National Perinatal Death Clinical Audit Tool

Australian and New Zealand stillbirth alliance

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Perinatal Society of Australia & New Zealand

Type of Perinatal Death

☐ **STILLBIRTH (Fetal death) : Death prior to the complete expulsion or extraction from its mother of a product of conception of 20 or more completed weeks of gestation or of 400 g or more birthweight where gestation is not known. The death is indicated by the fact that after such separation the fetus does not breathe or show any other evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles.**

***Please select type*:**

- ☐ **Antepartum fetal death**
- ☐ **Intrapartum fetal death**
- ☐ **Time of fetal death not known**
- ☐ **Termination of pregnancy**

OR

☐ **NEONATAL DEATH: Death of a liveborn infant occurring before 28 completed days after birth.**

***Please select type*:**

- ☐ **Non-admitted neonatal death**
- ☐ **Neonatal death in hospital**
- ☐ **Termination of pregnancy**

Please follow the instructions and answer all questions as directed. You may not know the answer to some of the questions but please provide as much detail as possible. Personally identifiable information collected on this form will be kept confidential. Information included in reports will be grouped and non identifiable.

Section 1: CLINICAL DATA RELEVANT TO PERINATAL DEATH

PLEASE COMPLETE THIS SECTION WITHIN 48 HOURS OF THE STILLBIRTH OR NEONATAL DEATH.

1. **How many perinatal deaths are associated with this pregnancy?** ☐
2. **Mother:** **Surname** ☐
   Given name(s): ☐
   Other name(s): ☐
3. **Mother's Unit Record No:** ☐
4. **Mother's date of birth:** ☐☐/☐☐/☐☐☐☐ (DD/MM/YYYY)
5. **Usual residential address of mother at time of birth:**
   Town/City/Locality ☐
   State ☐
   Post Code ☐
6. **Date and time of baby's birth:**
   Date: ☐☐/☐☐/☐☐☐☐ (DD/MM/YYYY)
   Time: ☐☐.☐☐ hrs (24hour Clock)
7. **Date and time of baby's death (neonatal deaths):**
   Date: ☐☐/☐☐/☐☐☐☐ (DD/MM/YYYY)
   Time: ☐☐.☐☐ hrs (24hour Clock)
8. **Calculated gestation of pregnancy at birth:** ☐☐ Completed Weeks
9. **Birth weight:** ☐☐☐☐ grams

10. Gender: **Male** ☐ **Female** ☐ **Undetermined** ☐

11. Name of facility reporting: ☐

12. Marital status: Never Married ☐ Married ☐ De facto ☐ Widowed ☐ Divorced ☐ Separated ☐

13. Education: <High school ☐ High school ☐ Tertiary ☐

14. Mother's occupation: ☐

15. Mother's country of birth: ☐

16. Mother's ethnicity:

- ☐ Aboriginal
- ☐ Torres Strait Islander
- ☐ Aboriginal & Torres Strait Islander
- ☐ Maori / Pacific Islander
- ☐ Papua New Guinean/ Timorese
- ☐ Caucasian
- ☐ Mediterranean
- ☐ Indian, Pakistani, Bangladeshi, Sri Lankan
- ☐ Cambodian, Laos, Vietnamese, Thai
- ☐ Malay, Philippino, Indonesian
- ☐ Chinese, Korean, Japanese
- ☐ Middle Eastern, Nth African
- ☐ African
- ☐ Central / Sth American
- ☐ Other, please state: ☐

17. Mother's understanding of spoken English:

- ☐ None *or* ☐ Unknown
- ☐ Poor
- ☐ Average
- ☐ Good

18. Mother's height: ☐☐☐ cms
weight: ☐☐☐ kg (earliest measured in pregnancy)
If not available please measure height and weight.

19. Maternal BMI at booking: ☐☐.☐ *or* Unknown ☐

20. Was this a multiple pregnancy?

Yes ☐ **No** ☐ **Unknown** ☐

If yes, what was birth order of this stillborn or deceased baby?

