Hand Hygiene in Healthcare

Clean Hands Count!

Nebraska
Infection Control
Network

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To improve hand hygiene compliance:

Hospitals must provide visible support and sufficient resources for new programs. Hospitals need to develop and implement innovative educational and motivational programs tailored to specific groups of health personnel. The strategies that are most appropriate for nurses, for example, may not achieve the same degree of success with physicians or with other health personnel.

It Is Time for Action: Improving Hand Hygiene in Hospitals, *John M. Boyce, MD,* Annals of Internal Medicine, January 19, 1999 Editorial

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Will we ever get there? It's a circle. . .

- Educating staff about hand hygiene, including…
- Observing staff technique…
- Auditing hand hygiene…
- Feeding back information from audits……

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What is Hand Hygiene

- Cleaning your hands using:
  - Soap and water
  - Antimicrobial soap and water
  - Alcohol-based hand sanitizer (foam or gel)
  - Surgical hand antisepsis

- Who should use hand hygiene?
  - All healthcare providers and employees who work in healthcare
  - All visitors, patients, and residents. EVERYONE!

https://www.cdc.gov/handhygiene/providers/index.html

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Why Practice Hand Hygiene?

- Cleaning your hands reduces:
  - The spread of potentially deadly pathogens between residents and patients
  - The risk of healthcare providers becoming colonized or infected with pathogens that our residents and patients have and that may be in the environment where care is provided.

https://www.cdc.gov/handhygiene/providers/index.html

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ABHS vs. Soap and Water

- Alcohol-based hand sanitizers are the most effective products for reducing the number of germs on the hands of healthcare providers.
  - Alcohol-based hand sanitizers are the preferred method for cleaning your hands in most clinical situations.
- Wash your hands with soap and water whenever they are visibly dirty, before eating, and after using the restroom.

https://www.cdc.gov/handhygiene/providers/index.html

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Clinical Indications for Hand Hygiene During Routine Care

Use an Alcohol-Based Hand Sanitizer	Wash with Soap and Water
• Immediately before touching a patient	• When hands are visibly soiled
• Before performing an aseptic task (e.g., placing an indwelling device) or handling invasive medical devices	• After caring for a person with known or suspected infectious diarrhea
• Before moving from work on a soiled body site to a clean body site on the same patient	• After known or suspected exposure to spores (e.g. *B. anthracis, C difficile* outbreaks)
• After touching a patient or the patient's immediate environment	
• After contact with blood, body fluids or contaminated surfaces	
• Immediately after glove removal	

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Efficacy of Hand Hygiene Preparations in Killing Bacteria

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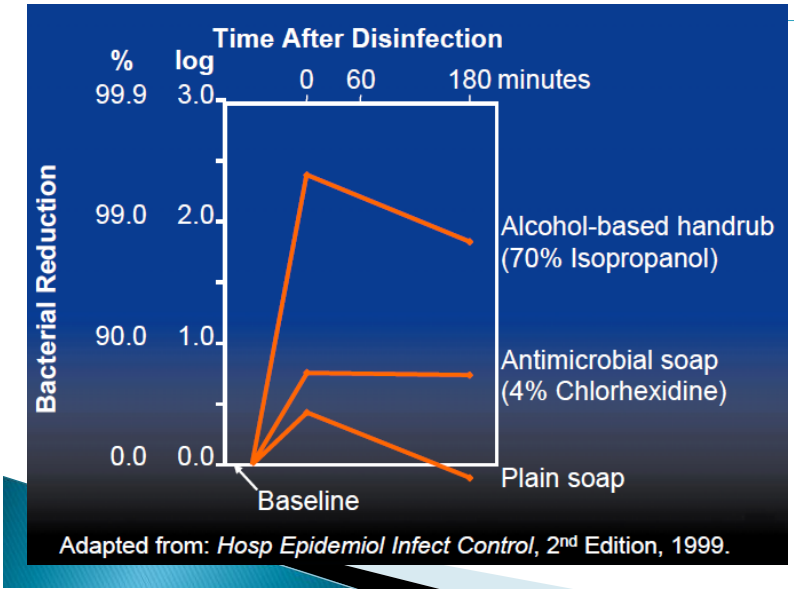
Ability of Hand Hygiene Agents to Reduce Bacteria on Hands



Taken from Hand Hygiene in Healthcare Settings, Core Slides

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SHEA/IDSA/APIC Practice Update 2022

A collaborative effort led by Society for Healthcare Epidemiology of America (SHEA, the Infectious Diseases Society of America (IDSA), and Association for Professionals in Infection Control and Epidemiology (APIC)

Updated recommendations to prevent healthcare associated infections through hand hygiene

Guidelines state that hand hygiene programs should strive to:

-Create a culture of safety and collaboration to protect patients and residents.

