
What We Know

› The Joint Commission (TJC) is an independent, not-for-profit organization that is responsible for accrediting and certifying nearly 21,000 healthcare organizations in the United States(9)
  • TJC evaluates healthcare organizations to verify that they consistently provide high quality, safe, and effective care

› TJC National Patient Safety Goals (NPSGs) were established in 2002. (10) Each year TJC provides a list of NPSGs that are intended to improve patient safety(2,10)
  • Some NPSGs are newly created and some are maintained from the previous year; there are no new NPSGs for 2018(10)
  • Each NPSG contains specific elements of performance (EPs; i.e., implementation requirements) that are measurable evidence- and expert-based strategies for achieving the NPSG(2,10)

› Healthcare-associated infections (HAIs) are infections contracted during course of receiving treatment in healthcare settings. HAIs contribute to a rise in healthcare costs and an increased risk for patient death. National efforts have increased during the past 5 years to eliminate HAIs. Investment in resources (e.g., funding) and sustained commitment for developing an HAI action plan is necessary to achieve related goals(8)
  • In 2011 there were an estimated 722,000 HAIs in acute care settings in the U.S.; 75,000 patients died as a result of HAIs. Pneumonia was the most common site of infection(4)
  • Because HAIs are a significant cause of morbidity and mortality and increased healthcare costs in the U.S., the U.S. Department of Health and Human Services (HHS) identified the reduction of HAIs as an Agency Priority Goal for the Department. Additionally, the U.S. CDC National Healthcare Safety Network (NHSN), the largest HAI tracking system in the U.S., is a key component to reducing HAIs. Over 17,000 acute care hospitals and other healthcare facilities report data to the NHSN(12)

› TJC continues to identify reducing the risk for HAIs as goal 7 for 2018(10)
  • NPSG.07.01.01 requires healthcare organizations to comply with hand hygiene guidelines developed by the CDC or by the World Health Organization (WHO)(10)
    – The CDC reports that on any given day, approximate 1 in 25 hospitalized patients in the U.S. has at least one HAI(2)
    – Effective hand hygiene has the greatest potential for preventing infections and inadequate hand hygiene is the greatest contributor to HAI acquisition and transmission(14,16)
      - Inadequate hand hygiene as a result of using an insufficient amount of hand hygiene product (e.g., alcohol gel), using an ineffective hand hygiene product, or spending an insufficient amount of time performing hand hygiene can result in poor hand decontamination and a higher risk for HAI transmission from a healthcare worker (HCW) to a patient(16)
NPSG.07.01.01 consists of three EPs, the first of which is to implement a hand hygiene program based on the CDC or WHO hand hygiene guidelines.  

Complete information regarding the WHO hand hygiene guidelines can be found at [http://apps.who.int/iris/bitstream/ handle/10665/44102/9789241597906_eng.pdf](http://apps.who.int/iris/bitstream/handle/10665/44102/9789241597906_eng.pdf).  

Complete information regarding the CDC hand hygiene guidelines can be found at [https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf](https://www.cdc.gov/mmwr/PDF/rr/rr5116.pdf).

According to the information in “My 5 Moments for Hand Hygiene” from the WHO and the CDC guidelines, HCWs should perform hand hygiene:  

- prior to touching a patient, including before touching intact skin  
- prior to performing a clean or aseptic procedure  
- after exposure to or risk of exposure to body fluids  
- after touching a patient, including after touching intact skin  
- after touching anything in the patient’s environment, including medical equipment  

Other indications for performing hand hygiene include:  

- hands appearing dirty or contaminated  
- when moving from a potentially contaminated (“dirty”) body site to an uncontaminated (“clean”) body site during the performance of patient care (e.g., assisting the patient with oral hygiene following completion of a bed bath)  
- after removing sterile or nonsterile gloves  
- after using a restroom  
- before eating or handling medication  

WHO and CDC guidelines for performing effective hand hygiene differ.  

WHO guidelines recommend that:  

- the hands be washed with soap and water if the hands appear dirty or contaminated or if exposure to spore-producing pathogens (e.g., *Clostridium difficile* [C. difficile]) is suspected; to wash with soap and water, the hands should first be wet with water, a cleansing agent should be applied to cover all surfaces of the hands, the hands should be washed for 40–60 seconds or more, and the hands should be rinsed with water and dried thoroughly using a single-use towel  
- The single-use towel is utilized to turn off the faucet and then discarded  
- alcohol-based hand antiseptic be used in all other routine clinical situations; a palmful of the antiseptic should be applied and rubbed over all surfaces of the hands for 20–30 seconds or more and allowed to dry  
- soap and water and an alcohol-based antiseptic should not be used concomitantly

CDC guidelines recommend:  

- a minimum duration of 15 seconds for hand washing with soap and water  
- following manufacturer instructions when using an alcohol-based hand antiseptic

Both CDC and WHO guidelines state that:  

- the use of gloves does not obviate the need for performing stringent hand hygiene  
- avoiding artificial nails and maintaining nail tips at < 0.25 inches long is recommended  
- There are no clear indications that wearing jewelry increases the risk for HAI transmission  
- patients/families should be educated, empowered, and encouraged to remind HCWs to perform hand hygiene

More stringent hand hygiene practices are required for surgical hand preparation.  

