



**OBSTETRICS AND GYNAECOLOGY  
 CLINICAL PRACTICE GUIDELINE**

# Perinatal loss: Unexpected (miscarriage and stillbirth)

<b>Scope (Staff):</b>	WNHS Obstetrics and Gynaecology Directorate staff
<b>Scope (Area):</b>	Obstetrics and Gynaecology Directorate clinical areas at KEMH, OPH and home visiting (e.g. Visiting Midwifery Services, Community Midwifery Program and Midwifery Group Practice)
This document should be read in conjunction with this <a href="#">Disclaimer</a>	

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# General

## Aim

- To provide comprehensive care to a woman experiencing a spontaneous pregnancy loss.

## Key points

1. All care to women experiencing pregnancy/perinatal loss should be in line with evidence-based guidelines and be woman focussed.
2. Consent should be gained in line with usual procedures.
3. All women and their support person should be given written accurate information about treatment, follow-up and offered appropriate counselling prior to consent. This may include – Referral to Genetic Services WA, Social Work, Pastoral Care, and other specialities.

## Admission management

- Escort the woman and support person to their room and orientate to facilities.
- Organise car parking for the support person through the ward clerk or ward manager. Only 1 car parking permit will be provided, for 3 days.
- Complete a full routine admission and observations.
- Weigh on admission if there is no recent record of measurement.
- Measure and fit Graduated Compression Stockings if required.
- Collect blood for a full blood picture, group and hold or cross matching (dependant on risk factors) prior to commencing treatment (if not already taken).
- Ensure the woman has an IV bung (16g) inserted prior to commencing any treatment.
- Clinical pathways:

<b>Ward 6 (&lt;19<sup>+6</sup> weeks)</b>	<b>Labour and Birth Suite ( ≥20 weeks)</b>
<b>Pregnancy Loss Clinical Pathway (MR 261.03) as a guide</b>	<b>Perinatal Loss ≥ 20 weeks gestation Vaginal Birth Clinical Pathway (MR 271) as a guide</b>

## ≤19<sup>+6</sup> weeks gestation (early pregnancy loss, miscarriage)

### Pregnancy loss in the first 13 weeks of pregnancy

WA Health staff to refer to the [Miscarriage](#) guideline

### Pregnancy loss between 13 to 19<sup>+6</sup> weeks gestation

#### Coverage

This section is designed for pregnancy loss between **13 and 20 weeks** gestation.

Inclusion criteria:

- Miscarriage (< 20 weeks)

For stillbirth / fetal death in utero (> 20 weeks)- see chapter in this document for ≥ 20 weeks.

#### Planning and management

**Patient information:** Provide [Pregnancy Loss: In the Second and Third Trimester](#) booklet.

**Clinical assessment:** should be undertaken by the lead consulting doctor. A comprehensive medical, surgical and psychosocial history must be taken, and examination conducted. Including:

- Accurate gestation assessment - this is essential to selecting optimal treatment options and regimens
- Formal ultrasound examination to confirm suspected fetal demise
- Relevant medical / surgical/ obstetric / gynaecological and psychosocial history
- Written consent must be obtained prior to the commencement of treatment (**Consent MR295**). Consent should include Induction of Labour (IOL) +/- Manual Removal of Placenta (MROP)
- Intrauterine Fetal Death – assess to see if investigation bloods required as per PSANZ guidelines – see [appendix 1](#) PSANZ investigations flowchart<sup>1</sup>
- Blood group and Rhesus status should be confirmed, and tested, if not known
  - Follow Rh (D) immunoglobulin guideline where applicable
- Medications should be charted on– “Medications Administered for Pregnancy Loss” form (MR 810.07)

## To book an admission

- Less than 19<sup>+6</sup> completed weeks gestation - Ward 6 Nurse Manager, Page 3311, Mon – Fri 0700-1600hrs **or** the Afterhours Hospital Manager page 3333. Select cases may be more appropriate to have their IOL on LBS.

## Nursing / midwifery care

### Fluids and nutrition

- The woman can eat and drink until membranes rupture, or other complications arise, such as heavy vaginal bleeding, at which time fasting should commence. Fasting should continue until after the birth of the placenta and/or maternal condition is stable.
- Consider the administration of intravenous fluids if fasting for extended period.

### Pain management

- Offer the woman appropriate analgesia
- Encourage the woman to select comfortable positions during her labour and encourage to ambulate as desired

### Comfort and emotional well being

Offer assistance to the support person by:

- Involving them in treatment options discussions
- Involving them in practical supportive tasks

### Referrals

- Initiate referrals to appropriate multidisciplinary team members as per Clinical Pathway

### Bladder management

- Conduct a urinalysis when the woman is admitted.
- Encourage the woman to empty her bladder regularly; and to empty her bladder prior to abdominal or vaginal assessment.
- If an epidural is placed, follow relevant section within Bladder Management guideline and Anaesthetic Epidural guidelines.

### Commencement of treatment

- Explain to woman and support person:
  - the effects of the medication, how it is expected to work
  - side effects of misoprostol (including abdominal pain, nausea and vomiting, diarrhoea, pyrexia, shivering)

- Administer medication according to the medication chart;
  - Mifepristone may have been administered pre-admission
  - Misoprostol is likely to be given in a loading dose
  - The woman is recommended to recline for one-hour post administration of vaginal medication to enhance absorption
- Encourage the woman to select comfortable positions during her labour and encourage to ambulate as desired.
- Advise the woman to avoid the supine position in labour.

## Delivery of the baby/fetus

See Clinical Guideline: O&G: Labour and Birth: Labour (Second Stage) Management

### Equipment

- Delivery bundle (pre-packed)
- Delivery instruments (pre-packed) OR
  - sterile scissors x 1 (disposable)
  - sterile cord clamps x 2 (disposable)
  - sponge holder x 1
- A cuddly/receptacle for the fetus
- Incontinence sheets
- Cardboard toilet receptacle
- Placenta container: White plastic containers with the patient's addressograph label on the sides, and on the lid

### Procedure

- The woman may choose the most comfortable position in which to give birth, this may be on the bed or the commode, or other position
- A sterile cord clamp is placed on the cord and the cord cut with sterile scissors, on the baby's side
- Record the time of birth

## Third stage management

See Clinical Guideline: Obstetrics and Gynaecology: Labour: Third Stage Management

- **Oxytocic should be given routinely**, following the birth of the baby/fetus, **regardless of whether or not the placenta is delivered immediately<sup>2</sup>**.
- Ensure the woman knows why she is receiving a uterotonic and gives verbal consent.
- Medications for active management of the third stage should be charted on the "Medications Administered for Pregnancy Loss" form (MR 810.07).

## Birth of the placenta

- **Assess the uterus for placental separation.** No attempt at cord traction should be made until the uterus is contracted, firm and ballotable.

If the placenta has separated:

- Encourage a maternal position of more upright one e.g. sitting up
- Encourage maternal effort (bearing down) to deliver the placenta
- Gentle controlled cord traction may be applied to assist maternal effort
- Record the time the placenta was delivered.
- Check the placenta and membranes are complete.
- Measure and weight blood loss and record/document

If there is excessive bleeding, maternal signs of deterioration, and/or a retained placenta; immediate medical management is required. Consider calling a Code Blue Medical.

- The woman should remain fasting until the placenta has been declared intact and vaginal loss is within normal limits.
- For code blue and deteriorating patients, see policy: [Recognising and Responding to Acute Clinical Deterioration \(Physiological and Mental Health\)](#)

## Retained placenta

- If the placenta is not delivered within 30 minutes, or the woman is bleeding, the Registrar and the Shift Co-ordinator should be notified
  - A vaginal examination by senior medical staff may be required (to determine if a manual removal of placenta in OT is required)
- Do not apply excessive cord traction. Attempts to remove a placenta that has not separated can produce excessive bleeding.
- The patient should be transferred to theatre for EUA and removal of placenta if the placenta is not easily deliverable by experienced staff.
- See Clinical Guideline: O&G Intrapartum: Retained Placenta

## Blood loss

- Measure and weigh blood loss. If there is continued and persistent vaginal blood loss or the loss is 300mL or above, transfer to theatre may be required.
- Place the placenta in a clearly labelled clear plastic container and store this in the fridge in the treatment room until transfer to perinatal Pathology.

