



# Hand hygiene hurdles: How can we overcome them?

*Q&A with Dr. Timothy Landers*



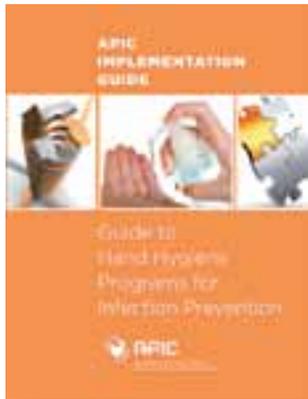
**F**or most of the last decade, Timothy Landers, PhD, RN, CNP, CIC, has been focused on effective hand hygiene programs. Therefore, it makes perfect sense that he would help write the latest in the series of APIC Implementation Guides, *Guide to Hand Hygiene Programs for Infection Prevention*, sponsored by GOJO—a long-standing Strategic Partner. Dr. Landers, who is an assistant professor in The Ohio State University College of Nursing and a Robert Wood Johnson Foundation nurse faculty scholar, said the guide examines the historical and regulatory context for hand hygiene programs, and also delves into the latest science. It's designed as a best-practices primer for beginning to intermediate infection preventionists (IPs), their clinician colleagues, and healthcare facility executives.

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Timothy Landers, PhD, RN, CNP, CIC.

*Prevention Strategist* chatted with Dr. Landers recently about specifics of the new *Guide to Hand Hygiene Programs for Infection Prevention*, and his thoughts on how hand hygiene can be improved in every type of healthcare setting.



Look for the new *Guide to Hand Hygiene Programs for Infection Prevention* at [www.apic.org/implementationguides](http://www.apic.org/implementationguides).

**Q: Why do you have an interest in hand hygiene?**

My area of interest is in the prevention of antibiotic-resistant bacteria, so the more I learned about the importance of hand hygiene in preventing these types of bacteria, the more I wanted to focus on it and develop effective programs. Hand hygiene is the cornerstone of our infection prevention activities; so as IPs, it should be the core of what we're doing.

Not to brag too much about IPs, but the work we do to prevent infections makes many other advancements in healthcare possible. Clinicians are able to do highly technological, highly invasive, lifesaving procedures like brain surgery or chemotherapy because we're focused on preventing infections that would otherwise kill people who are having these procedures.

**Q: What are the key points that IPs need to know in order to design and implement hand hygiene programs?**

This is the most exciting part of hand hygiene research in general—that is, the idea of a multimodal program is absolutely essential. Some of the key components of a multimodal program are education and training, providing effective products where they're needed, providing cultural and leadership support for hand hygiene efforts and monitoring, and then linking that back to education and training. It's really the synergy of when all those components of hand hygiene programs are working together effectively that we see the biggest change.

The guide presents what the individual components of a hand hygiene program might look like, and also helps IPs think about how the different modes or interventions could work together. That is the biggest take-home message.

This guide is unique in that it gives IPs the tools to adapt national and international hand hygiene guidelines to their local settings. A majority of hand hygiene activity depends on a supportive environment and a culture that places patient safety at the center. Successful hand hygiene activity also depends on the selection of products and the monitoring and training that healthcare professionals

receive; there are local variations in all of those things.

An off-the-shelf program that anyone can simply take and implement doesn't exist. Having a successful hand hygiene program requires trained, knowledgeable, and experienced IPs to examine their local settings and study their local cultures—even things like the humidity and temperature variations that affect users' preferences for hand hygiene products. The guide highlights the important role IPs have in developing these programs.

**Q: What is the future of hand hygiene in healthcare settings? What do you see as the major scientific issues related to hand hygiene that still need to be addressed?**

Practical questions need to be answered, like what are the best practice recommendations around glove use and hand hygiene? Work also needs to be done on designing well-tolerated hand hygiene products that are effective against the full range of pathogens in our healthcare settings. This is something industry is working on, but I think more needs to be done there.

Understanding behavioral aspects of hand hygiene is important, as well as what can be done as the healthcare system evolves. With the emphasis on being efficient and having good patient safety and patient outcomes, how can we leverage that interest to really encourage hand hygiene?

Work should be done to pinpoint the most effective monitoring strategies, including feedback on the best formats and ways to deliver monitoring results. The role of the patient in hand hygiene is an important area that has been overlooked and needs to be addressed. We haven't really developed recommendations or products for patients to be able to perform hand hygiene in healthcare settings.

In our guide, we've outlined a best-practices approach, and we discuss advancements in products, culture, behavioral change, and monitoring. Essentially, the guide is meant to help IPs be on the lookout for these things as they emerge. However, it doesn't necessarily make recommendations about one thing over another, except for what's based on solid science.

