GUIDELINE

Skin Care Guideline

Scope (Staff):	Nursing and Medical Staff
Scope (Area):	NICU KEMH, NICU PCH, NETS WA

Child Safe Organisation Statement of Commitment

CAHS commits to being a child safe organisation by applying the National Principles for Child Safe Organisations. This is a commitment to a strong culture supported by robust policies and procedures to reduce the likelihood of harm to children and young people.

This document should be read in conjunction with this disclaimer

For infants born ≤ 25 weeks gestation, this guideline should be read in conjunction with Skin care of extremely preterm infants ≤ 25 weeks gestation clinical pathway

Provide parents/carer with the information sheet "Looking after your baby's skin in hospital"

Contents

Aim

To outline skin care practices and pressure injury prevention and management in the neonatal units. Assist in identifying infants at risk for pressure injuries and poor skin integrity.

Risk

Adverse patient outcomes, increased length of stay.

Neonatal Skin

The skin is one of the most important organs at birth. Skin has the following functions

- Barrier protection to trans-epidermal water loss and control of absorption of substances.
- Temperature regulation
- Protection against the environment, including microorganisms
- Water and electrolyte regulation
- Tactile sensory function

Skin Care Practices in the Neonatal Unit

All infants are prone to developing skin injury or immobility-related pressure injury, including from medical devices. This is due to

- unrelieved or excessive pressure on dependent body parts, especially bony prominences
- prematurity (limited subcutaneous fat, underdevelopment of epidermis and dermis), and/or
- medical condition that restricts repositioning schedules and options.

It is essential to perform and document an assessment of every infant's skin integrity on admission and for each day of their hospital stay.

Routine hygiene is attended as per the Care, Hygiene and Clothing guideline, this includes minimal cleanse, bathing and/or application of chlorhexidine lotion (Chlorhexidine Wash) for infants.

Coconut Oil is to be used to maintain and improve skin integrity in preterm infants born <30 weeks gestation and continued until 37 weeks corrected gestational age or discharge from the unit. Refer to Coconut Oil monograph.

All health care professionals are responsible for maintaining an infant's skin integrity and for the prevention, identification, treatment and documentation of pressure injury due to medical devices for the infants in their care.

Using the Neonatal Skin Condition Tool (NSCS) and the Glamorgan Scale (Modified) Pressure Injury Risk Assessment Tool (GS) for routine assessment may promote consistency in scoring and in recognising skin problems.

Neonatal Skin Condition Score (NSCS) Tool

Skin integrity is to be monitored and assessed with each episode of care.

- A NSCS score is to be documented **within the first 4 hours of admission** to the neonatal unit.
- A NSCS score is to be document for each nursing shift thereafter.
- The score is to be documented on the infant's observation chart.
- Refer to the Skin Care and Pressure Injury Prevention Reference Guide below to assist with planning patient care.
- Where an infant score is >3, an action plan is to be documented in the patient's progress notes.
- For any loss of skin integrity or skin break down
  - Commence a Wound Assessment Form MR492
  - Notify the CNC / CNS and medical staff

Neonatal Skin Condition Score (NSCS)					
DRYNESS		**ERYTHEMA**		**BREAKDOWN**	
1	normal, no sign of dry skin	**1**	no evidence or erythema	**1**	none evident
2	dry skin, visible scaling	**2**	visible erythema, <50% body surface	**2**	small, localized areas
3	very dry skin, cracking/fissures	**3**	visible erythema, ≥50% body surface	**3**	extensive
Score 1-3 for each category: Perfect Score = 3, worst score = 9					

(This tool is designed to facilitate assessment of skin condition. It is copyright of Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN) and was developed for the AWHONN/NANN Neonatal Skin Care Research-Based Practice Project (2007) and is reproduced with their kind permission)

Pressure Injury Prevention

- Performing regular assessments identifies infants at high risk and early detection of pressure injury.
- NSQHS Standard 5 – Comprehensive Care specifies the need for the use of screening tools and risk assessment frameworks.
    - Application of reliable risk assessment tools provides a useful means for identification of at-risk infants so that appropriate and timely prevention strategies can be implemented.
- Pressure from medical devices and the degree of immobility are the 2 key risk factors which place infants at risk.

