10. Perinatal deaths

Review of perinatal deaths 2007

This chapter presents the results of perinatal death reviews carried out by the NSW Maternal and Perinatal Committee, which is a quality assurance committee established under the *NSW Health Administration Act 1982*. The Committee is privileged under the Act to carry out confidential reviews of maternal and perinatal deaths.

NSW Department of Health Policy Directive No. 2006_007 describes hospital procedures for review and reporting of perinatal deaths.[1] In 2006 and 2007, the Maternal and Perinatal Committee carried out reviews of perinatal deaths occurring among fetuses or infants of at least 20 weeks gestation or at least 400 g birth weight, bringing the Committee's review process in line with the criteria used by the NSW Midwives Data Collection (MDC) since 2006 for reporting of births.

Perinatal deaths were reviewed by the Committee's Perinatal Outcomes Working Party. Both stillbirths and neonatal deaths were classified according to an obstetric cause-specific classification, the Perinatal Society of Australia and New Zealand Perinatal Death Classification (PSANZ–PDC). Neonatal deaths were also classified by neonatal cause according to the Perinatal Society of Australia and New Zealand Neonatal Death Classification (PSANZ–NDC).[2]

There were 868 perinatal deaths of at least 20 weeks gestation or at least 400 g birth weight reported to the MDC in 2007. Confidential reports on 827 deaths were reviewed. Of the 629 stillbirths reported to the MDC, reviews were carried out on 582 (92.5%). The MDC was notified of 239 neonatal deaths. Reviews were carried out on 245 neonatal deaths, which include neonatal deaths that occurred after discharge or transfer from the hospital of birth.

Trends in causes of perinatal death

Causes of perinatal death in 2006 and 2007 are shown in Table 111. The overall pattern of deaths was similar for both years. The percentage of deaths due to congenital abnormalities fell slightly from 22.5% in 2006 to 20.7% in 2007; whereas there was an increase in the percentage of deaths attributed to unexplained antepartum, from 19.4% to 24.7%. Almost one in five deaths was due to spontaneous preterm birth for both years.

Causes of perinatal death 2007

Perinatal deaths were classified according to the PSANZ–PDC, which identifies the single most important factor that led to the chain of events that resulted in the death.

1. Congenital abnormality

In 2007, congenital abnormalities as a group were the second most common cause of perinatal death, responsible for 171 deaths (Table 112). The most common abnormalities were chromosomal ($n = 38$; 22.2%). Of these, 13 were trisomy 18, 13 were trisomy 21, two were trisomy 13, and two were Turner syndrome.

Table 111. Perinatal deaths by PSANZ perinatal death classification, NSW, 2006–2007[#]

PSANZ perinatal death classification	2006		2007	
	No.	%	No.	%
1. Congenital abnormality	194	22.5	171	20.7
2. Perinatal infection	51	5.9	54	6.5
3. Hypertension	26	3.0	27	3.3
4. Antepartum haemorrhage	71	8.2	70	8.5
5. Maternal disease	23	2.7	27	3.3
6. Specific perinatal conditions	74	8.6	48	5.8
7. Hypoxic peripartum death	27	3.1	35	4.2
8. Fetal growth restriction	53	6.1	31	3.7
9. Spontaneous preterm	171	19.8	152	18.4
10. Unexplained antepartum death	167	19.4	204	24.7
11. No obstetric antecedent	5	0.6	8	1.0
TOTAL	862	100.0	827	100.0

Source: NSW Maternal and Perinatal Committee, NSW Department of Health.
[#]Figures may differ from previous reports because of additional information having been received after publication.
PSANZ: Perinatal Society of Australia and New Zealand.

