

# Newborn Critical Care Center (NCCC) Guidelines

## Bedside Procedure Skin Preparation

### INDICATION:

To safely disinfect the targeted skin area prior to performing a procedure that requires a skin puncture, thus ensuring proper sterilization of the affected area.

### THE A, B, Cs OF ANTI-SEPTIC CLEANSERS:

**Alcohol:** A bactericidal anti-septic applied topically to the skin that rapidly kills live bacteria, viruses, and fungi by protein denaturation.

**Betadine:** A bactericidal povidone-iodine solution applied topically that rapidly kills bacteria, viruses, and fungi through the process of oxidation.

**Chlorhexidine Gluconate 2% (Chloraprep):** A bactericidal solution that kills targeted organisms by cell wall disruption. It is active against gram-positive and gram-negative organisms, facultative anaerobes, aerobes, and yeast.

PROCEDURE	INFANT ≤ 1000 G		INFANT > 1000 G
	< 1 Week Old	> 1 Week Old	
PIV	Betadine, then sterile saline	Chloraprep	Chloraprep
PAL	Betadine, then sterile saline	Chloraprep	Chloraprep
Umbilical Line Placement	Betadine	Chloraprep	Chloraprep
PICC	Betadine	Chloraprep	Chloraprep
Thoracentesis or Thoracostomy Tube	Betadine	Chloraprep	Chloraprep
Other Invasive Sterile Procedures (Suprapubic Tap, Paracentesis)	Betadine	Chloraprep	Chloraprep
Lumbar Puncture	Betadine	Betadine	Betadine
Urinary Catheterization	Betadine	Betadine	Betadine
Circumcision	N/A	N/A	Betadine

### ADDITIONAL INFORMATION:

1. Include type of prep in verbal "Time Out" with bedside RN prior to procedure.
2. Emergent procedures (i.e. UVC placement in the delivery room or any emergency thoracentesis) **DO NOT** require a timeout or a delay to allow for the antiseptic to completely dry unless the patient condition allows.
3. Squeeze swab stick in packet or gauze to minimize dripping, runoff, and pooling.
4. Allow prep solution to dry (2 - 4 minutes), then rinse solution off with sterile water or NS prior to procedure to minimize the risk of chemical burns.
5. After the procedure is complete, the provider **MUST** assess the skin carefully and **REMOVE** all residual anti-septic solution as betadine and chlorhexidine can cause severe and extensive skin burns in ELBW infants.

**References:**

1. AWHONN Neonatal Skin Care Evidence-Based Clinical Practice Guidelines (Fourth Edition), 2018
2. Merenstein and Gardner's Handbook of Neonatal Intensive Care, 8th edition, 2015
3. UNC Healthcare Nursing Policies and NCCC Clinical Guidelines/Unit Structure Standards