Labour and birth in water: Guideline MATY078	
Type: Guideline	HDSS Certification Standard:
Issued by: Maternity PPG Group	**Version:** 1.1
Applicable to: Hutt Valley DHB	**Contact person:** Service Manager
Lead DHB: Hutt Valley DHB	**Level:**

Hutt Maternity Policies provide guidance for the midwives and medical staff working in Hutt Maternity Services. Please discuss policies relevant to your care with your Lead Maternity Carer.

Purpose:

The purpose of this protocol is to;

- Establish a local approach to care, that is evidence based and consistent
- Inform good decision making
- Provide safe and consistent advice and care to pregnant people whose wish to labour and birth in water

Scope:

For the purposes of this document, staff will refer to:

All staff within Hutt Valley DHB. This includes staff not working in direct contact with patients/consumers. Staff are taken to include anyone engaged in working to the Hutt Valley DHB. This may include but is not limited to:

- Employees irrespective of their length of service
- Agency workers
- Self-employed workers
- Volunteers
- Consultants
- Third party service providers, and any other individual or suppliers working in Hutt Maternity, including Lead Maternity Carers, personnel affiliated with third parties, contractors, temporary workers and volunteers
- Students

Abbreviations and Definitions:

Abbrev.	Abbreviation

Roles and Responsibilities:

- Supporting those who wish to use water as part of their birth plan is a midwifery skill and midwives are responsible for antenatal discussions and for ensuring safety while the woman is in the pool.

Guideline Content:

Background

Immersion in water for labour and birth has become increasingly popular over the last two decades. Many people have found labouring in water helps them to relax and in turn cope better with pain. Advocates suggest that immersion in water shortens the length of labour, decreases the amount of analgesia needed, and birthing in water provides the baby with a gentle introduction to the world, although there is little evidence to suggest that water birth alters the outcome of vaginal and caesarean birth. There is weak evidence indicating that water immersion in labour marginally reduces the need for epidural/spinal anaesthesia (Cluett *et al*, 2018) and shortens the first stage of labour (Dahlen *et al*, 2013). Most significantly, water immersion increases satisfaction with the birth experience (Maude & Caplice, 2015; NZCOM, 2015; Ulfsdottir *et al*, 2018).

Some birthing people use water to help cope with labour pain only and some progress to a water birth. There is no evidence to suggest that labouring *or* birthing in water leads to detrimental effects such as infection for either the birthing person or baby (Cluett *et al*, 2018; NZCOM, 2015) , although study numbers may not be statistically powered to provide this evidence (RCOG/RCOM, 2006).

Water immersion during labour and birth is supported within HVDHB. This guideline focuses on issues specific to the use of water immersion during labour/birth. Labour care, monitoring and documentation continue as for any labour, according to the clinical situation.

Antenatal counselling

Pregnant people should receive information about both labour and birth in water antenatally (RANZCOG, 2008) to enable the woman to make an informed choice. These plans need to be clearly documented in the birthing plan and clinical record.

Informed Choice

Inform pregnant people that:

- They can leave the water anytime they wish
- They will be asked to leave the water if concerns arise regarding their health or that of their baby
- There is no strong evidence of risk in waterbirth
- There is no strong evidence of benefit in waterbirth
- There is a small increase in the chance of cord avulsion at the time of birth in water, but that this can be managed without undue risk
- They will be asked to leave the water for emergency procedures
- They will be asked to leave the water if continuous electronic fetal monitoring is advised if no telemetry monitoring is available

Assessment and facilitation of labour and birth in water

Criteria for labouring or birthing in water

- Informed choice

- Well pregnant person with no relevant obstetric or medical problems that pose a risk to immersion in water
- Singleton baby in a cephalic presentation
- ≥37 weeks gestation
- No evidence of meconium-stained liquor
- Normal fetal heart rate
- BMI <35
- Presence of a midwife or obstetrician skilled in water birth

Clinicians supporting people to use water immersion in the first stage of labour should be prepared for the event of the person giving birth in the water even if this was not the intent of the birthing person (RANZCOG, 2015).

