Water for Labour and Birth

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Contents

Back to Contents

1. Purpose of guideline

This guideline is to assist all practitioners in the safe care of the woman who chooses water as part of her labour and birthing experience either for pain relief during labour or for birth.

2. Education and support

If educational or clinical support is needed in relation to using water during labour/birth discuss with the Clinical Charge Midwife (CCM) or a senior midwife, or contact the Auckland DHB midwifery educators or clinical coaches to arrange education or alongside support.

3. Background

Consensus statement, New Zealand College of Midwives (2019):

"… The New Zealand College of Midwives (Inc) supports warm water immersion for women during labour as a method of pain management. There is no evidence that remaining in water for the birth of the baby leads to adverse outcomes for the mother or baby where the labour has been within normal parameters. Women who make an informed choice to give birth in water should be given every opportunity and assistance to do so by midwives who have the appropriate knowledge base.

Immersion in water during labour may assist with pain relief and reduce the need for epidural, increase maternal satisfaction, assist in optimising fetal positioning, and may reduce the length of the first stage of labour. There are no differences in rates of perineal trauma, postpartum haemorrhage, the use of oxytocin augmentation, and maternal infection. There are no differences in the incidence of low APGAR scores, respiratory distresss syndrome, neonatal infection or admission to SCBU".

4. Preparation

- The use and benefits of water for labour and birth should be discussed with all eligible women during pregnancy and again in labour and recorded on the woman's birth plan. All eligible women should routinely be offered and encouraged to use the pool or shower. This should be normalised as a first line approach for pain relief and be an integral part of labour and birth care.
- **Rooms with pools should be allocated to women who are likely to use the pool**. If a woman is planning to have/having an epidural, or has complexities not consistent with the use of a pool, she should be allocated/moved to a room without a pool whenever this is possible.

5. Criteria for using water during labour for pain relief

- There are no immediate concerns about fetal or maternal wellbeing.
- The woman is able to easily get out of the pool herself unaided.

Back to Contents

- Fetal wellbeing is able to be effectively monitored as per the Intrapartum Fetal Surveillance policy (see associated documents) (fetal scalp electrode can not be used in the water).
- The woman has not received opiate analgesia within the past two hours, and is alert if she has received it prior to this (and has not received any other medication that has caused drowsiness).

Note: Care is responsive to ongoing assessment of the immediate, changing, and anticipated needs of the woman and baby.

6. Criteria for birth in the pool

Ongoing consideration is needed in relation to the baby being born in the pool if the woman prefers, or whether the woman would benefit from labouring in the pool and leaving for the birth. Birth in the pool is an option for women who have:

- A singleton pregnancy
- Cephalic presentation
- Gestation > 37 weeks
- Labour is progressing normally
- The woman is able to easily get herself out of the pool
- There are no immediate or anticipated concerns about maternal or fetal wellbeing
  Fetal wellbeing is able to be reliably monitored as per the Intrapartum Fetal Surveillance policy (note: fetal scalp electrode (FSE) cannot be used in the pool as not reliable when the woman is submerged).

The woman must leave the pool if any deviation from normal labour or any concerns about maternal or fetal wellbeing.

If the woman has a cannula keep as dry as possible; do not submerge in the water. Redress the cannula site as needed.

For the care of women having an induction of labour, vaginal birth after caesarean (VBAC), or have premature rupture of membranes (PROM) or Group B Streptococcus (GBS) please see sections below.

6.1 PROM and Group B Streptococcus (GBS)

Women with ruptured membranes for more than 18 hours and woman who are GBS positive without other risk factors can use water for labour/birth after commencing the recommended intravenous antibiotics.

6.2 Women having an induction of labour

Women who's labour has been induced can use the pool providing they:

- Meet the criteria for using the pool in the criteria sections.
- Labour is progressing normally and cardiotocography (CTG) is normal
- Take into consideration the reasons for induction. Discuss any concerns with the CCM.

Back to Contents

- Oxytocin infusion can be used providing contractions can be effectively palpated and there is no sign of hyperstimulation
- Do not leave the woman on her own (midwife or labour support person to be present at all times).

6.3 Women labouring after caesarean section

National Institute for Health and Care Excellence (NICE) guidelines (2019) state that, '… Based on their knowledge, experience and expertise, the committee agreed that women in labour with a previous caesarean section should be offered a full range of options for pain relief, including labour and birth in water. Although no evidence was identified for inclusion for this aspect of the review, the committee agreed strongly that an absence of evidence in support of using the birthing pool should not be interpreted as meaning that labour and birth in water is contraindicated for this group of women'.

Women who have had just one previous caesarean and this was not done preterm/with a classical incision are able to use the pool during labour providing they:

- Meet the criteria for using the pool in the criteria section above.
- Labour has started spontaneously and is progressing normally without augmentation with oxytocin.
- Fetal heart and contractions are able to be reliably recorded as per Intrapartum Fetal Surveillance policy (see associated documents).

