# Standard Operational Procedure for Labour and Birth in Water and for the Emergency Evacuation of the Pool on the Labour Ward.



Prepared by: H. Smith

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# PROCEDURE FOR EMERGENCY EVACUATION FROM THE LABOUR WARD POOL

1. **Support the head**. **Keep face clear of the water, use inflatable pillow to assist with this (can involve birthing partner).**

2. **Summon immediate help using the emergency call bell**


3. **Shout for help and emergency equipment. Ask a staff member to call 2222**

4. **Simultaneously fill pool to maximum height (to assist buoyancy).**

5. **Ensure someone is tasked with bringing the older 'striker' bed (usually kept in recovery) and that the blue foam bed in the pool room is folded and pushed into the corner out of the way. The bed must be brought into the room 'head end' first.**

6. **Remove foot of bed and abduct the 2 leg supports as wide as they go, to allow the bed to be brought lengthways to foot of birthing pool.**

7. **Ensure brake is ON.**

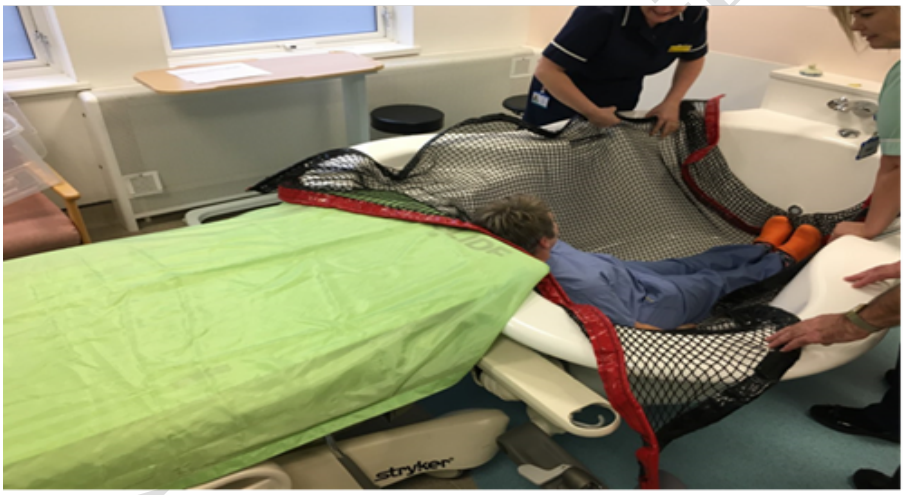
8. **Raise bed so mattress is the same height as pool and unplug the electrics.**

9. **Place pat slide on bed so it is in line with inner edge of birthing pool (not overlapping).**

**10. Ensure slide sheet covers whole of pat slide and overhangs into water**

**11. Place birthing pool net under mother (keep neck supported using neck pillow.**

**12. Insert net lengthways to support body.**




**13. Ensure: The correct number of staff to help prevent staff/patient injury (minimum of 4-adults, 2-3 each side). This may include separate support of legs and head.**

**14. Each handler must use a good working posture and scrunch and hold net in as close to mothers body as possible holding and keeping the net taut (close to load as possible).**

