

Long-Term Care Survey Alert

Research: Don't Let MDROs Catch Your Facility Off Guard

Review these CDC guidelines, advises LTC infection control expert.

Are you on top of recent research on multidrug resistant organisms?

Kerri Thom, MD, reports that studies have found "MRSA, *C. difficile*, and vancomycin-resistant enterococci ... in the environment surrounding patients infected or colonized with the organism."

Also: In research published in the November 2011 American Journal of Infection Control, Thom and colleagues at the University of Maryland "took samples from ten surfaces in each of 50 rooms inhabited by patients with a recent (less than two months prior to environmental sampling) or remote (more than two months) history" of multidrug resistant *Acinetobacter baumannii*, states a press release on the study. "Of these, 9.8 percent of surface samples representing 48 percent of the tested rooms showed environmental growth of *A. baumannii*."

"The study found that patients with a recent history of [multidrug resistant]-AB colonization or infection were not significantly more likely than those with a remote history of MDR-AB to contaminate their environment," reports the release from the Association for Professionals in Infection Control and Epidemiology.

"Supply carts (10/50, 20%), floors (8/50, 16%), infusion pumps (7/50, 14%), and ventilator touch pads (5/44, 11.4%) were most commonly contaminated," states an AJIC abstract for the study. The abstract also states that "in 85% (17/20) of cases, the environmental isolate was classified as genetically similar to the patient isolate."

Thom, the lead researcher for the study, says "there is research in which *Acinetobacter* has been identified in the healthcare environment. Much of it comes from studies of healthcare-associated outbreaks," she tells Eli. "To my knowledge, however, this is the first study to systematically look at *Acinetobacter* in the environment, identifying potential contamination of several high touch areas in patient rooms."

"Contamination of the environment is a potential source of transmission for any patient," Thom adds. "However, the exact role the environment plays in infection is unclear."

While the study involved ICU patients, Thom notes that "we have patients in ICUs who frequently come from long-term care facilities or SNFs and return to" those settings. And "*A. baumannii* is an important pathogen for people in any setting, including long-term care," Thom stresses. "It's also been found in wound infections in many returning veterans," she adds. "Hospitalized patients, particularly those patients who are critically-ill, receiving mechanical ventilation, or have recently received broad spectrum antibiotics are at increased risk for colonization and infection with this organism."

Thom also notes that "colonization with *A. baumannii* can lead to infection. In fact, many patients who are infected are colonized prior to infection. However, not all patients who are colonized develop infection, particularly healthy adults," she adds.

James Marx, RN, MS, CIC, an infection preventionist with long-term care expertise, cautions that *Acinetobacter baumannii* "can become a problem in subacute SNFs that have more complex patients with ventilation and trachs, and more complex wounds."

Know the Infection Control Ropes in SNFs

"Some facilities will use standard precautions for a patient with *A. baumannii* infection or colonization, unless it's in a body fluid that can't be contained, such as an open trach," says Marx. "For example, if it's in the urine or blood, depending on the setting and the patient's hygiene, then typically the staff can contain the body fluids," he adds.

"The CDC recommendations for MDROs are standard precautions in the SNF but it has to be based on the individual case -- unlike the hospital where anyone who is colonized or infected with an MDRO will be on contact precautions. Hospital-based SNFs will sometimes follow the hospital's policy whereas others will use the CDC recommendations 'to consider the individual patient's clinical situation and facility resources in deciding whether to implement contact precautions,'" Marx explains.

Does it make sense for healthcare staff to simply wear gloves when caring for all patients? Marx notes that "people have suggested using a universal gloving concept for a while but it's not clear whether it makes a difference." Thom agrees, noting "that question is something that [the infection control] community is interested in answering."

"Gloves are about 70 percent effective as people are likely to contaminate their hands when they remove the gloves, which is why handwashing remains a central component of infection control," Thom says. "However, gowns and gloves do reduce the pathogen burden in a healthcare setting."

Hone Disinfection and Cleaning

"Skilled facilities should review the most recent CDC guidelines on sterilization and disinfection," Marx advises. "Pertinent sections are *Clostridium difficile*, bloodborne pathogens, emerging pathogens, surface disinfection, and contact time. The principles of disinfection can help a facility evaluate the appropriate disinfectant for general use and changes that may be needed during an outbreak," he adds. To review the guidelines, go to www.premierinc.com/safety/topics/guidelines/downloads/Disinfection_Nov_2008.pdf.

Should healthcare facilities culture patient care areas? "There are a lot of inherent problems with doing that and it might not identify particular organisms," Thom tells Eli. "But providing some formal feedback about [how well the facility is being cleaned] is essential," she stresses. "When you look in the literature, you see there are ways you can formally test whether a surface has been cleaned," she adds. For example, "there are products available that you apply as a powder that fluoresces; people may not see the powder when they are cleaning, but you can come back and check to see if it fluoresces which means it wasn't wiped off the surface."

Resources: See the Association for Professionals in Infection Control and Epidemiology's "Environmental Hygiene Daily Resident Room Skills Check List" on page 7 of this issue. Also see "Compliance, Clinical & Survey News to Use" in this issue to read about the CDC's new fact sheet titled "Antibiotic use in long-term care facilities."