



Shared
Healthcare
Intervention to
Eliminate
Life-threatening
Dissemination of MDROs

Protocol Training Module



SHIELD Introduction

- Our hospital is participating in SHIELD, a nationally recognized quality improvement project to reduce multi-drug resistant organisms (MDROs) in healthcare facilities
- From this training you will learn:
 - ✓ How to implement decolonization with chlorhexidine (CHG)
 - ✓ How to implement decolonization with nasal iodophor
 - ✓ How to address special circumstances related to decolonization
- This training module will take approximately 20 minutes to complete

What is Decolonization?

- Decolonization is the use of topical antiseptic soaps and nasal products to remove bacteria from the body surface
- Body bacteria have a higher chance of causing infection in hospitals and nursing homes due to wounds, devices, and poor health
- Decolonization is proven in hospital ICUs to prevent antibiotic resistant bacteria and bloodstream infections
- The decolonization products used in this project may include:
 - Chlorhexidine 2% no-rinse impregnated cloths for bed baths
 - Chlorhexidine 4% rinse-off liquid for showering
 - Diluted Chlorhexidine 4% no-rinse liquid for bed baths
 - Iodophor (povidone-iodine) for the nose

Why Decolonize?

- Why should we decolonize in hospitals?
 - Body bacteria can cause infection in hospitals and nursing homes due to wounds, devices, and poor health of the patient
 - Decolonization removes germs on the body that can cause infection
 - Decolonization has been shown to prevent infections
 - For methicillin-resistant *Staphylococcus aureus* (MRSA) carriers
 - For carbapenem-resistant Enterobacteriaceae (CRE) carriers
 - In hospital ICUs
 - In long-term acute care hospitals

SHIELD Program Exclusions

- If a patient is allergic or develops an allergy to either iodophor or CHG, contact patient's physician and simply discontinue the agent in question.
- As with any medical care, the patient can refuse the protocol, but your enthusiasm can often help them understand the value of removing germs on their body to protect them from infection

How Do I Perform Universal Decolonization?

- Use chlorhexidine (CHG) for all bathing or shower needs for ALL patients for entire LTACH stay
- Use nasal iodophor twice a day for 5 days on admission and every other week for ALL patients, for entire LTACH stay
- Decolonization stops when discharged. **If readmitted, protocol begins anew regardless of prior receipt of CHG or iodophor.**

Chlorhexidine (CHG) for Routine Bathing/Showering

- 4% Liquid CHG*
 - Rinse-off for showering
 - Diluted to 2% for no-rinse, air dry, basin bed bath



- 2% CHG cloths* (bed baths)
 - No rinse, air dry



* The use of trade names is for identification only and does not imply endorsement by the Department of Health and Human Services or the Centers for Disease Control and Prevention.

Chlorhexidine for Bath or Shower

Patients should be cleansed with chlorhexidine (CHG) in one of three ways

- Bed bath with 2% no-rinse CHG disposable cloths
- Basin bed bath with 4% liquid, diluted to 2%, no-rinse with non-medicated disposable cloths or wipes
- 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

For maximum protection, **begin bathing on admission** to remove germs being brought into the hospital

CHG Talking Points

- Patients need encouragement for their bath
- Your enthusiasm is critical to protect patients by bathing
- Talking points:
 - 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, let me give you directions on how to use the soap 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

Patient Informational Handouts

- One-page CHG bathing and showering informational handouts are available for patients
- Providing patients with handout prior to bathing will save time (but should not replace verbal instructions)

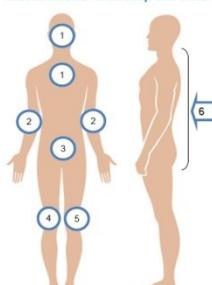
Prevent infections during your hospital stay
BATHE with Chlorhexidine (CHG) cloths

PATIENT

Prevent infections during your hospital stay
SHOWER with Chlorhexidine (CHG) soap

