	0.6
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0

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 are about one and a half fimes higher than shown. For urban area health services the true number is about twice the number shown, and for rural area health services is about 1.2 times higher than the number shown.

TABLE 41

HEALTH AREA OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AGE, NSW 2002#

Health Area			Maternal ag	ge (years)				
	Less	than 20	20		Not s		Т	OTAL
	No.	%	No.	%	No.	%	No.	%
Central Sydney	17	23.3	56	76.7	0	0.0	73	100.0
Northern Sydney##	-	-	-	-	0	0.0	14	100.
Western Sydney	31	24.2	97	75.8	0	0.0	128	100.
Wentworth	17	23.9	54	76.1	0	0.0	71	100.
South Western Sydney	15	16.3	77	83.7	0	0.0	92	100.
Central Coast	11	15.5	60	84.5	0	0.0	71	100.
Hunter	43	26.1	122	73.9	0	0.0	165	100.
Illawarra	21	16.0	110	84.0	0	0.0	131	100.
South Eastern Sydney	7	16.7	35	83.3	0	0.0	42	100.
Northern Rivers	38	24.5	117	75.5	0	0.0	155	100.
Mid North Coast	52	22.5	178	77.1	1	0.4	231	100.
New England	66	22.8	223	77.2	0	0.0	289	100.
Macquarie	59	24.3	182	74.9	2	0.8	243	100.
Mid Western	24	19.8	97	80.2	0	0.0	121	100.
Far West	41	25.9	116	73.4	1	0.6	158	100.
Greater Murray	25	24.0	79	76.0	0	0.0	104	100
Southern	11	20.4	43	79.6	0	0.0	54	100
Other/Not stated	2	15.4	11	84.6	0	0.0	13	100
TOTAL	481	22.3	1670	77.5	4	0.2	2155	100

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 are about one and a half fimes higher than shown. For urban area health services the true number is about twice the number shown, and for rural area health services is about 1.2 times higher than the number shown.
Information not shown for Health Areas where the number of mothers is less than five in a group where age was reported.

Booking status

In 2002, 87.3 per cent of Aboriginal and Torres Strait Islander mothers were booked into the hospital of birth, compared with 97.6 per cent of non-Aboriginal or Torres Strait Islander mothers.

Duration of pregnancy at first antenatal visit

Between 1998 and 2002, the proportion of mothers who commenced antenatal care at less than 20 weeks gestation was stable at about 65–67 per cent (Table 42). This compares with 87 per cent of non-Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation in 2002.

In 2002, the proportion of Aboriginal and Torres Strait Islander mothers who commenced antenatal care at less than 20 weeks gestation varied from 53.8 per cent in the Far West Area to 88.7 per cent in the Central Coast Area (Table 43).

TABLE 42

DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998–2002[#]

Duration of pregnancy at first antenatal visit (weeks)		1998		1999		Year 2000	2	2001		2002
	No.	%	No.	%	No.	%	No.	%	No.	%
0–19	1354	66.3	1348	65.5	1422	67.6	1365	64.7	1448	67.2
20–plus	555	27.2	599	29.1	546	25.9	615	29.1	560	26.0
Not stated	134	6.6	112	5.4	137	6.5	130	6.2	147	6.8
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0

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 are about one and a half fimes higher than shown.

TABLE 43

DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY HEALTH AREA OF RESIDENCE, NSW 2002[#]

