

A close-up photograph of a newborn baby's feet. The baby is lying down, and its feet are raised towards the camera. Each foot has a white identification band wrapped around the ankle. The background is softly blurred, showing the baby's legs and torso. The overall tone is warm and clinical.

# Neonatal Skin Injury Treatment Recommendations

**AWHONN**  
2018 Neonatal Skin  
Care Evidence-Based  
Guideline, 4th Edition



Know the risk  
factors for neonatal  
skin injuries

**RISK FACTORS**



## RISK FACTORS

- Preterm infants less than 32 weeks
- Low birth weight
- Immobility
- Physiological aberrations such as edema, dehydration or hypotension
- Infants undergoing treatment with vasopressors, sedatives or therapeutic hypothermia.
- The use of probes, electrodes and medical devices, including endotracheal, nasogastric and orogastric tubes, and vascular access devices.
- The use of cardiorespiratory support devices, such as nasal continuous positive airwaves pressure (NCPAP); high frequency ventilation; or extracorporeal membrane oxygenation (ECMO)





Essential nutritional  
support

**NUTRITION**



## Nutrition

- Premature infants have more nutritional requirements than term infants because of diminished nutrient stores at birth.
- Nutritional care for neonates should include adequate fluid, calories, amino acids, proteins, carbohydrates, fats, vitamins, and trace minerals.



High risk areas of  
the body for  
pressure ulcers

**HIGH RISK AREAS**





## High risk areas

- Pressure ulcers are more prevalent on the head, face, nasal region, lower limbs, and ears.
- Ulcers most often occur in infants who must remain immobile for prolonged periods of time, such as after surgery.
- Skin should be routinely monitored, particularly where the skin is susceptible to pressure from medical devices (nasal CPAP prongs and masks, vascular catheter hubs, central line interfaces, arm boards, tracheostomy tubes, and plaster cast edges).



Adopt methods to prevent or minimize the risk of skin injury

**PREVENTION**





## Prevention

- Pressure injuries may occur as a result of inadequate monitoring or the inappropriate use of devices used for oxygen therapy.
- Examine skin at pressure points at least once per shift or more often.
- Rotate nasal prongs and mask for CPAP
- Apply alcohol-free skin protectants when needed.
- Use protective dressings, protective padding, water mattresses, air mattresses, gelled mattresses, and blanket covered sheepskin, when appropriate.



Identify the potential  
cause(s) of skin injury.


**CAUSE OF INJURY**



## Cause of injury

- Mechanical pressure (adhesive removal, abrasion, friction, pressure sites)
- Thermal conditions (cooling blankets, warming devices)
- Chemical use (diaper dermatitis, cleansing solutions, extravasation injury)
- Congenital (epidermolysis bullosa)
- Infection
- Vascular compromise (hemangiomas, thromboembolism)



A close-up photograph of a newborn baby's arm and hand. The baby is lying on a white hospital bed. A clear plastic IV tube is connected to a small, clear plastic IV port on the baby's arm. The port is secured with white medical tape. A yellow cap is visible on the side of the port. The baby's skin is a healthy pinkish-red color. The background is slightly blurred, showing more of the hospital bed and some medical equipment.

Core essentials for  
treating skin injuries

**TREATING  
WOUNDS**



Assess the stage of injury or status of wound healing.

Consider the stage of healing, the amount of moisture, and presence of eschar or infection.

---

## **TREATING WOUNDS**



Obtain skin cultures, Gram stains, and potassium hydroxide preparations from the skin injury site where there are signs of infection, including, but not limited to ELBW, chronic surgical wounds, and immune compromise.

---

## **TREATING WOUNDS**





Clean the affected area with each dressing change using body-temperature, normal saline solution diluted 1:1 with sterile water or undiluted normal saline.

A 20-60-ml syringe with a blunt needle or intravenous catheter can be used to gently debride the area of exudate.

---

## **TREATING WOUNDS**



Apply antibacterial or antifungal ointment if indicated.

Medical grade honey with active Leptospermum or Manuka honey may be applied to wounds, especially wounds requiring debridement.

For infants who are not clinically stable or who have negative skin cultures, consider systemic treatment for ELBW.

---

## **TREATING WOUNDS**



Consider silicone-based adhesives, hydrocolloids, polyurethane films, hydrogels, or silver dressings for wounds or large denuded areas.

Avoid products that may strip the skin or create a periwound injury.

---

## **TREATING WOUNDS**