Sponsor: Women, Child and Youth (WCY)  
Name: The Management of Intrauterine Death and Stillbirth

MATERNITY SERVICES
GUIDELINE:

MANAGEMENT OF INTRAUTERINE DEATH AND STILLBIRTH

SCOPE:
All midwives, nurses, obstetricians and paediatricians involved in the care and management of women and their family/whanau who experience an intrauterine death/stillbirth.

AUTHOR:
Midwife Educator & Quality Coordinator

PURPOSE:
To meet a high standard of care for all women and whanau/family experiencing an intrauterine death or stillbirth.

DEFINITIONS:
Definitions in terms of the Birth, Death and Marriages Registration Act 1995 are as follows:

``Birth'' includes a still-birth; but does not include a miscarriage

``Dead fetus'' means a fetus that, whether or not the umbilical cord had been severed or the placenta had detached, at no time after issuing completely from its mother breathed or showed any other sign of life (such as beating of the heart, pulsation of the umbilical cord, or definite movement of the voluntary muscles):

``Delivery'' means a birth or a still-birth:

``Miscarriage'' means the issue from its mother, before 20+0 weeks of pregnancy, of a dead fetus weighing less than 400g:

``Still-born child'' means a dead fetus that:
   a/ Weighed 400g or more when it issued from its mother; or
   b/ Issued from its mother after 20+0 weeks of pregnancy

``Neonatal death'' refers to a live born infant irrespective of gestational age, dying within 28 days of birth.

Perinatal and Maternal Mortality Review Committee (PMMRC) – A perinatal death is defined as ‘the death of any fetus or baby from 20+0 weeks gestation (or over 400grams if gestation is not known) and before 28 days of life. All perinatal deaths are reportable to the PMMRC.
GUIDELINE:

The checklist at Appendix 1 is to be completed for each IUD/stillbirth and placed in the woman’s notes.

Referral of mother:
According to the ‘Guidelines for Consultation with Obstetric & Related Medical Services’ this is a Consultation referral condition in which the Lead Maternity Carer (LMC) must recommend to the woman that a consultation with a specialist is warranted. The decision regarding ongoing clinical roles/responsibilities will involve a three way discussion between the specialist, the LMC and the woman concerned.

Management of labour
Management of labour is to be planned by the consultant obstetrician together with the core midwife, LMC, the mother and her whanau/family.

- Confirmation of intrauterine death to be made by ultrasound scan by O & G/ qualified Ultrasoundographer (see core investigations of all stillbirths p 2).
- The consultant obstetrician and midwife/LMC will document the plan of care for the Induction of Labour (IOL) and birth in the clinical notes to include:

<table>
<thead>
<tr>
<th>Topics to be discussed</th>
<th>Points to cover</th>
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<tbody>
<tr>
<td>Mode of delivery</td>
<td>Vaginal birth</td>
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<td>Caesarean section</td>
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<td>Options for IOL</td>
<td>Prostaglandins</td>
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<td>Cervidil</td>
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<td>Misoprostil (with caution and consent – unlicensed medication in NZ)</td>
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<td>ARM (depending upon gestation)</td>
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<td>Syntocinon infusion</td>
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<tr>
<td>Timing of induction of labour</td>
<td>When do they wish the IOL to commence?</td>
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<td>Who do they wish to be present?</td>
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<td>If parents wish to birth at home – please discuss this with the obstetrician</td>
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<td>Pain relief options</td>
<td>TENS</td>
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<td>Pool</td>
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<td>Continuous support from a known caregiver</td>
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<td>Massage</td>
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<td>Nitrous oxide</td>
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<td>Pethidine/Morphine</td>
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<td>Epidural</td>
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<td>Management of the birth</td>
<td>Lighting / noise</td>
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<td>Arrangements once baby is birthed regarding:</td>
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<td>o Parents seeing their baby (to be encouraged)</td>
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<td></td>
<td>o Parents holding their baby</td>
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<td>Third stage management – active management recommended</td>
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<td>Cutting of the cord</td>
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<td>Washing baby</td>
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<td>Dressing baby</td>
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<td>Photographs of baby</td>
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</table>
Core investigations for all stillbirths

1/ At diagnosis of fetal death

- Comprehensive maternal and family history;
- If possible an ultrasound scan to detect possible fetal abnormalities and to assess amniotic fluid volume (this is especially helpful if a post-mortem is not consented to);
- Low vaginal and peri-anal swab to culture for anaerobic and aerobic investigation;
- MSU;
- Blood tests:
  - CBC and differential
  - Kleihauer;
  - HbA1c;
  - 2 purple for the above
  - Blood group and antibody screen if not already undertaken in this pregnancy;
  - 1 pink top

