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HAND HYGIENE TIMES



Soap selection: Key factors to consider to ensure a successful transition

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Hand hygiene is the primary measure to reduce pathogens on hands in healthcare facilities.¹ Alcohol-based hand rub is the primary pillar for hand hygiene due to its many proven advantages such as superior antimicrobial efficacy, speed of use, better compliance, and skin health benefits.² Handwashing with soap and water also plays a critical role in a hand hygiene program, namely when hands are visibly soiled or contaminated with blood or other bodily fluids or after caring for patients diagnosed with certain specific infections.² However, soap typically does not become a focus of attention unless healthcare facilities are faced with changing their soap products and they begin to look for technical information to assist them in their decision making.

When selecting soap, it's important to first understand how soap works. The general mechanism of action for plain or non-antimicrobial soap is the friction imposed by rubbing hands together while lathering to lift and suspend oil, dirt, and other organic substances so they can be rinsed down the drain.¹ Transient microorganisms that are loosely adherent on the skin can also be removed through this process.² Antimicrobial soaps have the same mechanism of action, but they also contain an antibacterial active ingredient that inactivates bacteria on the hands.¹

The World Health Organization and Health Canada allow the use of either a non-antimicrobial or antimicrobial soap.^{1,2} Some healthcare facilities take a risk-reduction approach by utilizing an antimicrobial soap in all patient care areas for added protection, while others choose a hybrid approach deploying antimicrobial soap only to high acuity areas such as intensive care, hematology-oncology, and surgical units. Other facilities use non-antimicrobial soaps throughout the entire facility.

How a soap affects the skin of healthcare workers (HCW) is especially important in healthcare where repeated-use scenarios are common. Ensuring skin tolerance of handwash products is critical to maximize HCW acceptance and hand hygiene compliance.^{1,3} While formal skin irritation assays should be performed during product development, the most important tests are field tests with HCWs to determine irritation or skin improvement effects with realistic conditions and behaviors in clinical settings. Therefore, a trial for skin tolerability and HCW acceptance is strongly recommended before selecting a new soap.^{1,3}

Product aesthetics (skin feel) are the attributes that are the most important to HCWs.² Aesthetic considerations can begin with how the product looks (color), product form (foam or liquid), and the sensory experience during product use (e.g. how it smells, lathers, and rinses). The bottom line is that if HCWs do not like the aesthetics of a soap product, they are less likely to use it,³ so aesthetic and skin feel considerations should not be minimized when choosing hand hygiene products.

Selecting a soap for a healthcare facility can be confusing. When faced with the challenge, it is important for key decision-makers to be armed with as much knowledge as possible. Careful consideration should be given when transitioning soap products due to the potential for adverse skin effects if not properly formulated. While the process may not be easy, being well-informed about the options and key selection factors can help make the process easier.

¹ Pittet D, Allegranzi B, Boyce J. The World Health Organization Guidelines on Hand Hygiene in Health Care and their consensus recommendations. *Infect Control Hosp Epidemiol* 2009;30:611-622.

² Public Health Agency of Canada. Hand hygiene practices in healthcare settings. Ottawa, Ontario: Public Health Agency of Canada, 2012.

³ Larson E, Girard R, Pessoa-Silva CL, Boyce J, Donaldson L, Pittet D. Skin reactions related to hand hygiene and selection of hand hygiene products. *Am J Infect Control* 2006;34(10):627-635.



PRODUCT FEATURE

Better Soap Means Better Hand Hygiene PURELL HEALTHY SOAP™* WITH CLEAN RELEASE™ TECHNOLOGY

Skin is made up of tiny cracks and crevices that are hard for most soaps to reach, so many of the products rely on harsh preservatives and antibacterials to strip skin of dirt. Both of these ingredients can't reach deep and are the most common causes of severe skin irritation.

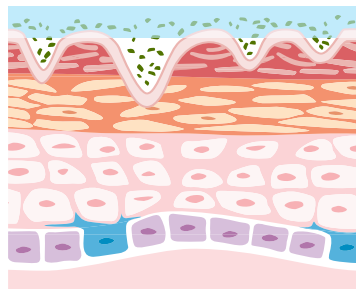
Formulated for dry and sensitive skin, hypoallergenic CLEAN RELEASE Technology soaps are free of these ingredients so they are better for skin. Born out of the best ingredients and best science, PURELL HEALTHY SOAP™* with CLEAN RELEASE Technology was designed specifically for dry or sensitive skin. The remarkably mild foam hand soap removes 99% of dirt and germs without harsh preservatives, antibacterials,** parabens, and phthalates.^{1,2}



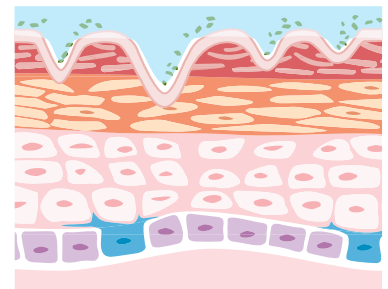
CLEAN RELEASE Technology Helps Soap Work Better

CLEAN RELEASE Technology boosts soap performance. Its novel surfactant system reaches deeper into skin's cracks and crevices to gently remove more dirt and germs than regular soap.^{1,3}

- **Cleaner Ingredients** - Free of harsh preservatives, antibacterials,** parabens, and phthalates
- **Better Wash Experience** - 95% preferred over regular soap⁴
- **Cleaner Hands** - Removes 30% more dirt than regular soap¹



Regular Soap†
Can't get to tough-to-reach areas where dirt and germs may hide.



CLEAN RELEASE Technology
Reaches into skin's cracks and crevices 2X better to lift and wash away more than 99% of dirt and germs.^{1,2,5,6}

* Cleans and Moisturizes | ** Does not contain an antimicrobial active ingredient. | † All references to regular soap are based on our top-selling non-antibacterial soap | 1. Augustine Scientific, Newbury OH, Ex Vivo Soil Removal Analysis, August 5, 2017. | 2. BioScience Laboratories, Inc.; Bozeman, MT, Study# 170398-101, Evaluation of In-Vivo Germ Removal, July 5, 2017. | 3. Bozeman, MT, Study #1707304-101, Evaluation of In-Vivo Germ Removal, August 22, 2017. | 4. GOJO Industries Inc., Study 2017-08-110608 Healthy Soap CRT Foam and Lather Study. | 5. Augustine Scientific, Newbury OH, Surface and Interfacial Rheology Analysis, June 30, 2017. | 6. GOJO Industries Inc., Akron OH, Evaluation of handwashes for germ removal from ex vivo skin, Study # EV-2017-002, August 15, 2017.



For more information on CLEAN RELEASE Technology and The PURELL SOLUTION™ visit PURELLSOLUTION.ca