## Immediate care post birth

Ensure the woman is clean and dry.

### Observations

- Monitor and record the woman's respiratory rate, oxygen saturation, heart rate, blood pressure, temperature, conscious state and vaginal loss every 15 minutes for the first hour after birth and then as often as dictated by her clinical condition.

### Continuing care

- Inform the following people following delivery as appropriate
  - Shift Co-ordinator
  - Ward 6 Clinical Nurse Consultant or Hospital Clinical Manager (after hours)
  - Medical team
  - Pastoral Care Service
  - Perinatal Loss Service
  - Social work (if applicable)
  - Referral to Psychological Medicine is based on a risk assessment and with the woman's consent.

**Suppression of lactation** advice should be given. Lactation may commence if the gestation was more than 14 weeks.

## Follow-up and subsequent pregnancy plan

- Routine follow-up should include medical review by GP or similar at 2 weeks post-birth for maternal health check-up.
- If a woman is greater than 16 weeks gestation then an eReferral should be completed to PLS. The PLS Midwife will triage this referral and ascertain if review in clinic is required.
- If investigations have been undertaken, including post-mortem, it is necessary to ensure there is a process for explanation of results. This could be through the PLS Clinic, obstetric care provider (Private Obstetrician, GP), Genetic Services WA (if known to them), or other. This should occur at 6-10 weeks post birth.
- Subsequent pregnancy planning should include pre-conception review by their local care provider, and early referral, i.e. first trimester, to specialist care (if indicated).
- The subsequent pregnancy care plan should be made with due consideration of all information available in order to minimise the risk of perinatal death.

## Care of the baby/fetus

- Refer to ≥20 week section in this guideline for care of the baby/fetus.
- **Second trimester loss:** Always separate the baby and placenta (clamp and cut the cord) and wash the baby before taking the baby back to the room.
- The woman / support person may wish to see and / or hold the baby/fetus. All babies are kept on the ward until the woman is discharged so that she / her family can have access at any time.
- Label the baby with a tag and maternal sticker.
- Wrap the baby in a rug/quilt and place in a basket before taking to the room. The quilt may be taken home by the couple if they wish.
- The couple may dress the baby if they wish.
- Place the placenta in a clearly labelled clear plastic container and store this in the fridge in the treatment room until transfer to Perinatal Pathology.
- Discuss memorabilia, e.g. grief pack, information, and mementos.
  - Mementos such as photographs and footprints taken and available to the woman/family– Will be taken by Perinatal Pathology, for women < 20 weeks.

## Transferring the baby/fetus

- The orderly is responsible for transferring the fetus/baby to Perinatal Pathology.
- Refer to section in this document '[Transferring the Baby to Perinatal Pathology](#)'.
- Taking the baby home or disposal and cremation:
  - For babies of less than 20<sup>+0</sup> weeks gestation, the parents may take the baby home for disposal after completion of the Department of Health WA '[Patient Information Sheet and Consent Form - Authorisation and Release of a Human Fetus or Placenta](#)' (external website, PDF, 139KB). **This point must be read in conjunction with the Department of Health WA:**
    - [Mandatory Policy 0129/20: Release of Human Tissue and Implanted Medical Devices Policy](#) and
    - [Guideline for the Release of a Human Fetus or Placenta](#)
  - If the parents are not taking the baby home, the baby and products of conception (POC) are sent to Perinatal Pathology for disposal and cremation. **Fetal POC are only to be cremated and never disposed of in anatomical waste bins [RCA recommendation].**

## Documentation and legalities

- Ensure documentation is complete – see clinical pathway for required documents
- Consider section in this guideline for Legalities
- Related form: PathWest: Consent for Post Mortem Examination (Non-Coronial): Perinatal and Paediatric Examination (NCC 1)

**Registration of birth:** not required.

Parents can apply to the Registry of Births, Deaths and Marriages for a [Recognition Certificate](#) (not for official purposes) for early (<20wks) pregnancy loss. See also [WA Government: Register a Birth \(external website\)](#).

**Fetal / baby arrangements:** See Transferring the Baby/Fetus section above

### **Fetal death in utero**

Refer to section in this guideline for pregnancy loss  $\geq 20^{+0}$  weeks gestation.

See also [Appendix 2: FDIU medical management in EC](#).

## **Other guidelines**

### **Ectopic**

This is not covered within this guideline, refer instead to guidelines for Ectopic Pregnancy.

### **Molar pregnancy**

This is not covered within this guideline, refer instead to guideline for Gestational Trophoblastic Disease.

## ≥20<sup>+0</sup> weeks gestation (stillbirth)

### Perinatal loss in the third trimester: Management

(Previously referred to as 'FDIU Antenatal / Intrapartum')

#### Aims

- To provide clinical staff with the information necessary to ensure the safe management of women experiencing perinatal death in the third trimester.
- To provide a guide in providing comprehensive care to a woman experiencing a third-trimester pregnancy loss: including fetal death in utero (FDIU), and neonatal death.

#### Scope

This guideline applies to women experiencing perinatal loss on the Labour and Birth Suite, Adult Special Care Unit, Obstetric Wards or other areas.

This section is designed for perinatal loss in the third trimester – however is appropriate for pregnancy loss that are over **20<sup>+0</sup> weeks** gestation.

Inclusion criteria:

- Intrauterine fetal death, antenatal
- Intrauterine fetal death, intrapartum
- When palliative care of the neonate is expected

#### Key points

1. Identify the woman's room and any hard-copy medical record with universal symbols so that all clinical and non-clinical staff are aware e.g. tear drop sticker
2. All women and their support person should be given accurate information, both verbal and written, about management planning, treatments, and follow-up
3. Compassionate and sensitive care should be provided with an emphasis on individual care planning, cultural and religious sensitivity and continuity of care giver. See also PSANZ Clinical Practice Guideline for Care around Stillbirth and Neonatal Death [Section 3 - Respectful and Supportive Perinatal Bereavement Care](#) (external website).
4. Consent should be gained in line with policy and guidelines. Documentation must be contemporaneous, correct and maintained.
5. All inquiries from medical practitioners regarding a fetal anomaly should be directed to the Maternal Fetal Medicine (MFM) Service.

## Background information

In Western Australia, according to the Births Deaths and Marriages legislation, perinatal deaths consist of stillbirths (the death of an unborn baby at 20 or more completed weeks gestation or at least 400 grams birthweight) and neonatal deaths (the death of a live born baby within 28 days of birth).

Between the triennium of 2011 and 2013, there were 100 460 babies born in Western Australia. Of those, 716 were stillbirths and 171 died within the first 28 days of birth. Giving a stillbirth rate of 7.1 per 1000 births and a neonatal death rate of 1.7 per 100 births.<sup>3</sup> However the perinatal mortality rates in babies born to Aboriginal or Torres Strait Islander mothers was much higher than that of babies born to non-indigenous mothers. The stillbirth rate for Aboriginal babies in the same period was 16.5 per 1000 births and the neonatal death rate for Aboriginal babies 5.3 per 1000 births.<sup>3</sup>

## Classification of cause of perinatal death

The most common cause of perinatal death in WA (2011-2013) was congenital abnormality, which contributed 27.5%, and this was followed by spontaneous preterm birth (24.9 per cent). The unexplained antepartum perinatal death rate was 11.6 percent, with specific perinatal conditions attributing 9.6 percent, and fetal growth restriction 8.1 percent.<sup>3</sup> Other causes included perinatal infection, hypertension, antepartum haemorrhage, maternal conditions, hypoxic peripartum death and no obstetric antecedent.

Note: Prior to April 2024 at King Edward Memorial Hospital, a major contributor to the perinatal mortality rate was due to abortion (termination of pregnancy), in accordance with the (superseded in March 2024) Abortion (Amendment) Act 1998. New abortion reform legislation (from March 2024) may impact future reporting.

