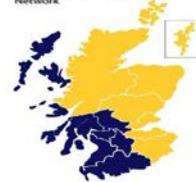


MCN for Neonatology

West of Scotland

Neonatal Guideline

WoS Neonatal Managed Clinical
Network



Bathing Newborn Infants

This guideline is applicable to all medical, nursing, midwifery and ancillary staff caring for neonates in the West of Scotland hospital and community settings. Staff should also be aware of guidelines for hand hygiene, the care of babies born to mothers with HIV and any relevant pharmacy monographs. Newborn Bathing will be approached with the aim of meeting the needs of the individual baby and family and the promotion of family centred care.

Purpose of the Guideline

To provide clinical guidance which supports consistent delivery of Family Centred Care practices across the Network. It includes the primary principles involved in maintaining the infants skin integrity, keeping the baby comfortable and clean and facilitating parental participation and bonding.

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Introduction

The first baby bath is an important event when parents/caregivers can participate in their baby's care. It promotes parent–infant interaction and bonding and it is a time when parents can gain confidence in the care of their baby.

General Principles of Bathing a Baby

Timing of the First Bath

The World Health Organization recommends delaying the first bath until at least 24 hours after birth. It has been suggested that delaying the first bath has a positive effect on bonding, breastfeeding and in the prevention of hypothermia and hypoglycaemia ¹. However the exact timing of the first bath should be specific to the individual needs of each baby and their parents/carers.

Newborn Skin

The newborn baby's skin differs from mature adult skin in structure, function, and composition ^{2, 3, 4} and is particularly susceptible to infection ⁵.

The pH value at birth is slightly higher and is almost close to neutral. Following birth there is a progressive decline in the pH from day 3 to day 30 as the body develops its protective acid mantle, a slightly acidic film on the surface of the skin which acts as a natural bacterial protection ⁶. Introduction of baby bathing products at this time such as wipes and creams can disrupt this delicate protective layer.

Bathing products

It has been recommended that liquid cleansers should not be used for babies during the first four weeks and plain water should be used for bathing ^{7, 8}. No creams or lotions should be routinely applied to dry or cracked skin. In the event of persistently dry skin, use of a preservative-free paraffin-based emollient such as liquid paraffin 50% in white soft paraffin is advocated.

Healthy Term Infants- First Immersion Bath

It is recommended that the first immersion bath (Box 1) will take place at least 24 hours after birth ¹. The first immersion bath should take place at a time convenient for the parents/caregivers. The baby should be clinically stable and able to maintain its own temperature within normal ranges of 36.6-37.3.

N.B. Babies born to HIV positive mothers should have their face and eyes cleansed immediately following delivery and their first bath carried out as early as possible if temperature satisfactory ⁹.

Box 1

First Immersion Bath

- The first immersion bath will take place once the baby's temperature has been within the normal range for 2-4 hours and the baby is clinically stable.
- Ensure the environment is safe, warm and draught free for the procedure to be carried out. Recommended room temperature 26-27c ^{10, 11}.
- Agree a plan for the timing of the bath with the parent/carers. Involve them in all areas of care wherever possible.
- Prepare equipment:
 - Disinfected baby bath
 - Bowl of water for face /hair
 - Cotton wool/gauze swabs, baby comb and pre-warmed towels
 - Clean clothes, bedding and nappy as needed
 - Disposal bag for rubbish
- Wash hands as per hospital policy. Gloves and apron must be worn throughout and when washing the nappy area.
- Bath the baby where possible prior to a feed.
- The water temperature should be checked in the clinical environment with a bath thermometer. Recommended water temperature is approximately 37- 38 degrees, ^{10, 11}. If a bath thermometer is not available the water temperature can also be checked using the "elbow check"- by placing an elbow in the water- temperature should be comfortable /lukewarm.
- The depth of the water should be deep enough to allow the infant to settle into it with his/her shoulders well covered. (Approximately 5 inches) ^{10,11}.
- Parents should be educated throughout the bath about safety e.g. adding cold water first, not leaving baby unattended etc.
- The first bath should be carried out using plain water only and cotton wool/gauze swabs for cleansing.
- Undress the baby keeping the nappy on and wrap in a towel.
- Holding the baby securely wash face with cotton wool/gauze swabs and dry. The baby's eye, and nose areas should be left untouched. If the eyes look sticky follow eye care guideline. Wash hair with water holding the baby's head over the bath and dry the scalp by gently rubbing with a towel. Debris and dried matter may be carefully removed with a baby comb ⁸.
- Re-check the temperature of the water again prior to removing the nappy and immersing baby. When ready place the baby in the bath using containment and supportive care giving procedures

¹². Ensure the baby's feet can touch the side of the bath to find a reassuring boundary.

