Obstetric Epidural Analgesia Management Guidelines

(For detailed information regarding epidural prescribing and management refer to local hospital policy)

• Observations after initiation and top up (maternal blood pressure, heart rate) every 5 minutes for 20 minutes.
• Continuous electronic fetal heart rate monitoring is required for the duration of intrapartum epidural analgesia.
• Subsequent maternal observations on this form to be recorded hourly.
• Motor block assessment every 2 hours.
• Epidural catheter site check: minimum every 8 hours, and prior to top ups.
• Epidural infusion pump settings to be checked every 8 hours.

Managing epidural adverse effects or inadequate analgesia

• Hypotension: refer to Clinical Emergency Response System (CERS) protocol for instructions (below). Confirm left lateral position, consider intravenous fluid bolus.
• Suspicious or pathological fetal heart rate pattern: contact the obstetric team (and attending anaesthetist if occurs within an hour of epidural bolus).
• A dedicated giving set that is yellow in colour and portless must be used.
• Intravenous access to be maintained for duration of epidural analgesia.
• No other opioids or sedatives to be administered post insertion unless ordered by the attending anaesthetist.
• Post-partum anticoagulants must not be commenced without prior discussion with the attending anaesthetist.
• Inadvertent disconnection of epidural catheter from filter: DO NOT reconnect, cover with a sterile dressing and contact anaesthetist immediately.

Medical officer to document any alterations to calling criteria for blood pressure

REFER TO YOUR LOCAL CLINICAL EMERGENCY RESPONSE SYSTEM (CERS) PROTOCOL FOR INSTRUCTIONS ON HOW TO MAKE A CALL TO ESCALATE CARE FOR THE WOMAN

APPROPRIATE CLINICAL CARE FOR A WOMAN WITH RED ZONE OBSERVATIONS:
1. CONSIDER OXYGEN THERAPY
2. STOP EPIDURAL PUMP
3. ENSURE THAT THE ATTENDING ANAESTHETIST IS CONTACTED

YELLOW ZONE RESPONSE

IF A WOMAN HAS ANY YELLOW ZONE OBSERVATIONS YOU MUST FOLLOW THE YELLOW ZONE RESPONSE INSTRUCTIONS ON THE NSW STANDARD MATERNITY OBSERVATION CHART AND INITIATE APPROPRIATE CLINICAL CARE

RED ZONE RESPONSE

IF A WOMAN HAS ANY RED ZONE OBSERVATIONS YOU MUST CALL FOR A RAPID RESPONSE (as per local CERS), FOLLOW THE RED ZONE RESPONSE INSTRUCTIONS ON THE NSW STANDARD MATERNITY OBSERVATION CHART AND INITIATE APPROPRIATE CLINICAL CARE AS STATED ABOVE
Obstetric Epidural Analgesia Prescription

**EPIDURAL SOLUTION PRESCRIPTION** is valid for a maximum of 24 hours unless ceased earlier.

<table>
<thead>
<tr>
<th>Local anaesthetic</th>
<th>Opioid</th>
<th>Amount</th>
<th>Concentration</th>
<th>Total volume</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>µg</td>
<td>µg/mL</td>
<td>µg/mL per mL</td>
<td>mL</td>
</tr>
</tbody>
</table>

- Date
- Prescriber’s signature
- Print your name
- Contact
- Pharmacy:

**INFUSION RATE** (mL per hour)

- Infusion range (mL per hour)
  (Range minimum per hour to maximum per hour)
- Start rate (mL per hour)
- Prescriber’s signature
- Print your name

From ……………mL per hour to ……………mL per hour

**TOP UP BOLUS DOSE** (for administration by midwife)

- Only registered midwives who have been assessed as competent can administer an epidural top up.
- Top up increment (mL)
- Interval between increments (minutes)
- Total number of increments per hour
- Maximum volume per hour (mL)
- Prescriber’s signature
- Print your name

**PCEA** (Patient controlled epidural analgesia)

- Background infusion (mL per hour)
  (Range minimum per hour to maximum per hour)
- Start rate (mL per hour)
- PCEA bolus dose (mL)
- PCEA lockout interval (minutes)
- Prescriber’s signature
- Print your name

