

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%): 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	Chloroprep	Chloroprep
PAL	Betadine, then sterile saline	Chloroprep	Chloroprep
Umbilical Line Placement	Betadine	Chloroprep	Chloroprep
PICC	Betadine	Chloroprep	Chloroprep
Thoracentesis or Thoracostomy Tube	Betadine	Chloroprep	Chloroprep
Other Invasive Sterile Procedures (Suprapubic Tap, Paracentesis)	Betadine	Chloroprep	Chloroprep
Lumbar Puncture	Betadine	Betadine	Betadine
Urinary Catheterization	Betadine	Betadine	Betadine
Circumcision	n/a	n/a	Betadine

ADDITIONAL INFORMATION:

1. Include type of prep in "Time Out" with RN prior to procedure.
2. Emergency procedures (ie UVC placement in the delivery room or any emergency thoracentesis) **DO NOT** require a timeout or the time for antiseptic to dry unless the patient condition allows.
3. Squeeze swab stick in packet or gauze to minimize dripping, runoff, and pooling.
4. Allow prep to dry (2 - 4 minutes) then wash off with sterile water or NS prior to procedure.
5. After the procedure, the provider **MUST** examine the skin carefully and **REMOVE** all residual anti-septic solution as betadine and chlorhexidine may cause fatal 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