Glamorgan Scale (GS) – Modified Pressure Injury Risk Assessment

Pressure injury risk is to be monitored with each episode of care or change in infant condition.

- A GS score is to be documented **within the first 4 hours of admission** to the neonatal unit.
- A GS score is to be document for each nursing shift thereafter.
- The score is to be documented on the infant's observation chart.
- Refer to the Skin Care and Pressure Injury Prevention Reference Guide below to assist with planning patient care.
- Most infants admitted to NICU will score 10 or higher therefore the risk of developing pressure injuries should not be underestimated, and action should be taken to prevent any occurrence.
    - This action may include normal nursing care, such as frequent changes of position (document how often position is changed), lying the infant on a sheepskin, gel mattress or on an air-filled mattress.
    - Changing the position of pulse oximeter probes and other monitoring devices regularly, ensuring the infant is not lying on objects in the bed such as cables, tubing or monitoring devices.

Pressure Injury Risk Factors

- GA <32 weeks
- Vascular compromise or poor tissue perfusion (HIE, Cooling, inotropes)
- Impaired neurological or sensory perception
- Immobility due to illness and/or sedation, muscle relaxation
- Sepsis
- Dehydration
- Oedema
- Respiratory support - ETT and nasal CPAP
- Surgery

Medical Device Risk Factors

- ETT, nasal CPAP, HHF, PBF
- TCM, Sa02, ECG leads, temperature probes.
- Medical taping (IV lines/splints, gastric tubes, phototherapy eye pads)
- Mattress surface

At risk body parts

- Occiput - prolonged contact with mattress
- Ears - prolonged contact with mattress, CPAP hat
- Nose - prolonged contact with mattress (prone), nasal CPAP prong, nasal ETT
- Knees - prolonged contact with mattress (prone), symptomatic NAS
- Heels - prolonged contact with mattress
- Shoulder blades - prolonged contact with mattres

Pressure Injury Risk Assessment –Glamorgan Scale (Modified)		
Instructions • Risk assessment to be completed at the commencement of each nursing shift • Score is to be documented on the infant's observation chart • It is not necessary to disturb the infant to complete the assessment • Add score from choice 1-4, to the score from 5. See examples below.		
Risk Assessment		Score
1	Infant cannot be moved without great difficulty or deterioration in condition • a ventilated infant who de-saturates with position changes or in certain positions. Poor peripheral perfusion: cold extremities, capillary refill > 2 seconds / cool mottled skin	20
2	Infant unable to change his/her position without assistance/reduced body movement • an infant may be unable to move themselves, but carers can move the infant and change his/her position without deterioration in vital signs.	15
3	Some mobility, but reduced for age • infant has some ability to change their own position but this is limited / restricted (infants on CPAP, nested, IV splints & fluids).	10
4	Normal mobility for age	0
5	Medical devices (equipment) – If yes • Any object pressing, rubbing or taped on the skin for long enough or with enough force that can cause pressure damage if not removed. • If no score is 0	15
Maximum that can be scored = 35 See action plan below to assist with planning patient care according to score Review skin care reference guide for ongoing care		

Examples

1. 28 week gestation infant, 3 weeks of age on HFJV with a peripheral IV. Infant is prone to having desaturations to 30-40% with handling and repositioning - Using the table above
    - score = 20 and add 15 for yes to medical equipment, total score = 35
2. 35 week gestation infant, 2 weeks of age swaddled and nursed in an open cot with no monitoring attached. Infant does have a nasogastric tube insitu. Using the table above.
    - Score = 0 and add 15 for yes to medical equipment, total score = 15
    - Note if this infant has its NGT removed it's score would then be 0 (No/low risk).