Link to [Perinatal and Infant Mortality Committee](#) (external website)

See PSANZ: [Clinical Practice Guideline for Care around Stillbirth and Neonatal Death](#) (external website, PDF, 880KB)

## Predisposing factors for perinatal death

- Maternal social factors
  - Low socio-economic status
  - Aboriginal and Torres Strait Islander
  - Ethnicity: South Asian, African (including refugee or asylum seeker)
  - Smoking
  - Obesity
  - Maternal age > 35 years
  - Nulliparity
  - Substance use

- Pre-existing medical
  - Diabetes: Type 1 and Type 2
  - Essential hypertension
  - Auto-immune disorders e.g. Systemic Lupus Erythromatosis
  - Other maternal e.g. Malaria, sexually transmitted diseases
  - Mental health disorder
- Obstetric
  - Antepartum
    - Congenital abnormality
    - Perinatal infection
    - Hypertensive disorders in pregnancy
    - Antepartum haemorrhage
    - Cholestasis of pregnancy
    - Antiphospholipid syndrome
    - Multiple pregnancy
    - Post term
    - Specific perinatal conditions: fetomaternal haemorrhage, uterine anomalies, autoimmune disease,
    - Fetal growth restriction
    - Reduced fetal movements
    - Placental dysfunction: e.g. abnormal maternal vascular perfusion
- Intrapartum
  - Hypoxic peripartum death with intrapartum complications
  - Previabile preterm labour and birth
- Postpartum/neonatal
  - Congenital abnormalities
  - Preterm birth
  - Hypoxic peripartum death in the neonatal period
  - Growth restriction (FGR or SGA)
  - Neonatal infection

## Planning and management

### **Consideration for planned / booked IOL admissions for perinatal loss women:**

On arrival to the LBS, women should be taken directly to their allocated room. If the room is not ready, families should be escorted to the dedicated PLS lounge area (next to Rm 1).

**Please DO NOT make the families wait in the general waiting room on LBS.**

### **Presentations:**

- **FDIU:** Most likely presentation will be a woman presenting to the Maternal Fetal Assessment Unit (MFAU- KEMH) / Assessment Unit (AU- OPH), Antenatal Clinic or Medical Imaging Department with reduced or absent fetal movements, with no fetal heart able to be auscultated.  
**CMP:** FDIU may also occur in the community (Community Midwifery Program). If the fetal heart cannot be auscultated with a handheld Doppler in the antenatal or intrapartum period arrangements must be made for immediate transfer to the client's support hospital. See WNHS guideline 'Transfer from Home to Hospital (VMS/MGP/CMP)'. For CMP home births if the birth is imminent or the midwife arrives shortly after the birth:
  - Call 000 and the support midwife to attend
  - Encourage active pushing if the woman is in the second stage of labour and continue to attempt to auscultate the fetal heart as per the WNHS clinical guideline 'Labour and Birth: Second Stage'.
  - Resuscitative procedures must be attempted unless baby is clearly a macerated stillborn identified by reddened/peeling/broken skin and skin slippage.
  - Recommend active management of third stage and ensure placenta accompanies baby to hospital.
  - Support midwife to attend the support hospital to provide added support to family and primary midwife.
- **If FDIU confirmed:** Notification should be made:
  - **KEMH:** Notify Midwife Coordinator/ Triage Midwife, Senior Registrar and Perinatal Loss Service (PLS) Clinical Midwifery Specialist (CMS).
  - **OPH:** Notify Consultant, Clinical Midwifery Manager (CMM) and CMS.
  - **CMP:** If CMP client then notify CMP CMS/CMM in hours or KEMH A/H Manager must be notified. If support hospital not KEMH then the support hospital procedure for FDIU should be followed.

A CIMS form to be completed if any concerns regarding clinical care.

- **Perinatal palliative care:** a specific individualised care plan will be in the medical record, notify the PLS CMS.
- **Preterm pre-viable labour and imminent birth:** Notify the LBS Coordinator and Senior Registrar, and transfer to Labour and Birth Suite

- The PLS CMS will assist in arranging plans for booking admission and ongoing management, Monday – Friday 8-4pm. If out of hours, the Hospital Clinical Manager should be informed.

Clinical assessment should be undertaken by a senior doctor. A comprehensive medical, surgical and psychosocial history must be taken, and examination conducted. Include:

- Accurate gestation assessment - this is essential to selecting optimal treatment options and regimens.
- Formal ultrasound examination to confirm suspected fetal demise.
  - There should be an ultrasound performed at KEMH/OPH to diagnose fetal death by demonstrating absence of fetal cardiac activity. This ultrasound should be conducted by an accredited professional-credentialed sonographer, obstetrician or Senior Registrar. Additional information may be gathered during ultrasound, such as: looking for anomalies, gestation/size, and timing of fetal death (Spalding's sign).
  - A midwife escort should be made available to support the woman whilst attending the ultrasound examination for confirmation.
- Intrauterine Fetal Death – assess to see if investigation bloods required as per [PSANZ Stillbirth investigations flowchart](#)
- Blood group and Rhesus status should be confirmed, and tested, if not known.
  - Follow Rh (D) immunoglobulin guideline where applicable.
- Medications should be charted on 'Medication Administered for Pregnancy Loss' (MR810.07) (OPH use site-specific form). See also:
  - [Misoprostol Guidelines](#) (available to WA Health staff through HealthPoint)
  - [Postpartum Complications](#): 'Oxytocin: Prophylactic and Therapeutic Regimes' for third stage management (available to WA Health staff through HealthPoint)

### Breaking bad news<sup>4</sup>

- Break bad news in a private, quiet room.
- Do not delay breaking news once diagnosis had been made.
- Ensure a support person is present for the woman – involve both parents where appropriate.
- Use empathetic but unambiguous language (e.g. “your baby has died” or “your baby is too early to survive”).
- Allow time for questions and offer sympathy.
- Enquire about any special cultural or religious needs.
- Consider whether an interpreter is required.

## Investigations

Accurate identification of the cause of stillbirth is the cornerstone to prevention and is critically important to parents to help them to understand why their baby has died and to plan future pregnancies.

The recommended investigations following stillbirth include those that should be routine for the majority of stillbirths (core investigations) and those that should be carried out based on information revealed from core investigations, or in the presence of specific clinical scenarios (sequential or selective investigations)

Selective investigations only may include thrombophilia studies, tests for infectious diseases, haemoglobin A1c (HbA1c), liver function and bile acid tests, and should be undertaken on the basis of the results of core investigations.

Clinicians should discuss post-mortem examination with parents in all cases of perinatal death and provide PathWest “Information for Parents” pamphlet. The placenta, membranes and cord should be sent fresh and unfixed for macroscopic and histological examination by a perinatal pathologist.

- Refer to PSANZ investigations flowchart<sup>1</sup> below

# Stillbirth Investigations Flowchart

## Core investigations

## Findings from core investigations

## Indicated selective investigations

### Mother

- Maternal history
- Maternal examination
- Kleihauer-Betke or flow cytometry

Personal or family history of thrombosis

APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

Suspected cholestasis

Bile acids; LFTs

### Baby

- Clinical examination at birth
- Full autopsy

Non-consent for full autopsy

MRI; NIA; MIA; Clinical photographs

LGA

HbA1c

FGR or SGA

Infectious diseases (e.g. CMV); HbA1c; APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

### Placenta

- Macroscopic examination
- Histopathology studies
- Cytogenetic analysis

Placental abruption or infarction

APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

Infection

Further testing as directed by pathologist

APS: Antiphospholipid syndrome; CMA: Chromosomal microarray; CMV: Cytomegalovirus; FGR: Fetal growth restriction; LFTs: Liver Function Tests; LGA: Large-for gestational-age; HbA1c: Haemoglobin A1c; MIA: Minimally-invasive autopsy; MRI: Magnetic Resonance Imaging; NIA: Non-invasive autopsy; SGA: Small for gestational age

1: Flenady V, Oats J, Gardener G, Masson Vicki, McCowan Lesley, Kent A, Tudehope David, Middleton P, Donnelly N, Boyle F, Horey D, Ellwood D, Gordon A, Sinclair L, Humphrey M, Zuccollo J, Dahlstrom J, Henry S, Khong Y for the PSANZ Care around the time of stillbirth and neonatal death guideline group. Clinical Practice Guideline for Care Around Stillbirth and Neonatal Death. Version 3, NHMRC Centre of Research Excellence in Stillbirth. Brisbane, Australia, March 2018

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New Zealand  
PSANZ



SANDA  
Stillbirth And Neonatal  
Death Alliance  
a sub committee of PSANZ

Stillbirth  
CENTRE OF RESEARCH EXCELLENCE



Flowchart used with permission

**Acknowledgment** - Flenady V, Oats J, Gardener G, Masson V, McCowan L, et al. for the PSANZ Care around the time of stillbirth and neonatal death guideline group. Clinical Practice Guideline for Care around Stillbirth and Neonatal Death. V3. NHMRC Centre of Research Excellence in Stillbirth. Brisbane, Australia, March 2018.

