



Hand Hygiene Should Always Include Skin Health

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A healthcare workers' (HCW) most important tool is his or her hands. Without the ability to use our hands effectively, we cannot perform the duties of our job. Many HCW consider skin dryness, irritation, and contact dermatitis of hands part of the "cost of doing business." However, this should not be the case, and healthcare workers need more education around how to properly care for their hands.

Hand hygiene products have come a long way in terms of formulation. Well-formulated products are designed to have good efficacy, skin health properties, and aesthetics (desirable sensorial attributes). Each attribute plays an important role in product functionality and how HCW accept and interact with products. Efficacy requirements of hand hygiene products are determined by the Food and Drug Administration (FDA). The Healthcare Personnel Handwash Test is the only FDA-accepted test method for healthcare hand washes, including alcohol-based hand rub (ABHR) products. This test measures the reduction of a transient marker organism on the hands of adult subjects after a single product use and after 10 consecutive product uses, requiring a 2- \log_{10} reduction at application 1 and a 3- \log_{10} reduction at application 10, respectively.¹ Key decision makers for hand hygiene products should


be aware of efficacy requirements and select products that meet these requirements.

HCW will be more acutely aware of skin health and aesthetic properties of hand hygiene products, such as whether the product causes skin dryness, or results in a sticky, tacky buildup. These attributes are important because of repeated product use throughout a shift. At the very least, hand hygiene products should maintain skin health, and ideally they should improve it. However, if products are improperly used, regardless of how well they are formulated, they will not prevent skin damage from occurring. For example, ABHR should be used for the majority of hand hygiene events, except when hands are visibly soiled or contaminated. Soap and water should not be over-used and should be limited to when hands are visibly soiled or contaminated because even the best formulated soaps are less mild to skin than a well-formulated ABHR. In addition, ABHR have many advantages over soap and water such as superior efficacy, speed of procedure, better compliance, and skin health benefits.² If HCW over-wash and under-sanitize, they are setting themselves up for a potential cycle of skin damage that may be difficult to break. HCW often believe that soap and water is less damaging to the skin, but it is ABHR that causes the stinging

and burning when the skin is already damaged and certain nerve receptors are exposed. Other common mistakes include not allowing hands to dry completely after the use of ABHR and soap and water and donning gloves too soon which traps moisture and contributes to skin irritation. Lastly, it's critical to provide lotion in the clinical setting. Using a lotion that is compatible with gloves and other hand hygiene products and does not contain offensive odors is key. HCW should be instructed to use lotion at least twice per shift, more often in cold climates or when relative humidity is low, and to use lotion frequently at home.

Even seasoned HCW should receive ongoing education and reminders around hand hygiene. It is often assumed that HCW know when and how to perform hand hygiene, but this is not always the case. Hand hygiene compliance is a major focus in many healthcare facilities right now. As pressure to improve compliance increases, a renewed focus on skin health should complement it.

1. Department of Health and Human Services: Food and Drug Administration. Topical antimicrobial drug products for over-the-counter human use; tentative final monograph for health-care antiseptic drug products. Federal Register. 1994;59(116):31402-31452.
2. Widmer AE. Replace and washing with use of a waterless alcohol hand rub? Clin Infect Dis. 2000;31:136-43.



THAT'S a FACT!

The stratum corneum is part of our innate immune system and protects us from the environment, preventing unwanted materials from entering and excessive loss of water from exiting the body. Many people don't realize that this tough protective layer is only 150 microns thick, or about the thickness of a sheet of paper!

Menon G, Cleary GW, Lane ME. The structure and function of the stratum corneum. Internat J Pharmaceutics. 2012;435(1):309.

Product Feature

PURELL® Advanced Hand Sanitizer ULTRA NOURISHING™ Luxurious Foam



IMPROVES SKIN CONDITION IN 3 DAYS¹

PURELL® Advanced Hand Sanitizer ULTRA NOURISHING™ Luxurious Foam is the next generation in hand sanitizer technology. It is specially formulated to deliver the proven efficacy of PURELL Advanced Hand Sanitizer with the addition of an unique blend of moisturizers and antioxidants clinically proven to improve skin hydration and skin condition in just 3 days.^{1,2} PURELL Advanced Hand Sanitizer ULTRA NOURISHING Luxurious Foam rubs-in quickly, leaving hands feeling both soft and clean.

SUPERIOR SKIN HEALTH

- Same great efficacy as PURELL Advanced Hand Sanitizer²
- Kills 99.99% of most common germs that may cause illness in as little as 15 seconds
- Evaporates quickly
- Leaves hands feeling clean
- CHG, nitrile, latex, and vinyl glove compatible
- Dermatologist tested; hypoallergenic
- USDA BioPreferred® Designated Hand Sanitizer
- Meets the ECOLOGO® environmental standard for instant hand antiseptics (UL 2783)



Description	Order Number	Case Pack	Uses Dispenser
PURELL Advanced Hand Sanitizer ULTRA NOURISHING Foam			
LTX-7™ - 700 mL Touch Free	1399-03	3	1320-04
LTX-12™ - 1200 mL Touch Free	1909-02	2	1920-04
TFX™ - 1200 mL Touch Free	5389-02	2	2720-12
Pump Bottle - 45 mL	5699-24	24	-
Pump Bottle - 1200 mL	5799-24	4	-

1. Skin health study, Study # 2014-12-C10408, Based on 100 times use per day, December 8-22, 2014, North Cliff Consultants, Inc., Cincinnati, OH.
2. HCPHW study, Study # 140547-101, October 30, 2014, BioScience Laboratories, Bozeman, MT.

A Look Ahead

next month's issue

Importance of
Hand Washing
and
Choosing the Right Soap

PROVON® Ultra Mild
Choosing sustainable products