

## NEONATAL SKIN CARE DOCUMENT

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Approved by Neonatal Guidelines Review Meeting on:	11 <sup>th</sup> November 2022
Review Date This is the most current document and should be used until a revised version is in place:	11 <sup>th</sup> November 2025

### Key Amendment

Date	Amendment	Approved by
September 2021	New document	Paediatric QIM
November 2022	Document approved for 3 years with no amendments	Dr Gregory/ Neonatal Guidelines Review Meeting

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## **1. Purpose**

The aim of this document is to maintain the skin integrity of pre-term and term neonates, whilst reducing the risk of infection and promoting skin maturation. The document ensures evidence based practice is implemented across the unit and reduces conflicting advice to parents.

This document sets out Worcestershire Acute Hospital NHS Trust's best practice for the care of skin in neonates.

The following general principles can be applied in order to:

- 1.1 Prevent potential damage and to maintain optimum skin integrity
- 1.2 Identify neonates who are or may be at risk of changes to skin integrity
- 1.3 Support normal skin development
- 1.4 Assess the neonate's skin condition
- 1.5 Recognise the environmental factors and treatment-related factors that may alter neonatal skin integrity
- 1.6 Treating damaged skin whilst ensuring optimum healing of wounds

## **2) Introduction**

Skin is a vital organ with many functions and roles. Skin helps to form a healthy barrier against infection. Skin helps to regulate temperature and fluid balance.

The skin of a pre term baby is not developed fully; it has many physiological and anatomical factors which mean it is very vulnerable to damage. This includes limited subcutaneous fat, oedema, immaturity of the skin capillary network, underdevelopment of the stratum corneum and diminished cohesion between the epidermis and dermis.

Although sterile at birth, the skin quickly becomes colonized within the first week of life. Preterm immature skin has limited ability to restrict invasion by microorganisms compared to that of term infants.

Those at 30 weeks gestation and under, or less than 1.5 kilograms, are at greater risk as their skin is not yet fully formed. (At 30 weeks gestation the stratum corneum is only 2-3 cells thick however at 40 weeks gestation it is 10-20 cell layers thick).

The skin of babies born at term has a pH of 6.4 which reduces to 4.9 over 3-4 days as the body develops its protective acid mantle, a natural bacterial protection. This can take up to 3 weeks in a premature infant.

The more premature the baby is, the greater the trans epidermal water loss (TEWL), due to the thin, immature and poorly keratinised skin. TEWL can lead to significant alterations in temperature, electrolyte levels and fluid balance of the premature baby. The TEWL in the term baby is replaced

systemically but in the premature and very premature baby the associated organs and systems may not be sufficiently developed to cope with the additional fluid required.

Newborn skin of full-term is coated with vernix caseosa. This begins to form around 17-20 weeks gestation, with the thickest coating being around 36-38 weeks. By 40 weeks it is found primarily in the skin creases. Vernix acts as a chemical and mechanical barrier in utero protecting the baby from maceration by amniotic fluid. It allows the foetus to move without chafing as it grows in utero. It facilitates postnatal adaptation to the extrauterine dry environment. Vernix assists in the development of the 'acid mantle' of the skin surface, which inhibits the growth of pathogenic microorganisms; and imparts immunologic properties.

### **3. General care principles**

It is the responsibility of any health care professionals who work with babies to assess and maintain optimum skin integrity and to prevent potential damage. This includes the responsibility to involve and educate parents in assessing, maintaining and managing the healthy skin of their infant.

Keeping the baby's sleep/wake state and stability in mind the baby's skin should be assessed at least once daily unless skin assessment score instructs otherwise. This includes observing vulnerable areas such as the neck, behind the ears, axilla and groin, areas with medical devices in contact with skin. Any concerns should be documented and if necessary reported to a senior nursing colleague or member of the medical team.

If skin breakdown has been identified use the skin care assessment tool and determine potential cause of skin breakdown. Assessments should be increased with areas of concerns.

For breakdown excoriation to nappy area follow advice in irritant contact dermatitis.

For suspected infection inform medical staff and document the following; Skin assessment score, suspected risk/cause for skin breakdown, accurate description of skin breakdown.

Work collaboratively with parents involving/supervising in care plan delivery as soon as they feel competent, confident and able. Refer to tissue viability team for advice to assess and formulate care plan if required.

