

## Waterbirth

### Care during Labour for Low Risk Women

|                            |             |
|----------------------------|-------------|
| <b>Reference</b>           | SWBH /MAT / |
| <b>Category</b>            | Maternity   |
| <b>Date Approved</b>       |             |
| <b>Date of Next Review</b> |             |

## POLICY PROFILE

|  |   |
|--|---|
| <b>Overview</b>  |   |
| Key overall purpose of policy  | To provide midwives with evidenced based guidance when caring for women in water during labour and to ensure safe practice for both women and midwives when undertaking waterbirth. |
| Principal target audience  | Maternity Services  |
| Application  | Staff   |
| Accountable Executive Director                                       | Clinical Director - obstetrics  |
| Author(s)  | Kathryn Gutteridge – Consultant Midwife   |
| <b>Impact Assessment</b>   |   |
| Resource implications  | N/A   |
| Training implications  | N/A   |
| Communications implications  | N/A   |
| Date of initial equality impact assessment                           | Feb 2010  |
| Date of full equality impact assessment (if appropriate)             | N/A   |
| NHSLA risk management standards/ CQC core standards                  | Health and Safety   |
| <b>Consultation and referencing</b>                                  |   |
| Key stakeholders consulted/involved in the development of the policy | <b>Maternity Clinicians</b>   |
| Complementary Trust documents for cross reference                    | Care of Women in Labour   |
| <b>Approvals and monitoring</b>                                      |   |
| Approving body   | Maternity Governance Committee  |
| Date of implementation   |   |
| Monitoring and audit   | As per policy   |

## DOCUMENT CONTROL AND HISTORY

| Version No | Date Approved | Date of Implementation | Next Review Date | Reason for Change e.g. full rewrite, amendment to reflect new legislation, updated flowchart, etc. |
|------------|---------------|------------------------|------------------|--|
| 1          | DD-MM-YYYY    | DD-MM-YYYY             | DD-MM-YYYY       |  |
|            |               |                        |                  |  |
|            |               |                        |                  |  |
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## 1.0 Introduction

- 1.1 The use of water is an established and realistic option for childbearing women in labour, particularly those who have experienced an uncomplicated pregnancy. Water is an ancient method of pain relief which causes no harm to the woman or fetus and facilitates a normal birth outcome.
- 1.2 Water is recommended by NICE IPC Guideline 55 as the optimum method of pain relief for labouring women excluding epidural block (NICE, 2007). Traditional birthing practices endorse the benefits of water throughout labour; citing benefits as:
  - Reduction of pharmacological pain relief
  - Increased normal birth outcomes
  - Reduced time of first and second stage of labour
  - Reduction in perineal damage.
- 1.3 Nationally, 0.6% of births include birth in water or the use of immersion in water during labour. Immersion in water during labour compared to conventional care has not been shown to reduce caesarean section rates however other significant benefits have been reported such as:
  - Reduced pharmacological analgesia
  - Increased intact perineums in nulliparous women
  - Less episiotomies
  - Incidence of perineal trauma less
  - Shorter overall labour
  - Greater sense of control for women
  - Women rate excellent experience

## 2.0 Objectives

- 2.1 To provide midwives with evidenced based guidance when caring for women in water during labour
- 2.2 To promote normality and aim to reduce intervention rates
- 2.3 To ensure safe practice for both women and midwives when undertaking waterbirth
- 2.4 To give women a range of choices for coping with their labour
- 2.5 To ensure local infection control guidance and infection risks are adhered to.

## 3.0 Scope

These guidelines apply to all midwifery staff working within the community in all locations including temporary employees and agency staff.

## 4.0 Definitions

- Low risk – women who are 37-42 weeks pregnant and who have experienced an uncomplicated pregnancy without any underlying medical problems
- Water birth - where a baby is born fully submerged into water.

## 5.0 Roles and Responsibilities

Midwives are responsible for the care of low risk women and for caring for women during the antenatal, intrapartum and postnatal period in a variety of settings including home, midwifery led unit and delivery suite.