2 purple + 1 pink top tube if all needed

- Serology for Toxoplasmosis, Cytomegalovirus, Herpes, Parvovirus B19,
- Anticardiolipin antibodies;
- Renal function tests including uric acid
- Liver function tests;
- 1 yellow + 1 light green tube (lithium heparin) if well filled for the above
- Rubella and Syphilis if not already undertaken in this pregnancy; 1 yellow + 1 light green tube (lithium heparin)

1 Yellow + 1 light green (lithium heparin) tube if all needed

- Lupus anticoagulant (DRVVT, Delta KCT, index of circulating anticoagulant, APTT, INR and fibrinogen included in this test) –
  2 light blue top tubes, filled correctly, keep trauma to a minimum, send to laboratory immediately, turnaround time 1 week; and
- Activated protein C (APC) resistance 1 light blue top tube, filled correctly, keep trauma to a minimum, and send to laboratory immediately.

2 light blue tubes if all needed

So if all tests are required, take 2 purple, 1 pink, 1 yellow, 1 light green and 2 light blue tubes.

Call ext 8177 for advice if needed re tubes.

2/ Following the birth

- External examination of the baby (by a paediatrician where possible in daylight hours with parental consent) see appendix 2;
- Measurements of baby – crown/heel, head circumference, weight;
- Clinical photographs as appropriate, if post-mortem not consented to - these are in addition to photographs for the parents and should only be taken with informed and documented consent;
- Ear and throat swabs for aerobic and anaerobic bacterial culture;
- Cord blood to be taken as soon as possible following the birth for infection screen, CBC with differential, nucleated red cell count, group and antibody screen, and chromosomal analysis (if not able to take cord blood cardiac puncture may be performed by a paediatrician with parental consent, during daylight hours);
- Placental microbiology cultures (take a swab from the placental surface);
- The placenta should accompany the baby for a post-mortem examination if this is consented to, otherwise if consent gained send to Auckland via TLab for:
  - Detailed macroscopic examination of the placenta and cord;
  - Placental and amnion biopsy for chromosomal analysis; and
  - Placental histopathology.
(Refer to organisational policy on Whenua/Placental management (of disposal) re consent for histology & Perinatal post-mortem & placental histopathology guideline).

Ensure that all appropriate laboratory forms are completed and signed by the consultant obstetrician/paediatrician, and are hand written as are the blood tubes. Also ensure that information is included notifying the laboratory on where to return the baby and placenta.

Process:
- The family is made aware of post birth processes and support available.
- This is given at a sensitive moment, allowing that IOL can take some time.
- Religious support to be organised (if desired) from a denomination chosen by family or by the hospital chaplain.
- The Stillbirth and Neonatal Death Support (SANDS) group is available in Gisborne, contact details can be found in maternity. Give the information pack available as early as possible.
- Contact is to be made with Evans Funeral Services. The family will need to contact the Funeral Services to identify their options. The funeral home does not charge for the funeral, however they do ask that contact is made within office hours and callouts will only be for exceptional circumstances. If a post-mortem is consented to, call the funeral service to arrange transporting the baby to Auckland as soon as possible so that arrangements can be made (see Perinatal post-mortem & placental histopathology guideline).
- During labour and birth the mother may wish to have her partner and other support people present. Birthing suite 5 has its own ensuite so therefore allows more privacy.

At the birth:
These women are at greater risk of having a retained placenta. An active management of the third stage is recommended.

Infant:
The parents should be encouraged to spend as much time as they want with their baby. The parents may request that the baby be washed - if possible bathe and dress the baby in the presence of the woman/whanau. A gentle sponge may or may not be more appropriate depending on the condition of the baby’s skin. The parents may wish to dress the baby in something of their own or should be offered the option of choosing something from the SANDS basket held in maternity ward 1.
There are baskets of differing sizes available in maternity to lay the baby in. The baby can go to the Funeral Director in the basket (the basket does not need to be returned).

There is also a camera available in NNU for the parents to take photos and have them printed immediately, and they should be encouraged to do so. Alternatively the midwife could offer to take photographs.

Use the stamp pad available in maternity to take hand or foot prints, and a lock of hair if possible, according to the parent’s wishes. Also complete and offer the parents an ID band and a cot card.

An ID band should be attached to the baby’s ankle if possible, with the following details – name of mother, mother’s NHI number, date and time of birth, sex and weight of infant.

**Documentation:**
Medical Certificate – The midwife/LMC/obstetrician must complete a Medical certificate of cause of fetal death & neonatal deaths (HP4721 stored at the back of reception).