#### **4. Risk Factors / common causes for neonatal skin injury**

Gestation (increased risk <32 weeks)  
Low birth weight  
Nappy rash  
Phototherapy  
Birth Injury  
Suboptimal hydration/ nutrition  
Immobility  
Oedema  
Use of adhesive e.g., ET tube fixation, IV securing, surgical wounds and ostomies  
Use of sedatives and paralytics  
Use of inotropes  
Cooling  
Infection  
Congenital skin problem  
Neonatal abstinence syndrome  
Use of medical devices e.g. venous/ arterial lines, NG & OG tubes, masks, nasal cpap, nasal cannula, ET tubes, fiO2 monitoring.

#### **5. Advice for prevention of skin damage**

Staff should follow trust policy on hand washing, and bare below the elbow. This includes keeping finger nails short to avoid injury.

Skin assessment and identification of risk factors is undertaken on admission (using skin assessment tool) and at appropriate opportunity (e.g. at nappy changes) but at least once per shift. (See skin assessment tool)

<http://www.treatmentpathways.worcsacute.nhs.uk/EasysiteWeb/getresource.axd?AssetID=207636&servicetype=Attachment>

Vernix caseosa should be left on the skin of all newborn babies to absorb naturally.

Medicated wipes are not recommended. Avoid using baby wipes until a term baby is at least 2-4 weeks old. When used, they should be mild and free from alcohol and perfume. It is recommended that for premature babies, skin products are avoided for 6-8 weeks as the skin's protective barrier takes longer to mature.

When condition allows, baby can be bathed (see bathing .11)

Plain water should be the first choice for skin cleansing, patting skin dry after, instead of rubbing dry. The use of soap, bubble bath or lotions can remove protective lipids from the skin making it more vulnerable to irritants and microorganisms.

Use appropriate incubator humidification (see separate guideline).

Use aseptic non-touch technique (ANTT) when performing any invasive procedure on the skin. (Refer to Trust guidelines)

Using developmental positioning aids, position baby according to gestational age, (see developmental care guidelines). Avoid placing toys near infants due to infection risk.

Care should be taken to perform heel pricks in appropriate area. (Appendix 1).

For any skin infections, swab area if instructed by medical team and if required use prescribed treatments.

Tape should only be used if essential. Film applicator (barrier film) may be used prior to use of tape to minimise risk of epidermal stripping. Remove tapes slowly and carefully with warm water, or adhesive removers (Appeel) to prevent epidermal stripping.

Cannulation site should be clearly visible and must be observed hourly. Infusion pumps should be used with appropriate pressure alarms. Ensure IV assessment score is documented and ensure transparent dressings are used.

Babies with many risks factors are at more risk of pressure related injury and therefore extra vigilance should be taken when caring for and handling such babies, both to prevent pressure and to monitor sites of high risk such as bony prominences.

Any monitoring equipment used must be used following manufacturer's instruction and equipment guidelines. Ensure skin under medical devices is observed including identification of pressure points to prevent pressure ulcers secondary to medical device use.

Pulse oximetry probes site should be assessed as above and changed 4 hourly with cares, or more frequently if skin is marking.

Support and educate parents to participate in their baby's care.

## **6. Skin care assessment**

During your assessment take into account the babies skin temperature, skin changes, any discoloured areas of skin, and any birthmarks. Skin integrity should be assessed for: dryness, rashes, bruising, erythema, breakdown, oedema and signs of infection.

Using the skin care assessment tool assessments on the neonatal unit should be recorded on the back of the SBAR forms and what actions you will take should be recorded in the notes.

Assessment should be carried out on admission or up to 6 hours after, once admitted assessment should be carried out at least daily unless total score instructs otherwise.

Staff should familiarise themselves with common neonatal skin conditions such as neonatal erythema toxicum, milia, neonatal acne (milk spots). See appendix 3.

## **7. Skin care products**

For nappy care products see appendix 2 for the prevention and intervention flow chart.

Products applied to the neonate's skin should be single patient use only. Where it is possible, products used on neonatal skin should be licensed for use on neonates. Any product applied to the neonates skin should be pharmaceutical grade and where possible sterile before opening.

Visibly dry skin on a neonate should be left to recover and repair itself.

Do not apply moisturising products which only alter the cosmetic appearance of the outer skin layers.

