# Decolonization of Non-ICU Patients With Devices



## Section 11-6

# **Nursing Protocol Training**

## Basin Bed Bathing With 2% Chlorhexidine (CHG)

and Showering With 4% CHG Liquid Soap



#### **Targeted Decolonization Introduction**

- Our hospital is adopting a targeted decolonization protocol for adult non-intensive care unit (ICU) patients with selected medical devices:
  - Central lines
  - Midline catheters\*
  - Lumbar drains
- From this training you will learn:
  - How to implement targeted decolonization with chlorhexidine (CHG)
  - How to address special circumstances related to decolonization
- This training module will take approximately 20 minutes to complete

\*NOTE: The ABATE Infection Trial showed the same 32 percent reduction in bloodstream infection for midlines as it did for central lines.

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#### What Is Decolonization?

- Decolonization is the use of topical antiseptic soaps and nasal products to remove bacteria from the body surface
- Decolonization is proven in hospitals to prevent antibiotic-resistant bacteria and bloodstream infections
- The decolonization products used include:
  - o 2% CHG no-rinse liquid for basin bed baths
  - 4% CHG rinse-off liquid for showering

#### Why Are We Targeting Patients With Medical Devices?

- Body bacteria can cause infection in hospitals and nursing homes due to wounds, devices, and poor health of the patient
- Decolonization has been shown to prevent infections
  - For patients with multidrug-resistant organisms
  - In hospital ICUs
  - In long-term acute care hospitals
  - In hospital non-ICU patients with devices
- The <u>Active Bathing to Eliminate (ABATE)</u> Infection Trial found that decolonization for adult non-ICU patients with specific medical devices reduced all-cause bloodstream infections by 32 percent and positive methicillin-resistant *Staphylococcus aureus* (MRSA) and vancomycin-resistant enterococcus (VRE) cultures by 37%<sup>1</sup>

<sup>1</sup> Lancet. 2019 Mar 23;393(10177):1205-15

#### **How Do I Perform Targeted Decolonization?**

- Use CHG, instead of regular soap, for all daily bathing or shower needs for all adult patients with selected medical devices, every day, for entire unit stay
- Applies to patients on non-ICU units

#### **Options for CHG Bed Bath or Shower**

- 2% CHG liquid with disposable cloths
  - Dilute 4% 4 oz. bottle to 2% liquid
  - $\circ~$  No rinse, air dry



4% liquid CHG
 Rinse-off for showering



#### **CHG for Bath or Shower**

- Patients with devices should be cleansed with CHG in <u>one of</u> <u>two ways</u>
- Basin bed bath with 2% CHG liquid, applied as <u>no-rinse</u> soap with disposable non-cotton cloths
- Shower with 4% rinse-off CHG liquid soap with mesh sponge
- CHG is the bathing/cleansing soap. It replaces regular soap.
  Do NOT use other soaps which can inactivate CHG.
- CHG works better than soap and water to remove bacteria. It should be firmly massaged into the skin. Once applied, it will continue to work to keep germs off the skin for 24 hours.
- CHG is less drying than regular soap and water

### **CHG Talking Points**

- Patients need encouragement to take their daily bath
- Your enthusiasm is critical to protect patients with bathing
- Talking points to patients:
  - CHG reduces germs on your skin better than soap and water
  - CHG serves as your protective bath to prevent infection
  - The bath will only take about 10 minutes
  - If you wish to bathe yourself, I can give you directions on how to use the soap in the right way to get rid of bacteria and protect you from infection. Let me help with hard-to-reach areas.
- If your patient declines a bath, try again later in the day

#### What you will need:



#### One 4 oz. Bottle of 4% Liquid CHG





Bath Basin

Six Disposable Non-Cotton Cloths

#### **CHG Basin Bed Bath Instructions**

- Obtain a bath basin and dispense one 4 oz. bottle of 4% CHG liquid into basin
- Fill one emptied 4 oz. bottle with water and dispense it into basin with 4% CHG liquid in it. (IMPORTANT: Do NOT overdilute. Use only equal parts of water and CHG. Goal is to achieve 2% CHG.)