- Vernix should be left on the skin to absorb naturally ^{10,11, 13}. However it may be necessary to remove excessive amounts from the skin folds to avoid irritation ^{5, 14}.
- Clean around cord area with water to remove any debris and dry with gauze, (see umbilical cord care guidelines). Gently dry the baby by 'patting' the skin dry with warm towels, taking care not to damage the skin. WHO recommendations for dry cord care and special emphasis on keeping the nappy below the level of cord stump to avoid contamination should be followed.

Nothing should be applied over the stump to cover it ¹⁵.

- Gently dry the baby by 'patting' the skin dry with warm towels, taking care not to damage the skin.
- Apply nappy and then dress the baby in clean warm clothes. Apply a hat and extra blanket for a limited time to maintain warmth if necessary.
- Check baby name bands are secure and baby is comfortable in accordance with developmental care guidelines.
- Clear equipment and disinfect bath. Bathing water should not be disposed in a handwashing sink.
- Document care and skin assessment in baby's care plan.

Healthy Term Infants- Routine Immersion Bath

The benefits of daily bathing have not been clearly demonstrated, therefore decisions about the frequency of bathing should be based upon individual needs and family values and beliefs. As a general guide, it is reasonable to suggest bathing well, term babies on alternate days ¹⁶.

Healthy Term Infants should be bathed in plain tap water during the first 4 weeks of life ^{7, 8}. No creams or lotions should be routinely applied to dry or cracked skin. In the event of persistently dry skin, use of a preservative-free paraffin-based emollient such as liquid paraffin 50% in white soft paraffin is advocated. In the clinical areas all such preparations require to be prescribed on the baby's drug kardex prior to administration.

Bathing products can be gradually introduced 4 weeks following birth, however they should be free from colours and perfumes, have a neutral pH and be used sparingly. Apart from plain water wipes, baby wipes should be avoided for the first 4 weeks and once introduced, should be mild and free from alcohol or perfume.

The procedure and principles outlined in Box 1 should be applied, with emphasis being placed on parent participation and education.

Parent Education

Gaining confidence in handling and bathing their baby for the first time can be an exciting but also stressful time for parents. It is therefore crucial that parents are involved and encouraged to participate in their baby's bath if possible before taking their baby home.

There is a wealth of information available both in written format and online for parents to review. There is available online information for parents within NHS GG&C covering a range of topics from bathing to napkin care and feeding ¹⁷.

Bathing Your Baby NHS Information- Video for parents



Bathing Sick Term Infants

Staff caring for sick babies in the clinical area should assess and plan care on an individual basis in relation to the specific needs of the baby in partnership with parents.

Skincare should be performed to maintain the integrity of the baby's skin, help prevent infection and maintain comfort. It is also an important opportunity to assess the skin and identify and monitor any potential problems.

During periods of acute illness, skincare should be performed as required to ensure that the skin is clean and dry and any waste products are removed. While an immersion bath cannot be performed on a relatively unwell baby, particular care should be taken to ensure that areas such as the axilla, neck, skin folds and fingers are kept clean and dry.

The baby's skin should be cleansed with warm, plain, tap water or plain water wipes only. Any concerns over skin integrity should be discussed with the tissue viability team and a plan of care developed.

Progress from incubator to immersion baths will take place when the baby is transferred from a closed incubator to cot / babytherm / basinet. A record of baby bathing should be recorded in the baby's care plan/nursing notes.

Bathing Preterm Infants

The importance placed on bath time for newborn babies and their families is well recognised. However despite the many benefits, it can be a stressful time for both parents and babies.

Routine immersion baths can cause considerable distress particularly to the preterm infant, triggering adverse physiological and behavioural responses such as increased heart rate and cardiac oxygen demand ¹⁸ . Furthermore the preterm and VLBW infant has an incompletely developed thermoregulatory system, making them highly vulnerable to changes in environmental temperature ¹⁹ . In preterm infants who have poor temperature control bathing can cause hypothermia, which can occasionally lead to further complications such as hypoglycaemia, apnoea, acidosis and pulmonary insufficiency. Hypothermia remains a major contributor to newborn mortality worldwide and is a common problem for low birth weight infants ²⁰ .

Therefore the bathing procedure for this group should be modified to minimise the preterm infants' exposure to excessive stimulation, reduce the stress experienced and maintain a normal body temperature ²¹.

A supportive method of bathing baby which applies the principles of gentle touch and containment is called "Swaddle Bathing" (Figure 1).

Figure1. Swaddle Bathing



Swaddle Bathing

The swaddle method of bathing is reported to reduce the stress associated with traditional immersion baths and help maintain normal body temperature ²² .