Recent research has shown that whilst the preterm baby's skin treated with oil is hydrated due to glycerol in the oil staying on the skin, the fatty acids in the oil penetrated the skin and adversely affected the skin barrier (this effect cannot be seen by eye). If the dry skin is felt to be so severe it is causing an infection risk, then emollient or similar products should only be applied under medical direction and with a prescription.

Olive oil should not be used as it is high oleic acid (55-85%) which can damage the stratum corneum.

Peanut- (arachis oil) must not be used due to its elevated risks of allergic or anaphylactic response.

Topical coconut oil application to the skin may be beneficial in preterm infants, but the quality of evidence is low to moderate.

## **8. Eye care and mouth care**

### Eye care

Routine eye care is not normally necessary but may be required for the following:

- 1) Prevention or treatment of infection, pain relief or to ease discomfort.
- 2) To prevent or treat damage to the eyes, or due to sticky eyes.

Sticky eyes are often due to a blocked tear duct. Approximately 1 in 5 babies are born with tear ducts that have not fully developed, affecting one or both eyes. If the white of the eye remains clear (no redness) it is likely to be sticky eye rather than an infection. These should self-resolve (can take up to 12 months).

Staff should observe babies for clinical evidence of Infection:

- 1) Redness of the white of the eye (conjunctivitis)
- 2) Any new swelling of the eyelid(s) – not connected to birth trauma
- 3) Discharge – characterised by yellow/green colour
- 4) Changes to the lining of the lower lid

### Eye care procedure

1. Prepare equipment: sterile gauze swabs, gloves and dressing towel, ampules of sterile water, swabs for microscopy if required and eye drops/ointment if prescribed.

2. ANNT is necessary (sterile procedure may be necessary only in some circumstances e.g. if there is damage to the eye)
3. Wait if possible until the baby is awake or due for routine feeding or cares
4. Explain the procedure to parents/carers of the baby if possible
5. Assess general state of the eyes
6. Create a clean to dirty work flow area
7. Wash hands and put on clean gloves
8. Ensure baby is calm and comfortable and positioned according to developmental care guidelines
9. Take swab if indicated
10. Clean least affected eye first, clean from inner canthus (nasal corner) to outer canthus and throw away
11. Using a clean moistened swab each time. Repeat procedure until all discharge has been removed if possible.
12. If required instil eye drops/ointment
13. Dispose of waste and wash hands, (as per Trust policy).
14. Inform parents and/or medical staff of findings as appropriate
15. Document procedure
16. Train parents to feel competent in this procedure if they wish

### Mouth care

The standard objective of oral care is to keep the mouth in a healthy condition and improve comfort. Specific aims of mouth care include to;

- 1) Keep the oral mucosa clean, soft, moist and intact, thus decreasing the risk of oral and systemic infection
- 2) Keep the lips clean, soft, moist and intact
- 3) Remove debris without damaging the mucosa
- 4) Alleviate pain/discomfort, and for some patients thereby enabling oral intake
- 5) Reduce oral colonisation of gram negative flora. (There is a significant increase of the Gram-negative flora in those patients without oral care)

However in the sick or preterm neonate who is not yet receiving regular oral feeds, it also aims to:

Provide a positive oral experience for the infant.

Support early sensory development of taste and smell.

If maternal colostrum or breast milk is used for mouth care, the infant does not swallow the milk, but is able to absorb through the oral mucosa, many of the advantageous constituents of the colostrum.

Colostrum provides bactericidal, antiviral, anti-inflammatory and immunomodulatory protection.

Fresh maternal colostrum (when available) should always be the first choice for performing mouth care.

Second choice (when available) should be maternal breast milk. Ideally freshly expressed milk as refrigeration can reduce some of the anti-infective properties of breast milk. Freezing and thawing breast milk reduces its' cellular and host defence

properties. Therefore if fresh milk is not available, refrigerated, but never frozen milk is the next best option.

Third choice for mouth care will usually be sterile water if no form of human milk is available for the baby.

Mouth care using colostrum/ maternal breast milk may be contraindicated if there are concerns about the safety of the mothers' milk. For example the mother has HIV, or is taking medication that contraindicates breast feeding

The maternal breast milk used for mouth care should not contain additives such as fortifier.

A frequency of at least 6-8 hourly will be appropriate for most babies however the frequency of mouth care should be individualised for each baby and based on their behavioural cues, sleep state and tolerance of handling.

