



The purpose of this project was to survey neonatal nurse practitioners and nursing leaders across NICUs regarding the current use of chlorhexidine gluconate (CHG) in term and preterm infants” Beekman and Steward (2019).

Abstract:

**BACKGROUND:** Central-line-associated bloodstream infection (CLABSI) contributes to significant morbidity and mortality in the neonatal intensive care unit (NICU). Disinfection of skin is part of bundled cares aimed at prevention of CLABSI. While considered an essential component of insertion and maintenance bundles, the optimal solution to disinfect neonatal skin remains controversial.

**PURPOSE:** The purpose of this project was to survey neonatal nurse practitioners and nursing leaders across NICUs regarding the current use of chlorhexidine gluconate (CHG) in term and preterm infants.

**METHODS:** This descriptive study involved the collection of survey data to determine NICU practices related to the use of CHG in their infant population. The sample was composed of nursing directors of NICUs and neonatal nurse practitioners who completed an electronic survey via a provided link.

**FINDINGS/RESULTS:** Chlorhexidine was reported to be used in 53 (82.81%) of the NICUs and

was the primary agent used to prepare the skin for central vascular catheter insertion (53.23%) followed by povidone-iodine (45.16%), and 70% isopropyl alcohol (1.61%). Gestational age or birth weight restrictions for CHG use were reported in 43 (82.69%) NICUs. Trends in the data demonstrated nursing's role in using CHG in the NICU. Adverse events reported from CHG included burns, redness, dermatitis, and other irritations. Concerns included risk of absorption, burns, skin irritation, lack of evidence, and overall safety.

**IMPLICATIONS FOR PRACTICE:** Systematic monitoring by nurse leaders is needed to identify evidence related to skin disinfection and CHG in neonates. Targeted education for nursing staff related to directed to developmental maturation of the skin, safe use of CHG, review of best evidence, rationale for usage of CHG, and potential iatrogenic effects is recommended.

**IMPLICATIONS FOR RESEARCH:** Research is needed to evaluate the impact of educational offerings and surveillance for adverse events on CLABSI rates.

## You may also be interested in...

Daily chlorhexidine gluconate (CHG) bathing reduces the risk of hospital-acquired infections  
Study offers evaluation of residual chlorhexidine gluconate on skin  
Infection prevention strategies for procedural classifications

### Reference:

Beekman, K. and Steward, D. (2019) Chlorhexidine Gluconate Utilization for Infection Prevention in the NICU: A Survey of Current Practice. *Advances in Neonatal Care*. 2019 Sep 13. doi: 10.1097/ANC.0000000000000658. .