## Consider birthing options

**Consideration for planned / booked IOL admissions for perinatal loss women:**

On arrival to the LBS, women should be taken directly to their allocated room. If the room is not ready, families should be escorted to the dedicated PLS lounge area (next to Rm 1).

**Please DO NOT make the families wait in the general waiting room on LBS.**

Provide information on birth / induction options appropriate to the clinical circumstances and service capabilities.

- The options include expectant management (with a named contact), induction of labour immediately (usually for maternal health reasons), planned induction of labour or planned caesarean section (if indicated)
- Timing of birth should be made in the best interest of the parents. There is usually no clinical need to expedite birth urgently and hasty intervention may not be in the best long-term interests of the parents. If clinically appropriate, the woman may wish to go home and return for induction at a later date.
- Consider method of induction relevant to gestation and clinical circumstances.
- All women will be identified by the use of a universal symbol (tear drop sticker): woman's room and medical record so that all clinical and non-clinical staff are aware

## Referrals (on admission)

- Refer routinely to Pastoral Care Service for bereavement support and information related to funeral arrangements. (Note: At OPH- via eReferral)
- Refer routinely to PLS for continuing care (Note: At OPH- optional)
- Refer routinely to Social Work Department for support and information on Birth Registration Forms, Centrelink Bereavement Payment of Family Tax Benefit and Maternity Allowance
- KEMH: Refer to Psychological Medicine if there is a history of mental health disorder or clinically indicated. However, carers must be alert to the fact that women are at risk of prolonged psychological reactions including grief, depression, anxiety and post-traumatic stress disorder, and that their reactions may differ.

## Intrapartum care

- Care intrapartum must be in line with various guidelines, and ensure the most appropriate care is provided, including staffing considerations (experienced, or supported less experienced). Refer also to WNHS Labour and Birth guidelines for First Stage, Second Stage, Third Stage: Active Management and Immediate Care of Mother in Labour and Birth Suite Following Birth

- Senior staff should be used routinely for consultation
- Commence all women on: **Perinatal loss > 20 weeks gestation vaginal birth clinical pathway** (MR 271(KEMH / 71.1(OPH))
- All women to have an intrapartum partogram. A partogram should be commenced once in established labour or at commencement of oxytocin infusion.
- Continuity of caregiver is best practice, limiting the numbers of staff involved.
- Individualised care plan should be applied
- Compassionate, empathetic and non-judgement care is reported as being a positive experience for bereaved families
- Active management of the third stage is recommended, at all gestations
- Appropriate analgesia should be offered.
- There are specific requirements for reporting of death of a child <1 year and stillbirth from 20<sup>+0</sup> weeks gestation. See section “[Legalities](#)” and Department of Health: [Notification of birth events and cases attended by midwives](#) (external sites).

## Postnatal care

Length of stay, and place of stay, should be individualised, and be made in consultation with medical and midwifery staff, and the family.

- Experienced doctors and midwives should provide comprehensive and continuing care in the postnatal period
- Information and results should be relayed when available
- Advise on lactation suppression and breast comfort. See WNHS Obstetrics and Gynaecology guideline: Newborn Feeding: ‘Suppression of lactation’ chapter.
- Discuss and advise on contraception if appropriate
- Provide written information on available support services for parents, children and other family members
- Visiting Midwifery Service (VMS) (or similar) should be arranged upon discharge. Note: OPH may choose to use their own staff.
- Contact the woman’s nominated GP by telephone to inform them of the outcome of the pregnancy and need for supportive postnatal care.
  - If the women does not have a nominated GP, ask if they attend a local medical practice or clinic that could be contacted to provide support and medical care after discharge.
  - For Aboriginal women, referring to the interactive map of Aboriginal Community Controlled Health services (“clinics”) available at [www.ahcwa.org.au/member-services](http://www.ahcwa.org.au/member-services) (external website) may assist in identifying which service to contact

## Care of the baby

- The literature about contact with the baby is not certain. Most families will want to see and hold their baby and spend time with their baby. Offer all families the opportunity to see and hold their baby. If families choose not to, they should be regularly re-offered the opportunity, however not coerced. Respect for cultures and compassionate sensitivity is required.
- Parents appreciate it when staff treat their baby with respect, such as calling the baby by name. Mementoes should be created routinely for all perinatal deaths and offered to the family.
- Every family must make some arrangements for the body of the baby, such as burial or cremation, depending on the circumstances.

Refer to section in this document: [Care and Management of the Deceased Baby](#) and section 'Religious and Cultural Considerations' in WNHS clinical guideline, Obstetrics and Gynaecology: [Deceased Patient: Management](#).

## Post-mortem

- A post-mortem should be offered to all parents following a stillbirth.
- Information gained from autopsy can assist in understanding of events surrounding the death. In addition, this information can assist future pregnancy planning by enabling consideration of the recurrence risk and different management strategies.
- All autopsy examinations require written consent – **PathWest Consent for Post-Mortem Examination**
- Provide written information about autopsy – **PathWest Post-mortem Examinations – Information for Parents** pamphlet
- Discussion with the parents should include:
  - The value of an autopsy
  - Options of exam: full, limited or external only
  - Issues related to retained fetal tissues
  - The possibility that a cause may not be found
  - Cost to the parents of the autopsy (NIL)
  - Appearance of the baby following autopsy
  - The likely timeframe for results to become available and
  - Arrangements for communicating these results (e.g. PLS clinic, GP, Private Obstetrician)

## Documentation

All births and deaths that occur from 20<sup>+0</sup> weeks gestation require documentation in accordance with various legislative requirements, policies, and guidelines. These include Registration of Birth, Medical Certificate of Cause of Stillbirth or Neonatal

Death, Death in Hospital form, and for sentinel events a CIMS form.

- Refer to PLS Clinical Pathway 'Perinatal Loss > 20 weeks Gestation Vaginal Birth Pathway' (MR271(KEMH) / 71.1(OPH)) – Documentation and Forms (p3). See also section in this document: [Legalities](#).

## Follow-up and subsequent pregnancy plan

Follow-up and subsequent pregnancy plans require multidisciplinary collaboration, including local care providers.

- Postnatal follow-up should include VMS (or similar, i.e. GP, local hospital / clinic, or Community Midwife) to be arranged upon discharge for up until day 5 post-birth. Ensure GP/Obstetrician/Midwife follow-up at 2 and 6 weeks postpartum for maternal health check-up.
- Ensure there is a process for explanation of results, including post-mortem. This could be through PLS Clinic, OPH Gynaecology Clinic, Obstetric care provider (Private Obstetrician, GP), Genetic Services WA (if known to them), or other. This should occur at 6-8 weeks post birth.
- Subsequent pregnancy planning should include pre-conception review by their local care provider, and early referral, i.e. first trimester, to specialist care (if indicated).
- The subsequent pregnancy care plan should be made with due consideration of all information available in order to minimise the risk of perinatal death.

## Legalities and reporting

A registered perinatal death refers to the birth of a baby from 20<sup>+0</sup> weeks gestation, or if gestation is unknown the baby weighed 400 grams or more, which either dies before birth (stillbirth) or in the neonatal period i.e. first 28 days of life (neonatal death).