#### Mouth care procedure

- 1) Staff should observe the condition of the mouth, lips and tongue closely, in order to make a thorough oral assessment.
- 2) Clean hands and apply non sterile gloves
- 3) Take a gauze swab and dip it into either the EBM or sterile water and gently wipe around the inside of the lips and gums to gently remove debris and dry skin.
- 4) Repeat if necessary with a fresh cotton bud, gauze swab. Do not re-dip.
- 5) Administer the fresh colostrum inside the baby's cheek where it will be absorbed (up to 0.3ml if available)
- 6) Give medication such as treatment for oral thrush at the end of mouth care

Inform a senior nurse or one of the medical team if you have any concerns.

Educate parents to perform mouth care independently if they wish.

Document cares given.

## **9.Irritant contact dermatitis (nappy rash)**

### Risk factors for Nappy Rash

- 1) IV antibiotics (altered intestinal flora)
- 2) Neonatal abstinence syndrome
- 3) Recent changes in diet- e.g. changing type of milk
- 4) Prolonged contact of skin to urine and faeces (Atherton 2005)
- 5) Use of products cleansing products which may derange the infants natural skin pH and increase the risk for allergic contact dermatitis
- 6) Malabsorption
- 7) Frequent stools / prolonged exposure to urine or faeces.
- 8) Excessive scrubbing and washing of the skin
- 9) Maternal history of candida



Practice principles to prevent and treat nappy rash

Irritant contact dermatitis (ICD) develops as a result of a direct insult to the stratum corneum that causes a change in pH or cellular lipids leading to cell activation and a visible inflammatory response.

Babies with Irritant contact dermatitis (nappy rash) should have their skin cleansed as soon as possible after nappy is soiled (balanced with need for rest).

The nappy area should be cleaned gently; skin should never be 'rubbed'.

Persistent and non-responsive nappy rash should be swabbed if candida or bacterial infection is suspected (in addition check for oral candidiasis.) However anti-fungal or anti-bacterial creams should only be used for strongly suspected or confirmed infection with medical advice follow topical prescription for treatment. A barrier cream may be used in conjunction with this.

Assess area under nappy at each nappy change for signs of nappy rash, paying attention to creases (groin, under scrotum etc.)

Consider preventative barrier cream use for babies those at risk (see risk factors). Cover all the skin thinly that may be exposed to urine/faeces.

Treatment should focus on protecting the damaged skin and reducing friction to reddened or sore area. Use skin assessment tool and expose skin to air (considering babies temperature).

Exposing sore skin when a baby has irritant contact dermatitis allows the skin to dry and prevents friction to the skin.

To achieve this remove nappy and clothing from legs and lower body, so that sore nappy area is in contact with air. Nurse baby on an absorbent disposable pad, preferably nursed prone (saturation monitoring required) so area around anus is dry and exposed. Cover baby to maintain dignity. This could also be achieved during skin to skin. Monitor the baby's temperature closely. Carers may need to move the baby to an incubator if temperature control cannot be adequately achieved. The baby should be closely observed, and the nappy area cleansed as soon as soiling is noted.

For cleaning the nappy area gently cleanse the area with clean warm water as the use of soap or liquid solvents in pre term infants can remove protective lipids from the skin and pat dry after cleansing, instead of rubbing dry.

Avoid using baby wipes until a term baby is at least 2-4 weeks old. When used, they should be mild and free from alcohol and perfume. It is recommend that for premature babies, skin products are avoided for 6-8 weeks as the skin's protective barrier takes longer to mature.

Ensure parents are given information regarding care and work collaboratively. Complete nappy care documentation at each nappy change, assessing and evaluating treatment and healing.

### Frequency of Nappy Changes

The frequency of nappy changes will be dependent upon the baby's condition.

It is recommended that most babies will require a nappy change every 3-4 hours. However in sick babies; the nappy is usually changed every 6 hours but in a critically ill baby may be left on for a maximum of 12 hours.

Nappy care for the preterm infant is as above and assessed on an individual basis

## **10. Pressure area care**

Early identification of babies at risk of pressure damage is crucial in order to prevent serious adverse outcomes. The most important approach to the management of pressure damage is prevention.