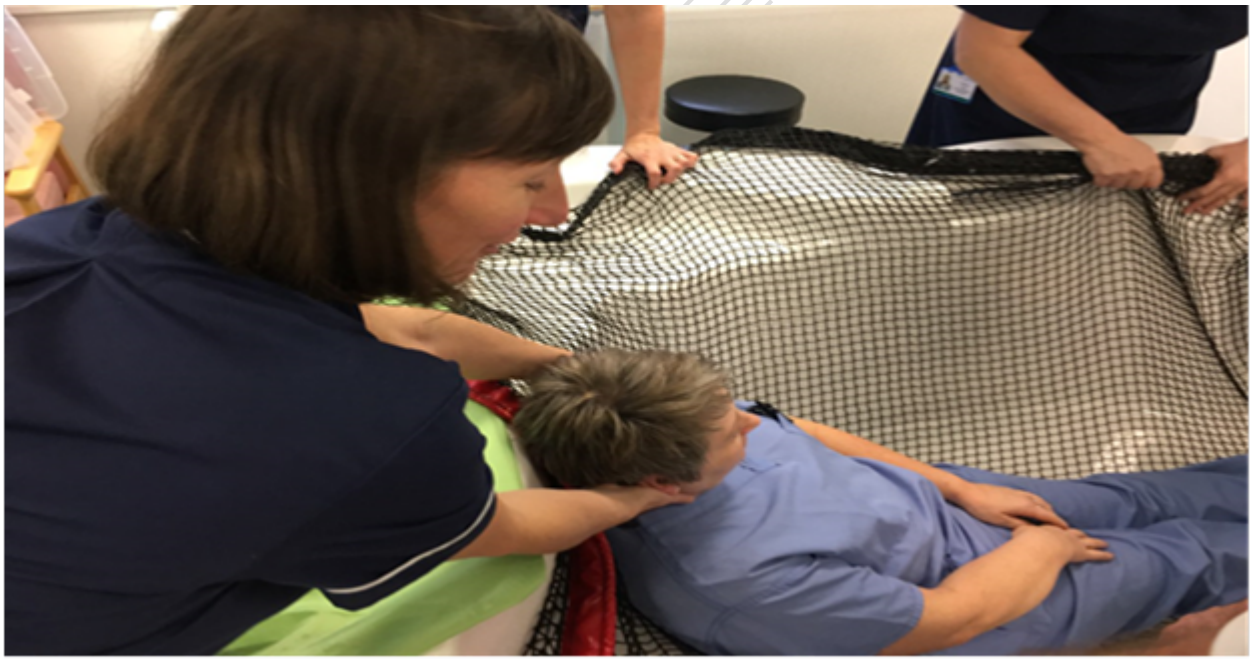
**15. The nominated leader must provide clear instructions using COMMAND: READY, SET using three consecutive manoeuvres, with short pause between.**

# The Three Manoeuvres

## FIRST manoeuvre

**READY SET MOVE**

**MOVE Mother to head of Pool**



# SECOND manoeuvre

## READY SET LIFT

**LIFT Mother's bottom to the edge of the bed. Support legs to aid buoyancy.**

# THIRD manoeuvre

## READY SET SLIDE

## SLIDE the mother to the top of the bed using the net to slide on to slide sheet.

**14. Remove neck inflatable once patient onto bed, roll and remove PAT slide, net and slide sheet as per lateral training techniques AND replace with DRY slide sheet.**

**15. Dry the mother as much as possible, remember the floor will be wet and so may need to put some towels down.**

**16. Cover the mother (remember her dignity), assign a member of staff to stand at each end of the corridor preventing visitors and unnecessary staff walking down the corridor.**

**17. Prepare second DRY bed in corridor for transfer.**

**18. Place beds end to end, remove heads and foots of both beds. Place PAT slide over the gap in-between beds. The slide sheet should still be under the mother to aid with this.**

**19. Transfer the woman to the dry bed. You will need one person to support head (use dry pillow for transfer) and at least 4 staff members (2 each side). Assign leader to provide commands.**

**20. Remove PAT slide and slide sheet as per lateral training techniques.**

**21. Move the woman on the dry bed into a new DRY room.**

# Remember Safety points:

- **Avoid hypothermia.**
- **Dry the floor immediately.**

## DO NOT defibrillate whilst in a puddle of water!

**A video demonstration of this method of evacuation is available for training purposes if you copy and paste link into internet address bar:**

**https://www.youtube.com/watch?v=PjFZvGscXH4**

## 1. Purpose/Background:

This Standard Operating Procedure (SOP) aims to support midwives to provide safe, evidence based care to women requesting to labour and/or birth in water.

It will also ensure that all staff groups who may be called to attend the procedure of Emergency Evacuation of the Pool on the Labour Ward are able to carry out the procedure correctly and safely.