10.1071/NB10S10

Table 112. Perinatal deaths by PSANZ perinatal death classification and perinatal outcome, NSW, 2007

PSANZ perinatal death classification	Perinatal outcome					
	Stillbirth		Neonatal death		TOTAL	
	No.	%	No.	%	No.	%
1. Congenital abnormality						
Central nervous system	31	5.3	24	9.8	55	6.7
Cardiovascular system	11	1.9	10	4.1	21	2.5
Urinary system	4	0.7	6	2.4	10	1.2
Gastrointestinal system	3	0.5	0	0.0	3	0.4
Chromosomal	34	5.8	4	1.6	38	4.6
Metabolic	1	0.2	1	0.4	2	0.2
Multiple	11	1.9	5	2.0	16	1.9
Musculoskeletal	10	1.7	5	2.0	15	1.8
Respiratory	1	0.2	1	0.4	2	0.2
Diaphragmatic hernia	1	0.2	4	1.6	5	0.6
Tumours	1	0.2	1	0.4	2	0.2
Other specified	0	0.0	1	0.4	1	0.1
Unspecified	0	0.0	1	0.4	1	0.1
Total	108	18.6	63	25.7	171	20.7
2. Perinatal infection						
Group B *Streptococcus*	5	0.9	2	0.8	7	0.8
Escherichia coli	4	0.7	4	1.6	8	1.0
Spirochaetal	0	0.0	1	0.4	1	0.1
Other bacterial	1	0.2	2	0.8	3	0.4
Unspecified bacterial	9	1.5	6	2.4	15	1.8
Cytomegalovirus	2	0.3	2	0.8	4	0.5
Parvovirus	1	0.2	0	0.0	1	0.1
Herpes simplex virus	2	0.3	0	0.0	2	0.2
Other unspecified organism	9	1.5	4	1.6	13	1.6
Total	33	5.7	21	8.6	54	6.5
3. Hypertension						
Chronic: essential	0	0.0	1	0.4	1	0.1
Chronic: secondary, e.g. renal	1	0.2	0	0.0	1	0.1
Gestational	4	0.7	0	0.0	4	0.5
Pre-eclampsia	18	3.1	1	0.4	19	2.3
Pre-eclampsia superimposed on chronic hypertension	1	0.2	1	0.4	2	0.2
Total	24	4.1	3	1.2	27	3.3
4. Antepartum haemorrhage						
Placental abruption	31	5.3	16	6.5	47	5.7
Placenta praevia	2	0.3	0	0.0	2	0.2
Vasa praevia	1	0.2	0	0.0	1	0.1
Other	3	0.5	0	0.0	3	0.4
Undetermined origin	7	1.2	10	4.1	17	2.1
Total	44	7.6	26	10.6	70	8.5
5. Maternal disease						
Termination of pregnancy for maternal psychosocial indications	3	0.5	2	0.8	5	0.6
Diabetes/gestational diabetes	7	1.2	2	0.8	9	1.1
Maternal injury: accidental	3	0.5	0	0.0	3	0.4
Lupus obstetric syndrome	2	0.3	1	0.4	3	0.4
Obstetric cholestasis	2	0.3	0	0.0	2	0.2
Other specified	4	0.7	1	0.4	5	0.6
Total	21	3.6	6	2.4	27	3.3
6. Specific perinatal conditions						
Twin-to-twin transfusion	13	2.2	1	0.4	14	1.7
Fetomaternal haemorrhage	5	0.9	0	0.0	5	0.6
Antepartum cord complications	7	1.2	0	0.0	7	0.8
Uterine abnormality	3	0.5	2	0.8	5	0.6
Birth trauma	1	0.2	0	0.0	1	0.1
Alloimmune disease – ABO	1	0.2	0	0.0	1	0.1
Alloimmune disease – unspecified	1	0.2	0	0.0	1	0.1
Idiopathic hydrops	7	1.2	4	1.6	11	1.3
Other	3	0.5	0	0.0	3	0.4
Total	41	7.0	7	2.9	48	5.8
7. Hypoxic peripartum death						
Intrapartum complication – uterine rupture	1	0.2	2	0.8	3	0.4
Intrapartum complication – cord prolapse	0	0.0	5	2.0	5	0.6
Intrapartum complication – shoulder dystocia	2	0.3	2	0.8	4	0.5

