

NSW Mothers and Babies 2016



Health

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SHPN (CEE) 170669
ISBN 978-1-76000-767-6

Produced by:
Centre for Epidemiology and Evidence
Population and Public Health Division

Suggested citation:
Centre for Epidemiology and Evidence. *New South Wales Mothers and Babies 2016*. Sydney: NSW Ministry of Health, 2017.

Further copies of this document can be downloaded from the NSW Ministry of Health website at www.health.nsw.gov.au/hsnsw.

December 2017

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1. ACKNOWLEDGEMENTS

NSW Perinatal Data Collection

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NSW hospitals' midwives and independent midwives

NSW hospitals' medical record departments

Maternal death reviews

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2. EXECUTIVE SUMMARY

This is the nineteenth annual report on mothers and babies in NSW. The key findings are:

- The number of births in NSW fell from 99,510 in 2012 to 98,727 in 2016, an overall decrease of 0.8%. The largest relative decrease occurred in the Northern NSW Local Health District, where the number of births decreased from 2,786 to 2,327 between 2012 and 2016.
- The percentage of mothers who were teenagers fell from 3.2% in 2012 to 2.2% in 2016. Over the same period the percentage of mothers aged 35 years and over remained stable, and was 23.7% in 2016.
- The rate of normal vaginal birth decreased from 57.1% in 2012 to 55.2% in 2016. The caesarean section rate increased from 31.1% to 32.9%, while the rate of instrumental birth remained steady at about 11.5%.
- Operative and instrumental births are more common among privately than publicly insured mothers. Among privately insured mothers the rate of normal vaginal birth decreased from 45.3% in 2012 to 44.0% in 2016 and the caesarean section rate increased from 40.7% to 42.1%. Among publicly insured mothers the rate of normal vaginal birth decreased from 63.2% to 61.4% and the caesarean section rate increased from 26.1% to 27.8%.
- The proportion of mothers reporting any smoking during pregnancy declined from 10.4% in 2012 to 8.3% in 2016. Of mothers who smoked during pregnancy in 2016, 26.7% stopped smoking in the first half of pregnancy.
- In 2016, the majority of mothers planned to give birth in a hospital labour ward, and 2.5% of mothers planned to give birth in a birth centre. Eighty-six per cent of mothers who planned to give birth in a birth centre actually did so. There were 173 homebirths in NSW reported in 2016.
- In 2016, 7.3% of babies were born prematurely (less than 37 weeks gestation), a slight decrease from 7.6% in 2012.
- Since 2012, the rate of low birth weight (less than 2,500 grams) has remained stable, ranging from 6.1% to 6.6%. The rate of low birth weight was 6.5% in 2016.
- Between 2012 and 2016, the reported number of Aboriginal or Torres Strait Islander mothers giving birth increased from 3,348 to 4,118, an increase from 3.4% to 4.2% of all mothers.
- The percentage of Aboriginal or Torres Strait Islander mothers who were teenagers fell substantially from 18.6% in 2012 to 12.8% in 2016. The percentage of Aboriginal or Torres Strait Islander mothers giving birth at 35 years of age or more has increased from 8.1% in 2012 to 9.5% in 2016.
- In 2016, 41.3% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy.
- Since 2012, rates of low birth weight and prematurity in Aboriginal or Torres Strait Islander babies have been over 10%. In 2016, 10.8% of Aboriginal or Torres Strait Islander babies were low birth weight and 11.2% were premature.
- The perinatal mortality rate of 12.2 per 1,000 births in Aboriginal or Torres Strait Islander mothers in 2016 is higher than the rate of 7.3 per 1,000 births experienced among babies born to non-Aboriginal or Torres Strait Islander mothers.

3. METHODS

Data sources

NSW Perinatal Data Collection

The New South Wales Perinatal Data Collection (PDC) is a population-based surveillance system covering all births in NSW public and private hospitals, as well as home births. It encompasses all live births, and stillbirths of at least 20 weeks gestation or at least 400 grams birth weight.

The PDC relies on the attending midwife or doctor to complete an electronic notification when a birth occurs. The electronic notification captures items described in *PD2015_025 NSW Perinatal Data Collection (PDC) Reporting and Submission Requirements from 1 January 2016*. These items include demographic, maternal health, pregnancy, labour, birth, and perinatal outcomes. Completed notifications are transferred electronically to the state database, which is managed by Health System Information and Performance Reporting Branch within the System Purchasing and Performance Division of the NSW Ministry of Health. The PDC data dictionary can be found at <http://www.cherel.org.au/data-dictionaries>.

In 2016, 100.0% of PDC records were received electronically from public and private hospitals information systems. There are several source systems that generate the PDC data. The largest source is ObstetriX, which supplies 57.4% of all PDC records and covers all public hospitals in Northern Sydney, Central Coast, South Eastern Sydney, Illawarra Shoalhaven, Hunter New England, Nepean Blue Mountains and Western Sydney Local Health Districts and some hospitals in Mid North Coast, Northern NSW, Murrumbidgee, Southern NSW, Western NSW and Far West Local Health Districts. CERNER systems supply 18.5% of PDC records (public hospitals in Sydney and South Western Sydney Local Health Districts). In 2016, 4 Local Health Districts transitioned to eMaternity during the year, supplying 0.8% of PDC records (public hospitals in Mid North Coast, Northern NSW, Northern Sydney, and Central Coast). Healthscope Hospitals (Prince of Wales Private Hospital, Norwest Private Hospital, Sydney South West Private Hospital, Nepean Private Hospital and Newcastle Private Hospital) supply 8.3% of PDC records. Meditech, which includes 5 Ramsay Private Hospitals (North Shore Private Hospital, Westmead Private Hospital, St George Private Hospital, Kareena Private Hospital and Wollongong Private Hospital), supplies 8.2% of all PDC data. The Mater Hospital, North Sydney database supplies 2.4% of PDC records, and 2.0% of PDC records are supplied from the Sydney Adventist Hospital database.

The PDC receives notifications of women whose usual place of residence is outside NSW but who give birth in NSW. However, the PDC does not receive notifications of births outside NSW to women usually resident in NSW.

Maternal and Child Health Register

The Maternal and Child Health Register is a dataset of linked de-identified records that has been established under the Public Health and Disease Registers provisions of the *NSW Public Health 2010 Act*. It includes records from the following data collections for children and young people aged less than 16 years and women aged 12 to 55 years:

- NSW PDC for the period 1994 onwards (all records);
- NSW Admitted Patient Data Collection (public hospitals and the NSW Private Hospital Inpatient Statistics Collection) for the period 1 July 2001 onwards (children and young people aged less than 16 years and women aged 12 to 55 years);
- NSW Emergency Department Data Collection for the period 1 July 2005 onwards (children and young people aged less than 16 years and women aged 12 to 55 years);
- NSW Register of Congenital Conditions for the most recently available 6 year period (all records);
- NSW Perinatal Death Review database for the period 1 January 2000 onwards (all records);
- Notifiable Conditions Information Management System for the period 1994 onwards (children and young people aged less than 16 years and women aged 12 to 55 years);
- NSW Registry of Births, Deaths and Marriages death registrations for the period 1994 onwards (children and young people aged less than 16 years and women aged 12 to 55 years); and
- Australian Coordinating Registry Cause of Death Unit Record File for the period 1994 onwards (children and young people aged less than 16 years and women aged 12 to 55 years).

An Enhanced Reporting of Aboriginality (ERA) variable is available on the Maternal and Child Health Register. This variable uses linkage with routinely collected population-based health and health-related data collections in NSW to obtain more accurate information about Aboriginal people than is currently available in individual collections, and thus to more accurately identify and monitor risk factors for diseases and conditions that are different for Aboriginal people compared to non-Aboriginal people.

(Continued on next page)

Enhanced reporting relies on having independent sources of information on whether a person is Aboriginal or Torres Strait Islander.¹ Each independent report is counted as a “unit of information” that contributes to the weight of evidence as to whether a person is reported as Aboriginal or Torres Strait Islander. ERA uses the following algorithm to determine whether a person is reported as Aboriginal:

1. If a person is consistently reported as Aboriginal or Torres Strait Islander on all contributing sources of data, then the person is reported as Aboriginal or Torres Strait Islander.
2. If the person is not consistently reported as Aboriginal or Torres Strait Islander, then:
 - i) if the person has 3 or more units of information across all contributing data sets, at least 2 indicating that the person is Aboriginal or Torres Strait Islander are required to report the person as Aboriginal or Torres Strait Islander;
 - ii) otherwise, if the person has 1 or 2 units of information in all contributing data sets, 1 is sufficient to report the person as Aboriginal or Torres Strait Islander.
3. If a person is consistently reported as unknown, not stated or the information is missing on all contributing data sets, then the person’s Aboriginality is reported as “missing”.

For mothers and babies, ERA is based on the weight of evidence from linked records of the PDC, Admitted Patient Data Collection (APDC), Emergency Department Data Collection, Australian Coordinating Registry Cause of Death Unit Record File, and Registry of Births, Deaths and Marriages (RBDM) birth registration data. In this report, APDC records do not contribute to the mother’s or baby’s ERA where there is a corresponding linked PDC birth record. This is because, from 2012, information on a person’s Aboriginality as reported on the PDC is usually obtained from the hospital’s patient administration system and is not an independent source of information.

The Maternal and Child Health Register linkage is updated regularly for all years of data. Reported numbers of Aboriginal mothers and babies according to ERA for a particular birth year may therefore vary when subsequently reported. It should be noted that the 2012 ERA figures reported in the NSW Mothers and Babies 2012 and 2013 reports used a definition where PDC records always contributed to the mother’s and baby’s ERA.

NSW Maternal and Perinatal Mortality Review Committee

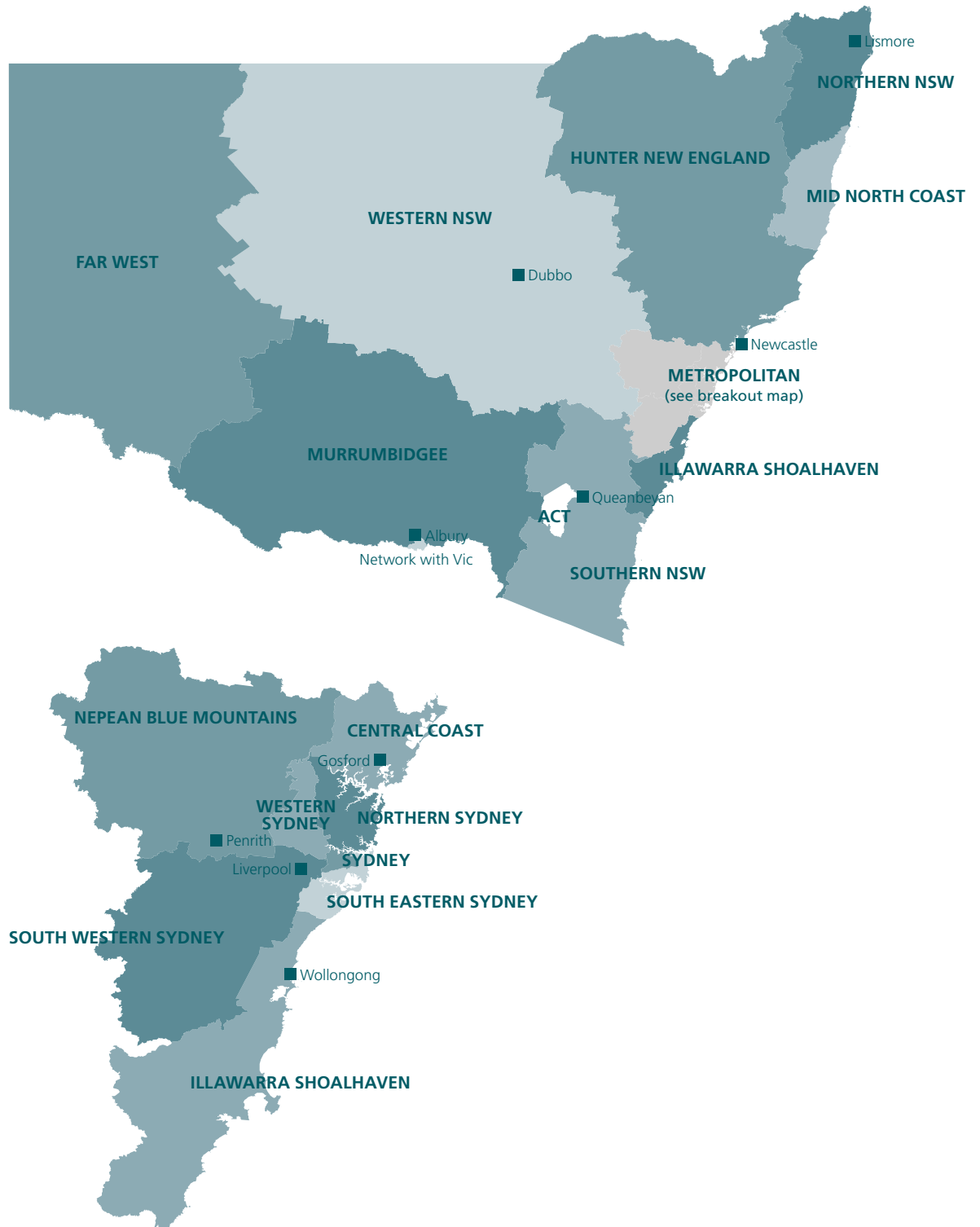
The NSW Maternal and Perinatal Mortality Review Committee was established under the *NSW Health Administration Act 1982*, and is privileged under the Act to carry out confidential reviews of both maternal and perinatal deaths. Members are appointed by the Minister for Health.

The Committee reviews each maternal death to classify the death, identify the cause of death, ascertain any possible avoidable factors, and identify lessons to be learnt. The Committee also reviews perinatal deaths among liveborn babies, and stillbirths of at least 20 weeks gestation or at least 400 grams birth weight. The information obtained from these reviews assists in the development of policies aimed at improving the health of mothers and newborns in NSW. Information considered by the Committee is confidential.

Reference

1. Population and Public Health Division. *Improved reporting of Aboriginal and Torres Strait Islander peoples on population datasets in New South Wales using record linkage—a feasibility study*. Sydney: NSW Ministry of Health, 2012.

Map of NSW Local Health Districts



4. TRENDS IN NEW SOUTH WALES

Confinements and births by plurality

The number of births in NSW fell from 99,510 in 2012 to 98,727 in 2016, a decrease of 0.8%. In 2016, 98,727 births to 97,306 mothers were reported (Table 1). The percentage of multiple (twin and triplet) pregnancies has remained fairly stable over recent years at about 1.4%.

TABLE 1: PLURALITY, NSW 2012–2016

Plurality		Year									
		2012		2013		2014		2015		2016	
		No.	%	No.	%	No.	%	No.	%	No.	%
Confinements	Singleton	96793	98.6	94128	98.5	94543	98.6	93609	98.5	95906	98.6
	Twins	1327	1.4	1384	1.4	1367	1.4	1358	1.4	1379	1.4
	Triplets	21	0.0	25	0.0	16	0.0	22	0.0	21	0.0
	TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0
Births	Singleton	96793	97.3	94128	97.1	94543	97.1	93609	97.1	95906	97.1
	Twins	2654	2.7	2768	2.9	2734	2.8	2716	2.8	2758	2.8
	Triplets	63	0.1	75	0.1	48	0.0	66	0.1	63	0.1
	TOTAL	99510	100.0	96971	100.0	97325	100.0	96391	100.0	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Local Health District of residence

The largest relative increase occurred in the Nepean Blue Mountains Local Health District, where the number of births increased from 4,788 to 5,042 between 2012 and 2016. The largest relative decrease occurred in the Northern NSW Local Health District, where the number of births decreased from 2,786 to 2,327 between 2012 and 2016. In 2016, 29.2% of mothers giving birth were residents in South Western Sydney and Western Sydney Local Health Districts, similar to previous years (Table 2).

TABLE 2: MATERNAL LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2012–2016

Local Health District	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	8769	8.9	8331	8.7	8401	8.8	8249	8.7	8345	8.6
South Western Sydney	13176	13.4	12842	13.4	13220	13.8	12996	13.7	13750	14.1
South Eastern Sydney	11878	12.1	11396	11.9	11460	11.9	11077	11.7	11318	11.6
Illawarra Shoalhaven	4476	4.6	4398	4.6	4363	4.5	4507	4.7	4534	4.7
Western Sydney	14601	14.9	14515	15.2	14877	15.5	14640	15.4	14667	15.1
Nepean Blue Mountains	4788	4.9	4743	5.0	4820	5.0	4929	5.2	5042	5.2
Northern Sydney	10653	10.9	10310	10.8	10454	10.9	10270	10.8	10804	11.1
Central Coast	3823	3.9	3922	4.1	3738	3.9	3813	4.0	3816	3.9
Hunter New England	11328	11.5	10931	11.4	10717	11.2	10797	11.4	10690	11.0
Northern NSW	2786	2.8	2785	2.9	2631	2.7	2557	2.7	2327	2.4
Mid North Coast	2243	2.3	2235	2.3	2151	2.2	2183	2.3	1900	2.0
Southern NSW	1450	1.5	1368	1.4	1339	1.4	1360	1.4	1372	1.4
Murrumbidgee	2402	2.4	2305	2.4	2435	2.5	2377	2.5	2370	2.4
Western NSW	3879	4.0	3707	3.9	3805	4.0	3678	3.9	3740	3.8
Far West	255	0.3	226	0.2	230	0.2	222	0.2	234	0.2
Other-not stated	1634	1.7	1523	1.6	1285	1.3	1334	1.4	2397	2.5
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Maternal age

The percentage of mothers who were teenagers fell from 3.2% in 2012 to 2.2% in 2016. Between 2012 and 2016, the percentage of mothers aged 35 years and over remained stable and was 23.7% in 2016 (Figure 1, Table 3).

The mean maternal age rose from 30.3 to 30.6 years over the 5 years 2012 to 2016. The mean maternal age rose from 28.7 to 29.3 years for primiparous mothers and remained stable for multiparous mothers (31.7 years in 2016).

The proportion of mothers giving birth for the first time who were aged 35 years or more was 15.3% in 2012 and 16.0% in 2016. The proportion of multiparous mothers who were aged 35 years or more was 30.1% in 2012 and 29.7% in 2016.

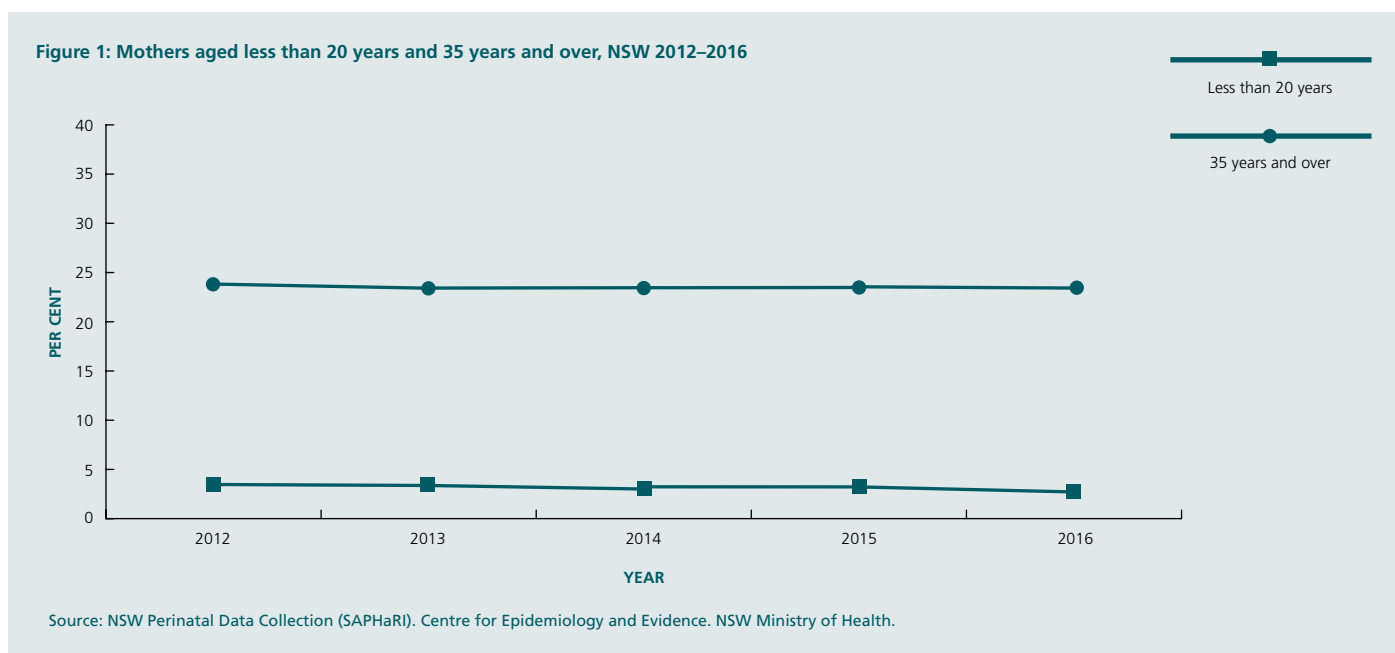


TABLE 3: MATERNAL AGE, NSW 2012–2016

Maternal age (years)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 15	18	0.0	15	0.0	14	0.0	15	0.0	8	0.0
15-19	3144	3.2	2832	3.0	2616	2.7	2362	2.5	2106	2.2
20-24	12694	12.9	12097	12.7	11699	12.2	11358	12.0	11007	11.3
25-29	26769	27.3	25801	27.0	25995	27.1	25476	26.8	25926	26.6
30-34	32385	33.0	32411	33.9	33300	34.7	33569	35.3	35126	36.1
35-39	18534	18.9	17841	18.7	17939	18.7	17776	18.7	18627	19.1
40-44	4314	4.4	4282	4.5	4115	4.3	4163	4.4	4142	4.3
45+	266	0.3	240	0.3	241	0.3	268	0.3	325	0.3
Not stated	17	0.0	18	0.0	7	0.0	2	0.0	39	0.0
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Maternal country of birth

The percentage of mothers born in Australia decreased between 2012 and 2016, from 65.0% to 62.1%. In 2016, mothers born in India, China, New Zealand, United Kingdom, the Philippines, Vietnam, Lebanon and Iraq together accounted for 19.1% of all mothers (Table 4).

TABLE 4: MATERNAL COUNTRY OF BIRTH, NSW 2012–2016[#]

Country of birth	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Australia	63799	65.0	62165	65.1	60761	63.3	60769	64.0	60429	62.1
China	4145	4.2	3856	4.0	4753	5.0	3830	4.0	5079	5.2
India	3142	3.2	3328	3.5	3634	3.8	3860	4.1	4247	4.4
New Zealand	2246	2.3	2188	2.3	2128	2.2	2060	2.2	2081	2.1
United Kingdom	2185	2.2	1968	2.1	1816	1.9	1704	1.8	1825	1.9
Philippines	1494	1.5	1465	1.5	1450	1.5	1513	1.6	1626	1.7
Vietnam	1861	1.9	1436	1.5	1537	1.6	1478	1.6	1499	1.5
Iraq	981	1.0	1014	1.1	1092	1.1	1021	1.1	1152	1.2
Lebanon	1337	1.4	1280	1.3	1289	1.3	1159	1.2	1081	1.1
Nepal	542	0.6	636	0.7	766	0.8	824	0.9	1059	1.1
Pakistan	592	0.6	646	0.7	733	0.8	800	0.8	902	0.9
Bangladesh	714	0.7	761	0.8	827	0.9	846	0.9	901	0.9
Indonesia	902	0.9	823	0.9	778	0.8	787	0.8	796	0.8
South Korea	802	0.8	728	0.8	690	0.7	768	0.8	747	0.8
Thailand	569	0.6	535	0.6	535	0.6	528	0.6	606	0.6
South Africa	660	0.7	610	0.6	598	0.6	580	0.6	587	0.6
Fiji	641	0.7	621	0.7	590	0.6	582	0.6	552	0.6
Ireland	450	0.5	441	0.5	471	0.5	455	0.5	514	0.5
Iran	297	0.3	295	0.3	369	0.4	425	0.4	512	0.5
United States of America	510	0.5	473	0.5	498	0.5	514	0.5	504	0.5
Hong Kong	548	0.6	452	0.5	456	0.5	441	0.5	500	0.5
Sri Lanka	450	0.5	442	0.5	452	0.5	432	0.5	448	0.5
Malaysia	451	0.5	420	0.4	441	0.5	440	0.5	426	0.4
Afghanistan	365	0.4	340	0.4	405	0.4	415	0.4	423	0.4
Japan	427	0.4	392	0.4	404	0.4	363	0.4	382	0.4
Canada	292	0.3	333	0.3	290	0.3	307	0.3	334	0.3
Brazil	216	0.2	242	0.3	267	0.3	282	0.3	317	0.3
Germany	308	0.3	309	0.3	349	0.4	304	0.3	293	0.3
Egypt	209	0.2	214	0.2	242	0.3	263	0.3	260	0.3
Cambodia	303	0.3	267	0.3	274	0.3	290	0.3	256	0.3
Western Samoa	219	0.2	239	0.3	222	0.2	217	0.2	250	0.3
Russian Federation (not USSR)	206	0.2	169	0.2	243	0.3	240	0.3	244	0.3
Taiwan	184	0.2	187	0.2	191	0.2	182	0.2	244	0.3
Sudan	268	0.3	284	0.3	265	0.3	250	0.3	236	0.2
France	161	0.2	173	0.2	233	0.2	223	0.2	221	0.2
Syria	151	0.2	132	0.1	192	0.2	177	0.2	214	0.2
Poland	195	0.2	204	0.2	181	0.2	182	0.2	199	0.2
Tonga	169	0.2	166	0.2	148	0.2	176	0.2	158	0.2
Colombia	142	0.1	135	0.1	136	0.1	157	0.2	151	0.2
Turkey	175	0.2	179	0.2	176	0.2	173	0.2	147	0.2
Singapore	170	0.2	135	0.1	137	0.1	154	0.2	147	0.2
Saudi Arabia	132	0.1	116	0.1	120	0.1	139	0.1	138	0.1
Chile	147	0.1	124	0.1	135	0.1	130	0.1	137	0.1
Serbia (includes Kosovo)	65	0.1	60	0.1	75	0.1	83	0.1	133	0.1
Macedonia	123	0.1	125	0.1	150	0.2	114	0.1	128	0.1
Bosnia and Herzegovina	123	0.1	113	0.1	134	0.1	137	0.1	126	0.1
Former Yugoslavia	123	0.1	104	0.1	121	0.1	116	0.1	125	0.1
Italy	102	0.1	86	0.1	74	0.1	116	0.1	120	0.1
Peru	94	0.1	130	0.1	116	0.1	98	0.1	112	0.1
Zimbabwe	127	0.1	110	0.1	129	0.1	107	0.1	111	0.1
Jordan	95	0.1	105	0.1	116	0.1	112	0.1	105	0.1
North Korea	177	0.2	157	0.2	174	0.2	126	0.1	103	0.1
Burma (Myanmar)	100	0.1	108	0.1	146	0.2	116	0.1	102	0.1
Nigeria	58	0.1	56	0.1	43	0.0	74	0.1	100	0.1
Other/Not stated	3197	3.3	3460	3.6	3374	3.5	3350	3.5	3217	3.3
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Countries of birth for which 100 or more women gave birth in 2016.

Aboriginal and Torres Strait Islander mothers

The reported number of Aboriginal or Torres Strait Islander mothers giving birth increased from 3,348 in 2012 to 4,118 in 2016, an increase from 3.4% to 4.2% of all mothers (Table 5). Further information on Aboriginal and Torres Strait Islander mothers and babies is shown in Chapter 8.

TABLE 5: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016

Aboriginal or Torres Strait Islander	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Aboriginal or Torres Strait Islander	3348	3.4	3492	3.7	3756	3.9	3823	4.0	4118	4.2
Non-Aboriginal or Torres Strait Islander	94738	96.5	91986	96.3	92158	96.1	91166	96.0	92623	95.2
Not stated	55	0.1	59	0.1	12	0.0	0	0.0	565	0.6
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Previous pregnancies

In recent years there has been a slight decrease in the percentage of mothers giving birth for the first time, from 44.0% in 2012 to 43.4% in 2016 (Table 6), with an equivalent increase in the proportion of mothers giving birth to a second and subsequent baby, from 56.0% in 2012 to 56.4% in 2016.

TABLE 6: PREVIOUS PREGNANCIES, NSW 2012–2016

No. previous pregnancies (>20 weeks gestation)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	43140	44.0	42257	44.2	42338	44.1	41547	43.7	42272	43.4
1-4	53447	54.5	51831	54.3	52070	54.3	52034	54.8	53486	55.0
5+	1518	1.5	1429	1.5	1491	1.6	1390	1.5	1426	1.5
Not stated	36	0.0	20	0.0	27	0.0	18	0.0	122	0.1
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Duration of pregnancy at first antenatal visit

Between 2012 and 2016, the proportion of mothers starting antenatal care at less than 14 weeks gestation substantially increased from 61.2% to 67.8% (Table 7). In 2016, 88.8% of mothers commenced antenatal care at less than 20 weeks gestation.

TABLE 7: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT, NSW 2012–2016

Duration of pregnancy (weeks)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0-13	60051	61.2	57336	60.0	57293	59.7	61073	64.3	65988	67.8
14-19	21489	21.9	22916	24.0	24062	25.1	21869	23.0	20404	21.0
20+	14063	14.3	14507	15.2	14164	14.8	11685	12.3	10033	10.3
Not stated	2538	2.6	778	0.8	407	0.4	362	0.4	881	0.9
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Smoking in pregnancy

The proportion of mothers reporting any smoking during pregnancy declined from 10.4% in 2012 to 8.3% in 2016 (Table 8). Of mothers who smoked during pregnancy in 2016, 26.7% stopped smoking in the first half of pregnancy. Over the 5-year period, among those who smoked in the second half of pregnancy, there was a trend towards smoking fewer cigarettes per day (Table 9).

TABLE 8: SMOKING IN PREGNANCY, NSW 2012–2016

Smoking in pregnancy	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Did not smoke	87580	89.2	86251	90.3	87041	90.7	86547	91.1	88000	90.4
Smoked	10225	10.4	9285	9.7	8883	9.3	8442	8.9	8083	8.3
Not stated	336	0.3	1	0.0	2	0.0	0	0.0	1223	1.3
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

TABLE 9: MOTHERS WHO SMOKED AT ALL DURING PREGNANCY BY NUMBER OF CIGARETTES SMOKED IN THE SECOND HALF OF PREGNANCY, NSW 2012–2016

Cigarettes smoked in the second half of pregnancy	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	2562	25.1	2446	26.3	2306	26.0	2292	27.1	2156	26.7
1 - 10 per day	5439	53.2	5069	54.6	4948	55.7	4691	55.6	4738	58.6
> 10 per day	1849	18.1	1510	16.3	1319	14.8	1202	14.2	1065	13.2
Smoked, amount not stated	363	3.6	260	2.8	310	3.5	257	3.0	15	0.2
Not stated	12	0.1	0	0.0	0	0.0	0	0.0	109	1.3
TOTAL	10225	100.0	9285	100.0	8883	100.0	8442	100.0	8083	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Place of birth

In 2016, the majority of mothers planned to give birth in a hospital labour ward, and 2.5% of mothers planned to give birth in a birth centre (Table 10). Eighty-six per cent of mothers who planned to give birth in a birth centre actually did so. The total number of reported planned homebirths fell from 232 in 2012 to 219 in 2016, and the reported number of planned homebirths that occurred at home fell from 202 in 2012 to 196 in 2016.

TABLE 10: MATERNAL PLACE OF BIRTH, NSW 2012–2016

Place of birth	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	93945	95.7	92012	96.3	92596	96.5	91830	96.7	94025	96.6
Birth centre	2837	2.9	2392	2.5	2202	2.3	2095	2.2	2128	2.2
Planned birth centre- hospital admission	596	0.6	354	0.4	381	0.4	323	0.3	341	0.4
Planned homebirth	202	0.2	217	0.2	228	0.2	187	0.2	196	0.2
Planned homebirth- hospital admission	30	0.0	19	0.0	30	0.0	16	0.0	23	0.0
Born before arrival	519	0.5	543	0.6	488	0.5	538	0.6	542	0.6
Not stated	12	0.0	0	0.0	1	0.0	0	0.0	51	0.1
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hypertension and diabetes

The reported rate of gestational diabetes rose from 7.4% in 2012 to 12.6% in 2016, following widespread implementation of the Australasian Diabetes in Pregnancy Society (ADIPS) Consensus Guidelines during 2016.¹ The rate of diabetes mellitus also increased from 0.7% to 0.9% (Table 11), while the rate of hypertension in pregnancy remained steady at about 5% over the 5-year period.

TABLE 11: MATERNAL HYPERTENSION OR DIABETES, NSW 2012–2016

Condition	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Diabetes mellitus	662	0.7	1170	1.2	1358	1.4	1398	1.5	886	0.9
Gestational diabetes	7292	7.4	6710	7.0	7242	7.5	7918	8.3	12260	12.6
Chronic hypertension	776	0.8	741	0.8	745	0.8	731	0.8	716	0.7
Pre-eclampsia	1675	1.7	1577	1.7	1458	1.5	1463	1.5	1557	1.6
Gestational hypertension	2825	2.9	2766	2.9	2810	2.9	2909	3.1	2860	2.9
TOTAL*	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total refers to number of confinements.

Labour

The rate of spontaneous onset of labour fell from 54.1% in 2012 to 48.5% in 2016 and the rate of induction of labour rose from 27.3% in 2012 to 31.1% in 2016 (Table 12). The most common reported reason for induction of labour in 2016 was prelabour rupture of membranes (16.9%), followed by prolonged pregnancy (41 or more weeks) (15.7%), diabetes (14.0%), hypertensive disease (7.4%), suspected intrauterine growth retardation (5.0%), fetal distress (2.5%) and fetal death (0.8%).

TABLE 12: ONSET AND AUGMENTATION OF LABOUR, NSW 2012–2016

Onset of labour	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	38144	38.9	35970	37.7	35398	36.9	34176	36.0	33947	34.9
Spontaneous augmented with ARM	6389	6.5	5965	6.2	5645	5.9	5533	5.8	5932	6.1
Spontaneous augmented with oxytocics ^{††}	8530	8.7	7888	8.3	7680	8.0	7501	7.9	7311	7.5
No labour	18253	18.6	17818	18.7	18812	19.6	18827	19.8	19710	20.3
Induced - oxytocics/ prostaglandins	9693	9.9	10028	10.5	10343	10.8	9971	10.5	9673	9.9
Induced - ARM only	1729	1.8	1884	2.0	1887	2.0	1869	2.0	3335	3.4
Induced - ARM + oxytocics/ prostaglandins	15220	15.5	15822	16.6	15940	16.6	16719	17.6	16879	17.3
Induced - other [†]	163	0.2	159	0.2	216	0.2	390	0.4	384	0.4
Not stated	20	0.0	3	0.0	5	0.0	3	0.0	135	0.1
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

ARM: artificial rupture of membranes.

May include prostaglandins for 2015 and earlier.

† May include artificial rupture of membranes.

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

Birth

Among NSW mothers, the rate of normal vaginal birth decreased from 57.1% in 2012 to 55.2% in 2016 (Table 13). The caesarean section rate increased from 31.1% to 32.9%, while the rate of instrumental birth (forceps and vacuum extraction) remained steady at about 11.5%.

Operative and instrumental births are more common among privately than publicly insured mothers (Table 14). Among privately insured mothers the rate of normal vaginal birth decreased from 45.3% in 2012 to 44.0% in 2016 and the caesarean section rate increased from 40.7% to 42.1%. Among publicly insured mothers the rate of normal vaginal birth decreased from 63.2% to 61.4% and the caesarean section rate increased from 26.1% to 27.8%.

TABLE 13: TYPE OF BIRTH, NSW 2012–2016

Type of birth	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	55993	57.1	54269	56.8	53988	56.3	53203	56.0	53740	55.2
Forceps	4192	4.3	4349	4.6	4489	4.7	4488	4.7	4536	4.7
Vacuum extraction	6981	7.1	6500	6.8	6160	6.4	6122	6.4	6649	6.8
Vaginal breech	399	0.4	363	0.4	367	0.4	363	0.4	339	0.3
Elective caesarean section	18253	18.6	17818	18.7	18812	19.6	18826	19.8	19692	20.2
Emergency caesarean section*	12305	12.5	12236	12.8	12103	12.6	11984	12.6	12321	12.7
Not stated	18	0.0	2	0.0	7	0.0	3	0.0	29	0.0
TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

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

TABLE 14: MATERNAL HEALTH INSURANCE BY TYPE OF BIRTH, NSW 2012–2016#

Insurance status-type of birth		Year									
		2012		2013		2014		2015		2016	
		No.	%	No.	%	No.	%	No.	%	No.	%
PUBLIC	Normal vaginal	40351	63.2	39160	62.8	38761	62.4	37823	62.1	38112	61.4
	Forceps	2725	4.3	2814	4.5	2827	4.5	2863	4.7	2951	4.8
	Vacuum extraction	3770	5.9	3529	5.7	3354	5.4	3192	5.2	3446	5.6
	Vaginal breech	311	0.5	277	0.4	252	0.4	275	0.5	261	0.4
	Elective caesarean section	9128	14.3	8877	14.2	9303	15.0	9267	15.2	9487	15.3
	Emergency caesarean section*	7506	11.8	7697	12.3	7653	12.3	7464	12.3	7800	12.6
	Not stated	7	0.0	0	0.0	3	0.0	3	0.0	23	0.0
	TOTAL	63798	100.0	62354	100.0	62153	100.0	60887	100.0	62080	100.0
PRIVATE	Normal vaginal	15391	45.3	14756	45.2	14849	44.7	14960	44.7	15301	44.0
	Forceps	1456	4.3	1515	4.6	1651	5.0	1609	4.8	1571	4.5
	Vacuum extraction	3193	9.4	2934	9.0	2781	8.4	2883	8.6	3173	9.1
	Vaginal breech	83	0.2	84	0.3	112	0.3	87	0.3	74	0.2
	Elective caesarean section	9088	26.8	8877	27.2	9449	28.4	9474	28.3	10147	29.2
	Emergency caesarean section*	4744	14.0	4456	13.7	4370	13.2	4434	13.3	4476	12.9
	Not stated	9	0.0	2	0.0	4	0.0	0	0.0	5	0.0
	TOTAL	33964	100.0	32624	100.0	33216	100.0	33447	100.0	34747	100.0
TOTAL†	Normal vaginal	55993	57.1	54269	56.8	53988	56.3	53203	56.0	53740	55.2
	Forceps	4192	4.3	4349	4.6	4489	4.7	4488	4.7	4536	4.7
	Vacuum extraction	6981	7.1	6500	6.8	6160	6.4	6122	6.4	6649	6.8
	Vaginal breech	399	0.4	363	0.4	367	0.4	363	0.4	339	0.3
	Elective caesarean section	18253	18.6	17818	18.7	18812	19.6	18826	19.8	19692	20.2
	Emergency caesarean section*	12305	12.5	12236	12.8	12103	12.6	11984	12.6	12321	12.7
	Not stated	18	0.0	2	0.0	7	0.0	3	0.0	29	0.0
	TOTAL	98141	100.0	95537	100.0	95926	100.0	94989	100.0	97306	100.0

Source: Maternal and Child Health Register. Centre for Epidemiology and Evidence, NSW Ministry of Health.

Figures for 2012-15 differ to those reported previously as the linkage has been updated.

* Emergency caesarean section includes cases where caesarean section was reported but type of onset of labour was not reported.

† Total includes mothers where type of health insurance was not stated.

Baby sex

There was no significant change in the pattern of baby sex since 2012, with slightly more male babies born than females in each year. In 2016, 50,742 (51.4%) babies were male, 47,964 (48.6%) were female, and 10 were of indeterminate sex. This compares with babies born in 2012, when 51,527 (51.8%) babies were male, 47,958 (48.2%) were female, and 9 were of indeterminate sex.

Gestational age

In 2016, 7.3% of babies were born prematurely (less than 37 weeks gestation), a slight decrease from 7.6% in 2012 (Table 15). Over the 5 year period, around 92% of babies were born at term (37-41 weeks gestation). The percentage of post-term babies (42-plus weeks gestation) was 0.6% in 2012 and 1.1% in 2016.

TABLE 15: GESTATIONAL AGE, NSW 2012–2016

Gestational age (weeks)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
< 28	686	0.7	690	0.7	659	0.7	733	0.8	696	0.7
28-31	679	0.7	659	0.7	696	0.7	690	0.7	619	0.6
32-36	6184	6.2	6059	6.2	6140	6.3	6200	6.4	5865	5.9
37-41	91388	91.8	89086	91.9	89435	91.9	88397	91.7	90270	91.4
42 +	569	0.6	466	0.5	391	0.4	367	0.4	1065	1.1
Not stated	4	0.0	11	0.0	4	0.0	4	0.0	212	0.2
TOTAL	99510	100.0	96971	100.0	97325	100.0	96391	100.0	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Birth weight

Since 2012, the pattern of birth weight has remained stable, with the rate of low birth weight (less than 2,500 grams) ranging from 6.1% to 6.6% (Table 16). The rate of low birth weight was 6.5% in 2016.

TABLE 16: BIRTH WEIGHT, NSW 2012–2016

Birth weight (grams)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 500	252	0.3	232	0.2	225	0.2	283	0.3	326	0.3
500-999	428	0.4	413	0.4	433	0.4	411	0.4	411	0.4
1000-1499	521	0.5	524	0.5	552	0.6	545	0.6	534	0.5
1500-1999	1166	1.2	1129	1.2	1096	1.1	1193	1.2	1191	1.2
2000-2499	3714	3.7	3856	4.0	3839	3.9	3918	4.1	3931	4.0
2500-2999	15356	15.4	15089	15.6	15598	16.0	15931	16.5	16272	16.5
3000-3499	36647	36.8	36118	37.2	36528	37.5	36122	37.5	37290	37.8
3500-3999	30171	30.3	29191	30.1	28986	29.8	28315	29.4	29171	29.5
4000-4499	9571	9.6	8860	9.1	8606	8.8	8330	8.6	8348	8.5
4500+	1618	1.6	1460	1.5	1393	1.4	1276	1.3	1182	1.2
Not stated	66	0.1	99	0.1	69	0.1	67	0.1	71	0.1
TOTAL	99510	100.0	96971	100.0	97325	100.0	96391	100.0	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Apgar score

In 2016, 2.3% of babies were born with an Apgar score of less than 7 at 5 minutes and 1.1% were born with an Apgar score of less than 5 (Table 17). These rates are similar to those of previous years.

TABLE 17: APGAR SCORE AT 5 MINUTES, NSW 2012–2016*

Apgar score	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0-4	1052	1.1	1053	1.1	1050	1.1	1025	1.1	1047	1.1
5-6	1145	1.2	1184	1.2	1206	1.2	1200	1.2	1209	1.2
7+	97081	97.6	94673	97.6	94861	97.5	93864	97.4	95844	97.1
Not stated	232	0.2	61	0.1	208	0.2	302	0.3	627	0.6
TOTAL	99510	100.0	96971	100.0	97325	100.0	96391	100.0	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Includes stillbirths and live births.

Hepatitis B

The percentage of babies given a hepatitis B vaccination at birth has decreased slightly from 94.0% in 2012 to 93.7% in 2016 (Table 18).

TABLE 18: HEPATITIS B DOSE GIVEN TO LIVEBORN BABIES, NSW 2012–2016

Hepatitis B dose given	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
No	5882	5.9	5441	5.6	5207	5.4	5366	5.6	4956	5.0
Yes	92957	94.0	90921	94.3	91538	94.6	90378	94.4	92013	93.7
Not stated	36	0.0	26	0.0	31	0.0	14	0.0	1215	1.2
TOTAL	98875	100.0	96388	100.0	96776	100.0	95758	100.0	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Infant feeding

The percentage of babies fully breastfed at the time of discharge from hospital decreased from 82.1% to 74.9% between 2012 and 2016. The percentage of babies that received any breastfeeding rose from 6.8% in 2012 to 13.4% in 2016. In the same 5-year period, the percentage of babies receiving infant formula only fell from 10.3% to 8.5% (Table 19).

TABLE 19: LIVE BIRTHS BY TYPE OF INFANT FEEDING, NSW 2012–2016

Infant feeding	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Full breastfeeding	81154	82.1	76912	79.8	76018	78.6	75562	78.9	73524	74.9
Any breastfeeding	6709	6.8	8457	8.8	10132	10.5	10047	10.5	13177	13.4
Infant formula only	10163	10.3	9935	10.3	9577	9.9	9270	9.7	8305	8.5
Not stated	849	0.9	1084	1.1	1049	1.1	879	0.9	3178	3.2
TOTAL	98875	100.0	96388	100.0	96776	100.0	95758	100.0	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Perinatal outcome

Across the period 2012–2016 the perinatal mortality rate decreased from 8.2 to 7.5 per 1,000 births (Table 20). In 2016, 73.0% of all reported perinatal deaths were stillbirths and 27.0% were neonatal deaths.