- ☐ First
- ☐ Second
- ☐ Other

a. Number of fetuses/babies **alive** at 20 weeks gestation: ☐
b. Chorionicity (if known) _____

21. Mother's previous obstetric history:

a) total number of previous pregnancies: ☐☐ *or* Unknown ☐

b) details of previous pregnancies ***(list in order from first pregnancy- more space page 11)***

Date of Birth	Place of birth	Gestation (weeks)	Pregnancy Outcome *(codes below)*	Type of birth *(codes below)*	Birth weight	Complications (eg. IUGR) (*codes below*)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						

Pregnancy Outcome: LB = live birth; **SM** = spontaneous miscarriage; **TOP** = termination of pregnancy; **E** = ectopic pregnancy; **SB** = stillbirth; **NNDE** = early neonatal death (<7 days age); **NNDL** = late neonatal death (7 days – 28 days); **NNDI** = Death 28 days – 2 years; **U** = unknown.

Type of Birth: NVB = normal vaginal birth; **OVD** = operative vaginal delivery; **VB** = vaginal breech; **CS** = caesarean section; **U** = unknown.

Complications: NIL = no complications; **HE** = hyperemesis; **APH** = ante partum haemorrhage/abruption; **CxS** = cervical stitch; **IUGR** = intrauterine growth retardation; **GDM** = gestational diabetes mellitus; **GH** = gestational hypertension; **U** = unknown; **Other** = please comment in summary section, page 11.

22. Mother's medical history (before this pregnancy)

	Yes	No	Unknown
a. Any pre-existing medical condition *(If no or unknown, go to question 23)*	☐	☐	☐
b. Asthma	☐	☐	☐
c. Diabetes pre pregnancy (type 1 or 2)	☐	☐	☐
d. Epilepsy	☐	☐	☐
e. Heart condition (congenital or acquired)	☐	☐	☐
f. Hypertension	☐	☐	☐
g. Endocrine disorder (eg.hyper/hypothyroid)	☐	☐	☐
h. Inflammatory bowel disease	☐	☐	☐
i. Systemic lupus erythematosus	☐	☐	☐
j. Other autoimmune disorder	☐	☐	☐
k. Mental health disorder	☐	☐	☐
l. Renal disease	☐	☐	☐
m. Venous thromboembolism	☐	☐	☐
n. Haematological disorders	☐	☐	☐
o. Cervical/uterine surgery	☐	☐	☐
p. Urinary tract infection	☐	☐	☐
q. Uterine abnormality	☐	☐	☐
r. Other, please state:	☐		

All remaining questions relate only to the pregnancy associated with this perinatal death.

23. Fertility treatment or assisted conception in this pregnancy?

Yes ☐ **No** ☐ **Unknown** ☐

If yes, method/s and dates:

24. Is mother a smoker? **Yes** ☐ *If yes:* ☐☐ *per day* **No** ☐

If no:

Never smoked ☐
Stopped before this pregnancy ☐
Stopped during this pregnancy ☐ *at gestation*: **wks**
Unknown ☐

25. Mother's use of alcohol and other drugs: **Yes** ☐ **No** ☐ **Unknown** ☐

If yes specify drug and alcohol use during this pregnancy:

a) First trimester :

b) Month prior to birth:

26. Antenatal check ups :

a. Total number of antenatal visits recorded ☐☐ **Unknown** ☐

b. Gestation at first antenatal visit: ☐☐ weeks **Unknown** ☐

27. Model of antenatal maternity care:

(Select one in each column)	**At booking**	**At birth**
No booked care	☐	☐
Obstetric hospital	☐	☐
Maternal/Fetal Medicine	☐	☐
Hospital midwifery (eg birth centre)	☐	☐
Private obstetrician	☐	☐
Private midwife	☐	☐
General Practitioner/Shared	☐	☐
Unknown	☐	☐

28.Intended place of birth before labour:

☐ Home
☐ Birth Centre
☐ Public Hospital
☐ Private Hospital
☐ Other
☐ Unknown

Please state name of intended place:

29. Actual place of birth:

☐ Home
☐ Birth Centre
☐ Public Hospital
☐ Private Hospital
☐ Unattended/Freebirth
☐ Other

Please state name of actual place:

30. Obstetric conditions during this pregnancy:

Indicate all conditions known to be present during this pregnancy.