PATIENT

During your stay, shower regularly with a special antiseptic soap (CHG) which removes germs and prevents infection better than soap and water



Take a CHG Shower

SHOWERING with CHG soap

- You will be given a 4 oz CHG bottle to wash your hair, face, and body
- Begin with hair and face, rinse
- Apply generous amount of CHG to mesh sponge or non-cotton cloth and rub until foamy
- Apply CHG with water off or stand out of water stream
- Firmly massage onto skin. Clean from top down (cleanest to dirtiest areas). Reapply CHG to keep sponge foamy
- Ask for help for hard-to-reach areas
- For best effect, leave soapy lather on skin for 2 minutes. Rinse body well.
- If needed, ask your nurse for CHG-compatible lotions to moisturize

Protect Yourself Every Day

Reminders

- CHG is proven to work better than regular soap to get rid of germs
- Once massaged onto skin, CHG works to kill germs for 24 hours
- Use CHG every day. Starting on the admission day works best to remove germs before IVs, lines, urinary catheters, and procedures or surgery
- Be thorough. Ask for help to reach hard-to-reach areas, including backside, around devices, on wounds
- CHG is safe on rashes, burns, and wounds that are not large or deep

Clean all skin areas with attention to:

- Neck
- All skin folds
- Skin around all devices (tubes/drains)
- Wounds and open skin
- Armpit, groin, between fingers/toes

Avoid eyes and ear canals

* Regular soap and shampoo prevent CHG from working well. If you must use your own shampoo or face wash, use them first and try to keep the shampoo and face wash off the body so CHG will work as body soap.

Shower Instructions

We are pleased to provide you with a special liquid soap, chlorhexidine (CHG), which has been proven to work better than soap and water in removing germs from your skin and keeping you clean.

- Use liquid chlorhexidine (CHG) for all areas of the body
- Begin by washing your hair using CHG as shampoo. **Avoid getting soap into eyes and ears.** Rinse well.
- Next, clean face with CHG. Rinse.
- Apply generous amount of CHG to mesh sponge or non-cotton cloth and **rub until foamy**
 - Wet skin with water
 - Turn water off or stand out of water stream
 - FIRMLY MASSAGE** soapy sponge or cloth onto all skin from head to toe. Reapply CHG generously to the sponge to keep sponge foamy.
 - ✓ Neck and chest
 - ✓ Both shoulders, arms and hands
 - ✓ Abdomen, hip and groin
 - ✓ Both legs and feet
 - ✓ Back of neck, genitals and buttocks last
 - For best results, leave soapy lather on skin for 2 minutes**
- Don't forget to clean your neck, armpits, and skin folds well, including under the breast. Clean between fingers and toes too.**
- Rinse body well.
- Ask nurse to help clean lines, tubes, drains, or wounds that were covered for showering with CHG cloths
- If needed, ask your nurse for CHG-compatible lotion to moisturize

CHG continues to work for 24 hours to keep germs off your body. If you must use your own shampoo and face products, please use them before the CHG soap. Please try to keep them off the body as regular soap and shampoo prevents CHG from working as well.

CHG Cloth Bathing

For patients who need a bed bath:

- Use CHG cloths* for all bathing needs
- Bathe with CHG cloths for **entire hospital stay**
- Use all 6 CHG cloths provided (3 packets of 2 cloths each)
- Obtain cloths from warmer
- Cloths are hard to open from the ends. Open pack at notch located on the back.



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CHG Bathing Cloth Warming Instructions

1. Warming is for comfort only. CHG works at room temperature.
2. Place CHG packs in warmer based on number of baths needed
3. Warmer lights change from "not ready" to "ready" after **2 hours**
4. If warmer lights show "dispose" (after 84h), remove product and discard
5. After removing, replace with a new package



Orange = Not ready (still warming)
Solid Green=Ready
Flashing Green= Take first
Red = expired, dispose

Caution: check temperature of cloth prior to use. Gloves diminish sense of heat.

