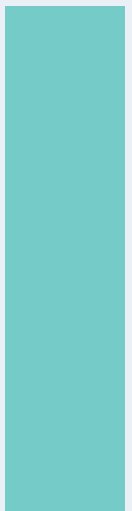


# Best Practices for Healthy Skin



Hand Hygiene and Skin Care Guide



# HAND HYGIENE AND SKIN HEALTH

Hand hygiene is a critical aspect of patient safety. In fact, it is the single most important measure one can take to help prevent the spread of infection. Healthcare workers (HCW) are repeatedly exposed to hand hygiene products, placing them at risk for skin damage. Despite alcohol-based hand rub (ABHR) being widely available in healthcare facilities, HCW remain concerned about the effects of ABHR on skin condition. Therefore, it is essential that HCW understand how to maintain their skin health which leads to better hand hygiene compliance.

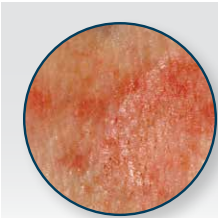


**In a study, 69.5% of nurses believed ABHRs to be more damaging to the skin.<sup>1</sup>**

However, there are many benefits of ABHR, including superior efficacy, speed, convenience, better compliance, and skin health benefits.<sup>2</sup>

## HAND HYGIENE REGIMENS AND THEIR EFFECT ON SKIN HEALTH

Irritant contact dermatitis is a common skin reaction related to hand hygiene. In one study, 85% of nurses reported a history of irritant contact dermatitis, and 25% reported dermatitis symptoms.<sup>3</sup>



### DERMATITIS SYMPTOMS

- dryness
- irritation
- itching
- redness
- cracking
- bleeding
- swelling
- rash

**Despite evidence to the contrary, many HCW still believe that ABHR is more damaging to the skin than soap and water.**

Understanding the different effects that ABHR and soap and water have on your skin can help you change your hand hygiene practices and break the cycle of skin damage.



### HAND SANITIZING (ABHR)

Properly formulated alcohol has very little effect on the skin. ABHR can cause symptoms that are an indicator of skin damage, such as stinging or burning because the nerves in the skin are exposed, but it is actually the soap that caused the issue in the first place. Because the stinging and burning is felt with use of ABHR, a HCW's instinct is to switch to soap and water, but this only worsens the problem, creating a vicious cycle of injury and insult.

Properly formulated ABHR contain emollients, or moisturizers that help hydrate the skin and maintain healthy skin.

ABHR should be used for the majority of hand hygiene events.

ABHR are available in foam, gel and liquid. Product evaluations should be conducted to ensure maximize acceptance by front-line care givers for better hand hygiene compliance.



### HANDWASHING (SOAP AND WATER)

Soap can damage the outermost layer of the skin by dissolving lipids, which help retain moisture in the skin. As a result, there is loss of water in the skin which results in dry and flakey skin. With each soap and water use, it gets worse. Eventually, nerves in the skin become exposed.

Some soap contains moisturizers, but this does not negate the damage that is caused when lipids are dissolved and the skin is not able to retain moisture.

Soap and water should be used when hands are visibly soiled or contaminated, before eating, and after using the restroom.

Either an antimicrobial or non-antimicrobial soap may be used. With any antimicrobial, some skin health benefits are lost. It may be prudent to switch to a non-antimicrobial soap for most units and use an antimicrobial soap in high-risk areas only, such as intensive care units, the operating room at the facility's discretion.



# OTHER FACTORS THAT EFFECT SKIN HEALTH

Besides hand hygiene regimens, there are other external factors that can have a negative effect on skin health and can contribute to dermatitis.

- Using hot water when handwashing
- Using poor quality paper towels and vigorously drying hands
- Climate changes including cold, dry and windy weather, especially in winter months
- Low relative humidity from indoor heated air or outdoor climate
- Donning gloves when hands are still wet from ABHR or handwashing
- Switching hand hygiene products can sometimes cause a temporary dermatitis while the skin adjusts to the new product. This is usually transient, lasting several weeks.
- Using other over-the-counter hand care products that have not been evaluated and approved by your healthcare institution.