In 2016, of the 744 perinatal deaths in NSW, 684 (92.0%) were reported among planned hospital births, 29 (3.9%) among planned birth centre births and 14 deaths were among babies born before arrival at hospital (1.9%). There were no perinatal deaths reported among planned or actual homebirths.

TABLE 20: PERINATAL OUTCOMES, NSW 2012–2016[#]

Year	Liveborn surviving		Stillborn		Neonatal death		Death–age not stated		Not stated		Total births		Perinatal death rate/1,000 births [†]
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
2012	98657	99.1	600	0.6	212	0.2	6	0.0	35	0.0	99510	100.0	8.2
2013	96174	99.2	562	0.6	212	0.2	2	0.0	21	0.0	96971	100.0	8.0
2014	96553	99.2	534	0.5	221	0.2	2	0.0	15	0.0	97325	100.0	7.8
2015	95571	99.1	602	0.6	186	0.2	1	0.0	31	0.0	96391	100.0	8.2
2016	97983	99.2	543	0.6	201	0.2	0	0.0	0	0.0	98727	100.0	7.5

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

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

[†] The perinatal death rate excludes deaths where the age at death was not stated.

Maternal deaths

In the period 1990–2015, 234 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. Of these, 69 (29.5%) died of incidental causes not related to the pregnancy or its management, 101 (43.2%) deaths were found to be directly due to pregnancy or its management, and 60 (25.6%) were found to result from pre-existing disease or disease which developed during pregnancy (not due to direct obstetric causes), but which may have been aggravated by the physiologic effects of pregnancy (Table 21). Table 22 shows maternal deaths by cause in NSW for 2015.

TABLE 21: MATERNAL DEATHS BY YEAR, NSW 1990–2015*

Year	Classification									
	Direct		Indirect		Total Direct & Indirect		Incidental		TOTAL	
	No.	Ratio/100,000	No.	Ratio/100,000	No.	Ratio/100,000	No.	Ratio/100,000	No.	Ratio/100,000
1990	4	4.6	6	6.9	10	11.6	2	2.3	12	13.9
1991	4	4.7	1	1.2	5	5.8	1	1.2	6	7.0
1992	5	5.7	1	1.1	6	6.8	5	5.7	11	12.5
1993	6	6.9	1	1.2	7	8.1	6	6.9	13	15.0
1994	8	9.2	1	1.2	9	10.4	3	3.5	12	13.8
1995	7	8.1	2	2.3	9	10.4	6	7.0	15	17.4
1996	6	7.0	1	1.2	7	8.2	5	5.9	12	14.1
1997	7	8.1	2	2.3	9	10.5	5	5.8	14	16.1
1998	4	4.7	4	4.7	8	9.4	3	3.5	11	12.9
1999†	4	4.7	1	1.2	5	5.8	6	7.0	12	14.0
2000	4	4.7	5	5.9	9	10.7	1	1.2	10	11.9
2001	4	4.7	4	4.7	8	9.5	1	1.2	9	10.7
2002	2	2.4	2	2.4	4	4.7	1	1.2	5	5.9
2003	1	1.2	3	3.5	4	4.7	3	3.5	7	8.2
2004†	2	2.3	2	2.3	4	4.7	2	2.3	7	8.2
2005	4	4.5	4	4.5	8	9.0	2	2.2	11	12.3
2006	4	4.4	3	3.3	7	7.7	3	3.3	10	11.0
2007	1	1.1	0	0.0	1	1.1	0	0.0	1	1.1
2008	0	0.0	4	4.2	4	4.2	1	1.1	5	5.3
2009	5	5.3	2	2.1	7	7.4	3	3.2	10	10.5
2010	4	4.2	2	2.1	6	6.3	2	2.1	8	8.4
2011	3	3.1	5	5.2	8	8.3	2	2.1	10	10.4
2012	3	3.1	2	2.0	5	5.1	2	2.0	7	7.1
2013	2	2.1	1	1.0	3	3.1	2	2.1	5	5.2
2014	4	4.2	1	1.0	5	5.2	2	2.1	7	7.3
2015†	3	3.2	0	0.0	3	3.2	0	0.0	4	4.2

Source: NSW Maternal and Perinatal Mortality Review Committee.

Includes all deaths of women who were pregnant at the time of death, or who died within 42 days of childbirth. Direct deaths include those resulting from obstetric complications of the pregnant state, including its management. Indirect deaths include those resulting from pre-existing disease or disease which developed during pregnancy and was not due to direct obstetric causes but which may have been aggravated by the physiological effects of pregnancy. Incidental deaths are those where the pregnancy is unlikely to have contributed significantly to the death.²

† Totals for the year include one death that was unable to be classified.

TABLE 22: MATERNAL DEATHS BY CAUSE, NSW 2015*

Classification	Cause	No.
Direct	E. Coli septicemia	1
Direct	Ruptured ectopic pregnancy	1
Direct	Pulmonary embolism	1
TOTAL†		4

Source: NSW Maternal and Perinatal Mortality Review Committee.

Includes all deaths of women who were pregnant at the time of death, or who died within 42 days of childbirth. Direct deaths include those resulting from obstetric complications of the pregnant state, including its management. Indirect deaths include those resulting from pre-existing disease or disease which developed during pregnancy and was not due to direct obstetric causes but which may have been aggravated by the physiological effects of pregnancy. Incidental deaths are those where the pregnancy is unlikely to have contributed significantly to the death.²

† Total includes one death that was unable to be classified.

References

1. Australasian Diabetes in Pregnancy Society. *ADIPS Consensus Guidelines for the Testing and Diagnosis of Gestational Diabetes Mellitus in Australia 2014*. Available at www.adips.org. Accessed 12 January 2018.
2. Humphrey MD, Bonello MR, Chugtai A, Macalodow A, Harris K & Chambers GM. *Maternal deaths in Australia 2008–2012*. Maternal deaths series no. 5 Cat. No. PER 70. Canberra: AIHW, 2015.

5. LOCAL HEALTH DISTRICTS

Information on the health of Aboriginal and Torres Strait Islander mothers is shown in Chapter 8.

Confinements

The largest numbers of mothers who gave birth in 2016 were resident in the Western Sydney Local Health District ($n = 14,667$, 15.1%), followed by the South Western Sydney Local Health District ($n = 13,750$, 14.1%) and the South Eastern Sydney Local Health District ($n = 11,318$, 11.6%) (Table 23).

Maternal age

In 2016, the proportion of women giving birth at less than 20 years of age varied from 0.1% in the Northern Sydney Local Health District to 5.2% in the Mid North Coast Local Health District, while the proportion of mothers giving birth at 35 years of age or more ranged from 8.5% in the Far West Local Health District to 38.2% in the Northern Sydney Local Health District (Table 23).

TABLE 23: MATERNAL AGE BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	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.	%				
Sydney	44	0.5	475	5.7	1727	20.7	3379	40.5	2118	25.4	542	6.5	56	0.7	4	0.0	8345	100.0
South Western Sydney	297	2.2	1921	14.0	4180	30.4	4630	33.7	2196	16.0	482	3.5	39	0.3	5	0.0	13750	100.0
South Eastern Sydney	54	0.5	520	4.6	2279	20.1	4750	42.0	2954	26.1	709	6.3	50	0.4	2	0.0	11318	100.0
Illawarra Shoalhaven	142	3.1	580	12.8	1361	30.0	1541	34.0	736	16.2	165	3.6	8	0.2	1	0.0	4534	100.0
Western Sydney	219	1.5	1529	10.4	4267	29.1	5649	38.5	2509	17.1	452	3.1	35	0.2	7	0.0	14667	100.0
Nepean Blue Mountains	142	2.8	742	14.7	1643	32.6	1639	32.5	699	13.9	166	3.3	10	0.2	1	0.0	5042	100.0
Northern Sydney	15	0.1	252	2.3	1777	16.4	4630	42.9	3289	30.4	779	7.2	62	0.6	0	0.0	10804	100.0
Central Coast	108	2.8	553	14.5	1123	29.4	1221	32.0	625	16.4	153	4.0	19	0.5	14	0.4	3816	100.0
Hunter New England	462	4.3	1832	17.1	3205	30.0	3359	31.4	1517	14.2	292	2.7	23	0.2	0	0.0	10690	100.0
Northern NSW	97	4.2	407	17.5	683	29.4	670	28.8	392	16.8	73	3.1	5	0.2	0	0.0	2327	100.0
Mid North Coast	99	5.2	364	19.2	541	28.5	564	29.7	262	13.8	64	3.4	6	0.3	0	0.0	1900	100.0
Southern NSW	62	4.5	234	17.1	436	31.8	429	31.3	172	12.5	36	2.6	3	0.2	0	0.0	1372	100.0
Murrumbidgee	112	4.7	439	18.5	733	30.9	739	31.2	280	11.8	65	2.7	2	0.1	0	0.0	2370	100.0
Western NSW	192	5.1	792	21.2	1178	31.5	1050	28.1	438	11.7	85	2.3	5	0.1	0	0.0	3740	100.0
Far West	12	5.1	58	24.8	87	37.2	57	24.4	16	6.8	4	1.7	0	0.0	0	0.0	234	100.0
Other-not stated	57	2.4	309	12.9	706	29.5	819	34.2	424	17.7	75	3.1	4	0.2	3	0.1	2397	100.0
TOTAL	2114	2.2	11007	11.3	25926	26.6	35126	36.1	18627	19.1	4142	4.3	327	0.3	37	0.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

Maternal country of birth

Sixty-eight per cent of women who gave birth in NSW in 2016 were born in English speaking countries, 20.8% were born in Asian countries, and 5.1% were born in the Middle East or Africa (Table 24). The highest proportions of mothers born in non-English speaking countries were resident in the Western Sydney, Sydney and South Western Sydney Local Health Districts.

TABLE 24: MATERNAL COUNTRY OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Country of birth group																					
	English speaking		Central & South America		Melanesia, Micronesia & Polynesia		Southern Europe		Western & Northern Europe		Eastern Europe, Russia, Central Asian & Baltic States		Middle East & Africa		South East Asia		North East Asia		Southern Asia		TOTAL†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	4466	53.5	111	1.3	93	1.1	123	1.5	107	1.3	129	1.5	465	5.6	714	8.6	1167	14.0	952	11.4	8345	100.0
South Western Sydney	7953	57.8	148	1.1	407	3.0	243	1.8	50	0.4	103	0.7	1949	14.2	1576	11.5	434	3.2	864	6.3	13750	100.0
South Eastern Sydney	7099	62.7	244	2.2	67	0.6	198	1.7	249	2.2	257	2.3	361	3.2	784	6.9	1196	10.6	699	6.2	11318	100.0
Illawarra Shoalhaven	3975	87.7	24	0.5	13	0.3	43	0.9	25	0.6	17	0.4	123	2.7	109	2.4	95	2.1	79	1.7	4534	100.0
Western Sydney	6512	44.4	85	0.6	347	2.4	94	0.6	60	0.4	388	2.6	1294	8.8	929	6.3	1699	11.6	3214	21.9	14667	100.0
Nepean Blue Mountains	4302	85.3	19	0.4	51	1.0	17	0.3	22	0.4	39	0.8	127	2.5	148	2.9	74	1.5	213	4.2	5042	100.0
Northern Sydney	6384	59.1	262	2.4	40	0.4	144	1.3	215	2.0	218	2.0	305	2.8	605	5.6	1835	17.0	686	6.3	10804	100.0
Central Coast	3452	90.5	18	0.5	12	0.3	7	0.2	29	0.8	24	0.6	27	0.7	77	2.0	76	2.0	69	1.8	3816	100.0
Hunter New England	9913	92.7	32	0.3	30	0.3	25	0.2	55	0.5	46	0.4	115	1.1	162	1.5	100	0.9	189	1.8	10690	100.0
Northern NSW	2100	90.2	18	0.8	2	0.1	9	0.4	34	1.5	12	0.5	12	0.5	50	2.1	24	1.0	30	1.3	2327	100.0
Mid North Coast	1705	89.7	3	0.2	3	0.2	4	0.2	10	0.5	8	0.4	26	1.4	43	2.3	21	1.1	55	2.9	1900	100.0
Southern NSW	1252	91.3	2	0.1	3	0.2	13	0.9	2	0.1	3	0.2	14	1.0	32	2.3	10	0.7	37	2.7	1372	100.0
Murrumbidgee	2123	89.6	0	0.0	28	1.2	2	0.1	7	0.3	6	0.3	31	1.3	42	1.8	20	0.8	107	4.5	2370	100.0
Western NSW	3482	93.1	3	0.1	7	0.2	8	0.2	13	0.3	9	0.2	20	0.5	53	1.4	25	0.7	110	2.9	3740	100.0
Far West	222	94.9	0	0.0	1	0.4	0	0.0	0	0.0	0	0.0	1	0.4	5	2.1	0	0.0	3	1.3	234	100.0
Other-not stated	1338	55.8	33	1.4	42	1.8	25	1.0	18	0.8	33	1.4	78	3.3	189	7.9	331	13.8	260	10.8	2397	100.0
TOTAL	66278	68.1	1002	1.0	1146	1.2	955	1.0	896	0.9	1292	1.3	4948	5.1	5518	5.7	7107	7.3	7567	7.8	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

† Includes 597 mothers in NSW for whom country of birth was not stated. Maternal countries of birth and birth groups are shown in Appendix 3.

Aboriginal and Torres Strait Islander mothers

In 2016, 4.2% of mothers were reported to be Aboriginal or Torres Strait Islander (Table 25). The reported proportion of Aboriginal or Torres Strait Islander mothers varied from 0.4% in the Northern Sydney Local Health District to 17.9% in the Far West Local Health District.

TABLE 25: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Aboriginal or Torres Strait Islander		Non-Aboriginal or Torres Strait Islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	86	1.0	8234	98.7	25	0.3	8345	100.0
South Western Sydney	318	2.3	13411	97.5	21	0.2	13750	100.0
South Eastern Sydney	112	1.0	11186	98.8	20	0.2	11318	100.0
Illawarra Shoalhaven	241	5.3	4290	94.6	3	0.1	4534	100.0
Western Sydney	258	1.8	14347	97.8	62	0.4	14667	100.0
Nepean Blue Mountains	232	4.6	4805	95.3	5	0.1	5042	100.0
Northern Sydney	40	0.4	10497	97.2	267	2.5	10804	100.0
Central Coast	226	5.9	3576	93.7	14	0.4	3816	100.0
Hunter New England	1052	9.8	9599	89.8	39	0.4	10690	100.0
Northern NSW	225	9.7	2092	89.9	10	0.4	2327	100.0
Mid North Coast	234	12.3	1661	87.4	5	0.3	1900	100.0
Southern NSW	96	7.0	1269	92.5	7	0.5	1372	100.0
Murrumbidgee	215	9.1	2141	90.3	14	0.6	2370	100.0
Western NSW	630	16.8	3106	83.0	4	0.1	3740	100.0
Far West	42	17.9	192	82.1	0	0.0	234	100.0
Other-not stated	111	4.6	2217	92.5	69	2.9	2397	100.0
TOTAL	4118	4.2	92623	95.2	565	0.6	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Duration of pregnancy at first antenatal visit

In 2016, 88.8% of mothers commenced antenatal care prior to 20 weeks gestation and 67.8% commenced antenatal care prior to 14 weeks gestation. The percentage of mothers commencing antenatal care prior to 20 weeks gestation varied from 72.7% in the Southern NSW Local Health District to 95.7% in the Sydney Local Health District (Table 26).

TABLE 26: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Duration of pregnancy at first antenatal visit (weeks)									
	0–13		14–19		20+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	6932	83.1	1050	12.6	336	4.0	27	0.3	8345	100.0
South Western Sydney	9595	69.8	2377	17.3	1450	10.5	328	2.4	13750	100.0
South Eastern Sydney	7421	65.6	3032	26.8	835	7.4	30	0.3	11318	100.0
Illawarra Shoalhaven	2069	45.6	1461	32.2	982	21.7	22	0.5	4534	100.0
Western Sydney	8153	55.6	4116	28.1	2291	15.6	107	0.7	14667	100.0
Nepean Blue Mountains	2948	58.5	1486	29.5	568	11.3	40	0.8	5042	100.0
Northern Sydney	7228	66.9	2917	27.0	628	5.8	31	0.3	10804	100.0
Central Coast	2267	59.4	987	25.9	552	14.5	10	0.3	3816	100.0
Hunter New England	9278	86.8	772	7.2	530	5.0	110	1.0	10690	100.0
Northern NSW	1895	81.4	246	10.6	153	6.6	33	1.4	2327	100.0
Mid North Coast	1533	80.7	153	8.1	195	10.3	19	1.0	1900	100.0
Southern NSW	605	44.1	393	28.6	363	26.5	11	0.8	1372	100.0
Murrumbidgee	1515	63.9	456	19.2	390	16.5	9	0.4	2370	100.0
Western NSW	2688	71.9	599	16.0	405	10.8	48	1.3	3740	100.0
Far West	113	48.3	97	41.5	19	8.1	5	2.1	234	100.0
Other-not stated	1748	72.9	262	10.9	336	14.0	51	2.1	2397	100.0
TOTAL	65988	67.8	20404	21.0	10033	10.3	881	0.9	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Smoking in pregnancy

In 2016, 6.0% of mothers reported smoking in the second half of pregnancy (Table 27). The lowest rate was reported among mothers resident in the Northern Sydney Local Health District (0.5%) and the highest rate was reported among residents of the Far West Local Health District (26.5%).

TABLE 27: CIGARETTES SMOKED IN THE SECOND HALF OF PREGNANCY BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Cigarettes smoked in the second half of pregnancy										TOTAL	
	None		1–10 per day		> 10 per day		Smoked, amount not stated		Not stated			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	8055	96.5	112	1.3	24	0.3	0	0.0	154	1.8	8345	100.0
South Western Sydney	12436	90.4	625	4.5	132	1.0	1	0.0	556	4.0	13750	100.0
South Eastern Sydney	10994	97.1	134	1.2	25	0.2	1	0.0	164	1.4	11318	100.0
Illawarra Shoalhaven	4154	91.6	303	6.7	52	1.1	9	0.2	16	0.4	4534	100.0
Western Sydney	13996	95.4	498	3.4	105	0.7	1	0.0	67	0.5	14667	100.0
Nepean Blue Mountains	4656	92.3	293	5.8	71	1.4	0	0.0	22	0.4	5042	100.0
Northern Sydney	10711	99.1	45	0.4	5	0.0	2	0.0	41	0.4	10804	100.0
Central Coast	3410	89.4	264	6.9	70	1.8	0	0.0	72	1.9	3816	100.0
Hunter New England	9322	87.2	1031	9.6	258	2.4	0	0.0	79	0.7	10690	100.0
Northern NSW	2066	88.8	209	9.0	29	1.2	0	0.0	23	1.0	2327	100.0
Mid North Coast	1637	86.2	195	10.3	47	2.5	0	0.0	21	1.1	1900	100.0
Southern NSW	1173	85.5	152	11.1	32	2.3	0	0.0	15	1.1	1372	100.0
Murrumbidgee	2064	87.1	238	10.0	56	2.4	1	0.0	11	0.5	2370	100.0
Western NSW	3128	83.6	448	12.0	115	3.1	0	0.0	49	1.3	3740	100.0
Far West	168	71.8	49	20.9	13	5.6	0	0.0	4	1.7	234	100.0
Other-not stated	2186	91.2	142	5.9	31	1.3	0	0.0	38	1.6	2397	100.0
TOTAL	90156	92.7	4738	4.9	1065	1.1	15	0.0	1332	1.4	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Place of birth

Ninety-seven per cent of mothers chose to give birth in a hospital birthing suite in 2016, compared to 2.5% who planned a birth centre birth and 0.2% who planned a home birth (Table 28). Planned birth centre births were most commonly reported in the Hunter New England Local Health District.

TABLE 28: PLACE OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Place of birth										TOTAL†			
	Hospital		Birth centre		Planned birth centre–hospital admission		Planned homebirth		Planned homebirth–hospital admission				Born before arrival	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	7980	95.6	299	3.6	13	0.2	4	0.0	1	0.0	37	0.4	8345	100.0
South Western Sydney	13597	98.9	23	0.2	12	0.1	7	0.1	2	0.0	80	0.6	13750	100.0
South Eastern Sydney	10778	95.2	369	3.3	119	1.1	6	0.1	1	0.0	42	0.4	11318	100.0
Illawarra Shoalhaven	4465	98.5	19	0.4	6	0.1	17	0.4	3	0.1	24	0.5	4534	100.0
Western Sydney	14334	97.7	226	1.5	8	0.1	8	0.1	0	0.0	90	0.6	14667	100.0
Nepean Blue Mountains	4952	98.2	53	1.1	4	0.1	5	0.1	0	0.0	28	0.6	5042	100.0
Northern Sydney	10610	98.2	123	1.1	18	0.2	12	0.1	3	0.0	38	0.4	10804	100.0
Central Coast	3693	96.8	87	2.3	6	0.2	4	0.1	0	0.0	25	0.7	3816	100.0
Hunter New England	9817	91.8	639	6.0	75	0.7	70	0.7	7	0.1	82	0.8	10690	100.0
Northern NSW	2119	91.1	156	6.7	2	0.1	29	1.2	3	0.1	18	0.8	2327	100.0
Mid North Coast	1868	98.3	17	0.9	4	0.2	0	0.0	0	0.0	11	0.6	1900	100.0
Southern NSW	1343	97.9	8	0.6	4	0.3	1	0.1	0	0.0	16	1.2	1372	100.0
Murrumbidgee	2330	98.3	15	0.6	12	0.5	1	0.0	1	0.0	10	0.4	2370	100.0
Western NSW	3691	98.7	24	0.6	4	0.1	0	0.0	0	0.0	20	0.5	3740	100.0
Far West	229	97.9	1	0.4	0	0.0	1	0.4	0	0.0	2	0.9	234	100.0
Other-not stated	2219	92.6	69	2.9	54	2.3	31	1.3	2	0.1	19	0.8	2397	100.0
TOTAL	94025	96.6	2128	2.2	341	0.4	196	0.2	23	0.0	542	0.6	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

† Includes 51 mothers in NSW for whom place of birth was not stated.

Labour

In 2016, the onset of labour was spontaneous in 48.5% of confinements (Table 29). Labour was induced in 31.1% of confinements and no labour (elective caesarean section) was reported in 20.3%. The rate of spontaneous onset of labour was highest among residents of the Southern NSW Local Health District (60.1%). The highest rate of induction of labour was among residents of the Nepean Blue Mountains Local Health District (35.6%).

TABLE 29: ONSET AND AUGMENTATION OF LABOUR BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Onset of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics [†]		No labour		Induced-oxytocics/prostaglandins		Induced-ARM only		Induced-ARM + oxytocics/prostaglandins		Induced-other [‡]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	2504	30.0	541	6.5	867	10.4	1897	22.7	1074	12.9	392	4.7	1025	12.3	37	0.4	8	0.1	8345	100.0
South Western Sydney	4958	36.1	1151	8.4	1124	8.2	2553	18.6	1755	12.8	705	5.1	1420	10.3	61	0.4	23	0.2	13750	100.0
South Eastern Sydney	3676	32.5	696	6.1	970	8.6	2495	22.0	1149	10.2	402	3.6	1872	16.5	42	0.4	16	0.1	11318	100.0
Illawarra Shoalhaven	1548	34.1	237	5.2	309	6.8	899	19.8	414	9.1	88	1.9	1030	22.7	8	0.2	1	0.0	4534	100.0
Western Sydney	5120	34.9	994	6.8	1053	7.2	2839	19.4	1274	8.7	262	1.8	3048	20.8	56	0.4	21	0.1	14667	100.0
Nepean Blue Mountains	1604	31.8	293	5.8	192	3.8	1143	22.7	414	8.2	156	3.1	1197	23.7	29	0.6	14	0.3	5042	100.0
Northern Sydney	3532	32.7	566	5.2	1035	9.6	2604	24.1	950	8.8	244	2.3	1842	17.0	29	0.3	2	0.0	10804	100.0
Central Coast	1380	36.2	188	4.9	329	8.6	714	18.7	375	9.8	67	1.8	754	19.8	8	0.2	1	0.0	3816	100.0
Hunter New England	3844	36.0	538	5.0	499	4.7	1983	18.6	976	9.1	610	5.7	2110	19.7	96	0.9	34	0.3	10690	100.0
Northern NSW	1092	46.9	130	5.6	163	7.0	286	12.3	168	7.2	66	2.8	420	18.0	2	0.1	0	0.0	2327	100.0
Mid North Coast	757	39.8	81	4.3	103	5.4	389	20.5	173	9.1	40	2.1	352	18.5	0	0.0	5	0.3	1900	100.0
Southern NSW	665	48.5	62	4.5	98	7.1	204	14.9	108	7.9	51	3.7	179	13.0	4	0.3	1	0.1	1372	100.0
Murrumbidgee	911	38.4	102	4.3	131	5.5	534	22.5	243	10.3	80	3.4	365	15.4	4	0.2	0	0.0	2370	100.0
Western NSW	1398	37.4	187	5.0	197	5.3	699	18.7	328	8.8	106	2.8	815	21.8	4	0.1	6	0.2	3740	100.0
Far West	89	38.0	20	8.5	12	5.1	38	16.2	19	8.1	12	5.1	43	18.4	0	0.0	1	0.4	234	100.0
Other-not stated	869	36.3	146	6.1	229	9.6	433	18.1	253	10.6	54	2.3	407	17.0	4	0.2	2	0.1	2397	100.0
TOTAL	33947	34.9	5932	6.1	7311	7.5	19710	20.3	9673	9.9	3335	3.4	16879	17.3	384	0.4	135	0.1	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

ARM: artificial rupture of membranes.

† May include artificial rupture of membranes.

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

Birth type

Fifty-five per cent of births were normal vaginal births in 2016, 11.5% were instrumental and 32.9% were by caesarean section (Table 30). The highest rate of normal vaginal birth was 66.5% among residents of the Northern NSW Local Health District, while the highest rate of instrumental birth was 15.7% among residents of the South Eastern Sydney Local Health District. The caesarean section rate varied from 23.5% among mothers resident in the Northern NSW Local Health District to 37.9% in the Nepean Blue Mountains Local Health District.

TABLE 30: TYPE OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Type of birth															
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section [†]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	4128	49.5	504	6.0	697	8.4	17	0.2	1894	22.7	1102	13.2	3	0.0	8345	100.0
South Western Sydney	8419	61.2	408	3.0	897	6.5	43	0.3	2547	18.5	1422	10.3	14	0.1	13750	100.0
South Eastern Sydney	5505	48.6	755	6.7	1026	9.1	38	0.3	2495	22.0	1498	13.2	1	0.0	11318	100.0
Illawarra Shoalhaven	2496	55.1	187	4.1	340	7.5	10	0.2	899	19.8	602	13.3	0	0.0	4534	100.0
Western Sydney	8303	56.6	730	5.0	788	5.4	89	0.6	2834	19.3	1918	13.1	5	0.0	14667	100.0
Nepean Blue Mountains	2638	52.3	116	2.3	359	7.1	18	0.4	1142	22.6	768	15.2	1	0.0	5042	100.0
Northern Sydney	5242	48.5	732	6.8	726	6.7	32	0.3	2604	24.1	1468	13.6	0	0.0	10804	100.0
Central Coast	2111	55.3	231	6.1	239	6.3	14	0.4	714	18.7	507	13.3	0	0.0	3816	100.0
Hunter New England	6259	58.6	402	3.8	691	6.5	35	0.3	1981	18.5	1320	12.3	2	0.0	10690	100.0
Northern NSW	1547	66.5	95	4.1	134	5.8	5	0.2	286	12.3	260	11.2	0	0.0	2327	100.0
Mid North Coast	1128	59.4	55	2.9	90	4.7	4	0.2	388	20.4	234	12.3	1	0.1	1900	100.0
Southern NSW	866	63.1	48	3.5	91	6.6	3	0.2	204	14.9	160	11.7	0	0.0	1372	100.0
Murrumbidgee	1315	55.5	40	1.7	168	7.1	5	0.2	534	22.5	308	13.0	0	0.0	2370	100.0
Western NSW	2254	60.3	111	3.0	225	6.0	15	0.4	699	18.7	436	11.7	0	0.0	3740	100.0
Far West	155	66.2	6	2.6	5	2.1	0	0.0	38	16.2	29	12.4	1	0.4	234	100.0
Other-not stated	1374	57.3	116	4.8	173	7.2	11	0.5	433	18.1	289	12.1	1	0.0	2397	100.0
TOTAL	53740	55.2	4536	4.7	6649	6.8	339	0.3	19692	20.2	12321	12.7	29	0.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

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

Birth weight

In 2016, 6.5% of babies were low birth weight (less than 2,500 grams). These comprised 0.7% of babies with a birth weight less than 1,000 grams, 0.5% in the 1,000 to 1,499 gram range and 5.2% in the 1,500 to 2,499 gram range (Table 31). Rates of low birth weight ranged from 3.0% in the Southern NSW Local Health District to 7.5% in the Western NSW Local Health District.

TABLE 31: BIRTH WEIGHT BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Birth weight (grams)																							
	Less than 500		500–999		1,000–1,499		1,500–1,999		2,000–2,499		2,500–2,999		3,000–3,499		3,500–3,999		4,000–4,499		4,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	30	0.4	30	0.4	50	0.6	106	1.3	347	4.1	1574	18.6	3420	40.4	2294	27.1	548	6.5	65	0.8	4	0.0	8468	100.0
South Western Sydney	51	0.4	68	0.5	83	0.6	164	1.2	582	4.2	2404	17.2	5214	37.3	4106	29.4	1115	8.0	158	1.1	20	0.1	13965	100.0
South Eastern Sydney	33	0.3	40	0.3	47	0.4	129	1.1	456	4.0	1942	16.9	4634	40.3	3273	28.5	824	7.2	108	0.9	7	0.1	11493	100.0
Illawarra Shoalhaven	5	0.1	14	0.3	20	0.4	84	1.8	173	3.8	734	15.9	1638	35.6	1487	32.3	393	8.5	54	1.2	1	0.0	4603	100.0
Western Sydney	64	0.4	76	0.5	90	0.6	177	1.2	604	4.1	2758	18.6	5786	38.9	4074	27.4	1083	7.3	145	1.0	2	0.0	14859	100.0
Nepean Blue Mountains	19	0.4	23	0.5	32	0.6	66	1.3	192	3.8	842	16.5	1872	36.7	1537	30.1	465	9.1	56	1.1	3	0.1	5107	100.0
Northern Sydney	23	0.2	37	0.3	57	0.5	108	1.0	376	3.4	1734	15.8	4448	40.6	3217	29.4	843	7.7	112	1.0	3	0.0	10958	100.0
Central Coast	19	0.5	20	0.5	18	0.5	49	1.3	148	3.8	515	13.3	1373	35.4	1251	32.2	405	10.4	77	2.0	5	0.1	3880	100.0
Hunter New England	27	0.2	46	0.4	71	0.7	136	1.3	504	4.6	1530	14.1	3717	34.2	3452	31.8	1175	10.8	190	1.7	16	0.1	10864	100.0
Northern NSW	3	0.1	3	0.1	5	0.2	25	1.1	70	3.0	306	13.0	841	35.8	770	32.8	277	11.8	45	1.9	1	0.0	2346	100.0
Mid North Coast	6	0.3	6	0.3	15	0.8	27	1.4	81	4.2	285	14.8	663	34.4	604	31.4	207	10.8	27	1.4	4	0.2	1925	100.0
Southern NSW	3	0.2	6	0.4	4	0.3	11	0.8	18	1.3	206	14.9	489	35.4	466	33.7	153	11.1	25	1.8	0	0.0	1381	100.0
Murrumbidgee	9	0.4	12	0.5	11	0.5	33	1.4	96	4.0	363	15.1	889	36.9	718	29.8	247	10.2	33	1.4	0	0.0	2411	100.0
Western NSW	19	0.5	21	0.6	23	0.6	52	1.4	170	4.5	601	15.8	1330	35.0	1139	30.0	390	10.3	56	1.5	2	0.1	3803	100.0
Far West	0	0.0	1	0.4	0	0.0	1	0.4	6	2.6	38	16.2	78	33.2	73	31.1	35	14.9	2	0.9	1	0.4	235	100.0
Other-not stated	15	0.6	8	0.3	8	0.3	23	0.9	108	4.4	440	18.1	898	37.0	710	29.2	188	7.7	29	1.2	2	0.1	2429	100.0
TOTAL	326	0.3	411	0.4	534	0.5	1191	1.2	3931	4.0	16272	16.5	37290	37.8	29171	29.5	8348	8.5	1182	1.2	71	0.1	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Gestational age

The majority of births (91.4%) were at term, and 1.1% were post-term (42-plus weeks). The 7.3% of preterm births comprised 0.7% born at less than 28 weeks, 0.6% at 28–31 weeks, and 5.9% at 32–36 weeks. The highest rate of preterm birth was 9.1% in the Western NSW Local Health District, while the lowest was 2.6% in the Far West Local Health District (Table 32).

TABLE 32: GESTATIONAL AGE BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Gestational age (weeks)													
	< 28		28–31		32–36		37–41		42+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	55	0.6	63	0.7	479	5.7	7839	92.6	22	0.3	10	0.1	8468	100.0
South Western Sydney	112	0.8	85	0.6	930	6.7	12659	90.6	31	0.2	148	1.1	13965	100.0
South Eastern Sydney	71	0.6	51	0.4	630	5.5	10573	92.0	148	1.3	20	0.2	11493	100.0
Illawarra Shoalhaven	15	0.3	31	0.7	319	6.9	4196	91.2	40	0.9	2	0.0	4603	100.0
Western Sydney	132	0.9	95	0.6	773	5.2	13771	92.7	79	0.5	9	0.1	14859	100.0
Nepean Blue Mountains	35	0.7	39	0.8	331	6.5	4660	91.2	41	0.8	1	0.0	5107	100.0
Northern Sydney	65	0.6	51	0.5	577	5.3	10162	92.7	98	0.9	5	0.0	10958	100.0
Central Coast	32	0.8	29	0.7	247	6.4	3459	89.1	111	2.9	2	0.1	3880	100.0
Hunter New England	74	0.7	87	0.8	721	6.6	9771	89.9	209	1.9	2	0.0	10864	100.0
Northern NSW	5	0.2	7	0.3	109	4.6	2150	91.6	74	3.2	1	0.0	2346	100.0
Mid North Coast	11	0.6	19	1.0	131	6.8	1723	89.5	39	2.0	2	0.1	1925	100.0
Southern NSW	10	0.7	7	0.5	36	2.6	1278	92.5	50	3.6	0	0.0	1381	100.0
Murrumbidgee	19	0.8	15	0.6	163	6.8	2180	90.4	33	1.4	1	0.0	2411	100.0
Western NSW	36	0.9	30	0.8	280	7.4	3410	89.7	46	1.2	1	0.0	3803	100.0
Far West	1	0.4	0	0.0	5	2.1	224	95.3	4	1.7	1	0.4	235	100.0
Other-not stated	23	0.9	10	0.4	134	5.5	2215	91.2	40	1.6	7	0.3	2429	100.0
TOTAL	696	0.7	619	0.6	5865	5.9	90270	91.4	1065	1.1	212	0.2	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hepatitis B

Ninety-four per cent of babies in NSW were given a hepatitis B vaccination at birth. The highest rate of hepatitis B vaccinations at birth was 97.1% in the Murrumbidgee Local Health District, while the lowest was 80.9% in the Northern NSW Local Health District (Table 33).

TABLE 33: HEPATITIS B DOSE GIVEN TO LIVEBORN BABIES, NSW 2016

Local Health District	Hepatitis B dose given							
	No		Yes		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	429	5.1	7928	94.1	67	0.8	8424	100.0
South Western Sydney	288	2.1	12604	90.8	984	7.1	13876	100.0
South Eastern Sydney	931	8.1	10478	91.7	23	0.2	11432	100.0
Illawarra Shoalhaven	184	4.0	4403	95.9	3	0.1	4590	100.0
Western Sydney	480	3.2	14275	96.6	21	0.1	14776	100.0
Nepean Blue Mountains	240	4.7	4815	94.8	24	0.5	5079	100.0
Northern Sydney	753	6.9	10146	93.0	9	0.1	10908	100.0
Central Coast	173	4.5	3672	95.4	6	0.2	3851	100.0
Hunter New England	402	3.7	10398	96.2	14	0.1	10814	100.0
Northern NSW	446	19.1	1888	80.9	1	0.0	2335	100.0
Mid North Coast	158	8.3	1753	91.7	1	0.1	1912	100.0
Southern NSW	82	6.0	1288	93.8	3	0.2	1373	100.0
Murrumbidgee	69	2.9	2329	97.1	1	0.0	2399	100.0
Western NSW	121	3.2	3646	96.7	4	0.1	3771	100.0
Far West	9	3.8	224	95.7	1	0.4	234	100.0
Other-not stated	191	7.9	2166	89.9	53	2.2	2410	100.0
TOTAL	4956	5.0	92013	93.7	1215	1.2	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Infant feeding

In 2016, infant feeding on discharge from hospital was reported for 95,006 liveborn babies (Table 34). The majority of babies (74.9%) were reported to be fully breastfed, 8.5% were receiving infant formula only, and a further 13.4% were being partially breastfed. Rates of full breastfeeding varied from 58.5% in the South Western Sydney Local Health District to 86.4% in the Northern NSW Local Health District.

TABLE 34: LIVE BIRTHS BY INFANT FEEDING ON DISCHARGE AND LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	6342	75.3	1584	18.8	361	4.3	137	1.6	8424	100.0
South Western Sydney	8123	58.5	2933	21.1	1620	11.7	1200	8.6	13876	100.0
South Eastern Sydney	9046	79.1	1692	14.8	520	4.5	174	1.5	11432	100.0
Illawarra Shoalhaven	3665	79.8	256	5.6	602	13.1	67	1.5	4590	100.0
Western Sydney	10874	73.6	2203	14.9	1245	8.4	454	3.1	14776	100.0
Nepean Blue Mountains	3734	73.5	511	10.1	615	12.1	219	4.3	5079	100.0
Northern Sydney	8786	80.5	1628	14.9	333	3.1	161	1.5	10908	100.0
Central Coast	3168	82.3	306	7.9	335	8.7	42	1.1	3851	100.0
Hunter New England	8270	76.5	987	9.1	1213	11.2	344	3.2	10814	100.0
Northern NSW	2017	86.4	105	4.5	128	5.5	85	3.6	2335	100.0
Mid North Coast	1572	82.2	131	6.9	171	8.9	38	2.0	1912	100.0
Southern NSW	1160	84.5	60	4.4	117	8.5	36	2.6	1373	100.0
Murrumbidgee	1812	75.5	178	7.4	375	15.6	34	1.4	2399	100.0
Western NSW	2942	78.0	241	6.4	501	13.3	87	2.3	3771	100.0
Far West	176	75.2	11	4.7	38	16.2	9	3.8	234	100.0
Other-not stated	1837	76.2	351	14.6	131	5.4	91	3.8	2410	100.0
TOTAL	73524	74.9	13177	13.4	8305	8.5	3178	3.2	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Perinatal outcomes

The perinatal mortality rate in 2016 was 7.5 per 1,000 births. This rate includes all live births, and stillbirths of at least 400 grams birth weight or at least 20 weeks gestation (Table 35). The perinatal mortality rate varied from 4.6 per 1,000 births in the Illawarra Shoalhaven Local Health District to 10.8 per 1,000 births in the Western NSW Local Health District.

TABLE 35: PERINATAL OUTCOMES BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016^a

Local Health District	Liveborn surviving		Stillborn		Neonatal death		Death—age not stated		Not stated		Total births		Perinatal death rate/1,000 births ^b	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	No.
Sydney	8409	99.3	44	0.5	15	0.2	0	0.0	0	0.0	8468	100.0		7.0
South Western Sydney	13847	99.2	89	0.6	29	0.2	0	0.0	0	0.0	13965	100.0		8.4
South Eastern Sydney	11413	99.3	61	0.5	19	0.2	0	0.0	0	0.0	11493	100.0		7.0
Illawarra Shoalhaven	4582	99.5	13	0.3	8	0.2	0	0.0	0	0.0	4603	100.0		4.6
Western Sydney	14734	99.2	83	0.6	42	0.3	0	0.0	0	0.0	14859	100.0		8.4
Nepean Blue Mountains	5068	99.2	28	0.5	11	0.2	0	0.0	0	0.0	5107	100.0		7.6
Northern Sydney	10896	99.4	50	0.5	12	0.1	0	0.0	0	0.0	10958	100.0		5.7
Central Coast	3846	99.1	29	0.7	5	0.1	0	0.0	0	0.0	3880	100.0		8.8
Hunter New England	10789	99.3	50	0.5	25	0.2	0	0.0	0	0.0	10864	100.0		6.9
Northern NSW	2333	99.4	11	0.5	2	0.1	0	0.0	0	0.0	2346	100.0		5.5
Mid North Coast	1910	99.2	13	0.7	2	0.1	0	0.0	0	0.0	1925	100.0		7.8
Southern NSW	1367	99.0	8	0.6	6	0.4	0	0.0	0	0.0	1381	100.0		10.1
Murrumbidgee	2393	99.3	12	0.5	6	0.2	0	0.0	0	0.0	2411	100.0		7.5
Western NSW	3762	98.9	32	0.8	9	0.2	0	0.0	0	0.0	3803	100.0		10.8
Far West	233	99.1	1	0.4	1	0.4	0	0.0	0	0.0	235	100.0		8.5
Other-not stated	2401	98.8	19	0.8	9	0.4	0	0.0	0	0.0	2429	100.0		259.6
TOTAL	97983	99.2	543	0.6	201	0.2	0	0.0	0	0.0	98727	100.0		7.5

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

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

[†] The perinatal death rate excludes deaths where the age at death was not stated.

