



Quality Advisory

Patient Safety: Improving Hand Hygiene through Safe Use of Alcohol-based Hand Rubs

September 16, 2003

A Message to America's Hospitals:

Hospitals and health care professionals are committed to improving the health of the patients they serve. One of our biggest challenges is reducing the chances that a patient may acquire a health care-associated (nosocomial) infection. Scientific research has shown that many of these infections are transmitted to the patient from caregivers' hands. In October 2002, the Centers for Disease Control and Prevention (CDC) released *Guidelines for Hand Hygiene in Health-Care Settings*, which updates the agency's 1985 guidelines. Compliance with the 2002 guidelines is included as one of the Joint Commission on Accreditation of Healthcare Organizations 2004 National Patient Safety Goals.

As part of the new guidelines, the CDC recommends the routine use of alcohol-based hand rubs (hand rubs) as a method to improve hand hygiene in the health care setting, in situations where hands are not visibly soiled. While noting that the efficacy of alcohol-based hand hygiene products is effected by several factors, including the type, concentration and volume of alcohol used, contact time, and whether the hands are wet when the alcohol is applied, the CDC states that "using alcohol-based hand rubs may be a better option than traditional handwashing with plain soap and water or antiseptic handwash, because they not only require less time, but act faster and irritate hands less often."

However, many health care facilities have run into difficulty installing hand rub dispensers because national and local fire codes restrict the location and use of flammable liquids, including alcohol-based rubs. To reconcile these divergent directives, the AHA and CDC co-hosted a meeting with representatives from more than 20 organizations, including fire safety, infection control, public health, government bodies, hospitals and the AHA's American Society for Healthcare Engineering (ASHE), to clarify what fire codes currently allow and to begin discussions about placement and installation of the hand rubs without increasing the risks of harm from fire.

This advisory provides a brief overview of the meeting and what you can do now while these issues are being resolved. We recommend you read the detailed executive summary of the stakeholders' meeting, available at www.hospitalconnect.com/ashe/currentevent/abhi.html.

Please share this information with your:

- Chief medical officer
- Chief of medical staff
- Quality director
- Infection control director/personnel
- Hospital engineering director
- Nurse executives
- Risk management director
- Safety director
- Materials management director

Meeting Summary

Those attending the meeting learned that hand rubs are an important strategy for improving the hand hygiene practices of health care personnel, reducing health care-associated infection and improving overall patient safety. The best adherence to routine hand hygiene practice¹ is achieved when hand rub dispensers are in readily accessible locations, such as in patient rooms and in the corridor near the patient room entrance. However, while existing national fire codes permit hand rub dispensers in patient rooms, they currently prohibit installation in egress or exit corridors.

To evaluate the safety of placing dispensers in accessible locations other than patient rooms, ASHE commissioned a fire modeling study. The results of the study show that dispensers could be safely installed in corridors as long as:

- the volume of the hand rub was 1.2 liters or less.
- the dispensers were not installed too closely together along the corridor.
- facilities avoid installing dispensers over carpeting until further testing.

However, national fire code changes are needed before hand rub dispensers can be installed in egress corridors. Based on these study results and evidence showing the efficacy of hand rubs, health care and fire safety groups, who attended the meeting, agreed to take steps to revise the national fire codes or otherwise obtain exceptions that would permit safe placement of dispensers in readily accessible locations. ASHE will conduct additional fire testing to further define safe placement and use of hand rubs.

Next Steps for Hospitals

- Evaluate and understand your organization's compliance with the CDC's guidelines.
- Consider placing alcohol-based hand rub dispensers in patient rooms, suites, and other appropriate locations within your facility. Do not install them in egress corridors or next to sinks. Work with your local fire marshals to ensure that these installations are consistent with local fire codes.
- Implement an ongoing systematic hand hygiene program that continually monitors and promotes efforts to improve hand hygiene practices. Education is a cornerstone in improving hand hygiene practices – be sure to include information on the proper use of alcohol-based hand rubs. Materials to assist you in developing such a program can be

¹Note: When hands are visibly soiled, the preferred method is soap and water.

found at www.cdc.gov/handhygiene.

- Watch for future *Quality Advisories* on the status of proposed fire code changes that, if made and adopted into local fire codes in your community, would allow the installation of hand rub dispensers in additional locations.

The AHA and ASHE remain committed to helping you continually improve the safety of patient care. We will keep you updated as these issues evolve.

Sincerely,



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