### Stillbirth (no signs of life after birth)

#### 1. Period of gestation 20-28 weeks

- **Registration:** If the period of gestation is known to be 20<sup>+0</sup> weeks or more or if the gestation is unknown the weight is 400gm or more, the birth and death must be registered with the Registrar of Births, Deaths and Marriages.
  - i. **The mother must register the birth** using the Birth Registration form
  - ii. **Perinatal Pathology, Funeral Director or person disposing of the body must register the Death using** the Medical Certificate of Cause of Stillbirth or Neonatal Death (BDM 201).

## 2. Period of gestation 28 weeks or more

- **Registration:** The birth and death must be registered as above.
- **Baby arrangements:** The parents must make arrangements for the baby to have a funeral (cremation or burial) arranged through an external funeral director.

## Neonatal death (signs of life, such as heart beat, after birth)

- **Registration:** All babies born alive (regardless of gestation) who subsequently die in the neonatal period must have the birth and death registered with the Registrar of Births, Deaths and Marriages.
- The mother must register the birth using the Birth Registration form
- A Funeral Director or person disposing of the body must register the death using the Medical Certificate of Cause of Stillbirth or Neonatal Death (BDM 201)

## Documentation

Follow the Perinatal Loss > 20 weeks Gestation Vaginal Birth Clinical Pathway (MR 271(KEMH) / 71.1 (OPH)) for the documentation required. Depending on the circumstances, not all documentation may be required.

## Stillbirth or neonatal death (from 20<sup>+0</sup> weeks gestation)

- **Death in Hospital Form MR 001 / (MR37B (OPH))-** completed by the clinical staff in attendance. File in the medical record (assists in the determination of whether the death is reportable either under the *Coroners Act 1996* or under the *Health Act 1911*).
  - If reported under the Coroners Act: see Department of Health: Review of Death policy
  - If reported under the Health Act: All deaths are required to be reported to the Chief Medical Officer. At WNHS that is via the 'Medical Certificate of Cause of Stillbirth or Neonatal Death (BDM 201)' (see below).
  - Sentinel events are notified to Safety and Quality directly, see [NMHS CIMS policy](#) and Department of Health WA CIMS Policy.
- **Medical Certificate of Cause of Stillbirth or Neonatal Death BDM 201** – completed by the attending Medical Officer. The completed certificate sent to Perinatal Pathology.
  - A copy of the BDM 201 (Death Certificate) must be sent to the Chief Health Officer (CHO) via email: [edphwa@health.wa.gov.au](mailto:edphwa@health.wa.gov.au). At KEMH, this is performed on a weekly basis by the PLS CMC. At OPH this will be done after each PLS case, by the CMS.

- **Consent for Cremation of Stillborn Baby (less than 28 weeks gestation).**  
Required for all stillborn babies less than 28 weeks gestation when KEMH cremation is consented to. Form is completed by Pastoral Care Services and sent to Perinatal Pathology. Pastoral Care should be routinely called to discuss options and facilitate.
- **Certificate of Medical Attendant (Cremation Form 7) (if > 28 weeks gestation)** – completed by the Medical Officer and the completed certificate is sent to Perinatal Pathology.
- **Birth Registration**  
The Mother must complete the Birth Registration Form and send to the Registrar of Births, Deaths and Marriages. The Midwife must note the name of the accoucheur and the time and date of birth.
- **Bereavement Payment forms.** The midwife documents those sections of the forms that are required to be completed by the attending midwife. The form is completed by the parent(s). The completed form forwarded sent to Centrelink/Medicare.
- **Consent for Post Mortem Examination** The clinical staff must discuss post mortem, and if consent is given, complete all relevant areas of the form and is responsible for the completion of the 'Consent by Next of Kin' section of the form. The completed form is sent to Perinatal Pathology. Additional information is in the Perinatal Pathology Handbook and the patient information pamphlet 'Post Mortem Examinations – Information for Parents'.
- **Consent for Pathology Examination Baby Less than 20 weeks Gestation form.** Babies less than 20<sup>+0</sup> weeks gestation require this form to be completed, if a post mortem examination is consented to. Clinical staff completes all relevant areas of the form. If consent for post mortem is declined, this is noted on the form and sent to Perinatal Pathology. Further information is located in the Perinatal Pathology Handbook.
- **Pathology request form.** Placenta should be sent to pathology with a request form for histopathology, including all relevant clinical details.
- See WNHS OGD guideline: [Labour: Indications for Placental Examination in Pathology](#)

### **Presentation of newborn – Dead on arrival (DOA)**

If a woman presents to KEMH having given birth prior to presentation at KEMH and the newborn is dead on arrival, the following procedure is to be followed and documented in the maternal medical record.

- The Obstetric Registrar will examine the mother and baby and will enquire about the circumstances of the birth.
- The Obstetric Consultant for the team will be notified.
- The Neonatal Registrar will be called to examine the baby.
- Upon consideration of the circumstances, if the baby has been born with signs of life, or unknown if signs of life are present, the Coroner's Office may be notified.
- The mother should be offered admission for continuing care and counselling.
- The baby may accompany the mother. Alternatively, the baby may be transferred to Perinatal Pathology.

# Care and management of a deceased baby

## Key points

1. Care is always carried out in a private area.
2. If the death is to be investigated by the **Coroner** - leave all tubes in situ; curl up the catheters and tape to the baby, do not bath the baby.

## Procedure

1. Offer the parents the opportunity to participate in the care provided to their baby.
2. Attach an identity band to the ankle or an appropriate area, depending on the baby's size. The Identification band must remain on the baby at all times.
3. If appropriate and requested, bathe or wash the baby gently, especially if fetal death has occurred as skin integrity may be compromised.
4. Record the weight, length and head circumference.
5. Examine the baby and note any obvious abnormalities. Document the examination in the medical notes.
6. Complete a cot card.
7. Dress the baby and wrap in a sheet / blanket. The baby may be dressed in clothes provided by the parents or those provided by the hospital.
8. Obtain verbal consent from the parents to collect the following mementos and place in the memento booklet:
  - Photographs: **Note:** Lead photo must be a photo of the baby with Identification (ID) addressograph/ cot card for identification purposes. For Neonatal deaths use the baby's addressograph. The baby must have at least one photo showing ID band in-situ. This must be readable in the photo.
  - Foot and hand prints
  - A lock of hair
  - Baby identification band and cot card
9. Place these in the Memento booklet in the grief pack, and place the grief pack in the Memory Box
10. If the memento booklet is declined:
  - Document this in the notes
  - Place the mementos in a sealed envelope and file in the mothers medical records, noting the contents on the outside of the envelope.
  - Inform the parents that they will be kept on file in case they request them at a later date.
  - It is important that the information in the Grief Pack is provided to the family.

Consider transferring the baby to Perinatal Pathology intermittently to be cooled in the

mortuary refrigerator as this will slow the rate of deterioration. Alternatively utilise the Cuddle Cot Cooling System to cool the baby. **OPH:** Refer to OPH PLS Checklist for OPH specifics around transferring to Holding Bay fridge and transfer to Perinatal Pathology.

## Transferring the baby to Perinatal Pathology

### 1. Ensure:

- Identification label / band on the baby is correct
- The baby remains dressed

Attach the identity band to the ankle or an appropriate area, depending on the baby's size. The identification band must remain on the baby at all times.