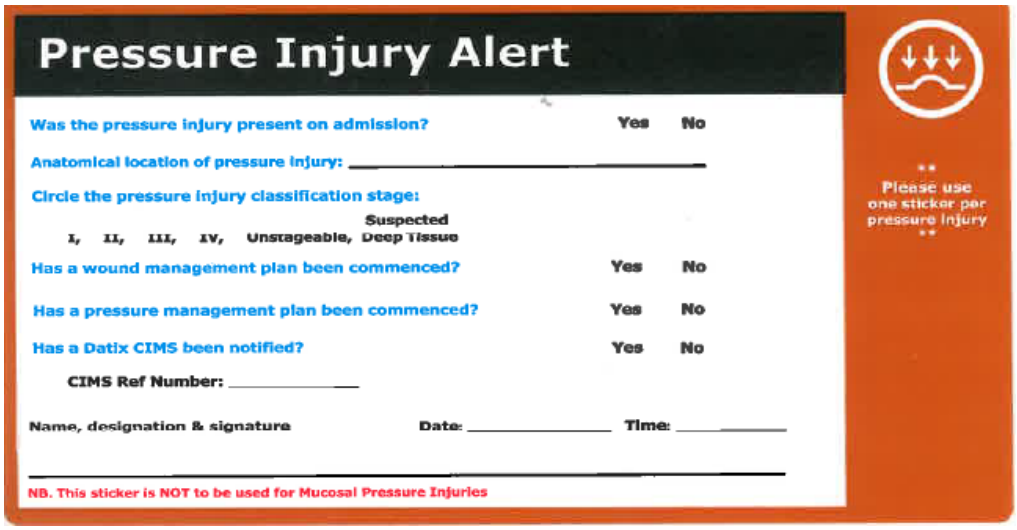
Pressure Injury Action Plan		
Score	Category	Action
0	Not at risk	Continue GS scoring per shift. Inspect skin integrity as per NSCS
10+	At risk	• Continue GS scoring per shift. Inspect skin integrity as per NSCS • Relieve pressure by repositioning no longer than 4 hourly. • Resite monitoring devices 4 hourly (eg O_2 saturation probe) • Consider the use of pressure redistribution surface/device.
15+	High risk	• Continue GS scoring per shift. Inspect skin integrity as per NSCS • Relieve pressure by repositioning no longer than 4 hourly. • Inspect skin with each repositioning • Ensure infant is not lying on any lines or cords • Resite monitoring devices at least 4 hourly (eg O_2 saturation probe) • Use pressure redistribution surface/devices.
20+	Very high risk	• Continue GS and NSCS scoring per shift. • Relieve pressure by repositioning no longer than 4 hourly. • Inspect skin with each repositioning • Ensure infant is not lying on any lines or cords and sheets are wrinkle free • Resite monitoring devices at least 4 hourly (eg O_2 saturation probe) • Use pressure redistribution surface/devices.
NOTE: In some instances, infant condition may not permit change of position 4 hourly. • If this is the case consultation with shift coordinator +/- CNC to ensure all measures possible are taken to reduce the risk of pressure injuries. • Ensure agreed plan is documented clearly in the patient progress notes. • Plan is to be reassessed daily or when there is a change in patient condition.		

Pressure Injury Relieving Equipment

Refer to Appendix 1

Pressure Injury Management

- On detection of any pressure injury a Pressure Injury Alert sticker is to be completed and placed in the progress notes.
    - All pressure injuries are to be staged using the Pan Pacific pressure injury classification system for neonates and children, Appendix 2.
- A Wound Assessment and Management form MR492 is also to be commenced and reviewed by CNC/S.
    - and document in progress notes that MR492 has been commenced.
- Complete clinical incident (Datix CIMS) report.



Wound Assessment and Management Tool

On detection of any skin breakdown or pressure injury the following steps should be followed.

