Implementing Decolonization in Nursing Homes to Prevent MDROs and Hospitalizations

Susan Huang, MD MPH
Chancellor's Professor, Division of Infectious Diseases
Medical Director, Epidemiology & Infection Prevention
University of California Irvine School of Medicine

Prior Decolonization Evidence Call - Recorded

- Implementation of a Universal Decolonization Strategy through the SHIELD OC Program to Combat MDROs
  - October 26, 2022
  - Described evidence for decolonization in nursing homes
  - Link below

https://naccho.zoom.us/rec/play/3Sm37oBZif6F_Y7vJ7kJaeY858GkLZ1d-eRE4NU4vdA3XFuni2EFsyadgf-mWKW23PMTY8i94e_ITflR.kaYHgFUzKmry2EqF?startTime=1666796469000&_x_zm_rtaid=9MTOgbBWQ12f4YmQprIlnw.1667236534816.c0908cb288112474cb79f6f08724d3e6&_x_zm_rhtaid=790

Agenda

- Brief Overview: Evidence for Decolonization
  - Hospitals: ICUs
  - Hospitals: non-ICUs
  - Post-Discharge
  - Nursing Homes
- Implementation Steps
- Support Options

Why Decolonize?

Decolonization: use of topical antiseptic soaps and nasal ointments to reduce the body's bacteria during high-risk times for infection

Moments when our body bacteria becomes our own worst enemy

- Surgery
- Wounds
- Devices
- Difficulty with hygiene, clearance of secretions
- Hospitalization and nursing home stays

The Rise of MultiDrug-Resistant Organisms (MDROs)

- Methicillin Resistant *Staphylococcus aureus* (MRSA)
- Vancomycin Resistant Enterococcus (VRE)
- MultiDrug-Resistant Pseudomonas
- Extended Spectrum Beta Lactamase Producers (ESBLs)
- Carbapenem Resistant Enterobacterales (CRE)
- Carbapenem Resistant Acinetobacter (CRAB)
- *Candida auris*

10-15% of hospital patients harbor at least one of the above

64% of nursing home residents harbor at least one of the above

Which Products?

Most studied products

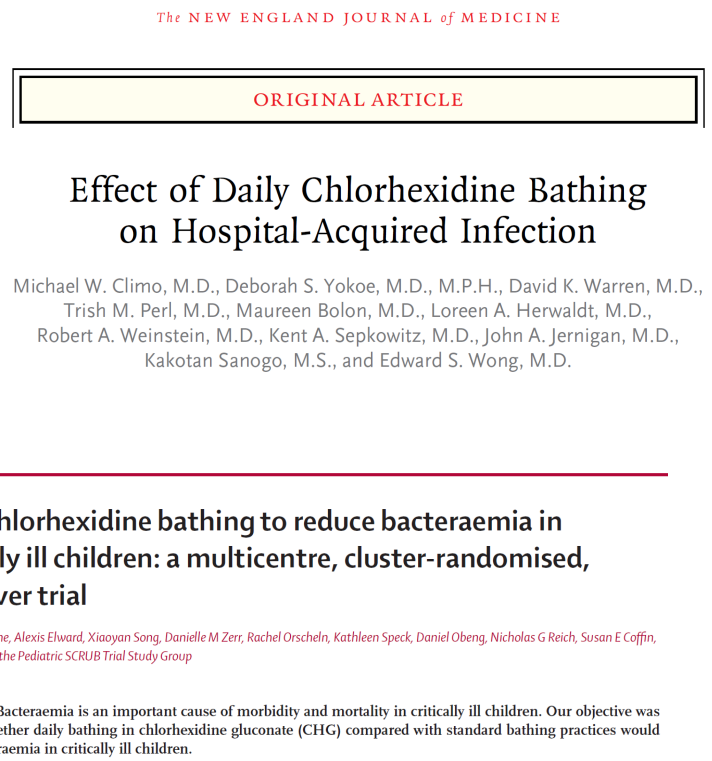
- Skin: chlorhexidine (CHG) antiseptic soap
- Nose: mupirocin ointment or nasal povidone-iodine (iodophor)
  - Necessary to address *Staphylococcus aureus*
  - Major cause of skin, device, and wound infections
  - Both methicillin-sensitive (MSSA) and resistant (MRSA) forms

Use of Chlorhexidine (CHG)

- Antiseptic uses in healthcare
  - Hand antisepsis at 2% and 4%
  - Dental hygiene
  - 1990s: Cleaning of skin prior to line insertion
  - 1990s: Pre-operative bathing
  - 2000s: Surgical prep
  - 2000s: Pre-op *S. aureus* carriers

Universal Chlorhexidine in ICUs

- 2013 – 3 large randomized clinical trials
  - **Climo et al**. 9 academic adult ICUs, 7700 patients
    - Reduced spread of VRE > MRSA
    - Reduced bloodstream infection by 28%
  - **Pediatric SCRUB Trial**
    - 10 Pediatric academic ICUs, 1500 patients
    - Reduced bloodstream infection by 36%



The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

Effect of Daily Chlorhexidine Bathing on Hospital-Acquired Infection

Michael W. Climo, M.D., Deborah S. Yokoe, M.D., M.P.H., David K. Warren, M.D., Trish M. Perl, M.D., Maureen Bolon, M.D., Loreen A. Herwaldt, M.D., Robert A. Weinstein, M.D., Kent A. Sepkowitz, M.D., John A. Jernigan, M.D., Kakotan Sanogo, M.S., and Edward S. Wong, M.D.