- ### 2. Baby/fetus must be wrapped and sealed in bluey with maternal addressograph\* on the outside of the bluey (\*Note: If a neonatal death has occurred the neonate will have its own addressograph).
- Babies <20<sup>+0</sup> weeks and smaller babies from 20<sup>+0</sup> weeks): must be placed in a plastic container with maternal addressograph on the outside (top and side)
  - Plastic container must be placed in plastic bag and tied at the top
  - Plastic container is then place in Blue fabric carry bag for transfer to Perinatal Pathology
  - Larger baby is placed in the plastic mortuary bag with maternal / neonatal sticker on the outside
  - The baby (within the mortuary bag) must be placed in the blue fabric carry bag for transfer to Perinatal Pathology
- ### 3. The placenta must be double bagged (plastic bags) with maternal addressograph on the outer plastic bag.
- ### 4. The bagged placenta must be placed in a sealed, plastic placenta container.
- ### 5. Do not place the placenta in saline, formalin or any other form of fixative.
- ### 6. Attach a maternal addressograph the container (lid and side).
- ### 7. Record date and time of birth on the addressograph on the lid of the container
- ### 8. A pathology request form should accompany the placenta, including date and time of the birth. Obstetric history (G/P), gestation at birth, and clinical history.
- ### 9. Page the orderly (3101) and ask for a mortuary bag to be brought to the area. Refer to [MP 0129/20 Release of Human Tissue and Explanted Medical Devices Policy](#) (external website): Page 3- 3.3 Preparation for the release of a human fetus of fewer than 20 weeks gestation, or a placenta.
- ### 10. All transportation of deceased babies within or from KEMH must be recorded in the appropriate transport log. See related WNHS policy: [Release of the Deceased from](#)

**Perinatal Pathology.** Prior to transfer to Perinatal Pathology, cross **check identification with Orderly:**

- Paperwork included is checked i.e. Medical Certificate of Cause of Stillbirth or Neonatal Death, Cremation Form (Form 7)
  - Identification addressograph on the baby matches identification addressograph in 'Perinatal Death Movement Register' in LBS (PLS room).
  - Orderly and Midwife/Nurse to co-sign the 'Perinatal Death Movement Register' in LBS (PLS room).
11. The Orderly must also record every transfer of a baby to and from Perinatal Pathology in the Perinatal Pathology 'Mortuary Register'.
12. A 'Permission to Transport a Deceased Baby' form (MR295.95 KEMH / 37D (OPH)) is required to release a baby to its parents' care. The parents may elect to return the baby to KEMH or to the care of a nominated funeral director.
13. The release of a baby's body to a funeral director must be recorded in the Perinatal Pathology 'Mortuary Register'. Refer to Perinatal Pathology Policy.

### **Parental contact with their baby**

- Parents can be offered the opportunity to spend time with their baby at any time, whilst an inpatient, and by arrangement after discharge
- The baby may stay in the woman's room whilst she is an inpatient
- Intermittent cooling in Perinatal Pathology Mortuary refrigerator will delay deterioration.
- If the baby is in Perinatal Pathology the following process shall be followed.  
Nursing / midwifery staff will:
  - Phone Perinatal Pathology 82730 and inform them the parents wish to view their baby. Perinatal Pathology open hours: 07:30 – 15:30 Mon-Fri; (If after hours orderly can access the mortuary)
  - Page the on call orderly (3101) to collect the baby from Perinatal Pathology.
  - Accept baby from the orderly and prepare baby for contact with the parents.
  - When the parents request their baby to be returned, page the orderly to collect the baby from the nurse / midwife on the ward.
  - Ensure baby is returned to Perinatal Pathology at end of contact time.
- Following discharge, the parents may wish to spend time with their baby in the viewing room in Perinatal Pathology. This can be arranged directly with Perinatal Pathology in normal working hours by calling them direct on: 6458 2730.

### **Notes:**

- If a neonatal death has occurred the neonate will have its own addressograph.
- Refer to Department of Health WA: [MP 0129/20 Release of Human Tissue and Implanted Medical Devices Policy](#) (external website): Page 3- 3.3 Preparation for the release of a human fetus of fewer than 20 week's gestation, or a placenta

### **Flexmort cuddle cot cooling system**

Refer to the instructions that are with the cooling cot system.

### **Baptism, funeral and pastoral care**

For all enquiries regarding baptism and funeral options, contact Pastoral Care Services. At OPH: Complete an eReferral.

See related WNHS Pastoral Care guideline: [Baptism and Other Life Rituals](#)  
(available to WA Health staff through HealthPoint)

## References

1. Gardener G, Flenady V, Wojcieszek A, McCowan L, Shand A, et al. for the PSANZ Care around the time of stillbirth and neonatal death guideline group. Section 5: Investigations for stillbirth. March 2018. In: Clinical Practice Guideline for Care around Stillbirth and Neonatal Death [Internet]. Brisbane, Australia: NHMRC Centre of Research Excellence in Stillbirth., . Available from: <https://sanda.psanz.com.au/assets/Uploads/Section-5-Stillbirth-Investigations-V3-23032018.pdf>
2. Dickinson JE, Doherty DA. Optimization of third-stage management after second-trimester medical pregnancy termination. **American Journal of Obstetrics and Gynecology**. 2009;201(3):303.e1-.e7. Available from: <http://www.sciencedirect.com/science/article/pii/S0002937809005547>
3. Ballestas T, on behalf of the Perinatal and Infant Mortality Committee of Western Australia. The 15th Report of the Perinatal and Infant Mortality Committee of Western Australia, 2011-2013. Perth: Department of Health WA. 2017. Available from: [https://ww2.health.wa.gov.au/~/\\_media/Files/Corporate/Reports%20and%20publications/Perinatal%20infant%20and%20maternal/PIMC\\_Report\\_2011-2013.pdf](https://ww2.health.wa.gov.au/~/_media/Files/Corporate/Reports%20and%20publications/Perinatal%20infant%20and%20maternal/PIMC_Report_2011-2013.pdf)
4. Buckman RA. Breaking bad news: The S-P-I-K-E-S strategy. *Psychosocial Oncology, Community Oncology* March/April 2005, Volume 2/Number 2 pgs. 138-142.

### Bibliography (from ≤ 19+6 week section)

- Dickinson J, Godfrey M, Evans S. Efficacy of intravaginal misoprostol in second-trimester pregnancy termination: a randomised controlled trial. **J Mat Fet Med** 1998;7:115-9.
- Dickinson J, Evans S. The optimization of intravaginal misoprostol dosing schedules in second trimester pregnancy termination. **Am J Obstet Gynecol** 2002;186:470-4. (Erratum in Am J Obstet Gynecol. 2005 Aug;193(2):597).
- Dickinson J, Evans S. A comparison of oral misoprostol with vaginal misoprostol administration in second-trimester pregnancy termination for fetal abnormality. **Obstet Gynecol**. 2003;101:1294-99.
- Dickinson J. Misoprostol for second-trimester pregnancy termination in women with prior caesarean delivery. **Obstet Gynecol** 2005;105:352-6.
- Dickinson J, Doherty D. Factors influencing the duration of pregnancy termination with vaginal misoprostol for fetal abnormality. **Prenatal Diagnosis**. 2009;29:520-4.
- Kim C, Barnard S et al. Medical treatments for incomplete miscarriage. **Cochrane Database Syst Rev**. 2017;1: CD007223.
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG). [Clinical Guideline for Abortion Care](#). 2023.

### Additional resources- 'Pregnancy Loss' section

- Jackson K, Anderson M, Marshall J. Physiology and care during the first stage of labour. In: Marshall J, Raynor M (Eds.). **Myles textbook for midwives**. 17<sup>th</sup> ed. Edinburgh: Elsevier; 2020; 447-99.
- National Institute for Health and Care Excellence. **Intrapartum care for healthy women and babies**. NICE: London. 2017.
- Parsons M. Midwifery dilemma: To fast or feed the labouring woman. Part 2: the case supporting oral intake in labour. **Australian Journal of Midwifery**. 2004;17(1):5-9.
- Walsh D. Care in the first stage of labour. In: Macdonald S, Johnson G (Eds.). **Mayes' midwifery**. Edinburgh: Elsevier; 2017; 586-613.

### Bibliography (from ≥20 week gestation section)

Australian Institute of Health and Welfare. Perinatal deaths in Australia 1993–2012. Perinatal Death

Series. 2016.

Blencowe H, Cousens, S, Bianchi Jassir, B, Say, L, Chou, D, Mathers, C, Hogan, D, Shiekh, S, U Qureshi, Z, You, D, Lawn, JE,. National, regional, and worldwide estimates of stillbirth rates in 2015, with trends from 2000: a systematic analysis. *The Lancet*. 2016.