The form has two copies. The white copy goes to admissions to be collected by the funeral director; the yellow copy remains or is filed in the mother’s clinical notes.

- Enter information in Delivery Register in maternity, and on Galen Perinatal (not baby’s details).
- Infants not born alive are allocated a NHI number. Once weighed admit the baby through admissions who will notify NZHIS of the issue of the NHI which can then be placed on any specimens from the baby.
- Midwife/LMC to ensure that labour, birth and infant page are completed in the mother’s clinical notes. Also ensure that the Galen ‘mothers discharge summary’ states that the baby was stillborn.

**Post mortem examination**
A post mortem examination full or partial (see separate guideline) should be recommended to parents following a stillbirth by and at the request of the consultant obstetrician, with informed consent from the parents documented in the clinical notes. Please give the information leaflet ‘Panui for post-mortem examination’ & the ‘Perinatal and Maternal Mortality Review Committee’ to the woman and her partner/family.

- The consultant must contact the pathologist to discuss any preparatory work that may be necessary.
- It is estimated that the post-mortem report should be back within two months.

*Note that a fetus under 20+0 weeks gestation is regarded as a specimen for histology, a fetus ≥ 20+0 weeks gestation would be for post-mortem examination.*
If post mortem is declined by parents, or not requested by the obstetrician, obtain the following:

- Examination by an experienced clinician
- Consider a babygram (full body x-ray):
  - The radiologist can be contacted between 0830 – 1630hrs.
  - Out of these hours the baby must not be wrapped. Position the baby flat with its limbs away from the body. This is especially important with bone deformities requiring assessment for genetic counselling on future pregnancies.
  - Try to keep baby at room temperature, unless not appropriate then leave in the Mortuary.
- Ultrasound if not performed prior to the birth and hydrocephalus, renal tract abnormality or trauma suspected.
- An MRI if available may be considered.
- Clinical photographs should be encouraged where possible for later review, which should be clearly labelled and filed in the medical record.
- If no consent obtained to send placenta for histology, take a swab from the surface and send for histology.
- Skin sample for cytogenetics – there are 2 tubes available in the blood fridge in the laboratory out of hours room for skin samples. This is taken using an aseptic technique with a scalpel blade from under the arm of the baby – consent must be obtained for this. Cytogenetic screening can be performed from the placenta (see Perinatal post-mortem & placental histopathology guideline).

Cause of death if not known:

- Discuss implications with obstetric specialist and consider requirements to notify police/coronor. The specialist is to discuss the case with these people prior to alerting the families concerned. Note that consent for post-mortem is not required if post-mortem is required by the coroner. See post-mortem guideline.

Options open to family/whanau:

- Baby may be placed in stillborn area at cemetery.
- Baby may be placed in plot with past family member.
- Baby may be placed in Children’s lawn at Taruheru cemetery.
- According to the Burial/Cremation Act 1964, the body must be buried in consecrated ground. If relatives wish assistance from the Funeral Director (without obligation of a funeral) a casket may be obtained from funeral directors. This is not essential by law. Parents wishing to bury their baby at home prior to 20 weeks cannot involve the funeral directors.

Follow up and discharge:

Discharge can be made on the same day, should the woman and her family wish, depending upon the clinical condition of the woman.

Discussion should be held with the consultant obstetrician and paediatrician regarding any follow appointments in the postnatal period and these should be arranged prior to discharge taking into account the length of time for the return of post-mortem results.
See discharge checklist (Appendix 1) to be completed for each IUD/stillbirth and placed in the woman’s notes.

ASSOCIATED DOCUMENTS:
Organisational policy: Whenua/Placental management (of disposal)
Organisational Policy Care of Human Tissue (including care of deceased)
Woman, Child and Youth Maternity guideline - Perinatal post mortem & placental histopathology
Information about the Perinatal and Maternal Mortality Review Committee (2007)
PMMRC – Panui for post mortem examination leaflet (2009)

APPENDICES:
1. Checklist for intrauterine death and stillbirth (photocopy and put in mums notes)
2. Clinical examination of baby checklist
3. Rapid reporting form for perinatal death – mother and baby. Photocopy and complete as much as possible of hard copy (to be completed online by LMC – see checklist for website and password details – or PMMRC local coordinator will complete if details given as soon as possible)

REFERENCES:
Birth, Death and Marriages Registration Act 1995
Burial/Cremation Act 1964