## Q ■ Based on your work, what do we know about hand hygiene and glove use?

More work must be done in this area. The interesting facet of hand hygiene and glove use is that, in general, we think about hand hygiene protecting patients from the transmission of these dangerous organisms or pathogens, and we tend to think about glove use as protecting ourselves as healthcare workers. Thus, there is an intrinsic motivation for glove use and extrinsic motivation to perform hand hygiene.

Others have called for the glove use guidelines to be based on more solid evidence. I believe we'll see more evidence on this topic in the next two to three years.

## Q ■ What are some of the explanations for variations in hand hygiene compliance?

Compliance varies by discipline. Training and background sometimes emphasizes the importance of hand hygiene in different ways. We also may see levels and frequency of hand hygiene differing depending on levels of interaction with patients. Unfortunately, infection prevention and control measures don't have as much of an immediate effect on a patient as giving the wrong drug or using the wrong surgical technique. So in infection prevention, the outcome is somewhat distant from the intervention.

It's important for IPs to be aware of the various ways different professionals respond to infection prevention initiatives, and how interventions need to be based on empirical, validated data. Leadership also must make a commitment to a hand hygiene program. Leadership sets an example and provides resources for integrating multimodal hand hygiene programs.

Throughout the guide, we present ways to facilitate cultural change and overcome hand hygiene compliance variations. Three unique ways include:

- 1. Positive deviance.** This includes novel ways of managing change.
- 2. Frontline ownership.** This involves getting direct caregivers to commit to hand hygiene as their core metrics.
- 3. Writing a business case.** This includes learning how to converse with corporate leaders about the economics of a

well-functioning hand hygiene program. For instance, it could mean doing chief executive rounding to get executive buy-in.

Overall, the guide reinforces the importance of highly skilled IPs. It takes knowledgeable and engaged IPs to recognize the needs of different audiences and develop hand hygiene strategies and approaches for different groups.

## Q ■ What does successful hand hygiene implementation look like?

Successful hand hygiene programs need to be multimodal, coordinated, adequately resourced, and be an institutional priority

that are led by highly skilled and engaged IPs who are able to adapt the program specifically for their environment.

## Q ■ It seems like we've known about hand hygiene for so long, but there are still issues. What barriers remain in implementing hand hygiene programs?

In the non-infection prevention world, an idea exists that hand hygiene is a simple act. But it's really a complex act that has deep motivations. We need to understand that hand hygiene is complex but is worth doing to keep patients safe. 



### READ MORE ABOUT HAND HYGIENE IN THE *AMERICAN JOURNAL OF INFECTION CONTROL*

**Impact of sink location on hand hygiene compliance for *Clostridium difficile* infection**, Zellmer, Caroline et al., *American Journal of Infection Control*, Volume 43, Issue 4, 387-389.

**Sustained increase in resident meal time hand hygiene through an interdisciplinary intervention engaging long-term care facility residents and staff**, O'Donnell, Marguerite et al., *American Journal of Infection Control*, Volume 43, Issue 2, 162-164.

**Impact of the first hand sanitizing relay world record on compliance with hand hygiene in a hospital**, Seto, Wing Hong et al., *American Journal of Infection Control*, Volume 43, Issue 3, 295-297.

**A multifactorial action plan improves hand hygiene adherence and significantly reduces central line-associated bloodstream infections**, Johnson, Linda et al., *American Journal of Infection Control*, Volume 42, Issue 11, 1146-1151.

**Comparison of hand hygiene monitoring using the 5 Moments for Hand Hygiene method versus a wash in-wash out method**, Sunkesula, Venkata C.K. et al., *American Journal of Infection Control*, Volume 43, Issue 1, 16-19.

**Face touching: A frequent habit that has implications for hand hygiene**, Kwok, Yen Lee Angela et al., *American Journal of Infection Control*, Volume 43, Issue 2, 112-114.

**See one, do one, teach one: Hand hygiene attitudes among medical students, interns, and faculty**, Polacco, Marc A. et al., *American Journal of Infection Control*, Volume 43, Issue 2, 159-161.

**Impact of the International Nosocomial Infection Control Consortium (INICC) multidimensional hand hygiene approach in 3 cities in Brazil**, Medeiros, Eduardo A. et al., *American Journal of Infection Control*, Volume 43, Issue 1, 10-15.

**Systematic qualitative literature review of health care workers' compliance with hand hygiene guidelines**, Smiddy, Maura P. et al., *American Journal of Infection Control*, Volume 43, Issue 3, 269-27.