## 2. Scope:

All midwifery, medical and support staff involved in the care of women who choose to use water during their labour and/or birth and who may be involved in any potential emergency situation necessitating evacuation from the pool in labour ward.

## 3. Responsibilities

It is the responsibility of all Midwifery, medical and support staff to:

- Access read understand and apply this guidance
- Attend any mandatory training pertaining to the guidance

It is the responsibility of the department to:

- Ensure the guideline is reviewed as required in line with trust and national recommendations
- Ensure the guideline is accessible to all relevant staff

## 4. Procedure:

### 4.1 Risk assessment for use of the water pool for labour and birth

All women requesting to use a birthing pool must be assessed prior to immersion. To use a pool they should be considered low risk according to the initial labour risk assessment (see the SOP for Advice on place of Birth and Risk Assessment for labour).

### 4.2 Inclusion criteria

- Low risk pregnancy
- Singleton pregnancy

- Cephalic presentation
- 37 completed weeks of gestation
- Body Mass Index <35
- Spontaneous onset of labour (although women undergoing uncomplicated Prostin induction can be considered on an individual basis, as per the Guideline for Induction of Labour and Prolonged Pregnancy)
- No pharmacological analgesia other than Entonox.
- Any pre-existing reason that raises concern.

### 4.3 Possible inclusion criteria

- Group B Streptococcus (GBS) - woman with known GBS requiring antibiotics in labour, may use the pool situated in the hospital, between IV infusions (keeping the cannula dry by keeping hand out of the water and covered with a glove).
- Women requiring Continuous Electronic Fetal Monitoring (CEFM), providing the Fetal Heart Telemetry is available for use in the pool
- Maternal request, as long as the women has had a discussion around her individual risks of using the pool and has made an informed decision. These discussions should be documented in the maternal notes and actioned accordingly.

**The woman and her birth partner/s should be made aware she will be asked to leave the pool immediately if the attending midwife is concerned or labour appears to be deviating from the norm.**

### 4.4 Pre-Birth Visit

- The Community midwife should fully discuss all labour options with the woman and partner at 36 weeks gestation. This should include the use of the birthing pool if the pregnancy is low risk and the woman fits within the criteria for its use.
- If the woman expresses an interest in birthing or labouring in water, she should be made fully aware of the criteria for use of the birthing pool.

- The woman should be made aware the hospital water pool cannot be booked or hired – it is offered on a first-come-first-served basis.
- The woman should be informed she can privately hire her own pool for use at home.
- Some women may choose to use the pool when already in labour; the time waiting for the pool to fill is ample time to discuss the use of the pool.
- If a woman who does not fit the low risk criteria requests a pool birth, the risks of birthing outside medical advice should be discussed so she can make an informed decision. If she still chooses a water birth, she should have an appointment made with the PMA midwife to discuss her choice fully and have an individual birth plan made. If consultant input is required a consultant appointment should also be made. All discussions and subsequent Birth Plan should be documented in the hand held notes.

### 4.5 Home Water birth

Each homebirth will be risk assessed at the 36 week home appointment. To be suitable for a homebirth the woman should be considered low risk as per the initial antenatal risk assessment. In addition:

- The 36 week risk assessment on page 20 of the antenatal care booklet should be completed
- Complete the Homebirth checklist and information sharing document and share appropriately (see SOP for Planned home birth, BBA and Transfer in via Ambulance).
- The practicalities of a home water birth should be fully explored with the woman and her birth partner.
- The pool, it's filling, maintenance, emptying and cleaning is the partner's sole responsibility.
- The strength of floors and covering of floors is also the responsibility of the woman and her partner.
- Emergency risk factors should be thoroughly discussed. Any Risk Factors identified must be actioned accordingly.

### 4.6 Health and Safety

#### 4.6.1 Electrical Safety

- Care should be taken with all electrical equipment within the pool room environment.
- Plastic plug covers should be used to serve as a reminder when plugging in any appliance.