Date of Approval: February 2016
Next Review Date: February 2019
## Appendix 1

### CHECKLIST FOR INTRAUTERINE DEATH or STILLBIRTH

*(please print out and use for each stillbirth and file in records)*

#### PRE-ADMISSION:

<table>
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<tr>
<th>Action</th>
<th>Completed</th>
<th>Date</th>
<th>Signature</th>
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<tbody>
<tr>
<td>Prepare room – BS 5 most suitable as toilet facilities not shared</td>
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<tr>
<td>Notes in order and relevant – obtain medical records from main file</td>
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<tr>
<td>SANDS booklets given prior to admission if possible (kept in store room in ward 1 behind PN room 4)</td>
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<td>O &amp; G notified of pending admission</td>
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#### ON ADMISSION:

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<tr>
<td>Orientation to the facilities</td>
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<td>Begin birth register (check current address and phone number)</td>
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<td>Notify admissions and obtain previous records</td>
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<tr>
<td>O &amp; G notified (if not aware)</td>
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<td>LMC notified (if not with woman)</td>
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<td>Availability of whanau room for extended family if required (security pager 95)</td>
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<td>ID/allergy bracelet in place</td>
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<td>Admission assessment and vital signs taken and recorded</td>
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<tr>
<td>Relevant clinical procedures and blood serology as indicated by O &amp; G and consented to by woman (see Management of IUD &amp; Stillbirth guideline)</td>
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<tr>
<td>Follow procedures in the Perinatal Post-mortems and Placental Histopathology guideline if this has been discussed &amp; consent obtained</td>
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<tr>
<td>Arrangements for placenta confirmed (histology, return to woman if requested as per guideline)</td>
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<tr>
<td>SANDS booklets available/offered if not already given</td>
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<tr>
<td>Explanation re care, procedures, pain relief, moment of birth (woman’s wishes), encouragement to hold baby, etc.</td>
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<td>Availability of hospital chaplain if desired or own church minister</td>
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<tr>
<td>Cultural support required identified as needed</td>
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### AT SOME TIME:

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<th>Action</th>
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<tr>
<td>SANDS box (depending on gestation)</td>
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<tr>
<td>Availability of baby clothing – SANDS boxes made up in maternity store room.</td>
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### AFTER THE BIRTH:

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<th>Action</th>
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<tr>
<td>Take cord blood for CBC differential, nucleated red cell count, group and antibody screen, Guthrie and chromosomal analysis.</td>
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**Care of baby:**

1. Weight
2. Admit and obtain NHI from admissions in ED (please confirm they are aware this is FDIU/ stillbirth) so relevant notification can be entered
3. Swabs – ear and throat
4. Wash
5. Measure crown/heel, head circumference
6. Dress-wrap as family requests
7. Paediatric examination if consented by parents

**Routine PN observations and checks of mother**

**Documentation of birth in clinical notes**

**Anti-D given as required within 72 hours**

**Notification as appropriate:**

1. LMC
2. Minister
3. Maori Health Liaison officer
4. GP (phone if possible)
5. Well Child to avoid future contact & immunisation appointments
6. **Check & cancel any ANC appts**

### Registration:

(only if ≥ 20+0 weeks of gestation and/or weighed ≥ 400g).

1. Parents need to Register the Birth please give them the form if applicable
2. Medical certificate of cause of fetal death & neonatal deaths (HP4721 stored at the back of reception) required by undertaker
3. Complete birth register

**Contact Funeral Services in conjunction with family if registration as above (06 867 9150)**
**Blessing of room after discharge by hospital chaplain, **while all equipment and linen still in the room** (pager 036)

**Complete rapid reporting forms for mother & baby** either paper copy or online, within 48 hours of the baby’s death (where possible),

*www.pmmrc.otago.ac.nz*

Username: Tairawhiti DHB

Password: tairaw4484 – details to PMMRC local coordinator if LMC/Core staff unable to complete

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**FOLLOW UP:**

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<th>Action</th>
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<tbody>
<tr>
<td>Postnatal care plan by LMC completed, including care of breasts re suppression of lactation</td>
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<tr>
<td>Grief support need and availability identified – SANDS support group information given</td>
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<tr>
<td>Discuss with O &amp; G when follow up appointment (to be seen at gynaecological not antenatal clinic) is required. Inform woman this appointment will be sent to her if not given prior to discharge. Request this appointment.</td>
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<tr>
<td>Paediatric appointment made as appropriate</td>
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<tr>
<td>Debrief for staff involved</td>
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Appendix 2

CLINICAL EXAMINATION OF BABY CHECKLIST (CLICK LINK BELOW TO OPEN)

Clinical Examination of Baby Checklist 1.4.doc