Waterbirth Guideline (Including Risk Assessment)

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

This Guideline is for use to advise and risk assess for suitability of water during labour and birth. It includes a Risk Assessment and procedures of using the birthing pool.

It also provides instructions on how to clean and disinfect the pool prior to and after use.

This guideline is for use by the following staff groups:

Midwives
Maternity Support Workers/ Maternity Care Workers working in the birth centre/Delivery Suite
Consultant Obstetricians
Obstetric Registrars

Lead Clinician(s)

Hazel Brookes	Meadow Birth Centre Lead Midwife
Approved by *Maternity Governance Meeting* on:	17th January 2023
Review Date: This is the most current document and should be used until a revised version is in place	17th January 2026

Key amendments to this guideline

Date	Amendment	Approved by:
January 2023	New document	Maternity Governance Meeting

Worcestershire Acute Hospitals NHS Trust

Contents

Worcester Acute Hospitals NHS Trust is committed to person centre care and inclusive language. This guidance uses the word woman but this term includes all 'women.'

Introduction

1. Labour in water for women or birthing people with uncomplicated pregnancies is recommended and people who make an informed choice to give birth in water should be given every opportunity and assistance to do so by attendants who have appropriate experience (RCOG/RCM 2006).

The therapeutic properties of water as a form of analgesia in labour and childbirth are well-recognised and documented. Evidence suggests that water promotes oxytocin production, thus encouraging the physiological progress in labour (Shaw-Battista 2017). Benefits related with birthing in water include facilitating:

- mobility,
- aiding comfort,
- greater sense of control,
- providing significant analgesic effect,
- increased patient satisfaction,
- promotes relaxation and reduces the need for interventions,
- can shorten the duration of labour,
- can help reduce the rate of epidural and caesarean section rates,
- a gentle transition for the neonate and is highly rated by women (RCM, 2018).

2. Prior to using water

- Ensure that the woman and birth partner have been given relevant information regarding the benefits of using water as analgesia
- to facilitate informed choice and they will be provided with the opportunity to ask questions.
- Explain to the woman that they can choose to leave the pool as they wish and might be asked to do so to assist with physiological birth.
- If any concerns arise, these will be discussed, and they will be asked to leave the pool.
- Women who request to use the pool and have a BMI ≥ 40, should be risk assessed before labour begins to ensure that they can get in and out of the pool un-aided. They also need to be informed of the additional chance of transfer to the obstetric unit and potential delays in transfer if collapse in the pool. This can be completed by any midwife or medical professional and should be documented on BadgerNet.
- All women accessing water should be able to get in and out of the pool un-aided, if the midwife is unsure of their ability, they should assess them by asking them to get into the pool and evacuate without adding water in the first instance. This should be documented on Badgernet.

3. Before getting into the birthing pool

- Rinse the pool with cold water and allow the tap to run for 2 minutes
- Close off the plug and fill the pool just over half way with water from hot tap
- The midwife will check the water temp and add cold water to the required level
- The woman **must not** enter the water until it has been checked and documented

4. Key Points on water temperature

- Keep Water Temperature between 34-37.4°C during labour
- Adjust water temperature to Woman's comfort during labour
- In the event of Fetal tachycardia (on first instance) check the water temperature and consider cooling the water or exiting the pool (Woman's preference).
- Ensure the pool temperature is maintained at approximately 37°C during the second stage – or when anticipating birth.

5. Suitability for waterbirth

<table>
<tr><th>Suitable for Pool</th><th>Not Suitable for Pool (requiring a personalised care plan discussion with On-Call Consultant/ Senior Registrar if requesting use of pool in labour or birth)</th></tr>
<tr><td>

- Singleton pregnancy 37 – 42 weeks
- Cephalic presentation
- Post-dates induction of labour following Propess or artificial rupture of membranes
- Normal maternal and fetal observations
- BMI less than 40 ensure that they can get in and out of the pool un-aided
- GBS this pregnancy/previous pregnancy - if IV antibiotics are recommended in labour (see GBS guideline) these can be offered in the pool
- Confirmed ruptured membranes (see in conjunction with pre labour rupture of membranes guideline) SROM: Considered safe to use the pool up to 24 hours following spontaneous rupture of membranes

