

RFID Debuts as Hand-Washing Compliance Officer

To reduce the spread of infections, a new automated hand-sanitizing system uses RFID to monitor how well health-care workers wash their hands.

By Beth Bacheldor

June 20, 2007—RFID continues to make its way into a number of health-care applications. Now the technology is being employed in an automated, touchless hand-washing system, to help reduce the spread of infections at health-care institutions.

Next week, Resurgent Health and Medical is introducing its CleanTech IC line of automated hand-washing systems, which utilizes RFID tags and interrogators to identify each person using the hand-washing system—and records how long. The system will be unveiled at the Association for Professionals in Infection Control and Epidemiology's (APIC) 2007 Annual Conference in San Jose, Calif.

Health-care-associated infections affect nearly 2 million individuals annually in the United States, and are responsible for approximately 80,000 deaths each year, according to a guide published by the Centers for Disease Control and Prevention (CDC), in collaboration with APIC, the Infectious Disease Society of America (IDSA) and the Society of Healthcare Epidemiology of America (SHEA). The transmission of health-care-related pathogens most often occurs via the contaminated hands of health-care workers, according to the guide, titled the "Guideline for Hand Hygiene in Healthcare Settings".

This, says Resurgent Health and Medical, makes it important to promote and track the hand hygiene of health-care workers. Located in Golden, Colo., the manufacturer makes hand-washing and sanitizing systems for health-care, agriculture, food-processing and clean-room manufacturing companies.

The CleanTech IC will be available in three different versions: the IC In-Counter, designed to be built into existing workplace countertops or other small areas; the portable, freestanding IC Table Mount; and the IC Wall Mount, intended to keep workplace floors clear and accessible.

When washing hands, a caregiver wearing an RFID badge is identified by the CleanTech machine's RFID interrogator. The reader identifies the employee by scanning that person's unique tag ID number, associated with the caregiver's name in a back-end database. The device records the date and time, as well as the beginning and end of the wash cycle, then communicates that information to the database, which uses the interrogator's Ethernet card MAC address to identify each CleanTech and the department in which it is located.

RELATED_ARTICLES The wash cycle automatically starts when the caregiver's hands are inserted into the machine's cylindrical openings. Water and sanitizing solution is applied for 10 seconds through 20 high-pressure nozzles, located in each opening and designed to clean the hands from fingertips to wrists.

If a caregiver removes the hands before the 10-second cycle finishes, the interrogator transmits this information to the back-end database. Hospital administrators can then run departmental statistics and other compliance reports to determine which caregivers have completed the washing cycles.

Copyright ©2005 RFID Journal, Inc. All Rights Reserved