Daily chlorhexidine bathing to reduce bacteraemia in critically ill children: a multicentre, cluster-randomised, crossover trial

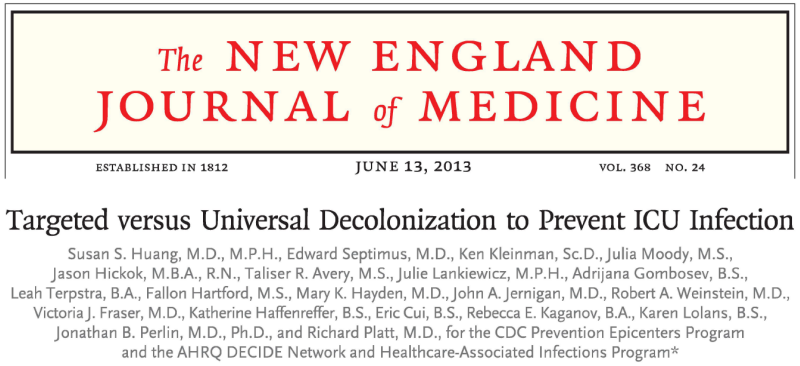
Aaron M Milstone, Alexis Elward, Xiaoyan Song, Danielle M Zerr, Rachel Orscheln, Kathleen Speck, Daniel Obeng, Nicholas G Reich, Susan E Coffin, Trish M Perl, for the Pediatric SCRUB Trial Study Group

Summary

Background Bacteraemia is an important cause of morbidity and mortality in critically ill children. Our objective was to assess whether daily bathing in chlorhexidine gluconate (CHG) compared with standard bathing practices would reduce bacteraemia in critically ill children.

Universal Chlorhexidine & Mupirocin in ICUs

- 2013 – 3rd large randomized clinical trial
  - **REDUCE MRSA Trial**
    - 43 community hospitals, 74 adult ICUs, 74,000 patients
    - 3 group trial: universal decolonization, targeted decolonization, routine care
    - Universal decolonization the most effective
    - Reduced all-cause MRSA by 37%
    - Reduced bloodstream infection by 44%



Decolonization in Non-ICUs

- 2019
  - ➢ **ABATE Infection Trial**
    - 53 community hospitals, 194 adult non-ICUs, 340,000 patients
    - Universal CHG bathing plus mupirocin if MRSA+ vs routine care
    - Decolonization not effective for all non-ICU patients
    - Highly effective if medical device
      - ✓ Reduced MRSA & VRE by 37%
      - ✓ Reduced bloodstream by 32%

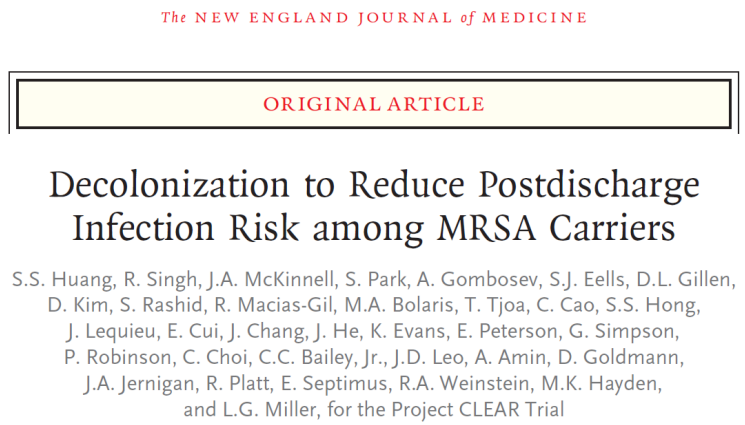

THE LANCET

Chlorhexidine versus routine bathing to prevent multidrug-resistant organisms and all-cause bloodstream infections in general medical and surgical units (ABATE Infection trial): a cluster-randomised trial

Susan S Huang, Edward Septimus, Ken Kleinman, Julia Moody, Jason Hickok, Lauren Heim, Adrijana Gombosev, Taliser R Avery, Katherine Haffenreffer, Lauren Shimelman, Mary K Hayden, Robert A Weinstein, Caren Spencer-Smith, Rebecca E Kaganov, Michael V Murphy, Tyler Forehand, Julie Lankiewicz, Micaela H Coady, Lena Portillo, Jalpa Sarup-Patel, John A Jernigan, Jonathan B Perlin, Richard Platt, for the ABATE Infection trial team

Decolonization Post-Hospitalization

- 2019
  - ➢ **CLEAR Trial**
    - 2100 recently discharged MRSA+ adult patients
    - Decolonization vs routine care
    - 5-day CHG & mupirocin twice monthly for 6 months
      - ✓ Reduced MRSA infection by 30%
      - ✓ Reduced all-cause infection by 17%