CHG Bathing Cloth Warming Instructions

- **Do not waste cloths**
- **Cloths cannot be reused**
- **Take only what you need**
- **Use cloths wisely**

Extra CHG Bathing Cloths

- Sometimes extra CHG bathing cloths are needed, but be a good steward of CHG cloth use:
 - Large body size (>300 lbs)
 - Freshening up
 - Reapplication after incontinence clean up
- Use a 2-cloth packet or “single” instead of the full 6 cloth bath:
 - Separate packets and place into an individual slot in warmer
 - Same warming instructions apply for separated packets
 - Do not rewarm cloths



Single 2-cloth packet*



A slot can hold up to 3 singles

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Before CHG Cloth Bed Bath

- Give patients the CHG bath handout
- Tell the patient
 - These cloths are their protective bath
 - No lather, but works better than soap and water
 - Has aloe vera so less drying to skin than soap
 - Aloe vera makes skin feel sticky for a few minutes
 - **No rinse** for protective effect

Prevent infections during your hospital stay
BATHE with Chlorhexidine (CHG) cloths

PATIENT

During your stay, we will bathe you regularly with a special antiseptic (CHG) which removes germs and prevents infection better than soap and water.
Each packet has 6 cloths to be used on all skin areas as shown below:

Take a CHG Bed Bath

BATHING with CHG cloths

1. Use CHG cloths for bed bathing. Starting on the admission day works best to remove germs before IVs, lines, urinary catheters, and procedures/surgery.
2. These no-rinse cloths are your protective bath. The CHG continues to get rid of germs for 24 hours.
3. Use all 6 cloths. More, if needed.
4. **Firmly massage** on all skin areas to ensure deep cleaning of skin
5. Clean over non-gauze dressings
6. **Your nurse will clean parts of lines, tubes and drains nearest the body**
7. Throw away in trash. Do not flush.

Protect yourself every day

Important Points and Reminders

- CHG is proven to work better than soap and water to get rid of germs
- CHG cloths have aloe and are good for your skin. CHG is less drying than soap.
- **Do not rinse.** Once massaged onto skin, CHG works to kill germs for 24 hours
- **Be thorough. Ask for help for hard to reach areas, backside, around devices.**
- CHG is safe on rashes and wounds that are not very large or deep
- **Clean lines, drains, tubes 6 inches from the body.** Ask for help, if needed.

Clean all skin areas with attention to:

- Neck
- All skin folds
- Skin around all devices (tubes/drains)
- Wounds and open skin
- Armpits, groin, between fingers/toes

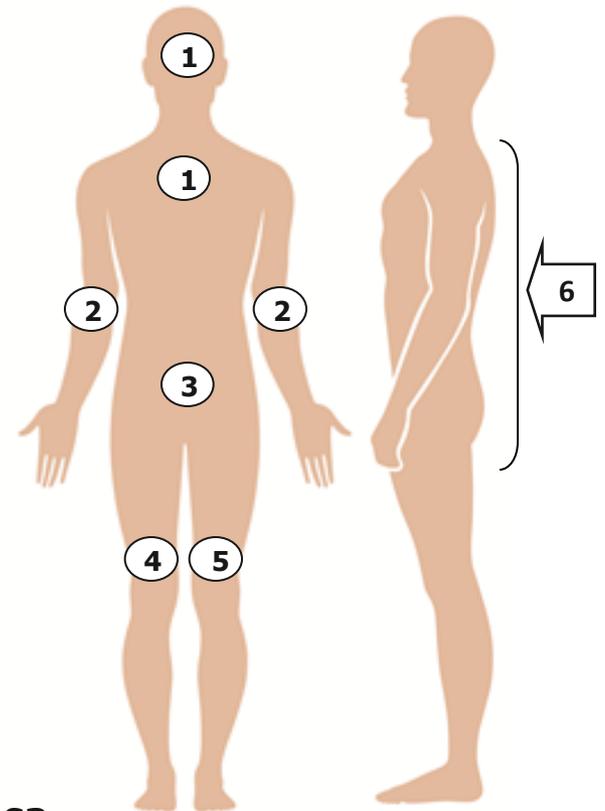
Avoid eyes and ear canals

CHG Cloth Bathing Procedure

Firmly massage to remove bacteria.