- Identify the causative factors, aetiology e.g. device (CPAP prongs, saturation probe), decreased mobility (sedated, muscle weakness) or poor tissue perfusion (extreme prematurity, cooling).
- History and duration of injury if known.
- Check pain score and consider pain relief. Continue pain assessment until pain resolved.
- Inform Coordinator, Medical team and CNC.
- Complete a Neonatal Wound Assessment and management Plan MR492 and formulate a plan for the management of the wound and a dressing if needed - in

conjunction with appropriate team i.e. Stoma Therapist, Plastics or Surgical Team.

- Complete clinical incident (Datix CIMS) and document in progress notes that MR492 commenced.
- Review nutritional status of patient with Dietician and Medical Team.
- Inform Parent/Carer of the presence of the pressure injury, potential cause and the management plan.

Nappy Rash/Perineal Excoriation

Provide a Barrier and Prevent Further Breakdown

<table>
<tr><td rowspan="2">Routine nappy care</td><td colspan="2">Standard perineal hygiene: use warm water ± mild soap and unsterile cotton wool balls or Redi-wipe®/Tru-wipe®/Waterwipes. Allow to air dry or pat skin dry. Take care not to drag the skin during removal of faeces and urine or whilst drying. Change nappies at least 4-6 hourly.</td></tr>
<tr><td>Infants that have calories added to their breast milk are to have Secura cream applied to the anal/perineal area at each nappy change to protect the skin.</td><td>If skin intact discontinue when tube empty</td></tr>
<tr><td colspan="3">If Candida suspected take skin swab. Medical review. Treat with a topical antifungal and if candida confirmed or clinically evident treat with oral and topical antifungal for a minimum of 5 days.</td></tr>
<tr><td>Mild nappy rash</td><td colspan="2">After cleaning, apply a thick layer of Sudocrem as a barrier over the entire area at each nappy change, change nappies at least 4 hourly. Consider using water and cotton balls to clean. Also consider exposing the buttocks to room air BD.</td></tr>
<tr><td rowspan="2">Moderate –
Severe nappy rash</td><td>KEMH
After cleaning, apply Cavilon spray BD, allow drying. Apply a thick layer of Conveen Critic Barrier over the entire area at each nappy change, change nappies at least 4hourly.
Subsequent nappy changes, try to only remove stool, take care not to drag skin during cleaning. Try to leave barrier intact but if skin showing through barrier layer, use Conveen Easi-Cleanse to remove barrier taking care not to drag the skin. Reapply barrier and Conveen Critic Barrier as needed.
Consider exposing the buttocks to room air BD.
When plan complete consider returning to Mild nappy rash plan</td><td rowspan="2">PCH
After cleaning, use Wellard no sting skin barrier wipe and allow to dry. Apply a thick layer of Conveen Critic Barrier over the entire area at each nappy change, change nappies at least 4hourly.
Subsequent nappy changes, try to only remove stool, take care not to drag skin during cleaning. Try to leave barrier intact but if skin showing through barrier layer, use aqueous cream to remove barrier taking care not to drag the skin. Reapply barrier and Conveen Critic Barrier as needed.</td></tr>
<tr><td>Use aqueous cream when Conveen Easi-cleanse is unavailable</td></tr>
<tr><td>Nappy rash with skin breakdown</td><td>Inform CNC for individualised wound management plan.</td><td>Contact stoma nurse to assist in development of individualised plan.</td></tr>
</table>

Note: medical air or oxygen is not to be used at any time on wound bed when exposing buttock to air.