 Soak disposable cloths in basin. Wring each cloth prior to application. Only soak and wring each cloth once. Do NOT apply cloth to patient and place back in basin to rinse and apply again.

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### **CHG Bed Bath Bathing Procedure**

- Firmly massage to remove bacteria.
- Use ALL six disposable cloths in the following order:
  - $\circ~$  Face, neck, and chest. Avoid eyes and ears.
  - $\circ~$  Both shoulders, arms, and hands
  - $\circ~$  Abdomen, then groin/perineum
  - o Right leg and foot
  - $\circ~$  Left leg and foot
  - $\circ~$  Back of neck, back, then buttocks
- For all tubes, lines, and drains, clean 6 inches closest to the body and over non-gauze dressings
- Use additional cloths for larger patients
- Safe on perineum, including female labia and genital surface
- Air dry. Do **NOT** rinse.



Basin CHG Cloth/Shower

(1)

(1)

#### **CHG and Devices**

- Decolonization should be targeted to patients with selected medical devices, such as central lines, midline catheters, and lumbar drains.
- Breaks in the skin due to medical devices increase risk for infection.
- Use a clean CHG cloth to clean not only skin around the device, but the device itself to prevent infection. CHG is safe on devices.
  - Ensure careful cleansing of skin around lines to remove bacteria.
  - After cleaning skin, clean 6 inches of line closest to the body.
  - Clean over non-gauze dressings.
  - If dressing in place, clean over dressing. After skin is cleaned, use clean part of cloth to clean at least the 6 inches of the device that are closest to the body.

#### **Clean ALL Devices**

- Patients with selected devices, such as central venous catheters, midline catheters, or lumbar drains, may have other devices as well.
- Remember to clean EVERY device that the patient has. This was the protocol in the ABATE Infection Trial.
- This includes not only the devices that identified the patient for decolonization, but also any other devices. These may include:
  - Urinary catheters
  - o G-tube, J-tubes
  - Chest tubes
  - Rectal tubes
  - EKG leads and wires

#### **Special Circumstances**

- Incontinence
- Wounds
- Obese patients
- Allergies and refusals

#### **CHG and Incontinence**

- Do NOT use soap to cleanse incontinent patients. Soap can inactivate CHG. Use barrier products compatible with CHG.\*
- Remove urine/stool with usual incontinence wipes/cloths and water. Do NOT use soap.
- After removing soilage, if evidence of skin breakdown or wounds in the area, clean skin again with CHG wipes and air dry.
- Apply CHG-compatible barrier protection, if needed.
- If additional barrier protection is needed during day, OK to use additional CHG compatible barrier protection products.
- If additional bathing is required throughout the day, follow the same CHG bed basin bathing protocol, then reapply CHG compatible barrier protection products, as needed.

\*Contact product manufacturers to confirm CHG compatibility

#### **CHG and Wounds**

- Use of CHG on wounds helps remove bacteria and prevent infection. CHG wipes or liquid CHG for showering can be used on all superficial wounds. These include:
  - Superficial decubitus ulcers (stages 1 and 2)
  - Friable skin/rashes
  - Superficial burns
- Clean the wound carefully with CHG, including over wound VACs (vacuum-assisted closures)
- CHG should be used over semipermeable/occlusive dressings
- CHG should be applied over sutured or stapled wounds
- CHG cloths do not have alcohol and will not cause stinging in wounds
- Do NOT use on large or deep wounds (e.g., packed wounds)

#### **CHG Bathing of Obese Patients**

- Nurses should use as many CHG wipes as necessary and throughout the day if additional bathing is required (incontinence, sweating, or other reasons)
- Ensure neck and all skin folds are well cleaned
- Dry CHG well. Do **not** wipe off.

#### **Targeted Decolonization Allergies and Refusals**

- If a patient with a device is allergic to CHG, do NOT use CHG for bathing or showering. Provide an alternative soap.
- As is the case with any medical care, patients can refuse the protocol, but your enthusiasm and encouragement can often help them understand the value of removing germs on their body to protect them from infection.