Live births by statistical area of residence

TABLE 36: LIVE BIRTHS BY LOCAL HEALTH DISTRICT AND STATISTICAL AREA OF RESIDENCE, NSW 2016^a

Local Health District–Statistical Area 3 ¹	No.	%	
Sydney	Bankstown*	25	0.3
	Canada Bay	1167	13.9
	Canterbury*	2089	24.8
	Hurstville*	139	1.7
	Leichhardt	889	10.6
	Marrickville–Sydenham–Petersham	700	8.3
	Strathfield–Burwood–Ashfield	1802	21.4
	Sydney Inner City*	1611	19.1
	TOTAL	8424	100.0
South Western Sydney	Auburn*	15	0.1
	Bankstown*	2592	18.7
	Bringelly–Green Valley	1773	12.8
	Camden	1033	7.4
	Campbelltown	2489	17.9
	Canterbury*	150	1.1
	Fairfield*	2271	16.4
	Liverpool*	1992	14.4
	Merrylands–Guildford*	462	3.3
	Penrith*	85	0.6
	Southern Highlands	462	3.3
	Wollondilly	542	3.9
	TOTAL	13876	100.0
South Eastern Sydney	Botany	732	6.4
	Cronulla–Miranda–Caringbah	1372	12.0
	Eastern Suburbs–North	1787	15.6
	Eastern Suburbs–South	1896	16.6
	Hurstville*	1518	13.3
	Kogarah–Rockdale	2175	19.0
	Liverpool*	8	0.1
	Sutherland–Menai –Heathcote	1319	11.5
	Sydney Inner City*	613	5.4
	TOTAL	11432	100.0
Illawarra Shoalhaven	Dapto–Port Kembla	982	21.4
	Kiama –Shellharbour	1050	22.9
	Shoalhaven	1025	22.3
	South Coast*	3	0.1
	Wollongong	1527	33.3
	TOTAL	4590	100.0
Western Sydney	Auburn*	1803	12.2
	Baulkham Hills*	1179	8.0
	Blacktown	2275	15.4
	Blacktown–North	1512	10.2
	Carlingford*	655	4.4
	Dural–Wisemans Ferry*	87	0.6
	Merrylands–Guildford*	2303	15.6
	Mount Druitt	2050	13.9
	Parramatta	2476	16.8
	Pennant Hills–Epping*	108	0.7
	Rouse Hill–McGraths Hill*	284	1.9
	Ryde–Hunters Hill*	34	0.2
	TOTAL	14776	100.0

Local Health District–Statistical Area 3 ¹	No.	%	
Nepean Blue Mountains	Blue Mountains	754	14.8
	Dural–Wisemans Ferry*	5	0.1
	Fairfield*	13	0.3
	Hawkesbury	264	5.2
	Lithgow–Mudgee*	237	4.7
	Penrith*	2289	45.1
	Richmond–Windsor	471	9.3
	Rouse Hill–McGraths Hill*	153	3.0
	St Marys	892	17.6
	TOTAL	5079	100.0
Northern Sydney	Baulkham Hills*	158	1.4
	Carlingford*	86	0.8
	Chatswood–Lane Cove	1646	15.1
	Dural–Wisemans Ferry*	134	1.2
	Hornsby	1034	9.5
	Ku-ring-gai	1055	9.7
	Manly	636	5.8
	North Sydney–Mosman	1372	12.6
	Pennant Hills–Epping*	360	3.3
	Pittwater	636	5.8
	Ryde–Hunters Hill*	1750	16.0
	Warringah	2034	18.6
	TOTAL	10908	100.0
Central Coast	Gosford	1914	49.7
	Wyong	1937	50.3
	TOTAL	3851	100.0
Hunter New England	Armidale	395	3.7
	Great Lakes	256	2.4
	Inverell–Tenterfield*	385	3.6
	Kempsey–Nambucca	1	0.0
	Lake Macquarie–East	1422	13.1
	Lake Macquarie–West	927	8.6
	Lower Hunter	1183	10.9
	Maitland	1086	10.0
	Moree–Narrabri	371	3.4
	Newcastle	2027	18.7
	Port Stephens	698	6.5
	Tamworth–Gunnedah	1077	10.0
	Taree–Gloucester	530	4.9
	Upper Hunter	440	4.1
	TOTAL	10814	100.0
Northern NSW	Clarence Valley	412	17.6
	Coffs Harbour*	3	0.1
	Richmond Valley–Coastal	602	25.8
	Richmond Valley–Hinterland	644	27.6
	Tweed Valley	672	28.8
	TOTAL	2335	100.0
Mid North Coast	Coffs Harbour*	819	42.8
	Kempsey–Nambucca	486	25.4
	Port Macquarie	603	31.5
	TOTAL	1912	100.0

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TABLE 36: (Continued)

Local Health District–Statistical Area 3 [†]	No.	%
Southern NSW		
Goulburn–Yass*	336	24.5
Queanbeyan	336	24.5
Snowy Mountains	149	10.9
South Coast*	551	40.1
TOTAL	1373	100.0
Murrumbidgee		
Albury	12	0.5
Goulburn–Yass*	169	7.0
Griffith–Murrumbidgee (West)	651	27.1
Lachlan Valley*	58	2.4
Lower Murray*	29	1.2
Tumut–Tumbarumba	143	6.0
Upper Murray excluding Albury	88	3.7
Wagga Wagga	1243	51.8
TOTAL	2399	100.0
Western NSW		
Bathurst	584	15.5
Bourke–Cobar–Coonamble	363	9.6
Dubbo	1036	27.5
Lachlan Valley*	569	15.1
Lithgow–Mudgee *	319	8.5
Orange	886	23.5
TOTAL	3771	100.0
Far West		
Broken Hill and Far West	234	100.0
TOTAL	234	100.0
Other-not stated	2410	100.0
TOTAL	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Statistical Area assigned according to the Australian Bureau of Statistics Australian Statistical Geographical Standard, 2011 (Cat No. 1270.0.55.001)

* Geographical boundaries of Statistical Area Level 3 (SA3) occur within two Local Health Districts.

† Totals include live births where Statistical Area was unknown.

6. NSW HOSPITALS

Onset and augmentation of labour

Table 37 shows onset or augmentation of labour for local health districts, and Table 38 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 37: ONSET AND AUGMENTATION OF LABOUR BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Onset and augmentation of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics [†]		No labour		Induced - oxytocics/ prostaglandins		Induced - ARM only		Induced - ARM + oxytocics/ prostaglandins		Induced - other [‡]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	2038	30.0	507	7.5	825	12.1	1232	18.1	1008	14.8	374	5.5	790	11.6	22	0.3	0	0.0	6796	100.0
South Western Sydney	4370	39.0	1012	9.0	1003	9.0	1807	16.1	1476	13.2	649	5.8	829	7.4	46	0.4	3	0.0	11195	100.0
South Eastern Sydney	2999	37.5	526	6.6	738	9.2	1152	14.4	852	10.6	183	2.3	1549	19.4	5	0.1	0	0.0	8004	100.0
Illawarra Shoalhaven	1252	37.2	226	6.7	211	6.3	534	15.9	369	11.0	64	1.9	703	20.9	5	0.1	1	0.0	3365	100.0
Western Sydney	3927	38.7	664	6.6	812	8.0	1582	15.6	896	8.8	149	1.5	2072	20.4	29	0.3	5	0.0	10136	100.0
Nepean Blue Mountains	1918	36.7	276	5.3	224	4.3	1071	20.5	410	7.8	109	2.1	1200	22.9	18	0.3	3	0.1	5229	100.0
Northern Sydney	2298	38.2	315	5.2	554	9.2	965	16.0	701	11.7	99	1.6	1076	17.9	5	0.1	0	0.0	6013	100.0
Central Coast	1199	41.6	143	5.0	248	8.6	422	14.6	315	10.9	36	1.2	519	18.0	0	0.0	0	0.0	2882	100.0
Hunter New England	3490	39.7	363	4.1	489	5.6	1368	15.6	892	10.1	211	2.4	1963	22.3	14	0.2	6	0.1	8796	100.0
Northern NSW	1404	46.3	174	5.7	213	7.0	368	12.1	250	8.2	78	2.6	543	17.9	2	0.1	0	0.0	3032	100.0
Mid North Coast	883	40.5	95	4.4	113	5.2	441	20.2	192	8.8	47	2.2	406	18.6	0	0.0	5	0.2	2182	100.0
Southern NSW	697	48.4	66	4.6	102	7.1	213	14.8	114	7.9	52	3.6	192	13.3	3	0.2	1	0.1	1440	100.0
Murrumbidgee	850	42.1	98	4.9	115	5.7	362	17.9	207	10.3	61	3.0	323	16.0	3	0.1	0	0.0	2019	100.0
Western NSW	1331	38.4	180	5.2	191	5.5	597	17.2	309	8.9	94	2.7	754	21.8	2	0.1	4	0.1	3462	100.0
Far West	89	38.7	19	8.3	11	4.8	38	16.5	19	8.3	12	5.2	41	17.8	0	0.0	1	0.4	230	100.0
Private Hospitals	5119	22.8	1268	5.7	1462	6.5	7558	33.7	1663	7.4	1117	5.0	3919	17.5	230	1.0	106	0.5	22442	100.0
TOTAL*	33947	34.9	5932	6.1	7311	7.5	19710	20.3	9673	9.9	3335	3.4	16879	17.3	384	0.4	135	0.1	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

ARM: artificial rupture of membranes.

[†] May include artificial rupture of membranes.

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

* Total includes births at home assisted by independent midwives.

TABLE 38: ONSET AND AUGMENTATION OF LABOUR BY HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level-hospital	Onset and augmentation of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics [†]		No labour		Induced - oxytocics/ prostaglandins		Induced - ARM only		Induced - ARM + oxytocics/ prostaglandins		Induced - other [‡]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6																				
Royal Prince Alfred	1468	29.2	357	7.1	632	12.6	962	19.1	711	14.1	268	5.3	615	12.2	18	0.4	0	0.0	5031	100.0
Royal North Shore	1010	34.2	150	5.1	244	8.3	574	19.5	339	11.5	41	1.4	591	20.0	0	0.0	0	0.0	2949	100.0
Royal Hospital for Women	1611	39.5	237	5.8	307	7.5	639	15.7	442	10.8	103	2.5	732	18.0	3	0.1	0	0.0	4074	100.0
Liverpool	1232	35.9	327	9.5	313	9.1	627	18.3	467	13.6	178	5.2	265	7.7	17	0.5	1	0.0	3427	100.0
Nepean	1476	35.9	218	5.3	188	4.6	858	20.9	293	7.1	86	2.1	967	23.6	18	0.4	2	0.0	4106	100.0
Westmead	2002	36.0	377	6.8	452	8.1	946	17.0	525	9.4	91	1.6	1155	20.8	11	0.2	1	0.0	5560	100.0
John Hunter	1363	34.5	139	3.5	232	5.9	678	17.2	450	11.4	94	2.4	985	24.9	7	0.2	0	0.0	3948	100.0
TOTAL	10162	34.9	1805	6.2	2368	8.1	5284	18.2	3227	11.1	861	3.0	5310	18.3	74	0.3	4	0.0	29095	100.0
Level 5																				
Gosford	1080	39.3	126	4.6	248	9.0	422	15.4	315	11.5	36	1.3	519	18.9	0	0.0	0	0.0	2746	100.0
St. George	862	33.9	178	7.0	252	9.9	348	13.7	266	10.5	53	2.1	582	22.9	2	0.1	0	0.0	2543	100.0
Blacktown	1327	41.2	214	6.6	218	6.8	486	15.1	227	7.0	49	1.5	688	21.4	12	0.4	0	0.0	3221	100.0
Coffs Harbour	382	34.9	48	4.4	58	5.3	261	23.9	115	10.5	25	2.3	205	18.7	0	0.0	0	0.0	1094	100.0
Lismore Base	522	46.0	63	5.5	80	7.0	133	11.7	93	8.2	28	2.5	216	19.0	1	0.1	0	0.0	1136	100.0
Tweed Heads	487	39.7	71	5.8	104	8.5	164	13.4	105	8.6	36	2.9	261	21.3	0	0.0	0	0.0	1228	100.0
Port Macquarie Base	294	38.4	28	3.7	40	5.2	149	19.5	64	8.4	16	2.1	169	22.1	0	0.0	5	0.7	765	100.0
Dubbo Base	412	32.9	56	4.5	62	5.0	229	18.3	146	11.7	34	2.7	311	24.9	0	0.0	1	0.1	1251	100.0

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TABLE 38: (Continued)

Maternity service level–hospital	Onset and augmentation of labour														TOTAL					
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics†		No labour		Induced - oxytocics/ prostaglandins		Induced - ARM only		Induced - ARM + oxytocics/ prostaglandins		Induced - other‡		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Wollongong	941	37.9	181	7.3	147	5.9	386	15.6	248	10.0	47	1.9	527	21.2	5	0.2	0	0.0	2482	100.0
Wagga Wagga Base	379	37.5	38	3.8	74	7.3	204	20.2	103	10.2	24	2.4	190	18.8	0	0.0	0	0.0	1012	100.0
TOTAL	6686	38.3	1003	5.7	1283	7.3	2782	15.9	1682	9.6	348	2.0	3668	21.0	20	0.1	6	0.0	17478	100.0
Level 4																				
Canterbury	570	32.3	150	8.5	193	10.9	270	15.3	297	16.8	106	6.0	175	9.9	4	0.2	0	0.0	1765	100.0
Hornsby	495	40.7	92	7.6	142	11.7	138	11.3	154	12.7	21	1.7	173	14.2	2	0.2	0	0.0	1217	100.0
Manly	342	34.8	34	3.5	97	9.9	143	14.6	131	13.3	21	2.1	213	21.7	1	0.1	0	0.0	982	100.0
Mona Vale	358	47.0	29	3.8	71	9.3	110	14.4	77	10.1	16	2.1	99	13.0	2	0.3	0	0.0	762	100.0
Sutherland	526	37.9	111	8.0	179	12.9	165	11.9	144	10.4	27	1.9	235	16.9	0	0.0	0	0.0	1387	100.0
Campbelltown	1440	43.0	194	5.8	261	7.8	485	14.5	416	12.4	275	8.2	251	7.5	22	0.7	2	0.1	3346	100.0
Bankstown-Lidcombe	833	38.2	192	8.8	198	9.1	355	16.3	328	15.0	118	5.4	153	7.0	5	0.2	0	0.0	2182	100.0
Grafton Base	190	45.1	29	6.9	25	5.9	66	15.7	45	10.7	10	2.4	55	13.1	1	0.2	0	0.0	421	100.0
Armidale	187	46.2	22	5.4	25	6.2	73	18.0	26	6.4	19	4.7	53	13.1	0	0.0	0	0.0	405	100.0
Tamworth Base	367	36.8	50	5.0	64	6.4	150	15.1	91	9.1	28	2.8	240	24.1	2	0.2	4	0.4	996	100.0
Manning Base	261	40.0	24	3.7	37	5.7	86	13.2	59	9.0	17	2.6	166	25.5	2	0.3	0	0.0	652	100.0
Orange Base	339	31.8	67	6.3	59	5.5	216	20.3	77	7.2	32	3.0	273	25.6	2	0.2	1	0.1	1066	100.0
Maitland	618	42.6	43	3.0	73	5.0	188	13.0	158	10.9	23	1.6	344	23.7	3	0.2	1	0.1	1451	100.0
Griffith Base	221	42.2	33	6.3	32	6.1	89	17.0	56	10.7	13	2.5	77	14.7	3	0.6	0	0.0	524	100.0
TOTAL	6747	39.3	1070	6.2	1456	8.5	2534	14.8	2059	12.0	726	4.2	2507	14.6	49	0.3	8	0.0	17156	100.0
Level 3																				
Auburn	598	44.1	73	5.4	142	10.5	150	11.1	144	10.6	9	0.7	229	16.9	6	0.4	4	0.3	1355	100.0
Blue Mountains	134	56.8	10	4.2	7	3.0	43	18.2	20	8.5	0	0.0	22	9.3	0	0.0	0	0.0	236	100.0
Fairfield	701	39.0	237	13.2	187	10.4	266	14.8	215	12.0	65	3.6	124	6.9	2	0.1	0	0.0	1797	100.0
Hawkesbury	242	35.8	37	5.5	22	3.3	128	18.9	62	9.2	19	2.8	166	24.6	0	0.0	0	0.0	676	100.0
Kempsey	166	60.6	16	5.8	15	5.5	29	10.6	13	4.7	5	1.8	30	10.9	0	0.0	0	0.0	274	100.0
Inverell	68	27.6	5	2.0	24	9.8	61	24.8	31	12.6	3	1.2	54	22.0	0	0.0	0	0.0	246	100.0
Mudgee	126	51.0	6	2.4	15	6.1	35	14.2	19	7.7	5	2.0	40	16.2	0	0.0	1	0.4	247	100.0
Bathurst Base	264	53.9	18	3.7	28	5.7	63	12.9	33	6.7	12	2.4	71	14.5	0	0.0	1	0.2	490	100.0
Lithgow	66	31.3	11	5.2	7	3.3	42	19.9	35	16.6	4	1.9	45	21.3	0	0.0	1	0.5	211	100.0
Bega	121	47.3	12	4.7	12	4.7	33	12.9	18	7.0	4	1.6	55	21.5	0	0.0	1	0.4	256	100.0
Goulburn Base	138	48.3	20	7.0	29	10.1	57	19.9	19	6.6	4	1.4	19	6.6	0	0.0	0	0.0	286	100.0
Moruya	158	52.7	12	4.0	8	2.7	52	17.3	27	9.0	12	4.0	30	10.0	1	0.3	0	0.0	300	100.0
Queanbeyan	201	44.7	13	2.9	41	9.1	60	13.3	43	9.6	17	3.8	74	16.4	1	0.2	0	0.0	450	100.0
Bowral	164	37.0	62	14.0	44	9.9	74	16.7	50	11.3	13	2.9	36	8.1	0	0.0	0	0.0	443	100.0
Shoalhaven	298	34.4	41	4.7	64	7.4	148	17.1	121	14.0	17	2.0	176	20.3	0	0.0	1	0.1	866	100.0
Broken Hill Base	89	38.7	19	8.3	11	4.8	38	16.5	19	8.3	12	5.2	41	17.8	0	0.0	1	0.4	230	100.0
Other hospitals	763	47.9	114	7.2	66	4.1	228	14.3	149	9.4	54	3.4	219	13.7	0	0.0	0	0.0	1593	100.0
TOTAL	4297	43.2	706	7.1	722	7.3	1507	15.1	1018	10.2	255	2.6	1431	14.4	10	0.1	10	0.1	9956	100.0
Level 2																				
TOTAL	839	77.9	76	7.1	20	1.9	45	4.2	24	2.2	28	2.6	43	4.0	1	0.1	1	0.1	1077	100.0
Private																				
Mater, North Sydney	578	24.3	117	4.9	254	10.7	908	38.1	124	5.2	73	3.1	329	13.8	0	0.0	0	0.0	2383	100.0
North Shore Private	775	30.9	0	0.0	237	9.4	933	37.1	152	6.1	67	2.7	334	13.3	14	0.6	0	0.0	2512	100.0
Sydney Adventist	418	20.6	255	12.5	254	12.5	572	28.1	108	5.3	37	1.8	364	17.9	25	1.2	0	0.0	2033	100.0
North Gosford Private	111	15.5	35	4.9	72	10.1	236	33.0	46	6.4	18	2.5	192	26.9	4	0.6	1	0.1	715	100.0
Hurstville Community	208	25.3	75	9.1	107	13.0	220	26.7	57	6.9	9	1.1	139	16.9	2	0.2	6	0.7	823	100.0
Kareena Private	189	24.1	0	0.0	68	8.7	282	36.0	52	6.6	17	2.2	171	21.8	4	0.5	0	0.0	783	100.0
St. George Private	406	25.8	0	0.0	153	9.7	494	31.4	267	17.0	106	6.7	139	8.8	6	0.4	0	0.0	1571	100.0
Prince of Wales Private	485	22.1	187	8.5	0	0.0	927	42.3	138	6.3	167	7.6	221	10.1	43	2.0	25	1.1	2193	100.0
Norwest Private	389	18.9	240	11.6	1	0.0	546	26.5	154	7.5	70	3.4	626	30.4	20	1.0	16	0.8	2062	100.0
Sydney Southwest Private	218	21.0	130	12.5	1	0.1	290	27.9	129	12.4	23	2.2	229	22.0	4	0.4	15	1.4	1039	100.0
Nepean Private	106	13.4	45	5.7	0	0.0	265	33.4	81	10.2	75	9.4	197	24.8	12	1.5	13	1.6	794	100.0
Westmead Private	569	25.4	0	0.0	224	10.0	772	34.4	196	8.7	5	0.2	469	20.9	6	0.3	0	0.0	2241	100.0
Wollongong Private	217	24.2	0	0.0	78	8.7	272	30.3	30	3.3	16	1.8	282	31.4	2	0.2	0	0.0	897	100.0
Newcastle Private	369	18.6	175	8.8	0	0.0	642	32.4	90	4.5	416	21.0	174	8.8	87	4.4	30	1.5	1983	100.0
Calvary, Wagga Wagga	81	20.7	9	2.3	13	3.3	177	45.3	39	10.0	18	4.6	53	13.6	1	0.3	0	0.0	391	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	22	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	22	100.0
TOTAL	5119	22.8	1268	5.7	1462	6.5	7558	33.7	1663	7.4	1117	5.0	3919	17.5	230	1.0	106	0.5	22442	100.0
TOTAL NSW*	33947	34.9	5932	6.1	7311	7.5	19710	20.3	9673	9.9	3335	3.4	16879	17.3	384	0.4	135	0.1	97306	100.0

Source: NSW Perinatal Data Collection (SAPHARI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

ARM: artificial rupture of membranes.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in *Appendix 2: Explanatory notes*.

† May include artificial rupture of membranes.

Type of birth

Table 39 shows type of birth for local health districts, and Table 40 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 39: TYPE OF BIRTH BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Type of birth															
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section [†]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	3689	54.3	433	6.4	537	7.9	11	0.2	1232	18.1	894	13.2	0	0.0	6796	100.0
South Western Sydney	7219	64.5	284	2.5	696	6.2	35	0.3	1798	16.1	1147	10.2	16	0.1	11195	100.0
South Eastern Sydney	4405	55.0	650	8.1	617	7.7	51	0.6	1152	14.4	1129	14.1	0	0.0	8004	100.0
Illawarra Shoalhaven	2030	60.3	158	4.7	191	5.7	5	0.1	534	15.9	447	13.3	0	0.0	3365	100.0
Western Sydney	6111	60.3	533	5.3	466	4.6	92	0.9	1577	15.6	1352	13.3	5	0.0	10136	100.0
Nepean Blue Mountains	2841	54.3	105	2.0	326	6.2	16	0.3	1070	20.5	870	16.6	1	0.0	5229	100.0
Northern Sydney	3307	55.0	577	9.6	295	4.9	27	0.4	965	16.0	842	14.0	0	0.0	6013	100.0
Central Coast	1746	60.6	196	6.8	153	5.3	12	0.4	422	14.6	353	12.2	0	0.0	2882	100.0
Hunter New England	5463	62.1	378	4.3	423	4.8	33	0.4	1366	15.5	1131	12.9	2	0.0	8796	100.0
Northern NSW	2037	67.2	119	3.9	176	5.8	6	0.2	368	12.1	326	10.8	0	0.0	3032	100.0
Mid North Coast	1288	59.0	66	3.0	107	4.9	6	0.3	440	20.2	273	12.5	2	0.1	2182	100.0
Southern NSW	914	63.5	54	3.8	96	6.7	1	0.1	213	14.8	162	11.3	0	0.0	1440	100.0
Murrumbidgee	1213	60.1	39	1.9	136	6.7	6	0.3	362	17.9	263	13.0	0	0.0	2019	100.0
Western NSW	2127	61.4	105	3.0	213	6.2	12	0.3	597	17.2	408	11.8	0	0.0	3462	100.0
Far West	153	66.5	6	2.6	4	1.7	0	0.0	38	16.5	28	12.2	1	0.4	230	100.0
Private Hospitals	9114	40.6	833	3.7	2213	9.9	26	0.1	7558	33.7	2696	12.0	2	0.0	22442	100.0
TOTAL*	53740	55.2	4536	4.7	6649	6.8	339	0.3	19692	20.2	12321	12.7	29	0.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

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

* Total NSW includes births at home assisted by independent midwives

TABLE 40: TYPE OF BIRTH BY HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016[#]

Maternity service level-hospital	Type of birth															
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section [†]		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6																
Royal Prince Alfred	2698	53.6	354	7.0	365	7.3	10	0.2	962	19.1	642	12.8	0	0.0	5031	100.0
Royal North Shore	1484	50.3	360	12.2	103	3.5	19	0.6	574	19.5	409	13.9	0	0.0	2949	100.0
Royal Hospital for Women	2107	51.7	379	9.3	320	7.9	43	1.1	639	15.7	586	14.4	0	0.0	4074	100.0
Liverpool	2093	61.1	160	4.7	183	5.3	20	0.6	625	18.2	340	9.9	6	0.2	3427	100.0
Nepean	2215	53.9	95	2.3	239	5.8	15	0.4	858	20.9	684	16.7	0	0.0	4106	100.0
Westmead	3213	57.8	323	5.8	261	4.7	78	1.4	946	17.0	739	13.3	0	0.0	5560	100.0
John Hunter	2271	57.5	226	5.7	195	4.9	20	0.5	677	17.1	558	14.1	1	0.0	3948	100.0
TOTAL	16081	55.3	1897	6.5	1666	5.7	205	0.7	5281	18.2	3958	13.6	7	0.0	29095	100.0
Level 5																
Gosford	1610	58.6	196	7.1	153	5.6	12	0.4	422	15.4	353	12.9	0	0.0	2746	100.0
St. George	1398	55.0	173	6.8	229	9.0	4	0.2	348	13.7	391	15.4	0	0.0	2543	100.0
Blacktown	1945	60.4	164	5.1	167	5.2	10	0.3	486	15.1	449	13.9	0	0.0	3221	100.0
Coffs Harbour	611	55.9	27	2.5	60	5.5	1	0.1	260	23.8	134	12.2	1	0.1	1094	100.0
Lismore Base	739	65.1	54	4.8	72	6.3	3	0.3	133	11.7	135	11.9	0	0.0	1136	100.0
Tweed Heads	799	65.1	48	3.9	82	6.7	2	0.2	164	13.4	133	10.8	0	0.0	1228	100.0
Port Macquarie Base	431	56.3	37	4.8	34	4.4	4	0.5	149	19.5	110	14.4	0	0.0	765	100.0
Dubbo Base	743	59.4	52	4.2	80	6.4	2	0.2	229	18.3	145	11.6	0	0.0	1251	100.0
Wollongong	1478	59.5	117	4.7	163	6.6	4	0.2	386	15.6	334	13.5	0	0.0	2482	100.0
Wagga Wagga Base	580	57.3	31	3.1	57	5.6	3	0.3	204	20.2	137	13.5	0	0.0	1012	100.0
TOTAL	10334	59.1	899	5.1	1097	6.3	45	0.3	2781	15.9	2321	13.3	1	0.0	17478	100.0
Level 4																
Canterbury	991	56.1	79	4.5	172	9.7	1	0.1	270	15.3	252	14.3	0	0.0	1765	100.0
Hornsby	749	61.5	115	9.4	46	3.8	4	0.3	138	11.3	165	13.6	0	0.0	1217	100.0
Manly	526	53.6	61	6.2	95	9.7	1	0.1	143	14.6	156	15.9	0	0.0	982	100.0
Mona Vale	445	58.4	41	5.4	51	6.7	3	0.4	110	14.4	112	14.7	0	0.0	762	100.0

(Continued on next page)

TABLE 40: (Continued)

Maternity service level–hospital	Type of birth															
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section†		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sutherland	900	64.9	98	7.1	68	4.9	4	0.3	165	11.9	152	11.0	0	0.0	1387	100.0
Campbelltown	2220	66.3	31	0.9	292	8.7	8	0.2	485	14.5	308	9.2	2	0.1	3346	100.0
Bankstown-Lidcombe	1384	63.4	51	2.3	103	4.7	4	0.2	348	15.9	285	13.1	7	0.3	2182	100.0
Grafton Base	274	65.1	13	3.1	18	4.3	0	0.0	66	15.7	50	11.9	0	0.0	421	100.0
Armidale	237	58.5	15	3.7	18	4.4	3	0.7	73	18.0	59	14.6	0	0.0	405	100.0
Tamworth Base	592	59.4	56	5.6	42	4.2	2	0.2	149	15.0	154	15.5	1	0.1	996	100.0
Manning Base	429	65.8	26	4.0	45	6.9	1	0.2	86	13.2	65	10.0	0	0.0	652	100.0
Orange Base	606	56.8	31	2.9	66	6.2	8	0.8	216	20.3	139	13.0	0	0.0	1066	100.0
Maitland	979	67.5	36	2.5	62	4.3	2	0.1	188	13.0	184	12.7	0	0.0	1451	100.0
Griffith Base	298	56.9	3	0.6	51	9.7	2	0.4	89	17.0	81	15.5	0	0.0	524	100.0
TOTAL	10630	62.0	656	3.8	1129	6.6	43	0.3	2526	14.7	2162	12.6	10	0.1	17156	100.0
Level 3																
Auburn	953	70.3	46	3.4	38	2.8	4	0.3	145	10.7	164	12.1	5	0.4	1355	100.0
Blue Mountains	134	56.8	2	0.8	24	10.2	0	0.0	43	18.2	33	14.0	0	0.0	236	100.0
Fairfield	1273	70.8	9	0.5	93	5.2	3	0.2	266	14.8	153	8.5	0	0.0	1797	100.0
Hawkesbury	354	52.4	7	1.0	58	8.6	1	0.1	128	18.9	128	18.9	0	0.0	676	100.0
Kempsey	200	73.0	2	0.7	13	4.7	1	0.4	29	10.6	29	10.6	0	0.0	274	100.0
Inverell	146	59.3	12	4.9	6	2.4	3	1.2	61	24.8	18	7.3	0	0.0	246	100.0
Mudgee	164	66.4	4	1.6	22	8.9	0	0.0	35	14.2	22	8.9	0	0.0	247	100.0
Bathurst Base	329	67.1	15	3.1	23	4.7	2	0.4	63	12.9	58	11.8	0	0.0	490	100.0
Lithgow	138	65.4	1	0.5	5	2.4	0	0.0	41	19.4	25	11.8	1	0.5	211	100.0
Bega	158	61.7	9	3.5	16	6.3	0	0.0	33	12.9	40	15.6	0	0.0	256	100.0
Goulburn Base	163	57.0	17	5.9	15	5.2	0	0.0	57	19.9	34	11.9	0	0.0	286	100.0
Moruya	199	66.3	10	3.3	8	2.7	1	0.3	52	17.3	30	10.0	0	0.0	300	100.0
Queanbeyan	274	60.9	18	4.0	50	11.1	0	0.0	60	13.3	48	10.7	0	0.0	450	100.0
Bowral	249	56.2	33	7.4	25	5.6	0	0.0	74	16.7	61	13.8	1	0.2	443	100.0
Shoalhaven	537	62.0	41	4.7	28	3.2	1	0.1	148	17.1	111	12.8	0	0.0	866	100.0
Broken Hill Base	153	66.5	6	2.6	4	1.7	0	0.0	38	16.5	28	12.2	1	0.4	230	100.0
Other hospitals	1084	68.0	15	0.9	90	5.6	3	0.2	228	14.3	173	10.9	0	0.0	1593	100.0
TOTAL	6508	65.4	247	2.5	518	5.2	19	0.2	1501	15.1	1155	11.6	8	0.1	9956	100.0
Level 2																
TOTAL	973	90.3	4	0.4	26	2.4	1	0.1	45	4.2	27	2.5	1	0.1	1077	100.0
Private																
Mater, North Sydney	841	35.3	72	3.0	227	9.5	0	0.0	908	38.1	335	14.1	0	0.0	2383	100.0
North Shore Private	883	35.2	102	4.1	229	9.1	2	0.1	933	37.1	363	14.5	0	0.0	2512	100.0
Sydney Adventist	960	47.2	96	4.7	171	8.4	5	0.2	572	28.1	229	11.3	0	0.0	2033	100.0
North Gosford Private	259	36.2	24	3.4	76	10.6	2	0.3	236	33.0	118	16.5	0	0.0	715	100.0
Hurstville Community	371	45.1	22	2.7	99	12.0	0	0.0	220	26.7	109	13.2	2	0.2	823	100.0
Kareena Private	291	37.2	58	7.4	55	7.0	1	0.1	282	36.0	96	12.3	0	0.0	783	100.0
St. George Private	607	38.6	70	4.5	184	11.7	1	0.1	494	31.4	215	13.7	0	0.0	1571	100.0
Prince of Wales Private	725	33.1	64	2.9	239	10.9	0	0.0	927	42.3	238	10.9	0	0.0	2193	100.0
Norwest Private	1030	50.0	96	4.7	168	8.1	3	0.1	546	26.5	219	10.6	0	0.0	2062	100.0
Sydney Southwest Private	505	48.6	56	5.4	113	10.9	0	0.0	290	27.9	75	7.2	0	0.0	1039	100.0
Nepean Private	353	44.5	10	1.3	77	9.7	2	0.3	265	33.4	87	11.0	0	0.0	794	100.0
Westmead Private	987	44.0	120	5.4	118	5.3	5	0.2	772	34.4	239	10.7	0	0.0	2241	100.0
Wollongong Private	334	37.2	21	2.3	145	16.2	2	0.2	272	30.3	123	13.7	0	0.0	897	100.0
Newcastle Private	835	42.1	22	1.1	277	14.0	3	0.2	642	32.4	204	10.3	0	0.0	1983	100.0
Calvary, Wagga Wagga	133	34.0	0	0.0	35	9.0	0	0.0	177	45.3	46	11.8	0	0.0	391	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	0	0.0	22	100.0	0	0.0	0	0.0	22	100.0
TOTAL	9114	40.6	833	3.7	2213	9.9	26	0.1	7558	33.7	2696	12.0	2	0.0	22442	100.0
TOTAL NSW*	53740	55.2	4536	4.7	6649	6.8	339	0.3	19692	20.2	12321	12.7	29	0.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

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

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Pain relief

Table 41 shows type of pain relief provided to women during labour or delivery for local health districts, and Table 42 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

In addition to the types of pain relief shown in the tables, in 2016 a further 24,821 (25.5%) women were reported to have received local anaesthetic to the perineum, and 739 (0.8%) received a pudendal block.

TABLE 41: PAIN RELIEF BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Epidural-spinal [†]		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL [‡]	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	3233	47.6	294	4.3	343	5.0	2989	44.0	788	11.6	6796	100.0
South Western Sydney	4031	36.0	507	4.5	1931	17.2	5414	48.4	1532	13.7	11195	100.0
South Eastern Sydney	4295	53.7	173	2.2	1261	15.8	3868	48.3	433	5.4	8004	100.0
Illawarra Shoalhaven	1551	46.1	114	3.4	355	10.5	1723	51.2	288	8.6	3365	100.0
Western Sydney	4885	48.2	328	3.2	884	8.7	4766	47.0	586	5.8	10136	100.0
Nepean Blue Mountains	2586	49.5	272	5.2	825	15.8	2543	48.6	337	6.4	5229	100.0
Northern Sydney	3085	51.3	163	2.7	578	9.6	2619	43.6	307	5.1	6013	100.0
Central Coast	1267	44.0	111	3.9	520	18.0	1277	44.3	242	8.4	2882	100.0
Hunter New England	3384	38.5	477	5.4	1501	17.1	4400	50.0	820	9.3	8796	100.0
Northern NSW	1168	38.5	77	2.5	472	15.6	1381	45.5	364	12.0	3032	100.0
Mid North Coast	958	43.9	78	3.6	252	11.5	929	42.6	238	10.9	2182	100.0
Southern NSW	521	36.2	40	2.8	193	13.4	740	51.4	211	14.7	1440	100.0
Murrumbidgee	732	36.3	50	2.5	469	23.2	1023	50.7	273	13.5	2019	100.0
Western NSW	1353	39.1	153	4.4	653	18.9	1751	50.6	267	7.7	3462	100.0
Far West	80	34.8	5	2.2	31	13.5	111	48.3	40	17.4	230	100.0
Private Hospitals	17219	76.7	262	1.2	1546	6.9	5999	26.7	1149	5.1	22442	100.0
TOTAL NSW*	50348	51.7	3104	3.2	11814	12.1	41535	42.7	7917	8.1	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

[†] The category 'Epidural-spinal' includes epidural, spinal, combined epidural and spinal, and caudal pain relief.

[‡] Row percentages do not sum to 100 per cent as one woman may have more than one type of analgesia.

* Total includes births at home assisted by independent midwives

TABLE 42: PAIN RELIEF BY HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016[‡]

Maternity service level—hospital	Epidural-spinal [†]		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL [‡]	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6												
Royal Prince Alfred	2471	49.1	229	4.6	224	4.5	2117	42.1	599	11.9	5031	100.0
Royal North Shore	1717	58.2	72	2.4	280	9.5	1272	43.1	101	3.4	2949	100.0
Royal Hospital for Women	2364	58.0	71	1.7	665	16.3	1754	43.1	214	5.3	4074	100.0
Liverpool	1510	44.1	182	5.3	607	17.7	1529	44.6	282	8.2	3427	100.0
Nepean	2100	51.1	230	5.6	631	15.4	2016	49.1	254	6.2	4106	100.0
Westmead	2930	52.7	188	3.4	451	8.1	2465	44.3	212	3.8	5560	100.0
John Hunter	1800	45.6	281	7.1	770	19.5	1954	49.5	255	6.5	3948	100.0
TOTAL	14892	51.2	1253	4.3	3628	12.5	13107	45.0	1917	6.6	29095	100.0
Level 5												
Gosford	1267	46.1	111	4.0	518	18.9	1236	45.0	228	8.3	2746	100.0
St. George	1283	50.5	69	2.7	474	18.6	1356	53.3	117	4.6	2543	100.0
Blacktown	1463	45.4	120	3.7	351	10.9	1519	47.2	250	7.8	3221	100.0
Coffs Harbour	527	48.2	45	4.1	142	13.0	435	39.8	104	9.5	1094	100.0
Lismore Base	482	42.4	23	2.0	184	16.2	527	46.4	149	13.1	1136	100.0
Tweed Heads	520	42.3	38	3.1	195	15.9	607	49.4	109	8.9	1228	100.0
Port Macquarie Base	365	47.7	23	3.0	46	6.0	323	42.2	79	10.3	765	100.0
Dubbo Base	505	40.4	63	5.0	275	22.0	605	48.4	86	6.9	1251	100.0
Wollongong	1185	47.7	86	3.5	175	7.1	1254	50.5	207	8.3	2482	100.0
Wagga Wagga Base	424	41.9	35	3.5	224	22.1	506	50.0	122	12.1	1012	100.0
TOTAL	8021	45.9	613	3.5	2584	14.8	8368	47.9	1451	8.3	17478	100.0
Level 4												
Canterbury	762	43.2	65	3.7	119	6.7	872	49.4	189	10.7	1765	100.0
Hornsby	539	44.3	36	3.0	113	9.3	648	53.2	70	5.8	1217	100.0
Manly	506	51.5	25	2.5	90	9.2	344	35.0	60	6.1	982	100.0
Mona Vale	323	42.4	30	3.9	94	12.3	336	44.1	60	7.9	762	100.0
Sutherland	648	46.7	33	2.4	122	8.8	758	54.7	102	7.4	1387	100.0

(Continued on next page)

TABLE 42: (Continued)

Maternity service level–hospital	Epidural-spinal†		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL‡	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Campbelltown	1069	31.9	127	3.8	508	15.2	1569	46.9	672	20.1	3346	100.0
Bankstown-Lidcombe	861	39.5	104	4.8	389	17.8	1198	54.9	203	9.3	2182	100.0
Grafton Base	147	34.9	13	3.1	83	19.7	189	44.9	57	13.5	421	100.0
Armidale	158	39.0	10	2.5	109	26.9	203	50.1	29	7.2	405	100.0
Tamworth Base	430	43.2	34	3.4	154	15.5	527	52.9	85	8.5	996	100.0
Manning Base	218	33.4	33	5.1	176	27.0	357	54.8	72	11.0	652	100.0
Orange Base	502	47.1	60	5.6	169	15.9	516	48.4	77	7.2	1066	100.0
Maitland	488	33.6	80	5.5	118	8.1	785	54.1	176	12.1	1451	100.0
Griffith Base	199	38.0	13	2.5	156	29.8	274	52.3	66	12.6	524	100.0
TOTAL	6850	39.9	663	3.9	2400	14.0	8576	50.0	1918	11.2	17156	100.0
Level 3												
Auburn	492	36.3	20	1.5	82	6.1	782	57.7	124	9.2	1355	100.0
Blue Mountains	86	36.4	6	2.5	21	8.9	101	42.8	14	5.9	236	100.0
Fairfield	399	22.2	80	4.5	266	14.8	920	51.2	319	17.8	1797	100.0
Hawkesbury	311	46.0	34	5.0	139	20.6	323	47.8	54	8.0	676	100.0
Kempsey	63	23.0	10	3.6	56	20.4	153	55.8	41	15.0	274	100.0
Inverell	74	30.1	2	0.8	44	17.9	102	41.5	37	15.0	246	100.0
Mudgee	77	31.2	5	2.0	23	9.3	128	51.8	29	11.7	247	100.0
Bathurst Base	157	32.0	13	2.7	66	13.5	268	54.7	45	9.2	490	100.0
Lithgow	89	42.2	2	0.9	34	16.1	103	48.8	15	7.1	211	100.0
Bega	99	38.7	6	2.3	48	18.8	123	48.0	42	16.4	256	100.0
Goulburn Base	107	37.4	13	4.5	50	17.5	178	62.2	18	6.3	286	100.0
Moruya	96	32.0	10	3.3	29	9.7	129	43.0	59	19.7	300	100.0
Queanbeyan	185	41.1	8	1.8	52	11.6	231	51.3	59	13.1	450	100.0
Bowral	192	43.3	14	3.2	161	36.3	198	44.7	56	12.6	443	100.0
Shoalhaven	365	42.1	27	3.1	179	20.7	460	53.1	78	9.0	866	100.0
Broken Hill Base	80	34.8	5	2.2	31	13.5	111	48.3	40	17.4	230	100.0
Other hospitals	389	24.4	46	2.9	304	19.1	830	52.1	219	13.7	1593	100.0
TOTAL	3261	32.8	301	3.0	1585	15.9	5140	51.6	1249	12.5	9956	100.0
Level 2												
TOTAL	104	9.7	11	1.0	70	6.5	333	30.9	187	17.4	1077	100.0
Private												
Mater, North Sydney	1813	76.1	13	0.5	105	4.4	564	23.7	142	6.0	2383	100.0
North Shore Private	2010	80.0	24	1.0	81	3.2	675	26.9	60	2.4	2512	100.0
Sydney Adventist	1520	74.8	21	1.0	228	11.2	658	32.4	90	4.4	2033	100.0
North Gosford Private	537	75.1	8	1.1	33	4.6	200	28.0	12	1.7	715	100.0
Hurstville Community	609	74.0	4	0.5	44	5.3	234	28.4	24	2.9	823	100.0
Kareena Private	662	84.5	9	1.1	8	1.0	114	14.6	38	4.9	783	100.0
St. George Private	1273	81.0	26	1.7	49	3.1	304	19.4	69	4.4	1571	100.0
Prince of Wales Private	1864	85.0	27	1.2	116	5.3	525	23.9	99	4.5	2193	100.0
Norwest Private	1510	73.2	33	1.6	155	7.5	569	27.6	181	8.8	2062	100.0
Sydney Southwest Private	677	65.2	10	1.0	257	24.7	250	24.1	99	9.5	1039	100.0
Nepean Private	525	66.1	18	2.3	152	19.1	279	35.1	51	6.4	794	100.0
Westmead Private	1731	77.2	28	1.2	91	4.1	587	26.2	43	1.9	2241	100.0
Wollongong Private	737	82.2	18	2.0	1	0.1	295	32.9	31	3.5	897	100.0
Newcastle Private	1461	73.7	19	1.0	194	9.8	642	32.4	161	8.1	1983	100.0
Calvary, Wagga Wagga	269	68.8	3	0.8	32	8.2	103	26.3	49	12.5	391	100.0
Other hospitals	21	95.5	1	4.5	0	0.0	0	0.0	0	0.0	22	100.0
TOTAL	17219	76.7	262	1.2	1546	6.9	5999	26.7	1149	5.1	22442	100.0
TOTAL NSW*	50348	51.7	3104	3.2	11814	12.1	41535	42.7	7917	8.1	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

† The category 'Epidural-spinal' includes epidural, spinal, combined epidural and spinal, and caudal pain relief.

‡ Row percentages do not sum to 100 per cent as one woman may have more than one type of analgesia.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals

Perineal status

Table 43 shows the perineal status in vaginal births for local health districts, and Table 44 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

In 2016, there were 1,896 cases of third degree tear and 96 cases of fourth degree tear reported among women who gave birth vaginally, including tears associated with an episiotomy.

TABLE 43: PERINEAL STATUS AMONG VAGINAL BIRTHS BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Perineal status														TOTAL			
	Intact		1st degree tear/ graze		2nd degree tear		3rd or 4th degree tear		Episiotomy		Combined tear and episiotomy		Other				Not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	642	13.7	932	20.0	1719	36.8	185	4.0	857	18.4	215	4.6	120	2.6	0	0.0	4670	100.0
South Western Sydney	1879	22.8	1908	23.2	2413	29.3	242	2.9	1314	16.0	163	2.0	296	3.6	19	0.2	8234	100.0
South Eastern Sydney	722	12.6	1491	26.1	1905	33.3	147	2.6	937	16.4	471	8.2	50	0.9	0	0.0	5723	100.0
Illawarra Shoalhaven	548	23.0	767	32.2	642	26.9	45	1.9	273	11.5	95	4.0	12	0.5	2	0.1	2384	100.0
Western Sydney	891	12.4	1871	26.0	2078	28.9	106	1.5	1480	20.5	721	10.0	42	0.6	13	0.2	7202	100.0
Nepean Blue Mountains	497	15.1	1184	36.0	912	27.7	73	2.2	349	10.6	237	7.2	30	0.9	6	0.2	3288	100.0
Northern Sydney	439	10.4	1071	25.5	1582	37.6	139	3.3	582	13.8	371	8.8	22	0.5	0	0.0	4206	100.0
Central Coast	304	14.4	771	36.6	662	31.4	47	2.2	179	8.5	116	5.5	28	1.3	0	0.0	2107	100.0
Hunter New England	1280	20.3	2261	35.9	1675	26.6	138	2.2	577	9.2	294	4.7	61	1.0	11	0.2	6297	100.0
Northern NSW	450	19.2	882	37.7	667	28.5	34	1.5	200	8.6	70	3.0	31	1.3	4	0.2	2338	100.0
Mid North Coast	333	22.7	532	36.3	357	24.3	26	1.8	148	10.1	49	3.3	22	1.5	0	0.0	1467	100.0
Southern NSW	247	23.2	367	34.5	273	25.6	33	3.1	106	10.0	29	2.7	10	0.9	0	0.0	1065	100.0
Murrumbidgee	324	23.2	526	37.7	314	22.5	16	1.1	146	10.5	60	4.3	7	0.5	1	0.1	1394	100.0
Western NSW	460	18.7	978	39.8	568	23.1	51	2.1	258	10.5	120	4.9	19	0.8	3	0.1	2457	100.0
Far West	55	33.7	69	42.3	32	19.6	2	1.2	3	1.8	2	1.2	0	0.0	0	0.0	163	100.0
Private Hospitals	1848	15.2	2024	16.6	3948	32.4	107	0.9	3151	25.9	268	2.2	775	6.4	65	0.5	12186	100.0
TOTAL*	10962	16.8	17644	27.0	19773	30.3	1392	2.1	10561	16.2	3281	5.0	1526	2.3	125	0.2	65264	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total includes births at home assisted by independent midwives.

