

## Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth

**A clinical guideline recommended for use**

<b>In:</b>	Maternity Services
<b>By:</b>	<b>Midwives</b>
<b>For:</b>	Women requesting immersion in water for labour and/or birth
<b>Key words:</b>	Waterbirth
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This guideline is for use when women wish to labour and or give birth in water in hospital or at home. However, not all aspects will apply to both settings, for example evacuation procedure.

### Background

## **Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth**

It has been suggested that if midwives wish to make birth more satisfying for mothers and babies and are committed to restoring normality in birth, then every woman without major complications should be offered the opportunity to labour and/or give birth in water. (Miller 2006).

The therapeutic properties of warm water immersion for pain relief have been recorded for centuries. The use of water is now well recognised as an effective form of pain relief, the warmth and support of water encourages relaxation which helps promote the normal physiological progression of labour and encourages endorphin and oxytocin production. Labour and birth in water is associated with low risks for both the mother and her baby when guidelines and criteria for use are followed. (Geissbuehler V, Stein S, Eberhard J. 2004. Cluett et al 2009. Gilbert and Tookey 1999)

Some of the documented benefits include;

- Facilitating mobility and enabling the mother to assume any comfortable position.
- Gives the woman a greater feeling of control.
- Provides significant pain relief.
- Promotes relaxation and reduces the need for drugs and interventions.
- Protects the mother from interventions by giving her a protected private space.
- Reduces the incidence of perineal trauma.
- Can help reduce use of epidural and caesarean section rates.
- Encourages an easier birth for mother and a gentler welcome for baby.
- Is highly rated by mothers - typically stating they would consider giving birth in water again.

This guideline aims to give midwives advice on who can safely be cared for using water immersion in labour and their subsequent management, and to promote the safe care of women wishing to use immersion in water for pain relief in labour and for birth.

It is important that all midwives caring for women labouring and birthing in water have up-to-date knowledge and information on the latest research and evidence relating to the advantages and disadvantages of labour/birth in water (RCOG/RCM 2006).

### **Inclusion Criteria**

The inclusion criteria for using water for labour and birth is the same as that for midwifery led care of low risk women (see Trust guideline for [Intrapartum Care in all Settings MID 7/IO1](#))

- Labour and birth in water should be offered to all women with an uncomplicated pregnancy of between 37 and 42 completed weeks gestation where there is no evidence to suggest that there are any increased risks associated with using water for the birth of the baby. The decision to labour and subsequently give

## **Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth**

birth while immersed in water should be the woman's choice and the midwife should ensure that the woman is making an informed choice. Written documentation of any discussion is essential.

- For women with prolonged ruptured membranes (PROM) the liquor should be clear and the membranes ruptured for no longer than 24 hours at the onset of labour
- If greater than 18 hours from the rupture of membranes to the birth of the baby, the baby will need to be admitted for PROM observations. Swabs must be taken from the nose and ear.
- Women undergoing prostin IOL may use the pool for labour and birth providing they are no more than 42 weeks gestation and there are no other risk factors. For these women a CTG must be performed and seen to be normal prior to entering the pool. (See Trust guideline [Prolonged Pregnancy and Induction of Labour A08](#)) Likewise, if an ARM has been performed for IOL the liquor must be clear and the CTG normal.

### **Precautions.**

Because of the sedating effect on the mother and fetus, systemic opiates such as pethidine should not be used for labour and/or delivery in water. However there appears to be no evidence basis for excluding women who have had systemic pain relief earlier during the current episode of labour care from subsequently using water for pain relief during labour and birth. The NICE Intrapartum Guideline (2007) states that 'Women should not enter water (a birthing pool or bath) within two hours of opiate administration or if they feel drowsy'. The effects of the drug on the individual and how many doses she has had should be used as a guide to determine the suitability of any woman who then wishes to use the pool.

If active labour is not established, using water for pain relief can sometimes slow the progress of labour or stop contractions all together. It is therefore advisable that labour is established before filling a birthing pool for use. However this should not preclude women from using the bath or shower to help them cope in early labour

The woman must be forewarned that it will be necessary for her to leave the pool if complications arise such as maternal pyrexia, vaginal bleeding, meconium liquor, fetal heart irregularities heard on auscultation, or any other deviation from the normal. She will also need to leave the pool if she requests further pain relief other than Entonox.

Women wishing to use a pool at home should be advised to wait until the midwife has arrived before entering the water. This enables baseline observations to be performed and assurance that the mother is in active labour and the baby's heart rate is within the normal range.

