

5. AREA HEALTH SERVICES

Information on the health of Aboriginal and Torres Strait Islander mothers, and mothers born in non-English speaking countries is shown in Chapters 6 and 7 respectively.

Confinements

Continuing the pattern of recent years, the largest numbers of confinements in 2002 were among mothers resident in the South Western Sydney (12,526, 14.8 per cent) and Western Sydney Health Areas (11,051, 13.1 per cent). These two health areas contributed over one quarter of the State's births. Eighty-one per cent of confinements were to mothers resident in the metropolitan health areas (including the Central Coast, Hunter and Illawarra Health Areas), and 18.7 per cent were to mothers resident in rural health areas (Table 22).

Maternal age

The proportion of women giving birth at less than 20 years of age varied from 0.6 per cent in the Northern Sydney Health Area to 14.1 per cent in the Far West Health Area, while the proportion of mothers giving birth at 35 years of age or more ranged from 10.7 per cent in the Far West Health Area to 32.2 per cent in the Northern Sydney Health Area.

Maternal country of birth

Eighty per cent of women who gave birth in NSW in 2002 were born in English speaking countries, 10.9 per cent were born in Asian countries, and 4.3 per cent were born in the Middle East or Africa (Table 23).

The highest proportions of mothers born in non-English speaking countries were in the South Western Sydney and Central Sydney Health Areas. In Central Sydney, the majority of mothers born in non-English speaking countries were born in North East Asia (10.0 per cent) and South East Asia (9.2 per cent). In South Western Sydney, the majority of mothers born in non-English speaking countries were born in South East Asia (14.9 per cent).

Maternal Aboriginality

In 2002, 2.5 per cent of mothers were reported to be Aboriginal or Torres Strait Islander (Table 24). The proportion of Aboriginal or Torres Strait Islander mothers varied from 0.2 per cent in the Northern Sydney Area to 31.8 per cent in the Far West Area.

Duration of pregnancy at first antenatal visit

In 2002, 86.4 per cent of mothers commenced antenatal care prior to 20 weeks gestation. This percentage varied from 74.4 per cent in the Far West Health Area to 95.2 in the Central Coast Health Area (Table 25).

Smoking in pregnancy

In 2002, 15.7 per cent of mothers reported smoking in the second half of pregnancy (Table 26). The lowest reported rate was among mothers resident in the Northern Sydney Health Area (4.1 per cent) and the highest rate among residents of the Far West Health Area (37.4 per cent).

Place of birth

Ninety-six per cent of mothers chose to deliver in a hospital delivery suite in 2002, compared to 3.4 per cent who planned a birth centre birth and 0.2 per cent who planned a home birth (Table 27). Planned birth centre births were most common in the Hunter and South Eastern Sydney Health Areas, and planned home births were most common in the Northern Sydney Health Area.

Labour and delivery

In 2002, the onset of labour was spontaneous in 61.1 per cent of confinements (Table 28). Labour was induced in 25.0 per cent of confinements and no labour (elective caesarean section) was reported in 13.9 per cent of confinements.

The rate of spontaneous onset of labour was highest among residents of the Far West Health Area (69.0 per cent). The highest rate of induction of labour was among residents of the New England Health Area (31.4 per cent).

Sixty-four per cent of confinements were by normal vaginal birth, 10.5 per cent were instrumental and 24.9 per cent were by caesarean section (Table 29). The highest rate of normal vaginal birth was among residents of Far West Health Area (75.3 per cent), while the highest rates of instrumental delivery were among residents of Northern Sydney and South Eastern Sydney Health Areas (13.7 and 13.2 per cent respectively). The caesarean section rate varied from 19.2 per cent among mothers resident in the South Western Sydney Health Area to 30.7 per cent in the Northern Sydney Health Area.

TABLE 22

CONFINEMENTS BY MATERNAL AGE AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Maternal age (years)																TOTAL	
	12-19		20-24		25-29		30-34		35-39		40-44		45+		Not stated			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Central Sydney	134	2.0	618	9.4	1575	23.9	2493	37.9	1428	21.7	318	4.8	12	0.2	1	0.0	6579	100.0
Northern Sydney	56	0.6	389	4.2	1851	20.0	3979	43.0	2483	26.8	471	5.1	25	0.3	4	0.0	9258	100.0
Western Sydney	438	4.0	1794	16.2	3486	31.5	3515	31.8	1469	13.3	325	2.9	16	0.1	8	0.1	11051	100.0
Wentworth	221	4.8	871	18.9	1565	34.0	1285	27.9	555	12.0	98	2.1	3	0.1	8	0.2	4606	100.0
South Western Sydney	562	4.5	2240	17.9	4136	33.0	3721	29.7	1547	12.4	309	2.5	7	0.1	4	0.0	12526	100.0
Central Coast	173	4.9	614	17.2	1090	30.6	1122	31.5	457	12.8	97	2.7	5	0.1	2	0.1	3560	100.0
Hunter	400	5.8	1243	18.0	2221	32.1	2068	29.9	843	12.2	133	1.9	8	0.1	2	0.0	6918	100.0
Illawarra	222	5.1	741	17.1	1320	30.5	1347	31.1	579	13.4	110	2.5	8	0.2	2	0.0	4329	100.0
South Eastern Sydney	129	1.4	756	8.1	2375	25.3	3744	40.0	1940	20.7	412	4.4	12	0.1	2	0.0	9370	100.0
Northern Rivers	200	7.3	543	19.9	748	27.4	783	28.7	362	13.3	86	3.2	3	0.1	0	0.0	2725	100.0
Mid North Coast	223	8.1	560	20.3	830	30.2	745	27.1	328	11.9	56	2.0	5	0.2	5	0.2	2752	100.0
New England	210	9.3	522	23.0	699	30.9	576	25.4	208	9.2	45	2.0	3	0.1	2	0.1	2265	100.0
Macquarie	145	9.8	334	22.5	411	27.7	421	28.3	145	9.8	24	1.6	1	0.1	5	0.3	1486	100.0
Mid Western	152	7.2	417	19.9	689	32.8	578	27.6	222	10.6	34	1.6	4	0.2	2	0.1	2098	100.0
Far West	70	14.1	131	26.4	120	24.1	122	24.5	45	9.1	8	1.6	0	0.0	1	0.2	497	100.0
Greater Murray	172	6.9	484	19.5	778	31.3	720	29.0	273	11.0	50	2.0	4	0.2	3	0.1	2484	100.0
Southern	119	8.0	301	20.3	449	30.2	404	27.2	163	11.0	42	2.8	2	0.1	5	0.3	1485	100.0
Other/Not stated	26	4.3	116	19.4	180	30.1	187	31.3	60	10.0	27	4.5	2	0.3	0	0.0	598	100.0
TOTAL	3652	4.3	12674	15.0	24523	29.0	27810	32.9	13107	15.5	2645	3.1	120	0.1	56	0.1	84587	100.0