Contraindications

- Preterm labour
- Communicable blood or skin infection
- Maternal fever >38°C
- Excessive vaginal bleeding
- Abnormal fetal heart rate or risk factors requiring continuous electronic fetal monitoring
- Suspected macrosomia with history of shoulder dystocia (may labour in water, but should not birth in tub)
- Sedation with opioids/use of opioids within past four hours
- Malpresentation or multiple birth

Positive Group B Strep status is not a contraindication to water birth with appropriate administration of intrapartum IV antibiotics

Procedure

Equipment

Equipment to be used for labouring and/or birth in water includes:

- Birthing pool and disposable liner if using, or bath
- Sieve or container
- Long gloves
- Thermometer
- Sonicaid with waterproof underwater probe
- Waterproof torch and/or mirror

Water temperature

The water temperature should be kept at a temperature the labouring person finds comfortable during the first stage of labour, and which allows a normal body temperature to be maintained. The temperature should be increased to between 36 and 37°C for birth (Maude & Caplice, 2015).

If the labouring person's temperature increases more than 1°C above the baseline temperature, then the water should be cooled or the person encouraged to leave the bath/pool

Water temperature should be documented in the clinical notes as the labouring person enters the pool and taken hourly while they remain there. Document adjustments to temperature for second stage.

Analgesia

Entonox can be used judiciously as per normal labour, with care to ensure the labouring person does not become drowsy or dizzy with its use.

Water immersion is contraindicated if the labouring person has had narcotic analgesia within the previous 4 hours.

Narcotic analgesia should not be given to people labouring in water.

Length of Immersion

One study suggests immersion prior to 5cm increased augmentation rates and uptake of pharmacological analgesia, but it is unclear whether this is purely due to inclusion of people in latent labour (Cluett *et al*, 2018).

Labouring people should be able to enter and leave the pool/bath as desired and as with all normal labours encouraged to change position regularly.

Observations and Fluid management

Vital signs should be taken and recorded as follows:

- Baseline observations: temperature, pulse, respiration rate and blood pressure, and auscultation of the fetal heart should be recorded prior to entering the pool/bath
- Fetal heart rate should be recorded every 15-30 mins as per standard recommendations for auscultation
- Maternal temperature and water temperature should be taken hourly while immersed in water
- Encourage regular oral fluids and record volume to prevent dehydration
- Encourage regular bladder emptying.
- Vaginal examination may be conducted in the bath/pool if required; a low threshhold should be held for asking the labouring person to get out of the bath if inadequate assessment can be made

Care in second stage

The baby should be born completely under water with no air contact until raised to the surface, then bought to the surface immediately but gently. Do not re-immerse the face thereafter.

- Do not feel for the nuchal cord
- Do not clamp and cut the cord
- If it is thought that the cord is impeding progress of second stage assist the birthing person to leave the pool.

- Inadvertent traction on the cord as the baby is lifted to the surface may cause cord avulsion – ensure availability of clamps at birth
- Following birth, keep the newborn's body under water and skin to skin to maintain warmth unless the baby's condition dictates otherwise

Care in third stage

Physiological care in third stage is appropriate, given the low-risk pregnancies of people who birth in water, no reliable evidence is available to inform decision-making regarding the safety of placental birth occuring in water (NZCOM, 2015). If prolonged or requiring active management is required, assist the birthing person to leave the pool/bath.

- Blood loss must be monitored carefully. Clinicians are known to underestimate blood loss generally, and assessment of blood loss in water must take into account movement and dilution of the blood through water. Be watchful for the passage of clots, which can accumulate in the bottom of the bath, as well as fluid blood. If there is *any* concern about the amount of blood loss assist the person to leave the pool / bath immediately.
  A useful visual tool is available at https://www.pregnancy.com.au/estimating-blood-loss-in-an-inflatable-birth-pool/ with caution given to the fact that overall volume can differ significantly between different pools and baths
- Delay suturing for one hour after leaving pool to allow recovery from the effects of water saturation on the perineal tissue. If bleeding from perineal trauma is excessive, then immediate suturing is required.

