# Table of Contents

<table>
<thead>
<tr>
<th>Module</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Introduction</strong></td>
<td>4</td>
</tr>
<tr>
<td>Module 1:</td>
<td>Preterm Labour</td>
<td>7</td>
</tr>
<tr>
<td>Module 2:</td>
<td>Feeling Generally Unwell &amp; ↑ BP in Pregnancy</td>
<td>13</td>
</tr>
<tr>
<td>Module 3:</td>
<td>Febrile</td>
<td>22</td>
</tr>
<tr>
<td>Module 4:</td>
<td>Abdominal Trauma (e.g. MVA, Domestic Violence, Falls)</td>
<td>28</td>
</tr>
<tr>
<td>Module 5:</td>
<td>Vaginal Bleeding Before 20 Weeks of Pregnancy</td>
<td>34</td>
</tr>
<tr>
<td>Module 6:</td>
<td>Vaginal Bleeding After 20 Weeks of Pregnancy</td>
<td>39</td>
</tr>
<tr>
<td>Module 7:</td>
<td>Cord Prolapse</td>
<td>45</td>
</tr>
<tr>
<td>Module 8:</td>
<td>Imminent Normal Birth</td>
<td>50</td>
</tr>
<tr>
<td>Module 9:</td>
<td>Meconium Stained Amniotic Fluid</td>
<td>60</td>
</tr>
<tr>
<td>Module 10:</td>
<td>Emergency Breech Birth</td>
<td>63</td>
</tr>
<tr>
<td>Module 11a:</td>
<td>Primary Postpartum Haemorrhage - Within 24 hrs</td>
<td>69</td>
</tr>
<tr>
<td>Module 11b:</td>
<td>Secondary Postpartum Haemorrhage - 24hrs – 6/52</td>
<td>75</td>
</tr>
<tr>
<td>Module 12:</td>
<td>Neonatal Resuscitation</td>
<td>78</td>
</tr>
<tr>
<td>Module 13:</td>
<td>A Baby with Abnormalities</td>
<td>85</td>
</tr>
<tr>
<td>Module 14:</td>
<td>Stillbirth or Neonatal Death</td>
<td>88</td>
</tr>
<tr>
<td>Module 15:</td>
<td>Retained Placenta</td>
<td>95</td>
</tr>
<tr>
<td>References</td>
<td></td>
<td>99</td>
</tr>
<tr>
<td>Appendix A</td>
<td>Essential Documentation</td>
<td>100</td>
</tr>
<tr>
<td>Appendix B</td>
<td>Glossary of Terms &amp; Birth Pack Contents</td>
<td>103</td>
</tr>
<tr>
<td>Appendix C</td>
<td>Referral Agency Phone Numbers</td>
<td>106</td>
</tr>
<tr>
<td>Appendix D</td>
<td>Other Resources and Links</td>
<td>107</td>
</tr>
<tr>
<td>Appendix E</td>
<td>Evaluation Form</td>
<td>108</td>
</tr>
<tr>
<td>Appendix F</td>
<td>NSW Health Department Policy Directives</td>
<td>109</td>
</tr>
</tbody>
</table>
Introduction

The Australian College of Midwives NSW Branch Inc., responding to a perceived need, has designed these guidelines for use by Registered Nurses (RNs) and Aboriginal Health Practitioners/Professionals (AHPs) employed in rural/remote settings or who are called on to provide emergency maternity care. These guidelines are for emergency use only and are to be used when there is no midwife or appropriately qualified medical practitioner available.

The Australian College of Midwives NSW Branch Inc recognises that there are constraints on registered nurses when dealing with maternity emergencies. Therefore we have deliberately not included those assessment techniques that require specialised midwifery skills such as listening to fetal heart sounds or performing a vaginal examination. We have concentrated on the implications of information gained by routine observation. RNs and AHPs attending women in these circumstances must be careful to document all observations and actions; including dates and times for medico-legal purposes. These circumstances require universal precautions to be followed at all times.

These guidelines are based on the best available evidence at the time of publication. For ease of reading in an emergency the references have not been included in the text but can be found at the end of the document.

Each section of the manual is written in both flowchart format and with more detailed instructions.

The flowchart provides a quick reference, while the written section is set out in terms of:

Presenting signs and symptom(s)
What questions to ask
The implications of the answers received
What to do
What to do next
Who to call for advice.

Although these guidelines were written for NSW they are appropriate for any state. Where NSW numbers or guidelines are given, you will need to substitute the ones that are pertinent to your area. It is recognised that not all rural and remote areas have medical assistance onsite, and because of this we have included the NSW Pregnancy and Newborn Services Network (PSN) Neonatal Emergency Transport Service (NETS) Line - 1300 36 2500 or 1300 36 2499 for non-urgent cases or enquiries. This service will link you with further specialist advice (Statewide Perinatal Advisor). Use the options provided to select the service you need (NSW and ACT only).
We have also included a number of pertinent NSW Health policy directives and guidelines that are in Appendix F.

This may assist with clinical decisions in difficult circumstances and will also facilitate transfer to an appropriate institution should it be necessary.

There are numerous references to appropriate medical consultation throughout the document which may be directed to available local or district practitioners and/or clinicians (obstetric and/or midwifery) from the nearest regional maternity unit. If further advice is needed then the nearest tertiary obstetric referral centre or the Statewide Perinatal Advisor (via NETS) should be contacted. Space for local emergency contact numbers is also provided at the front of this manual.

Changes to sections of this document will occur over time in keeping with advances in the clinical understanding of maternity care. It must also be acknowledged that the guidelines are designed to assist in meeting the needs of a specific group of people who work in unique circumstances.

The Australian College of Midwives NSW Branch Inc. welcomes any feedback from individuals using the guidelines to assist in ongoing development of the guidelines and to make the document more workable. We have included an evaluation form and welcome your feedback (Appendix E)

Australian College of Midwives NSW Branch Inc. 2014

Fifth Edition Editors (2014)
Elaine Burns, Allison Cummins, Elaine Dietsch, Ann Grieve, Jane Raymond, Katie Sullivan, Alexandra Weston

Fifth Edition: Professional Development Committee (2014)
Elaine Burns, Allison Cummins, Ann Grieve, Rosemarie Hogan, Lyn Kramer, Julie Mate, Lyndall Mollart, Jane Raymond, Michelle Simmons, Rachel Smith, Katie Sullivan, Alexandra Weston, Leah Whitehead,

Alison Teate, Leah Whitehead, Alexandra Weston, Julie Mate

Fourth Edition: Professional Development Committee (2010)
Rachel Smith, Ann Grieve, Moira Williamson, Lyndall Mollart, Katie Sullivan, Tessa Capsanis, Hilary Gatward, Jane Raymond

Alison Goodfellow, Ann Grieve, Pam Mulholland, Moira Williamson

Third Edition: Professional Development Committee (2007)
Alison Goodfellow, Ann Grieve, Moira Williamson, Rachel Smith, Joanne Gray, Lyndall Mollart, Avon Strahle, Lyn Passant, Allison Cummins, Nicky Leap, Deb Davis, Katie Sullivan, Alex Weston

Sue Kildea, Caroline Homer, Nicky Leap, Ann Grieve, Lyndall Mollart, Sue Kruske, Avon Strahle, Moira Williamson.


First Edition: Education and Research Committee (1998)
Emergency Contact Numbers

After initial assessment of the woman, document your assessment and call a medical officer with your findings. The following phone numbers will differ according to the available resources, and should be customised to suit your facility. Please fill in the phone numbers specific to your facilities.

Local medical officer/s:
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................

Note: If unsuccessful, call Base Hospital/Regional on-call specialist Obstetrician / Clinician.

Base Hospital/Regional on-call specialist obstetrician and/or other clinician:
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................

Note: If unsuccessful, call Tertiary Referral Centre.

Obstetric Tertiary Referral Centre:
Contract your nearest regional or base hospital maternity service and find out which obstetric tertiary referral centre is normally used.
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................
Name: ............................................ Phone Number/s ..........................................

If you are UNCERTAIN of the process, or want further advice, call the NETS emergency line 1300 36 2500 or 1300 36 2499 for non-urgent cases or enquiries (in NSW and ACT only). For more information, see Critical Care Tertiary Referral Networks (Perinatal) PD2010_069 - Appendix F. After consulting with the medical officer, document the time you contacted him/her and any orders he/she requested.
MODULE 1:

Preterm Labour
Module 1: Preterm Labour

Preterm labour is labour starting after 20 weeks and before 37 weeks of pregnancy. It is a maternal / neonatal emergency. Always contact a medical practitioner immediately.

Preterm labour is the major cause of morbidity and mortality in babies. Babies born before 34 weeks of pregnancy face the most serious risks.

Presenting signs & symptoms

Abdominal pain, period-like pain.
Abdominal tightness occurring at regular intervals (uterine contractions).
Backache, persistent or intermittent.
Waters broken, clear fluid or green-brown fluid/discharge noted on sanitary pad.
General feeling of discomfort / woman states she does not feel well.

Note: Pain may be abdominal or may present as backache. Gastro-intestinal symptoms may also occur (diarrhoea).

What to ask

Does the woman have her antenatal card with her?
Module 1: Preterm labour

Is there a history of:
- previous preterm labour and/or birth?
- urinary tract or other infections?
- trauma (e.g. domestic violence, motor vehicle accident, a fall)?
- assisted conception in this pregnancy?

Does she know how many weeks or months pregnant she is? Has she had an ultrasound?
- is this a multiple pregnancy?

Is the baby moving as usual?

When did the pain commence?

Where is the pain?

Is the pain constant or intermittent?

How often does the pain occur?

How long does the pain last?

Does the woman say the pain is mild, moderate or strong?

Does she have a fever?

Is there any vaginal discharge or bleeding?

What consistency and colour is the discharge?
What to do

Observations: temperature, pulse, blood pressure and urinalysis.

It is optimal for a pregnant woman in preterm labour to be transferred to a hospital with maternity services. However, there are a number of options, as not all preterm labouring women have to be transferred to a tertiary obstetric referral centre:

- If > 34 weeks and a singleton pregnancy: contact your nearest regional or base hospital
- If < 34 weeks, a multiple pregnancy or the woman has any other complications: contact your nearest tertiary obstetric referral centre

The Statewide Perinatal Advisor may be contacted via the NETS line 1300 36 2500 (NSW and ACT only)

If birth is imminent, contact the NETS line for assistance and advice on neonatal care and possible retrieval. Look at Module 8 on Normal Birth.

Collect mid-stream urine specimen if possible.
Insert IV cannula.

**Trained maternity service provider will/may on arrival:**
Ascertain if transfer to either a regional or base hospital is feasible.
Assess condition of woman and baby: uterine activity and fetal heart rate.