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

TABLE 23

CONFINEMENTS BY MATERNAL COUNTRY OF BIRTH AND HEALTH AREA OF RESIDENCE, NSW 2002#

Health Area	Country of birth group																		TOTAL			
	English speaking		Central & South America		Melanesia, Micronesia & Polynesia		Southern Europe		Western Europe Northern Europe		Eastern & Russia, Central Asian & Baltic States		Middle East Europe, & Africa		South East Asia		North East Asia			Southern Asia		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%	
Central Sydney	4014	61.1	84	1.3	200	3.0	146	2.2	57	0.9	56	0.9	496	7.5	602	9.2	659	10.0	258	3.9	6572	100.0
Northern Sydney	7352	79.5	80	0.9	106	1.1	78	0.8	173	1.9	76	0.8	223	2.4	367	4.0	608	6.6	190	2.1	9253	100.0
Western Sydney	7083	64.1	112	1.0	421	3.8	152	1.4	56	0.5	59	0.5	1054	9.5	803	7.3	625	5.7	680	6.2	1045	100.0
Wentworth	4213	91.5	18	0.4	44	1.0	39	0.8	33	0.7	13	0.3	57	1.2	95	2.1	27	0.6	64	1.4	4603	100.0
South Western Sydney	7568	60.5	254	2.0	504	4.0	303	2.4	57	0.5	79	0.6	1323	10.6	1869	14.9	312	2.5	243	1.9	12512	100.0
Central Coast	3390	95.3	13	0.4	13	0.4	6	0.2	25	0.7	6	0.2	15	0.4	58	1.6	22	0.6	11	0.3	3559	100.0
Hunter	6703	96.9	12	0.2	28	0.4	17	0.2	20	0.3	6	0.1	17	0.2	68	1.0	26	0.4	18	0.3	6915	100.0
Illawarra	3975	91.8	33	0.8	24	0.6	90	2.1	22	0.5	10	0.2	46	1.1	80	1.8	33	0.8	16	0.4	4329	100.0
South Eastern Sydney	7106	76.1	113	1.2	121	1.3	147	1.6	113	1.2	132	1.4	360	3.9	483	5.2	586	6.3	180	1.9	9341	100.0
Northern Rivers	2625	96.4	4	0.1	9	0.3	3	0.1	17	0.6	4	0.1	9	0.3	35	1.3	13	0.5	5	0.2	2724	100.0
Mid North Coast	2660	96.8	2	0.1	3	0.1	4	0.1	14	0.5	3	0.1	5	0.2	28	1.0	16	0.6	14	0.5	2749	100.0
New England	2222	98.1	2	0.1	4	0.2	2	0.1	3	0.1	3	0.1	4	0.2	16	0.7	6	0.3	2	0.1	2264	100.0
Macquarie	1458	98.2	1	0.1	2	0.1	0	0.0	1	0.1	1	0.1	7	0.5	4	0.3	4	0.3	7	0.5	1485	100.0
Mid Western	2048	97.7	2	0.1	7	0.3	4	0.2	6	0.3	5	0.2	7	0.3	7	0.3	6	0.3	5	0.2	2097	100.0
Far West	485	97.8	0	0.0	3	0.6	0	0.0	1	0.2	0	0.0	0	0.0	4	0.8	2	0.4	1	0.2	496	100.0
Greater Murray	2367	95.5	4	0.2	32	1.3	2	0.1	9	0.4	2	0.1	16	0.6	18	0.7	8	0.3	20	0.8	2478	100.0
Southern	1440	97.1	2	0.1	8	0.5	7	0.5	6	0.4	2	0.1	7	0.5	5	0.3	5	0.3	1	0.1	1483	100.0
Other/Not stated	559	93.6	3	0.5	5	0.8	1	0.2	1	0.2	1	0.2	7	1.2	15	2.5	4	0.7	1	0.2	597	100.0
TOTAL	67268	79.6	739	0.9	1534	1.8	1001	1.2	614	0.7	458	0.5	3653	4.3	4557	5.4	2962	3.5	1716	2.0	84502	100.0

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

Excludes 85 mothers for whom country of birth was not stated. Maternal countries of birth and country of birth groups are shown in Appendix 3.