## 6.0 Inclusion Criteria

- 37-42 weeks gestation
- Singleton pregnancy
- Cephalic presentation
- Established labour and 4cms dilated with regular painful contractions
- Normal range of baseline observations
- Normal fetal heartrate on auscultation

***Normal fetal heart rate is interpreted as a baseline between 110 and 160 bpm. In the active stages of labour, auscultation is performed after a contraction for a minimum of 60 seconds (and at least every 15 minutes in the first stage and every 5 minutes in the second stage)NICE. 2007 .***

## 7.0 Pregnancy

- 7.1 Ensure all women have access to information leaflet (appendix 3) early in pregnancy
- 7.2 Ensure the woman and her partner understands the criteria for inclusion of low risk women and waterbirth.
- 7.3 Ensure the woman and her partner has information of local parent education sessions where waterbirth is discussed. What is the provision for this is it achievable?
- 7.4 Ensure the woman and her birth partner visit birth centre or delivery suite if having waterbirth in hospital so she is aware of the environment and facilities
- 7.5 Community midwife to risk assess continuously during pregnancy and follow guidance for Low Risk Inclusion criteria.

## 8.0 Care during Labour

- 8.1 Ensure the woman is in established labour prior to immersion in the water. Evidence suggests that immersion prior to cervical dilatation of 4cms with regular moderate to strong contractions may inhibit the normal progress of labour.
- 8.2 Some women prefer to have the bowels empty before entering the water ask the woman about this and offer her an enema if she is worried about bowel movement.
- 8.3 A full risk assessment must be conducted prior to immersion including:
- Review of pregnancy history – confirm low risk status
  - Temperature, blood pressure, pulse and urinalysis
  - Abdominal examination to determine cephalic presentation
  - Fetal heart auscultated and is within normal parameters
  - Offer a vaginal examination to ensure dilatation is 4cms or more, presenting part is cephalic, position of presenting part, presence/absence of membranes and no abnormal features found.
- 8.4 Fill the pool with water at breast level so that the gravid uterus is completely immersed. The temperature of the water should be comfortable to the woman usually 35-37 C, document the water temperature in the partogram hourly. Water temperature at the point of birth should not be greater than 37C; fetal temperature is 1<sup>o</sup> higher than maternal core temperature (Rosevear et al 1993).
- 8.5 Once the woman is immersed in water she should not be left alone. This may be a midwife or a maternity care assistant/health care assistant.
- 8.6 The woman may use other methods of analgesia whilst in the water this may include Entonox and oral analgesia such as Paracetamol. Pethidine must not be given if the woman remains in the water.
- 8.7 Observations that must be carried out throughout labour and documented on the partogram during the first stage of labour include:

| Observation             | Rationale                                 | Abnormality  | Action                                    |
|-------------------------|---|--|---|
| 4 hourly temperature    | Detect pyrexia and underlying infection   | If >37.6 on 2 occasions  | Contact DS                                |
| 4 hourly BP             | Detect hypertension and PET               | 140/90 on 2 occasions 30 mins apart<br>150/110 on one occasion | Transfer to DS                            |
| Hourly Pulse            | Detect acidosis, infection or haemorrhage | Repeat pulse within 5 minutes if still tachycardia             | Contact DS                                |
| Bladder and micturition | Detect dehydration and or infection       | 3+ Protein – signs of PET<br>?infection                        | Check other signs for PET<br>–Transfer DS |

|                             |   |   |  |
|-----------------------------|---|---|--|
| PU out of pool              |   | 2+ Ketones - ? dehydration or/and acidosis            | Ensure fluids & high energy drink/food - Contact DS if persists  |
| Abdominal Examination       | Determine presentation, progress and detect abnormal labour and descent   | Irregular contractions, weak in strength & regularity | Out of pool - if no improvement contact DS   |
| ½ Frequency of contractions |   | Hyperstimulation                                      | Out of pool - transfer to DS   |
| Vaginal Examination         | To determine cervical progress, assess rotation and descent<br>May be performed in water but if unsure out of pool                                      | Failure to progress in labour                         | Out of pool – try alternative positions, ARM – if no change contact DS   |
|                             |   | Cord presentation/prolapse                            | Keep fingers against presenting part, ask for assistance – transfer to DS  |
|                             |   | Caput and/or moulding                                 | Evidence of malposition – out of pool, change position. Contact DS if persists   |
| Fetal Heart                 | To monitor fetal wellbeing – using a waterproof Sonicaid or a Pinnard Stethoscope, after a contraction for at least 1 minute, at least every 15 minutes | Detect abnormality and or fetal distress              | Out of pool – repeat within 5 minutes, if abnormality still present ask colleague to check.<br>If confirmed transfer to DS |

8.8 Women should be encouraged to drink plenty of cool fluids whilst in the pool to maintain hydration. Light diet should be offered to avoid ketoacidosis.