-Allow for interprofessional dialogue and safe spaces for learning about hand hygiene

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

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Practice Update

- Easy to read document that highlights updated recommendations in 4 main sections

1. Essential Practices
   - Healthy skin and nails
   - Appropriate products
   - Accessibility of supplies
   - Reducing hand and environmental contamination
   - Sinks and drains
   - Monitoring hand hygiene
   - Feedback to enhance safety

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Practice Update

2. Additional approaches during outbreaks
   - Education and monitoring for structured technique
   - Disinfection of sinks/drains if water-borne pathogens
   - Clear guidelines for when to add soap and water wash
3. Approaches that should be <u>discouraged</u>
   - Use of pocket-sized bottles rather than wall mounted
   - Topping off dispensers
   - Double-gloving or disinfecting gloves
   - Removing ABHS when patient has *CDifficile*/Norovirus
4. Unresolved Issues
   - Using alcohol-impregnated hand wipes is unresolved due to lack of data

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ABHR and *Clostridioides difficile*

- Spore-forming organisms
  - Are difficult to inactivate with surface disinfectants and may not be inactivated by alcohol
  - Are difficult to remove through hand washing
- The document maintains the recommendation to wash hands with soap and water during outbreaks of *C. difficile* and norovirus
- The document specifies that ABHS should not be prohibited when caring for patients with C*. difficile* or norovirus.

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

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ABHR and *Clostridioides difficile*

- When caring for patients with *C. difficile or those with new acute diarrhea or vomiting*:
  - Communicate with staff to increase awareness
  - Educate about the proper use of gloves for care
  - Maintain the availability of ABHS
  - Use Standard and Contact Precautions
  - In all settings, regardless of organisms present, wash hands if visibly soiled, before eating, and after using the bathroom

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ABHR and *Clostridioides difficile*

- Consider **ADDING** the requirement for staff to wash with soap and water in addition to the use of ABHR rather than take it away.
- Staff should still use ABHR when they enter the room and when they leave the room.
- If your facility does not have separate hand washing sinks inside the patient or resident room, where will they wash their hands with soap and water??
- Are you sure the staff are using proper procedure if washing with soap and water?

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How to Perform Hand Hygiene

Washing hands

- Wet hands and lather up with soap
- Scrub all surfaces of your hands with friction for at least 15 seconds
- Rinse well under running water
- Dry hands thoroughly with paper towel
- Turn off faucets with paper towel

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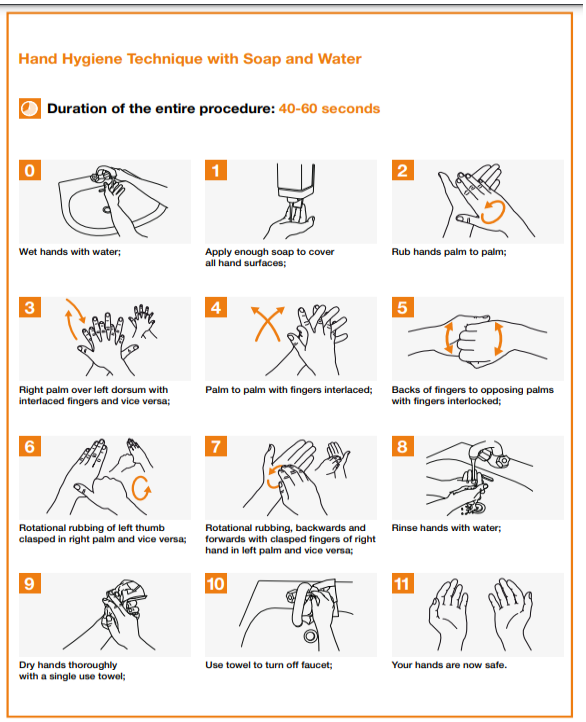