Yes

a. Hypertension ☐

If yes indicate type of hypertension

- ☐ Gestational hypertension
- ☐ Pre-eclampsia
- ☐ Pre-eclampsia with chronic hypertension
- ☐ Eclampsia
- ☐ Unspecified

b. Preterm labour ☐

c. Prolonged rupture of membranes ☐

If yes indicate gestation

- ☐ Preterm - rupture < 37 weeks gestation
- ☐ Term - rupture ≥ 37 weeks gestation

d. Cholestasis of pregnancy ☐

e. Confirmed maternal infection ☐

If yes indicate kind of infection

- ☐ Pyelonephritis
- ☐ Lower urinary tract infection
- ☐ Other infection

If other please specify: ☐

f. Trauma ☐

If yes indicate kind of trauma

- ☐ Vehicular
- ☐ Fall
- ☐ Violent personal injury
- ☐ Other, please specify: ☐

g. Vaginal bleeding ☐

If yes indicate gestation

- ☐ Before 20 weeks
- ☐ After 20 weeks

h. Gestational diabetes ☐

If yes indicate intervention

- ☐ Oral hypoglycaemic therapy
- ☐ Insulin treated
- ☐ Other, please specify: ☐

i. Other obstetric condition ☐

Please specify: ☐

- ☐ **None of the above**
- ☐ **Unknown**

31. Suspected fetal growth restriction during pregnancy: *(Select **one**)*

- ☐ No
- ☐ Yes and confirmed by scan
- ☐ Yes but normal growth on scan
- ☐ Yes but no scan performed
- ☐ Unknown

32. Antenatal procedures: *(Please indicate all procedures undertaken in pregnancy **before** perinatal death)*

	Yes
First trimester screening scan	☐
Anomaly scan at ≤ 20 gestation	☐
Chorion villus sampling	☐
Cervical suture	☐
Amniocentesis	☐
Doppler studies	☐
External cephalic version	☐
Fetocide	☐
Amnioreduction	☐
Laser treatment	☐
Other, please state:	
None of the above	☐
Unknown	☐

Total number of scans= ☐

33. Please indicate if obstetric consultation occurred for these reasons: *(All that apply)*

No obstetric consultations	☐
Prolonged pregnancy (>41 weeks)	☐
Poor obstetric history	☐
Breech presentation	☐
Mother's request	☐
Previous perinatal death	☐
Size of fetus	☐ large ☐ *or* small
Previous caesarean section	☐
Antepartum haemorrhage	☐
Unstable lie	☐
Fetal abnormality	☐
Prolonged rupture of membranes	☐
Decreased fetal movements	☐
Non-reassuring CTG	☐
Polyhydramnios/Oligohydramnios	☐
Surgery, specify:	
Other reason, specify:	

34. Was the mother referred to other healthcare services during pregnancy?

Yes ☐ **No** ☐ **Unknown** ☐

If yes, select all applicable:

Medical	☐
Mental health	☐
Drug and alcohol	☐
Social worker	☐
Other service	☐
If other, specify:	

35. Were maternal corticosteroids given in pregnancy?

Yes ☐ **No** ☐ **Unknown** ☐

36. Medications taken in this pregnancy? **Yes** ☐ **No** ☐

(Include all over the counter and traditional medicines)

If yes, list: _____

_____

_____

_____

NB. If fetal death confirmed before labour, please go to question 42.

Labour and Birth:

37. Onset of labour:

Spontaneous ☐ **Induced** ☐ **No labour** ☐ **Unknown** ☐

(If no labour, go to question 42)

a) If labour induced, state methods used to induce labour

☐ Drugs used, please specify: _____

☐ Artificial rupture of membranes (Date & Time_____)

☐ Other, please specify: _____

b) Reason for induction:

_____

38. Labour augmentation: Yes ☐ No ☐ Unknown ☐

(If yes, please select all that apply)

☐ Artificial rupture of membranes (Date & Time _____)

☐ Oxytocin infusion

☐ Other, please specify: _____

39. Analgesia during labour: Yes ☐ No ☐ Unknown ☐

*(If yes, select **all** relevant)*

Opiate ☐

Nitrous oxide ☐

Epidural ☐

Non-pharmacological – please specify _____

Other - please state: _____

40. Water immersion during labour:

Did part of labour occur in bath/pool? Yes ☐ No ☐ Unknown ☐

(If yes)