Regional Decolonization

- Presented IDWeek 2020
  - **SHIELD Orange County Collaborative**
    - 6th largest U.S. county
    - 18 nursing homes (NHs), 3 LTACHs, 16 hospitals
    - ***NH and LTACHs:*** CHG for all routine bathing plus 5d nasal iodophor every other week
    - ***Hospitals:*** decolonized ICU and contact precaution patients
      - ✓ Reduced MDROs: NH by 25%, LTACHs by 23%, hospitals by 14%
      - ✓ For NHs, reduced hospitalization due to infection by 38%

Universal Decolonization in Nursing Homes

- Presented IDWeek 2021
  - **Protect Trial**
    - 28 nursing homes, 14,000 adult residents
    - Decolonization for all vs routine care
    - CHG for all routine bathing plus 5d nasal iodophor every other week
      - ✓ Reduced odds of MDRO carriage by 54%
      - ✓ Reduced odds of hospitalization due to infection by 32%
      - ✓ Reduced odds of all-cause hospitalization by 23%
      - ✓ Adoption would reduce 1.9 hospitalizations ***per month*** per ***100 bed nursing home***

Implementation Steps

Step 1: Assess Readiness for Adoption

- Nursing home leadership sees value, need to reduce
  - Infections
  - Hospitalizations
  - MDRO pathogens (65% of residents colonized, common outbreak source)
    - Gram positives: MRSA, VRE
    - Gram negatives: ESBL, CRE, CRAB
    - Fungi: *C. auris*

Support Options:

- ✓ Share 2-page evidence sheet
- ✓ Share NACCHO recorded webinar on decolonization evidence
- ✓ Request special presentation by UCI to nursing homes in your area

Decolonization Benefits in Nursing Homes

The benefit of universal decolonization was presented to the Quality Assurance (QA) meeting and there was strong leadership support for implementation

Residents less colonized by MDROs

- ✓ Any MDRO **35% reduction**
- ✓ MRSA **31% reduction**
- ✓ VRE **73% reduction**
- ✓ ESBL **45% reduction**

Decolonization results in fewer MDROs, less MDRO colonization, and fewer residents on contact precautions

Residents less likely to be hospitalized

- ✓ Any hospitalization **23% reduction**
  - 1 hospitalization prevented for every 12.5 residents treated
- ✓ Infection-related hospitalization **32% reduction**
  - 1 infection-related hospitalization prevented for every 10.0 residents treated

Decolonization prevents 1.9 infection-related hospitalizations *per month* per 100 beds

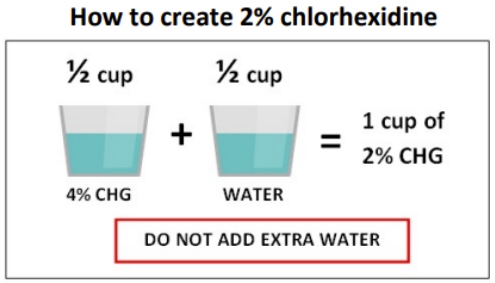
Step 2: Agree to Investment for Quality & Cost Savings

- Universal decolonization requires leadership support to
  - ➢ Adopt as Quality Assurance/Performance Improvement (QAPI) Program
  - ➢ Prepare for a campaign
  - ➢ Purchase products
  - ➢ Designate champions

Options:

✓ Share 2-page cost savings sheet

4% rinse off CHG for showers

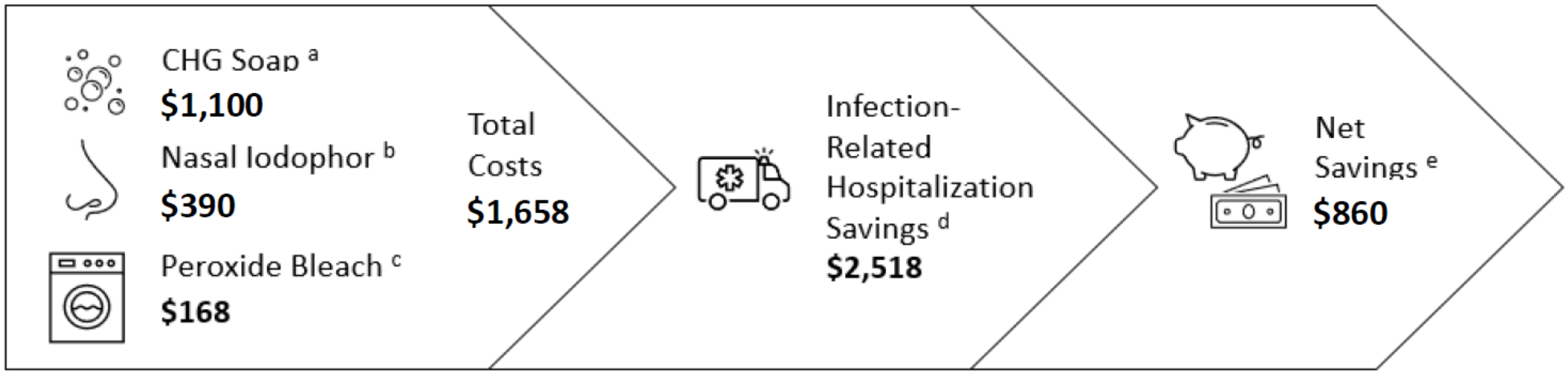


Create 2% leave-on CHG for bed baths

Nasal Iodophor Swabs

Decision Making and Costs

Estimated Monthly Savings for a 100-Bed Nursing Home = $860

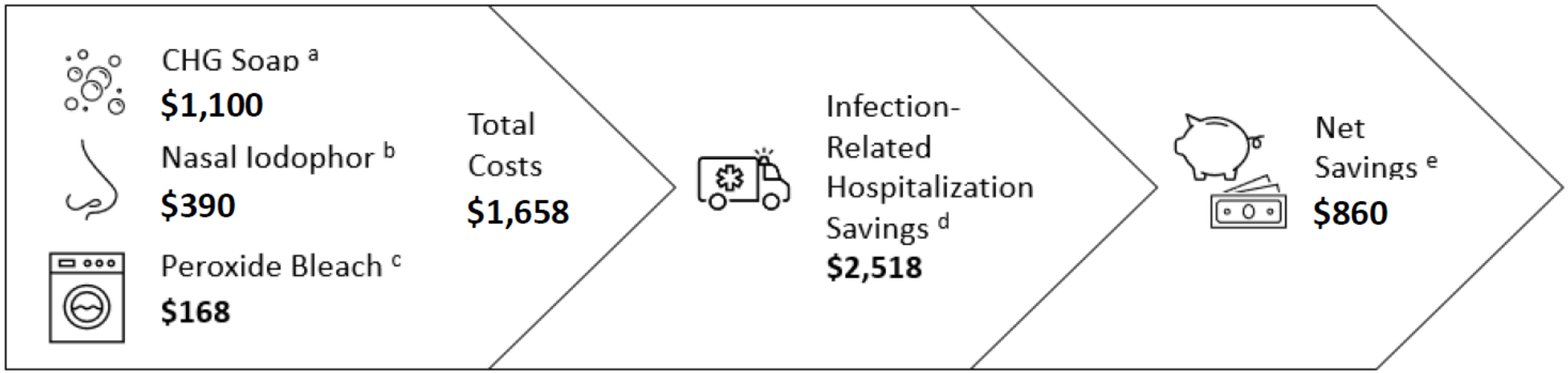


a. **Switching from regular soap to CHG soap**
   - Assumes baseline use of 50 gallons regular soap/month at $20/gallon (gal) = $1,000/mo
   - Assumes 35 gal of CHG at $60/gal = $2,100/mo (CHG protocol uses less volume of soap)
   - Difference = $1,100 added product cost/month

b. **Purchasing nasal iodophor.** $6.95 for box of 50 swabs. At perfect compliance, a 100-bed nursing home uses: 2 swabs (one/nostril) x 2 times/day x 10 days/month x 100 residents = 4,000 swabs (80 boxes). Studies suggest 70% compliance, at cost of $390/mo.

Decision Making and Costs

Estimated Monthly Savings for a 100-Bed Nursing Home = $860



c. **Switching from chlorine to peroxide bleach.** Estimated costs are for 20 gal/month. Chlorine bleach: $65/5-gal or $260/mo. Peroxide: $107/5-gal or $428/mo. Difference per month is $168. Some laundry contracts with a fixed price per bed do not incur additional cost when switching from chlorine to peroxide bleach.

d. **Decolonization prevents 1.9 infection-related hospitalizations per month per 100 beds.** A 100-bed nursing home would save $2,518 per month by preventing 5.3 bed-hold days per hospitalization at $250 per day.

Step 2: Checklist

☐ Purchase product

- 4% Chlorhexidine (CHG) (gallon formulation for humans, not pets)
- 10% Povidone-Iodine swab sticks (generic)
- Non-cotton disposable dry wipes or cloths
  - Note: Tena non-cotton dry cloths work particularly well
  - Cotton binds CHG and does not release well to skin

☐ Switch from chlorine to peroxide bleach

- Chlorine and CHG can mix in the laundry and leave a brown stain
- Ensure several laundry runs with peroxide occur before CHG adopted

☐ Confirm lotions and skin products are CHG compatible

- Call manufacturers to confirm skin products are compatible. Because CHG is widely used in hospitals, common healthcare manufacturers have tested their products against CHG. If not, several same-priced alternatives exist.

Step 3: Prepare to Launch

- Benefit tied to ensuring proper process
  - ➢ Designate MD, RN, LVN, and CNA champions
  - ➢ Create a training plan
  - ➢ Plan to report feedback and improvement to champions, QA meeting
  - ➢ Plan to track outcomes

Support Options:

- ✓ Access nursing home toolkit at **ucihealth.org/shield**
- ✓ Print handouts and training materials
- ✓ Request train-the-trainer presentation by UCI to nursing homes in your area
- ✓ Schedule dates for direct-to-staff training sessions

Nursing Home Decolonization Toolkit

Step 1: Adopt SHIELD program as Quality Assurance Performance Improvement (QAPI)

1. QAPI Project Documentation Form (PDF) (DOC)
2. Universal Plan of Care (PDF) (DOC)
3. Resident Plan of Care (PDF) (DOC)
4. Pre-Launch Checklist for the Infection Preventionist (PDF) (DOC)

ucihealth.org/shield

Step 2: What to Expect? (PDF) (DOC)