8.9 Progress in labour should be based upon:

- Primigravid – 2cm in 4 hours
- Multigravid – 4cm in 4 hours

- 8.10 Any delay in progress should alert the midwife to encourage the woman to change position, get out of pool, empty bladder and offer vaginal assessment to determine next action.

## 9.0 Second Stage of Labour

- 9.1 The woman should not be encouraged to push before she has the natural urge; sustained and directed pushing is associated with lower Apgar scores and umbilical artery pH (Enkin et al 2000).
- 9.2 Whenever possible, a 'hands off' birth, supported by quiet verbal guidance by the midwife, should be practised to minimise stimulation of the baby underwater. The woman can be encouraged to reach down and support her 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 should dystocia is observed.** All manoeuvres for shoulder dystocia should be performed clear of the water. (Refer to Appendix 1– Waterbirth – Pool Evacuation).
- 9.3 It is not necessary to feel for the presence of the cord (Garland 2000). The cord can be loosened and disentangled as the baby is born, in the usual manner. If the cord is tight around the baby's neck and needs to be cut, the woman should 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.
- 9.4 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.**
- 9.5 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).
- 9.6 **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).
- 9.7 **Under no circumstances should the baby's head be re-submerged under water.**
- 9.8 Maintain warmth of baby by skin-to-skin contact with its mother. Dry baby's exposed head and skin to reduce heat loss.
- 9.9 Apgar score should be recorded at 1 and 5 minutes after birth (as for normal births), not at removal from the pool.
- 9.10 If respiration is not established **within one minute of birth, the cord should be clamped and cut,** and the baby removed from the pool for resuscitation.

**Commence neonatal resuscitation immediately.**

- 9.11 Intramuscular injections or episiotomies **should not be conducted under water, always ask the woman to get out of the pool.**

## **10.0 Management of Third Stage of Labour**

**Information about the risk/benefits of management of the third stage should be given to ALL women and consent obtained for whichever mode of management for the third stage.**

- 10.1 The RCOG & RCM joint guidance cites inconclusive evidence to make conclusive recommendations for third stage management (RCOG & RCM 2006-2009). Women should be informed about the risks and benefits normally associated with low risk women and the third stage of labour so they can choose their preferred method. Midwives should be vigilant during labour so that women are appropriately advised and therefore deviations from the norm acted upon.

- 10.2 **Physiological Management** - Women who have experienced an uncomplicated first and second stage should be able to choose a physiological third stage as an option.

- There should be no interference with palpating the cord or fundal massage.
- Observe blood loss and evidence of any clots.
- Allow the woman to expulse the placenta sitting upright in the water but ensure the temperature is 37°C.
- Any delay in placental separation; ask the woman to get out of the pool and use active management.
- Physiological management of 3<sup>rd</sup> stage is usually complete within 1 hour.
- Blood loss is estimated, examination of the placenta, membranes and cord should be examined by the midwife, documented in the notes.

- 10.3 **Active Management** - where active management of the third stage is requested by the women or advocated by the midwife, the woman should be requested to stand clear of the water or to leave the pool.

- 1 ampoule of IM syntometrine is given
- Controlled cord traction applied whilst guarding the uterus with the other hand.
- Active management or 3<sup>rd</sup> stage is usually complete within 15 minutes.
- The presence of any resistance during controlled cord traction should alert the midwife – care taken until separation is complete.

- Blood loss is estimated, examination of the placenta, membranes and cord should be examined by the midwife, documented in the notes.

10.4 Examination of the perineum should be conducted out of the pool and suturing of perineal tears delayed for a least 1 hour to allow for water retention in the tissues to dissipate (unless bleeding profusely).

## 11.0 Emergency Situations and Complications

11.1 All women opting for a waterbirth should know the potential risks and benefits of birthing in water. This is highlighted in the information leaflet (appendix 3).