Use **ALL 6 CHG cloths** in the following order:

1. Face, neck & chest. **Avoid eyes and ears.**
 2. Both shoulders, arms and hands
 3. Abdomen & *then* groin/perineum
 4. Right leg & foot
 5. Left leg & foot
 6. Back of neck, back & *then* buttocks
- Clean **6 inches** of all tubes, lines, and drains closest to the body
 - Use more than 6 CHG cloths, **as needed**
 - **Safe** on perineum, vaginal and external mucosa



Importance of Allowing CHG to Fully Dry

- **CHG cloths contain aloe vera**
 - Aloe vera may feel sticky or tacky on patient's skin when not fully dry
 - Once the skin is dry this feeling will go away
- **Dressing changes**
 - Wound dressing or other dressings will not adhere to skin if CHG has not fully dried
 - Ensure CHG is fully dried before changing and replacing dressings

Special Circumstances

- **Devices**
- **Incontinence**
- **Wounds**
- **Obese patients**

CHG Cloths and Devices

- **Remember to clean not only the skin around the device, but the device itself to prevent infection. CHG is safe on devices.**
- **In the example of central lines:**
 - ✓ Ensure careful cleansing of skin around lines to remove bacteria
 - ✓ After cleaning skin, clean 6 inches of line closest to the body
 - ✓ Clean over semi-permeable dressings
- **The same applies to other devices, such as drains, G or J -tubes, rectal tubes, chest tubes, EKG leads, urinary catheters:**
 - ✓ If dressing removed for changing, clean area well with CHG and **fully dry** before replacing dressing
 - ✓ If dressing in place, clean over dressing. After skin is cleaned, use clean part of CHG cloth to clean at least 6 inches of tubing closest to patient.

CHG Cloths 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.
- Apply a single 2-cloth CHG pack and allow to **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, clean with CHG cloths, then reapply CHG compatible barrier protection products, as needed

*Contact manufacture for confirmation of CHG compatibility

CHG and Wounds

Use of CHG on wounds helps remove bacteria and prevent infection. CHG cloths or liquid CHG for showering can be used on all superficial wounds. These include:

- Superficial Decubitus Ulcers (Stage 1 & 2)
 - Friable Skin/Rash
 - Superficial Burns
-
- Clean the wound carefully with CHG, including over wound vacs
 - CHG can be used over semi-permeable/occlusive dressings
 - CHG can be applied over sutured or stapled wounds
 - CHG cloths do not have alcohol and will not sting wounds
 - Do **NOT** use on large or deep wounds (ex: packed wounds)

CHG Bathing of Obese Patients

- Nurses should use as many CHG cloths as necessary and throughout the day if additional bathing is required (incontinence, sweating, or other reasons)
- Remind patient to ensure neck and all skin folds are well-cleaned
- Dry well in skin folds

Can a Patient Self-Bathe?

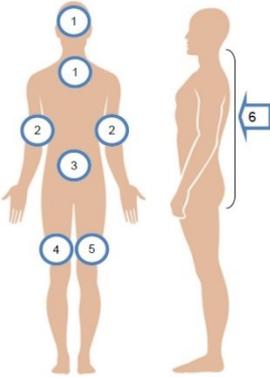
- Yes, with instruction and encouragement
- Give handout to patient an hour or two before bathing
- At bath time, go over the 1-page CHG cloth bathing handout

Prevent infections during your hospital stay
BATHE with Chlorhexidine (CHG) cloths

PATIENT

During your stay, we will bathe you regularly with a special antiseptic (CHG) which removes germs and prevents infection better than soap and water.

