# Birthing pool use for labour and delivery

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<tr>
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Statement of changes from version 3
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1. **AIM/PRINCIPLE:**

To provide a framework of clinical care to ensure best practice in caring for women who choose to have a water birth.
To maintain optimum safety for the mother and baby who use the birthing pool for labour and delivery.

2. **METHODOLOGY:**

This guideline has been reviewed and updated using all documents in the references.

3. **PROCESS/PROCEDURE:**

All healthy women with uncomplicated pregnancies should have the option of water as pain relief and be able to proceed to a water birth if they wish.

Women should be given information in advance of labour to enable them to make an informed choice regarding labour in the birthing pool and water birth.

They should be advised that the final decision to proceed with delivery in the birthing pool will be made following undertaking of a risk assessment in labour.

Women should be advised that there is no increased risk to babies being admitted to SCBU following water birth.

3.1 **Inclusion Criteria**

For labour in water/use of birthing pool may include;

- Women’s informed choice
- Normal term pregnancy i.e. between 37 – 42 weeks gestation
- Singleton foetus with cephalic presentation
- Assessed as low risk following initial assessment on admission to Delivery Suite using Delivery Suite proforma or following risk assessment of home environment if planned home birth
NHS General

2. Exclusion Criteria

- BMI >35 at booking
- Maternal pyrexia
- History of recent significant infection being treated with antibiotics, or with a white cell count of 20 per dL or more at latest blood test. Any queries should be referred to the Microbiologist on call.
- Women who have tested positive for HIV or hepatitis B or C
- Meconium stained liquor
- Rupture of membranes > 24 hours
- Known or suspected IUGR
- Induction of labour for reason other than post term
- Antepartum haemorrhage (unless minor due to cervical erosion)
- Previous Caesarean section
- Previous shoulder dystocia
- Multiple pregnancy
- Malpresentation
- Grand multiparity (Para 5 and above)
- Previous PPH
- Intravenous infusion
- Epilepsy
- Skin conditions
  - infected wounds, cold sores, shingles, chicken pox
- Administration of opiates within the previous 2 hours

Women with a history of the following infections during this pregnancy should be excluded from using the pool

- Known carrier of group B streptococcus – group A&G streptococcal infections
- Pseudomonas aeruginosa – E coli 0157, salmonella, campylobacter, intestinal worms, gardia or cryptosporidia.

3. Preparation of Birthing Pool and Delivery Room

CLEANING AND DISINFECTING

Prior to a woman entering the pool.

Before filling the pool for use wipe surface with Difficile-s 1.400 and rinse with clean running water or use the shower head if available. Always make sure that the taps are run for 2 minutes prior to filling to flush the water pipes.

The water depth should be approximately at the level of the woman’s xiphisternum (additive free).

Ensure all equipment is available
  - Water thermometer
  - Sieve
NHS General

- Gauntlets
- Hand held Aquanatal Sonicaid
- Entonox
- Warm towels for mother and baby

(NB, the sieve and water thermometer must be rinsed thoroughly after use and steeped in Difficil-s for 5minutes)

The ambient room temperature should be comfortable for the woman and maintained at 21c – 22c checked and recorded hourly (Appendix 1).

Following a delivery in the pool, rinse with clean running water or use a shower head if available to remove the debris, then the pool **MUST** be cleaned with 1 in 400 Difficile-s cleansing solution using a disposable cloth to wash all pool surface areas.

(NB: DO NOT SUBMERGE THE SHOWER HEAD INTO THE POOL WATER WHEN IT IS OCCUPIED FOR CROSS INFECTION PURPOSES)

The drainage outlet should be paid particular attention and cleaned with a disposable cloth and bristle brush, after cleaning make sure the drainage outlet is closed, and keep closed when the pool is not in use.

ALLOW THE POOL TO **AIR DRY**.

**Record the details of cleaning (i.e. patient’s unit number date and signature) on the pool room cleaning log.**

**Daily maintenance**
Run the taps for 2minutes daily to comply with Trust policy on Legionella control and wipe the pool surface with Difficile-s 1 in 400 cleansing solution. Allow to Air Dry.

