

# NSW Mothers and Babies 2017



## NSW MINISTRY OF HEALTH

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## NSW Perinatal Data Collection

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## 2. EXECUTIVE SUMMARY

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

- The number of births in NSW fell from 96,971 in 2013 to 95,825 in 2017, an overall decrease of 1.2%. The largest percentage decrease occurred in Northern NSW Local Health District, where the number of births decreased by 9.3% between 2013 and 2017.
- The percentage of mothers who were teenagers fell from 3.0% in 2013 to 2.0% in 2017. Over the same period the percentage of mothers aged 35 years and over remained stable and was 24.7% in 2017.
- The rate of normal vaginal birth decreased from 56.8% in 2013 to 54.5% in 2017. The caesarean section rate increased from 31.5% to 33.8%, while the rate of instrumental birth remained steady at about 11%.
- Operative and instrumental births were 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 that reported smoking at some time during pregnancy declined from 9.7% in 2013 to 8.8% in 2017. Of mothers who smoked during pregnancy in 2017, 24.8% stopped smoking in the first half of pregnancy.
- In 2017, the majority of mothers planned to give birth in a hospital labour ward, and 6.3% of mothers planned to give birth in a birth centre. Sixty-eight per cent of mothers who planned to give birth in a birth centre actually did so. There were 198 homebirths in NSW reported in 2017.
- In 2017, 7.4% of babies were born prematurely (less than 37 weeks gestation), similar to 7.6% reported in 2013.
- Since 2013, the rate of low birth weight (less than 2,500 grams) has remained stable, ranging from 6.3% to 6.7%. The rate of low birth weight was 6.7% in 2017.
- Between 2013 and 2017, the reported number of Aboriginal or Torres Strait Islander mothers giving birth increased from 3,492 to 4,183, an increase from 3.7% to 4.4% of all mothers.
- The percentage of Aboriginal or Torres Strait Islander mothers who were teenagers fell substantially from 17.6% in 2013 to 12.3% in 2017. The percentage of Aboriginal or Torres Strait Islander mothers giving birth at 35 years of age or more has remained stable and was 9.6% in 2017.
- In 2017, 42.4% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy.
- Since 2013, rates of low birth weight and prematurity in Aboriginal or Torres Strait Islander babies have been over 10%. In 2017, 11.1% of Aboriginal or Torres Strait Islander babies were low birth weight and 11.7% were premature.
- The perinatal mortality rate of 12.7 per 1,000 births in Aboriginal or Torres Strait Islander mothers in 2017 is higher than the rate of 8.2 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*.<sup>1</sup> 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 System Information and Analytics 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 2017, 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 of PDC records was ObstetriX, which supplied 33.8% of all PDC records and covered all public hospitals in South Eastern Sydney, Illawarra Shoalhaven, Hunter New England, Nepean Blue Mountains and Western Sydney Local Health Districts, as well as some hospitals in Murrumbidgee, Southern NSW, Western NSW and Far West Local Health Districts for part of 2017. Cerner systems supplied 18.9% of PDC records (public hospitals in Sydney and South Western Sydney Local Health Districts). In 2017, four Local Health Districts reported all births via eMaternity (Northern Sydney, Central Coast, Northern NSW and Mid North Coast). A further nine Local Health Districts transitioned to eMaternity during 2017 (public hospitals in South Eastern Sydney, Illawarra Shoalhaven, Hunter New England, Nepean Blue Mountains and Western Sydney Local Health Districts, as well as some hospitals in Murrumbidgee, Southern NSW, Western NSW and Far West Local Health Districts). In total, eMaternity supplied 25.2% of all PDC records. Healthscope Hospitals (Prince of Wales Private Hospital, Norwest Private Hospital, Sydney South West Private Hospital, Nepean Private Hospital and Newcastle Private Hospital) supplied 8.0% of PDC records. Meditech, which includes five Ramsay Private Hospitals (North Shore Private Hospital, Westmead Private Hospital, St George Private Hospital, Kareena Private Hospital and Wollongong Private Hospital), supplied 8.1% of all PDC records. The Mater Hospital, North Sydney database supplied 2.3% of PDC records, and 2.0% of PDC records were 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 Act 2010*. 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)
- 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 is able 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.<sup>2</sup> Each independent report is counted as a “unit of information” that contributed 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 three or more units of information across all contributing data sets, at least two 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 one or two units of information in all contributing data sets, one 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 Register 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 vary when subsequently reported.

## NSW Maternal and Perinatal Mortality Review Committee

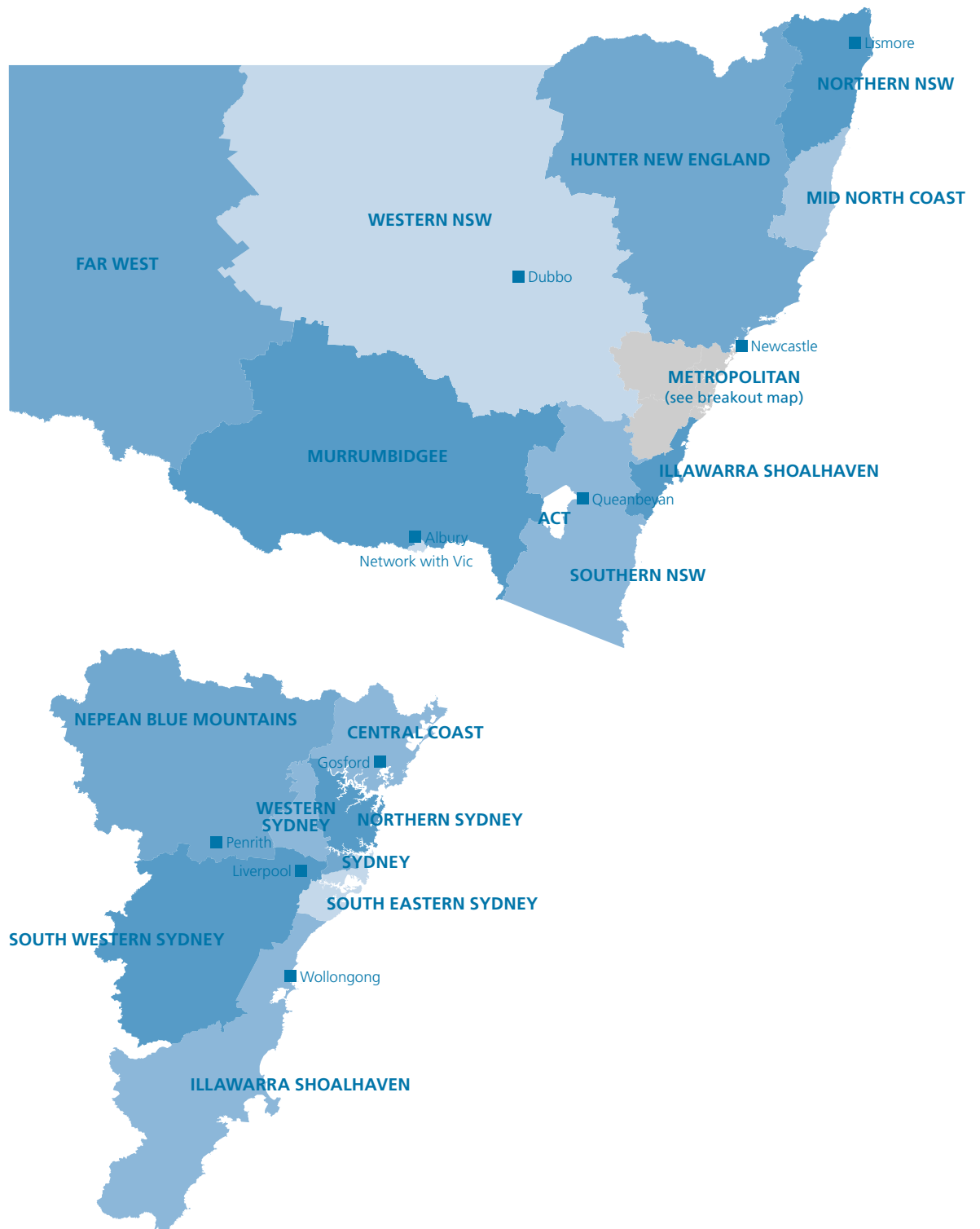
The NSW Maternal and Perinatal Mortality Review Committee is established under the *NSW Health Administration Act 1982*, and is privileged under the Act to carry out confidential reviews of both maternal and perinatal deaths. Members are appointed by the Minister for Health.

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.

## References

1. NSW Ministry of Health. *NSW Perinatal Data Collection (PDC) Reporting and Submission Requirements from 1 January 2016*. Available at [https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2015\\_025.pdf](https://www1.health.nsw.gov.au/pds/ActivePDSDocuments/PD2015_025.pdf). Accessed 26 September 2018.
2. 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 96,971 in 2013 to 95,825 in 2017, a decrease of 1.2%. In 2017, 95,825 births to 94,449 mothers were reported (Table 1). The percentage of multiple (twin and triplet) pregnancies has remained stable over recent years at 1.4%.

TABLE 1: PLURALITY, NSW 2013–2017

Plurality		Year									
		2013		2014		2015		2016		2017	
		No.	%	No.	%	No.	%	No.	%	No.	%
Confinements	Singleton	94128	98.5	94543	98.6	93609	98.5	95906	98.6	93098	98.6
	Twins	1384	1.4	1367	1.4	1358	1.4	1379	1.4	1326	1.4
	Triplets	25	0.0	16	0.0	22	0.0	21	0.0	25	0.0
	<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>
Births	Singleton	94128	97.1	94543	97.1	93609	97.1	95906	97.1	93098	97.2
	Twins	2768	2.9	2734	2.8	2716	2.8	2758	2.8	2652	2.8
	Triplets	75	0.1	48	0.0	66	0.1	63	0.1	75	0.1
	<b>TOTAL</b>	<b>96971</b>	<b>100.0</b>	<b>97325</b>	<b>100.0</b>	<b>96391</b>	<b>100.0</b>	<b>98727</b>	<b>100.0</b>	<b>95825</b>	<b>100.0</b>

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

## Local Health District of residence

The largest percentage increase occurred in the South Western Sydney Local Health District, where the number of births increased by 5.5% between 2013 and 2017. The largest percentage decrease occurred in the Northern NSW Local Health District, where the number of births decreased by 9.3% between 2013 and 2017. In 2017, 29.7% 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 2013–2017

Local Health District	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	8331	8.7	8401	8.8	8249	8.7	8345	8.6	8008	8.5
South Western Sydney	12842	13.4	13220	13.8	12996	13.7	13750	14.1	13554	14.4
South Eastern Sydney	11396	11.9	11460	11.9	11077	11.7	11318	11.6	10644	11.3
Illawarra Shoalhaven	4398	4.6	4363	4.5	4507	4.7	4534	4.7	4475	4.7
Western Sydney	14515	15.2	14877	15.5	14640	15.4	14667	15.1	14479	15.3
Nepean Blue Mountains	4743	5.0	4820	5.0	4929	5.2	5042	5.2	4908	5.2
Northern Sydney	10310	10.8	10454	10.9	10270	10.8	10804	11.1	10146	10.7
Central Coast	3922	4.1	3738	3.9	3813	4.0	3816	3.9	3832	4.1
Hunter New England	10931	11.4	10717	11.2	10797	11.4	10690	11.0	10543	11.2
Northern NSW	2785	2.9	2631	2.7	2557	2.7	2327	2.4	2526	2.7
Mid North Coast	2235	2.3	2151	2.2	2183	2.3	1900	2.0	2163	2.3
Southern NSW	1368	1.4	1339	1.4	1360	1.4	1372	1.4	1363	1.4
Murrumbidgee	2305	2.4	2435	2.5	2377	2.5	2370	2.4	2345	2.5
Western NSW	3707	3.9	3805	4.0	3678	3.9	3740	3.8	3581	3.8
Far West	226	0.2	230	0.2	222	0.2	234	0.2	205	0.2
Other-not stated	1523	1.6	1285	1.3	1334	1.4	2397	2.5	1677	1.8
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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

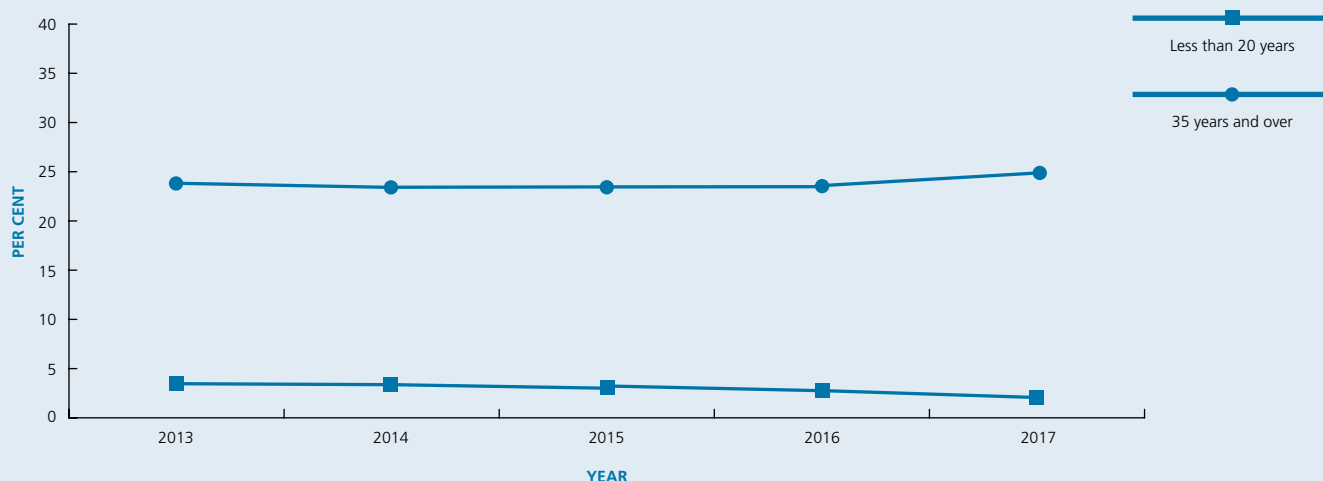
## Maternal age

The percentage of mothers who were teenagers fell from 3.0% in 2013 to 2.0% in 2017. Between 2013 and 2017, the percentage of mothers aged 35 years and over remained stable and was 24.7% in 2017 (Figure 1, Table 3).

The mean maternal age rose from 30.3 to 30.7 years between 2013 and 2017. The mean maternal age rose from 28.9 to 29.4 years for primiparous mothers and remained stable for multiparous mothers (31.8 years in 2017).

The proportion of mothers giving birth for the first time who were aged 35 years or more was 15.7% in 2013 and 16.6% in 2017. The proportion of multiparous mothers who were aged 35 years or more was 29.5% in 2013 and 30.8% in 2017.

FIGURE 1: MOTHERS AGED LESS THAN 20 YEARS AND 35 YEARS AND OVER, NSW 2013–2017



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

TABLE 3: MATERNAL AGE, NSW 2013–2017

Maternal age (years)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 15	15	0.0	14	0.0	15	0.0	8	0.0	8	0.0
15–19	2832	3.0	2616	2.7	2362	2.5	2106	2.2	1859	2.0
20–24	12097	12.7	11699	12.2	11358	12.0	11007	11.3	10541	11.2
25–29	25801	27.0	25995	27.1	25476	26.8	25926	26.6	25036	26.5
30–34	32411	33.9	33300	34.7	33569	35.3	35126	36.1	33642	35.6
35–39	17841	18.7	17939	18.7	17776	18.7	18627	19.1	19043	20.2
40–44	4282	4.5	4115	4.3	4163	4.4	4142	4.3	4011	4.2
45+	240	0.3	241	0.3	268	0.3	328	0.3	285	0.3
Not stated	18	0.0	7	0.0	2	0.0	36	0.0	24	0.0
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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 2013 and 2017, from 65.1% to 61.6%. In 2017, mothers born in India, China, New Zealand, the United Kingdom, the Philippines, Vietnam, Iraq, and Nepal together accounted for 18.9% of all mothers (Table 4).

**TABLE 4: MATERNAL COUNTRY OF BIRTH, NSW 2013–2017#**

Country of birth	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Australia	62165	65.1	60761	63.3	60769	64.0	60429	62.1	58187	61.6
India	3328	3.5	3634	3.8	3860	4.1	4247	4.4	4393	4.7
China	3856	4.0	4753	5.0	3830	4.0	5079	5.2	4385	4.6
New Zealand	2188	2.3	2128	2.2	2060	2.2	2081	2.1	2008	2.1
United Kingdom	1968	2.1	1816	1.9	1704	1.8	1825	1.9	1805	1.9
Philippines	1465	1.5	1450	1.5	1513	1.6	1626	1.7	1624	1.7
Vietnam	1436	1.5	1537	1.6	1478	1.6	1499	1.5	1391	1.5
Iraq	1014	1.1	1092	1.1	1021	1.1	1152	1.2	1112	1.2
Nepal	636	0.7	766	0.8	824	0.9	1059	1.1	1094	1.2
Lebanon	1280	1.3	1289	1.3	1159	1.2	1081	1.1	1049	1.1
Pakistan	646	0.7	733	0.8	800	0.8	902	0.9	992	1.1
Bangladesh	761	0.8	827	0.9	846	0.9	901	0.9	943	1.0
Indonesia	823	0.9	778	0.8	787	0.8	796	0.8	749	0.8
South Korea	728	0.8	690	0.7	768	0.8	747	0.8	745	0.8
South Africa	610	0.6	598	0.6	580	0.6	587	0.6	572	0.6
Thailand	535	0.6	535	0.6	528	0.6	606	0.6	563	0.6
United States of America	473	0.5	498	0.5	514	0.5	504	0.5	555	0.6
Iran	295	0.3	369	0.4	425	0.4	512	0.5	531	0.6
Hong Kong	452	0.5	456	0.5	441	0.5	500	0.5	515	0.5
Fiji	621	0.7	590	0.6	582	0.6	552	0.6	486	0.5
Sri Lanka	442	0.5	452	0.5	432	0.5	448	0.5	484	0.5
Ireland	441	0.5	471	0.5	455	0.5	514	0.5	476	0.5
Afghanistan	340	0.4	405	0.4	415	0.4	423	0.4	471	0.5
Malaysia	420	0.4	441	0.5	440	0.5	426	0.4	447	0.5
Brazil	242	0.3	267	0.3	282	0.3	317	0.3	354	0.4
Japan	392	0.4	404	0.4	363	0.4	382	0.4	348	0.4
Germany	309	0.3	349	0.4	304	0.3	293	0.3	306	0.3
Canada	333	0.3	290	0.3	307	0.3	334	0.3	279	0.3
Egypt	214	0.2	242	0.3	263	0.3	260	0.3	274	0.3
Cambodia	267	0.3	274	0.3	290	0.3	256	0.3	269	0.3
Syria	132	0.1	192	0.2	177	0.2	214	0.2	258	0.3
France	173	0.2	233	0.2	223	0.2	221	0.2	256	0.3
Russian Federation (not USSR)	169	0.2	243	0.3	240	0.3	244	0.3	248	0.3
Western Samoa	239	0.3	222	0.2	217	0.2	250	0.3	232	0.2
Taiwan	187	0.2	191	0.2	182	0.2	244	0.3	224	0.2
Sudan	284	0.3	265	0.3	250	0.3	236	0.2	208	0.2
Poland	204	0.2	181	0.2	182	0.2	199	0.2	186	0.2
Italy	86	0.1	74	0.1	116	0.1	120	0.1	169	0.2
Saudi Arabia	116	0.1	120	0.1	139	0.1	138	0.1	153	0.2
Turkey	179	0.2	176	0.2	173	0.2	147	0.2	152	0.2
Colombia	135	0.1	136	0.1	157	0.2	151	0.2	148	0.2
Burma (Myanmar)	108	0.1	146	0.2	116	0.1	102	0.1	143	0.2
Bosnia and Herzegovina	113	0.1	134	0.1	137	0.1	126	0.1	142	0.2
Tonga	166	0.2	148	0.2	176	0.2	158	0.2	139	0.1
Serbia (includes Kosovo)	60	0.1	75	0.1	83	0.1	133	0.1	134	0.1
Jordan	105	0.1	116	0.1	112	0.1	105	0.1	125	0.1
Chile	124	0.1	135	0.1	130	0.1	137	0.1	125	0.1
Singapore	135	0.1	137	0.1	154	0.2	147	0.2	124	0.1
Former Yugoslavia	104	0.1	121	0.1	116	0.1	125	0.1	121	0.1
Macedonia	125	0.1	150	0.2	114	0.1	128	0.1	116	0.1
Nigeria	56	0.1	43	0.0	74	0.1	100	0.1	105	0.1
Netherlands	88	0.1	98	0.1	86	0.1	99	0.1	104	0.1
Peru	130	0.1	116	0.1	98	0.1	112	0.1	103	0.1
Other/Not stated	3639	3.8	3579	3.7	3497	3.7	3332	3.4	3327	3.5
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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 2017.



## Aboriginal and Torres Strait Islander mothers

The reported number of Aboriginal or Torres Strait Islander mothers giving birth increased from 3,492 in 2013 to 4,183 in 2017, an increase from 3.7% to 4.4% 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 2013–2017**

Aboriginal or Torres Strait Islander	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Aboriginal or Torres Strait Islander	3492	3.7	3756	3.9	3823	4.0	4118	4.2	4183	4.4
Non-Aboriginal or Torres Strait Islander	91986	96.3	92158	96.1	91166	96.0	92623	95.2	89836	95.1
Not stated	59	0.1	12	0.0	0	0.0	565	0.6	430	0.5
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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 44.2% in 2013 to 42.8% in 2017 (Table 6), and an increase in the proportion of mothers giving birth to a subsequent baby, from 55.7% in 2013 to 57.0% in 2017.

**TABLE 6: PREVIOUS PREGNANCIES, NSW 2013–2017**

No. previous pregnancies (>20 weeks gestation)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	42257	44.2	42338	44.1	41547	43.7	42272	43.4	40469	42.8
1–4	51831	54.3	52070	54.3	52034	54.8	53486	55.0	52447	55.5
5+	1429	1.5	1491	1.6	1390	1.5	1426	1.5	1387	1.5
Not stated	20	0.0	27	0.0	18	0.0	122	0.1	146	0.2
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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

## Duration of pregnancy at first antenatal visit

Between 2013 and 2017, the proportion of mothers starting antenatal care at less than 14 weeks gestation substantially increased from 60.0% to 73.1% (Table 7). In 2017, 90.6% of mothers commenced antenatal care at less than 20 weeks gestation.

**TABLE 7: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT, NSW 2013–2017**

Duration of pregnancy (weeks)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–13	57336	60.0	57293	59.7	61073	64.3	65988	67.8	69062	73.1
14–19	22916	24.0	24062	25.1	21869	23.0	20404	21.0	16473	17.4
20+	14507	15.2	14164	14.8	11685	12.3	10033	10.3	8324	8.8
Not stated	778	0.8	407	0.4	362	0.4	881	0.9	590	0.6
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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

## Smoking in pregnancy

The proportion of mothers that reported any smoking during pregnancy declined from 9.7% in 2013 to 8.8% in 2017 (Table 8). Of those mothers who smoked during pregnancy in 2017, 24.8% 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 2013–2017**

Smoking in pregnancy	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Did not smoke	86251	90.3	87041	90.7	86547	91.1	88000	90.4	85189	90.2
Smoked	9285	9.7	8883	9.3	8442	8.9	8083	8.3	8279	8.8
Not stated	1	0.0	2	0.0	0	0.0	1223	1.3	981	1.0
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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 2013–2017**

Cigarettes smoked in the second half of pregnancy	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
None	2446	26.3	2306	26.0	2292	27.1	2156	26.7	2053	24.8
1–10 per day	5069	54.6	4948	55.7	4691	55.6	4738	58.6	5090	61.5
> 10 per day	1510	16.3	1319	14.8	1202	14.2	1065	13.2	1012	12.2
Smoked, amount not stated	260	2.8	310	3.5	257	3.0	15	0.2	13	0.2
Not stated	0	0.0	0	0.0	0	0.0	109	1.3	111	1.3
<b>TOTAL</b>	<b>9285</b>	<b>100.0</b>	<b>8883</b>	<b>100.0</b>	<b>8442</b>	<b>100.0</b>	<b>8083</b>	<b>100.0</b>	<b>8279</b>	<b>100.0</b>

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

## Place of birth

In 2017, the majority of mothers planned to give birth in a hospital labour ward, and 6.3% planned to give birth in a birth centre (Table 10). Sixty-eight per cent of mothers who planned to give birth in a birth centre actually did so. The total number of reported planned homebirths remained stable at 236 in 2013 and 239 in 2017, and the reported number of planned homebirths that occurred at home fell from 217 in 2013 to 198 in 2017.

**TABLE 10: MATERNAL PLACE OF BIRTH, NSW 2013–2017**

Place of birth	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Hospital	92012	96.3	92596	96.5	91830	96.7	94025	96.6	87687	92.8
Birth centre	2392	2.5	2202	2.3	2095	2.2	2128	2.2	4043	4.3
Planned birth centre-hospital admission	354	0.4	381	0.4	323	0.3	341	0.4	1913	2.0
Planned homebirth	217	0.2	228	0.2	187	0.2	196	0.2	198	0.2
Planned homebirth-hospital admission	19	0.0	30	0.0	16	0.0	23	0.0	41	0.0
Born before arrival	543	0.6	488	0.5	538	0.6	542	0.6	544	0.6
Not stated	0	0.0	1	0.0	0	0.0	51	0.1	23	0.0
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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

## Diabetes

The reported rate of gestational diabetes rose from 7.0% in 2013 to 13.1% in 2017, following widespread implementation of the *Australasian Diabetes in Pregnancy Society (ADIPS) Consensus Guidelines for the Testing and Diagnosis of Gestational Diabetes Mellitus* during 2016.<sup>1</sup> The rate of pre-existing diabetes mellitus was just over 1.0% (Table 11) over the 5-year period.

**TABLE 11: MATERNAL DIABETES, NSW 2013–2017**

Condition	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Pre-existing diabetes mellitus	1170	1.2	1358	1.4	1398	1.5	886	0.9	900	1.0
Type 1 <sup>†</sup>	-	-	-	-	-	-	281	0.3	256	0.3
Type 2 <sup>†</sup>	-	-	-	-	-	-	332	0.3	377	0.4
Gestational diabetes mellitus	6710	7.0	7242	7.5	7918	8.3	12260	12.6	12375	13.1
Other <sup>†</sup>	-	-	-	-	-	-	273	0.3	267	0.3
<b>Total diabetes*</b>	<b>7857</b>	<b>8.2</b>	<b>8600</b>	<b>9.0</b>	<b>9316</b>	<b>9.8</b>	<b>13146</b>	<b>13.5</b>	<b>13275</b>	<b>14.1</b>

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

\* Total diabetes refers to the number of mothers with a diagnosis of any type of diabetes mellitus.

† Pre-existing diabetes mellitus type 1, 2 and other newly captured from 2016.

## Hypertension

The reported rate of gestational hypertension was 2.7% in 2017, similar to previous years. The overall rate of hypertension in pregnancy remained steady at about 5% over the 5-year period (Table 12).

**TABLE 12: MATERNAL HYPERTENSION, NSW 2013–2017**

Condition	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Chronic hypertension	741	0.8	745	0.8	731	0.8	716	0.7	694	0.7
Pre-eclampsia	1577	1.7	1458	1.5	1463	1.5	1557	1.6	1352	1.4
Eclampsia <sup>†</sup>	-	-	-	-	-	-	27	0.0	35	0.0
Gestational hypertension	2766	2.9	2810	2.9	2909	3.1	2860	2.9	2592	2.7
<b>Total hypertension*</b>	<b>4999</b>	<b>5.2</b>	<b>4925</b>	<b>5.1</b>	<b>5018</b>	<b>5.3</b>	<b>5062</b>	<b>5.2</b>	<b>4526</b>	<b>4.8</b>

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

\* Total hypertension refers to the number of mothers with a diagnosis of any of the following conditions: Chronic hypertension, pre-eclampsia, eclampsia and gestational hypertension.

† Eclampsia newly captured from 2016.

## Labour

The rate of spontaneous onset of labour fell from 52.2% in 2013 to 46.3% in 2017 and the rate of induction of labour rose from 29.2% in 2013 to 32.3% in 2017 (Table 13). The most common reported reason for induction of labour in 2017 was prelabour rupture of membranes (15.5%), followed by diabetes (14.1%), prolonged pregnancy (41 or more weeks) (13.9%), hypertensive disease (6.7%), suspected intrauterine growth retardation (5.8%), fetal distress (2.7%) and fetal death (0.7%).

**TABLE 13: ONSET AND AUGMENTATION OF LABOUR, NSW 2013–2017**

Onset of labour	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	35970	37.7	35398	36.9	34176	36.0	33947	34.9	31411	33.3
Spontaneous augmented with ARM	5965	6.2	5645	5.9	5533	5.8	5932	6.1	5286	5.6
Spontaneous augmented with oxytocics <sup>#</sup>	7888	8.3	7680	8.0	7501	7.9	7311	7.5	7060	7.5
No labour	17818	18.7	18812	19.6	18827	19.8	19710	20.3	20132	21.3
Induced – oxytocics/prostaglandins	10028	10.5	10343	10.8	9971	10.5	9673	9.9	10473	11.1
Induced – ARM only	1884	2.0	1887	2.0	1869	2.0	3335	3.4	2797	3.0
Induced – ARM + oxytocics/prostaglandins	15822	16.6	15940	16.6	16719	17.6	16879	17.3	16957	18.0
Induced – other <sup>†</sup>	159	0.2	216	0.2	390	0.4	384	0.4	266	0.3
Not stated	3	0.0	5	0.0	3	0.0	135	0.1	67	0.1
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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.

## Type of birth

Among NSW mothers, the rate of normal vaginal birth decreased from 56.8% in 2013 to 54.5% in 2017 (Table 14). The caesarean section rate increased from 31.5% to 33.8%, while the rate of instrumental birth (forceps and vacuum extraction) remained steady at about 11%.

TABLE 14: TYPE OF BIRTH, NSW 2013–2017

Type of birth	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	54269	56.8	53988	56.3	53203	56.0	53740	55.2	51434	54.5
Forceps	4349	4.6	4489	4.7	4488	4.7	4536	4.7	4435	4.7
Vacuum extraction	6500	6.8	6160	6.4	6122	6.4	6649	6.8	6338	6.7
Vaginal breech	363	0.4	367	0.4	363	0.4	339	0.3	336	0.4
Elective caesarean section	17818	18.7	18812	19.6	18826	19.8	19692	20.2	20115	21.3
Emergency caesarean section*	12236	12.8	12103	12.6	11984	12.6	12321	12.7	11764	12.5
Not stated	2	0.0	7	0.0	3	0.0	29	0.0	27	0.0
<b>TOTAL</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>	<b>94449</b>	<b>100.0</b>

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.

Operative and instrumental births are more common among privately than publicly insured mothers (Table 15). 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% in 2012 to 61.4% in 2016 and the caesarean section rate increased from 26.1% to 27.8%.

TABLE 15: 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.	%	
<b>PUBLIC</b>	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
	<b>TOTAL</b>	<b>63798</b>	<b>100.0</b>	<b>62354</b>	<b>100.0</b>	<b>62153</b>	<b>100.0</b>	<b>60887</b>	<b>100.0</b>	<b>62080</b>	<b>100.0</b>
<b>PRIVATE</b>	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
	<b>TOTAL</b>	<b>33964</b>	<b>100.0</b>	<b>32624</b>	<b>100.0</b>	<b>33216</b>	<b>100.0</b>	<b>33447</b>	<b>100.0</b>	<b>34747</b>	<b>100.0</b>
<b>NOT STATED</b>	Normal vaginal	251	66.2	353	63.1	378	67.9	420	64.1	327	68.3
	Forceps	11	2.9	20	3.6	11	2.0	16	2.4	14	2.9
	Vacuum extraction	18	4.7	37	6.6	25	4.5	47	7.2	30	6.3
	Vaginal breech	5	1.3	2	0.4	3	0.5	1	0.2	4	0.8
	Elective caesarean section	37	9.8	64	11.4	60	10.8	85	13.0	58	12.1
	Emergency caesarean section*	55	14.5	83	14.8	80	14.4	86	13.1	45	9.4
	Not stated	2	0.5	0	0.0	0	0.0	0	0.0	1	0.2
	<b>TOTAL</b>	<b>379</b>	<b>100.0</b>	<b>559</b>	<b>100.0</b>	<b>557</b>	<b>100.0</b>	<b>655</b>	<b>100.0</b>	<b>479</b>	<b>100.0</b>
<b>TOTAL†</b>	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
	<b>TOTAL</b>	<b>98141</b>	<b>100.0</b>	<b>95537</b>	<b>100.0</b>	<b>95926</b>	<b>100.0</b>	<b>94989</b>	<b>100.0</b>	<b>97306</b>	<b>100.0</b>

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 2013, with slightly more male babies born than females in each year. In 2017, 49,068 (51.2%) babies were male, 46,738 (48.8%) were female, and 15 were of indeterminate sex. This compares with babies born in 2013, when 49,980 (51.5%) babies were male, 46,966 (48.4%) were female, and six were of indeterminate sex.

## Gestational age

In 2017, 7.4% of babies were born prematurely (less than 37 weeks gestation), similar to 7.6% reported in 2013 (Table 16). 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 0.5% in 2013 and 0.9% in 2017.

TABLE 16: GESTATIONAL AGE, NSW 2013–2017

Gestational age (weeks)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
< 28	690	0.7	659	0.7	733	0.8	696	0.7	713	0.7
28–31	659	0.7	696	0.7	690	0.7	619	0.6	642	0.7
32–36	6059	6.2	6140	6.3	6200	6.4	5865	5.9	5754	6.0
37–41	89086	91.9	89435	91.9	88397	91.7	90270	91.4	87768	91.6
42 +	466	0.5	391	0.4	367	0.4	1065	1.1	885	0.9
Not stated	11	0.0	4	0.0	4	0.0	212	0.2	63	0.1
<b>TOTAL</b>	<b>96971</b>	<b>100.0</b>	<b>97325</b>	<b>100.0</b>	<b>96391</b>	<b>100.0</b>	<b>98727</b>	<b>100.0</b>	<b>95825</b>	<b>100.0</b>

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

## Birth weight

Since 2013, the pattern of birth weight has remained stable, with the rate of low birth weight (less than 2,500 grams) ranging from 6.3% to 6.7% (Table 17). The rate of low birth weight was 6.7% in 2017.

TABLE 17: BIRTH WEIGHT, NSW 2013–2017

Birth weight (grams)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 500	232	0.2	225	0.2	283	0.3	326	0.3	341	0.4
500–999	413	0.4	433	0.4	411	0.4	411	0.4	455	0.5
1,000–1,499	524	0.5	552	0.6	545	0.6	534	0.5	503	0.5
1,500–1,999	1129	1.2	1096	1.1	1193	1.2	1191	1.2	1154	1.2
2,000–2,499	3856	4.0	3839	3.9	3918	4.1	3931	4.0	3952	4.1
2,500–2,999	15089	15.6	15598	16.0	15931	16.5	16272	16.5	16011	16.7
3,000–3,499	36118	37.2	36528	37.5	36122	37.5	37290	37.8	36263	37.8
3,500–3,999	29191	30.1	28986	29.8	28315	29.4	29171	29.5	28051	29.3
4,000–4,499	8860	9.1	8606	8.8	8330	8.6	8348	8.5	7942	8.3
4,500+	1460	1.5	1393	1.4	1276	1.3	1182	1.2	1106	1.2
Not stated	99	0.1	69	0.1	67	0.1	71	0.1	47	0.0
<b>TOTAL</b>	<b>96971</b>	<b>100.0</b>	<b>97325</b>	<b>100.0</b>	<b>96391</b>	<b>100.0</b>	<b>98727</b>	<b>100.0</b>	<b>95825</b>	<b>100.0</b>

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

## Apgar score

In 2017, 2.2% of babies were born with an Apgar score of less than seven at 5 minutes and 1.0% were born with an Apgar score of less than five (Table 18). These rates are similar to those of previous years.

TABLE 18: APGAR SCORE AT 5 MINUTES, NSW 2013–2017#

Apgar score	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0-4	1053	1.1	1050	1.1	1025	1.1	1047	1.1	1003	1.0
5-6	1184	1.2	1206	1.2	1200	1.2	1209	1.2	1083	1.1
7+	94673	97.6	94861	97.5	93864	97.4	95844	97.1	93157	97.2
Not stated	61	0.1	208	0.2	302	0.3	627	0.6	582	0.6
<b>TOTAL</b>	<b>96971</b>	<b>100.0</b>	<b>97325</b>	<b>100.0</b>	<b>96391</b>	<b>100.0</b>	<b>98727</b>	<b>100.0</b>	<b>95825</b>	<b>100.0</b>

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 remained stable at about 94% between 2013 and 2017 (Table 19).

**TABLE 19: HEPATITIS B DOSE GIVEN TO LIVEBORN BABIES, NSW 2013–2017**

Hepatitis B dose given	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
No	5441	5.6	5207	5.4	5366	5.6	4956	5.0	5220	5.5
Yes	90921	94.3	91538	94.6	90378	94.4	92013	93.7	89070	93.5
Not stated	26	0.0	31	0.0	14	0.0	1215	1.2	944	1.0
<b>TOTAL</b>	<b>96388</b>	<b>100.0</b>	<b>96776</b>	<b>100.0</b>	<b>95758</b>	<b>100.0</b>	<b>98184</b>	<b>100.0</b>	<b>95234</b>	<b>100.0</b>

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 79.8% to 73.7% between 2013 and 2017. The percentage of babies that received any breastfeeding rose from 8.8% in 2013 to 14.7% in 2017. In the same 5-year period, the percentage of babies receiving infant formula only fell from 10.3% to 8.3% (Table 20).

**TABLE 20: LIVE BIRTHS BY TYPE OF INFANT FEEDING, NSW 2013–2017**

Infant feeding	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Full breastfeeding	76912	79.8	76018	78.6	75562	78.9	73524	74.9	70234	73.7
Any breastfeeding	8457	8.8	10132	10.5	10047	10.5	13177	13.4	14031	14.7
Infant formula only	9935	10.3	9577	9.9	9270	9.7	8305	8.5	7921	8.3
Not stated	1084	1.1	1049	1.1	879	0.9	3178	3.2	3048	3.2
<b>TOTAL</b>	<b>96388</b>	<b>100.0</b>	<b>96776</b>	<b>100.0</b>	<b>95758</b>	<b>100.0</b>	<b>98184</b>	<b>100.0</b>	<b>95234</b>	<b>100.0</b>

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

## Perinatal outcome

Across the period 2013–2017 the perinatal mortality rate varied from 7.5 to 8.4 per 1,000 births and was 8.4 per 1,000 in 2017 (Table 21). In 2017, 73.7% of all reported perinatal deaths were stillbirths and 26.3% were neonatal deaths.

Of the 802 perinatal deaths in 2017 in NSW, 669 (83.4%) were reported among planned hospital births, 112 (14.0%) among planned birth centre births and 19 deaths were among babies born before arrival at hospital (2.4%). There were no perinatal deaths reported among planned or actual homebirths.

**TABLE 21: PERINATAL OUTCOMES, NSW 2013–2017<sup>#</sup>**

Year	Liveborn surviving		Stillborn		Neonatal death		Death—age not stated		Not stated		Total births		Perinatal death rate/1,000 births <sup>†</sup>
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
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
2017	95023	99.2	591	0.6	211	0.2	0	0.0	0	0.0	95825	100.0	8.4

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

<sup>#</sup> 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.

<sup>†</sup> The perinatal death rate excludes deaths where the age at death was not stated.

## Maternal deaths

In the period 1990–2016, 239 deaths were reported among pregnant women or women who gave birth less than 6 weeks previously. Of these, 69 (28.9%) died of incidental causes not related to the pregnancy or its management, 103 (43.1%) deaths were found to be directly due to pregnancy or its management, and 63 (26.4%) 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 physiological effects of pregnancy (Table 22). Table 23 shows maternal deaths by cause in NSW for 2016.

**TABLE 22: MATERNAL DEATHS BY YEAR, NSW 1990-2016<sup>a</sup>**

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 <sup>†</sup>	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 <sup>†</sup>	2	2.3	2	2.3	4	4.7	2	2.3	7	8.2
2005 <sup>†</sup>	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 <sup>†</sup>	3	3.2	0	0.0	4	4.2	0	0.0	4	4.2
2016	2	2.1	3	3.1	5	5.1	0	0.0	5	5.1

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.<sup>2</sup>

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

**TABLE 23: MATERNAL DEATHS BY CAUSE, NSW 2016<sup>a</sup>**

Classification	Cause	No.
Indirect	Meningococcal septicaemia	1
Indirect	Laryngospasm leading to respiratory arrest	1
Indirect	Suicide	1
Direct	Suicide	1
Direct	Intracranial haemorrhage associated with pre-eclampsia	1
<b>TOTAL</b>		<b>5</b>

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.<sup>2</sup>

## 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](http://www.adips.org). Accessed 12 January 2018.
2. Australian Institute of Health and Welfare. *Maternal deaths in Australia 2012-2014*. Cat. No. PER 70. Canberra: AIHW, 2017.

# 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 2017 were resident in the Western Sydney Local Health District ( $n = 14,479$ , 15.3%), followed by the South Western Sydney Local Health District ( $n = 13,554$ , 14.4%) and the South Eastern Sydney Local Health District ( $n = 10,644$ , 11.3%) (Table 24).

## Maternal age

In 2017, the proportion of women giving birth at less than 20 years of age varied from 0.2% in the Northern Sydney Local Health District to 5.9% in the Far West Local Health District, while the proportion of mothers giving birth at 35 years of age or more ranged from 13.7% in the Far West Local Health District to 40.1% in the Northern Sydney Local Health District (Table 24).

**TABLE 24: MATERNAL AGE BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

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	28	0.3	426	5.3	1602	20.0	3257	40.7	2180	27.2	482	6.0	32	0.4	1	0.0	<b>8008</b>	<b>100.0</b>
South Western Sydney	252	1.9	1855	13.7	4240	31.3	4379	32.3	2287	16.9	504	3.7	36	0.3	1	0.0	<b>13554</b>	<b>100.0</b>
South Eastern Sydney	52	0.5	460	4.3	2131	20.0	4348	40.8	2924	27.5	665	6.2	63	0.6	1	0.0	<b>10644</b>	<b>100.0</b>
Illawarra Shoalhaven	122	2.7	587	13.1	1305	29.2	1564	34.9	753	16.8	136	3.0	8	0.2	0	0.0	<b>4475</b>	<b>100.0</b>
Western Sydney	223	1.5	1487	10.3	4114	28.4	5452	37.7	2707	18.7	465	3.2	31	0.2	0	0.0	<b>14479</b>	<b>100.0</b>
Nepean Blue Mountains	116	2.4	757	15.4	1538	31.3	1565	31.9	761	15.5	155	3.2	12	0.2	4	0.1	<b>4908</b>	<b>100.0</b>
Northern Sydney	17	0.2	235	2.3	1532	15.1	4298	42.4	3244	32.0	775	7.6	45	0.4	0	0.0	<b>10146</b>	<b>100.0</b>
Central Coast	98	2.6	529	13.8	1085	28.3	1307	34.1	650	17.0	139	3.6	11	0.3	13	0.3	<b>3832</b>	<b>100.0</b>
Hunter New England	400	3.8	1711	16.2	3205	30.4	3387	32.1	1531	14.5	289	2.7	19	0.2	1	0.0	<b>10543</b>	<b>100.0</b>
Northern NSW	96	3.8	481	19.0	730	28.9	698	27.6	417	16.5	97	3.8	7	0.3	0	0.0	<b>2526</b>	<b>100.0</b>
Mid North Coast	92	4.3	394	18.2	642	29.7	624	28.8	330	15.3	73	3.4	8	0.4	0	0.0	<b>2163</b>	<b>100.0</b>
Southern NSW	49	3.6	233	17.1	447	32.8	424	31.1	190	13.9	18	1.3	2	0.1	0	0.0	<b>1363</b>	<b>100.0</b>
Murrumbidgee	109	4.6	423	18.0	760	32.4	701	29.9	287	12.2	62	2.6	3	0.1	0	0.0	<b>2345</b>	<b>100.0</b>
Western NSW	181	5.1	733	20.5	1144	31.9	1000	27.9	435	12.1	85	2.4	3	0.1	0	0.0	<b>3581</b>	<b>100.0</b>
Far West	12	5.9	47	22.9	65	31.7	53	25.9	26	12.7	2	1.0	0	0.0	0	0.0	<b>205</b>	<b>100.0</b>
Other-not stated	20	1.2	183	10.9	496	29.6	585	34.9	321	19.1	64	3.8	5	0.3	3	0.2	<b>1677</b>	<b>100.0</b>
<b>TOTAL</b>	<b>1867</b>	<b>2.0</b>	<b>10541</b>	<b>11.2</b>	<b>25036</b>	<b>26.5</b>	<b>33642</b>	<b>35.6</b>	<b>19043</b>	<b>20.2</b>	<b>4011</b>	<b>4.2</b>	<b>285</b>	<b>0.3</b>	<b>24</b>	<b>0.0</b>	<b>94449</b>	<b>100.0</b>

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 2017 were born in English speaking countries, 20.8% were born in Asian countries, and 5.3% were born in the Middle East or Africa (Table 25). The highest proportions of mothers born in non-English speaking countries were in the Western Sydney, Sydney and South Western Sydney Local Health Districts.

**TABLE 25: MATERNAL COUNTRY OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

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	4246	53.0	127	1.6	60	0.7	146	1.8	129	1.6	128	1.6	425	5.3	666	8.3	1079	13.5	975	12.2	<b>8008</b>	<b>100.0</b>
South Western Sydney	7731	57.0	133	1.0	381	2.8	246	1.8	44	0.3	118	0.9	1995	14.7	1578	11.6	369	2.7	940	6.9	<b>13554</b>	<b>100.0</b>
South Eastern Sydney	6638	62.4	258	2.4	63	0.6	236	2.2	247	2.3	267	2.5	339	3.2	685	6.4	1070	10.1	681	6.4	<b>10644</b>	<b>100.0</b>
Illawarra Shoalhaven	3940	88.0	24	0.5	12	0.3	54	1.2	30	0.7	17	0.4	119	2.7	100	2.2	77	1.7	81	1.8	<b>4475</b>	<b>100.0</b>
Western Sydney	6123	42.3	95	0.7	298	2.1	91	0.6	46	0.3	423	2.9	1367	9.4	913	6.3	1571	10.9	3523	24.3	<b>14479</b>	<b>100.0</b>
Nepean Blue Mountains	4087	83.3	20	0.4	62	1.3	20	0.4	19	0.4	37	0.8	167	3.4	153	3.1	64	1.3	250	5.1	<b>4908</b>	<b>100.0</b>
Northern Sydney	5966	58.8	249	2.5	41	0.4	141	1.4	236	2.3	219	2.2	316	3.1	551	5.4	1691	16.7	648	6.4	<b>10146</b>	<b>100.0</b>
Central Coast	3472	90.6	22	0.6	13	0.3	14	0.4	36	0.9	26	0.7	17	0.4	72	1.9	58	1.5	80	2.1	<b>3832</b>	<b>100.0</b>
Hunter New England	9684	91.9	28	0.3	26	0.2	20	0.2	59	0.6	38	0.4	126	1.2	214	2.0	119	1.1	200	1.9	<b>10543</b>	<b>100.0</b>
Northern NSW	2310	91.4	22	0.9	8	0.3	8	0.3	37	1.5	8	0.3	11	0.4	45	1.8	32	1.3	21	0.8	<b>2526</b>	<b>100.0</b>
Mid North Coast	1965	90.8	10	0.5	8	0.4	10	0.5	13	0.6	11	0.5	21	1.0	47	2.2	17	0.8	54	2.5	<b>2163</b>	<b>100.0</b>
Southern NSW	1244	91.3	3	0.2	4	0.3	5	0.4	10	0.7	1	0.1	7	0.5	29	2.1	15	1.1	43	3.2	<b>1363</b>	<b>100.0</b>
Murrumbidgee	2109	89.9	2	0.1	25	1.1	3	0.1	5	0.2	10	0.4	28	1.2	48	2.0	25	1.1	90	3.8	<b>2345</b>	<b>100.0</b>
Western NSW	3363	93.9	7	0.2	4	0.1	4	0.1	15	0.4	5	0.1	21	0.6	43	1.2	20	0.6	88	2.5	<b>3581</b>	<b>100.0</b>
Far West	195	95.1	0	0.0	0	0.0	0	0.0	0	0.0	1	0.5	0	0.0	3	1.5	0	0.0	5	2.4	<b>205</b>	<b>100.0</b>
Other-not stated	813	48.5	34	2.0	29	1.7	16	1.0	21	1.3	23	1.4	79	4.7	205	12.2	206	12.3	236	14.1	<b>1677</b>	<b>100.0</b>
<b>TOTAL</b>	<b>63886</b>	<b>67.6</b>	<b>1034</b>	<b>1.1</b>	<b>1034</b>	<b>1.1</b>	<b>1014</b>	<b>1.1</b>	<b>947</b>	<b>1.0</b>	<b>1332</b>	<b>1.4</b>	<b>5038</b>	<b>5.3</b>	<b>5352</b>	<b>5.7</b>	<b>6413</b>	<b>6.8</b>	<b>7915</b>	<b>8.4</b>	<b>94449</b>	<b>100.0</b>

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

† Includes 484 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 2017, 4.4% of mothers were reported to be Aboriginal or Torres Strait Islander (Table 26). The reported proportion of Aboriginal or Torres Strait Islander mothers varied from 0.4% in the Northern Sydney Local Health District to 17.1% in the Far West Local Health District.