Skin Care and Pressure Injury Prevention Reference Guide	
Pressure injury prevention	
At risk infants	**Care considerations and pressure relieving options**
Muscle relaxed / sedated / vascular compromised / Therapeutic Hypothermia / post- operative / HFJV / HFOV	Sheepskin Gel mattress Alternating air mattress **Other positioning aids include gel wedges, positioning bolsters, gel protectors, fat pads, ear pads, comfeel applied to pressure points. Document use of pressure relieving devices and repositioning of infant.
Nasal CPAP HHF CPAP guideline	Hat type, mask, comfeel to septum, neoseal. See Use of **other positioning aids above as required. Document use of pressure relieving devices and repositioning of infant.
ETT Care of ventilated infant guideline	Maintain alignment, use of positioning aids. Use of **other positioning aids above as required. Document use of pressure relieving devices and repositioning of infant.
ECG leads	Check around ECG site daily, replace leads every 7 days +/or after bathing Document use of pressure relieving devices and repositioning of infant.
TCM Transcutaneous Monitoring guideline	<27/40 and <14 days - set transducer temp at 41°C/rotate between 2 sites 2hourly. All others resite 3-4hourly or as directed Document resiting of probe and discs.
Temperature probe	Do not position underneath infant, resite at least every 24 hours Document resiting of probe
Pulse oximeter Monitoring and Observation Frequency	Resite 2-4 hourly, check site integrity at change time. Do not over tighten strappit. Document resiting of probe see
IV splints/taping	Refer to Peripheral Intravenous Cannula Insertion and Management guideline. Maintain anatomical alignment of limb. Do not over tighten tape.
Brainz monitor	Assess sites 3-4 hourly. Review Brainz Monitor: Low Impedance Needle Electrodes guideline
NAS Neonatal Abstinence Syndrome	Consider use transparent dressings to prevent friction injury on pressure points e.g. comfeel over knees and use of sheep skin.
PBF/NGT/OGT	Do not position tubing underneath infant. Assess integrity of taping with each care episode
Phototherapy eye pads	Remove at care times/parent visits, check for exudate. Do not over tighten. Cleaning the eyes should not be done routinely. If eye toilet necessary see Eye Care guideline for performing eye care
Medical devices and equipment • All staff must be trained in the correct usage of medical devices used in the NICU, as well as injury prevention strategies.	

**Other positioning aids include gel wedges, positioning bolsters, gel protectors, fat pads, ear pads, comfeel applied to pressure points.

Skin Care (Skin breakdown – loss of skin integrity)	
Notify CNC and Medical Team. Complete Wound Assessment and Management Plan MR492, communicate the plan for management of the wound in conjunction with appropriate team: Stoma Therapist, Plastics or Surgical as required.	
Trans epidermal water loss (TEWL)	
Commence humidity <32/40 or less than 1500g BW. Babies <27/40 commence in 80% humidity. Infants at high risk of skin breakdown. Commence weaning humidity during the first week of life when the infant can maintain a per axilla temperature within normal range. Wean at 5% intervals over 7days to ~ 50%.	Humidity reduction should be alternated with incubator temperature reduction until suitable temp regulation is maintained. Thermoregulation guideline
Emollients/barrier creams (skin moisturiser)	
Coconut Oil is to be used to maintain and improve skin integrity in preterm infants born <30 weeks gestation and continued until 37 weeks corrected gestational age.	Contact CNC if concerned about skin integrity. See Skin care extremely preterm infants clinical pathway
Minimal cleanse/ Bathing	
Regular bathing or washing of the skin using lotions and soaps in the sick or preterm infant has been shown to alter the skin pH. The acid mantle and natural flora of the skin is an important defence against infection. Refer to the Cares, Hygiene and Clothing guideline for washing and bathing details.	Cleaning the eyes should not be done routinely. If eye toilet necessary use sterile cotton wool & sterile Na Cl, see Eye Care guideline
Chlorhexidine Wash Procedure	
Used on infants in incubators on day 1 then on alternate days. Used on infants in open cots on day 1 then on alternate days until having routine baths.	Chlorhexidine should never be applied to excoriated or ulcerated areas of skin Chlorhexidine Wash Procedure
Skin antisepsis/skin cleaning - Aseptic technique is to be use for all procedures	
≤ 27 weeks - use Povidine-iodine 10% swab. > 27 weeks - use 1% Chlorhexidine solution. Clean procedures (venepuncture, heel prick) ≤ 27 weeks - use Povidine - iodine 10% swab. > 27 weeks - use Chlorhexidine 1%/alcohol 70% swab.	Wash off excess solution after the procedure with sterile water or saline. See Aseptic Technique in the NICU guideline
Tapes/adhesives/dressings	
IV TAPING FOR INFANTS ≤ 27 WEEKS (avoid tegaderm) • 3 small Leukostrips. • Small sized splint. • 3 large Leukostrips. IV TAPING FOR INFANTS > 27 WEEKS • 3 small Leukostrips. • Appropriately sized splint. • Tegaderm. • Leukoplast tape (backed with cotton wool)	Use the ≤ 27-week strapping policy If there are concerns regarding skin integrity irrespective of the age. V bungs must be flushed with 0.5ml of Normal Saline every 4-6 hours to ensure patency. Document the date of insertion and position of cannula on M489/491. Tape removal - use SKIN-PREP® protective wipe or ConVaCare® adhesive remover wipe