(*Continued*)

Table 112. (Continued)

PSANZ perinatal death classification	Perinatal outcome					
	Stillbirth		Neonatal death		TOTAL	
	No.	%	No.	%	No.	%
Intrapartum complication – other	1	0.2	2	0.8	3	0.4
Evidence of non-reassuring fetal status in a normally grown infant	3	0.5	4	1.6	7	0.8
No intrapartum complications and no evidence of non-reassuring fetal status	2	0.3	0	0.0	2	0.2
Unspecified	9	1.5	2	0.8	11	1.3
Total	18	3.1	17	6.9	35	4.2
8. Fetal growth restriction						
With evidence of reduced vascular perfusion on Doppler studies and/or placental histopathology	17	2.9	3	1.2	20	2.4
With chronic villitis	1	0.2	0	0.0	1	0.1
No placental pathology	5	0.9	0	0.0	5	0.6
No examination of placenta	0	0.0	1	0.4	1	0.1
Other specified placental pathology	3	0.5	0	0.0	3	0.4
Unspecified or not known whether placental examined	1	0.2	0	0.0	1	0.1
Total	27	4.6	4	1.6	31	3.7
9. Spontaneous preterm						
Intact membranes or membrane rupture less than 24 h, with chorioamnionitis on placental histopathology	7	1.2	34	13.9	41	5.0
Intact membranes or membrane rupture less than 24 h, without chorioamnionitis on placental histopathology	12	2.1	14	5.7	26	3.1
Intact membranes or membrane rupture less than 24 h, with clinical evidence of chorioamnionitis, no examination of placenta	2	0.3	0	0.0	2	0.2
Intact membranes or membrane rupture less than 24 h, with no clinical signs of choriamnionitis, no examination of placenta	2	0.3	2	0.8	4	0.5
Intact membranes or membrane rupture less than 24 h, with unspecified/unknown placental examination	0	0.0	5	2.0	5	0.6
Membrane rupture 24 h or more, with chorioamnionitis on placental histopathology	22	3.8	20	8.2	42	5.1
Membrane rupture 24 h or more, without chorioamnionitis on placental histopathology	2	0.3	5	2.0	7	0.8
Membrane rupture 24 h or more, with clinical evidence of chorioamnionitis, no examination of placenta	1	0.2	1	0.4	2	0.2
Membrane rupture 24 h or more, with no clinical signs of chorioamnionitis, no examination of placenta	8	1.4	3	1.2	11	1.3
Membrane rupture 24 h or more, with unspecified/unknown placental examination	2	0.3	0	0.0	2	0.2
Membrane rupture unknown duration, with chorioamnionitis on placental histopathology	0	0.0	3	1.2	3	0.4
Membrane rupture unknown duration, without chorioamnionitis on placental histopathology	0	0.0	1	0.4	1	0.1
Membrane rupture unknown duration, with no clinical signs of chorioamnionitis, no examination of placenta	4	0.7	1	0.4	5	0.6
Membrane rupture unknown duration, with unspecified/ unknown placental examination	0	0.0	1	0.4	1	0.1
Total	62	10.7	90	36.7	152	18.4
10. Unexplained antepartum death						
With evidence of reduced vascular perfusion on Doppler studies and/or placental histopathology	24	4.1	0	0.0	24	2.9
With chronic villitis	3	0.5	0	0.0	3	0.4
No placental pathology	111	19.1	0	0.0	111	13.4
No examination of placenta	14	2.4	0	0.0	14	1.7
Other specified placental pathology	50	8.6	0	0.0	50	6.0
Unspecified or not known whether placenta examined	2	0.3	0	0.0	2	0.2
Total	204	35.1	0	0.0	204	24.7
11. No obstetric antecedent						
Postnatally acquired infection	0	0.0	2	0.8	2	0.2
Other specified	0	0.0	1	0.4	1	0.1
Unknown/unexplained	0	0.0	5	2.0	5	0.6
Total	0	0.0	8	3.3	8	1.0
TOTAL	582	100.0	245	100.0	827	100.0

Source: NSW Maternal and Perinatal Committee, NSW Department of Health.
PSANZ: Perinatal Society of Australia and New Zealand.