TABLE 44: PERINEAL STATUS AMONG VAGINAL BIRTHS BY HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level-hospital	Perineal status														TOTAL			
	Intact		1st degree tear/ graze		2nd degree tear		3rd or 4th degree tear		Episiotomy		Combined tear and episiotomy		Other				Not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6																		
Royal Prince Alfred	430	12.5	677	19.8	1359	39.7	145	4.2	582	17.0	159	4.6	75	2.2	0	0.0	3427	100.0
Royal North Shore	156	7.9	447	22.7	753	38.3	54	2.7	328	16.7	215	10.9	13	0.7	0	0.0	1966	100.0
Royal Hospital for Women	320	11.2	809	28.4	971	34.1	84	2.9	402	14.1	234	8.2	29	1.0	0	0.0	2849	100.0
Liverpool	506	20.6	572	23.3	739	30.1	101	4.1	383	15.6	61	2.5	91	3.7	3	0.1	2456	100.0
Nepean	377	14.7	905	35.3	711	27.7	55	2.1	284	11.1	206	8.0	26	1.0	0	0.0	2564	100.0
Westmead	460	11.9	902	23.3	1092	28.2	46	1.2	920	23.7	424	10.9	28	0.7	3	0.1	3875	100.0
John Hunter	446	16.4	938	34.6	795	29.3	76	2.8	263	9.7	169	6.2	20	0.7	5	0.2	2712	100.0
TOTAL	2695	13.6	5250	26.4	6420	32.3	561	2.8	3162	15.9	1468	7.4	282	1.4	11	0.1	19849	100.0
Level 5																		
Gosford	281	14.3	694	35.2	630	32.0	46	2.3	178	9.0	115	5.8	27	1.4	0	0.0	1971	100.0
St. George	252	14.0	390	21.6	611	33.9	49	2.7	330	18.3	160	8.9	12	0.7	0	0.0	1804	100.0
Blacktown	258	11.3	657	28.7	688	30.1	46	2.0	412	18.0	216	9.4	9	0.4	0	0.0	2286	100.0
Coffs Harbour	157	22.5	244	34.9	173	24.7	12	1.7	81	11.6	23	3.3	9	1.3	0	0.0	699	100.0
Lismore Base	132	15.2	332	38.2	240	27.6	9	1.0	106	12.2	33	3.8	14	1.6	2	0.2	868	100.0
Tweed Heads	184	19.8	310	33.3	297	31.9	21	2.3	77	8.3	29	3.1	12	1.3	1	0.1	931	100.0
Port Macquarie Base	107	21.1	167	33.0	133	26.3	9	1.8	61	12.1	20	4.0	9	1.8	0	0.0	506	100.0
Dubbo Base	186	21.2	338	38.5	189	21.6	14	1.6	113	12.9	31	3.5	6	0.7	0	0.0	877	100.0
Wollongong	353	20.0	572	32.5	502	28.5	32	1.8	210	11.9	84	4.8	9	0.5	0	0.0	1762	100.0
Wagga Wagga Base	126	18.8	267	39.8	153	22.8	9	1.3	81	12.1	31	4.6	4	0.6	0	0.0	671	100.0
TOTAL	2036	16.5	3971	32.1	3616	29.2	247	2.0	1649	13.3	742	6.0	111	0.9	3	0.0	12375	100.0
Level 4																		
Canterbury	212	17.1	255	20.5	360	29.0	40	3.2	275	22.1	56	4.5	45	3.6	0	0.0	1243	100.0
Hornsby	106	11.6	250	27.4	354	38.7	36	3.9	90	9.8	73	8.0	5	0.5	0	0.0	914	100.0
Manly	63	9.2	167	24.5	263	38.5	21	3.1	107	15.7	60	8.8	2	0.3	0	0.0	683	100.0
Mona Vale	91	16.9	161	29.8	180	33.3	28	5.2	56	10.4	22	4.1	2	0.4	0	0.0	540	100.0
Sutherland	150	14.0	292	27.3	323	30.2	14	1.3	205	19.2	77	7.2	9	0.8	0	0.0	1070	100.0

(Continued on next page)

TABLE 44: (Continued)

Maternity service level-hospital	Perineal status																	
	Intact		1st degree tear/ graze		2nd degree tear		3rd or 4th degree tear		Episiotomy		Combined tear and episiotomy		Other		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Campbelltown	573	22.5	627	24.6	789	30.9	62	2.4	367	14.4	25	1.0	99	3.9	9	0.4	2551	100.0
Bankstown-Lidcombe	342	22.2	332	21.5	420	27.2	26	1.7	307	19.9	51	3.3	57	3.7	7	0.5	1542	100.0
Grafton Base	87	28.5	126	41.3	66	21.6	4	1.3	13	4.3	6	2.0	3	1.0	0	0.0	305	100.0
Armidale	52	19.0	113	41.4	61	22.3	3	1.1	29	10.6	13	4.8	2	0.7	0	0.0	273	100.0
Tamworth Base	145	21.0	245	35.4	166	24.0	8	1.2	85	12.3	34	4.9	7	1.0	2	0.3	692	100.0
Manning Base	88	17.6	205	40.9	135	26.9	7	1.4	34	6.8	20	4.0	12	2.4	0	0.0	501	100.0
Orange Base	114	16.0	266	37.4	177	24.9	14	2.0	75	10.5	58	8.2	5	0.7	2	0.3	711	100.0
Maitland	230	21.3	399	37.0	301	27.9	33	3.1	74	6.9	32	3.0	9	0.8	1	0.1	1079	100.0
Griffith Base	88	24.9	131	37.0	82	23.2	3	0.8	36	10.2	13	3.7	1	0.3	0	0.0	354	100.0
TOTAL	2341	18.8	3569	28.6	3677	29.5	299	2.4	1753	14.1	540	4.3	258	2.1	21	0.2	12458	100.0
Level 3																		
Auburn	173	16.6	312	30.0	298	28.6	14	1.3	148	14.2	81	7.8	5	0.5	10	1.0	1041	100.0
Blue Mountains	16	10.0	64	40.0	62	38.8	4	2.5	7	4.4	6	3.8	0	0.0	1	0.6	160	100.0
Fairfield	385	27.9	293	21.3	389	28.2	50	3.6	203	14.7	24	1.7	34	2.5	0	0.0	1378	100.0
Hawkesbury	80	19.0	145	34.5	109	26.0	14	3.3	45	10.7	19	4.5	3	0.7	5	1.2	420	100.0
Kempsey	55	25.5	96	44.4	45	20.8	5	2.3	6	2.8	6	2.8	3	1.4	0	0.0	216	100.0
Inverell	48	28.7	58	34.7	21	12.6	0	0.0	37	22.2	2	1.2	1	0.6	0	0.0	167	100.0
Mudgee	41	21.6	90	47.4	37	19.5	2	1.1	17	8.9	2	1.1	0	0.0	1	0.5	190	100.0
Bathurst Base	54	14.6	157	42.5	99	26.8	13	3.5	27	7.3	14	3.8	5	1.4	0	0.0	369	100.0
Lithgow	24	16.7	70	48.6	30	20.8	0	0.0	13	9.0	6	4.2	1	0.7	0	0.0	144	100.0
Bega	44	24.0	62	33.9	48	26.2	3	1.6	19	10.4	2	1.1	5	2.7	0	0.0	183	100.0
Goulburn Base	50	25.6	37	19.0	62	31.8	10	5.1	32	16.4	4	2.1	0	0.0	0	0.0	195	100.0
Moruya	61	28.0	84	38.5	45	20.6	8	3.7	16	7.3	2	0.9	2	0.9	0	0.0	218	100.0
Queanbeyan	53	15.5	133	38.9	86	25.1	12	3.5	35	10.2	20	5.8	3	0.9	0	0.0	342	100.0
Bowral	73	23.8	84	27.4	76	24.8	3	1.0	54	17.6	2	0.7	15	4.9	0	0.0	307	100.0
Shoalhaven	190	31.3	186	30.6	139	22.9	13	2.1	63	10.4	11	1.8	3	0.5	2	0.3	607	100.0
Broken Hill Base	55	33.7	69	42.3	32	19.6	2	1.2	3	1.8	2	1.2	0	0.0	0	0.0	163	100.0
Other hospitals	309	25.9	441	37.0	259	21.7	17	1.4	97	8.1	52	4.4	14	1.2	3	0.3	1192	100.0
TOTAL	1711	23.5	2381	32.7	1837	25.2	170	2.3	822	11.3	255	3.5	94	1.3	22	0.3	7292	100.0
Level 2																		
TOTAL	283	28.2	428	42.6	248	24.7	7	0.7	23	2.3	8	0.8	5	0.5	2	0.2	1004	100.0
Private																		
Mater, North Sydney	164	14.4	250	21.9	383	33.6	7	0.6	321	28.2	10	0.9	5	0.4	0	0.0	1140	100.0
North Shore Private	147	12.1	244	20.1	403	33.1	19	1.6	321	26.4	10	0.8	41	3.4	31	2.5	1216	100.0
Sydney Adventist	221	17.9	267	21.7	382	31.0	2	0.2	321	26.1	0	0.0	39	3.2	0	0.0	1232	100.0
North Gosford Private	74	20.5	72	19.9	106	29.4	0	0.0	72	19.9	14	3.9	22	6.1	1	0.3	361	100.0
Hurstville Community	87	17.7	120	24.4	156	31.7	3	0.6	113	23.0	5	1.0	5	1.0	3	0.6	492	100.0
Kareena Private	52	12.8	90	22.2	153	37.8	2	0.5	91	22.5	2	0.5	8	2.0	7	1.7	405	100.0
St. George Private	173	20.1	143	16.6	374	43.4	11	1.3	131	15.2	3	0.3	22	2.6	5	0.6	862	100.0
Prince of Wales Private	147	14.3	129	12.5	302	29.4	5	0.5	267	26.0	63	6.1	115	11.2	0	0.0	1028	100.0
Norwest Private	222	17.1	175	13.5	417	32.2	4	0.3	280	21.6	46	3.5	153	11.8	0	0.0	1297	100.0
Sydney Southwest Private	106	15.7	78	11.6	173	25.7	6	0.9	215	31.9	28	4.2	68	10.1	0	0.0	674	100.0
Nepean Private	44	10.0	43	9.7	128	29.0	6	1.4	155	35.1	22	5.0	44	10.0	0	0.0	442	100.0
Westmead Private	154	12.5	175	14.2	307	25.0	6	0.5	521	42.4	5	0.4	47	3.8	15	1.2	1230	100.0
Wollongong Private	56	11.2	76	15.1	159	31.7	3	0.6	192	38.2	0	0.0	16	3.2	0	0.0	502	100.0
Newcastle Private	167	14.7	123	10.8	456	40.1	33	2.9	116	10.2	60	5.3	182	16.0	0	0.0	1137	100.0
Calvary, Wagga Wagga	34	20.2	39	23.2	49	29.2	0	0.0	35	20.8	0	0.0	8	4.8	3	1.8	168	100.0
TOTAL	1848	15.2	2024	16.6	3948	32.4	107	0.9	3151	25.9	268	2.2	775	6.4	65	0.5	12186	100.0
TOTAL NSW*	10962	16.8	17644	27.0	19773	30.3	1392	2.1	10561	16.2	3281	5.0	1526	2.3	125	0.2	65264	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Birth weight

Table 45 shows the birth weight of babies for local health districts, and Table 46 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 45: BIRTHS BY BIRTH WEIGHT AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Birth weight											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	63	0.9	55	0.8	398	5.8	6376	92.5	4	0.1	6896	100.0
South Western Sydney	108	1.0	59	0.5	620	5.5	10546	92.9	21	0.2	11354	100.0
South Eastern Sydney	92	1.1	57	0.7	497	6.1	7493	92.1	1	0.0	8140	100.0
Illawarra Shoalhaven	7	0.2	11	0.3	207	6.1	3192	93.4	0	0.0	3417	100.0
Western Sydney	123	1.2	85	0.8	586	5.7	9496	92.3	1	0.0	10291	100.0
Nepean Blue Mountains	61	1.1	61	1.1	342	6.4	4844	91.2	3	0.1	5311	100.0
Northern Sydney	65	1.1	58	1.0	283	4.6	5688	93.3	0	0.0	6094	100.0
Central Coast	21	0.7	3	0.1	140	4.8	2754	94.3	3	0.1	2921	100.0
Hunter New England	90	1.0	92	1.0	590	6.6	8177	91.4	1	0.0	8950	100.0
Northern NSW	9	0.3	4	0.1	128	4.2	2916	95.4	1	0.0	3058	100.0
Mid North Coast	11	0.5	3	0.1	105	4.8	2081	94.4	4	0.2	2204	100.0
Southern NSW	4	0.3	3	0.2	27	1.9	1410	97.6	0	0.0	1444	100.0
Murrumbidgee	12	0.6	10	0.5	108	5.3	1919	93.7	0	0.0	2049	100.0
Western NSW	24	0.7	9	0.3	181	5.2	3293	93.8	2	0.1	3509	100.0
Far West	1	0.4	0	0.0	7	3.0	222	96.1	1	0.4	231	100.0
Private Hospitals	46	0.2	24	0.1	903	4.0	21774	95.6	28	0.1	22775	100.0
TOTAL*	737	0.7	534	0.5	5122	5.2	92263	93.5	71	0.1	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total includes births at home assisted by independent midwives.

TABLE 46: BIRTHS BY BIRTH WEIGHT, HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level–hospital	Birth weight											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6												
Royal Prince Alfred	60	1.2	55	1.1	321	6.3	4686	91.4	3	0.1	5125	100.0
Royal North Shore	53	1.8	56	1.9	201	6.7	2699	89.7	0	0.0	3009	100.0
Royal Hospital for Women	77	1.8	55	1.3	278	6.7	3759	90.1	1	0.0	4170	100.0
Liverpool	77	2.2	54	1.5	279	7.9	3107	88.3	3	0.1	3520	100.0
Nepean	59	1.4	61	1.5	317	7.6	3749	89.6	0	0.0	4186	100.0
Westmead	91	1.6	80	1.4	369	6.5	5137	90.5	0	0.0	5677	100.0
John Hunter	80	2.0	81	2.0	375	9.3	3515	86.8	0	0.0	4051	100.0
TOTAL	497	1.7	442	1.5	2140	7.2	26652	89.6	7	0.0	29738	100.0
Level 5												
Gosford	21	0.8	3	0.1	140	5.0	2619	94.0	2	0.1	2785	100.0
St. George	10	0.4	1	0.0	188	7.3	2384	92.3	0	0.0	2583	100.0
Blacktown	26	0.8	4	0.1	172	5.3	3054	93.8	0	0.0	3256	100.0
Coffs Harbour	3	0.3	2	0.2	57	5.1	1045	94.3	1	0.1	1108	100.0
Lismore Base	3	0.3	1	0.1	51	4.4	1092	95.1	1	0.1	1148	100.0
Tweed Heads	4	0.3	2	0.2	47	3.8	1184	95.7	0	0.0	1237	100.0
Port Macquarie Base	8	1.0	1	0.1	42	5.4	719	93.0	3	0.4	773	100.0
Dubbo Base	8	0.6	4	0.3	75	5.9	1182	93.1	1	0.1	1270	100.0
Wollongong	6	0.2	11	0.4	181	7.1	2334	92.2	0	0.0	2532	100.0
Wagga Wagga Base	8	0.8	6	0.6	64	6.2	950	92.4	0	0.0	1028	100.0
TOTAL	97	0.5	35	0.2	1017	5.7	16563	93.5	8	0.0	17720	100.0
Level 4												
Canterbury	3	0.2	0	0.0	77	4.3	1690	95.4	1	0.1	1771	100.0
Hornsby	4	0.3	2	0.2	31	2.5	1188	97.0	0	0.0	1225	100.0
Manly	2	0.2	0	0.0	34	3.4	956	96.4	0	0.0	992	100.0
Mona Vale	6	0.8	0	0.0	17	2.2	742	97.0	0	0.0	765	100.0
Sutherland	5	0.4	1	0.1	31	2.2	1350	97.3	0	0.0	1387	100.0
Campbelltown	15	0.4	3	0.1	179	5.3	3181	93.9	11	0.3	3389	100.0
Bankstown-Lidcombe	10	0.5	1	0.0	92	4.2	2091	95.3	1	0.0	2195	100.0
Grafton Base	1	0.2	1	0.2	24	5.6	400	93.9	0	0.0	426	100.0
Armidale	1	0.2	1	0.2	32	7.8	377	91.7	0	0.0	411	100.0

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TABLE 46: (Continued)

Maternity service level–hospital	Birth weight											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Tamworth Base	5	0.5	5	0.5	53	5.3	946	93.8	0	0.0	1009	100.0
Manning Base	1	0.2	0	0.0	32	4.8	629	95.0	0	0.0	662	100.0
Orange Base	14	1.3	3	0.3	67	6.2	999	92.2	1	0.1	1084	100.0
Maitland	2	0.1	2	0.1	69	4.7	1395	95.0	0	0.0	1468	100.0
Griffith Base	2	0.4	4	0.7	34	6.3	498	92.6	0	0.0	538	100.0
TOTAL	71	0.4	23	0.1	772	4.5	16442	94.9	14	0.1	17322	100.0
Level 3												
Auburn	6	0.4	1	0.1	45	3.3	1305	96.1	1	0.1	1358	100.0
Blue Mountains	0	0.0	0	0.0	2	0.8	232	98.3	2	0.8	236	100.0
Fairfield	6	0.3	1	0.1	61	3.4	1731	96.0	5	0.3	1804	100.0
Hawkesbury	2	0.3	0	0.0	16	2.4	660	97.3	0	0.0	678	100.0
Kempsey	0	0.0	0	0.0	6	2.2	268	97.8	0	0.0	274	100.0
Inverell	1	0.4	0	0.0	10	4.0	239	95.6	0	0.0	250	100.0
Mudgee	0	0.0	1	0.4	5	2.0	241	97.6	0	0.0	247	100.0
Bathurst Base	2	0.4	0	0.0	24	4.8	472	94.8	0	0.0	498	100.0
Lithgow	0	0.0	0	0.0	7	3.3	203	96.2	1	0.5	211	100.0
Bega	0	0.0	0	0.0	6	2.3	251	97.7	0	0.0	257	100.0
Goulburn Base	0	0.0	2	0.7	6	2.1	279	97.2	0	0.0	287	100.0
Moruya	3	1.0	1	0.3	7	2.3	291	96.4	0	0.0	302	100.0
Queanbeyan	0	0.0	0	0.0	6	1.3	444	98.7	0	0.0	450	100.0
Bowral	0	0.0	0	0.0	9	2.0	436	97.8	1	0.2	446	100.0
Shoalhaven	1	0.1	0	0.0	26	3.0	841	96.9	0	0.0	868	100.0
Broken Hill Base	1	0.4	0	0.0	7	3.0	222	96.1	1	0.4	231	100.0
Other hospitals	2	0.1	4	0.3	34	2.1	1556	97.5	0	0.0	1596	100.0
TOTAL	24	0.2	10	0.1	277	2.8	9671	96.8	11	0.1	9993	100.0
Level 2												
TOTAL	2	0.2	0	0.0	13	1.2	1060	98.4	2	0.2	1077	100.0
Private												
Mater, North Sydney	2	0.1	0	0.0	105	4.4	2302	95.6	0	0.0	2409	100.0
North Shore Private	6	0.2	9	0.4	115	4.5	2428	94.9	1	0.0	2559	100.0
Sydney Adventist	6	0.3	4	0.2	70	3.4	1987	96.1	0	0.0	2067	100.0
North Gosford Private	6	0.8	0	0.0	26	3.6	692	95.3	2	0.3	726	100.0
Hurstville Community	0	0.0	1	0.1	25	3.0	801	96.4	4	0.5	831	100.0
Kareena Private	1	0.1	0	0.0	20	2.5	774	97.4	0	0.0	795	100.0
St. George Private	1	0.1	1	0.1	78	4.9	1527	95.0	0	0.0	1607	100.0
Prince of Wales Private	2	0.1	1	0.0	74	3.3	2138	96.3	5	0.2	2220	100.0
Norwest Private	5	0.2	0	0.0	94	4.5	1988	95.3	0	0.0	2087	100.0
Sydney Southwest Private	2	0.2	0	0.0	43	4.1	1010	95.7	0	0.0	1055	100.0
Nepean Private	1	0.1	1	0.1	33	4.1	771	95.7	0	0.0	806	100.0
Westmead Private	10	0.4	4	0.2	95	4.2	2153	95.1	1	0.0	2263	100.0
Wollongong Private	1	0.1	2	0.2	26	2.9	880	96.8	0	0.0	909	100.0
Newcastle Private	2	0.1	1	0.0	79	3.9	1923	95.2	15	0.7	2020	100.0
Calvary, Wagga Wagga	1	0.3	0	0.0	20	5.0	378	94.7	0	0.0	399	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	22	100.0	0	0.0	22	100.0
TOTAL	46	0.2	24	0.1	903	4.0	21774	95.6	28	0.1	22775	100.0
TOTAL NSW*	737	0.7	534	0.5	5122	5.2	92263	93.5	71	0.1	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Gestational age

Table 47 shows the gestational age of babies for local health districts, and Table 48 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 47: BIRTHS BY GESTATIONAL AGE AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Gestational age											
	<32		32–33		34–36		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	125	1.8	55	0.8	401	5.8	6310	91.5	5	0.1	6896	100.0
South Western Sydney	171	1.5	104	0.9	633	5.6	10290	90.6	156	1.4	11354	100.0
South Eastern Sydney	162	2.0	69	0.8	355	4.4	7550	92.8	4	0.0	8140	100.0
Illawarra Shoalhaven	15	0.4	37	1.1	219	6.4	3146	92.1	0	0.0	3417	100.0
Western Sydney	198	1.9	96	0.9	408	4.0	9587	93.2	2	0.0	10291	100.0
Nepean Blue Mountains	131	2.5	88	1.7	309	5.8	4782	90.0	1	0.0	5311	100.0
Northern Sydney	124	2.0	56	0.9	221	3.6	5691	93.4	2	0.0	6094	100.0
Central Coast	22	0.8	21	0.7	138	4.7	2739	93.8	1	0.0	2921	100.0
Hunter New England	203	2.3	107	1.2	490	5.5	8148	91.0	2	0.0	8950	100.0
Northern NSW	15	0.5	15	0.5	116	3.8	2909	95.1	3	0.1	3058	100.0
Mid North Coast	15	0.7	5	0.2	131	5.9	2050	93.0	3	0.1	2204	100.0
Southern NSW	10	0.7	4	0.3	26	1.8	1404	97.2	0	0.0	1444	100.0
Murrumbidgee	24	1.2	11	0.5	102	5.0	1912	93.3	0	0.0	2049	100.0
Western NSW	33	0.9	18	0.5	209	6.0	3249	92.6	0	0.0	3509	100.0
Far West	1	0.4	0	0.0	5	2.2	224	97.0	1	0.4	231	100.0
Private Hospitals	66	0.3	77	0.3	1339	5.9	21262	93.4	31	0.1	22775	100.0
TOTAL*	1315	1.3	763	0.8	5102	5.2	91335	92.5	212	0.2	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total includes births at home assisted by independent midwives.

TABLE 48: BIRTHS BY GESTATIONAL AGE, HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level–hospital	Gestational age											
	<32		32–33		34–36		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6												
Royal Prince Alfred	122	2.4	49	1.0	326	6.4	4623	90.2	5	0.1	5125	100.0
Royal North Shore	109	3.6	52	1.7	123	4.1	2725	90.6	0	0.0	3009	100.0
Royal Hospital for Women	140	3.4	47	1.1	199	4.8	3783	90.7	1	0.0	4170	100.0
Liverpool	133	3.8	83	2.4	260	7.4	3020	85.8	24	0.7	3520	100.0
Nepean	128	3.1	84	2.0	277	6.6	3696	88.3	1	0.0	4186	100.0
Westmead	161	2.8	77	1.4	247	4.4	5192	91.5	0	0.0	5677	100.0
John Hunter	181	4.5	100	2.5	280	6.9	3490	86.2	0	0.0	4051	100.0
TOTAL	974	3.3	492	1.7	1712	5.8	26529	89.2	31	0.1	29738	100.0
Level 5												
Gosford	22	0.8	21	0.8	138	5.0	2603	93.5	1	0.0	2785	100.0
St. George	14	0.5	21	0.8	121	4.7	2426	93.9	1	0.0	2583	100.0
Blacktown	30	0.9	16	0.5	131	4.0	3079	94.6	0	0.0	3256	100.0
Coffs Harbour	6	0.5	2	0.2	74	6.7	1025	92.5	1	0.1	1108	100.0
Lismore Base	4	0.3	11	1.0	48	4.2	1083	94.3	2	0.2	1148	100.0
Tweed Heads	8	0.6	3	0.2	49	4.0	1176	95.1	1	0.1	1237	100.0
Port Macquarie Base	9	1.2	3	0.4	49	6.3	711	92.0	1	0.1	773	100.0
Dubbo Base	12	0.9	13	1.0	101	8.0	1144	90.1	0	0.0	1270	100.0
Wollongong	14	0.6	34	1.3	185	7.3	2299	90.8	0	0.0	2532	100.0
Wagga Wagga Base	17	1.7	9	0.9	60	5.8	942	91.6	0	0.0	1028	100.0
TOTAL	136	0.8	133	0.8	956	5.4	16488	93.0	7	0.0	17720	100.0
Level 4												
Canterbury	3	0.2	6	0.3	75	4.2	1687	95.3	0	0.0	1771	100.0
Hornsby	5	0.4	2	0.2	41	3.3	1176	96.0	1	0.1	1225	100.0
Manly	4	0.4	1	0.1	41	4.1	945	95.3	1	0.1	992	100.0
Mona Vale	6	0.8	1	0.1	16	2.1	742	97.0	0	0.0	765	100.0
Sutherland	8	0.6	1	0.1	35	2.5	1341	96.7	2	0.1	1387	100.0
Campbelltown	17	0.5	12	0.4	200	5.9	3089	91.1	71	2.1	3389	100.0
Bankstown-Lidcombe	13	0.6	3	0.1	80	3.6	2054	93.6	45	2.1	2195	100.0
Grafton Base	2	0.5	1	0.2	16	3.8	407	95.5	0	0.0	426	100.0
Armidale	1	0.2	1	0.2	27	6.6	381	92.7	1	0.2	411	100.0

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TABLE 48: (Continued)

Maternity service level–hospital	Gestational age											
	<32		32–33		34–36		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Tamworth Base	12	1.2	1	0.1	54	5.4	942	93.4	0	0.0	1009	100.0
Manning Base	1	0.2	1	0.2	33	5.0	627	94.7	0	0.0	662	100.0
Orange Base	16	1.5	2	0.2	75	6.9	991	91.4	0	0.0	1084	100.0
Maitland	3	0.2	2	0.1	70	4.8	1393	94.9	0	0.0	1468	100.0
Griffith Base	6	1.1	2	0.4	32	5.9	498	92.6	0	0.0	538	100.0
TOTAL	97	0.6	36	0.2	795	4.6	16273	93.9	121	0.7	17322	100.0
Level 3												
Auburn	7	0.5	3	0.2	30	2.2	1316	96.9	2	0.1	1358	100.0
Blue Mountains	0	0.0	0	0.0	0	0.0	236	100.0	0	0.0	236	100.0
Fairfield	8	0.4	6	0.3	76	4.2	1704	94.5	10	0.6	1804	100.0
Hawkesbury	3	0.4	2	0.3	26	3.8	647	95.4	0	0.0	678	100.0
Kempsey	0	0.0	0	0.0	8	2.9	266	97.1	0	0.0	274	100.0
Inverell	1	0.4	0	0.0	17	6.8	232	92.8	0	0.0	250	100.0
Mudgee	1	0.4	0	0.0	2	0.8	244	98.8	0	0.0	247	100.0
Bathurst Base	2	0.4	2	0.4	28	5.6	466	93.6	0	0.0	498	100.0
Lithgow	0	0.0	2	0.9	6	2.8	203	96.2	0	0.0	211	100.0
Bega	0	0.0	1	0.4	7	2.7	249	96.9	0	0.0	257	100.0
Goulburn Base	3	1.0	0	0.0	7	2.4	277	96.5	0	0.0	287	100.0
Moruya	7	2.3	0	0.0	9	3.0	286	94.7	0	0.0	302	100.0
Queanbeyan	0	0.0	3	0.7	2	0.4	445	98.9	0	0.0	450	100.0
Bowral	0	0.0	0	0.0	17	3.8	423	94.8	6	1.3	446	100.0
Shoalhaven	1	0.1	3	0.3	31	3.6	833	96.0	0	0.0	868	100.0
Broken Hill Base	1	0.4	0	0.0	5	2.2	224	97.0	1	0.4	231	100.0
Other hospitals	7	0.4	3	0.2	20	1.3	1565	98.1	1	0.1	1596	100.0
TOTAL	41	0.4	25	0.3	291	2.9	9616	96.2	20	0.2	9993	100.0
Level 2												
TOTAL	1	0.1	0	0.0	6	0.6	1069	99.3	1	0.1	1077	100.0
Private												
Mater, North Sydney	1	0.0	16	0.7	114	4.7	2276	94.5	2	0.1	2409	100.0
North Shore Private	11	0.4	25	1.0	147	5.7	2376	92.8	0	0.0	2559	100.0
Sydney Adventist	10	0.5	9	0.4	102	4.9	1946	94.1	0	0.0	2067	100.0
North Gosford Private	6	0.8	1	0.1	57	7.9	661	91.0	1	0.1	726	100.0
Hurstville Community	2	0.2	2	0.2	26	3.1	774	93.1	27	3.2	831	100.0
Kareena Private	1	0.1	3	0.4	53	6.7	738	92.8	0	0.0	795	100.0
St. George Private	2	0.1	3	0.2	118	7.3	1484	92.3	0	0.0	1607	100.0
Prince of Wales Private	2	0.1	6	0.3	111	5.0	2101	94.6	0	0.0	2220	100.0
Norwest Private	6	0.3	4	0.2	119	5.7	1958	93.8	0	0.0	2087	100.0
Sydney Southwest Private	2	0.2	0	0.0	57	5.4	996	94.4	0	0.0	1055	100.0
Nepean Private	3	0.4	0	0.0	65	8.1	738	91.6	0	0.0	806	100.0
Westmead Private	13	0.6	4	0.2	123	5.4	2123	93.8	0	0.0	2263	100.0
Wollongong Private	3	0.3	0	0.0	44	4.8	862	94.8	0	0.0	909	100.0
Newcastle Private	3	0.1	1	0.0	159	7.9	1857	91.9	0	0.0	2020	100.0
Calvary, Wagga Wagga	1	0.3	3	0.8	44	11.0	351	88.0	0	0.0	399	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	21	95.5	1	4.5	22	100.0
TOTAL	66	0.3	77	0.3	1339	5.9	21262	93.4	31	0.1	22775	100.0
TOTAL NSW*	1315	1.3	763	0.8	5102	5.2	91335	92.5	212	0.2	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Neonatal resuscitation

Table 49 shows the type of neonatal resuscitation for local health districts, and Table 50 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 49: BIRTHS BY TYPE OF RESUSCITATION AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Resuscitation of baby															
	None/Minimal		Suction		O2 Therapy		IPPR by mask		Intubation and IPPR		External cardiac massage and ventilation		CPAP ventilation		TOTAL†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	5722	83.0	159	2.3	221	3.2	614	8.9	48	0.7	31	0.4	98	1.4	6896	100.0
South Western Sydney	9990	88.0	233	2.1	276	2.4	615	5.4	19	0.2	57	0.5	145	1.3	11354	100.0
South Eastern Sydney	6499	79.8	459	5.6	193	2.4	284	3.5	74	0.9	42	0.5	589	7.2	8140	100.0
Illawarra Shoalhaven	2975	87.1	93	2.7	90	2.6	127	3.7	2	0.1	11	0.3	119	3.5	3417	100.0
Western Sydney	7891	76.7	1057	10.3	162	1.6	241	2.3	104	1.0	38	0.4	796	7.7	10291	100.0
Nepean Blue Mountains	4195	79.0	320	6.0	174	3.3	156	2.9	33	0.6	17	0.3	416	7.8	5311	100.0
Northern Sydney	4926	80.8	274	4.5	105	1.7	175	2.9	45	0.7	18	0.3	551	9.0	6094	100.0
Central Coast	2364	80.9	121	4.1	46	1.6	207	7.1	1	0.0	11	0.4	171	5.9	2921	100.0
Hunter New England	7143	79.8	200	2.2	86	1.0	361	4.0	30	0.3	40	0.4	1086	12.1	8950	100.0
Northern NSW	2498	81.7	103	3.4	25	0.8	103	3.4	3	0.1	6	0.2	320	10.5	3058	100.0
Mid North Coast	1855	84.2	34	1.5	17	0.8	84	3.8	0	0.0	8	0.4	206	9.3	2204	100.0
Southern NSW	1247	86.4	16	1.1	17	1.2	56	3.9	3	0.2	6	0.4	99	6.9	1444	100.0
Murrumbidgee	1756	85.7	45	2.2	46	2.2	103	5.0	3	0.1	8	0.4	88	4.3	2049	100.0
Western NSW	2965	84.5	87	2.5	91	2.6	177	5.0	5	0.1	20	0.6	164	4.7	3509	100.0
Far West	201	87.0	9	3.9	2	0.9	13	5.6	1	0.4	2	0.9	2	0.9	231	100.0
Private Hospitals	20549	90.2	536	2.4	770	3.4	736	3.2	17	0.1	30	0.1	31	0.1	22775	100.0
TOTAL†	82849	83.9	3746	3.8	2324	2.4	4052	4.1	388	0.4	345	0.3	4881	4.9	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

IPPR: Intermittent positive pressure respiration. CPAP: Continuous positive airway pressure.

† Total includes births where resuscitation type was not stated.

* Total includes births at home assisted by independent midwives.

TABLE 50: BIRTHS BY TYPE OF RESUSCITATION, HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level-hospital	Resuscitation of baby																		
	None/Minimal		Suction		O2 Therapy		IPPR by mask		Intubation and IPPR		External cardiac massage and ventilation		CPAP ventilation		Not stated		TOTAL†		
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	
Level 6																			
Royal Prince Alfred	4205	82.0	86	1.7	148	2.9	520	10.1	48	0.9	27	0.5	89	1.7	2	0.0	5125	100.0	
Royal North Shore	2329	77.4	145	4.8	43	1.4	75	2.5	41	1.4	9	0.3	367	12.2	0	0.0	3009	100.0	
Royal Hospital for Women	3105	74.5	350	8.4	109	2.6	175	4.2	71	1.7	15	0.4	345	8.3	0	0.0	4170	100.0	
Liverpool	2934	83.4	119	3.4	94	2.7	304	8.6	14	0.4	13	0.4	39	1.1	3	0.1	3520	100.0	
Nepean	3249	77.6	251	6.0	111	2.7	133	3.2	32	0.8	14	0.3	396	9.5	0	0.0	4186	100.0	
Westmead	4371	77.0	438	7.7	54	1.0	161	2.8	96	1.7	22	0.4	533	9.4	2	0.0	5677	100.0	
John Hunter	3035	74.9	84	2.1	17	0.4	156	3.9	23	0.6	12	0.3	724	17.9	0	0.0	4051	100.0	
TOTAL	23228	78.1	1473	5.0	576	1.9	1524	5.1	325	1.1	112	0.4	2493	8.4	7	0.0	29738	100.0	
Level 5																			
Gosford	2238	80.4	117	4.2	45	1.6	202	7.3	1	0.0	11	0.4	171	6.1	0	0.0	2785	100.0	
St. George	2164	83.8	76	2.9	60	2.3	83	3.2	2	0.1	21	0.8	177	6.9	0	0.0	2583	100.0	
Blacktown	2303	70.7	570	17.5	54	1.7	51	1.6	8	0.2	11	0.3	259	8.0	0	0.0	3256	100.0	
Coffs Harbour	941	84.9	19	1.7	12	1.1	42	3.8	0	0.0	2	0.2	92	8.3	0	0.0	1108	100.0	
Lismore Base	908	79.1	51	4.4	15	1.3	50	4.4	1	0.1	1	0.1	122	10.6	0	0.0	1148	100.0	
Tweed Heads	1025	82.9	37	3.0	5	0.4	35	2.8	2	0.2	4	0.3	129	10.4	0	0.0	1237	100.0	
Port Macquarie Base	636	82.3	13	1.7	5	0.6	26	3.4	0	0.0	4	0.5	89	11.5	0	0.0	773	100.0	
Dubbo Base	1018	80.2	61	4.8	19	1.5	59	4.6	2	0.2	7	0.6	104	8.2	0	0.0	1270	100.0	
Wollongong	2192	86.6	74	2.9	72	2.8	90	3.6	2	0.1	9	0.4	93	3.7	0	0.0	2532	100.0	
Wagga Wagga Base	847	82.4	31	3.0	7	0.7	65	6.3	2	0.2	7	0.7	69	6.7	0	0.0	1028	100.0	
TOTAL	14272	80.5	1049	5.9	294	1.7	703	4.0	20	0.1	77	0.4	1305	7.4	0	0.0	17720	100.0	
Level 4																			
Canterbury	1517	85.7	73	4.1	73	4.1	94	5.3	0	0.0	4	0.2	9	0.5	1	0.1	1771	100.0	
Hornsby	1009	82.4	64	5.2	24	2.0	26	2.1	2	0.2	4	0.3	96	7.8	0	0.0	1225	100.0	
Manly	825	83.2	50	5.0	27	2.7	43	4.3	0	0.0	4	0.4	43	4.3	0	0.0	992	100.0	
Mona Vale	671	87.7	15	2.0	5	0.7	26	3.4	2	0.3	1	0.1	45	5.9	0	0.0	765	100.0	
Sutherland	1230	88.7	33	2.4	24	1.7	26	1.9	1	0.1	6	0.4	67	4.8	0	0.0	1387	100.0	
Campbelltown	3100	91.5	17	0.5	44	1.3	138	4.1	3	0.1	21	0.6	56	1.7	10	0.3	3389	100.0	

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TABLE 50: (Continued)

Maternity service level–hospital	Resuscitation of baby																	
	None/Minimal		Suction		O2 Therapy		IPPR by mask		Intubation and IPPR		External cardiac massage and ventilation		CPAP ventilation		Not stated		TOTAL†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Bankstown-Lidcombe	1975	90.0	43	2.0	41	1.9	93	4.2	2	0.1	17	0.8	23	1.0	1	0.0	2195	100.0
Grafton Base	352	82.6	11	2.6	2	0.5	15	3.5	0	0.0	1	0.2	45	10.6	0	0.0	426	100.0
Armidale	325	79.1	6	1.5	23	5.6	15	3.6	0	0.0	1	0.2	41	10.0	0	0.0	411	100.0
Tamworth Base	792	78.5	37	3.7	13	1.3	61	6.0	6	0.6	5	0.5	95	9.4	0	0.0	1009	100.0
Manning Base	569	86.0	9	1.4	5	0.8	31	4.7	0	0.0	4	0.6	44	6.6	0	0.0	662	100.0
Orange Base	949	87.5	11	1.0	35	3.2	64	5.9	0	0.0	8	0.7	17	1.6	0	0.0	1084	100.0
Maitland	1269	86.4	23	1.6	5	0.3	37	2.5	0	0.0	11	0.7	123	8.4	0	0.0	1468	100.0
Griffith Base	466	86.6	4	0.7	28	5.2	29	5.4	0	0.0	0	0.0	11	2.0	0	0.0	538	100.0
TOTAL	15049	86.9	396	2.3	349	2.0	698	4.0	16	0.1	87	0.5	715	4.1	12	0.1	17322	100.0
Level 3																		
Auburn	1217	89.6	49	3.6	54	4.0	29	2.1	0	0.0	5	0.4	4	0.3	0	0.0	1358	100.0
Blue Mountains	200	84.7	14	5.9	8	3.4	4	1.7	1	0.4	0	0.0	9	3.8	0	0.0	236	100.0
Fairfield	1598	88.6	51	2.8	80	4.4	48	2.7	0	0.0	4	0.2	19	1.1	4	0.2	1804	100.0
Hawkesbury	563	83.0	50	7.4	47	6.9	9	1.3	0	0.0	2	0.3	7	1.0	0	0.0	678	100.0
Kempsey	230	83.9	2	0.7	0	0.0	16	5.8	0	0.0	2	0.7	24	8.8	0	0.0	274	100.0
Inverell	178	71.2	24	9.6	9	3.6	32	12.8	0	0.0	0	0.0	7	2.8	0	0.0	250	100.0
Mudgee	230	93.1	0	0.0	2	0.8	12	4.9	0	0.0	1	0.4	2	0.8	0	0.0	247	100.0
Bathurst Base	408	81.9	13	2.6	13	2.6	31	6.2	2	0.4	0	0.0	31	6.2	0	0.0	498	100.0
Lithgow	183	86.7	5	2.4	8	3.8	10	4.7	0	0.0	1	0.5	4	1.9	0	0.0	211	100.0
Bega	222	86.4	1	0.4	6	2.3	12	4.7	0	0.0	1	0.4	15	5.8	0	0.0	257	100.0
Goulburn Base	231	80.5	13	4.5	4	1.4	8	2.8	1	0.3	2	0.7	28	9.8	0	0.0	287	100.0
Moruya	277	91.7	0	0.0	6	2.0	12	4.0	2	0.7	0	0.0	5	1.7	0	0.0	302	100.0
Queanbeyan	382	84.9	2	0.4	1	0.2	15	3.3	0	0.0	0	0.0	50	11.1	0	0.0	450	100.0
Bowral	383	85.9	3	0.7	17	3.8	32	7.2	0	0.0	2	0.4	8	1.8	1	0.2	446	100.0
Shoalhaven	766	88.2	19	2.2	18	2.1	37	4.3	0	0.0	2	0.2	26	3.0	0	0.0	868	100.0
Broken Hill Base	201	87.0	9	3.9	2	0.9	13	5.6	1	0.4	2	0.9	2	0.9	1	0.4	231	100.0
Other hospitals	1407	88.2	25	1.6	44	2.8	46	2.9	3	0.2	11	0.7	56	3.5	4	0.3	1596	100.0
TOTAL	8676	86.8	280	2.8	319	3.2	366	3.7	10	0.1	35	0.4	297	3.0	10	0.1	9993	100.0
Level 2																		
TOTAL	983	91.3	12	1.1	13	1.2	25	2.3	0	0.0	4	0.4	40	3.7	0	0.0	1077	100.0
Private																		
Mater, North Sydney	2157	89.5	56	2.3	108	4.5	81	3.4	0	0.0	5	0.2	0	0.0	2	0.1	2409	100.0
North Shore Private	2293	89.6	108	4.2	89	3.5	41	1.6	0	0.0	1	0.0	1	0.0	26	1.0	2559	100.0
Sydney Adventist	1890	91.4	17	0.8	78	3.8	78	3.8	0	0.0	4	0.2	0	0.0	0	0.0	2067	100.0
North Gosford Private	621	85.5	19	2.6	29	4.0	49	6.7	0	0.0	0	0.0	0	0.0	8	1.1	726	100.0
Hurstville Community	752	90.5	24	2.9	36	4.3	7	0.8	0	0.0	1	0.1	0	0.0	11	1.3	831	100.0
Kareena Private	679	85.4	33	4.2	34	4.3	40	5.0	0	0.0	0	0.0	3	0.4	6	0.8	795	100.0
St. George Private	1274	79.3	86	5.4	191	11.9	36	2.2	2	0.1	1	0.1	4	0.2	13	0.8	1607	100.0
Prince of Wales Private	2087	94.0	19	0.9	23	1.0	76	3.4	6	0.3	2	0.1	7	0.3	0	0.0	2220	100.0
Norwest Private	1990	95.4	4	0.2	25	1.2	62	3.0	1	0.0	2	0.1	3	0.1	0	0.0	2087	100.0
Sydney Southwest Private	1035	98.1	2	0.2	6	0.6	11	1.0	0	0.0	1	0.1	0	0.0	0	0.0	1055	100.0
Nepean Private	759	94.2	3	0.4	20	2.5	20	2.5	1	0.1	3	0.4	0	0.0	0	0.0	806	100.0
Westmead Private	1987	87.8	95	4.2	82	3.6	54	2.4	2	0.1	4	0.2	1	0.0	38	1.7	2263	100.0
Wollongong Private	795	87.5	52	5.7	39	4.3	20	2.2	1	0.1	0	0.0	0	0.0	2	0.2	909	100.0
Newcastle Private	1849	91.5	9	0.4	6	0.3	135	6.7	3	0.1	6	0.3	12	0.6	0	0.0	2020	100.0
Calvary, Wagga Wagga	360	90.2	9	2.3	4	1.0	25	6.3	1	0.3	0	0.0	0	0.0	0	0.0	399	100.0
Other hospitals	21	95.5	0	0.0	0	0.0	1	4.5	0	0.0	0	0.0	0	0.0	0	0.0	22	100.0
TOTAL	20549	90.2	536	2.4	770	3.4	736	3.2	17	0.1	30	0.1	31	0.1	106	0.5	22775	100.0
TOTAL NSW†	82849	83.9	3746	3.8	2324	2.4	4052	4.1	388	0.4	345	0.3	4881	4.9	142	0.1	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

IPPR: Intermittent positive pressure respiration. CPAP: Continuous positive airway pressure.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

† Total includes births where resuscitation type was not stated.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Infant feeding

Table 51 shows infant feeding at discharge from the hospital of birth for local health districts, and Table 52 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 51: LIVE BIRTHS BY TYPE OF INFANT FEEDING AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	5278	77.0	1178	17.2	306	4.5	92	1.3	6854	100.0
South Western Sydney	6418	56.9	2360	20.9	1445	12.8	1055	9.4	11278	100.0
South Eastern Sydney	6717	83.1	904	11.2	390	4.8	73	0.9	8084	100.0
Illawarra Shoalhaven	2735	80.3	148	4.3	478	14.0	47	1.4	3408	100.0
Western Sydney	7818	76.5	1280	12.5	883	8.6	240	2.3	10221	100.0
Nepean Blue Mountains	3751	71.1	501	9.5	901	17.1	126	2.4	5279	100.0
Northern Sydney	5303	87.6	515	8.5	176	2.9	59	1.0	6053	100.0
Central Coast	2405	82.8	194	6.7	277	9.5	28	1.0	2904	100.0
Hunter New England	6784	76.2	717	8.1	1235	13.9	162	1.8	8898	100.0
Northern NSW	2635	86.6	143	4.7	161	5.3	102	3.4	3041	100.0
Mid North Coast	1806	82.4	135	6.2	204	9.3	47	2.1	2192	100.0
Southern NSW	1230	85.7	58	4.0	112	7.8	35	2.4	1435	100.0
Murrumbidgee	1503	73.7	135	6.6	373	18.3	29	1.4	2040	100.0
Western NSW	2751	79.0	198	5.7	459	13.2	74	2.1	3482	100.0
Far West	172	74.8	11	4.8	38	16.5	9	3.9	230	100.0
Private Hospitals	16142	71.1	4699	20.7	867	3.8	994	4.4	22702	100.0
TOTAL*	73524	74.9	13177	13.4	8305	8.5	3178	3.2	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total includes births at home assisted by independent midwives.