### **Observations**

- Maternal temperature, pulse and respirations should be recorded before entering the water to provide a baseline. These observations should then be carried out as per any low risk labour with the exception of maternal temperature which

## **Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth**

should be checked and recorded hourly. (see guideline for [Intrapartum Care in all Settings MID 7/IO1](#))

- Monitoring of the fetal heart using underwater Doppler should be standard practice, as stated in the current NICE guidelines (intrapartum care 2007). The fetal heart should be auscultated for a full minute, beginning immediately after the end of a contraction, every 15 minutes during the first stage.
- If there are any concerns about maternal or fetal wellbeing or progress of labour, the woman should be asked to leave the water. If deviations from normality are confirmed the opinion of an obstetrician should be sought. This will require transfer to Delivery Suite from a community or Midwifery Led Birthing Unit setting.
- All staff involved in the care of a woman using the pool must be familiar with the procedure for evacuation from the pool in an emergency. \* See Appendix 1 When a woman wishes to labour and birth in water at home the logistics of evacuation in the case of emergency should be discussed with the woman and her birth partner(s) prior to entering the water.
- The water should be kept as clear and clean as possible and also at the appropriate temperature.

### **First Stage of Labour**

- For the first stage of labour, the water temperature should be comfortable for the mother and within the range of temperature is between 34 - 37°C. The temperature should be checked every hour and recorded in the maternal hand held records.
- If the maternal temperature rises above 37.5 °C or if the woman feels too hot she should leave to pool until she has cooled down.
- Women should be encouraged to drink plenty of cool fluids while in the pool to prevent dehydration.
- The woman should be encouraged to empty her bladder regularly. If the woman does not wish to leave to pool altogether to do so, she can stand and hold a suitable receptical (eg a bedpan) beneath her.
- The depth of the water should be up to the mother's armpits when she is in a sitting position. This aids buoyancy and promotes movement, which aids the progress of labour and increases maternal control. This will also give enough depth should the woman choose to give birth in the water.

### **Second Stage of Labour and Birth in Water**

- Two midwives should be present for the birth. One of whom must be experienced in caring for women labouring and giving birth in water.

## **Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth**

- The water temperature should be maintained at 37-37.5 °C for the birth (NICE 2007).
- Auscultation should be after every contraction or every 5 minutes in the second stage of labour and recorded in the maternal hand held records.
- Pushing should be physiological.
- The water must be deep enough for the baby to be born completely under water.
- Progress of the emerging head can be observed with a mirror.
- The 'hands off' method of birth should be practised. This will minimize the stimulation to the emerging baby. Traditional control of the head during crowning and palpation of the umbilical cord following birth are unnecessary. (Garland 2000) The cord can be loosened and disentangled if necessary as the body emerges. The cord should never be clamped and cut whilst baby is still under the water. The woman or midwife reach down and support the baby as it emerges. Be aware that restitution still occurs under water and at no point should the midwife expedite the birth of the body unless suspected shoulder dystocia is observed. All manoeuvres for shoulder dystocia should be performed clear of the water.
- The baby should be brought immediately to the surface. Following the birth rest the baby's head above the water keeping the body in the water at the level of the mother's uterus. This will keep the baby warm and promote skin to skin contact
- Once the baby's head has come out of the water it must not be submerged again.
- Avoid undue traction on the umbilical cord as the baby's head surfaces from the water. This minimises the possibility of the cord snapping (Gilbert & Tookey, Cro and Preston 2002)
- It is important to record clearly whether the baby was born under water and the condition of the baby at birth.
- If the woman is having a physiological third stage of labour there is no need to clamp the cord until the placenta is delivered.

### **Third Stage of Labour**

- The mother may wish to remain in the pool for the third stage of labour and there is no evidence to contraindicate delivery of the placenta in water, however the blood loss should be carefully observed and if the water is blood stained enough to impede visibility the woman must be asked to leave the water
- If the woman wishes for an active management of the third stage or if for any reason this is indicated she needs to sit above the water on the step within the pool, or vacate the pool.
- The estimated blood loss should be recorded as less than 500 mls or greater than 500 mls.
- Both mother and baby should be kept warm following the birth.

## **Guideline for the Management of Women Requesting Immersion in Water for Active Labour and/or Birth**

- Suturing should be delayed for one hour due to water saturation of the tissues unless bleeding is excessive, when prompt suturing is required.

### **Infection control and safety**

The following steps should be taken to maintain safety and minimise the risk of infection:

- Protective clothing should be worn by the midwife, including gauntlet gloves and plastic apron
- The pool and all equipment used should be kept as clean as possible during use, using a sieve to remove faecal matter, meconium and blood clots etc.
- The area surrounding the pool should be kept clear in case of emergency evacuation.

