

Hospitals divided over best way to fight drug-resistant bacteria

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A troublesome drug-resistant bacteria, methicillin-resistant staphylococcus aureus – known simply as MRSA – kills nearly 19,000 Americans each year during hospital stays.

But, hospital officials are divided over the best method to reduce such infections.

Some say stringent sterilization procedures are the most cost-effective technique, while others say all patients entering hospitals should be tested for MRSA, which can be acquired in communal settings like gyms and college dormitories.

Baystate, Holyoke and Mercy medical centers do not automatically test unless there are symptoms of the infection. However, Cooley Dickinson Hospital in Northampton has chosen to test all patients admitted through the emergency room, and last week it became the first hospital in New England to use a new sterilization technique – pulsed ultraviolet light to kill MRSA and other organisms in its patient and operating rooms.

MRSA is resistant to front-line antibiotics, but there are still antibiotics that are effective against it. In 2005 in the United States, about 94,000 people contracted MRSA and about 20 percent died from the infection during a hospital stay.

The federal Centers for Disease Control has made no specific recommendation to hospitals about how to combat MRSA. However, the agency is closely following studies of hospitals' varying strategies.

Area health officials say that what is right for one hospital may not be right for another.

For instance, at urban hospitals with busy emergency rooms, universal testing may have drawbacks that it does not



The Republican / John Suchocki

Cooley Dickinson Hospital Environmental Services technician Paul Sniadach sets up one of the two room disinfectant units now in use at the hospital. The Xenex produces high intensity flashes of ultraviolet light that kills all virus, bacteria and spores that can cause hospital borne infections for patients.

have at a community hospital where a greater percentage of patients enter for elective surgery and non-emergency care.

At Mercy Medical Center, the emphasis has been on less costly measures to rid the hospital of the bacteria, says Dr. Robert P. Hoffman, head of infection control at the center.

"Our rates have been very low at Mercy. Our transmission rate is as close to zero as you can get. We make sure everyone washes their hands. We literally measure the amount of soap they are using," he said.

"If your infection rates are very low, then in an era when the amount of money is limited, you can't spend it on something that isn't a major problem to begin with. And, that's why there are different local decisions," Hoffman said.

When someone does test positive for MRSA, they are often isolated in a room by themselves, and doctors and nurses take additional precautions to thwart the spread, such as by wearing plastic gowns, masks and gloves during all visits.

Precautionary measures in hospitals have dramatically reduced MRSA infections that enter the bloodstream through lines such as feeding and medication tubes. Between 2001 and 2007, they dropped by 50 to 70 percent, according to data from the Centers for Disease Control.

Specific MRSA figures for Massachusetts hospitals are not given out by the state Department of Public Health or the Centers for Disease Control.

At Baystate Medical Center, the emphasis is also on preventing the proliferation of the bacteria, said Dr. Sarah D. Haessler, an infectious disease specialist at the center.

"We don't do active surveillance culturing," she said. "It hasn't been shown to help, and it's a waste of resources. The only time it helps is when you have an outbreak in a particular place, like an (intensive care unit) and you see multiple cases in the same area."

Dr. Joanne Levin, head of the infection control program at Cooley Dickinson, said her hospital uses a combined strategy of testing all patients who enter through the emergency room for MRSA along with precautionary sterilization techniques, such as thorough and frequent hand washing, to battle the bacteria.

The strategy has reduced MRSA infections by 70 percent at the hospital, officials at Cooley Dickinson have reported.

Now, Cooley Dickinson has added a new sterilization technique – pulsed ultraviolet light to kill MRSA and other organisms. On Tuesday the hospital became the first in New England to deploy a Xenex Disinfection System in its patient and operating rooms.

Levin said screening patients for MRSA "really only works when coupled with isolation for patients who are found to

carry MRSA.”

However, Haessler said isolating patients comes with risks of its own.

“Everyone who goes into the room has to put on plastic gowns and gloves. That can cause psychological harm to that person. It’s a source of anxiety,” she said.

Also, the stringent dress requirements could lead to longer times for nurses and doctors to answer calls, Haessler said.

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