GOJO

HAND HYGIENE TIMES

Your Canadian resource for the latest news in effective infection control program development and best practices.

Issue 2 Volume 6

Hand Hygiene and Skin Health

Hand hygiene is an effective strategy to prevent health care-associated infections (HAI) and limit the transmission of microorganisms. It is a required practice for all health care providers, is recommended in all national and international infection control guidelines, and is a basic expectation of patients and their families.[1]

Despite poor compliance with hand hygiene being strongly linked to HAI, adherence to hand hygiene is estimated to be less than 50% in most healthcare settings.[2-4] Major factors contributing to the lack of adherence to hand hygiene protocols include:[5]

1) the high number of hand hygiene opportunities per hour of patient care
2) wearing gowns and gloves and
3) hand washing agents causing irritation and dryness.

Few environments are impacted more by topical product usage than healthcare facilities. In a large hospital study of healthcare worker (HCW) hand hygiene practices, it was estimated that HCWs could clean their hands in an ICU setting approximately 20 times per patient hour.[1] Based upon that calculation, during one 12-hour shift a HCW could have as many as 240 opportunities to perform hand hygiene. Therefore, it is imperative that HCW receive education on how to prevent skin issues that may arise as a result of hand hygiene regimens and what to do when skin issues occur.

First, it is important to understand that soap and water and alcohol-based hand rub (ABHR) affect the skin differently. The use of water alone, without any other product, can dry the skin through removal of intrinsic moisturizing factors within the stratum corneum, or outermost protective layer of the skin. Hand washing, which can include elements of water, surfactants, antiseptic agents, friction, and towel drying coupled with subsequent occlusion from gloves, can negatively impact the skin. In addition, environmental stressors such as low relative humidity, using hot water, and low quality of paper towels can also contribute to skin damage.[6]

Alcohol-based hand rubs, on the other hand have been shown to have very little impact on the stratum corneum with single and repeated applications. In addition, properly formulated ABHR contain emollients and other skin-conditioning agents that minimize skin irritation and dryness.[7] Selecting properly formulated hand hygiene products is imperative to protecting the skin health of healthcare workers.

Research results

A study with over 1800 nurses found that 69.5% of nurses believed ABHRs to be more damaging than hand washing, compared to 30.5% who believed hand washing to be more damaging than ABHRs.[8] Another study looked at two separate hand hygiene regimens: soap and water versus an ABHR hand gel using a crossover study that lasted six weeks (2834 observed opportunities for hand washing). The reported results were that the ABHR gel regimen did not adversely impact skin condition whereas the soap and water regimen had a dramatic negative effect, namely irritation and dryness.[9] Even though this was a low frequency-of-use trial with just over three hand hygiene episodes per hour worked, it highlights the relative mildness of ABHRs versus soap and water.

Education for HCW is important and HCW may need to change their hand hygiene practices to see a skin benefit. By switching to using ABHR for the majority of hand hygiene events except when hands are visibly soiled or contaminated, using supplementary lotion during and after their shift, and using properly formulated hand hygiene products, HCW can help prevent skin damage from occurring.

1. Ontario Agency for Health Protection and Promotion (Public Health Ontario), Provincial Infectious Diseases Advisory Committee. Best Practices for Hand Hygiene in All Health Care Settings. 4th ed. Toronto, ON: Queen's Printer for Ontario; April 2014.
2. Pittet D, Mourouga P, Perneger TV, Members of the Infection Control Program. Compliance with handwashing in a teaching hospital. Ann Intern Med. 1999;130(2):126-30.
3. Pittet D. Improving adherence to hand hygiene practice: a multidisciplinary approach. Emerg Infect Dis. 2001 Mar-Apr;7(2):234-40.
4. Loeb M. Adherence to Hand Hygiene among Healthcare Workers in Ontario Hospitals: results from a NET Cohort Study. Presented at the Hand Hygiene Consensus Building Workshop March 1, 2006.
5. The Joint Commission. Measuring hand hygiene adherence: overcoming the challenges. 2009. Available from: http://www.jointcommission.org/assets/1/18/hh_monograph.pdf. Accessed May 14, 2014.
6. Larson E, Girard R, Pessoa-Silva CL, Boyce J, Donaldson L, Pittet D, et al. Skin reactions related to hand hygiene and selection of hand hygiene products. Am J Infect Control. 2006;34:627-635.
7. Infection Prevention and Control Canada. Information about hand hygiene. http://www.ipac-canada.org/links_handhygiene.php. Updated April 30, 2015. Accessed May 1, 2015.

Product Feature

NEW EDUCATION TOOLS TO HELP DRIVE HAND HYGIENE COMPLIANCE

To help Infection Preventionists implement, manage and drive hand hygiene compliance among healthcare workers (HCWs), GOJO has developed NEW educational building tools. These new tools will support your efforts to increase awareness and address common knowledge barriers amongst for staff on how, when and why to perform hand hygiene and help keep their skin healthy.

5 RIGHTS OF HAND HYGIENE™

At GOJO Industries, Inc., we believe that clean hands make a difference, and so we have developed **THE FIVE RIGHTS OF HAND HYGIENE** as a tool to help healthcare workers remember the important aspects of hand hygiene. This is similar to what many nurses have learned about the 5 rights of medication administration, which are meant to promote patient safety during medication administration. The program includes videos and posters available on the GOJOCanada.ca/education website.

The five rights include:

1. **The Right Product** – Use ABHR unless hands are visibly soiled or contaminated to avoid potential skin damage caused by using soap and water.

2. **The Right Amount** – Use enough product to ensure proper efficacy . Manufacturers should specify the amount of product that is needed to provide optimal antimicrobial efficacy.

3. **The Right Time and Technique** –Use product for the right amount of time using the right technique to ensure all surfaces of the hands, fingers and wrists are clean.

4. **The Right Moment** –Perform hand hygiene at key times during the 4 Moments of Hand Hygiene during patient care where transmission of microorganisms is most likely

5. **The Right People** - Include everyone who plays a role in the spread of germs: Healthcare workers, patients and visitors

Hand hygiene is very effective when performed correctly. The more informed healthcare workers are about how and when to perform hand hygiene, the better equipped they will be to engage patients and family members doing so as well.

HAND HYGIENE AND SKIN CARE GUIDE FOR HEALTHY SKIN

Healthcare workers (HCW) are repeatedly exposed to hand hygiene products, placing them a risk for skin damage. There is still a knowledge gap among healthcare workers about when to perform hand hygiene, which product to use, and how to use it. And 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.

This new Skin Care Guide provides the knowledge you need to education our staff on best practices to keep skin healthy such as:

- Hand hygiene regimen effect on skin health
- Additional factors that affect skin health
- Symptoms and causes of Irritant contact dermatitis
- Comparison of using sanitizer or soap and water
- When and how to perform hand hygiene
- Tips for breaking the cycle of skin damage
- Suggested steps for skin care issues

ACCESS THESE TOOLS AND MORE ONLINE AT GOJOCANADA.CA/EDUCATION

Learn more

View the new GOJO 2015 Hand Hygiene Symposium on the AJIC website. "Better Ways to Measure Hand Hygiene Compliance and Successfully Engage your Staff: Lessons Learned from the Field. http://handhygiene.ajicjournal.org/

Download the NEW APIC Guide to Hand Hygiene Programs for Infection Prevention which provides an overview of hand hygiene programs and their key components. – www.apic.org/Professional-Practice/Implementation-guides

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