	0-	-19	2	20+	Not	stated	T	OTAL
	No.	%	No.	%	No.	%	No.	%
Central Sydney	42	57.5	28	38.4	3	4.1	73	100.0
Northern Sydney##	-	-	-	-	_	-	14	100.0
Western Sydney	68	53.1	46	35.9	14	10.9	128	100.0
Wentworth	51	71.8	15	21.1	5	7.0	71	100.0
South Western Sydney	54	58.7	31	33.7	7	7.6	92	100.0
Central Coast	63	88.7	7	9.9	1	1.4	71	100.0
Hunter	107	64.8	51	30.9	7	4.2	165	100.0
Illawarra	98	74.8	31	23.7	2	1.5	131	100.0
South Eastern Sydney	27	64.3	13	31.0	2	4.8	42	100.0
Northern Rivers	92	59.4	57	36.8	6	3.9	155	100.0
Mid North Coast	152	65.8	51	22.1	28	12.1	231	100.0
New England	212	73.4	52	18.0	25	8.7	289	100.0
Macquarie	175	72.0	50	20.6	18	7.4	243	100.0
Mid Western	90	74.4	25	20.7	6	5.0	121	100.0
Far West	85	53.8	57	36.1	16	10.1	158	100.0
Greater Murray	75	72.1	26	25.0	3	2.9	104	100.0
Southern	38	70.4	14	25.9	2	3.7	54	100.0
Other/Not stated	7	53.8	4	30.8	2	15.4	13	100.0
TOTAL	1448	67.2	560	26.0	147	6.8	2155	100.0

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

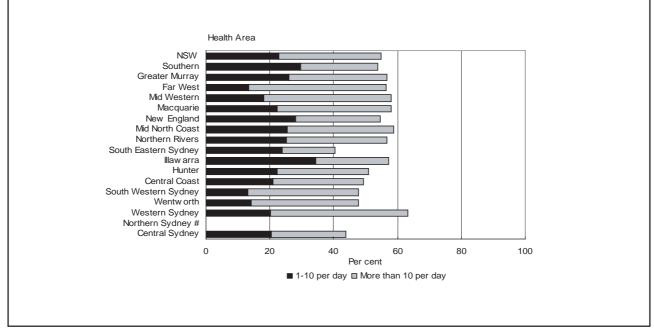
Due to under-reporting of Aboriginality to the MDC, it is likely that the true numbers are about one and a half fimes higher than shown. For urban area health services the true number is about twice the number shown, and for rural area health services is about 1.2 times higher than the number shown. Information not shown for Health Areas where the number of mothers is less than five in a group where duration of pregnancy at first antenatal visit was reported.

Smoking in pregnancy

In 2002, 58.0 per cent of Aboriginal and Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 58.2 per cent in 1998. This compares with 15.3 per cent of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2002. Smoking in the second half of pregnancy poses the greatest risk to the health of both mother and baby. In 2002, 57.0 per cent of Aboriginal and Torres Strait Islander mothers reported smoking in the second half of pregnancy. This percentage varied from 42.9 per cent in the South Eastern Sydney Area to 65.6 per cent in the Western Sydney 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 2002[#]



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

Information not shown for health areas where the number of mothers is less than five 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 fimes higher than shown.

Medical conditions and obstetric complications

In 2002, there were slightly lower rates of gestational diabetes and pre-eclampsia reported among Aboriginal and Torres Strait Islander mothers compared with non-Aboriginal or Torres Strait Islander mothers (Table 44).

The number of Aboriginal and Torres Strait Islander mothers with medical conditions and obstetric complications reported to the MDC is very 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 underreporting.

TABLE 44

#

ICAL CONDITIONS AND OBSTETRIC COMPLICATIONS BY ABORIGINALITY, NSW 2002#

Condition				boriginality				
	Torre	ginal and es Strait ander	Torre	ooriginal or es Strait ander	No	tstated	T	OTAL
	No.	%	No.	%	No	%	No.	%
Diabetes mellitus	17	0.8	444	0.5	1	2.0	462	0.5
Gestational diabetes	67	3.1	3626	4.4	0	0.0	3693	4.4
Essential hypertension	24	1.1	915	1.1	1	2.0	940	1.1
Pre-eclampsia	112	5.2	4726	5.7	1	2.0	4839	5.7
TOTAL CONFINEMENTS	2155	100.0	82383	100.0	49	100.0	84587	100.0

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 are about one and a half fimes higher than shown.

