New strategies to combat MRSA in hospitals

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New guidelines aim to reduce the prevalence of methicillin-resistant *Staphylococcus aureus* (MRSA), improve patient safety and prioritize current prevention efforts underway in hospitals. This drug resistant bacterium is a common source of patient morbidity and mortality in U.S. hospitals, causing nearly twice the number of deaths, significantly longer hospital stays and higher hospital costs than other forms of the bacteria.

The strategies were published in the July issue of *Infection Control and Hospital Epidemiology* and produced in a collaborative effort led by the Society for Healthcare Epidemiology of America, the Infectious Diseases Society of America, the American Hospital Association, the Association for Professionals in Infection Control and Epidemiology, and The Joint Commission.

"Many hospitals have made inroads in preventing healthcare-associated MRSA through essential prevention strategies, but some hospitals need additional intervention," said David Calfee, MD, MS, co-lead author of the guidelines with Cassandra Salgado, MD, MS. "This guidance provides a roadmap for prioritizing and implementing strategies."

Key highlights from the guidelines include:

- Conduct an MRSA risk assessment: During the assessment, two important factors to focus on include the opportunity for MRSA transmission (i.e. number of patients who are MRSA carriers and produce risk for transmission) and estimates of facility-specific MRSA burden and rates of transmission and infection (i.e. the ability of facility's current activities to contain MRSA).
- Implement an MRSA monitoring program and track rates: Goals of the program should focus on identifying any patient with a current or prior history of MRSA and provide mechanism for tracking hospital-onset cases of the infection. Alerts should be sent out from laboratory to notify HCP of new colonization or cases of MRSA.
- Ensure compliance on hand hygiene recommendations: Healthcare personnel should perform hand hygiene in accordance with CDC or World Health Organization recommendations.
- Ensure compliance with contact precautions for MRSA-colonized and infected patients: Patients colonized with MRSA should be separated from the general patient population and HCP should wear gloves and gowns when interacting with this patient population to prevent the spread of the bacteria.
- Ensure proper cleaning and disinfection of equipment and environment: Because contamination can be widespread among the patient's environment, optimal cleaning and disinfection procedures should be employed.
- Educate healthcare personnel, patients and families about MRSA: Personnel, patients and families should be made aware of risk and their role in prevention, transmission and recommended precautions.
- Implement an alert system: Notification of laboratory-identified or readmitted patients with MRSA should be instituted to provide timely information and allow prompt initiation of control measures.

"There is no "one-size-fits-all" approach to improving practices. Local contextual factors matter when implementing strategies," said Edward Septimus, MD, an author of the commentary, Approaches for Prevention Healthcare-Associated Infections: Go Long or Go Wide, also published in the July issue.

The new practice recommendations are a part of Compendium of Strategies to Prevent Healthcare-Associated Infections in Acute Care Hospitals: 2014 Updates, a series of articles to be published over several months sharing evidence-based strategies to help healthcare professionals

effectively control and prevent the spread of healthcare-associated infections (HAIs). The 2014 release revises the initial 2008 Compendium publication.

More information: David Calfee, Cassandra Salgado, Aaron Milstone, Anthony Harris, David Kuhar, Julia Moody, Kathy Aureden, Susan Huang, Lisa Maragakis, Deborah Yokoe. "Strategies to Prevent Methicillin-Resistant Staphylococcus aureus Transmission and Infection in Acute Care Hospitals: 2014 Update." *Infection Control and Hospital Epidemiology* 35:7 (July 2014)

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