TABLE 24**CONFINEMENTS BY MATERNAL ABORIGINALITY AND HEALTH AREA OF RESIDENCE, NSW 2002**

Health Area	Aboriginal Torres Strait Islander		Aboriginality Non-Aboriginal Torres Strait Islander			Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	
	Central Sydney	73	1.1	6504	98.9	2	0.0	6579	100.0
Northern Sydney	14	0.2	9239	99.8	5	0.1	9258	100.0	
Western Sydney	128	1.2	10921	98.8	2	0.0	11051	100.0	
Wentworth	71	1.5	4535	98.5	0	0.0	4606	100.0	
South Western Sydney	92	0.7	12431	99.2	3	0.0	12526	100.0	
Central Coast	71	2.0	3489	98.0	0	0.0	3560	100.0	
Hunter	165	2.4	6751	97.6	2	0.0	6918	100.0	
Illawarra	131	3.0	4194	96.9	4	0.1	4329	100.0	
South Eastern Sydney	42	0.4	9315	99.4	13	0.1	9370	100.0	
Northern Rivers	155	5.7	2568	94.2	2	0.1	2725	100.0	
Mid North Coast	231	8.4	2513	91.3	8	0.3	2752	100.0	
New England	289	12.8	1975	87.2	1	0.0	2265	100.0	
Macquarie	243	16.4	1240	83.4	3	0.2	1486	100.0	
Mid Western	121	5.8	1977	94.2	0	0.0	2098	100.0	
Far West	158	31.8	339	68.2	0	0.0	497	100.0	
Greater Murray	104	4.2	2379	95.8	1	0.0	2484	100.0	
Southern	54	3.6	1429	96.2	2	0.1	1485	100.0	
Other/Not stated	13	2.2	584	97.7	1	0.2	598	100.0	
TOTAL	2155	2.5	82383	97.4	49	0.1	84587	100.0	

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

TABLE 25**CONFINEMENTS BY DURATION OF PREGNANCY AT FIRST ANTENATAL CHECK AND HEALTH AREA OF RESIDENCE, NSW 2002**

Health Area	Duration of pregnancy at first antenatal visit						TOTAL	
	0-19		20-plus		Not stated		No.	%
	No.	%	No.	%	No.	%		
Central Sydney	5556	84.5	975	14.8	48	0.7	6579	100.0
Northern Sydney	8700	94.0	541	5.8	17	0.2	9258	100.0
Western Sydney	9121	82.5	1830	16.6	100	0.9	11051	100.0
Wentworth	3953	85.8	624	13.5	29	0.6	4606	100.0
South Western Sydney	9790	78.2	2623	20.9	113	0.9	12526	100.0
Central Coast	3390	95.2	163	4.6	7	0.2	3560	100.0
Hunter	5844	84.5	1004	14.5	70	1.0	6918	100.0
Illawarra	3979	91.9	329	7.6	21	0.5	4329	100.0
South Eastern Sydney	8277	88.3	947	10.1	146	1.6	9370	100.0
Northern Rivers	2374	87.1	324	11.9	27	1.0	2725	100.0
Mid North Coast	2410	87.6	276	10.0	66	2.4	2752	100.0
New England	2036	89.9	164	7.2	65	2.9	2265	100.0
Macquarie	1309	88.1	138	9.3	39	2.6	1486	100.0
Mid Western	1917	91.4	160	7.6	21	1.0	2098	100.0
Far West	370	74.4	107	21.5	20	4.0	497	100.0
Greater Murray	2211	89.0	242	9.7	31	1.2	2484	100.0
Southern	1350	90.9	115	7.7	20	1.3	1485	100.0
Other/Not stated	529	88.5	52	8.7	17	2.8	598	100.0
TOTAL	73116	86.4	10614	12.5	857	1.0	84587	100.0

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

TABLE 26
CONFINEMENTS BY NUMBER OF CIGARETTES SMOKED IN THE SECOND HALF OF PREGNANCY, NSW 2002

Health Area	Cigarettes smoked in the second half of pregnancy													
	None		1–10 per day				More than ten per day		Smoked—amount not stated		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Central Sydney	6106	92.8	318	4.8	152	2.3	2	0.0	1	0.0	6579	100.0		
Northern Sydney	8874	95.9	240	2.6	120	1.3	23	0.2	1	0.0	9258	100.0		
Western Sydney	9523	86.2	733	6.6	750	6.8	45	0.4	0	0.0	11051	100.0		
Wentworth	3729	81.0	373	8.1	472	10.2	32	0.7	0	0.0	4606	100.0		
South Western Sydney	10785	86.1	847	6.8	842	6.7	51	0.4	1	0.0	12526	100.0		
Central Coast	2750	77.2	445	12.5	358	10.1	7	0.2	0	0.0	3560	100.0		
Hunter	5439	78.6	676	9.8	789	11.4	13	0.2	1	0.0	6918	100.0		
Illawarra	3397	78.5	572	13.2	355	8.2	5	0.1	0	0.0	4329	100.0		
South Eastern Sydney	8733	93.2	377	4.0	233	2.5	27	0.3	0	0.0	9370	100.0		
Northern Rivers	2052	75.3	345	12.7	318	11.7	8	0.3	2	0.1	2725	100.0		
Mid North Coast	1968	71.5	365	13.3	398	14.5	20	0.7	1	0.0	2752	100.0		
New England	1657	73.2	309	13.6	277	12.2	16	0.7	6	0.3	2265	100.0		
Macquarie	1055	71.0	168	11.3	254	17.1	7	0.5	2	0.1	1486	100.0		
Mid Western	1528	72.8	259	12.3	307	14.6	4	0.2	0	0.0	2098	100.0		
Far West	310	62.4	55	11.1	121	24.3	10	2.0	1	0.2	497	100.0		
Greater Murray	1894	76.2	278	11.2	303	12.2	7	0.3	2	0.1	2484	100.0		
Southern	1047	70.5	214	14.4	221	14.9	1	0.1	2	0.1	1485	100.0		
Other/Not stated	454	75.9	65	10.9	77	12.9	1	0.2	1	0.2	598	100.0		
TOTAL	71301	84.3	6639	7.8	6347	7.5	279	0.3	21	0.0	84587	100.0		