Was the baby born in bath/pool? Yes ☐ No ☐ Unknown ☐

41. Fetal monitoring during labour: Yes ☐ No ☐ Unknown ☐

*(If yes select **all** relevant)*

Intermittent auscultation ☐

CTG on admission ☐

Intermittent CTG ☐

Continuous CTG external ☐

Continuous CTG - FSE ☐

Fetal scalp ph/lactate ☐

Other, please state: _____

42. Method of birth of this baby

Vaginal non-instrumental ☐

Forceps ☐

Vacuum extractor ☐

LSCS *(see below)* ☐

Classical caesarean *(see below)* ☐

Other, please state ☐ *Details*: _____

Unknown/not stated ☐

If caesarean, please answer a) and b) over:

a) Main reason for caesarean: *(select one)*

- ☐ No medical indication
- ☐ Previous caesarean
- ☐ Breech presentation
- ☐ Pre-eclampsia
- ☐ Antepartum haemorrhage
- ☐ Maternal request
- ☐ Intra uterine fetal death (*Go to Question 48.*)
- ☐ Intra uterine growth restriction
- ☐ Fetal abnormality
- ☐ Fetal distress
- ☐ Cord presentation/prolapse
- ☐ Failure to progress
- ☐ Other, please specify: _____

b) Anaesthetic for operative delivery:

- General ☐
- Spinal ☐
- Epidural ☐

43. Complications in labour: Yes ☐ No ☐ Unknown ☐

*(If yes, select **all** relevant)*

- APH ☐
- Meconium liqour ☐
- Fetal bradycardia ☐
- Non-reassuring CTG ☐
- Cord entanglement/ prolapse ☐
- Shoulder dystocia ☐
- Failure to progress/dystocia ☐
- Other, please state: ☐

44. Length of labour:

a) First stage ☐☐ hours ☐☐ minutes *or* Unknown ☐

b) Second stage ☐☐ hours ☐☐ minutes *or* Unknown ☐

c) If birth occurred in hospital, state time in hospital before birth:

☐☐ days ☐☐ hours ☐☐ minutes *or* Unknown ☐

45. Apgar scores:

☐ 1 min ☐ 5 min ☐ 10 min ☐ 15 min

☐ Unknown

46. a) Resuscitation at birth: Yes ☐ No ☐ Unknown ☐

If yes answer the rest of this question:

Baby resuscitated and transferred to another clinical area ☐

Baby not able to be resuscitated ☐

b) Details of resuscitation at birth: *If resuscitation commenced indicate methods:*

- ☐ Suction
- ☐ Oxygen
- ☐ IPPV – bag and mask
- ☐ External cardiac massage
- ☐ Medications, specify: ☐
- ☐ Other resuscitation, specify**:** ☐

State category of senior staff present: ☐

47. Cord gases at birth: Yes ☐ No ☐ Unknown ☐

		Arterial	Venous
pH		☐☐.☐☐	☐☐.☐☐
Base deficit	+ / -	☐☐.☐☐	+ / - ☐☐.☐☐
CO_2		☐☐.☐☐	☐☐.☐☐
Lactate		☐☐.☐☐	☐☐.☐☐

48. Baby's examination after birth (live and stillborn babies):

a) Length ☐☐.☐ **cm** **and** Head circumference ☐☐.☐ **cm**

b) External abnormalities noted on examination of baby: Yes ☐ No ☐

If yes, specify (including birth trauma) _____

_____

_____

_____

c) If stillborn, degree of maceration: None ☐ Slight ☐ Moderate ☐ Marked ☐

NB. If fetal death confirmed before labour, go to question 53.