Do a speculum examination to determine dilatation of cervix and evidence of ruptured membranes. **A digital vaginal examination should not be undertaken unless the woman is in active labour.**
Collect cervical and vaginal swabs for culture and sensitivity.
Discuss the commencement of tocolysis (drugs to stop labour) with the regional or tertiary centre clinician (PD 2005_249: Appendix F).
Discuss the commencement of IV antibiotics with the regional or tertiary centre clinician.
Discuss the commencement of IMI Betamethasone with the regional or tertiary centre clinician.
If birth is imminent and no midwife or medical officer is present, assist the woman to give birth (refer to Module 8 for management of normal birth)

Looking after a Preterm Baby

Dry the baby immediately with warm towels. Remove used towels and replace with warm blankets.

If the baby is <28 weeks - immediately after birth, place the baby’s body in a polythene bag or wrap (this effectively reduces heat loss in very preterm babies).

Keep the baby warm - this is best done by skin to skin contact with the mother with warm blankets over both.

Closely monitor the baby’s colour and respirations every 5 minutes for at least the first hour.

If the baby is <34 weeks gestation, contact NETS (in NSW and ACT) for advice.

Refer to NSW PD2008_027 Newborn Resuscitation (Appendix F)
PRE TERM LABOUR

It is optimal to transfer the woman prior to birth

ASK ABOUT:
- How many weeks/months pregnant?
- Past history- preterm birth, urinary tract infection, trauma, assisted conception
- Pain- length of time? intermittent? regular? Strength- mild, moderate, strong
- Vaginal discharge or bleeding?
- Is the baby moving?

Temperature, Pulse, Blood pressure, Midstream Urine, Perineal pad (if appropriate)

Labour detected

No

Discuss with Medical officer

Yes

Call Medical officer

- IV cannula
- Speculum examination and swabs
- DO NOT PERFORM A VAGINAL EXAMINATION

Spontaneous Birth

- Keep baby warm and dry
- Monitor colour, temperature and respirations

Early Labour

- Following consultation:
  - Drugs to stop contractions
  - Antibiotics
  - IMI Betamethasone
MODULE 2:
Feeling Generally Unwell and Hypertension in Pregnancy
Module 2: Feeling Generally Unwell and Hypertension in Pregnancy

The onset of any or all of these symptoms in a pregnant woman whose gestation (period of pregnancy) is 20 weeks or greater may be an indication of pre eclampsia or an early warning sign of eclampsia (seizure) and as such should not be dismissed lightly. Medical assistance may be required. Emergency contact numbers are provided at the front of this manual.

Presenting signs and symptoms

Feeling generally unwell or complaining of any of the following:

- Headache.
- Visual disturbances, e.g. flashing lights, shimmering.
- Nausea and vomiting.
- Heartburn or epigastric pain.
- Abdominal pain.
What to ask?

**Headache**
- How long have you had the headache?
- Was the onset gradual or sudden?
- Have you had this type of headache at other times during this pregnancy?
- What area of the head is affected? (e.g. frontal, parietal, occipital)

The sudden onset of a severe headache, which is frontal or occipital in location, may indicate cerebral oedema and is a cause for concern.

**Visual disturbances**
- Can you describe the problem e.g. blurred vision, flashing lights, photophobia?
- Was the onset sudden, gradual or accompanied by any other symptoms?
- Have you had this problem before during this pregnancy?
- Do you suffer from migraines? If yes, how do they start?

Visual disturbances may be a result of retinal oedema. Migraine should also be considered as a cause.
Nausea, vomiting, heartburn and indigestion

- Can you describe the problem?
- Are any of the symptoms associated with food?
- Are any of the symptoms relieved by medication of any kind e.g. antacid?

Any of these symptoms which are unrelieved by treatment may indicate liver damage which can occur in pre-eclampsia.

Abdominal pain

- Where is the pain?
- Is the pain associated with any other symptom (e.g. urinary frequency or dysuria)?
- Is the pain constant or intermittent?
  - Palpate for abdominal tenderness.
- Was the onset of the pain sudden?
- Is the baby moving?
- Is the pain worse when the baby moves?
- Have the waters broken?

Abdominal pain may indicate either the onset of labour or the presence of placental bleeding, liver damage, or may be associated with a urinary tract infection.

When a woman presents with abdominal pain in pregnancy an ectopic pregnancy must be suspected until proven otherwise. This can be a life-threatening emergency. Always consult with a medical practitioner.
What to do

Immediate

- Ascertain if there are any medical problems in her history.
- Measure blood pressure, temperature, pulse and fetal heart rate (if you have this skill):
  - Ideally, the woman should be seated in a chair or on the edge of the bed.
  - The BP should be recorded on the right arm.
  - Use correct cuff size for BP – use large cuff if arm circumference is > 33cm.
  - Use phase 5 Korotkoff sign for hearing the diastolic BP. The phase 5 Korotkoff sign is when you hear the sound disappear, not just muffle.

A systolic blood pressure of $\geq 140$mmHg and / or a diastolic blood pressure of $\geq 90$mmHg or more is cause for concern and should be investigated immediately.

- Obtain and test a clean catch urine specimen for proteinuria.

Proteinuria $\geq +1$ on the dipstick test is cause for concern and should be investigated immediately.

- Note any drowsiness or confusion.

Uncharacteristic drowsiness or confusion may be a symptom of cerebral oedema

- Check reflexes e.g. patella (knee).

Brisk reflexes may also indicate cerebral oedema
Urgent Management

- If blood pressure is \( \geq 170/110 \text{mmHg} \)
  - and/or
  - Severe right upper quadrant abdominal pain is present
    - Seek medical assistance immediately.
  - Insert IV cannula.
  - Commence medications as ordered
  - If a seizure (convulsion) occurs:
    - Seek urgent medical assistance.

<table>
<thead>
<tr>
<th>It is no longer recommended to shorten or abolish the initial seizure using drugs such as diazepam. Prepare a Magnesium Sulphate infusion (See Policy Directive 2011_064 - Appendix F).</th>
</tr>
</thead>
</table>

- Maintain airway.
- Place in coma position to facilitate drainage of saliva and vomitus.
- Prevent the woman from being injured during the clonic stage.
- Administer \( O_2 \) at 8 L / minute to prevent severe hypoxia. Prepare Magnesium Sulphate infusion.

The medical officer may prescribe:

An appropriate hypertensive drug after consultation with the regional or tertiary centre specialists experienced in the management of hypertension in pregnancy. To control blood pressure, the following drugs may be used:

Nifedipine orally.
Hydralazine IMI or IV (NSW Health 2011_064 - Appendix F).

To prevent or control seizures, Magnesium Sulphate IVI may be prescribed. The dosage and guidelines for administration should follow the NSW Health guidelines (Policy Directive 2011_064 - Appendix F).

Be careful not to lower the BP too quickly. Using Hydralazine and Magnesium Sulphate together may lead to hypotension.

Blood should be collected for:

Full blood count (FBC), liver function tests (LFT), urea, electrolytes and creatinine (UEC), Group and Hold (G&H), blood sugar level (BSL), serum uric acid and clotting studies.
Ongoing management

- If there is no seizure:
  - Keep under close surveillance.
  - Close observation of blood pressure (if possible use Mercury sphygmomanometer not automatic BP machine).
  - Neurological observations.
  - Nil by mouth.
  - Hourly urine measure via indwelling catheter if IV medication has been administered.
  - Caution with IV fluids (risk of pulmonary oedema).

- If a seizure has occurred:
  - Keep under continuous surveillance.
  - Continuous blood pressure monitoring.
  - Neurological observations.
  - Nil by mouth.
  - Hourly urine measure via indwelling catheter.
  - Caution with IV fluids (risk of pulmonary oedema).

Who to call

Contact appropriate medical practitioners – this is a multisystem disorder and requires a multidisciplinary focus and appropriate transfer.
Feeling Generally Unwell

OBTAIN INFORMATION ABOUT:
- Headaches/visual disturbance
- Nausea and vomiting
- Heartburn/indigestion
- Rapid onset of generalised oedema
- Abdominal pain/contractions/have the waters broken?
- Is the baby moving?

Check (Action)
- Temperature, pulse, blood pressure
- U/A- protein, nitrates
- Levels of consciousness, reflexes

NO ABNORMALITIES DETECTED
Consult with Medical officer Prior to discharge

BP ≥ 140/90
Check
U/A ? protein
? drowsy
? reflexes

Monitor and consult

NO SEIZURE
- Close observations/frequent BP
- Neurological obs/NBM
- Closely monitor urine output

SEIZURE
- Maintain airways
- Coma position/prevent injury
- O2 8 L/min

BP 170 ≥ 110 AND/OR SEVERE RIGHT UPPER QUADRANT ABDOMINAL PAIN
Call medical officer immediately
Insert IV and commence medications as ordered

Continuous surveillance ie
- BP, respirations, neuro obs, NBM, urine output
- Bloods- FBC, LFT’s, BSL, Uric acid, clotting studies, Group & Hold

To control hypertension
Oral Nifedipine
IM or IV Hydralazine

To control seizure
IV Magnesium Sulphate

TRANSFER
TRANSFER
MODULE 3: Febrile
Module 3: Febrile

Presenting symptom

The most common causes of fever during pregnancy are urinary tract infections (UTI) and viral infections such as influenza or the common cold and occasionally appendicitis.

Diagnosis of urinary tract infection is important because of the predisposition to preterm labour in the presence of UTI, and also because if untreated, it may progress to pyelonephritis.

What to ask?

When did these symptoms commence?
Have you had any urinary frequency? If yes, for how long?
Have you had any pain or burning when passing urine? If yes, for how long?
Have you had any backache, abdominal or loin pain? If yes, for how long?
Have you had any contractions?
Have you noticed any change in the smell of your urine?
Have you experienced any nausea or vomiting?
Have you been coughing or sneezing?
Have you experienced any generalised body aches and pains?
Have you noticed any vaginal discharge?
What to do first

Check temperature, pulse and blood pressure.
Obtain urine specimen for routine dipstick test
  – Is there any protein, blood, nitrites, glucose, ketones or leukocytes present?
Ask the woman if she is having contractions or tightenings
  – How often do they occur?
Gently palpate the woman's renal angles (loin)
  – Is this painful?
Check abdomen for rebound tenderness in right iliac fossa (RIF).

In pregnancy, rebound tenderness may not be demonstrated in the RIF but may be displaced upwards.
Fever, respiratory symptoms, generalised muscular aches, no evidence of urinary symptoms or uterine contractions.
Discharge, after appropriate medical officer review. Suggest that she return if symptoms do not subside or urinary symptoms commence.

Fever, urinary symptoms, clear urine on dipstick, and no loin pain.
Obtain further urine specimen for microscopic examination, culture and sensitivity.

Contact appropriate medical practitioners.