TABLE 52: LIVE BIRTHS BY TYPE OF INFANT FEEDING, HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016[#]

Maternity service level-hospital	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6										
Royal Prince Alfred	3975	78.2	858	16.9	201	4.0	52	1.0	5086	100.0
Royal North Shore	2587	86.8	288	9.7	86	2.9	20	0.7	2981	100.0
Royal Hospital for Women	3452	83.6	479	11.6	171	4.1	29	0.7	4131	100.0
Liverpool	1923	55.3	631	18.1	408	11.7	518	14.9	3480	100.0
Nepean	2843	68.4	455	10.9	755	18.2	106	2.5	4159	100.0
Westmead	4418	78.5	602	10.7	459	8.2	151	2.7	5630	100.0
John Hunter	3001	74.8	407	10.1	575	14.3	27	0.7	4010	100.0
TOTAL	22199	75.3	3720	12.6	2655	9.0	903	3.1	29477	100.0
Level 5										
Gosford	2275	82.2	193	7.0	273	9.9	27	1.0	2768	100.0
St. George	2066	80.4	341	13.3	148	5.8	15	0.6	2570	100.0
Blacktown	2510	77.4	348	10.7	331	10.2	52	1.6	3241	100.0
Coffs Harbour	924	83.8	84	7.6	79	7.2	16	1.5	1103	100.0
Lismore Base	963	84.3	65	5.7	51	4.5	64	5.6	1143	100.0
Tweed Heads	1118	90.9	44	3.6	57	4.6	11	0.9	1230	100.0
Port Macquarie Base	617	80.4	44	5.7	80	10.4	26	3.4	767	100.0
Dubbo Base	963	76.4	74	5.9	210	16.7	14	1.1	1261	100.0
Wollongong	1991	78.8	117	4.6	397	15.7	21	0.8	2526	100.0
Wagga Wagga Base	738	72.2	72	7.0	196	19.2	16	1.6	1022	100.0
TOTAL	14165	80.3	1382	7.8	1822	10.3	262	1.5	17631	100.0
Level 4										
Canterbury	1303	73.7	320	18.1	105	5.9	40	2.3	1768	100.0
Hornsby	1059	86.8	107	8.8	38	3.1	16	1.3	1220	100.0
Manly	876	88.6	82	8.3	20	2.0	11	1.1	989	100.0
Mona Vale	682	89.7	38	5.0	31	4.1	9	1.2	760	100.0
Sutherland	1199	86.7	84	6.1	71	5.1	29	2.1	1383	100.0
Campbelltown	2055	60.9	432	12.8	511	15.1	375	11.1	3373	100.0
Bankstown-Lidcombe	1395	64.0	485	22.2	241	11.0	60	2.8	2181	100.0
Grafton Base	337	79.9	31	7.3	47	11.1	7	1.7	422	100.0
Armidale	342	83.2	31	7.5	35	8.5	3	0.7	411	100.0
Tamworth Base	722	72.0	74	7.4	152	15.2	55	5.5	1003	100.0

(Continued on next page)

TABLE 52: (Continued)

Maternity service level–hospital	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Manning Base	508	76.9	45	6.8	84	12.7	24	3.6	661	100.0
Orange Base	834	77.9	87	8.1	110	10.3	40	3.7	1071	100.0
Maitland	1114	76.0	81	5.5	246	16.8	24	1.6	1465	100.0
Griffith Base	369	69.0	51	9.5	108	20.2	7	1.3	535	100.0
TOTAL	12795	74.2	1948	11.3	1799	10.4	700	4.1	17242	100.0
Level 3										
Auburn	890	65.9	330	24.4	93	6.9	37	2.7	1350	100.0
Blue Mountains	204	86.4	8	3.4	14	5.9	10	4.2	236	100.0
Fairfield	704	39.1	780	43.3	248	13.8	68	3.8	1800	100.0
Hawkesbury	557	82.5	27	4.0	86	12.7	5	0.7	675	100.0
Kempsey	223	81.7	6	2.2	41	15.0	3	1.1	273	100.0
Inverell	180	72.0	24	9.6	40	16.0	6	2.4	250	100.0
Mudgee	204	82.6	5	2.0	35	14.2	3	1.2	247	100.0
Bathurst Base	417	84.1	17	3.4	52	10.5	10	2.0	496	100.0
Lithgow	147	70.3	11	5.3	46	22.0	5	2.4	209	100.0
Bega	217	84.4	13	5.1	22	8.6	5	1.9	257	100.0
Goulburn Base	228	80.0	13	4.6	38	13.3	6	2.1	285	100.0
Moruya	259	86.9	10	3.4	20	6.7	9	3.0	298	100.0
Queanbeyan	403	90.2	20	4.5	16	3.6	8	1.8	447	100.0
Bowral	341	76.8	32	7.2	37	8.3	34	7.7	444	100.0
Shoalhaven	728	84.2	31	3.6	81	9.4	25	2.9	865	100.0
Broken Hill Base	172	74.8	11	4.8	38	16.5	9	3.9	230	100.0
Other hospitals	1295	81.3	75	4.7	196	12.3	27	1.7	1593	100.0
TOTAL	7169	72.0	1413	14.2	1103	11.1	270	2.7	9955	100.0
Level 2										
TOTAL	961	89.4	14	1.3	59	5.5	41	3.8	1075	100.0
Private										
Mater, North Sydney	1627	67.6	664	27.6	97	4.0	19	0.8	2407	100.0
North Shore Private	1820	71.4	624	24.5	94	3.7	10	0.4	2548	100.0
Sydney Adventist	1538	74.7	360	17.5	51	2.5	110	5.3	2059	100.0
North Gosford Private	606	84.4	65	9.1	45	6.3	2	0.3	718	100.0
Hurstville Community	523	63.1	218	26.3	70	8.4	18	2.2	829	100.0
Kareena Private	640	80.6	72	9.1	76	9.6	6	0.8	794	100.0
St. George Private	997	62.2	474	29.6	124	7.7	7	0.4	1602	100.0
Prince of Wales Private	1698	76.7	404	18.2	0	0.0	113	5.1	2215	100.0
Norwest Private	1481	71.2	361	17.4	0	0.0	238	11.4	2080	100.0
Sydney Southwest Private	592	56.2	299	28.4	0	0.0	162	15.4	1053	100.0
Nepean Private	554	69.1	149	18.6	0	0.0	99	12.3	802	100.0
Westmead Private	1485	65.9	557	24.7	191	8.5	19	0.8	2252	100.0
Wollongong Private	720	79.4	75	8.3	105	11.6	7	0.8	907	100.0
Newcastle Private	1505	74.7	327	16.2	0	0.0	184	9.1	2016	100.0
Calvary, Wagga Wagga	339	85.2	49	12.3	10	2.5	0	0.0	398	100.0
Other hospitals	17	77.3	1	4.5	4	18.2	0	0.0	22	100.0
TOTAL	16142	71.1	4699	20.7	867	3.8	994	4.4	22702	100.0
TOTAL NSW*	73524	74.9	13177	13.4	8305	8.5	3178	3.2	98184	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Baby discharge status

Table 53 shows the discharge status of babies for local health districts, and Table 54 for individual hospitals by maternity service level where at least 200 mothers gave birth in 2016.

TABLE 53: BABY DISCHARGE STATUS BY HOSPITAL AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2016

Local Health District	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not Stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	6666	96.7	42	0.6	14	0.2	166	2.4	8	0.1	6896	100.0
South Western Sydney	10903	96.0	76	0.7	30	0.3	319	2.8	26	0.2	11354	100.0
South Eastern Sydney	7867	96.6	56	0.7	30	0.4	170	2.1	17	0.2	8140	100.0
Illawarra Shoalhaven	3298	96.5	9	0.3	4	0.1	86	2.5	20	0.6	3417	100.0
Western Sydney	9723	94.5	70	0.7	40	0.4	361	3.5	97	0.9	10291	100.0
Nepean Blue Mountains	4964	93.5	32	0.6	16	0.3	210	4.0	89	1.7	5311	100.0
Northern Sydney	5881	96.5	41	0.7	12	0.2	159	2.6	1	0.0	6094	100.0
Central Coast	2858	97.8	17	0.6	5	0.2	39	1.3	2	0.1	2921	100.0
Hunter New England	8342	93.2	52	0.6	29	0.3	443	4.9	84	0.9	8950	100.0
Northern NSW	2919	95.5	17	0.6	2	0.1	50	1.6	70	2.3	3058	100.0
Mid North Coast	2049	93.0	12	0.5	3	0.1	113	5.1	27	1.2	2204	100.0
Southern NSW	1382	95.7	9	0.6	4	0.3	46	3.2	3	0.2	1444	100.0
Murrumbidgee	1896	92.5	9	0.4	5	0.2	136	6.6	3	0.1	2049	100.0
Western NSW	3235	92.2	27	0.8	7	0.2	211	6.0	29	0.8	3509	100.0
Far West	221	95.7	1	0.4	1	0.4	2	0.9	6	2.6	231	100.0
Private Hospitals	22518	98.9	73	0.3	7	0.0	174	0.8	3	0.0	22775	100.0
TOTAL*	94802	96.0	543	0.6	209	0.2	2686	2.7	487	0.5	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

* Total includes births at home assisted by independent midwives.

TABLE 54: BABY DISCHARGE STATUS BY HOSPITAL AND MATERNITY SERVICE LEVEL, NSW 2016*

Maternity service level-hospital	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not Stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Level 6												
Royal Prince Alfred	4942	96.4	39	0.8	13	0.3	127	2.5	4	0.1	5125	100.0
Royal North Shore	2861	95.1	28	0.9	11	0.4	109	3.6	0	0.0	3009	100.0
Royal Hospital for Women	3986	95.6	39	0.9	21	0.5	124	3.0	0	0.0	4170	100.0
Liverpool	3244	92.2	40	1.1	22	0.6	207	5.9	7	0.2	3520	100.0
Nepean	3869	92.4	27	0.6	16	0.4	196	4.7	78	1.9	4186	100.0
Westmead	5232	92.2	47	0.8	24	0.4	298	5.2	76	1.3	5677	100.0
John Hunter	3747	92.5	41	1.0	24	0.6	239	5.9	0	0.0	4051	100.0
TOTAL	27881	93.8	261	0.9	131	0.4	1300	4.4	165	0.6	29738	100.0
Level 5												
Gosford	2737	98.3	17	0.6	5	0.2	24	0.9	2	0.1	2785	100.0
St. George	2529	97.9	13	0.5	5	0.2	35	1.4	1	0.0	2583	100.0
Blacktown	3182	97.7	15	0.5	15	0.5	44	1.4	0	0.0	3256	100.0
Coffs Harbour	1036	93.5	5	0.5	0	0.0	62	5.6	5	0.5	1108	100.0
Lismore Base	1076	93.7	5	0.4	1	0.1	16	1.4	50	4.4	1148	100.0
Tweed Heads	1215	98.2	7	0.6	1	0.1	9	0.7	5	0.4	1237	100.0
Port Macquarie Base	711	92.0	6	0.8	3	0.4	33	4.3	20	2.6	773	100.0
Dubbo Base	1144	90.1	9	0.7	3	0.2	111	8.7	3	0.2	1270	100.0
Wollongong	2453	96.9	6	0.2	4	0.2	67	2.6	2	0.1	2532	100.0
Wagga Wagga Base	938	91.2	6	0.6	5	0.5	78	7.6	1	0.1	1028	100.0
TOTAL	17021	96.1	89	0.5	42	0.2	479	2.7	89	0.5	17720	100.0
Level 4												
Canterbury	1724	97.3	3	0.2	1	0.1	39	2.2	4	0.2	1771	100.0
Hornsby	1203	98.2	5	0.4	0	0.0	17	1.4	0	0.0	1225	100.0
Manly	974	98.2	3	0.3	0	0.0	14	1.4	1	0.1	992	100.0
Mona Vale	746	97.5	5	0.7	1	0.1	13	1.7	0	0.0	765	100.0
Sutherland	1352	97.5	4	0.3	4	0.3	11	0.8	16	1.2	1387	100.0
Campbelltown	3303	97.5	16	0.5	3	0.1	53	1.6	14	0.4	3389	100.0
Bankstown-Lidcombe	2146	97.8	14	0.6	3	0.1	31	1.4	1	0.0	2195	100.0
Grafton Base	412	96.7	4	0.9	0	0.0	10	2.3	0	0.0	426	100.0
Armidale	399	97.1	0	0.0	1	0.2	11	2.7	0	0.0	411	100.0
Tamworth Base	906	89.8	6	0.6	2	0.2	55	5.5	40	4.0	1009	100.0

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TABLE 54: (Continued)

Maternity service level–hospital	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not Stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Manning Base	631	95.3	1	0.2	0	0.0	14	2.1	16	2.4	662	100.0
Orange Base	981	90.5	13	1.2	3	0.3	67	6.2	20	1.8	1084	100.0
Maitland	1378	93.9	3	0.2	1	0.1	69	4.7	17	1.2	1468	100.0
Griffith Base	495	92.0	3	0.6	0	0.0	40	7.4	0	0.0	538	100.0
TOTAL	16650	96.1	80	0.5	19	0.1	444	2.6	129	0.7	17322	100.0
Level 3												
Auburn	1309	96.4	8	0.6	1	0.1	19	1.4	21	1.5	1358	100.0
Blue Mountains	222	94.1	0	0.0	0	0.0	5	2.1	9	3.8	236	100.0
Fairfield	1778	98.6	4	0.2	2	0.1	17	0.9	3	0.2	1804	100.0
Hawkesbury	671	99.0	3	0.4	0	0.0	3	0.4	1	0.1	678	100.0
Kempsey	255	93.1	1	0.4	0	0.0	17	6.2	1	0.4	274	100.0
Inverell	244	97.6	0	0.0	1	0.4	5	2.0	0	0.0	250	100.0
Mudgee	241	97.6	0	0.0	0	0.0	6	2.4	0	0.0	247	100.0
Bathurst Base	483	97.0	2	0.4	1	0.2	8	1.6	4	0.8	498	100.0
Lithgow	202	95.7	2	0.9	0	0.0	6	2.8	1	0.5	211	100.0
Bega	250	97.3	0	0.0	0	0.0	6	2.3	1	0.4	257	100.0
Goulburn Base	279	97.2	2	0.7	0	0.0	6	2.1	0	0.0	287	100.0
Moruya	283	93.7	4	1.3	2	0.7	13	4.3	0	0.0	302	100.0
Queanbeyan	429	95.3	3	0.7	0	0.0	17	3.8	1	0.2	450	100.0
Bowral	432	96.9	2	0.4	0	0.0	11	2.5	1	0.2	446	100.0
Shoalhaven	831	95.7	3	0.3	0	0.0	17	2.0	17	2.0	868	100.0
Broken Hill Base	221	95.7	1	0.4	1	0.4	2	0.9	6	2.6	231	100.0
Other hospitals	1518	95.1	3	0.2	0	0.0	67	4.2	8	0.5	1596	100.0
TOTAL	9648	96.5	38	0.4	8	0.1	225	2.3	74	0.7	9993	100.0
Level 2												
TOTAL	989	91.8	2	0.2	2	0.2	61	5.7	23	2.1	1077	100.0
Private												
Mater, North Sydney	2385	99.0	2	0.1	1	0.0	21	0.9	0	0.0	2409	100.0
North Shore Private	2535	99.1	11	0.4	1	0.0	12	0.5	0	0.0	2559	100.0
Sydney Adventist	2051	99.2	8	0.4	2	0.1	6	0.3	0	0.0	2067	100.0
North Gosford Private	708	97.5	8	1.1	0	0.0	8	1.1	2	0.3	726	100.0
Hurstville Community	825	99.3	2	0.2	0	0.0	4	0.5	0	0.0	831	100.0
Kareena Private	787	99.0	1	0.1	0	0.0	7	0.9	0	0.0	795	100.0
St. George Private	1589	98.9	5	0.3	0	0.0	13	0.8	0	0.0	1607	100.0
Prince of Wales Private	2212	99.6	5	0.2	0	0.0	3	0.1	0	0.0	2220	100.0
Norwest Private	2061	98.8	7	0.3	0	0.0	18	0.9	1	0.0	2087	100.0
Sydney Southwest Private	1046	99.1	2	0.2	0	0.0	7	0.7	0	0.0	1055	100.0
Nepean Private	795	98.6	4	0.5	0	0.0	7	0.9	0	0.0	806	100.0
Westmead Private	2221	98.1	11	0.5	2	0.1	29	1.3	0	0.0	2263	100.0
Wollongong Private	894	98.3	2	0.2	1	0.1	12	1.3	0	0.0	909	100.0
Newcastle Private	1996	98.8	4	0.2	0	0.0	20	1.0	0	0.0	2020	100.0
Calvary, Wagga Wagga	394	98.7	1	0.3	0	0.0	4	1.0	0	0.0	399	100.0
Other hospitals	19	86.4	0	0.0	0	0.0	3	13.6	0	0.0	22	100.0
TOTAL	22518	98.9	73	0.3	7	0.0	174	0.8	3	0.0	22775	100.0
TOTAL NSW*	94802	96.0	543	0.6	209	0.2	2686	2.7	487	0.5	98727	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually. Maternity service levels are described on page 80 in Appendix 2: Explanatory notes.

* Total NSW includes births at home assisted by independent midwives and births at level 1 hospitals.

Postnatal length of stay

Table 55 shows the mother's postnatal length of stay in the hospital of birth for hospitals where at least 200 mothers gave birth in 2016.

TABLE 55: AVERAGE MATERNAL POSTNATAL LENGTH OF STAY IN HOSPITAL OF BIRTH, NSW 2012–2016[#]

Local Health District–Hospital		Average postnatal length of stay (days)				
		2012	2013	2014	2015	2016
Sydney	Canterbury	2.8	2.6	2.6	2.7	2.6
	Royal Prince Alfred	3.2	3.1	3.1	3.1	3.2
	TOTAL	3.1	3.0	3.0	3.0	3.0
South Western Sydney	Fairfield	2.3	2.3	2.3	2.5	2.5
	Liverpool	2.9	2.9	2.9	2.7	2.6
	Campbelltown	2.3	2.3	2.3	2.3	2.1
	Bankstown-Lidcombe	2.4	2.6	2.4	2.4	2.4
	Bowral	2.7	2.8	2.8	2.8	2.7
TOTAL	2.5	2.6	2.5	2.5	2.4	
South Eastern Sydney	St. George	2.8	2.8	2.5	2.4	2.2
	Sutherland	2.7	2.6	2.6	2.2	2.0
	Royal Hospital for Women	3.1	3.0	2.9	2.9	3.0
	Other hospitals	0.0	4.0	0.0	0.0	0.0
TOTAL	2.9	2.9	2.7	2.7	2.6	
Illawarra Shoalhaven	Shoalhaven	2.6	2.2	2.0	2.2	2.3
	Wollongong	2.5	2.5	2.5	2.4	2.4
	Other hospitals	2.3	2.2	1.7	1.7	1.4
	TOTAL	2.5	2.4	2.3	2.3	2.3
Western Sydney	Auburn	1.8	1.9	1.9	1.9	1.9
	Blacktown	2.4	2.2	2.2	2.2	2.1
	Westmead	2.2	2.1	2.0	2.1	2.1
	TOTAL	2.2	2.1	2.0	2.1	2.1
Nepean Blue Mountains	Blue Mountains	2.6	2.2	2.0	2.2	2.5
	Nepean	2.0	2.0	2.0	2.2	2.0
	Hawkesbury	3.1	3.0	3.0	3.0	2.9
	Lithgow	2.7	3.0	2.8	2.8	2.7
	TOTAL	2.2	2.2	2.2	2.3	2.2
Northern Sydney	Hornsby	2.2	2.0	2.0	2.0	2.1
	Manly	2.3	2.4	2.2	2.4	2.4
	Mona Vale	2.4	2.5	2.5	2.4	2.3
	Royal North Shore	2.7	2.8	2.7	2.9	2.8
	Other hospitals	0.1	0.1	0.2	0.1	0.1
	TOTAL	2.4	2.5	2.4	2.5	2.5
Central Coast	Gosford	2.1	2.2	2.1	2.1	2.1
	Other hospitals	0.9	0.4	0.2	0.1	0.2
	TOTAL	2.1	2.1	2.0	2.0	2.0
Hunter New England	Armidale	3.0	2.4	2.4	2.4	2.5
	Inverell	2.9	2.8	3.3	2.8	2.9
	Tamworth Base	2.7	2.7	2.3	2.5	2.4
	Manning Base	3.0	2.7	2.6	2.7	2.7
	Maitland	2.4	2.1	2.2	2.0	2.0
	John Hunter	2.6	2.6	2.5	2.4	2.4
	Other hospitals	2.4	2.3	2.3	2.3	2.3
	TOTAL	2.6	2.5	2.4	2.4	2.4
Northern NSW	Grafton Base	3.4	3.1	3.3	3.0	3.0
	Lismore Base	2.8	2.8	2.6	2.3	2.3
	Tweed Heads	2.4	2.6	2.6	2.5	2.5
	Other hospitals	2.1	2.8	3.2	1.8	1.8
	TOTAL	2.6	2.7	2.7	2.5	2.4

Local Health District–Hospital		Average postnatal length of stay (days)				
		2012	2013	2014	2015	2016
Mid North Coast	Coffs Harbour	3.1	2.8	2.5	2.6	2.7
	Kempsey	3.0	2.6	2.5	2.3	2.4
	Port Macquarie Base	3.5	2.8	2.6	2.6	2.4
	Other hospitals	2.8	2.7	2.6	2.0	2.3
	TOTAL	3.2	2.8	2.6	2.6	2.6
Southern NSW	Bega	2.4	2.1	2.3	2.4	2.3
	Goulburn Base	3.0	2.8	2.6	2.5	2.4
	Moruya	2.4	2.4	2.2	2.2	2.2
	Queanbeyan	2.8	2.7	2.8	2.8	2.8
	Other hospitals	3.3	3.3	3.3	3.6	2.9
	TOTAL	2.7	2.6	2.6	2.6	2.5
Murrumbidgee	Griffith Base	2.9	2.8	2.9	2.8	2.9
	Wagga Wagga Base	2.6	2.6	2.5	2.5	2.4
	Other hospitals	3.1	3.0	3.0	2.7	2.8
	TOTAL	2.8	2.8	2.8	2.6	2.6
Western NSW	Dubbo Base	2.5	2.5	2.2	2.2	2.2
	Mudgee	2.8	3.0	2.8	2.5	2.4
	Bathurst Base	2.9	2.6	2.5	2.7	2.3
	Orange Base	2.6	2.5	2.5	2.3	2.5
	Other hospitals	2.8	2.9	2.6	2.6	3.0
	TOTAL	2.7	2.6	2.4	2.4	2.4
	Far West	Broken Hill Base	3.0	2.5	2.8	2.3
TOTAL		3.0	2.5	2.8	2.3	2.1
Private Hospitals	Mater, North Sydney	4.4	4.6	4.7	4.4	4.5
	North Shore Private	4.5	4.5	4.5	4.5	4.5
	Sydney Adventist	4.7	4.6	4.7	4.7	4.7
	North Gosford Private	4.4	4.8	4.9	4.3	4.3
	Hurstville Community	4.4	4.3	4.4	4.2	4.5
	Kareena Private	4.5	4.3	4.4	4.4	4.4
	St. George Private	4.4	4.4	4.4	4.4	4.3
	Prince of Wales Private	4.5	4.6	4.6	4.5	4.5
	Norwest Private	4.3	4.4	4.5	4.3	4.2
	Sydney Southwest Private	4.4	4.4	4.2	4.0	3.8
	Nepean Private	4.6	4.5	4.3	4.1	4.2
	Westmead Private	4.3	4.3	4.3	4.3	4.2
	Wollongong Private	0.0	0.0	0.0	0.0	5.3
	Newcastle Private	4.1	4.3	4.3	4.2	4.3
	Calvary, Wagga Wagga	5.0	4.5	4.8	4.6	4.5
	Other hospitals	5.1	5.2	5.2	5.2	4.5
	TOTAL	4.5	4.5	4.5	4.4	4.4
TOTAL NSW*	3.1	3.0	3.0	2.9	2.9	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Hospitals with more than 200 births in 2016 are identified individually.
^{*} Total NSW includes births at home assisted by independent midwives.

7. CLINICAL INDICATORS

Selected clinical indicators for obstetrics are reported in this section. The definitions of the clinical indicators follow those described in Version 7.2 of the Australian Council on Healthcare Standards Clinical Indicator User's Manual for data collected in 2014.¹

Outcome of selected primipara

Indicator 1.1

Definition: The total number of selected primipara who have a spontaneous vaginal birth as a percentage of the total number of selected primipara who give birth.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation. Spontaneous vaginal birth is defined as a vaginal birth (regardless of onset of labour) that is not assisted by forceps or vacuum and not a vaginal breech delivery.

Table 56 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 56: 1.1 SELECTED PRIMIPARA WHO HAVE A SPONTANEOUS VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016^a

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	52.6	54.4	51.7	49.7	42.6
	Royal Prince Alfred	54.1	52.9	52.4	52.2	51.4
	TOTAL	53.8	53.3	52.2	51.5	49.5
South Western Sydney	Fairfield	79.2	79.9	76.4	69.6	64.1
	Liverpool	62.7	63.2	58.8	59.9	56.0
	Campbelltown	65.4	65.7	62.1	61.5	56.4
	Bankstown-Lidcombe	61.9	64.0	64.4	59.6	48.6
	Bowral	57.7	57.1	45.3	48.4	39.8
TOTAL	66.3	66.7	63.2	61.3	55.5	
South Eastern Sydney	St. George	53.0	52.6	50.7	46.3	44.9
	Sutherland	58.8	57.9	57.9	52.9	56.4
	Royal Hospital for Women	53.0	50.5	48.7	47.4	49.9
TOTAL	53.9	52.5	50.9	48.0	49.4	
Illawarra Shoalhaven	Shoalhaven	57.7	52.6	57.8	49.1	52.9
	Wollongong	61.9	52.0	50.6	52.2	52.6
	Other hospitals	50.0	50.0	88.2	100.0	0.0
TOTAL	60.3	52.1	53.2	51.5	52.6	
Western Sydney	Auburn	71.2	64.2	66.0	61.7	63.5
	Blacktown	48.2	48.3	48.9	50.8	51.4
	Westmead	51.8	50.0	52.6	52.4	53.9
TOTAL	53.8	51.6	53.5	53.3	54.5	
Nepean Blue Mountains	Blue Mountains	73.7	46.7	75.8	52.9	52.0
	Nepean	45.3	44.9	45.7	43.1	46.2
	Hawkesbury	43.5	43.4	44.2	43.4	47.8
	Lithgow	65.9	61.0	55.3	55.6	62.0
TOTAL	47.1	45.5	47.3	44.3	47.2	
Northern Sydney	Hornsby	58.9	61.5	59.7	54.2	50.6
	Manly	51.9	53.2	48.9	48.9	45.6
	Mona Vale	43.4	43.4	53.4	59.9	52.2
	Royal North Shore	50.7	45.7	49.3	52.9	47.8
	Other hospitals	100.0	100.0	97.3	100.0	100.0
TOTAL	53.7	50.9	52.6	54.2	49.2	
Central Coast	Gosford	44.6	44.0	44.1	51.2	49.7
	Other hospitals	100.0	100.0	100.0	100.0	100.0
TOTAL	47.4	47.6	46.1	53.1	51.9	

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Hunter New England	Armidale	57.4	62.6	39.2	44.6	51.6
	Inverell	46.7	35.6	46.9	43.3	50.9
	Tamworth Base	56.9	50.8	57.1	50.8	51.1
	Manning Base	56.4	56.6	54.8	48.4	54.7
	Maitland	56.2	56.3	61.3	58.4	62.3
	John Hunter	51.9	54.2	54.2	53.9	51.1
	Other hospitals	67.9	66.0	67.5	65.5	71.0
	TOTAL	55.8	55.6	56.4	54.5	55.6
Northern NSW	Grafton Base	63.0	52.4	60.3	53.4	58.3
	Lismore Base	63.3	56.0	59.1	64.3	54.2
	Tweed Heads	65.1	61.6	53.8	61.6	63.0
	Other hospitals	90.1	96.5	98.4	98.2	84.5
TOTAL	66.9	60.8	59.8	64.1	61.3	
Mid North Coast	Coffs Harbour	51.9	54.3	54.6	56.2	48.0
	Kempsey	63.0	70.5	60.3	58.6	64.4
	Port Macquarie Base	55.9	57.0	50.0	49.7	52.1
	Other hospitals	91.7	66.7	63.6	100.0	100.0
TOTAL	55.1	56.9	53.9	55.1	51.7	
Southern NSW	Bega	53.8	49.2	54.2	54.0	54.4
	Goulburn Base	45.6	48.8	48.5	42.1	40.0
	Moruya	56.4	65.1	62.7	51.5	59.4
	Queanbeyan	55.0	52.0	44.6	49.3	51.9
	Other hospitals	56.8	57.5	73.2	83.0	78.3
TOTAL	53.5	53.5	53.4	53.4	54.4	
Murrumbidgee	Griffith Base	43.0	52.1	44.4	49.1	49.0
	Wagga Wagga Base	48.3	53.0	52.3	43.2	49.8
	Other hospitals	66.1	65.2	62.7	66.1	53.8
TOTAL	51.0	56.4	53.8	50.5	50.5	
Western NSW	Dubbo Base	62.2	51.7	48.8	52.1	51.3
	Mudgee	73.1	73.2	59.0	56.2	56.5
	Bathurst Base	57.7	57.0	50.7	65.5	57.6
	Orange Base	52.6	46.7	48.7	52.8	49.6
	Other hospitals	57.0	58.3	56.9	68.3	66.7
	TOTAL	58.8	53.7	50.9	56.7	54.1

(Continued on next page)

Reference

1. Australian Council on Healthcare Standards. *Obstetrics Indicator Users' Manual 2014. Obstetrics version 7.2.* Sydney: ACHS, 2014.

TABLE 56: (Continued)

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Far West	Broken Hill Base	56.0	46.5	65.0	67.7	63.3
	TOTAL	56.0	46.5	65.0	67.7	63.3
Private Hospitals	Mater, North Sydney	33.4	35.4	35.8	34.5	28.1
	North Shore Private	31.7	36.0	31.3	30.3	31.2
	Sydney Adventist	51.2	51.9	51.2	52.4	45.3
	North Gosford Private	36.7	35.3	27.6	33.5	28.6
	Hurstville Community	43.5	38.3	36.6	46.4	46.4
	Kareena Private	31.0	34.9	27.9	34.2	28.9
	St. George Private	31.1	33.0	27.8	32.8	33.2
	Prince of Wales Private	30.4	28.6	29.7	30.9	30.7

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
	Norwest Private	43.3	40.4	46.4	39.9	42.8
	Sydney Southwest Private	42.8	47.7	46.3	36.2	39.4
	Nepean Private	41.7	31.6	40.8	42.2	37.9
	Westmead Private	32.3	36.4	35.4	37.2	40.2
	Wollongong Private	0.0	0.0	0.0	0.0	32.0
	Newcastle Private	41.3	42.9	38.8	40.8	34.9
	Calvary, Wagga Wagga	35.5	23.5	23.0	25.5	35.8
	Other hospitals	33.8	35.2	33.4	33.6	0.0
	TOTAL	36.9	37.4	36.6	36.9	35.7
TOTAL NSW*		51.4	50.6	50.0	49.8	48.5

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 1.2

Definition: The total number of selected primipara who undergo induction of labour as a percentage of the total number of selected primipara who give birth.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation. Induction of labour is defined as surgical and/or medical induction.

Table 57 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 57: 1.2 SELECTED PRIMIPARA WHO UNDERGO INDUCTION OF LABOUR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016[#]

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	37.8	39.7	44.8	47.6	46.5
	Royal Prince Alfred	34.3	34.6	36.3	38.2	38.4
	TOTAL	35.1	35.7	38.4	40.5	40.2
South Western Sydney	Fairfield	24.6	25.9	30.4	28.9	30.8
	Liverpool	30.8	33.0	33.2	34.3	39.8
	Campbelltown	34.5	40.9	36.2	37.8	38.3
	Bankstown-Lidcombe	32.0	34.0	33.6	39.6	41.1
	Bowral	30.1	38.8	33.3	27.0	31.4
	TOTAL	30.9	34.6	33.7	35.4	37.7
South Eastern Sydney	St. George	40.5	44.9	47.2	49.1	46.7
	Sutherland	35.1	36.5	38.7	39.7	41.2
	Royal Hospital for Women	34.5	41.9	40.5	37.7	38.4
	TOTAL	36.7	41.9	42.4	41.7	41.6
Illawarra Shoalhaven	Shoalhaven	34.6	47.0	41.3	43.1	47.6
	Wollongong	36.3	38.2	46.4	44.2	44.2
	Other hospitals	21.9	18.8	11.8	0.0	0.0
	TOTAL	35.3	39.7	44.4	43.7	45.1
Western Sydney	Auburn	31.8	34.1	38.8	43.0	40.4
	Blacktown	45.0	46.0	43.9	45.8	45.9
	Westmead	40.0	45.2	48.2	46.3	48.3
	TOTAL	40.1	43.8	45.7	45.6	46.4
Nepean Blue Mountains	Blue Mountains	26.3	35.0	27.3	36.8	18.7
	Nepean	43.6	45.5	48.4	48.1	45.6
	Hawkesbury	32.5	47.3	47.0	44.3	51.1
	Lithgow	34.1	59.3	53.2	61.9	54.0
	TOTAL	40.5	46.0	47.3	47.5	45.2
Northern Sydney	Hornsby	34.2	31.6	37.8	33.0	37.9
	Manly	43.0	43.6	42.3	48.0	42.2
	Mona Vale	34.0	37.4	30.8	36.0	31.0
	Royal North Shore	41.5	45.2	45.1	44.2	45.1
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	39.1	40.5	40.6	40.9	40.9
Central Coast	Gosford	44.2	45.5	42.7	43.8	42.7
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	41.9	42.5	41.2	42.1	40.8
Hunter New England	Armidale	37.5	39.6	32.0	29.8	28.4
	Inverell	53.3	28.8	39.1	35.0	41.8
	Tamworth Base	44.6	48.8	45.6	46.6	45.6
	Manning Base	34.6	42.8	40.1	43.4	52.7
	Maitland	42.1	48.0	43.9	45.6	49.1
	John Hunter	43.0	43.1	46.0	47.1	51.0
	Other hospitals	21.9	25.2	25.7	24.9	27.6
	TOTAL	39.4	42.0	42.2	42.9	46.1
	Northern NSW	Grafton Base	32.0	41.9	39.7	42.0
Lismore Base		31.0	34.0	33.0	34.5	40.7
Tweed Heads		26.2	33.4	39.8	44.5	38.2

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		0.0	1.8	0.0	0.0	16.9
	TOTAL	25.5	32.7	34.6	37.9	37.2
Mid North Coast	Coffs Harbour	31.2	37.4	34.3	36.0	44.4
	Kempsey	17.4	36.4	27.6	34.5	22.0
	Port Macquarie Base	37.7	39.6	41.5	45.0	47.4
	Other hospitals	0.0	16.7	0.0	0.0	0.0
	TOTAL	31.8	38.0	35.2	38.2	42.7
Southern NSW	Bega	30.8	23.0	30.6	27.0	47.1
	Goulburn Base	27.8	30.5	31.8	30.3	28.0
	Moruya	29.5	30.2	27.1	30.3	31.9
	Queanbeyan	18.1	23.7	30.6	30.0	39.0
	Other hospitals	22.7	27.5	28.6	30.2	17.4
TOTAL	24.4	26.4	30.0	29.7	34.7	
Murrumbidgee	Griffith Base	35.2	30.7	41.0	45.5	37.1
	Wagga Wagga Base	40.5	43.5	44.8	49.4	45.7
	Other hospitals	26.8	30.3	28.0	27.4	27.4
	TOTAL	35.5	35.5	38.7	42.7	39.3
Western NSW	Dubbo Base	48.1	43.8	51.2	53.4	52.5
	Mudgee	35.9	40.8	32.8	32.9	34.8
	Bathurst Base	32.4	30.3	38.2	28.2	41.7
	Orange Base	41.5	48.3	45.8	48.0	48.8
	Other hospitals	27.3	23.3	33.0	28.7	30.6
	TOTAL	39.2	40.2	43.7	43.0	45.7
Far West	Broken Hill Base	30.0	25.6	46.7	30.6	40.0
	TOTAL	30.0	25.6	46.7	30.6	40.0
Private Hospitals	Mater, North Sydney	26.4	29.1	32.0	27.8	28.2
	North Shore Private	26.2	27.3	29.9	29.1	26.1
	Sydney Adventist	27.3	31.3	28.1	30.5	29.4
	North Gosford Private	44.5	45.4	44.8	47.7	45.2
	Hurstville Community	26.5	41.1	29.6	34.0	26.8
	Kareena Private	26.7	33.6	31.4	30.4	35.1
	St. George Private	32.4	33.3	35.4	42.7	37.8
	Prince of Wales Private	25.2	26.5	27.5	31.9	33.3
	Norwest Private	46.3	49.8	49.2	51.8	55.5
	Sydney Southwest Private	34.3	48.0	38.7	48.6	46.6
	Nepean Private	47.4	45.3	53.8	57.8	62.5
	Westmead Private	38.0	37.0	38.0	41.9	40.8
	Wollongong Private	0.0	0.0	0.0	0.0	45.7
	Newcastle Private	37.3	39.4	41.7	46.3	50.2
	Calvary, Wagga Wagga	50.4	47.0	37.2	40.9	41.1
	Other hospitals	46.6	47.3	49.3	49.8	0.0
TOTAL	33.9	36.4	36.7	39.4	38.8	
TOTAL NSW[*]	35.6	38.6	39.5	40.8	41.3	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Hospitals with more than 200 births in 2016 are identified individually

^{*} Total NSW includes births at home assisted by independent midwives

Indicator 1.3

Definition: The total number of selected primipara who undergo an instrumental vaginal birth as a percentage of the total number of selected primipara who give birth.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation. Instrumental vaginal birth is defined as forceps or vacuum.

Table 58 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 58: 1.3 SELECTED PRIMIPARA WHO UNDERGO AN INSTRUMENTAL VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	19.1	19.9	22.8	24.6	27.6
	Royal Prince Alfred	25.9	24.6	25.6	25.8	21.9
	TOTAL	24.4	23.5	24.9	25.5	23.2
South Western Sydney	Fairfield	8.8	7.6	8.4	10.5	14.4
	Liverpool	19.1	19.1	22.4	21.8	21.9
	Campbelltown	13.8	13.4	14.3	17.2	21.4
	Bankstown-Lidcombe	18.8	14.9	14.9	20.6	17.4
	Bowral	25.2	19.7	22.6	25.4	24.6
	TOTAL	15.8	14.6	16.2	18.5	19.7
South Eastern Sydney	St. George	26.8	24.7	26.8	27.2	29.7
	Sutherland	24.9	23.2	23.9	25.8	23.8
	Royal Hospital for Women	30.3	30.6	31.7	30.5	27.6
	TOTAL	28.3	27.4	28.8	28.6	27.6
Illawarra Shoalhaven	Shoalhaven	20.5	22.8	15.7	15.4	17.8
	Wollongong	17.8	21.0	21.0	21.7	24.5
	Other hospitals	25.0	25.0	0.0	0.0	0.0
	TOTAL	18.8	21.6	19.2	19.9	22.9
Western Sydney	Auburn	15.0	17.5	13.4	15.0	14.0
	Blacktown	25.7	22.1	21.2	21.6	22.9
	Westmead	23.0	26.9	23.2	21.2	22.6
	TOTAL	22.5	24.1	21.2	20.4	21.5
Nepean Blue Mountains	Blue Mountains	12.3	18.3	9.1	19.1	25.3
	Nepean	19.9	22.4	21.0	21.3	19.0
	Hawkesbury	19.0	19.0	18.6	22.6	18.3
	Lithgow	12.2	6.8	6.4	11.1	10.0
	TOTAL	19.1	20.8	19.5	20.9	19.0
Northern Sydney	Hornsby	20.4	18.4	22.2	28.2	24.4
	Manly	32.9	25.3	26.3	27.7	27.5
	Mona Vale	26.4	32.3	27.3	17.6	24.3
	Royal North Shore	22.3	26.0	29.0	25.3	27.3
	Other hospitals	0.0	0.0	2.7	0.0	0.0
	TOTAL	23.9	24.6	26.6	24.9	26.1
Central Coast	Gosford	28.4	30.8	29.0	26.7	26.4
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	27.0	28.8	27.9	25.7	25.3
Hunter New England	Armidale	15.4	13.2	23.7	16.5	15.8
	Inverell	18.3	11.9	10.9	23.3	21.8
	Tamworth Base	17.8	25.6	26.7	21.1	21.3
	Manning Base	24.0	26.4	30.6	28.3	26.0
	Maitland	17.0	17.2	15.3	20.0	17.5
	John Hunter	24.0	19.9	21.7	22.7	23.3
	Other hospitals	14.7	16.7	13.7	14.9	14.0
	TOTAL	20.3	19.6	20.5	21.2	20.8
	Northern NSW	Grafton Base	13.0	15.2	16.4	20.5
Lismore Base		17.3	23.6	18.3	16.9	23.6
Tweed Heads		20.9	18.4	21.2	20.9	18.8

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		8.9	1.8	0.0	0.0	7.0
	TOTAL	17.8	18.8	18.0	18.1	19.9
Mid North Coast	Coffs Harbour	19.3	16.5	17.5	18.4	22.0
	Kempsey	15.2	11.4	15.5	8.6	16.9
	Port Macquarie Base	19.1	24.6	23.3	23.8	17.2
	Other hospitals	8.3	33.3	36.4	0.0	0.0
	TOTAL	18.7	19.6	19.6	18.8	19.5
Southern NSW	Bega	17.3	24.6	18.1	17.5	16.2
	Goulburn Base	38.0	28.0	27.3	32.9	20.0
	Moruya	24.4	12.7	15.3	21.2	15.9
	Queanbeyan	23.5	29.6	29.3	22.0	29.9
	Other hospitals	13.6	10.0	8.9	3.8	10.9
TOTAL	24.6	23.9	22.2	20.8	21.4	
Murrumbidgee	Griffith Base	32.4	25.7	23.9	21.8	23.8
	Wagga Wagga Base	17.6	20.8	15.4	20.3	20.8
	Other hospitals	13.4	13.6	15.5	19.4	20.5
	TOTAL	21.1	20.2	17.3	20.4	21.6
Western NSW	Dubbo Base	9.1	21.7	23.0	20.9	25.8
	Mudgee	14.1	11.3	19.7	19.2	26.1
	Bathurst Base	15.5	12.7	20.1	16.2	20.9
	Orange Base	26.1	23.4	23.9	26.6	18.1
	Other hospitals	14.1	12.6	16.5	6.9	14.4
	TOTAL	16.5	18.7	21.7	20.0	21.4
Far West	Broken Hill Base	14.0	30.2	23.3	14.5	10.0
	TOTAL	14.0	30.2	23.3	14.5	10.0
Private Hospitals	Mater, North Sydney	25.9	24.7	23.7	23.8	25.0
	North Shore Private	29.0	26.1	24.7	26.4	22.7
	Sydney Adventist	15.1	16.2	16.4	15.3	23.6
	North Gosford Private	18.8	25.2	27.1	27.2	25.8
	Hurstville Community	21.9	28.0	25.4	19.6	23.8
	Kareena Private	28.7	26.2	32.8	24.5	26.9
	St. George Private	25.9	29.6	29.3	28.9	28.0
	Prince of Wales Private	25.1	26.0	22.0	24.2	24.7
	Norwest Private	29.9	31.2	27.1	26.4	27.1
	Sydney Southwest Private	24.3	28.1	24.8	35.6	33.4
	Nepean Private	19.8	25.9	26.5	18.9	23.3
	Westmead Private	27.6	25.3	24.1	25.6	22.1
	Wollongong Private	0.0	0.0	0.0	0.0	36.0
	Newcastle Private	26.1	29.0	26.7	25.4	30.1
	Calvary, Wagga Wagga	24.8	17.4	23.0	24.8	22.1
	Other hospitals	34.0	30.5	24.7	25.4	0.0
TOTAL	25.6	26.2	24.7	24.8	25.9	
TOTAL NSW*		22.6	22.9	22.7	22.8	23.3

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 1.4

Definition: The total number of selected primipara undergoing caesarean section as a percentage of the total number of selected primipara who give birth.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation.