3.4 **Preparation of Woman**
All women who express an interest in the use of water should be given a patient information leaflet, including where appropriate a copy of the unit’s guideline. This will include what steps will be taken in the event of an emergency (Appendix 1). They should be informed of the importance of leaving the pool if the midwife deems this necessary.

The woman should be asked to have shower before entering pool and any clothing to be worn in the pool must be clean.

3.5 **Management of First Stage of Labour**
The woman may enter the pool when she feels ready, regardless of cervical dilation.
NHS General

The midwife or her birth partner must remain in constant attendance whilst she is in the pool.

Bowel preparation is optional.

The temperature of the water and the temperature of the woman and time she enters the pool should be documented (Appendix 2).

Thereafter, the water temperature should be monitored half hourly and recorded on the partogram maintaining the temperature at 35c- 37c degrees Centigrade (Appendix 2).

The water temperature should not exceed 37 degrees centigrade during the first stage of labour.

Hourly monitoring of the maternal temperature should be recorded and the pool water cooled if her temperature rises 1 degree above the baseline.

The water should be kept as clean as possible, and the sieve should be used to remove any debris including maternal faeces, meconium and blood clots.

Other observations in labour to be documented as per Maternity Intrapartum No 28 Care of Women in Labour.

The fetal heart may be monitored out of the water or with an aquanatal sonicaid.

The woman should be encouraged to void in the toilet every two hours.

Vaginal examinations can be performed in or out of the water.

Amniotomy is not contraindicated.

Entonox can be used.

If the woman chooses to have an opiate, 2 hours must have elapsed prior to her re-entering the pool

The woman should be encouraged to drink to prevent dehydration with an aim to give approx 1 litre of fluid per hour, or minimum 500mls.

3.6 Management of Second Stage of Labour

When signs that the woman is in second stage then discreet preparations for emergency evacuation from the pool should be made .e.g. bed raised to appropriate height, brake off with evacuation net in place.
NHS General

Water temperature should be maintained between 36-37 degrees Centigrade and monitored every 15 minutes during the second stage of labour (Appendix 2).

If maternal temperature rises more than 1 degree centigrade above the baseline – water should be cooled, or the woman should be asked to leave the pool.

A second midwife must be in attendance when the delivery is imminent.

A ‘hands off’ approach must be adopted.

Traditional control of the head is unnecessary; immersion in water appears to facilitate slow crowning of the head, the baby should be born fully submerged and guided head first to the surface immediately. Skin to skin contact between mother and baby is to be facilitated ensuring baby’s body remains submerged to maintain temperature.

If any manipulation is required the baby should be delivered out of the water (do not feel for cord or assist with the delivery of the head and/or shoulders in the water) then the woman should be raised out of the water, either onto the internal safety seat or into the standing position.

If the fetal head is exposed to the air, the woman must remain out of the water until completion of the delivery to avoid the risk of premature gasping under water due to air stimulation.

3.7 Management of Third Stage of Labour

Delayed cord clamping can be practiced.

Expectant management of the 3rd stage is recommended and can be achieved whilst the woman remains in the pool. If active management is requested/offered the woman should be advised to leave the pool.

If the placenta has not delivered within 1 hour, Syntocinon 10 iu should be administered intramuscularly and controlled cord traction attempted following signs of separation out of the pool.

Blood loss cannot be estimated accurately, therefore should be classified as above or below 500mls.

Routine examination of the vagina and perineum should be carried out but any suturing should be delayed for 1 hour after delivery unless there are signs of bleeding.

Cord bloods to be taken within one hour of delivery as routine if mother is Rhesus Negative blood group.

3.8 Labour/Birth Complications in the Bath
If there is any deviation from normal observations of the woman and/or fetus, the woman must be asked to leave the water (e.g. Meconium-stained liquor, fetal bradycardia/tachycardia).

In the rare case of an emergency situation (e.g. Intrapartum haemorrhage, shoulder dystocia), ask the woman to stand up and assist her with leaving the bath.

If the woman becomes unconscious, emergency procedures must be enacted immediately and measures to remove the woman from the bath. (Appendix 1). In view of the evacuation process requiring a minimum of 3 people to remove the woman from the pool, the pool at Berwick is only accessible until 1800hrs where there are 3 colleagues present. After this time the woman will be asked to come out of the water in case emergency evacuation procedures are required.