Medical officer may order broad spectrum antibiotic cover:
- using Amoxycillin 500mg TDS for 5 days
- or
- Cephalexin 500mg TDS for 5 days
Discharge home with appropriate antibiotic.
To return for review when antibiotic course completed or if symptoms return.
Fever, nausea and vomiting, urinary symptoms and loin pain
Prepare to transfer to appropriate maternity unit.
Collect urine for urgent culture and microscopy.
Collect blood for FBC, UECs and blood culture.
Consult appropriate medical officer.
Commence IV fluids if dehydrated (usually 0.9% Normal Saline).
Commence antibiotics as ordered.

Fever, nausea & vomiting, abdominal pain with rebound tenderness
Collect urine for urgent culture and microscopy.
Collect blood for FBC, UECs and blood culture.
Consult appropriate medical officer.
Commence IV fluids if dehydrated (usually 0.9% Normal Saline).
Prepare to transfer to appropriate maternity unit.
Nil by mouth.

Who to call

Contact appropriate medical practitioners - emergency contact numbers are provided at the front of this manual.
Febrile - not feeling well

ASK ABOUT:
- How many weeks/months pregnant?
- Timing of symptoms
- Urine- frequency/pain/burning
- Pain- back/abdominal/loin?
- Contractions- timing/strength?
- Nausea/vomiting/diarrhoea?
- Coughing/sneezing/general malaise/
- Spots/rashes?
- Is the baby moving?

Check:
- Temperature, Pulse, Blood pressure,
- Midstream Urine (MSU)
- Contractions
- Pain in renal angles
- Rebound tenderness

Fever respiratory symptoms    muscular aches

Fever urinary symptoms

Fever Nausea & vomiting
Urinary symptoms
Loin pain

Fever Nausea & vomiting
Abdominal pain
Rebound tenderness

MSU for culture & sensitivity

Consult Medical officer
MO may order antibiotics

Discharge and review when antibiotics complete or if symptoms return

- MSU
- Bloods: FBC, UEC’s, blood culture,
- IV fluids
- Prepare for transfer

Antibiotics as ordered

NBM

TRANSFER
MODULE 4: Abdominal Trauma

e.g. MVA, Domestic Violence, Falls
Module 4: Abdominal Trauma

If the woman is more than 20 weeks pregnant, with even a relatively minor abdominal trauma, she should be transferred to a regional obstetric or tertiary service (she is at increased risk of preterm labour). The wellbeing of the mother takes priority, optimal care of the mother will generally ensure optimal care of the infant.

What to ask

What was the cause of the injury?
How long ago did the injury take place?
Can you indicate the location of the injury or injuries?
Can you indicate the location of any pain?
Is the pain constant or intermittent?
When is your baby due - how many weeks/months pregnant are you?
Have you felt the baby move since the injury? (Not usually relevant at 18 weeks gestation or less).
Have you had any vaginal bleeding or discharge since the injury?

What to do: first

General observations:
Check temperature, pulse, respirations, blood pressure and urinalysis.

Abdominal examination:
Observe the woman's abdomen for any bruising and note location e.g. seatbelt or steering wheel marks.
Rest your hand gently on the woman’s abdomen.
- Does it feel soft or tense and board-like?
- Does just resting your hand on the abdomen cause the woman pain?
- Does the abdomen become alternately tense and relaxed (contractions)?
- Are any periods of abdominal tension related to an increase in pain?

**Examination of vaginal loss (if present)**

If vaginal loss is present:
- Does it appear to be blood or clear liquid or a mixture of both?
- Is any bleeding bright or dark?
- How much is there? e.g. Enough to soak underwear? Enough to soak a pad, or several pads?
- Does loss other than blood smell like urine or amniotic fluid?

---

Amniotic fluid has been described as smelling like marigolds, bleach or semen.

---

**What to do next**

**Abdomen soft, no vaginal loss, no pain, baby moving, +/- bruising, +/- tenderness over bruising:**
Observe for four (4) hours
Collect blood for Kleihauer
Consult with appropriate medical officer
If domestic violence is disclosed or suspected, ensure support, appropriate referral and ask the woman if she feels safe to be discharged home. Alternate options may need to be arranged.

**Contractions present and decreasing, no bruising, no vaginal loss, baby moving:**
Any other injuries unrelated to pregnancy.
Consult with appropriate medical officer.
Observe for 24 hours.
Treat as necessary.

**Contractions present and increasing in frequency and strength:**
For pregnancies of less than 37 weeks – see Module 1 on Preterm Labour.
For pregnancies 37 weeks or greater – see Module 8 on Normal Birth.

**Severe or increasing abdominal pain and tension, with or without vaginal bleeding:**

This may be a maternal /neonatal emergency. Contact nearest appropriate medical practitioners.

If signs of shock are present position in left lateral and elevate legs.
Administer O₂ at 8 L/ minute.
Insert IV cannula and give Normal Saline 500mls rapidly.
Obtain blood sample for FBC, Kleihauer, clotting studies and cross-match if possible.
Insert urinary catheter and measure output hourly.
Do not give anything by mouth.
Do not do any vaginal examinations

Who to call

This is considered a maternal emergency. Contact your nearest appropriate medical practitioners - this may be available local practitioners and your nearest obstetric tertiary referral centre.

If this is a situation involving domestic violence, ensure that the woman is safe and has appropriate access to resources and services.
ABDOMINAL TRAUMA - MVA, ASSAULT, FALL

Obtain information about:
- How many weeks/months pregnant?
- Cause / timing of injury?
- Location & type of pain?
- Abdominal pain/bruising?
- Vaginal discharge or bleeding?
- Is the baby moving?

Check
- Temperature, pulse, blood pressure, Respiration, urinalysis
- Contractions
- Perineal pad (if appropriate)

Check for other injuries as well as abdominal

Abnormalities or labour detected

NO
- Abdomen soft
- No vaginal loss
- No pain
- Baby moving
- ± bruising
- ± tenderness

Consult Medical officer

YES

Contraction present

YES

Increasing abdominal pain & tension
± vaginal bleeding

Do not perform vaginal examination

IF SHOCKED

Contraction increasing

NO

Observe for 24 hours
Consult with Medical officer

YES

Contraction < 37 wks
Refer to Preterm Labour
Module 1 OR
Normal Labour Module 8

Prepare for transfer

PREPARE FOR TRANSFER

Module 4: Abdominal trauma
MODULE 5:
Vaginal Bleeding Prior to 20 Weeks Gestation
Module 5: Vaginal Bleeding Prior to 20 Weeks of Pregnancy

Presenting symptoms

Vaginal bleeding.
Cramping abdominal pain.
Back pain.

What to ask

How many weeks/months pregnant do you think you are?
What is the blood loss like? [i.e. bright red or dark brown, clots, tissue].
How much are you bleeding?
How long have you been bleeding and has it happened before in this pregnancy?
Did the bleeding start following sexual intercourse or an accident or injury (including domestic violence)?
Is there any back ache, lower abdominal or shoulder tip pain?
When did the pain start?
Do you have any history of tubal infection or surgery, ectopic pregnancy, are you using contraception with progesterone only pills (minipill) or do you have an intrauterine contraceptive device?
Miscarriage can result in emotional distress and anguish for the woman and her partner. A sensitive approach and the provision of psychological support are essential. Miscarriage is also very common. It has been estimated that one in seven recognised pregnancies will result in a miscarriage.

When a woman presents with vaginal bleeding and / or abdominal pain in pregnancy an ectopic pregnancy must be suspected until proven otherwise. This can be a life-threatening emergency. Always consult with a medical practitioner.

What to do first

Assess:
BP, temperature and pulse.
Signs of shock?
Total amount of blood loss.
Her emotional state.

What to do next

If bleeding is heavy or the woman is shocked:
Call for assistance.
Give O₂ at 8L/min.
Insert IV cannula (the largest you can manage) and give Normal Saline 500mls immediately.
Insert a second IV cannula and take blood for FBC, blood group and cross match.
Explain to the woman what is happening.
Contact medical officer and discuss situation.

**If bleeding is not heavy and there are no signs of shock:**
Insert an IV cannula and take blood for FBC, group and hold. 
Reassure the woman. 
Contact medical officer and discuss situation

– MO may order an ultrasound if this is available and recommend no sexual intercourse until cause of bleeding is determined.

**If bleeding is slight (i.e. spotting) and no lower abdominal or back pain:**
Reassure the woman. 
Contact medical officer and discuss situation

– MO may order an ultrasound if this is available and recommend she does not have sexual intercourse until the cause of bleeding is determined.

**If bleeding and crampy lower abdominal pain continues:**
Reassure the woman. 
Be aware that a miscarriage may occur or has occurred. The woman needs to be seen by a medical officer who may seek further advice from an obstetrician.

Contact appropriate medical practitioners - emergency contact numbers are provided at the front of this manual.
Module 5: Vaginal bleeding prior to 20 weeks

**Vaginal bleeding prior to 20 weeks**

**ASK ABOUT:**
- How many weeks/months pregnant?
- Vaginal bleeding - colour/amount/duration
- Pain? - length of time? intermittent? regular? Backpain, abdominal and/or shouldertip Strength - mild, moderate, strong
- Factors associated with bleeding - post-intercourse/injury
- Past history - previous ectopic/tubal infections, Intrauterine device (IUD)

**Check:**
- Temperature, pulse, blood pressure,
- Blood loss - perineal pad
- Abdominal tenderness

**Abnormalities detected**
- Suspect ectopic pregnancy till proven otherwise

**Bleeding Slight**
- No pain or shock
  - Review by Medical officer

**Bleeding Moderate**
- No signs of shock
  - **Call for help**
  - Insert IV cannula
  - Blood - FBC, Group & hold
  - Continue observations
  - **TRANSFER**

**Bleeding Heavy or shock present**
- **Call for help**
- Oxygen 8 L/min and NBM
- Large bore IV Cannula/ Normal Saline 500mls stat
- Bloods - FBC, Group & hold
- Frequent observations
  - **TRANSFER**
MODULE 6:

Vaginal Bleeding After 20 Weeks
Module 6: Vaginal Bleeding After 20 Weeks of Pregnancy

Vaginal bleeding after 20 weeks gestation can be an emergency - refer to appropriate medical practitioner immediately on presentation. Emergency contact numbers are provided at the front of this manual.

Presenting signs & symptoms

- Vaginal bleeding with or without abdominal pain

What to ask

- How many weeks/months pregnant do you think you are?
- What is the blood loss like? [i.e. bright red or dark brown, mucousy].
- How much are you bleeding?
- How long have you been bleeding?
- Has it happened before in this pregnancy?
- Did the bleeding start following sexual intercourse or an accident or injury (including domestic violence)?
- Is there any back ache, lower abdominal or shoulder tip pain?
- When did the pain start?
- Is the baby moving as usual?
- Was the bleeding sudden in onset and without warning or pain?
- Are you having contractions?
- Is the pain present between contractions?
- Have your waters (membranes) broken?
What colour was the water?
Have you ever had high blood pressure in your pregnancy?