49. Was baby transferred from place of birth (eg via NETS) prior to death?

Yes ☐ **No** ☐ **Unknown** ☐

If yes, where was the baby transferred to? *(Select **one**)*

NICU/SCU* ☐ *Neonatal Intensive Care Unit/Special Care Unit

Post natal ward ☐

Home ☐

Died in transfer ☐

Tertiary Services ☐

Other ☐

If other please state: _____

50. If baby admitted to hospital, provide details of further treatments.

a) Diagnoses made:

b) Investigations/procedures:

c) IV therapy and drugs:

d) Mechanical ventilation details:

e) Were active life supporting measures withdrawn? Yes ☐ No ☐

f) **Summary of significant neonatal events:**

Date	Time	Baby's age	Event

51. Place of death if baby was born alive:

Home ☐
Hospital ☐ Specify location in hospital: _____
Other ☐ Give details: _____

52. Baby examination after neonatal death:

External abnormalities noted on examination of the baby?

Yes ☐ No ☐

*If yes, please specify (including birth trauma)*_____

_____

_____

53. Placental examination:

a) Placenta weight: ☐☐☐☐ gm **or** Unknown ☐

b) Placental examination

☐ Not examined
☐ Normal
☐ Abnormalities, please state: _____

c) Placenta sent to pathology: Yes ☐ No ☐ Unknown ☐

54. Umbilical cord notable features: Yes ☐ No ☐ Unknown ☐

*If yes, indicate **all** features noted:*

True knot	☐	tight ☐	loose ☐		
Cord round neck	☐	tight ☐	loose ☐		
Cord round limbs or body	☐	tight ☐	loose ☐		
Hyper-coiled appearance	☐				
Marginal/ velamentous insertion	☐				
Abnormal cord length	☐	short ☐	long ☐	_____	cms
Unusual thickness	☐	thin ☐	thick ☐	_____	cms
Meconium stained	☐				
2 vessels	☐				
Other abnormality, please state:	_____				

55. Maternal outcome:

☐ Alive and generally well

☐ Alive but with serious morbidity (e.g. admitted to ICU, hysterectomy, stroke).

☐ Dead

Please add further details in the summary (page 11) if serious maternal morbidity or mortality.

56. Post mortem examination:

a) Parents offered a post mortem examination? Yes ☐ No ☐ Unknown ☐

Parental consent to <u>full</u> post mortem? Yes ☐ No ☐

Parental consent to <u>limited</u> post mortem? Yes ☐ No ☐

Parental consent to external examination? Yes ☐ No ☐

b) Death referred to the Coroner? Yes ☐ No ☐

57. Were there any other factors which contributed to the perinatal death?

Yes ☐ No ☐

*If yes, please specify and complete **section 2**.*

_____

58. Bereavement support program commenced with family? Yes ☐ No ☐

59. Summary: Please provide any relevant information not covered in the previous questions, which you consider may have contributed to the perinatal death.

Section 1 of this form completed by:-
Name:-

Designation:-

Contact details: - Phone-
Email-
Date:-

Please mail completed original Section 1 marked 'Confidential' to:

Insert Health Department postal details here

SECTION 2 : CAUSE OF DEATH AND ASSOCIATED FACTORS

COMPLETE THIS SECTION AT PERINATAL MORTALITY COMMITTEE REVIEW

Mother's Surname ***(If multiple birth, indicate birth number of this baby)***	
Date of perinatal death	
Gestation	
Facility reporting	

1. Classification of cause of death

A) Cause of death recorded on Medical Certificate

i. Main disease or condition in fetus or infant:_____

ii. Other diseases or conditions in fetus or infant:_____

iii. Main maternal disease or condition affecting fetus or infant:_____

iv. Other maternal diseases or conditions affecting fetus or infant:_____

v. Other relevant circumstances_____

B) PSANZ Perinatal Mortality Classification of Cause of Death

(I) Perinatal Death Classification (PSANZ-PDC) Category ☐

Category description_____

(II) Neonatal Death Classification (PSANZ-NDC) Category ☐

Category classification_____

C) PSANZ Perinatal Mortality Classification of associated conditions

Associated condition 1:

(a) Perinatal Death Classification (PSANZ-PDC) Category ☐

Category description_____

OR

(b) Neonatal Death Classification (PSANZ-NDC) Category ☐

Category classification_____

Associated condition 2:

(a) Perinatal Death Classification (PSANZ-PDC) Category ☐

Category description_____

OR

(b) Neonatal Death Classification (PSANZ-NDC) Category ☐

Category classification_____

2. Post mortem Investigations and results

(a) Autopsy conducted **Yes - Full** ☐ **Yes - Limited** ☐ **No** ☐

If yes, state limits (if applicable) and findings **(**or attach copy of report)

_____

_____

(b) Placental histopathology **Yes** ☐ **No** ☐

If yes, state limits (if applicable) and findings **(**or attach copy of report)

(c) Maternal investigations

(c) State other tests and available results

3. Factors relating to care

Were any potentially contributing factors relating to provision of (or access to) care present?