Step 3: Communication to Residents

1. Admission Packet Letter (PDF) (DOC)
2. Resident/Ombudsman Information Sheet (PDF) (DOC

Step 4: Products & Protocols

1. Products (PDF) (DOC)
2. CHG Compatibility (PDF) (DOC)
3. Protocol: Bed Bath With CHG Cloths (PDF) (DOC)
4. Protocol: Bed Bath With CHG Liquid (PDF) (DOC)
5. Protocol: Showering With CHG (PDF) (DOC)
6. Protocol: Nasal Iodophor (PDF) (DOC)
7. Order Set Examples (PDF)
8. Admission – SHIELD Checklist (PDF) (DOC)

Step 5: Staff Education & Training

1. Paper or Computer Based Training (PDF) (PPT)
2. Staff Post-Training Test and Answer Key: Basin Bed Bathing
3. Staff Post-Training Test and Answer Key: CHG Cloths (PDF)
4. Physician and Staff Notification Flyer (PDF) (DOC)
5. Staff Handouts for CHG Bathing/Showering (PDF) (PUB)
6. Staff Handout for Basin Bed Bathing With CHG (PDF) (PUB)
7. Staff Handout for Nasal Iodophor (PDF) (PUB)
8. Staff Huddle Reminder Documents (PDF) (DOC)
9. FAQ: General (PDF) (DOC)
10. FAQ: Nasal Iodophor (PDF) (DOC)
11. FAQ: CHG for Bathing (PDF) (DOC)
12. FAQ: Wound Care (PDF) (DOC)
13. FAQ: Do and Don't (PDF) (DOC)

Step 6: Resident Education & Training

1. Resident Handout for CHG Bed Bath (PDF) (PUB)
2. Resident Handout for CHG Shower (PDF) (PUB)
3. Resident Handout for Nasal Iodophor (PDF) (PUB)
4. Waterproof Shower Poster for Residents (PDF) (DOC)
5. Resident Talking Points: CHG (PDF) (DOC)
6. Resident Talking Points: Iodophor (PDF) (DOC)

Step 7: Skills Assessments and Compliance Checks

1. CHG Cloth Skills Assessment Checklist (PDF) (DOC)
2. CHG Liquid Bed Bath Skills Assessment Checklist (PDF) (DOC)
3. Resident Self-Showering Assessment (PDF) (DOC)
4. Resident Self-Bed Bath Assessment (PDF) (DOC)

Step 8: Safety and Side Effects

1. Safety and Side Effects (PDF) (DOC)
2. Side Effect Tracking Form (PDF) (DOC)

Nursing Home Decolonization Toolkit

Prevent infections during each nursing home stay

BATHE or SHOWER with Chlorhexidine (CHG) soap

STAFF

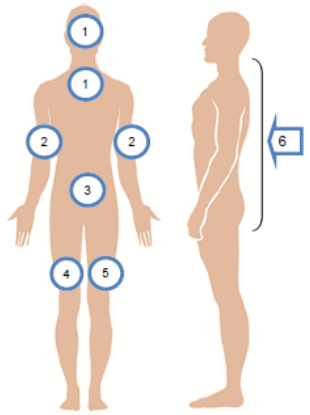
Bathe with CHG to remove germs and prevent infection

CHG works better than soap and water

CHG is a protective bath

CHG cloths are less drying than soap

Apply as shown below



Avoid eyes, mouth, & ear canals

REMINDERS

- **Your enthusiasm** helps residents understand why CHG is important
- Bathing on admission removes germs to protect the resident and nursing home
- CHG works for 24 hours to kill germs
- **Firmly massage** CHG onto skin
- Clean **6 inches** of lines, drains, tubes
- Safe on surface wounds, rashes, burns
- Use only CHG-compatible lotions
- If barrier protection needed, apply CHG then apply barrier protection

Clean all skin areas with attention to:

- Neck
- All skin folds
- Skin around all devices (line/tube/drain)
- Wounds unless deep or large
- Armpit, groin, between fingers/toes

SHOWERING with CHG soap

1. Rinse body with warm water
2. Wash hair and face with CHG
3. Avoid getting into eyes and ears
4. Turn off water and lather mesh sponge with plenty of CHG
5. Massage CHG onto all skin areas
5. Leave CHG on for **2 minutes** then rinse

BATHING with CHG cloths

1. Tell residents these cloths are their protective bath
2. Use all 6 cloths. More, if needed.
3. **Firmly massage** skin with cloth
4. Clean over semi-permeable dressings
5. Clean 6 inches of lines, tubes, and drains
6. Air dry. Do not wipe off.
7. Put used cloths in trash. Do not flush.