**TABLE 26: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Aboriginal or Torres Strait Islander		Non-Aboriginal or Torres Strait Islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	99	1.2	7884	98.5	25	0.3	8008	100.0
South Western Sydney	295	2.2	13239	97.7	20	0.1	13554	100.0
South Eastern Sydney	113	1.1	10518	98.8	13	0.1	10644	100.0
Illawarra Shoalhaven	276	6.2	4197	93.8	2	0.0	4475	100.0
Western Sydney	289	2.0	14134	97.6	56	0.4	14479	100.0
Nepean Blue Mountains	229	4.7	4672	95.2	7	0.1	4908	100.0
Northern Sydney	36	0.4	9905	97.6	205	2.0	10146	100.0
Central Coast	230	6.0	3597	93.9	5	0.1	3832	100.0
Hunter New England	1100	10.4	9413	89.3	30	0.3	10543	100.0
Northern NSW	231	9.1	2284	90.4	11	0.4	2526	100.0
Mid North Coast	262	12.1	1894	87.6	7	0.3	2163	100.0
Southern NSW	91	6.7	1267	93.0	5	0.4	1363	100.0
Murrumbidgee	204	8.7	2134	91.0	7	0.3	2345	100.0
Western NSW	666	18.6	2906	81.2	9	0.3	3581	100.0
Far West	35	17.1	170	82.9	0	0.0	205	100.0
Other-not stated	27	1.6	1622	96.7	28	1.7	1677	100.0
<b>TOTAL</b>	<b>4183</b>	<b>4.4</b>	<b>89836</b>	<b>95.1</b>	<b>430</b>	<b>0.5</b>	<b>94449</b>	<b>100.0</b>

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

## Duration of pregnancy at first antenatal visit

In 2017, 90.6% of mothers commenced antenatal care prior to 20 weeks gestation and 73.1% commenced antenatal care prior to 14 weeks gestation. The percentage of mothers commencing antenatal care prior to 20 weeks gestation varied from 73.1% in the Southern NSW Local Health District to 95.9% in the Sydney and Northern Sydney Local Health Districts (Table 27).

**TABLE 27: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

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	6781	84.7	898	11.2	294	3.7	35	0.4	8008	100.0
South Western Sydney	10070	74.3	2021	14.9	1272	9.4	191	1.4	13554	100.0
South Eastern Sydney	7527	70.7	2455	23.1	627	5.9	35	0.3	10644	100.0
Illawarra Shoalhaven	2466	55.1	1337	29.9	659	14.7	13	0.3	4475	100.0
Western Sydney	8733	60.3	3741	25.8	1931	13.3	74	0.5	14479	100.0
Nepean Blue Mountains	3067	62.5	1304	26.6	515	10.5	22	0.4	4908	100.0
Northern Sydney	8200	80.8	1533	15.1	367	3.6	46	0.5	10146	100.0
Central Coast	2840	74.1	699	18.2	280	7.3	13	0.3	3832	100.0
Hunter New England	9044	85.8	772	7.3	640	6.1	87	0.8	10543	100.0
Northern NSW	2153	85.2	227	9.0	139	5.5	7	0.3	2526	100.0
Mid North Coast	1760	81.4	158	7.3	234	10.8	11	0.5	2163	100.0
Southern NSW	669	49.1	327	24.0	354	26.0	13	1.0	1363	100.0
Murrumbidgee	1660	70.8	277	11.8	399	17.0	9	0.4	2345	100.0
Western NSW	2725	76.1	476	13.3	367	10.2	13	0.4	3581	100.0
Far West	117	57.1	79	38.5	9	4.4	0	0.0	205	100.0
Other-not stated	1250	74.5	169	10.1	237	14.1	21	1.3	1677	100.0
<b>TOTAL</b>	<b>69062</b>	<b>73.1</b>	<b>16473</b>	<b>17.4</b>	<b>8324</b>	<b>8.8</b>	<b>590</b>	<b>0.6</b>	<b>94449</b>	<b>100.0</b>

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

## Smoking in pregnancy

In 2017, 8.8% of mothers reported smoking at all during pregnancy. The percentage of mothers that reported smoking at all during pregnancy varied from 1.7% in the Northern Sydney Local Health District to 26.8% in the Far West Local Health District (Table 28). A total of 6.5% of mothers reported smoking in the second half of pregnancy. The lowest rate was reported among mothers living in the Northern Sydney Local Health District (0.9%) and the highest rate was reported among residents of the Far West Local Health District (21.5%).

**TABLE 28: SMOKING IN PREGNANCY BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Smoking during pregnancy							
	Smoked in first half of pregnancy		Smoked in second half of pregnancy		Smoked at all during pregnancy		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	213	2.7	128	1.6	223	2.8	8008	100.0
South Western Sydney	1066	7.9	758	5.6	1124	8.3	13554	100.0
South Eastern Sydney	304	2.9	190	1.8	321	3.0	10644	100.0
Illawarra Shoalhaven	509	11.4	397	8.9	538	12.0	4475	100.0
Western Sydney	937	6.5	633	4.4	984	6.8	14479	100.0
Nepean Blue Mountains	538	11.0	348	7.1	552	11.2	4908	100.0
Northern Sydney	163	1.6	89	0.9	173	1.7	10146	100.0
Central Coast	494	12.9	419	10.9	522	13.6	3832	100.0
Hunter New England	1429	13.6	1285	12.2	1533	14.5	10543	100.0
Northern NSW	415	16.4	367	14.5	437	17.3	2526	100.0
Mid North Coast	371	17.2	322	14.9	393	18.2	2163	100.0
Southern NSW	175	12.8	160	11.7	192	14.1	1363	100.0
Murrumbidgee	390	16.6	306	13.0	419	17.9	2345	100.0
Western NSW	710	19.8	619	17.3	744	20.8	3581	100.0
Far West	51	24.9	44	21.5	55	26.8	205	100.0
Other-not stated	66	4.0	49	3.6	69	4.2	1677	100.0
<b>TOTAL</b>	<b>7831</b>	<b>8.3</b>	<b>6114</b>	<b>6.5</b>	<b>8279</b>	<b>8.8</b>	<b>94449</b>	<b>100.0</b>

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

## Place of birth

Ninety-three per cent of mothers chose to give birth in a hospital birthing suite in 2017, compared to 6.3% who planned a birth centre birth and 0.3% who planned a home birth (Table 29). Planned birth centre births were most commonly reported in the Northern NSW Local Health District (16.7%).

**TABLE 29: PLACE OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Place of birth													
	Hospital		Birth centre		Planned birth centre–hospital admission		Planned homebirth		Planned homebirth–hospital admission		Born before arrival		TOTAL†	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	7679	95.9	254	3.2	30	0.4	6	0.1	0	0.0	35	0.4	8008	100.0
South Western Sydney	13324	98.3	57	0.4	79	0.6	11	0.1	1	0.0	77	0.6	13554	100.0
South Eastern Sydney	9912	93.1	503	4.7	158	1.5	8	0.1	2	0.0	56	0.5	10644	100.0
Illawarra Shoalhaven	4278	95.6	95	2.1	71	1.6	8	0.2	2	0.0	21	0.5	4475	100.0
Western Sydney	13708	94.7	510	3.5	183	1.3	4	0.0	1	0.0	73	0.5	14479	100.0
Nepean Blue Mountains	4730	96.4	116	2.4	28	0.6	14	0.3	0	0.0	20	0.4	4908	100.0
Northern Sydney	9329	91.9	375	3.7	377	3.7	19	0.2	7	0.1	39	0.4	10146	100.0
Central Coast	3258	85.0	367	9.6	161	4.2	3	0.1	3	0.1	39	1.0	3832	100.0
Hunter New England	9266	87.9	919	8.7	181	1.7	69	0.7	7	0.1	96	0.9	10543	100.0
Northern NSW	2044	80.9	289	11.4	134	5.3	28	1.1	8	0.3	22	0.9	2526	100.0
Mid North Coast	1829	84.6	139	6.4	177	8.2	3	0.1	3	0.1	12	0.6	2163	100.0
Southern NSW	1269	93.1	38	2.8	37	2.7	3	0.2	1	0.1	13	1.0	1363	100.0
Murrumbidgee	2199	93.8	75	3.2	60	2.6	0	0.0	2	0.1	9	0.4	2345	100.0
Western NSW	3117	87.0	244	6.8	194	5.4	0	0.0	4	0.1	22	0.6	3581	100.0
Far West	182	88.8	15	7.3	6	2.9	0	0.0	0	0.0	2	1.0	205	100.0
Other-not stated	1563	93.2	47	2.8	37	2.2	22	1.3	0	0.0	8	0.5	1677	100.0
<b>TOTAL</b>	<b>87687</b>	<b>92.8</b>	<b>4043</b>	<b>4.3</b>	<b>1913</b>	<b>2.0</b>	<b>198</b>	<b>0.2</b>	<b>41</b>	<b>0.0</b>	<b>544</b>	<b>0.6</b>	<b>94449</b>	<b>100.0</b>

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

† Includes 23 mothers in NSW for whom place of birth was not stated.

## Labour

In 2017, the onset of labour was spontaneous in 46.3% of confinements (Table 30). Labour was induced in 32.3% of confinements and no labour (elective caesarean section) was reported in 21.3%. The rate of spontaneous onset of labour was highest among residents of the Southern NSW Local Health District (57.3%). The highest rate of induction of labour was among residents of the Nepean Blue Mountains Local Health District (36.6%).

**TABLE 30: ONSET AND AUGMENTATION OF LABOUR BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Onset of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics <sup>†</sup>		No labour		Induced-oxytocics/prostaglandins		Induced-ARM only		Induced-ARM + oxytocics/prostaglandins		Induced-other <sup>‡</sup>		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	2220	27.7	484	6.0	846	10.6	1904	23.8	1143	14.3	345	4.3	1036	12.9	28	0.3	2	0.0	8008	100.0
South Western Sydney	4699	34.7	1076	7.9	1113	8.2	2505	18.5	1854	13.7	797	5.9	1424	10.5	77	0.6	9	0.1	13554	100.0
South Eastern Sydney	3245	30.5	592	5.6	872	8.2	2488	23.4	1175	11.0	297	2.8	1944	18.3	15	0.1	16	0.2	10644	100.0
Illawarra Shoalhaven	1504	33.6	198	4.4	323	7.2	884	19.8	411	9.2	105	2.3	1042	23.3	8	0.2	0	0.0	4475	100.0
Western Sydney	4816	33.3	910	6.3	1118	7.7	2939	20.3	1251	8.6	206	1.4	3191	22.0	38	0.3	10	0.1	14479	100.0
Nepean Blue Mountains	1548	31.5	255	5.2	179	3.6	1122	22.9	528	10.8	108	2.2	1151	23.5	7	0.1	10	0.2	4908	100.0
Northern Sydney	3046	30.0	483	4.8	938	9.2	2763	27.2	1007	9.9	224	2.2	1648	16.2	35	0.3	2	0.0	10146	100.0
Central Coast	1264	33.0	192	5.0	311	8.1	810	21.1	464	12.1	44	1.1	737	19.2	8	0.2	2	0.1	3832	100.0
Hunter New England	3683	34.9	450	4.3	460	4.4	2116	20.1	1149	10.9	328	3.1	2324	22.0	25	0.2	8	0.1	10543	100.0
Northern NSW	1082	42.8	129	5.1	157	6.2	351	13.9	291	11.5	66	2.6	447	17.7	3	0.1	0	0.0	2526	100.0
Mid North Coast	896	41.4	87	4.0	113	5.2	409	18.9	225	10.4	43	2.0	388	17.9	2	0.1	0	0.0	2163	100.0
Southern NSW	628	46.1	59	4.3	94	6.9	203	14.9	128	9.4	27	2.0	216	15.8	1	0.1	7	0.5	1363	100.0
Murrumbidgee	903	38.5	101	4.3	117	5.0	544	23.2	230	9.8	62	2.6	383	16.3	4	0.2	1	0.0	2345	100.0
Western NSW	1255	35.0	164	4.6	225	6.3	732	20.4	392	10.9	82	2.3	719	20.1	12	0.3	0	0.0	3581	100.0
Far West	75	36.6	16	7.8	18	8.8	37	18.0	25	12.2	1	0.5	33	16.1	0	0.0	0	0.0	205	100.0
Other-not stated	547	32.6	90	5.4	176	10.5	325	19.4	200	11.9	62	3.7	274	16.3	3	0.2	0	0.0	1677	100.0
<b>TOTAL</b>	<b>31411</b>	<b>33.3</b>	<b>5286</b>	<b>5.6</b>	<b>7060</b>	<b>7.5</b>	<b>20132</b>	<b>21.3</b>	<b>10473</b>	<b>11.1</b>	<b>2797</b>	<b>3.0</b>	<b>16957</b>	<b>18.0</b>	<b>266</b>	<b>0.3</b>	<b>67</b>	<b>0.1</b>	<b>94449</b>	<b>100.0</b>

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

ARM: Artificial Rupture of Membranes.

<sup>†</sup> May include artificial rupture of membranes.

<sup>‡</sup> This category includes other forms of induction such as Foley's catheter.

## Type of birth

Fifty-five per cent of births were normal vaginal births in 2017, 11.4% were instrumental and 33.8% were by caesarean section (Table 31). The highest rate of normal vaginal birth was 67.1% among residents of the Northern NSW Local Health District, while the highest rate of instrumental birth was 15.0% among residents of the South Eastern Sydney Local Health District. The caesarean section rate varied from 24.0% among mothers resident in the Northern NSW Local Health District to 39.1% in the Northern Sydney Local Health District.

**TABLE 31: TYPE OF BIRTH BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Type of birth															
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section <sup>†</sup>		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	3816	47.7	499	6.2	681	8.5	15	0.2	1904	23.8	1093	13.6	0	0.0	8008	100.0
South Western Sydney	8235	60.8	429	3.2	906	6.7	49	0.4	2503	18.5	1430	10.6	2	0.0	13554	100.0
South Eastern Sydney	5060	47.5	717	6.7	882	8.3	32	0.3	2485	23.3	1464	13.8	4	0.0	10644	100.0
Illawarra Shoalhaven	2464	55.1	208	4.6	295	6.6	12	0.3	884	19.8	612	13.7	0	0.0	4475	100.0
Western Sydney	8123	56.1	725	5.0	883	6.1	80	0.6	2934	20.3	1729	11.9	5	0.0	14479	100.0
Nepean Blue Mountains	2615	53.3	103	2.1	337	6.9	15	0.3	1122	22.9	716	14.6	0	0.0	4908	100.0
Northern Sydney	4754	46.9	699	6.9	694	6.8	29	0.3	2763	27.2	1207	11.9	0	0.0	10146	100.0
Central Coast	2084	54.4	218	5.7	243	6.3	18	0.5	810	21.1	459	12.0	0	0.0	3832	100.0
Hunter New England	5993	56.8	390	3.7	585	5.5	46	0.4	2112	20.0	1408	13.4	9	0.1	10543	100.0
Northern NSW	1696	67.1	82	3.2	127	5.0	13	0.5	350	13.9	257	10.2	1	0.0	2526	100.0
Mid North Coast	1310	60.6	73	3.4	118	5.5	5	0.2	409	18.9	248	11.5	0	0.0	2163	100.0
Southern NSW	844	61.9	56	4.1	75	5.5	3	0.2	202	14.8	180	13.2	3	0.2	1363	100.0
Murrumbidgee	1297	55.3	30	1.3	158	6.7	4	0.2	543	23.2	312	13.3	1	0.0	2345	100.0
Western NSW	2114	59.0	112	3.1	199	5.6	9	0.3	732	20.4	415	11.6	0	0.0	3581	100.0
Far West	125	61.0	7	3.4	9	4.4	0	0.0	37	18.0	27	13.2	0	0.0	205	100.0
Other-not stated	904	53.9	87	5.2	146	8.7	6	0.4	325	19.4	207	12.3	2	0.1	1677	100.0
<b>TOTAL</b>	<b>51434</b>	<b>54.5</b>	<b>4435</b>	<b>4.7</b>	<b>6338</b>	<b>6.7</b>	<b>336</b>	<b>0.4</b>	<b>20115</b>	<b>21.3</b>	<b>11764</b>	<b>12.5</b>	<b>27</b>	<b>0.0</b>	<b>94449</b>	<b>100.0</b>

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

<sup>†</sup> Emergency caesarean section includes caesarean sections where the onset of labour was not stated.

## Birth weight

In 2017, 6.7% of babies were low birth weight (less than 2,500 grams). These comprised 0.8% of babies with a birth weight less than 1,000 grams, 0.5% in the 1,000 to 1,499 gram range and 5.3% in the 1,500 to 2,499 gram range (Table 32). Rates of low birth weight ranged from 3.1% in the Southern NSW Local Health District to 7.6% in the Mid North Coast Local Health District.

TABLE 32: BIRTH WEIGHT BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017

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	32	0.4	46	0.6	92	1.1	379	4.7	1572	19.4	3222	39.7	2160	26.6	517	6.4	64	0.8	1	0.0	8115	100.0
South Western Sydney	52	0.4	64	0.5	76	0.6	172	1.2	621	4.5	2421	17.5	5312	38.5	3899	28.3	1036	7.5	133	1.0	11	0.1	13797	100.0
South Eastern Sydney	53	0.5	40	0.4	46	0.4	137	1.3	424	3.9	1830	16.9	4347	40.2	3062	28.3	749	6.9	117	1.1	4	0.0	10809	100.0
Illawarra Shoalhaven	11	0.2	17	0.4	16	0.4	58	1.3	173	3.8	683	15.0	1667	36.7	1441	31.7	417	9.2	58	1.3	0	0.0	4541	100.0
Western Sydney	66	0.4	85	0.6	81	0.6	206	1.4	623	4.2	2827	19.2	5747	39.1	3888	26.5	1014	6.9	147	1.0	6	0.0	14690	100.0
Nepean Blue Mountains	17	0.3	25	0.5	28	0.6	89	1.8	203	4.1	804	16.1	1816	36.4	1480	29.7	456	9.1	60	1.2	6	0.1	4984	100.0
Northern Sydney	23	0.2	36	0.4	45	0.4	69	0.7	380	3.7	1683	16.4	4099	39.9	3070	29.9	779	7.6	96	0.9	2	0.0	10282	100.0
Central Coast	10	0.3	25	0.6	20	0.5	45	1.2	141	3.6	568	14.6	1314	33.8	1255	32.3	441	11.3	70	1.8	1	0.0	3890	100.0
Hunter New England	39	0.4	72	0.7	76	0.7	135	1.3	469	4.4	1544	14.4	3688	34.5	3435	32.1	1087	10.2	151	1.4	7	0.1	10703	100.0
Northern NSW	15	0.6	10	0.4	3	0.1	27	1.1	91	3.6	367	14.4	870	34.1	817	32.0	302	11.8	48	1.9	3	0.1	2553	100.0
Mid North Coast	9	0.4	20	0.9	15	0.7	19	0.9	104	4.8	297	13.6	797	36.4	667	30.5	218	10.0	41	1.9	0	0.0	2187	100.0
Southern NSW	1	0.1	3	0.2	0	0.0	1	0.1	38	2.8	181	13.2	492	35.9	475	34.7	156	11.4	20	1.5	3	0.2	1370	100.0
Murrumbidgee	3	0.1	2	0.1	10	0.4	22	0.9	102	4.3	354	14.9	849	35.8	733	30.9	254	10.7	40	1.7	1	0.0	2370	100.0
Western NSW	9	0.2	15	0.4	27	0.7	65	1.8	137	3.8	527	14.5	1332	36.7	1109	30.5	370	10.2	41	1.1	0	0.0	3632	100.0
Far West	0	0.0	1	0.5	0	0.0	2	1.0	8	3.9	28	13.5	72	34.8	75	36.2	19	9.2	2	1.0	0	0.0	207	100.0
Other-not stated	3	0.2	8	0.5	14	0.8	15	0.9	59	3.5	325	19.2	639	37.7	485	28.6	127	7.5	18	1.1	2	0.1	1695	100.0
<b>TOTAL</b>	<b>341</b>	<b>0.4</b>	<b>455</b>	<b>0.5</b>	<b>503</b>	<b>0.5</b>	<b>1154</b>	<b>1.2</b>	<b>3952</b>	<b>4.1</b>	<b>16011</b>	<b>16.7</b>	<b>36263</b>	<b>37.8</b>	<b>28051</b>	<b>29.3</b>	<b>7942</b>	<b>8.3</b>	<b>1106</b>	<b>1.2</b>	<b>47</b>	<b>0.0</b>	<b>95825</b>	<b>100.0</b>

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

## Gestational age

The majority of births (91.6%) were at term, and 0.9% were post-term (42-plus weeks). The 7.4% of preterm births comprised 0.7% born at less than 28 weeks, 0.7% at 28–31 weeks, and 6.0% at 32–36 weeks. The highest rate of preterm birth was 8.9% in the Nepean Blue Mountains Local Health District, while the lowest was 4.0% in the Southern NSW Local Health District (Table 33).

TABLE 33: GESTATIONAL AGE BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017

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	53	0.7	65	0.8	524	6.5	7450	91.8	20	0.2	3	0.0	8115	100.0
South Western Sydney	99	0.7	96	0.7	932	6.8	12622	91.5	33	0.2	15	0.1	13797	100.0
South Eastern Sydney	80	0.7	61	0.6	559	5.2	10011	92.6	91	0.8	7	0.1	10809	100.0
Illawarra Shoalhaven	25	0.6	20	0.4	289	6.4	4140	91.2	67	1.5	0	0.0	4541	100.0
Western Sydney	141	1.0	105	0.7	759	5.2	13570	92.4	114	0.8	1	0.0	14690	100.0
Nepean Blue Mountains	30	0.6	47	0.9	364	7.3	4510	90.5	28	0.6	5	0.1	4984	100.0
Northern Sydney	56	0.5	49	0.5	537	5.2	9562	93.0	77	0.7	1	0.0	10282	100.0
Central Coast	29	0.7	25	0.6	248	6.4	3492	89.8	91	2.3	5	0.1	3890	100.0
Hunter New England	113	1.1	99	0.9	711	6.6	9615	89.8	160	1.5	5	0.0	10703	100.0
Northern NSW	15	0.6	8	0.3	152	6.0	2296	89.9	76	3.0	6	0.2	2553	100.0
Mid North Coast	26	1.2	20	0.9	121	5.5	1988	90.9	29	1.3	3	0.1	2187	100.0
Southern NSW	3	0.2	2	0.1	50	3.6	1290	94.2	23	1.7	2	0.1	1370	100.0
Murrumbidgee	3	0.1	7	0.3	180	7.6	2147	90.6	31	1.3	2	0.1	2370	100.0
Western NSW	27	0.7	24	0.7	240	6.6	3304	91.0	33	0.9	4	0.1	3632	100.0
Far West	1	0.5	1	0.5	7	3.4	198	95.7	0	0.0	0	0.0	207	100.0
Other-not stated	12	0.7	13	0.8	81	4.8	1573	92.8	12	0.7	4	0.2	1695	100.0
<b>TOTAL</b>	<b>713</b>	<b>0.7</b>	<b>642</b>	<b>0.7</b>	<b>5754</b>	<b>6.0</b>	<b>87768</b>	<b>91.6</b>	<b>885</b>	<b>0.9</b>	<b>63</b>	<b>0.1</b>	<b>95825</b>	<b>100.0</b>

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

## Hepatitis B

Ninety-four per cent of babies born in NSW in 2017 were given a hepatitis B vaccination at birth. The highest rate of hepatitis B vaccinations at birth was 97.1% in the Far West Local Health District, while the lowest was 79.8% in the Northern NSW Local Health District (Table 34).

**TABLE 34: HEPATITIS B DOSE GIVEN TO LIVEBORN BABIES, NSW 2017**

Local Health District	Hepatitis B dose given							
	No		Yes		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	439	5.4	7582	93.9	54	0.7	8075	100.0
South Western Sydney	336	2.5	12604	92.1	751	5.5	13691	100.0
South Eastern Sydney	934	8.7	9790	91.1	20	0.2	10744	100.0
Illawarra Shoalhaven	213	4.7	4303	95.2	3	0.1	4519	100.0
Western Sydney	529	3.6	14018	96.1	42	0.3	14589	100.0
Nepean Blue Mountains	229	4.6	4710	95.0	19	0.4	4958	100.0
Northern Sydney	732	7.1	9504	92.8	2	0.0	10238	100.0
Central Coast	224	5.8	3621	93.9	10	0.3	3855	100.0
Hunter New England	479	4.5	10136	95.4	12	0.1	10627	100.0
Northern NSW	512	20.1	2028	79.8	2	0.1	2542	100.0
Mid North Coast	204	9.4	1964	90.6	0	0.0	2168	100.0
Southern NSW	81	5.9	1281	93.8	4	0.3	1366	100.0
Murrumbidgee	74	3.1	2283	96.8	1	0.0	2358	100.0
Western NSW	105	2.9	3502	97.0	4	0.1	3611	100.0
Far West	6	2.9	199	97.1	0	0.0	205	100.0
Other-not stated	123	7.3	1545	91.5	20	1.2	1688	100.0
<b>TOTAL</b>	<b>5220</b>	<b>5.5</b>	<b>89070</b>	<b>93.5</b>	<b>944</b>	<b>1.0</b>	<b>95234</b>	<b>100.0</b>

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

## Infant feeding

In 2017, infant feeding on discharge from hospital was reported for 92,186 liveborn babies (Table 35). The majority of babies (73.7%) were reported to be fully breastfed, 8.3% were receiving infant formula only, and a further 14.7% were being partially breastfed. Rates of full breastfeeding varied from 59.7% in the South Western Sydney Local Health District to 86.3% in the Northern NSW Local Health District.

**TABLE 35: LIVE BIRTHS BY INFANT FEEDING ON DISCHARGE AND LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	6002	74.3	1636	20.3	310	3.8	127	1.6	8075	100.0
South Western Sydney	8167	59.7	3004	21.9	1564	11.4	956	7.0	13691	100.0
South Eastern Sydney	8364	77.8	1743	16.2	443	4.1	194	1.8	10744	100.0
Illawarra Shoalhaven	3468	76.7	350	7.7	605	13.4	96	2.1	4519	100.0
Western Sydney	10591	72.6	2317	15.9	1174	8.0	507	3.5	14589	100.0
Nepean Blue Mountains	3621	73.0	549	11.1	581	11.7	207	4.2	4958	100.0
Northern Sydney	7959	77.7	1701	16.6	322	3.1	256	2.5	10238	100.0
Central Coast	3024	78.4	400	10.4	342	8.9	89	2.3	3855	100.0
Hunter New England	7989	75.2	1127	10.6	1190	11.2	321	3.0	10627	100.0
Northern NSW	2193	86.3	158	6.2	138	5.4	53	2.1	2542	100.0
Mid North Coast	1788	82.5	188	8.7	164	7.6	28	1.3	2168	100.0
Southern NSW	1124	82.3	93	6.8	106	7.8	43	3.1	1366	100.0
Murrumbidgee	1759	74.6	206	8.7	360	15.3	33	1.4	2358	100.0
Western NSW	2738	75.8	278	7.7	515	14.3	80	2.2	3611	100.0
Far West	166	81.0	8	3.9	27	13.2	4	2.0	205	100.0
Other-not stated	1281	75.9	273	16.2	80	4.7	54	3.2	1688	100.0
<b>TOTAL</b>	<b>70234</b>	<b>73.7</b>	<b>14031</b>	<b>14.7</b>	<b>7921</b>	<b>8.3</b>	<b>3048</b>	<b>3.2</b>	<b>95234</b>	<b>100.0</b>

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

## Perinatal mortality

The perinatal mortality rate in 2017 was 8.4 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 36). The perinatal mortality rate varied from 3.6 per 1,000 births in the Southern NSW Local Health District to 11.6 per 1,000 births in the Central Coast Local Health District.

**TABLE 36: PERINATAL OUTCOMES BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017<sup>#</sup>**

Local Health District	Liveborn surviving		Stillborn		Neonatal death		Death-age not stated		Not stated		Total births		Perinatal death rate/1,000 births <sup>†</sup>
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.
Sydney	8059	99.3	40	0.5	16	0.2	0	0.0	0	0.0	8115	100.0	<b>6.9</b>
South Western Sydney	13669	99.1	106	0.8	22	0.2	0	0.0	0	0.0	13797	100.0	<b>9.3</b>
South Eastern Sydney	10723	99.2	65	0.6	21	0.2	0	0.0	0	0.0	10809	100.0	<b>8.0</b>
Illawarra Shoalhaven	4513	99.4	22	0.5	6	0.1	0	0.0	0	0.0	4541	100.0	<b>6.2</b>
Western Sydney	14543	99.0	101	0.7	46	0.3	0	0.0	0	0.0	14690	100.0	<b>10.0</b>
Nepean Blue Mountains	4945	99.2	26	0.5	13	0.3	0	0.0	0	0.0	4984	100.0	<b>7.8</b>
Northern Sydney	10217	99.4	44	0.4	21	0.2	0	0.0	0	0.0	10282	100.0	<b>6.3</b>
Central Coast	3845	98.8	35	0.9	10	0.3	0	0.0	0	0.0	3890	100.0	<b>11.6</b>
Hunter New England	10592	99.0	76	0.7	35	0.3	0	0.0	0	0.0	10703	100.0	<b>10.4</b>
Northern NSW	2537	99.4	11	0.4	5	0.2	0	0.0	0	0.0	2553	100.0	<b>6.3</b>
Mid North Coast	2163	98.9	19	0.9	5	0.2	0	0.0	0	0.0	2187	100.0	<b>11.0</b>
Southern NSW	1365	99.6	4	0.3	1	0.1	0	0.0	0	0.0	1370	100.0	<b>3.6</b>
Murrumbidgee	2358	99.5	12	0.5	0	0.0	0	0.0	0	0.0	2370	100.0	<b>5.1</b>
Western NSW	3603	99.2	21	0.6	8	0.2	0	0.0	0	0.0	3632	100.0	<b>8.0</b>
Far West	205	99.0	2	1.0	0	0.0	0	0.0	0	0.0	207	100.0	<b>9.7</b>
Other-not stated	1686	99.5	7	0.4	2	0.1	0	0.0	0	0.0	1695	100.0	<b>384.0</b>
<b>TOTAL</b>	<b>95023</b>	<b>99.2</b>	<b>591</b>	<b>0.6</b>	<b>211</b>	<b>0.2</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>95825</b>	<b>100.0</b>	<b>8.4</b>

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

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

<sup>†</sup> The perinatal death rate excludes deaths where the age at death was not stated.

## Live births by statistical area of residence

TABLE 37: LIVE BIRTHS BY LOCAL HEALTH DISTRICT AND STATISTICAL AREA OF RESIDENCE, NSW 2017\*

Local Health District–Statistical Area 3 <sup>1</sup>		No.	%
<b>Sydney</b>	Bankstown*	23	0.3
	Canada Bay	1187	14.7
	Canterbury*	2052	25.4
	Hurstville*	121	1.5
	Leichhardt	832	10.3
	Marrickville–Sydenham–Petersham	661	8.2
	Strathfield–Burwood–Ashfield	1711	21.2
	Sydney Inner City*	1488	18.4
	<b>TOTAL</b>	<b>8075</b>	<b>100.0</b>
<b>South Western Sydney</b>	Auburn*	9	0.1
	Bankstown*	2500	18.3
	Bringelly–Green Valley	1840	13.4
	Camden	1019	7.4
	Campbelltown	2461	18.0
	Canterbury*	133	1.0
	Fairfield*	2150	15.7
	Liverpool*	2009	14.7
	Merrylands–Guildford*	458	3.3
	Penrith*	79	0.6
	Southern Highlands	432	3.2
	Wollondilly	595	4.3
<b>TOTAL</b>	<b>13691</b>	<b>100.0</b>	
<b>South Eastern Sydney</b>	Botany	665	6.2
	Cronulla–Miranda–Caringbah	1290	12.0
	Eastern Suburbs–North	1814	16.9
	Eastern Suburbs–South	1735	16.1
	Hurstville*	1343	12.5
	Kogarah–Rockdale	2033	18.9
	Liverpool*	4	0.0
	Sutherland–Menai–Heathcote	1224	11.4
	Sydney Inner City*	631	5.9
<b>TOTAL</b>	<b>10744</b>	<b>100.0</b>	
<b>Illawarra Shoalhaven</b>	Dapto–Port Kembla	1020	22.6
	Kiama–Shellharbour	1047	23.2
	Shoalhaven	998	22.1
	Wollongong	1451	32.1
	<b>TOTAL</b>	<b>4519</b>	<b>100.0</b>
<b>Western Sydney</b>	Auburn*	1734	11.9
	Baulkham Hills*	1138	7.8
	Blacktown	2197	15.1
	Blacktown–North	1573	10.8
	Carlingford*	673	4.6
	Dural–Wisemans Ferry*	80	0.5
	Merrylands–Guildford*	2291	15.7
	Mount Druitt	1984	13.6
	Parramatta	2444	16.8
	Pennant Hills–Epping*	119	0.8
	Rouse Hill–McGraths Hill*	309	2.1
	Ryde–Hunters Hill*	35	0.2
	<b>TOTAL</b>	<b>14589</b>	<b>100.0</b>

Local Health District–Statistical Area 3 <sup>1</sup>		No.	%
<b>Nepean Blue Mountains</b>	Blue Mountains	755	15.2
	Dural–Wisemans Ferry*	6	0.1
	Fairfield*	13	0.3
	Hawkesbury	261	5.3
	Lithgow–Mudgee*	200	4.0
	Penrith*	2147	43.3
	Richmond–Windsor	511	10.3
	Rouse Hill–McGraths Hill*	159	3.2
	St Marys	904	18.2
	<b>TOTAL</b>	<b>4958</b>	<b>100.0</b>
<b>Northern Sydney</b>	Baulkham Hills*	156	1.5
	Carlingford*	70	0.7
	Chatswood–Lane Cove	1452	14.2
	Dural–Wisemans Ferry*	124	1.2
	Hornsby	1081	10.6
	Ku-ring-gai	979	9.6
	Manly	559	5.5
	North Sydney–Mosman	1293	12.6
	Pennant Hills–Epping*	313	3.1
	Pittwater	629	6.1
	Ryde–Hunters Hill*	1642	16.0
	Warringah	1936	18.9
<b>TOTAL</b>	<b>10238</b>	<b>100.0</b>	
<b>Central Coast</b>	Gosford	1836	47.6
	Wyong	2019	52.4
	<b>TOTAL</b>	<b>3855</b>	<b>100.0</b>
<b>Hunter New England</b>	Armidale	403	3.8
	Great Lakes	229	2.2
	Inverell–Tenterfield*	364	3.4
	Kempsey–Nambucca	2	0.0
	Lake Macquarie–East	1395	13.1
	Lake Macquarie–West	936	8.8
	Lower Hunter	1174	11.0
	Maitland	1087	10.2
	Moree–Narrabri	352	3.3
	Newcastle	1994	18.8
	Port Stephens	705	6.6
	Tamworth–Gunnedah	1063	10.0
	Taree–Gloucester	507	4.8
Upper Hunter	404	3.8	
<b>TOTAL</b>	<b>10627</b>	<b>100.0</b>	
<b>Northern NSW</b>	Clarence Valley	482	19.0
	Coffs Harbour*	5	0.2
	Richmond Valley–Coastal	623	24.5
	Richmond Valley–Hinterland	740	29.1
	Tweed Valley	691	27.2
<b>TOTAL</b>	<b>2542</b>	<b>100.0</b>	
<b>Mid North Coast</b>	Coffs Harbour*	925	42.7
	Kempsey–Nambucca	556	25.6
	Port Macquarie	680	31.4
	<b>TOTAL</b>	<b>2168</b>	<b>100.0</b>

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TABLE 37: (Continued)

Local Health District–Statistical Area 3 <sup>†</sup>	No.	%
<b>Southern NSW</b>		
Goulburn–Yass*	321	23.5
Queanbeyan	380	27.8
Snowy Mountains	137	10.0
South Coast*	528	38.7
<b>TOTAL</b>	<b>1366</b>	<b>100.0</b>
<b>Murrumbidgee</b>		
Albury	13	0.6
Goulburn–Yass*	167	7.1
Griffith–Murrumbidgee (West)	669	28.4
Lachlan Valley*	64	2.7
Lower Murray*	38	1.6
Tumut–Tumbarumba	136	5.8
Upper Murray excluding Albury	92	3.9
Wagga Wagga	1179	50.0
<b>TOTAL</b>	<b>2358</b>	<b>100.0</b>
<b>Western NSW</b>		
Bathurst	572	15.8
Bourke–Cobar–Coonamble	312	8.6
Dubbo	1014	28.1
Lachlan Valley*	620	17.2
Lithgow–Mudgee*	321	8.9
Orange	762	21.1
<b>TOTAL</b>	<b>3611</b>	<b>100.0</b>
<b>Far West</b>		
Broken Hill and Far West	205	100.0
<b>TOTAL</b>	<b>205</b>	<b>100.0</b>
<b>Other-not stated</b>	<b>767</b>	<b>100.0</b>
<b>TOTAL</b>	<b>95234</b>	<b>100.0</b>

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 38 shows onset or augmentation of labour for local health districts, and Table 39 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 38: ONSET AND AUGMENTATION OF LABOUR BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Onset and augmentation of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics <sup>†</sup>		No labour		Induced – oxytocics/prostaglandins		Induced – ARM only		Induced – ARM + oxytocics/prostaglandins		Induced – other <sup>‡</sup>		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	1884	27.5	488	7.1	805	11.7	1289	18.8	1165	17.0	361	5.3	835	12.2	31	0.5	0	0.0	6858	100.0
South Western Sydney	4092	37.2	911	8.3	978	8.9	1747	15.9	1551	14.1	761	6.9	875	8.0	72	0.7	0	0.0	10987	100.0
South Eastern Sydney	2644	35.0	447	5.9	673	8.9	1190	15.8	911	12.1	162	2.1	1509	20.0	11	0.1	2	0.0	7549	100.0
Illawarra Shoalhaven	1210	36.2	189	5.7	227	6.8	554	16.6	350	10.5	78	2.3	723	21.7	7	0.2	0	0.0	3338	100.0
Western Sydney	3771	36.7	636	6.2	874	8.5	1723	16.8	892	8.7	132	1.3	2224	21.6	25	0.2	0	0.0	10277	100.0
Nepean Blue Mountains	1808	35.6	256	5.0	216	4.3	1098	21.6	539	10.6	85	1.7	1072	21.1	6	0.1	0	0.0	5080	100.0
Northern Sydney	2043	35.8	273	4.8	529	9.3	1081	18.9	784	13.7	86	1.5	910	15.9	7	0.1	0	0.0	5713	100.0
Central Coast	1146	39.0	142	4.8	237	8.1	484	16.5	401	13.7	28	1.0	494	16.8	4	0.1	0	0.0	2936	100.0
Hunter New England	3327	37.9	302	3.4	448	5.1	1547	17.6	981	11.2	184	2.1	1953	22.3	17	0.2	8	0.1	8767	100.0
Northern NSW	1211	42.7	144	5.1	191	6.7	379	13.4	330	11.6	73	2.6	505	17.8	3	0.1	0	0.0	2836	100.0
Mid North Coast	891	40.9	89	4.1	116	5.3	400	18.3	235	10.8	45	2.1	402	18.4	2	0.1	0	0.0	2180	100.0
Southern NSW	679	46.5	63	4.3	106	7.3	210	14.4	137	9.4	28	1.9	229	15.7	1	0.1	7	0.5	1460	100.0
Murrumbidgee	842	40.9	102	5.0	114	5.5	393	19.1	191	9.3	58	2.8	357	17.3	2	0.1	1	0.0	2060	100.0
Western NSW	1186	35.8	157	4.7	213	6.4	644	19.4	369	11.1	70	2.1	665	20.1	9	0.3	0	0.0	3313	100.0
Far West	74	36.5	16	7.9	19	9.4	34	16.7	25	12.3	1	0.5	34	16.7	0	0.0	0	0.0	203	100.0
Private Hospitals	4503	21.7	1070	5.1	1313	6.3	7358	35.4	1611	7.8	644	3.1	4170	20.1	69	0.3	46	0.2	20784	100.0
<b>TOTAL*</b>	<b>31411</b>	<b>33.3</b>	<b>5286</b>	<b>5.6</b>	<b>7060</b>	<b>7.5</b>	<b>20132</b>	<b>21.3</b>	<b>10473</b>	<b>11.1</b>	<b>2797</b>	<b>3.0</b>	<b>16957</b>	<b>18.0</b>	<b>266</b>	<b>0.3</b>	<b>67</b>	<b>0.1</b>	<b>94449</b>	<b>100.0</b>

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

ARM: Artificial Rupture of Membranes.

<sup>†</sup> May include artificial rupture of membranes.

<sup>‡</sup> This category includes other forms of induction such as Foley's catheter.

\* Total includes births at home assisted by independent midwives.

**TABLE 39: ONSET AND AUGMENTATION OF LABOUR BY HOSPITAL AND PEER GROUP, NSW 2017\***

Peer Group–hospital	Onset and augmentation of labour																			
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics <sup>†</sup>		No labour		Induced – oxytocics/prostaglandins		Induced – ARM only		Induced – ARM + oxytocics/prostaglandins		Induced – other <sup>‡</sup>		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>																				
Royal Prince Alfred	1399	27.7	336	6.7	622	12.3	993	19.7	758	15.0	272	5.4	643	12.7	25	0.5	0	0.0	5048	100.0
Gosford	1056	37.2	134	4.7	236	8.3	484	17.1	401	14.1	28	1.0	494	17.4	4	0.1	0	0.0	2837	100.0
Royal North Shore	872	31.8	121	4.4	241	8.8	605	22.1	360	13.1	36	1.3	507	18.5	1	0.0	0	0.0	2743	100.0
St. George	730	30.0	154	6.3	245	10.1	333	13.7	312	12.8	65	2.7	591	24.3	3	0.1	2	0.1	2435	100.0
Royal Hospital for Women	1456	37.8	212	5.5	276	7.2	650	16.9	477	12.4	78	2.0	693	18.0	8	0.2	0	0.0	3850	100.0
Liverpool	1281	36.3	339	9.6	306	8.7	601	17.0	510	14.5	174	4.9	279	7.9	38	1.1	0	0.0	3528	100.0
Nepean	1341	33.8	199	5.0	176	4.4	896	22.6	428	10.8	67	1.7	858	21.6	6	0.2	0	0.0	3971	100.0
Westmead	2020	35.2	356	6.2	514	9.0	1040	18.1	472	8.2	89	1.6	1235	21.5	10	0.2	0	0.0	5736	100.0
Bankstown-Lidcombe	696	37.6	159	8.6	187	10.1	278	15.0	256	13.8	122	6.6	139	7.5	14	0.8	0	0.0	1851	100.0
Wollongong	889	35.9	146	5.9	160	6.5	401	16.2	254	10.2	58	2.3	564	22.8	7	0.3	0	0.0	2479	100.0
John Hunter	1365	33.7	138	3.4	202	5.0	792	19.5	522	12.9	84	2.1	937	23.1	11	0.3	4	0.1	4055	100.0
<b>TOTAL</b>	<b>13105</b>	<b>34.0</b>	<b>2294</b>	<b>6.0</b>	<b>3165</b>	<b>8.2</b>	<b>7073</b>	<b>18.4</b>	<b>4750</b>	<b>12.3</b>	<b>1073</b>	<b>2.8</b>	<b>6940</b>	<b>18.0</b>	<b>127</b>	<b>0.3</b>	<b>6</b>	<b>0.0</b>	<b>38533</b>	<b>100.0</b>
<b>Peer Group B</b>																				
Canterbury	485	26.8	152	8.4	183	10.1	296	16.4	407	22.5	89	4.9	192	10.6	6	0.3	0	0.0	1810	100.0
Hornsby	462	37.6	77	6.3	125	10.2	204	16.6	188	15.3	19	1.5	150	12.2	5	0.4	0	0.0	1230	100.0
Manly	304	34.0	31	3.5	95	10.6	146	16.3	138	15.4	19	2.1	160	17.9	1	0.1	0	0.0	894	100.0
Mona Vale	310	41.6	39	5.2	68	9.1	126	16.9	98	13.1	12	1.6	93	12.5	0	0.0	0	0.0	746	100.0
Sutherland	458	36.2	81	6.4	152	12.0	207	16.4	122	9.7	19	1.5	225	17.8	0	0.0	0	0.0	1264	100.0
Auburn	555	42.4	67	5.1	108	8.2	165	12.6	144	11.0	8	0.6	260	19.8	3	0.2	0	0.0	1310	100.0
Blacktown	1196	37.0	213	6.6	252	7.8	518	16.0	276	8.5	35	1.1	729	22.6	12	0.4	0	0.0	3231	100.0
Fairfield	575	34.2	172	10.2	176	10.5	266	15.8	232	13.8	111	6.6	144	8.6	3	0.2	0	0.0	1679	100.0

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TABLE 39: (Continued)

Peer Group-hospital	Onset and augmentation of labour														TOTAL							
	Spontaneous		Spontaneous augmented with ARM		Spontaneous augmented with oxytocics <sup>†</sup>		No labour		Induced - oxytocics/ prostaglandins		Induced - ARM only		Induced - ARM + oxytocics/ prostaglandins		Induced - other <sup>‡</sup>		Not stated		TOTAL			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%		
Campbelltown	1389	39.4	189	5.4	269	7.6	537	15.2	512	14.5	329	9.3	282	8.0	17	0.5	0	0.0	0	0.0	3524	100.0
Coffs Harbour	415	37.6	46	4.2	68	6.2	234	21.2	108	9.8	27	2.4	206	18.7	0	0.0	0	0.0	0	0.0	1104	100.0
Lismore Base	502	41.9	76	6.3	70	5.8	165	13.8	151	12.6	32	2.7	203	16.9	0	0.0	0	0.0	0	0.0	1199	100.0
Tweed Heads	397	36.4	43	3.9	101	9.3	141	12.9	130	11.9	32	2.9	245	22.5	1	0.1	0	0.0	0	0.0	1090	100.0
Port Macquarie Base	264	35.4	28	3.8	39	5.2	136	18.2	90	12.1	9	1.2	179	24.0	1	0.1	0	0.0	0	0.0	746	100.0
Tamworth Base	330	33.5	42	4.3	47	4.8	197	20.0	102	10.3	11	1.1	254	25.8	2	0.2	1	0.1	0	0.0	986	100.0
Manning Base	237	38.2	22	3.5	28	4.5	82	13.2	36	5.8	27	4.4	185	29.8	3	0.5	0	0.0	0	0.0	620	100.0
Dubbo Base	384	31.6	42	3.5	103	8.5	226	18.6	172	14.2	22	1.8	263	21.6	3	0.2	0	0.0	0	0.0	1215	100.0
Orange Base	259	27.6	41	4.4	61	6.5	217	23.1	85	9.0	27	2.9	245	26.1	5	0.5	0	0.0	0	0.0	940	100.0
Shoalhaven	320	37.3	43	5.0	67	7.8	153	17.8	96	11.2	20	2.3	159	18.5	0	0.0	0	0.0	0	0.0	858	100.0
Maitland	570	38.1	31	2.1	97	6.5	235	15.7	185	12.4	27	1.8	348	23.3	1	0.1	2	0.1	0	0.0	1496	100.0
Wagga Wagga Base	349	33.0	47	4.4	65	6.1	249	23.5	101	9.5	23	2.2	225	21.2	0	0.0	0	0.0	0	0.0	1059	100.0
Other hospitals	90	90.9	8	8.1	1	1.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	99	100.0
<b>TOTAL</b>	<b>9851</b>	<b>36.4</b>	<b>1490</b>	<b>5.5</b>	<b>2175</b>	<b>8.0</b>	<b>4500</b>	<b>16.6</b>	<b>3373</b>	<b>12.4</b>	<b>898</b>	<b>3.3</b>	<b>4747</b>	<b>17.5</b>	<b>63</b>	<b>0.2</b>	<b>3</b>	<b>0.0</b>	<b>3</b>	<b>0.0</b>	<b>27100</b>	<b>100.0</b>
<b>Peer Group C</b>																						
Blue Mountains	129	57.6	8	3.6	6	2.7	35	15.6	20	8.9	2	0.9	24	10.7	0	0.0	0	0.0	0	0.0	224	100.0
Hawkesbury	274	38.8	36	5.1	28	4.0	142	20.1	61	8.6	11	1.6	154	21.8	0	0.0	0	0.0	0	0.0	706	100.0
Grafton Base	146	38.7	21	5.6	20	5.3	73	19.4	49	13.0	9	2.4	57	15.1	2	0.5	0	0.0	0	0.0	377	100.0
Kempsey	144	55.0	15	5.7	9	3.4	30	11.5	37	14.1	9	3.4	17	6.5	1	0.4	0	0.0	0	0.0	262	100.0
Armidale	186	44.5	8	1.9	29	6.9	73	17.5	52	12.4	6	1.4	64	15.3	0	0.0	0	0.0	0	0.0	418	100.0
Inverell	64	28.2	11	4.8	25	11.0	55	24.2	19	8.4	2	0.9	51	22.5	0	0.0	0	0.0	0	0.0	227	100.0
Mudgee	109	47.2	15	6.5	8	3.5	39	16.9	20	8.7	4	1.7	36	15.6	0	0.0	0	0.0	0	0.0	231	100.0
Bathurst Base	241	48.6	22	4.4	17	3.4	84	16.9	58	11.7	7	1.4	66	13.3	1	0.2	0	0.0	0	0.0	496	100.0
Bega	108	43.0	2	0.8	10	4.0	43	17.1	35	13.9	2	0.8	50	19.9	0	0.0	1	0.4	0	0.0	251	100.0
Goulburn Base	140	51.5	18	6.6	34	12.5	45	16.5	18	6.6	4	1.5	13	4.8	0	0.0	0	0.0	0	0.0	272	100.0
Moruya	161	54.9	11	3.8	10	3.4	38	13.0	25	8.5	8	2.7	39	13.3	0	0.0	1	0.3	0	0.0	293	100.0
Queanbeyan	201	38.9	26	5.0	48	9.3	71	13.7	53	10.3	8	1.5	106	20.5	1	0.2	3	0.6	0	0.0	517	100.0
Bowral	151	37.3	52	12.8	40	9.9	65	16.0	41	10.1	25	6.2	31	7.7	0	0.0	0	0.0	0	0.0	405	100.0
Griffith Base	255	47.2	23	4.3	31	5.7	78	14.4	55	10.2	18	3.3	78	14.4	2	0.4	0	0.0	0	0.0	540	100.0
Broken Hill Base	74	36.5	16	7.9	19	9.4	34	16.7	25	12.3	1	0.5	34	16.7	0	0.0	0	0.0	0	0.0	203	100.0
Other hospitals	1220	59.4	117	5.7	59	2.9	215	10.5	136	6.6	56	2.7	248	12.1	0	0.0	3	0.1	0	0.0	2054	100.0
<b>TOTAL</b>	<b>3603</b>	<b>48.2</b>	<b>401</b>	<b>5.4</b>	<b>393</b>	<b>5.3</b>	<b>1120</b>	<b>15.0</b>	<b>704</b>	<b>9.4</b>	<b>172</b>	<b>2.3</b>	<b>1068</b>	<b>14.3</b>	<b>7</b>	<b>0.1</b>	<b>8</b>	<b>0.1</b>	<b>8</b>	<b>0.1</b>	<b>7476</b>	<b>100.0</b>
<b>Peer Group D</b>																						
<b>TOTAL</b>	<b>248</b>	<b>55.5</b>	<b>30</b>	<b>6.7</b>	<b>13</b>	<b>2.9</b>	<b>80</b>	<b>17.9</b>	<b>34</b>	<b>7.6</b>	<b>9</b>	<b>2.0</b>	<b>32</b>	<b>7.2</b>	<b>0</b>	<b>0.0</b>	<b>1</b>	<b>0.2</b>	<b>1</b>	<b>0.2</b>	<b>447</b>	<b>100.0</b>
<b>Private</b>																						
Mater, North Sydney	437	20.4	107	5.0	216	10.1	875	40.9	100	4.7	54	2.5	351	16.4	0	0.0	0	0.0	0	0.0	2140	100.0
North Shore Private	681	27.9	0	0.0	180	7.4	999	41.0	153	6.3	82	3.4	327	13.4	15	0.6	0	0.0	0	0.0	2437	100.0
Sydney Adventist	369	19.8	189	10.1	222	11.9	588	31.5	98	5.2	39	2.1	344	18.4	18	1.0	0	0.0	0	0.0	1867	100.0
North Gosford Private	67	10.0	40	6.0	61	9.1	234	35.1	47	7.0	16	2.4	199	29.8	2	0.3	1	0.1	0	0.0	667	100.0
Hurstville Community	142	24.3	51	8.7	77	13.2	146	25.0	38	6.5	5	0.9	121	20.7	2	0.3	3	0.5	0	0.0	585	100.0
Kareena Private	166	23.4	0	0.0	77	10.9	255	36.0	32	4.5	13	1.8	162	22.8	4	0.6	0	0.0	0	0.0	709	100.0
St. George Private	343	23.5	0	0.0	152	10.4	494	33.8	216	14.8	82	5.6	168	11.5	6	0.4	0	0.0	0	0.0	1461	100.0
Prince of Wales Private	445	20.5	173	8.0	0	0.0	962	44.2	161	7.4	71	3.3	346	15.9	1	0.0	17	0.8	0	0.0	2176	100.0
Norwest Private	345	18.1	232	12.1	0	0.0	550	28.8	142	7.4	38	2.0	590	30.9	4	0.2	10	0.5	0	0.0	1911	100.0
Sydney Southwest Private	204	22.7	92	10.2	0	0.0	272	30.3	122	13.6	15	1.7	187	20.8	0	0.0	6	0.7	0	0.0	898	100.0
Nepean Private	111	15.3	37	5.1	0	0.0	232	32.0	76	10.5	39	5.4	219	30.2	1	0.1	9	1.2	0	0.0	724	100.0
Westmead Private	527	25.2	0	0.0	237	11.3	698	33.4	177	8.5	11	0.5	437	20.9	4	0.2	0	0.0	0	0.0	2091	100.0
Wollongong Private	231	24.6	0	0.0	82	8.7	273	29.0	46	4.9	21	2.2	287	30.5	0	0.0	0	0.0	0	0.0	940	100.0
Newcastle Private	363	19.9	145	8.0	0	0.0	602	33.0	161	8.8	150	8.2	393	21.6	9	0.5	0	0.0	0	0.0	1823	100.0
Calvary, Wagga Wagga	72	21.8	4	1.2	9	2.7	154	46.5	42	12.7	8	2.4	39	11.8	3	0.9	0	0.0	0	0.0	331	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	24	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	24	100.0
<b>TOTAL</b>	<b>4503</b>	<b>21.7</b>	<b>1070</b>	<b>5.1</b>	<b>1313</b>	<b>6.3</b>	<b>7358</b>	<b>35.4</b>	<b>1611</b>	<b>7.8</b>	<b>644</b>	<b>3.1</b>	<b>4170</b>	<b>20.1</b>	<b>69</b>	<b>0.3</b>	<b>46</b>	<b>0.2</b>	<b>46</b>	<b>0.1</b>	<b>20784</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>31411</b>	<b>33.3</b>	<b>5286</b>	<b>5.6</b>	<b>7060</b>	<b>7.5</b>	<b>20132</b>	<b>21.3</b>	<b>10473</b>	<b>11.1</b>	<b>2797</b>	<b>3.0</b>	<b>16957</b>	<b>18.0</b>	<b>266</b>	<b>0.3</b>	<b>67</b>	<b>0.1</b>	<b>67</b>	<b>0.1</b>	<b>94449</b>	<b>100.0</b>

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 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.