#### 4.6.2 Lifting

- On entering the pool the woman should be made aware that if the midwife is concerned she must comply with *any* request to vacate the pool in the interest of her own safety and that of her baby.
- In acute emergencies if the woman is unable to vacate the pool unaided, the Evacuation of the Pool procedure will be initiated (See Procedure for Emergency Evacuation on Page 1).
- **On no account should a midwife try to physically lift a woman from the pool either on her own or with the birth partner.**

#### 4.6.3 Posture

Concern has been expressed regarding back-problems in midwives when using the water pool.

- Water birth is an essentially 'hands off' technique so excessive leaning over the pool is unnecessary and therefore back problems are no more exacerbated by water birth than any other position the mother chooses to birth her baby.
- The woman can be asked to raise her abdomen out of the pool for auscultation if necessary to avoid over stretching and this should be highlighted before the woman enters the pool.
- The crowning head can be viewed using a torch and strategically placed mirror in the bottom of the pool.

### 4.6.4 Slippery Floors

- Water spills should be mopped up, as they occur to avoid slipping by maternity staff and the woman's birth partner/s.
- The woman needs to have her legs and feet dried before being carefully escorted to the toilet.

## 4.7 Emergency Procedures

- If an acute emergency arises medical help is urgently summoned, by pulling the emergency buzzer and ringing 2222 to request appropriate emergency teams.
- Emergency situations should be handled according to the labour ward guidelines.
- The mother is instructed to leave the pool immediately or at least stand up if she is able to.
- The pool should be emptied as quickly as possible.
- If the woman is unable to vacate the pool unaided in an Emergency, follow the Emergency Evacuation instructions (See Procedure for Emergency Evacuation on Page 1).

## 4.8 Filling the Pool

- The pool takes approximately 10 minutes to fill and approximately five minutes to empty.
- The water is very hot therefore as a precaution to prevent scalding put in 1/3 cold water first followed by the hot water.

## 4.9 Depth of Water and Temperature

- The level of the water should be at least to the level of the woman's breasts to allow buoyancy and unrestricted movement.
- Lower water levels introduce the risk of the baby being born not totally submerged, which may lead to premature respiratory efforts.
- The temperature should be between –
    - 35-37c in the 1st stage
    - 37-37.5c in 2nd stage

- The temperature should be checked hourly and recorded in the notes. The water may be topped up to keep the water temperature constant. The risk of scalding should be minimized by asking the woman to vacate the pool for this.

### 4.10 Water Additives

- On no account should anything be added to the water. It is necessary to observe the colour/clarity of the water as an indicator of possible meconium staining if the membranes have ruptured.
- Additives may also have an adverse effect on neonatal wellbeing.

### 4.11 Cleaning the Pool

- In hospital, the pool should be cleaned after each use according to the Trust policy (Appendix A)
- The pool needs to be cleaned every 24 hours with 'Hospec' cleaning detergent.
- Every 48 hours (to coincide with cleaning) the taps need to be run for 2 minutes.
- The daily pool cleaning schedule is kept in the Pool Maintenance Schedule folder in the pool room should be completed following daily cleaning.
- Faecal matter should be removed immediately as E. coli is a potential source of neonatal infection.
- At home cleaning of the pool will be the partner's responsibility.
- If the water becomes heavily soiled in the second stage of labour, the mother should be requested to leave the pool.

### 4.12 The 1st Stage of Labour

#### 4.12.1 When to get in the water –

- If a woman is in established labour with regular painful contractions with descent and rotation of the baby, immersion is unlikely to disrupt her labour.
- If in the latent phase of labour in the hospital setting, women should be encouraged to use the bath rather than the pool. This is to avoid blocking its use for someone else.

### 4.12.2 When to get out of the water:

- Maternal request
- Request for further pharmacological analgesia other than Entonox (which can be safely used in the pool)
- Failure to progress
- Diagnostic vaginal examinations
- Artificial Rupture of membranes
- Meconium staining
- Maternal pyrexia
- Excessive Vaginal bleeding
- Any adverse/suspicious changes in fetal heart rate
- Any obstetric emergency

### 4.12.3 Maternal Observations in labour

- The usual observation in labour will continue (see the Guideline for care of women in labour) with the addition of maternal temperature being recorded every hour.