Each packet has 6 cloths to be used on all skin areas as shown below:



Avoid eyes and ear canals

Take a CHG Bed Bath

BATHING with CHG cloths

1. Use CHG cloths for bed bathing. Starting on the admission day works best to remove germs before IVs, lines, urinary catheters, and procedures/surgery.
2. These no-rinse cloths are your protective bath. The CHG continues to get rid of germs for 24 hours.
3. Use all 6 cloths. More, if needed.
4. **Firmly massage** on all skin areas to ensure deep cleaning of skin
5. Clean over non-gauze dressings
6. **Your nurse will clean parts of lines, tubes and drains nearest the body**
7. Throw away in trash. **Do not flush.**



Protect yourself every day

Important Points and Reminders

- CHG is proven to work better than soap and water to get rid of germs
- CHG cloths have aloe and are good for your skin. CHG is less drying than soap.
- **Do not rinse.** Once massaged onto skin, CHG works to kill germs for 24 hours
- **Be thorough.** Ask for help for hard to reach areas, backside, around devices.
- CHG is safe on rashes and wounds that are not very large or deep
- **Clean lines, drains, tubes 6 inches from the body.** Ask for help, if needed.

Clean all skin areas with attention to:

- Neck
- All skin folds
- Skin around all devices (tubes/drains)
- Wounds and open skin
- Armpits, groin, between fingers/toes

Can a Patient Self-Bathe?

■ **Be sure to mention:**

- ✓ Open packet at tear notch on back
- ✓ Cloths are a 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
 - ✓ Ok to clean over semi-permeable dressings (not gauze)
 - ✓ Safe on rashes, burns, wounds that are not deep or large

Bathing Clean Up

Dispose of each
washcloth in the trash



Do **NOT** flush
washcloths in the toilet



Cloths CLOG toilets

Do Not Flush Products

- If desired, “Do Not Flush” posters are available for download at <https://sageproducts.com/do-not-flush/>
- Suggested uses: Patient rooms and bathrooms



8 ½ x 11 Poster

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 Cloths

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
- Safe on rashes, cuts, scrapes
- Safe on burns, superficial wounds
- If readmitted, protocol starts anew
- Only use CHG compatible lotions*

DON'T

- Do **NOT** wipe off. **Let 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

*Contact manufacture for confirmation of CHG compatibility

CHG Showering Instructions

- Patients who wish to shower should receive:
 - 1-page CHG shower instruction sheet 1-2 hours prior to showering
 - Verbal review of instruction sheet
 - CHG liquid (available in shower)
 - 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.
 - **Post-shower, help your patient apply a CHG cloth packet to any wrapped device or dressing within 6 inches of the body.**

CHG Showering Instructions

- **Be sure to mention:**

- CHG works better than soap and water to kill germs and keep them off the body for 24 hours if applied correctly
- Safe for shampoo and face/body wash. **Avoid eyes/ears.**
- **If available, use a mesh sponge**
 - CHG foams well with it, but not without
- Apply to skin with out of water stream for 2 minutes before rinsing
- 2 minutes is about the time it takes to soap up all body areas and then do it again before rinsing
- Massage all over skin. Pay attention to neck and skin folds.



- If patients insist on using personal shampoo or face wash, but are willing to use CHG for body wash, have them avoid contacting other skin when using shampoo/other soaps and then apply CHG to other areas. Encourage only use of CHG if possible.