Babies have a large surface area to weight ratio, so pressure injuries are not that common in neonates. However, research has shown that baby's most at risk of pressure related skin damage are;

- 1) Extreme preterm babies 26 weeks and below.
- 2) Baby's with restricted movement (i.e. pharmacological paralysis, movement disorders, hydrocephalus or spina bifida).
- 3) Critically ill babies, with possible poor tissue perfusion, poor nutrition, oedema and restricted movement.
- 4) Baby's nursed on a firmer surface like a fibre optic phototherapy 'blanket'.

Hydrocolloid dressings have been found to be effective protection against pressure on skin that is showing the early signs of chaffing. For example on knees or elbows that have become red when a baby is nursed prone.

Regular repositioning can help relieve and redistribute pressure on a baby's skin, but must be balanced with the need for sleep and fragility of the baby. See developmental care guideline for further advice in this area.

Extra vigilance should be taken when caring for and handling such babies, both to prevent pressure and to monitor sites of high risk. Such sites include bony prominences such as; knees, elbows, ankles, heels, pelvis/hip bones, shoulders if laid laterally and scalp.

For babies intubated and those on nasal continuous positive airway pressure (NCPAP)/hi flow, support the tubes and hat with gauze, or duoderm as appropriate to prevent sore areas developing and excoriation of the skin.

Assess area around hat, cannula and tubes regularly, and behind ear lobes. Do not tie hats/tubes in position tightly. Observe these areas for any development of redness/ sore areas. Hourly visual checks to septum, alternating between the two interfaces of mask /prong 4-6 hourly is associated with fewer injuries unless clinical instability limits this, document any repositioning or limitations.

Ensure that neonates and infants who are at risk of developing a pressure ulcer are repositioned at least every 4 hours.

Consider more frequent repositioning than every 4 hours for neonates who have been assessed as being at high risk of developing a pressure ulcer. Document the frequency of repositioning required

If a pressure ulcer occurred, make a referral to tissue viability, and document findings. Pressure areas should be photographed using clinical photography form with consent.

Document an estimate of the depth of a pressure ulcer.

Categorise each pressure ulcer in neonates at onset using a validated classification tool to guide ongoing preventative and management options. Repeat and document each time the ulcer is assessed.

Inform paediatric dietitian to offer an age-related nutritional assessment to neonates with a pressure ulcer.

Each incubator and cot should use a Giraffe pressure diffusing mattress. The three layer giraffe PDM provides an effective method of decreasing mattress-related pressure against the skin interface.

## **11. Bathing, including who can be bathed and swaddled bathing**

### Who can be bathed?

Bathing should only take place providing:

The infant is clinically stable, all intravenous lines have been removed and the infant has been physiologically stable for at least 48 hours. The baby should have been thermally stable for at least 48 hours.

### Best Care Practices

The vessel in which the baby is bathed should have been designed for the purpose of bathing babies.

During the bathing procedure carry out a skin assessment

Term Babies (37 weeks gestation upwards) bathing frequency should be a maximum of 2-3 times a week. Plain water should be used for the first 2-4 weeks. If parents then wish to use toiletry products, introduce them gradually.

Preterm Babies (less than 37 week's gestation) bathing frequency should be a maximum of every 3-4 days and only if required. Preterm babies should only be bathed in plain water. If toiletry products are introduced it should be gradually and when a baby's corrected gestation is 37 weeks.

Bathing should be kept to minimum time duration to avoid stress and temperature changes.

The use of toiletry products at any time should be actively discouraged by staff.

If a parents wish to use toiletry products after the 2-4 week period of plain water bathing, then the products should ideally be; manufactured for newborn babies, Perfume free, Colour free, not alkaline in nature.

Hydrogel ECG leads do not need to be removed from a baby's skin for bathing. The moisture will usually help to rehydrate the gel and assist in their continued adhesion. (For safety, the leads should be disconnected from the monitoring equipment before immersion.)

When drying a baby after its bath, do not rub the skin to dry it, instead pat skin gently with towel.

Parents/ carers should be supported and encouraged to be involved in their baby's bathing whilst on the Unit. The special nature of newborn and preterm babies' skin should be explained to parents, including the rationale behind the skin care aspects of this guideline. The frequency and timing of bathing should be negotiated with a baby's parents/carers to try and balance the parent's wishes with the baby's behavioural cues, hygiene needs and skin integrity. However, daily bathing should be discouraged to optimise skin integrity and reduce negative outcomes to baby. Use containment, and supportive care giving procedures during bath, making sure the baby's feet can touch the side or end of the bath to find a reassuring boundary and reduce stress.