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

TABLE 27
CONFINEMENTS BY PLACE OF BIRTH AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Place of birth												TOTAL	
	Hospital		Birth centre		Planned birth centre—hospital admission		Planned home birth		Planned home birth—hospital admission		Born before arrival			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Central Sydney	6035	91.7	390	5.9	128	1.9	5	0.1	0	0.0	21	0.3	6579	100.0
Northern Sydney	9085	98.1	90	1.0	42	0.5	27	0.3	2	0.0	12	0.1	9258	100.0
Western Sydney	10390	94.0	282	2.6	321	2.9	4	0.0	1	0.0	53	0.5	11051	100.0
Wentworth	4527	98.3	24	0.5	27	0.6	12	0.3	3	0.1	13	0.3	4606	100.0
South Western Sydney	12272	98.0	183	1.5	18	0.1	6	0.0	1	0.0	46	0.4	12526	100.0
Central Coast	3526	99.0	13	0.4	1	0.0	5	0.1	1	0.0	14	0.4	3560	100.0
Hunter	6248	90.3	573	8.3	62	0.9	2	0.0	2	0.0	31	0.4	6918	100.0
Illawarra	4290	99.1	14	0.3	2	0.0	8	0.2	0	0.0	15	0.3	4329	100.0
South Eastern Sydney	8670	92.5	434	4.6	228	2.4	9	0.1	2	0.0	27	0.3	9370	100.0
Northern Rivers	2672	98.1	2	0.1	12	0.4	14	0.5	9	0.3	16	0.6	2725	100.0
Mid North Coast	2710	98.5	16	0.6	3	0.1	0	0.0	3	0.1	20	0.7	2752	100.0
New England	2244	99.1	0	0.0	6	0.3	0	0.0	2	0.1	13	0.6	2265	100.0
Macquarie	1469	98.9	2	0.1	9	0.6	0	0.0	0	0.0	6	0.4	1486	100.0
Mid Western	2076	99.0	2	0.1	13	0.6	1	0.0	0	0.0	6	0.3	2098	100.0
Far West	490	98.6	0	0.0	1	0.2	0	0.0	2	0.4	4	0.8	497	100.0
Greater Murray	2470	99.4	0	0.0	2	0.1	0	0.0	0	0.0	12	0.5	2484	100.0
Southern	1469	98.9	4	0.3	2	0.1	3	0.2	3	0.2	4	0.3	1485	100.0
Other/Not stated	587	98.2	1	0.2	4	0.7	3	0.5	0	0.0	3	0.5	598	100.0
TOTAL	81230	96.0	2030	2.4	881	1.0	99	0.1	31	0.0	316	0.4	84587	100.0

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

TABLE 28

CONFINEMENTS BY ONSET AND AUGMENTATION OF LABOUR AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics prosta-glandins		No labour		Induced-oxytocics prosta-glandins		Induced ARM only		Induced-ARM+ oxytocics prosta-glandins		Induced-other#		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	Central Sydney	3188	48.5	170	2.6	808	12.3	933	14.2	1035	15.7	69	1.0	356	5.4	19	0.3	1	0.0	6579
Northern Sydney	3565	38.5	513	5.5	1045	11.3	1708	18.4	646	7.0	146	1.6	1618	17.5	17	0.2	0	0.0	9258	100.0
Western Sydney	5102	46.2	843	7.6	1049	9.5	1340	12.1	641	5.8	82	0.7	1957	17.7	35	0.3	2	0.0	11051	100.0
Wentworth	2118	46.0	340	7.4	265	5.8	623	13.5	345	7.5	78	1.7	814	17.7	23	0.5	0	0.0	4606	100.0
South Western Sydney	6297	50.3	712	5.7	1110	8.9	1370	10.9	934	7.5	138	1.1	1889	15.1	76	0.6	0	0.0	12526	100.0
Central Coast	1235	34.7	388	10.9	477	13.4	552	15.5	275	7.7	49	1.4	576	16.2	7	0.2	1	0.0	3560	100.0
Hunter	3461	50.0	393	5.7	324	4.7	932	13.5	559	8.1	175	2.5	1041	15.0	33	0.5	0	0.0	6918	100.0
Illawarra	1632	37.7	593	13.7	416	9.6	543	12.5	341	7.9	41	0.9	754	17.4	9	0.2	0	0.0	4329	100.0
South Eastern Sydney	4038	43.1	513	5.5	995	10.6	1513	16.1	847	9.0	94	1.0	1331	14.2	39	0.4	0	0.0	9370	100.0
Northern Rivers	1208	44.3	339	12.4	217	8.0	357	13.1	228	8.4	46	1.7	326	12.0	4	0.1	0	0.0	2725	100.0
Mid North Coast	1160	42.2	345	12.5	166	6.0	381	13.8	255	9.3	54	2.0	379	13.8	11	0.4	1	0.0	2752	100.0
New England	739	32.6	347	15.3	191	8.4	276	12.2	284	12.5	49	2.2	371	16.4	7	0.3	1	0.0	2265	100.0
Macquarie	627	42.2	178	12.0	125	8.4	195	13.1	125	8.4	29	2.0	196	13.2	7	0.5	4	0.3	1486	100.0
Mid Western	861	41.0	291	13.9	133	6.3	342	16.3	219	10.4	46	2.2	205	9.8	1	0.0	0	0.0	2098	100.0
Far West	272	54.7	41	8.2	30	6.0	49	9.9	44	8.9	4	0.8	56	11.3	0	0.0	1	0.2	497	100.0
Greater Murray	1089	43.8	217	8.7	121	4.9	346	13.9	441	17.8	65	2.6	191	7.7	13	0.5	1	0.0	2484	100.0
Southern	747	50.3	143	9.6	118	7.9	186	12.5	142	9.6	22	1.5	124	8.4	3	0.2	0	0.0	1485	100.0
Other/Not stated	276	46.2	56	9.4	54	9.0	74	12.4	53	8.9	6	1.0	78	13.0	1	0.2	0	0.0	598	100.0
TOTAL	37615	44.5	6422	7.6	7644	9.0	11720	13.9	7414	8.8	1193	1.4	12262	14.5	305	0.4	12	0.0	84587	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.