Do not leave the woman on her own in the water at any time (midwife to stay in the birthing room).

The woman must leave the pool straight away if any deviation from normal labour at any stage or any concerns about maternal or fetal wellbeing. If sudden increase in maternal heart rate, fetal distress, any sudden or unusual pain, or excessive vaginal bleeding, the woman must leave the pool immediately.

Advise IV leur as per VBAC guideline (see associated documents).

7. Intrapartum care

Baseline assessments of maternal and fetal wellbeing should be done prior to entering the pool and must be within normal range. Continue to assess as per Intrapartum Care - Normal Labour & Birth guideline (or VBAC/IOL guideline) with the addition of hourly measurements of maternal temperature.

Any deviation from normal labour or concern about maternal or fetal wellbeing at any stage should be discussed with the woman, and the woman advised to leave the pool until there are no longer concerns. This is explained to the woman before entering the pool.

The table below describes care when preparing and using the pool

Aspect	Description
Water level	Fill the pool to the level of the height of the woman's axillae (when sitting down).
Water temperature	The temperature of the water should start at **35.5-36.5 degrees celsius** during labour and should be kept as cool as the woman finds comfortable during the first stage of labour. It should not exceed **37.5 degrees celcius.** Ask the woman regularly about her level of comfort. Monitor the water temperature hourly, adjust as required, and record in the clinical notes.
Maternal temperature	Assess and record maternal temperature hourly. **If greater than or equal to 37.6C on 2 occasions or there is a rise of 1 degree above the woman's baseline temperature** the woman should leave the water until she is normothermic; cool the water as needed.
Oral fluids	Provide and encourage oral fluids and avoid overheating.
Positions	Encourage the woman to explore different positions in the pool.
Time in the pool	• The woman can leave, and re-enter the pool, at any time. • Encourage the woman to leave the pool to pass urine regularly. • Encourage the woman to leave the pool to mobilise if contractions become irregular or less frequent.
Pain management	Entonox can be used in the pool. Opiate analgesia is not to be given.
Support	The woman should not be left alone in the pool.
Vaginal examinations	• Vaginal examinations may be carried out with the woman in the water. • If any concerns about accuracy ask the woman to leave the pool for examination

7.1 In preparation for birth

- Increase the water temperature to 37 degrees. Check and record water temperature every 30 minutes during second stage.
- Ensure availability of cord clamps in case of cord avulsion.
- Pushing should always be spontaneous.
- Monitor fetal heart every five minutes or after each push/contraction and document (or continue with CTG monitoring as appropriate as Intrapartum Fetal surveillance policy).
- A mirror can be used to observe progress.

7.2 Birth in the pool

- It is recommended that two practitioners are present at the birth.
- The woman must either be completely submerged or out of the water for the birth.
- 'Hands poised' birth supported by verbal encouragement and guidance by the midwife. However, the midwife should be observing closely and sometimes some control of the head may be necessary to minimise perineal trauma.

Back to Contents

- At birth the baby should be completely submerged and brought gently to the surface, head first and face down. The baby's head must not be re-submerged once it has surfaced.
- Do not cut the cord before the baby is completely born. If the cord appears to be short assist the woman to stand up. Following birth if it is difficult for the mother to hold her baby comfortably due to a short cord, assist the woman to leave the pool.
- The baby should be skin to skin with the mother with the baby's body remaining in the water to maintain warmth unless the baby's condition dictates otherwise. The pool may need a top-up of hot water.
- Closely observe the baby's colour, tone, heart rate, respirations and temperature.
- Support early breastfeeding in the pool.

7.3 Following birth

- Physiological management of third stage. The cord is left unclamped until it stops pulsating.
- Should oxytocin be required or third stage is prolonged assist the woman to leave the pool.
- Assess blood loss and the woman's condition and manage appropriately. Assist the woman to leave the pool if any concerns.
- Check for perineal trauma out of the pool. Suturing should be delayed up to one hour after the woman has left the water (perineal tissue needs to revitalise following prolonged immersion in water).

8. Criteria for leaving the pool

- Maternal request
- Any concern regarding maternal or fetal wellbeing at any stage including meconium stained liquor
- For abdominal palpation and VE if any concerns regarding the accuracy of assessments done in the water
- Tight nuchal cord
- Shoulder dystocia
- If active management of third stage of labour is needed
- Postpartum haemorrhage (PPH) or suspected PPH.

9. Safety when leaving the pool

- Ensure the floor around the pool is kept dry
- Provide the woman with towels and ask her to dry herself as much as possible before leaving the pool
- Offer assistance and steps if required

10. Emergency situations

In the unlikely event of an emergency assist the woman to leave the pool immediately:

- Suspected fetal distress
- Shoulder dystocia
- Tight nuchal cord
- PPH
- Maternal collapse.

