

LETTERS TO THE EDITOR

What Drives Healthcare Worker Actions to Treat Irritant Contact Dermatitis on Hands?

To the Editor—Hand hygiene (HH) is one of the most important procedures healthcare workers (HCWs) can perform to avoid spreading healthcare-associated infections, yet compliance with HH practices remains less than 50%.^{1,2} One reason HCWs often cite for noncompliance is irritant contact dermatitis (ICD) from repeated use of soaps and sanitizers and the expectation to perform HH frequently.³

There are relatively few published accounts of specific aspects of hand skin condition among HCWs under typical clinical conditions because studies can disrupt normal practice.^{4,5} Similarly, there are few published methods for HCWs to monitor symptoms and make ICD treatment decisions.⁶

To address this lack of information, our team attempted to quantify factors that drive HCW monitoring and treatment decisions for ICD on hands. Our goals were (1) to measure ICD knowledge sources, (2) to identify monitoring and treatment actions, and (3) to determine knowledge and awareness of guidelines for monitoring and treatment.

In collaboration with the Society for Healthcare Epidemiology of America's Research Network, we conducted an Internet survey of network members in November-December 2015. The survey consisted of 3 parts: (1) knowledge sources for ICD, (2) procedures to monitor and treat ICD, and (3) awareness of

policies or guidelines that provide direction. Responses were analyzed as a percentage of total responses; verbatim responses were categorized by common themes.

This study summarizes the results from respondents from the United States, where most invitations were sent: 123 active members were invited and 43 responded (35% response rate).

Figure 1 summarizes the knowledge sources for ICD.

Respondents rated ICD information as “extremely applicable” (4 [9%]), “very applicable” (12 [28%]), or “somewhat applicable” (19 [44%]). Nobody rated information as “not applicable.” However, 8 (19%) did not seek information.

Respondents received the following guidance on avoiding ICD: formal instruction/training, 16 (37%); learning on one's own, 12 (28%); advice from colleagues, 10 (23%); general information provided by supervisor, 9 (21%); don't know, 2 (5%); and no instruction, 10 (23%).

The most common change to HCW HH behavior when experiencing ICD symptoms was to increase use of moisturizing lotion (37 respondents [86%]). Changes in other HH methods (alternate products or different drying method) were each cited by less than one-quarter of respondents.

Changes in HH procedure to treat ICD symptoms are determined by the following: employee/occupational health makes the decision, 28 (65%); a trained dermatologist evaluates, 9 (21%); HCWs make their own decision, 7 (16%); number of ICD cases is monitored, 3 (7%); supervisor uses discretion, 2 (5%); and don't know, 2 (5%).

When asked whether HCWs ever used personal, nonapproved lotions or products at work, 17 (40%) responded affirmatively:

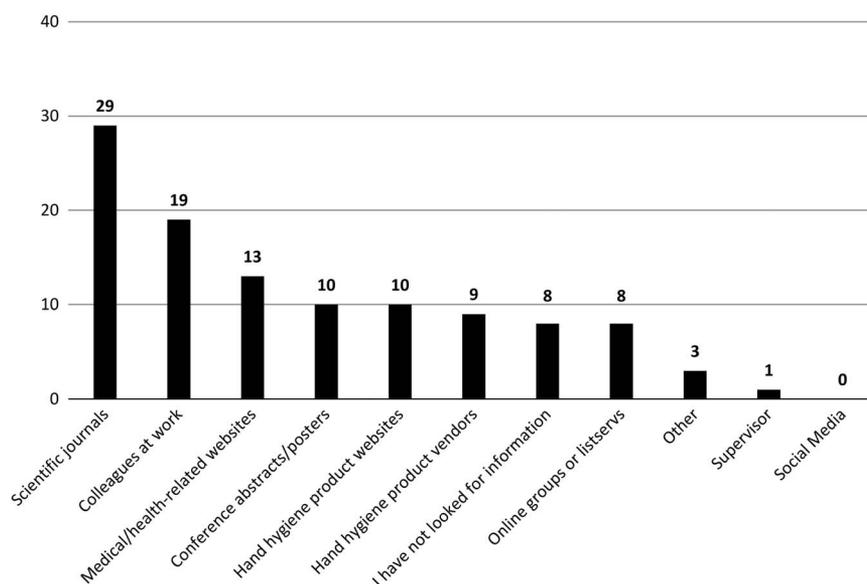


FIGURE 1. Knowledge sources for irritant contact dermatitis on hands. Bars represent number of all 43 respondents who chose each one of the information sources listed on the figure. Respondents could choose any source that applied.

of these 17 people, 8 preferred the feel/scent, 3 cited more convenient access, and 2 said moisturizing products were not available or offered by their facility.

Methods for monitoring for symptoms of ICD are as follows: self-reporting, 28 (65%); visits to employee/occupational health are tracked, 8 (19%); no procedure, 11 (26%); and don't know, 6 (14%).

Half of respondents (22 [51%]) must follow facility guidelines. Professional association guidelines or World Health Organization/Centers for Disease Control guidelines were each cited by 4 people (9%). An additional 4 people (9%) ask colleagues what to do, 3 (7%) do not have guidelines, 2 (5%) don't know, and 1 (2%) makes his or her own decisions.

Policy instructs HCWs with ICD symptoms to do the following: consult employee/occupational health, 28 (65%); use approved lotion, 25 (58%); use approved alternative soap/sanitizer, 19 (44%); moisturize frequently, 14 (33%); use small disposable bottles or packets of approved lotion, 2 (5%); and don't know/not applicable, 5 (12%).

This study embodies the World Health Organization's facets of empowerment: there must be an appropriate foundation of knowledge, development of appropriate skills/behaviors, and a facilitative environment for actions.¹

Scientific journals as knowledge sources are a solid foundation used by two-thirds of respondents. The influence of peers and websites should be investigated further in order to understand the kind of information retrieved and how it is applied in clinical practice. Formal instruction was cited by only one-third of respondents, whereas informal learning on one's own, from peers, or none at all, each cited by one-fourth of respondents, suggest a lack of standard knowledge foundation.

Approved lotions are the most common solution to treat ICD—their use was determined by employee/occupational health for two-thirds of respondents. Given the level of autonomy for HCWs to monitor their own symptoms before going to employee health professionals (as two-thirds of all HCWs reported this), we do not know what thresholds are established before seeking a change in HH procedure. As with training, a standard for monitoring is needed to ensure best actions at the right times.

The use of nonapproved products by nearly 40% of respondents sounds an alarm. Any product not reviewed by the facility may impact negatively the efficacy of approved antimicrobial soaps and sanitizers. The popular citation "preferred feel/scent" should be applied to future product evaluation efforts. Difficulty of access and lack of availability are problems easily addressed in collaboration with environmental services. HCWs will use products they like or have easy access to.

And finally, more than three-quarters of respondents are expected to follow facility or professional organization policies for addressing ICD. But the responses from other questions of the survey indicate varied levels of training and actions:

policies are not specific enough or policies are not consulted frequently. Knowledge and actions are best supported when facilities have explicit guidelines that detail monitoring and actions.

HH saves lives. Support and encouragement for HCW HH compliance leads to better patient care. By addressing ICD on hands, we can avoid one of the common barriers to HH.

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The Economics of Autoclave-Based Sterilization: Experience from Central Sterile Supply Department of a Cancer Center in Eastern India

To the Editor—The central sterile supply department (CSSD) is an essential component of hospital services. Sterilization of a