#### **Can a Patient Self-Bathe?**

- Yes, with instruction and encouragement
- Give handout to patient an hour or two before bathing
- At bath time, go over the one-page CHG cloth bathing handout



### **Can a Patient Self-Bathe? (continued)**

- Be sure to mention:
  - CHG is their protective bath, kills germs for 24 hours
  - CHG is safe, over-the-counter, and better than soap
  - Air dry, do NOT rinse
  - Massage (rather than wipe) into all areas of skin for effect
  - Pay special attention to the neck, skin folds
  - Remember, patients only feel comfortable cleaning normal skin
    - You will help them with hard-to-reach areas
    - > Clean all lines, tubes, drains within 6 inches of the body
    - Clean over semipermeable dressings (not gauze)
    - > Safe on rashes, burns, wounds that are not deep or large

### **Bathing Cleanup**

 Dispose of each cloth in the trash



Cloths CLOG toilets





#### **Long-Term Use of CHG**

- CHG has been used to safely bathe millions of patients, including patients in ICUs and burn units, and before and after surgery.
- Long-term use of CHG does not cause deterioration of skin or other problematic skin conditions. It is safe to use for routine bathing in patients who require prolonged care and has been shown to be better for the skin than regular soap and water.
- It is safe to use repeatedly in patients with multiple incontinent episodes.

### **CHG Bathing: Critical Points To Remember**

### DO

- Use CHG cloths for all bathing
- Firmly massage skin to cleanse
- Pay special attention to neck and tubes, drains, lines
- Use CHG on rashes, cuts, scrapes
- Use CHG on burns, superficial wounds
- Only use CHG compatible lotions\*

\*Contact product manufacturers to confirm CHG compatibility

### • Do **NOT** wipe off. Let

DON'T

- air dry.
- Do NOT save open packs for later use
- Do NOT flush
- Do NOT use on deep/large wounds
- Do **NOT** use on patient if allergic

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#### **CHG Showering Instructions**

- Patients who wish to shower should receive:
  - One-page CHG shower instruction sheet prior to showering
  - Verbal review of instruction sheet
  - 4 oz. bottle of 4% CHG liquid
  - Mesh sponge or non-cotton cloth to lather CHG onto body. Do NOT use cotton cloths—cotton binds CHG and does not release CHG well onto the skin.
- Wrap all devices (e.g., central lines and midline catheters), as needed, to protect from water in shower
- After shower, unwrap devices and clean with 2% CHG wipes

#### **Shampoo and Face Wash**

- Encourage use of CHG for all shampoo and soap needs
- If patients insist on using personal shampoo or face wash, but are willing to use CHG for body wash, have them wash hair and face first, taking care to avoid contacting other skin areas as much as possible so that CHG will work on those areas.

#### **CHG Showering Instructions**

#### Be sure to mention:

- CHG works better than soap and water to kill germs and keep germs off the body for 24 hours if applied correctly
- Safe for shampoo and face/body wash. Avoid eyes, ear canals.
- $\circ~$  If available, use a mesh sponge
  - > CHG foams well with it, but not without



- Apply to skin out of water stream for 2 minutes before rinsing
- Lathering all body areas twice before rinsing generally takes about 2 minutes
- Massage all over skin. Pay attention to neck and skin folds.
- Rinse and towel dry

#### **Post-Shower Device Cleaning**

- After the shower, unwrap devices and perform the following with a single packet of two 2% CHG cloths:
  - For ALL lines and tubes, and drains (e.g., central lines, urinary catheters, G-tube/J-tubes, rectal tubes, chest tubes), clean the 6 inches closest to the body.
  - Wipe over non-gauze dressings. CHG is safe to use on devices and should also be used over non-gauze dressings.

#### **Decolonization: Key Points**

- Use CHG for entire unit stay for adult non-ICU patients with medical devices
- Be encouraging. Remind patients that this bath protects them from infection
- Give the bathing/showering handout to read before the bath/shower
- Patients who self-bathe still need verbal directions
- Clean ALL devices (lines, tubes, drains), dressings, and wounds unless large or deep
- Allow CHG to air dry
- The protocol begins again if patients with devices are readmitted