What to do first

Assess:
BP, temperature and pulse.
Is the woman showing signs of shock?
Total amount of blood loss.
If a previous ultrasound report is available look at the report for an indication of where the placenta is.
Assess emotional state

If low lying placenta then this episode of bleeding may be a result of the position of the placenta over the cervix.

Abdominal pain:
– Is the pain continuous or intermittent?

If the woman is bleeding and has no pain with a soft abdomen this indicates that the placenta may be lying over the cervix (placenta praevia - see diagram above).
If abdomen is hard this suggests concealed bleeding caused by part, or all, of the placenta separating (placental abruption – the diagram below shows a complete placental abruption).

Figure 2. Complete Placental Abruption (notice the placenta has come away from the uterine wall). A complete abruption is a maternity emergency – the baby cannot survive in utero.

Call for immediate assistance.

What to do next

DO NOT PERFORM A VAGINAL EXAMINATION

If bleeding is heavy or the woman is shocked:

Call for help/assistance
Give O₂ at 8 litres/min.
Lie the woman on her left side.
Insert two IV cannulas (the largest you can manage) and give Normal Saline 500mls immediately.
Take blood for FBC, blood group and cross match.
Nil by mouth.
Contact medical officer and discuss situation.
Continue observations while awaiting transfer.
If bleeding is not heavy and there are no signs of shock:
Insert an IV cannula and take blood for FBC, group and hold.
Contact medical officer and discuss situation.
Continue observations while awaiting transfer.

Who to call

Contact appropriate local medical practitioners as well as appropriately skilled regional or tertiary obstetric clinicians - emergency contact numbers are provided at the front of this manual.
Vaginal Bleeding after 20 weeks

**ASK ABOUT:**
- How many weeks/months pregnant?
- Vaginal bleeding- colour /amount/ duration
- Pain ?- length of time? intermittent? regular?
  - Backpain, abdominal and/or shouldertip
  - Strength- mild, moderate, strong
- Factors associated with bleeding- post-intercourse/injury
- High blood pressure?
- Is the baby moving?

**Check:**
- Temperature, Pulse, Blood pressure,
- Blood loss- perineal pad
- Abdominal tenderness
- If had ultrasound- check report for placental position

**DO NOT PERFORM A VAGINAL EXAMINATION**

**Bleeding Slight**
- No pain or shock

- Call for help
- Insert IV Cannula
- Blood- FBC, Group & hold
- Continue observations

**Bleeding Moderate**
- No signs of shock

- Call for help
- Left lateral position/ NBM/ Oxygen 8 L/min
- 2 Large bore IV Cannula
- 1 L Normal Saline stat
- Bloods- FBC, Group & hold
- Frequent observations

**Bleeding Heavy**
- Or shock present

- Call for help

TRANSFER

TRANSFER
MODULE 7:

Cord Prolapse
Module 7: Cord Prolapse

Cord prolapse is a maternal / neonatal emergency. The cord can prolapse after rupture of the membranes when the presenting part is ill-fitting e.g. breech or head not in the pelvis. Fetal blood flow becomes obstructed the longer the cord remains outside the mother’s body.

Figure 3. Cord Prolapse, it may prolapse only a little or a lot.

Presenting sign

A cord will be visible at the vulva.
What to ask

When did the membranes rupture (waters break)?
How long has the cord been visible?
What other events were associated with the cord prolapse (waters breaking, blood, contractions)?
How many weeks/months pregnant are you?
Is the baby moving as usual?
Are you having contractions?

This is a maternal / neonatal emergency

What to do first

Call for assistance.
Put on a sterile glove and gently replace the cord inside the vagina.
Help woman to adopt exaggerated Sim's position (see diagram below) or a knee-chest position (see diagram over page) in order to take the pressure off the cord.

Figure 4. Exaggerated Sim's Position.
Keep the woman calm and prepare her for a likely caesarean section.

Keep the woman nil by mouth.

If needing to transfer this will probably need to be done with the woman in the exaggerated Sim’s position as it is very difficult to place a trolley seatbelt on a woman in the knee chest position.

What to do next

Await medical officer’s instructions for further management.

If contractions are present, refer to Module 8 Normal Birth and Module 10 Breech Birth.

If the baby is <34 weeks gestation, contact NETS (in NSW & ACT) for advice. Refer to NSW PD2008_027 Maternity – Clinical Care and Resuscitation of the Newborn Infant – Appendix F.

If the baby dies, see Module 14 Stillbirth or Neonatal Death.
Module 7: Cord prolapse

Cord prolapse

***Cord prolapse is a maternity emergency***

**CALL FOR HELP**

**WHAT TO LOOK FOR:**
An umbilical cord may be visible at the vulva

**ASK ABOUT:**
- How long has it been there?
- How many weeks/months pregnant?
- Vaginal discharge? Colour?
- Is the baby moving?
- Are contractions present?

**WHAT TO DO:**
- Using sterile gloves, replace umbilical cord into the vaginal cavity
- If there is pressure on the cord, put 2 fingers in the vagina and gently push the baby’s head/other presenting part away from the cord
- Prepare for an emergency caesarean section

**Position woman into knee-chest or exaggerated Sims**

**Nil By Mouth**

**TRANSFER ASAP**
Module 8: Imminent Normal Birth

A normal birth is not an emergency. Call a midwife. Where there is no midwifery support available, call a medical officer.

A normal birth is defined as the birth of a baby occurring after 37 weeks gestation. The baby is born head first through a process involving physiology and the woman’s unaided efforts.

Presentation

The woman presents with strong contractions. With each contraction she may experience pressure in her vagina or rectum and a strong urge to bear down.

There will be:

- A gradual gaping of the anus, thinning out and stretching of the perineum and parting of the labia as the fetal head extends and gradually becomes visible. It will take longer (perhaps half an hour) for the baby’s head to be expelled in a woman having her first baby than in women who have given birth before.

There may be:

- Some blood and mucous expelled before the fetal head comes on view.
- Amniotic fluid expelled with each contraction if the membranes have ruptured.
- Urine and faecal matter may be expelled from the woman if the bladder or rectum is full.
Module 8: Imminent normal birth

What to do first

Make the room as warm as possible and have warm towels ready to dry the baby.

Help the woman adopt a comfortable position for birth (may be kneeling, all fours, squatting, sitting propped up or side lying and may change throughout the birthing process).

If the baby is coming very fast, the woman being on all fours may slow things down and allow the baby to be born slowly.

If the woman is frightened or in great pain encourage her to take deep, slow, regular breaths during each contraction, and breathe normally between them.

Reassure the woman that the strong pains are normal and that they will help to push her baby out.

Do not encourage her to "push hard".

Use words like "Let your baby out slowly".

Figure 6 Sitting Position for Birth

Figure 7 Squatting Position – may need support for this position

Figure 8 All Fours Position
What to do next

Prepare for the birth

Explain what is happening.
Place a clean absorbable sheet beneath the woman.
Open Birth Pack (Appendix B) and put on a pair of sterile gloves and eye protection.

Assist the women to give birth

**Talk calmly between contractions keeping the woman informed.**

Tell her how much you can see of her baby's head if she can't see or feel it.
Use words like "You are letting this baby out so well, everything's stretching nicely" "That's great, let the baby out slowly".
Once the baby’s head is born, if the face is covered with mucous, meconium, or faeces, gently wipe it clean with a sponge.

**Wait for the next contraction—sometimes this takes a minute or so to occur.**

**Keep your hands off! There is no need to pull on the baby.**

If the membranes are still intact leave well alone until after the baby is born when you will be able to gently wipe the membranes from around the baby's face to aid with his/her breathing.
Communicate any action you need to take - e.g. "I am wiping the baby's face with this cloth".
There is no need to feel for the cord or to clamp and cut it if it is around the baby’s neck. It will unravel as the baby is born. It is very common for the cord to be around the baby’s neck and this is not an emergency.
Wait for the rotation of the shoulders with the next contraction (The shoulders have rotated into their birthing position when you see the baby's head turn to face the mother's inner thigh).

If the shoulders appear to be stuck after awaiting the next contraction, assist the mother onto all fours or into a more upright position and bring her knees towards her chest. This should help dislodge the shoulders so that the mother can push her baby out. If the birth does not proceed seek immediate medical advice.

Wait for the body to slip out and receive the baby into your hands. This may not occur until the next contraction.

In a normal birth, there is no need to suction the baby's airways. Most babies clear their own airways by spluttering and sneezing.

Encourage the woman to pick up her baby when she is ready or pass her the baby.

Note the time of birth.

For management of the cord and placenta see below.

CONGRATULATE HER!

Dry the baby immediately with warm towels.

Keep the baby warm—this is best done by skin-to-skin contact with the mother with warm blankets over both and/or a heater.

Observe the baby

Breathing, heart rate and colour (in good light):

- The baby should have breathing movements and maintain a flexed attitude while changing colour from a bluish tinge to pink. Babies do not need to cry if you observe breathing movements (new babies often have erratic breathing patterns). If the baby's colour following the birth remains pale or blue refer to Module 12 on Neonatal Resuscitation.

- If the woman was given opioids within 4 hours of the birth, observations on the baby (respiratory
rate, heart rate, colour, chest recession) should be made every 15 minutes for the first hour and then at intervals determined by the condition of the baby for at least four hours after the birth.

(NSWHealth PD2005_256 – Appendix F)

If the birthing room is cold, turn off the air conditioner (if possible) put the baby on the mother’s chest and cover baby and mother with a warm blanket.

Maintain the mother and baby's temperature. Remove any wet towels or blankets and replace with warm blankets. Remember to cover the baby’s head, as a lot of heat is lost in this way.

Keep the baby near the mother's breast - the close contact and breastfeeding will help expel the placenta and control bleeding.

Place a name tag on the baby.

**The third stage of labour - the placenta**

The third stage of labour is the birth of the placenta, which is usually separated soon after the baby has been born. Women usually expel their placenta spontaneously in the first hour following birth.

There are two ways of managing this stage of labour, physiologically or actively. The evidence shows that active management of third stage reduces the risk of postpartum haemorrhage.

The NSW Health (Policy Directive 2005_161 - Appendix F) recommends active management be used by trained medical professionals and midwives. Therefore, if the clinician attending the birth has not had this training, it will be appropriate to use the physiological method that allows the placenta to be separated naturally.

**Physiological third stage**

There are often signs that the placenta has separated from the uterus. These include a lengthening of the cord, a small gush show of blood and the uterus rising in the abdomen.
A full feeling in her vagina may also alert the woman that her placenta has separated and is ready to be born. Reassure her that the placenta is much softer than the baby’s head and will be easier to push out.

**Do not push on the mother’s abdomen.**

Place receptacle or a bedpan beneath the woman to collect the placenta.

