Getting to Zero!
Central Line–Associated Infection Prevention
Multidisciplinary Workshops:
Proper Hand Hygiene & Glove Use
November 2016
Learner Objectives

- The Learner will be able to describe the World Health Organization’s 5 Moments of hand hygiene
- The Learner will be able to compare and contrast alcohol-based hand rubs and the use of soap and water
- The Learner will be able to demonstrate proper hand hygiene with alcohol-based hand rubs
- The Learner will review performing hand hygiene with a 3-min scrub
- The Learner will be able to identify the appropriate times to use gloves
- The Learner will be able to educate parents and families about hand hygiene
Learner Objective # 1

- The Learner will be able to describe the World Health Organization’s 5 Moments of hand hygiene
WHEN? Your 5 moments for hand hygiene

1. BEFORE PATIENT CONTACT
2. BEFORE ASEPTIC TASK
3. AFTER BODY FLUID EXPOSURE RISK
4. AFTER PATIENT CONTACT
5. AFTER CONTACT WITH PATIENT SURROUNDINGS
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| 1 | **WHEN?** Clean your hands before touching a patient when approaching him/her  
**EXAMPLES:** shaking hands, helping a patient to move around, clinical examination | **WHEN?** Clean your hands immediately before any aseptic task  
**EXAMPLES:** oral/dental care, secretion aspiration, wound dressing, catheter insertion, preparation of food, medications | **WHEN?** Clean your hands immediately after an exposure risk to body fluids (and after glove removal)  
**EXAMPLES:** oral/dental care, secretion aspiration, drawing and manipulating blood, clearing up urine, faeces, handling waste | **WHEN?** Clean your hands after touching a patient and her/his immediate surroundings, when leaving the patient’s side  
**EXAMPLES:** shaking hands, helping a patient to move around, clinical examination | **WHEN?** Clean your hands after touching any object or furniture in the patient’s immediate surroundings, when leaving - even if the patient has not been touched  
**EXAMPLES:** changing bed linen, perfusion speed adjustment |
The Learner will be able to compare and contrast alcohol-based hand rubs and soap and water.
Soap and Water vs. Alcohol–based hand rub

Soap and Water
- Effective against C. difficile, Norovirus
- Second choice for hand hygiene (not as accessible as alcohol–based hand rub)
- Reduces less bacterial and viral counts
- Wash hands for 20–30 seconds for optimum hand washing

Alcohol–based hand rub
- Not effective if hands are greasy or visibly dirty
- Less drying than soap and water
- 99.99% of bacteria are killed with proper use
- Needs to air dry to be effective
- Must contain at least 60% alcohol for good activity
Learner Objective # 3

- The Learner will be able to demonstrate proper hand hygiene with alcohol-based hand rub and soap and water
How to Handrub?

RUB HANDS FOR HAND HYGIENE! WASH HANDS WHEN VISIBLY SOILED

Duration of the entire procedure: 20-30 seconds

1a. Apply a palmful of the product in a cupped hand, covering all surfaces;

1b. Rub hands palm to palm;

2. Right palm over left dorsum with interlaced fingers and vice versa;

3. Palm to palm with fingers interlaced;

4. Backs of fingers to opposing palms with fingers interlocked;

5. Rotational rubbing of left thumb clasped in right palm and vice versa;

6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa;

7. Once dry, your hands are safe.
How to handwash?

WASH HANDS ONLY WHEN VISIBLY SOILED! OTHERWISE, USE HANDRUB!

Duration of the entire procedure: 40-60 sec.

0. Wet hands with water
1. Apply enough soap to cover all hand surfaces.
2. Rub hands palm to palm
3. Right palm over left dorsum with interlaced fingers and vice versa
4. Palm to palm with fingers interlaced
5. Backs of fingers to opposing palms with fingers interlocked
6. Rotational rubbing of left thumb clasp in right palm and vice versa
7. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa.
8. Rinse hands with water
9. Dry thoroughly with a single use towel
10. Use towel to turn off faucet
11. ...and your hands are safe.
Frequently Missed Areas During Hand Hygiene

- Most Frequently missed
- Frequently missed
- Less Frequently missed
Learner Objective # 4

- The Learner will review bare arms and performing hand hygiene with a 3-minute hand scrub
Bare Arms

- Remove all arm and hand jewelry
- Bare arms up to the elbows during cares
3–Minute Hand Scrub with 4% CHG

**STEP ONE:**
Wet hands and arms up to the elbows with warm water. Use nail pick to clean nails.

**STEP TWO:**
Work up lather. Scrub fingers and interdigital spaces with the brush side and scrub each hand and arm to the elbows using the sponge side for a total scrub time of 3 minutes.

Note: Use brush side only on nails and cuticles or on areas of visible soil.
3–Minute Scrub with 4% CHG

**STEP THREE:**
Rinse hands and arms from finger tips to elbows with warm water. Dry hands and arms thoroughly with a paper towel or sterile towel.
The Learner will be able to identify the appropriate times to use gloves.
Proper Glove Use

Glove use and the need for hand hygiene:

- When an indication for hand hygiene precedes a contact that also requires glove usage, hand rubbing or hand washing should be performed before donning gloves.
- When an indication for hand hygiene follows a contact that has required gloves, hand rubbing or hand washing should occur after removing gloves.
- When an indication for hand hygiene applies while the health-care worker is wearing gloves, then gloves should be removed to perform handrubbing or handwashing.

Inappropriate glove use:

- The use of gloves when not indicated represents a waste of resources and does not contribute to a reduction of cross-transmission.
- It may also result in missed opportunities for hand hygiene.
- The use of contaminated gloves caused by inappropriate storage, inappropriate moments and techniques for donning and removing, may also result in germ transmission.
Learner Objective # 6

- The Learner will be able to educate parents and families about hand hygiene
Tips for Parents

- Prior to entry into the NICU use gray topped PDI Sani-Cloth AF wipes on cell phones.
- Parents may perform doing an initial 3-minute scrub with 4% CHG or soap and water prior to NICU entry or in the private room.
- Perform hand hygiene after entering the room and before picking up the infant.
- Perform hand hygiene after changing a diaper.
- Perform hand hygiene before bottle or breastfeeding the infant.
Quiz

- Name the WHO’s 5 Moments of Hand Hygiene?
- Soap and water is superior to alcohol-based rub most of the time True or False
- Donning gloves are a substitute for performing hand hygiene True or False
- How long should an initial scrub be done for?
References

- WHO’s 5 Moments of Hand Hygiene: 
  http://who.int/gpsc/tools/Five_moments/en/
  http://www.who.int/gpsc/tools/faqs/system_change/en/

- CDC Handwashing: Clean Hands Save Lives
  http://www.cdc.gov/handwashing/show-me-the-science-handwashing.html

- CDC video on Healthstream