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How to Perform Hand Hygiene

Alcohol-based hand sanitizer

- Apply a palm full of hand rub
  - Amount will vary according to size of hands
- Rub all surfaces vigorously, between fingers, around nails, wrists, and backs of hands until hands are dry.
- Follow same motions as hand washing.
- Should take about 25 seconds to rub in until dry

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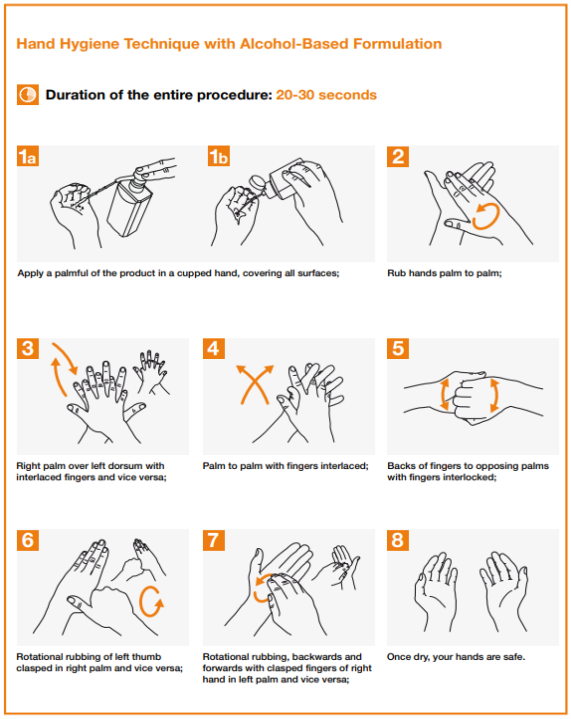

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Elements of Effective Hand Hygiene Programs

- Hand hygiene culture change
- Program support from organizational leaders – active engagement
- Education and training
- Compliance monitoring
- Multidisciplinary teams
- Accessible hand hygiene products
- Reminders in the workplace, and
- Outcome monitoring

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Effective Hand Hygiene Programs

- Assess what is needed/lacking – risk assessment
- Create Hand Hygiene Policy – promote ABHS use–proper use and accessibility
- Train HCWs on proper way to wash/ABHS – at hire and annually
- Monitor compliance and provide feedback (validate)
- Educate frequently & emphasize clean hands
- Involve staff in case reviews –Make it real!

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Effective Hand Hygiene Programs

- The goal of measuring hand hygiene:
  - Provide timely, meaningful, actionable feedback to guide improvement.
- Elements to measure include:
  - Adherence to cleaning hands at the right time
  - Technique
  - Prevalence of hand dermatitis
  - Functionality and accessibility of equipment and supplies including dispensers and sinks

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How to audit hand hygiene

- In and out & indications (opportunities)
- Secret shoppers (direct observation)
- While rounding and auditing other processes (blood glucose monitoring, isolation, med admin, etc)
- Product usage, compare use of ABHR product or soap products
- Automated systems – some generate reports

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SHEA Update

Table 5. Type and Timing of Feedback by Hand Hygiene Measurement Method

Measurement Method	Type of Feedback	Timing of Feedback
Direct overt observations	Individualized	Immediate
Direct covert observations	Individualized	End of observation period
	Aggregate	Regular reports of adherence (eg, weekly)
Automated hand-hygiene monitoring systems (AHHMSs)	Individualized	Immediate (ie, real-time reminders)
	Aggregate	Continuously updated real-time reports
		Regular reports of adherence (eg, weekly)
Remote video observations	Individualized	End of shift
	Aggregate	Regular reports of adherence (eg, weekly)
Patient as observer	Individualized	Regular reports of adherence (eg, weekly)
	Aggregate	Regular reports of adherence (eg, weekly)
Indirect methods	Aggregate	Regular reports of usage or events (eg, monthly, quarterly)