TABLE 29

CONFINEMENTS BY TYPE OF DELIVERY AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section#		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
	Central Sydney	3953	60.1	219	3.3	620	9.4	24	0.4	933	14.2	827	12.6	3	0.0	6579
Northern Sydney	5120	55.3	415	4.5	856	9.2	26	0.3	1708	18.4	1133	12.2	0	0.0	9258	100.0
Western Sydney	7376	66.7	678	6.1	458	4.1	49	0.4	1340	12.1	1146	10.4	4	0.0	11051	100.0
Wentworth	3024	65.7	172	3.7	219	4.8	19	0.4	623	13.5	548	11.9	1	0.0	4606	100.0
South Western Sydney	8821	70.4	261	2.1	973	7.8	70	0.6	1370	10.9	1031	8.2	0	0.0	12526	100.0
Central Coast	2137	60.0	50	1.4	356	10.0	16	0.4	552	15.5	449	12.6	0	0.0	3560	100.0
Hunter	4482	64.8	163	2.4	512	7.4	37	0.5	932	13.5	791	11.4	1	0.0	6918	100.0
Illawarra	2850	65.8	83	1.9	355	8.2	11	0.3	543	12.5	486	11.2	1	0.0	4329	100.0
South Eastern Sydney	5412	57.8	475	5.1	759	8.1	22	0.2	1513	16.1	1187	12.7	2	0.0	9370	100.0
Northern Rivers	1858	68.2	78	2.9	73	2.7	9	0.3	357	13.1	350	12.8	0	0.0	2725	100.0
Mid North Coast	1921	69.8	86	3.1	103	3.7	12	0.4	381	13.8	249	9.0	0	0.0	2752	100.0
New England	1597	70.5	53	2.3	128	5.7	10	0.4	276	12.2	199	8.8	2	0.1	2265	100.0
Macquarie	1035	69.7	53	3.6	50	3.4	9	0.6	195	13.1	140	9.4	4	0.3	1486	100.0
Mid Western	1301	62.0	56	2.7	105	5.0	11	0.5	342	16.3	283	13.5	0	0.0	2098	100.0
Far West	374	75.3	8	1.6	11	2.2	3	0.6	49	9.9	51	10.3	1	0.2	497	100.0
Greater Murray	1573	63.3	117	4.7	162	6.5	13	0.5	346	13.9	273	11.0	0	0.0	2484	100.0
Southern	1021	68.8	59	4.0	79	5.3	7	0.5	186	12.5	133	9.0	0	0.0	1485	100.0
Other/Not stated	416	69.6	8	1.3	36	6.0	5	0.8	74	12.4	59	9.9	0	0.0	598	100.0
TOTAL	54271	64.2	3034	3.6	5855	6.9	353	0.4	11720	13.9	9335	11.0	19	0.0	84587	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.

Birthweight

In 2002, 6.4 per cent of births were low birthweight (less than 2,500 grams). These comprised 0.7 per cent of birthweight less than 1,000 grams, 0.5 per cent in the 1,000 to 1,499 gram range, and 5.1 per cent in the 1,500 to 2,499 gram range (Table 30). Rates of low birthweight ranged from 5.0 per cent in Northern Sydney Health Area to 7.8 per cent in the Far West Health Area.

Gestational age

The majority of births (90.5 per cent) were at term, and 2.4 per cent were post-term (42-plus weeks). The 7.1 per cent of preterm births comprised 0.7 per cent born at 20–27 weeks, 0.7 per cent at 28–31 weeks, and 5.7 per cent at 32–36 weeks. The highest rate of preterm birth was in the Central Coast Health Area (9.7 per cent), while the lowest was 4.7 per cent in the Southern Health Area (Table 31).