Table 59 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 59: 1.4 SELECTED PRIMIPARA UNDERGOING CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	28.2	25.4	25.5	25.8	29.8
	Royal Prince Alfred	20.0	22.5	22.0	22.0	26.6
	TOTAL	21.8	23.1	22.8	23.0	27.3
South Western Sydney	Fairfield	12.0	12.5	15.2	20.0	21.3
	Liverpool	18.2	17.7	18.8	18.3	22.0
	Campbelltown	20.8	20.9	23.6	21.3	22.2
	Bankstown-Lidcombe	19.3	21.1	20.7	19.9	33.9
	Bowral	17.1	23.1	32.1	26.2	34.7
	TOTAL	17.9	18.7	20.6	20.1	24.6
South Eastern Sydney	St. George	20.2	22.7	22.5	26.5	25.5
	Sutherland	16.3	18.9	18.2	21.4	19.8
	Royal Hospital for Women	16.7	18.9	19.6	22.1	22.5
	TOTAL	17.8	20.1	20.3	23.4	23.0
Illawarra Shoalhaven	Shoalhaven	21.8	24.7	26.5	35.6	29.3
	Wollongong	20.4	27.0	28.4	26.0	22.9
	Other hospitals	25.0	25.0	11.8	0.0	0.0
	TOTAL	20.9	26.3	27.6	28.5	24.5
Western Sydney	Auburn	13.8	18.3	20.6	23.3	22.2
	Blacktown	26.1	29.7	29.9	27.7	25.7
	Westmead	25.1	23.1	24.2	26.4	23.5
	TOTAL	23.6	24.3	25.3	26.3	24.0
Nepean Blue Mountains	Blue Mountains	14.0	35.0	15.2	27.9	22.7
	Nepean	34.8	32.7	33.3	35.6	34.8
	Hawkesbury	37.5	37.6	37.2	33.9	33.9
	TOTAL	33.8	33.7	33.2	34.8	33.8
Northern Sydney	Hornsby	20.7	20.1	18.1	17.6	24.9
	Manly	15.1	21.5	24.9	23.4	26.9
	Mona Vale	30.2	24.2	19.4	22.5	23.5
	Royal North Shore	27.1	28.2	21.6	21.8	24.9
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	22.4	24.5	20.9	20.9	24.7
Central Coast	Gosford	27.0	25.2	26.9	22.0	23.9
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	25.6	23.6	26.0	21.2	22.9
Hunter New England	Armidale	27.2	24.2	37.1	38.8	32.6
	Inverell	35.0	52.5	42.2	33.3	27.3
	Tamworth Base	25.2	23.6	16.1	28.2	27.6
	Manning Base	19.6	17.0	14.6	23.3	19.3
	Maitland	26.8	26.5	23.4	21.6	20.2
	John Hunter	24.1	25.9	24.1	23.4	25.6
	Other hospitals	17.4	17.4	18.9	19.5	15.0
	TOTAL	23.9	24.7	23.0	24.2	23.6
Northern NSW	Grafton Base	24.0	32.4	23.3	26.1	18.8
	Lismore Base	19.4	20.4	22.6	18.8	22.2
	Tweed Heads	14.0	20.0	24.9	17.6	18.2

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		1.0	1.8	1.6	1.8	8.5
	TOTAL	15.3	20.4	22.2	17.8	18.8
Mid North Coast	Coffs Harbour	28.8	29.1	27.9	25.5	29.6
	Kempsey	21.7	18.2	24.1	32.8	18.6
	Port Macquarie Base	25.0	18.4	26.7	26.5	30.7
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	TOTAL	26.2	23.5	26.5	26.0	28.6
Southern NSW	Bega	28.8	26.2	27.8	28.6	29.4
	Goulburn Base	16.5	23.2	24.2	25.0	40.0
	Moruya	19.2	22.2	22.0	27.3	24.6
	Queanbeyan	21.5	18.4	26.1	28.7	18.2
	TOTAL	21.9	22.6	24.4	25.7	24.3
Murrumbidgee	Griffith Base	24.6	22.1	31.6	29.1	27.3
	Wagga Wagga Base	34.1	26.2	32.4	36.5	29.4
	Other hospitals	19.6	21.2	21.7	14.5	25.6
	TOTAL	27.7	23.4	28.9	29.1	28.0
Western NSW	Dubbo Base	28.6	26.6	28.2	27.1	22.9
	Mudgee	12.8	15.5	21.3	24.7	17.4
	Bathurst Base	26.8	30.3	29.2	18.3	21.6
	Orange Base	21.3	29.9	27.3	20.6	32.3
	Other hospitals	28.9	29.1	26.6	24.8	18.9
	TOTAL	24.7	27.6	27.4	23.3	24.5
Far West	Broken Hill Base	30.0	23.3	11.7	17.7	26.7
	TOTAL	30.0	23.3	11.7	17.7	26.7
Private Hospitals	Mater, North Sydney	40.5	39.5	40.1	41.6	47.0
	North Shore Private	39.2	37.9	44.0	43.2	46.1
	Sydney Adventist	33.3	31.9	32.4	32.3	30.9
	North Gosford Private	44.1	38.5	45.2	39.3	45.6
	Hurstville Community	34.6	33.6	38.0	34.0	29.8
	Kareena Private	39.9	38.4	39.3	41.4	44.2
	St. George Private	43.0	37.4	42.9	38.3	38.9
	Prince of Wales Private	44.2	45.2	48.2	44.9	44.6
	Norwest Private	26.6	28.1	26.2	33.7	30.1
	Sydney Southwest Private	32.6	23.8	28.9	28.2	27.1
	Nepean Private	38.5	42.5	32.8	39.0	38.7
	Westmead Private	40.1	38.3	40.5	37.0	37.8
	Wollongong Private	0.0	0.0	0.0	0.0	32.0
	Newcastle Private	32.6	28.0	33.9	33.8	34.9
	Calvary, Wagga Wagga	39.0	59.1	53.4	49.6	42.1
	Other hospitals	32.2	34.3	41.9	41.0	100.0
TOTAL	37.4	36.3	38.5	38.2	38.4	
TOTAL NSW*	25.9	26.5	27.3	27.4	28.2	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Vaginal birth following caesarean section

Indicator 2.1

Definition: Total number of women delivering vaginally following a previous primary caesarean section at 20 weeks or greater gestation as a percentage of the total number of women delivering by any route who have had a previous primary caesarean section at 20 weeks or greater gestation and no intervening pregnancies.

Table 60 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 60: 2.1 VAGINAL DELIVERY AFTER PREVIOUS PRIMARY CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	7.4	8.2	10.9	12.2	22.4
	Royal Prince Alfred	12.7	15.4	11.3	13.9	12.0
	TOTAL	11.5	13.5	11.2	13.5	15.7
South Western Sydney	Fairfield	1.6	1.9	4.6	1.8	0.0
	Liverpool	24.4	13.8	14.8	8.9	20.7
	Campbelltown	25.2	20.1	20.6	19.0	22.4
	Bankstown-Lidcombe	18.5	15.6	18.9	13.0	19.7
	Bowral	10.5	5.4	15.2	4.2	10.3
	TOTAL	19.7	14.2	16.0	11.7	18.1
South Eastern Sydney	St. George	18.3	14.6	17.9	13.3	13.3
	Sutherland	0.0	0.0	3.4	1.2	1.3
	Royal Hospital for Women	10.4	12.0	9.7	10.5	10.4
	TOTAL	12.2	11.6	11.9	10.4	10.4
Illawarra Shoalhaven	Shoalhaven	14.3	16.1	19.8	6.8	7.4
	Wollongong	15.6	12.3	13.6	10.2	14.9
	TOTAL	14.9	13.5	15.5	9.3	13.1
Western Sydney	Auburn	1.2	2.8	1.2	2.6	4.9
	Blacktown	11.8	13.0	11.0	9.9	12.4
	Westmead	14.3	15.9	15.1	15.0	12.4
	TOTAL	12.4	14.0	12.7	12.5	11.9
Nepean Blue Mountains	Blue Mountains	0.0	12.5	6.5	0.0	0.0
	Nepean	10.3	12.0	9.3	12.7	12.1
	Hawkesbury	12.0	10.7	5.1	14.4	14.4
	TOTAL	10.0	11.6	8.5	11.9	11.4
Northern Sydney	Hornsby	12.5	12.9	14.4	13.0	15.4
	Manly	16.9	16.0	8.4	7.3	14.0
	Mona Vale	7.7	5.6	4.1	11.1	16.2
	Royal North Shore	12.5	10.0	12.1	8.8	12.3
	TOTAL	13.4	11.3	11.1	9.7	13.6
Central Coast	Gosford	9.0	14.2	11.9	12.9	13.4
TOTAL	9.0	14.2	11.9	12.9	13.4	
Hunter New England	Armidale	7.8	18.2	7.1	22.9	8.9
	Inverell	13.3	11.1	11.4	12.0	14.0
	Tamworth Base	14.8	18.9	4.3	10.0	15.6
	Manning Base	20.5	22.6	14.5	20.6	21.9
	Maitland	13.6	17.1	20.1	21.3	11.5
	John Hunter	18.1	19.4	17.8	14.3	14.8
	Other hospitals	23.1	11.5	12.0	10.0	3.7
	TOTAL	16.9	18.0	15.3	15.4	13.5
Northern NSW	Grafton Base	7.1	16.3	11.8	16.7	13.0
	Lismore Base	18.9	16.2	20.6	20.4	26.8
	Tweed Heads	16.4	21.1	35.2	11.1	18.9

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		0.0	0.0	0.0	0.0	25.0
	TOTAL	14.2	16.6	22.8	15.2	21.5
Mid North Coast	Coffs Harbour	14.3	5.9	5.8	6.7	6.3
	Kempsey	27.8	30.0	27.3	22.2	21.7
	Port Macquarie Base	18.2	15.9	17.9	11.0	12.5
	TOTAL	16.9	11.9	12.2	10.1	9.8
Southern NSW	Bega	15.4	5.3	18.8	8.7	13.3
	Goulburn Base	13.2	15.6	32.5	22.2	13.8
	Moruya	20.0	10.3	8.6	20.0	10.3
	TOTAL	14.1	9.0	18.3	13.2	14.3
Murrumbidgee	Griffith Base	9.8	20.5	20.8	10.7	15.3
	Wagga Wagga Base	21.3	6.9	5.3	8.1	11.4
	Other hospitals	1.6	7.5	10.2	14.3	16.7
	TOTAL	11.9	10.1	10.4	10.5	13.4
Western NSW	Dubbo Base	13.3	17.8	9.7	13.8	11.2
	Mudgee	8.7	3.7	4.3	4.8	7.7
	Bathurst Base	18.5	12.0	8.8	19.0	11.1
	Orange Base	9.5	13.2	14.5	12.3	18.5
	TOTAL	14.3	12.8	13.3	14.1	14.4
Far West	Broken Hill Base	8.3	16.0	6.7	15.8	8.7
	TOTAL	8.3	16.0	6.7	15.8	8.7
Private Hospitals	Mater, North Sydney	5.3	5.7	1.9	4.1	4.4
	North Shore Private	5.9	5.1	4.5	6.0	2.8
	Sydney Adventist	7.5	8.8	7.3	5.3	5.7
	North Gosford Private	5.9	7.9	7.7	5.5	5.1
	Hurstville Community	3.5	5.2	5.6	4.7	5.6
	Kareena Private	3.2	7.9	4.7	3.1	7.1
	St. George Private	3.9	4.7	3.5	4.3	3.7
	Prince of Wales Private	1.9	2.8	2.5	2.8	1.5
	Norwest Private	7.4	5.0	5.9	5.6	5.6
	Sydney Southwest Private	1.8	0.8	1.4	0.0	0.9
	Nepean Private	5.6	5.2	6.0	4.7	7.1
	Westmead Private	6.0	5.0	3.8	5.4	3.4
	Wollongong Private	0.0	0.0	0.0	0.0	2.5
	Newcastle Private	10.9	5.6	6.5	3.3	6.3
	Calvary, Wagga Wagga	8.3	5.7	0.0	3.3	1.1
TOTAL	5.6	5.2	4.3	4.4	4.1	
TOTAL NSW*	11.0	10.8	10.2	9.6	10.5	

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Major perineal tears and surgical repair of the perineum

Indicator 3.1

Definition: Total number of selected primipara with an intact perineum (other than superficial grazes) while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation.

Table 61 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 61: 3.1 SELECTED PRIMIPARA DELIVERING VAGINALLY WITH AN INTACT PERINEUM BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016^a

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	9.5	10.5	6.2	7.0	5.4
	Royal Prince Alfred	12.0	9.6	8.8	8.0	7.8
	TOTAL	11.5	9.8	8.2	7.7	7.3
South Western Sydney	Fairfield	23.4	24.6	21.0	19.3	13.1
	Liverpool	13.0	11.4	15.4	12.1	10.8
	Campbelltown	22.0	23.6	20.4	20.0	10.7
	Bankstown-Lidcombe	13.2	14.9	14.7	14.0	7.5
	Bowral	20.6	28.3	21.3	18.9	17.1
	TOTAL	17.9	18.8	17.9	16.2	10.8
South Eastern Sydney	St. George	12.2	9.9	8.3	8.0	5.0
	Sutherland	21.7	13.0	11.9	10.2	5.2
	Royal Hospital for Women	12.6	11.4	9.6	11.9	10.3
	TOTAL	13.9	11.2	9.6	10.4	7.6
Illawarra Shoalhaven	Shoalhaven	35.5	40.1	38.4	43.0	21.4
	Wollongong	12.7	13.7	10.1	12.6	8.0
	Other hospitals	20.8	25.0	40.0	33.3	0.0
	TOTAL	19.0	20.7	18.1	20.1	11.1
Western Sydney	Auburn	15.3	16.2	10.3	11.3	5.6
	Blacktown	10.0	6.8	6.3	9.1	4.4
	Westmead	9.0	7.3	7.7	6.5	5.2
	TOTAL	10.4	8.6	7.7	8.0	5.0
Nepean Blue Mountains	Blue Mountains	36.7	15.4	19.6	24.5	10.3
	Nepean	15.0	12.1	10.5	11.9	7.5
	Hawkesbury	26.4	25.5	28.1	23.3	21.1
	Lithgow	15.6	15.0	24.1	9.5	5.6
	TOTAL	18.2	14.8	14.3	14.4	9.4
Northern Sydney	Hornsby	14.4	15.4	11.4	9.5	5.6
	Manly	17.6	11.0	15.6	12.7	9.4
	Mona Vale	27.0	15.3	22.1	23.8	15.9
	Royal North Shore	9.5	9.3	7.2	9.2	6.2
	Other hospitals	35.9	51.6	48.6	34.3	46.2
	TOTAL	13.9	12.5	12.3	12.2	8.5
Central Coast	Gosford	16.8	9.6	11.7	12.1	8.6
	Other hospitals	51.4	49.0	44.8	28.1	25.7
	TOTAL	19.1	13.0	13.3	12.8	9.6
Hunter New England	Armidale	24.2	24.6	16.4	28.4	18.8
	Inverell	23.1	42.9	37.8	32.5	40.0
	Tamworth Base	17.2	21.1	18.1	14.1	13.7
	Manning Base	26.4	30.3	20.1	21.3	19.0
	Maitland	20.2	24.3	22.4	19.2	13.9
	John Hunter	14.4	12.6	11.8	13.1	9.9
	Other hospitals	32.4	28.8	26.2	27.1	27.6
	TOTAL	19.9	19.9	17.4	17.6	15.1
Northern NSW	Grafton Base	43.4	39.4	39.3	35.4	35.9
	Lismore Base	20.7	25.7	27.8	27.5	15.4
	Tweed Heads	24.5	25.5	17.3	11.0	15.7

Local Health District–Hospital		2012	2013	2014	2015	2016	
		%	%	%	%	%	
Other hospitals		34.0	42.9	46.7	50.9	32.3	
	TOTAL	26.3	28.0	26.5	22.0	19.7	
Mid North Coast	Coffs Harbour	16.2	14.4	15.3	15.6	16.5	
	Kempsey	30.6	36.1	31.8	25.6	27.1	
	Port Macquarie Base	15.7	20.1	8.5	12.2	10.5	
	Other hospitals	33.3	33.3	36.4	25.0	50.0	
	TOTAL	17.8	19.2	15.5	15.7	16.1	
Southern NSW	Bega	27.0	37.8	28.8	24.4	16.7	
	Goulburn Base	12.1	14.3	12.0	12.3	11.1	
	Moruya	34.9	32.7	32.6	35.4	21.2	
	Queanbeyan	33.3	29.8	35.3	29.9	26.2	
	Other hospitals	38.7	48.1	45.7	58.7	58.5	
TOTAL	29.0	29.9	31.6	31.0	26.0		
Murrumbidgee	Griffith Base	28.0	34.9	28.8	32.1	24.0	
	Wagga Wagga Base	23.0	25.8	25.8	20.3	17.4	
	Other hospitals	32.6	43.3	37.3	31.1	32.2	
	TOTAL	27.2	34.1	30.4	26.4	22.6	
Western NSW	Dubbo Base	33.1	23.5	25.7	23.5	17.8	
	Mudgee	22.1	21.7	25.0	23.6	21.1	
	Bathurst Base	26.0	23.2	17.6	23.3	11.9	
	Orange Base	19.6	14.2	12.1	16.5	10.8	
	Other hospitals	37.4	27.4	28.8	39.5	20.0	
	TOTAL	27.1	20.9	20.9	23.2	15.6	
Far West	Broken Hill Base	31.4	21.2	45.3	47.1	45.5	
	TOTAL	31.4	21.2	45.3	47.1	45.5	
Private Hospitals	Mater, North Sydney	11.7	15.1	13.9	11.1	7.0	
	North Shore Private	12.2	12.4	12.5	10.0	5.2	
	Sydney Adventist	11.9	14.2	10.7	12.5	10.3	
	North Gosford Private	19.5	11.9	11.3	11.0	9.3	
	Hurstville Community	9.7	11.3	12.1	10.2	15.8	
	Kareena Private	11.6	7.8	7.2	9.4	6.7	
	St. George Private	12.4	8.9	8.2	10.4	7.3	
	Prince of Wales Private	10.8	12.3	11.0	11.0	6.4	
	Norwest Private	7.9	12.3	12.0	12.7	5.5	
	Sydney Southwest Private	12.2	10.0	12.8	6.9	5.9	
	Nepean Private	9.9	6.3	3.8	5.9	1.3	
	Westmead Private	6.2	3.0	4.7	6.1	2.3	
	Wollongong Private	0.0	0.0	0.0	0.0	2.9	
	Newcastle Private	17.7	13.8	17.2	8.7	4.9	
	Calvary, Wagga Wagga	4.7	11.1	14.5	15.9	12.7	
	Other hospitals	9.3	4.8	5.2	6.3	0.0	
	TOTAL	11.2	10.7	10.7	9.8	6.2	
	TOTAL NSW^a		15.6	14.7	13.7	13.4	9.7

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

^a Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 3.2

Definition: Total number of selected primipara undergoing episiotomy and no perineal tear (other than superficial grazes) while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation.

Table 62 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 62: 3.2 SELECTED PRIMIPARA UNDERGOING EPISIOTOMY AND NO PERINEAL TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016^a

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	24.5	28.9	36.4	39.9	43.2
	Royal Prince Alfred	20.3	23.5	27.1	25.0	24.4
	TOTAL	21.2	24.7	29.3	28.6	28.4
South Western Sydney	Fairfield	25.0	24.6	30.7	31.1	31.6
	Liverpool	30.7	33.2	30.4	32.4	28.1
	Campbelltown	21.3	19.1	24.1	27.2	31.3
	Bankstown-Lidcombe	31.5	31.5	31.8	30.5	41.0
	Bowral	24.5	17.7	33.3	32.2	34.2
	TOTAL	26.9	26.5	29.1	30.2	32.0
South Eastern Sydney	St. George	19.4	25.1	31.2	32.4	32.9
	Sutherland	21.1	23.5	32.0	36.8	32.3
	Royal Hospital for Women	28.5	27.8	32.1	27.9	20.7
	TOTAL	24.3	26.2	31.8	30.8	26.7
Illawarra Shoalhaven	Shoalhaven	24.6	27.8	18.9	22.7	25.2
	Wollongong	16.0	20.6	26.3	25.6	25.0
	Other hospitals	4.2	4.2	0.0	33.3	0.0
	TOTAL	17.8	21.8	23.7	24.9	25.0
Western Sydney	Auburn	21.3	27.7	26.3	32.0	27.9
	Blacktown	37.8	32.8	39.1	40.4	33.0
	Westmead	36.0	37.9	42.7	43.5	38.8
	TOTAL	33.9	34.9	39.3	40.8	35.5
Nepean Blue Mountains	Blue Mountains	4.1	2.6	8.9	8.2	10.3
	Nepean	24.7	28.1	22.5	30.0	22.9
	Hawkesbury	26.4	26.2	23.0	32.9	18.7
	Lithgow	18.8	32.5	17.2	35.7	11.1
	TOTAL	23.5	26.8	21.5	29.5	21.2
Northern Sydney	Hornsby	16.8	14.0	17.7	22.4	15.9
	Manly	22.9	22.0	19.8	24.6	24.4
	Mona Vale	13.5	20.0	12.7	11.0	19.0
	Royal North Shore	25.2	25.9	27.2	25.1	24.9
	Other hospitals	2.6	3.2	2.7	0.0	0.0
	TOTAL	21.7	21.5	21.7	22.2	21.9
Central Coast	Gosford	15.6	23.2	21.5	22.4	18.0
	Other hospitals	0.0	0.0	3.4	0.0	2.9
	TOTAL	14.5	21.3	20.6	21.3	17.1
Hunter New England	Armidale	25.3	17.4	42.6	31.1	18.8
	Inverell	51.3	28.6	37.8	50.0	40.0
	Tamworth Base	17.9	26.3	27.5	27.7	26.4
	Manning Base	12.5	15.9	9.0	18.0	15.7
	Maitland	17.6	12.3	11.5	15.0	17.2
	John Hunter	18.7	23.1	22.0	19.5	18.3
	Other hospitals	16.0	16.3	17.3	13.3	14.0
	TOTAL	18.6	19.9	20.2	19.9	18.8
Northern NSW	Grafton Base	18.4	15.5	10.1	7.7	15.4
	Lismore Base	17.3	23.7	19.4	17.4	24.3
	Tweed Heads	16.0	13.1	17.7	20.1	14.6

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		3.0	1.8	1.7	0.0	6.2
	TOTAL	15.1	15.9	15.7	16.3	17.1
Mid North Coast	Coffs Harbour	17.1	18.3	20.8	18.6	29.4
	Kempsey	5.6	8.3	9.1	12.8	6.3
	Port Macquarie Base	13.7	17.8	20.9	27.3	21.8
	Other hospitals	8.3	16.7	0.0	0.0	0.0
TOTAL	14.6	17.1	18.9	20.6	23.5	
Southern NSW	Bega	10.8	17.8	13.5	8.9	18.8
	Goulburn Base	59.1	52.4	40.0	45.6	40.0
	Moruya	12.7	14.3	15.2	14.6	19.2
	Queanbeyan	12.0	12.1	17.2	15.0	20.6
	Other hospitals	16.1	7.4	10.9	2.2	4.9
TOTAL	22.3	21.1	19.0	17.8	20.8	
Murrumbidgee	Griffith Base	29.0	18.3	26.3	17.9	22.1
	Wagga Wagga Base	16.3	13.7	18.4	27.5	24.2
	Other hospitals	23.6	12.5	11.1	19.8	18.4
	TOTAL	22.4	14.8	17.6	22.8	22.3
Western NSW	Dubbo Base	24.4	28.1	33.0	30.5	24.4
	Mudgee	14.7	16.7	20.8	23.6	24.6
	Bathurst Base	10.6	11.1	25.5	17.2	16.5
	Orange Base	19.1	18.6	25.4	22.5	22.2
	Other hospitals	15.4	17.8	13.8	11.8	17.8
	TOTAL	18.1	20.1	26.1	23.0	21.7
Far West	Broken Hill Base	14.3	30.3	22.6	15.7	4.5
	TOTAL	14.3	30.3	22.6	15.7	4.5
Private Hospitals	Mater, North Sydney	42.5	37.9	37.9	39.4	45.6
	North Shore Private	40.1	32.0	36.8	31.9	34.8
	Sydney Adventist	31.8	32.7	38.4	30.4	42.6
	North Gosford Private	35.9	46.3	52.2	35.2	35.6
	Hurstville Community	39.5	42.3	38.6	34.4	29.1
	Kareena Private	29.7	31.2	31.7	26.6	34.1
	St. George Private	27.4	27.2	25.8	30.2	23.8
	Prince of Wales Private	31.6	41.7	45.2	40.5	34.6
	Norwest Private	30.3	36.4	35.5	42.7	33.5
	Sydney Southwest Private	52.2	51.3	49.7	54.3	49.0
	Nepean Private	53.9	57.0	60.0	53.3	52.3
	Westmead Private	66.8	63.5	64.6	66.3	63.7
	Wollongong Private	0.0	0.0	0.0	0.0	57.4
	Newcastle Private	25.2	13.4	15.3	12.5	15.3
	Calvary, Wagga Wagga	42.4	44.4	36.2	29.0	32.7
	Other hospitals	48.3	54.1	49.4	52.9	0.0
	TOTAL	39.2	39.0	40.4	38.9	39.1
TOTAL NSW^b	26.7	27.7	29.8	30.0	28.7	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

^a Hospitals with more than 200 births in 2016 are identified individually

^b Total NSW includes births at home assisted by independent midwives

Indicator 3.3

Definition: Total number of selected primipara sustaining a perineal tear and no episiotomy while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation.

Table 63 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 63: 3.3 SELECTED PRIMIPARA SUSTAINING A PERINEAL TEAR AND NO EPISIOTOMY BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016^a

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	58.6	59.2	51.4	48.1	42.4
	Royal Prince Alfred	65.5	60.9	56.9	61.7	63.2
	TOTAL	64.1	60.5	55.6	58.4	58.8
South Western Sydney	Fairfield	58.0	54.2	50.8	53.6	53.9
	Liverpool	54.8	53.9	53.0	51.0	59.8
	Campbelltown	63.6	63.7	61.5	57.2	58.5
	Bankstown-Lidcombe	51.4	47.8	47.6	49.9	43.3
	Bowral	58.8	58.4	43.5	50.0	56.6
	TOTAL	57.2	55.8	53.5	53.1	55.5
South Eastern Sydney	St. George	55.8	56.1	51.0	52.6	48.2
	Sutherland	58.9	57.8	49.9	47.8	50.9
	Royal Hospital for Women	55.2	57.5	53.7	55.7	62.2
	TOTAL	56.0	57.1	52.2	53.4	55.6
Illawarra Shoalhaven	Shoalhaven	60.1	56.2	63.4	51.7	62.9
	Wollongong	72.0	61.8	61.9	59.1	61.9
	Other hospitals	75.0	75.0	80.0	33.3	0.0
	TOTAL	69.0	60.9	62.7	57.2	62.2
Western Sydney	Auburn	64.5	57.7	60.9	51.9	52.9
	Blacktown	46.6	50.7	44.6	44.4	44.3
	Westmead	47.6	43.5	35.9	39.4	38.6
	TOTAL	50.3	47.7	42.0	42.8	42.4
Nepean Blue Mountains	Blue Mountains	73.5	87.2	69.6	73.5	77.6
	Nepean	59.2	56.0	62.5	54.1	57.4
	Hawkesbury	56.8	56.7	61.5	50.0	63.4
	Lithgow	53.1	52.5	62.1	54.8	75.0
	TOTAL	59.5	57.5	62.8	54.5	60.1
Northern Sydney	Hornsby	65.0	69.6	70.9	58.3	63.8
	Manly	57.5	59.6	58.9	53.6	58.5
	Mona Vale	67.6	66.0	69.6	70.3	64.1
	Royal North Shore	57.7	55.6	55.1	57.3	55.1
	Other hospitals	82.1	96.8	81.1	88.6	88.5
	TOTAL	60.3	61.4	61.2	59.2	59.0
Central Coast	Gosford	64.9	57.4	59.9	60.6	65.8
	Other hospitals	73.0	86.3	86.2	87.5	94.3
	TOTAL	65.4	59.8	61.1	61.9	67.4
Hunter New England	Armidale	53.5	65.2	41.0	52.7	68.8
	Inverell	30.8	57.1	45.9	35.0	50.0
	Tamworth Base	62.3	59.3	54.9	57.6	55.8
	Manning Base	69.4	66.7	72.4	63.9	66.9
	Maitland	67.4	70.8	70.7	69.4	71.4
	John Hunter	65.6	61.9	63.0	65.1	65.6
	Other hospitals	62.9	60.1	64.4	65.2	67.9
	TOTAL	64.2	63.4	63.3	63.9	65.6
Northern NSW	Grafton Base	56.6	56.3	73.0	73.8	69.2
	Lismore Base	67.9	59.3	69.0	69.1	61.2
	Tweed Heads	67.7	69.9	62.5	67.1	71.8
Other hospitals		81.0	78.6	91.7	80.0	86.2
TOTAL		68.3	65.9	68.8	69.5	69.4
Mid North Coast	Coffs Harbour	63.3	65.0	67.3	68.3	57.2
	Kempsey	77.8	69.4	77.3	69.2	77.1
	Port Macquarie Base	63.4	63.9	65.9	49.6	69.2
	Other hospitals	75.0	66.7	100.0	83.3	100.0
	TOTAL	65.0	65.0	68.9	62.2	64.4
Southern NSW	Bega	78.4	60.0	57.7	68.9	64.6
	Goulburn Base	24.2	30.2	46.0	42.1	46.7
	Moruya	49.2	69.4	71.7	62.5	75.0
	Queanbeyan	70.1	67.7	50.9	74.8	63.5
	Other hospitals	54.8	63.0	60.9	71.7	63.4
TOTAL	55.7	58.8	55.8	65.3	63.1	
Murrumbidgee	Griffith Base	52.3	65.1	56.3	66.7	60.6
	Wagga Wagga Base	63.7	67.7	61.3	55.6	58.9
	Other hospitals	46.1	55.8	59.5	55.7	58.6
	TOTAL	55.3	63.2	59.6	58.2	59.3
Western NSW	Dubbo Base	51.7	49.5	44.7	54.5	62.0
	Mudgee	67.6	75.0	58.3	65.5	64.9
	Bathurst Base	72.1	76.8	63.7	66.4	66.1
	Orange Base	57.3	61.7	57.2	58.0	54.5
	Other hospitals	61.5	61.6	58.8	67.1	62.2
	TOTAL	59.9	61.5	54.4	60.0	61.0
Far West	Broken Hill Base	71.4	51.5	66.0	76.5	81.8
	TOTAL	71.4	51.5	66.0	76.5	81.8
Private Hospitals	Mater, North Sydney	34.8	38.8	38.6	42.6	47.4
	North Shore Private	46.1	53.5	45.2	56.2	50.6
	Sydney Adventist	57.0	51.9	48.9	55.4	47.1
	North Gosford Private	37.5	35.8	28.7	40.7	39.8
	Hurstville Community	47.6	43.7	44.7	50.8	57.6
	Kareena Private	58.1	56.0	56.1	63.3	52.6
	St. George Private	60.2	62.1	64.6	59.4	65.7
	Prince of Wales Private	50.4	40.3	35.9	36.7	39.6
	Norwest Private	53.7	43.9	40.1	35.0	39.9
	Sydney Southwest Private	32.2	37.0	27.2	28.0	30.2
	Nepean Private	28.3	28.2	25.0	26.3	27.1
	Westmead Private	24.9	28.5	25.9	23.1	27.8
	Wollongong Private	0.0	0.0	0.0	0.0	35.3
	Newcastle Private	59.7	62.4	50.2	55.8	52.9
	Calvary, Wagga Wagga	42.4	37.0	46.4	46.4	49.1
	Other hospitals	40.9	38.6	43.6	38.5	0.0
	TOTAL	46.0	45.2	41.4	43.6	44.2
TOTAL NSW^a		56.6	55.4	53.0	53.5	54.8

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 3.4

Definition: Total number of selected primipara undergoing episiotomy and sustaining a perineal tear while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation.

Table 64 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 64: 3.4 SELECTED PRIMIPARA UNDERGOING EPISIOTOMY AND SUSTAINING A PERINEAL TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	6.43	4.53	6.87	6.57	9.82
	Royal Prince Alfred	6.38	8.68	9.83	8.20	6.61
	TOTAL	6.39	7.77	9.14	7.80	7.30
South Western Sydney	Fairfield	1.92	3.63	2.47	2.96	4.04
	Liverpool	5.60	4.53	4.43	5.52	4.43
	Campbelltown	1.94	3.16	1.77	1.68	2.20
	Bankstown-Lidcombe	8.09	7.91	6.51	8.75	7.73
	Bowral	0.98	1.77	1.85	2.22	2.63
	TOTAL	4.22	4.55	3.67	4.48	4.11
South Eastern Sydney	St. George	15.99	13.30	13.76	9.72	16.64
	Sutherland	7.78	10.23	10.85	8.33	13.58
	Royal Hospital for Women	8.53	7.76	9.14	9.08	12.21
	TOTAL	10.88	9.93	10.91	9.15	13.88
Illawarra Shoalhaven	Shoalhaven	2.19	1.23	1.83	4.65	5.03
	Wollongong	5.11	7.94	5.03	6.03	9.28
	Other hospitals	8.33	4.17	0.00	0.00	0.00
	TOTAL	4.45	6.13	4.09	5.67	8.30
Western Sydney	Auburn	7.55	8.09	7.43	9.94	16.43
	Blacktown	7.77	13.00	12.01	10.14	21.36
	Westmead	10.67	13.98	16.10	13.25	20.23
	TOTAL	9.34	12.76	13.71	11.85	20.00
Nepean Blue Mountains	Blue Mountains	2.04	5.13	1.79	8.16	6.90
	Nepean	9.06	8.10	10.39	9.47	17.74
	Hawkesbury	6.40	3.55	2.22	4.11	10.57
	Lithgow	12.50	10.00	6.90	9.52	11.11
	TOTAL	8.33	7.25	8.44	8.49	15.89
Northern Sydney	Hornsby	10.18	8.03	4.01	12.20	18.27
	Manly	10.20	12.65	12.55	13.49	14.96
	Mona Vale	5.41	6.67	7.84	6.98	8.72
	Royal North Shore	11.66	14.97	14.06	13.56	17.75
	Other hospitals	2.56	0.00	2.70	0.00	3.85
	TOTAL	10.53	11.80	10.84	12.16	16.03
Central Coast	Gosford	10.18	13.79	12.39	10.63	12.61
	Other hospitals	0.00	0.00	0.00	3.13	2.86
	TOTAL	9.48	12.62	11.79	10.27	12.05
Hunter New England	Armidale	8.08	10.14	11.48	5.41	6.25
	Inverell	5.13	3.57	2.70	2.50	5.00
	Tamworth Base	8.61	4.64	8.24	6.81	12.18
	Manning Base	4.17	2.27	4.48	4.92	9.09
	Maitland	4.11	7.69	7.48	9.31	8.06
	John Hunter	9.54	9.04	9.87	9.82	13.57
	Other hospitals	5.09	8.15	3.96	8.57	5.35
	TOTAL	7.25	7.67	8.08	8.59	10.61
	Northern NSW	Grafton Base	1.32	2.82	3.37	3.08
Lismore Base		5.91	6.32	3.70	6.28	6.07
Tweed Heads		5.66	6.80	10.25	5.79	6.27

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		3.00	0.00	0.00	1.82	0.00
	TOTAL	5.02	5.81	6.17	5.34	5.28
Mid North Coast	Coffs Harbour	10.00	6.67	6.44	7.54	7.22
	Kempsey	2.78	0.00	0.00	5.13	10.42
	Port Macquarie Base	11.11	10.06	8.53	12.95	7.52
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	9.49	7.42	6.22	9.00	7.65
Southern NSW	Bega	5.41	2.22	7.69	13.33	4.17
	Goulburn Base	4.55	7.94	6.00	1.75	2.22
	Moruya	3.17	0.00	8.70	8.33	0.00
	Queanbeyan	5.13	3.23	8.62	4.67	11.11
	Other hospitals	9.68	7.41	2.17	2.17	2.44
TOTAL	5.10	3.90	7.10	5.61	5.77	
Murrumbidgee	Griffith Base	5.61	1.83	7.50	3.85	8.65
	Wagga Wagga Base	5.93	5.65	6.75	11.11	13.16
	Other hospitals	4.49	5.77	6.35	7.55	9.20
	TOTAL	5.44	4.45	6.78	8.31	11.02
Western NSW	Dubbo Base	2.33	7.14	4.85	4.69	8.26
	Mudgee	4.41	3.33	6.25	3.64	1.75
	Bathurst Base	7.69	4.04	2.94	6.03	11.01
	Orange Base	14.57	15.30	13.29	11.50	17.61
	Other hospitals	3.30	6.85	6.25	6.58	10.00
	TOTAL	7.41	8.67	7.22	7.12	10.83
Far West	Broken Hill Base	5.71	9.09	1.89	1.96	4.55
	TOTAL	5.71	9.09	1.89	1.96	4.55
Private Hospitals	Mater, North Sydney	7.01	3.88	6.47	5.29	1.17
	North Shore Private	0.92	0.72	1.66	0.71	1.93
	Sydney Adventist	0.47	1.44	1.60	1.47	0.00
	North Gosford Private	3.13	2.24	3.48	9.66	6.78
	Hurstville Community	4.32	2.11	2.27	4.69	1.82
	Kareena Private	1.29	0.71	0.72	0.00	0.74
	St. George Private	0.59	0.26	0.80	0.00	0.29
	Prince of Wales Private	7.08	4.72	5.37	5.13	8.86
	Norwest Private	4.44	4.57	4.99	3.84	7.10
	Sydney Southwest Private	2.61	1.74	2.01	5.17	6.27
	Nepean Private	3.29	4.23	5.63	6.58	11.61
	Westmead Private	1.01	0.74	0.78	0.82	0.64
	Wollongong Private	0.00	0.00	0.00	0.00	0.00
	Newcastle Private	0.00	2.45	14.29	9.69	10.23
	Calvary, Wagga Wagga	2.35	1.85	4.35	2.90	0.00
	Other hospitals	1.93	0.00	0.00	0.00	0.00
TOTAL	2.73	2.22	3.93	3.60	3.85	
TOTAL NSW*	6.56	7.09	7.68	7.38	9.93	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 3.5

Definition: Total number of selected primipara undergoing surgical repair of the perineum for third degree tear while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation. Surgical repair is defined as suture of the perineum following delivery.