11.2 **Failure to progress** – progress should be assessed using the partogram documentation. Women who do not make expected progress should be asked to get out of pool and:

- Adopt alternative positions
- Empty bladder
- Ensure fluid and calorie intake is maintained
- Monitor regularity and strength of contractions
- Discuss artificial rupture of membranes – perform
- If progress still failing transfer to delivery suite

11.3 **Haemorrhage –antepartum or postpartum** – any signs of bleeding or evidence of clots in the water. Call for assistance and inform delivery suite coordinator. The woman must be removed from the water immediately, core observations taken; pulse, respirations and blood pressure. If during labour auscultate fetal heart and check maternal pulse before and after. Transfer woman to delivery suite if Serenity Midwifery Led Birth Centre according to Transfer of Low Risk Women. Document all findings with description of estimated blood loss.

11.4 **Meconium** – the presence of meconium in the water may indicate fetal distress. The woman should be asked to leave the water, basic observations conducted and fetal heart auscultated. Significant meconium-stained liquor which is defined as either dark green or black amniotic fluid that is thick or tenacious or any meconium-stained amniotic fluid containing lumps of meconium is treated with caution.

- If during 1 stage of labour - transfer to delivery suite.
- If during 2<sup>nd</sup> stage of labour request neonatal team assistance and inform delivery suite obstetric consultant if suspected maternal problem.

11.5 **Fetal Heart Abnormality** – the presence of any abnormal feature detected during intermittent auscultation may indicate fetal distress. Ask the woman to get out of the pool. Repeat auscultation, prior to this check maternal pulse; if reassuring document and repeat 5 minutes later – if reassuring the

change in position may have been all that was required. If abnormal feature continues - ask colleague to auscultate. If the birth is imminent, prepare for neonatal resuscitation and request neonatal team assistance. Transfer to Delivery Suite if birth not imminent.

- 11.6 **Cord rupture and cord snap-** the occurrence of both cord rupture and snap is rare but may lead to haemorrhage. The midwife must be vigilant for signs of fetal distress and immediate neonatal respiratory distress. Neonatal assistance should be requested.
- 11.7 **Neonatal Exposure to Infection & Pre-Labour Rupture of Membranes –** babies born to mothers who gave birth in water are at no greater risk of infection than if they were born in air. Women who rupture their membranes in a low risk pregnancy at 37-42 weeks should not be excluded from waterbirth if SROM is within 48 hours before onset of labour. The liquor should be clear with no signs of infection or odour.
- 11.8 **Neonatal Respiratory Distress –** if the woman remains submerged during the second stage of labour premature gasp is avoided. Handling the cord under the water at any time during second stage or restitution will cause physiological fetal changes and must be avoided. If there is evidence of fetal distress/meconium detected during auscultation particularly during second stage ask the woman to stand clear of water. Clamp and cut cord out of water if baby is born otherwise conduct the birth **free of the water**, ask for neonatal assistance.

## 12.0 **Evacuation Process in Emergency Situations** **Appendix 1 Flowchart**

- 12.1 During care of the woman in labour ensure that water is not splashed onto the floor and the surrounding area is kept dry.
- 12.2 If the woman has to stand for any reason she should be supported to get into standing position.
- 12.3 If the woman is able she should be helped to stand and get out of the pool.
- 12.5 For emergency removal from the pool the midwife must firstly ask for assistance. Once help has been requested the midwife will initiate emergency evacuation procedure as follows:
- Ensure woman is responding and not unconscious
  - If faint or unresponsive, ensure airway is maintained
  - Ensure pool is full and allows buoyancy
  - 4 people must be available 2 each side
  - Scoop net is passed under woman
  - Place woman gently on flat surface (bed or floor)
  - Cover with towels to keep warm
  - Ensure head is supported throughout

12.6 Immediate resuscitation procedures should follow.

## **13.0 Infection Control - Appendix 2 Cleaning Directions**

**Universal precautions must be used at all times.**

### **13.1 Fixed Pool -**

- Run water through plumbing for 2 minutes prior to filling the pool
- Check water temperature before woman gets in, it should feel comfortable to her
- There should be good ventilation in the room
- Any water on the floor must be wiped away
- Contamination of any kind should be removed using plastic sieves (which should be disposed of afterwards. If there is heavy contamination the woman should be advised to leave the pool, the pool must be emptied, cleaned in accordance with current infection control recommendations and thoroughly dried before refilling
- After use the pool must be cleaned and left to dry before next filling.