### **In hospital**

- The pool must be emptied as soon as possible after use and cleaned using Actichlor 10% (Midwife Birthing Unit) & Tristel® (Delivery Suite) solution made up as per the manufacturer's instructions to the correct concentration.
- All hospital equipment (such as mirrors and thermometers) should be disposed of or thoroughly cleaned, and dried after every use.

### **Training & Awareness**

- All midwives should be competent to perform water birth, any midwives wishing to update his/her skills should contact Practice Development Midwives and arrange to work on the Midwifery Led Birthing Unit.

### **Auditing and Monitoring Compliance**

The process for audit, multidisciplinary review of results and subsequent monitoring of action plans is detailed in the monitoring compliance table appendix 2.

This guideline was originally written by Midwifery Guidelines group. It has been subsequently reviewed and amended to incorporate more recent research and practice and is in keeping with the NICE guideline for intapartum care (2007)

### **Distribution List**

Head of Midwifery  
Risk Manager  
Clinical managers  
Community team leaders

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Trust Intranet

### References

Cluett ER, Burns E. (2009) Immersion in water in labour and birth. *Cochrane Database of Systematic Reviews*, Issue 2. Art. No.: CD000111. DOI: 10.1002/14651858.CD000111.pub3.

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Cro S, Preston J (2002) Cord snapping at Waterbirth delivery. *British Journal Midwifery* 10(8)494-7

Geissbuehler V, Stein S, Eberhard J. (2004) Waterbirths compared with landbirths: an observational study of nine years *Journal Perinatal Medicine* 32 (4): 308-14

Gilbert R. E., Tookey P.A. (1999). Perinatal mortality and morbidity among babies delivered in water: surveillance study and postal survey. *British Medical Journal* 319:483-7.

Harper B J (2002) Taking the Plunge: re-evaluating Waterbirth temperature guidelines. *MIDIRS Midwifery Digest* 12 (4) pp506-508

Johnson P. (1996) Birth under water - to breathe or not to breathe. *British Journal of Obstetrics and Gynaecology* Vol: 103 (3) 202-8.

Miller B, Magill-Cuerden J (2006) *British Journal of Midwifery* 14(8): 484 - 485

NICE Clinical Guideline 55 Intrapartum Care 2007

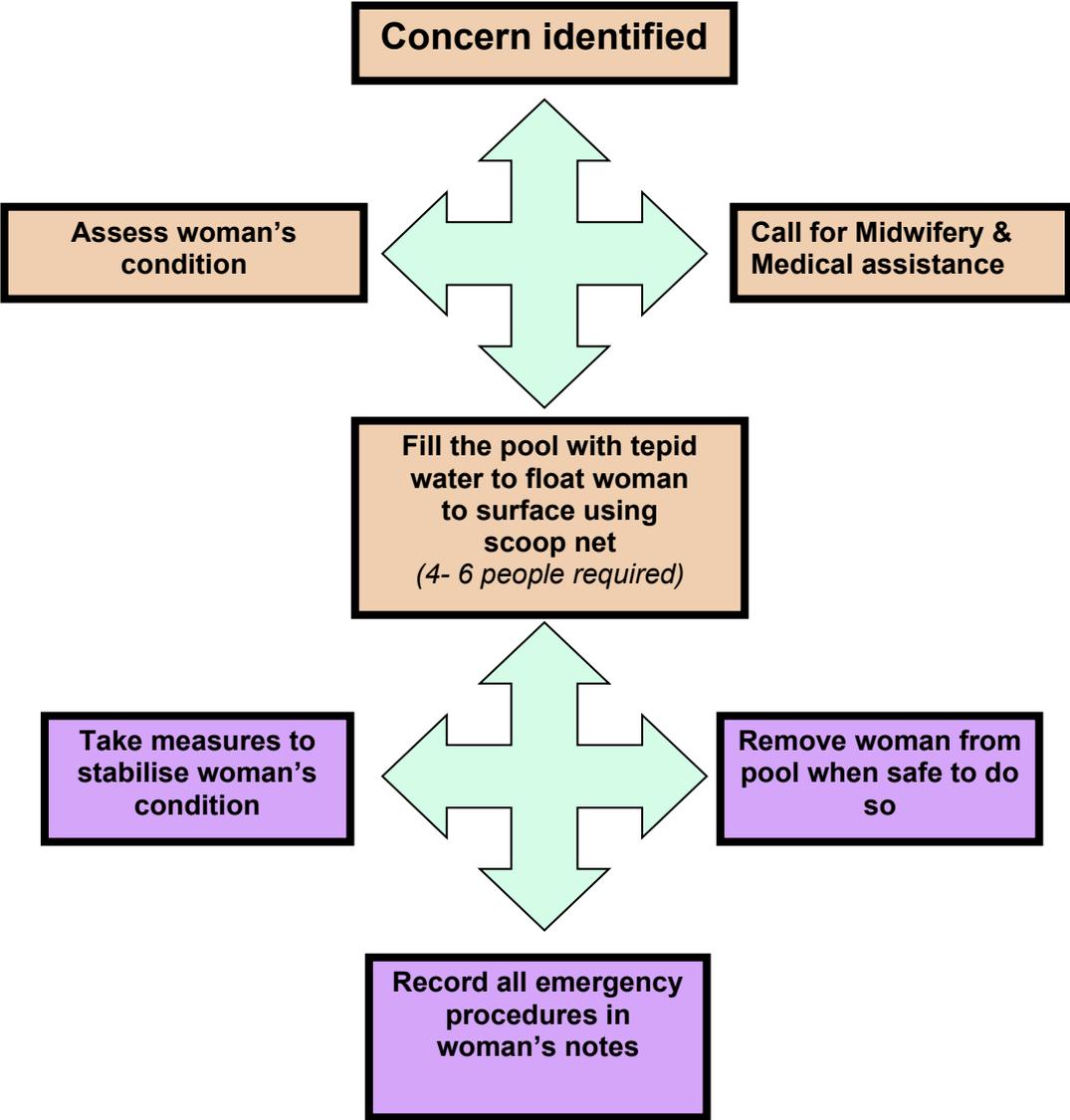
RCOG/Royal College of Midwives Joint Statement NO1 Immersion in Water during Labour and Birth (2006)