Encourage the woman to push her placenta out - she may feel better doing this while squatting, sitting on a pan or kneeling forward. Do not try to assist the process other than to encourage the woman to push out her placenta when she is ready.

**Do not pull on the cord.**

Keep the placenta for later inspection by an appropriately skilled person. It should be placed in a plastic bag, sealed and kept refrigerated (this should be discussed with family members as it may not be culturally appropriate to place the placenta in the fridge).

Feel the top of the uterus (fundus) - it should be at about the level of the umbilicus and be firm (tone) and at about the level of the umbilicus. Massage the fundus until it is hard.

Encourage the woman to breastfeed as soon as possible. Breastfeeding helps stimulate the uterus to contract.

Estimate the blood loss.

**Cut the cord**

Clamp and cut the cord once the placenta is born. Ensure there is a two finger space between the baby's skin and then between the first cord clamp and the second cord clamp. Cut the cord between the two clamps.

Make everyone a cup of tea - well done to all!

**Active Management of Third Stage**

Active management of the third stage is the most effective way to prevent a post partum haemorrhage.
Administer Syntocinon (kept in the fridge) 10 units IMI to the woman following the birth of the baby when you are sure there is not a second twin still to be born.

If you only have Syntometrine (1ml IMI), this can be given instead of Syntocinon but be aware that it should not be given if the woman has a raised BP as it can cause hypertension.

Watch for signs of separation of the placenta (see below).

Place a metal clamp on the cord near the vulva. Hold the clamp in one hand.

Place the other hand above the pelvic bone and gently push in and up to prevent the uterus being pulled out.

![Figure 9. Controlled Cord Traction.](image)

Wait for signs of separation and a strong uterine contraction.

**There are often signs that the placenta has separated from the uterus. These include a lengthening of the cord, a small gush of blood and the uterus rising in the abdomen.**

Use gentle traction to pull down on the cord. Never pull on the cord without applying counter-traction as in the diagram above.

Stop if there is resistance, if it feels like tearing or if the placenta does not descend after 30-40 seconds.

Once the placenta comes through the vulva, turn the placenta around twisting on the membranes and VERY GENTLY deliver them to prevent leaving some behind.
Keep the placenta for later inspection by a midwife or an appropriately skilled medical officer. It should be placed in a plastic bag, sealed and kept refrigerated (discuss with the family to make sure it is culturally appropriate to place the placenta in the fridge).

Feel the top of the uterus (fundus) – it should be at about the level of the umbilicus and be firm. Massage the fundus until it is hard.

Encourage the woman to breastfed as soon as possible. Breastfeeding helps stimulate the uterus to contract.

Estimate the blood loss.

**After the birth**

Continue to monitor the woman’s blood loss, uterine tone and vital signs.

Continue to monitor the baby’s breathing, heart rate and colour (in good light).

Make sure the baby stays warm and close to the mother.

Document fully and fill in appropriate paperwork including the Perinatal Data Collection form.
Imminent Normal Birth

Presenting symptoms and signs
- Uterine contractions
- Uncontrollable urge to push
- Baby’s head visible at the vulva

CALL FOR HELP

ASK ABOUT:
- How many weeks/months pregnant?
- When did the contractions start?
- Strength- mild, moderate, strong
- Vaginal discharge or bleeding?
- Is the baby moving?

Prepare for Birth
- Warm room
- Warm towels
- Open birth pack, gloves and eye protection

Position woman for comfort
- Kneeling, hands & knees, squatting, on her side – not flat on her back
- Do not encourage hard pushing

Allow the woman to birth naturally. You do not need to help the baby out

Note time of birth

Physiological management of placenta
Refer to this module

Active management of placenta
Refer to this module

Keep baby warm and dry
Monitor breathing, heart rate and colour (in good light)

Keep mother warm, offer light refreshments
Monitor BP, Pulse, Temperature and PV blood loss
Check the top of the uterus is hard (just near the umbilicus)
MODULE 9:

Meconium Stained Amniotic Fluid
Module 9: Meconium-Stained Amniotic Fluid

Prior to the commencement of labour, or at any time during labour, the fluid that is discharged from the vagina should be clear or pink. Where the amniotic fluid is any shade of green or brown, it means that the baby has passed meconium (opened its bowels) in utero. In some cases, meconium stained amniotic fluid could be indicative of a baby in distress. If any meconium is aspirated into the baby’s lungs then respiratory distress may develop.

What to do first

If birth is imminent
Call for assistance.

If the baby is born and cries readily, there is no need for any action, except usual newborn observations (heart rate, breathing and colour).

If the baby is non-vigorous and has not commenced spontaneous respirations, gentle suctioning of meconium from the mouth and pharynx with a small flexible suction catheter (FG10) should be carried out (Australian Resuscitation Council Neonatal resuscitation Guidelines 2010)

Monitor the baby’s respiratory rate and condition carefully if meconium has been present.

If the baby’s condition deteriorates (↑ respiratory effort, or cyanosis), administer oxygen and call for assistance. See the NSW Health policy on neonatal resuscitation (PD2008_027 - Appendix F) and Module 12 on Neonatal Resuscitation.
Module 9: Meconium-stained amniotic fluid

**Meconium-stained amniotic fluid**

If meconium is present in the amniotic fluid (vaginal discharge may be green or brown)

**What to do first**

If birth is imminent
- Call for assistance
- Await birth of the baby
- Assess the need for resuscitation at birth (observe heart rate, breathing and colour)

- If baby crying - no need for any action
- If meconium is very thick and the baby is not breathing, gently suction the mouth and pharynx with a small flexible suction catheter (FG10)

Monitor breathing, heart rate and colour
- If ↑ respiratory effort or cyanosis
  - Call for assistance
  - Administer oxygen.
MODULE 10:
Emergency Breech Birth
Module 10: Emergency Breech Birth

Presenting symptoms

The woman presents with strong contractions. With each contraction she may experience pressure in her vagina or rectum and a strong urge to bear down.

Presenting signs

There will be:

- A gradual gaping of the anus, thinning out and stretching of the perineum and parting of the labia as a foot or buttocks gradually come on view.

There may be:

- Some blood and mucous expelled before the baby’s foot or buttocks come on view.
- Fluid expelled with each contraction if the waters have broken.
It is normal for meconium to be passed as the baby’s buttocks are squeezed.

**What to do first**

Call for help.
Make the room as warm as possible and have warm towels ready for the baby.
Help the woman adopt a comfortable position for birth.

The position of comfort for breech births is usually kneeling forward or standing supported. The diagram below shows how gravity and an upright position of standing or squatting assist the birth.
The birth of the buttocks / feet will occur slowly, more becoming visible with each contraction.

Do not touch the baby.

Talk calmly between contractions.

**Figure 12. Breech Birth, Note - hands nearby but should not be touching.**

---

**Keep the woman informed.**

**Prepare for the birth**

Open Birth Pack (Appendix B) and sterile gloves.

Tell the woman how much you can see of her baby's body if she can't see or feel it.

Use words like "You are letting this baby out so well, everything's stretching nicely" "That's great, let the baby out slowly".

---

**What to do next**

**Do not take your eyes off the baby but do not touch the baby either.**
Wait for the next contraction. Let the baby hang until the neck comes into view. There is no need to bring down a loop of cord. The baby’s head should flex spontaneously to enable it to be born.

Do not pull on the baby.

Once you can see the nape of the neck you may gently support the baby’s body as the head slips out. Do not squeeze the baby.

The birth of the head should occur slowly. The head may not be completely born until the next contraction.

Towel the baby dry. Breech babies are often shocked and need further assistance to establish respiration, such as vigorous rubbing down to stimulate them. See Module 12 on Neonatal Resuscitation. If the baby is well, pass him/her to the woman. Keep the baby warm — this is best done by skin-to-skin contact with the mother with warm blankets over both and/or a heater.

Refer to Module 8 Normal birth for care of the woman and her baby after the birth, cutting the cord, birth of placenta and ongoing observations.
Module 10: Emergency breech birth

Breech Birth

CALL FOR HELP

WHAT TO DO:
• Warm the room and open the birth pack
• Ensure woman is in a comfortable position ie kneeling, standing etc
• Reassure woman and support persons throughout the birthing
• DO NOT TOUCH THE BABY AS IT EMERGES
• Let the baby hang till the neck is visible
• Do not take your eyes off the baby
• Using sterile gloves, gently encourage the mother to birth the head slowly
• Note time of birth of baby

Care of Baby
Towel dry
Resuscitation as per Neonatal Resuscitation- Module 12

Care of Mother
as per Normal Birth – Module 8
MODULE 11:
Vaginal Bleeding After Birth

11a: Primary Postpartum Haemorrhage (PPH)
Vaginal bleeding immediately after birth (first 24 hours)

11b: Secondary Postpartum Haemorrhage
Vaginal bleeding from 24 hours to 6 weeks following birth
Module 11a: Primary Postpartum Haemorrhage (first 24 hours after birth)

Call for help – contact the nearest available medical officer and other staff as indicated. Emergency contact numbers are provided at the front of this manual.

What to ask

How much bleeding?
Estimates of blood loss are notoriously low, often half the actual loss. Therefore this should be taken into consideration when estimating blood loss.

Bleeding may occur at a slow rate over several hours. Postpartum haemorrhage may not be recognised until the woman enters a state of shock.

Following the birth the uterus should contract to prevent blood loss from the placental site. It is normal to bleed like a heavy period after a birth. If a woman has been lying down, often she passes clots when she stands as blood has been pooling in her vagina.

Postpartum haemorrhage can occur very quickly. Observe carefully and treat haemorrhage at the first signs.
What to do

Think of the 4 T’s – reasons for Postpartum Haemorrhage (PPH)
Tone, Trauma, Tissue, Thrombin.

Make a rapid evaluation including vital signs – pulse, BP, respirations, temperature and colour.

If shock suspected – TREAT immediately.
If signs of shock not present – OBSERVE very closely
Think ABC – maintain airway, breathing and circulation.
Commence IV fluids – give Normal Saline.
Give the woman oxygen if necessary.

Tone

The uterus should feel hard like a grapefruit or rockmelon. In an atonic uterus, it feels soft and boggy. Atonic uterus is the cause of 70% of PPH’s

Feel the abdomen for the uterus at about the level of woman’s umbilicus - if spongy, massage the top of uterus until it feels hard - repeat as necessary.

Give Syntocinon 10 units IMI or Syntometrine IMI i.e. 1 amp [kept in the fridge]. Note: If the woman has elevated blood pressure (>140/90), avoid Syntometrine unless necessary.

Make sure that the woman's bladder is empty – you may need to insert a urinary catheter.
If the woman plans to breastfeed, encourage the baby to suckle - this will help the uterus to contract.

If the uterus is still boggy and the woman is still bleeding:
- Insert two large bore IV cannulas.
- Commence IV Syntocinon - 40 units in 1L Normal Saline over 4 hours and use the second cannula for fluid replacement therapy.
Module 11: Vaginal bleeding after birth (within 24 hours)

- Take blood for cross match.
If the uterus is still soft and boggy and the woman is still bleeding.

