



## POLICY - BIRTH IN WATER

This Policy has been developed to give guidance to registered midwives and medical staff when caring for women who make an informed choice to birth in water.

Midwives and medical staff facilitating water immersion for birth are responsible for ensuring that the information given to the woman is accurate and up to date. Ideally this information should be given early in pregnancy.

There is a need to continue to consider the evidence from research, for the use of the bath for birth, and utilise it to inform practice.

### PREAMBLE

Water birth is a practice women request from time to time. The woman's wishes with regard to childbirth should be respected where safety/clinical guidelines allow. It is the duty of health professionals to accommodate the autonomy of pregnant women, which is protected by law and jurisprudence, in as safe a manner as possible for both mother and baby.

While there are no adequately powered randomised controlled trials to provide an evidence base for water births, strong opinions exist among providers for, and against, the practice (Woodward and Kelly 2004; Keirse 2005). Those in favour advocate advantages to the birth process, those against raise issues of fetal safety.

A water birth should only be undertaken at the woman's specific request.

A woman will be supported to birth in water if she fits the criteria for a low risk, singleton pregnancy at term and the midwife/doctor is confident and competent to assist.

Moreover, the woman **must have given signed consent**.

If the midwife/doctor does not feel comfortable with facilitating a water birth, it is her/his responsibility to inform the woman and attempt to find a midwife/doctor to take over her care. If this is not possible, then the woman should be advised that with her and her baby's safety in mind, she should leave the bath for the birth of her baby.

## **1. DEFINITION**

Water birth means where a baby is born fully submerged into water. The baby's head must remain submerged under water until after the body is born, then the baby is brought to the surface immediately. The baby's head must not be submerged again.

## **2. AIM**

- 2.1 That midwives/doctors will be able to care safely for women who use the bath/pool during all stages of their labour and birth.
- 2.2 To achieve a vaginal birth of a healthy baby.

## **3. RATIONALE**

- 3.1 The use of water during birth provides a woman with an alternative option for comfort, mobility and privacy, thereby increasing the opportunity for a deeply satisfying experience.
- 3.2 Water offers a labouring woman an environment where she can behave instinctively and feel in control. When a woman feels in control during childbirth, she experiences a higher degree of emotional well-being in the postnatal period (Green et al 1990).
- 3.3 The buoyancy of water enables a woman to move more easily than on land. This alleviates pain and optimises the progress of her labour (Burns & Kitzinger 2001; Burns 2001; Enkin et al 2000; Harmsworth 1994; Johnson 1996; St George Hospital 2001).
- 3.4 Current observational evidence suggests that where water births are conducted according to a protocol, they can be achieved safely.
- 3.5 Evidence that birth in water reduces perineal trauma or blood loss is inconclusive.
- 3.6 There is no evidence that perinatal mortality and morbidity, including admissions to special care nurseries for babies born into a warm water environment, is significantly different to babies born out of water (Geissbuehler et al 2004; Gilbert & Tookey 1999).

## **4. OUTCOME STATEMENT**

- 4.1 Maternal and infant safety maintained throughout labour and birth.
- 4.2 Safe birth of a live infant.
- 4.3 Increased maternal choice for type of birth.
- 4.4 Maternal satisfaction with the birth experience.

## 5. STANDARD REQUIREMENTS FOR FACILITATING WATER BIRTH

- 5.1. A birth in water should be attended by a qualified midwife or medical practitioner who is experienced in facilitating a water birth.
- 5.2. Appropriate experience with water birth should include:
  - 5.2.1 having facilitated at least two water births under supervision (either as a student or after qualification);
  - 5.2.2 having attended an educational session or workshop on water birth (either as a student or after graduation); and
  - 5.2.3 awareness of the contraindications for and potential complications of birth in water, including the means to avoid them.
- 5.3 Health units will ensure that practitioners in their employ, who desire to facilitate water births, have an understanding of the Department of Health policies on *First Stage Labour in Water* and *Birth in Water*.