## BEST PRACTICES IN HAND HYGIENE<sup>4,5</sup>

### HOW TO CLEAN YOUR HANDS

#### USING ABHR:



Apply product to the palm of one hand



Rub hands together vigorously covering all surfaces thoroughly



Should take at least 15 seconds to dry

#### USING SOAP AND WATER:



Wet hands with lukewarm water



Apply the manufacturer's recommended amount of product to hands



Rub hands together vigorously covering all surfaces thoroughly



Rinse hands with water



Dry thoroughly with a disposable towel and use towel to turn off faucet.

### WHEN TO CLEAN YOUR HANDS

#### USING ABHR:

- Before direct patient contact
- After removing gloves
- Before handling an invasive device for insertion
- After contact with intact skin
- After contact with body fluids, or excretions, mucous membranes, nonintact skin, and wound dressings if hands are not visibly soiled
- Before moving from contaminated patient body site to a clean site during patient care
- After contact with inanimate objects or medical equipment close to a patient

#### USING SOAP AND WATER:

- When hands are visibly dirty or contaminated with proteinaceous material or are visibly soiled with blood or other body fluids
- Before eating
- After using the restroom



### WHERE TO CLEAN YOUR HANDS

# BREAKING THE CYCLE OF SKIN DAMAGE



*Simple changes in your hand hygiene routine can make a difference when it comes to skin health.*

## Here are some tips to keep your hands healthy year round.

- Use an ABHR as opposed to soap and water whenever possible
- Use lukewarm (not hot) water when washing hands with soap and water
- Use lotion at least twice during your shift and use copious amounts of lotion before and after your shift
- Do not don gloves when your hands are still wet with ABHR. This prevents the alcohol from completely drying and can cause burning or stinging, especially when skin is already damaged
- Do not vigorously dry your hands with a paper towel; pat gently
- Wear gloves when going outside if you live in a cold, dry climate
- Avoid exposure to any harsh cleaners or chemicals

## SUGGESTED STEPS FOR SKIN CARE ISSUES

- Use ABHR when hands are not visibly soiled or contaminated
- Choose a PURELL® Advanced formulation with skin improvement benefits
- Minimize handwashing with soap and water, except when hands are visibly soiled or contaminated
- Consider using plain (not antimicrobial) soap
- Use a moisturizer frequently during your shift
- Incorporate a skin repair cream recommended by your healthcare provider or dermatologist
- Protect your hands in cold, dry climates by wearing gloves when outdoors

*If you experience dryness, redness or cracking, break the cycle of skin damage by following these steps. Always consult your healthcare provider and consider visiting a dermatologist if symptoms do not improve within a few days, or worsen.*

1. Stutz N, Becker U, Jappe U, John SM, Ladwig A, Spornraft-Ragaller P, et al. Nurse's perceptions of the benefits and adverse effects of hand disinfection: alcohol-based handrubs vs. hygienic handwashing: a multicenter questionnaire study with additional patch testing by the German Contact Dermatitis Research Group. *Br J Dermatol.* 2009;160:565-572.
2. Widmer AF. Replace and washing with use of a waterless alcohol hand rub? *Clin Infect Dis.* 2000;31:136-43.
3. Larson E, Friedman C, Cohran J, Treston-Aurand J, Green S. Prevalence and correlates of skin damage on the hands of nurses. *Heart and Lung.* 1997;26:404-412
4. World Health Organization. WHO guidelines on hand hygiene in health care. First global patient safety challenge: clean care is safer care. [http://whqlibdoc.who.int/publications/2009/9789241597906\\_eng.pdf](http://whqlibdoc.who.int/publications/2009/9789241597906_eng.pdf). Published 2009. Accessed March 1, 2015.
5. Centers for Disease Control and Prevention. Guideline for hand hygiene in health-care settings: recommendations of the healthcare infection control practices advisory committee and the HICPAC SHEA/APIC/IDSA hand hygiene task force. *MMWR* 2002;51:RR-16.



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