CHG Basin Bed Bath Instructions

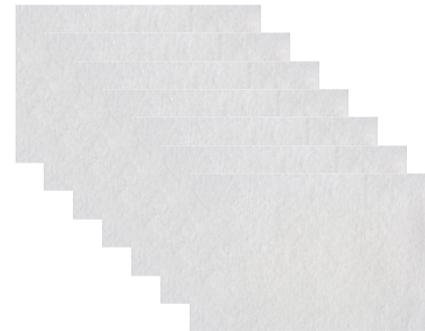
What you will need



One 4 oz bottle of 4% Liquid CHG*



Bath Basin

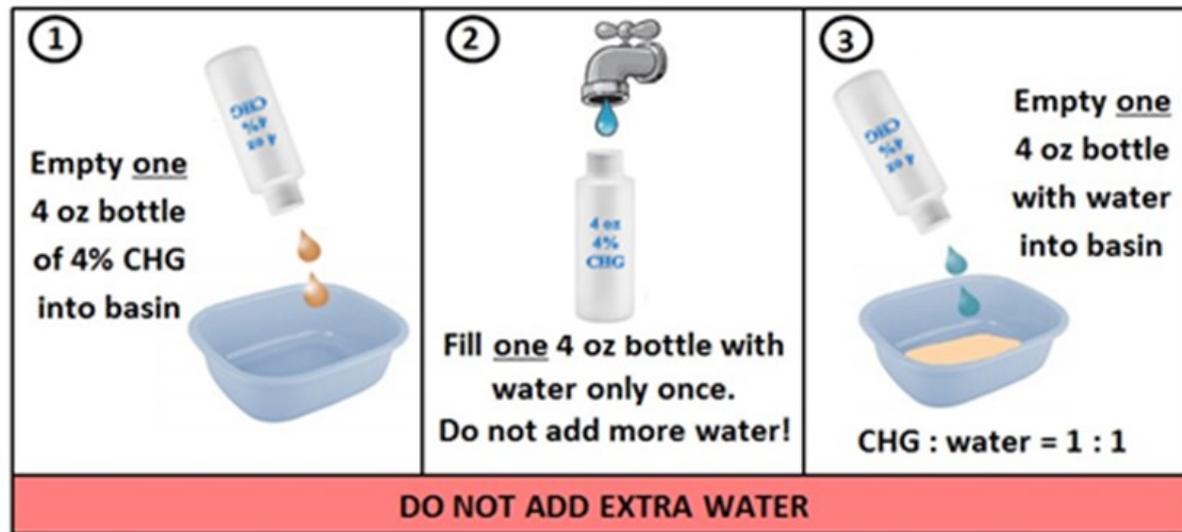


6 Disposable Non-Medicated Cloths

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CHG Basin Bed Bath Instructions

1. Obtain a bath basin and dispense one 4 oz bottle of 4% CHG liquid into basin.
2. Fill one emptied 4 oz bottle with water and dispense it into basin with 4% CHG liquid in it. (IMPORTANT: **Do NOT** dilute more than equal part of water and CHG. Goal is to achieve 2% CHG)



3. Soak disposable wipes in basin. Wring each wipe prior to application. Only soak and wring each wipe once. **DO NOT** apply wipe to patient and place back in basin to rinse and apply again.