Fifty-five deaths were associated with abnormalities of the central nervous system (32.2%) and included 24 deaths due to neural tube defects and 13 deaths associated with congenital hydrocephalus. Twenty-one deaths were associated with abnormalities of the cardiovascular system, which included 10 cases of hypoplastic left-heart syndrome, two cases of transposition of the great vessels, one case of hypoplastic left ventricle, one case of hypoplastic right heart and one case of coarctation of the aorta.

Five deaths were associated with congenital diaphragmatic hernia, and 16 deaths were due to multiple abnormalities not associated with a chromosomal abnormality.

2. Perinatal infection

Fifty-four deaths (6.5%) were found to be due to infection, of which 33 were stillbirths and 21 were neonatal deaths. For 33 deaths, there was an associated chorioamnionitis. The most common infective organisms were *Escherichia coli* ($n = 8$) and group B *Streptococcus* infection ($n = 7$). Four perinatal deaths followed congenital cytomegalo-virus infection, one followed a parvovirus infection, and one followed a herpes simplex infection.

3. Hypertension

Twenty-seven deaths (3.3%) were considered to be due to maternal hypertension. There were 24 stillbirths and three neonatal deaths. The majority ($n = 19$) occurred in mothers with pre-eclampsia. There were two deaths attributed to chronic hypertension, four to gestational hypertension, and two to pre-eclampsia superimposed on pre-existing hypertension.

4. Antepartum haemorrhage

Seventy deaths were due to antepartum haemorrhage, of which 47 were due to placental abruption, two were due to placenta praevia, and one was due to vasa praevia. Of the 47 deaths due to placental abruption, seven were associated with maternal hypertension.

5. Maternal disease

Twenty-seven deaths were attributed to other maternal conditions, including diabetes ($n = 9$), maternal injury ($n = 3$), lupus obstetric syndrome ($n = 3$) and termination of pregnancy ($n = 5$).

6. Specific perinatal conditions

Twin-to-twin transfusion accounted for the majority of deaths in this group ($n = 14$), followed by idiopathic hydrops ($n = 11$), antepartum cord complications ($n = 7$), uterine abnormality ($n = 5$) and fetomaternal haemorrhage ($n = 5$).

7. Hypoxic peripartum death

There were 35 deaths associated with peripartum hypoxia. Five deaths followed cord prolapse, four deaths were associated with shoulder dystocia and three deaths followed uterine rupture. Eight deaths occurred before the onset of labour, nine during labour and one at an unspecified time prior to birth. The remaining 17 deaths occurred in the neonatal period.

8. Fetal growth restriction

In 31 cases, the main cause of death was considered to be fetal growth restriction (FGR). Of these, 27 were stillbirths and four were neonatal deaths. FGR is defined as less than the tenth percentile of birth weight for gestational age, with no major congenital abnormalities. If a maternal or fetal cause of FGR was known, then the cause of death was classified to the underlying cause of the FGR. Stillbirths with evidence of maceration were not classified as FGR, unless there was evidence of growth restriction on serial ultrasound during pregnancy.

9. Spontaneous preterm

There were 152 (18.4%) perinatal deaths associated with spontaneous preterm birth, which comprises normally formed and appropriately grown babies born before 37 weeks gestation. Of these, 62 (40.8%) were stillbirths and 90 (59.2%) were neonatal deaths.

