MATERNITY UNIT

GUIDELINE: **Water for labour & birth**

SCOPE: All midwives working in the maternity unit

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PURPOSE: To provide a safe environment and assist practitioners in the safe care of women who choose water as part of their birthing experience either for pain relief or the birth. Safety of practice is the responsibility of the practitioner providing care.

DEFINITION: The immersion of women in warm water during labour or birth. Water birth is defined as a baby born fully submerged in water.

GUIDELINE
CRITERIA

Water immersion and birth may be offered to women when:

- ≥37 weeks of uncomplicated pregnancy
- Have had no adverse factors affecting maternal or fetal wellbeing during pregnancy or labour
- If using the pool will not adversely affect maternal or fetal wellbeing during labour and birth
- Have made an informed choice
- Preferably in established labour but may be used for pain relief and relaxation during the latent stage.
- Have a diagnosis of labour dystocia or long latent phase
- Have ruptured membranes with clear or light meconium staining
- Single pregnancy with cephalic presentation
- For a VBAC
- Mild PET
- Body mass index of less than ≤ 35. This can be assessed on an individual basis dependant on the ability of the woman to get in and out of the pool or to be safely removed from the pool in an emergency situation.

The pool should not be considered if there are any adverse maternal or fetal factors noted in labour.

Exclusion Criteria for pool use:-

Labouring in the pool	**Birthing in the pool**
Any fetal compromise necessitating continuous fetal monitoring (refer to antenatal and fetal monitoring guideline for risk assessments*)*. If the woman insists she wishes to labour in the pool having been informed of the risk then recommend the use of continuous EFM by telemetry	Any contra-indication to labouring in the pool
Placenta praevia	Preterm labour (less than 37 weeks)
Maternal medical conditions e.g. diabetes on an insulin infusion, cardiac disease, severe PET, epilepsy	Any concerns re: fetal condition
Moderate or heavily meconium stained liquor	Breech, unless experienced health professional conducting birth & woman fully informed of risks & benefits
Morphine given to the woman in the last 2 hours	Multiple pregnancy unless experienced health professional conducting the birth and woman fully informed of risks and benefits
Augmentation/induction with syntocinon	Previous significant PPH
Repeated bleeding in pregnancy	History of shoulder dystocia
Prolonged ROM >18 hours unless IV antibiotics have been administered	Prolonged second stage

Baseline assessments of both mother and baby including maternal temperature should be carried out prior to entering the pool and assessment continued throughout the time in the water as for any normal labour. Encourage the woman to empty her bladder before entering the pool. Record the pool temperature. Ensure all equipment is available (see Appendix One) and adequate fluids for all in the room and an area prepared in the event of an emergency evacuation out of the pool.

Any deviation from the normal labour, at any stage, should be acknowledged, discussed with the woman, documented and acted on. This may necessitate the woman leaving the pool.

Considerations:

- Women whose labour is being induced with prostin/ARM may use the water, providing there are no concerns with the fetal or maternal condition.

- If the woman has GBS risk factors she may still use the pool (after consideration of the risk factors) but would need to have IV antibiotics as per guideline and keep her IV leur out of the water due to the risk of contamination of the IV site.

- Women who have PET (diastolic>/95) may be offered hydrotherapy after consultation with the obstetrician – evidence suggests that water lowers the blood pressure.

- Entonox may be used by the woman whilst in the pool but narcotics should never be administered within 2 hours of entering the pool.

- Women should not be denied the use of the pool in the latent phase of labour for relaxation & pain relief. Inform the woman that the pool may stop her contractions but may also augment her labour.

- Ensure there are plenty of oral fluids available for the woman, her partner & the health professionals in the pool room.

- Observations of the baby should be as per fetal monitoring during labour guidelines.

- A thermometer that is only for the pool should be used and cleaned appropriately between pool births.

- The water temperature should be checked hourly during the first stage of labour and maintained between 35-37ºC according to the woman's comfort.

- The water temperature should be checked every 15 minutes during the second & third stage of labour and be maintained between 36.5—37.5ºC.

- If the maternal temperature raises more than 1ºC above the baseline temperature, then the water should be cooled, her temperature rechecked and if no improvement she should be encouraged to leave the pool. Ensure she is drinking plenty of cool fluids to avoid dehydration.

- Careful documentation should be kept of the maternal and water temperatures, FHR and fluid intake.

- The water level should not be above nipple level to avoid overheating and dehydration.

- Water should be kept clear of debris with a sieve which must be cleaned appropriately between pool births.

- If the pool becomes heavily contaminated with loose faecal matter then ask her to leave the pool so the water can be changed.

Labour and delivery

- Vaginal examinations can be performed with the woman remaining in the pool.

- Episiotomy should **not** be performed in the pool.

- **Under no circumstances should the cord be cut and clamped under the water**. Do not check for nuchal cord, pool births are conducted with a 'Hands off' approach.

- Keep tactile stimulation during the birth to a minimum. Do not feel for a nuchal cord. The cord is easily unwrapped as the baby is born into the water.

- Avoid undue traction on the umbilical cord to reduce the risk of cord avulsion. The cord should never be clamped and cut whilst the baby is still under the water. If the cord appears to be short ask the woman to elevate herself above the water level & adjust the water level accordingly.