- Perform bimanual compression (see diagram).

![Figure 14. Bimanual Compression.]

Trauma

Perineal, cervical and vaginal lacerations are the cause of 20% of postpartum haemorrhages.

Check the perineum and vagina for any lacerations.
If evidence of laceration then apply pressure.

Tissue

Retained fragments of the placenta cause 10% of postpartum haemorrhages (the most common cause of a secondary haemorrhage, after 24 hours, is retained tissue).

Manage as for Tone (above).
Check the placenta to determine if any pieces are missing.

Thrombin

Coagulopathies are rare and cause less than 1% of postpartum haemorrhages.
Coagulopathy may also be secondary to a significant postpartum haemorrhage.

Is the blood clotting on the floor?
If not:

- Manage as described in “Tone’ above.
- Arrange transfer.
- If the blood loss has been extensive, inform the transfer team as they may bring replacement blood products with them.
Postpartum Haemorrhage-first 24hrs

WHAT TO THINK:
The 4 T’s and ABC

**TONES-UTERINE**
(70%)
Is it soft?

- Massage uterus
- Syntocinon 10u/s IMI
  Or
- Syntometrine 1 amp
  IMI only if BP normal
- Empty bladder

---

**TRAUMA**
(20%)
Is there damage?

- Assess for lacerations
  Apply pressure

- TRANFER to appropriate
  venue for suturing (may need theatre)

---

Inform the transfer team

Uterus still soft/boggy

- Bimanual compression

---

**THROMBIN**
(1%)
Is the blood clotting?

- NO

---

**TISSUE-PLACENTA**
(9%)
Incomplete or not expelled?

- YES

---

Maternity Emergency Guidelines for Registered Nurses
Module 11b: Secondary Postpartum Haemorrhage (after 24hrs to 6 weeks)

DEFINITION: Bright vaginal bleeding with or without clots in the period 24 hours to 6 weeks following birth (most commonly between 7-10 days).

It is important that any heavy sudden bright bleeding in this period be investigated as soon as possible.

Bleeding can occur up to 12 weeks postpartum, however the definition of a postpartum haemorrhage in Australia is within 6 weeks.

What to ask

- How much bleeding is/was there?
- Enough to soak underwear, a pad, or several pads?
- Is the bleeding bright red or dark?
- When did the bleeding start?
- Has there been any vaginal discharge prior to the start of bleeding?
- What does the blood loss smell like?
- Have you felt hot/cold/shaky/generally unwell?

What to do

Feel the woman’s abdomen for the top of the uterus (between her umbilicus and symphysis pubis).
The uterine fundus (top of uterus) is usually palpable until about 10 days after the baby’s birth.

Fundal massage can be attended if the uterus is not firm and central

Assess the rate and amount of blood loss (is it a continuous trickle, a gush, clots).

Assess the smell of the blood loss/discharge.

Collect low vaginal swab for culture.

If infection is present, the discharge may be smelly and the uterus may be larger than expected and tender when palpated.

Assess vital signs - temperature, pulse, respiratory rate and BP.

Consult nearest medical officer or regional or base hospital.

The medical officer may order:

- An appropriate oxytocic medication, e.g. Syntocinon, Syntometrine or Ergometrine. (see NSW Health PD 2010_064 – Appendix F)
- Commencement of antibiotics orally or IV.
- Ultrasound of the uterus if this is available at the facility.

What to do next

If the woman is bleeding heavily:

Call for help.

Insert two large bore IV cannulas.

Commence IV fluid replacement therapy.

Obtain blood sample for FBC, group and cross match.

Insert an indwelling urinary catheter and monitor output hourly.

Ensure the woman remains nil by mouth.

Prepare the woman for operating theatre either at the hospital or after transfer.
Module 11: Vaginal bleeding after birth (24 hours to 6 weeks)

Secondary Postpartum Haemorrhage 24-hrs to 6 weeks

ASK ABOUT:
- How much vaginal bleeding?
- When did it start?
- Colour of discharge/bleeding?
- Is there an offensive smell?
- Are you feeling well? Sweating? Fever?

WHAT TO DO:
- Assess blood loss
- Feel for top of uterus
- Vital signs
- Low vaginal swab
- Discuss with Medical Officer

WOMAN MAY NEED:
- Oxytocics
- Antibiotics
- Ultrasound
- Theatre for Dilatation & Curettage (D&C)

IF BLEEDING IS HEAVY:
- IDC
- 2 large bore cannulas
- IV Fluids
- FBC, Blood group and cross match
- 40 units Syntocinon in 1 litre Normal Saline @ 250 mls/hr
- Nil By Mouth and Theatre
MODULE 12:
Neonatal Resuscitation
Module 12: Neonatal Resuscitation

All newborn babies need to be warm and dry and some may need help with breathing or maintaining their blood sugar levels. 90% of babies will not need any form of resuscitation except stimulation. If resuscitation is required, bag and mask ventilation will be adequate in almost all cases until help arrives.

What to do first

Dry and stimulate the baby with a warm towel.
Assess breathing, heart rate (HR) and tone (the baby’s heart rate may be felt at the umbilicus, or easily heard with a hand held Doppler or stethoscope placed directly on the chest).
If the baby is unresponsive, call for help.
Clamp and cut the cord.
Place under radiant warmer.
Commence resuscitation (NSW PD 2008_027 - Appendix F).
Where meconium is present at birth and the baby needs resuscitation see Module 9 'Meconium-Stained Amniotic Fluid' for specific management instructions.

What to do next

Ensure the baby’s airway is open. Place the baby in “sniffing position” i.e. not hyperextended or deflexed. Suction of the pharynx is not recommended unless obvious obstruction.
If the baby is breathing, check its heart rate.

Use a fetal Doppler or stethoscope on the baby’s chest, or feel at the umbilicus.

If the baby is breathing, its HR is greater than 100 beats/min and it is centrally pink → give the baby to the mother.

If the baby is breathing and its HR is less than 100 beats/min → commence bag and mask ventilation.

If the baby is not breathing → commence bag and mask ventilation.

**Bag and mask ventilation**

Ensure correct size mask is used - needs to cover mouth and nose but not eyes.

Place the mask over the mouth and nose. Air should be administered initially; however 100% Oxygen should be available if there is no response in heart rate by 90 seconds. The flow rate should be set at 8 – 10 L/min.

First few breaths should be long and slow to expand the baby’s lungs.
Continue at a rate of 60 breaths per minute (1 per sec) observing the rise and fall of the chest.

After 30 seconds, reevaluate HR and breathing.

If the baby is breathing/crying, its HR is greater than 100 beats/min and it is centrally pink → give the baby to the mother and keep baby warm by skin to skin.

If the baby is still not breathing and/or its HR is 60-100 beats/min → Continue bag and mask ventilation and reassess in 30 seconds. Assess need for supplementary oxygen.

If the baby is not breathing and its HR is less than 60 beats/min → continue bag and mask ventilation and start cardiac compressions. SWITCH TO 100% OXYGEN AT 8 – 10L/min

**Cardiac compression and ventilation (3:1)**

The lower one third of the sternum should be used for compression.

Place the two thumbs on the lower third of the sternum with fingers encircling the chest and supporting the back.

Aim for a compression depth of one third to one half of the anterior-posterior dimension of the chest.

Three compressions are performed and then a brief pause for a ventilation breath (3:1 = 90 compressions and 30 ventilations per minute). Ideally there should be no delay with the pause. Evaluate after 30 seconds.
The medical officer may order drugs if ventilation and cardiac compression are ineffective - refer to the NSW Health PD2008_027 – Appendix F. Drugs are rarely used in neonatal resuscitation.

Opioid antagonists (e.g. Nalaxone) should not be used as a substitute for effective resuscitation.

Nalaxone should not be given to babies whose mothers are known or suspected to be addicted to opioids.

**NOTE**: Respiratory grunting, chest retraction, nasal flaring or chest recession all indicate respiratory compromise requiring oxygen therapy.

**Equipment needed**

Heat source and warm towels.

Good light source.

Neonatal resuscitation bag and appropriate sized masks (0, 00, 000).

Oxygen supply.

Suction equipment (Catheters 8-10 Fg).

Stethoscope.

Firm flat surface.

**Care after resuscitation**

Maintain the mother and baby's temperature. Remove any wet towels or blankets and replace with warm blankets. Remember to cover the baby’s head, as a lot of heat is lost in this way.

Keep the baby warm—this is best done by skin to skin contact with the mother with warm blankets over both and/or a heater.
Observe the baby closely – monitor temperature, heart rate and respirations (consult regarding need for BSLs).
Module 12: Neonatal resuscitation

Neonatal Resuscitation

Birth

Breathing or crying?
Good muscle tone?

Yes

Routine care:
Dry the baby
Provide warmth
Place skin to skin with mother
Clear the airway only if needed
Assess breathing, colour and heart rate (HR)

NO

Dry and stimulate
Position the head and neck to open the airway
Provide warmth

Assess breathing and HR *

If HR <100/min or inadequate breathing
Give positive pressure ventilation until HR >100 and infant breathing

Inadequate breathing and HR <60/min*
Assess adequacy of ventilation and improve if possible
If HR does not increase >60/min
Give chest compressions with positive pressure ventilation at 3:1

If HR still does not increase > 60/min reassess ventilation technique *
Give adrenaline
May also need to give IV fluids

* endotracheal intubation may be considered at several stages

If baby is breathing, HR is >100/min and beginning to look pink then give routine care and observations appropriate for gestation

Maternity Emergency Guidelines for Registered Nurses  Page 84
MODULE 13:

A Baby With Abnormalities
Module 13: A baby with abnormalities

Babies born with physical / anatomical abnormalities may need specific care. Some need urgent specific treatment and transfer. Notify the appropriate transfer service.

The birth of a baby with an abnormality can be a shock and very stressful for the woman and her partner. Sensitivity and the provision of psychological support are paramount.

What to do first

Assess the baby.

Contact NETS immediately (NSW and ACT only) telephone 1300 36 2500.

Decide what sort of abnormality that baby has (Appendix B - Glossary).

Follow the Neonatal Resuscitation Module.

Gastrochisis, Spina Bifida, Exomphalos

Cover exposed bodyparts with cling wrap – this may include placing cling wrap around the baby’s body loosely.

Never place warm saline packs over the exposed areas.

Make a pad and roll around edges of defect (like an air-ring) to keep the pressure off the area.

Try not to handle the bowel in the case of gastrochisis

Try not to break the sacs of the spina bifida or exomphalos

Babies with spina bifida who have no other problems may only need elective transfer. Discuss with appropriate clinicians at the tertiary hospital.

If babies are not responding to resuscitation, any of the following abnormalities may be present:

Cardiac abnormalities.