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- Concerns with maternal or fetal wellbeing (i.e. pyrexia or tachycardia).
- Not cephalic fetal presentation, e.g., breech
- Current significant APH
- Use of Pethidine or Opiates (within 4 hours).
- Induction of labour with Oxytocin.
- Major medical condition requiring intensive maternal monitoring, e.g. cardiac disease, diabetes requiring sliding scale.
- Pregnancy complications posing risk of seizure or collapse, e.g., current APH, PET, epilepsy.
- Significantly compromised mobility
- BMI 40 or greater
- Maternal pyrexia (37.5 on two occasions or 38 once) and or evidence of active infection
- Active herpes Hep B HIV
- Gestation less than 37 weeks Significant polyhydramnios
- Head 5/5 palpable
- Multiple pregnancy
- Significant meconium
- FGR

This list is not exhaustive and if the at any point waterbirth is considered unsafe escalation should be sought for care planning discussions. (If waterbirth requested).

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<u>Suitable in Labour but NOT 2nd Stage</u>
case by case basis following individualised care planning antenatally with consultant midwife, named consultant or senior registrar.

- Risk of postpartum haemorrhage (PPH) (women who have had previous PPH <1000mls who otherwise meet birth centre criteria).
- 97th centile (by USS not fundal height).
- Previous 3rd or 4th degree tear if delivering vaginally

Consideration should be given to whether birth is imminent or rapidly progressing labour.

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<u>Suitable for Pool with the use of telemetry continuous monitoring</u>
case by case basis following discussion with consultant midwife, named consultant or on call Reg/consultant if out of hours

- Previous LSCS (VBAC)
- Small for Gestational Age (SGA)
- Maternal age >40 years old at booking and >40 weeks' gestation
- Induction of Labour **without** Oxytocin
- Gestation >42 weeks

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6. The Pool in the Home Setting

Women choosing to use a pool at home should be advised to hire/purchase a pool from a reputable company following their own research. They should be encouraged to trial run inflating the pool and ensure all of the attachments all work correctly, following the manufacturer's instructions. Women should **not** expect the attending midwives to know how their chosen birth pool and/or accompanying accessories work. This needs to be communicated to the family in the antenatal period

Women will need to provide:

- Pool Thermometer
- Handheld Mirror
- Pool Liner
- Debris Net
- Torch
- Adequate supply of Towels
- Bucket (To Empty/Top up pool if required)
- Access to adequate continuous Hot Water (Ideally Combi Boiler or similar)
- Stool to step in/out of pool if required

Midwives will provide:

- Midwifery care provided in accordance with this guideline , NICE 190 and care in labour guidance. See Care in Labour Guideline.

- A assessment of the home environment will be made during the antenatal period by the midwife booking the woman for a homebirth. This should include a discussion around the location and positioning of the pool – ensuring it is easily accessible from all sides and there is adequate space to enter and exit. See Homebirth Guideline

7. Water Temperature

The Temperature of the pool needs to be at 37°C at the time of birth (NICE, 2014). The temperature of the water should be adjusted to maternal comfort throughout labour, topped up with warm water if cooling and cool water if the woman becomes too warm. The maximum temperature within the pool should not exceed 37.5°C (NICE, 2014) a temperature above this can lead to maternal exhaustion, lowered blood pressure (and feeling faint) and slowed contractions (Garland, 2017); Fetal tachycardia can be attributed to a rise in maternal temperature, so the water temperature should be lowered in this event. Although there is no definition of a lower limit, a water temperature of below 34°C can cause a reduction in contraction frequency, and can contribute to a delay in labour.

8. Specific equipment needed to facilitate a waterbirth

- Pool mirror
- Debris net
- Pool thermometer
- Torch
- Pool evacuation net in the case of an emergency.
- Gauntlet gloves

