

# Germ-killing soaps cut hospital infection rates

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A policy of regularly washing every patient in the intensive care unit with antimicrobial cloths helped cut down on dangerous blood infections by 44 percent, a US study said Wednesday.

The strategy was better at cutting back potentially lethal methicillin-resistant *Staphylococcus aureus* (MRSA) infections than screening and isolating infected patients, said the report in the *New England Journal of Medicine*.

The randomized study compared methods at 43 hospitals, including 74 ICUs and 74,256 patients.

The winning practice, known as "universal decolonization," involves giving patients a nasal dose of the antibiotic mupirocin twice daily for five days, and bathing patients daily with cloths covered in antimicrobial chlorhexidine for the entire ICU stay.

"Universal decolonization of patients in the ICU was the most effective strategy, significantly reducing MRSA-positive clinical cultures by 37 percent and [bloodstream infections](#) from any pathogen by 44 percent," said the study.

The method works by reducing the number of pathogens on the skin, "thus protecting patients in the ICU from their own [microbiota](#) during a period of heightened vulnerability to infection," said the study.

Also, by cutting back on the number of microbes, there were fewer opportunities for patient-to-patient spread of [harmful pathogens](#).

Another key to the strategy was it began on the first day in the ICU, eliminating the waiting involved with trying to isolate patients who may be infected.

The findings indicate that legislative mandates—currently on the books in nine US states—that require MRSA screening in the ICU may be misguided.

"This study helps answer a long-standing debate in the medical field about whether we should tailor our efforts to prevent infection to specific pathogens, such as MRSA, or whether we should identify a high-risk patient group and give them all special treatment to prevent infection," said lead author Susan Huang.

"The universal [decolonization](#) strategy was the most effective and the easiest to implement. It eliminates the need for screening ICU patients for MRSA," said Huang, medical director of epidemiology and infection prevention at University of California Irvine Health.

Washing all ICU patients this way could also cut down on unnecessary surveillance tests and do away with precautions over contacting patients who test positive, which can interfere with care, the researchers said.

However, some prior research has pointed to the possibility that widespread use of [chlorhexidine](#) and mupirocin could lead to MRSA resistance, so such efforts would need to be monitored carefully.

MRSA is priority target among health care associated infections because of its prevalence, virulence and multidrug resistant profile, said the study.

The study, known as the REDUCE MRSA trial, was carried out by the University of California, Irvine, Harvard Pilgrim Health Care Institute, Hospital Corporation of America (HCA) and the Centers for Disease Control and Prevention.

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