

Your Health in their Hands: Hand Hygiene in Healthcare Settings

By Ralph Morris, MD, MPH and Barbara M. Soule, R.N., MPA, CIC, FSHEA

Would you be surprised to learn that healthcare professionals, on average, clean their hands less than half the number of times they should? That statistic comes from a US Centers for Disease Control and Prevention (CDC) [press release](#) announcing a new campaign, “Clean Hands Count.” CDC is “urging healthcare professionals, patients, and patients’ loved ones to prevent healthcare-associated infections by keeping their hands clean.”

In an age of astounding advances in medical technology, it is ironic that one of the simplest methods known to avoid spreading pathogens is overlooked so often. [CDC estimates](#) 722,000 infections are contracted each year in US hospitals, and that 75,000 patients die of these infections during their hospital stay. Good hand hygiene will help reduce these infections and deaths.

CDC’s 2002 [guidelines](#) for hand hygiene in healthcare settings include a thorough review of soaps, alcohols, and other hand hygiene agents, how to select an agent, techniques for using each agent, skin care, and more. [CDC notes](#) that alcohol-based hand sanitizers are the preferred method of hand cleaning when hands are not visibly dirty¹. That’s because alcohol-based cleaners:

- Are more effective at killing potentially deadly germs on hands than soap
- Require less time to apply
- Are often more accessible than hand washing sinks
- Produce reduced bacterial counts on hands compared to hand washing
- Are less irritating and drying than soap and water

Setting the Record Straight

As part of its campaign, CDC is addressing hand hygiene “myths and misperceptions:”

Myth	Fact
Using alcohol-based hand sanitizer contributes to antibiotic resistance.	Alcohol-based sanitizer kills germs quickly and in a different way than antibiotics. Using these sanitizers does not contribute to antibiotic resistance.

¹ Wash visibly dirty hands first with soap and water and then apply alcohol-based hand sanitizer.



Logo for CDC's new hand hygiene campaign

Alcohol-based hand sanitizers kill all the germs found in healthcare settings.	Alcohol-based sanitizers kill most of the bad germs found in healthcare settings, but they do not kill “C. diff,” a bacterial “super bug” infection that causes severe diarrhea. Hand washing with soap and water is more effective than alcohol-based hand sanitizers against <i>C. diff</i> .
Alcohol-based hand sanitizers cause hands to develop dry skin.	Alcohol-based hand sanitizers are less irritating to hands than frequent use of soap and water.
Patients in healthcare settings are powerless to avoid new infections.	Patients and their loved ones can remind healthcare providers to clean their hands. They can ask tactfully, e.g., “Would it be alright if you cleaned your hands before you examine me?” They should also “practice what they preach” and clean their own hands often.

How often hand hygiene is needed per worker shift depends upon the particular tasks to be done and the amount of contact with the patient, patient equipment and patient environment. [CDC discusses](#) observational studies in hospitals in which healthcare workers washed their hands on average 5 to 30 times per shift, but notes that some nurses washed their hands as many as 100 times per shift.

We commend CDC for its renewed focus on hand hygiene. Given the fact that on any given day, about [one in 25 hospital patients has at least one healthcare associated infection](#), we agree it’s time to reconsider the hygiene of the hands that heal.

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