† May include artificial rupture of membranes.

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

\* Total NSW includes births at home assisted by independent midwives.

## Type of birth

Table 40 shows type of birth for local health districts, and Table 41 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 40: TYPE OF BIRTH BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Type of birth												TOTAL			
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section <sup>†</sup>				Not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	3544	51.7	489	7.1	587	8.6	15	0.2	1289	18.8	934	13.6	0	0.0	6858	100.0
South Western Sydney	7053	64.2	293	2.7	683	6.2	42	0.4	1745	15.9	1169	10.6	2	0.0	10987	100.0
South Eastern Sydney	3988	52.8	639	8.5	586	7.8	34	0.5	1189	15.8	1112	14.7	1	0.0	7549	100.0
Illawarra Shoalhaven	1961	58.7	188	5.6	162	4.9	8	0.2	554	16.6	465	13.9	0	0.0	3338	100.0
Western Sydney	6160	59.9	528	5.1	577	5.6	86	0.8	1718	16.7	1203	11.7	5	0.0	10277	100.0
Nepean Blue Mountains	2802	55.2	96	1.9	325	6.4	12	0.2	1098	21.6	747	14.7	0	0.0	5080	100.0
Northern Sydney	3087	54.0	537	9.4	305	5.3	24	0.4	1081	18.9	679	11.9	0	0.0	5713	100.0
Central Coast	1766	60.1	184	6.3	158	5.4	14	0.5	484	16.5	330	11.2	0	0.0	2936	100.0
Hunter New England	5239	59.8	341	3.9	385	4.4	47	0.5	1543	17.6	1203	13.7	9	0.1	8767	100.0
Northern NSW	1914	67.5	93	3.3	148	5.2	13	0.5	378	13.3	289	10.2	1	0.0	2836	100.0
Mid North Coast	1334	61.2	77	3.5	118	5.4	3	0.1	400	18.3	248	11.4	0	0.0	2180	100.0
Southern NSW	903	61.8	60	4.1	88	6.0	3	0.2	209	14.3	194	13.3	3	0.2	1460	100.0
Murrumbidgee	1204	58.4	32	1.6	144	7.0	5	0.2	392	19.0	282	13.7	1	0.0	2060	100.0
Western NSW	1990	60.1	107	3.2	183	5.5	6	0.2	644	19.4	383	11.6	0	0.0	3313	100.0
Far West	126	62.1	7	3.4	10	4.9	0	0.0	34	16.7	26	12.8	0	0.0	203	100.0
Private Hospitals	8261	39.7	764	3.7	1879	9.0	23	0.1	7356	35.4	2499	12.0	2	0.0	20784	100.0
<b>TOTAL*</b>	<b>51434</b>	<b>54.5</b>	<b>4435</b>	<b>4.7</b>	<b>6338</b>	<b>6.7</b>	<b>336</b>	<b>0.4</b>	<b>20115</b>	<b>21.3</b>	<b>11764</b>	<b>12.5</b>	<b>27</b>	<b>0.0</b>	<b>94449</b>	<b>100.0</b>

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

<sup>†</sup> 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 41: TYPE OF BIRTH BY HOSPITAL AND PEER GROUP, NSW 2017\***

Peer Group–hospital	Type of birth												TOTAL			
	Normal vaginal		Forceps		Vacuum extraction		Vaginal breech		Elective caesarean section		Emergency caesarean section <sup>†</sup>				Not stated	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>																
Royal Prince Alfred	2602	51.5	389	7.7	399	7.9	13	0.3	993	19.7	652	12.9	0	0.0	5048	100.0
Gosford	1667	58.8	184	6.5	158	5.6	14	0.5	484	17.1	330	11.6	0	0.0	2837	100.0
Royal North Shore	1375	50.1	323	11.8	92	3.4	15	0.5	605	22.1	333	12.1	0	0.0	2743	100.0
St. George	1288	52.9	160	6.6	260	10.7	12	0.5	333	13.7	382	15.7	0	0.0	2435	100.0
Royal Hospital for Women	1943	50.5	402	10.4	255	6.6	19	0.5	649	16.9	581	15.1	1	0.0	3850	100.0
Liverpool	2162	61.3	152	4.3	201	5.7	23	0.7	600	17.0	389	11.0	1	0.0	3528	100.0
Nepean	2146	54.0	83	2.1	247	6.2	12	0.3	896	22.6	587	14.8	0	0.0	3971	100.0
Westmead	3316	57.8	347	6.0	317	5.5	71	1.2	1040	18.1	645	11.2	0	0.0	5736	100.0
Bankstown–Lidcombe	1219	65.9	53	2.9	105	5.7	6	0.3	277	15.0	190	10.3	1	0.1	1851	100.0
Wollongong	1441	58.1	152	6.1	120	4.8	7	0.3	401	16.2	358	14.4	0	0.0	2479	100.0
John Hunter	2269	56.0	197	4.9	189	4.7	36	0.9	789	19.5	572	14.1	3	0.1	4055	100.0
<b>TOTAL</b>	<b>21428</b>	<b>55.6</b>	<b>2442</b>	<b>6.3</b>	<b>2343</b>	<b>6.1</b>	<b>228</b>	<b>0.6</b>	<b>7067</b>	<b>18.3</b>	<b>5019</b>	<b>13.0</b>	<b>6</b>	<b>0.0</b>	<b>38533</b>	<b>100.0</b>
<b>Peer Group B</b>																
Canterbury	942	52.0	100	5.5	188	10.4	2	0.1	296	16.4	282	15.6	0	0.0	1810	100.0
Hornsby	723	58.8	119	9.7	46	3.7	3	0.2	204	16.6	135	11.0	0	0.0	1230	100.0
Manly	465	52.0	63	7.0	95	10.6	4	0.4	146	16.3	121	13.5	0	0.0	894	100.0
Mona Vale	424	56.8	32	4.3	72	9.7	2	0.3	126	16.9	90	12.1	0	0.0	746	100.0
Sutherland	757	59.9	77	6.1	71	5.6	3	0.2	207	16.4	149	11.8	0	0.0	1264	100.0
Auburn	891	68.0	38	2.9	60	4.6	3	0.2	161	12.3	153	11.7	4	0.3	1310	100.0
Blacktown	1953	60.4	143	4.4	200	6.2	12	0.4	517	16.0	405	12.5	1	0.0	3231	100.0
Fairfield	1136	67.7	24	1.4	88	5.2	3	0.2	266	15.8	162	9.6	0	0.0	1679	100.0
Campbelltown	2310	65.6	37	1.0	267	7.6	7	0.2	537	15.2	366	10.4	0	0.0	3524	100.0
Coffs Harbour	648	58.7	31	2.8	60	5.4	0	0.0	234	21.2	131	11.9	0	0.0	1104	100.0
Lismore Base	806	67.2	47	3.9	59	4.9	11	0.9	165	13.8	111	9.3	0	0.0	1199	100.0
Tweed Heads	706	64.8	41	3.8	72	6.6	2	0.2	141	12.9	128	11.7	0	0.0	1090	100.0
Port Macquarie Base	438	58.7	44	5.9	44	5.9	2	0.3	136	18.2	82	11.0	0	0.0	746	100.0
Tamworth Base	545	55.3	43	4.4	41	4.2	2	0.2	196	19.9	154	15.6	5	0.5	986	100.0
Manning Base	384	61.9	29	4.7	48	7.7	1	0.2	82	13.2	76	12.3	0	0.0	620	100.0
Dubbo Base	738	60.7	61	5.0	59	4.9	1	0.1	226	18.6	130	10.7	0	0.0	1215	100.0
Orange Base	499	53.1	28	3.0	63	6.7	2	0.2	217	23.1	131	13.9	0	0.0	940	100.0
Shoalhaven	519	60.5	36	4.2	42	4.9	1	0.1	153	17.8	107	12.5	0	0.0	858	100.0
Maitland	960	64.2	37	2.5	39	2.6	3	0.2	235	15.7	222	14.8	0	0.0	1496	100.0

(Continued on next page)

TABLE 41: (Continued)

Peer Group-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.	%
Wagga Wagga Base	547	51.7	23	2.2	64	6.0	1	0.1	249	23.5	175	16.5	0	0.0	1059	100.0
Other hospitals	99	100.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	0	0.0	99	100.0
<b>TOTAL</b>	<b>16490</b>	<b>60.8</b>	<b>1053</b>	<b>3.9</b>	<b>1678</b>	<b>6.2</b>	<b>65</b>	<b>0.2</b>	<b>4494</b>	<b>16.6</b>	<b>3310</b>	<b>12.2</b>	<b>10</b>	<b>0.0</b>	<b>27100</b>	<b>100.0</b>
<b>Peer Group C</b>																
Blue Mountains	148	66.1	0	0.0	14	6.3	0	0.0	35	15.6	27	12.1	0	0.0	224	100.0
Hawkesbury	387	54.8	12	1.7	59	8.4	0	0.0	142	20.1	106	15.0	0	0.0	706	100.0
Grafton Base	232	61.5	5	1.3	17	4.5	0	0.0	72	19.1	50	13.3	1	0.3	377	100.0
Kempsey	184	70.2	2	0.8	10	3.8	1	0.4	30	11.5	35	13.4	0	0.0	262	100.0
Armidale	244	58.4	21	5.0	15	3.6	1	0.2	73	17.5	64	15.3	0	0.0	418	100.0
Inverell	139	61.2	9	4.0	8	3.5	0	0.0	55	24.2	16	7.0	0	0.0	227	100.0
Mudgee	152	65.8	1	0.4	12	5.2	1	0.4	39	16.9	26	11.3	0	0.0	231	100.0
Bathurst Base	315	63.5	16	3.2	26	5.2	1	0.2	84	16.9	54	10.9	0	0.0	496	100.0
Bega	151	60.2	11	4.4	11	4.4	0	0.0	43	17.1	34	13.5	1	0.4	251	100.0
Goulburn Base	170	62.5	12	4.4	11	4.0	1	0.4	45	16.5	33	12.1	0	0.0	272	100.0
Moruya	192	65.5	15	5.1	15	5.1	0	0.0	38	13.0	33	11.3	0	0.0	293	100.0
Queanbeyan	297	57.4	20	3.9	46	8.9	2	0.4	70	13.5	80	15.5	2	0.4	517	100.0
Bowral	226	55.8	27	6.7	22	5.4	3	0.7	65	16.0	62	15.3	0	0.0	405	100.0
Griffith Base	336	62.2	3	0.6	51	9.4	2	0.4	77	14.3	70	13.0	1	0.2	540	100.0
Broken Hill Base	126	62.1	7	3.4	10	4.9	0	0.0	34	16.7	26	12.8	0	0.0	203	100.0
Other hospitals	1545	75.2	13	0.6	98	4.8	7	0.3	215	10.5	175	8.5	1	0.0	2054	100.0
<b>TOTAL</b>	<b>4844</b>	<b>64.8</b>	<b>174</b>	<b>2.3</b>	<b>425</b>	<b>5.7</b>	<b>19</b>	<b>0.3</b>	<b>1117</b>	<b>14.9</b>	<b>891</b>	<b>11.9</b>	<b>6</b>	<b>0.1</b>	<b>7476</b>	<b>100.0</b>
<b>Peer Group D</b>																
<b>TOTAL</b>	<b>308</b>	<b>68.9</b>	<b>2</b>	<b>0.4</b>	<b>13</b>	<b>2.9</b>	<b>0</b>	<b>0.0</b>	<b>80</b>	<b>17.9</b>	<b>44</b>	<b>9.8</b>	<b>0</b>	<b>0.0</b>	<b>447</b>	<b>100.0</b>
<b>Private</b>																
Mater, North Sydney	708	33.1	59	2.8	208	9.7	0	0.0	875	40.9	290	13.6	0	0.0	2140	100.0
North Shore Private	798	32.7	89	3.7	194	8.0	1	0.0	999	41.0	356	14.6	0	0.0	2437	100.0
Sydney Adventist	860	46.1	83	4.4	139	7.4	1	0.1	588	31.5	196	10.5	0	0.0	1867	100.0
North Gosford Private	229	34.3	23	3.4	73	10.9	1	0.1	234	35.1	107	16.0	0	0.0	667	100.0
Hurstville Community	271	46.3	16	2.7	65	11.1	1	0.2	146	25.0	86	14.7	0	0.0	585	100.0
Kareena Private	265	37.4	45	6.3	58	8.2	0	0.0	253	35.7	86	12.1	2	0.3	709	100.0
St. George Private	543	37.2	54	3.7	178	12.2	1	0.1	494	33.8	191	13.1	0	0.0	1461	100.0
Prince of Wales Private	730	33.5	66	3.0	180	8.3	3	0.1	962	44.2	235	10.8	0	0.0	2176	100.0
Norwest Private	928	48.6	90	4.7	140	7.3	4	0.2	550	28.8	199	10.4	0	0.0	1911	100.0
Sydney Southwest Private	416	46.3	40	4.5	105	11.7	0	0.0	272	30.3	65	7.2	0	0.0	898	100.0
Nepean Private	333	46.0	12	1.7	72	9.9	2	0.3	232	32.0	73	10.1	0	0.0	724	100.0
Westmead Private	893	42.7	130	6.2	123	5.9	6	0.3	698	33.4	241	11.5	0	0.0	2091	100.0
Wollongong Private	400	42.6	16	1.7	126	13.4	0	0.0	273	29.0	125	13.3	0	0.0	940	100.0
Newcastle Private	767	42.1	41	2.2	197	10.8	3	0.2	602	33.0	213	11.7	0	0.0	1823	100.0
Calvary, Wagga Wagga	120	36.3	0	0.0	21	6.3	0	0.0	154	46.5	36	10.9	0	0.0	331	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	0	0.0	24	100.0	0	0.0	0	0.0	24	100.0
<b>TOTAL</b>	<b>8261</b>	<b>39.7</b>	<b>764</b>	<b>3.7</b>	<b>1879</b>	<b>9.0</b>	<b>23</b>	<b>0.1</b>	<b>7356</b>	<b>35.4</b>	<b>2499</b>	<b>12.0</b>	<b>2</b>	<b>0.0</b>	<b>20784</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>51434</b>	<b>54.5</b>	<b>4435</b>	<b>4.7</b>	<b>6338</b>	<b>6.7</b>	<b>336</b>	<b>0.4</b>	<b>20115</b>	<b>21.3</b>	<b>11764</b>	<b>12.5</b>	<b>27</b>	<b>0.0</b>	<b>94449</b>	<b>100.0</b>

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.  
 # Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 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.

## Pain relief

Table 42 shows type of pain relief provided to women during labour or delivery for local health districts, and Table 43 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

In addition to the types of pain relief shown in the tables, in 2017 a further 20,929 (22.2%) women were reported to have received local anaesthetic to the perineum, and 684 (0.7%) received a pudendal block.

**TABLE 42: PAIN RELIEF BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Epidural-spinal <sup>†</sup>		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL <sup>‡</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	3380	49.3	267	3.9	290	4.2	2958	43.1	703	10.3	6858	100.0
South Western Sydney	4196	38.2	424	3.9	1745	15.9	5300	48.2	1543	14.0	10987	100.0
South Eastern Sydney	4213	55.8	189	2.5	1164	15.4	3551	47.0	387	5.1	7549	100.0
Illawarra Shoalhaven	1586	47.5	103	3.1	324	9.7	1660	49.7	290	8.7	3338	100.0
Western Sydney	5007	48.7	298	2.9	971	9.4	4792	46.6	609	5.9	10277	100.0
Nepean Blue Mountains	2488	49.0	281	5.5	751	14.8	2386	47.0	347	6.8	5080	100.0
Northern Sydney	2962	51.8	124	2.2	413	7.2	2195	38.4	410	7.2	5713	100.0
Central Coast	1303	44.4	83	2.8	357	12.2	1180	40.2	332	11.3	2936	100.0
Hunter New England	3676	41.9	466	5.3	1190	13.6	4141	47.2	843	9.6	8766	100.0
Northern NSW	1132	39.9	80	2.8	319	11.2	1142	40.3	420	14.8	2836	100.0
Mid North Coast	958	43.9	44	2.0	169	7.8	831	38.1	275	12.6	2180	100.0
Southern NSW	556	38.1	46	3.2	150	10.3	723	49.5	188	12.9	1460	100.0
Murrumbidgee	778	37.8	55	2.7	422	20.5	958	46.5	280	13.6	2060	100.0
Western NSW	1491	45.0	138	4.2	556	16.8	1595	48.1	260	7.8	3313	100.0
Far West	86	42.4	3	1.5	35	17.2	94	46.3	31	15.3	203	100.0
Private Hospitals	16439	79.1	249	1.2	1284	6.2	5311	25.6	1055	5.1	20784	100.0
<b>TOTAL NSW*</b>	<b>50253</b>	<b>53.2</b>	<b>2850</b>	<b>3.0</b>	<b>10140</b>	<b>10.7</b>	<b>38818</b>	<b>41.1</b>	<b>8015</b>	<b>8.5</b>	<b>94449</b>	<b>100.0</b>

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

IM: Intramuscular.

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

<sup>‡</sup> 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 43: PAIN RELIEF BY HOSPITAL AND PEER GROUP, NSW 2017<sup>#</sup>**

Peer Group–hospital	Epidural-spinal <sup>†</sup>		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL <sup>‡</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>												
Royal Prince Alfred	2486	49.2	197	3.9	202	4.0	2097	41.5	535	10.6	5048	100.0
Gosford	1303	45.9	83	2.9	356	12.5	1151	40.6	300	10.6	2837	100.0
Royal North Shore	1569	57.2	60	2.2	214	7.8	1068	38.9	135	4.9	2743	100.0
St. George	1284	52.7	63	2.6	458	18.8	1301	53.4	117	4.8	2435	100.0
Royal Hospital for Women	2299	59.7	85	2.2	582	15.1	1621	42.1	195	5.1	3850	100.0
Liverpool	1575	44.6	159	4.5	575	16.3	1559	44.2	365	10.3	3528	100.0
Nepean	2037	51.3	256	6.4	545	13.7	1858	46.8	243	6.1	3971	100.0
Westmead	3056	53.3	163	2.8	564	9.8	2554	44.5	251	4.4	5736	100.0
Bankstown–Lidcombe	701	37.9	79	4.3	294	15.9	993	53.6	186	10.0	1851	100.0
Wollongong	1225	49.4	85	3.4	195	7.9	1222	49.3	183	7.4	2479	100.0
John Hunter	1947	48.0	283	7.0	554	13.7	1882	46.4	270	6.7	4055	100.0
<b>TOTAL</b>	<b>19482</b>	<b>50.6</b>	<b>1513</b>	<b>3.9</b>	<b>4539</b>	<b>11.8</b>	<b>17306</b>	<b>44.9</b>	<b>2780</b>	<b>7.2</b>	<b>38533</b>	<b>100.0</b>
<b>Peer Group B</b>												
Canterbury	894	49.4	70	3.9	88	4.9	861	47.6	168	9.3	1810	100.0
Hornsby	580	47.2	31	2.5	92	7.5	545	44.3	88	7.2	1230	100.0
Manly	470	52.6	21	2.3	69	7.7	267	29.9	75	8.4	894	100.0
Mona Vale	343	46.0	11	1.5	36	4.8	298	39.9	64	8.6	746	100.0
Sutherland	630	49.8	41	3.2	124	9.8	629	49.8	75	5.9	1264	100.0
Auburn	484	36.9	20	1.5	88	6.7	756	57.7	114	8.7	1310	100.0
Blacktown	1467	45.4	115	3.6	319	9.9	1482	45.9	244	7.6	3231	100.0
Fairfield	453	27.0	68	4.1	274	16.3	923	55.0	262	15.6	1679	100.0
Campbelltown	1286	36.5	114	3.2	502	14.2	1662	47.2	671	19.0	3524	100.0
Coffs Harbour	530	48.0	21	1.9	82	7.4	357	32.3	126	11.4	1104	100.0
Lismore Base	499	41.6	28	2.3	137	11.4	480	40.0	164	13.7	1199	100.0
Tweed Heads	475	43.6	35	3.2	121	11.1	470	43.1	112	10.3	1090	100.0
Port Macquarie Base	364	48.8	15	2.0	37	5.0	319	42.8	71	9.5	746	100.0
Tamworth Base	458	46.5	39	4.0	102	10.3	496	50.3	90	9.1	986	100.0
Manning Base	225	36.3	45	7.3	150	24.2	319	51.5	61	9.8	620	100.0
Dubbo Base	581	47.8	46	3.8	215	17.7	614	50.5	73	6.0	1215	100.0
Orange Base	514	54.7	54	5.7	162	17.2	435	46.3	44	4.7	940	100.0

(Continued on next page)

TABLE 43: (Continued)

Peer Group—hospital	Epidural-spinal <sup>†</sup>		General anaesthetic		IM narcotics		Nitrous oxide		Nil		TOTAL <sup>‡</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Shoalhaven	361	42.1	18	2.1	129	15.0	438	51.0	106	12.4	858	100.0
Maitland	598	40.0	61	4.1	140	9.4	771	51.5	155	10.4	1496	100.0
Wagga Wagga Base	512	48.3	39	3.7	203	19.2	453	42.8	107	10.1	1059	100.0
Other hospitals	0	0.0	0	0.0	1	1.0	29	29.3	32	32.3	99	100.0
<b>TOTAL</b>	<b>11724</b>	<b>43.3</b>	<b>892</b>	<b>3.3</b>	<b>3071</b>	<b>11.3</b>	<b>12604</b>	<b>46.5</b>	<b>2902</b>	<b>10.7</b>	<b>27100</b>	<b>100.0</b>
<b>Peer Group C</b>												
Blue Mountains	75	33.5	4	1.8	27	12.1	100	44.6	18	8.0	224	100.0
Hawkesbury	304	43.1	19	2.7	144	20.4	338	47.9	64	9.1	706	100.0
Grafton Base	156	41.4	17	4.5	61	16.2	169	44.8	44	11.7	377	100.0
Kempsey	64	24.4	8	3.1	43	16.4	130	49.6	52	19.8	262	100.0
Armidale	163	39.0	9	2.2	118	28.2	180	43.1	52	12.4	418	100.0
Inverell	70	30.8	2	0.9	36	15.9	105	46.3	29	12.8	227	100.0
Mudgee	77	33.3	8	3.5	13	5.6	81	35.1	39	16.9	231	100.0
Bathurst Base	187	37.7	18	3.6	66	13.3	240	48.4	53	10.7	496	100.0
Bega	90	35.9	6	2.4	34	13.5	118	47.0	39	15.5	251	100.0
Goulburn Base	99	36.4	8	2.9	52	19.1	166	61.0	13	4.8	272	100.0
Moruya	93	31.7	9	3.1	14	4.8	144	49.1	47	16.0	293	100.0
Queanbeyan	242	46.8	16	3.1	36	7.0	238	46.0	70	13.5	517	100.0
Bowral	181	44.7	4	1.0	100	24.7	163	40.2	59	14.6	405	100.0
Griffith Base	166	30.7	12	2.2	137	25.4	270	50.0	81	15.0	540	100.0
Broken Hill Base	86	42.4	3	1.5	35	17.2	94	46.3	31	15.3	203	100.0
Other hospitals	441	21.5	40	1.9	297	14.5	854	41.6	471	22.9	2054	100.0
<b>TOTAL</b>	<b>2494</b>	<b>33.4</b>	<b>183</b>	<b>2.4</b>	<b>1213</b>	<b>16.2</b>	<b>3390</b>	<b>45.3</b>	<b>1162</b>	<b>15.5</b>	<b>7476</b>	<b>100.0</b>
<b>Peer Group D</b>												
<b>TOTAL</b>	<b>112</b>	<b>25.1</b>	<b>13</b>	<b>2.9</b>	<b>33</b>	<b>7.4</b>	<b>206</b>	<b>46.1</b>	<b>74</b>	<b>16.6</b>	<b>447</b>	<b>100.0</b>
<b>Private</b>												
Mater, North Sydney	1724	80.6	18	0.8	67	3.1	441	20.6	105	4.9	2140	100.0
North Shore Private	2008	82.4	20	0.8	41	1.7	533	21.9	93	3.8	2437	100.0
Sydney Adventist	1405	75.3	24	1.3	210	11.2	529	28.3	72	3.9	1867	100.0
North Gosford Private	522	78.3	5	0.7	28	4.2	179	26.8	13	1.9	667	100.0
Hurstville Community	439	75.0	7	1.2	33	5.6	168	28.7	15	2.6	585	100.0
Kareena Private	617	87.0	12	1.7	1	0.1	116	16.4	30	4.2	709	100.0
St. George Private	1238	84.7	21	1.4	43	2.9	274	18.8	45	3.1	1461	100.0
Prince of Wales Private	1890	86.9	16	0.7	80	3.7	559	25.7	101	4.6	2176	100.0
Norwest Private	1463	76.6	31	1.6	158	8.3	517	27.1	142	7.4	1911	100.0
Sydney Southwest Private	613	68.3	24	2.7	209	23.3	227	25.3	83	9.2	898	100.0
Nepean Private	500	69.1	9	1.2	115	15.9	254	35.1	61	8.4	724	100.0
Westmead Private	1646	78.7	21	1.0	94	4.5	576	27.5	52	2.5	2091	100.0
Wollongong Private	765	81.4	16	1.7	1	0.1	286	30.4	33	3.5	940	100.0
Newcastle Private	1363	74.8	21	1.2	182	10.0	570	31.3	167	9.2	1823	100.0
Calvary, Wagga Wagga	222	67.1	4	1.2	22	6.6	82	24.8	43	13.0	331	100.0
Other hospitals	24	100.0	0	0.0	0	0.0	0	0.0	0	0.0	24	100.0
<b>TOTAL</b>	<b>16439</b>	<b>79.1</b>	<b>249</b>	<b>1.2</b>	<b>1284</b>	<b>6.2</b>	<b>5311</b>	<b>25.6</b>	<b>1055</b>	<b>5.1</b>	<b>20784</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>50253</b>	<b>53.2</b>	<b>2850</b>	<b>3.0</b>	<b>10140</b>	<b>10.7</b>	<b>38818</b>	<b>41.1</b>	<b>8015</b>	<b>8.5</b>	<b>94449</b>	<b>100.0</b>

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

IM: Intramuscular.

# Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 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.

## Perineal status

Table 44 shows the perineal status in vaginal births for local health districts, and Table 45 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

In 2017, there were 1,856 cases of third degree tear and 84 cases of fourth degree tear reported among women who gave birth vaginally, including tears associated with an episiotomy.

**TABLE 44: PERINEAL STATUS AMONG VAGINAL BIRTHS BY LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

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.	%		
Sydney	681	14.7	994	21.4	1611	34.8	152	3.3	866	18.7	209	4.5	122	2.6	0	0.0	<b>4635</b>	<b>100.0</b>
South Western Sydney	1704	21.1	1947	24.1	2385	29.6	195	2.4	1350	16.7	173	2.1	317	3.9	0	0.0	<b>8071</b>	<b>100.0</b>
South Eastern Sydney	640	12.2	1197	22.8	1757	33.5	138	2.6	997	19.0	387	7.4	125	2.4	6	0.1	<b>5247</b>	<b>100.0</b>
Illawarra Shoalhaven	526	22.7	665	28.7	656	28.3	43	1.9	258	11.1	72	3.1	96	4.1	3	0.1	<b>2319</b>	<b>100.0</b>
Western Sydney	946	12.9	1841	25.0	2097	28.5	129	1.8	1533	20.9	673	9.2	131	1.8	1	0.0	<b>7351</b>	<b>100.0</b>
Nepean Blue Mountains	429	13.3	1148	35.5	950	29.4	66	2.0	371	11.5	205	6.3	62	1.9	4	0.1	<b>3235</b>	<b>100.0</b>
Northern Sydney	400	10.1	909	23.0	1413	35.7	135	3.4	739	18.7	142	3.6	215	5.4	0	0.0	<b>3953</b>	<b>100.0</b>
Central Coast	282	13.3	614	28.9	672	31.7	43	2.0	287	13.5	40	1.9	184	8.7	0	0.0	<b>2122</b>	<b>100.0</b>
Hunter New England	1133	18.8	2101	34.9	1565	26.0	151	2.5	630	10.5	267	4.4	156	2.6	9	0.1	<b>6012</b>	<b>100.0</b>
Northern NSW	376	17.3	684	31.5	613	28.3	69	3.2	225	10.4	23	1.1	178	8.2	0	0.0	<b>2168</b>	<b>100.0</b>
Mid North Coast	311	20.3	409	26.7	457	29.8	31	2.0	176	11.5	22	1.4	126	8.2	0	0.0	<b>1532</b>	<b>100.0</b>
Southern NSW	223	21.2	349	33.1	285	27.0	31	2.9	110	10.4	30	2.8	24	2.3	2	0.2	<b>1054</b>	<b>100.0</b>
Murrumbidgee	294	21.2	540	39.0	311	22.5	25	1.8	138	10.0	45	3.2	30	2.2	2	0.1	<b>1385</b>	<b>100.0</b>
Western NSW	414	18.1	844	36.9	474	20.7	63	2.8	292	12.8	83	3.6	115	5.0	1	0.0	<b>2286</b>	<b>100.0</b>
Far West	34	23.8	62	43.4	26	18.2	3	2.1	8	5.6	1	0.7	9	6.3	0	0.0	<b>143</b>	<b>100.0</b>
Private Hospitals	1611	14.7	1954	17.9	3443	31.5	100	0.9	2892	26.5	208	1.9	694	6.4	25	0.2	<b>10927</b>	<b>100.0</b>
<b>TOTAL*</b>	<b>10051</b>	<b>16.1</b>	<b>16290</b>	<b>26.0</b>	<b>18734</b>	<b>30.0</b>	<b>1375</b>	<b>2.2</b>	<b>10872</b>	<b>17.4</b>	<b>2580</b>	<b>4.1</b>	<b>2588</b>	<b>4.1</b>	<b>53</b>	<b>0.1</b>	<b>62543</b>	<b>100.0</b>

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 45: PERINEAL STATUS AMONG VAGINAL BIRTHS BY HOSPITAL AND PEER GROUP, NSW 2017\***

Peer Group-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.	%		
<b>Peer Group A</b>																		
Royal Prince Alfred	462	13.6	741	21.8	1247	36.6	115	3.4	616	18.1	138	4.1	84	2.5	0	0.0	<b>3403</b>	<b>100.0</b>
Gosford	274	13.5	557	27.5	648	32.0	43	2.1	283	14.0	39	1.9	179	8.8	0	0.0	<b>2023</b>	<b>100.0</b>
Royal North Shore	145	8.0	372	20.6	652	36.1	62	3.4	421	23.3	75	4.2	78	4.3	0	0.0	<b>1805</b>	<b>100.0</b>
St. George	211	12.3	352	20.5	567	33.0	48	2.8	342	19.9	162	9.4	35	2.0	3	0.2	<b>1720</b>	<b>100.0</b>
Royal Hospital for Women	315	12.0	614	23.4	908	34.7	76	2.9	470	17.9	171	6.5	65	2.5	0	0.0	<b>2619</b>	<b>100.0</b>
Liverpool	487	19.2	614	24.2	751	29.6	81	3.2	447	17.6	48	1.9	110	4.3	0	0.0	<b>2538</b>	<b>100.0</b>
Nepean	308	12.4	870	35.0	737	29.6	50	2.0	291	11.7	184	7.4	48	1.9	0	0.0	<b>2488</b>	<b>100.0</b>
Westmead	503	12.4	936	23.1	1153	28.5	47	1.2	931	23.0	429	10.6	52	1.3	0	0.0	<b>4051</b>	<b>100.0</b>
Bankstown-Lidcombe	291	21.0	318	23.0	372	26.9	22	1.6	256	18.5	57	4.1	67	4.8	0	0.0	<b>1383</b>	<b>100.0</b>
Wollongong	353	20.5	473	27.5	517	30.1	33	1.9	208	12.1	56	3.3	80	4.7	0	0.0	<b>1720</b>	<b>100.0</b>
John Hunter	400	14.9	870	32.3	771	28.7	99	3.7	341	12.7	149	5.5	60	2.2	1	0.0	<b>2691</b>	<b>100.0</b>
<b>TOTAL</b>	<b>3749</b>	<b>14.2</b>	<b>6717</b>	<b>25.4</b>	<b>8323</b>	<b>31.5</b>	<b>676</b>	<b>2.6</b>	<b>4606</b>	<b>17.4</b>	<b>1508</b>	<b>5.7</b>	<b>858</b>	<b>3.2</b>	<b>4</b>	<b>0.0</b>	<b>26441</b>	<b>100.0</b>
<b>Peer Group B</b>																		
Canterbury	219	17.8	253	20.5	364	29.5	37	3.0	250	20.3	71	5.8	38	3.1	0	0.0	<b>1232</b>	<b>100.0</b>
Hornsby	91	10.2	195	21.9	338	37.9	33	3.7	143	16.0	36	4.0	55	6.2	0	0.0	<b>891</b>	<b>100.0</b>
Manly	60	9.6	133	21.2	230	36.7	22	3.5	108	17.2	18	2.9	56	8.9	0	0.0	<b>627</b>	<b>100.0</b>
Mona Vale	85	16.0	165	31.1	161	30.4	17	3.2	66	12.5	13	2.5	23	4.3	0	0.0	<b>530</b>	<b>100.0</b>
Sutherland	114	12.6	231	25.4	282	31.1	14	1.5	185	20.4	54	5.9	25	2.8	3	0.3	<b>908</b>	<b>100.0</b>
Auburn	168	16.9	258	26.0	277	27.9	21	2.1	182	18.3	61	6.1	24	2.4	1	0.1	<b>992</b>	<b>100.0</b>
Blacktown	275	11.9	647	28.0	667	28.9	61	2.6	420	18.2	183	7.9	55	2.4	0	0.0	<b>2308</b>	<b>100.0</b>
Fairfield	301	24.1	300	24.0	327	26.1	40	3.2	224	17.9	36	2.9	23	1.8	0	0.0	<b>1251</b>	<b>100.0</b>
Campbelltown	553	21.1	638	24.3	875	33.4	48	1.8	381	14.5	29	1.1	97	3.7	0	0.0	<b>2621</b>	<b>100.0</b>
Coffs Harbour	150	20.3	188	25.4	247	33.4	10	1.4	82	11.1	10	1.4	52	7.0	0	0.0	<b>739</b>	<b>100.0</b>
Lismore Base	163	17.7	287	31.1	259	28.1	31	3.4	115	12.5	10	1.1	58	6.3	0	0.0	<b>923</b>	<b>100.0</b>
Tweed Heads	127	15.5	215	26.2	250	30.5	30	3.7	99	12.1	13	1.6	87	10.6	0	0.0	<b>821</b>	<b>100.0</b>
Port Macquarie Base	94	17.8	120	22.7	151	28.6	16	3.0	86	16.3	10	1.9	51	9.7	0	0.0	<b>528</b>	<b>100.0</b>
Tamworth Base	123	19.5	219	34.7	161	25.5	9	1.4	69	10.9	26	4.1	20	3.2	4	0.6	<b>631</b>	<b>100.0</b>
Manning Base	81	17.5	182	39.4	100	21.6	12	2.6	47	10.2	25	5.4	15	3.2	0	0.0	<b>462</b>	<b>100.0</b>
Dubbo Base	168	19.6	312	36.3	137	15.9	20	2.3	142	16.5	31	3.6	49	5.7	0	0.0	<b>859</b>	<b>100.0</b>
Orange Base	90	15.2	204	34.5	133	22.5	16	2.7	84	14.2	38	6.4	27	4.6	0	0.0	<b>592</b>	<b>100.0</b>

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TABLE 45: (Continued)

Peer Group-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.	%
Shoalhaven	173	28.9	191	31.9	139	23.2	10	1.7	50	8.4	16	2.7	16	2.7	3	0.5	<b>598</b>	<b>100.0</b>
Maitland	202	19.4	396	38.1	267	25.7	19	1.8	77	7.4	43	4.1	31	3.0	4	0.4	<b>1039</b>	<b>100.0</b>
Wagga Wagga Base	97	15.3	252	39.7	158	24.9	16	2.5	68	10.7	30	4.7	13	2.0	1	0.2	<b>635</b>	<b>100.0</b>
Other hospitals	8	8.1	57	57.6	24	24.2	0	0.0	4	4.0	1	1.0	5	5.1	0	0.0	<b>99</b>	<b>100.0</b>
<b>TOTAL</b>	<b>3342</b>	<b>17.3</b>	<b>5443</b>	<b>28.2</b>	<b>5547</b>	<b>28.8</b>	<b>482</b>	<b>2.5</b>	<b>2882</b>	<b>14.9</b>	<b>754</b>	<b>3.9</b>	<b>820</b>	<b>4.3</b>	<b>16</b>	<b>0.1</b>	<b>19286</b>	<b>100.0</b>
<b>Peer Group C</b>																		
Blue Mountains	15	9.3	59	36.4	69	42.6	2	1.2	7	4.3	2	1.2	6	3.7	2	1.2	<b>162</b>	<b>100.0</b>
Hawkesbury	82	17.9	158	34.5	124	27.1	13	2.8	61	13.3	16	3.5	2	0.4	2	0.4	<b>458</b>	<b>100.0</b>
Grafton Base	59	23.2	102	40.2	56	22.0	4	1.6	10	3.9	0	0.0	23	9.1	0	0.0	<b>254</b>	<b>100.0</b>
Kempsey	47	23.9	69	35.0	50	25.4	4	2.0	7	3.6	1	0.5	19	9.6	0	0.0	<b>197</b>	<b>100.0</b>
Armidale	55	19.6	102	36.3	68	24.2	3	1.1	25	8.9	16	5.7	12	4.3	0	0.0	<b>281</b>	<b>100.0</b>
Inverell	50	32.1	47	30.1	15	9.6	1	0.6	35	22.4	3	1.9	5	3.2	0	0.0	<b>156</b>	<b>100.0</b>
Mudgee	34	20.5	58	34.9	53	31.9	2	1.2	12	7.2	0	0.0	7	4.2	0	0.0	<b>166</b>	<b>100.0</b>
Bathurst Base	52	14.5	142	39.7	83	23.2	17	4.7	34	9.5	7	2.0	23	6.4	0	0.0	<b>358</b>	<b>100.0</b>
Bega	35	20.2	59	34.1	52	30.1	4	2.3	8	4.6	7	4.0	8	4.6	0	0.0	<b>173</b>	<b>100.0</b>
Goulburn Base	42	21.6	46	23.7	60	30.9	3	1.5	39	20.1	1	0.5	3	1.5	0	0.0	<b>194</b>	<b>100.0</b>
Moruya	49	22.1	84	37.8	55	24.8	6	2.7	20	9.0	3	1.4	5	2.3	0	0.0	<b>222</b>	<b>100.0</b>
Queanbeyan	63	17.3	124	34.0	98	26.8	15	4.1	40	11.0	18	4.9	5	1.4	2	0.5	<b>365</b>	<b>100.0</b>
Bowral	72	25.9	77	27.7	60	21.6	4	1.4	42	15.1	3	1.1	20	7.2	0	0.0	<b>278</b>	<b>100.0</b>
Griffith Base	85	21.7	162	41.3	93	23.7	2	0.5	38	9.7	5	1.3	7	1.8	0	0.0	<b>392</b>	<b>100.0</b>
Broken Hill Base	34	23.8	62	43.4	26	18.2	3	2.1	8	5.6	1	0.7	9	6.3	0	0.0	<b>143</b>	<b>100.0</b>
Other hospitals	446	26.8	666	40.0	368	22.1	26	1.6	87	5.2	21	1.3	47	2.8	2	0.1	<b>1663</b>	<b>100.0</b>
<b>TOTAL</b>	<b>1220</b>	<b>22.3</b>	<b>2017</b>	<b>36.9</b>	<b>1330</b>	<b>24.4</b>	<b>109</b>	<b>2.0</b>	<b>473</b>	<b>8.7</b>	<b>104</b>	<b>1.9</b>	<b>201</b>	<b>3.7</b>	<b>8</b>	<b>0.1</b>	<b>5462</b>	<b>100.0</b>
<b>Peer Group D</b>																		
<b>TOTAL</b>	<b>82</b>	<b>25.4</b>	<b>126</b>	<b>39.0</b>	<b>72</b>	<b>22.3</b>	<b>7</b>	<b>2.2</b>	<b>19</b>	<b>5.9</b>	<b>6</b>	<b>1.9</b>	<b>11</b>	<b>3.4</b>	<b>0</b>	<b>0.0</b>	<b>323</b>	<b>100.0</b>
<b>Private</b>																		
Mater, North Sydney	142	14.6	247	25.3	294	30.2	9	0.9	267	27.4	12	1.2	4	0.4	0	0.0	<b>975</b>	<b>100.0</b>
North Shore Private	143	13.2	232	21.4	362	33.5	21	1.9	273	25.2	4	0.4	33	3.0	14	1.3	<b>1082</b>	<b>100.0</b>
Sydney Adventist	191	17.6	275	25.4	319	29.5	0	0.0	267	24.7	0	0.0	31	2.9	0	0.0	<b>1083</b>	<b>100.0</b>
North Gosford Private	70	21.5	44	13.5	104	31.9	0	0.0	93	28.5	9	2.8	6	1.8	0	0.0	<b>326</b>	<b>100.0</b>
Hurstville Community	69	19.5	79	22.4	118	33.4	0	0.0	84	23.8	1	0.3	2	0.6	0	0.0	<b>353</b>	<b>100.0</b>
Kareena Private	31	8.4	70	19.0	143	38.9	6	1.6	95	25.8	0	0.0	17	4.6	6	1.6	<b>368</b>	<b>100.0</b>
St. George Private	130	16.8	170	21.9	298	38.4	10	1.3	137	17.7	0	0.0	26	3.4	5	0.6	<b>776</b>	<b>100.0</b>
Prince of Wales Private	128	13.1	134	13.7	293	29.9	2	0.2	273	27.9	41	4.2	108	11.0	0	0.0	<b>979</b>	<b>100.0</b>
Norwest Private	206	17.7	155	13.3	347	29.9	7	0.6	274	23.6	37	3.2	136	11.7	0	0.0	<b>1162</b>	<b>100.0</b>
Sydney Southwest Private	74	13.2	91	16.2	143	25.5	7	1.2	168	29.9	24	4.3	54	9.6	0	0.0	<b>561</b>	<b>100.0</b>
Nepean Private	49	11.7	47	11.2	114	27.2	2	0.5	147	35.1	17	4.1	43	10.3	0	0.0	<b>419</b>	<b>100.0</b>
Westmead Private	135	11.7	178	15.5	269	23.4	5	0.4	515	44.7	6	0.5	44	3.8	0	0.0	<b>1152</b>	<b>100.0</b>
Wollongong Private	65	12.0	77	14.2	187	34.5	3	0.6	181	33.4	0	0.0	29	5.4	0	0.0	<b>542</b>	<b>100.0</b>
Newcastle Private	156	15.5	127	12.6	397	39.4	26	2.6	91	9.0	55	5.5	156	15.5	0	0.0	<b>1008</b>	<b>100.0</b>
Calvary, Wagga Wagga	22	15.6	28	19.9	55	39.0	2	1.4	27	19.1	2	1.4	5	3.5	0	0.0	<b>141</b>	<b>100.0</b>
<b>TOTAL</b>	<b>1611</b>	<b>14.7</b>	<b>1954</b>	<b>17.9</b>	<b>3443</b>	<b>31.5</b>	<b>100</b>	<b>0.9</b>	<b>2892</b>	<b>26.5</b>	<b>208</b>	<b>1.9</b>	<b>694</b>	<b>6.4</b>	<b>25</b>	<b>0.2</b>	<b>10927</b>	<b>100.0</b>
<b>TOTAL NSW</b>	<b>10051</b>	<b>16.1</b>	<b>16290</b>	<b>26.0</b>	<b>18734</b>	<b>30.0</b>	<b>1375</b>	<b>2.2</b>	<b>10872</b>	<b>17.4</b>	<b>2580</b>	<b>4.1</b>	<b>2588</b>	<b>4.1</b>	<b>53</b>	<b>0.1</b>	<b>62543</b>	<b>100.0</b>

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

# Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.