### 4.12.4 Hydration and Nutrition

- Hydration is important when using the pool. The woman should be encouraged to drink plenty of oral fluids and to vacate the pool to urinate on a regular basis.
- Small, high carbohydrate, low fat snacks can be eaten if the woman so wishes.

### 4.12.5 Birth Partners in the Pool

- Some birth partners may like to join the woman in the pool. This is permissible as long as he/she is appropriately attired i.e. swimwear.

### 4.13 2nd Stage of Labour

- A **'hands off'** approach is necessary to avoid stimulation of respiratory efforts.

- Restitution occurs under water and at no point should the midwife expedite the birth of the body.
- There is no need to feel for a nuchal cord as stimulation may cause respiratory effort.
- The cord should never be clamped or cut under the water before the baby comes to the surface as the reduction in oxygenated blood will stimulate breathing and the possibility of shoulder dystocia cannot be ruled out (some oxygen is better than none)
- Once the head is born, the shoulders and body should come with the next contraction.
- The baby should be brought immediately to the surface of the water, avoiding unnecessary traction on the umbilical cord to avoid snapping it.
- If the cord appears to be too short, the mother should be asked to sit on the ledge of the pool or to stand up.
- Babies born underwater do not necessarily cry at birth, therefore close observation is necessary to assess wellbeing.
- The mother will hold the baby close to her with the body under the water ensuring the baby's head is above the water, to keep the baby warm.

### 4.13.2 Shoulder Dystocia in the pool

- If the baby's body does not deliver in the next contraction after the head is born, Shoulder Dystocia should be suspected and the mother should be asked to stand up and help summoned.
- Once the woman is stood up out of the water assistance can be given to deliver the baby
- Care should be taken to prevent the baby slipping back under the water at birth.
- If the baby can still not be delivered, Shoulder Dystocia should be confirmed and the mother should be requested to leave the pool. The act of lifting her leg over the pool edge may dislodge the shoulder. If the delivery has not occurred once out of the pool, continue as per emergency shoulder dystocia procedure.

### 4.14 3rd Stage of Labour

#### 4.14.1 Physiological 3rd stage

- If the woman chooses a physiological 3rd stage, she can remain in the pool.
- Do not clamp and cut cord until the cord has stopped pulsating.
- The placenta and membranes are expelled by maternal effort, this may happen in the pool or the woman may wish to get out.
- If placenta isn't delivered within an hour, or there are concerns that the blood loss is >500mls a change to active management should be recommended, and the woman advised to leave the pool.

#### 4.14.2 Active Management

- If the mother chooses active management of the 3rd stage, she should be asked to leave the pool following delivery.
- Active management should be undertaken as per third stage management set out in the Guideline for the Care of Women in Labour.

#### 4.14.3 Estimated Blood Loss

- It is impossible to estimate blood loss accurately in the water.
- If the bottom of the pool is visible it can be assumed that the blood loss is <500ml
- If the bottom of the pool is not visible and/or the 'cloud' of blood at the bottom of the pool appears to be enlarging and the mothers' clinical signs suggest she is losing a significant amount of blood**, she should be asked to leave the pool immediately**.
- The E3 system does currently require a specified amount for estimated blood loss; therefore the midwife will have to estimate to the best of her knowledge using the information above as a guide.

### 4.14.4 Cord snapping

- This is a rare event. Bring the baby to the surface, catch the end of the cord and clamp it.
- The baby should be reviewed by a paediatrician as soon as possible following confirmed cord snapping in the pool, as it is difficult to ascertain how much blood may have been lost.

### 4.15 Perineal trauma

- In the absence of heavy bleeding, it is preferable to leave suturing until 1 hour post water immersion.