From ……………mL per hour to ……………mL per hour

**PIEB** (Programmed intermittent epidural bolus)

- PIEB dose (mL)
- PIEB dose range (mL)
- PIEB Lockout interval (Hour or minutes)
- Hourly limit (mL)
- Delay time till first bolus (Hour or minutes)
- Prescriber’s signature
- Print your name

<table>
<thead>
<tr>
<th>Hour</th>
<th>Minutes</th>
</tr>
</thead>
</table>

- **PIEB + PCEA** (Programmed intermittent epidural bolus + Patient controlled epidural analgesia)

- PIEB dose (mL)
- PIEB dose range (mL)
- PIEB Lockout interval (Hour or minutes)
- PCEA dose (mL)
- PCEA lockout (minutes)
- Hourly limit (mL)
- Delay time till first bolus (Hour or minutes)
- Prescriber’s signature
- Print your name

<table>
<thead>
<tr>
<th>Hour</th>
<th>Minutes</th>
</tr>
</thead>
</table>

First Prescriber to Print Patient Name and Check Label Correct:

<table>
<thead>
<tr>
<th>Specialist referral</th>
</tr>
</thead>
<tbody>
<tr>
<td>Referring doctor name: ..........................</td>
</tr>
<tr>
<td>Signature: ........................................</td>
</tr>
<tr>
<td>Date: ............................................</td>
</tr>
</tbody>
</table>

Attach ADR Sticker

- Allergies & Adverse Drug Reactions (ADR)
  - Nil known
  - Unknown
  - Drug (or other)
  - Reaction/Type/Date
  - Initials

- Attach ADR Sticker
- Sign: ...........................................
- Print: ........................................
- Date: .................................

- Drug (or other)
- Initials
- Reaction/Type/Date
- Sign: ...........................................
- Print: ........................................
- Date: .................................

- Attach ADR Sticker
- Sign: ...........................................
- Print: ........................................
- Date: .................................
## Record of Epidural Insertion

**Facility:**

**OBSTETRIC EPIDURAL ANALGESIA**

**Record of Epidural Insertion (Completed by anaesthetist)**

<table>
<thead>
<tr>
<th>Indication:</th>
<th>Time from request to attendance:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Analgesia first stage labour</td>
<td>□ Less than 30 minutes</td>
</tr>
<tr>
<td>□ Analgesia second stage labour</td>
<td>□ 30 - 60 minutes</td>
</tr>
<tr>
<td>□ Caesarean section</td>
<td>□ Greater than 60 minutes</td>
</tr>
<tr>
<td>□ Instrumental delivery</td>
<td>□ Maternal disease</td>
</tr>
<tr>
<td>□ Other:</td>
<td></td>
</tr>
</tbody>
</table>

**PATIENT ASSESSMENT:**

Risk discussion:

Consent □

<table>
<thead>
<tr>
<th>Position:</th>
<th>Skin preparation:</th>
<th>Epidural kit:</th>
<th>Level of insertion:</th>
<th>Loss of resistance:</th>
<th>Depth to epidural space:</th>
<th>Length at skin:</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ Sitting</td>
<td>□ Chlorhexidine and alcohol</td>
<td>□ 18G</td>
<td>□ Air</td>
<td>cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Lateral</td>
<td>□ Betadine</td>
<td>□ 16G</td>
<td>□ Saline</td>
<td>cm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>□ Chlorhexidine and alcohol</td>
<td>□ CSE</td>
<td>□ 16G</td>
<td>□</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**INSERTION ISSUES:**

□ Blood in catheter

□ Dural puncture

□ Paraesthesia

□ Difficult insertion

□ Other:

<table>
<thead>
<tr>
<th>Date inserted:</th>
<th>Time inserted:</th>
<th>Anaesthetist inserting signature</th>
<th>Print your name</th>
<th>Contact</th>
</tr>
</thead>
</table>

**Epidural initiation and pain rescue drugs (top up) administered**

- **Epidural initiation drugs administered:**
  - Volume: mL
  - Time: 
  - Anaesthetist administering: (Signature and print name)

- **Epidural pain rescue (top up) drugs administered:**
  - Volume: mL
  - Time: 
  - Anaesthetist administering: (Signature and print name)

**Epidural: Record of drug administration and volume of drug discarded**

- **Record of infusion bag volume commenced OR Epidural top up total volume**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Volume (mL)</th>
<th>Signature 1</th>
<th>Signature 2</th>
</tr>
</thead>
</table>