Flexmort Cuddle Cot Cooling System product Instruction Booklet. [www.flexmort.com](http://www.flexmort.com)

Flexmort SDS (Safety Data Sheet): PuraChemFRB-21 Fast Release Biocide. Perth Waste Management - [www.perthwaste.com.au](http://www.perthwaste.com.au)

Fretts R, Spong, C. Fetal death and stillbirth: Incidence, etiology, and prevention. UpToDate Inc. 2018.

Gardener G, Daly L, Bowring V, Burton G, Chadha Y, Ellwood D, Frøen F, Gordon A, Heazell A, MacDonald S, Mahomed K, Norman JE, Oats J, Flenady V. Clinical practice guideline for the care of women with decreased fetal movements. Centre of Research Excellence in Stillbirth. Brisbane, Australia, May 2017.

Government of Western Australia; Department of Health. Notification of perinatal and infant deaths. 2018.

Lawn J, Blencowe, H, Waiswa, P, Amouzoe, A, Mathers, C, Hogan, D, Flenady, V, Froen, JF, U Qureshi, Z, Calderwood, C, Shiekh, S, Bianchi Jassir, F, You, D, McClure, EM, Mathai, M, Cousens, S, . Ending preventable stillbirths 2; Stillbirths: rates, risk factors, and acceleration towards 2030. *The Lancet*. 2016.

Miller E, Mintum, L, Linn, R, Weese-Mayer, DE, Ernst, LM,. Stillbirth evaluation: A stepwise assessment of placental pathology and autopsy. *American Journal of Obstetrics*. 2016.

Nijkamp J, Sebire, NJ, Bouman, k, Korteweg, FJ, Erwich, JJHM, Gordjin, SJ, . Perinatal death investigations: What is current practice? *Seminars in Fetal and Neonatal Medicine*. 2017;22:167 - 175.

Page J, Silver, RM. Evaluation of stillbirth. *Current Opinion in Obstetrics and Gynaecology*. 2018;30(2).

Queensland Clinical Guidelines. Stillbirth care. Maternity and Neonatal Clinical Guideline. 2018.

Royal College of Obstetricians and Gynaecologists. Late Intrauterine Fetal Death and Stillbirth. Green-top Guideline No. 55. 2010.

World Health Organization. International Statistical Classification of Diseases and Related Health Problems, 10th ed, World Health Organization, Geneva 2004.

## Related legislation and policies (external websites)

### Legislation:

- [Births, Deaths and Marriages Registration Act 1998](#) (section 44)
- [Cemeteries Act 1986](#)
- [Coroner's Act 1996](#)
- [Health \(Miscellaneous Provisions\) Act 1911](#)
  - Part XIII Section 336 (death of a woman as a result of pregnancy or childbirth); Section 336A (certain deaths of children including stillbirth from 20<sup>+0</sup> weeks gestation) and 336B (death whilst under anaesthetic)
  - FDIU guideline section: Section 335 Reporting births (including living, term, premature, stillbirth) attended
  - Legalities: Section 334(7)
- [Mental Health Act 2014](#)

### Department of Health WA:

- [Legal Policy Framework](#)

- [Review of Death Policy](#) (web page) and [MP 0098/18 Review of Death Policy](#) and [Review of Death Guideline](#) (pdf, 515KB)
- [MP 0129/20 Release of Human Tissue and Explant Medical Devices Policy](#) (pdf, 183KB)

## Related WNHS, CAHS and PathWest policies, procedures and guidelines

NMHS policy: [Release of the Deceased](#) (available to WA Health staff through HealthPoint)

WNHS policy: [Release of the Deceased from Perinatal Pathology](#)

WNHS guidelines: (available to WA Health staff through HealthPoint)

- Obstetrics and Gynaecology:
  - [Abortion and Perinatal Loss Medications \(mifepristone and misoprostol\) \[Restricted Area Guideline\]](#) (available to WA Health staff through HealthPoint)
  - [Deceased Patient: Management](#)
  - [Labour and Birth: Indications for Placental Examination in Pathology](#)
- Perioperative: [Death in the Operating Theatre](#)
- [Allied Health](#): Pastoral Care guidelines and [Hub page](#) (contact details and information)

CAHS Neonatology guideline: [End of Life Care](#) (available to WA Health employees through Healthpoint): Includes post mortem examination, coronial matters, last offices, palliative care, grief and loss, viewing the infant, baptism, funeral arrangements

PathWest policies and procedures (available to WA Health employees through [FastTrack](#) (external website))

## Useful resources (including related forms)

Department of Health WA (external websites):

- [Notification of perinatal and infant deaths](#)
- [Notification of birth events and cases attended by midwives](#)
- [From death we learn](#) (summaries of coronial inquest findings)
- [Sentinel events](#)

[WNHS Patient brochures](#):

- Death: [Following the death of your baby](#) (pdf 367KB) and in [other languages](#)- see 'D'
- Death: [A Ritual of Remembrance; Pastoral Care Service](#) (917KB)
- Post mortem examinations – information for parents
- Pregnancy Loss: [Medical management of early pregnancy loss](#) (pdf 316KB)
- [Pregnancy loss in the first 13 weeks of pregnancy](#) (pdf 378KB)
- [Pregnancy loss in the second and third trimester](#) (pdf 404KB)

- Preparing for your Baby’s Funeral
- [Safe infant sleeping](#) (pdf 856KB)

[PathWest Perinatal Pathology website](#) (information for families, health professionals and funeral directors)

Stillbirth Centre of Research Excellence:

- [Clinical Practice Guidelines and Position Statements](#) (external website)
- PSANZ Clinical Practice Guideline for Care around Stillbirth and Neonatal Death [Section 3 - Respectful and Supportive Perinatal Bereavement Care](#) (external website, PDF 1.59MB)

**Forms:**

- Death in Hospital Form (MR001 (KEMH) / MR37B (OPH))
- Perinatal loss > 20 weeks gestation vaginal birth clinical pathway (MR271(KEMH / 71.1(OPH))
- Permission to Transport a Deceased Baby’ form (MR295.95(KEMH) / 37D(OPH))
- Medication Administered for Pregnancy Loss (MR810.07)
- Other:
  - Certificate of Medical Attendant (Cremation Form 7)
  - Medical Certificate of Cause of Stillbirth or Neonatal Death (BDM 201)
  - PathWest- Consent for Post Mortem (NCC1)
  - PathWest- Perinatal Pathology: Consent for Cremation and Mementos (Miscarried or stillborn baby less than 28 weeks gestation) (NCC Form 3)
  - Datix Clinical Incident Management System (CIMS)
- Under 20 weeks gestation: Department of Health WA [Patient Information Sheet and Consent Form - Authorisation and Release of a Human Fetus or Placenta’](#) (external website, PDF, 139KB)

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### Version history

See also OGD [Guideline Updates](#) by month/year of review date

Version number	Date	Summary
1	Oct 2018	<p>First version. Endorsed at MSMSC 23/10/2018.</p> <p><b>History:</b> Oct 2018 Amalgamated nine individual guidelines (five from section 'Death' in Joint Obstetrics &amp; Gynaecology; two [FDIU- Antenatal &amp; Intrapartum] from Obstetrics and two [FDIU- Antenatal and Intrapartum] from CMP guidelines), created from August 1993 onwards into one document.</p> <p><b>In Oct 2018 these previously individual guidelines were superseded:</b></p> <ol style="list-style-type: none"> <li>1. FDIU &gt;20 Weeks Management (Antenatal) (version dated Sept 2014)</li> <li>2. FDIU &gt;20 Weeks Management (Intrapartum) (version last amended Feb 2015)</li> <li>3. Perinatal Loss: Legalities (version last endorsed Jan 2018)</li> <li>4. Perinatal Loss Funeral Arrangements for Deceased Babies (version dated April 2015)</li> <li>5. Perinatal Loss Flexmort Cuddle Cot Cooling System Management (version last amended Jan 2015)</li> <li>6. Perinatal Loss: Deceased Baby Care &amp; Management (version last endorsed Jan 2018)</li> <li>7. Perinatal Loss: Baptism &amp; Pastoral Care (version dated March 2015)</li> <li>8. CMP: Absence of Fetal Heart in the Antenatal Period (version last amended Dec 2015)</li> <li>9. CMP: Absence of Fetal Heart in the Intrapartum Period (version last amended Dec 2015)</li> </ol> <p><b>Changes in this version:</b></p> <ul style="list-style-type: none"> <li>• Amalgamated nine guidelines (O&amp;G &amp; CMP) relating to fetal death in utero and perinatal loss</li> <li>• Section perinatal loss in the third trimester (previously separated into antenatal and intrapartum guidelines for FDIU).             <ul style="list-style-type: none"> <li>➢ Background statistics updated for WA.</li> <li>➢ CMP management added.</li> </ul> </li> </ul>