10.1 Soulder dystocia

Press the emergency buzzer. Encourage the woman to change position in the water onto all fours or left lateral. Woman may also stand in the pool and lift one leg onto the side of the pool and semi-squat. If manoeuvres are required assist the woman to leave the pool immediately while supporting the baby's head.

11. Health and safety

- Use above elbow gloves
- Keep the floor around the pool dry to avoid slips
- Take care with handling techniques

11.1 Infection control

1.1.1 Cleaning before each use

If the pool has not been used for 24 hours wash with hot water and detergent and rince well before use

1.1.2 Cleaning after use

- Midwives should ensure the pool is emptied of water and all debris (blood clots etc.) removed.
- All water birth equipment used (such as thermometer,mirror,etc) should be placed in the base of the pool after use ready for cleaning.
- The sieve is single use only.

Follow the steps below to complete the cleaning procedure

Step	Action
1.	Wear apron, eye protection and gloves
2.	Clinell wipes can be used for the initial clean once the pool has been emptied working from the top of the pool to prevent recontamination (pay particular attention to the plughole and waterline)
3.	Use sodium hypochlorite (Na HCL) for the final clean once all organic matter has been removed. Na HCL has a recommended contact time of 10mins on the pool surface.
4.	Rince the pool with warm water from the top to the base
5.	Pool thermometer, plug, and mirror need to be thoroughly cleaned with sodium hypochlorite Wipe electronic equipment with an alcohol based product.

Back to Contents

12. Supporting evidence

- Burns, E. E., Boulton, M. G., Cluett, E., Cornelius, V. R., & Smith, L. A. (2012). Characteristics, interventions, and outcomes of women who used a birthing pool: a prospective observational study. *Birth*, *39*(3), 192-202.
- Carlsson, T., & Ulfsdottir, H. (2020). Waterbirth in low-risk pregnancy: An exploration of women's experiences. *Journal of advanced nursing*, *76*(5), 1221-1231.
- Cluett, E. R., Burns, E., & Cuthbert, A. (2018). Immersion in water during labour and birth. *Cochrane Database of Systematic Reviews*, (5).
- Cooper, M., McCutcheon, H., & Warland, J. (2017). A critical analysis of Australian policies and guidelines for water immersion during labour and birth. *Women and Birth*, *30*(5), 431-441.
- Dahlen, H. G., Dowling, H., Tracy, M., Schmied, V., & Tracy, S. (2013). Maternal and perinatal outcomes amongst low risk women giving birth in water compared to six birth positions on land. A descriptive cross sectional study in a birth centre over 12 years. *Midwifery*, *29*(7), 759-764.
- Dunning, T., Martin, H., & McGrath, Y. (2019). Vaginal birth after caesarean: how NICE guidelines can inform midwifery practice. *British Journal of Midwifery*, *27*(11), 689-693.
- Jackson, R. (2013). The use of water during the first stage of labour: Is this a safe choice for women undergoing VBAC?. *British Journal of Midwifery*, *21*(6), 388-393. Maude, R. M., & Kim, M. (2020). Getting into the water: a prospective observational study of water immersion for labour and birth at a New Zealand District Health Board. *BMC pregnancy and childbirth*, *20*, 1-12. New Zealand College of Midwives. (2019). Consensus Statement: The Use of Water for Labour and Birth
- National Institute for Health and Care Excellence. (2019). Intrapartum care for women with existing medical condition or obstetric complications and their babies: Evidence review for previous caesarean section. https://www.nice.org.uk/ guidance/ng121/evidence/s-previous-caesarean-section- pdf-241806242808
- Royal College of Obstetricians and Gynaecologists & Royal College of Midwives (RCM) 2006, Joint Statement No. 1, London: RCOG/RCM. Available http://www.waterbirth.org/assets/s/rcog_rcm_birth_in_water.pdf
- Royal Australian and New Zealand College of Obstetricians and Gynaecologists.(2021). Water immersion during labour and birth. Retrieved from 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

13. Associated documents

- Induction of Labour (IOL)
- Intrapartum Fetal Surveillance
- Entonox® / Nitrous Oxide in Maternity
- Vaginal birth after caesarean section
- Postpartum Haemorrhage (PPH) Prevention and Management
- Moving and Handling
- Standard Precautions

Back to Contents

14. Disclaimer

No guideline can cover all variations required for specific circumstances. It is the responsibility of the health care practitioners using this Auckland DHB guideline to adapt it for safe use within their own institution, recognise the need for specialist help, and call for it without delay, when an individual patient falls outside of the boundaries of this guideline.

15. Corrections and amendments

The next scheduled review of this document is as per the document classification table (page 1). However, if the reader notices any errors or believes that the document should be reviewed ***before*** the scheduled date, they should contact the owner or Document Control without delay.