TABLE 30

BIRTHS BY BIRTHWEIGHT AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Birthweight (grams)																		TOTAL No. %					
	Less than 500		500– 999		1000– 1499		1500– 1999		2000– 2499		2500– 2999		3000– 3499		3500– 3999		4000– 4499			4500+		Not stated		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		No.	%	No.	%	No.
Central Sydney	15	0.2	27	0.4	45	0.7	102	1.5	230	3.4	1066	15.9	2453	36.6	2043	30.5	615	9.2	103	1.5	7	0.1	6706	100.0
Northern Sydney	18	0.2	41	0.4	36	0.4	111	1.2	262	2.8	1270	13.4	3459	36.6	3072	32.5	1018	10.8	160	1.7	3	0.0	9450	100.0
Western Sydney	33	0.3	53	0.5	58	0.5	127	1.1	470	4.2	1773	15.8	4118	36.6	3323	29.6	1107	9.8	176	1.6	2	0.0	11240	100.0
Wentworth	10	0.2	19	0.4	30	0.6	49	1.0	168	3.6	700	15.0	1552	33.1	1559	33.3	495	10.6	99	2.1	1	0.0	4682	100.0
South Western Sydney	33	0.3	73	0.6	72	0.6	156	1.2	539	4.2	2064	16.3	4618	36.4	3722	29.3	1217	9.6	203	1.6	10	0.1	2698	100.0
Central Coast	14	0.4	19	0.5	28	0.8	41	1.1	165	4.6	502	13.9	1164	32.2	1161	32.1	420	11.6	102	2.8	2	0.1	3618	100.0
Hunter	21	0.3	41	0.6	51	0.7	104	1.5	306	4.4	949	13.5	2319	33.0	2249	32.0	837	11.9	154	2.2	1	0.0	7032	100.0
Illawarra	11	0.3	20	0.5	28	0.6	55	1.3	164	3.7	609	13.9	1560	35.5	1418	32.3	454	10.3	74	1.7	1	0.0	4394	100.0
South Eastern Sydney	15	0.2	36	0.4	50	0.5	121	1.3	352	3.7	1422	14.9	3499	36.6	2981	31.2	930	9.7	135	1.4	11	0.1	9552	100.0
Northern Rivers	5	0.2	5	0.2	7	0.3	31	1.1	99	3.6	402	14.6	952	34.5	862	31.2	345	12.5	46	1.7	5	0.2	2759	100.0
Mid North Coast	6	0.2	18	0.6	7	0.3	58	2.1	129	4.6	412	14.7	982	35.1	833	29.8	301	10.8	52	1.9	2	0.1	2800	100.0
New England	5	0.2	7	0.3	18	0.8	36	1.6	111	4.8	362	15.8	837	36.4	679	29.5	200	8.7	39	1.7	4	0.2	2298	100.0
Macquarie	8	0.5	6	0.4	8	0.5	21	1.4	61	4.1	253	16.8	512	34.0	462	30.7	143	9.5	29	1.9	3	0.2	1506	100.0
Mid Western	4	0.2	16	0.7	15	0.7	29	1.4	79	3.7	301	14.0	731	34.1	681	31.8	246	11.5	40	1.9	2	0.1	2144	100.0
Far West	1	0.2	1	0.2	4	0.8	6	1.2	27	5.4	98	19.5	163	32.4	146	29.0	45	8.9	12	2.4	0	0.0	503	100.0
Greater Murray	7	0.3	11	0.4	6	0.2	29	1.2	99	3.9	317	12.6	876	34.8	811	32.2	313	12.4	48	1.9	3	0.1	2520	100.0
Southern	2	0.1	2	0.1	1	0.1	4	0.3	55	3.7	250	16.7	502	33.6	487	32.6	164	11.0	28	1.9	1	0.1	1496	100.0
Other/Not stated	4	0.7	4	0.7	5	0.8	3	0.5	28	4.6	88	14.5	207	34.1	187	30.8	71	11.7	9	1.5	1	0.2	607	100.0
TOTAL	212	0.2	399	0.5	469	0.5	1083	1.3	3344	3.9	12838	14.9	30504	35.5	26676	31.0	8921	10.4	1509	1.8	50	0.1	86005	100.0

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

TABLE 31

BIRTHS BY GESTATIONAL AGE AND HEALTH AREA OF RESIDENCE, NSW 2002

Health Area	Gestational age (weeks)												TOTAL	
	20–27		28–31		32–36		37–41		42+		Not stated		No.	%
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Central Sydney	47	0.7	56	0.8	375	5.6	6118	91.2	108	1.6	2	0.0	6706	100.0
Northern Sydney	60	0.6	46	0.5	499	5.3	8632	91.3	213	2.3	0	0.0	9450	100.0
Western Sydney	75	0.7	75	0.7	610	5.4	10153	90.3	327	2.9	0	0.0	11240	100.0
Wentworth	26	0.6	30	0.6	260	5.6	4274	91.3	92	2.0	0	0.0	4682	100.0
South Western Sydney	106	0.8	93	0.7	649	5.1	11440	90.1	409	3.2	1	0.0	12698	100.0
Central Coast	32	0.9	34	0.9	286	7.9	3236	89.4	30	0.8	0	0.0	3618	100.0
Hunter	58	0.8	70	1.0	474	6.7	6119	87.0	311	4.4	0	0.0	7032	100.0
Illawarra	31	0.7	29	0.7	264	6.0	3995	90.9	75	1.7	0	0.0	4394	100.0
South Eastern Sydney	48	0.5	69	0.7	529	5.5	8703	91.1	195	2.0	8	0.1	9552	100.0
Northern Rivers	9	0.3	12	0.4	137	5.0	2528	91.6	73	2.6	0	0.0	2759	100.0
Mid North Coast	23	0.8	18	0.6	182	6.5	2530	90.4	44	1.6	3	0.1	2800	100.0
New England	11	0.5	26	1.1	144	6.3	2090	90.9	26	1.1	1	0.0	2298	100.0
Macquarie	14	0.9	9	0.6	90	6.0	1377	91.4	13	0.9	3	0.2	1506	100.0
Mid Western	20	0.9	22	1.0	138	6.4	1933	90.2	31	1.4	0	0.0	2144	100.0
Far West	2	0.4	4	0.8	30	6.0	461	91.7	6	1.2	0	0.0	503	100.0
Greater Murray	18	0.7	12	0.5	109	4.3	2344	93.0	35	1.4	2	0.1	2520	100.0
Southern	4	0.3	1	0.1	65	4.3	1381	92.3	44	2.9	1	0.1	1496	100.0
Other/Not stated	10	1.6	6	1.0	24	4.0	551	90.8	15	2.5	1	0.2	607	100.0
TOTAL	594	0.7	612	0.7	4865	5.7	77865	90.5	2047	2.4	22	0.0	86005	100.0