Prevent infections during each nursing home stay

BASIN BED BATHING with Chlorhexidine (CHG) Liquid

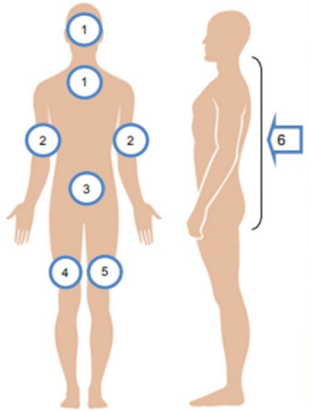
STAFF

Bathe with CHG to remove germs and prevent infection

CHG works better than soap and water

CHG is a protective bath

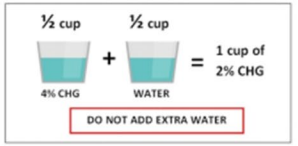
Apply as shown below



Avoid eyes, mouth, & ear canals

BASIN BATH Instructions

1. Prepare 4% liquid CHG, a measuring cup, a bed basin, and 6 disposable wipes (more if needed).
2. Dispense 1/2 cup of 4% CHG liquid into basin.
3. Add 1/2 cup of water. **Do not dilute more than equal part of water to CHG.**



4. Soak wipes in basin and wring before use. Do not place back into basin after use.
5. **Firmly massage** skin with wipes.
6. Clean over semi-permeable dressings.
7. Clean 6 inches of lines, tubes, and drains.

REMINDERS

- **Your enthusiasm** helps residents understand why CHG is important
- Bathing on admission removes germs to protect the resident and nursing home
- CHG works for 24 hours to kill germs
- **Firmly massage** CHG onto skin
- Clean **6 inches** of lines, drains, tubes
- Safe on surface wounds, rashes, burns
- Use only CHG-compatible lotions
- If barrier protection needed, apply CHG then apply barrier protection

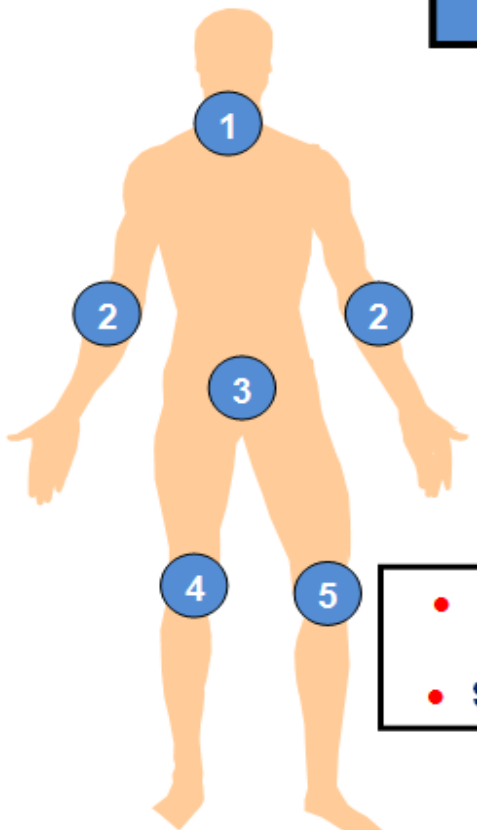
Clean all skin areas with attention to:

- Neck
- All skin folds
- Skin around all devices (line/tube/drain)
- Wounds unless deep or large
- Armpit, groin, between fingers/toes

ucihealth.org/shield

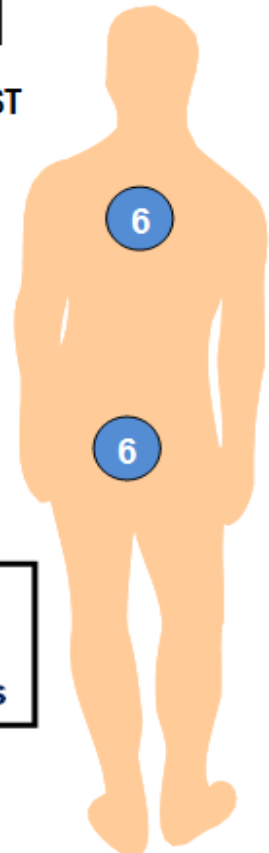
Apply Chlorhexidine WITH FIRM MASSAGE to remove bacteria

USE ALL 6 CHG CLOTHS
Avoid EYES & EAR CANAL



FRONT

1. FACE, NECK SHOULDERS & CHEST
2. BOTH ARMS & HANDS
3. ABDOMEN, GROIN & PERINEUM
4. RIGHT LEG & FOOT
5. LEFT LEG & FOOT
6. BACK, THEN BUTTOCKS



BACK

- Clean 6 inches of all tubes, lines, and drains closest to patient with CHG
- Safe on superficial wounds, rash, burns

Skin may feel sticky for a few minutes after CHG application.
Do NOT wipe off. Allow to air dry.

THIS IS a PROTECTIVE BATH
Do not use soap which can inactivate CHG

CHG Cloth Observation Checklist

Please complete for **THREE** different staff **per unit**

Individual Giving CHG Bath

Please indicate who performed the CHG bath.

☐ Nursing Assistant (CNA) ☐ Nurse ☐ Other: _____

Observed CHG Bathing Practices

Please check the appropriate response for each observation.