\* Total NSW includes births at home assisted by independent midwives.

## Birth weight

Table 46 shows the birth weight of babies for local health districts, and Table 47 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 46: BIRTHS BY BIRTH WEIGHT AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Birth weight (grams)											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	81	1.2	67	1.0	435	6.2	6377	91.6	2	0.0	6962	100.0
South Western Sydney	101	0.9	60	0.5	660	5.9	10339	92.6	7	0.1	11167	100.0
South Eastern Sydney	107	1.4	56	0.7	468	6.1	7070	91.8	1	0.0	7702	100.0
Illawarra Shoalhaven	16	0.5	6	0.2	181	5.4	3180	94.0	0	0.0	3383	100.0
Western Sydney	137	1.3	84	0.8	622	6.0	9595	91.9	0	0.0	10438	100.0
Nepean Blue Mountains	58	1.1	59	1.1	371	7.2	4679	90.5	2	0.0	5169	100.0
Northern Sydney	57	1.0	48	0.8	285	4.9	5412	93.3	0	0.0	5802	100.0
Central Coast	14	0.5	5	0.2	134	4.5	2819	94.9	0	0.0	2972	100.0
Hunter New England	115	1.3	85	1.0	582	6.5	8126	91.2	5	0.1	8913	100.0
Northern NSW	26	0.9	2	0.1	124	4.3	2709	94.6	2	0.1	2863	100.0
Mid North Coast	16	0.7	5	0.2	110	5.0	2070	94.0	0	0.0	2201	100.0
Southern NSW	4	0.3	1	0.1	41	2.8	1418	96.7	3	0.2	1467	100.0
Murrumbidgee	4	0.2	7	0.3	103	5.0	1962	94.5	1	0.0	2077	100.0
Western NSW	15	0.4	9	0.3	158	4.7	3174	94.6	0	0.0	3356	100.0
Far West	1	0.5	0	0.0	9	4.4	195	95.1	0	0.0	205	100.0
Private Hospitals	44	0.2	9	0.0	823	3.9	20144	95.7	20	0.1	21040	100.0
<b>TOTAL*</b>	<b>796</b>	<b>0.8</b>	<b>503</b>	<b>0.5</b>	<b>5106</b>	<b>5.3</b>	<b>89373</b>	<b>93.3</b>	<b>47</b>	<b>0.0</b>	<b>95825</b>	<b>100.0</b>

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 47: BIRTHS BY BIRTH WEIGHT, HOSPITAL AND PEER GROUP, NSW 2017<sup>a</sup>**

Peer Group–hospital	Birth weight (grams)											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>												
Royal Prince Alfred	73	1.4	65	1.3	348	6.8	4659	90.6	0	0.0	5145	100.0
Gosford	14	0.5	5	0.2	134	4.7	2720	94.7	0	0.0	2873	100.0
Royal North Shore	45	1.6	46	1.6	196	7.0	2522	89.8	0	0.0	2809	100.0
St. George	25	1.0	1	0.0	163	6.6	2293	92.3	1	0.0	2483	100.0
Royal Hospital for Women	75	1.9	53	1.3	270	6.8	3555	89.9	0	0.0	3953	100.0
Liverpool	71	2.0	54	1.5	308	8.5	3195	88.0	3	0.1	3631	100.0
Nepean	56	1.4	58	1.4	335	8.3	3604	88.9	0	0.0	4053	100.0
Westmead	99	1.7	78	1.3	413	7.0	5270	89.9	0	0.0	5860	100.0
Bankstown–Lidcombe	7	0.4	2	0.1	88	4.7	1778	94.8	0	0.0	1875	100.0
Wollongong	14	0.6	5	0.2	156	6.2	2344	93.1	0	0.0	2519	100.0
John Hunter	98	2.4	79	1.9	377	9.0	3613	86.7	0	0.0	4167	100.0
<b>TOTAL</b>	<b>577</b>	<b>1.5</b>	<b>446</b>	<b>1.1</b>	<b>2788</b>	<b>7.1</b>	<b>35553</b>	<b>90.3</b>	<b>4</b>	<b>0.0</b>	<b>39368</b>	<b>100.0</b>
<b>Peer Group B</b>												
Canterbury	8	0.4	2	0.1	87	4.8	1718	94.6	2	0.1	1817	100.0
Hornsby	3	0.2	0	0.0	49	4.0	1188	95.8	0	0.0	1240	100.0
Manly	6	0.7	2	0.2	22	2.4	871	96.7	0	0.0	901	100.0
Mona Vale	3	0.4	0	0.0	18	2.4	731	97.2	0	0.0	752	100.0
Sutherland	7	0.6	2	0.2	35	2.8	1222	96.5	0	0.0	1266	100.0
Auburn	9	0.7	0	0.0	40	3.0	1263	96.3	0	0.0	1312	100.0
Blacktown	29	0.9	6	0.2	169	5.2	3062	93.8	0	0.0	3266	100.0
Fairfield	4	0.2	1	0.1	76	4.5	1604	95.1	1	0.1	1686	100.0
Campbelltown	18	0.5	3	0.1	184	5.2	3361	94.2	2	0.1	3568	100.0
Coffs Harbour	6	0.5	0	0.0	62	5.6	1049	93.9	0	0.0	1117	100.0
Lismore Base	7	0.6	2	0.2	72	5.9	1133	93.3	1	0.1	1215	100.0
Tweed Heads	7	0.6	0	0.0	37	3.4	1056	96.0	0	0.0	1100	100.0
Port Macquarie Base	6	0.8	3	0.4	41	5.4	704	93.4	0	0.0	754	100.0
Tamworth Base	5	0.5	3	0.3	58	5.8	931	93.2	2	0.2	999	100.0
Manning Base	3	0.5	0	0.0	30	4.8	594	94.6	1	0.2	628	100.0
Dubbo Base	7	0.6	5	0.4	77	6.2	1144	92.8	0	0.0	1233	100.0
Orange Base	7	0.7	0	0.0	49	5.1	900	94.1	0	0.0	956	100.0
Shoalhaven	2	0.2	1	0.1	25	2.9	835	96.8	0	0.0	863	100.0
Maitland	4	0.3	1	0.1	61	4.1	1437	95.6	0	0.0	1503	100.0
Wagga Wagga Base	2	0.2	5	0.5	67	6.3	992	93.0	1	0.1	1067	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	99	100.0	0	0.0	99	100.0
<b>TOTAL</b>	<b>143</b>	<b>0.5</b>	<b>36</b>	<b>0.1</b>	<b>1259</b>	<b>4.6</b>	<b>25894</b>	<b>94.7</b>	<b>10</b>	<b>0.0</b>	<b>27342</b>	<b>100.0</b>

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TABLE 47: (Continued)

Peer Group—hospital	Birth weight (grams)											
	Less than 1,000		1,000–1,499		1,500–2,499		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group C</b>												
Blue Mountains	0	0.0	0	0.0	2	0.9	221	98.7	1	0.4	<b>224</b>	<b>100.0</b>
Hawkesbury	2	0.3	1	0.1	27	3.8	681	95.6	1	0.1	<b>712</b>	<b>100.0</b>
Grafton Base	11	2.9	0	0.0	15	4.0	351	92.9	1	0.3	<b>378</b>	<b>100.0</b>
Kempsey	4	1.5	2	0.8	6	2.3	250	95.4	0	0.0	<b>262</b>	<b>100.0</b>
Armidale	1	0.2	2	0.5	34	8.0	387	91.3	0	0.0	<b>424</b>	<b>100.0</b>
Inverell	3	1.3	0	0.0	5	2.2	219	96.5	0	0.0	<b>227</b>	<b>100.0</b>
Mudgee	1	0.4	0	0.0	4	1.7	227	97.8	0	0.0	<b>232</b>	<b>100.0</b>
Bathurst Base	0	0.0	4	0.8	25	5.0	475	94.2	0	0.0	<b>504</b>	<b>100.0</b>
Bega	0	0.0	0	0.0	6	2.4	244	97.2	1	0.4	<b>251</b>	<b>100.0</b>
Goulburn Base	2	0.7	0	0.0	7	2.6	264	96.7	0	0.0	<b>273</b>	<b>100.0</b>
Moruya	2	0.7	1	0.3	10	3.4	283	95.3	1	0.3	<b>297</b>	<b>100.0</b>
Queanbeyan	0	0.0	0	0.0	12	2.3	504	97.5	1	0.2	<b>517</b>	<b>100.0</b>
Bowral	1	0.2	0	0.0	4	1.0	401	98.5	1	0.2	<b>407</b>	<b>100.0</b>
Griffith Base	2	0.4	2	0.4	24	4.4	520	94.9	0	0.0	<b>548</b>	<b>100.0</b>
Broken Hill Base	1	0.5	0	0.0	9	4.4	195	95.1	0	0.0	<b>205</b>	<b>100.0</b>
Other hospitals	2	0.1	0	0.0	38	1.8	2015	98.0	2	0.1	<b>2057</b>	<b>100.0</b>
<b>TOTAL</b>	<b>32</b>	<b>0.4</b>	<b>12</b>	<b>0.2</b>	<b>228</b>	<b>3.0</b>	<b>7237</b>	<b>96.3</b>	<b>9</b>	<b>0.1</b>	<b>7518</b>	<b>100.0</b>
<b>Peer Group D</b>												
<b>TOTAL</b>	<b>0</b>	<b>0.0</b>	<b>0</b>	<b>0.0</b>	<b>8</b>	<b>1.8</b>	<b>440</b>	<b>98.2</b>	<b>0</b>	<b>0.0</b>	<b>448</b>	<b>100.0</b>
<b>Private</b>												
Mater, North Sydney	1	0.0	2	0.1	87	4.0	2075	95.8	0	0.0	<b>2165</b>	<b>100.0</b>
North Shore Private	7	0.3	3	0.1	114	4.6	2348	94.9	1	0.0	<b>2473</b>	<b>100.0</b>
Sydney Adventist	3	0.2	0	0.0	65	3.4	1817	96.4	0	0.0	<b>1885</b>	<b>100.0</b>
North Gosford Private	3	0.4	0	0.0	21	3.1	649	96.3	1	0.1	<b>674</b>	<b>100.0</b>
Hurstville Community	0	0.0	0	0.0	27	4.6	561	94.8	4	0.7	<b>592</b>	<b>100.0</b>
Kareena Private	0	0.0	0	0.0	20	2.8	696	97.2	0	0.0	<b>716</b>	<b>100.0</b>
St. George Private	6	0.4	1	0.1	61	4.1	1411	95.4	0	0.0	<b>1479</b>	<b>100.0</b>
Prince of Wales Private	2	0.1	1	0.0	89	4.1	2105	95.8	0	0.0	<b>2197</b>	<b>100.0</b>
Norwest Private	2	0.1	0	0.0	75	3.9	1854	95.5	10	0.5	<b>1941</b>	<b>100.0</b>
Sydney Southwest Private	2	0.2	1	0.1	30	3.3	874	96.1	2	0.2	<b>909</b>	<b>100.0</b>
Nepean Private	3	0.4	0	0.0	27	3.7	704	95.9	0	0.0	<b>734</b>	<b>100.0</b>
Westmead Private	4	0.2	0	0.0	102	4.8	2011	95.0	0	0.0	<b>2117</b>	<b>100.0</b>
Wollongong Private	1	0.1	1	0.1	27	2.8	924	97.0	0	0.0	<b>953</b>	<b>100.0</b>
Newcastle Private	9	0.5	0	0.0	63	3.4	1772	96.0	2	0.1	<b>1846</b>	<b>100.0</b>
Calvary, Wagga Wagga	1	0.3	0	0.0	15	4.5	319	95.2	0	0.0	<b>335</b>	<b>100.0</b>
Other hospitals	0	0.0	0	0.0	0	0.0	24	100.0	0	0.0	<b>24</b>	<b>100.0</b>
<b>TOTAL</b>	<b>44</b>	<b>0.2</b>	<b>9</b>	<b>0.0</b>	<b>823</b>	<b>3.9</b>	<b>20144</b>	<b>95.7</b>	<b>20</b>	<b>0.1</b>	<b>21040</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>796</b>	<b>0.8</b>	<b>503</b>	<b>0.5</b>	<b>5106</b>	<b>5.3</b>	<b>89373</b>	<b>93.3</b>	<b>47</b>	<b>0.0</b>	<b>95825</b>	<b>100.0</b>

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

# Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 in *Appendix 2: Explanatory notes*.

\* Total NSW includes births at home assisted by independent midwives.

## Gestational age

Table 48 shows the gestational age of babies for local health districts, and Table 49 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 48: BIRTHS BY GESTATIONAL AGE AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Gestational age (weeks)										TOTAL	
	<32		32–33		34–36		37+		Not stated			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	154	2.2	62	0.9	443	6.4	6301	90.5	2	0.0	6962	100.0
South Western Sydney	176	1.6	120	1.1	632	5.7	10223	91.5	16	0.1	11167	100.0
South Eastern Sydney	167	2.2	92	1.2	334	4.3	7106	92.3	3	0.0	7702	100.0
Illawarra Shoalhaven	23	0.7	21	0.6	191	5.6	3148	93.1	0	0.0	3383	100.0
Western Sydney	225	2.2	117	1.1	402	3.9	9692	92.9	2	0.0	10438	100.0
Nepean Blue Mountains	125	2.4	76	1.5	323	6.2	4644	89.8	1	0.0	5169	100.0
Northern Sydney	103	1.8	56	1.0	236	4.1	5407	93.2	0	0.0	5802	100.0
Central Coast	17	0.6	17	0.6	146	4.9	2792	93.9	0	0.0	2972	100.0
Hunter New England	228	2.6	113	1.3	502	5.6	8063	90.5	7	0.1	8913	100.0
Northern NSW	22	0.8	18	0.6	143	5.0	2676	93.5	4	0.1	2863	100.0
Mid North Coast	21	1.0	8	0.4	98	4.5	2072	94.1	2	0.1	2201	100.0
Southern NSW	6	0.4	0	0.0	44	3.0	1415	96.5	2	0.1	1467	100.0
Murrumbidgee	9	0.4	11	0.5	131	6.3	1924	92.6	2	0.1	2077	100.0
Western NSW	19	0.6	23	0.7	172	5.1	3140	93.6	2	0.1	3356	100.0
Far West	2	1.0	2	1.0	4	2.0	197	96.1	0	0.0	205	100.0
Private Hospitals	58	0.3	74	0.4	1143	5.4	19755	93.9	10	0.0	21040	100.0
<b>TOTAL*</b>	<b>1355</b>	<b>1.4</b>	<b>810</b>	<b>0.8</b>	<b>4944</b>	<b>5.2</b>	<b>88653</b>	<b>92.5</b>	<b>63</b>	<b>0.1</b>	<b>95825</b>	<b>100.0</b>

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 49: BIRTHS BY GESTATIONAL AGE, HOSPITAL AND PEER GROUP, NSW 2017<sup>a</sup>**

Peer Group-hospital	Gestational age (weeks)										TOTAL	
	<32		32–33		34–36		37+		Not stated			
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>												
Royal Prince Alfred	146	2.8	57	1.1	357	6.9	4583	89.1	2	0.0	5145	100.0
Gosford	17	0.6	17	0.6	146	5.1	2693	93.7	0	0.0	2873	100.0
Royal North Shore	91	3.2	52	1.9	151	5.4	2515	89.5	0	0.0	2809	100.0
St. George	20	0.8	22	0.9	129	5.2	2312	93.1	0	0.0	2483	100.0
Royal Hospital for Women	137	3.5	69	1.7	175	4.4	3570	90.3	2	0.1	3953	100.0
Liverpool	138	3.8	91	2.5	257	7.1	3143	86.6	2	0.1	3631	100.0
Nepean	120	3.0	75	1.9	273	6.7	3585	88.5	0	0.0	4053	100.0
Westmead	186	3.2	98	1.7	249	4.2	5325	90.9	2	0.0	5860	100.0
Bankstown-Lidcombe	7	0.4	3	0.2	101	5.4	1759	93.8	5	0.3	1875	100.0
Wollongong	19	0.8	19	0.8	165	6.6	2316	91.9	0	0.0	2519	100.0
John Hunter	198	4.8	103	2.5	303	7.3	3562	85.5	1	0.0	4167	100.0
<b>TOTAL</b>	<b>1079</b>	<b>2.7</b>	<b>606</b>	<b>1.5</b>	<b>2306</b>	<b>5.9</b>	<b>35363</b>	<b>89.8</b>	<b>14</b>	<b>0.0</b>	<b>39368</b>	<b>100.0</b>
<b>Peer Group B</b>												
Canterbury	8	0.4	5	0.3	86	4.7	1718	94.6	0	0.0	1817	100.0
Hornsby	3	0.2	2	0.2	38	3.1	1197	96.5	0	0.0	1240	100.0
Manly	6	0.7	1	0.1	29	3.2	865	96.0	0	0.0	901	100.0
Mona Vale	3	0.4	1	0.1	18	2.4	730	97.1	0	0.0	752	100.0
Sutherland	10	0.8	1	0.1	30	2.4	1224	96.7	1	0.1	1266	100.0
Auburn	8	0.6	0	0.0	19	1.4	1285	97.9	0	0.0	1312	100.0
Blacktown	31	0.9	19	0.6	134	4.1	3082	94.4	0	0.0	3266	100.0
Fairfield	4	0.2	3	0.2	70	4.2	1608	95.4	1	0.1	1686	100.0
Campbelltown	25	0.7	22	0.6	192	5.4	3328	93.3	1	0.0	3568	100.0
Coffs Harbour	5	0.4	5	0.4	48	4.3	1058	94.7	1	0.1	1117	100.0
Lismore Base	9	0.7	13	1.1	83	6.8	1108	91.2	2	0.2	1215	100.0
Tweed Heads	9	0.8	4	0.4	48	4.4	1038	94.4	1	0.1	1100	100.0
Port Macquarie Base	10	1.3	3	0.4	44	5.8	696	92.3	1	0.1	754	100.0
Tamworth Base	10	1.0	4	0.4	62	6.2	919	92.0	4	0.4	999	100.0
Manning Base	7	1.1	1	0.2	24	3.8	596	94.9	0	0.0	628	100.0
Dubbo Base	7	0.6	13	1.1	82	6.7	1130	91.6	1	0.1	1233	100.0
Orange Base	7	0.7	7	0.7	59	6.2	882	92.3	1	0.1	956	100.0
Shoalhaven	4	0.5	2	0.2	26	3.0	831	96.3	0	0.0	863	100.0
Maitland	7	0.5	2	0.1	63	4.2	1431	95.2	0	0.0	1503	100.0
Wagga Wagga Base	7	0.7	5	0.5	88	8.2	967	90.6	0	0.0	1067	100.0
Other hospitals	0	0.0	0	0.0	0	0.0	99	100.0	0	0.0	99	100.0
<b>TOTAL</b>	<b>180</b>	<b>0.7</b>	<b>113</b>	<b>0.4</b>	<b>1243</b>	<b>4.5</b>	<b>25792</b>	<b>94.3</b>	<b>14</b>	<b>0.1</b>	<b>27342</b>	<b>100.0</b>

(Continued on next page)

TABLE 49: (Continued)

Peer Group–hospital	Gestational age (weeks)											
	<32		32–33		34–36		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group C</b>												
Blue Mountains	0	0.0	0	0.0	1	0.4	223	99.6	0	0.0	<b>224</b>	<b>100.0</b>
Hawkesbury	4	0.6	1	0.1	39	5.5	667	93.7	1	0.1	<b>712</b>	<b>100.0</b>
Grafton Base	4	1.1	1	0.3	12	3.2	360	95.2	1	0.3	<b>378</b>	<b>100.0</b>
Kempsey	6	2.3	0	0.0	4	1.5	252	96.2	0	0.0	<b>262</b>	<b>100.0</b>
Armidale	3	0.7	2	0.5	34	8.0	385	90.8	0	0.0	<b>424</b>	<b>100.0</b>
Inverell	2	0.9	0	0.0	5	2.2	220	96.9	0	0.0	<b>227</b>	<b>100.0</b>
Mudgee	3	1.3	1	0.4	2	0.9	226	97.4	0	0.0	<b>232</b>	<b>100.0</b>
Bathurst Base	2	0.4	2	0.4	22	4.4	478	94.8	0	0.0	<b>504</b>	<b>100.0</b>
Bega	0	0.0	0	0.0	5	2.0	245	97.6	1	0.4	<b>251</b>	<b>100.0</b>
Goulburn Base	2	0.7	0	0.0	11	4.0	260	95.2	0	0.0	<b>273</b>	<b>100.0</b>
Moruya	4	1.3	0	0.0	14	4.7	279	93.9	0	0.0	<b>297</b>	<b>100.0</b>
Queanbeyan	0	0.0	0	0.0	6	1.2	510	98.6	1	0.2	<b>517</b>	<b>100.0</b>
Bowral	2	0.5	1	0.2	12	2.9	385	94.6	7	1.7	<b>407</b>	<b>100.0</b>
Griffith Base	2	0.4	5	0.9	33	6.0	508	92.7	0	0.0	<b>548</b>	<b>100.0</b>
Broken Hill Base	2	1.0	2	1.0	4	2.0	197	96.1	0	0.0	<b>205</b>	<b>100.0</b>
Other hospitals	2	0.1	0	0.0	42	2.0	2010	97.7	3	0.1	<b>2057</b>	<b>100.0</b>
<b>TOTAL</b>	<b>38</b>	<b>0.5</b>	<b>15</b>	<b>0.2</b>	<b>246</b>	<b>3.3</b>	<b>7205</b>	<b>95.8</b>	<b>14</b>	<b>0.2</b>	<b>7518</b>	<b>100.0</b>
<b>Peer Group D</b>												
<b>TOTAL</b>	<b>0</b>	<b>0.0</b>	<b>2</b>	<b>0.4</b>	<b>6</b>	<b>1.3</b>	<b>439</b>	<b>98.0</b>	<b>1</b>	<b>0.2</b>	<b>448</b>	<b>100.0</b>
<b>Private</b>												
Mater, North Sydney	3	0.1	11	0.5	119	5.5	2031	93.8	1	0.0	<b>2165</b>	<b>100.0</b>
North Shore Private	11	0.4	14	0.6	146	5.9	2302	93.1	0	0.0	<b>2473</b>	<b>100.0</b>
Sydney Adventist	3	0.2	10	0.5	90	4.8	1782	94.5	0	0.0	<b>1885</b>	<b>100.0</b>
North Gosford Private	4	0.6	1	0.1	41	6.1	624	92.6	4	0.6	<b>674</b>	<b>100.0</b>
Hurstville Community	1	0.2	2	0.3	22	3.7	565	95.4	2	0.3	<b>592</b>	<b>100.0</b>
Kareena Private	0	0.0	8	1.1	28	3.9	680	95.0	0	0.0	<b>716</b>	<b>100.0</b>
St. George Private	7	0.5	8	0.5	82	5.5	1382	93.4	0	0.0	<b>1479</b>	<b>100.0</b>
Prince of Wales Private	3	0.1	3	0.1	92	4.2	2099	95.5	0	0.0	<b>2197</b>	<b>100.0</b>
Norwest Private	5	0.3	7	0.4	106	5.5	1823	93.9	0	0.0	<b>1941</b>	<b>100.0</b>
Sydney Southwest Private	3	0.3	2	0.2	43	4.7	861	94.7	0	0.0	<b>909</b>	<b>100.0</b>
Nepean Private	1	0.1	0	0.0	65	8.9	668	91.0	0	0.0	<b>734</b>	<b>100.0</b>
Westmead Private	6	0.3	5	0.2	105	5.0	2001	94.5	0	0.0	<b>2117</b>	<b>100.0</b>
Wollongong Private	2	0.2	1	0.1	45	4.7	905	95.0	0	0.0	<b>953</b>	<b>100.0</b>
Newcastle Private	9	0.5	0	0.0	131	7.1	1706	92.4	0	0.0	<b>1846</b>	<b>100.0</b>
Calvary, Wagga Wagga	0	0.0	2	0.6	28	8.4	305	91.0	0	0.0	<b>335</b>	<b>100.0</b>
Other hospitals	0	0.0	0	0.0	0	0.0	21	87.5	3	12.5	<b>24</b>	<b>100.0</b>
<b>TOTAL</b>	<b>58</b>	<b>0.3</b>	<b>74</b>	<b>0.4</b>	<b>1143</b>	<b>5.4</b>	<b>19755</b>	<b>93.9</b>	<b>10</b>	<b>0.0</b>	<b>21040</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>1355</b>	<b>1.4</b>	<b>810</b>	<b>0.8</b>	<b>4944</b>	<b>5.2</b>	<b>88653</b>	<b>92.5</b>	<b>63</b>	<b>0.1</b>	<b>95825</b>	<b>100.0</b>

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

# Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.

\* Total NSW includes births at home assisted by independent midwives.

## Neonatal resuscitation

Table 50 shows the type of neonatal resuscitation for local health districts, and Table 51 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 50: BIRTHS BY TYPE OF RESUSCITATION AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Resuscitation of baby															
	None/Minimal		Suction		O <sub>2</sub> Therapy		IPPR by mask		Intubation and IPPR		External cardiac massage and ventilation		CPAP ventilation		TOTAL <sup>†</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	5801	83.3	164	2.4	155	2.2	634	9.1	42	0.6	28	0.4	136	2.0	<b>6962</b>	<b>100.0</b>
South Western Sydney	9879	88.5	265	2.4	269	2.4	551	4.9	13	0.1	45	0.4	139	1.2	<b>11167</b>	<b>100.0</b>
South Eastern Sydney	6008	78.0	447	5.8	128	1.7	239	3.1	60	0.8	27	0.4	793	10.3	<b>7702</b>	<b>100.0</b>
Illawarra Shoalhaven	2906	85.9	89	2.6	66	2.0	89	2.6	3	0.1	13	0.4	217	6.4	<b>3383</b>	<b>100.0</b>
Western Sydney	8190	78.5	903	8.7	117	1.1	222	2.1	81	0.8	37	0.4	886	8.5	<b>10438</b>	<b>100.0</b>
Nepean Blue Mountains	4074	78.8	320	6.2	152	2.9	161	3.1	40	0.8	15	0.3	407	7.9	<b>5169</b>	<b>100.0</b>
Northern Sydney	4735	81.6	234	4.0	67	1.2	144	2.5	26	0.4	12	0.2	584	10.1	<b>5802</b>	<b>100.0</b>
Central Coast	2417	81.3	97	3.3	60	2.0	175	5.9	5	0.2	10	0.3	208	7.0	<b>2972</b>	<b>100.0</b>
Hunter New England	7088	79.5	192	2.2	65	0.7	287	3.2	24	0.3	33	0.4	1219	13.7	<b>8913</b>	<b>100.0</b>
Northern NSW	2355	82.3	60	2.1	28	1.0	63	2.2	8	0.3	8	0.3	340	11.9	<b>2863</b>	<b>100.0</b>
Mid North Coast	1855	84.3	39	1.8	20	0.9	49	2.2	7	0.3	7	0.3	224	10.2	<b>2201</b>	<b>100.0</b>
Southern NSW	1266	86.3	10	0.7	10	0.7	38	2.6	0	0.0	5	0.3	135	9.2	<b>1467</b>	<b>100.0</b>
Murrumbidgee	1783	85.8	29	1.4	46	2.2	105	5.1	3	0.1	15	0.7	96	4.6	<b>2077</b>	<b>100.0</b>
Western NSW	2844	84.7	61	1.8	73	2.2	140	4.2	6	0.2	25	0.7	207	6.2	<b>3356</b>	<b>100.0</b>
Far West	179	87.3	6	2.9	3	1.5	12	5.9	0	0.0	2	1.0	3	1.5	<b>205</b>	<b>100.0</b>
Private Hospitals	19010	90.4	460	2.2	637	3.0	627	3.0	10	0.0	21	0.1	214	1.0	<b>21040</b>	<b>100.0</b>
<b>TOTAL<sup>†</sup></b>	<b>80489</b>	<b>84.0</b>	<b>3378</b>	<b>3.5</b>	<b>1899</b>	<b>2.0</b>	<b>3539</b>	<b>3.7</b>	<b>328</b>	<b>0.3</b>	<b>303</b>	<b>0.3</b>	<b>5808</b>	<b>6.1</b>	<b>95825</b>	<b>100.0</b>

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.

<sup>†</sup> Total includes births where resuscitation type was not stated.

\* Total includes births at home assisted by independent midwives.

**TABLE 51: BIRTHS BY TYPE OF RESUSCITATION, HOSPITAL AND PEER GROUP, NSW 2017<sup>#</sup>**

Peer Group-hospital	Resuscitation of baby																	
	None/Minimal		Suction		O <sub>2</sub> Therapy		IPPR by mask		Intubation and IPPR		External cardiac massage and ventilation		CPAP ventilation		Not stated		TOTAL <sup>†</sup>	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>																		
Royal Prince Alfred	4243	82.5	104	2.0	100	1.9	516	10.0	41	0.8	19	0.4	122	2.4	0	0.0	<b>5145</b>	<b>100.0</b>
Gosford	2323	80.9	96	3.3	60	2.1	174	6.1	5	0.2	10	0.3	205	7.1	0	0.0	<b>2873</b>	<b>100.0</b>
Royal North Shore	2138	76.1	186	6.6	26	0.9	60	2.1	24	0.9	4	0.1	371	13.2	0	0.0	<b>2809</b>	<b>100.0</b>
St. George	2115	85.2	42	1.7	25	1.0	68	2.7	0	0.0	9	0.4	224	9.0	0	0.0	<b>2483</b>	<b>100.0</b>
Royal Hospital for Women	2815	71.2	371	9.4	96	2.4	139	3.5	59	1.5	16	0.4	457	11.6	0	0.0	<b>3953</b>	<b>100.0</b>
Liverpool	3051	84.0	145	4.0	128	3.5	245	6.7	9	0.2	7	0.2	43	1.2	3	0.1	<b>3631</b>	<b>100.0</b>
Nepean	3106	76.6	277	6.8	94	2.3	147	3.6	36	0.9	12	0.3	381	9.4	0	0.0	<b>4053</b>	<b>100.0</b>
Westmead	4524	77.2	376	6.4	51	0.9	120	2.0	78	1.3	19	0.3	690	11.8	2	0.0	<b>5860</b>	<b>100.0</b>
Bankstown-Lidcombe	1685	89.9	33	1.8	20	1.1	103	5.5	2	0.1	12	0.6	20	1.1	0	0.0	<b>1875</b>	<b>100.0</b>
Wollongong	2151	85.4	73	2.9	46	1.8	69	2.7	3	0.1	10	0.4	167	6.6	0	0.0	<b>2519</b>	<b>100.0</b>
John Hunter	3129	75.1	92	2.2	15	0.4	110	2.6	20	0.5	17	0.4	784	18.8	0	0.0	<b>4167</b>	<b>100.0</b>
<b>TOTAL</b>	<b>31280</b>	<b>79.5</b>	<b>1795</b>	<b>4.6</b>	<b>661</b>	<b>1.7</b>	<b>1751</b>	<b>4.4</b>	<b>277</b>	<b>0.7</b>	<b>135</b>	<b>0.3</b>	<b>3464</b>	<b>8.8</b>	<b>5</b>	<b>0.0</b>	<b>39368</b>	<b>100.0</b>
<b>Peer Group B</b>																		
Canterbury	1558	85.7	60	3.3	55	3.0	118	6.5	1	0.1	9	0.5	14	0.8	2	0.1	<b>1817</b>	<b>100.0</b>
Hornsby	1053	84.9	29	2.3	13	1.0	30	2.4	2	0.2	3	0.2	110	8.9	0	0.0	<b>1240</b>	<b>100.0</b>
Manly	796	88.3	10	1.1	19	2.1	25	2.8	0	0.0	4	0.4	47	5.2	0	0.0	<b>901</b>	<b>100.0</b>
Mona Vale	659	87.6	8	1.1	5	0.7	25	3.3	0	0.0	0	0.0	55	7.3	0	0.0	<b>752</b>	<b>100.0</b>
Sutherland	1078	85.2	34	2.7	7	0.6	32	2.5	1	0.1	2	0.2	112	8.8	0	0.0	<b>1266</b>	<b>100.0</b>
Auburn	1200	91.5	57	4.3	22	1.7	21	1.6	2	0.2	5	0.4	5	0.4	0	0.0	<b>1312</b>	<b>100.0</b>
Blacktown	2466	75.5	470	14.4	44	1.3	81	2.5	1	0.0	13	0.4	191	5.8	0	0.0	<b>3266</b>	<b>100.0</b>
Fairfield	1527	90.6	44	2.6	45	2.7	38	2.3	1	0.1	2	0.1	28	1.7	1	0.1	<b>1686</b>	<b>100.0</b>
Campbelltown	3265	91.5	41	1.1	58	1.6	144	4.0	0	0.0	20	0.6	39	1.1	1	0.0	<b>3568</b>	<b>100.0</b>
Coffs Harbour	947	84.8	25	2.2	15	1.3	16	1.4	1	0.1	2	0.2	111	9.9	0	0.0	<b>1117</b>	<b>100.0</b>
Lismore Base	975	80.2	24	2.0	18	1.5	31	2.6	6	0.5	2	0.2	159	13.1	0	0.0	<b>1215</b>	<b>100.0</b>
Tweed Heads	900	81.8	32	2.9	6	0.5	21	1.9	2	0.2	5	0.5	134	12.2	0	0.0	<b>1100</b>	<b>100.0</b>
Port Macquarie Base	612	81.2	12	1.6	4	0.5	29	3.8	6	0.8	4	0.5	87	11.5	0	0.0	<b>754</b>	<b>100.0</b>
Tamworth Base	742	74.3	47	4.7	11	1.1	48	4.8	2	0.2	6	0.6	140	14.0	3	0.3	<b>999</b>	<b>100.0</b>
Manning Base	524	83.4	7	1.1	3	0.5	27	4.3	1	0.2	6	1.0	60	9.6	0	0.0	<b>628</b>	<b>100.0</b>
Dubbo Base	1015	82.3	34	2.8	23	1.9	45	3.6	3	0.2	8	0.6	105	8.5	0	0.0	<b>1233</b>	<b>100.0</b>
Orange Base	808	84.5	17	1.8	26	2.7	47	4.9	0	0.0	11	1.2	47	4.9	0	0.0	<b>956</b>	<b>100.0</b>
Shoalhaven	754	87.4	16	1.9	20	2.3	20	2.3	0	0.0	3	0.3	50	5.8	0	0.0	<b>863</b>	<b>100.0</b>

(Continued on next page)

TABLE 51: (Continued)

Peer Group–hospital	Resuscitation of baby																		
	None/Minimal		Suction		O <sub>2</sub> 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.	%	
Maitland	1334	88.8	11	0.7	6	0.4	36	2.4	0	0.0	4	0.3	112	7.5	0	0.0	1503	100.0	
Wagga Wagga Base	897	84.1	22	2.1	9	0.8	57	5.3	1	0.1	5	0.5	76	7.1	0	0.0	1067	100.0	
Other hospitals	94	94.9	1	1.0	0	0.0	1	1.0	0	0.0	0	0.0	3	3.0	0	0.0	99	100.0	
<b>TOTAL</b>	<b>23204</b>	<b>84.9</b>	<b>1001</b>	<b>3.7</b>	<b>409</b>	<b>1.5</b>	<b>892</b>	<b>3.3</b>	<b>30</b>	<b>0.1</b>	<b>114</b>	<b>0.4</b>	<b>1685</b>	<b>6.2</b>	<b>7</b>	<b>0.0</b>	<b>27342</b>	<b>100.0</b>	
<b>Peer Group C</b>																			
Blue Mountains	197	87.9	6	2.7	2	0.9	3	1.3	0	0.0	0	0.0	16	7.1	0	0.0	224	100.0	
Hawkesbury	618	86.8	33	4.6	46	6.5	5	0.7	1	0.1	3	0.4	6	0.8	0	0.0	712	100.0	
Grafton Base	323	85.4	4	1.1	2	0.5	9	2.4	0	0.0	1	0.3	38	10.1	1	0.3	378	100.0	
Kempsey	231	88.2	1	0.4	1	0.4	4	1.5	0	0.0	1	0.4	24	9.2	0	0.0	262	100.0	
Armidale	326	76.9	6	1.4	7	1.7	17	4.0	0	0.0	0	0.0	68	16.0	0	0.0	424	100.0	
Inverell	163	71.8	21	9.3	11	4.8	26	11.5	0	0.0	0	0.0	6	2.6	0	0.0	227	100.0	
Mudgee	214	92.2	2	0.9	3	1.3	7	3.0	0	0.0	1	0.4	5	2.2	0	0.0	232	100.0	
Bathurst Base	417	82.7	6	1.2	9	1.8	32	6.3	1	0.2	4	0.8	35	6.9	0	0.0	504	100.0	
Bega	226	90.0	0	0.0	3	1.2	13	5.2	0	0.0	0	0.0	8	3.2	1	0.4	251	100.0	
Goulburn Base	232	85.0	8	2.9	4	1.5	13	4.8	0	0.0	1	0.4	14	5.1	1	0.4	273	100.0	
Moruya	274	92.3	0	0.0	2	0.7	4	1.3	0	0.0	1	0.3	16	5.4	0	0.0	297	100.0	
Queanbeyan	411	79.5	1	0.2	1	0.2	8	1.5	0	0.0	3	0.6	92	17.8	1	0.2	517	100.0	
Bowral	351	86.2	2	0.5	18	4.4	21	5.2	1	0.2	4	1.0	9	2.2	1	0.2	407	100.0	
Griffith Base	472	86.1	2	0.4	29	5.3	34	6.2	2	0.4	3	0.5	6	1.1	0	0.0	548	100.0	
Broken Hill Base	179	87.3	6	2.9	3	1.5	12	5.9	0	0.0	2	1.0	3	1.5	0	0.0	205	100.0	
Other hospitals	1856	90.2	18	0.9	38	1.8	47	2.3	5	0.2	6	0.3	85	4.1	2	0.1	2057	100.0	
<b>TOTAL</b>	<b>6490</b>	<b>86.3</b>	<b>116</b>	<b>1.5</b>	<b>179</b>	<b>2.4</b>	<b>255</b>	<b>3.4</b>	<b>10</b>	<b>0.1</b>	<b>30</b>	<b>0.4</b>	<b>431</b>	<b>5.7</b>	<b>7</b>	<b>0.1</b>	<b>7518</b>	<b>100.0</b>	
<b>Peer Group D</b>																			
<b>TOTAL</b>	<b>405</b>	<b>90.4</b>	<b>4</b>	<b>0.9</b>	<b>10</b>	<b>2.2</b>	<b>11</b>	<b>2.5</b>	<b>1</b>	<b>0.2</b>	<b>3</b>	<b>0.7</b>	<b>14</b>	<b>3.1</b>	<b>0</b>	<b>0.0</b>	<b>448</b>	<b>100.0</b>	
<b>Private</b>																			
Mater, North Sydney	1933	89.3	43	2.0	90	4.2	96	4.4	1	0.0	2	0.1	0	0.0	0	0.0	2165	100.0	
North Shore Private	2257	91.3	89	3.6	66	2.7	36	1.5	2	0.1	0	0.0	1	0.0	22	0.9	2473	100.0	
Sydney Adventist	1748	92.7	16	0.8	47	2.5	37	2.0	1	0.1	2	0.1	34	1.8	0	0.0	1885	100.0	
North Gosford Private	611	90.7	11	1.6	15	2.2	30	4.5	0	0.0	2	0.3	3	0.4	2	0.3	674	100.0	
Hurstville Community	534	90.2	10	1.7	34	5.7	11	1.9	0	0.0	0	0.0	0	0.0	3	0.5	592	100.0	
Kareena Private	605	84.5	21	2.9	53	7.4	25	3.5	0	0.0	0	0.0	6	0.8	6	0.8	716	100.0	
St. George Private	1154	78.0	69	4.7	166	11.2	45	3.0	1	0.1	0	0.0	24	1.6	20	1.4	1479	100.0	
Prince of Wales Private	2075	94.4	12	0.5	16	0.7	72	3.3	1	0.0	0	0.0	21	1.0	0	0.0	2197	100.0	
Norwest Private	1838	94.7	2	0.1	17	0.9	76	3.9	0	0.0	3	0.2	5	0.3	0	0.0	1941	100.0	
Sydney Southwest Private	880	96.8	1	0.1	2	0.2	23	2.5	0	0.0	2	0.2	1	0.1	0	0.0	909	100.0	
Nepean Private	675	92.0	0	0.0	24	3.3	22	3.0	0	0.0	4	0.5	9	1.2	0	0.0	734	100.0	
Westmead Private	1923	90.8	68	3.2	55	2.6	53	2.5	3	0.1	3	0.1	5	0.2	7	0.3	2117	100.0	
Wollongong Private	784	82.3	96	10.1	46	4.8	23	2.4	1	0.1	1	0.1	1	0.1	1	0.1	953	100.0	
Newcastle Private	1665	90.2	18	1.0	4	0.2	54	2.9	0	0.0	1	0.1	104	5.6	0	0.0	1846	100.0	
Calvary, Wagga Wagga	305	91.0	4	1.2	2	0.6	23	6.9	0	0.0	1	0.3	0	0.0	0	0.0	335	100.0	
Other hospitals	23	95.8	0	0.0	0	0.0	1	4.2	0	0.0	0	0.0	0	0.0	0	0.0	24	100.0	
<b>TOTAL</b>	<b>19010</b>	<b>90.4</b>	<b>460</b>	<b>2.2</b>	<b>637</b>	<b>3.0</b>	<b>627</b>	<b>3.0</b>	<b>10</b>	<b>0.0</b>	<b>21</b>	<b>0.1</b>	<b>214</b>	<b>1.0</b>	<b>61</b>	<b>0.3</b>	<b>21040</b>	<b>100.0</b>	
<b>TOTAL NSW †</b>	<b>80489</b>	<b>84.0</b>	<b>3378</b>	<b>3.5</b>	<b>1899</b>	<b>2.0</b>	<b>3539</b>	<b>3.7</b>	<b>328</b>	<b>0.3</b>	<b>303</b>	<b>0.3</b>	<b>5808</b>	<b>6.1</b>	<b>81</b>	<b>0.1</b>	<b>95825</b>	<b>100.0</b>	

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 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.

† Total includes births where resuscitation type was not stated.

\* Total NSW includes births at home assisted by independent midwives.