Of all deaths in this category, 84 (55.3%) were at less than 23 weeks gestation, 54 (35.5%) were at 23–25 weeks gestation, and 14 (9.2%) occurred between 26 and 36 weeks gestation. Fifty-six deaths (36.8%) were associated with membrane rupture of 24 h or more.

10. Unexplained antepartum death

Of the 204 unexplained stillbirths, 123 (60.3%) were low birth weight babies and 130 (63.7%) were premature. A variety of associated maternal conditions were reported in this group, including multiple pregnancy ($n = 14$ deaths), maternal hypertension ($n = 15$), diabetes ($n = 8$), and thyrotoxicosis ($n = 2$). Post-mortem examination was carried out in 80 cases (39.2%). Placental histopathology results were provided for 181 unexplained antepartum deaths (88.7%).

11. No obstetric antecedent

No obstetric cause of death was identified for eight neonatal deaths. There were two deaths due to postnatally acquired infection, one death due to primary persistent pulmonary hypertension and five deaths were unexplained.

Obstetric cause of perinatal death by hospital service level

Obstetric service levels are described in the Explanatory Notes of the Methods section (p. 11). The majority of perinatal deaths occurred in Level 6 hospitals (45.6%, Table 113). The proportion of unexplained intrauterine deaths was substantially lower in Level 6 hospitals than in other hospitals, possibly because of better access to perinatal post-mortem services. The proportion of deaths associated with congenital abnormalities was highest in Level 6 hospitals, reflecting patterns of referral for diagnosis and treatment.

Time of death 2007

Of the 827 perinatal deaths reviewed for 2007, 377 (45.6 %) occurred before the onset of labour, 72 (8.7%) occurred during labour, 131 (15.8%) occurred at an unknown time before birth, and 247 (29.8%) were neonatal deaths.

Of the 72 deaths that occurred during labour, 40 (55.6%) occurred at less than 23 weeks gestation, 16 (22.2%) occurred at 23–25 weeks gestation, and 16 (22.2%) occurred at 26 weeks or more.

Neonatal causes of death

In 2007, extreme prematurity (26 weeks gestation or less) was the most common cause of neonatal death, accounting for 45.3% of all neonatal deaths in 2007 (Table 114). Congenital abnormalities were the next most common cause of neonatal death, accounting for about one in four deaths.

Of the 245 neonatal deaths, 195 (79.6%) were preterm (Table 115). Among the 50 neonatal deaths among babies born at term, 22 deaths were due to congenital malformations and a further 16 were due to neurological conditions.

Table 113. Perinatal deaths by PSANZ perinatal death classification and hospital service level, NSW, 2007[#]

PSANZ perinatal death classification	Hospital service level													
	2		3		4		5		6		Private		TOTAL[##]	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1. Congenital abnormality	0	0.0	8	12.5	8	6.4	22	13.8	116	30.8	15	16.7	171	20.7
2. Perinatal infection	0	0.0	3	4.7	7	5.6	7	4.4	32	8.5	4	4.4	54	6.5
3. Hypertension	0	0.0	4	6.3	6	4.8	4	2.5	10	2.7	3	3.3	27	3.3
4. Antepartum haemorrhage	1	20.0	7	10.9	14	11.2	10	6.3	31	8.2	7	7.8	70	8.5
5. Maternal disease	0	0.0	0	0.0	8	6.4	5	3.1	11	2.9	3	3.3	27	3.3
6. Specific perinatal conditions	0	0.0	4	6.3	4	3.2	7	4.4	25	6.6	8	8.9	48	5.8
7. Hypoxic peripartum death	0	0.0	4	6.3	6	4.8	5	3.1	14	3.7	4	4.4	35	4.2
8. Fetal growth restriction	0	0.0	2	3.1	10	8.0	7	4.4	10	2.7	2	2.2	31	3.7
9. Spontaneous preterm	2	40.0	14	21.9	17	13.6	36	22.5	72	19.1	11	12.2	152	18.4
10. Unexplained antepartum death	2	40.0	17	26.6	43	34.4	56	35.0	53	14.1	33	36.7	204	24.7
11. No obstetric antecedent	0	0.0	1	1.6	2	1.6	1	0.6	3	0.8	0	0.0	8	1.0
TOTAL	5	100.0	64	100.0	125	100.0	160	100.0	377	100.0	90	100.0	827	100.0