Labour and delivery

The rate of induction of labour among Aboriginal and Torres Strait Islander mothers varied from about 18 to 20 per cent between 1998 and 2002, while the rate of spontaneous onset of labour varied from about 70 to 73 per cent (Table 45). The rate of induction of labour among Aboriginal and Torres Strait Islander mothers was lower than the rate of 25.2 per cent reported among non-Aboriginal and Torres Strait Islander mothers in 2002. Between 1998 and 2002, the rate of normal vaginal birth fell slightly from 76.5 to 74.2 per cent. The caesarean section rate rose from 17.3 to 20.6 per cent (Table 46). Following statewide trends the percentage of deliveries by vacuum extraction increased from 2.1 to 3.2 per cent.

TABLE 45

LABOUR ONSET FOR ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998-2002#

Labour onset						'ear				
	1	998	1	999	2	2000		001	2002	
	No.	%								
Spontaneous	1467	71.8	1512	73.4	1527	72.5	1486	70.4	1507	69.9
No labour##	176	8.6	172	8.4	206	9.8	207	9.8	223	10.3
Induced	400	19.6	375	18.2	372	17.7	417	19.8	423	19.6
Not stated	0	0.0	0	0.0	0	0.0	0	0.0	2	0.1
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0

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 are about one and a half fimes higher than shown.
No labour indicates elective caesarean section.

TABLE 46

TYPE OF DELIVERY AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 1998-2002*

Type of delivery	1998	1999		Year 2000	2	2001	20	002		
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	1563	76.5	1586	77.0	1573	74.7	1562	74.0	1598	74.2
Forceps	56	2.7	64	3.1	51	2.4	39	1.8	30	1.4
Vacuum extraction	43	2.1	54	2.6	67	3.2	66	3.1	68	3.2
Vaginal breech	27	1.3	25	1.2	31	1.5	16	0.8	14	0.6
Elective caesarean section	176	8.6	172	8.4	206	9.8	207	9.8	223	10.3
Emergency caesarean section##	177	8.7	158	7.7	177	8.4	220	10.4	222	10.3
Not stated	1	0.0	0	0.0	0	0.0	0	0.0	0	0.0
TOTAL	2043	100.0	2059	100.0	2105	100.0	2110	100.0	2155	100.0

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

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

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

Birthweight

Since 1998, the rate of low birthweight (less than 2,500 grams) in Aboriginal and Torres Strait Islander babies has been over 10 per cent and was 12.8 per cent in 2002 (Table 47). This is over twice the rate for babies born to non-Aboriginal or Torres Strait Islander mothers, which was 6.2 per cent in 2002. In 2002, the largest number of low birthweight babies were born in the New England Area (Table 48).

TABLE 47

WEIGHT OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 1998-2002#

Birthweight (grams)	1998		1	1999		Year 2000		001	2002	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 1,000	24	1.2	20	1.0	33	1.6	27	1.3	21	1.0
1,000–1,499	19	0.9	24	1.2	20	0.9	33	1.5	28	1.3
1,500-2,499	174	8.4	217	10.4	199	9.4	228	10.7	230	10.5
2,500+	1850	89.5	1816	87.4	1866	87.9	1848	86.4	1900	87.0
Not stated	1	0.0	1	0.0	4	0.2	2	0.1	4	0.2
TOTAL	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0

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 are about one and a half fimes higher than shown.