It is recommended for the preterm neonate however can also be used with well term babies. It has been reported that compared to traditional immersion bathing , swaddle bathing resulted in decreased physiological and motor stress decreased crying and agitation and less temperature instability ²³ . Swaddle bathing is consistent with developmental theory and promotes family –centred care ²² .

A quality improvement project carried out in a Neonatal Unit concluded that when swaddle bathed, infants do not loose heat, cry less and the bathing experience appears less stressful and much more enjoyable for infants and their families. ^{24, 25} .

Which babies can have a swaddle bath?

- Any baby who is deemed clinically well and fit for an immersion bath can receive a swaddle bath.
- Babies nursed in incubators/babytherm/heated mattresses can be included.
- Stable babies on respiratory support can also receive a swaddle bath.

The swaddle bath should take place prior to a feed or when cluster care is performed. If this is not possible it should be started at least an hour after a feed ²⁵ .

It is particularly important that supporting and handling the preterm baby with gentle touch and containment is applied throughout bathing to reduce signs and levels of stress ¹² . Parents should be fully involved in the swaddle bath (Box 2) and work up to swaddle bathing their baby independently.

A video demonstration of swaddle bathing can be viewed at: <https://youtu.be/wQfjPSOre58>. Courtesy of Michele Brooks, Practice Educator and Gill Currie Advanced Practitioner OT, Neonatal Unit University Hospital Wishaw.

Box 2

Swaddle Bathing

- The swaddle bath should take place once the baby's temperature has been within the normal range for 2-4 hours and the baby is clinically stable.
- Ensure the environment is safe, warm and draught free for the procedure to be carried out. Recommended room temperature 26-27c ^{10,11} .
- Agree a plan for the timing of the bath with the parent/carers. Involve them in all areas of care wherever possible.
 - Prepare equipment:
 - Disinfected baby bath
 - Bowl of water/plain water wipes for face /hair
 - Cotton wool/gauze swabs, baby comb and pre-warmed muslin towels
 - Clean clothes, bedding and nappy as needed
 - Disposal bag for rubbish
- Wash hands as per hospital policy. Gloves may be worn throughout and when cleansing the nappy area.
- The water temperature should be checked in the clinical environment with a bath thermometer. Recommended water temperature is approximately 37-38 degrees, ^{10,11} . If a bath thermometer is not available the water temperature can also be

checked using the "elbow check"- by placing an elbow in the water-temperature should be comfortable /lukewarm.

- The depth of the water should be deep enough to allow the infant to settle into it with his/her shoulders well covered. (Approximately 5 inches, ^{10,11})
- Parents should be educated throughout the bath about safety e.g. adding cold water first, not leaving baby unattended etc.
- It is recommended that plain water/plain water wipes should be used in the first month ^{7, 8} .

When cleansing agents are introduced they should be free from colours and perfumes, have a neutral pH and be used sparingly.

- The baby should not be in the water for more than approximately 5-6 minutes.
- Undress the baby keeping the nappy on and wrap in the muslin towel
- Parents should be advised to provide support under the babies shoulders and neck throughout the bath. To provide additional comfort the baby's feet can be braced at the end of the bath.
- Holding the baby securely wash the face with cotton wool/gauze swabs and a separate bowl of clean water and dry. The baby's eye, and nose areas should be left untouched. If the eyes look sticky follow eye care guideline. Baby's hair should be washed at the end of the bath.
- Re-check the temperature of the water again prior to removing the nappy and cleansing the napkin area.
- Disconnect any monitoring for the bath.
- Place the baby wrapped in the muslin towel gently in the bath providing containment and support. Ensure the baby's shoulders and neck are both supported.
- Unwrap one arm and wash gently including the chest and then re-swaddle with the towel.
- Repeat with the other arm.
- Unwrap one leg including the stomach, wash gently and re-swaddle with the towel.
- Repeat with the other leg.
- The baby's back is washed with the water through the muslin towel.
- Finally wash the baby's hair using a separate bowl of clean water.
- When the bath is complete, unwrap the baby and leave the wet muslin towel in the bath.
- Hold a dry towel against the parent's or carer's chest. Remove the baby from the bath and wrap in the towel.
- Gently dry the baby by 'patting' the skin dry with warm towels, taking care not to damage the skin.
- Apply nappy and then dress the baby in clean warm clothes. Apply a hat and extra blanket for a limited time to maintain warmth if necessary.
- Check labels are secure and baby is comfortable in accordance with developmental care guidelines.
- Clear equipment and disinfect bath. Bathing water should not be disposed in a handwashing sink.
- Document care and skin assessment in baby's care plan/nursing notes.

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Guideline name

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