9. Points specific to care in water

- Follow care in labour guidance with the exception of from maternal temperature which will be taken hourly whilst in the pool to ensure that the woman does not develop an environmental pyrexia.
- Pool temperature recorded hourly, adjusted as the woman or birthing person requires. (move to above under point
- Additional equipment must be in the room prior to the woman entering the pool, including: debris net, mirror, thermometer, and torch.
- A record of the time entering and leaving the pool will be made on Badgernet.
- Both pool and maternal temperature will be recorded on entry to the pool
- Women will be encouraged to drink throughout labour to prevent dehydration, this should be recorded on the fluid balance.
- Use universal precautions for infection control, i.e. gloves, gauntlets and aprons
- Aromatherapy oils must not be added to the water if it is anticipated the baby will be born in that water. If oils are on the skin advise showering prior to the pool.
- Do not leave the woman alone while she is in the pool.
- If a fetal heart abnormality is detected, the woman will be asked to leave the pool and CTG commenced in line with the fetal monitoring guideline.
- Vaginal examinations can be offered in the water, the woman must be advised that if the midwife is unsure of the findings, she will be asked to exit the pool and have a further vaginal examination on land to confirm the findings. Midwife must be competent and confident to perform in the water.

10. Additional Pain Relief

- Entonox can be used in the pool with close assessment and monitoring
- If further pharmacological pain relief is required, the woman must leave the pool.
- If pethidine has been administered previously please allow for 4 hours, or until the person is deemed safe to enter the water during labour.

11. The Second Stage of Labour

- Ensure the temperature of the water is a 37 degrees.
- A prepared and checked resuscitaire or resuscitation equipment and cord clamp is to be made available and kept close by
- If the woman lifts herself out of the water and exposes the presenting part/fetal head to air, she should be advised to remain out of the water to avoid the risk of premature gasping underwater (RCOG/RCM 2006)
- Keep hands off and observe - control of the perineum is unnecessary; immersion in water changes the skin elasticity thereby aiding stretching. Do not touch the emerging fetal head. It is not necessary to feel for the nuchal cord. If the woman is on all fours/kneeling for the birth the midwife assisting should ensure that the baby is born in front of the headfirst.

12. The Birth of the Baby

- Encourage the woman to reach down and gently lift the baby out of the water as the body is born. It is important to prevent undue traction on the cord as the baby is guided to the surface (Burns et al 2012).
- Observe the cord immediately following the birth. Avoid tension of the cord to minimise the chance of the cord snapping.
- Ensure the woman and baby are kept warm, the pool may need to be topped up to maintain 37 degrees and the baby kept submerged in the water with their head free from the water.
- babies born in water are often appear calmer, if concerned - gentle stimulation with a towel can be used. If APGAR's appear abnormal, call for help and follow NLS algorithm.
- Remember to remove any towels used for stimulation of the neonate, the towel submerged in water can lead to hypothermia in the neonate.
- Observation of vaginal loss – may be difficult as the loss is diluted in the water, however, observation of blood and/or meconium should be observed and the woman to exit the pool if any concerns are identified or unable to determine blood loss.

13. The Third stage of labour

- **Physiological third stage**
  Physiological third stage should be an option, as for any other low risk birth. The cord is left intact until the placenta and membranes are expelled by the mother in the pool.
- **Active management of third stage**
  Syntometrine can be administered by IM injection into the deltoid muscle in the arm, delayed cord clamping should be carried out unless fetal or maternal concerns and continue with active management.
- **Following the birth of the placenta**
  Examine for perineal and vaginal trauma.
  If repair is required delay repair of perineum for 30 - 60 minutes as perineum will be water saturated.
  If birth on the birth centre, ensure examination light and a bed are used as required for any perineal repair
- Blood loss should be estimated as less than 500mls or more than 500mls.if birth in the pool

14. Cleaning and Decontamination of fixed pools within the Maternity Unit

- It is the responsibility of the Midwife or MSW to clean the pool following every use.
- Once the woman has exited the pool (whilst the woman is still present in the room) the pool should be rinsed to avoid any staining or potential difficulties with cleaning.
- Ensure the woman, her partner and baby have left the room before cleaning the pool.
- Open the windows and doors if possible. Why?
- PPE **MUST** be employed for cleaning (minimum gloves, plastic apron and appropriate eye protection)
- Wipe the inside and outside of the pool with clinell wipes.
- Fill the Tristel water can with 5 litres of water and add one sachet of Tristel- high level disinfecting and sporicidal solution. (Liquid concentrate containing 2.1% sodium chloride and 5% citric acid for the generation of 0.01% chlorine dioxide)
- Pour around the inside of the pool and leave to stand for 10 minutes.
- Use a disposable mop to clean the sides of the pool with the solution.
- Drain the pool
- Rinse the pool again thoroughly with cold water.

The responsibility of cleaning pools at home lies with the family.

References

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