Intravenous infiltration	
Tape IV so site visible. Observe the IV site at least hourly and document PIVAS scores. Pay attention to pump pressures. Set initial pressure limit at 50-100cm H2O above baseline and monitor fluctuations closely.	Most at risk VLBW, IV TPN, calcium, sodium bicarbonate or inotropes. See Extravasation Injuries and Medication Protocols Hyaluronidase

Related CAHS internal policies, procedures and guidelines

Neonatology Clinical Guidelines

- Aseptic Technique in the Neonatal Unit
- Brainz Monitor: Low Impedance Needle Electrodes
- Care's, Hygiene and Clothing
- Chlorhexidine Wash Procedure
- Continuous Positive Airway Pressure (CPAP)
- Extravasation Injuries
- Monitoring and Observation Frequency
- Neonatal Abstinence Syndrome (NAS)
- Peripheral Intravenous Cannula Insertion and Management
- Thermoregulation
- Transcutaneous Monitoring (TCM)
- Ventilated Neonate: Nursing Care of

Neonatology Medication Protocols

- Coconut Oil
- Hyaluronidase

CAHS Policy

- Pressure Injury Prevention and Management

References and related external legislation, policies, and guidelines

Australian Commission on Safety and Quality in Heath Care, Standard 5: Comprehensive Care Standard – Minimising patient Harm

1. Association of Women's Health, Obstetric and Neonatal Nurses. Neonatal skin care: Evidence based clinical practice guideline (4th Edition). 2018.
2. European Pressure Ulcer Advisory Panel, National Pressure Injury Advisory Panel and Pan Pacific Pressure Injury Alliance.Prevention and Treatment of Pressure Ulcers/Injuries: Clinical Practice Guideline. The International Guideline. Emily Haesler (Ed.). EPUAP/NPIAP/PPPIA:2019

3. Grosvenor, J., Dowling, M., Prevention of neonatal pressure injuries. Journal of Neonatal Nursing (2017), https://doi.org/10.1016/j.jnn.2017.09.004
4. NSQHS Standard 5 Actions 5.21, 5.22 and 5.23. Preventing pressure injuries and wound management Fact Sheet. Australian Commission on safety and Quality in Health Care 2020. Available from Fact Sheet: Preventing pressure injuries and wound management (safetyandquality.gov.au)

Useful resources

Looking after your baby's skin in hospital

Fact Sheet: Preventing pressure injuries and wound management (safetyandquality.gov.au)

Australian Commission on Safety and Quality in Heath Care, Standard 5: Comprehensive Care Standard – Minimising patient Harm

This document can be made available in alternative formats on request.