TABLE 48

WEIGHT OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES BY HEALTH AREA OF RESIDENCE, NSW 2002#

Health Area				jht (grams)				
	Less th	an 2,500	2,5	500+	Not	stated	TO	TAL
	No.	%	No.	%	No.	%	No.	%
Central Sydney	11	14.9	63	85.1	0	0.0	74	100.0
Northern Sydney##	-	-	-	-	-	-	15	100.0
Western Sydney	15	11.5	116	88.5	0	0.0	131	100.0
Wentworth	14	19.7	57	80.3	0	0.0	71	100.0
South Western Sydney	8	8.7	84	91.3	0	0.0	92	100.0
Central Coast	5	6.9	67	93.1	0	0.0	72	100.0
Hunter	16	9.6	150	90.4	0	0.0	166	100.0
Illawarra	11	8.4	120	91.6	0	0.0	131	100.0
South Eastern Sydney	8	18.2	36	81.8	0	0.0	44	100.0
Northern Rivers	17	11.0	138	89.0	0	0.0	155	100.0
Mid North Coast	31	13.2	203	86.8	0	0.0	234	100.0
New England	41	13.9	251	85.1	3	1.0	295	100.0
Macquarie	37	15.0	208	84.6	1	0.4	246	100.0
Mid Western	20	16.1	104	83.9	0	0.0	124	100.0
Far West	24	15.0	136	85.0	0	0.0	160	100.0
Greater Murray	10	9.5	95	90.5	0	0.0	105	100.0
Southern	6	10.9	49	89.1	0	0.0	55	100.0
Other/Not stated	2	15.4	11	84.6	0	0.0	13	100.0
TOTAL	279	12.8	1900	87.0	4	0.2	2183	100.0

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 are about one and a half fimes higher than shown. For urban area health services the true number is about twice the number shown, and for rural area health services is about 1.2 times higher than the number shown.
Information not shown for Health Areas where the number of mothers is less than five in a group where birthweight was reported.

Gestational age

Since 1998, the rate of prematurity (less than 37 weeks gestation) in Aboriginal and Torres Strait Islander babies has been over 10 per cent. The rate was 12.2 per cent in 2002 (Table 49)—compared with a rate of 6.9 per cent for babies born to non-Aboriginal or Torres Strait Islander mothers. In 2002, the largest number of premature babies were born in the New England and Macquarie Areas (Table 50).

TABLE 49

GESTATIONAL AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 1998-2002#

Gestational age (weeks)	4	998	4	999		/ear :000		2001 2002		
(weeks)	No.	990 %	No.	999 %	No.	.000 %	No.	.001 %	No.	2002 %
	NO.	70	110.	70	NO.	70	NO.	70	110.	70
20–27	26	1.3	18	0.9	33	1.6	26	1.2	21	1.0
28–31	26	1.3	29	1.4	29	1.4	38	1.8	34	1.6
32–36	167	8.1	209	10.1	185	8.7	201	9.4	212	9.7
37–41	1822	88.1	1780	85.7	1839	86.7	1824	85.3	1868	85.6
42 +	27	1.3	42	2.0	36	1.7	48	2.2	45	2.1
Not stated	0	0.0	0	0.0	0	0.0	1	0.0	3	0.1
TOTAL	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0

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 are about one and a half fimes higher than shown.

TABLE 50

GESTATIONAL AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER BABIES BY HEALTH AREA OF RESIDENCE, NSW 2002#

Health Area			Gest	ational age (we	eks)			
	Less	than 37	3	7+	Not	stated	то	TAL
	No.	%	No.	%	No.	%	No.	%
Central Sydney	9	12.2	65	87.8	0	0.0	74	100.0
Northern Sydney##	_	_	_	_	_	_	15	100.0
Western Sydney	19	14.5	112	85.5	0	0.0	131	100.0
Wentworth	13	18.3	58	81.7	0	0.0	71	100.0
South Western Sydney	7	7.6	85	92.4	0	0.0	92	100.0
Central Coast	14	19.4	58	80.6	0	0.0	72	100.0
Hunter	15	9.0	151	91.0	0	0.0	166	100.0
Illawarra	12	9.2	119	90.8	0	0.0	131	100.0
South Eastern Sydney	6	13.6	38	86.4	0	0.0	44	100.0
Northern Rivers	18	11.6	137	88.4	0	0.0	155	100.0
Mid North Coast	25	10.7	209	89.3	0	0.0	234	100.0
New England	36	12.2	259	87.8	0	0.0	295	100.0
Macquarie	34	13.8	209	85.0	3	1.2	246	100.0
Mid Western	20	16.1	104	83.9	0	0.0	124	100.0
Far West	20	12.5	140	87.5	0	0.0	160	100.0
Greater Murray	8	7.6	97	92.4	0	0.0	105	100.0
Southern	7	12.7	48	87.3	0	0.0	55	100.0
Other/Not stated	1	7.7	12	92.3	0	0.0	13	100.0
TOTAL	267	12.2	1913	87.6	3	0.1	2183	100.0