### **13.2 Inflatable Pool –**

- Pool must be fully inflated and positioned safely away from radiator
- Liner is fitted to inside of the pool
- Fill the pool as for fixed pool
- The liner should be discarded after use and the pool cleaned with detergent being left to dry before use again.

## **14.0 Equality and Diversity**

The Trust recognises the diversity of the local community and those in its employ. The aim is, therefore, to provide a safe environment free from discrimination and a place where all individuals are treated fairly, with dignity and appropriately to their need. The Trust recognises that equality impacts on all aspects of its day-to-day operations and has produced an Equality Policy Statement to reflect this. All policies are assessed in accordance with the Equality impact assessment tool, the results for which are monitored centrally.

## **15.0 Review**

This policy will be reviewed in three years time. Earlier review may be required in response to exceptional circumstances, organisational change or relevant changes in legislation or guidance.

## 16.0 Training and Awareness

- All midwives will be competent to assist women with a waterbirth
- Newly qualified midwives will be given a period of preceptorship where they will spend time with their mentor assisting with waterbirths
- Community midwives will update their intrapartum skills by working on the Serenity Midwifery Led Birth Centre
- All midwives will have evidence of experience with waterbirths in a PREP folder which will be available to their Supervisor of Midwives at their annual review and at management review - PDR
- Midwives who feel they need update with waterbirth skills should request an opportunity to work in Serenity Midwifery Led Birth Centre

## 17.0 Monitoring and auditable standards

Monitoring will be assessed by the **Maternity Audit Group** and **30 sets** of notes from each site will be reviewed. The Maternity Audit Group is a multidisciplinary representation of obstetric consultants, junior medical staff and midwives of all levels of experience. Supervisors of midwives undertake audit as part of their supervisory activity.

Standards to be audited include:

- observations on admission
- observations during established first stage of labour
- observations during second stage of labour
- observations during third stage of labour
- documentation of observations
- duration of all 3 stages of labour
- referral and reason for transfer to obstetric care from midwifery led care

In addition:

- Maternity Governance group will ensure processes and systems exists for monitoring all audit and policy/guideline development and implementation, feedback to staff and minute meetings.
- Maternity Audit Group will oversee the implementation of audit, multidisciplinary review of audit results and presentation of findings through multidisciplinary training events on a quarterly basis.
- All clinical data / maternity health care records will be inputted to Maternity IT system – 'Evolution'. Reports from evolution will be accessed monthly and monitored via the maternity Dashboard at monthly Dashboard meetings.
- Problematic cases will have an incident form completed and managed as per the risk management process.

- Incidents graded red will be discussed at the Perinatal Risk Meeting, actioned planned and followed up, subsequent monitoring of action plans will be overseen through the Perinatal Risk Management Group.

## 18.0 Discipline

Breaches of this policy will be investigated and may result in the matter being treated as a disciplinary offence under the Trust's disciplinary procedure.