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Healthy kids, healthy communities

Compassion | Excellence | Collaboration | Accountability | Equity | Respect

Neonatology | Community Health | Mental Health | Perth Children's Hospital

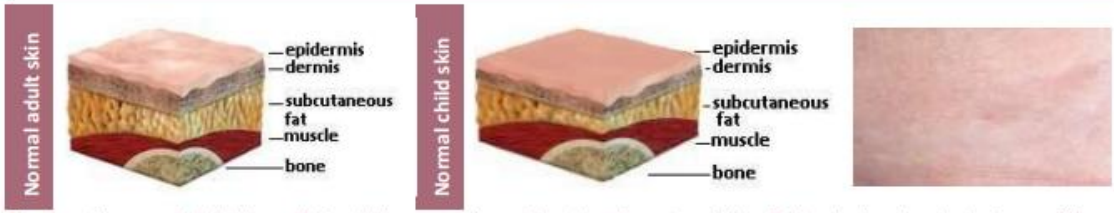
Appendix 1: Pressure Relieving Devices

Device		Guide for use
Coziny 100 Air alternating pressure relief mattress	KEMH PCH	< 3.5 kg Can fit into incubator All muscle relaxed infants All infants with severe HIE (not to be used during active cooling) Neonates with an inability to move Consider for infants ventilated on Sensormedics ventilator
Coziny 200 Air alternating pressure relief mattress	KEMH PCH	3.0-10kg For overhead warmer use All muscle relaxed infants All infants with severe HIE (not to be used during active cooling) Neonates with an inability to move Consider for infants ventilated on Sensormedics ventilator
Giraffe warmer pressure diffusing mattress	KEMH	Overhead warmers Neonates with reduced mobility, nursed on overhead warmer
Drager warmer gel mattress	KEMH	Any neonate nursed on Drager overhead warmer
Omnibed pressure diffusing mattress	KEMH	Omnibed incubators
Gelliroll mattress for cooling	KEMH PCH	All infants being actively cooled
Sheep skin	KEMH PCH	Preterm infants on respiratory support. Or as individually assessed.
Comfeel	KEMH PCH	NAS, PRS infants over bony prominences to reduce injury by friction
Dermis Plus	KEMH	All neonates <750g (under head) All muscle relaxed infants Neonates with identified pressure injury over a bony prominence Consider for infants with severe HIE or other high risk factors

Appendix 2: Pressure Injury Classification System for Neonates and Children

PAN PACIFIC PRESSURE INJURY CLASSIFICATION SYSTEM FOR NEONATES AND CHILDREN

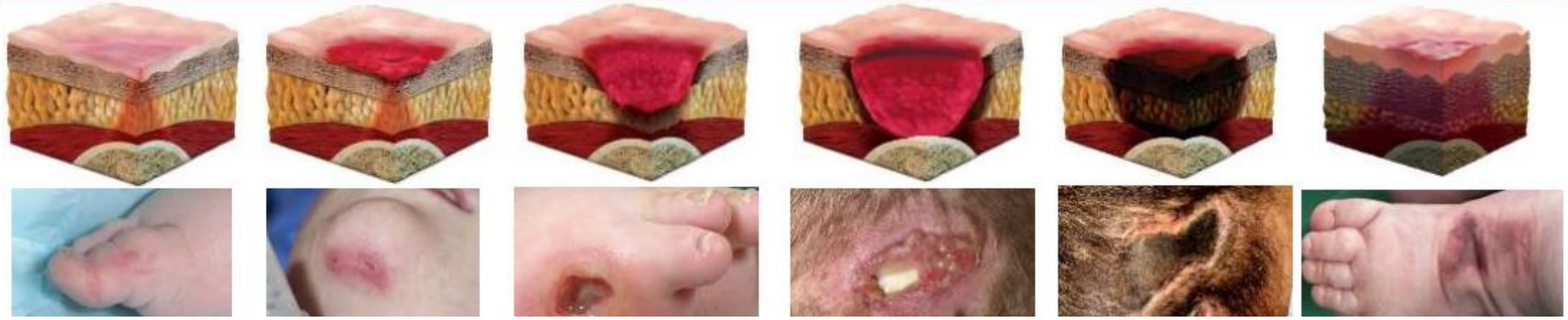
PAN PACIFIC
Pressure Injury Alliance



Compared to normal adult skin, paediatric skin has a smoother epidermis and less pigmentation. Epidermis, dermis and subcutaneous fat are thinner in children. Skin moisture concentration and sebum are lower, and water content is higher in children. Skin pH is higher in neonates.