## 6. STANDARD STATEMENT

Midwives and medical staff will:

- 6.1 be aware of the possible advantages, the precautions, contraindications and current literature regarding the use of the bath during labour and/or birth;
- 6.2 inform the woman of the Department of Health policies for the use of the bath during labour and/or birth, the precautions necessary and contraindications;
- 6.3 provide the woman with the information leaflet *Labour and Birth in Water* and ensure that the woman clearly understands it;
- 6.4 ensure that the woman has signed two (2) copies of the consent form, one of which is filed in the SA Pregnancy Record and the other kept by the woman;
- 6.5 ensure that all observations and advice are documented correctly and appropriately;
- 6.6 take appropriate action to preserve the mother's and baby's health.

## 7. CONTRAINDICATIONS

**There should be no known fetal or maternal contraindications.**

- 7.1 The midwife/doctor will ensure that the woman's condition is suitable for labour and/or birth in the bath and that she does not meet any of the contraindications in 6.2. The woman should have:

- 7.1.1 an **uncomplicated singleton** pregnancy;
  - 7.1.2 no conditions that preclude the use of the bath;
  - 7.1.3 established labour with regular moderate contractions;
  - 7.1.4 no specific indication for continuous fetal monitoring (Burns & Kitzinger 2001) unless a waterproof CTG is available.
- 7.2 A woman is excluded from using the bath for birth in the presence of any of the following:
- <37 weeks gestation;
  - multiple pregnancy;
  - pre-eclampsia;
  - previous post-partum haemorrhage in excess of 1 litre;
  - insulin dependent diabetes;
  - active herpes;
  - known HIV positive;
  - alcohol or drug abuse;
  - mobility/skeletal problems that may prevent leaving the bath when necessary;
  - any presentation other than cephalic;
  - intrauterine growth restriction;
  - previous or current risk factors for shoulder dystocia;
  - thick meconium stained liquor (in the presence of meconium stained liquor and normal fetal heart rate, the woman could use the bath for labour, but not for birth [Garland 2000]);
  - febrile or evidence of infection (maternal temperature >37.6 C, or 2 high readings 2 hours apart);
  - fetal heart rate abnormalities;
  - intrapartum haemorrhage;
  - maternal narcotic use within the last 4 hours;
  - epidural analgesia.
- 7.3 The following may be negotiable for using the bath for birth:
- induction of labour;
  - group B Streptococcus positive;
  - prolonged rupture of the membranes of > 18 hours (refer to South Australian Perinatal Practice Guidelines).

## 8. ESSENTIAL EQUIPMENT

- 8.1 In addition to **standard delivery items**, the midwife/doctor should ensure that the following is in readiness for a birth in water:

- water thermometer;
- maternal thermometer;
- waterproof Doppler;
- gloves of sufficient length to cover bare skin when in contact with amniotic fluid or blood;
- waterproof gown or apron;
- a sieve should be provided to remove faecal contamination;
- a means to remove the woman from the bath if required;
- kneeler pads, cushions, low stool and birthing balls should be provided for health and safety of midwives and birth companion (Burns & Kitzinger 2001; Garland 2000).

8.2 An attached shower facility over the bath should be considered whenever practicable, for additional maternal comfort to ease backache (Burns & Kitzinger 2001).

## 9. PRECAUTIONS

The occupational health, safety and welfare of the mother, midwife/doctor and baby is to be preserved.

- 9.1 Ordinary tap water is to be used with **no additives** (eg. no essential oils).
- 9.2 Principles of infection control will be maintained in accordance with National Infection Control Guidelines.
- 9.3 Personal protective clothing should be worn as appropriate.
- 9.4 Gloves should be used to avoid contact with maternal blood and body fluids in the bath water, as per National Infection Control Guidelines. Any breaks in skin integrity are to be covered with a waterproof dressing.
- 9.5 Midwives/doctors are to remain outside the bath/pool. Knee pads are recommended.
- 9.6 Proper back care for the midwife/doctor should be maintained.
- 9.7 Emergency equipment must be available and ready for use, inside or outside the room.
- 9.8 Staffing levels should be adequate to ensure that the woman can be removed from the bath if she is unable to do so herself.
- 9.9 If the bath becomes heavily contaminated, the woman should be asked to leave the bath temporarily until the water can be changed and the bath cleaned.
- 9.10 After use, the bath and sieve must be thoroughly cleaned and allowed to air dry before next use (refer to Appendix A).