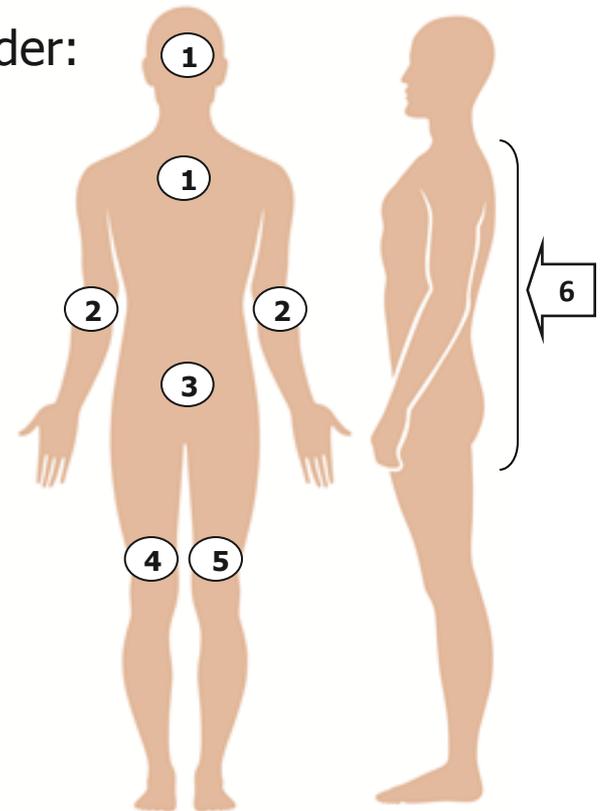
CHG Basin Bed Bath Bathing Procedure

Firmly massage to remove bacteria.

Use **ALL 6 disposable wipes** in the following order:

1. Face, neck & chest. **Avoid eyes and ears.**
2. Both shoulders, arms and hands
3. Abdomen & *then* groin/perineum
4. Right leg & foot
5. Left leg & foot
6. Back of neck, back & *then* buttocks

- Clean **6 inches** of all tubes, lines, and drains closest to the body
- Use additional wipes for larger patients
- Safe on perineum and external mucosa
- **Air dry. Do NOT rinse.**



Nasal Decolonization

- Nasal iodophor* is an antiseptic which is active against MRSA
- It is topical and used in the front of the nose (nostrils)
- Nasal iodophor will be used:
 - **For ALL patients**
 - **Twice a day for 5 days on admission**
 - **Then, twice a day for 5 days every other week**
- Protocol stops upon discharge
- If patients are readmitted, nasal iodophor protocol starts anew **regardless of prior receipt of nasal iodophor**



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How to Use Nasal Iodophor

1. Place patient's bed at 30 degrees, if tolerated
2. Have patient use a tissue to blow their nose or clean the nares and tip of nostril. Discard tissue.
3. Insert first swab into one nostril and apply firmly to entire inner surface with a circular motion for 30 seconds (at least 3 times around slowly). Discard swab.
4. Using the second swab, repeat step 3 in the other nostril (swab 2)
5. Do this twice a day for 5 days
6. Patients should not blow nose. If needed, gently dab nostril opening with a tissue.

Iodophor and Nasal Devices

- **Removable Nasal Devices:**

If tolerated, briefly remove nasal prongs to apply nasal iodophor

- **Nasal Endotracheal Tube/Nasogastric Tubes:**

Apply nasal iodophor around tube, if possible

- **Nasal Trauma:**

Do **NOT** use nasal iodophor if nostril(s) are packed

Refusals

- As with any Quality Improvement project, consent is not required. However, patients should have the process explained to them so they understand the importance of decolonization.
- Similar to any medical care, the patient can refuse the protocol, but your enthusiasm can often help them understand the value of removing germs on their body to protect them from infection

CHG and Iodophor Allergic Reactions

Nasal iodophor and CHG have minimal side effects

- For nasal iodophor, side effects are uncommon, and may include brief itching and burning in the nose.
- For CHG, side effects include rash in 1-3%

As with any drug, both mild and severe allergies (rare) can occur

If a CHG or iodophor reaction is suspected

- Contact the treating physician for all medical assessment and treatment decisions

Decolonization: Key Points

- Use **CHG for entire hospital stay** for **all adult patients**
- Begin CHG and iodophor on admission to protect patients
- Be encouraging and supportive. Patients will bathe with your enthusiasm.
- Give the bathing/showering handout to read before the bath/shower
- Patients who self-bathe still need verbal directions
- Clean lines, tubes, drains, dressings, and wounds unless large or deep
- Allow CHG to air dry
- Use nasal iodophor twice a day for 5 days on admission. Then, twice a day for 5 days every other week.
- The protocol begins again if patients are readmitted