Text adapted from: *International NPUAP/EPUAP Pressure Ulcer Classification System (2009,2014)* published in: National Pressure Ulcer Advisory Panel (NPUAP), European Pressure Ulcer Advisory Panel (EPUAP), Pan Pacific Pressure Injury Alliance (PPPIA), Prevention and Treatment of Pressure Ulcers: Clinical Practice Guideline. 2014: Emily Haesler (Ed.) Cambridge Media: Osborne Park, WA. **3D graphics:** Owned by PPPIA, supported by Silver Chain. **Photos**: Photos courtesy of C. Boylan, used with permission. **Also available in this series:** PPPIA Classification System: Multicultural, PPPIA Classification System for Adults with Light Skin Tones, PPPIA Classification System for Dark Skin Tones, PPPIA Classification System for Asian Skin Tones, PPPIA Classification System for Older Adults. **More information and permission:** www.pppia.org

Stage 1	Stage 2	Stage 3	Stage 4	Unstageable	Suspected Deep Tissue Injury
Intact skin with non-blanchable redness of a localised area usually over bony prominences. Darkly pigmented skin may not have visible blanching; its colour may differ from the surrounding area. The area may be painful, firm, soft, warmer or cooler as compared to adjacent tissue. Stage I pressure injuries may be difficult to detect in babies/children with darkly pigmented skin tone. May indicate 'at risk' babies/children (a heralding sign of risk).	Partial thickness loss of dermis presenting as a shallow open ulcer with a red/pink wound bed, without slough. May also present as an intact or open/ruptured serum-filled blister. Presents as a shiny or dry shallow ulcer without slough or bruising (bruising indicates suspected deep tissue injury). Stage 2 pressure injuries should not be used to describe skin tears, tape burns, perineal dermatitis, maceration or excoriation.	Full thickness tissue loss. Subcutaneous fat may be visible, but bone, tendon or muscle are not exposed. Slough may be present but does not obscure depth of tissue loss. May include undermining and tunnelling. The depth of Stage 3 pressure injuries varies by anatomical location. The bridge of nose, ear, occiput and malleolus do not have subcutaneous tissue and Stage 3 ulcers can be shallow. In contrast, areas of significant adiposity can develop extremely deep Stage 3 pressure injuries. Bone/tendon is not visible or directly palpable.	Full thickness tissue loss with exposed bone, tendon or muscle. Slough or eschar may be present on some parts of the wound bed. Often include undermining and tunnelling. The depth of a Stage 4 pressure injury varies by anatomical location. The bridge of nose, ear, occiput and malleolus do not have subcutaneous tissue and these ulcers can be shallow. Stage 4 pressure injuries can extend into muscle and/or supporting structures (e.g. fascia, tendon or joint capsule) making osteomyelitis possible. Exposed bone/tendon is visible or directly palpable.	Full thickness tissue loss in which the ulcer base is covered by slough (yellow, tan, gray, green or brown) and/or eschar (tan, brown or black) in the wound bed. Until enough slough and/or eschar is removed to expose the base of the wound, the true depth, (and therefore Stage) cannot be determined. Stable (dry, adherent, intact, no erythema or fluctuance) eschar on the heels serves as 'the body's natural (biological) cover' and should not be removed.	Purple or maroon localised area of discoloured intact skin or blood-filled blister due to damage of underlying soft tissue from pressure and/or shear. The area may be preceded by tissue that is painful, firm, mushy, boggy, warmer or cooler as compared to adjacent tissue. Deep tissue injury may be difficult to detect in babies/children with dark skin tones. Evolution may include a thin blister over a dark wound bed. The wound may further evolve and be covered by thin eschar. Evolution may be rapid, exposing additional layers of tissue even with optimal treatment.



Appendix 3: Pressure Injury Flow Chart