## Infant feeding

Table 52 shows infant feeding at discharge from the hospital of birth for local health districts, and Table 53 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 52: LIVE BIRTHS BY TYPE OF INFANT FEEDING AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	5226	75.6	1332	19.3	243	3.5	114	1.6	6915	100.0
South Western Sydney	6465	58.3	2387	21.5	1440	13.0	789	7.1	11081	100.0
South Eastern Sydney	6178	80.9	998	13.1	349	4.6	107	1.4	7632	100.0
Illawarra Shoalhaven	2603	77.3	203	6.0	485	14.4	75	2.2	3366	100.0
Western Sydney	7712	74.5	1404	13.6	807	7.8	434	4.2	10357	100.0
Nepean Blue Mountains	3643	71.0	523	10.2	864	16.8	99	1.9	5129	100.0
Northern Sydney	4903	84.9	611	10.6	187	3.2	72	1.2	5773	100.0
Central Coast	2259	76.7	327	11.1	311	10.6	50	1.7	2947	100.0
Hunter New England	6625	74.9	840	9.5	1207	13.7	168	1.9	8840	100.0
Northern NSW	2470	86.6	169	5.9	155	5.4	57	2.0	2851	100.0
Mid North Coast	1820	83.2	178	8.1	166	7.6	23	1.1	2187	100.0
Southern NSW	1216	83.1	100	6.8	107	7.3	40	2.7	1463	100.0
Murrumbidgee	1509	73.1	178	8.6	349	16.9	29	1.4	2065	100.0
Western NSW	2576	77.1	239	7.2	464	13.9	61	1.8	3340	100.0
Far West	163	80.3	8	3.9	28	13.8	4	2.0	203	100.0
Private Hospitals	14764	70.4	4533	21.6	759	3.6	921	4.4	20977	100.0
<b>TOTAL*</b>	<b>70234</b>	<b>73.7</b>	<b>14031</b>	<b>14.7</b>	<b>7921</b>	<b>8.3</b>	<b>3048</b>	<b>3.2</b>	<b>95234</b>	<b>100.0</b>

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 53: LIVE BIRTHS BY TYPE OF INFANT FEEDING, HOSPITAL AND PEER GROUP, NSW 2017\***

Peer Group-hospital	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>										
Royal Prince Alfred	3862	75.6	1012	19.8	158	3.1	74	1.4	5106	100.0
Gosford	2171	76.2	325	11.4	305	10.7	47	1.7	2848	100.0
Royal North Shore	2343	83.9	326	11.7	89	3.2	35	1.3	2793	100.0
St. George	1878	76.3	399	16.2	134	5.4	51	2.1	2462	100.0
Royal Hospital for Women	3209	82.0	518	13.2	152	3.9	34	0.9	3913	100.0
Liverpool	2074	57.8	829	23.1	450	12.5	237	6.6	3590	100.0
Nepean	2724	67.8	473	11.8	747	18.6	72	1.8	4016	100.0
Westmead	4422	76.2	612	10.5	400	6.9	368	6.3	5802	100.0
Bankstown-Lidcombe	1223	65.5	378	20.2	227	12.2	39	2.1	1867	100.0
Wollongong	1885	75.3	173	6.9	405	16.2	41	1.6	2504	100.0
John Hunter	3034	73.7	448	10.9	582	14.1	55	1.3	4119	100.0
<b>TOTAL</b>	<b>28825</b>	<b>73.9</b>	<b>5493</b>	<b>14.1</b>	<b>3649</b>	<b>9.4</b>	<b>1053</b>	<b>2.7</b>	<b>39020</b>	<b>100.0</b>
<b>Peer Group B</b>										
Canterbury	1364	75.4	320	17.7	85	4.7	40	2.2	1809	100.0
Hornsby	1051	84.9	128	10.3	45	3.6	14	1.1	1238	100.0
Manly	752	84.1	96	10.7	33	3.7	13	1.5	894	100.0
Mona Vale	663	88.6	61	8.2	19	2.5	5	0.7	748	100.0
Sutherland	1091	86.8	81	6.4	63	5.0	22	1.8	1257	100.0
Auburn	867	66.3	334	25.6	77	5.9	29	2.2	1307	100.0
Blacktown	2423	74.6	458	14.1	330	10.2	37	1.1	3248	100.0
Fairfield	690	41.2	670	40.0	188	11.2	128	7.6	1676	100.0
Campbelltown	2172	61.3	485	13.7	533	15.0	352	9.9	3542	100.0
Coffs Harbour	911	82.1	127	11.5	65	5.9	6	0.5	1109	100.0
Lismore Base	1026	84.8	91	7.5	75	6.2	18	1.5	1210	100.0
Tweed Heads	970	88.6	58	5.3	44	4.0	23	2.1	1095	100.0
Port Macquarie Base	624	83.1	43	5.7	70	9.3	14	1.9	751	100.0
Tamworth Base	695	70.0	98	9.9	146	14.7	54	5.4	993	100.0
Manning Base	496	79.5	48	7.7	69	11.1	11	1.8	624	100.0
Dubbo Base	883	72.3	89	7.3	231	18.9	19	1.6	1222	100.0
Orange Base	737	77.4	101	10.6	94	9.9	20	2.1	952	100.0
Shoalhaven	717	83.3	30	3.5	80	9.3	34	3.9	861	100.0
Maitland	1118	74.7	117	7.8	242	16.2	19	1.3	1496	100.0
Wagga Wagga Base	744	70.3	95	9.0	203	19.2	17	1.6	1059	100.0
Other hospitals	88	88.9	2	2.0	6	6.1	3	3.0	99	100.0
<b>TOTAL</b>	<b>20082</b>	<b>73.9</b>	<b>3532</b>	<b>13.0</b>	<b>2698</b>	<b>9.9</b>	<b>878</b>	<b>3.2</b>	<b>27190</b>	<b>100.0</b>

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TABLE 53: (Continued)

Peer Group–hospital	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group C</b>										
Blue Mountains	190	84.8	8	3.6	9	4.0	17	7.6	224	100.0
Hawkesbury	584	82.4	34	4.8	84	11.8	7	1.0	709	100.0
Grafton Base	313	83.2	20	5.3	34	9.0	9	2.4	376	100.0
Kempsey	221	85.3	6	2.3	29	11.2	3	1.2	259	100.0
Armidale	348	82.9	33	7.9	31	7.4	8	1.9	420	100.0
Inverell	168	74.3	27	11.9	29	12.8	2	0.9	226	100.0
Mudgee	189	81.5	9	3.9	26	11.2	8	3.4	232	100.0
Bathurst Base	416	82.7	24	4.8	57	11.3	6	1.2	503	100.0
Bega	194	77.3	26	10.4	27	10.8	4	1.6	251	100.0
Goulburn Base	215	79.3	21	7.7	28	10.3	7	2.6	271	100.0
Moruya	248	84.1	15	5.1	22	7.5	10	3.4	295	100.0
Queanbeyan	452	87.4	31	6.0	21	4.1	13	2.5	517	100.0
Bowral	306	75.4	25	6.2	42	10.3	33	8.1	406	100.0
Griffith Base	390	71.6	67	12.3	81	14.9	7	1.3	545	100.0
Broken Hill Base	163	80.3	8	3.9	28	13.8	4	2.0	203	100.0
Other hospitals	1701	82.8	103	5.0	202	9.8	48	2.3	2054	100.0
<b>TOTAL</b>	<b>6098</b>	<b>81.4</b>	<b>457</b>	<b>6.1</b>	<b>750</b>	<b>10.0</b>	<b>186</b>	<b>2.5</b>	<b>7491</b>	<b>100.0</b>
<b>Peer Group D</b>										
<b>TOTAL</b>	<b>362</b>	<b>81.0</b>	<b>15</b>	<b>3.4</b>	<b>65</b>	<b>14.5</b>	<b>5</b>	<b>1.1</b>	<b>447</b>	<b>100.0</b>
<b>Private</b>										
Mater, North Sydney	1413	65.5	654	30.3	82	3.8	9	0.4	2158	100.0
North Shore Private	1742	70.6	606	24.6	109	4.4	9	0.4	2466	100.0
Sydney Adventist	1216	64.6	383	20.4	62	3.3	220	11.7	1881	100.0
North Gosford Private	596	89.0	48	7.2	23	3.4	3	0.4	670	100.0
Hurstville Community	334	56.5	196	33.2	57	9.6	4	0.7	591	100.0
Kareena Private	611	85.5	57	8.0	41	5.7	6	0.8	715	100.0
St. George Private	868	59.0	489	33.2	106	7.2	8	0.5	1471	100.0
Prince of Wales Private	1677	76.4	423	19.3	0	0.0	95	4.3	2195	100.0
Norwest Private	1381	71.4	359	18.6	0	0.0	195	10.1	1935	100.0
Sydney Southwest Private	542	59.9	256	28.3	0	0.0	107	11.8	905	100.0
Nepean Private	512	69.9	128	17.5	0	0.0	92	12.6	732	100.0
Westmead Private	1465	69.4	487	23.1	144	6.8	14	0.7	2110	100.0
Wollongong Private	720	75.6	108	11.3	119	12.5	5	0.5	952	100.0
Newcastle Private	1380	75.1	303	16.5	0	0.0	154	8.4	1837	100.0
Calvary, Wagga Wagga	286	85.4	35	10.4	14	4.2	0	0.0	335	100.0
Other hospitals	21	87.5	1	4.2	2	8.3	0	0.0	24	100.0
<b>TOTAL</b>	<b>14764</b>	<b>70.4</b>	<b>4533</b>	<b>21.6</b>	<b>759</b>	<b>3.6</b>	<b>921</b>	<b>4.4</b>	<b>20977</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>70234</b>	<b>73.7</b>	<b>14031</b>	<b>14.7</b>	<b>7921</b>	<b>8.3</b>	<b>3048</b>	<b>3.2</b>	<b>95234</b>	<b>100.0</b>

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

# Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.

\* Total NSW includes births at home assisted by independent midwives.

## Baby discharge status

Table 54 shows the discharge status of babies for local health districts, and Table 55 for individual hospitals by peer group where at least 200 mothers gave birth in 2017.

**TABLE 54: BABY DISCHARGE STATUS BY HOSPITAL AND LOCAL HEALTH DISTRICT OF HOSPITAL, NSW 2017**

Local Health District	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	6738	96.8	47	0.7	27	0.4	148	2.1	2	0.0	6962	100.0
South Western Sydney	10748	96.2	86	0.8	18	0.2	309	2.8	6	0.1	11167	100.0
South Eastern Sydney	7419	96.3	70	0.9	23	0.3	129	1.7	61	0.8	7702	100.0
Illawarra Shoalhaven	3258	96.3	17	0.5	3	0.1	54	1.6	51	1.5	3383	100.0
Western Sydney	9729	93.2	81	0.8	51	0.5	314	3.0	263	2.5	10438	100.0
Nepean Blue Mountains	4842	93.7	40	0.8	17	0.3	212	4.1	58	1.1	5169	100.0
Northern Sydney	5620	96.9	29	0.5	17	0.3	136	2.3	0	0.0	5802	100.0
Central Coast	2894	97.4	25	0.8	2	0.1	51	1.7	0	0.0	2972	100.0
Hunter New England	8284	92.9	73	0.8	45	0.5	435	4.9	76	0.9	8913	100.0
Northern NSW	2783	97.2	12	0.4	5	0.2	29	1.0	34	1.2	2863	100.0
Mid North Coast	2117	96.2	14	0.6	3	0.1	67	3.0	0	0.0	2201	100.0
Southern NSW	1409	96.0	4	0.3	1	0.1	40	2.7	13	0.9	1467	100.0
Murrumbidgee	1918	92.3	12	0.6	0	0.0	138	6.6	9	0.4	2077	100.0
Western NSW	3167	94.4	16	0.5	5	0.1	165	4.9	3	0.1	3356	100.0
Far West	198	96.6	2	1.0	0	0.0	5	2.4	0	0.0	205	100.0
Private Hospitals	20823	99.0	62	0.3	7	0.0	147	0.7	1	0.0	21040	100.0
<b>TOTAL*</b>	<b>92049</b>	<b>96.1</b>	<b>590</b>	<b>0.6</b>	<b>224</b>	<b>0.2</b>	<b>2380</b>	<b>2.5</b>	<b>582</b>	<b>0.6</b>	<b>95825</b>	<b>100.0</b>

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 55: BABY DISCHARGE STATUS BY HOSPITAL AND PEER GROUP, NSW 2017\***

Peer Group—hospital	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group A</b>												
Royal Prince Alfred	4961	96.4	39	0.8	24	0.5	121	2.4	0	0.0	5145	100.0
Gosford	2801	97.5	25	0.9	2	0.1	45	1.6	0	0.0	2873	100.0
Royal North Shore	2673	95.2	16	0.6	17	0.6	103	3.7	0	0.0	2809	100.0
St. George	2407	96.9	21	0.8	4	0.2	12	0.5	39	1.6	2483	100.0
Royal Hospital for Women	3780	95.6	40	1.0	19	0.5	111	2.8	3	0.1	3953	100.0
Liverpool	3346	92.2	41	1.1	16	0.4	225	6.2	3	0.1	3631	100.0
Nepean	3764	92.9	37	0.9	17	0.4	194	4.8	41	1.0	4053	100.0
Westmead	5249	89.6	58	1.0	33	0.6	270	4.6	250	4.3	5860	100.0
Bankstown—Lidcombe	1846	98.5	8	0.4	0	0.0	19	1.0	2	0.1	1875	100.0
Wollongong	2434	96.6	15	0.6	3	0.1	43	1.7	24	1.0	2519	100.0
John Hunter	3824	91.8	48	1.2	39	0.9	243	5.8	13	0.3	4167	100.0
<b>TOTAL</b>	<b>37085</b>	<b>94.2</b>	<b>348</b>	<b>0.9</b>	<b>174</b>	<b>0.4</b>	<b>1386</b>	<b>3.5</b>	<b>375</b>	<b>1.0</b>	<b>39368</b>	<b>100.0</b>
<b>Peer Group B</b>												
Canterbury	1777	97.8	8	0.4	3	0.2	27	1.5	2	0.1	1817	100.0
Hornsby	1227	99.0	2	0.2	0	0.0	11	0.9	0	0.0	1240	100.0
Manly	880	97.7	7	0.8	0	0.0	14	1.6	0	0.0	901	100.0
Mona Vale	746	99.2	4	0.5	0	0.0	2	0.3	0	0.0	752	100.0
Sutherland	1232	97.3	9	0.7	0	0.0	6	0.5	19	1.5	1266	100.0
Auburn	1277	97.3	5	0.4	4	0.3	13	1.0	13	1.0	1312	100.0
Blacktown	3203	98.1	18	0.6	14	0.4	31	0.9	0	0.0	3266	100.0
Fairfield	1656	98.2	10	0.6	0	0.0	19	1.1	1	0.1	1686	100.0
Campbelltown	3503	98.2	26	0.7	2	0.1	37	1.0	0	0.0	3568	100.0
Coffs Harbour	1079	96.6	8	0.7	0	0.0	30	2.7	0	0.0	1117	100.0
Lismore Base	1187	97.7	5	0.4	2	0.2	9	0.7	12	1.0	1215	100.0
Tweed Heads	1069	97.2	5	0.5	1	0.1	11	1.0	14	1.3	1100	100.0
Port Macquarie Base	725	96.2	3	0.4	3	0.4	23	3.1	0	0.0	754	100.0
Tamworth Base	895	89.6	6	0.6	4	0.4	48	4.8	46	4.6	999	100.0
Manning Base	611	97.3	4	0.6	0	0.0	12	1.9	1	0.2	628	100.0
Dubbo Base	1146	92.9	11	0.9	1	0.1	75	6.1	0	0.0	1233	100.0
Orange Base	892	93.3	4	0.4	4	0.4	56	5.9	0	0.0	956	100.0
Shoalhaven	823	95.4	2	0.2	0	0.0	11	1.3	27	3.1	863	100.0
Maitland	1412	93.9	7	0.5	0	0.0	74	4.9	10	0.7	1503	100.0
Wagga Wagga Base	981	91.9	8	0.7	0	0.0	72	6.7	6	0.6	1067	100.0
Other hospitals	93	93.9	0	0.0	0	0.0	6	6.1	0	0.0	99	100.0
<b>TOTAL</b>	<b>26414</b>	<b>96.6</b>	<b>152</b>	<b>0.6</b>	<b>38</b>	<b>0.1</b>	<b>587</b>	<b>2.1</b>	<b>151</b>	<b>0.6</b>	<b>27342</b>	<b>100.0</b>

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TABLE 55: (Continued)

Peer Group–hospital	Baby discharge status											
	Discharged		Stillborn		Neonatal death		Transferred		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
<b>Peer Group C</b>												
Blue Mountains	207	92.4	0	0.0	0	0.0	3	1.3	14	6.3	<b>224</b>	<b>100.0</b>
Hawkesbury	698	98.0	3	0.4	0	0.0	8	1.1	3	0.4	<b>712</b>	<b>100.0</b>
Grafton Base	366	96.8	2	0.5	2	0.5	7	1.9	1	0.3	<b>378</b>	<b>100.0</b>
Kempsey	249	95.0	3	1.1	0	0.0	10	3.8	0	0.0	<b>262</b>	<b>100.0</b>
Armidale	407	96.0	4	0.9	1	0.2	12	2.8	0	0.0	<b>424</b>	<b>100.0</b>
Inverell	222	97.8	1	0.4	1	0.4	3	1.3	0	0.0	<b>227</b>	<b>100.0</b>
Mudgee	222	95.7	0	0.0	0	0.0	10	4.3	0	0.0	<b>232</b>	<b>100.0</b>
Bathurst Base	496	98.4	1	0.2	0	0.0	7	1.4	0	0.0	<b>504</b>	<b>100.0</b>
Bega	246	98.0	0	0.0	0	0.0	5	2.0	0	0.0	<b>251</b>	<b>100.0</b>
Goulburn Base	264	96.7	2	0.7	1	0.4	6	2.2	0	0.0	<b>273</b>	<b>100.0</b>
Moruya	283	95.3	2	0.7	0	0.0	11	3.7	1	0.3	<b>297</b>	<b>100.0</b>
Queanbeyan	496	95.9	0	0.0	0	0.0	12	2.3	9	1.7	<b>517</b>	<b>100.0</b>
Bowral	397	97.5	1	0.2	0	0.0	9	2.2	0	0.0	<b>407</b>	<b>100.0</b>
Griffith Base	500	91.2	3	0.5	0	0.0	45	8.2	0	0.0	<b>548</b>	<b>100.0</b>
Broken Hill Base	198	96.6	2	1.0	0	0.0	5	2.4	0	0.0	<b>205</b>	<b>100.0</b>
Other hospitals	1950	94.8	3	0.1	0	0.0	84	4.1	20	1.0	<b>2057</b>	<b>100.0</b>
<b>TOTAL</b>	<b>7201</b>	<b>95.8</b>	<b>27</b>	<b>0.4</b>	<b>5</b>	<b>0.1</b>	<b>237</b>	<b>3.2</b>	<b>48</b>	<b>0.6</b>	<b>7518</b>	<b>100.0</b>
<b>Peer Group D</b>												
<b>TOTAL</b>	<b>424</b>	<b>94.6</b>	<b>1</b>	<b>0.2</b>	<b>0</b>	<b>0.0</b>	<b>21</b>	<b>4.7</b>	<b>2</b>	<b>0.4</b>	<b>448</b>	<b>100.0</b>
<b>Private</b>												
Mater, North Sydney	2145	99.1	7	0.3	1	0.0	12	0.6	0	0.0	<b>2165</b>	<b>100.0</b>
North Shore Private	2453	99.2	7	0.3	4	0.2	9	0.4	0	0.0	<b>2473</b>	<b>100.0</b>
Sydney Adventist	1874	99.4	4	0.2	1	0.1	6	0.3	0	0.0	<b>1885</b>	<b>100.0</b>
North Gosford Private	663	98.4	3	0.4	0	0.0	8	1.2	0	0.0	<b>674</b>	<b>100.0</b>
Hurstville Community	589	99.5	1	0.2	0	0.0	2	0.3	0	0.0	<b>592</b>	<b>100.0</b>
Kareena Private	707	98.7	1	0.1	0	0.0	8	1.1	0	0.0	<b>716</b>	<b>100.0</b>
St. George Private	1460	98.7	8	0.5	0	0.0	11	0.7	0	0.0	<b>1479</b>	<b>100.0</b>
Prince of Wales Private	2180	99.2	2	0.1	0	0.0	14	0.6	1	0.0	<b>2197</b>	<b>100.0</b>
Norwest Private	1930	99.4	6	0.3	0	0.0	5	0.3	0	0.0	<b>1941</b>	<b>100.0</b>
Sydney Southwest Private	900	99.0	4	0.4	0	0.0	5	0.6	0	0.0	<b>909</b>	<b>100.0</b>
Nepean Private	715	97.4	2	0.3	0	0.0	17	2.3	0	0.0	<b>734</b>	<b>100.0</b>
Westmead Private	2090	98.7	7	0.3	1	0.0	19	0.9	0	0.0	<b>2117</b>	<b>100.0</b>
Wollongong Private	937	98.3	1	0.1	0	0.0	15	1.6	0	0.0	<b>953</b>	<b>100.0</b>
Newcastle Private	1824	98.8	9	0.5	0	0.0	13	0.7	0	0.0	<b>1846</b>	<b>100.0</b>
Calvary, Wagga Wagga	332	99.1	0	0.0	0	0.0	3	0.9	0	0.0	<b>335</b>	<b>100.0</b>
Other hospitals	24	100.0	0	0.0	0	0.0	0	0.0	0	0.0	<b>24</b>	<b>100.0</b>
<b>TOTAL</b>	<b>20823</b>	<b>99.0</b>	<b>62</b>	<b>0.3</b>	<b>7</b>	<b>0.0</b>	<b>147</b>	<b>0.7</b>	<b>1</b>	<b>0.0</b>	<b>21040</b>	<b>100.0</b>
<b>TOTAL NSW*</b>	<b>92049</b>	<b>96.1</b>	<b>590</b>	<b>0.6</b>	<b>224</b>	<b>0.2</b>	<b>2380</b>	<b>2.5</b>	<b>582</b>	<b>0.6</b>	<b>95825</b>	<b>100.0</b>

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.  
 # Hospitals with more than 200 births in 2017 are identified individually. Peer group levels are described on page 84 in Appendix 2: Explanatory notes.  
 \* Total NSW includes births at home assisted by independent midwives.

## Postnatal length of stay

Table 56 shows the mother's postnatal length of stay in the hospital of birth for hospitals where at least 200 mothers gave birth in 2017.

**TABLE 56: AVERAGE MATERNAL POSTNATAL LENGTH OF STAY IN HOSPITAL OF BIRTH, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		Average postnatal length of stay (days)				
		2013	2014	2015	2016	2017
Sydney	Canterbury	2.6	2.6	2.7	2.6	2.5
	Royal Prince Alfred	3.1	3.1	3.1	3.2	3.2
	<b>TOTAL</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>	<b>3.0</b>
South Western Sydney	Fairfield	2.3	2.3	2.5	2.5	2.5
	Liverpool	2.9	2.9	2.7	2.6	2.5
	Campbelltown	2.3	2.3	2.3	2.1	2.1
	Bankstown–Lidcombe	2.6	2.4	2.4	2.4	2.4
	Bowral	2.8	2.8	2.8	2.7	2.6
<b>TOTAL</b>	<b>2.6</b>	<b>2.5</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>	
South Eastern Sydney	St. George	2.8	2.5	2.4	2.2	2.3
	Sutherland	2.6	2.6	2.2	2.0	2.1
	Royal Hospital for Women	3.0	2.9	2.9	3.0	3.0
	Other hospitals	4.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>2.9</b>	<b>2.7</b>	<b>2.7</b>	<b>2.6</b>	<b>2.6</b>	
Illawarra Shoalhaven	Shoalhaven	2.2	2.0	2.2	2.3	2.2
	Wollongong	2.5	2.5	2.4	2.4	2.4
	Other hospitals	2.2	1.7	1.7	1.4	2.0
	<b>TOTAL</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>	<b>2.3</b>
Western Sydney	Auburn	1.9	1.9	1.9	1.9	1.9
	Blacktown	2.2	2.2	2.2	2.1	2.1
	Westmead	2.1	2.0	2.1	2.1	2.1
	<b>TOTAL</b>	<b>2.1</b>	<b>2.0</b>	<b>2.1</b>	<b>2.1</b>	<b>2.1</b>
Nepean Blue Mountains	Blue Mountains	2.2	2.0	2.2	2.5	2.1
	Nepean	2.0	2.0	2.2	2.0	2.1
	Hawkesbury	3.0	3.0	3.0	2.9	2.8
	Other hospitals	3.0	2.8	2.8	2.7	2.8
	<b>TOTAL</b>	<b>2.2</b>	<b>2.2</b>	<b>2.3</b>	<b>2.2</b>	<b>2.3</b>
Northern Sydney	Hornsby	2.0	2.0	2.0	2.1	2.2
	Manly	2.4	2.2	2.4	2.4	2.4
	Mona Vale	2.5	2.5	2.4	2.3	2.3
	Royal North Shore	2.8	2.7	2.9	2.8	2.8
	Other hospitals	0.1	0.2	0.1	0.1	0.2
	<b>TOTAL</b>	<b>2.5</b>	<b>2.4</b>	<b>2.5</b>	<b>2.5</b>	<b>2.5</b>
Central Coast	Gosford	2.2	2.1	2.1	2.1	2.1
	Other hospitals	0.4	0.2	0.1	0.2	0.3
	<b>TOTAL</b>	<b>2.1</b>	<b>2.0</b>	<b>2.0</b>	<b>2.0</b>	<b>2.1</b>
Hunter New England	Armidale	2.4	2.4	2.4	2.5	2.8
	Inverell	2.8	3.3	2.8	2.9	3.1
	Tamworth Base	2.7	2.3	2.5	2.4	2.8
	Manning Base	2.7	2.6	2.7	2.7	2.6
	Maitland	2.1	2.2	2.0	2.0	2.1
	John Hunter	2.6	2.5	2.4	2.4	2.4
	Other hospitals	2.3	2.3	2.3	2.3	2.3
	<b>TOTAL</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>
Northern NSW	Grafton Base	3.1	3.3	3.0	3.0	3.1
	Lismore Base	2.8	2.6	2.3	2.3	2.4
	Tweed Heads	2.6	2.6	2.5	2.5	2.4
	Other hospitals	2.8	3.2	1.8	1.8	1.2
	<b>TOTAL</b>	<b>2.7</b>	<b>2.7</b>	<b>2.5</b>	<b>2.4</b>	<b>2.4</b>

Local Health District–Hospital		Average postnatal length of stay (days)				
		2013	2014	2015	2016	2017
Mid North Coast	Coffs Harbour	2.8	2.5	2.6	2.7	2.7
	Kempsey	2.6	2.5	2.3	2.4	2.8
	Port Macquarie Base	2.8	2.6	2.6	2.4	2.4
	Other hospitals	2.7	2.6	2.0	2.3	2.1
	<b>TOTAL</b>	<b>2.8</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>
Southern NSW	Bega	2.1	2.3	2.4	2.3	2.4
	Goulburn Base	2.8	2.6	2.5	2.4	2.8
	Moruya	2.4	2.2	2.2	2.2	2.1
	Queanbeyan	2.7	2.8	2.8	2.8	2.7
	Other hospitals	3.3	3.3	3.6	2.9	3.6
	<b>TOTAL</b>	<b>2.6</b>	<b>2.6</b>	<b>2.6</b>	<b>2.5</b>	<b>2.6</b>
Murrumbidgee	Griffith Base	2.8	2.9	2.8	2.9	2.6
	Wagga Wagga Base	2.6	2.5	2.5	2.4	2.7
	Other hospitals	3.0	3.0	2.7	2.8	3.0
	<b>TOTAL</b>	<b>2.8</b>	<b>2.8</b>	<b>2.6</b>	<b>2.6</b>	<b>2.7</b>
Western NSW	Dubbo Base	2.5	2.2	2.2	2.2	2.2
	Mudgee	3.0	2.8	2.5	2.4	2.3
	Bathurst Base	2.6	2.5	2.7	2.3	2.5
	Orange Base	2.5	2.5	2.3	2.5	2.5
	Other hospitals	2.9	2.6	2.6	3.0	2.7
	<b>TOTAL</b>	<b>2.6</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>	<b>2.4</b>
Far West	Broken Hill Base	2.5	2.8	2.3	2.1	2.4
	<b>TOTAL</b>	<b>2.5</b>	<b>2.8</b>	<b>2.3</b>	<b>2.1</b>	<b>2.4</b>
Private Hospitals	Mater, North Sydney	4.6	4.7	4.4	4.5	4.6
	North Shore Private	4.5	4.5	4.5	4.5	4.5
	Sydney Adventist	4.6	4.7	4.7	4.7	4.8
	North Gosford Private	4.8	4.9	4.3	4.3	4.3
	Hurstville Community	4.3	4.4	4.2	4.5	4.3
	Kareena Private	4.3	4.4	4.4	4.4	4.4
	St. George Private	4.4	4.4	4.4	4.3	4.4
	Prince of Wales Private	4.6	4.6	4.5	4.5	4.6
	Norwest Private	4.4	4.5	4.3	4.2	4.2
	Sydney Southwest Private	4.4	4.2	4.0	3.8	3.8
	Nepean Private	4.5	4.3	4.1	4.2	4.3
	Westmead Private	4.3	4.3	4.3	4.2	4.0
	Wollongong Private <sup>†</sup>	-	-	-	5.3	5.3
	Newcastle Private	4.3	4.3	4.2	4.3	4.2
	Calvary, Wagga Wagga	4.5	4.8	4.6	4.5	4.4
	Other hospitals	5.2	5.2	5.2	4.5	4.4
	<b>TOTAL</b>	<b>4.5</b>	<b>4.5</b>	<b>4.4</b>	<b>4.4</b>	<b>4.4</b>
<b>TOTAL NSW*</b>	<b>3.0</b>	<b>3.0</b>	<b>2.9</b>	<b>2.9</b>	<b>2.9</b>	

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

<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

<sup>†</sup> Wollongong Private Hospital opened in 2016.

# 7. CLINICAL INDICATORS

Selected clinical indicators for obstetrics are reported in this section. The definitions of the clinical indicators follow those described in Version 8 of the Australian Council on Healthcare Standards Clinical Indicator User Manual for data collected in 2017.<sup>1</sup>

## 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 37<sup>0</sup> to 40<sup>6</sup> 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 57 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 57: 1.1 SELECTED PRIMIPARA WHO HAVE A SPONTANEOUS VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>Sydney</b>	Canterbury	54.4	51.7	49.7	42.6	37.5
	Royal Prince Alfred	52.9	52.4	52.2	51.4	50.5
	<b>TOTAL</b>	<b>53.3</b>	<b>52.2</b>	<b>51.5</b>	<b>49.5</b>	<b>47.4</b>
<b>South Western Sydney</b>	Fairfield	79.9	76.4	69.6	64.1	62.2
	Liverpool	63.2	58.8	59.9	56.0	52.9
	Campbelltown	65.7	62.1	61.5	56.4	58.7
	Bankstown–Lidcombe	64.0	64.4	59.6	48.6	57.5
	Bowral	57.1	45.3	48.4	39.8	51.0
<b>TOTAL</b>	<b>66.7</b>	<b>63.2</b>	<b>61.3</b>	<b>55.5</b>	<b>56.9</b>	
<b>South Eastern Sydney</b>	St. George	52.6	50.7	46.3	44.9	43.9
	Sutherland	57.9	57.9	52.9	56.4	54.7
	Royal Hospital for Women	50.5	48.7	47.4	49.9	45.6
	<b>TOTAL</b>	<b>52.5</b>	<b>50.9</b>	<b>48.0</b>	<b>49.4</b>	<b>46.4</b>
<b>Illawarra Shoalhaven</b>	Shoalhaven	52.6	57.8	49.1	52.9	49.6
	Wollongong	52.0	50.6	52.2	52.6	46.4
	Other hospitals	50.0	88.2	100.0	0.0	0.0
	<b>TOTAL</b>	<b>52.1</b>	<b>53.2</b>	<b>51.5</b>	<b>52.6</b>	<b>47.2</b>
<b>Western Sydney</b>	Auburn	64.2	66.0	61.7	63.5	61.1
	Blacktown	48.3	48.9	50.8	51.4	50.9
	Westmead	50.0	52.6	52.4	53.9	53.8
	<b>TOTAL</b>	<b>51.6</b>	<b>53.5</b>	<b>53.3</b>	<b>54.5</b>	<b>54.0</b>
<b>Nepean Blue Mountains</b>	Blue Mountains	46.7	75.8	52.9	52.0	60.7
	Nepean	44.9	45.7	43.1	46.2	49.2
	Hawkesbury	43.4	44.2	43.4	47.8	46.8
	Other hospitals	61.0	55.3	55.6	62.0	56.3
<b>TOTAL</b>	<b>45.5</b>	<b>47.3</b>	<b>44.3</b>	<b>47.2</b>	<b>49.6</b>	
<b>Northern Sydney</b>	Hornsby	61.5	59.7	54.2	50.6	50.6
	Manly	53.2	48.9	48.9	45.6	47.0
	Mona Vale	43.4	53.4	59.9	52.2	54.2
	Royal North Shore	45.7	49.3	52.9	47.8	47.8
	Other hospitals	100.0	97.3	100.0	100.0	100.0
<b>TOTAL</b>	<b>50.9</b>	<b>52.6</b>	<b>54.2</b>	<b>49.2</b>	<b>49.8</b>	
<b>Central Coast</b>	Gosford	44.0	44.1	51.2	49.7	49.3
	Other hospitals	100.0	100.0	100.0	100.0	100.0
	<b>TOTAL</b>	<b>47.6</b>	<b>46.1</b>	<b>53.1</b>	<b>51.9</b>	<b>50.8</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>Hunter New England</b>	Armidale	62.6	39.2	44.6	51.6	51.3
	Inverell	35.6	46.9	43.3	50.9	59.7
	Tamworth Base	50.8	57.1	50.8	51.1	44.5
	Manning Base	56.6	54.8	48.4	54.7	50.6
	Maitland	56.3	61.3	58.4	62.3	58.3
	John Hunter	54.2	54.2	53.9	51.1	52.8
	Other hospitals	66.0	67.5	65.5	71.0	65.2
<b>TOTAL</b>	<b>55.6</b>	<b>56.4</b>	<b>54.5</b>	<b>55.6</b>	<b>54.2</b>	
<b>Northern NSW</b>	Grafton Base	52.4	60.3	53.4	58.3	62.1
	Lismore Base	56.0	59.1	64.3	54.2	67.4
	Tweed Heads	61.6	53.8	61.6	63.0	58.2
	Other hospitals	96.5	98.4	98.2	84.5	100.0
<b>TOTAL</b>	<b>60.8</b>	<b>59.8</b>	<b>64.1</b>	<b>61.3</b>	<b>64.8</b>	
<b>Mid North Coast</b>	Coffs Harbour	54.3	54.6	56.2	48.0	52.3
	Kempsey	70.5	60.3	58.6	64.4	66.7
	Port Macquarie Base	57.0	50.0	49.7	52.1	56.1
	Other hospitals	66.7	63.6	100.0	100.0	80.0
<b>TOTAL</b>	<b>56.9</b>	<b>53.9</b>	<b>55.1</b>	<b>51.7</b>	<b>55.5</b>	
<b>Southern NSW</b>	Bega	49.2	54.2	54.0	54.4	50.7
	Goulburn Base	48.8	48.5	42.1	40.0	43.4
	Moruya	65.1	62.7	51.5	59.4	51.2
	Queanbeyan	52.0	44.6	49.3	51.9	44.5
	Other hospitals	57.5	73.2	83.0	78.3	76.9
	<b>TOTAL</b>	<b>53.5</b>	<b>53.4</b>	<b>53.4</b>	<b>54.4</b>	<b>49.1</b>
<b>Murrumbidgee</b>	Griffith Base	52.1	44.4	49.1	49.0	57.7
	Wagga Wagga Base	53.0	52.3	43.2	49.8	46.2
	Other hospitals	65.2	62.7	66.1	53.8	65.8
<b>TOTAL</b>	<b>56.4</b>	<b>53.8</b>	<b>50.5</b>	<b>50.5</b>	<b>53.5</b>	
<b>Western NSW</b>	Dubbo Base	51.7	48.8	52.1	51.3	50.6
	Mudgee	73.2	59.0	56.2	56.5	46.7
	Bathurst Base	57.0	50.7	65.5	57.6	61.4
	Orange Base	46.7	48.7	52.8	49.6	47.4
	Other hospitals	58.3	56.9	68.3	66.7	61.5
	<b>TOTAL</b>	<b>53.7</b>	<b>50.9</b>	<b>56.7</b>	<b>54.1</b>	<b>52.4</b>

(Continued on next page)

### Reference

1. Australian Council on Healthcare Standards. *Clinical Indicators User Manual. Maternity Version 8*. Sydney: ACHS, 2017.

TABLE 57: (Continued)

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>Far West</b>	Broken Hill Base	46.5	65.0	67.7	63.3	47.5
	<b>TOTAL</b>	<b>46.5</b>	<b>65.0</b>	<b>67.7</b>	<b>63.3</b>	<b>47.5</b>
<b>Private Hospitals</b>	Mater, North Sydney	35.4	35.8	34.5	28.1	27.8
	North Shore Private	36.0	31.3	30.3	31.2	29.8
	Sydney Adventist	51.9	51.2	52.4	45.3	45.5
	North Gosford Private	35.3	27.6	33.5	28.6	22.4
	Hurstville Community	38.3	36.6	46.4	46.4	44.0
	Kareena Private	34.9	27.9	34.2	28.9	30.6
	St. George Private	33.0	27.8	32.8	33.2	28.0
	Prince of Wales Private	28.6	29.7	30.9	30.7	26.9

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
	Norwest Private	40.4	46.4	39.9	42.8	42.4
	Sydney Southwest Private	47.7	46.3	36.2	39.4	40.5
	Nepean Private	31.6	40.8	42.2	37.9	42.4
	Westmead Private	36.4	35.4	37.2	40.2	39.2
	Wollongong Private†	-	-	-	32.0	39.7
	Newcastle Private	42.9	38.8	40.8	34.9	35.2
	Calvary, Wagga Wagga	23.5	23.0	25.5	35.8	33.3
	Other hospitals	35.2	33.4	33.6	0.0	0.0
	<b>TOTAL</b>	<b>37.4</b>	<b>36.6</b>	<b>36.9</b>	<b>35.7</b>	<b>34.8</b>
<b>TOTAL NSW*</b>		<b>50.6</b>	<b>50.0</b>	<b>49.8</b>	<b>48.5</b>	<b>48.1</b>

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

# Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

† Wollongong Private Hospital opened in 2016.

## 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation. Induction of labour is defined as surgical and/or medical induction.

Table 58 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 58: 1.2 SELECTED PRIMIPARA WHO UNDERGO INDUCTION OF LABOUR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	39.7	44.8	47.6	46.5	53.8
	Royal Prince Alfred	34.6	36.3	38.2	38.4	42.9
	<b>TOTAL</b>	<b>35.7</b>	<b>38.4</b>	<b>40.5</b>	<b>40.2</b>	<b>45.5</b>
South Western Sydney	Fairfield	25.9	30.4	28.9	30.8	38.0
	Liverpool	33.0	33.2	34.3	39.8	41.6
	Campbelltown	40.9	36.2	37.8	38.3	43.2
	Bankstown–Lidcombe	34.0	33.6	39.6	41.1	41.7
	Bowral	38.8	33.3	27.0	31.4	25.2
<b>TOTAL</b>	<b>34.6</b>	<b>33.7</b>	<b>35.4</b>	<b>37.7</b>	<b>40.8</b>	
South Eastern Sydney	St. George	44.9	47.2	49.1	46.7	52.0
	Sutherland	36.5	38.7	39.7	41.2	39.6
	Royal Hospital for Women	41.9	40.5	37.7	38.4	44.6
<b>TOTAL</b>	<b>41.9</b>	<b>42.4</b>	<b>41.7</b>	<b>41.6</b>	<b>46.4</b>	
Illawarra Shoalhaven	Shoalhaven	47.0	41.3	43.1	47.6	46.5
	Wollongong	38.2	46.4	44.2	44.2	49.0
	Other hospitals	18.8	11.8	0.0	0.0	0.0
<b>TOTAL</b>	<b>39.7</b>	<b>44.4</b>	<b>43.7</b>	<b>45.1</b>	<b>48.4</b>	
Western Sydney	Auburn	34.1	38.8	43.0	40.4	49.7
	Blacktown	46.0	43.9	45.8	45.9	48.4
	Westmead	45.2	48.2	46.3	48.3	47.5
	<b>TOTAL</b>	<b>43.8</b>	<b>45.7</b>	<b>45.6</b>	<b>46.4</b>	<b>48.1</b>
Nepean Blue Mountains	Blue Mountains	35.0	27.3	36.8	18.7	24.6
	Nepean	45.5	48.4	48.1	45.6	48.3
	Hawkesbury	47.3	47.0	44.3	51.1	44.4
	Other hospitals	59.3	53.2	61.9	54.0	58.3
<b>TOTAL</b>	<b>46.0</b>	<b>47.3</b>	<b>47.5</b>	<b>45.2</b>	<b>47.0</b>	
Northern Sydney	Hornsby	31.6	37.8	33.0	37.9	41.1
	Manly	43.6	42.3	48.0	42.2	42.3
	Mona Vale	37.4	30.8	36.0	31.0	39.1
	Royal North Shore	45.2	45.1	44.2	45.1	48.7
	Other hospitals	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>40.5</b>	<b>40.6</b>	<b>40.9</b>	<b>40.9</b>	<b>44.2</b>	
Central Coast	Gosford	45.5	42.7	43.8	42.7	41.9
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	<b>TOTAL</b>	<b>42.5</b>	<b>41.2</b>	<b>42.1</b>	<b>40.8</b>	<b>40.7</b>
Hunter New England	Armidale	39.6	32.0	29.8	28.4	43.6
	Inverell	28.8	39.1	35.0	41.8	40.3
	Tamworth Base	48.8	45.6	46.6	45.6	53.7
	Manning Base	42.8	40.1	43.4	52.7	54.2
	Maitland	48.0	43.9	45.6	49.1	49.6
	John Hunter	43.1	46.0	47.1	51.0	52.5
	Other hospitals	25.2	25.7	24.9	27.6	25.4
<b>TOTAL</b>	<b>42.0</b>	<b>42.2</b>	<b>42.9</b>	<b>46.1</b>	<b>48.8</b>	
Northern NSW	Grafton Base	41.9	39.7	42.0	38.5	42.5
	Lismore Base	34.0	33.0	34.5	40.7	37.6
	Tweed Heads	33.4	39.8	44.5	38.2	44.4
	Other hospitals	1.8	0.0	0.0	16.9	0.0
	<b>TOTAL</b>	<b>32.7</b>	<b>34.6</b>	<b>37.9</b>	<b>37.2</b>	<b>38.8</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	37.4	34.3	36.0	44.4	42.1
	Kempsey	36.4	27.6	34.5	22.0	29.6
	Port Macquarie Base	39.6	41.5	45.0	47.4	48.8
	Other hospitals	16.7	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>38.0</b>	<b>35.2</b>	<b>38.2</b>	<b>42.7</b>	<b>42.6</b>	
Southern NSW	Bega	23.0	30.6	27.0	47.1	50.7
	Goulburn Base	30.5	31.8	30.3	28.0	21.1
	Moruya	30.2	27.1	30.3	31.9	29.3
	Queanbeyan	23.7	30.6	30.0	39.0	43.1
	Other hospitals	27.5	28.6	30.2	17.4	35.9
<b>TOTAL</b>	<b>26.4</b>	<b>30.0</b>	<b>29.7</b>	<b>34.7</b>	<b>37.7</b>	
Murrumbidgee	Griffith Base	30.7	41.0	45.5	37.1	38.9
	Wagga Wagga Base	43.5	44.8	49.4	45.7	45.8
	Other hospitals	30.3	28.0	27.4	27.4	22.5
<b>TOTAL</b>	<b>35.5</b>	<b>38.7</b>	<b>42.7</b>	<b>39.3</b>	<b>39.0</b>	
Western NSW	Dubbo Base	43.8	51.2	53.4	52.5	46.8
	Mudgee	40.8	32.8	32.9	34.8	36.7
	Bathurst Base	30.3	38.2	28.2	41.7	41.7
	Orange Base	48.3	45.8	48.0	48.8	50.6
	Other hospitals	23.3	33.0	28.7	30.6	26.9
<b>TOTAL</b>	<b>40.2</b>	<b>43.7</b>	<b>43.0</b>	<b>45.7</b>	<b>44.0</b>	
Far West	Broken Hill Base	25.6	46.7	30.6	40.0	35.6
	<b>TOTAL</b>	<b>25.6</b>	<b>46.7</b>	<b>30.6</b>	<b>40.0</b>	<b>35.6</b>
Private Hospitals	Mater, North Sydney	29.1	32.0	27.8	28.2	27.7
	North Shore Private	27.3	29.9	29.1	26.1	27.4
	Sydney Adventist	31.3	28.1	30.5	29.4	32.7
	North Gosford Private	45.4	44.8	47.7	45.2	52.6
	Hurstville Community	41.1	29.6	34.0	26.8	31.4
	Kareena Private	33.6	31.4	30.4	35.1	35.3
	St. George Private	33.3	35.4	42.7	37.8	39.7
	Prince of Wales Private	26.5	27.5	31.9	33.3	34.2
	Norwest Private	49.8	49.2	51.8	55.5	51.5
	Sydney Southwest Private	48.0	38.7	48.6	46.6	47.4
	Nepean Private	45.3	53.8	57.8	62.5	63.9
	Westmead Private	37.0	38.0	41.9	40.8	42.1
	Wollongong Private <sup>†</sup>	-	-	-	45.7	46.1
	Newcastle Private	39.4	41.7	46.3	50.2	50.1
	Calvary, Wagga Wagga	47.0	37.2	40.9	41.1	39.7
Other hospitals	47.3	49.3	49.8	0.0	0.0	
<b>TOTAL</b>	<b>36.4</b>	<b>36.7</b>	<b>39.4</b>	<b>38.8</b>	<b>39.7</b>	
<b>TOTAL NSW<sup>a</sup></b>	<b>38.6</b>	<b>39.5</b>	<b>40.8</b>	<b>41.3</b>	<b>43.7</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.  
<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.  
<sup>†</sup> Wollongong Private Hospital opened in 2016.

### 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation. Instrumental vaginal birth is defined as forceps or vacuum.

Table 59 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 59: 1.3 SELECTED PRIMIPARA WHO UNDERGO AN INSTRUMENTAL VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	19.9	22.8	24.6	27.6	32.0
	Royal Prince Alfred	24.6	25.6	25.8	21.9	27.3
	<b>TOTAL</b>	<b>23.5</b>	<b>24.9</b>	<b>25.5</b>	<b>23.2</b>	<b>28.5</b>
South Western Sydney	Fairfield	7.6	8.4	10.5	14.4	15.6
	Liverpool	19.1	22.4	21.8	21.9	24.7
	Campbelltown	13.4	14.3	17.2	21.4	18.9
	Bankstown–Lidcombe	14.9	14.9	20.6	17.4	19.4
	Bowral	19.7	22.6	25.4	24.6	23.2
<b>TOTAL</b>	<b>14.6</b>	<b>16.2</b>	<b>18.5</b>	<b>19.7</b>	<b>20.4</b>	
South Eastern Sydney	St. George	24.7	26.8	27.2	29.7	30.7
	Sutherland	23.2	23.9	25.8	23.8	22.9
	Royal Hospital for Women	30.6	31.7	30.5	27.6	29.4
<b>TOTAL</b>	<b>27.4</b>	<b>28.8</b>	<b>28.6</b>	<b>27.6</b>	<b>28.8</b>	
Illawarra Shoalhaven	Shoalhaven	22.8	15.7	15.4	17.8	22.2
	Wollongong	21.0	21.0	21.7	24.5	24.8
	Other hospitals	25.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>21.6</b>	<b>19.2</b>	<b>19.9</b>	<b>22.9</b>	<b>24.1</b>	
Western Sydney	Auburn	17.5	13.4	15.0	14.0	15.9
	Blacktown	22.1	21.2	21.6	22.9	24.5
	Westmead	26.9	23.2	21.2	22.6	24.8
<b>TOTAL</b>	<b>24.1</b>	<b>21.2</b>	<b>20.4</b>	<b>21.5</b>	<b>23.4</b>	
Nepean Blue Mountains	Blue Mountains	18.3	9.1	19.1	25.3	9.8
	Nepean	22.4	21.0	21.3	19.0	20.3
	Hawkesbury	19.0	18.6	22.6	18.3	19.5
	Other hospitals	6.8	6.4	11.1	10.0	6.3
<b>TOTAL</b>	<b>20.8</b>	<b>19.5</b>	<b>20.9</b>	<b>19.0</b>	<b>19.3</b>	
Northern Sydney	Hornsby	18.4	22.2	28.2	24.4	28.1
	Manly	25.3	26.3	27.7	27.5	30.6
	Mona Vale	32.3	27.3	17.6	24.3	25.6
	Royal North Shore	26.0	29.0	25.3	27.3	27.8
	Other hospitals	0.0	2.7	0.0	0.0	0.0
<b>TOTAL</b>	<b>24.6</b>	<b>26.6</b>	<b>24.9</b>	<b>26.1</b>	<b>27.7</b>	
Central Coast	Gosford	30.8	29.0	26.7	26.4	26.2
	Other hospitals	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>28.8</b>	<b>27.9</b>	<b>25.7</b>	<b>25.3</b>	<b>25.5</b>	
Hunter New England	Armidale	13.2	23.7	16.5	15.8	19.7
	Inverell	11.9	10.9	23.3	21.8	14.9
	Tamworth Base	25.6	26.7	21.1	21.3	23.4
	Manning Base	26.4	30.6	28.3	26.0	29.5
	Maitland	17.2	15.3	20.0	17.5	11.6
	John Hunter	19.9	21.7	22.7	23.3	20.5
	Other hospitals	16.7	13.7	14.9	14.0	10.7
<b>TOTAL</b>	<b>19.6</b>	<b>20.5</b>	<b>21.2</b>	<b>20.8</b>	<b>18.7</b>	
Northern NSW	Grafton Base	15.2	16.4	20.5	22.9	12.6
	Lismore Base	23.6	18.3	16.9	23.6	19.0
	Tweed Heads	18.4	21.2	20.9	18.8	21.1
	Other hospitals	1.8	0.0	0.0	7.0	0.0
<b>TOTAL</b>	<b>18.8</b>	<b>18.0</b>	<b>18.1</b>	<b>19.9</b>	<b>18.0</b>	

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	16.5	17.5	18.4	22.0	20.5
	Kempsey	11.4	15.5	8.6	16.9	7.4
	Port Macquarie Base	24.6	23.3	23.8	17.2	23.4
	Other hospitals	33.3	36.4	0.0	0.0	20.0
<b>TOTAL</b>	<b>19.6</b>	<b>19.6</b>	<b>18.8</b>	<b>19.5</b>	<b>20.3</b>	
Southern NSW	Bega	24.6	18.1	17.5	16.2	19.4
	Goulburn Base	28.0	27.3	32.9	20.0	22.4
	Moruya	12.7	15.3	21.2	15.9	24.4
	Queanbeyan	29.6	29.3	22.0	29.9	24.6
Other hospitals	10.0	8.9	3.8	10.9	10.3	
<b>TOTAL</b>	<b>23.9</b>	<b>22.2</b>	<b>20.8</b>	<b>21.4</b>	<b>22.3</b>	
Murrumbidgee	Griffith Base	25.7	23.9	21.8	23.8	18.8
	Wagga Wagga Base	20.8	15.4	20.3	20.8	19.4
	Other hospitals	13.6	15.5	19.4	20.5	18.9
<b>TOTAL</b>	<b>20.2</b>	<b>17.3</b>	<b>20.4</b>	<b>21.6</b>	<b>19.1</b>	
Western NSW	Dubbo Base	21.7	23.0	20.9	25.8	21.5
	Mudgee	11.3	19.7	19.2	26.1	18.3
	Bathurst Base	12.7	20.1	16.2	20.9	18.9
	Orange Base	23.4	23.9	26.6	18.1	21.9
	Other hospitals	12.6	16.5	6.9	14.4	14.4
<b>TOTAL</b>	<b>18.7</b>	<b>21.7</b>	<b>20.0</b>	<b>21.4</b>	<b>20.1</b>	
Far West	Broken Hill Base	30.2	23.3	14.5	10.0	20.3
	<b>TOTAL</b>	<b>30.2</b>	<b>23.3</b>	<b>14.5</b>	<b>10.0</b>	<b>20.3</b>
Private Hospitals	Mater, North Sydney	24.7	23.7	23.8	25.0	21.4
	North Shore Private	26.1	24.7	26.4	22.7	20.8
	Sydney Adventist	16.2	16.4	15.3	23.6	23.3
	North Gosford Private	25.2	27.1	27.2	25.8	32.8
	Hurstville Community	28.0	25.4	19.6	23.8	25.7
	Kareena Private	26.2	32.8	24.5	26.9	28.5
	St. George Private	29.6	29.3	28.9	28.0	30.7
	Prince of Wales Private	26.0	22.0	24.2	24.7	23.3
	Norwest Private	31.2	27.1	26.4	27.1	24.7
	Sydney Southwest Private	28.1	24.8	35.6	33.4	30.8
	Nepean Private	25.9	26.5	18.9	23.3	25.4
	Westmead Private	25.3	24.1	25.6	22.1	24.5
	Wollongong Private†	-	-	-	36.0	29.0
	Newcastle Private	29.0	26.7	25.4	30.1	25.1
	Calvary, Wagga Wagga	17.4	23.0	24.8	22.1	16.7
Other hospitals	30.5	24.7	25.4	0.0	0.0	
<b>TOTAL</b>	<b>26.2</b>	<b>24.7</b>	<b>24.8</b>	<b>25.9</b>	<b>25.0</b>	
<b>TOTAL NSW*</b>	<b>22.9</b>	<b>22.7</b>	<b>22.8</b>	<b>23.3</b>	<b>23.7</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
# Hospitals with more than 200 births in 2017 are identified individually.  
\* Total NSW includes births at home assisted by independent midwives.  
† Wollongong Private Hospital opened in 2016.