Infection control

- Follow standard precautions
- A new plug and thermometer will be found in the birth trolley and are disposed after use
- Ensure the labouring person is aware that if the pool is too contaminated they may be advised to leave

Health and safety

- Position freestanding pools to allow easy access all the way round (consider trolley access in an emergency)
- Remove all unnecessary furniture and avoid clutter
- Dry puddles of water on the ground surrounding the pool as soon as practical
- Provide assistance to ensure safe exit from the pool
- Have at least two people to support the person leaving the pool in case of hypotensive episodes and/or loss of balance

⚠	Do not attempt to lift a person out of the pool unsupported

⚠	Ensure that the full pool/bath is not left unattended or the room is secured from children

Emergency Protocol

- As per normal birth the LMC midwife/core midwife is responsible for checking emergency equipment in the room
- The labouring person should have someone with them at all times and within reach of a call bell
- The person should leave the pool immediately if required to do so for safety reasons
- **If in doubt, get them out**

Cleaning and storage

The practitioner conducting the birth is responsible for cleaning the bath and equipment

To clean the bath the following steps should be taken:

- Any birth debris should be removed from the pool as soon as possible and disposed of in the toilet/sluice
- After emptying bath, rinse away visible soiling
- All baths will be steam sterilised as per unit protocol

References:

Cluett ER, Burns E, Cuthbert A. (2018). Immersion in water during labour and birth. Cochrane Database of Systematic Reviews 2018, Issue 5. Art. No.: CD000111. DOI: 10.1002/14651858.CD000111.pub4. Accessed 25 August 2021.

Dahlen, H., *et al*. (2013) Maternal and perinatal outcomes among low risk women giving birth in water compared to six birth positions on land. Midwifery, 2013. 29: p. 759-764.

NZCOM (2015) Consensus Statement: The use of water for labour and birth (ratified July 2015)

Maude, R. and S. Caplice, Using water for labour and birth, in Midwifery Preparation for Practice, S. Pairman, et al., Editors. 2015, Elsevier: Sydney. p. 671-692

RANZCOG (2008). Water immersion during labour and birth: Best practice statement. July 2008, https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women%27s%20Health/Statement%20and%20guidelines/Clinical-Obstetrics/Water-immersion-during-labour-and-birth-(C-Obs-24)_March-2021.pdf?ext=.pdf

Royal College of Obstetricians and Gynaecologists (RCOG)/Royal College of Midwives (RCM). (2006). Joint Statement No.1 Immersion in watreBirth in water. April 2006 http://www.rcog.org.uk/statements (last accessed 11/5/04)

Ulfsdottir, H., Saltvedt, S. & Georgsson, S. (2018). Waterbirth in Sweden – a comparative study. Acta Obstetricia et Gynecologica Scandinavica 2018, Volume 97, Issue 3. DOI: 10.1111/aogs.13286

Related Documents:

- MATY138 Umbilical cord clamping and placental birth guideline
- MATY114 Group B streptococcus (GBS) in pregnancy

Keywords for searching:

1. Water birth
2. Waterbirth
3. Maternity
4. MATY078

Informed Consent:

The right of a consumer to make an informed choice and give informed consent, including the right to refuse medical treatment, is enshrined in law and in the Code of Health and Disability Consumers' Rights in New Zealand. This means that a woman can choose to decline treatment, referral to another practitioner, or transfer of clinical responsibility. If this occurs follow the process map on page 18 of the Referral Guidelines (Ministry of Health, 2012).

Tangata Whenua Statement:

The Women's Health Service recognises the rights and responsibilities of Māori as tangata whenua and Treaty Partners. This allows and acknowledges the importance of cultural diversity in all aspects of our care and practice in Aotearoa New Zealand.

As stated in Te Pae Amorangi (Hutt Valley DHB Māori Health Strategy) 2018-2027, Hutt DHB as a Crown agency is committed to our role in maintaining active relationships with iwi, under Te Tiriti o Waitangi. This strategy recognises the established principles of Partnership, Participation and Protection and recognises steps towards the reviewed interpretation of Te Tiriti principles to date (from the Wai 2575 claim into health). These are tino rangatiratanga, equity, active protection, partnership and options.

Attention in particular is drawn to:

- **Article one – Kāwanatanga**: actively engaging and working alongside with local iwi through the Hutt Valley Māori Health Unit
- **Article two – Tino Rangatiratanga**: Self-autonomy, self-determination; the responsibility to enable Māori to exercise their authority over their own health, determinants and definition of health
- **Article three – Ōritetanga**: equal health outcomes of peoples; ensuring that policy, guidelines or programmes do not further perpetuate any inequity
- **Article four (the 'oral clause') – Wairuatanga**: spirituality; thriving as Māori and the importance of health providers understanding health in te ao Māori (the Māori world), acknowledging the interconnectedness and inter-relationship of all living and non-living things.