The WHO has developed a toolkit to facilitate implementation of hand hygiene guidelines.  

The recommended 5-point strategy for implementing WHO hand hygiene guidelines is as follows:  

- Verify that the institution has the necessary resources and support to implement the program  
- Conduct a baseline assessment of current hand hygiene practices  
- Implement the hand hygiene program of guidelines  
- Provide alcohol-based hand antiseptic at the point of care and have at least one sink with fresh soap and towels available for every 10 patient beds
- Provide all HCWs with training and education regarding effective hand hygiene; topics should include the information in “My five moments for hand hygiene” and details regarding the correct method for hand washing with soap and water and hand rubbing with alcohol-based hand antiseptic.
- Observe HCWs performance of hand hygiene and provide feedback.
- Provide hand hygiene reminders (e.g., posters detailing correct hand hygiene methods) in the workplace.
- Develop and promote an institutional climate of safety at all levels of the organization.
  – Evaluate the effectiveness of the hand hygiene program.
  – Plan an ongoing 5-year hand hygiene evaluation program.
  • The implementation toolkit developed by the WHO is available at [http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf](http://www.who.int/gpsc/5may/Guide_to_Implementation.pdf).

In 2011, *C. difficile* was estimated to cause approximately 500,000 HAIs in the U.S. A 2011 guideline by the Society for Healthcare Epidemiology in America (SHEA) for hand hygiene related to *C. difficile* infections (CDIs) recommends the use of soap and water after caring for patients with CDIs. The SHEA guideline, however, is based on expert opinion because there is insufficient data to establish an increase in CDIs using alcohol-based hand hygiene products or a decrease in CDIs using soap and water. Thus, “preferential use of soap and water for hand hygiene after caring for patients with CDIs is not recommended in non-outbreak settings”.

Researchers report that a structured washing technique is more effective than an unstructured technique for removing *C. difficile* from artificially contaminated hands. Comparison and results of the following 3 hand washing techniques included:

• An unstructured technique of hand washing as participants would at home without monitoring or timing.
• The standard structured WHO-recommended hand washing technique of wetting hands for 10 seconds, soaping for 20 seconds, rinsing for 15 seconds, and drying for 15 seconds for a total of 60 seconds.
  – Although not statistically significant, this technique trended towards being superior to the unstructured technique.
• A modified WHO-shortened repeated (SR) technique comprised of the standard WHO technique shortened to 30 seconds and immediately repeated for another 30 seconds.
  – This method was significantly superior in removing *C. difficile* compared to the unstructured technique.
  – Although not statistically significant, this technique trended towards being superior to the standard WHO technique.

The recommended strategy for implementing CDC hand hygiene guidelines includes the following:

• Provide appropriate financial resources and administrative support to promote success of the hand hygiene program.
• Create a multidisciplinary program that promotes the performance of effective hand hygiene.
• Educate HCWs regarding effective hand hygiene practices.
• Provide easily accessible alcohol-based hand antiseptics at the entrance to each patient room or at the patient’s bedside, or provide HCWs with individual pocket-sized containers of alcohol-based hand antiseptic.
• Periodically monitor and record HCW compliance with the hand hygiene program, and provide HCWs with feedback regarding their compliance.
• The CDC offers a Web-based hand hygiene training course at [https://www.cdc.gov/handhygiene/training/interactiveEducation/](https://www.cdc.gov/handhygiene/training/interactiveEducation/).

**What We Can Do**

› Learn about NPSG.07.01.01 and WHO and CDC hand hygiene guidelines, including strategies for implementing hand hygiene guidelines, so you can accurately assess your facility’s hand hygiene program needs; share this information with your colleagues.
› Encourage your colleagues to review the CDC Web-based hand hygiene training course.
› Collaborate with your facility’s infection control and quality assurance committees to develop and implement a hand hygiene program based on WHO or CDC guidelines.
› Collaborate with members of your administrative team and TJC accreditation team to develop procedures that will enhance compliance with TJC guidelines and further promote patient safety as a result of following WHO or CDC hand hygiene guidelines.
› Report your facility’s HAIs to the CDC NHSN.
## References