☐ Y ☐ N Patient received CHG cloth bathing handout
☐ Y ☐ N Patient told that bath is a no rinse cloth that provides protection from germs
☐ Y ☐ N Provided rationale to the patient for not using soap at any time while in unit
☐ Y ☐ N Massaged skin *firmly* with CHG cloth to ensure adequate cleansing
☐ Y ☐ N Cleaned face and neck well
☐ Y ☐ N Cleaned between fingers and toes
☐ Y ☐ N Cleaned between all folds in perineal and gluteal area
☐ Y ☐ N ☐ N/A Cleaned occlusive and semi-permeable dressings with CHG cloth
☐ Y ☐ N ☐ N/A Cleaned 6 inches of all tubes, central lines, and drains closest to body
☐ Y ☐ N ☐ N/A Used CHG on superficial wounds, rash, and stage 1 & 2 decubitus ulcers
☐ Y ☐ N ☐ N/A Used CHG on surgical wounds (unless primary dressing or packed)
☐ Y ☐ N Used all 6 cloths (more if needed)
☐ Y ☐ N Allowed CHG to air-dry / does not wipe off CHG
☐ Y ☐ N Disposed of used cloths in trash /does not flush

Query to Bathing Assistant/Nurse

1. Do you ever use soap in conjunction with a CHG bathing cloth? If so, when?

_____

2. Do you reapply CHG after an episode of incontinence has been cleaned up?

_____

3. Are you comfortable applying CHG to superficial wounds, including surgical wounds?

_____

4. Are you comfortable applying CHG to lines, tubes, drains and non-gauze dressings?

_____

5. Do you ever wipe off the CHG after bathing?

_____

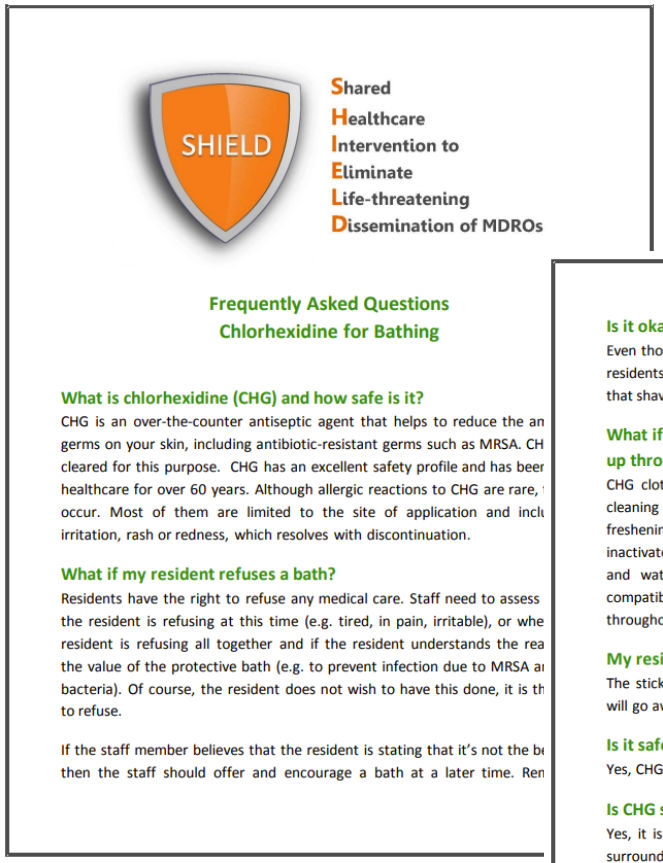
Decolonization Do and Don't

DO
• Begin decolonization on admission to remove germs as soon as possible
• Use chlorhexidine (CHG) for all bathing/showering needs for all residents
• Use 2% no-rinse CHG cloths for bed baths *or* 4% rinse-off liquid CHG for showers
• Use CHG for regular bathing during resident's entire nursing home stay
• Massage CHG onto skin for best effect
• Use CHG on lines, tubes, drains, and over non-gauze dressings
• Use on superficial wounds and rashes to remove germs
• Use nasal iodophor treatment twice a day for a 5-day period every other week

DON'T
• Do NOT get CHG into eyes or ears
• Do NOT wipe off after applying CHG cloths. Let air dry.
• Do NOT apply dressings when skin is still sticky. Wait until fully dry.
• Do NOT flush CHG cloths. Place in trash.
• Do NOT use cotton cloths for showering – it binds CHG and does not release well
• Do NOT use iodophor and/or CHG on resident if resident is allergic

REFER TO NURSING PROTOCOL FOR STEP-BY-STEP INSTRUCTIONS

Decolonization FAQs



SHIELD

Shared
Healthcare
Intervention to
Eliminate
Life-threatening
Dissemination of MDROs

Frequently Asked Questions
Chlorhexidine for Bathing

What is chlorhexidine (CHG) and how safe is it?

CHG is an over-the-counter antiseptic agent that helps to reduce the an
germs on your skin, including antibiotic-resistant germs such as MRSA. CH
cleared for this purpose. CHG has an excellent safety profile and has beer
healthcare for over 60 years. Although allergic reactions to CHG are rare,
occur. Most of them are limited to the site of application and inclu
irritation, rash or redness, which resolves with discontinuation.

What if my resident refuses a bath?

Residents have the right to refuse any medical care. Staff need to assess
the resident is refusing at this time (e.g. tired, in pain, irritable), or whe
resident is refusing all together and if the resident understands the rea
the value of the protective bath (e.g. to prevent infection due to MRSA a
bacteria). Of course, the resident does not wish to have this done, it is th
to refuse.