## 10. PROCEDURAL GUIDELINES

- 10.1 The midwife/doctor will ensure that maternal and fetal wellbeing are monitored by making certain that all observations are undertaken as for any normal birth.
- 10.2 The bath should be filled to the level of the woman's breasts when she is sitting in the bath (Burns & Kitzinger 2001) but the woman's vulval/perineal must be completely submerged for the birth.
- 10.3 The woman has a choice of her birth position (Walsh 2000).
- 10.4 The woman can leave the bath at any time she wishes.
- 10.5 The woman will be asked to leave the bath should complications arise and is expected to comply with the request (RCOG 2001).
- 10.6 Record the times that the woman enters and leaves the bath.
- 10.7 Midwife, doctor or support person to be in the room at all times that the bath is in use.
- 10.8 Recommended optimum temperature range of bath water for maternal comfort is **35° - 37°C. It should not exceed 37°C** (Faborg Maternity Unit protocol) because the temperature of the fetus is 1°C higher than the mother's during pregnancy (Rosevear et al 1993).
- 10.9 Monitor bath temperature hourly while in the bath and record on the partogram (Deans & Steer 1995).
- 10.10 Encourage oral fluids to prevent dehydration and overheating.
- 10.11 The woman should leave the bath to urinate.
- 10.12 Vaginal examinations may be performed underwater if deemed necessary. Proceed as for normal delivery.
- 10.13 Nitrous oxide and oxygen may be used in the bath if required. It is important in the bath environment, as on land, to guide the woman in the use of nitrous oxide and oxygen, to prevent hyperventilation and reduced maternal control. The woman can opt in and out of this form of pain relief as she wishes, thus remaining alert and in control. This gas is not retained in the body and has no known significant side effects on the fetus/neonate (Stefani et al 1982).

### Care of the woman and baby during the SECOND STAGE of labour:

- 10.14 The woman should not be encouraged to push before she has the urge as sustained and directed pushing is associated with lower Apgar scores and umbilical artery pH (Enkin et al 2000).

- 10.15 Whenever possible, a ‘hands off’ birth, supported by quiet verbal guidance by the midwife, should be practised to minimise stimulation of the baby underwater.
- 10.16 It is not necessary to feel for the presence of a nuchal cord (Garland 2000).
- 10.17 The cord can be loosened and disentangled as the baby is born, in the usual manner. If the cord is around the baby’s neck tightly and needs to be cut, the woman is to be assisted to stand out of the water so this process can occur safely. The woman remains standing to deliver the rest of the baby.
- 10.18 The baby must be born **completely underwater, with no air contact** until he/she is brought gently to the surface **immediately after the body is delivered**.
- 10.19 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 1999).
- 10.20 **Under no circumstances should the cord be clamped and cut under water.** Clamping or cutting of the umbilical cord stimulates the baby to breathe and **breathing must not occur under water** (Burns & Kitzinger 2001).
- 10.21 **Under no circumstances should the baby’s head be re-submerged under water.**
- 10.22 Maintain warmth of baby by skin to skin contact with its mother. Dry baby’s exposed head and skin to reduce heat loss.
- 10.23 Apgar score should be recorded at 1 and 5 minutes after birth (as for normal land births), not at removal from the bath.
- 10.24 If respiration is not facilitated **within one minute of birth, the cord should be clamped and cut**, and the baby removed from the bath for resuscitation. **Commence neonatal resuscitation immediately.**
- 10.25 Intramuscular injection **should not be given under water.**

**Care of the woman and baby during the THIRD STAGE of labour:**

- 10.26 Because of the difficulty assessing blood loss in water, **the third stage is not conducted in water.**
- 10.27 Before a potential water birth is engaged upon, the woman should be informed that the third stage will be managed out of the bath.
- 10.28 The woman is to be asked to leave the bath for delivery of the placenta as per a normal delivery.
- 10.29 After leaving the bath, the temperature of both mother and baby are measured and recorded.

10.30 Postnatal observations of both mother and baby are completed as per any other normal birth.

## **11. LABOUR/BIRTH COMPLICATIONS IN THE BATH**

11.1 If there is any deviation from normal observations of the woman and/or fetus, the woman **must** be asked to leave the water (eg, meconium-stained liquor, foetal bradycardia/tachycardia).