## 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 60 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 60: 1.4 SELECTED PRIMIPARA UNDERGOING CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	25.4	25.5	25.8	29.8	30.4
	Royal Prince Alfred	22.5	22.0	22.0	26.6	22.1
	<b>TOTAL</b>	<b>23.1</b>	<b>22.8</b>	<b>23.0</b>	<b>27.3</b>	<b>24.1</b>
South Western Sydney	Fairfield	12.5	15.2	20.0	21.3	22.2
	Liverpool	17.7	18.8	18.3	22.0	22.5
	Campbelltown	20.9	23.6	21.3	22.2	22.4
	Bankstown–Lidcombe	21.1	20.7	19.9	33.9	23.1
	Bowral	23.1	32.1	26.2	34.7	25.8
	<b>TOTAL</b>	<b>18.7</b>	<b>20.6</b>	<b>20.1</b>	<b>24.6</b>	<b>22.7</b>
South Eastern Sydney	St. George	22.7	22.5	26.5	25.5	25.4
	Sutherland	18.9	18.2	21.4	19.8	22.4
	Royal Hospital for Women	18.9	19.6	22.1	22.5	25.1
<b>TOTAL</b>	<b>20.1</b>	<b>20.3</b>	<b>23.4</b>	<b>23.0</b>	<b>24.8</b>	
Illawarra Shoalhaven	Shoalhaven	24.7	26.5	35.6	29.3	28.3
	Wollongong	27.0	28.4	26.0	22.9	28.8
	Other hospitals	25.0	11.8	0.0	0.0	0.0
<b>TOTAL</b>	<b>26.3</b>	<b>27.6</b>	<b>28.5</b>	<b>24.5</b>	<b>28.7</b>	
Western Sydney	Auburn	18.3	20.6	23.3	22.2	23.0
	Blacktown	29.7	29.9	27.7	25.7	24.5
	Westmead	23.1	24.2	26.4	23.5	21.3
	<b>TOTAL</b>	<b>24.3</b>	<b>25.3</b>	<b>26.3</b>	<b>24.0</b>	<b>22.5</b>
Nepean Blue Mountains	Blue Mountains	35.0	15.2	27.9	22.7	29.5
	Nepean	32.7	33.3	35.6	34.8	30.5
	Hawkesbury	37.6	37.2	33.9	33.9	33.7
	Other hospitals	32.2	38.3	33.3	28.0	37.5
<b>TOTAL</b>	<b>33.7</b>	<b>33.2</b>	<b>34.8</b>	<b>33.8</b>	<b>31.1</b>	
Northern Sydney	Hornsby	20.1	18.1	17.6	24.9	21.4
	Manly	21.5	24.9	23.4	26.9	22.4
	Mona Vale	24.2	19.4	22.5	23.5	20.2
	Royal North Shore	28.2	21.6	21.8	24.9	24.3
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	<b>TOTAL</b>	<b>24.5</b>	<b>20.9</b>	<b>20.9</b>	<b>24.7</b>	<b>22.6</b>
Central Coast	Gosford	25.2	26.9	22.0	23.9	24.4
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	<b>TOTAL</b>	<b>23.6</b>	<b>26.0</b>	<b>21.2</b>	<b>22.9</b>	<b>23.7</b>
Hunter New England	Armidale	24.2	37.1	38.8	32.6	29.1
	Inverell	52.5	42.2	33.3	27.3	25.4
	Tamworth Base	23.6	16.1	28.2	27.6	32.1
	Manning Base	17.0	14.6	23.3	19.3	19.9
	Maitland	26.5	23.4	21.6	20.2	30.1
	John Hunter	25.9	24.1	23.4	25.6	26.7
	Other hospitals	17.4	18.9	19.5	15.0	24.1
	<b>TOTAL</b>	<b>24.7</b>	<b>23.0</b>	<b>24.2</b>	<b>23.6</b>	<b>27.2</b>
Northern NSW	Grafton Base	32.4	23.3	26.1	18.8	25.3
	Lismore Base	20.4	22.6	18.8	22.2	13.6
	Tweed Heads	20.0	24.9	17.6	18.2	20.7
	Other hospitals	1.8	1.6	1.8	8.5	0.0
	<b>TOTAL</b>	<b>20.4</b>	<b>22.2</b>	<b>17.8</b>	<b>18.8</b>	<b>17.3</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	29.1	27.9	25.5	29.6	27.2
	Kempsey	18.2	24.1	32.8	18.6	25.9
	Port Macquarie Base	18.4	26.7	26.5	30.7	20.5
	Other hospitals	0.0	0.0	0.0	0.0	0.0
	<b>TOTAL</b>	<b>23.5</b>	<b>26.5</b>	<b>26.0</b>	<b>28.6</b>	<b>24.2</b>
Southern NSW	Bega	26.2	27.8	28.6	29.4	29.9
	Goulburn Base	23.2	24.2	25.0	40.0	34.2
	Moruya	22.2	22.0	27.3	24.6	24.4
	Queanbeyan	18.4	26.1	28.7	18.2	30.8
	Other hospitals	32.5	17.9	13.2	10.9	12.8
<b>TOTAL</b>	<b>22.6</b>	<b>24.4</b>	<b>25.7</b>	<b>24.3</b>	<b>28.6</b>	
Murrumbidgee	Griffith Base	22.1	31.6	29.1	27.3	23.5
	Wagga Wagga Base	26.2	32.4	36.5	29.4	34.4
	Other hospitals	21.2	21.7	14.5	25.6	15.3
	<b>TOTAL</b>	<b>23.4</b>	<b>28.9</b>	<b>29.1</b>	<b>28.0</b>	<b>27.4</b>
Western NSW	Dubbo Base	26.6	28.2	27.1	22.9	27.9
	Mudgee	15.5	21.3	24.7	17.4	35.0
	Bathurst Base	30.3	29.2	18.3	21.6	19.7
	Orange Base	29.9	27.3	20.6	32.3	30.8
	Other hospitals	29.1	26.6	24.8	18.9	24.0
<b>TOTAL</b>	<b>27.6</b>	<b>27.4</b>	<b>23.3</b>	<b>24.5</b>	<b>27.5</b>	
Far West	Broken Hill Base	23.3	11.7	17.7	26.7	32.2
	<b>TOTAL</b>	<b>23.3</b>	<b>11.7</b>	<b>17.7</b>	<b>26.7</b>	<b>32.2</b>
Private Hospitals	Mater, North Sydney	39.5	40.1	41.6	47.0	50.8
	North Shore Private	37.9	44.0	43.2	46.1	49.4
	Sydney Adventist	31.9	32.4	32.3	30.9	31.2
	North Gosford Private	38.5	45.2	39.3	45.6	44.8
	Hurstville Community	33.6	38.0	34.0	29.8	30.4
	Kareena Private	38.4	39.3	41.4	44.2	40.4
	St. George Private	37.4	42.9	38.3	38.9	41.3
	Prince of Wales Private	45.2	48.2	44.9	44.6	49.8
	Norwest Private	28.1	26.2	33.7	30.1	32.8
	Sydney Southwest Private	23.8	28.9	28.2	27.1	28.7
	Nepean Private	42.5	32.8	39.0	38.7	32.2
	Westmead Private	38.3	40.5	37.0	37.8	36.3
	Wollongong Private <sup>†</sup>	-	-	-	32.0	31.3
	Newcastle Private	28.0	33.9	33.8	34.9	39.7
	Calvary, Wagga Wagga	59.1	53.4	49.6	42.1	50.0
Other hospitals	34.3	41.9	41.0	100.0	0.0	
<b>TOTAL</b>	<b>36.3</b>	<b>38.5</b>	<b>38.2</b>	<b>38.4</b>	<b>40.2</b>	
<b>TOTAL NSW<sup>a</sup></b>	<b>26.5</b>	<b>27.3</b>	<b>27.4</b>	<b>28.2</b>	<b>28.2</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.  
<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.  
<sup>†</sup> Wollongong Private Hospital opened in 2016.

## 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 61 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 61: 2.1 VAGINAL DELIVERY AFTER PREVIOUS PRIMARY CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>#</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	8.2	10.9	12.2	22.4	16.4
	Royal Prince Alfred	15.4	11.3	13.9	12.0	14.5
	<b>TOTAL</b>	<b>13.5</b>	<b>11.2</b>	<b>13.5</b>	<b>15.7</b>	<b>15.1</b>
South Western Sydney	Fairfield	1.9	4.6	1.8	0.0	3.4
	Liverpool	13.8	14.8	8.9	20.7	17.8
	Campbelltown	20.1	20.6	19.0	22.4	22.9
	Bankstown–Lidcombe	15.6	18.9	13.0	19.7	21.0
	Bowral	5.4	15.2	4.2	10.3	13.0
<b>TOTAL</b>	<b>14.2</b>	<b>16.0</b>	<b>11.7</b>	<b>18.1</b>	<b>18.2</b>	
South Eastern Sydney	St. George	14.6	17.9	13.3	13.3	11.1
	Sutherland	0.0	3.4	1.2	1.3	0.0
	Royal Hospital for Women	12.0	9.7	10.5	10.4	8.9
	Other hospitals	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>11.6</b>	<b>11.9</b>	<b>10.4</b>	<b>10.4</b>	<b>8.3</b>	
Illawarra Shoalhaven	Shoalhaven	16.1	19.8	6.8	7.4	6.1
	Wollongong	12.3	13.6	10.2	14.9	16.3
	Other hospitals	0.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>13.5</b>	<b>15.5</b>	<b>9.3</b>	<b>13.1</b>	<b>13.3</b>	
Western Sydney	Auburn	2.8	1.2	2.6	4.9	2.2
	Blacktown	13.0	11.0	9.9	12.4	12.1
	Westmead	15.9	15.1	15.0	12.4	13.3
<b>TOTAL</b>	<b>14.0</b>	<b>12.7</b>	<b>12.5</b>	<b>11.9</b>	<b>12.1</b>	
Nepean Blue Mountains	Blue Mountains	12.5	6.5	0.0	0.0	0.0
	Nepean	12.0	9.3	12.7	12.1	10.9
	Hawkesbury	10.7	5.1	14.4	14.4	11.2
	Other hospitals	6.3	10.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>11.6</b>	<b>8.5</b>	<b>11.9</b>	<b>11.4</b>	<b>10.5</b>	
Northern Sydney	Hornsby	12.9	14.4	13.0	15.4	16.0
	Manly	16.0	8.4	7.3	14.0	4.8
	Mona Vale	5.6	4.1	11.1	16.2	15.6
	Royal North Shore	10.0	12.1	8.8	12.3	4.2
<b>TOTAL</b>	<b>11.3</b>	<b>11.1</b>	<b>9.7</b>	<b>13.6</b>	<b>8.7</b>	
Central Coast	Gosford	14.2	11.9	12.9	13.4	12.9
	<b>TOTAL</b>	<b>14.2</b>	<b>11.9</b>	<b>12.9</b>	<b>13.4</b>	<b>12.9</b>
Hunter New England	Armidale	18.2	7.1	22.9	8.9	12.5
	Inverell	11.1	11.4	12.0	14.0	11.5
	Tamworth Base	18.9	4.3	10.0	15.6	12.5
	Manning Base	22.6	14.5	20.6	21.9	7.4
	Maitland	17.1	20.1	21.3	11.5	8.0
	John Hunter	19.4	17.8	14.3	14.8	16.7
	Other hospitals	11.5	12.0	10.0	3.7	6.7
<b>TOTAL</b>	<b>18.0</b>	<b>15.3</b>	<b>15.4</b>	<b>13.5</b>	<b>13.1</b>	
Northern NSW	Grafton Base	16.3	11.8	16.7	13.0	7.0
	Lismore Base	16.2	20.6	20.4	26.8	21.2
	Tweed Heads	21.1	35.2	11.1	18.9	26.1
	Other hospitals	0.0	0.0	0.0	25.0	0.0
<b>TOTAL</b>	<b>16.6</b>	<b>22.8</b>	<b>15.2</b>	<b>21.5</b>	<b>21.0</b>	

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	5.9	5.8	6.7	6.3	9.4
	Kempsey	30.0	27.3	22.2	21.7	0.0
	Port Macquarie Base	15.9	17.9	11.0	12.5	14.3
	<b>TOTAL</b>	<b>11.9</b>	<b>12.2</b>	<b>10.1</b>	<b>9.8</b>	<b>10.6</b>
Southern NSW	Bega	5.3	18.8	8.7	13.3	3.8
	Goulburn Base	15.6	32.5	22.2	13.8	24.0
	Moruya	10.3	8.6	20.0	10.3	16.7
	Queanbeyan	3.2	11.8	0.0	7.3	4.1
	Other hospitals	9.1	16.7	15.8	50.0	8.3
<b>TOTAL</b>	<b>9.0</b>	<b>18.3</b>	<b>13.2</b>	<b>14.3</b>	<b>10.6</b>	
Murrumbidgee	Griffith Base	20.5	20.8	10.7	15.3	24.1
	Wagga Wagga Base	6.9	5.3	8.1	11.4	4.4
	Other hospitals	7.5	10.2	14.3	16.7	5.6
	<b>TOTAL</b>	<b>10.1</b>	<b>10.4</b>	<b>10.5</b>	<b>13.4</b>	<b>9.5</b>
Western NSW	Dubbo Base	17.8	9.7	13.8	11.2	16.3
	Mudgee	3.7	4.3	4.8	7.7	26.1
	Bathurst Base	12.0	8.8	19.0	11.1	10.0
	Orange Base	13.2	14.5	12.3	18.5	11.7
	Other hospitals	8.5	28.9	20.0	17.1	13.6
<b>TOTAL</b>	<b>12.8</b>	<b>13.3</b>	<b>14.1</b>	<b>14.4</b>	<b>14.2</b>	
Far West	Broken Hill Base	16.0	6.7	15.8	8.7	11.8
	<b>TOTAL</b>	<b>16.0</b>	<b>6.7</b>	<b>15.8</b>	<b>8.7</b>	<b>11.8</b>
Private Hospitals	Mater, North Sydney	5.7	1.9	4.1	4.4	2.5
	North Shore Private	5.1	4.5	6.0	2.8	4.7
	Sydney Adventist	8.8	7.3	5.3	5.7	6.7
	North Gosford Private	7.9	7.7	5.5	5.1	1.6
	Hurstville Community	5.2	5.6	4.7	5.6	1.3
	Kareena Private	7.9	4.7	3.1	7.1	7.7
	St. George Private	4.7	3.5	4.3	3.7	2.6
	Prince of Wales Private	2.8	2.5	2.8	1.5	2.1
	Norwest Private	5.0	5.9	5.6	5.6	7.3
	Sydney Southwest Private	0.8	1.4	0.0	0.9	0.0
	Nepean Private	5.2	6.0	4.7	7.1	1.5
	Westmead Private	5.0	3.8	5.4	3.4	3.5
	Wollongong Private <sup>†</sup>	-	-	-	2.5	4.5
	Newcastle Private	5.6	6.5	3.3	6.3	4.3
	Calvary, Wagga Wagga	5.7	0.0	3.3	1.1	2.8
Other hospitals	4.1	2.4	4.8	0.0	0.0	
<b>TOTAL</b>	<b>5.2</b>	<b>4.3</b>	<b>4.4</b>	<b>4.1</b>	<b>3.9</b>	
<b>TOTAL NSW<sup>*</sup></b>	<b>10.8</b>	<b>10.2</b>	<b>9.6</b>	<b>10.5</b>	<b>10.1</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.  
<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.  
<sup>†</sup> Wollongong Private Hospital opened in 2016.

## 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 62 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 62: 3.1 SELECTED PRIMIPARA DELIVERING VAGINALLY WITH AN INTACT PERINEUM BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	10.5	6.2	7.0	5.4	4.7
	Royal Prince Alfred	9.6	8.8	8.0	7.8	7.8
	<b>TOTAL</b>	<b>9.8</b>	<b>8.2</b>	<b>7.7</b>	<b>7.3</b>	<b>7.1</b>
South Western Sydney	Fairfield	24.6	21.0	19.3	13.1	12.6
	Liverpool	11.4	15.4	12.1	10.8	8.3
	Campbelltown	23.6	20.4	20.0	10.7	9.9
	Bankstown–Lidcombe	14.9	14.7	14.0	7.5	11.1
	Bowral	28.3	21.3	18.9	17.1	22.3
<b>TOTAL</b>	<b>18.8</b>	<b>17.9</b>	<b>16.2</b>	<b>10.8</b>	<b>10.6</b>	
South Eastern Sydney	St. George	9.9	8.3	8.0	5.0	3.3
	Sutherland	13.0	11.9	10.2	5.2	6.5
	Royal Hospital for Women	11.4	9.6	11.9	10.3	8.9
	<b>TOTAL</b>	<b>11.2</b>	<b>9.6</b>	<b>10.4</b>	<b>7.6</b>	<b>6.6</b>
Illawarra Shoalhaven	Shoalhaven	40.1	38.4	43.0	21.4	26.1
	Wollongong	13.7	10.1	12.6	8.0	7.4
	Other hospitals	25.0	40.0	33.3	0.0	0.0
	<b>TOTAL</b>	<b>20.7</b>	<b>18.1</b>	<b>20.1</b>	<b>11.1</b>	<b>12.1</b>
Western Sydney	Auburn	16.2	10.3	11.3	5.6	7.5
	Blacktown	6.8	6.3	9.1	4.4	5.2
	Westmead	7.3	7.7	6.5	5.2	4.8
	<b>TOTAL</b>	<b>8.6</b>	<b>7.7</b>	<b>8.0</b>	<b>5.0</b>	<b>5.3</b>
Nepean Blue Mountains	Blue Mountains	15.4	19.6	24.5	10.3	2.3
	Nepean	12.1	10.5	11.9	7.5	8.1
	Hawkesbury	25.5	28.1	23.3	21.1	16.9
	Other hospitals	15.0	24.1	9.5	5.6	13.3
<b>TOTAL</b>	<b>14.8</b>	<b>14.3</b>	<b>14.4</b>	<b>9.4</b>	<b>9.3</b>	
Northern Sydney	Hornsby	15.4	11.4	9.5	5.6	4.9
	Manly	11.0	15.6	12.7	9.4	7.3
	Mona Vale	15.3	22.1	23.8	15.9	17.4
	Royal North Shore	9.3	7.2	9.2	6.2	4.8
	Other hospitals	51.6	48.6	34.3	46.2	30.8
	<b>TOTAL</b>	<b>12.5</b>	<b>12.3</b>	<b>12.2</b>	<b>8.5</b>	<b>7.4</b>
Central Coast	Gosford	9.6	11.7	12.1	8.6	7.1
	Other hospitals	49.0	44.8	28.1	25.7	27.3
	<b>TOTAL</b>	<b>13.0</b>	<b>13.3</b>	<b>12.8</b>	<b>9.6</b>	<b>7.9</b>
Hunter New England	Armidale	24.6	16.4	28.4	18.8	22.9
	Inverell	42.9	37.8	32.5	40.0	40.0
	Tamworth Base	21.1	18.1	14.1	13.7	11.5
	Manning Base	30.3	20.1	21.3	19.0	9.0
	Maitland	24.3	22.4	19.2	13.9	12.8
	John Hunter	12.6	11.8	13.1	9.9	5.5
	Other hospitals	28.8	26.2	27.1	27.6	31.2
	<b>TOTAL</b>	<b>19.9</b>	<b>17.4</b>	<b>17.6</b>	<b>15.1</b>	<b>12.1</b>
	Northern NSW	Grafton Base	39.4	39.3	35.4	35.9
Lismore Base		25.7	27.8	27.5	15.4	17.4
Tweed Heads		25.5	17.3	11.0	15.7	12.4
Other hospitals		42.9	46.7	50.9	32.3	46.5

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>TOTAL</b>		<b>28.0</b>	<b>26.5</b>	<b>22.0</b>	<b>19.7</b>	<b>19.8</b>
Mid North Coast	Coffs Harbour	14.4	15.3	15.6	16.5	11.8
	Kempsey	36.1	31.8	25.6	27.1	17.5
	Port Macquarie Base	20.1	8.5	12.2	10.5	8.6
	Other hospitals	33.3	36.4	25.0	50.0	40.0
<b>TOTAL</b>	<b>19.2</b>	<b>15.5</b>	<b>15.7</b>	<b>16.1</b>	<b>11.8</b>	
Southern NSW	Bega	37.8	28.8	24.4	16.7	23.4
	Goulburn Base	14.3	12.0	12.3	11.1	16.0
	Moruya	32.7	32.6	35.4	21.2	22.6
	Queanbeyan	29.8	35.3	29.9	26.2	17.1
	Other hospitals	48.1	45.7	58.7	58.5	52.9
<b>TOTAL</b>	<b>29.9</b>	<b>31.6</b>	<b>31.0</b>	<b>26.0</b>	<b>22.4</b>	
Murrumbidgee	Griffith Base	34.9	28.8	32.1	24.0	24.6
	Wagga Wagga Base	25.8	25.8	20.3	17.4	11.2
	Other hospitals	43.3	37.3	31.1	32.2	30.9
	<b>TOTAL</b>	<b>34.1</b>	<b>30.4</b>	<b>26.4</b>	<b>22.6</b>	<b>19.9</b>
Western NSW	Dubbo Base	23.5	25.7	23.5	17.8	9.3
	Mudgee	21.7	25.0	23.6	21.1	12.8
	Bathurst Base	23.2	17.6	23.3	11.9	12.7
	Orange Base	14.2	12.1	16.5	10.8	12.3
	Other hospitals	27.4	28.8	39.5	20.0	22.8
<b>TOTAL</b>	<b>20.9</b>	<b>20.9</b>	<b>23.2</b>	<b>15.6</b>	<b>12.7</b>	
Far West	Broken Hill Base	21.2	45.3	47.1	45.5	22.5
	<b>TOTAL</b>	<b>21.2</b>	<b>45.3</b>	<b>47.1</b>	<b>45.5</b>	<b>22.5</b>
Private Hospitals	Mater, North Sydney	15.1	13.9	11.1	7.0	6.9
	North Shore Private	12.4	12.5	10.0	5.2	4.8
	Sydney Adventist	14.2	10.7	12.5	10.3	9.3
	North Gosford Private	11.9	11.3	11.0	9.3	5.7
	Hurstville Community	11.3	12.1	10.2	15.8	6.0
	Kareena Private	7.8	7.2	9.4	6.7	4.3
	St. George Private	8.9	8.2	10.4	7.3	6.0
	Prince of Wales Private	12.3	11.0	11.0	6.4	6.0
	Norwest Private	12.3	12.0	12.7	5.5	6.4
	Sydney Southwest Private	10.0	12.8	6.9	5.9	4.9
	Nepean Private	6.3	3.8	5.9	1.3	1.4
	Westmead Private	3.0	4.7	6.1	2.3	3.3
	Wollongong Private <sup>†</sup>	-	-	-	2.9	2.3
	Newcastle Private	13.8	17.2	8.7	4.9	6.9
	Calvary, Wagga Wagga	11.1	14.5	15.9	12.7	7.7
Other hospitals	4.8	5.2	6.3	0.0	0.0	
<b>TOTAL</b>	<b>10.7</b>	<b>10.7</b>	<b>9.8</b>	<b>6.2</b>	<b>5.6</b>	
<b>TOTAL NSW<sup>a</sup></b>		<b>14.7</b>	<b>13.7</b>	<b>13.4</b>	<b>9.7</b>	<b>8.9</b>

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

<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.

<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.

<sup>†</sup> Wollongong Private Hospital opened in 2016.

### 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 63 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 63: 3.2 SELECTED PRIMIPARA UNDERGOING EPISIOTOMY AND NO PERINEAL TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013– 2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	28.9	36.4	39.9	43.2	39.6
	Royal Prince Alfred	23.5	27.1	25.0	24.4	27.5
	<b>TOTAL</b>	<b>24.7</b>	<b>29.3</b>	<b>28.6</b>	<b>28.4</b>	<b>30.2</b>
South Western Sydney	Fairfield	24.6	30.7	31.1	31.6	39.1
	Liverpool	33.2	30.4	32.4	28.1	34.7
	Campbelltown	19.1	24.1	27.2	31.3	30.3
	Bankstown–Lidcombe	31.5	31.8	30.5	41.0	38.9
	Bowral	17.7	33.3	32.2	34.2	26.8
<b>TOTAL</b>	<b>26.5</b>	<b>29.1</b>	<b>30.2</b>	<b>32.0</b>	<b>34.3</b>	
South Eastern Sydney	St. George	25.1	31.2	32.4	32.9	35.1
	Sutherland	23.5	32.0	36.8	32.3	34.2
	Royal Hospital for Women	27.8	32.1	27.9	20.7	26.7
<b>TOTAL</b>	<b>26.2</b>	<b>31.8</b>	<b>30.8</b>	<b>26.7</b>	<b>30.8</b>	
Illawarra Shoalhaven	Shoalhaven	27.8	18.9	22.7	25.2	17.0
	Wollongong	20.6	26.3	25.6	25.0	25.4
	Other hospitals	4.2	0.0	33.3	0.0	0.0
<b>TOTAL</b>	<b>21.8</b>	<b>23.7</b>	<b>24.9</b>	<b>25.0</b>	<b>23.3</b>	
Western Sydney	Auburn	27.7	26.3	32.0	27.9	31.8
	Blacktown	32.8	39.1	40.4	33.0	33.8
	Westmead	37.9	42.7	43.5	38.8	39.5
<b>TOTAL</b>	<b>34.9</b>	<b>39.3</b>	<b>40.8</b>	<b>35.5</b>	<b>36.7</b>	
Nepean Blue Mountains	Blue Mountains	2.6	8.9	8.2	10.3	11.6
	Nepean	28.1	22.5	30.0	22.9	23.2
	Hawkesbury	26.2	23.0	32.9	18.7	25.7
	Other hospitals	32.5	17.2	35.7	11.1	20.0
<b>TOTAL</b>	<b>26.8</b>	<b>21.5</b>	<b>29.5</b>	<b>21.2</b>	<b>22.9</b>	
Northern Sydney	Hornsby	14.0	17.7	22.4	15.9	31.1
	Manly	22.0	19.8	24.6	24.4	27.2
	Mona Vale	20.0	12.7	11.0	19.0	19.5
	Royal North Shore	25.9	27.2	25.1	24.9	35.8
	Other hospitals	3.2	2.7	0.0	0.0	3.8
<b>TOTAL</b>	<b>21.5</b>	<b>21.7</b>	<b>22.2</b>	<b>21.9</b>	<b>30.7</b>	
Central Coast	Gosford	23.2	21.5	22.4	18.0	29.2
	Other hospitals	0.0	3.4	0.0	2.9	18.2
<b>TOTAL</b>	<b>21.3</b>	<b>20.6</b>	<b>21.3</b>	<b>17.1</b>	<b>28.8</b>	
Hunter New England	Armidale	17.4	42.6	31.1	18.8	19.3
	Inverell	28.6	37.8	50.0	40.0	32.0
	Tamworth Base	26.3	27.5	27.7	26.4	23.6
	Manning Base	15.9	9.0	18.0	15.7	20.3
	Maitland	12.3	11.5	15.0	17.2	15.5
	John Hunter	23.1	22.0	19.5	18.3	23.8
	Other hospitals	16.3	17.3	13.3	14.0	11.8
	<b>TOTAL</b>	<b>19.9</b>	<b>20.2</b>	<b>19.9</b>	<b>18.8</b>	<b>20.9</b>
Northern NSW	Grafton Base	15.5	10.1	7.7	15.4	10.8
	Lismore Base	23.7	19.4	17.4	24.3	27.4
	Tweed Heads	13.1	17.7	20.1	14.6	24.5
	Other hospitals	1.8	1.7	0.0	6.2	0.0
<b>TOTAL</b>	<b>15.9</b>	<b>15.7</b>	<b>16.3</b>	<b>17.1</b>	<b>22.4</b>	

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	18.3	20.8	18.6	29.4	27.3
	Kempsey	8.3	9.1	12.8	6.3	12.5
	Port Macquarie Base	17.8	20.9	27.3	21.8	28.2
	Other hospitals	16.7	0.0	0.0	0.0	10.0
<b>TOTAL</b>	<b>17.1</b>	<b>18.9</b>	<b>20.6</b>	<b>23.5</b>	<b>25.9</b>	
Southern NSW	Bega	17.8	13.5	8.9	18.8	12.8
	Goulburn Base	52.4	40.0	45.6	40.0	52.0
	Moruya	14.3	15.2	14.6	19.2	22.6
	Queanbeyan	12.1	17.2	15.0	20.6	21.2
	Other hospitals	7.4	10.9	2.2	4.9	8.8
<b>TOTAL</b>	<b>21.1</b>	<b>19.0</b>	<b>17.8</b>	<b>20.8</b>	<b>23.6</b>	
Murrumbidgee	Griffith Base	18.3	26.3	17.9	22.1	20.2
	Wagga Wagga Base	13.7	18.4	27.5	24.2	21.2
	Other hospitals	12.5	11.1	19.8	18.4	16.0
<b>TOTAL</b>	<b>14.8</b>	<b>17.6</b>	<b>22.8</b>	<b>22.3</b>	<b>19.6</b>	
Western NSW	Dubbo Base	28.1	33.0	30.5	24.4	35.1
	Mudgee	16.7	20.8	23.6	24.6	20.5
	Bathurst Base	11.1	25.5	17.2	16.5	18.6
	Orange Base	18.6	25.4	22.5	22.2	24.0
	Other hospitals	17.8	13.8	11.8	17.8	17.7
<b>TOTAL</b>	<b>20.1</b>	<b>26.1</b>	<b>23.0</b>	<b>21.7</b>	<b>26.1</b>	
Far West	Broken Hill Base	30.3	22.6	15.7	4.5	12.5
	<b>TOTAL</b>	<b>30.3</b>	<b>22.6</b>	<b>15.7</b>	<b>4.5</b>	<b>12.5</b>
Private Hospitals	Mater, North Sydney	37.9	37.9	39.4	45.6	40.8
	North Shore Private	32.0	36.8	31.9	34.8	38.7
	Sydney Adventist	32.7	38.4	30.4	42.6	39.6
	North Gosford Private	46.3	52.2	35.2	35.6	50.0
	Hurstville Community	42.3	38.6	34.4	29.1	27.1
	Kareena Private	31.2	31.7	26.6	34.1	33.1
	St. George Private	27.2	25.8	30.2	23.8	32.0
	Prince of Wales Private	41.7	45.2	40.5	34.6	37.0
	Norwest Private	36.4	35.5	42.7	33.5	40.7
	Sydney Southwest Private	51.3	49.7	54.3	49.0	41.7
	Nepean Private	57.0	60.0	53.3	52.3	54.0
	Westmead Private	63.5	64.6	66.3	63.7	64.7
	Wollongong Private <sup>†</sup>	-	-	-	57.4	47.4
	Newcastle Private	13.4	15.3	12.5	15.3	14.4
	Calvary, Wagga Wagga	44.4	36.2	29.0	32.7	33.3
	Other hospitals	54.1	49.4	52.9	0.0	0.0
<b>TOTAL</b>	<b>39.0</b>	<b>40.4</b>	<b>38.9</b>	<b>39.1</b>	<b>40.2</b>	
<b>TOTAL NSW<sup>a</sup></b>	<b>27.7</b>	<b>29.8</b>	<b>30.0</b>	<b>28.7</b>	<b>31.3</b>	

Source: NSW Perinatal Data Collection (SAPHaRI), Centre for Epidemiology and Evidence, NSW Ministry of Health.  
<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.  
<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.  
<sup>†</sup> Wollongong Private Hospital opened in 2016.

### 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 64 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 64: 3.3 SELECTED PRIMIPARA SUSTAINING A PERINEAL TEAR AND NO EPISIOTOMY BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	59.2	51.4	48.1	42.4	40.3
	Royal Prince Alfred	60.9	56.9	61.7	63.2	59.5
	<b>TOTAL</b>	<b>60.5</b>	<b>55.6</b>	<b>58.4</b>	<b>58.8</b>	<b>55.2</b>
South Western Sydney	Fairfield	54.2	50.8	53.6	53.9	48.1
	Liverpool	53.9	53.0	51.0	59.8	51.5
	Campbelltown	63.7	61.5	57.2	58.5	59.7
	Bankstown–Lidcombe	47.8	47.6	49.9	43.3	41.9
	Bowral	58.4	43.5	50.0	56.6	50.9
<b>TOTAL</b>	<b>55.8</b>	<b>53.5</b>	<b>53.1</b>	<b>55.5</b>	<b>52.1</b>	
South Eastern Sydney	St. George	56.1	51.0	52.6	48.2	45.3
	Sutherland	57.8	49.9	47.8	50.9	47.4
	Royal Hospital for Women	57.5	53.7	55.7	62.2	56.6
<b>TOTAL</b>	<b>57.1</b>	<b>52.2</b>	<b>53.4</b>	<b>55.6</b>	<b>51.2</b>	
Illawarra Shoalhaven	Shoalhaven	56.2	63.4	51.7	62.9	61.8
	Wollongong	61.8	61.9	59.1	61.9	62.6
	Other hospitals	75.0	80.0	33.3	0.0	0.0
<b>TOTAL</b>	<b>60.9</b>	<b>62.7</b>	<b>57.2</b>	<b>62.2</b>	<b>62.4</b>	
Western Sydney	Auburn	57.7	60.9	51.9	52.9	48.0
	Blacktown	50.7	44.6	44.4	44.3	45.4
	Westmead	43.5	35.9	39.4	38.6	37.1
<b>TOTAL</b>	<b>47.7</b>	<b>42.0</b>	<b>42.8</b>	<b>42.4</b>	<b>41.1</b>	
Nepean Blue Mountains	Blue Mountains	87.2	69.6	73.5	77.6	72.1
	Nepean	56.0	62.5	54.1	57.4	57.1
	Hawkesbury	56.7	61.5	50.0	63.4	61.0
	Other hospitals	52.5	62.1	54.8	75.0	56.7
<b>TOTAL</b>	<b>57.5</b>	<b>62.8</b>	<b>54.5</b>	<b>60.1</b>	<b>58.4</b>	
Northern Sydney	Hornsby	69.6	70.9	58.3	63.8	51.6
	Manly	59.6	58.9	53.6	58.5	54.9
	Mona Vale	66.0	69.6	70.3	64.1	60.5
	Royal North Shore	55.6	55.1	57.3	55.1	50.2
	Other hospitals	96.8	81.1	88.6	88.5	84.6
<b>TOTAL</b>	<b>61.4</b>	<b>61.2</b>	<b>59.2</b>	<b>59.0</b>	<b>53.3</b>	
Central Coast	Gosford	57.4	59.9	60.6	65.8	53.6
	Other hospitals	86.3	86.2	87.5	94.3	68.2
	<b>TOTAL</b>	<b>59.8</b>	<b>61.1</b>	<b>61.9</b>	<b>67.4</b>	<b>54.2</b>
Hunter New England	Armidale	65.2	41.0	52.7	68.8	57.8
	Inverell	57.1	45.9	35.0	50.0	44.0
	Tamworth Base	59.3	54.9	57.6	55.8	58.1
	Manning Base	66.7	72.4	63.9	66.9	63.9
	Maitland	70.8	70.7	69.4	71.4	66.9
	John Hunter	61.9	63.0	65.1	65.6	59.7
	Other hospitals	60.1	64.4	65.2	67.9	72.9
<b>TOTAL</b>	<b>63.4</b>	<b>63.3</b>	<b>63.9</b>	<b>65.6</b>	<b>61.9</b>	
Northern NSW	Grafton Base	56.3	73.0	73.8	69.2	64.6
	Lismore Base	59.3	69.0	69.1	61.2	62.7
	Tweed Heads	69.9	62.5	67.1	71.8	54.8
	Other hospitals	78.6	91.7	80.0	86.2	86.0
<b>TOTAL</b>	<b>65.9</b>	<b>68.8</b>	<b>69.5</b>	<b>69.4</b>	<b>61.4</b>	

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	65.0	67.3	68.3	57.2	54.1
	Kempsey	69.4	77.3	69.2	77.1	60.0
	Port Macquarie Base	63.9	65.9	49.6	69.2	50.3
	Other hospitals	66.7	100.0	83.3	100.0	80.0
<b>TOTAL</b>	<b>65.0</b>	<b>68.9</b>	<b>62.2</b>	<b>64.4</b>	<b>53.8</b>	
Southern NSW	Bega	60.0	57.7	68.9	64.6	66.0
	Goulburn Base	30.2	46.0	42.1	46.7	36.0
	Moruya	69.4	71.7	62.5	75.0	66.1
	Queanbeyan	67.7	50.9	74.8	63.5	62.3
	Other hospitals	63.0	60.9	71.7	63.4	67.6
<b>TOTAL</b>	<b>58.8</b>	<b>55.8</b>	<b>65.3</b>	<b>63.1</b>	<b>60.2</b>	
Murrumbidgee	Griffith Base	65.1	56.3	66.7	60.6	65.8
	Wagga Wagga Base	67.7	61.3	55.6	58.9	60.3
	Other hospitals	55.8	59.5	55.7	58.6	62.8
<b>TOTAL</b>	<b>63.2</b>	<b>59.6</b>	<b>58.2</b>	<b>59.3</b>	<b>62.5</b>	
Western NSW	Dubbo Base	49.5	44.7	54.5	62.0	46.7
	Mudgee	75.0	58.3	65.5	64.9	61.5
	Bathurst Base	76.8	63.7	66.4	66.1	64.7
	Orange Base	61.7	57.2	58.0	54.5	55.6
	Other hospitals	61.6	58.8	67.1	62.2	62.0
<b>TOTAL</b>	<b>61.5</b>	<b>54.4</b>	<b>60.0</b>	<b>61.0</b>	<b>55.0</b>	
Far West	Broken Hill Base	51.5	66.0	76.5	81.8	75.0
	<b>TOTAL</b>	<b>51.5</b>	<b>66.0</b>	<b>76.5</b>	<b>81.8</b>	<b>75.0</b>
Private Hospitals	Mater, North Sydney	38.8	38.6	42.6	47.4	52.0
	North Shore Private	53.5	45.2	56.2	50.6	52.3
	Sydney Adventist	51.9	48.9	55.4	47.1	50.3
	North Gosford Private	35.8	28.7	40.7	39.8	33.0
	Hurstville Community	43.7	44.7	50.8	57.6	64.7
	Kareena Private	56.0	56.1	63.3	52.6	53.2
	St. George Private	62.1	64.6	59.4	65.7	60.1
	Prince of Wales Private	40.3	35.9	36.7	39.6	39.8
	Norwest Private	43.9	40.1	35.0	39.9	36.1
	Sydney Southwest Private	37.0	27.2	28.0	30.2	36.4
	Nepean Private	28.2	25.0	26.3	27.1	28.8
	Westmead Private	28.5	25.9	23.1	27.8	26.9
	Wollongong Private <sup>†</sup>	-	-	-	35.3	43.2
	Newcastle Private	62.4	50.2	55.8	52.9	53.2
Calvary, Wagga Wagga	37.0	46.4	46.4	49.1	56.4	
Other hospitals	38.6	43.6	38.5	0.0	0.0	
<b>TOTAL</b>	<b>45.2</b>	<b>41.4</b>	<b>43.6</b>	<b>44.2</b>	<b>44.8</b>	
<b>TOTAL NSW<sup>a</sup></b>	<b>55.4</b>	<b>53.0</b>	<b>53.5</b>	<b>54.8</b>	<b>52.0</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.  
<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.  
<sup>†</sup> Wollongong Private Hospital opened in 2016.

### 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 65 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 65: 3.4 SELECTED PRIMIPARA UNDERGOING EPISIOTOMY AND SUSTAINING A PERINEAL TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	4.53	6.87	6.57	9.82	14.43
	Royal Prince Alfred	8.68	9.83	8.20	6.61	6.95
	<b>TOTAL</b>	<b>7.77</b>	<b>9.14</b>	<b>7.80</b>	<b>7.30</b>	<b>8.61</b>
South Western Sydney	Fairfield	3.63	2.47	2.96	4.04	6.43
	Liverpool	4.53	4.43	5.52	4.43	5.00
	Campbelltown	3.16	1.77	1.68	2.20	2.22
	Bankstown–Lidcombe	7.91	6.51	8.75	7.73	9.09
	Bowral	1.77	1.85	2.22	2.63	1.79
	<b>TOTAL</b>	<b>4.55</b>	<b>3.67</b>	<b>4.48</b>	<b>4.11</b>	<b>4.82</b>
South Eastern Sydney	St. George	13.30	13.76	9.72	16.64	16.49
	Sutherland	10.23	10.85	8.33	13.58	10.46
	Royal Hospital for Women	7.76	9.14	9.08	12.21	10.95
	<b>TOTAL</b>	<b>9.93</b>	<b>10.91</b>	<b>9.15</b>	<b>13.88</b>	<b>12.76</b>
Illawarra Shoalhaven	Shoalhaven	1.23	1.83	4.65	5.03	6.67
	Wollongong	7.94	5.03	6.03	9.28	6.24
	Other hospitals	4.17	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>6.13</b>	<b>4.09</b>	<b>5.67</b>	<b>8.30</b>	<b>6.34</b>
Western Sydney	Auburn	8.09	7.43	9.94	16.43	14.25
	Blacktown	13.00	12.01	10.14	21.36	16.48
	Westmead	13.98	16.10	13.25	20.23	20.59
	<b>TOTAL</b>	<b>12.76</b>	<b>13.71</b>	<b>11.85</b>	<b>20.00</b>	<b>18.46</b>
Nepean Blue Mountains	Blue Mountains	5.13	1.79	8.16	6.90	4.65
	Nepean	8.10	10.39	9.47	17.74	15.90
	Hawkesbury	3.55	2.22	4.11	10.57	7.35
	<b>TOTAL</b>	<b>7.25</b>	<b>8.44</b>	<b>8.49</b>	<b>15.89</b>	<b>13.88</b>
Northern Sydney	Hornsby	8.03	4.01	12.20	18.27	6.36
	Manly	12.65	12.55	13.49	14.96	4.47
	Mona Vale	6.67	7.84	6.98	8.72	4.74
	Royal North Shore	14.97	14.06	13.56	17.75	7.65
	Other hospitals	0.00	2.70	0.00	3.85	0.00
	<b>TOTAL</b>	<b>11.80</b>	<b>10.84</b>	<b>12.16</b>	<b>16.03</b>	<b>6.33</b>
Central Coast	Gosford	13.79	12.39	10.63	12.61	3.65
	Other hospitals	0.00	0.00	3.13	2.86	4.55
	<b>TOTAL</b>	<b>12.62</b>	<b>11.79</b>	<b>10.27</b>	<b>12.05</b>	<b>3.68</b>
Hunter New England	Armidale	10.14	11.48	5.41	6.25	13.25
	Inverell	3.57	2.70	2.50	5.00	6.00
	Tamworth Base	4.64	8.24	6.81	12.18	9.46
	Manning Base	2.27	4.48	4.92	9.09	12.03
	Maitland	7.69	7.48	9.31	8.06	10.69
	John Hunter	9.04	9.87	9.82	13.57	11.99
	Other hospitals	8.15	3.96	8.57	5.35	1.76
	<b>TOTAL</b>	<b>7.67</b>	<b>8.08</b>	<b>8.59</b>	<b>10.61</b>	<b>10.39</b>
Northern NSW	Grafton Base	2.82	3.37	3.08	3.85	0.00
	Lismore Base	6.32	3.70	6.28	6.07	1.24
	Tweed Heads	6.80	10.25	5.79	6.27	2.90
	Other hospitals	0.00	0.00	1.82	0.00	0.00
	<b>TOTAL</b>	<b>5.81</b>	<b>6.17</b>	<b>5.34</b>	<b>5.28</b>	<b>1.69</b>
Mid North Coast	Coffs Harbour	6.67	6.44	7.54	7.22	3.64
	Kempsey	0.00	0.00	5.13	10.42	0.00
	Port Macquarie Base	10.06	8.53	12.95	7.52	6.13
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>7.42</b>	<b>6.22</b>	<b>9.00</b>	<b>7.65</b>	<b>4.16</b>
	Southern NSW	Bega	2.22	7.69	13.33	4.17
Goulburn Base		7.94	6.00	1.75	2.22	2.00
Moruya		0.00	8.70	8.33	0.00	3.23
Queanbeyan		3.23	8.62	4.67	11.11	10.27
Other hospitals		7.41	2.17	2.17	2.44	2.94
<b>TOTAL</b>		<b>3.90</b>	<b>7.10</b>	<b>5.61</b>	<b>5.77</b>	<b>6.49</b>
Murrumbidgee	Griffith Base	1.83	7.50	3.85	8.65	2.63
	Wagga Wagga Base	5.65	6.75	11.11	13.16	12.29
	Other hospitals	5.77	6.35	7.55	9.20	5.32
	<b>TOTAL</b>	<b>4.45</b>	<b>6.78</b>	<b>8.31</b>	<b>11.02</b>	<b>7.75</b>
Western NSW	Dubbo Base	7.14	4.85	4.69	8.26	8.89
	Mudgee	3.33	6.25	3.64	1.75	0.00
	Bathurst Base	4.04	2.94	6.03	11.01	4.90
	Orange Base	15.30	13.29	11.50	17.61	12.28
	Other hospitals	6.85	6.25	6.58	10.00	5.06
	<b>TOTAL</b>	<b>8.67</b>	<b>7.22</b>	<b>7.12</b>	<b>10.83</b>	<b>8.12</b>
Far West	Broken Hill Base	9.09	1.89	1.96	4.55	2.50
	<b>TOTAL</b>	<b>9.09</b>	<b>1.89</b>	<b>1.96</b>	<b>4.55</b>	<b>2.50</b>
Private Hospitals	Mater, North Sydney	3.88	6.47	5.29	1.17	1.63
	North Shore Private	0.72	1.66	0.71	1.93	0.00
	Sydney Adventist	1.44	1.60	1.47	0.00	0.00
	North Gosford Private	2.24	3.48	9.66	6.78	7.55
	Hurstville Community	2.11	2.27	4.69	1.82	0.75
	Kareena Private	0.71	0.72	0.00	0.74	0.00
	St. George Private	0.26	0.80	0.00	0.29	0.00
	Prince of Wales Private	4.72	5.37	5.13	8.86	6.27
	Norwest Private	4.57	4.99	3.84	7.10	5.63
	Sydney Southwest Private	1.74	2.01	5.17	6.27	6.31
	Nepean Private	4.23	5.63	6.58	11.61	5.04
	Westmead Private	0.74	0.78	0.82	0.64	0.67
	Wollongong Private <sup>†</sup>	-	-	-	0.00	0.00
	Newcastle Private	2.45	14.29	9.69	10.23	9.77
	Calvary, Wagga Wagga	1.85	4.35	2.90	0.00	5.13
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>2.22</b>	<b>3.93</b>	<b>3.60</b>	<b>3.85</b>	<b>3.02</b>	
<b>TOTAL NSW<sup>a</sup></b>		<b>7.09</b>	<b>7.68</b>	<b>7.38</b>	<b>9.93</b>	<b>8.32</b>

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

<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.

<sup>\*</sup> Total NSW includes births at home assisted by independent midwives.

<sup>†</sup> Wollongong Private Hospital opened in 2016.