Table 65 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 65: 3.5 SELECTED PRIMIPARA UNDERGOING SURGICAL REPAIR OF THE PERINEUM FOR THIRD DEGREE TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	6.90	10.26	5.54	10.09	7.75
	Royal Prince Alfred	7.63	6.17	8.08	8.87	8.51
	TOTAL	7.48	7.08	7.49	9.17	8.35
South Western Sydney	Fairfield	7.69	8.87	6.79	5.93	8.08
	Liverpool	6.58	5.96	6.77	5.64	9.27
	Campbelltown	5.26	2.65	5.58	3.36	5.43
	Bankstown-Lidcombe	5.23	4.68	5.31	8.38	5.67
	Bowral	5.88	4.42	2.78	3.33	1.32
	TOTAL	6.14	5.21	5.97	5.45	6.97
South Eastern Sydney	St. George	11.01	9.12	11.80	6.94	10.24
	Sutherland	8.61	8.95	7.75	11.02	3.95
	Royal Hospital for Women	5.66	5.57	4.92	7.36	7.62
	TOTAL	7.89	7.29	7.60	7.87	7.78
Illawarra Shoalhaven	Shoalhaven	2.19	1.85	3.66	5.81	3.77
	Wollongong	7.57	3.43	4.60	3.58	5.30
	Other hospitals	0.00	4.17	0.00	0.00	0.00
TOTAL	5.89	3.07	4.25	4.11	4.95	
Western Sydney	Auburn	5.03	4.44	5.43	6.35	4.18
	Blacktown	4.93	8.72	4.93	5.53	5.52
	Westmead	5.92	6.99	4.80	6.04	4.38
	TOTAL	5.50	7.04	4.93	5.95	4.68
Nepean Blue Mountains	Blue Mountains	10.20	7.69	12.50	8.16	6.90
	Nepean	6.62	6.03	6.36	3.85	6.14
	Hawkesbury	6.40	4.96	4.44	1.37	7.32
	Lithgow	0.00	0.00	3.45	0.00	0.00
	TOTAL	6.54	5.63	6.36	3.49	6.11
Northern Sydney	Hornsby	7.49	5.02	8.36	9.15	6.31
	Manly	1.98	8.57	6.84	11.51	9.83
	Mona Vale	2.70	6.00	8.33	12.79	8.72
	Royal North Shore	9.51	11.73	10.84	8.08	8.29
	Other hospitals	2.56	0.00	2.70	0.00	0.00
	TOTAL	6.78	8.81	9.19	9.26	8.05
Central Coast	Gosford	7.19	9.62	6.98	7.30	4.84
	Other hospitals	0.00	5.88	6.90	3.13	0.00
	TOTAL	6.69	9.30	6.98	7.10	4.56
Hunter New England	Armidale	2.02	4.35	3.28	2.70	4.69
	Inverell	2.56	0.00	2.70	0.00	2.50
	Tamworth Base	3.97	5.15	5.49	4.19	4.06
	Manning Base	6.25	2.27	3.73	8.20	3.31
	Maitland	7.33	7.69	6.23	8.71	7.33
	John Hunter	8.09	8.06	10.11	8.62	9.05
	Other hospitals	4.73	3.86	4.46	3.81	4.12
	TOTAL	6.55	6.44	7.39	7.15	6.81
Northern NSW	Grafton Base	2.63	0.00	0.00	0.00	2.56
	Lismore Base	2.95	2.37	5.09	5.80	2.34
	Tweed Heads	4.25	5.58	5.65	5.49	5.23

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		2.00	3.57	0.00	0.00	0.00
	TOTAL	3.46	3.91	4.17	4.58	3.42
Mid North Coast	Coffs Harbour	6.19	6.11	5.94	3.52	4.64
	Kempsey	0.00	5.56	4.55	5.13	10.42
	Port Macquarie Base	9.80	12.43	9.30	5.04	7.52
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	6.81	8.70	6.74	4.11	6.33
Southern NSW	Bega	5.41	4.44	5.77	4.44	2.08
	Goulburn Base	1.52	1.59	4.00	3.51	4.44
	Moruya	12.70	8.16	10.87	12.50	9.62
	Queanbeyan	0.00	3.23	4.31	3.74	7.94
	TOTAL	4.14	4.22	5.48	5.28	5.77
Murrumbidgee	Griffith Base	2.80	1.83	2.50	2.56	6.73
	Wagga Wagga Base	8.89	8.06	7.36	6.54	5.26
	Other hospitals	4.49	3.85	4.76	9.43	2.30
	TOTAL	5.74	4.75	5.42	6.53	4.99
Western NSW	Dubbo Base	4.65	2.04	3.40	4.23	3.72
	Mudgee	1.47	0.00	6.25	1.82	3.51
	Bathurst Base	9.62	4.04	5.88	6.90	6.42
	Orange Base	10.55	9.29	10.40	8.50	7.39
	Other hospitals	5.49	4.11	8.75	6.58	7.78
	TOTAL	7.10	4.58	6.73	6.06	5.64
Far West	Broken Hill Base	0.00	3.03	0.00	1.96	2.27
	TOTAL	0.00	3.03	0.00	1.96	2.27
Private Hospitals	Mater, North Sydney	2.34	1.83	2.16	4.50	1.46
	North Shore Private	1.15	1.91	1.11	2.38	2.79
	Sydney Adventist	0.47	0.72	0.91	1.96	0.00
	North Gosford Private	2.34	2.99	0.00	4.14	1.69
	Hurstville Community	2.16	1.41	2.27	1.56	1.21
	Kareena Private	1.29	3.55	2.16	1.44	2.22
	St. George Private	2.65	3.39	2.93	1.89	2.93
	Prince of Wales Private	0.88	2.36	0.85	2.05	2.49
	Norwest Private	2.22	2.91	3.39	2.16	3.10
	Sydney Southwest Private	3.04	2.61	2.01	3.45	1.96
	Nepean Private	1.97	2.82	0.63	3.95	5.81
	Westmead Private	0.40	0.93	0.58	0.82	0.85
	Wollongong Private	0.00	0.00	0.00	0.00	0.98
	Newcastle Private	3.10	5.12	5.67	5.67	7.42
	Calvary, Wagga Wagga	5.88	0.00	4.35	0.00	0.00
	Other hospitals	1.16	0.97	0.58	0.00	0.00
	TOTAL	1.78	2.33	2.04	2.57	2.47
TOTAL NSW*	5.43	5.53	5.64	5.78	5.65	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Indicator 3.6

Definition: Total number of selected primipara undergoing surgical repair of the perineum for fourth degree tear while giving birth vaginally as a percentage of the total number of selected primipara delivering vaginally.

A selected primipara is defined as a woman who is 20–34 years of age at the time of giving birth; giving birth for the first time at 20 weeks or greater gestation; singleton pregnancy; cephalic presentation; and at 37⁰ to 40⁶ weeks gestation. Surgical repair is defined as suture of the perineum following delivery.

Table 66 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 66: 3.6 SELECTED PRIMIPARA UNDERGOING SURGICAL REPAIR OF THE PERINEUM FOR FOURTH DEGREE TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016^a

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	0.24	0.95	0.22	0.00	0.52
	Royal Prince Alfred	0.50	0.34	0.34	0.30	0.14
	TOTAL	0.45	0.48	0.31	0.23	0.22
South Western Sydney	Fairfield	0.70	0.00	0.21	0.00	0.24
	Liverpool	0.42	0.26	0.12	0.12	0.55
	Campbelltown	0.28	0.25	0.25	0.36	0.00
	Bankstown-Lidcombe	0.51	0.36	0.34	0.00	0.52
	Bowral	0.00	0.00	0.93	0.00	0.00
	TOTAL	0.44	0.22	0.25	0.15	0.29
	South Eastern Sydney	St. George	0.39	0.15	0.28	0.46
Sutherland		0.28	0.26	0.00	0.81	0.00
Royal Hospital for Women		0.84	0.46	0.35	0.73	0.18
TOTAL		0.61	0.32	0.27	0.66	0.23
Illawarra Shoalhaven	Shoalhaven	1.09	0.62	0.00	0.00	0.63
	Wollongong	0.20	0.43	0.00	0.75	0.19
	Other hospitals	0.00	0.00	0.00	0.00	0.00
TOTAL	0.43	0.46	0.00	0.57	0.29	
Western Sydney	Auburn	0.23	0.26	0.57	0.28	0.00
	Blacktown	0.45	1.27	1.15	0.46	0.14
	Westmead	0.22	0.45	0.44	0.23	0.37
	TOTAL	0.28	0.64	0.65	0.30	0.25
Nepean Blue Mountains	Blue Mountains	0.00	0.00	0.00	0.00	0.00
	Nepean	0.87	0.52	0.62	0.48	0.27
	Hawkesbury	0.00	0.00	0.00	0.68	0.00
	Lithgow	0.00	2.50	0.00	0.00	0.00
	TOTAL	0.64	0.50	0.46	0.47	0.21
Northern Sydney	Hornsby	0.90	0.00	0.67	0.34	1.00
	Manly	0.28	0.00	0.38	0.00	0.00
	Mona Vale	0.00	0.67	0.00	0.00	0.00
	Royal North Shore	0.77	0.00	0.65	0.43	0.65
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.64	0.07	0.51	0.28	0.52
Central Coast	Gosford	0.80	0.18	1.05	0.63	0.35
	Other hospitals	0.00	3.92	0.00	0.00	0.00
	TOTAL	0.74	0.50	1.00	0.60	0.33
Hunter New England	Armidale	0.00	0.00	0.00	0.00	0.00
	Inverell	0.00	0.00	0.00	0.00	0.00
	Tamworth Base	0.00	0.52	1.10	0.00	1.02
	Manning Base	0.00	0.00	0.75	0.00	0.83
	Maitland	0.29	0.62	1.25	0.60	0.73
	John Hunter	0.36	0.61	0.61	0.72	0.25
	Other hospitals	0.00	0.43	0.99	0.00	0.41
	TOTAL	0.21	0.50	0.80	0.44	0.46
	Northern NSW	Grafton Base	0.00	0.00	1.12	1.54
Lismore Base		0.00	0.00	0.93	0.48	0.00
Tweed Heads		0.24	0.49	0.35	0.30	0.35
Other hospitals		0.00	0.00	0.00	0.00	0.00
TOTAL		0.12	0.25	0.62	0.46	0.31
Mid North Coast	Coffs Harbour	0.48	0.00	0.50	0.50	0.00
	Kempsey	0.00	0.00	0.00	0.00	4.17
	Port Macquarie Base	0.65	0.00	0.00	0.00	0.00
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.49	0.00	0.26	0.26	0.53
Southern NSW	Bega	0.00	2.22	1.92	0.00	0.00
	Goulburn Base	0.00	0.00	0.00	0.00	0.00
	Moruya	0.00	0.00	0.00	2.08	0.00
	Queanbeyan	0.85	0.00	0.86	0.00	0.00
	Other hospitals	0.00	0.00	0.00	0.00	0.00
TOTAL	0.32	0.32	0.65	0.33	0.00	
Murrumbidgee	Griffith Base	0.00	0.00	0.00	0.00	0.00
	Wagga Wagga Base	0.74	0.00	0.00	0.00	0.00
	Other hospitals	1.12	0.00	1.59	0.00	1.15
	TOTAL	0.60	0.00	0.54	0.00	0.26
Western NSW	Dubbo Base	0.00	0.00	0.00	0.94	0.41
	Mudgee	1.47	0.00	0.00	1.82	0.00
	Bathurst Base	0.96	0.00	0.00	1.72	0.00
	Orange Base	0.00	0.00	0.00	0.50	0.00
	Other hospitals	1.10	4.11	0.00	1.32	0.00
	TOTAL	0.47	0.49	0.00	1.06	0.15
Far West	Broken Hill Base	0.00	0.00	0.00	0.00	0.00
	TOTAL	0.00	0.00	0.00	0.00	0.00
Private Hospitals	Mater, North Sydney	0.23	0.00	0.24	0.00	0.29
	North Shore Private	0.00	0.00	0.28	0.00	0.43
	Sydney Adventist	0.23	0.48	0.00	0.25	0.23
	North Gosford Private	0.00	0.75	0.00	0.69	0.00
	Hurstville Community	1.08	0.00	0.00	0.00	0.00
	Kareena Private	0.00	0.00	0.00	0.00	0.00
	St. George Private	0.00	0.78	0.00	0.00	0.00
	Prince of Wales Private	0.22	0.00	0.28	0.00	0.00
	Norwest Private	0.00	0.00	0.00	0.00	0.22
	Sydney Southwest Private	0.00	0.43	0.00	0.00	0.00
	Nepean Private	0.66	0.00	0.63	0.00	0.65
	Westmead Private	0.00	0.00	0.00	0.00	0.00
	Wollongong Private	0.00	0.00	0.00	0.00	0.00
	Newcastle Private	0.22	0.00	0.00	0.00	0.00
	Calvary, Wagga Wagga	0.00	0.00	0.00	0.00	0.00
	Other hospitals	0.00	0.00	0.58	0.00	0.00
	TOTAL	0.15	0.15	0.11	0.05	0.14
TOTAL NSW^a		0.38	0.33	0.37	0.32	0.27

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
^a Hospitals with more than 200 births in 2016 are identified individually
^{*} Total NSW includes births at home assisted by independent midwives

General anaesthesia for caesarean section

Indicator 4.1

Definition: Total number of women having a general anaesthetic for a caesarean section as a percentage of women having a caesarean section.

Table 67 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 67: 4.1 GENERAL ANAESTHESIA FOR CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016[#]

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	11.86	13.47	10.52	10.61	8.62
	Royal Prince Alfred	10.43	10.08	10.09	11.13	10.54
	TOTAL	10.77	10.87	10.19	11.00	10.07
South Western Sydney	Fairfield	21.91	14.48	11.82	12.43	12.65
	Liverpool	18.06	14.68	15.08	13.67	15.54
	Campbelltown	11.25	9.39	10.73	13.14	12.74
	Bankstown-Lidcombe	17.69	12.72	10.26	10.68	13.27
	Bowral	10.20	11.90	10.56	10.53	8.89
TOTAL	16.43	12.61	12.26	12.62	13.58	
South Eastern Sydney	St. George	8.87	9.91	7.01	7.47	6.22
	Sutherland	11.58	8.94	10.94	9.69	6.62
	Royal Hospital for Women	4.42	4.51	4.15	3.88	4.49
	Other hospitals	0.00	0.00	0.00	0.00	0.00
TOTAL	6.83	6.85	6.03	5.88	5.35	
Illawarra Shoalhaven	Shoalhaven	6.10	6.51	7.87	5.90	6.18
	Wollongong	8.26	9.12	9.54	7.26	9.72
	Other hospitals	3.85	11.76	20.00	0.00	50.00
TOTAL	7.50	8.42	9.15	6.81	8.87	
Western Sydney	Auburn	10.57	5.64	7.74	8.33	4.53
	Blacktown	10.43	12.77	12.73	11.89	10.27
	Westmead	11.40	9.30	9.95	8.40	8.96
TOTAL	11.00	10.07	10.67	9.53	8.91	
Nepean Blue Mountains	Blue Mountains	9.62	8.33	6.58	3.53	6.58
	Nepean	18.36	16.19	15.25	13.90	12.00
	Hawkesbury	8.49	7.48	7.94	8.49	8.20
	Lithgow	4.08	3.28	6.15	4.69	1.52
TOTAL	16.00	13.91	13.45	12.34	10.93	
Northern Sydney	Hornsby	5.88	6.40	5.50	6.92	7.92
	Manly	4.21	4.20	7.43	7.43	6.69
	Mona Vale	0.00	6.08	8.42	8.25	9.01
	Royal North Shore	5.14	5.16	5.16	5.62	5.29
	Other hospitals	100.00	0.00	0.00	0.00	0.00
TOTAL	5.03	5.32	5.97	6.46	6.42	
Central Coast	Gosford	7.78	7.74	6.54	6.33	10.97
	TOTAL	7.78	7.74	6.54	6.33	10.97
Hunter New England	Armidale	9.33	5.38	4.84	5.84	5.30
	Inverell	3.37	2.13	3.09	1.27	2.53
	Tamworth Base	10.37	9.82	13.50	14.78	9.24
	Manning Base	15.66	13.64	11.88	11.11	14.57
	Maitland	13.46	9.79	10.74	6.78	14.25
	John Hunter	16.55	18.25	15.36	12.49	16.28
	Other hospitals	20.00	20.36	24.00	15.00	11.11
TOTAL	14.74	14.48	13.92	11.30	13.54	
Northern NSW	Grafton Base	10.61	9.23	8.49	11.40	6.90
	Lismore Base	5.33	6.55	6.44	4.92	6.72
	Tweed Heads	12.11	7.23	12.01	7.82	7.07

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		1.30	0.00	2.17	0.00	15.38
	TOTAL	8.49	6.73	8.63	6.93	7.06
Mid North Coast	Coffs Harbour	10.06	8.22	7.67	7.87	7.61
	Kempsey	3.33	1.92	15.38	0.00	15.52
	Port Macquarie Base	6.79	9.05	10.17	11.11	7.34
	Other hospitals	0.00	0.00	0.00	0.00	0.00
TOTAL	8.27	7.97	9.19	8.42	8.13	
Southern NSW	Bega	9.09	15.38	3.17	5.88	4.11
	Goulburn Base	12.50	2.74	2.94	7.78	7.69
	Moruya	5.68	8.96	6.25	4.05	6.10
	Queanbeyan	8.91	12.04	5.05	3.39	2.78
Other hospitals	8.00	2.22	18.18	11.76	4.76	
TOTAL	8.83	8.70	5.83	5.73	5.07	
Murrumbidgee	Griffith Base	10.12	6.02	10.53	5.96	7.06
	Wagga Wagga Base	11.57	6.84	8.33	12.72	7.62
	Other hospitals	5.77	7.69	4.40	3.54	1.75
TOTAL	9.54	6.86	7.85	9.30	6.40	
Western NSW	Dubbo Base	17.91	18.42	21.36	17.11	15.51
	Mudgee	5.08	7.94	1.61	8.57	3.51
	Bathurst Base	9.47	13.51	5.71	10.67	5.79
	Orange Base	16.78	11.21	11.05	5.98	11.83
	Other hospitals	19.01	10.00	0.93	7.45	7.14
TOTAL	15.46	13.43	11.89	11.01	11.54	
Far West	Broken Hill Base	12.50	14.52	8.33	8.00	7.58
	TOTAL	12.50	14.52	8.33	8.00	7.58
Private Hospitals	Mater, North Sydney	2.44	2.25	2.60	1.62	1.05
	North Shore Private	1.89	1.28	1.80	1.62	1.62
	Sydney Adventist	3.71	6.34	3.75	3.87	2.37
	North Gosford Private	2.17	3.95	2.61	2.85	2.26
	Hurstville Community	3.92	4.22	2.24	4.36	1.22
	Kareena Private	2.76	1.76	2.62	3.63	2.38
	St. George Private	4.07	3.23	4.04	3.42	3.53
	Prince of Wales Private	1.00	0.67	2.12	2.01	2.32
	Norwest Private	6.73	6.92	4.50	6.09	4.31
	Sydney Southwest Private	3.80	4.26	4.11	3.67	2.47
	Nepean Private	7.46	5.12	4.33	4.60	5.11
	Westmead Private	2.03	3.24	3.70	2.84	2.67
	Wollongong Private	0.00	0.00	0.00	0.00	4.56
Newcastle Private	1.48	2.07	1.78	2.59	2.25	
Calvary, Wagga Wagga	2.95	4.02	3.94	1.04	1.35	
Other hospitals	4.45	3.78	3.46	4.02	4.55	
TOTAL	2.97	3.10	3.03	2.98	2.48	
TOTAL NSW*	8.45	7.97	7.86	7.40	7.42	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Postpartum haemorrhage and blood transfusion after vaginal birth

Indicator 7.1

Definition: Total number of women who give birth vaginally who receive a blood transfusion during the same admission as a percentage of women who give birth vaginally.

Table 68 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 68: 7.1 POSTPARTUM HAEMORRHAGE AND BLOOD TRANSFUSION FOLLOWING VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016	
		%	%	%	%	%	
Sydney	Canterbury	1.23	1.68	1.52	0.99	1.13	
	Royal Prince Alfred	0.79	1.10	0.93	0.96	1.69	
	TOTAL	0.90	1.26	1.09	0.97	1.54	
South Western Sydney	Fairfield	0.43	0.48	0.61	0.85	1.16	
	Liverpool	0.78	0.69	0.82	0.48	0.65	
	Campbelltown	0.71	1.00	1.01	1.07	0.94	
	Bankstown-Lidcombe	0.86	1.10	1.35	0.84	0.78	
	Bowral	0.55	0.00	0.61	1.39	0.00	
	TOTAL	0.70	0.79	0.94	0.82	0.83	
South Eastern Sydney	St. George	1.64	1.54	1.73	1.83	1.11	
	Sutherland	0.89	2.13	1.46	1.75	1.12	
	Royal Hospital for Women	1.83	1.54	1.53	1.24	0.81	
	TOTAL	1.61	1.65	1.58	1.52	0.96	
Illawarra Shoalhaven	Shoalhaven	1.98	1.95	1.46	1.58	1.32	
	Wollongong	0.98	1.86	1.50	1.53	1.31	
	Other hospitals	2.11	1.27	0.00	0.00	0.00	
	TOTAL	1.27	1.86	1.45	1.53	1.30	
Western Sydney	Auburn	0.68	0.76	1.43	0.81	1.34	
	Blacktown	1.13	0.74	1.13	1.17	1.49	
	Westmead	1.64	2.20	1.88	1.49	1.24	
	TOTAL	1.32	1.53	1.59	1.30	1.33	
Nepean Blue Mountains	Blue Mountains	1.20	3.01	2.81	2.35	0.63	
	Nepean	1.32	1.65	2.18	1.49	1.13	
	Hawkesbury	1.01	0.98	1.05	2.71	1.43	
	TOTAL	1.47	1.62	1.95	1.64	1.09	
Northern Sydney	Hornsby	1.19	0.86	0.89	1.14	0.88	
	Manly	1.03	1.98	1.34	1.59	1.17	
	Mona Vale	0.92	2.04	0.86	2.52	0.74	
	Royal North Shore	0.98	1.27	1.17	1.03	1.68	
	Other hospitals	0.00	0.00	0.00	0.81	0.97	
	TOTAL	1.01	1.36	1.07	1.33	1.28	
Central Coast	Gosford	0.93	1.01	1.08	1.36	0.96	
	Other hospitals	0.57	1.19	0.70	0.00	0.00	
	TOTAL	0.89	1.02	1.05	1.26	0.90	
Hunter New England	Armidale	1.60	0.32	1.40	1.78	1.10	
	Inverell	1.16	2.59	0.56	2.01	1.80	
	Tamworth Base	1.39	1.44	2.54	2.17	0.43	
	Manning Base	1.36	2.54	2.20	3.61	1.20	
	Maitland	2.12	1.71	1.72	1.78	1.67	
	John Hunter	1.82	2.23	1.87	2.77	0.85	
	Other hospitals	1.16	0.95	1.08	1.73	0.34	
	TOTAL	1.66	1.82	1.78	2.39	0.94	
Northern NSW	Grafton Base	0.96	1.54	1.85	1.02	0.33	
	Lismore Base	0.98	1.66	2.19	1.89	0.69	
	Tweed Heads	1.39	1.69	2.45	1.96	1.61	
Other hospitals		0.91	1.15	1.68	0.54	0.00	
	TOTAL	1.15	1.61	2.20	1.71	0.94	
Mid North Coast	Coffs Harbour	2.09	0.69	0.72	0.85	1.57	
	Kempsey	2.97	2.50	1.92	3.50	0.00	
	Port Macquarie Base	2.60	1.33	1.33	2.62	1.58	
	Other hospitals	1.64	0.00	0.00	1.85	0.00	
	TOTAL	2.38	1.14	1.08	1.87	1.30	
Southern NSW	Bega	1.80	1.23	2.70	2.65	1.09	
	Goulburn Base	0.80	0.00	1.97	1.38	0.00	
	Moruya	3.32	1.31	1.01	2.20	3.21	
	Queanbeyan	3.36	4.04	5.63	0.34	1.46	
	TOTAL	2.44	1.72	3.02	1.27	1.41	
Murrumbidgee	Griffith Base	0.85	2.58	3.29	1.19	1.41	
	Wagga Wagga Base	1.22	2.04	1.68	1.91	2.38	
	Other hospitals	5.34	1.32	1.68	2.04	1.36	
	TOTAL	2.60	1.94	2.08	1.77	1.87	
Western NSW	Dubbo Base	1.33	1.91	1.61	1.58	1.82	
	Mudgee	1.98	0.00	1.10	2.27	1.58	
	Bathurst Base	2.80	1.92	1.80	1.34	1.36	
	Orange Base	2.03	1.65	1.64	0.85	0.70	
	Other hospitals	2.69	0.84	0.55	1.73	1.61	
	TOTAL	2.00	1.55	1.45	1.40	1.38	
Far West	Broken Hill Base	2.87	3.73	2.92	1.78	0.61	
	TOTAL	2.87	3.73	2.92	1.78	0.61	
Private Hospitals	Mater, North Sydney	2.04	2.32	1.43	0.91	0.26	
	North Shore Private	0.55	0.41	0.10	0.51	0.58	
	Sydney Adventist	1.71	2.80	3.14	2.94	0.49	
	North Gosford Private	3.48	2.10	3.86	1.09	0.83	
	Hurstville Community	2.00	1.68	1.20	0.98	0.20	
	Kareena Private	0.24	0.23	0.49	0.26	0.49	
	St. George Private	0.32	0.21	0.44	0.46	0.35	
	Prince of Wales Private	1.73	2.21	1.82	0.27	0.19	
	Norwest Private	2.21	1.74	1.28	0.71	0.54	
	Sydney Southwest Private	1.60	2.45	0.00	0.17	0.30	
	Nepean Private	2.15	2.48	2.54	0.00	0.23	
	Westmead Private	0.39	0.39	0.78	0.88	1.06	
	Wollongong Private	0.00	0.00	0.00	0.00	0.60	
	Newcastle Private	0.24	0.86	1.81	0.34	0.35	
	Calvary, Wagga Wagga	0.70	2.35	2.02	0.98	0.00	
	Other hospitals	0.15	0.00	0.21	0.38	0.00	
	TOTAL	1.25	1.44	1.38	0.80	0.47	
	TOTAL NSW*		1.33	1.45	1.45	1.32	1.02

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
 # Hospitals with more than 200 births in 2016 are identified individually
 * Total NSW includes births at home assisted by independent midwives

Postpartum haemorrhage and blood transfusion after caesarean section

Indicator 7.2

Definition: Total number of women who undergo caesarean section who receive a blood transfusion during the same admission as a percentage of women who undergo caesarean section.

Table 69 shows information for hospitals where at least 200 mothers gave birth in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 69: 7.2 POSTPARTUM HAEMORRHAGE AND BLOOD TRANSFUSION FOLLOWING CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	1.02	1.89	1.24	1.02	1.15
	Royal Prince Alfred	0.83	1.47	0.81	0.73	1.18
	TOTAL	0.88	1.57	0.91	0.80	1.18
South Western Sydney	Fairfield	0.77	1.61	0.99	1.35	0.72
	Liverpool	1.16	0.62	1.66	0.43	0.73
	Campbelltown	0.76	0.41	0.54	1.24	0.88
	Bankstown-Lidcombe	0.80	1.16	1.21	0.89	1.42
	Bowral	0.00	0.00	0.70	0.00	1.48
	TOTAL	0.87	0.79	1.12	0.86	0.95
South Eastern Sydney	St. George	0.72	2.94	1.96	2.35	0.95
	Sutherland	1.40	1.66	2.19	0.94	0.32
	Royal Hospital for Women	1.90	2.16	2.41	1.77	0.90
	Other hospitals	0.00	0.00	0.00	0.00	0.00
TOTAL	1.45	2.33	2.24	1.84	0.83	
Illawarra Shoalhaven	Shoalhaven	3.25	3.83	3.15	2.80	2.32
	Wollongong	1.55	2.99	1.88	2.22	1.11
	Other hospitals	0.00	5.88	20.00	0.00	0.00
TOTAL	1.99	3.28	2.31	2.40	1.43	
Western Sydney	Auburn	3.40	3.01	1.35	1.92	0.97
	Blacktown	1.47	0.91	1.02	1.26	1.28
	Westmead	2.82	2.54	1.98	2.30	1.54
	TOTAL	2.44	2.05	1.59	1.92	1.40
Nepean Blue Mountains	Blue Mountains	1.92	3.33	1.32	1.18	0.00
	Nepean	2.23	3.41	2.57	2.88	1.17
	Hawkesbury	2.58	1.36	1.08	0.74	1.17
	Lithgow	2.04	3.28	1.54	1.56	1.52
TOTAL	2.28	3.04	2.25	2.45	1.13	
Northern Sydney	Hornsby	1.68	2.02	2.27	0.38	1.32
	Manly	0.70	2.29	1.12	1.12	3.34
	Mona Vale	1.92	0.00	0.53	0.52	0.90
	Royal North Shore	1.71	1.68	1.12	1.49	1.53
	Other hospitals	100.00	0.00	0.00	0.00	0.00
TOTAL	1.59	1.69	1.27	1.13	1.72	
Central Coast	Gosford	1.98	1.11	1.15	1.01	0.90
	TOTAL	1.98	1.11	1.15	1.01	0.90
Hunter New England	Armidale	0.67	0.77	0.81	2.92	0.76
	Inverell	5.62	4.26	2.06	2.53	0.00
	Tamworth Base	2.49	2.46	2.55	2.06	1.32
	Manning Base	1.20	1.30	2.50	3.17	1.32
	Maitland	2.90	3.73	2.39	1.41	1.61
	John Hunter	4.20	4.58	3.75	3.43	1.62
	Other hospitals	3.56	0.90	3.11	2.27	1.33
	TOTAL	3.38	3.46	3.04	2.78	1.44
Northern NSW	Grafton Base	6.82	2.31	0.94	1.75	2.59
	Lismore Base	0.94	2.98	2.03	0.38	1.49
	Tweed Heads	1.41	2.71	2.47	1.63	1.01

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		0.00	0.00	0.00	0.00	0.00
	TOTAL	1.93	2.55	1.92	1.11	1.44
Mid North Coast	Coffs Harbour	0.86	0.57	1.92	0.87	0.25
	Kempsey	5.00	5.77	1.92	1.64	3.45
	Port Macquarie Base	1.36	3.33	2.12	1.15	1.54
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	1.43	1.95	1.99	1.05	0.98
Southern NSW	Bega	4.55	1.92	0.00	2.94	0.00
	Goulburn Base	3.75	0.00	0.00	1.11	3.30
	Moruya	5.68	1.49	3.75	0.00	1.22
	Queanbeyan	5.94	8.33	2.02	0.00	0.93
Other hospitals	2.00	0.00	0.00	0.00	0.00	
TOTAL	4.68	3.19	1.46	0.78	1.33	
Murrumbidgee	Griffith Base	2.38	0.75	1.32	0.66	0.59
	Wagga Wagga Base	0.83	3.85	1.74	2.66	1.17
	Other hospitals	5.13	4.90	5.66	5.31	1.75
	TOTAL	2.47	3.33	2.67	2.66	1.12
Western NSW	Dubbo Base	4.18	2.30	2.08	2.06	2.67
	Mudgee	0.00	1.59	1.61	2.86	0.00
	Bathurst Base	4.14	1.35	1.71	1.33	0.00
	Orange Base	1.75	1.15	0.58	1.66	0.85
	Other hospitals	2.48	2.50	0.00	1.06	0.00
	TOTAL	2.99	1.73	1.27	1.78	1.29
Far West	Broken Hill Base	3.75	0.00	0.00	2.00	0.00
	TOTAL	3.75	0.00	0.00	2.00	0.00
Private Hospitals	Mater, North Sydney	0.93	0.87	0.93	0.45	0.88
	North Shore Private	0.00	0.18	0.28	0.00	0.23
	Sydney Adventist	0.37	0.43	0.25	0.40	0.37
	North Gosford Private	1.63	1.13	0.58	0.32	0.85
	Hurstville Community	1.31	0.90	1.60	0.67	0.61
	Kareena Private	0.83	0.00	0.00	0.00	0.53
	St. George Private	0.38	0.26	0.48	0.71	0.71
	Prince of Wales Private	1.28	2.07	1.46	0.42	0.43
	Norwest Private	1.02	0.85	0.82	0.25	0.92
	Sydney Southwest Private	1.36	0.00	0.51	0.52	0.00
	Nepean Private	1.10	2.70	0.31	0.00	0.28
	Westmead Private	0.21	0.31	0.40	0.55	0.59
	Wollongong Private	0.00	0.00	0.00	0.00	0.25
	Newcastle Private	0.12	0.83	0.63	0.13	0.35
Calvary, Wagga Wagga	0.84	0.40	0.39	0.35	0.00	
Other hospitals	1.35	0.24	0.92	0.67	0.00	
TOTAL	0.74	0.80	0.68	0.35	0.51	
TOTAL NSW*	1.58	1.72	1.43	1.25	0.99	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Intrauterine growth restriction

Indicator 8.1

Definition: Total number of babies born with birth weight less than 2,750 grams at 40⁰ weeks gestation or beyond as a percentage of the total number of babies born at 40⁰ weeks gestation or beyond.

Table 70 shows information for hospitals where at least 200 babies were born in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 70: 8.1 INTRAUTERINE GROWTH RESTRICTION AT 40 WEEKS GESTATION OR MORE BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	1.86	1.38	1.89	2.57	0.97
	Royal Prince Alfred	1.39	1.36	1.55	1.14	1.68
	TOTAL	1.50	1.36	1.63	1.47	1.51
South Western Sydney	Fairfield	1.82	2.45	3.04	1.92	2.52
	Liverpool	2.57	1.99	2.31	2.73	2.20
	Campbelltown	1.15	1.46	1.28	1.99	0.84
	Bankstown-Lidcombe	2.41	1.17	2.16	1.74	2.33
	Bowral	1.40	0.51	1.44	0.57	1.03
	TOTAL	1.95	1.67	2.08	2.08	1.80
South Eastern Sydney	St. George	2.75	2.12	2.04	2.16	1.80
	Sutherland	2.62	0.88	0.67	0.17	1.93
	Royal Hospital for Women	1.23	1.20	1.62	1.78	2.04
	TOTAL	1.97	1.42	1.57	1.58	1.95
Illawarra Shoalhaven	Shoalhaven	1.58	1.52	0.29	2.02	1.75
	Wollongong	0.83	1.16	0.74	0.94	1.00
	Other hospitals	0.00	0.00	2.86	0.00	0.00
	TOTAL	1.01	1.23	0.67	1.25	1.19
Western Sydney	Auburn	2.09	2.10	2.76	2.08	1.91
	Blacktown	1.60	1.52	1.72	1.70	2.98
	Westmead	2.51	2.53	2.44	2.12	3.46
	TOTAL	2.14	2.15	2.26	1.99	3.08
Nepean Blue Mountains	Blue Mountains	0.00	0.83	1.71	0.00	0.69
	Nepean	0.66	1.53	1.87	2.11	1.61
	Hawkesbury	1.02	0.96	0.69	2.27	1.45
	TOTAL	0.77	1.49	1.70	1.97	1.77
Northern Sydney	Hornsby	2.08	1.04	1.97	1.05	1.46
	Manly	1.17	0.90	1.57	1.18	1.02
	Mona Vale	2.30	1.02	1.48	0.60	0.66
	Royal North Shore	2.14	1.92	1.59	1.37	2.73
	TOTAL	1.82	1.35	1.61	1.10	1.83
Central Coast	Gosford	1.15	1.58	1.86	1.15	0.71
	Other hospitals	0.00	0.00	1.64	0.00	0.00
	TOTAL	1.06	1.47	1.85	1.07	0.66
Hunter New England	Armidale	3.19	1.65	3.01	1.31	2.43
	Inverell	1.52	1.10	1.12	1.25	0.00
	Tamworth Base	3.09	2.56	0.93	3.12	1.37
	Manning Base	1.27	1.88	1.08	1.46	3.91
	Maitland	1.85	1.47	1.48	1.47	1.36
	John Hunter	1.86	1.74	1.31	1.17	1.51
	Other hospitals	2.13	1.61	1.49	1.61	1.44
	TOTAL	2.02	1.74	1.38	1.53	1.64
Northern NSW	Grafton Base	1.04	1.49	2.04	0.66	1.43
	Lismore Base	0.99	1.28	1.26	2.14	1.72
	Tweed Heads	1.56	0.79	0.52	0.50	1.08
Other hospitals		0.46	1.27	0.69	1.61	2.29
	TOTAL	1.18	1.08	1.01	1.19	1.48
Mid North Coast	Coffs Harbour	1.34	2.55	1.30	0.00	0.86
	Kempsey	1.87	0.97	1.82	0.87	2.04
	Port Macquarie Base	1.24	1.61	0.65	1.70	1.22
	Other hospitals	0.00	0.00	3.57	4.35	0.00
	TOTAL	1.32	1.91	1.21	0.88	1.13
Southern NSW	Bega	1.01	0.00	1.54	0.00	3.25
	Goulburn Base	1.71	2.61	0.71	1.85	3.23
	Moruya	2.78	2.01	0.85	0.00	1.34
	Queanbeyan	0.43	2.37	1.33	1.81	0.40
	TOTAL	1.29	2.23	1.17	1.16	1.97
Murrumbidgee	Griffith Base	1.93	1.55	1.19	0.00	2.07
	Wagga Wagga Base	2.16	2.41	2.61	1.01	2.05
	Other hospitals	2.04	1.67	0.00	4.78	1.53
	TOTAL	2.05	1.89	1.32	1.99	1.91
Western NSW	Dubbo Base	2.95	2.57	2.49	2.20	2.92
	Mudgee	0.74	1.75	1.77	0.00	1.69
	Bathurst Base	2.58	1.76	1.15	0.81	2.14
	Orange Base	3.26	1.49	0.99	1.02	1.32
	TOTAL	2.57	1.78	1.55	1.11	2.24
Far West	Broken Hill Base	1.15	5.26	3.26	4.88	0.82
	TOTAL	1.15	5.26	3.26	4.88	0.82
Private Hospitals	Mater, North Sydney	1.68	2.15	2.02	1.21	1.16
	North Shore Private	1.39	1.62	1.54	0.93	1.22
	Sydney Adventist	1.67	1.79	1.39	2.17	1.23
	North Gosford Private	0.00	0.49	0.53	0.98	1.31
	Hurstville Community	1.01	0.89	1.30	1.52	0.94
	Kareena Private	0.62	2.20	0.00	0.58	1.13
	St. George Private	0.62	2.11	2.43	2.96	1.42
	Prince of Wales Private	1.62	1.79	0.86	1.86	1.73
	Norwest Private	1.45	1.50	1.13	1.44	2.46
	Sydney Southwest Private	1.14	3.00	1.63	0.35	0.72
	Nepean Private	0.41	0.44	0.50	0.00	0.00
	Westmead Private	1.49	2.03	1.56	2.60	1.75
	Wollongong Private	0.00	0.00	0.00	0.00	1.67
	Newcastle Private	3.18	1.06	0.81	0.96	0.41
	Calvary, Wagga Wagga	0.00	0.00	0.00	0.00	0.00
	TOTAL	1.52	1.62	1.39	1.53	1.31
TOTAL NSW*	1.69	1.62	1.60	1.58	1.78	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

Apgar score

Indicator 9.1

Definition: Total number of term babies born with an Apgar score of less than 7 at 5 minutes post delivery as a percentage of the total number of term babies born.

Table 71 shows information for hospitals where at least 200 babies were born in 2016, totals for hospitals for each local health district, and the NSW total.

TABLE 71: 9.1 APGAR SCORE OF 7 OR LESS IN TERM BABIES BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2012–2016*

Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Sydney	Canterbury	0.92	1.51	1.43	1.40	1.42
	Royal Prince Alfred	1.68	2.01	2.08	1.94	1.15
	TOTAL	1.49	1.88	1.91	1.79	1.22
South Western Sydney	Fairfield	0.99	0.96	0.72	1.26	0.88
	Liverpool	1.54	1.48	1.38	1.12	0.90
	Campbelltown	1.63	1.69	1.41	1.32	1.46
	Bankstown-Lidcombe	0.65	0.53	0.73	0.93	1.02
	Bowral	0.45	1.31	1.54	0.26	1.43
	TOTAL	1.22	1.24	1.14	1.13	1.11
South Eastern Sydney	St. George	1.25	1.69	1.82	2.26	1.61
	Sutherland	1.38	2.75	0.93	0.88	1.64
	Royal Hospital for Women	2.04	1.88	1.98	1.63	1.88
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	TOTAL	1.67	1.97	1.74	1.71	1.75
Illawarra Shoalhaven	Shoalhaven	1.35	1.08	1.55	1.17	1.92
	Wollongong	1.51	1.88	1.21	1.03	1.00
	Other hospitals	0.00	1.08	0.00	0.00	0.00
TOTAL	1.41	1.64	1.28	1.06	1.24	
Western Sydney	Auburn	0.50	1.10	0.54	0.40	0.46
	Blacktown	0.71	0.69	0.82	0.62	1.01
	Westmead	0.83	0.95	0.97	1.51	1.29
	TOTAL	0.74	0.89	0.86	1.08	1.09
Nepean Blue Mountains	Blue Mountains	0.95	0.45	0.00	1.61	1.69
	Nepean	0.74	0.64	0.92	1.19	1.22
	Hawkesbury	1.38	0.79	0.83	0.28	0.77
	Lithgow	1.16	2.31	2.05	3.21	1.98
TOTAL	0.87	0.74	0.90	1.17	1.21	
Northern Sydney	Hornsby	1.70	1.41	1.64	1.56	2.13
	Manly	0.82	1.38	1.76	0.76	1.90
	Mona Vale	0.63	1.14	1.72	1.24	0.81
	Royal North Shore	0.80	1.53	1.58	1.39	1.95
	Other hospitals	0.74	0.78	0.00	0.81	0.00
TOTAL	1.02	1.41	1.61	1.28	1.79	
Central Coast	Gosford	2.42	2.34	1.57	1.76	2.19
	Other hospitals	0.57	1.20	0.00	0.00	1.47
TOTAL	2.29	2.27	1.49	1.67	2.16	
Hunter New England	Armidale	1.16	1.67	1.57	1.06	1.84
	Inverell	0.00	0.38	0.40	0.00	1.72
	Tamworth Base	1.85	2.37	2.25	2.83	2.44
	Manning Base	2.45	2.60	1.82	2.59	1.59
	Maitland	1.48	1.60	2.40	2.16	1.79
	John Hunter	2.28	2.15	2.67	1.83	2.24
	Other hospitals	1.87	0.79	0.98	0.98	1.02
	TOTAL	1.93	1.84	2.16	1.87	1.94
Northern NSW	Grafton Base	1.70	2.66	1.44	1.06	1.97
	Lismore Base	1.57	1.65	1.21	1.82	2.03
	Tweed Heads	1.90	1.81	1.68	1.36	1.62
Local Health District–Hospital		2012	2013	2014	2015	2016
		%	%	%	%	%
Other hospitals		0.25	0.31	0.35	0.00	0.41
TOTAL		1.57	1.71	1.35	1.38	1.72
Mid North Coast	Coffs Harbour	1.70	1.75	1.81	1.74	1.08
	Kempsey	1.60	1.27	4.82	3.64	3.02
	Port Macquarie Base	1.72	1.59	1.82	1.48	1.27
	Other hospitals	0.00	0.00	0.00	0.00	2.08
	TOTAL	1.65	1.58	2.14	1.84	1.42
Southern NSW	Bega	1.82	1.46	0.84	0.94	1.61
	Goulburn Base	1.88	1.09	2.32	2.41	0.73
	Moruya	1.57	0.70	0.76	1.05	0.00
	Queanbeyan	0.24	0.94	1.21	1.74	1.13
	Other hospitals	1.19	1.97	1.40	2.56	2.04
TOTAL	1.25	1.12	1.29	1.70	1.00	
Murrumbidgee	Griffith Base	0.86	1.77	2.23	1.57	1.81
	Wagga Wagga Base	1.91	2.74	3.02	2.05	1.80
	Other hospitals	0.82	0.87	0.97	1.48	0.42
	TOTAL	1.25	1.86	2.13	1.75	1.46
Western NSW	Dubbo Base	1.15	1.66	1.46	1.23	2.01
	Mudgee	0.40	1.27	1.26	2.07	1.23
	Bathurst Base	1.67	1.63	1.85	2.00	1.08
	Orange Base	1.12	1.30	1.49	1.94	0.81
	Other hospitals	1.37	0.22	1.78	1.20	1.00
TOTAL	1.20	1.32	1.56	1.62	1.33	
Far West	Broken Hill Base	1.64	3.24	2.24	1.42	1.79
	TOTAL	1.64	3.24	2.24	1.42	1.79
Private Hospitals	Mater, North Sydney	0.39	0.30	0.32	0.38	0.18
	North Shore Private	0.61	0.46	0.57	0.66	0.25
	Sydney Adventist	0.94	0.93	1.19	1.07	4.94
	North Gosford Private	0.66	0.40	0.14	0.93	1.52
	Hurstville Community	0.67	0.99	1.01	1.19	1.16
	Kareena Private	1.24	0.41	1.15	1.25	1.22
	St. George Private	0.87	1.29	0.54	0.75	1.01
	Prince of Wales Private	0.50	0.61	0.54	0.36	0.48
	Norwest Private	0.37	0.57	0.25	0.36	0.36
	Sydney Southwest Private	1.05	0.62	0.42	0.53	0.60
	Nepean Private	0.00	0.39	0.13	0.40	0.68
	Westmead Private	0.70	0.65	0.78	0.77	0.33
	Wollongong Private	0.00	0.00	0.00	0.00	0.58
	Newcastle Private	0.55	0.56	0.39	0.71	0.70
	Calvary, Wagga Wagga	1.02	0.92	0.65	0.90	0.85
	Other hospitals	0.85	0.53	0.80	0.22	0.00
	TOTAL	0.65	0.63	0.58	0.65	0.96
TOTAL NSW*	1.19	1.29	1.28	1.26	1.33	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Hospitals with more than 200 births in 2016 are identified individually

* Total NSW includes births at home assisted by independent midwives

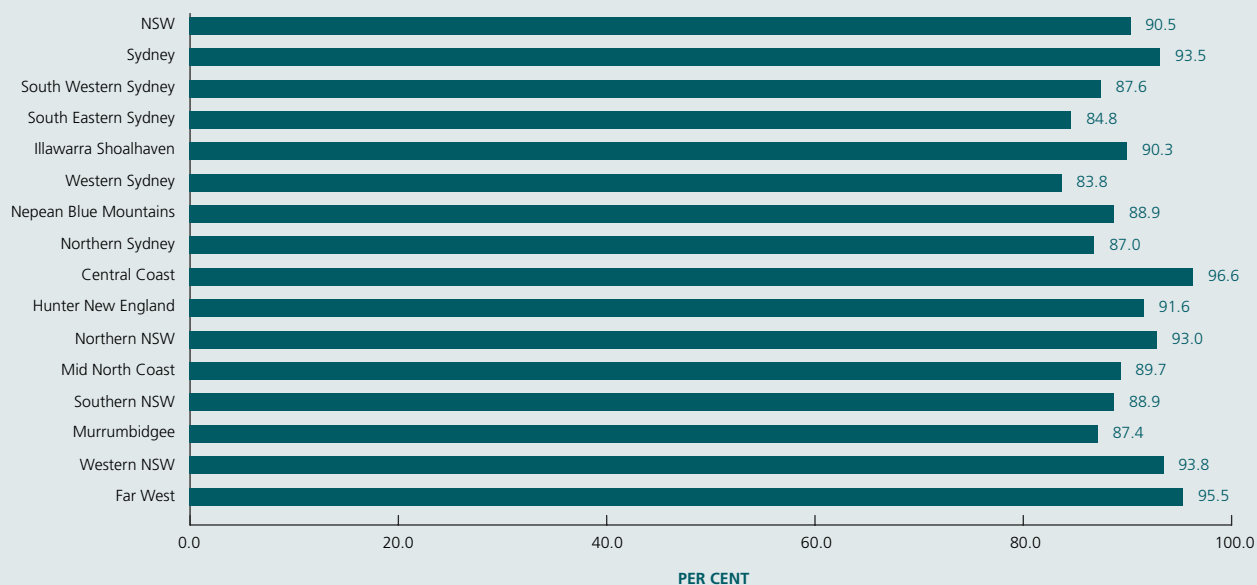
8. ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES

Reporting of Aboriginality

Aboriginal mothers and babies are under-reported on the Perinatal Data Collection. One method of assessing the extent of under-reporting and monitoring changes over time is to compare the reporting of Aboriginal mothers on the Perinatal Data Collection with reporting on other data collections. We used Enhanced Reporting of Aboriginality information on the Maternal and Child Health Register (see Methods) to give a “best estimate” of the true numbers of Aboriginal mothers and babies in NSW. We compared this best estimate with the actual numbers of Aboriginal mothers and babies born to Aboriginal mothers reported on the Perinatal Data Collection and calculated the level of reporting of Aboriginal mothers and babies for NSW and individual local health districts.