### Benefits of Bathing Neonates less frequently

- 1) Less physiological stress
- 2) Less behavioural stress
- 3) Skin flora colonisation not effected
- 4) Skin pathogen colonisation not effected
- 5) Less drying and irritation of skin
- 6) Acid mantle is able to mature
- 7) Reduced exposure to chemicals in toiletry products, that may be absorbed into skin

### First Bath

A baby's first bath is an important family event and should whenever possible be performed with parents / carers present. If parents cannot be present for a first bath, then staff must ensure parents are aware it will be done without them and that parents have consented to this and consider taking a photograph for parents who are not able to be present if they wish and consent.

Test water temperature before placing baby into the water, parents need to be educated to achieve correct temperature without the use of a thermometer, (i.e. by using the underside of the forearm to test the water is comfortably warm). The depth of the water should be deep enough to allow the infant to settle into it with his/her shoulders well covered. Educate the parents throughout the procedure about safety e.g. adding cold water first, not leaving baby unattended etc.

The room should be warm and draft free. Baths are generally best carried out before a baby is fed. The baby is more likely to be awake and alert and less likely to vomit than after a feed.

### Safety

Parents should be supervised when bathing their baby until deemed to be competent. Staff should follow manual handling guidelines when moving a bath that may be heavy, awkwardly shaped and difficult to balance. If possible do not move the baby bath when full of water. Instead bath the baby near to the water source or fill and empty the bath using a jug or similar, smaller volume container. If the bath

needs to be moved when it is full then, move using a trolley of a suitable height. Beware of water on the floor causing staff/parents to slip. Ensure the surface is stable that the bath will be placed on. Brakes must be applied if the trolley/cot is on wheels. Any monitoring leads that remain attached to the baby during bathing must not be attached to the monitoring equipment, for reasons of electrical safety.

Swaddled Bathing

Swaddle bathing is the concept of swaddling babies during bathing to reduce stress. Nursing observations identify benefits over ‘traditional bathing’ including improved physiological stability, less stress responses, thus reducing energy expended by the baby, and a more pleasurable experience for baby and carer.

Swaddle bathing is also more effective in maintaining body temperature and preventing heat loss in premature infants compared to conventional bathing

There are different techniques described in the literature, with the basic concept being that the baby is swaddled in a clean cloth before being placed in the water.

The baby then either; 1) Remains swaddled and flexed during the bath, with individual limbs being exposed and washed in turn, and the back being washed through the cloth. The cloth is only removed before the baby is taken out of the bath.

2) The cloth around the baby is gradually released as the baby adjusts to the water and lack of clothes and boundaries. The baby can then enjoy stretching and floating with support from carer. Staff should consider this technique for all preterm infants and any vulnerable babies on the Unit, as an alternative to the traditional bathing method commonly used.

**12. Appendices**

Appendix 1

For full-term and preterm infants



Jain A, Rutter, N (1999)





Please note that the key documents are not designed to be printed, but to be used on-line. This is to ensure that the correct and most up-to-date version is being used. If, in exceptional circumstances, you need to print a copy, please note that the information will only be valid for 24 hours and should be read in conjunction with the key document supporting information and/or Key Document intranet page, which will provide approval and review information.

Appendix 2

**Nappy-associated dermatitis (NAD)**

- Nappy-associated dermatitis (NAD), also known as nappy rash, is caused by prolonged exposure of urine and faeces to the skin (Health Direct Australia, 2015)
- The pH of the skin alters and damages cells, causing dermatitis or irritation (Schmid-Wendtner and Korting, 2006)