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

Perinatal outcomes

The perinatal mortality rate in 2002 was 8.7 per 1,000 births. This rate includes all births and deaths of babies of at least 400 grams birthweight or at least 20 weeks gestation (Table 32). The rate varied from 6.4 per 1,000 in the Wentworth Health Area to 11.3 per 1,000 in Macquarie Health Area.

TABLE 32

PERINATAL OUTCOMES BY HEALTH AREA OF RESIDENCE, NSW 2002*

Health Area	Liveborn surviving		Stillborn		Perinatal outcome Neonatal death		Not stated		Total births		Perinatal mortality rate/1,000 births
	No.	%	No.	%	No.	%	No.	%	No.	%	
	Central Sydney	6634	98.9	44	0.7	27	0.4	1	0.0	6706	
Northern Sydney	9386	99.3	44	0.5	18	0.2	2	0.0	9450	100.0	6.6
Western Sydney	11146	99.2	68	0.6	26	0.2	0	0.0	11240	100.0	8.4
Wentworth	4652	99.4	18	0.4	12	0.3	0	0.0	4682	100.0	6.4
South Western Sydney	12573	99.0	86	0.7	35	0.3	4	0.0	12698	100.0	9.5
Central Coast	3581	99.0	28	0.8	9	0.2	0	0.0	3618	100.0	10.2
Hunter	6963	99.0	48	0.7	21	0.3	0	0.0	7032	100.0	9.8
Illawarra	4363	99.3	23	0.5	8	0.2	0	0.0	4394	100.0	7.1
South Eastern Sydney	9461	99.0	56	0.6	27	0.3	8	0.1	9552	100.0	8.7
Northern Rivers	2738	99.2	16	0.6	5	0.2	0	0.0	2759	100.0	7.6
Mid North Coast	2773	99.0	14	0.5	8	0.3	5	0.2	2800	100.0	7.9
New England	2276	99.0	16	0.7	6	0.3	0	0.0	2298	100.0	9.6
Macquarie	1482	98.4	11	0.7	6	0.4	7	0.5	1506	100.0	11.3
Mid Western	2120	98.9	15	0.7	7	0.3	2	0.1	2144	100.0	10.3
Far West	498	99.0	2	0.4	3	0.6	0	0.0	503	100.0	9.9
Greater Murray	2494	99.0	18	0.7	5	0.2	3	0.1	2520	100.0	9.1
Southern	1483	99.1	3	0.2	7	0.5	3	0.2	1496	100.0	6.7
Other/Not stated	599	98.7	5	0.8	3	0.5	0	0.0	607	100.0	13.2
TOTAL	85222	99.1	515	0.6	233	0.3	35	0.0	86005	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.