		<ul style="list-style-type: none"> <li>➤ Read section 'Planning &amp; management' for updated management including formal KEMH USS requirements</li> <li>➤ Updated PSANZ Stillbirth Investigations Flowchart attached</li> <li>➤ Intrapartum care- all women require an intrapartum partogram; Added specific reporting requirements for reporting of death of a child &lt;1 year and stillbirth &gt;20 weeks gestation.</li> <li>• Baptism: If baptised, a certificate of baptism should be completed and given to the parents. Certificates are available in the same drawer as the Baptismal Register. Pastoral Care must be informed of any emergency baptism.</li> <li>• Legalities- details added to clarify reporting of stillbirth. Process changed for sending copy of BDM 201 to the Chief Health Officer- is now through the Perinatal Loss Service.</li> <li>• Funeral arrangements:             <ul style="list-style-type: none"> <li>➤ All transportation of deceased babies within or from KEMH must be recorded in the appropriate transport log.</li> <li>➤ If parents wish to arrange the funeral themselves they should be referred to the Pastoral Care Service for information and support.</li> </ul> </li> </ul>
2	June 2021	<ul style="list-style-type: none"> <li>• Legalities and reporting-             <ul style="list-style-type: none"> <li>➤ <del>Terminations of pregnancy resulting in a live born baby must be reported to the Coroner under the Coroners Act 1996 [removed in 2024]</del></li> <li>➤ Stillbirth or neonatal death- Placenta should be sent to pathology with a request form for histopathology, including all relevant clinical detail</li> </ul> </li> <li>• Perinatal loss in the third trimester:             <ul style="list-style-type: none"> <li>➤ Link added to PSANZ for respectful and supportive bereavement care</li> <li>➤ CIMS - only if concerns regarding clinical care as per CIMS policy</li> <li>➤ Post-mortem examination- provide PathWest "Information for Parents" pamphlet</li> <li>➤ A partogram should be commenced once in established labour or at commencement of oxytocin infusion</li> </ul> </li> <li>• Baptism and cultural care- removed reference to Cultural and Health Care information file</li> <li>• Care and Management of the Deceased Baby-             <ul style="list-style-type: none"> <li>➤ Attach the identity band to the ankle or an appropriate area, depending on the baby's size. The Identification band must remain on the baby at all times</li> <li>➤ Links to Department of Health mandatory policy on human tissue (including fetus under 20<sup>+0</sup> weeks or placenta) release</li> <li>➤ Removed reference to parental wishes sheet- not in use</li> </ul> </li> <li>• Removed Cuddle cot instructions- refer instead to instructions accompanying cot</li> </ul>
3	Nov 2021	<ul style="list-style-type: none"> <li>• Changed process in chapter 'Care and management of a deceased baby': WNHS will no longer be providing after-hours viewings of deceased babies for discharged or external patients. These requests are now to be redirected to Perinatal Pathology (Monday- Friday during working hours).</li> </ul>
4	Jun 2023	<ul style="list-style-type: none"> <li>• Consideration for planned / booked IOL admissions for Perinatal Loss women: On arrival to LBS, women should be taken directly to their allocated room. If room not ready, families should be escorted to the dedicated PLS</li> </ul>

		<p>lounge area (next to Rm 1). Please do not make the families wait in the general waiting room on LBS.</p> <ul style="list-style-type: none"> <li>• Added link to PathWest Fast Track policies and procedures</li> <li>• Amendment as per Statutory Registers Branch for consistent wording when describing over 20 weeks- now 'from 20+0 weeks'</li> <li>• Consent for cremation form MR297 replaced with PathWest form NCC Form 3</li> <li>• OPH specific details added</li> </ul>
5	Oct 2023	<ul style="list-style-type: none"> <li>• POC not taken by the parents are sent to Perinatal Pathology for disposal and cremation. <b>Fetal POC are only to be cremated and never disposed of in anatomical waste bins [RCA recommendation]</b></li> <li>• Added details for improved communication with GP after pregnancy loss- see p10</li> <li>• Legalities section marked as 'under review' due to upcoming changes to WA legislation</li> </ul>
6	Mar 2024	<p><b>History:</b> Changes in WA abortion legislation led to WNHS developing new abortion guidelines and resources. Content pertaining to termination or abortion has subsequently moved out of this guideline - WNHS clinicians can refer to information on the <a href="#">WNHS HealthPoint Abortion webpage</a>. Content relating to perinatal loss at all gestations has been amalgamated and moved into this guideline. <b>This previously individual guideline has been superseded:</b></p> <ol style="list-style-type: none"> <li>1. Mid-trimester Pregnancy Loss (dated Dec 2023)</li> </ol> <p><b>Changes include:</b></p> <ul style="list-style-type: none"> <li>• New title and guideline restructured into early pregnancy loss <math>\leq 19^{+6}</math> weeks and stillbirth / FDIU <math>\geq 20^{+0}</math> weeks gestation.</li> <li>• Funeral and baptism sections removed- refer to Pastoral care</li> </ul>

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# Stillbirth Investigations Flowchart

## Core investigations

## Findings from core investigations

## Indicated selective investigations

### Mother

- Maternal history
- Maternal examination
- Kleihauer-Betke or flow cytometry

Personal or family history of thrombosis

APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

Suspected cholestasis

Bile acids; LFTs

### Baby

- Clinical examination at birth
- Full autopsy

Non-consent for full autopsy

MRI; NIA; MIA; Clinical photographs

LGA

HbA1c

FGR or SGA

Infectious diseases (e.g. CMV); HbA1c; APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

### Placenta

- Macroscopic examination
- Histopathology studies
- Cytogenetic analysis

Placental abruption or infarction

APS (anticardiolipin, lupus anticoagulant, anti-B2 glycoprotein-1 antibodies)

Infection

Further testing as directed by pathologist

APS: Antiphospholipid syndrome; CMA: Chromosomal microarray; CMV: Cytomegalovirus; FGR: Fetal growth restriction; LFTs: Liver Function Tests; LGA: Large-for gestational-age; HbA1c: Haemoglobin A1c; MIA: Minimally-invasive autopsy; MRI: Magnetic Resonance Imaging; NIA: Non-invasive autopsy; SGA: Small for gestational age

1: Flenady V, Oats J, Gardener G, Masson Vicki, McCowan Lesley, Kent A, Tudehope David, Middleton P, Donnelly N, Boyle F, Horey D, Ellwood D, Gordon A, Sinclair L, Humphrey M, Zuccollo J, Dahlstrom J, Henry S, Khong Y for the PSANZ Care around the time of stillbirth and neonatal death guidelines group. Clinical Practice Guideline for Care Around Stillbirth and Neonatal Death. Version 3, NHMRC Centre of Research Excellence in Stillbirth. Brisbane, Australia, March 2018

Flowchart used with permission

Acknowledgment - Flenady V, Oats J, Gardener G, Masson V, McCowan L, et al. for the PSANZ Care around the time of stillbirth and neonatal death guideline group. Clinical Practice Guideline for Care around Stillbirth and Neonatal Death. V3. NHMRC Centre of Research Excellence in Stillbirth. Brisbane, Australia, March 2018.

## Appendix 2: EC process: FDIU ( $\leq 19+6$ weeks) medical management with mifepristone [NEW]

**Scope:** This flowchart is for patients who present to EC and a diagnosis of FDIU and discussion with the patient regarding options has occurred. See process below if decision has been made for Medical Management combination therapy (including mifepristone).