## 5 Implementation/training/awareness

- This is a review of a current document and it formalises current practice.
- Once ratified it will be available in all clinical areas within the Maternity Unit and on the intranet.
- All new, reviewed and ratified documents are notified to staff via the monthly maternity newsletter

## 6. Auditable Standards

| What aspects of compliance with the document will be monitored | What will be reviewed to evidence this | How and how often will this be done | Detail sample size (if applicable) | Who will coordinate findings | Which group or report will receive findings |
|---|---|---|---|---|---|
| Pool Evacuation Training access by 85%staff | Training Records | 2 Yearly | All records | PDM | MCSG |
| Pool Cleaning Schedule adhered to | Cleaning schedule | 2 yearly | All records | Audit Midwife | MCSG |

## 7. Related Documents:

### Trust Policies/Procedures:

- Guideline for care of women in labour
- SOP for Advice on place of Birth and Risk Assessment of Women in Labour in All Care Settings
- Guideline for Induction of Labour and Prolonged Pregnancy

- SOP for Intermittent Auscultation
- SOP for Planned Homebirth, BBA and Transfer in via Ambulance

## 8. References:


- Midwifery Care in labour Guidance for all women in all Settings. RCM Midwifery Blue Top Guidance No. 1. Nov- 2018
- NICE Guideline for Intrapartum care for healthy women and babies [CG190] December 2014 (Updated February 2017)
- Dekker, R. (2014 updated 2018) The Evidence on: Waterbirth. RCM. Available at Evidence Based Birth.com/Waterbirth


## 9 DISCLAIMER

It is the responsibility of staff to check the Trust intranet to ensure that the most recent version/issue of this document is being referenced.



| DOCUMENT HISTORY | | | | | |
|---|---|---|---|---|---|
| **Date of Issue** | **Version No.** | **Next Review Date** | **Date Approved** | **Director Responsible for Change** | **Nature of Change** |
| May 2005 | 1.0 | July 2009 | May 2005 | | New document. |
| July 2009 | 2.0 | July 2011 | July 2009 | | Approved at Maternity CSG |
| August 2017 | 3.0 | 15th August 2020 | 15th August 2017 | Clinical Director of SWCH | Reviewed and updated. Approved at Maternity CSG |
| June 2020 | SOP v1 | June 2023 | 25th June 2020 | MCSG | Converted to SOP, Amalgamated with Evacuation SOP, reviewed and ratified |

**APPENDIX A:**

## Pool Cleaning procedure – Maternity Services

- The pool needs to be cleaned every 24 hours with 'Hospec' style cleaning detergent.
- Prior to and every 48 hours – to coincide with the pool cleaning the taps should be run for 2 minutes.
- After cleaning the pool the cleaning record should be completed.

After Use:

1. Use standard infection control procedures – plastic apron, disposable gloves and eye protection to clean the pool. Ensure the area is well ventilated.
2. Remove any debris from the pool and rinse well with warm water.
3. Use a non – abrasive cleaner to remove any further debris, ensuring the tap area is the start point working down into the pool. Rinse area well with warm water.
4. Make up 2–3 litres of a solution of Hypochlorite to 1000 parts per million (ppm) – 1x 1G Actichlor tablet per litre of water, in a clean plastic jug. **DO NOT** use bleach as it is highly corrosive to the pool.
5. Ensure the tap outlet is closed
   Pour the solution over the pool area working from top to bottom.
   Using a clean disposable mop head/cloth clean over the surface of the pool to ensure the solution has full contact with the surface.
   Leave for 10 minutes to allow the solution to have contact with the area.
   Discard the mop head/ cloth.
6. After the 10 minutes open the drain outlet and empty the pool.
7. Using cold water, starting at the taps rinse the whole area to remove traces of the solution.
8. Dry the entire are thoroughly with a clean dry cloth.
9. Keep the drain outlet closed when not in use.
10. Ensure all the areas around the edge of the pool are cleaned with Clinell universal wipes.
11. Any equipment used that is not disposable should be cleaned using the same solution and rinsed a dried thoroughly.
12. Ensure the cleaning record is updated.