Yes ☐ **No** ☐ **If no, go to question 4.**

If yes, complete table and state whether each event was **antenatal, intrapartum or postnatal**:

A. Factors related to the woman/her family/social situation	**Sub-optimal factor code**	**Relevance to outcome code**
1.		
2.		
3.		
B. Factors related to access to care		
1.		
2.		
3.		
C. Factors related to professional care		
1.		
2.		
3.		
D. Other factors:		

Suboptimal factors – coding	**Relevance of sub-optimal factor to outcome - coding**
R - ***Failure to <u>recognise</u> problem***	**I -** ***Insignificant. Sub-optimal factor(s) identified but <u>unlikely</u> to have contributed to outcome.***
A - ***Failure to <u>act</u> appropriately***	**P-** ***Possible. Sub-optimal factor(s) identified <u>might</u> have contributed to outcome.***
C - ***<u>Communication</u> failure***	**S -** ***Significant. Sub-optimal factor(s) identified <u>likely</u> to have contributed to outcome***
S - ***Failure to <u>supervise</u>***	**U -** ***Undetermined. Insufficient information available.***
H - ***Inadequate <u>human</u> resources***	
O - ***<u>Other</u>***	

4. Recommendations for practice improvement: **Yes** ☐ **No** ☐

Recommendation 1: _____

Action required: _____

Review date: _____

Recommendation 2: _____

Action required: _____

Review date: _____

Recommendation 3: _____

Action required: _____

Review date: _____

5. Other recommendations (eg. education or research): **Yes** ☐ **No** ☐

Recommendation 1: _____

Recommendation 2: _____

Recommendation 3: _____

6. Perinatal mortality review administrative details

Location of perinatal mortality review: _____

Date of review: _____

Review finalized? Yes ☐ No ☐

If yes, date finalized: _____

If no, please specify outstanding areas for review _____

_____

Section 2 of this form completed by:-

Name:- _____

Designation:- _____
Contact details: - Phone- _____
Email-_____

Date:- _____.

Please copy Section 2 for perinatal mortality committee records and mail completed original marked 'Confidential' to:
Insert Health Department postal details here

SECTION 3 : PERINATAL DEATH FOLLOW-UP (*OPTIONAL*)

COMPLETE THIS SECTION WHEN MOTHER DISCHARGED FROM MEDICAL CARE
(FILE IN CASE NOTES)

1. Follow-up visits for family

Obstetrician:_____ Yes ☐ Date/time:_____

Neonatologist:_____ Yes ☐ Date/time:_____

Midwife:_____ Yes ☐ Date/time:_____

General Practitioner:_____ Yes ☐ (Date/time:_____)

Bereavement support: _____ Yes ☐ Date/time:_____

Other, specify_____ _____ Yes ☐ Date/time:_____

G.P. notified of the perinatal death: Yes ☐ Date notified:_____

Genetic counselling required? Yes ☐ No ☐
If yes, please specify
_____

Further investigations required? Yes ☐ No ☐
If yes, please specify
_____

Specific religious or cultural considerations? Yes ☐ No ☐
If yes, please specify _____

Other relevant information: _____
_____

2. Other investigations proceeding:

Coroner's case **Yes** ☐ **No** ☐
Please provide details:
_____

Sentinel event report **Yes** ☐ **No** ☐
Please provide details:
_____

Root Cause Analysis report **Yes** ☐ **No** ☐
Please provide details:
_____

Perinatal Mortality Review Committee **Yes** ☐ **No** ☐
Please provide details:
_____

Section 3 of this form completed by:-
Name:-
Designation:-
Contact details: -
Phone-
Date:-
Email-