Livebirths in statistical local areas

TABLE 33
LIVEBIRTHS BY HEALTH AREA AND STATISTICAL LOCAL AREA OF RESIDENCE, NSW 2002

Health Area–Statistical Local Area	No.	%	Health Area–Statistical Local Area	No.	%
Central Sydney			South Eastern Sydney		
Ashfield	503	7.6	Botany	502	5.3
Burwood	367	5.5	Hurstville	966	10.2
Canterbury	2127	31.9	Kogarah	623	6.6
Concord	354	5.3	Randwick	1484	15.6
Drummoyne	464	7.0	Rockdale	1338	14.1
Leichhardt	997	15.0	Sth Sydney (SESAHS)	395	4.2
Marrickville	1025	15.4	Sutherland Shire - East	1254	13.2
Sth Sydney (CSAHS)	412	6.2	Sutherland Shire - West	1455	15.3
Strathfield	277	4.2	Sydney - Inner	68	0.7
Sydney (CSAHS)	135	2.0	Sydney (SESAHS)	72	0.5
TOTAL	6661	100.0	Waverley	592	8.3
Northern Sydney			Woollahra	559	5.9
Hornsby	1821	19.4	TOTAL	9488	100.0
Hunters Hill	145	1.5	Northern Rivers		
Ku-ring-gai	879	9.3	Ballina	381	13.9
Lane Cove	381	4.1	Byron	302	11.0
Manly	528	5.6	Copmanhurst	49	1.8
Mosman	340	3.6	Grafton	199	7.3
North Sydney	753	8.0	Kyogle	81	3.0
Pittwater	677	7.2	Lismore - Pt A	370	13.5
Ryde	1229	13.1	Lismore - Pt B	149	5.4
Warringah	1842	19.6	Maclean	149	5.4
Willoughby	809	8.6	Pristine Waters - Nymboida	91	3.3
TOTAL	9404	100.0	Pristine Waters - Ulmarra	72	2.6
Western Sydney			Richmond Valley - Casino	142	5.2
Auburn	1051	9.4	Richmond Valley Bal	122	4.4
Baulkham Hills	1825	16.3	Tweed - Pt A	345	12.6
Blacktown - North	1465	13.1	Tweed - Pt B	291	10.6
Blacktown - South-East	1421	12.7	TOTAL	2743	100.0
Blacktown - South-West	1815	16.2	Mid North Coast		
Holroyd	1415	12.7	Bellingen	125	4.5
Parramatta	2180	19.5	Coffs Harbour - Pt A	546	19.6
TOTAL	11172	100.0	Coffs Harbour - Pt B	163	5.9
Wentworth			Gloucester	38	1.4
Blue Mountains	914	19.6	Greater Taree	504	18.1
Hawkesbury	933	20.0	Great Lakes	287	10.3
Penrith	2817	60.4	Hastings - Pt A	341	12.3
TOTAL	4664	100.0	Hastings - Pt B	246	8.8
South Western Sydney			Kempsey	354	12.7
Bankstown	2685	21.3	Nambucca	177	6.4
Camden	861	6.8	TOTAL	2781	100.0
Campbelltown	2263	17.9	New England		
Fairfield	2699	21.4	Armidale Dumaresq - City	236	10.3
Liverpool	2997	23.8	Armidale Dumaresq Bal	96	4.2
Wingecarribee	494	3.9	Barraba	15	0.7
Wollondilly	609	4.8	Bingara	12	0.5
TOTAL	12608	100.0	Glen Innes	99	4.3
Central Coast			Gunnedah	158	6.9
Gosford	1895	52.8	Guyra	47	2.1
Wyong	1695	47.2	Inverell - Pt A	71	3.1
TOTAL	3590	100.0	Inverell - Pt B	128	5.6
Hunter			Manilla	46	2.0
Cessnock	610	8.7	Moree Plains	250	11.0
Dungog	105	1.5	Narrabri	194	8.5
Lake Macquarie	2161	30.9	Nundle	8	0.4
Maitland	807	11.6	Parry - Pt A	56	2.5
Merriwa	24	0.3	Parry - Pt B	138	6.0
Murrurundi	26	0.4	Quirindi	79	3.5
Muswellbrook	236	3.4	Severn	32	1.4
Newcastle - Inner	47	0.7	Tamworth	418	18.3
Newcastle - Remainder	1768	25.3	Tenterfield	52	2.3
Port Stephens	715	10.2	Uralla	66	2.9
Scone	141	2.0	Walcha	46	2.0
Singleton	344	4.9	Yallaroi	35	1.5
TOTAL	6984	100.0	TOTAL	2282	100.0
Illawarra					
Kiama	196	4.5			
Shellharbour	851	19.5			
Shoalhaven - Pt A	446	10.2			
Shoalhaven - Pt B	460	10.5			
Wollongong	2418	55.3			
TOTAL	4371	100.0			

TABLE 33 continued
LIVEBIRTHS BY HEALTH AREA AND STATISTICAL LOCAL AREA OF RESIDENCE, NSW 2002

Health Area—Statistical Local Area	No.	%	Health Area—Statistical Local Area	No.	%
Macquarie			Greater Murray		
Bogan	55	3.7	Albury	6	0.2
Cobar	80	5.4	Berrigan	25	1.0
Coolah	46	3.1	Bland	81	3.2
Coonabarabran	64	4.3	Carrathool	77	3.1
Coonamble	83	5.6	Conargo	8	0.3
Dubbo - Pt A	548	36.8	Coolamon	52	2.1
Dubbo - Pt B	47	3.2	Cootamundra	79	3.2
Gilgandra	56	3.8	Corowa	36	1.4
Mudgee	219	14.7	Culcairn	32	1.3
Narromine	125	8.4	Deniliquin	77	3.1
Warren	54	3.6	Griffith	404	16.2
Wellington	111	7.5	Gundagai	65	2.6
TOTAL	1488	100.0	Hay	59	2.4
Mid Western			Holbrook	8	0.3
Bathurst	364	17.1	Jerilderie	5	0.2
Blayney - Pt A	69	3.2	Junee	65	2.6
Blayney - Pt B	16	0.8	Leeton	152	6.1
Cabonne - Pt A	12	0.6	Lockhart	36	1.4
Cabonne - Pt C	107	5.0	Murray	6	0.2
Cowra	154	7.2	Murrumbidgee	37	1.5
Evans - Pt A	12	0.6	Narrandera	102	4.1
Evans - Pt B	30	1.4	Temora	79	3.2
Forbes	119	5.6	Tumbarumba	20	0.8
Greater Lithgow	233	11.0	Tumut	132	5.3
Lachlan	94	4.4	Urana	6	0.2
Oberon	111	5.2	Wagga Wagga - Pt A	740	29.6
Orange	531	25.0	Wagga Wagga - Pt B	87	3.5
Parkes	189	8.9	Wakool	7	0.3
Rylstone	48	2.3	Windouran	12	0.5
Weddin	35	1.6	Other	4	0.2
Other	3	0.1	TOTAL	2499	100.0
TOTAL	2127	100.0	Southern		
Far West			Bega Valley	278	18.7
Bourke	86	17.2	Bombala	17	1.1
Brewarrina	41	8.2	Boorowa	14	0.9
Broken Hill	218	43.5	Cooma-Monaro	81	5.4
Central Darling	31	6.2	Crookwell	23	1.5
Walgett	115	23.0	Eurobodalla	261	17.5
Unincorp. Far West	9	1.8	Goulburn	236	15.8
Other	1	0.2	Gunning	9	0.6
TOTAL	501	100.0	Harden	34	2.3
			Mulwaree	65	4.4
			Queanbeyan	203	13.6
			Snowy River	58	3.9
			Tallaganda	11	0.7
			Yarrowlumla - Pt A	22	1.5
			Yass	29	1.9
			Young	149	10.0
			TOTAL	1490	100.0
			Other/ Not Stated	602	100.0
			TOTAL NSW	85455	100.0

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