Source: NSW Maternal and Perinatal Committee, NSW Department of Health.
[#]The maternity service level is the level of the hospital of death.
[##]Total includes four babies born in NSW who died interstate and two babies who died in NSW non-maternity hospitals.
PSANZ: Perinatal Society of Australia and New Zealand.

Table 114. Neonatal deaths by PSANZ neonatal death classification, NSW, 2006–2007

PSANZ neonatal death classification	Year			
	2006		2007	
	No.	%	No.	%
Congenital abnormality				
Central nervous system	5	1.9	19	7.8
Cardiovascular system	7	2.6	10	4.1
Urinary tract	7	2.6	6	2.4
Gastrointestinal tract	5	1.9	0	0.0
Chromosomal	16	6.0	4	1.6
Metabolic	2	0.7	2	0.8
Multiple	12	4.5	5	2.0
Musculoskeletal	4	1.5	4	1.6
Respiratory	1	0.4	1	0.4
Diaphragmatic hernia	3	1.1	4	1.6
Haematological	0	0.0	1	0.4
Tumours	1	0.4	1	0.4
Other specified congenital abnormality	1	0.4	1	0.4
Unspecified	1	0.4	1	0.4
Total	65	24.3	59	24.1
Extreme prematurity				
Not resuscitated	72	26.9	83	33.9
Unsuccessful resuscitation	10	3.7	11	4.5
Resuscitation unspecified or unknown	26	9.7	17	6.9
Total	108	40.3	111	45.3
Cardio-respiratory disorders				
Hyaline membrane disease/respiratory distress syndrome	18	6.7	5	2.0
Meconium aspiration syndrome	4	1.5	2	0.8
Primary persistent pulmonary hypertension	1	0.4	1	0.4
Pulmonary hypoplasia	4	1.5	3	1.2
Other	3	1.1	5	2.0
Total	30	11.2	16	6.5
Infection				
Congenital bacterial	5	1.9	6	2.4
Acquired bacterial	6	2.2	2	0.8
Congenital viral	2	0.7	1	0.4
Acquired viral	0	0.0	1	0.4
Other	0	0.0	1	0.4
Unspecified organism	5	1.9	1	0.4
Total	18	6.7	12	4.9
Neurological				
Hypoxic ischaemic encephalopathy/perinatal asphyxia	27	10.1	26	10.6
Intracranial haemorrhage	8	3.0	10	4.1
Other	0	0.0	1	0.4
Total	35	13.1	37	15.1
Gastrointestinal				
Necrotising enterocolitis	3	1.1	2	0.8
Total	3	1.1	2	0.8
Other				
SIDS	1	0.4	0	0.0
Trauma	1	0.4	0	0.0
Other specified	3	1.1	0	0.0
Unclassified sudden infant death	0	0.0	1	0.4
Unknown/undetermined	4	1.5	7	2.9
Total	9	3.4	8	3.3
TOTAL	268	100.0	245	100.0

Source: NSW Maternal and Perinatal Committee, NSW Department of Health.
PSANZ: Perinatal Society of Australia and New Zealand.
SIDS: sudden infant death syndrome.