11.2 In the rare case of an emergency situation (eg. intrapartum haemorrhage, shoulder dystocia), ask the woman to stand up and assist her with leaving the bath.

11.3 If the woman becomes unconscious, emergency procedures must be enacted immediately and measures taken to remove the woman from the bath. Hospitals should each develop their own emergency procedures. Possible solutions include utilisation of patient lifting devices, or alternatively the accessibility of immediately available hospital staff trained and able to lift an unconscious patient from the bath.

11.4 As when caring for any woman in labour, the midwife/doctor is responsible for using her/his clinical judgement in responding appropriately to problems that may occur during any stage of labour, and for documenting her/his actions

11.5 If the labour is not 'progressing', the woman may need to leave the water and mobilise, possibly eat and drink, to facilitate increased contractions.

## **12. DOCUMENTATION**

As giving birth in water is not a common practice in Australia and only conducted at the woman's request, **adequate documentation is, therefore, of the utmost importance**. The earlier that documentation is started the more weight it will carry when challenged.

12.1 Consent form discussed, signed and filed in the SA Pregnancy Record (see 6.3, 6.4 and 15.3).

12.2 Discussions with the woman on the use of the bath.

12.3 Advice about leaving the bath.

12.4 As per any other birth.

## **13. POLICIES/PROCEDURES**

13.1 As per normal birth.



#### **14. BATH CLEANING REQUIREMENTS**

Refer to Appendix A for detail.

#### **15. CHECKLIST FOR MIDWIVES/MEDICAL OFFICERS**

- 15.1 Current evidence based information about the use of the bath for labour and/or birth has been given to the woman and her partner during pregnancy and/or in early labour.
- 15.2 The woman has been informed of the Department of Health policies *First Stage Labour in Water* and *Birth in Water*, the precautions necessary and contraindications.
- 15.3 The woman has signed two (2) copies of the consent form, one of which is filed in the SA Pregnancy Record and the other is kept by the woman.
- 15.4 The Department of Health policies *First Stage Labour in Water* and *Birth in Water* have been followed by the midwife (s) and any medical staff in attendance.
- 15.5 All discussions with the woman are carefully documented.
- 15.6 All documentation has been completed according to hospital policy and guidelines.

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**LEVEL OF EVIDENCE:**

III and IV

**ASSOCIATED UNIT/S OF CARE (UOC's)**

<b>Unit</b>	<b>Title</b>
Perinatal Medicine	Birth in Water

## BATH CLEANING REQUIREMENTS

### 1. PREAMBLE

Standard Infection Control Guidelines including Standard Precautions and appropriate environmental cleaning must be adhered to, to prevent cross infection or contamination.

Evidence seems to suggest no great risk of infection from using water for labour and/or birth, although routine infection control procedures are recommended, including removal of faecal or blood contamination from the water and appropriate cleaning of baths (Brown 1998; Eriksson et al 1996; Robertson et al 1998; Forde et al 1999).

The suggestion that bath water provides a perfect condition for bacteria to reproduce is refuted by data of Garland and Jones (1997).

### 2. PROCEDURE

**The extent of cleaning will depend on whether a bath or a birthing pool is used:**

- 2.1 if a portable pool is to be used, use/purchase individuals pool with a disposable liner;
- 2.2 if a spa bath is used, the cleaning regimen should include jets, drain pumps, hoses and filters. They should be well maintained, free draining and flushed through with a chlorine solution after each use.
- 2.3 the cleaning agent should be an appropriate hospital cleanser commonly used by the organisation;
- 2.4 the bath should be allowed to air dry;
- 2.5 the bath should be rinsed before the next use;
- 2.6 the bath or pool should be regularly maintained;
- 2.7 routine Legionella testing of the hospital water supply should occur in accordance with State/National recommendations.

**Correct ergonomic positions for cleaning of the bath should be adopted, as follows:**

- 2.8 cleaning of baths should take place with long handled equipment, adjusted to the correct length to allow cleaning of all bath walls;
- 2.9 the bath should be cleaned without forward bending, twisting or over-reaching;
- 2.10 the back should be kept in a position so as to maintain normal spinal curves with all cleaning activities.

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