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Auditing tools – examples

Type of Caregiver	Entering and Exiting Patient Room				While in Patient Room			
	Opportunities	Hand Hygiene			Opportunities	Hand Hygiene		
		Soap/ Water	Gel	None		Soap/ Water	Gel	None
Nurses								
Ancillary Services								
Physicians								
Other								

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Hand Hygiene Competency Validation
Soap & Water
Alcohol Based Hand Rub (ABHR) (60% - 95% alcohol content)

Type of validation: Return demonstration	☐ Orientation ☐ Annual ☐ Other

Employee Name: _____ Job Title: _____

Hand Hygiene with Soap & Water	Competent	
	YES	NO
1. Checks that sink areas are supplied with soap and paper towels		
2. Turns on faucet and regulates water temperature		
3. Wets hands and applies enough soap to cover all surfaces of hands		
4. Vigorously rubs hands for at least ***20 seconds*** including palms, back of hands, between fingers, and wrists		
5. Rinses thoroughly keeping fingertips pointed down		
6. Dries hands and wrists thoroughly with paper towels		
7. Discards paper towel in wastebasket		
8. Uses paper towel to turn off faucet to prevent contamination to clean hands		
Hand Hygiene with ABHR		
9. Applies enough product to adequately cover all surfaces of hands		
10. Rubs hands including palms, back of hands, between fingers until all surfaces dry		
General Observations		
11. Direct care providers—no artificial nails or enhancements		
12. Natural nails are clean, well groomed, and tips less than ¼ inch long		
13. Skin is intact without open wounds or rashes		

NC SPICE; 2020

https://www.ahrq.gov/nursing-home/resources/hand-hygiene-competency.html

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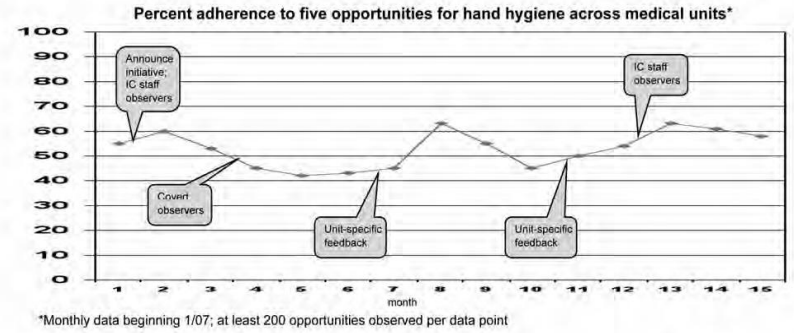
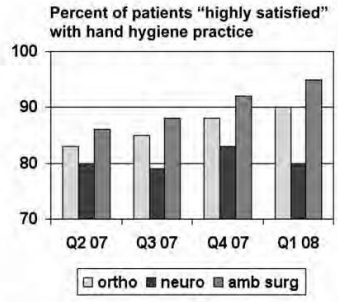


*Monthly data beginning 1/07; at least 200 opportunities observed per data point

Structural Audit date__ Dept.	# beds	# ABHR dispensers available	Number dispensers functioning and filled	# hand hygiene posters
MICU	10	20	20	1
SICU	6	12	10	0
CCU	8	15	13	0
Ortho	20	25	20	3
Neuro	25	18	17	1



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Actions for Effective Hand Hygiene Programs

Potential QAPI Project:

- Hand hygiene for residents and patients
  - What is available for patients to clean hands before meals
  - Are residents encouraged to clean hands prior to meals and when return to room?
  - **Is the ABHR within reach?**
  - **Do they know how?**

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Does anyone want to share QAPI projects you have done in your facility to promote hand hygiene?

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Resources

- WHO Guidelines on Hand Hygiene in Healthcare – 2009
- APIC Guide to Hand Hygiene Programs for Infection Prevention
- AHRQ Hand Hygiene Competency Validation Tool –2022
- Measuring hand hygiene adherence: overcoming the challenges – Joint Commission, 2009
- Hand Hygiene in Healthcare Settings: Providers– CDC.gov (2021)
- SHEA/IDSA/APIC Practice Recommendation: Strategies to prevent healthcare-associated infections through hand hygiene –2022

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Questions?

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