- The baby should be born completely submerged under the water. There should be no contact with the air until the baby is brought to the surface to breathe. If the baby becomes exposed to air during the second stage then the birth must continue in air.

- The baby is brought slowly and gently to the surface straight away with the head facing down so that water can drain from the baby's mouth and nose. Once the baby's head has come out of the water it must not be submerged again.

- If the woman births on all fours, pass the baby forwards between her legs so that the baby can be brought up to the surface and placed in the mother's arms with the cord intact. The mother may do this herself.

- The baby's head should remain at the level of the woman's uterus and the body remains in the water to reduce the cooling effect unless baby's condition dictates otherwise.

- Babies born in water can appear more relaxed and quiet at birth and tend to take a little longer to establish respirations than air/land births which may affect the 1 minute Apgar

score. Maintain close observation of baby's condition and proceed to active resuscitation if required.

- The baby's body should remain in the water to maintain warmth, unless the baby's condition dictates otherwise. Recheck the water temperature every 15 minutes – cold water, cold baby.

- Physiological third stage may occur in the pool, but if actively managed, the woman should be asked and assisted to leave the pool.

- It is very important to avoid the woman becoming cold during the 3rd stage of labour as this will increase her risk of PPH.

- Due to the difficulty of accurately assessing blood loss in the pool, EBL should be recorded as less than or more than 500 mls. Remove clots from the pool and put the sieve over the plug hole when it is emptied to collect any clots which can then be measured. As a guide, if you cannot see the bottom of the pool clearly the blood loss is over 500mls and the woman needs to be assisted out of the pool. Use a torch to assist assessing if the woman is actively bleeding PV in the pool.

- Warmth of mother and baby should always be a priority, be aware that a damp towel soon becomes cold.

- All midwives should follow standard precautions as for ALL births.

Dealing with emergencies

In any emergency, the woman should immediately be assisted to leave the pool – arrangements must be in place to ensure that this can happen speedily – i.e. **a bed or mattress in a close location and attendants to assist with moving the woman from the pool.** If she is unable to get out of the pool support her in the pool until there are enough people to help move her out. If needed ask her partner & whanau to assist you. The woman may express warning signs such as ringing in her ears, feeling extremely hot and/or light headed. Act on these signs and call for help, assist her out of the pool at that point and take appropriate actions to treat the cause e.g. ecbolic if bleeding during the 3rd stage of labour, fluids if dehydrated and faint.

Actions to take if **shoulder dystocia** occurs:

- **Pull the plug and call for help immediately**.
- Assist the woman to change to a standing position and to lean over the pool with one leg elevated.
- This action may free the anterior shoulder or allow it to be released from under the pubic bone, to aid the birth.

- If standing does not resolve this problem then assist the woman to leave the pool. Protect the baby's head during this movement. Once out of the pool use the **HELPERR** mnemonic, but NEVER perform manoeuvres with the baby underwater as this could lead to the baby gasping under water.
- If the baby births and is in a good condition the woman may sit back in the pool and the baby placed skin to skin with her. Recheck the pool temperature.
- Assess the baby's requirements for resuscitation and action as required.

Actions to take if **post partum haemorrhage** occurs:

- If the blood loss is excessive (a general guide is if you can no longer see the bottom of the pool clearly, the EBL is more than 500mls) call for immediate help and assist the woman out of the pool and onto the available bed or mattress.
- Follow guideline for PPH management
- Pass the baby to a member of the whanau but ensure baby is dry and warm.
- Explain to the whanau what is happening.
- Debrief woman and whanau after the event.

Additional points:

Note that it is the responsibility of the LMC to empty and ensure that the pool is cleaned ready for the next woman.

The pool should not be left unattended and full of water **at any time**.

There is an aqua sonicaid available for intermittent fetal monitoring. There are also cordless CTG monitors available which are waterproof and can be used if required, whilst acknowledging that if there are any fetal wellbeing concerns the woman should be asked to leave the pool.

ASSOCIATED DOCUMENTS

Maternity unit – Antenatal and Intrapartum fetal monitoring
TDH Maternity Guideline – Cleaning of the birth pool
TDH Maternity Guideline – Induction of labour
TDH Maternity Guideline – Prevention and management of Group B Streptococcus
TDH Maternity Guideline – Shoulder dystocia
TDH Maternity Guideline – Postpartum haemorrhage
TDH Organisational Policy – Infection Control Policy
TDH Organisational Policy – Isolation Policy (Preventing Transmission of Infectious Organisms in a Healthcare Setting)
TDH Organisational Policy – Needle-sticks/Body Fluid/Occupational Exposure Policy

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APPENDIX ONE

Equipment required in pool room

- Emergency call bell
- Bath or birthing pool
- A continuous supply of hot and cold tap water
- Waterproof thermometer for pool water
- Maternal thermometer
- Fine sieve/scooper
- Long gauntlet gloves/protective personal clothing
- Torch or overhead light source
- Mirror that can be used underwater
- Waterproof doppler
- Warm towels and linen
- A chair or stool for the midwife
- A dry area with a mattress or bed for use in emergency situations, eg PPH
- Delivery pack
- Ecbolic drugs
- Neonatal resuscitation equipment