### 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 37<sup>0</sup> to 40<sup>6</sup> 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 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 66: 3.5 SELECTED PRIMIPARA UNDERGOING SURGICAL REPAIR OF THE PERINEUM FOR THIRD DEGREE TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	10.26	5.54	10.09	7.75	8.96
	Royal Prince Alfred	6.17	8.08	8.87	8.51	6.31
	<b>TOTAL</b>	<b>7.08</b>	<b>7.49</b>	<b>9.17</b>	<b>8.35</b>	<b>6.90</b>
South Western Sydney	Fairfield	8.87	6.79	5.93	8.08	9.51
	Liverpool	5.96	6.77	5.64	9.27	8.47
	Campbelltown	2.65	5.58	3.36	5.43	3.71
	Bankstown–Lidcombe	4.68	5.31	8.38	5.67	5.30
	Bowral	4.42	2.78	3.33	1.32	2.68
<b>TOTAL</b>	<b>5.21</b>	<b>5.97</b>	<b>5.45</b>	<b>6.97</b>	<b>6.27</b>	
South Eastern Sydney	St. George	9.12	11.80	6.94	10.24	6.09
	Sutherland	8.95	7.75	11.02	3.95	6.15
	Royal Hospital for Women	5.57	4.92	7.36	7.62	6.76
	<b>TOTAL</b>	<b>7.29</b>	<b>7.60</b>	<b>7.87</b>	<b>7.78</b>	<b>6.43</b>
Illawarra Shoalhaven	Shoalhaven	1.85	3.66	5.81	3.77	4.85
	Wollongong	3.43	4.60	3.58	5.30	5.23
	Other hospitals	4.17	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>3.07</b>	<b>4.25</b>	<b>4.11</b>	<b>4.95</b>	<b>5.14</b>	
Western Sydney	Auburn	4.44	5.43	6.35	4.18	5.59
	Blacktown	8.72	4.93	5.53	5.52	8.60
	Westmead	6.99	4.80	6.04	4.38	5.42
	<b>TOTAL</b>	<b>7.04</b>	<b>4.93</b>	<b>5.95</b>	<b>4.68</b>	<b>6.36</b>
Nepean Blue Mountains	Blue Mountains	7.69	12.50	8.16	6.90	2.33
	Nepean	6.03	6.36	3.85	6.14	8.22
	Hawkesbury	4.96	4.44	1.37	7.32	5.15
	Other hospitals	0.00	3.45	0.00	0.00	3.33
<b>TOTAL</b>	<b>5.63</b>	<b>6.36</b>	<b>3.49</b>	<b>6.11</b>	<b>7.36</b>	
Northern Sydney	Hornsby	5.02	8.36	9.15	6.31	6.01
	Manly	8.57	6.84	11.51	9.83	7.32
	Mona Vale	6.00	8.33	12.79	8.72	5.26
	Royal North Shore	11.73	10.84	8.08	8.29	7.36
	Other hospitals	0.00	2.70	0.00	0.00	0.00
<b>TOTAL</b>	<b>8.81</b>	<b>9.19</b>	<b>9.26</b>	<b>8.05</b>	<b>6.68</b>	
Central Coast	Gosford	9.62	6.98	7.30	4.84	4.69
	Other hospitals	5.88	6.90	3.13	0.00	0.00
	<b>TOTAL</b>	<b>9.30</b>	<b>6.98</b>	<b>7.10</b>	<b>4.56</b>	<b>4.52</b>
Hunter New England	Armidale	4.35	3.28	2.70	4.69	2.41
	Inverell	0.00	2.70	0.00	2.50	2.00
	Tamworth Base	5.15	5.49	4.19	4.06	2.70
	Manning Base	2.27	3.73	8.20	3.31	9.77
	Maitland	7.69	6.23	8.71	7.33	3.79
	John Hunter	8.06	10.11	8.62	9.05	9.74
	Other hospitals	3.86	4.46	3.81	4.12	3.53
<b>TOTAL</b>	<b>6.44</b>	<b>7.39</b>	<b>7.15</b>	<b>6.81</b>	<b>6.87</b>	
Northern NSW	Grafton Base	0.00	0.00	0.00	2.56	1.54
	Lismore Base	2.37	5.09	5.80	2.34	5.39
	Tweed Heads	5.58	5.65	5.49	5.23	5.81
	Other hospitals	3.57	0.00	0.00	0.00	2.33
	<b>TOTAL</b>	<b>3.91</b>	<b>4.17</b>	<b>4.58</b>	<b>3.42</b>	<b>4.92</b>
Mid North Coast	Coffs Harbour	6.11	5.94	3.52	4.64	1.82
	Kempsey	5.56	4.55	5.13	10.42	2.50
	Port Macquarie Base	12.43	9.30	5.04	7.52	8.59
	Other hospitals	0.00	0.00	0.00	0.00	10.00
	<b>TOTAL</b>	<b>8.70</b>	<b>6.74</b>	<b>4.11</b>	<b>6.33</b>	<b>4.62</b>
	Southern NSW	Bega	4.44	5.77	4.44	2.08
Goulburn Base		1.59	4.00	3.51	4.44	4.00
Moruya		8.16	10.87	12.50	9.62	6.45
Queanbeyan		3.23	4.31	3.74	7.94	10.96
Other hospitals	7.41	4.35	4.35	0.00	5.88	
<b>TOTAL</b>	<b>4.22</b>	<b>5.48</b>	<b>5.28</b>	<b>5.77</b>	<b>7.96</b>	
Murrumbidgee	Griffith Base	1.83	2.50	2.56	6.73	1.75
	Wagga Wagga Base	8.06	7.36	6.54	5.26	8.38
	Other hospitals	3.85	4.76	9.43	2.30	2.13
	<b>TOTAL</b>	<b>4.75</b>	<b>5.42</b>	<b>6.53</b>	<b>4.99</b>	<b>4.91</b>
Western NSW	Dubbo Base	2.04	3.40	4.23	3.72	5.33
	Mudgee	0.00	6.25	1.82	3.51	5.13
	Bathurst Base	4.04	5.88	6.90	6.42	9.80
	Orange Base	9.29	10.40	8.50	7.39	11.70
	Other hospitals	4.11	8.75	6.58	7.78	5.06
	<b>TOTAL</b>	<b>4.58</b>	<b>6.73</b>	<b>6.06</b>	<b>5.64</b>	<b>7.79</b>
Far West	Broken Hill Base	3.03	0.00	1.96	2.27	5.00
	<b>TOTAL</b>	<b>3.03</b>	<b>0.00</b>	<b>1.96</b>	<b>2.27</b>	<b>5.00</b>
Private Hospitals	Mater, North Sydney	1.83	2.16	4.50	1.46	1.96
	North Shore Private	1.91	1.11	2.38	2.79	1.86
	Sydney Adventist	0.72	0.91	1.96	0.00	0.00
	North Gosford Private	2.99	0.00	4.14	1.69	1.89
	Hurstville Community	1.41	2.27	1.56	1.21	0.00
	Kareena Private	3.55	2.16	1.44	2.22	1.44
	St. George Private	3.39	2.93	1.89	2.93	2.85
	Prince of Wales Private	2.36	0.85	2.05	2.49	2.19
	Norwest Private	2.91	3.39	2.16	3.10	2.56
	Sydney Southwest Private	2.61	2.01	3.45	1.96	4.37
	Nepean Private	2.82	0.63	3.95	5.81	5.04
	Westmead Private	0.93	0.58	0.82	0.85	1.11
	Wollongong Private†	-	-	-	0.98	1.41
	Newcastle Private	5.12	5.67	5.67	7.42	6.32
	Calvary, Wagga Wagga	0.00	4.35	0.00	0.00	2.56
	Other hospitals	0.97	0.58	0.00	0.00	0.00
<b>TOTAL</b>	<b>2.33</b>	<b>2.04</b>	<b>2.57</b>	<b>2.47</b>	<b>2.33</b>	
<b>TOTAL NSW*</b>	<b>5.53</b>	<b>5.64</b>	<b>5.78</b>	<b>5.65</b>	<b>5.62</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
 † Hospitals with more than 200 births in 2017 are identified individually.  
 \* Total NSW includes births at home assisted by independent midwives.  
 † Wollongong Private Hospital opened in 2016.

### 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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation. Surgical repair is defined as suture of the perineum following delivery.

Table 67 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 67: 3.6 SELECTED PRIMIPARA UNDERGOING SURGICAL REPAIR OF THE PERINEUM FOR FOURTH DEGREE TEAR BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>a</sup>**

Local Health District–Hospital		2013	2014	2015	2016	2017	
		%	%	%	%	%	
Sydney	Canterbury	0.95	0.22	0.00	0.52	0.00	
	Royal Prince Alfred	0.34	0.34	0.30	0.14	0.28	
	<b>TOTAL</b>	<b>0.48</b>	<b>0.31</b>	<b>0.23</b>	<b>0.22</b>	<b>0.22</b>	
South Western Sydney	Fairfield	0.00	0.21	0.00	0.24	1.29	
	Liverpool	0.26	0.12	0.12	0.55	0.14	
	Campbelltown	0.25	0.25	0.36	0.00	0.37	
	Bankstown–Lidcombe	0.36	0.34	0.00	0.52	0.00	
	Bowral	0.00	0.93	0.00	0.00	0.00	
<b>TOTAL</b>	<b>0.22</b>	<b>0.25</b>	<b>0.15</b>	<b>0.29</b>	<b>0.37</b>		
South Eastern Sydney	St. George	0.15	0.28	0.46	0.43	0.00	
	Sutherland	0.26	0.00	0.81	0.00	0.31	
	Royal Hospital for Women	0.46	0.35	0.73	0.18	0.20	
<b>TOTAL</b>	<b>0.32</b>	<b>0.27</b>	<b>0.66</b>	<b>0.23</b>	<b>0.15</b>		
Illawarra Shoalhaven	Shoalhaven	0.62	0.00	0.00	0.63	0.00	
	Wollongong	0.43	0.00	0.75	0.19	0.20	
	Other hospitals	0.00	0.00	0.00	0.00	0.00	
<b>TOTAL</b>	<b>0.46</b>	<b>0.00</b>	<b>0.57</b>	<b>0.29</b>	<b>0.15</b>		
Western Sydney	Auburn	0.26	0.57	0.28	0.00	0.84	
	Blacktown	1.27	1.15	0.46	0.14	0.14	
	Westmead	0.45	0.44	0.23	0.37	0.07	
	<b>TOTAL</b>	<b>0.64</b>	<b>0.65</b>	<b>0.30</b>	<b>0.25</b>	<b>0.21</b>	
Nepean Blue Mountains	Blue Mountains	0.00	0.00	0.00	0.00	0.00	
	Nepean	0.52	0.62	0.48	0.27	0.27	
	Hawkesbury	0.00	0.00	0.68	0.00	0.74	
	Other hospitals	2.50	0.00	0.00	0.00	0.00	
<b>TOTAL</b>	<b>0.50</b>	<b>0.46</b>	<b>0.47</b>	<b>0.21</b>	<b>0.32</b>		
Northern Sydney	Hornsby	0.00	0.67	0.34	1.00	0.35	
	Manly	0.00	0.38	0.00	0.00	0.00	
	Mona Vale	0.67	0.00	0.00	0.00	1.05	
	Royal North Shore	0.00	0.65	0.43	0.65	0.29	
	Other hospitals	0.00	0.00	0.00	0.00	0.00	
	<b>TOTAL</b>	<b>0.07</b>	<b>0.51</b>	<b>0.28</b>	<b>0.52</b>	<b>0.35</b>	
Central Coast	Gosford	0.18	1.05	0.63	0.35	0.00	
	Other hospitals	3.92	0.00	0.00	0.00	0.00	
	<b>TOTAL</b>	<b>0.50</b>	<b>1.00</b>	<b>0.60</b>	<b>0.33</b>	<b>0.00</b>	
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	0.52	1.10	0.00	1.02	0.00	
	Manning Base	0.00	0.75	0.00	0.83	0.00	
	Maitland	0.62	1.25	0.60	0.73	0.34	
	John Hunter	0.61	0.61	0.72	0.25	0.25	
	Other hospitals	0.43	0.99	0.00	0.41	0.00	
	<b>TOTAL</b>	<b>0.50</b>	<b>0.80</b>	<b>0.44</b>	<b>0.46</b>	<b>0.18</b>	
Northern NSW	Grafton Base	0.00	1.12	1.54	1.28	1.54	
	Lismore Base	0.00	0.93	0.48	0.00	0.00	
	Tweed Heads	0.49	0.35	0.30	0.35	0.00	
	Other hospitals	0.00	0.00	0.00	0.00	0.00	
	<b>TOTAL</b>	<b>0.25</b>	<b>0.62</b>	<b>0.46</b>	<b>0.31</b>	<b>0.17</b>	
Mid North Coast	Coffs Harbour	0.00	0.50	0.50	0.00	0.00	
	Kempsey	0.00	0.00	0.00	4.17	0.00	
	Port Macquarie Base	0.00	0.00	0.00	0.00	0.61	
	Other hospitals	0.00	0.00	0.00	0.00	0.00	
	<b>TOTAL</b>	<b>0.00</b>	<b>0.26</b>	<b>0.26</b>	<b>0.53</b>	<b>0.23</b>	
	Southern NSW	Bega	2.22	1.92	0.00	0.00	2.13
		Goulburn Base	0.00	0.00	0.00	0.00	0.00
		Moruya	0.00	0.00	2.08	0.00	0.00
		Queanbeyan	0.00	0.86	0.00	0.00	0.00
		Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>0.32</b>	<b>0.65</b>	<b>0.33</b>	<b>0.00</b>	<b>0.29</b>		
Murrumbidgee	Griffith Base	0.00	0.00	0.00	0.00	0.00	
	Wagga Wagga Base	0.00	0.00	0.00	0.00	0.00	
	Other hospitals	0.00	1.59	0.00	1.15	2.13	
<b>TOTAL</b>	<b>0.00</b>	<b>0.54</b>	<b>0.00</b>	<b>0.26</b>	<b>0.52</b>		
Western NSW	Dubbo Base	0.00	0.00	0.94	0.41	0.00	
	Mudgee	0.00	0.00	1.82	0.00	0.00	
	Bathurst Base	0.00	0.00	1.72	0.00	0.98	
	Orange Base	0.00	0.00	0.50	0.00	0.00	
	Other hospitals	4.11	0.00	1.32	0.00	1.27	
<b>TOTAL</b>	<b>0.49</b>	<b>0.00</b>	<b>1.06</b>	<b>0.15</b>	<b>0.32</b>		
Far West	Broken Hill Base	0.00	0.00	0.00	0.00	0.00	
	<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	
Private Hospitals	Mater, North Sydney	0.00	0.24	0.00	0.29	0.00	
	North Shore Private	0.00	0.28	0.00	0.43	0.00	
	Sydney Adventist	0.48	0.00	0.25	0.23	0.00	
	North Gosford Private	0.75	0.00	0.69	0.00	0.00	
	Hurstville Community	0.00	0.00	0.00	0.00	0.75	
	Kareena Private	0.00	0.00	0.00	0.00	0.00	
	St. George Private	0.78	0.00	0.00	0.00	0.00	
	Prince of Wales Private	0.00	0.28	0.00	0.00	0.00	
	Norwest Private	0.00	0.00	0.00	0.22	0.00	
	Sydney Southwest Private	0.43	0.00	0.00	0.00	0.49	
	Nepean Private	0.00	0.63	0.00	0.65	0.00	
	Westmead Private	0.00	0.00	0.00	0.00	0.00	
	Wollongong Private <sup>†</sup>	-	-	-	0.00	0.00	
	Newcastle Private	0.00	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	0.58	0.00	0.00	0.00		
<b>TOTAL</b>	<b>0.15</b>	<b>0.11</b>	<b>0.05</b>	<b>0.14</b>	<b>0.05</b>		
<b>TOTAL NSW<sup>a</sup></b>	<b>0.33</b>	<b>0.37</b>	<b>0.32</b>	<b>0.27</b>	<b>0.21</b>		

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

# Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

† Wollongong Private Hospital opened in 2016.



# 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 68 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

TABLE 68: 4.1 GENERAL ANAESTHESIA FOR CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017<sup>#</sup>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	13.47	10.52	10.61	8.62	10.03
	Royal Prince Alfred	10.08	10.09	11.13	10.54	9.12
	<b>TOTAL</b>	<b>10.87</b>	<b>10.19</b>	<b>11.00</b>	<b>10.07</b>	<b>9.36</b>
South Western Sydney	Fairfield	14.48	11.82	12.43	12.65	10.28
	Liverpool	14.68	15.08	13.67	15.54	13.55
	Campbelltown	9.39	10.73	13.14	12.74	11.07
	Bankstown–Lidcombe	12.72	10.26	10.68	13.27	12.85
	Bowral	11.90	10.56	10.53	8.89	2.36
<b>TOTAL</b>	<b>12.61</b>	<b>12.26</b>	<b>12.62</b>	<b>13.58</b>	<b>11.70</b>	
South Eastern Sydney	St. George	9.91	7.01	7.47	6.22	6.29
	Sutherland	8.94	10.94	9.69	6.62	8.43
	Royal Hospital for Women	4.51	4.15	3.88	4.49	5.37
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>6.85</b>	<b>6.03</b>	<b>5.88</b>	<b>5.35</b>	<b>6.13</b>	
Illawarra Shoalhaven	Shoalhaven	6.51	7.87	5.90	6.18	4.62
	Wollongong	9.12	9.54	7.26	9.72	9.22
	Other hospitals	11.76	20.00	0.00	50.00	0.00
<b>TOTAL</b>	<b>8.42</b>	<b>9.15</b>	<b>6.81</b>	<b>8.87</b>	<b>8.05</b>	
Western Sydney	Auburn	5.64	7.74	8.33	4.53	5.10
	Blacktown	12.77	12.73	11.89	10.27	9.87
	Westmead	9.30	9.95	8.40	8.96	8.43
	<b>TOTAL</b>	<b>10.07</b>	<b>10.67</b>	<b>9.53</b>	<b>8.91</b>	<b>8.52</b>
Nepean Blue Mountains	Blue Mountains	8.33	6.58	3.53	6.58	1.61
	Nepean	16.19	15.25	13.90	12.00	13.96
	Hawkesbury	7.48	7.94	8.49	8.20	4.84
	Other hospitals	3.28	6.15	4.69	1.52	3.85
<b>TOTAL</b>	<b>13.91</b>	<b>13.45</b>	<b>12.34</b>	<b>10.93</b>	<b>12.03</b>	
Northern Sydney	Hornsby	6.40	5.50	6.92	7.92	3.24
	Manly	4.20	7.43	7.43	6.69	6.74
	Mona Vale	6.08	8.42	8.25	9.01	2.31
	Royal North Shore	5.16	5.16	5.62	5.29	5.76
<b>TOTAL</b>	<b>5.32</b>	<b>5.97</b>	<b>6.46</b>	<b>6.42</b>	<b>5.00</b>	
Central Coast	Gosford	7.74	6.54	6.33	10.97	7.86
	<b>TOTAL</b>	<b>7.74</b>	<b>6.54</b>	<b>6.33</b>	<b>10.97</b>	<b>7.86</b>
Hunter New England	Armidale	5.38	4.84	5.84	5.30	5.11
	Inverell	2.13	3.09	1.27	2.53	0.00
	Tamworth Base	9.82	13.50	14.78	9.24	9.43
	Manning Base	13.64	11.88	11.11	14.57	12.66
	Maitland	9.79	10.74	6.78	14.25	9.19
	John Hunter	18.25	15.36	12.49	16.28	14.25
	Other hospitals	20.36	24.00	15.00	11.11	10.38
<b>TOTAL</b>	<b>14.48</b>	<b>13.92</b>	<b>11.30</b>	<b>13.54</b>	<b>11.58</b>	
Northern NSW	Grafton Base	9.23	8.49	11.40	6.90	7.38
	Lismore Base	6.55	6.44	4.92	6.72	5.43
	Tweed Heads	7.23	12.01	7.82	7.07	8.92
	Other hospitals	0.00	2.17	0.00	15.38	0.00
	<b>TOTAL</b>	<b>6.73</b>	<b>8.63</b>	<b>6.93</b>	<b>7.06</b>	<b>7.20</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	8.22	7.67	7.87	7.61	3.84
	Kempsey	1.92	15.38	0.00	15.52	9.23
	Port Macquarie Base	9.05	10.17	11.11	7.34	5.96
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>7.97</b>	<b>9.19</b>	<b>8.42</b>	<b>8.13</b>	<b>5.09</b>	
Southern NSW	Bega	15.38	3.17	5.88	4.11	0.00
	Goulburn Base	2.74	2.94	7.78	7.69	6.41
	Moruya	8.96	6.25	4.05	6.10	11.27
	Queanbeyan	12.04	5.05	3.39	2.78	5.33
	Other hospitals	2.22	18.18	11.76	4.76	14.81
<b>TOTAL</b>	<b>8.70</b>	<b>5.83</b>	<b>5.73</b>	<b>5.07</b>	<b>6.20</b>	
Murrumbidgee	Griffith Base	6.02	10.53	5.96	7.06	6.12
	Wagga Wagga Base	6.84	8.33	12.72	7.62	7.08
	Other hospitals	7.69	4.40	3.54	1.75	3.88
	<b>TOTAL</b>	<b>6.86</b>	<b>7.85</b>	<b>9.30</b>	<b>6.40</b>	<b>6.38</b>
Western NSW	Dubbo Base	18.42	21.36	17.11	15.51	10.39
	Mudgee	7.94	1.61	8.57	3.51	9.23
	Bathurst Base	13.51	5.71	10.67	5.79	8.70
	Orange Base	11.21	11.05	5.98	11.83	12.93
	Other hospitals	10.00	0.93	7.45	7.14	5.83
	<b>TOTAL</b>	<b>13.43</b>	<b>11.89</b>	<b>11.01</b>	<b>11.54</b>	<b>10.42</b>
Far West	Broken Hill Base	14.52	8.33	8.00	7.58	5.00
	<b>TOTAL</b>	<b>14.52</b>	<b>8.33</b>	<b>8.00</b>	<b>7.58</b>	<b>5.00</b>
Private Hospitals	Mater, North Sydney	2.25	2.60	1.62	1.05	1.46
	North Shore Private	1.28	1.80	1.62	1.62	1.48
	Sydney Adventist	6.34	3.75	3.87	2.37	2.93
	North Gosford Private	3.95	2.61	2.85	2.26	1.17
	Hurstville Community	4.22	2.24	4.36	1.22	3.02
	Kareena Private	1.76	2.62	3.63	2.38	3.54
	St. George Private	3.23	4.04	3.42	3.53	3.07
	Prince of Wales Private	0.67	2.12	2.01	2.32	1.25
	Norwest Private	6.92	4.50	6.09	4.31	4.14
	Sydney Southwest Private	4.26	4.11	3.67	2.47	7.12
	Nepean Private	5.12	4.33	4.60	5.11	2.95
	Westmead Private	3.24	3.70	2.84	2.67	2.02
	Wollongong Private†	-	-	-	4.56	4.02
	Newcastle Private	2.07	1.78	2.59	2.25	2.58
	Calvary, Wagga Wagga	4.02	3.94	1.04	1.35	2.11
Other hospitals	3.78	3.46	4.02	4.55	0.00	
<b>TOTAL</b>	<b>3.10</b>	<b>3.03</b>	<b>2.98</b>	<b>2.48</b>	<b>2.47</b>	
<b>TOTAL NSW<sup>#</sup></b>	<b>7.97</b>	<b>7.86</b>	<b>7.40</b>	<b>7.42</b>	<b>6.95</b>	

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

<sup>#</sup> Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

† Wollongong Private Hospital opened in 2016.

# Full breastfeeding

## Indicator 6.1

Definition: The total number of breastfeeding selected primipara who are discharged and their neonate has never received formula as a percentage of the total number of selected primipara who breastfed and are discharged.

The Perinatal Data Collection captures information on the feeding status of the infant, that is, whether the infant is breastfeeding, or consuming expressed breast milk or infant formula, at discharge from the birth hospital.

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 37<sup>0</sup> to 40<sup>6</sup> weeks gestation.

Table 69 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 69: 6.1 SELECTED PRIMIPARA FULL BREASTFEEDING BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\*\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	95.7	88.5	85.4	80.3	81.0
	Royal Prince Alfred	96.5	86.7	83.2	82.2	79.2
	<b>TOTAL</b>	<b>96.3</b>	<b>87.2</b>	<b>83.8</b>	<b>81.8</b>	<b>79.7</b>
South Western Sydney	Fairfield	74.4	64.8	57.7	47.4	50.7
	Liverpool	84.2	77.2	75.3	75.3	71.4
	Campbelltown	91.9	84.2	85.4	82.6	81.7
	Bankstown–Lidcombe	92.1	82.0	74.1	74.2	76.4
	Bowral	97.9	95.1	93.4	91.4	92.4
	<b>TOTAL</b>	<b>86.8</b>	<b>78.8</b>	<b>75.8</b>	<b>73.1</b>	<b>73.0</b>
South Eastern Sydney	St. George	83.2	85.7	87.3	85.8	82.5
	Sutherland	95.2	95.1	94.3	93.5	93.1
	Royal Hospital for Women	88.7	87.2	89.4	87.8	86.1
	Other hospitals	100.0	0.0	0.0	0.0	0.0
<b>TOTAL</b>	<b>88.1</b>	<b>88.1</b>	<b>89.5</b>	<b>88.1</b>	<b>86.1</b>	
Illawarra Shoalhaven	Shoalhaven	94.9	95.9	96.3	95.9	96.0
	Wollongong	94.8	93.9	92.5	94.4	91.6
	Other hospitals	98.9	100.0	100.0	100.0	100.0
<b>TOTAL</b>	<b>95.0</b>	<b>94.6</b>	<b>93.6</b>	<b>94.9</b>	<b>92.8</b>	
Western Sydney	Auburn	83.0	78.5	72.0	73.0	72.2
	Blacktown	90.7	89.2	89.3	87.8	84.1
	Westmead	86.6	87.1	86.3	88.0	87.8
<b>TOTAL</b>	<b>87.4</b>	<b>86.5</b>	<b>85.3</b>	<b>85.9</b>	<b>84.6</b>	
Nepean Blue Mountains	Blue Mountains	95.6	95.3	96.1	96.2	96.0
	Nepean	87.9	86.6	87.2	86.2	85.2
	Hawkesbury	95.6	94.9	93.5	95.4	94.5
	Other hospitals	93.6	91.5	94.2	93.0	94.8
<b>TOTAL</b>	<b>89.9</b>	<b>88.6</b>	<b>88.9</b>	<b>88.2</b>	<b>87.4</b>	
Northern Sydney	Hornsby	91.0	89.8	91.4	90.8	89.1
	Manly	94.6	94.3	92.4	91.4	88.7
	Mona Vale	92.6	92.9	94.3	94.7	91.6
	Royal North Shore	91.0	91.5	91.3	90.0	87.8
	Other hospitals	100.0	100.0	99.2	100.0	100.0
<b>TOTAL</b>	<b>92.0</b>	<b>92.0</b>	<b>92.1</b>	<b>91.1</b>	<b>88.9</b>	
Central Coast	Gosford	93.5	92.1	92.9	92.2	87.0
	Other hospitals	99.4	100.0	97.8	99.2	97.8
	<b>TOTAL</b>	<b>93.9</b>	<b>92.5</b>	<b>93.2</b>	<b>92.5</b>	<b>87.4</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Hunter New England	Armidale	95.5	95.1	94.9	91.7	91.3
	Inverell	90.8	90.6	85.6	88.2	86.2
	Tamworth Base	93.3	92.8	91.7	90.7	87.6
	Manning Base	95.7	93.0	93.3	91.9	91.2
	Maitland	93.2	92.4	95.6	93.2	90.5
	John Hunter	92.2	92.4	92.3	88.1	87.1
	Other hospitals	97.1	96.0	96.2	94.3	91.7
<b>TOTAL</b>	<b>93.5</b>	<b>93.0</b>	<b>93.3</b>	<b>90.4</b>	<b>88.7</b>	
Northern NSW	Grafton Base	96.9	97.3	97.6	91.6	94.0
	Lismore Base	95.8	94.8	96.5	93.7	91.9
	Tweed Heads	96.4	97.7	95.9	96.2	94.4
	Other hospitals	99.0	98.2	99.5	98.6	100.0
<b>TOTAL</b>	<b>96.5</b>	<b>96.6</b>	<b>96.6</b>	<b>94.9</b>	<b>93.6</b>	
Mid North Coast	Coffs Harbour	94.8	94.7	93.7	91.7	87.8
	Kempsey	98.0	97.2	98.1	97.4	97.4
	Port Macquarie Base	95.5	94.7	94.4	93.3	93.6
	Other hospitals	98.2	100.0	96.2	97.7	97.0
<b>TOTAL</b>	<b>95.5</b>	<b>95.1</b>	<b>94.5</b>	<b>93.0</b>	<b>91.1</b>	
Southern NSW	Bega	95.2	93.6	94.0	94.3	88.2
	Goulburn Base	96.3	95.2	95.2	94.6	91.1
	Moruya	96.5	99.2	98.5	96.3	94.3
	Queanbeyan	97.1	93.2	95.0	95.3	93.6
	Other hospitals	95.7	94.8	91.8	98.4	93.9
<b>TOTAL</b>	<b>96.4</b>	<b>95.0</b>	<b>95.3</b>	<b>95.5</b>	<b>92.4</b>	
Murrumbidgee	Griffith Base	91.5	85.2	88.4	87.9	85.3
	Wagga Wagga Base	94.7	91.1	92.1	91.1	88.7
	Other hospitals	96.3	95.6	95.9	97.1	95.9
	<b>TOTAL</b>	<b>94.4</b>	<b>91.1</b>	<b>92.3</b>	<b>91.8</b>	<b>89.4</b>
Western NSW	Dubbo Base	95.5	94.6	95.4	92.9	90.8
	Mudgee	98.6	98.0	97.8	97.6	95.5
	Bathurst Base	96.4	97.0	96.4	96.1	94.5
	Orange Base	91.8	91.9	89.3	90.6	87.9
	Other hospitals	95.3	96.4	95.9	95.7	95.6
<b>TOTAL</b>	<b>94.6</b>	<b>94.7</b>	<b>93.9</b>	<b>93.3</b>	<b>91.5</b>	
Far West	Broken Hill Base	93.1	94.5	96.6	94.0	95.3
	<b>TOTAL</b>	<b>93.1</b>	<b>94.5</b>	<b>96.6</b>	<b>94.0</b>	<b>95.3</b>

(Continued on next page)

TABLE 69: (Continued)

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Private Hospitals	Mater, North Sydney	82.1	77.1	76.3	71.0	68.4
	North Shore Private	79.4	79.8	76.7	74.5	74.2
	Sydney Adventist	100.0	100.0	98.9	81.0	76.0
	North Gosford Private	91.8	91.5	92.0	90.3	92.5
	Hurstville Community	76.2	77.0	78.3	70.6	63.0
	Kareena Private	92.5	93.6	89.4	89.9	91.5
	St. George Private	69.1	66.9	66.8	67.8	64.0
	Prince of Wales Private	88.9	90.4	100.0	80.8	79.9
	Norwest Private	87.5	90.2	100.0	80.4	79.4
	Sydney Southwest Private	85.5	99.8	100.0	66.4	67.9

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
	Nepean Private	86.2	89.2	100.0	78.8	80.0
	Westmead Private	75.4	70.9	73.7	72.7	75.1
	Wollongong Private <sup>†</sup>	-	-	-	90.6	87.0
	Newcastle Private	96.4	94.7	100.0	82.2	82.0
	Calvary, Wagga Wagga	99.8	100.0	99.8	87.4	89.1
	Other hospitals	91.6	92.3	91.2	94.4	95.5
	<b>TOTAL</b>	<b>85.7</b>	<b>85.8</b>	<b>88.3</b>	<b>77.5</b>	<b>76.5</b>
<b>TOTAL NSW<sup>*</sup></b>		<b>90.1</b>	<b>88.2</b>	<b>88.3</b>	<b>84.8</b>	<b>83.3</b>

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

# Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

† Wollongong Private Hospital opened in 2016.

‡ The Perinatal Data Collection captures breastfeeding information on the date of discharge.

# 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 70 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 70: 7.1 POSTPARTUM HAEMORRHAGE AND BLOOD TRANSFUSION FOLLOWING VAGINAL BIRTH BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>Sydney</b>	Canterbury	1.68	1.52	0.99	1.13	1.95
	Royal Prince Alfred	1.10	0.93	0.96	1.69	1.15
	<b>TOTAL</b>	<b>1.26</b>	<b>1.09</b>	<b>0.97</b>	<b>1.54</b>	<b>1.36</b>
<b>South Western Sydney</b>	Fairfield	0.48	0.61	0.85	1.16	0.64
	Liverpool	0.69	0.82	0.48	0.65	1.14
	Campbelltown	1.00	1.01	1.07	0.94	0.72
	Bankstown–Lidcombe	1.10	1.35	0.84	0.78	1.01
	<b>TOTAL</b>	<b>0.79</b>	<b>0.94</b>	<b>0.82</b>	<b>0.83</b>	<b>0.87</b>
<b>South Eastern Sydney</b>	St. George	1.54	1.73	1.83	1.11	1.34
	Sutherland	2.13	1.46	1.75	1.12	0.77
	Royal Hospital for Women	1.54	1.53	1.24	0.81	1.30
	<b>TOTAL</b>	<b>1.65</b>	<b>1.58</b>	<b>1.52</b>	<b>0.96</b>	<b>1.22</b>
<b>Illawarra Shoalhaven</b>	Shoalhaven	1.95	1.46	1.58	1.32	1.00
	Wollongong	1.86	1.50	1.53	1.31	0.99
	<b>TOTAL</b>	<b>1.86</b>	<b>1.45</b>	<b>1.53</b>	<b>1.30</b>	<b>0.99</b>
<b>Western Sydney</b>	Auburn	0.76	1.43	0.81	1.34	0.71
	Blacktown	0.74	1.13	1.17	1.49	1.52
	Westmead	2.20	1.88	1.49	1.24	1.14
	<b>TOTAL</b>	<b>1.53</b>	<b>1.59</b>	<b>1.30</b>	<b>1.33</b>	<b>1.20</b>
<b>Nepean Blue Mountains</b>	Blue Mountains	3.01	2.81	2.35	0.63	0.62
	Nepean	1.65	2.18	1.49	1.13	1.69
	Hawkesbury	0.98	1.05	2.71	1.43	0.00
	<b>TOTAL</b>	<b>1.62</b>	<b>1.95</b>	<b>1.64</b>	<b>1.09</b>	<b>1.42</b>
<b>Northern Sydney</b>	Hornsby	0.86	0.89	1.14	0.88	0.45
	Manly	1.98	1.34	1.59	1.17	0.80
	Mona Vale	2.04	0.86	2.52	0.74	1.51
	Royal North Shore	1.27	1.17	1.03	1.68	0.33
	Other hospitals	0.00	0.00	0.81	0.97	0.00
	<b>TOTAL</b>	<b>1.36</b>	<b>1.07</b>	<b>1.33</b>	<b>1.28</b>	<b>0.58</b>
<b>Central Coast</b>	Gosford	1.01	1.08	1.36	0.96	0.49
	Other hospitals	1.19	0.70	0.00	0.00	0.00
	<b>TOTAL</b>	<b>1.02</b>	<b>1.05</b>	<b>1.26</b>	<b>0.90</b>	<b>0.47</b>
<b>Hunter New England</b>	Armidale	0.32	1.40	1.78	1.10	1.42
	Inverell	2.59	0.56	2.01	1.80	1.92
	Tamworth Base	1.44	2.54	2.17	0.43	1.27
	Manning Base	2.54	2.20	3.61	1.20	2.81
	Maitland	1.71	1.72	1.78	1.67	0.96
	John Hunter	2.23	1.87	2.77	0.85	1.30
	Other hospitals	0.95	1.08	1.73	0.34	0.53
	<b>TOTAL</b>	<b>1.82</b>	<b>1.78</b>	<b>2.39</b>	<b>0.94</b>	<b>1.28</b>
<b>Northern NSW</b>	Grafton Base	1.54	1.85	1.02	0.33	1.97
	Lismore Base	1.66	2.19	1.89	0.69	1.63
	Tweed Heads	1.69	2.45	1.96	1.61	1.22
	Other hospitals	1.15	1.68	0.54	0.00	1.18
	<b>TOTAL</b>	<b>1.61</b>	<b>2.20</b>	<b>1.71</b>	<b>0.94</b>	<b>1.48</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
<b>Mid North Coast</b>	Coffs Harbour	0.69	0.72	0.85	1.57	0.41
	Kempsey	2.50	1.92	3.50	0.00	1.52
	Port Macquarie Base	1.33	1.33	2.62	1.58	0.95
	Other hospitals	0.00	0.00	1.85	0.00	0.00
	<b>TOTAL</b>	<b>1.14</b>	<b>1.08</b>	<b>1.87</b>	<b>1.30</b>	<b>0.72</b>
<b>Southern NSW</b>	Bega	1.23	2.70	2.65	1.09	0.58
	Goulburn Base	0.00	1.97	1.38	0.00	1.03
	Moruya	1.31	1.01	2.20	3.21	1.80
	Queanbeyan	4.04	5.63	0.34	1.46	0.82
	<b>TOTAL</b>	<b>1.72</b>	<b>3.02</b>	<b>1.27</b>	<b>1.41</b>	<b>1.14</b>
<b>Murrumbidgee</b>	Griffith Base	2.58	3.29	1.19	1.41	1.02
	Wagga Wagga Base	2.04	1.68	1.91	2.38	1.57
	<b>TOTAL</b>	<b>1.94</b>	<b>2.08</b>	<b>1.77</b>	<b>1.87</b>	<b>1.16</b>
<b>Western NSW</b>	Dubbo Base	1.91	1.61	1.58	1.82	1.28
	Mudgee	0.00	1.10	2.27	1.58	0.60
	Bathurst Base	1.92	1.80	1.34	1.36	0.28
	Orange Base	1.65	1.64	0.85	0.70	0.51
	<b>TOTAL</b>	<b>1.55</b>	<b>1.45</b>	<b>1.40</b>	<b>1.38</b>	<b>0.74</b>
<b>Far West</b>	Broken Hill Base	3.73	2.92	1.78	0.61	2.10
	<b>TOTAL</b>	<b>3.73</b>	<b>2.92</b>	<b>1.78</b>	<b>0.61</b>	<b>2.10</b>
<b>Private Hospitals</b>	Mater, North Sydney	2.32	1.43	0.91	0.26	0.92
	North Shore Private	0.41	0.10	0.51	0.58	0.00
	Sydney Adventist	2.80	3.14	2.94	0.49	1.20
	North Gosford Private	2.10	3.86	1.09	0.83	0.31
	Hurstville Community	1.68	1.20	0.98	0.20	0.28
	Kareena Private	0.23	0.49	0.26	0.49	0.27
	St. George Private	0.21	0.44	0.46	0.35	0.13
	Prince of Wales Private	2.21	1.82	0.27	0.19	0.41
	Norwest Private	1.74	1.28	0.71	0.54	0.26
	Sydney Southwest Private	2.45	0.00	0.17	0.30	0.53
	Nepean Private	2.48	2.54	0.00	0.23	0.24
	Westmead Private	0.39	0.78	0.88	1.06	0.69
	Wollongong Private†	-	-	-	0.60	0.37
	Newcastle Private	0.86	1.81	0.34	0.35	0.20
	Calvary, Wagga Wagga	2.35	2.02	0.98	0.00	1.42
<b>TOTAL</b>	<b>1.44</b>	<b>1.38</b>	<b>0.80</b>	<b>0.47</b>	<b>0.47</b>	
<b>TOTAL NSW*</b>	<b>1.45</b>	<b>1.45</b>	<b>1.32</b>	<b>1.02</b>	<b>0.97</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
# Hospitals with more than 200 births in 2017 are identified individually.  
\* Total NSW includes births at home assisted by independent midwives.  
† Wollongong Private Hospital opened in 2016.

# 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 71 shows information for hospitals where at least 200 mothers gave birth in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 71: 7.2 POSTPARTUM HAEMORRHAGE AND BLOOD TRANSFUSION FOLLOWING CAESAREAN SECTION BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	1.89	1.24	1.02	1.15	0.69
	Royal Prince Alfred	1.47	0.81	0.73	1.18	1.22
	<b>TOTAL</b>	<b>1.57</b>	<b>0.91</b>	<b>0.80</b>	<b>1.18</b>	<b>1.08</b>
South Western Sydney	Fairfield	1.61	0.99	1.35	0.72	0.70
	Liverpool	0.62	1.66	0.43	0.73	1.31
	Campbelltown	0.41	0.54	1.24	0.88	0.22
	Bankstown–Lidcombe	1.16	1.21	0.89	1.42	2.36
	Bowral	0.00	0.70	0.00	1.48	0.79
<b>TOTAL</b>	<b>0.79</b>	<b>1.12</b>	<b>0.86</b>	<b>0.95</b>	<b>1.03</b>	
South Eastern Sydney	St. George	2.94	1.96	2.35	0.95	0.98
	Sutherland	1.66	2.19	0.94	0.32	1.12
	Royal Hospital for Women	2.16	2.41	1.77	0.90	1.79
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>2.33</b>	<b>2.24</b>	<b>1.84</b>	<b>0.83</b>	<b>1.43</b>	
Illawarra Shoalhaven	Shoalhaven	3.83	3.15	2.80	2.32	1.15
	Wollongong	2.99	1.88	2.22	1.11	1.58
	Other hospitals	5.88	20.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>3.28</b>	<b>2.31</b>	<b>2.40</b>	<b>1.43</b>	<b>1.47</b>	
Western Sydney	Auburn	3.01	1.35	1.92	0.97	0.64
	Blacktown	0.91	1.02	1.26	1.28	1.19
	Westmead	2.54	1.98	2.30	1.54	1.66
<b>TOTAL</b>	<b>2.05</b>	<b>1.59</b>	<b>1.92</b>	<b>1.40</b>	<b>1.40</b>	
Nepean Blue Mountains	Blue Mountains	3.33	1.32	1.18	0.00	0.00
	Nepean	3.41	2.57	2.88	1.17	0.61
	Hawkesbury	1.36	1.08	0.74	1.17	0.40
	Other hospitals	3.28	1.54	1.56	1.52	0.00
<b>TOTAL</b>	<b>3.04</b>	<b>2.25</b>	<b>2.45</b>	<b>1.13</b>	<b>0.54</b>	
Northern Sydney	Hornsby	2.02	2.27	0.38	1.32	1.18
	Manly	2.29	1.12	1.12	3.34	1.12
	Mona Vale	0.00	0.53	0.52	0.90	1.39
	Royal North Shore	1.68	1.12	1.49	1.53	1.28
	<b>TOTAL</b>	<b>1.69</b>	<b>1.27</b>	<b>1.13</b>	<b>1.72</b>	<b>1.25</b>
<b>TOTAL</b>	<b>1.59</b>	<b>1.69</b>	<b>1.27</b>	<b>1.13</b>	<b>1.72</b>	
Central Coast	Gosford	1.11	1.15	1.01	0.90	1.72
	<b>TOTAL</b>	<b>1.11</b>	<b>1.15</b>	<b>1.01</b>	<b>0.90</b>	<b>1.72</b>
Hunter New England	Armidale	0.77	0.81	2.92	0.76	0.00
	Inverell	4.26	2.06	2.53	0.00	0.00
	Tamworth Base	2.46	2.55	2.06	1.32	0.86
	Manning Base	1.30	2.50	3.17	1.32	3.16
	Maitland	3.73	2.39	1.41	1.61	0.88
	John Hunter	4.58	3.75	3.43	1.62	1.84
	Other hospitals	0.90	3.11	2.27	1.33	1.89
<b>TOTAL</b>	<b>3.46</b>	<b>3.04</b>	<b>2.78</b>	<b>1.44</b>	<b>1.49</b>	
Northern NSW	Grafton Base	2.31	0.94	1.75	2.59	1.64
	Lismore Base	2.98	2.03	0.38	1.49	0.36
	Tweed Heads	2.71	2.47	1.63	1.01	1.12
	Other hospitals	0.00	0.00	0.00	0.00	0.00
	<b>TOTAL</b>	<b>2.55</b>	<b>1.92</b>	<b>1.11</b>	<b>1.44</b>	<b>0.90</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	0.57	1.92	0.87	0.25	0.27
	Kempsey	5.77	1.92	1.64	3.45	3.08
	Port Macquarie Base	3.33	2.12	1.15	1.54	0.46
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>1.95</b>	<b>1.99</b>	<b>1.05</b>	<b>0.98</b>	<b>0.62</b>	
Southern NSW	Bega	1.92	0.00	2.94	0.00	1.30
	Goulburn Base	0.00	0.00	1.11	3.30	0.00
	Moruya	1.49	3.75	0.00	1.22	0.00
	Queanbeyan	8.33	2.02	0.00	0.93	0.00
	Other hospitals	0.00	0.00	0.00	0.00	3.70
<b>TOTAL</b>	<b>3.19</b>	<b>1.46</b>	<b>0.78</b>	<b>1.33</b>	<b>0.50</b>	
Murrumbidgee	Griffith Base	0.75	1.32	0.66	0.59	1.36
	Wagga Wagga Base	3.85	1.74	2.66	1.17	0.71
	Other hospitals	4.90	5.66	5.31	1.75	1.94
	<b>TOTAL</b>	<b>3.33</b>	<b>2.67</b>	<b>2.66</b>	<b>1.12</b>	<b>1.04</b>
Western NSW	Dubbo Base	2.30	2.08	2.06	2.67	1.40
	Mudgee	1.59	1.61	2.86	0.00	4.62
	Bathurst Base	1.35	1.71	1.33	0.00	0.00
	Orange Base	1.15	0.58	1.66	0.85	0.57
	Other hospitals	2.50	0.00	1.06	0.00	0.00
<b>TOTAL</b>	<b>1.73</b>	<b>1.27</b>	<b>1.78</b>	<b>1.29</b>	<b>0.97</b>	
Far West	Broken Hill Base	0.00	0.00	2.00	0.00	3.33
	<b>TOTAL</b>	<b>0.00</b>	<b>0.00</b>	<b>2.00</b>	<b>0.00</b>	<b>3.33</b>
Private Hospitals	Mater, North Sydney	0.87	0.93	0.45	0.88	0.77
	North Shore Private	0.18	0.28	0.00	0.23	0.07
	Sydney Adventist	0.43	0.25	0.40	0.37	0.00
	North Gosford Private	1.13	0.58	0.32	0.85	0.59
	Hurstville Community	0.90	1.60	0.67	0.61	0.00
	Kareena Private	0.00	0.00	0.00	0.53	0.29
	St. George Private	0.26	0.48	0.71	0.71	0.44
	Prince of Wales Private	2.07	1.46	0.42	0.43	0.33
	Norwest Private	0.85	0.82	0.25	0.92	0.67
	Sydney Southwest Private	0.00	0.51	0.52	0.00	0.30
	Nepean Private	2.70	0.31	0.00	0.28	0.66
	Westmead Private	0.31	0.40	0.55	0.59	0.75
	Wollongong Private†	-	-	-	0.25	0.75
	Newcastle Private	0.83	0.63	0.13	0.35	0.25
	Calvary, Wagga Wagga	0.40	0.39	0.35	0.00	0.00
Other hospitals	0.24	0.92	0.67	0.00	0.00	
<b>TOTAL</b>	<b>0.80</b>	<b>0.68</b>	<b>0.35</b>	<b>0.51</b>	<b>0.41</b>	
<b>TOTAL NSW*</b>	<b>1.72</b>	<b>1.43</b>	<b>1.25</b>	<b>0.99</b>	<b>0.94</b>	

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

# Hospitals with more than 200 births in 2017 are identified individually.

\* Total NSW includes births at home assisted by independent midwives.

† Wollongong Private Hospital opened in 2016.

# Intrauterine growth restriction

## Indicator 8.1

Definition: Total number of babies born with birth weight less than 2,750 grams at 40<sup>0</sup> weeks gestation or beyond as a percentage of the total number of babies born at 40<sup>0</sup> weeks gestation or beyond.