Tracheo oesophageal fistula.
Diaphragmatic hernia.

**What to do next**

Keep the baby warm.

Monitor respiratory rate frequently. It should be 40 - 60 breaths per minute.

Heart rate should be >100 beats per minute - if not, monitor frequently or refer to resuscitation techniques.

Colour - cyanotic babies will require oxygen preferably warmed and humidified.

Respiratory grunting, chest retraction, nasal flaring or chest recession all indicate respiratory compromise requiring oxygen therapy and consultation.

Maintain contact with specialist team or medical officer for decisions regarding medical management. They can provide information regarding where the mother and baby are going.

Arrange for transfer of mother and baby to referral centre (if possible).

Give parents and support people information about referral hospital and directions to get there.
MODULE 14:

Stillbirth or Neonatal Death
Module 14: Stillbirth or neonatal death

The death of a baby of any gestation can be a devastating occurrence for the parents, the family, and the carers involved. The initial care and management of the situation will have long term consequences so must be handled sensitively and with due consideration for both the parents’ wishes and the statutory requirements.

What to ask

Prior to birth (if you and the parents know that the baby has already died):

Do you want to see the baby at birth?
Do you want to know the gender of the baby?

Some parents will not wish to know about or see the baby immediately. It is important to respect their wishes at this time. Ensure the baby is easily accessible as the parents may change their minds when they have had time to come to terms with the situation.
Do you know what the baby will look like?

If the baby is of early gestation it will look very red and shiny and some of its blood vessels will be clearly visible through the skin. If the baby has been dead for some time it will be very floppy and its skull bones may be collapsing. Babies that are at or closer to term may have no visible damage and may only feel floppy. If these babies have been dead for some time their skin may have begun to slip and it is important to handle them gently to minimise further damage and to warn the parents that this may happen.

Do you want to hold the baby at birth?

If the parents indicate that they wish to hold the baby at birth it is important to treat the baby as you would one who is living. Prepare a warmed bunny rug or blanket, wrap the baby gently and give to the parents. Explain what you will do before the baby is born so that the parents are ready.

Would you like to bath the baby?

Would you like photographs with the baby?

Does the baby have a name?

If the baby has a name it is important to refer to him / her by that name. If the baby has no name be careful to always refer to her/him by gender, never as ‘it’.

Would you like a minister of religion or other person called?
What to do

After the baby is born:

If the parents wish to hold the baby:

− Wrap the baby gently in a warmed bunny rug or blanket and give to the parents.
− Do not put time limits on how long the baby may stay with the parents.

If the parents do not wish to see or hold the baby:

− Wrap the baby as previously detailed and remove to another room.

With or without the parents being present (depending on their choice):

− Weigh and measure (length and head circumference) the baby.
− Take hand and foot prints (an ordinary stamp pad and a piece of card can be used for this). This should also be done prior to bathing or sponging so that the ink can be removed.
− Assist the parents to take photographs with the baby.
− All photographs should be taken as soon as possible after the birth as deterioration in skin condition can occur very quickly.
− Full body photographs for medical records and congenital condition notification should be taken at this time. If any obvious congenital condition is present then closer photographs should be taken of the area. A measuring device (ruler or paper tape) should be placed next to the baby for size estimation.
− Depending on the gestation and degree of maceration (degeneration) gently bath or sponge the baby.
Identify the baby using plastic identification labels (if available) or paper or cardboard labels attached with string. Do not attach strapping directly to the baby’s skin.

If suitable clothing is available, dress the baby. If suitable clothing is not available, wrap the baby so that the face/head and perhaps the hands are visible. Take photographs for the parents. Close-ups of hands and feet may be taken as these are often the best features of very small babies.

If the parents do not want these photographs immediately they should be filed with the medical record as parents often decide at a later date that they do want photographs. The parents should be informed that the photographs exist and how they can be accessed.

When leaving the baby, be careful to position him/her in a supine (lying on back) position so that any post mortem lividity (dark coloration due to pooling of blood in lowest area) will not be on any area of the baby’s face.

Leave the baby with the parents for as long as they wish (hours or days if necessary). The baby will need to be taken to the morgue within the first 8 hours and then from time to time for refrigeration (to delay deterioration), especially if the weather is warm.

**Complete Documentation**

(NSW Health PD2007_025 – Appendix F)

a) Progress notes (record everything that has been done and the parents’ wishes).

b) New South Wales Register of Congenital Conditions (NSW RCA) Notification form – in NSW this will need to be obtained from NSW Health.

c) In most states, a Confidential Report on Perinatal Death must be completed. In NSW this can be obtained from NSW Health.

d) If the baby weighed more than 400gms or was 20 weeks gestation or more:

   - In NSW, a Family Tax Benefit form should be obtained from Centrelink, completed and given
to the parents. Check in other States and Territories.

- A Birth Registration form will need to be obtained from the Registry of Births, Deaths and Marriages, completed and given to the parents.

- A Death Certificate will need to be completed by a doctor.

- A Newborn Screening Test card with the details completed but without blood spots should be sent to the NSW Newborn Screening Program, Locked Bag 2012, Wentworthville, NSW, 2145. Cards can be obtained from this same address.

- The baby will need to be buried or cremated.

**What to do next**

Discussion with the parents about the need for autopsy should be undertaken at a mutually agreeable time. The pamphlet 'information for parents about the Post-mortem Examination of a stillborn baby' available from NSW Health will be useful here.

The baby may need to be transferred to another facility for autopsy but parents / families should be reassured that he or she will be returned for burial / cremation.

Help the parents and family to debrief - often all that is necessary is that you listen quietly while they talk about the baby’s birth and how they felt / feel about it. Do not feel that you have to ‘fix it’.

Be aware that 'SIDS and Kids' provide a range of pamphlets and information booklets which are available online and in hard copy.

Contact your nearest midwife for information regarding postpartum care of the mother, with special regard to breast care.

Provide the parents with contact details for:

- The nearest midwife.
- Any support groups in your area.
Module 14: Stillbirth or neonatal death

- SIDS and Kids booklet ‘Miscarriage’ if this is appropriate for the gestational age.
- The nearest Child and Family Health Centre.
- The nearest social worker.

It is also important that you and anyone who was involved with the birth and caring for the family also debrief. This may involve just talking amongst yourselves or a more formal process with a counsellor.
MODULE 15:

Retained Placenta
Module 15: Retained Placenta

With active management it is considered prolonged when the placenta remains undelivered after 30 minutes. With physiological management a longer time may be allowed, up to one hour providing the mother is in good condition and there is no excessive bleeding.

Presenting signs & symptoms

- The retained placenta can be partially or completely separated but trapped in the cervix or lower segment, in both cases bleeding will occur from the placental site.
- If the retained placenta is completely adhered to the uterine wall there will be no bleeding from the placental site.

The following may cause delay in the third stage by interfering with the descent and expulsion of a separated placenta:
- Full bladder
- Constriction ring – localised spasm of uterine muscle just above the lower segment – this is unusual.
Retained placenta

What to do first

Assess
- Is there bleeding?
- Is the woman showing signs of shock
- BP, pulse, respiratory rate and temperature

What to do next

If there is no bleeding
- Contact medical officer and discuss situation
- Explain to the woman what is happening
- Insert IV cannula (the largest you can manage) and take blood for FBC and group and hold.
  - If the placenta does not deliver by itself the woman will have to go to the operating theatre for a manual removal under general anaesthetic.

If there is bleeding
- Call for assistance
- Explain to the woman what is happening
- Insert IV cannula (the largest you can manage) and commence 500mls Normal Saline. Insert a second IV cannula and take blood for FBC, blood group and cross match as there is a risk of severe haemorrhage
- Treat symptoms of shock if there is excessive bleeding.
- Contact medical officer and discuss situation
- If the placenta does not deliver by itself the woman will have to go to the operating theatre for a manual removal under general anaesthetic. (DOH PD 2005_264 - Appendix F).
Retained placenta

Retained Placenta

Presenting symptoms and signs
- The retained placenta can be partially or completely separated but trapped in the cervix or lower segment, in both cases bleeding will occur from the placental site. If the retained placenta is completely adhered to the uterine wall there will be **no bleeding** from the placental site.

**WHAT TO DO FIRST**

**ASSESS:**
- Is there bleeding?
- Is the woman showing signs of shock
- BP, pulse and temperature

**IF THERE IS NO BLEEDING**
- Contact medical officer and discuss situation
- Explain to the woman what is happening
- Insert IV cannula (the largest you can manage) and take blood for FBC and group and hold.

**IF THERE IS BLEEDING**
- Call for assistance
- Explain to the woman what is happening
- Insert IV cannula (the largest you can manage) and commence 500mls Normal Saline.
- Insert a second IV cannula and take blood for FBC, blood group and cross match as there is a risk of severe haemorrhage
- Treat symptoms of shock if there is excessive bleeding.
- Contact medical officer and discuss situation

**IF THE PLACENTA IS NOT DELIVERED**

If the placenta does not deliver by itself the woman will have to go to the operating theatre for a manual removal under general anaesthetic.
References


http://www.resus.org.au/


The following sources are gratefully acknowledged for the use of their diagrams and figures:
World Health Organization (as above)
Congress Alukura and Nganampa Health Council Inc (as above)
Photo Gallery - http://www.alaskaems.org/photogallery/photo_gallery_medical.htm
Leather Dupris MoonDragon Birthing Services http://www.moondragon.org
Appendix A: Essential Documentation

As well as the routine record keeping which accompanies any occasion of service, there are certain essential documents, which must be completed following the birth of an infant. The documentation can vary between States and Territories but usually include:

**Perinatal Data collection (PDC)**

This information is collected following the birth of every baby in Australia who is greater than 400 grams in weight or 20 weeks or more gestation. The data collection system is different in each State and Territory but will include Demographic information details of the woman’s family and obstetric histories, details of the current pregnancy, labour and post partum period. In NSW, the required information is normally entered electronically, but must be completed manually if a computerised maternity information system is not available.

In NSW, the manual form is divided into four sections: the original (top copy) which is sent to the NSW Ministry of Health Data Collection and Quality Unit; a copy which is retained by the hospital for their records; a copy for the mother and a copy for the Child and Family Health Centre to which the mother will be taking the baby. In NSW the PDC forms can be obtained from Industrial Printing Co, email address print@ipc.com.au If a computerised obstetric information system is available in the hospital where the birth occurred, an appropriate print out should be provided and forwarded to the nominated local early childhood health centre or community health centre.
Centrelink Claim Form: Newborn Child, Claim for Paid Parental Leave, Family Assistance and Medicare

In NSW, a person who was present at the birth is required to complete the Proof of Birth-Doctor/Midwife Declaration of this multiple page document. Check to see if this is a requirement in your State or Territory. The mother (or father) is required to complete this document and take it to the nearest Centrelink office for processing, so that any entitlements may be paid.

