ABC’s of HCA’s MRSA control program

HCA, the hospital corporation based in Nashville, Tennessee, with 170 hospitals, is taking an aggressive stance on methicillin-resistant *Staphylococcus aureus* with its “ABCs” for MRSA control. The effort is led by HCA’s chief medical officer, Jonathan B. Perlin, MD, PhD, MSHA, FACP.

The ABCs include:
- Active surveillance cultures
- Barrier precautions
- Compulsive hand hygiene
- Disinfection and environmental cleaning
- Executive championship.

**A: Active surveillance cultures**

“The evidence shows that no one thing will protect your environment from MRSA—you have to take a bundled approach,” says Stephanie Davis, RN, MS, CNOR, HCA’s director of orthopedics and neurosciences.

For HCA surgical services, recommendations include active surveillance cultures for high-risk patients, defined as those having cardiac, spinal, or hip or knee replacement surgery.

HCA recommends that patients try to have preoperative testing prior to their elective surgery so culture results will be available and treatment can be initiated. If a patient is colonized with MRSA, steps are taken to decolonize the person. Steps include instructing the patient to:
- apply mupirocin (Bactroban) to the nares twice a day for 5 days
- shower with a chlorhexidine scrub. The Centers for Disease Control and Prevention (CDC) *Guideline for Prevention of Surgical Site Infection, 1999* recommends bathing or showering with an antiseptic.
- Vancomycin is given for antibiotic prophylaxis for those identified to have MRSA.

**B: Barrier precautions**

HCA urges its hospitals to follow the CDC-recommended contact precautions for patients infected or colonized with multidrug-resistant organisms like MRSA. The CDC advises placing these patients in a private room. (See sidebar for precautions when transferring surgical patients.)

**C: Compulsive hand hygiene**

Getting staff and physicians to comply with hand hygiene is tough, though clean hands are the single most important factor in preventing disease transmission.

Among steps HCA has taken:
- Make sure hand sanitizer dispensers are in convenient places.
- Post reminder signs. One sign shows a graphic of a hand with bacteria that grew after the hand was pressed into a Petri dish.
Conduct monitoring by staff. On each unit, staff rotate checking up on their peers.

Empower patients. Posters tell patients it’s OK to remind caregivers to wash their hands.

Send letters with progressively stronger wording to those who are not compliant. “We haven’t had to send many letters because people are getting the message,” Davis says.

One measure of progress—since the ABC program was introduced in January 2007, the amount of hand sanitizer used at HCA hospitals has risen by 600%.

Staphylococcus, including MRSA, can live for up to 56 days on hospital surfaces, Huang and colleagues found. Two strains of MRSA survived for 9 to 11 days on a plastic patient chart, a tabletop, and a cloth curtain, in a study by Neely et al.

OR surfaces may not be as clean as one might think (sidebar). There are established guidelines for cleaning—the challenge is making sure they are followed meticulously.

HCA uses pictures as reminders. For example, a photo of a typical OR has stars to mark places that need attention, such as the phone and the underside of the OR bed where hands touch.

“We are used to fast turnover in the OR, and you need to clean the room quickly. But you can’t overlook things like the doors and telephones,” Davis says.

Executives and managers at HCA hospitals have a 10-point checklist for implementing the MRSA control plan:

- Form a multidisciplinary team to implement the plan.
- Identify physician and executive champions.
- Have the medical executive committee at the hospital address the MRSA policy.
- Have an active surveillance process in place for high-risk patients.
- Have the CEO and chief nursing officer perform walk-arounds to talk with the staff and physicians and make sure they are washing their hands, using contact precautions, and so forth.
• Standardize MRSA culture tests and the reporting method.
• Monitor the facility’s infection rates and hand hygiene compliance.
• Engage and educate community leaders in nursing homes and long-term care facilities about infection control policies.
• Ensure that hand sanitizer dispensers have been positioned so they are visible and accessible to staff and patients.
• Educate environmental services personnel about proper disinfection supplies and techniques and observe for adherence.