Table 72 shows information for hospitals where at least 200 babies were born in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 72: 8.1 INTRAUTERINE GROWTH RESTRICTION AT 40 WEEKS GESTATION OR MORE BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	1.38	1.89	2.57	0.97	1.32
	Royal Prince Alfred	1.36	1.55	1.14	1.68	1.55
	<b>TOTAL</b>	<b>1.36</b>	<b>1.63</b>	<b>1.47</b>	<b>1.51</b>	<b>1.50</b>
South Western Sydney	Fairfield	2.45	3.04	1.92	2.52	2.51
	Liverpool	1.99	2.31	2.73	2.20	1.83
	Campbelltown	1.46	1.28	1.99	0.84	1.28
	Bankstown–Lidcombe	1.17	2.16	1.74	2.33	1.60
	Bowral	0.51	1.44	0.57	1.03	1.81
<b>TOTAL</b>	<b>1.67</b>	<b>2.08</b>	<b>2.08</b>	<b>1.80</b>	<b>1.71</b>	
South Eastern Sydney	St. George	2.12	2.04	2.16	1.80	2.92
	Sutherland	0.88	0.67	0.17	1.93	1.13
	Royal Hospital for Women	1.20	1.62	1.78	2.04	1.91
	<b>TOTAL</b>	<b>1.42</b>	<b>1.57</b>	<b>1.58</b>	<b>1.95</b>	<b>2.07</b>
Illawarra Shoalhaven	Shoalhaven	1.52	0.29	2.02	1.75	0.99
	Wollongong	1.16	0.74	0.94	1.00	1.26
	Other hospitals	0.00	2.86	0.00	0.00	0.00
<b>TOTAL</b>	<b>1.23</b>	<b>0.67</b>	<b>1.25</b>	<b>1.19</b>	<b>1.18</b>	
Western Sydney	Auburn	2.10	2.76	2.08	1.91	2.32
	Blacktown	1.52	1.72	1.70	2.98	2.47
	Westmead	2.53	2.44	2.12	3.46	2.72
	<b>TOTAL</b>	<b>2.15</b>	<b>2.26</b>	<b>1.99</b>	<b>3.08</b>	<b>2.59</b>
Nepean Blue Mountains	Blue Mountains	0.83	1.71	0.00	0.69	0.80
	Nepean	1.53	1.87	2.11	1.61	1.81
	Hawkesbury	0.96	0.69	2.27	1.45	0.34
	Other hospitals	4.23	2.74	1.64	9.09	2.67
<b>TOTAL</b>	<b>1.49</b>	<b>1.70</b>	<b>1.97</b>	<b>1.77</b>	<b>1.55</b>	
Northern Sydney	Hornsby	1.04	1.97	1.05	1.46	2.58
	Manly	0.90	1.57	1.18	1.02	1.61
	Mona Vale	1.02	1.48	0.60	0.66	0.74
	Royal North Shore	1.92	1.59	1.37	2.73	1.55
	Other hospitals	0.00	0.00	0.00	1.61	0.00
	<b>TOTAL</b>	<b>1.35</b>	<b>1.61</b>	<b>1.10</b>	<b>1.83</b>	<b>1.64</b>
Central Coast	Gosford	1.58	1.86	1.15	0.71	1.23
	Other hospitals	0.00	1.64	0.00	0.00	1.49
	<b>TOTAL</b>	<b>1.47</b>	<b>1.85</b>	<b>1.07</b>	<b>0.66</b>	<b>1.25</b>
Hunter New England	Armidale	1.65	3.01	1.31	2.43	0.98
	Inverell	1.10	1.12	1.25	0.00	3.37
	Tamworth Base	2.56	0.93	3.12	1.37	1.63
	Manning Base	1.88	1.08	1.46	3.91	1.61
	Maitland	1.47	1.48	1.47	1.36	0.91
	John Hunter	1.74	1.31	1.17	1.51	1.01
	Other hospitals	1.61	1.49	1.61	1.44	0.75
	<b>TOTAL</b>	<b>1.74</b>	<b>1.38</b>	<b>1.53</b>	<b>1.64</b>	<b>1.11</b>
Northern NSW	Grafton Base	1.49	2.04	0.66	1.43	1.89
	Lismore Base	1.28	1.26	2.14	1.72	1.77
	Tweed Heads	0.79	0.52	0.50	1.08	0.74
	Other hospitals	1.27	0.69	1.61	2.29	0.78
	<b>TOTAL</b>	<b>1.08</b>	<b>1.01</b>	<b>1.19</b>	<b>1.48</b>	<b>1.29</b>

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	2.55	1.30	0.00	0.86	1.92
	Kempsey	0.97	1.82	0.87	2.04	2.24
	Port Macquarie Base	1.61	0.65	1.70	1.22	0.64
	Other hospitals	0.00	3.57	4.35	0.00	0.00
	<b>TOTAL</b>	<b>1.91</b>	<b>1.21</b>	<b>0.88</b>	<b>1.13</b>	<b>1.47</b>
Southern NSW	Bega	0.00	1.54	0.00	3.25	0.85
	Goulburn Base	2.61	0.71	1.85	3.23	1.99
	Moruya	2.01	0.85	0.00	1.34	0.00
	Queanbeyan	2.37	1.33	1.81	0.40	0.37
	Other hospitals	4.41	1.37	1.41	3.53	0.00
<b>TOTAL</b>	<b>2.23</b>	<b>1.17</b>	<b>1.16</b>	<b>1.97</b>	<b>0.66</b>	
Murrumbidgee	Griffith Base	1.55	1.19	0.00	2.07	0.78
	Wagga Wagga Base	2.41	2.61	1.01	2.05	1.65
	Other hospitals	1.67	0.00	4.78	1.53	1.28
	<b>TOTAL</b>	<b>1.89</b>	<b>1.32</b>	<b>1.99</b>	<b>1.91</b>	<b>1.31</b>
Western NSW	Dubbo Base	2.57	2.49	2.20	2.92	1.08
	Mudgee	1.75	1.77	0.00	1.69	1.61
	Bathurst Base	1.76	1.15	0.81	2.14	0.41
	Orange Base	1.49	0.99	1.02	1.32	1.09
	Other hospitals	0.53	0.96	0.00	2.79	1.38
<b>TOTAL</b>	<b>1.78</b>	<b>1.55</b>	<b>1.11</b>	<b>2.24</b>	<b>1.06</b>	
Far West	Broken Hill Base	5.26	3.26	4.88	0.82	5.49
	<b>TOTAL</b>	<b>5.26</b>	<b>3.26</b>	<b>4.88</b>	<b>0.82</b>	<b>5.49</b>
Private Hospitals	Mater, North Sydney	2.15	2.02	1.21	1.16	1.02
	North Shore Private	1.62	1.54	0.93	1.22	2.16
	Sydney Adventist	1.79	1.39	2.17	1.23	0.99
	North Gosford Private	0.49	0.53	0.98	1.31	0.00
	Hurstville Community	0.89	1.30	1.52	0.94	2.80
	Kareena Private	2.20	0.00	0.58	1.13	0.61
	St. George Private	2.11	2.43	2.96	1.42	2.30
	Prince of Wales Private	1.79	0.86	1.86	1.73	1.79
	Norwest Private	1.50	1.13	1.44	2.46	0.46
	Sydney Southwest Private	3.00	1.63	0.35	0.72	0.87
	Nepean Private	0.44	0.50	0.00	0.00	1.16
	Westmead Private	2.03	1.56	2.60	1.75	4.00
	Wollongong Private†	-	-	-	1.67	0.50
	Newcastle Private	1.06	0.81	0.96	0.41	0.00
Calvary, Wagga Wagga	0.00	0.00	0.00	0.00	2.56	
Other hospitals	0.00	3.73	2.37	0.00	0.00	
<b>TOTAL</b>	<b>1.62</b>	<b>1.39</b>	<b>1.53</b>	<b>1.31</b>	<b>1.49</b>	
<b>TOTAL NSW*</b>	<b>1.62</b>	<b>1.60</b>	<b>1.58</b>	<b>1.78</b>	<b>1.62</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
# Hospitals with more than 200 births in 2017 are identified individually.  
\* Total NSW includes births at home assisted by independent midwives.  
† Wollongong Private Hospital opened in 2016.

# Apgar score

## Indicator 9.1

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

Table 73 shows information for hospitals where at least 200 babies were born in 2017, totals for hospitals for each local health district, and the NSW total.

**TABLE 73: 9.1 APGAR SCORE OF 7 OR LESS IN TERM BABIES BY LOCAL HEALTH DISTRICT AND HOSPITAL, NSW 2013–2017\***

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Sydney	Canterbury	1.51	1.43	1.40	1.42	0.87
	Royal Prince Alfred	2.01	2.08	1.94	1.15	1.27
	<b>TOTAL</b>	<b>1.88</b>	<b>1.91</b>	<b>1.79</b>	<b>1.22</b>	<b>1.16</b>
South Western Sydney	Fairfield	0.96	0.72	1.26	0.88	0.94
	Liverpool	1.48	1.38	1.12	0.90	0.73
	Campbelltown	1.69	1.41	1.32	1.46	1.29
	Bankstown–Lidcombe	0.53	0.73	0.93	1.02	0.91
	Bowral	1.31	1.54	0.26	1.43	1.30
<b>TOTAL</b>	<b>1.24</b>	<b>1.14</b>	<b>1.13</b>	<b>1.11</b>	<b>1.00</b>	
South Eastern Sydney	St. George	1.69	1.82	2.26	1.61	1.26
	Sutherland	2.75	0.93	0.88	1.64	1.47
	Royal Hospital for Women	1.88	1.98	1.63	1.88	1.74
	Other hospitals	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>1.97</b>	<b>1.74</b>	<b>1.71</b>	<b>1.75</b>	<b>1.54</b>	
Illawarra Shoalhaven	Shoalhaven	1.08	1.55	1.17	1.92	1.68
	Wollongong	1.88	1.21	1.03	1.00	1.39
	Other hospitals	1.08	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>1.64</b>	<b>1.28</b>	<b>1.06</b>	<b>1.24</b>	<b>1.46</b>	
Western Sydney	Auburn	1.10	0.54	0.40	0.46	0.86
	Blacktown	0.69	0.82	0.62	1.01	0.81
	Westmead	0.95	0.97	1.51	1.29	1.56
<b>TOTAL</b>	<b>0.89</b>	<b>0.86</b>	<b>1.08</b>	<b>1.09</b>	<b>1.23</b>	
Nepean Blue Mountains	Blue Mountains	0.45	0.00	1.61	1.69	1.79
	Nepean	0.64	0.92	1.19	1.22	1.17
	Hawkesbury	0.79	0.83	0.28	0.77	0.15
	Other hospitals	2.31	2.05	3.21	1.98	2.37
<b>TOTAL</b>	<b>0.74</b>	<b>0.90</b>	<b>1.17</b>	<b>1.21</b>	<b>1.10</b>	
Northern Sydney	Hornsby	1.41	1.64	1.56	2.13	1.42
	Manly	1.38	1.76	0.76	1.90	0.93
	Mona Vale	1.14	1.72	1.24	0.81	1.10
	Royal North Shore	1.53	1.58	1.39	1.95	1.55
	Other hospitals	0.78	0.00	0.81	0.00	1.00
<b>TOTAL</b>	<b>1.41</b>	<b>1.61</b>	<b>1.28</b>	<b>1.79</b>	<b>1.35</b>	
Central Coast	Gosford	2.34	1.57	1.76	2.19	1.97
	Other hospitals	1.20	0.00	0.00	1.47	1.01
	<b>TOTAL</b>	<b>2.27</b>	<b>1.49</b>	<b>1.67</b>	<b>2.16</b>	<b>1.94</b>
Hunter New England	Armidale	1.67	1.57	1.06	1.84	0.78
	Inverell	0.38	0.40	0.00	1.72	0.45
	Tamworth Base	2.37	2.25	2.83	2.44	2.62
	Manning Base	2.60	1.82	2.59	1.59	1.34
	Maitland	1.60	2.40	2.16	1.79	1.40
	John Hunter	2.15	2.67	1.83	2.24	1.66
	Other hospitals	0.79	0.98	0.98	1.02	0.84
<b>TOTAL</b>	<b>1.84</b>	<b>2.16</b>	<b>1.87</b>	<b>1.94</b>	<b>1.53</b>	
Northern NSW	Grafton Base	2.66	1.44	1.06	1.97	1.95
	Lismore Base	1.65	1.21	1.82	2.03	1.90
	Tweed Heads	1.81	1.68	1.36	1.62	1.74
	Other hospitals	0.31	0.35	0.00	0.41	0.00
<b>TOTAL</b>	<b>1.71</b>	<b>1.35</b>	<b>1.38</b>	<b>1.72</b>	<b>1.72</b>	

Local Health District–Hospital		2013	2014	2015	2016	2017
		%	%	%	%	%
Mid North Coast	Coffs Harbour	1.75	1.81	1.74	1.08	0.95
	Kempsey	1.27	4.82	3.64	3.02	0.79
	Port Macquarie Base	1.59	1.82	1.48	1.27	0.86
	Other hospitals	0.00	0.00	0.00	2.08	0.00
	<b>TOTAL</b>	<b>1.58</b>	<b>2.14</b>	<b>1.84</b>	<b>1.42</b>	<b>0.87</b>
Southern NSW	Bega	1.46	0.84	0.94	1.61	0.82
	Goulburn Base	1.09	2.32	2.41	0.73	1.16
	Moruya	0.70	0.76	1.05	0.00	0.36
	Queanbeyan	0.94	1.21	1.74	1.13	1.57
	Other hospitals	1.97	1.40	2.56	2.04	0.00
<b>TOTAL</b>	<b>1.12</b>	<b>1.29</b>	<b>1.70</b>	<b>1.00</b>	<b>0.99</b>	
Murrumbidgee	Griffith Base	1.77	2.23	1.57	1.81	1.57
	Wagga Wagga Base	2.74	3.02	2.05	1.80	1.66
	Other hospitals	0.87	0.97	1.48	0.42	1.56
<b>TOTAL</b>	<b>1.86</b>	<b>2.13</b>	<b>1.75</b>	<b>1.46</b>	<b>1.61</b>	
Western NSW	Dubbo Base	1.66	1.46	1.23	2.01	2.39
	Mudgee	1.27	1.26	2.07	1.23	0.00
	Bathurst Base	1.63	1.85	2.00	1.08	1.26
	Orange Base	1.30	1.49	1.94	0.81	0.91
	Other hospitals	0.22	1.78	1.20	1.00	1.42
<b>TOTAL</b>	<b>1.32</b>	<b>1.56</b>	<b>1.62</b>	<b>1.33</b>	<b>1.50</b>	
Far West	Broken Hill Base	3.24	2.24	1.42	1.79	1.53
	<b>TOTAL</b>	<b>3.24</b>	<b>2.24</b>	<b>1.42</b>	<b>1.79</b>	<b>1.53</b>
Private Hospitals	Mater, North Sydney	0.30	0.32	0.38	0.18	0.20
	North Shore Private	0.46	0.57	0.66	0.25	0.52
	Sydney Adventist	0.93	1.19	1.07	4.94	1.23
	North Gosford Private	0.40	0.14	0.93	1.52	0.48
	Hurstville Community	0.99	1.01	1.19	1.16	1.06
	Kareena Private	0.41	1.15	1.25	1.22	1.91
	St. George Private	1.29	0.54	0.75	1.01	0.72
	Prince of Wales Private	0.61	0.54	0.36	0.48	0.29
	Norwest Private	0.57	0.25	0.36	0.36	0.27
	Sydney Southwest Private	0.62	0.42	0.53	0.60	0.58
	Nepean Private	0.39	0.13	0.40	0.68	0.30
	Westmead Private	0.65	0.78	0.77	0.33	0.40
	Wollongong Private†	-	-	-	0.58	0.44
	Newcastle Private	0.56	0.39	0.71	0.70	0.59
Calvary, Wagga Wagga	0.92	0.65	0.90	0.85	0.98	
Other hospitals	0.53	0.80	0.22	0.00	0.00	
<b>TOTAL</b>	<b>0.63</b>	<b>0.58</b>	<b>0.65</b>	<b>0.96</b>	<b>0.57</b>	
<b>TOTAL NSW*</b>	<b>1.29</b>	<b>1.28</b>	<b>1.26</b>	<b>1.33</b>	<b>1.16</b>	

Source: NSW Perinatal Data Collection (SAPHaRI). Centre for Epidemiology and Evidence, NSW Ministry of Health.  
# Hospitals with more than 200 births in 2017 are identified individually.  
\* Total NSW includes births at home assisted by independent midwives.  
† Wollongong Private Hospital opened in 2016.



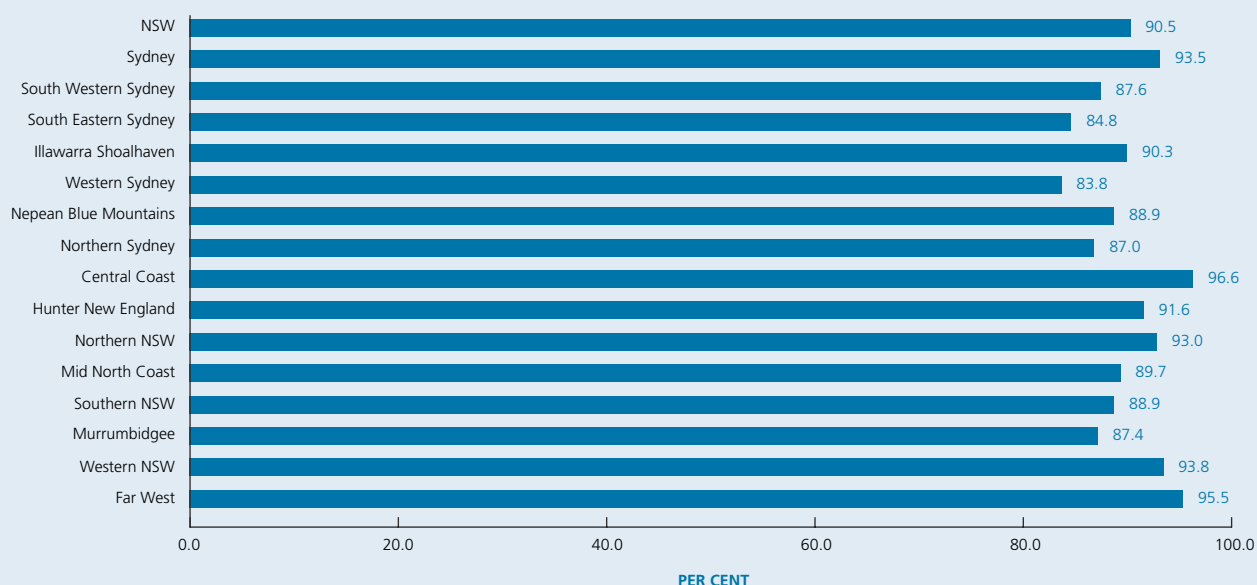
# 8. ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES

## 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 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 for each local health district.

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 74).

**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 74: 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.	%
<b>2014</b>	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
	<b>NSW</b>	<b>3756</b>	<b>4512</b>	<b>83.2</b>
<b>2015</b>	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
	<b>NSW</b>	<b>3823</b>	<b>4460</b>	<b>85.7</b>
<b>2016</b>	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
	<b>NSW</b>	<b>4118</b>	<b>4552</b>	<b>90.5</b>

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

Table 75 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 75: ABORIGINAL OR TORRES STRAIT ISLANDER BABIES AND ESTIMATED LEVEL OF REPORTING BY YEAR OF BIRTH AND LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2014–2016<sup>a</sup>**

Year of birth–Local Health District		PDC babies <sup>a</sup>	Estimated Aboriginal babies <sup>a</sup>	Level of reporting
		No.	No.	%
<b>2014</b>	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
<b>NSW</b>	<b>3808</b>	<b>5890</b>	<b>64.7</b>	
<b>2015</b>	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
<b>NSW</b>	<b>3872</b>	<b>5872</b>	<b>65.9</b>	
<b>2016</b>	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
<b>NSW</b>	<b>4174</b>	<b>5935</b>	<b>70.3</b>	

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

<sup>a</sup> 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 2013 and 2017, the number of reported births to Aboriginal or Torres Strait Islander mothers rose from 3,542 to 4,251, representing 3.7% and 4.4% respectively of all babies born in NSW. In 2017, 4,063 babies were born to Aboriginal mothers, 62 babies were born to Torres Strait Islander mothers and 126 babies were born to mothers of both Aboriginal and Torres Strait Islander background (Table 76).

**TABLE 76: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES, NSW 2013–2017<sup>#</sup>**

Aboriginal and Torres Strait Islander	Year										
	2013		2014		2015		2016		2017		
	No.	%	No.	%	No.	%	No.	%	No.	%	
<b>Confinements</b>											
Aboriginal but not Torres Strait Islander	3359	96.2	3596	95.7	3686	96.4	3938	95.6	3998	95.6	
Torres Strait Islander but not Aboriginal	53	1.5	51	1.4	43	1.1	50	1.2	61	1.5	
Both Aboriginal and Torres Strait Islander	80	2.3	109	2.9	94	2.5	130	3.2	124	3.0	
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>	
<b>Births</b>											
Aboriginal but not Torres Strait Islander	3406	96.2	3647	95.8	3735	96.5	3990	95.6	4063	95.6	
Torres Strait Islander but not Aboriginal	55	1.6	51	1.3	43	1.1	51	1.2	62	1.5	
Both Aboriginal and Torres Strait Islander	81	2.3	110	2.9	94	2.4	133	3.2	126	3.0	
<b>TOTAL</b>	<b>3542</b>	<b>100.0</b>	<b>3808</b>	<b>100.0</b>	<b>3872</b>	<b>100.0</b>	<b>4174</b>	<b>100.0</b>	<b>4251</b>	<b>100.0</b>	

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

<sup>#</sup> 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 74).

## Plurality

Between 2013 and 2017, multiple pregnancies (twins, triplets etc.) were reported for about 1.4% of all pregnancies. In 2017, 3.0% of babies born to Aboriginal or Torres Strait Islander mothers were twins (Table 77).

**TABLE 77: ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS AND BABIES BY PLURALITY, NSW 2013–2017<sup>#</sup>**

Plurality		Year									
		2013		2014		2015		2016		2017	
		No.	%	No.	%	No.	%	No.	%	No.	%
<b>Confinements</b>											
Singleton		3442	98.6	3705	98.6	3774	98.7	4062	98.6	4117	98.4
Twins		50	1.4	50	1.3	49	1.3	56	1.4	64	1.5
Triplets		0	0.0	1	0.0	0	0.0	0	0.0	2	0.0
<b>TOTAL</b>		<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>
<b>Births</b>											
Singleton		3442	97.2	3705	97.3	3774	97.5	4062	97.3	4117	96.8
Twins		100	2.8	100	2.6	98	2.5	112	2.7	128	3.0
Triplets		0	0.0	3	0.1	0	0.0	0	0.0	6	0.1
<b>TOTAL</b>		<b>3542</b>	<b>100.0</b>	<b>3808</b>	<b>100.0</b>	<b>3872</b>	<b>100.0</b>	<b>4174</b>	<b>100.0</b>	<b>4251</b>	<b>100.0</b>

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

<sup>#</sup> 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 74).

## Previous pregnancies

In 2017, one-third of Aboriginal or Torres Strait Islander mothers gave birth for the first time, 59.8% of mothers reported between one and four previous births and 6.1% of mothers had previously given birth to five or more babies (Table 78). Between 2013 and 2017, the percentage of mothers who had previously given birth to five or more babies declined from 6.8% to 6.1%.

**TABLE 78: PREVIOUS PREGNANCIES AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

No. previous pregnancies (>20 weeks gestation)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0	1235	35.4	1241	33.0	1322	34.6	1412	34.3	1412	33.8
1–4	2019	57.8	2262	60.2	2251	58.9	2441	59.3	2503	59.8
5+	237	6.8	252	6.7	248	6.5	259	6.3	257	6.1
Not stated	1	0.0	1	0.0	2	0.1	6	0.1	11	0.3
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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).

## Maternal age

The percentage of Aboriginal or Torres Strait Islander mothers who were teenagers fell substantially from 17.6% in 2013 to 12.3% in 2017. Between 2013 and 2017, the percentage of Aboriginal or Torres Strait Islander mothers giving birth at 35 years of age or more has remained stable and was 9.6% in 2017 (Table 79).

**TABLE 79: AGE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Maternal age (years)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
12–19	615	17.6	592	15.8	587	15.4	526	12.8	513	12.3
20–34	2546	72.9	2850	75.9	2905	76.0	3198	77.7	3268	78.1
35+	331	9.5	314	8.4	331	8.7	393	9.5	401	9.6
Not stated	0	0.0	0	0.0	0	0.0	1	0.0	1	0.0
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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).

## Local Health District of residence

The reported number of Aboriginal or Torres Strait Islander mothers who gave birth in 2017 ranged from 35 in the Far West Local Health District to 1,100 in the Hunter New England Local Health District (Table 80). The proportion of Aboriginal or Torres Strait Islander mothers who were teenagers varied from 6.2% in the South Eastern Sydney Local Health District to 16.2% in the Murrumbidgee Local Health District (Table 81).

**TABLE 80: LOCAL HEALTH DISTRICT OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Local Health District	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	90	2.6	120	3.2	111	2.9	86	2.1	99	2.4
South Western Sydney	199	5.7	235	6.3	237	6.2	318	7.7	295	7.1
South Eastern Sydney	92	2.6	99	2.6	110	2.9	112	2.7	113	2.7
Illawarra Shoalhaven	227	6.5	212	5.6	220	5.8	241	5.9	276	6.6
Western Sydney	256	7.3	301	8.0	246	6.4	258	6.3	289	6.9
Nepean Blue Mountains	193	5.5	196	5.2	243	6.4	232	5.6	229	5.5
Northern Sydney	28	0.8	29	0.8	32	0.8	40	1.0	36	0.9
Central Coast	188	5.4	217	5.8	222	5.8	226	5.5	230	5.5
Hunter New England	893	25.6	932	24.8	975	25.5	1052	25.5	1100	26.3
Northern NSW	257	7.4	235	6.3	241	6.3	225	5.5	231	5.5
Mid North Coast	228	6.5	251	6.7	248	6.5	234	5.7	262	6.3
Southern NSW	64	1.8	86	2.3	93	2.4	96	2.3	91	2.2
Murrumbidgee	160	4.6	190	5.1	172	4.5	215	5.2	204	4.9
Western NSW	548	15.7	583	15.5	610	16.0	630	15.3	666	15.9
Far West	46	1.3	46	1.2	43	1.1	42	1.0	35	0.8
Other-not stated	23	0.7	24	0.6	20	0.5	111	2.7	27	0.6
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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 74).

**TABLE 81: LOCAL HEALTH DISTRICT OF RESIDENCE OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AGE, NSW 2017<sup>#</sup>**

Local Health District	Maternal age (years)					
	Under 20		20-plus		TOTAL	
	No.	%	No.	%	No.	%
Sydney	-	-	-	-	99	100.0
South Western Sydney	34	11.5	261	88.5	295	100.0
South Eastern Sydney	7	6.2	106	93.8	113	100.0
Illawarra Shoalhaven	34	12.3	242	87.7	276	100.0
Western Sydney	40	13.8	249	86.2	289	100.0
Nepean Blue Mountains	23	10.0	206	90.0	229	100.0
Northern Sydney	-	-	-	-	36	100.0
Central Coast	25	10.9	205	89.1	230	100.0
Hunter New England	141	12.8	958	87.1	1100	100.0
Northern NSW	30	13.0	201	87.0	231	100.0
Mid North Coast	30	11.5	232	88.5	262	100.0
Southern NSW	10	11.0	81	89.0	91	100.0
Murrumbidgee	33	16.2	171	83.8	204	100.0
Western NSW	97	14.6	569	85.4	666	100.0
Far West	-	-	-	-	35	100.0
Other-not stated	-	-	-	-	27	100.0
<b>TOTAL</b>	<b>513</b>	<b>12.3</b>	<b>3669</b>	<b>87.7</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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 74). 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 2013 and 2017, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation increased from 49.8% to 68.1%, and the proportion that commenced antenatal care at less than 20 weeks gestation increased from 72.7% to 83.9% (Table 82). In contrast, 73.3% of non-Aboriginal or Torres Strait Islander mothers commenced antenatal care at less than 14 weeks gestation in 2017 and 90.9% at less than 20 weeks gestation. In 2017, the proportion of Aboriginal or Torres Strait Islander mothers who commenced antenatal care at less than 14 weeks gestation varied from 41.5% in the Western Sydney Local Health District to 81.2% in the Hunter New England Local Health District (Table 83).

**TABLE 82: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Duration of pregnancy (weeks)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–13	1740	49.8	2044	54.4	2124	55.6	2662	64.6	2850	68.1
14–19	798	22.9	788	21.0	781	20.4	704	17.1	661	15.8
20+	915	26.2	860	22.9	850	22.2	654	15.9	603	14.4
Not stated	39	1.1	64	1.7	68	1.8	98	2.4	69	1.6
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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).

**TABLE 83: DURATION OF PREGNANCY AT FIRST ANTENATAL VISIT AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017\***

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	78	78.8	12	12.1	9	9.1	0	0.0	99	100.0
South Western Sydney	206	69.8	48	16.3	34	11.5	7	2.4	295	100.0
South Eastern Sydney	65	57.5	42	37.2	5	4.4	1	0.9	113	100.0
Illawarra Shoalhaven	156	56.5	62	22.5	53	19.2	5	1.8	276	100.0
Western Sydney	120	41.5	81	28.0	76	26.3	12	4.2	289	100.0
Nepean Blue Mountains	136	59.4	58	25.3	32	14.0	3	1.3	229	100.0
Northern Sydney	26	72.2	6	16.7	-	-	-	-	36	100.0
Central Coast	152	66.1	47	20.4	28	12.2	3	1.3	230	100.0
Hunter New England	893	81.2	90	8.2	97	8.8	20	1.8	1100	100.0
Northern NSW	166	71.9	34	14.7	30	13.0	1	0.4	231	100.0
Mid North Coast	196	74.8	26	9.9	35	13.4	5	1.9	262	100.0
Southern NSW	60	65.9	15	16.5	14	15.4	2	2.2	91	100.0
Murrumbidgee	126	61.8	27	13.2	49	24.0	2	1.0	204	100.0
Western NSW	429	64.4	102	15.3	128	19.2	7	1.1	666	100.0
Far West	22	62.9	8	22.9	5	14.3	0	0.0	35	100.0
Other-not stated	19	70.4	-	-	-	-	-	-	27	100.0
<b>TOTAL</b>	<b>2850</b>	<b>68.1</b>	<b>661</b>	<b>15.8</b>	<b>603</b>	<b>14.4</b>	<b>69</b>	<b>1.6</b>	<b>4183</b>	<b>100.0</b>

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

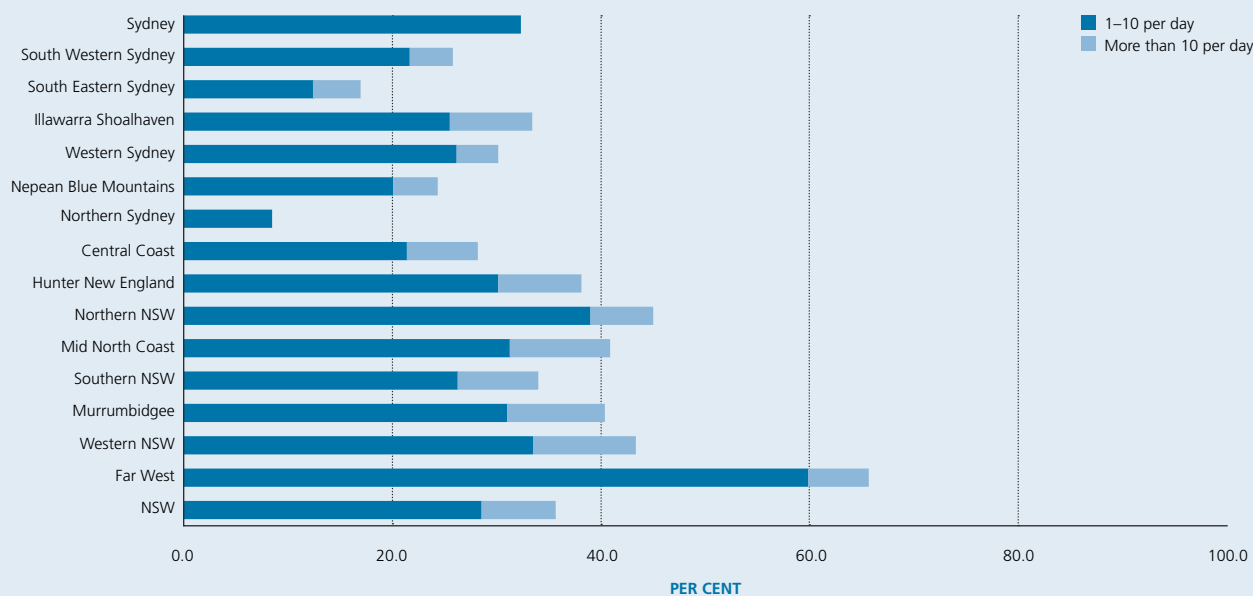
# Due to under-reporting of Aboriginal mothers to the PDC, it is likely that the true numbers of mothers are higher than shown. The level of under-reporting varies between Local Health Districts (Table 74). Data not shown for cell counts less than five.

### Smoking in pregnancy

In 2017, 42.4% of Aboriginal or Torres Strait Islander mothers reported smoking at some time during pregnancy, compared to 46.6% in 2013. This compares with 7.2% of non-Aboriginal or Torres Strait Islander mothers who reported smoking at some time during pregnancy in 2017.

Smoking in the second half of pregnancy poses the greatest risk to the health of both mother and baby. In 2017, 35.7% of Aboriginal or Torres Strait Islander mothers reported smoking in the second half of pregnancy. This percentage varied from 8.3% in the Northern Sydney Local Health District to 65.7% in the Far West Local Health District (Figure 3).

**FIGURE 3: SMOKING IN THE SECOND HALF OF PREGNANCY AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY AMOUNT SMOKED AND LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017**



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

## Diabetes and hypertension

In 2017, there were similar reported rates of pre-existing diabetes mellitus reported among Aboriginal or Torres Strait Islander mothers compared with non-Aboriginal or Torres Strait Islander mothers. However, the reported rate of gestational diabetes was lower among Aboriginal or Torres Strait Islander mothers (10.0%) than non-Aboriginal or Torres Strait Islander mothers (13.2%) (Table 84).

**TABLE 84: DIABETES AMONG ABORIGINAL AND NON-ABORIGINAL MOTHERS, NSW 2017<sup>#</sup>**

Condition	Aboriginal or Torres Strait Islander		Non-Aboriginal or Torres Strait Islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
<b>Pre-existing diabetes mellitus</b>	49	1.2	849	0.9	2	0.5	<b>900</b>	<b>1.0</b>
Type 1 <sup>†</sup>	14	0.3	240	0.3	2	0.5	<b>256</b>	<b>0.3</b>
Type 2 <sup>†</sup>	26	0.6	351	0.4	0	0.0	<b>377</b>	<b>0.4</b>
<b>Gestational diabetes mellitus</b>	419	10.0	11881	13.2	75	17.4	<b>12375</b>	<b>13.1</b>
Other <sup>†</sup>	9	0.2	258	0.3	0	0.0	<b>267</b>	<b>0.3</b>
<b>TOTAL DIABETES*</b>	<b>468</b>	<b>11.2</b>	<b>12730</b>	<b>14.2</b>	<b>77</b>	<b>17.9</b>	<b>13275</b>	<b>14.1</b>

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

<sup>#</sup> 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).

\* Total diabetes refers to the number of mothers with a diagnosis of any type of diabetes mellitus.

<sup>†</sup> Pre-existing diabetes mellitus type 1, 2 and other newly captured from 2016.

In 2017, there were similar rates of chronic hypertension reported among Aboriginal or Torres Strait Islander mothers compared with non-Aboriginal or Torres Strait Islander mothers. Overall, the rate of hypertension in pregnancy was higher in Aboriginal or Torres Strait Islander mothers (5.9%) compared with non-Aboriginal or Torres Strait Islander mothers (4.7%) (Table 85).

**TABLE 85: HYPERTENSION AMONG ABORIGINAL AND NON-ABORIGINAL MOTHERS, NSW 2017<sup>#</sup>**

Condition	Aboriginal or Torres Strait Islander		Non-Aboriginal or Torres Strait Islander		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Chronic hypertension	35	0.8	657	0.7	2	0.5	<b>694</b>	<b>0.7</b>
Pre-eclampsia	82	2.0	1266	1.4	4	0.9	<b>1352</b>	<b>1.4</b>
Eclampsia <sup>†</sup>	0	0.0	35	0.0	0	0.0	<b>35</b>	<b>0.0</b>
Gestational hypertension	137	3.3	2438	2.7	17	4.0	<b>2592</b>	<b>2.7</b>
<b>TOTAL HYPERTENSION*</b>	<b>245</b>	<b>5.9</b>	<b>4258</b>	<b>4.7</b>	<b>23</b>	<b>5.3</b>	<b>4526</b>	<b>4.8</b>

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

<sup>#</sup> 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).

\* Total hypertension refers to the number of mothers with a diagnosis of any of the following conditions: Chronic hypertension, pre-eclampsia, eclampsia and gestational hypertension.

<sup>†</sup> Eclampsia newly captured from 2016.

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.

## Labour and birth

The rate of spontaneous onset of labour among Aboriginal or Torres Strait Islander mothers fell from 57.1% in 2013 to 49.7% in 2017, while the rate of induction of labour increased from 28.5% to 33.4% (Table 86). The rate of spontaneous onset of labour was slightly higher among Aboriginal or Torres Strait Islander mothers compared to the rate of 46.2% reported among non-Aboriginal or Torres Strait Islander mothers in 2017.

Between 2013 and 2017, the rate of normal vaginal birth fell from 66.8% to 63.3%. The caesarean section rate rose from 25.5% to 29.4% (Table 87). The rate of instrumental delivery was stable at about 7.0%, and there was a slight fall in the rate of vaginal breech births from 0.7% to 0.3%.

**TABLE 86: LABOUR ONSET FOR ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Labour onset	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Spontaneous	1993	57.1	2028	54.0	2038	53.3	2157	52.4	2080	49.7
Induced	996	28.5	1152	30.7	1202	31.4	1284	31.2	1399	33.4
No labour*	503	14.4	575	15.3	583	15.2	671	16.3	702	16.8
Not stated	0	0.0	1	0.0	0	0.0	6	0.1	2	0.0
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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).

\* No labour indicates elective caesarean section.

**TABLE 87: TYPE OF BIRTH AMONG ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Type of birth	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Normal vaginal	2332	66.8	2456	65.4	2519	65.9	2642	64.2	2649	63.3
Forceps	102	2.9	99	2.6	94	2.5	111	2.7	114	2.7
Vacuum extraction	143	4.1	145	3.9	160	4.2	178	4.3	173	4.1
Vaginal breech	26	0.7	16	0.4	16	0.4	19	0.5	14	0.3
Elective caesarean section	503	14.4	575	15.3	583	15.2	671	16.3	701	16.8
Emergency caesarean section*	386	11.1	464	12.4	451	11.8	496	12.0	530	12.7
Not stated	0	0.0	1	0.0	0	0.0	1	0.0	2	0.0
<b>TOTAL</b>	<b>3492</b>	<b>100.0</b>	<b>3756</b>	<b>100.0</b>	<b>3823</b>	<b>100.0</b>	<b>4118</b>	<b>100.0</b>	<b>4183</b>	<b>100.0</b>

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

<sup>#</sup> 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).

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



## Birth weight

Since 2013, 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 11.1% in 2017 (Table 88). This is higher than the rate for babies born to non-Aboriginal or Torres Strait Islander mothers, which was 6.5% in 2017. The largest number of low birth weight babies in 2017 was in the Hunter New England Local Health District (Table 89).

**TABLE 88: WEIGHT OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017#**

Birth weight (grams)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
Less than 1,000	33	0.9	42	1.1	29	0.7	54	1.3	61	1.4
1,000–1,499	36	1.0	37	1.0	45	1.2	39	0.9	42	1.0
1,500–2,499	334	9.4	350	9.2	363	9.4	357	8.6	367	8.6
2,500+	3136	88.5	3374	88.6	3431	88.6	3722	89.2	3780	88.9
Not stated	3	0.1	5	0.1	4	0.1	2	0.0	1	0.0
<b>TOTAL</b>	<b>3542</b>	<b>100.0</b>	<b>3808</b>	<b>100.0</b>	<b>3872</b>	<b>100.0</b>	<b>4174</b>	<b>100.0</b>	<b>4251</b>	<b>100.0</b>

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 74).

**TABLE 89: WEIGHT OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017#**

Local Health District	Birth weight (grams)							
	< 2,500		2,500+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	9	9.0	91	91.0	0	0.0	100	100.0
South Western Sydney	-	-	272	91.6	-	-	297	100.0
South Eastern Sydney	9	7.9	105	92.1	0	0.0	114	100.0
Illawarra Shoalhaven	29	10.4	251	89.6	0	0.0	280	100.0
Western Sydney	48	16.1	250	83.9	0	0.0	298	100.0
Nepean Blue Mountains	20	8.7	211	91.3	0	0.0	231	100.0
Northern Sydney	-	-	33	91.7	-	-	36	100.0
Central Coast	23	9.9	210	90.1	0	0.0	233	100.0
Hunter New England	136	12.1	990	87.9	0	0.0	1126	100.0
Northern NSW	23	9.9	209	90.1	0	0.0	232	100.0
Mid North Coast	36	13.5	231	86.5	0	0.0	267	100.0
Southern NSW	7	7.6	85	92.4	0	0.0	92	100.0
Murrumbidgee	25	12.1	182	87.9	0	0.0	207	100.0
Western NSW	72	10.7	604	89.3	0	0.0	676	100.0
Far West	5	14.3	30	85.7	0	0.0	35	100.0
Other-not stated	-	-	26	96.3	-	-	27	100.0
<b>TOTAL</b>	<b>470</b>	<b>11.1</b>	<b>3780</b>	<b>88.9</b>	<b>-</b>	<b>0.0</b>	<b>4251</b>	<b>100.0</b>

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 74). Data not shown for cell counts less than five.

## Gestational age

Since 2013, over 11% of Aboriginal or Torres Strait Islander babies have been premature (less than 37 weeks gestation) (Table 90). The rate of prematurity was 11.7% in 2017, compared with a rate of 7.2% for babies born to non-Aboriginal or Torres Strait Islander mothers. In 2017, the largest number of premature babies was in the Hunter New England Local Health District (Table 91).

**TABLE 90: GESTATIONAL AGE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017#**

Gestational age (weeks)	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
< 28	35	1.0	39	1.0	36	0.9	49	1.2	58	1.4
28–31	44	1.2	54	1.4	60	1.5	53	1.3	52	1.2
32–36	369	10.4	400	10.5	396	10.2	364	8.7	387	9.1
37–41	3076	86.8	3299	86.6	3361	86.8	3651	87.5	3714	87.4
42 +	17	0.5	15	0.4	17	0.4	49	1.2	37	0.9
Not stated	1	0.0	1	0.0	2	0.1	8	0.2	3	0.1
<b>TOTAL</b>	<b>3542</b>	<b>100.0</b>	<b>3808</b>	<b>100.0</b>	<b>3872</b>	<b>100.0</b>	<b>4174</b>	<b>100.0</b>	<b>4251</b>	<b>100.0</b>

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 74).

**TABLE 91: GESTATIONAL AGE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017#**

Local Health District	Gestational age (weeks)							
	Less than 37		37+		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%
Sydney	13	13.0	87	87.0	0	0.0	100	100.0
South Western Sydney	23	7.7	274	92.3	0	0.0	297	100.0
South Eastern Sydney	9	7.9	105	92.1	0	0.0	114	100.0
Illawarra Shoalhaven	33	11.8	247	88.2	0	0.0	280	100.0
Western Sydney	41	13.8	257	86.2	0	0.0	298	100.0
Nepean Blue Mountains	25	10.8	206	89.2	0	0.0	231	100.0
Northern Sydney	-	-	35	97.2	-	-	36	100.0
Central Coast	26	11.2	207	88.8	0	0.0	233	100.0
Hunter New England	142	12.6	983	87.3	1	0.1	1126	100.0
Northern NSW	32	13.8	200	86.2	0	0.0	232	100.0
Mid North Coast	37	13.9	229	85.8	1	0.4	267	100.0
Southern NSW	5	5.4	87	94.6	0	0.0	92	100.0
Murrumbidgee	29	14.0	178	86.0	0	0.0	207	100.0
Western NSW	73	10.8	602	89.1	1	0.1	676	100.0
Far West	5	14.3	30	85.7	0	0.0	35	100.0
Other-not stated	-	-	24	88.9	-	-	27	100.0
<b>TOTAL</b>	<b>497</b>	<b>11.7</b>	<b>3751</b>	<b>88.2</b>	<b>3</b>	<b>0.1</b>	<b>4251</b>	<b>100.0</b>

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 74). Data not shown for cell counts less than five.

## Apgar score

In 2017, 3.0% of Aboriginal or Torres Strait Islander babies had an Apgar score less than seven at 5 minutes (Table 92), which is higher than the rate of 2.1% for babies born to non-Aboriginal or Torres Strait Islander mothers.

**TABLE 92: APGAR SCORE OF BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Apgar score at 5 minutes	Year									
	2013		2014		2015		2016		2017	
	No.	%	No.	%	No.	%	No.	%	No.	%
0–4	58	1.6	61	1.6	58	1.5	63	1.5	69	1.6
5–6	46	1.3	75	2.0	75	1.9	82	2.0	60	1.4
7+	3434	97.0	3657	96.0	3720	96.1	3977	95.3	4070	95.7
Not stated	4	0.1	15	0.4	19	0.5	52	1.2	52	1.2
<b>TOTAL</b>	<b>3542</b>	<b>100.0</b>	<b>3808</b>	<b>100.0</b>	<b>3872</b>	<b>100.0</b>	<b>4174</b>	<b>100.0</b>	<b>4251</b>	<b>100.0</b>

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

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

## Infant feeding

In 2017, 61.7% of babies born to Aboriginal or Torres Strait Islander mothers were fully breastfed at discharge from hospital, 10.1% were partially breastfed and 25.0% received infant formula only (Table 93). This compares with 74.4% of babies born to non-Aboriginal or Torres Strait Islander mothers who were fully breastfed in 2017. Rates of full breastfeeding ranged from 51.0% in the Western Sydney Local Health District to 80.6% in the Northern Sydney Local Health District.

**TABLE 93: INFANT FEEDING AMONG LIVEBORN BABIES OF ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS BY LOCAL HEALTH DISTRICT OF RESIDENCE, NSW 2017<sup>a</sup>**

Local Health District	Infant feeding									
	Full breastfeeding		Any breastfeeding		Infant formula only		Not stated		TOTAL	
	No.	%	No.	%	No.	%	No.	%	No.	%
Sydney	64	64.6	11	11.1	22	22.2	2	2.0	99	100.0
South Western Sydney	156	52.5	41	13.8	75	25.3	25	8.4	297	100.0
South Eastern Sydney	82	71.9	10	8.8	17	14.9	5	4.4	114	100.0
Illawarra Shoalhaven	177	63.2	13	4.6	75	26.8	15	5.4	280	100.0
Western Sydney	148	51.0	26	9.0	104	35.9	12	4.1	290	100.0
Nepean Blue Mountains	157	68.3	19	8.3	48	20.9	6	2.6	230	100.0
Northern Sydney	-	-	-	-	-	-	-	-	36	100.0
Central Coast	157	68.0	24	10.4	41	17.7	9	3.9	231	100.0
Hunter New England	687	61.7	131	11.8	270	24.2	26	2.3	1114	100.0
Northern NSW	164	71.0	24	10.4	37	16.0	6	2.6	231	100.0
Mid North Coast	187	71.1	26	9.9	43	16.3	7	2.7	263	100.0
Southern NSW	72	78.3	7	7.6	11	12.0	2	2.2	92	100.0
Murrumbidgee	112	54.4	17	8.3	74	35.9	3	1.5	206	100.0
Western NSW	365	54.6	65	9.7	223	33.3	16	2.4	669	100.0
Far West	23	67.6	-	-	7	20.6	-	-	34	100.0
Other-not stated	-	-	-	-	-	-	-	-	27	100.0
<b>TOTAL</b>	<b>2600</b>	<b>61.7</b>	<b>424</b>	<b>10.1</b>	<b>1052</b>	<b>25.0</b>	<b>137</b>	<b>3.3</b>	<b>4213</b>	<b>100.0</b>

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

<sup>#</sup> 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 74). Data not shown for cell counts less than five.

## Perinatal mortality

Between 2013 and 2017, the perinatal mortality rate among Aboriginal or Torres Strait Islander babies varied between 9.6 and 12.7 per 1,000 births (Table 94). The rate of 12.7 per 1,000 births in Aboriginal or Torres Strait Islander mothers in 2017 is higher than the rate of 8.2 per 1,000 births experienced among babies born to non-Aboriginal or Torres Strait Islander mothers.

**TABLE 94: PERINATAL DEATHS AMONG BABIES BORN TO ABORIGINAL AND TORRES STRAIT ISLANDER MOTHERS, NSW 2013–2017<sup>#</sup>**

Perinatal deaths	Year									
	2013		2014		2015		2016		2017	
	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000	No.	Rate/ 1,000
Stillborn	26	7.3	33	8.7	34	8.8	36	8.6	38	8.9
Neonatal death	13	3.7	14	3.7	3	0.8	15	3.6	16	3.8
<b>TOTAL</b>	<b>39</b>	<b>11.0</b>	<b>47</b>	<b>12.3</b>	<b>37</b>	<b>9.6</b>	<b>51</b>	<b>12.2</b>	<b>54</b>	<b>12.7</b>

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

<sup>#</sup> 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 perinatal deaths 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 zero to 10 (10 being perfect). It takes account of five physical signs, each of which is assigned a component score of zero, one or two: 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 or 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

Infant feeding is reported via three tick-box categories: breastfeeding, expressed breast milk and infant formula. More than one type of feeding may be reported by ticking multiple boxes. In this report, infant feeding is classified into three 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.

### Peer group

The hospital peer group levels for 2017 have been applied to the data in this report.

These are explained in the *NSW Health Information Bulletin, NSW Hospital Peer Groups 2016*, which provides a consistent language for describing clinical services delivered by public hospitals and health services. The aim of the peer grouping is to identify hospitals with similar characteristics, predominantly for comparative reporting and service planning.

For the purposes of this report, peer groups were collapsed into five reporting groupings as follows:

Peer group A: includes all births in Principal referral (A1), paediatric specialist (A2) and Ungrouped acute – tertiary referral (A3) hospitals.

Peer group B: includes all births in Major hospitals group 1 (B1) and Major hospitals group 2 (B2).

Peer group C: includes all births in District group 1 (D1a) and District group 2 (D1b) hospitals.

Peer group D: includes Community with surgery (D1a) and Community without surgery (D1b) hospitals.

Private hospitals: all private hospital births.

All births, including births in hospitals that have not been assigned a peer group, have been included in table totals.

### 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 record 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

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

\* NEC = Not elsewhere classified.