As when caring for any woman in labour, the midwife/doctor is responsible for using her/his clinical judgement in responding appropriately to problems that may occur during any stage of labour, and for documenting her/his actions.

If the labour is not ‘progressing’, the woman may need to leave the water and mobilise, possibly eat and drink, to facilitate contractions.

### 3.9 Water birth in the Community

The woman and her family have the sole responsibility for filling, emptying and cleaning the birthing pool or the purchase of any equipment. The suitability of the pool within the home environment is entirely the responsibility of the woman and her family and this should be explained during any discussion regarding water birth at home.

### 4. Labour and/or Delivery in the Pool Should Be Abandoned If There is Evidence Of:

- Maternal pyrexia
- Abnormal fetal heart rate
- Meconium stained liquor
- PV bleeding
- Prolonged labour
- Any manipulation required (e.g. nuchal cord)

**IF A WOMAN REFUSES TO LEAVE THE POOL:**

- Emphasise your concerns and the necessity to leave the pool
- Maintain detailed documentation
- Contact the supervisor of midwives on call

**TRAINING:**
Annual training updates to be undertaken by all midwives involved in labour and delivery in water including pool evacuation skill drill. Assisting women who choose to labour and/or give birth in water should be considered a core Midwifery competence and therefore appropriate education, training and supervision will be necessary.

Training will consist of attendance at group teaching study session to include:

- Risk assessment and preparation of woman
- Preparation of pool and delivery room
- Management of 1st stage of labour
- Management of Delivery
- Management of 3rd stage
- Care following delivery
- Cleaning & disinfection of pool and equipment.
- Annual attendance at ‘skill drills’ training including emergency evacuation from the pool

**MONITORING & AUDIT**

Audit of

- Maternal outcomes
- Fetal Outcomes
- User satisfaction

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<td>Audit</td>
<td>Audit of all maternal notes and neonatal notes.</td>
<td>Clinical Governance Co-ordinator</td>
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**REFERENCES/ACKNOWLEDGEMENTS:**


CLUETT ER, NICKODEM VC, McCANDLISH RE 2004 Immersion in Water in Pregnancy, Labour and Birth. The Cochrane Database of Systematic Reviews> Issue 1


Appendix 1

EVACUATION OF WOMAN FROM POOL WITH NO HOIST

Event that necessitates assistance

Call for emergency assistance

Woman unable to comply (collapsed)

Do not pull the plug

Bring prepared bed with slide sheet and birth net to side of pool. Put brakes on. Raise/lower bed until level with pool height.

Put the slide sheet over bath edge, into water, with coverage on the side of the bed. Open net out & place under woman’s bottom

Have 2 people – at the top end of the net and 1 person to support the legs.

Holding the net handles, float the woman to the surface of the water.

Saying ‘Ready Steady Out’, slide the woman with the aid of the net out of the pool on to the bed.

Transfer to suitable area for further treatment

Woman able to comply

Stand woman up – attempt to deal with problem e.g. cord around neck

Assist the woman to move from pool or help woman lift one leg onto side of pool or encourage to sit on pool seat) for e.g. shoulder

Assistance to leave pool to suitable surface e.g. bed, mattress on floor, reclining chair.
NB. WHERE A WOMAN IS UNABLE TO COMPLY ENSURE THAT THE WATER IS LEFT IN SITU TO AID BUOYANCY & ASSIST EVACUATION

i.e. Don't take out the plug until the woman is safely out of the pool
Observe the principles of Manual Handling throughout evacuation.

THERE MUST BE A MINIMUM OF 3 STAFF TO EVACUATE THE WOMAN USING THIS METHOD
WATERBIRTH OBSERVATION CHART

Date: _______________________

Time of entering pool: ______ am ______ pm

Time of leaving pool: _______ am ______ pm

Room Temperature:
Water Temperature on entering the pool:
Water Temperature on leaving the pool:

Room/Water Temperatures (During Labour & Delivery)
(First stage of labour record every 30 minutes & second stage record every 15 minutes)

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>FIRST STAGE Water Temperature (35 - 37°C)</th>
<th>SECOND STAGE Water Temperature (36 - 37°C)</th>
<th>Water Temperature following top-up</th>
<th>Room Temperature (21 - 22°C)</th>
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