Prevention and treatment in neonates and paediatrics				
	<b>Neonatal skin barrier:</b> <ul style="list-style-type: none"> <li>• Skin barrier properties depend on the thickness and integrity of the stratum corneum (Telofski et al, 2012)</li> <li>• Full-term infants have a 30% thinner stratum corneum than adults and are less resilient (Stamatias et al, 2010; Blume-Peytavi et al, 2012)</li> <li>• Premature infants, particularly those of very low birth weight, are at increased risk of skin damage and infection</li> </ul>			
<b>Skin condition</b>	 <b>Intact skin</b> Intact skin at risk of skin damage.	 <b>Mild skin damage</b> Irritated skin at risk of breakdown	 <b>Moderate skin damage</b> Moderate erythema and small areas of damaged skin (<50% of affected area)	 <b>Severe skin damage</b> Intense erythema and large areas of damaged skin (>50% of affected area)
<b>Cleansing</b>	<ul style="list-style-type: none"> <li>• Change frequently or soon after soiling</li> <li>• Cleanse with warm water and/or emollient and wet gauze</li> <li>• Pat dry (no rubbing) or allow to air dry</li> </ul>			<ul style="list-style-type: none"> <li>• Change frequently or soon after soiling</li> <li>• Cleanse with <b>MEDI DERMA-PRO Foam and Spray Incontinence Cleanser</b> (no rinsing required)</li> <li>• Pat dry (no rubbing) or allow to air dry</li> </ul>
<b>Skincare regimen</b>	<b>Apply MEDI DERMA-S Total Barrier Cream</b> <ul style="list-style-type: none"> <li>• A pea-sized amount to a palm-sized area</li> <li>• To the bottom, groin and genitalia</li> <li>• Apply twice daily</li> </ul>		<b>Apply MEDI DERMA-S Total Barrier Film</b> <ul style="list-style-type: none"> <li>• To the bottom, groin and genitalia</li> <li>• Apply every 24–72 hours</li> </ul>	
<b>Nursing recommendation</b>	<b>Assessment:</b> <ul style="list-style-type: none"> <li>• Observe and document changes in skin integrity</li> <li>• Assess frequency and consistency of stools on a daily basis</li> <li>• Consider differential diagnosis and dermatological referral</li> <li>• Look for features that may indicate bacterial secondary infection</li> <li>• Anticipate increased NAD risk from antibiotics, immunosuppression treatment or neonatal abstinence syndrome (NAS)</li> </ul>	<b>Good practice:</b> <ul style="list-style-type: none"> <li>• Encourage regular nappy-free time as much as possible</li> <li>• Use skin barrier products that do not interfere with the absorbency of nappies</li> <li>• Encourage use of disposable gel core nappies</li> <li>• Reassess the skin-care regimen every 48 hours</li> <li>• In case of skin deterioration, contact a tissue viability nurse</li> </ul>		<b>Avoid:</b> <ul style="list-style-type: none"> <li>• Baby wipes of any kind for neonates</li> <li>• Perfumed soaps and moisturisers</li> <li>• Powders, such as talcum powder</li> <li>• Thickly applied creams that can block the absorbency of nappies</li> </ul>

References: Health Direct Australia. Baby rash, 2015. <https://tinyurl.com/yw6vz2r> (accessed 15 January 2020); Schmid-Wendtner MH, Korting HC. The pH of the skin surface and its impact on the barrier function. *Skin Pharmacol Physiol*. 2006; 20(5): 296–302; Telofski LS, Morillo AP 3rd, Mack DMA MC, Stamatias GN et al. The infant skin barrier: can we preserve, protect and enhance the barrier? *Dermatol Res Pract*. 2012; 2012: 195783; Stamatias GN, Nikołoski J, Mack MC, Kollias N. Infant skin physiology and development during the first five years of life: a review of recent findings based on in vivo studies. *Int J Cosmet Sci*. 2011; 33(1): 17–24; Blume-Peytavi U, Hauser M, Stamatias GN, Pathirana D, Garcia-Bartels N. Skin care practices for newborns and infants: review of the clinical evidence for best practices. *Pediatr Dermatol*. 2012; 29(1): 1–14.

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Appendix 3



Neonatal Milia



Neonatal Erythema Toxicum



Neonatal acne or 'milk spots'.

### **13. References**

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**Monitoring Tool**

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non- compliance)</i>	Frequency of reporting:
	<b>WHAT?</b>	<b>HOW?</b>	<b>WHEN?</b>	<b>WHO?</b>	<b>WHERE?</b>	<b>WHEN?</b>
	Optimisation of the olfactory environment on NNU	The developmental care team will observe for compliant and non-compliant practise on the unit.	Every 6 months	Lead Developmental Care and the Developmental Care Team	NNU Matron for further reporting onto trust dashboards	Twice a year

Please note that the key documents are not designed to be printed, but to be used on-line. This is to ensure that the correct and most up-to-date version is being used. If, in exceptional circumstances, you need to print a copy, please note that the information will only be valid for 24 hours and should be read in conjunction with the key document supporting information and/or Key Document intranet page, which will provide approval and review information.