If the staff member believes that the resident is stating that it's not the b
then the staff should offer and encourage a bath at a later time. Ren

Is it okay for my residents to shave and use deodorant?

Even though shaving cream and deodorant may inactive CHG, we understand that residents will want to shave and use deodorant. If shaving is performed, ensure that shaving cream only contacts body area that is being shaved.

What if my resident has an incontinence episode or needs freshening up throughout the day?

CHG cloths should be used for all bathing purposes, including full-body bathing, cleaning after soiling, or any other reasons for additional cleaning such as freshening up. Do not use soap to cleanse incontinent residents because soap can inactivate CHG. First remove urine/stool with usual incontinence wipes or cloths and water. Next, clean with CHG and allow to air dry. Finally, apply CHG compatible barrier protection over the area. Repeat as often as needed throughout the day.

My resident reports that their skin feels sticky after the bath.

The sticky feeling is due to the moisturizing ingredients in the CHG cloths and it will go away as it dries. The cloths contain aloe vera.

Is it safe to use on the perineum?

Yes, CHG is safe to use on the perineum and external mucosa.

Is CHG safe to use on lines, tubes, and drains?

Yes, it is very important to clean lines, tubes, and drains in addition to the skin surrounding these devices in order to prevent infection. The 6 inches of any tube, drain, or line nearest the body should be cleaned. Non-absorbable (non-gauze) dressings should also be wiped over with the CHG cloth after the skin is cleaned.

Should gloves be worn or changed during bathing with CHG cloths?

Yes. Although it is safe to handle the CHG cloths with bare skin, gloves should be worn for bathing residents. If gloves become soiled, they should be changed.

SHIELD

Shared
Healthcare
Intervention to
Eliminate
Life-threatening
Dissemination of MDROs

Frequently Asked Questions
Wound Care

The majority of our nurses and certified nursing assistants (CNAs) feel comfortable using chlorhexidine (CHG) cloths on superficial wounds, but some do not. How would you suggest easing their concerns?

Remind all nursing staff that CHG cloths are safe to use on superficial wounds and stage 1 & 2 decubitus ulcers. Using the buddy system, in which nursing staff who are comfortable using CHG on superficial wounds buddy up with staff who are less comfortable, can also help.

Should I be concerned about CHG having a stinging effect on wounds?

Antiseptic over-the-counter products often contain alcohol and will sting when applied to wounds. In contrast, CHG cloths do not contain alcohol and will not sting. In fact, CHG cloths contain dimethicone and aloe vera which are moisturizers and actually have a soothing effect on the superficial wound area.

Will CHG be absorbed if I put it on a wound?

There is minimal to no systemic absorption when using CHG on a superficial wound. In addition, the CHG may be particularly important to get rid of bacteria in an open wound and prevent infection.

For what types of wounds is CHG safe?

CHG can be gently applied to any superficial wound, including stage 1 and 2 decubitus ulcers, friable skin/rash, and superficial burns. We do not recommend

SHIELD

Shared
Healthcare
Intervention to
Eliminate
Life-threatening
Dissemination of MDROs

Frequently Asked Questions
Nasal Iodophor

odophor and how safe is it?

is another name for "povidone-iodine," which is an over-the-counter that is most known for its use in cleaning scrapes, cuts, and wounds and ; infections. It is also FDA cleared for use in the nose. Povidone-iodine is e-counter antiseptic product. It has been used in healthcare for over 60 al iodophor has been used in thousands and thousands of patients prior , in ICUs, and in nursing homes as a way to prevent MRSA and methicillin-sensitive *Staphylococcus aureus* (MSSA) infection. Side effects from iodophor are uncommon, mild and resolve with discontinuation. They may include nasal irritation, runny nose, and sneezing. As with any product, rare serious allergic reactions can occur.

What is the purpose of putting it in the nose?

Iodophor removes germs that commonly live in the nose, including methicillin-resistant *Staphylococcus aureus*, or MRSA. Many studies have shown that nursing home residents are much more likely to harbor MRSA than people in the community or patients in hospitals. In fact, recent data across many nursing

Step 4: Process and Practice

- ☐ Select Launch Date
- ☐ Pre-Launch Facility-wide Training Days
  - CNAs
  - LVN/RNs
  - See toolkit modules and videos to be used with in-person train-the-trainer
- ☐ Pre-Launch Skin Check to avoid attributing existing conditions to CHG
- ☐ Launch
- ☐ Provide Admission Packet materials on routine decolonization (see toolkit)
- ☐ Post-Launch Feedback on Bathing Quality
  - Toolkit assessment tool (few times weekly early in campaign)
- ☐ Ongoing Training for new hires

Support Options:

- ✓ Access nursing home toolkit at **ucihealth.org/shield**
- ✓ Schedule UCI site visit for 2 or 3 months after launch for troubleshooting, reinforcement

Adoption Support

UCI Team dissemination efforts funded by NACCHO

- Interested?
- Contact: ravsingh@hs.uci.edu or sshuang@hs.uci.edu
- Ideally, UCI support is provided to several interested nursing homes in a region or area with public health collaboration