Birth Registration Statement
This is another multi section form, part of which must be filled out by the hospital at which the birth took place. The parents then complete the remainder of the document and send it to the nearest Registrar of Births, Deaths and Marriages, whose address appears at the bottom of the form, so that the baby’s birth may be officially registered and a Birth Certificate issued.

Personal Health Record
This is a booklet which is issued to every baby born in most States and Territories and facilitates the keeping of childhood health records, including records of immunisations, childhood development, illnesses and hospitalisation, as well as providing information for parents. A copy of the discharge summary (electronic version or hard copy) may be added to this booklet.

Congenital Conditions Register
Scheduled congenital conditions detected during pregnancy or in infants up to one year of age in NSW are required to be reported under the NSW Public Health Act 2010. Information on the reporting requirements of congenital conditions can be found in the NSW Health PD 2012_055 Congenital Conditions Register – Reporting Requirements.

Clinical Examination of Fetus and Placenta Following Stillbirth
In the event of a stillbirth, examination of the fetus and placenta should be carried out in line with the instructions issued in the NSW Health PD 2007_025 Stillbirth – Management and Investigation.
In most states, a Confidential Report on Perinatal Death must be completed. In NSW this form can be found in NSW Health PD 2011_076 Deaths-Review and Reporting of Perinatal Deaths.

**Centrelink Claim Form: for Bereavement Payment**
This form is to be completed for all stillbirths. A person who was present at the birth is required to complete part of this document. The parent/s then completes the remainder of the form and take/send it to the nearest Centrelink office for processing, so that the entitlements may be paid.
Appendix B: Glossary of Terms & Birth Pack Contents

List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBC</td>
<td>Full Blood Count</td>
</tr>
<tr>
<td>IV</td>
<td>Intravenous</td>
</tr>
<tr>
<td>LFTs</td>
<td>Liver Function Tests</td>
</tr>
<tr>
<td>MSU</td>
<td>Mid Stream Urine (requiring culture and sensitivity to be undertaken)</td>
</tr>
<tr>
<td>NETS</td>
<td>Neonatal Emergency Transport Service</td>
</tr>
<tr>
<td>NICU</td>
<td>Neonatal Intensive Care Unit (in this context, a Level 3 Unit able to provide long term mechanical ventilation for neonates and other specialised services).</td>
</tr>
<tr>
<td>PSN</td>
<td>Pregnancy and Newborn Services Network</td>
</tr>
<tr>
<td>PPH</td>
<td>Postpartum haemorrhage</td>
</tr>
<tr>
<td>PV Loss</td>
<td>Discharge/fluid loss from the vagina</td>
</tr>
<tr>
<td>UEC</td>
<td>Urea, Electrolytes and Creatine Estimation</td>
</tr>
<tr>
<td>UTI</td>
<td>Urinary Tract Infection</td>
</tr>
</tbody>
</table>

Terms Defined

Amniotic fluid  Clear fluid that surrounds the fetus in the maternal uterus.

Breech  The fetal buttocks or feet are presenting first (instead of the head) during the birth.

Contractions  Tightening of the maternal abdomen occurring at regular intervals and accompanied by discomfort/pain which may be expressed as either abdominal or backache.

Diaphragmatic hernia  A congenital condition. Herniation of abdominal organs into the thoracic cavity through a defect in the diaphragm

Eclampsia  Fitting caused by extension of pre eclampsia.

Exomphalos  Herniation of the abdominal wall viscera into the umbilical cord. It is usually covered by a peritoneal sac and the umbilical cord protrudes from the apex.
<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fetus</td>
<td>Baby before birth.</td>
</tr>
<tr>
<td>Forewaters</td>
<td>The membrane in front of the baby’s head containing liquor (fluid that surrounds the baby).</td>
</tr>
<tr>
<td>Gastrochisis</td>
<td>A centrally located full-thickness abdominal wall defect with loops of bowel protruding outside the wall defect and does not have a protective sac covering it. The umbilical cord is an intact structure at the level of the abdominal skin, just left of the defect.</td>
</tr>
<tr>
<td>Implantation</td>
<td>Attachment of the developing embryo to the uterus (may cause minor blood loss)</td>
</tr>
<tr>
<td>Kleihauer</td>
<td>Test of maternal blood to detect the presence of fetal red blood cells in the maternal circulation.</td>
</tr>
<tr>
<td>Liquor</td>
<td>Amniotic fluid (has been described as smelling sweet or musty – and has been compared to the smell of bleach or semen).</td>
</tr>
<tr>
<td>Meconium liquor</td>
<td>The presence of fetal faeces in the amniotic fluid.</td>
</tr>
<tr>
<td>Membranes</td>
<td>Membranous bag which contains the fetus, placenta and amniotic fluid.</td>
</tr>
<tr>
<td>Period of gestation</td>
<td>Length of pregnancy, usually expressed in weeks. For example:</td>
</tr>
<tr>
<td></td>
<td>Full term = 37 - 42 weeks</td>
</tr>
<tr>
<td></td>
<td>Premature or Preterm = less than 37 weeks</td>
</tr>
<tr>
<td></td>
<td>To calculate and estimated date of birth : First day of the last menstrual period (LMP) + 7 days + 9 months ie. (LMP=10/10/07 (+ 7 days) = 17/10/07 (+9 months) = 17/07/08)</td>
</tr>
<tr>
<td>Placental separation</td>
<td>Detachment of the placenta from the uterine wall.</td>
</tr>
<tr>
<td>Pre eclampsia</td>
<td>Multi system disease peculiar to pregnancy characterised by various combinations of symptoms including rising BP and proteinuria.</td>
</tr>
<tr>
<td>Postpartum haemorrhage</td>
<td>Postpartum haemorrhage (PPH) is defined as blood loss of 500mL or more during and after childbirth; severe PPH is defined as blood loss of 1000mL or more or any amount of blood loss postpartum that causes haemodynamic compromise.</td>
</tr>
<tr>
<td>Show</td>
<td>A collection of mucus and/or blood that sits in the neck of the womb and becomes dislodged as the cervix prepares</td>
</tr>
</tbody>
</table>
for labour (can be clear or bloody).

<table>
<thead>
<tr>
<th>Condition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spina Bifida</td>
<td>Bony defect of spine with protrusion of meninges and cord and associated skin defect. The area may or may not have a sac covering the defect.</td>
</tr>
<tr>
<td>Stillbirth</td>
<td>Death prior to the birth of an infant weighing greater than 400gms or over 20 weeks gestation</td>
</tr>
<tr>
<td>Tracheo-oesophageal atresia +/- fistula</td>
<td>Where a blockage occurs between the oesophagus and the stomach and may or may not have a connecting fistula with the trachea.</td>
</tr>
</tbody>
</table>

**Birth Pack**
This is a list of suggested contents in a birth pack.

- Cord clamps x 2
- Blanket
- Towel
- Scissors
- Gloves
- Nametags x 2
- Pen
- Goggles
- Blue sheet x 2
- Gauze swabs
Appendix C: Referral Agency Phone Numbers

NETS
1300 36 2500 (hotline)
1300 36 2499 (warm line - enquiries, non-urgent cases)
1300 36 2498 (fax service)

National Association for Prevention of Child Abuse and Neglect (NAPCAN)
National Domestic Violence Line
Toll free/anytime/any day/ national
1800 200 526

Family and Community Services (FACS)
24 hour Domestic Violence Line 1800 656 463

MotherSafe
Free telephone service for women and healthcare providers concerned about medication, infection and occupational exposures during pregnancy and breastfeeding:
Monday – Fri day 0900-1700
9282 6539 (Sydney metropolitan area)
1800 647 848 (non-metropolitan area)

Translation service:
13 14 50

SIDS and Kids (NSW)
Telephone support
1800 651 186 (24hrs)
Appendix D Other Resources and Links

Australian Resuscitation Council
http://www.resus.org.au/

CIAP (Clinical Information Access Portal) (NSW Only)
NSW Health Internal website with many resources and a number of online text books

CRANApuls: Improving Remote Health:
www.crana.org.au → The aim of CRANApuls is to educate, support and advocate for all health professionals working in the remote sector of Australia. There are many resources in relation to education for health professionals and information for parents on the site. For more information contact CRANA offices (08 89535244)

NETS web page:
www.nets.org.au

Rural Health Education Foundation - Educational Videos for non-Midwives (Midwifery and Obstetric Series) including Maternity Emergencies and Neonatal Resuscitation
www.rhef.com.au

Link to NSW Health polices, guidelines and other publications

Internet www.health.nsw.gov.au/audit/manuals or
Appendix E: Evaluation Form

The Australian College of Midwives NSW Branch Inc. aims to provide you with the highest quality resource material for use in maternity emergencies. If you have recently used this package we would appreciate your feedback on its usefulness.

Your reply will be invaluable to us in updating the package content so that it can continue to be of value to nurses in rural and remote areas in the future. (You may wish to photocopy the form so that it can be used again)

Please take a few minutes to complete this form as soon as possible after the maternity emergency.

Name and location of hospital/health centre

Your professional category (RN, EN, etc)

Years of service

Type of emergency presenting when you used these guidelines

Your age

Strengths of the guidelines (in regard to helping with communication during the emergency)

Weaknesses of the guidelines

Please add any suggestions for future guidelines

Send completed form to Australian College of Midwives NSW Branch Inc. PO Box 62 Glebe NSW 2037. Thank you for completing this evaluation
Appendix F: NSW Health Policy Directives

The following policy directives have been appended to this document.

PD2012_022 - Maternity – Management of Early Pregnancy Complications

PD2008_027 – Maternity - Clinical Care and Resuscitation of the Newborn Infant

PD2010_069 Critical Care Tertiary Referral Networks (Perinatal). *To be read in conjunction with:*

PD2010_021 Critical Care Tertiary Referral Networks and Transfer of Care (Adult)

PD2007_025 – Stillbirth – Management and Investigations

PD2005_161 – Maternity Emergencies

PD2011_064 – Maternity – Management of Hypertensive Disorders of Pregnancy

PD2005_239 – Magnesium Sulphate Infusion Protocol for Eclamptic Seizures

PD2005_241 – Protocol for Administration of Intravenous Hydralazine for Severe Hypertension in Pregnancy

PD2011_025 – Maternity – Tocolytic Agents for Threatened Preterm Labour before 34 weeks Gestation

PD2005_256 – Observation and Management of Newborn Infants with Respiratory Maladaptation to Birth, Including Infants Exposed to Intrapartum Opioids Administered to the Mother During Labour.

PD2010_064 – Maternity – Prevention, Early Recognition & management of Postpartum Haemorrhage (PPH)
National Clinical Guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn (2006) Commonwealth of Australia (currently under revision by NSW Health)

GL2008_001 Nursing & Midwifery Clinical Guidelines – Identifying and Responding to Drug & Alcohol Issues