Table 115. Neonatal deaths by PSANZ neonatal death classification and gestational age, NSW, 2007

PSANZ neonatal death classification	Gestational age (weeks)				TOTAL	
	<37		37+			
	No.	%	No.	%	No.	%
Congenital abnormality						
Central nervous system	14	7.2	5	10.0	19	7.8
Cardiovascular system	4	2.1	6	12.0	10	4.1
Urinary tract	6	3.1	0	0.0	6	2.4
Chromosomal	1	0.5	3	6.0	4	1.6
Metabolic	2	1.0	0	0.0	2	0.8
Multiple	3	1.5	2	4.0	5	2.0
Musculoskeletal	1	0.5	3	6.0	4	1.6
Respiratory	1	0.5	0	0.0	1	0.4
Diaphragmatic hernia	3	1.5	1	2.0	4	1.6
Haematological	1	0.5	0	0.0	1	0.4
Tumours	1	0.5	0	0.0	1	0.4
Other specified congenital abnormality	0	0.0	1	2.0	1	0.4
Unspecified	0	0.0	1	2.0	1	0.4
Total	37	19.0	22	44.0	59	24.1
Extreme prematurity						
Not resuscitated	83	42.6	0	0.0	83	33.9
Unsuccessful resuscitation	11	5.6	0	0.0	11	4.5
Resuscitation unspecified or unknown	17	8.7	0	0.0	17	6.9
Total	111	56.9	0	0.0	111	45.3
Cardio-respiratory disorders						
Hyaline membrane disease/respiratory distress syndrome	5	2.6	0	0.0	5	2.0
Meconium aspiration syndrome	0	0.0	2	4.0	2	0.8
Primary persistent pulmonary hypertension	1	0.5	0	0.0	1	0.4
Pulmonary hypoplasia	3	1.5	0	0.0	3	1.2
Other	3	1.5	2	4.0	5	2.0
Total	12	6.2	4	8.0	16	6.5
Infection						
Congenital bacterial	5	2.6	1	2.0	6	2.4
Acquired bacterial	2	1.0	0	0.0	2	0.8
Congenital viral	1	0.5	0	0.0	1	0.4
Acquired viral	0	0.0	1	2.0	1	0.4
Other	0	0.0	1	2.0	1	0.4
Unspecified organism	1	0.5	0	0.0	1	0.4
Total	9	4.6	3	6.0	12	4.9
Neurological						
Hypoxic ischaemic encephalopathy/perinatal asphyxia	10	5.1	16	32.0	26	10.6
Intracranial haemorrhage	10	5.1	0	0.0	10	4.1
Other	1	0.5	0	0.0	1	0.4
Total	21	10.8	16	32.0	37	15.1
Gastrointestinal						
Necrotising enterocolitis	2	1.0	0	0.0	2	0.8
Total	2	1.0	0	0.0	2	0.8
Other						
Unclassified sudden infant death	0	0.0	1	2.0	1	0.4
Unknown/undetermined	3	1.5	4	8.0	7	2.9
Total	3	1.5	5	10.0	8	3.3
TOTAL	195	100.0	50	100.0	245	100.0

Source: NSW Maternal and Perinatal Committee, NSW Department of Health.

Perinatal deaths associated with maternal drug dependency and abuse 2007

No perinatal deaths were directly attributed to maternal drug dependency or drug abuse in 2007. Nine deaths occurred among mothers who had a history of drug dependency or abuse, but drug use was not considered to be the main cause of death.

Post-mortem examination 2007

Post-mortem examination is valuable in ascertaining or confirming the cause of death, identifying additional factors that may have contributed to the death, and counselling parents about the cause of death. Post-mortem examinations were carried out for 283 (34.2%) deaths, including 227 stillborn infants (39.0% of all reported stillbirths) and 56 neonatal deaths (22.9% of all reported neonatal deaths). Placental histopathology was carried out for 665 perinatal deaths (80.4%).

References

1. NSW Department of Health. Hospital Procedures for Review and Reporting of Perinatal Deaths. Available at www.health.nsw.gov.au/policies/pd/2006/PD2006_006.html.
2. Perinatal Society of Australia and New Zealand. Clinical Practice Guideline for Perinatal Mortality Audit. PSANZ, 2005.