The estimated percentage of Aboriginal or Torres Strait Islander mothers in NSW that were reported to the Perinatal Data Collection was 83.2% in 2014, 85.7% in 2015 and 90.5% in 2016. In 2016, reporting varied between Local Health Districts, ranging from 83.8% in the Western Sydney Local Health District to 96.6% in the Central Coast Local Health District, with reporting generally better in rural compared to urban areas (Figure 2, Table 72).

Figure 2: Estimated level of reporting of births to Aboriginal or Torres Strait Islander mothers by year of birth and Local Health District of residence, NSW 2016



Source: NSW Perinatal Data Collection and the Maternal and Child Health Register (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

TABLE 72: ABORIGINAL OR TORRES STRAIT ISLANDER MOTHERS AND ESTIMATED LEVEL OF REPORTING BY YEAR OF BIRTH AND LOCAL HEALTH DISTRICT OF RESIDENCE 2014–2016

Year of birth–Local Health District		PDC mothers	Estimated Aboriginal mothers	Level of reporting
		No.	No.	%
2014	Sydney	120	135	88.9
	South Western Sydney	235	343	68.5
	South Eastern Sydney	99	126	78.6
	Illawarra Shoalhaven	212	260	81.5
	Western Sydney	301	390	77.2
	Nepean Blue Mountains	196	243	80.7
	Northern Sydney	29	45	64.4
	Central Coast	217	237	91.6
	Hunter New England	932	1106	84.3
	Northern NSW	235	266	88.3
	Mid North Coast	251	284	88.4
	Southern NSW	86	101	85.1
	Murrumbidgee	190	229	83.0
	Western NSW	583	667	87.4
	Far West	46	51	90.2
	Other–not stated	23	28	82.1
	NSW	3756	4512	83.2
2015	Sydney	111	134	82.8
	South Western Sydney	237	309	76.7
	South Eastern Sydney	110	139	79.1
	Illawarra Shoalhaven	220	261	84.3
	Western Sydney	246	324	75.9
	Nepean Blue Mountains	243	289	84.1
	Northern Sydney	32	42	76.2
	Central Coast	222	242	91.7
	Hunter New England	975	1095	89.0
	Northern NSW	241	268	89.9
	Mid North Coast	248	277	89.5
	Southern NSW	93	108	86.1
	Murrumbidgee	172	202	85.1
	Western NSW	610	701	87.0
	Far West	43	48	89.6
	Other–not stated	19	20	95.0
	NSW	3823	4460	85.7
2016	Sydney	86	92	93.5
	South Western Sydney	318	363	87.6
	South Eastern Sydney	112	132	84.8
	Illawarra Shoalhaven	241	267	90.3
	Western Sydney	258	308	83.8
	Nepean Blue Mountains	232	261	88.9
	Northern Sydney	40	46	87.0
	Central Coast	226	234	96.6
	Hunter New England	1052	1148	91.6
	Northern NSW	225	242	93.0
	Mid North Coast	234	261	89.7
	Southern NSW	96	108	88.9
	Murrumbidgee	215	246	87.4
	Western NSW	630	672	93.8
	Far West	42	44	95.5
	Other–not stated	35	39	89.7
	NSW	4118	4552	90.5

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Table 73 shows the number of babies born to Aboriginal or Torres Strait Islander mothers as reported to the Perinatal Data Collection and the number of Aboriginal or Torres Strait Islander babies born in NSW according to Enhanced Reporting of Aboriginality information on the Maternal and Child Health Register (see Methods). The estimated percentage of Aboriginal or Torres Strait Islander babies born in NSW that were reported to the Perinatal Data Collection was 70.3% in 2016. Reporting ranged from 62.7% in the Hunter New England Local Health District to 85.7% in the Far West Local Health District. There are therefore a substantial number of Aboriginal babies with non-Aboriginal or Torres Strait Islander mothers who are not represented in the numbers reported in this chapter.

Numbers of Aboriginal mothers and babies born to Aboriginal mothers shown in the tables and figures in this chapter are based on the actual numbers reported to the Perinatal Data Collection. The true numbers of Aboriginal mothers and babies are likely to be higher than shown and should therefore be interpreted with caution.

TABLE 73: ABORIGINAL OR TORRES STRAIT ISLANDER BABIES AND ESTIMATED LEVEL OF REPORTING BY YEAR OF BIRTH AND LOCAL HEALTH DISTRICT OF RESIDENCE 2014–2016*

Year of birth–Local Health District		PDC babies [#]	Estimated Aboriginal babies [#]	Level of reporting
		No.	No.	%
2014	Sydney	122	169	72.2
	South Western Sydney	238	414	57.5
	South Eastern Sydney	99	179	55.3
	Illawarra Shoalhaven	213	418	51.0
	Western Sydney	305	422	72.3
	Nepean Blue Mountains	199	320	62.2
	Northern Sydney	30	64	46.9
	Central Coast	217	321	67.6
	Hunter New England	948	1586	59.8
	Northern NSW	238	308	77.3
	Mid North Coast	256	363	70.5
	Southern NSW	87	133	65.4
	Murrumbidgee	193	285	67.7
	Western NSW	592	815	72.6
	Far West	46	53	86.8
	Other-not stated	24	38	63.2
NSW	3808	5890	64.7	
2015	Sydney	111	155	71.6
	South Western Sydney	246	428	57.5
	South Eastern Sydney	110	187	58.8
	Illawarra Shoalhaven	223	377	59.2
	Western Sydney	252	388	64.9
	Nepean Blue Mountains	246	371	66.3
	Northern Sydney	32	62	51.6
	Central Coast	223	360	61.9
	Hunter New England	990	1593	62.1
	Northern NSW	242	304	79.6
	Mid North Coast	254	356	71.3
	Southern NSW	94	138	68.1
	Murrumbidgee	174	262	66.4
	Western NSW	612	810	75.6
	Far West	43	50	86.0
	Other-not stated	19	30	63.3
NSW	3872	5872	65.9	
2016	Sydney	86	113	76.1
	South Western Sydney	325	471	69.0
	South Eastern Sydney	113	175	64.6
	Illawarra Shoalhaven	247	352	70.2
	Western Sydney	263	359	73.3
	Nepean Blue Mountains	232	324	71.6
	Northern Sydney	41	65	63.1
	Central Coast	232	350	66.3
	Hunter New England	1062	1695	62.7
	Northern NSW	226	304	74.3
	Mid North Coast	237	312	76.0
	Southern NSW	97	139	69.8
	Murrumbidgee	218	282	77.3
	Western NSW	640	801	79.9
	Far West	42	49	85.7
	Other-not stated	36	48	75.0
NSW	4174	5935	70.3	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

PDC babies: babies recorded on the PDC as being born to Aboriginal mothers. Estimated Aboriginal babies: babies born in NSW according to Enhanced Reporting of Aboriginality information on the Maternal and Child Health Register.

Trends in births

Between 2012 and 2016, the number of reported births to Aboriginal or Torres Strait Islander mothers rose from 3,399 to 4,174, representing 3.4% and 4.2% respectively of all babies born in NSW. In 2016, 3,990 babies were born to Aboriginal mothers, 51 babies were born to Torres Strait Islander mothers and 133 babies were born to mothers of both Aboriginal and Torres Strait Islander background (Table 74).

TABLE 74: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES, NSW 2012–2016[#]

Aboriginal and Torres Strait Islander	Year										
	2012		2013		2014		2015		2016		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Confinements											
Aboriginal but not Torres Strait Islander	3218	96.1	3359	96.2	3596	95.7	3686	96.4	3938	95.6	
Torres Strait Islander but not Aboriginal	49	1.5	53	1.5	51	1.4	43	1.1	50	1.2	
Both Aboriginal and Torres Strait Islander	81	2.4	80	2.3	109	2.9	94	2.5	130	3.2	
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0	
Births											
Aboriginal but not Torres Strait Islander	3269	96.2	3406	96.2	3647	95.8	3735	96.5	3990	95.6	
Torres Strait Islander but not Aboriginal	49	1.4	55	1.6	51	1.3	43	1.1	51	1.2	
Both Aboriginal and Torres Strait Islander	81	2.4	81	2.3	110	2.9	94	2.4	133	3.2	
TOTAL	3399	100.0	3542	100.0	3808	100.0	3872	100.0	4174	100.0	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers and babies are higher than shown (Table 72).

Plurality

Between 2012 and 2016, multiple pregnancies (twins, triplets etc.) were reported for about 1.4% of all pregnancies. In 2016, 2.7% of babies born to Aboriginal or Torres Strait Islander mothers were twins (Table 75).

TABLE 75: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY PLURALITY, NSW 2012–2016[#]

Plurality	Year										
	2012		2013		2014		2015		2016		
	No.	%	No.	%	No.	%	No.	%	No.	%	
Confinements											
Singleton	3298	98.5	3442	98.6	3705	98.6	3774	98.7	4062	98.6	
Twins	49	1.5	50	1.4	50	1.3	49	1.3	56	1.4	
Triplets	1	0.0	0	0.0	1	0.0	0	0.0	0	0.0	
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0	
Births											
Singleton	3298	97.0	3442	97.2	3705	97.3	3774	97.5	4062	97.3	
Twins	98	2.9	100	2.8	100	2.6	98	2.5	112	2.7	
Triplets	3	0.1	0	0.0	3	0.1	0	0.0	0	0.0	
TOTAL	3399	100.0	3542	100.0	3808	100.0	3872	100.0	4174	100.0	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers and babies are higher than shown (Table 72).

Previous pregnancies

In 2016, just over one-third of Aboriginal or Torres Strait Islander mothers gave birth for the first time, 59.3% of mothers reported between 1 and 4 previous births and 6.3% of mothers had previously given birth to 5 or more babies (Table 76). Between 2012 and 2016, the percentage of mothers who had previously given birth to 5 or more babies fluctuated between 6.3% and 6.8%.

TABLE 76: PREVIOUS PREGNANCIES AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

No. previous pregnancies (>20 weeks gestation)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	1156	34.5	1235	35.4	1241	33.0	1322	34.6	1412	34.3
1–4	1981	59.2	2019	57.8	2262	60.2	2251	58.9	2441	59.3
5+	211	6.3	237	6.8	252	6.7	248	6.5	259	6.3
Not stated	0	0.0	1	0.0	1	0.0	2	0.1	6	0.1
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 72).

Maternal age

The percentage of Aboriginal or Torres Strait Islander mothers who were teenagers fell substantially from 18.6% in 2012 to 12.8% in 2016. The percentage of Aboriginal or Torres Strait Islander mothers giving birth at 35 years of age or more has increased from 8.1% in 2012 to 9.5% in 2016 (Table 77).

TABLE 77: AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016^a

Maternal age (years)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
12-19	623	18.6	615	17.6	592	15.8	587	15.4	526	12.8
20-34	2451	73.2	2546	72.9	2850	75.9	2905	76.0	3198	77.7
35+	272	8.1	331	9.5	314	8.4	331	8.7	393	9.5
Not stated	2	0.1	0	0.0	0	0.0	0	0.0	1	0.0
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 72).

Local Health District of residence

The reported number of Aboriginal or Torres Strait Islander mothers who gave birth in 2016 ranged from 40 in the Northern Sydney Local Health District to 1,052 in the Hunter New England Local Health District (Table 78). The proportion of Aboriginal or Torres Strait Islander mothers who were teenagers varied from 7.1% in the South Eastern Sydney Local Health District to 19.8% in the Southern NSW Local Health District (Table 79).

TABLE 78: LOCAL HEALTH DISTRICT OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016^a

Local Health District	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	109	3.3	90	2.6	120	3.2	111	2.9	86	2.1
South Western Sydney	208	6.2	199	5.7	235	6.3	237	6.2	318	7.7
South Eastern Sydney	70	2.1	92	2.6	99	2.6	110	2.9	112	2.7
Illawarra Shoalhaven	213	6.4	227	6.5	212	5.6	220	5.8	241	5.9
Western Sydney	226	6.8	256	7.3	301	8.0	246	6.4	258	6.3
Nepean Blue Mountains	141	4.2	193	5.5	196	5.2	243	6.4	232	5.6
Northern Sydney	23	0.7	28	0.8	29	0.8	32	0.8	40	1.0
Central Coast	148	4.4	188	5.4	217	5.8	222	5.8	226	5.5
Hunter New England	867	25.9	893	25.6	932	24.8	975	25.5	1052	25.5
Northern NSW	222	6.6	257	7.4	235	6.3	241	6.3	225	5.5
Mid North Coast	224	6.7	228	6.5	251	6.7	248	6.5	234	5.7
Southern NSW	88	2.6	64	1.8	86	2.3	93	2.4	96	2.3
Murrumbidgee	149	4.5	160	4.6	190	5.1	172	4.5	215	5.2
Western NSW	592	17.7	548	15.7	583	15.5	610	16.0	630	15.3
Far West	46	1.4	46	1.3	46	1.2	43	1.1	42	1.0
Other-not stated	22	0.7	23	0.7	24	0.6	20	0.5	111	2.7
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72).

TABLE 79: LOCAL HEALTH DISTRICT OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AGE, NSW 2016[#]

Local Health District	Maternal age (Years)					
	Under 20		20-plus		TOTAL	
	No.	%	No.	%	No.	%
Sydney	7	8.1	79	91.9	86	100.0
South Western Sydney	32	10.1	286	89.9	318	100.0
South Eastern Sydney	8	7.1	104	92.9	112	100.0
Illawarra Shoalhaven	29	12.0	212	88.0	241	100.0
Western Sydney	25	9.7	232	89.9	258	100.0
Nepean Blue Mountains	22	9.5	210	90.5	232	100.0
Northern Sydney	-	-	-	-	40	100.0
Central Coast	27	11.9	199	88.1	226	100.0
Hunter New England	155	14.7	897	85.3	1052	100.0
Northern NSW	32	14.2	193	85.8	225	100.0
Mid North Coast	36	15.4	198	84.6	234	100.0
Southern NSW	19	19.8	77	80.2	96	100.0
Murrumbidgee	31	14.4	184	85.6	215	100.0
Western NSW	83	13.2	547	86.8	630	100.0
Far West	-	-	-	-	42	100.0
Other-not stated	15	13.5	96	86.5	111	100.0
TOTAL	526	12.8	3591	87.2	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72). Data not shown for cell counts less than five. Total includes one case where age was not stated.

Duration of pregnancy at first antenatal visit

Between 2012 and 2016, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation increased from 51.0% to 64.6%, and the proportion that commenced antenatal care at less than 20 weeks gestation increased from 72.0% to 81.7% (Table 80). In contrast, 67.9% of non-Aboriginal or Torres Strait Islander mothers commenced antenatal care at less than 14 weeks gestation in 2016. Eighty-nine per cent of non-Aboriginal or Torres Strait Islander mothers commenced antenatal care at less than 20 weeks gestation. In 2016, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation varied from 38.8% in the Western Sydney Local Health District to 81.1% in the Hunter New England Local Health District (Table 81).

TABLE 80: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

Duration of pregnancy (weeks)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–13	1707	51.0	1740	49.8	2044	54.4	2124	55.6	2662	64.6
14–19	703	21.0	798	22.9	788	21.0	781	20.4	704	17.1
20+	879	26.3	915	26.2	860	22.9	850	22.2	654	15.9
Not stated	59	1.8	39	1.1	64	1.7	68	1.8	98	2.4
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.
[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 72).

TABLE 81: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016*

Local Health District	Duration of pregnancy at first antenatal visit (weeks)								TOTAL	
	0–13		14–19		20+		Not stated			
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	66	76.7	11	12.8	6	7.0	3	3.5	86	100.0
South Western Sydney	193	60.7	57	17.9	47	14.8	21	6.6	318	100.0
South Eastern Sydney	56	50.0	34	30.4	21	18.8	1	0.9	112	100.0
Illawarra Shoalhaven	128	53.1	55	22.8	55	22.8	3	1.2	241	100.0
Western Sydney	100	38.8	83	32.2	63	24.4	12	4.7	258	100.0
Nepean Blue Mountains	114	49.1	65	28.0	49	21.1	4	1.7	232	100.0
Northern Sydney	28	70.0	10	25.0	-	-	-	-	40	100.0
Central Coast	98	43.4	65	28.8	63	27.9	0	0.0	226	100.0
Hunter New England	853	81.1	82	7.8	95	9.0	22	2.1	1052	100.0
Northern NSW	173	76.9	21	9.3	24	10.7	7	3.1	225	100.0
Mid North Coast	179	76.5	25	10.7	27	11.5	3	1.3	234	100.0
Southern NSW	46	47.9	25	26.0	24	25.0	1	1.0	96	100.0
Murrumbidgee	130	60.5	42	19.5	40	18.6	3	1.4	215	100.0
Western NSW	391	62.1	116	18.4	111	17.6	12	1.9	630	100.0
Far West	31	73.8	6	14.3	5	11.9	0	0.0	42	100.0
Other-not stated	76	68.5	7	6.3	-	-	-	-	111	100.0
TOTAL	2662	64.6	704	17.1	654	15.9	98	2.4	4118	100.0

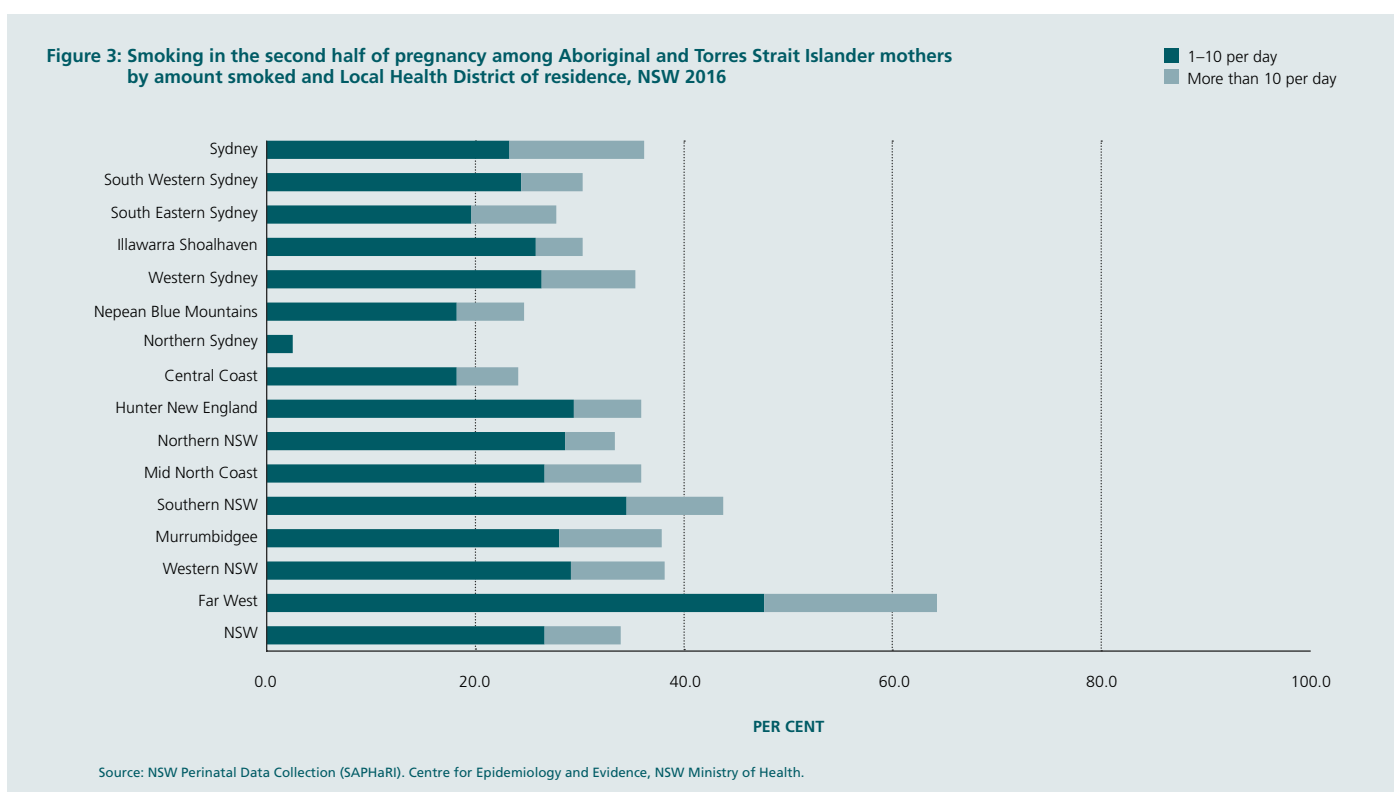
Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72). Data not shown for cell counts less than five.

Smoking in pregnancy

In 2016, 41.3% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 49.9% in 2012. This compares with 6.9% of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2016.

Smoking in the second half of pregnancy poses the greatest risk to the health of both mother and baby. In 2016, 36.0% of Aboriginal or Torres Strait Islander mothers reported smoking in the second half of pregnancy. This percentage varied from 2.5% in the Northern Sydney Local Health District to 64.3% in the Far West Local Health District (Figure 3).



Medical conditions and obstetric complications

In 2016, there were similar rates of diabetes mellitus and chronic hypertension reported among Aboriginal or Torres Strait Islander mothers compared with non-Aboriginal or Torres Strait Islander mothers. However, the rate of gestational diabetes was lower among Aboriginal or Torres Strait Islander mothers (10.7%) than non-Aboriginal or Torres Strait Islander mothers (12.7%). Overall, the rate of hypertension in pregnancy was higher in Aboriginal or Torres Strait Islander mothers (6.8%) compared with non-Aboriginal or Torres Strait Islander mothers (5.2%) (Table 82). The number of Aboriginal or Torres Strait Islander mothers with medical conditions and obstetric complications reported to the Perinatal Data Collection is low, even after taking into account under-reporting of Aboriginal mothers. The low numbers may be due to under-detection and/or under-reporting.

TABLE 82: MEDICAL CONDITIONS AND OBSTETRIC COMPLICATIONS AMONG ABORIGINAL AND NON-ABORIGINAL MOTHERS, NSW 2016^a

Condition	Aboriginal or Torres Strait Islander		Non-Aboriginal or Torres Strait Islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Diabetes mellitus	51	1.2	832	0.9	3	0.5	886	0.9
Gestational diabetes	441	10.7	11733	12.7	86	15.2	12260	12.6
Chronic hypertension	39	0.9	676	0.7	1	0.2	716	0.7
Pre-eclampsia	94	2.3	1454	1.6	9	1.6	1557	1.6
Gestational hypertension	147	3.6	2690	2.9	23	4.1	2860	2.9
TOTAL	4118	100.0	92623	100.0	565	100.0	97306	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 74).

Labour and birth

The rate of spontaneous onset of labour among Aboriginal or Torres Strait Islander mothers fell from 59.3% in 2012 to 52.4% in 2016, while the rate of induction of labour increased from 26.6% to 31.2% (Table 83). The rate of spontaneous onset of labour was slightly higher among Aboriginal or Torres Strait Islander mothers compared to the rate of 48.3% reported among non-Aboriginal or Torres Strait Islander mothers in 2016.

Between 2012 and 2016, the rate of normal vaginal birth fell from 67.4% to 64.2%. The caesarean section rate rose from 25.2% to 28.3% (Table 84). The rate of instrumental delivery increased slightly from 6.7% to 7.0%, and there was also a slight drop in the rate of vaginal breech births from 0.7% to 0.5%.

TABLE 83: LABOUR ONSET FOR ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016^a

Labour Onset	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	1984	59.3	1993	57.1	2028	54.0	2038	53.3	2157	52.4
Induced	891	26.6	996	28.5	1152	30.7	1202	31.4	1284	31.2
No labour*	472	14.1	503	14.4	575	15.3	583	15.2	671	16.3
Not stated	1	0.0	0	0.0	1	0.0	0	0.0	6	0.1
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 72).

* No labour indicates elective caesarean section.

TABLE 84: TYPE OF BIRTH AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016^a

Type of birth	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	2256	67.4	2332	66.8	2456	65.4	2519	65.9	2642	64.2
Forceps	82	2.4	102	2.9	99	2.6	94	2.5	111	2.7
Vacuum extraction	143	4.3	143	4.1	145	3.9	160	4.2	178	4.3
Vaginal breech	22	0.7	26	0.7	16	0.4	16	0.4	19	0.5
Elective caesarean section	472	14.1	503	14.4	575	15.3	583	15.2	671	16.3
Emergency caesarean section*	372	11.1	386	11.1	464	12.4	451	11.8	496	12.0
Not stated	1	0.0	0	0.0	1	0.0	0	0.0	1	0.0
TOTAL	3348	100.0	3492	100.0	3756	100.0	3823	100.0	4118	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 72).

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

Birth weight

Since 2012, the rate of low birth weight (less than 2,500 grams) in Aboriginal or Torres Strait Islander babies has been 10% or greater and was 10.8% in 2016 (Table 85). This is higher than the rate for babies born to non-Aboriginal or Torres Strait Islander mothers, which was 6.3% in 2016. In 2016, the largest number of low birth weight babies was in the Hunter New England Local Health District (Table 86).

TABLE 85: WEIGHT OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

Birth weight (grams)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 1,000	45	1.3	33	0.9	42	1.1	29	0.7	54	1.3
1,000–1,499	24	0.7	36	1.0	37	1.0	45	1.2	39	0.9
1,500–2,499	305	9.0	334	9.4	350	9.2	363	9.4	357	8.6
2,500+	3022	88.9	3136	88.5	3374	88.6	3431	88.6	3722	89.2
Not stated	3	0.1	3	0.1	5	0.1	4	0.1	2	0.0
TOTAL	3399	100.0	3542	100.0	3808	100.0	3872	100.0	4174	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown (Table 72).

TABLE 86: WEIGHT OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016[#]

Local Health District	Birth Weight (grams)							
	< 2,500		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	11	12.8	75	87.2	0	0.0	86	100.0
South Western Sydney	41	12.6	284	87.4	0	0.0	325	100.0
South Eastern Sydney	7	6.2	106	93.8	0	0.0	113	100.0
Illawarra Shoalhaven	25	10.1	222	89.9	0	0.0	247	100.0
Western Sydney	29	11.0	234	89.0	0	0.0	263	100.0
Nepean Blue Mountains	16	6.9	216	93.1	0	0.0	232	100.0
Northern Sydney	–	–	38	92.7	0	0.0	41	100.0
Central Coast	22	9.5	210	90.5	0	0.0	232	100.0
Hunter New England	118	11.1	944	88.9	0	0.0	1062	100.0
Northern NSW	18	8.0	207	91.6	1	0.4	226	100.0
Mid North Coast	27	11.4	209	88.2	1	0.4	237	100.0
Southern NSW	9	9.3	88	90.7	0	0.0	97	100.0
Murrumbidgee	32	14.7	186	85.3	0	0.0	218	100.0
Western NSW	74	11.6	566	88.4	0	0.0	640	100.0
Far West	–	–	38	90.5	0	0.0	42	100.0
Other-not stated	14	12.4	99	87.6	0	0.0	113	100.0
TOTAL	450	10.8	3722	89.2	2	0.0	4174	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72). Data not shown for cell counts less than five.

Gestational age

Since 2012, over 11% of Aboriginal or Torres Strait Islander babies have been premature (less than 37 weeks gestation) (Table 87). The rate of prematurity was 11.2% in 2016, compared with a rate of 7.1% for babies born to non-Aboriginal or Torres Strait Islander mothers. In 2016, the largest number of premature babies was in the Hunter New England Local Health District (Table 88).

TABLE 87: GESTATIONAL AGE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

Gestational age (weeks)	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
< 28	45	1.3	35	1.0	39	1.0	36	0.9	49	1.2
28–31	38	1.1	44	1.2	54	1.4	60	1.5	53	1.3
32–36	367	10.8	369	10.4	400	10.5	396	10.2	364	8.7
37–41	2927	86.1	3076	86.8	3299	86.6	3361	86.8	3651	87.5
42+	21	0.6	17	0.5	15	0.4	17	0.4	49	1.2
Not stated	1	0.0	1	0.0	1	0.0	2	0.1	8	0.2
TOTAL	3399	100.0	3542	100.0	3808	100.0	3872	100.0	4174	100.0

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown (Table 72).

TABLE 88: GESTATIONAL AGE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016[#]

Local Health District	Gestational age (weeks)							
	Less than 37		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	13	15.1	72	83.7	1	1.2	86	100.0
South Western Sydney	42	12.9	277	85.2	6	1.8	325	100.0
South Eastern Sydney	11	9.7	101	89.4	1	0.9	113	100.0
Illawarra Shoalhaven	27	10.9	220	89.1	0	0.0	247	100.0
Western Sydney	36	13.7	227	86.3	0	0.0	263	100.0
Nepean Blue Mountains	18	7.8	214	92.2	0	0.0	232	100.0
Northern Sydney	6	14.6	35	85.4	0	0.0	41	100.0
Central Coast	25	10.8	207	89.2	0	0.0	232	100.0
Hunter New England	102	9.6	960	90.4	0	0.0	1062	100.0
Northern NSW	22	9.7	204	90.3	0	0.0	226	100.0
Mid North Coast	25	10.5	212	89.5	0	0.0	237	100.0
Southern NSW	12	12.4	85	87.6	0	0.0	97	100.0
Murrumbidgee	29	13.3	189	86.7	0	0.0	218	100.0
Western NSW	83	13.0	557	87.0	0	0.0	640	100.0
Far West	–	–	40	95.2	0	0.0	42	100.0
Other-not stated	13	11.5	100	88.5	0	0.0	113	100.0
TOTAL	466	11.2	3700	88.6	8	0.2	4174	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72). Data not shown for cell counts less than five.

Apgar score

In 2016, 3.5% of Aboriginal or Torres Strait Islander babies had an Apgar score less than 7 at 5 minutes (Table 89), which is higher than the rate of 2.2% for babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 89: APGAR SCORE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

Apgar score at 5 minutes	Year									
	2012		2013		2014		2015		2016	
	No.	%	No.	%	No.	%	No.	%	No.	%
0-4	50	1.5	58	1.6	61	1.6	58	1.5	63	1.5
5-6	59	1.7	46	1.3	75	2.0	75	1.9	82	2.0
7+	3270	96.2	3434	97.0	3657	96.0	3720	96.1	3977	95.3
Not stated	20	0.6	4	0.1	15	0.4	19	0.5	52	1.2
TOTAL	3399	100.0	3542	100.0	3808	100.0	3872	100.0	4174	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown (Table 72).

Infant feeding

In 2016, 62.8% of babies born to Aboriginal or Torres Strait Islander mothers were fully breastfed at discharge from hospital, 8.0% were partially breastfed and 25.2% received infant formula only (Table 90). This compares with 75.4% of babies born to non-Aboriginal or Torres Strait Islander mothers who were fully breastfed in 2016. Rates of full breastfeeding ranged from 45.7% in the South Western Sydney Local Health District to 76.9% in the Northern NSW Local Health District.

TABLE 90: INFANT FEEDING AMONG LIVEBORN BABIES OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2016[#]

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	48	56.5	14	16.5	22	25.9	1	1.2	85	100.0
South Western Sydney	148	45.7	35	10.8	81	25.0	60	18.5	324	100.0
South Eastern Sydney	74	66.1	20	17.9	16	14.3	2	1.8	112	100.0
Illawarra Shoalhaven	149	60.6	15	6.1	79	32.1	3	1.2	246	100.0
Western Sydney	133	50.8	23	8.8	95	36.3	11	4.2	262	100.0
Nepean Blue Mountains	145	63.9	18	7.9	59	26.0	5	2.2	227	100.0
Northern Sydney	31	75.6	5	12.2	5	12.2	0	0.0	41	100.0
Central Coast	171	74.3	17	7.4	39	17.0	3	1.3	230	100.0
Hunter New England	691	65.5	74	7.0	259	24.5	31	2.9	1055	100.0
Northern NSW	173	76.9	15	6.7	28	12.4	9	4.0	225	100.0
Mid North Coast	170	72.3	17	7.2	39	16.6	9	3.8	235	100.0
Southern NSW	72	75.0	8	8.3	14	14.6	2	2.1	96	100.0
Murrumbidgee	128	59.0	7	3.2	76	35.0	6	2.8	217	100.0
Western NSW	371	59.0	47	7.5	196	31.2	15	2.4	629	100.0
Far West	23	54.8	-	-	13	31.0	2	4.8	42	100.0
Other-not stated	73	65.2	11	9.8	21	18.8	7	6.3	112	100.0
TOTAL	2600	62.8	330	8.0	1042	25.2	166	4.0	4138	100.0

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of babies are higher than shown. The level of under-reporting varies between Local Health Districts (Table 72). Data not shown for cell counts less than five.

Perinatal mortality

Between 2012 and 2016, the perinatal mortality rate among Aboriginal or Torres Strait Islander babies has varied between 9.6 and 12.3 per 1,000 births (Table 91). The rate of 12.2 per 1,000 births in Aboriginal or Torres Strait Islander mothers in 2016 is higher than the rate of 7.3 per 1,000 births experienced among babies born to non-Aboriginal or Torres Strait Islander mothers.

TABLE 91: PERINATAL DEATHS AMONG BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2012–2016[#]

Perinatal deaths	Year									
	2012		2013		2014		2015		2016	
	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000
Stillborn	28	8.2	26	7.3	33	8.7	34	8.8	36	8.6
Neonatal death	13	3.8	13	3.7	14	3.7	3	0.8	15	3.6
TOTAL	41	12.1	39	11.0	47	12.3	37	9.6	51	12.2

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.

[#] Perinatal deaths include deaths reported to the PDC only. As the PDC form is completed at discharge or transfer of the baby, deaths occurring after this time may not be reported to the PDC. Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown (Table 74).

9. APPENDICES

Appendix 1: Glossary of terms

Aboriginal and Torres Strait Islander

Women who identify themselves as Australian Aboriginal or Torres Strait Islander.

Apgar score

A numerical scoring system routinely administered 1 and 5 minutes after birth to evaluate the condition of the baby. The score ranges from 0–10 (10 being perfect). It takes account of 5 physical signs, each of which is assigned a component score of 0, 1 or 2: heart rate, respiration, muscle tone, reflexes, and colour.

Augmentation

Artificial rupture of the membranes or use of oxytocic drugs after spontaneous onset of labour.

Birth weight

The newborn infant's first bare weight in grams.
Low birth weight: birth weight less than 2,500 grams.
Very low birth weight: birth weight less than 1,500 grams.
Extremely low birth weight: birth weight less than 1,000 grams.

Caesarean section

Birth of the fetus through an abdominal incision. Elective caesarean section: a caesarean section (planned or unplanned) performed before the onset of labour. Emergency caesarean section: a caesarean section performed after the onset of labour, whether or not the onset of labour was spontaneous.

Confinement

Refers to a woman having given birth. In a multiple pregnancy, one confinement will result in more than one birth.

Epidural

Injection of analgesic agent outside the dura mater which covers the spinal canal; includes lumbar, spinal, and epidural anaesthetics.

Episiotomy

An incision of the perineum and vagina to enlarge the vulval orifice.

Gestational age

The duration of pregnancy in completed weeks from the first day of the last normal menstrual period. Where accurate information on the date of the last menstrual period is not available, a clinical estimate of gestational age may be obtained from ultrasound during the first half of pregnancy or by examination of the newborn infant. The 'best estimate' is used in this report.

Induction of labour

Oxytocics–prostaglandins: the initiation of labour by the use of oxytocic agents, prostaglandins, or their derivatives (oral, intravaginal or intravenous).

ARM only: the initiation of labour by artificial rupture of membranes.

Oxytocics–prostaglandins and ARM: both medical and surgical induction as defined above (combined medical and surgical induction).

Live birth

The complete expulsion or extraction from its mother of a baby who, after being born, breathes or shows any evidence of life such as a heartbeat.

Parity

The total number of live births and stillbirths of the mother before the pregnancy or birth under consideration.

Perinatal death

A stillbirth or neonatal death.

Perinatal mortality rate

The number of perinatal deaths (stillbirths and neonatal deaths) per 1,000 total births in a year (live births and stillbirths combined).

Perineal status

1st degree tear: a perineal graze–laceration–tear involving: the fourchette, hymen, labia, skin, vagina, or vulva.
2nd degree tear: a perineal laceration or tear involving the pelvic floor or perineal muscles or vaginal muscles.
3rd degree tear: a perineal laceration–tear involving the anal sphincter or rectovaginal septum.
4th degree tear: a third degree perineal laceration or tear which also involves the anal mucosa or rectal mucosa.

Plurality

The number of fetuses in utero at 20 weeks gestation that are subsequently born separately. On this basis pregnancy may be classified as single or multiple.

Premature infant

An infant born before 37 completed weeks gestation.

Stillbirth

The complete expulsion or extraction from its mother of a product of conception of at least 20 weeks gestation or 400 grams birth weight who did not, at any time after birth, breathe, or show any evidence of life such as a heartbeat.

Appendix 2: Explanatory notes

Breastfeeding

From 2007, the PDC has collected information on infant feeding at the time of discharge from hospital (or discharge from care for home births) for all infants born in NSW. Infant feeding is reported via 3 tick-box categories: breastfeeding, expressed breast milk and infant formula. More than 1 type of feeding may be reported by ticking multiple boxes. In this report, infant feeding is classified into 3 categories: full breastfeeding, which includes babies who were reported to be breastfed or to be receiving expressed breast milk; any breastfeeding, which includes babies who were reported to be receiving breast milk and infant formula; and infant formula only (no breastfeeding).

Place of residence of mother

The mother's usual residence was the basis for coding to statistical areas of residence and NSW Local Health Districts.

Labour

The category *labour—spontaneous with oxytocics—prostaglandins* was used where labour was augmented with artificial rupture of membranes as well as oxytocics or prostaglandins.

Maternity service level

The maternity service levels for 2016 have been applied to the data in this report. These are explained in the *NSW Health Guide to the Role Delineation of Clinical Services (2016)*, which provides a consistent language for describing clinical services delivered by public hospitals and health services. This guide delineates the level of clinical services, not hospitals or health facilities as a whole.

The *NSW Maternity and Neonatal Service Capability Framework (GL2016_018)* is used to guide services by identifying the scope of planned activity for each service capability level. It provides a mechanism for Local Health Districts to assess the planned service capability of their facilities.

For further information on role delineation levels for individual sites, please contact the relevant Local Health District.

Type of birth

The 'vaginal breech' category covers all forms of vaginal breech birth, including forceps to the after coming head.

Perinatal mortality rate

Perinatal deaths include deaths reported to the PDC only. As the PDC notification is completed at discharge or transfer of the baby, deaths occurring after this time may not be reported to the PDC. Birth and perinatal death registration data held by the Australian Bureau of Statistics (ABS) give the most complete overall ascertainment of perinatal deaths for calculation of rates.

Appendix 3: Maternal countries of birth and country of birth groups

English speaking	Southern Europe	Georgia	Madagascar	North East Asia	Honduras
Australia	Albania	Hungary	Malawi	China (excludes SARs and Taiwan)	Jamaica
Australian External Territories, NEC*	Andorra	Kazakhstan	Mali	Hong Kong (SAR of China)	Martinique
Bermuda	Bosnia and Herzegovina	Kyrgyzstan	Mauritania	Japan	Mexico
Canada	Bulgaria	Latvia	Mauritius	Korea, Democratic	Montserrat
England	Croatia	Lithuania	Mayotte	People's Republic of (North)	Nicaragua
Guernsey	Cyprus	Poland	Morocco	Korea, Republic of (South)	Panama
Ireland	Former Yugoslav Republic of Macedonia (FYROM)	Russian Federation (not USSR)	Mozambique	Macau (SAR of China)	Paraguay
Isle of Man	Gibraltar	Slovakia	Namibia	Mongolia	Peru
Jersey	Greece	Tajikistan	Niger	Taiwan	Puerto Rico
New Zealand	Holy See	Turkmenistan	Nigeria		Sint Maarten (Dutch part)
Norfolk Island	Italy	Ukraine	Oman		South America, NEC*
Northern Ireland	Kosovo	Uzbekistan	Qatar		St Barthelemy
Scotland	Malta	Middle East and Africa	Reunion		St Kitts and Nevis
South Africa	Moldova	Algeria	Rwanda	Southern Asia	St Lucia
St Pierre and Miquelon	Montenegro	Angola	Sao Tome and Principe	Bangladesh	St Martin (French part)
United States of America	Portugal	Bahrain	Saudi Arabia	Bhutan	St Vincent and the Grenadines
Wales	Romania	Benin	Senegal	India	Suriname
	San Marino	Botswana	Seychelles	Maldives	Trinidad and Tobago
Melanesia, Micronesia & Polynesia	Serbia	Burkina Faso	Sierra Leone	Nepal	Turks and Caicos Islands
Cook Islands	Slovenia	Burundi	Somalia	Pakistan	Uruguay
Fiji	Spain	Cameroon	South Sudan	Sri Lanka	Venezuela, Bolivarian Republic of
French Polynesia	Western and Northern Europe	Cape Verde	Southern and East Africa, NEC*		Virgin Islands, British
Guam	Aland Islands	Central African Republic	Spanish North Africa	Central and South America	Virgin Islands, United States
Kiribati	Austria	Chad	St Helena	Anguilla	
Marshall Islands	Belgium	Comoros	Sudan	Antigua and Barbuda	
Micronesia, Federated States of	Denmark	Congo, Democratic Republic of	Swaziland	Argentina	
Nauru	Faroe Islands	Congo, Republic of	Syria	Aruba	
New Caledonia	Finland	Cote d'Ivoire	Tanzania	Bahamas	
Niue	France	Djibouti	Togo	Barbados	
Northern Mariana Islands	Germany	Egypt	Tunisia	Belize	
Palau	Greenland	Equatorial Guinea	Turkey	Bolivia, Plurinational State of	
Papua New Guinea	Iceland	Eritrea	Uganda	Bonaire, Sint Eustatius and Saba	
Pitcairn Islands	Liechtenstein	Ethiopia	United Arab Emirates	Brazil	
Polynesia (excludes Hawaii), NEC*	Luxembourg	Gabon	Western Sahara	Cayman Islands	
Samoa	Monaco	Gambia, Republic of	Yemen	Chile	
Samoa, American	Netherlands	Gaza Strip and West Bank	Zambia	Colombia	
Solomon Islands	Norway	West Bank	Zimbabwe	Costa Rica	
Tokelau	Sweden	Ghana		Cuba	
Tonga	Switzerland	Guinea	South East Asia	Curacao	
Tuvalu		Guinea-Bissau	Brunei Darussalam	Dominica	
Vanuatu	Eastern Europe, Russia and Central Asian States	Iran	Cambodia	Dominican Republic	
Wallis and Futuna	Afghanistan	Iraq	Indonesia	Ecuador	
	Armenia	Israel	Laos	El Salvador	
	Azerbaijan	Jordan	Malaysia	Falkland Islands	
	Belarus	Kenya	Myanmar, The Republic of the Union of	French Guiana	
	Czech Republic	Kuwait	Philippines	Grenada	
	Estonia	Lebanon	Singapore	Guadeloupe	
		Lesotho	Thailand	Guatemala	
		Liberia	Timor-Leste	Guyana	
		Libya	Vietnam	Haiti	

* NEC = Not elsewhere classified.