- **Record of epidural solution discarded**

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Total volume discarded (mL)</th>
<th>Signature 1</th>
<th>Signature 2</th>
</tr>
</thead>
</table>

**Removal of Epidural Catheter:**

Date: Time: Signature: Print name: Designation: 

For time delays between anticoagulant administration and removal of epidural catheter refer to local hospital epidural policy and or anticoagulation guidelines.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
</table>

### Epidual Top Up

<table>
<thead>
<tr>
<th>Top up dose administered (mL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two initials required for midwife administered top up</td>
</tr>
</tbody>
</table>

### Circulation

#### Systolic Blood Pressure (mmHg)

- 200
- 190
- 180
- 170
- 160
- 150
- 140
- 130
- 120
- 110
- 100
- 90
- 80
- 70
- 60

#### Diastolic Blood Pressure (mmHg)

- 140
- 130
- 120
- 110
- 100
- 90
- 80
- 70
- 60
- 50
- 40

#### Heart Rate

- 180
- 170
- 160
- 150
- 140
- 130
- 120
- 110
- 100
- 90
- 80
- 70
- 60
- 50
- 40

### Motor Block Assessment

**Every two hours (L = left, R = right)**

- Unable to move feet or knees: 3
- Able to move feet only: 2
- Just able to move knees: 1
- Full flexion of knees and feet: 0

### Dermatome Level Check

**See local policy**

<table>
<thead>
<tr>
<th>Left</th>
<th>Upper to Lower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Right</td>
<td>Upper to Lower</td>
</tr>
<tr>
<td>DATE</td>
<td>TIME</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EPIDURAL INFUSION DELIVERY**

- Infusion rate (mL per hr) *OR*
- PCEA dose (mL)
- PIEB dose (mL)
- Attempts
- Successful

**Infused total (mL)**

- (Cumulative) *OR*
- Volume remaining (mL)

**Epidural program checked**

(initial, once per shift and on patient transfer)

**COMMENTS**

For example:
- Unilateral block
- Inadequacy of pain relief
- Epidural site check

**INITIAL**
**NSW Health**

**Facility:**

**OBSTETRIC EPIDURAL ANALGESIA**

- **Altered Calling Criteria**: 
- **LOCATION / WARD**: 

**DATE**

**TIME**

**EPIDURAL TOP UP**

- **Top up dose administered (mL)**
- **Two initials required for midwife administered top up**

**CIRCULATION**

- **Systolic Blood Pressure (mmHg)**: 200, 190, ..., 100, 90, ..., 40
- **Diastolic Blood Pressure (mmHg)**: 130, 120, ..., 50, 40
- **Heart Rate**: 180, 170, ..., 40

**MOTOR BLOCK ASSESSMENT** every two hours (L = left, R = right)

- Unable to move feet or knees: 3
- Able to move feet only: 2
- Just able to move knees: 1
- Full flexion of knees and feet: 0

**DERMATOME LEVEL CHECK**

- **Left**: Upper to Lower
- **Right**: Upper to Lower

All observations must be graphed.
<table>
<thead>
<tr>
<th>DATE</th>
<th>TIME</th>
</tr>
</thead>
</table>

**Epidural Infusion Delivery**

- Infusion rate (mL per hr) **OR**
- PCEA dose (mL)
- PIEB dose (mL)
- Attempts
- Successful
- Infused total (mL)
- (Cumulative)
- OR
- Volume remaining (mL)

**Epidural Program Checked**

- (initial, once per shift and on patient transfer)

**Comments**

For example:
- Unilateral block
- Inadequacy of pain relief
- Epidural site check

INITIAL

NO WRITING
OBSTETRIC EPIDURAL ANALGESIA

Facility:

- Altered Calling Criteria
- Location / Ward

ALL OBSERVATIONS MUST BE GRAPHED

COMPLETE ALL DETAILS OR AFFIX PATIENT LABEL HERE

MOTOR BLOCK ASSESSMENT

Bromage 3 (complete) - Unable to move feet or knees
Bromage 2 (almost complete) - Able to move feet only
Bromage 1 (partial) - Just able to move knees
Bromage 0 (none) - Full flexion of knees and feet