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Owner Sherie Goldbach:  
Project Coordinator  
Policy Area Infection Prevention  
Applicability UNC Medical Center

## Chlorhexidine Gluconate (CHG) Treatments and Skin Antisepsis

### I. Description

Describes the indications and methods for skin antisepsis, which is the process of using a substance to prevent or arrest the growth of microorganisms, to prepare a patient's skin for surgical/nonsurgical procedure and for central line-associated bloodstream infection (CLABSI) prevention.

### II. Policy

#### A. Indications for Skin Antisepsis in Clinical Practice:

1. Performed to prevent Hospital Acquired Infections such as Central Line Associated Bloodstream Infections (CLABSI) in high-risk patient populations.
  - a. Daily whole body CHG treatments with CHG-containing wipes (e.g., ReadyPrep<sup>®</sup>, SAGE<sup>®</sup> cloths) in all ICUs, step-downs, and for inpatients with a central line in the adult oncology unit, adult bone marrow transplant unit, and 5CH.
  - b. For pediatric patients, follow manufacturer's weight-based guidance on using CHG wipes.
  - c. For Neonatal Critical Care Center (NCCC) guidance refer to Nursing policy: [NC Children's Hospital: NCCC Standards and Guidelines](#).

- d. For Oncology Patients follow: the Nursing policy: [Care of the Oncology Patient: Skin Care and External Radiation Therapy](#).
  - e. For guidance on procedure of using CHG treatments refer to the documents: [CHG Treatment for Adults](#) and [CHG treatment for Pediatrics](#).
2. Before invasive procedures
  3. Performed before surgical procedures
    - a. Preoperative whole body Chlorhexidine gluconate (CHG) treatment with CHG-containing wipes (e.g., ReadyPrep CHG<sup>®</sup>, SAGE<sup>®</sup> cloths).
    - b. Refer to the following Nursing policy: [Operative/Procedural Management](#) for contraindications, exceptions, and specific instructions regarding application of wipes.

## B. Antiseptic Agents

### 1. Preparing Patient's Skin for Medical Procedures

- a. Intravenous Device (Central lines, Arterial lines, and Peripheral IVs)
  - Chlorhexidine gluconate with alcohol (e.g., ChloraPrep™) is the preferred antiseptic agent to use for skin preparation prior to insertion of intravenous devices and should be applied per manufacturer's instructions for use (MIFU).
- b. Minor Procedures (IM, Subcutaneous Injections, or heel sticks)
  - Alcohol is adequate for preparing skin for these types of procedures.
- c. Minor or Major Surgical Procedures
  - i. A surgical skin prep of the operative site will be performed in the assigned operating room before surgery using standard aseptic technique and following MIFU.
  - ii. Chlorhexidine-alcohol (e.g., ChloraPrep) has been demonstrated to be the most effective agent to use for skin antiseptics prior to surgery.
  - iii. Chlorhexidine gluconate with alcohol (e.g., ChloraPrep) is the antiseptic that should be used unless there is a medical contraindication in which case iodophors with alcohol (e.g., PurePrep) may be used.
    - The only contraindication to betadine (iodophors) is reaction to previous use of topical iodine preparation or

ingested iodine.

- The preoperative antiseptic skin preparation should be applied per MIFU. The prepped area must be large enough to extend the incision or create new incisions or drain site.

**NOTE:** For neurosurgery and spinal surgery involving the meninges, Chlorhexidine-alcohol (e.g., ChloraPrep) may be used with strict adherence to the manufacturer's application and drying instructions. Care should be taken to avoid direct contact with the meninges as per MIFU. Chlorhexidine-alcohol (e.g., ChloraPrep) has been demonstrated to be the most effective agent for skin antisepsis prior to surgery and a thorough review of the literature has not revealed any reported complications that can be attributed to the use of Chlorhexidine-alcohol (e.g., ChloraPrep) in such procedures. The benefits of reducing surgical site infection outweigh the theoretical risk of contact with the meninges. The surgeons will take care that this agent, which is applied to the skin and allowed to dry, does not have contact in its wet form with the central nervous system or meninges.

- Follow the MIFU and manufacturer's warnings.

iv. Urinary catheter insertion: Betadine is the preferred antiseptic agent to use for skin preparation prior to insertion of urinary catheters. Allow area to dry or allow at least 2 minutes of contact time prior to inserting catheter.

## 2. Antiseptic Agents for Neonates and Infants

- a. Refer to Nursing policy: [NC Children's Hospital: NCCC Standards and Guidelines](#) for details.
- b. Plain soap, PCMX, and aqueous quaternary ammonium compounds are not recommended as single agents for operative site preparation. Contact Infection Prevention if a patient's skin is sensitive to all acceptable antimicrobial products.
- c. When preparation of the patient's skin requires cleaning with an antiseptic

agent, a fast acting one is desirable.

d. "Defatting" agents such as acetone are not recommended.

## C. Implementation

Implementation of this policy is the responsibility of Infection Prevention, Service Line Directors, Nursing Service, Phlebotomy, and Medical Staff.

## III. References

SHEA/IDSA/APIC Practice Recommendation: Strategies to prevent healthcare-associated infections through hand hygiene: 2022 Update

Center for Disease Control and Prevention: Clean Hands. February 2024 <https://www.cdc.gov/clean-hands/about/index.html>. Accessed October 25 2024.

## IV. Related Policies

[Infection Prevention Policy: Infection Prevention Guidelines for Perioperative Services](#)

[Nursing Policy: Adult ICU Patient](#)

[Nursing Policy: Care of the Oncology Patient: Skin Care and External Radiation Therapy](#)

[Nursing Policy: Central Venous Access Device \(CVAD\) Care & Maintenance](#)

[Nursing Policy: Intermediate Care for Adult and Pediatric Patients](#)

[Nursing Policy: NC Children's Hospital: NCCC Standards and Guidelines](#)

[Nursing Policy: Operative/Procedural Management](#)

[Nursing Policy: Pediatric ICU \(PICU\) Patient](#)

[Nursing Policy: Skin Integrity](#)

## Approval Signatures

Step Description	Approver	Date
Policy Stat Administrator	Judith Strubin: Mgr Program-IP	01/2025
	Thomas Ivester: CMO/VP Medical Affairs	01/2025
	Emily Vavalle: Dir Epidemiology	01/2025

## Applicability

UNC Medical Center

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