**Guideline for the Management of Women Requesting Immersion in Water  
for Active Labour and/or Birth**

**Appendix 1**

**Waterbirth – Emergency Evacuation**

The aim of this procedure is to remove the woman from the pool in the quickest and safest way possible. Do not initiate this procedure if the woman is able to remove herself from the pool with some assistance.



**Drills for dealing with emergency situations should be practiced as part of the routine Skills Drills Sessions and attendance will be recorded.**

**Document Name: Immersion in water for active labour and/or birth.**

**Appendix 2**

<b>Element to be monitored</b> (For NHSLA documents this must include all Level 1 minimum requirements)	<b>Lead Responsible for monitoring</b> (Title needed & name of individual where appropriate)	<b>Monitoring Tool / Method of monitoring</b>	<b>Frequency of monitoring</b>	<b>Lead Responsible for developing action plan &amp; acting on recommendations</b>	<b>Reporting arrangements</b> (Committee or group where monitoring results and action plan progress are reported to)	<b>Sharing and disseminating lessons learned &amp; recommended changes in practice as a result of monitoring compliance with this document</b>
Please see compliance templates for Care of Women in Labour, Fetal Monitoring and Clinical Risk Assessment in Labour.	Clinical audit lead	A formalised audit with reference to CNST requirements	3 yearly audit or when clinical risk identified regarding failure to follow guidance	Clinical Governance Lead	Departmental Clinical Governance Meeting	The Lead responsible for developing the action plans will disseminate lessons learned via the most appropriate committee e.g. Clinical Effectiveness; Clinical Governance, Patient Safety and where appropriate, the
a) Maternal temperature, pulse and respirations recorded before entering the pool.	Clinical audit lead	A formalised audit with reference to CNST requirements	3 yearly audit or when clinical risk identified regarding failure to follow guidance	Clinical Governance Lead	Departmental Clinical Governance Meeting	learned via the most appropriate committee e.g. Clinical Effectiveness; Clinical Governance, Patient Safety and where appropriate, the
b) Maternal temperature recorded hourly	Clinical audit lead	A formalised audit with reference to CNST requirements	3 yearly audit or when clinical risk identified regarding failure to follow guidance	Clinical Governance Lead	Departmental Clinical Governance Meeting	learned via the most appropriate committee e.g. Clinical Effectiveness; Clinical Governance, Patient Safety and where appropriate, the



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c) Water temperature checked and recorded hourly.	Clinical audit lead	A formalised audit with reference to CNST requirements	3 yearly audit or when clinical risk identified regarding failure to follow guidance	Clinical Governance Lead	Departmental Clinical Governance Meeting	Compliance Assurance Group.
d) Water temperature maintained at 37-37.5 °c for the birth.	Clinical audit lead	A formalised audit with reference to CNST requirements	3 yearly audit or when clinical risk identified regarding failure to follow guidance	Clinical Governance Lead	Departmental Clinical Governance Meeting	