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 are about one and a half fimes higher than shown. For urban area health services the true number is about twice the number shown, and for rural area health services is about 1.2 times higher than the number shown. Information not shown for Health Areas where the number of babies is less than five in a group where gestational age was reported.

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Apgar score

In 2002, 3.2 per cent of Aboriginal and Torres Strait Islander babies had an Apgar score less than seven (Table 51), higher than the rate of 2.1 per cent for babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 51											
APGAR SCORE	OF ABORIGINAI	AND TORR	ES STRAIT	ISLANDER	BABIES, N	SW 1998–20)02#				
Apgar score						Year					
at 5 minutes		1998		1999		2000		2001		2002	
	No.	%	No.	%	No.	%	No.	%	No.	%	
0-4	38	1.8	36	1.7	41	1.9	49	2.3	38	1.7	
5-6	28	1.0	24	1.7	26	1.9	29	1.4	31	1.4	
7+	1989	96.2	2003	96.4	2045	96.4	2048	95.8	2104	96.4	
Not stated	13	0.6	15	0.7	10	0.5	12	0.6	10	0.5	
TOTAL	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0	

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 are about one and a half fimes higher than shown.

Special care and neonatal intensive care

In 2002, 19.7 per cent of Aboriginal and Torres Strait Islander babies were admitted to special care units and 3.3 per cent were admitted to neonatal intensive care units (Table 52). This compares with babies born to non-Aborignal or Torres Strait Islander mothers, of whom 14.7 per cent were admitted to special care units and 2.5 per cent were admitted to neonatal intensive care units in 2002.

TABLE 52

ABORIGINAL AND TORRES STRAIT ISLANDER BABIES ADMITTED TO SPECIAL CARE AND NEONATAL INTENSIVE CARE UNITS, NSW 1998–2002*

Unit of admission				١	⁄ear					
	1	1998	1	999	2	2000	20	001	20	002
	No.	%								
Special care unit	417	20.2	438	21.1	405	19.1	442	20.7	431	19.7
Neonatal intensive care unit	78	3.8	69	3.3	86	4.1	82	3.8	71	3.3
TOTAL BIRTHS	2068	100.0	2078	100.0	2122	100.0	2138	100.0	2183	100.0

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 are about one and a half fimes higher than shown.

Perinatal mortality

Since 1998, the perinatal mortality rate among Aboriginal and Torres Strait Islander babies has varied from 11.0 to 18.2 per 1,000 births (Table 53). The rate of 11.0 per 1,000 in 2002 is the lowest reported in the last 10 years, but continues to be higher than the rate of 8.6 per 1,000 experienced by babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 53

PERINATAL DEATHS AMONG ABORIGINAL AND TORRES STRAIT ISLANDER BABIES, NSW 1998-2002#

Perinatal deaths		Year 1998 1999 2000 2001 2002									
	No.	Rate/ 1,000	No.	Rate/ 1,000	20 No.	Rate/ 1,000	200 No.	Rate/ 1,000	No.	Rate/ 1,000	
Stillbirth	21	10.2	21	10.1	24	11.3	29	13.6	18	8.2	
Neonatal death	11	5.3	8	3.8	13	6.1	10	4.7	6	2.7	
TOTAL PERINATAL DEATHS	32	15.5	29	14.0	37	17.4	39	18.2	24	11.0	

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

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 one and a half fimes higher than shown.