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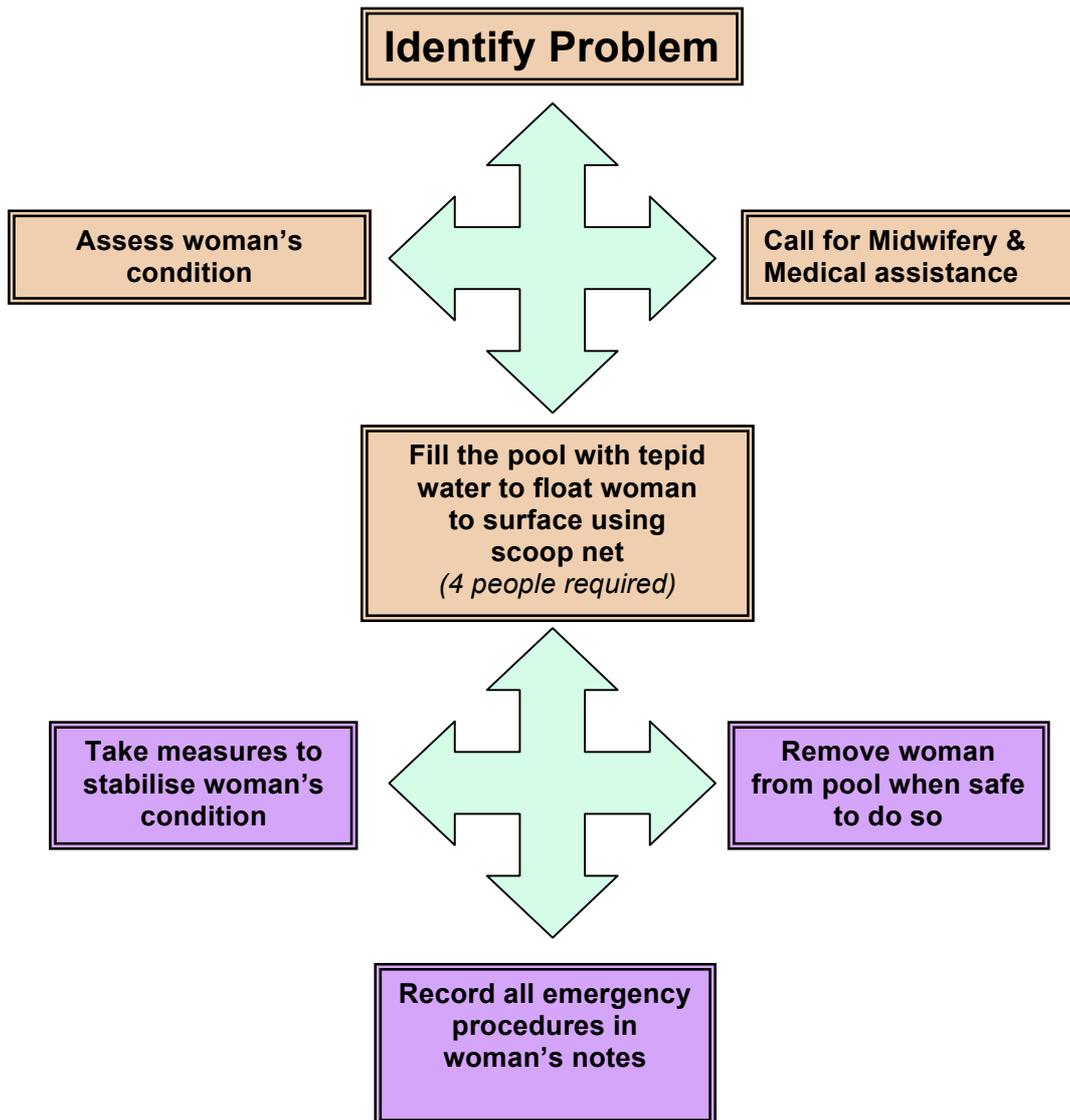
## **20.0 Further Enquiries**

Contact Head of Midwifery, Consultant Midwife and supervisors of midwives.

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 practised as part of the routine Skills Drills Sessions and attendance will be recorded.

## Appendix 2

### Waterbirth Guidance - Cleaning the Pool

Pools specifically designed for waterbirths are generally fabricated from a high impact weatherable ABS plastic; this material is preferable rather than GRP fibreglass for the shell due to its hardened surface being less brittle.

This type of pool is more resistant to bacteria and not affected by the repeated use of sterilising agents. The material has a lightly textured, slip resistant internal finish and a smooth, clean external finish.

#### Prior to Use

- ❖ The pool should be cleaned daily with warm water and a non-abrasive detergent.
- ❖ Ensure the pool is cleaned prior to use by filling and then rinsing with cold water, run the taps for two minutes.

#### After Use

- ❖ After use the pool must be cleaned with warm water and a non-abrasive detergent.
- ❖ The pool must be filled to a minimum of 10 litres; add 2 Chloride tablets to the water and allow to dissolve.
- ❖ Leave solution in the pool for 15 minutes ensuring all surfaces are wiped over
- ❖ The drainage outlet should be paid particular attention and cleaned with a disposable cloth.
- ❖ The pool should then be emptied of the solution and rinsed with cold water and dried.
- ❖ The drainage outlet pipe should be kept closed when not in use.
- ❖ All sieves and thermometers are cleaned and left to air dry.
- ❖ Complete the pool cleaning sheet with signature, date and time. The manager of Serenity Midwifery Led Birth Centre and Delivery Suite is responsible for ensuring compliance with pool cleaning and retaining signature sheet.

#### Cleaning of Inflatable Pools

The inflatable pool should be cleaned with warm water after use, the liner should be discarded. The pool must be allowed to dry and be deflated between use, so that the air tension does not cause deterioration of the material. A new liner is fitted to the pool before filling with water.

