

MRSA Frequently Asked Questions (FAQs)

January 2007

Q: What is *Staphylococcus aureus*?

A: *Staphylococcus aureus* are bacteria commonly carried on the skin or in the nose of healthy, often asymptomatic people. 25% or 30% of the population is colonized (when bacteria are present but not causing an infection) in the nose with staph bacteria. Most skin infections are minor pimples and boils and can be treated, but staph bacteria can also cause surgical wound infections, bloodstream infections and pneumonia.

Q: What is Methicillin resistant *Staphylococcus aureus*? (MRSA)

A: Some staph bacteria are resistant to antibiotics. MRSA is a type of staph that is resistant to antibiotics called beta-lactams. Beta-lactam antibiotics include methicillin and other more common antibiotics such as oxacillin, penicillin and amoxicillin. While 25% -30% of the population is colonized with staph, approximately 1% is colonized with MRSA

Q: What does it mean if a patient is colonized?

A: Colonization refers to the presence of bacteria in or on a host with growth and multiplication, but no tissue invasion or damage, no symptoms other than a positive culture. Colonization can lead to infection, which is the entry and multiplication of microorganisms in the tissues of the host, leading to local or systemic signs and symptoms of infection.

Q: What is active surveillance and why is it important?

A: Many organizations such as The Centers for Disease Control and Prevention (CDC) and The Society for Healthcare Epidemiology of America (SHEA) recommend active surveillance of some or all patients for MRSA. A nasal swab is collected and barrier precautions are initiated for all positive patients, even those colonized. Another method used is to also isolate any patient with a history of MRSA in the past, culture them and maintain isolation if positive. Some populations can benefit by from decolonization, like those facing surgery. The treatment might lessen the possibility of a surgical patient later developing a wound infection, but colonization may persist in spite of treatment.

Q: When can a patient with MRSA be taken out of isolation?

A: There are no set protocols for removing contact precautions. Some hospitals have adopted three negative cultures from the infected site as well as other at risk sites, within a week, as a reasonable policy. Some facilities continue with contact precautions until discharge.



Hospital Interventions
Quality Improvement Organization
Support Center

Find out more at
<http://www.medqic.org/Hospital>

MRSA Frequently Asked Questions (FAQs)

January 2007

Q: Which patients are at most risk for MRSA?

A: The population always thought to be most at risk is that group of patients living in close quarters, who are elderly, those who are immune compromised, any patient with a device such as a hip implant, or a long term ventilator, and patients who have had a past history of MRSA. With the advent of Community-acquired MRSA (CA-MRSA), there has been an increase in skin lesions in populations who have close skin-to-skin contact, openings in the skin such as cuts or abrasions, contaminated items and surfaces, crowded living conditions and poor hygiene. Athletic teams, prison populations and schools have seen CA-MRSA outbreaks.

Q: How do we prevent the spread of MRSA?

A: Judicious use of antibiotics, the appropriate barrier precautions and rigorous hand hygiene are the cornerstones of any program attempting to decrease the incidence of MRSA cross contamination.

Q: Why is it important to monitor Vancomycin use?

A: With resistant staph, Vancomycin has been widely used to treat infections, however, Vancomycin resistance has been in some bacterial strains. Avoiding over-use is crucial. Some valid reasons to use Vancomycin for prophylaxis might be the documentation of beta-lactam allergy, known, prior colonization with MRSA, high risk due to acute inpatient stay in the past year, patient with LTC setting within the last year, prior to admission, increased MRSA rate for facility or specific procedure, documentation of chronic wound care or dialysis, inpatient stay longer than 24 hours prior to principal procedure.

Resources

Huang, Susan S, et al "Impact of Routine Intensive Care Unit Surveillance Cultures and Resultant Barrier Precautions on Hospital-Wide Methicillin-Resistant *Staphylococcus aureus* Bacteremia," Clinical Infectious Diseases October, 2006 43:971-8

Stokowski, RN, MS "Questions About MRSA and Answers From the Experts" Medscape Nurses Posted 11-1-2006, Accessed 1-23-2007 www.medscape.com.

Kievens, R. Monina: et al "Community-associated Methicillin-resistant *Staphylococcus aureus* and Healthcare Risk Factors" Emerging Infectious Diseases 2006;12(12):1991-1993 Posted 1-10-2007, Accessed 1-23-2007 www.medscape.com

CDC "Community-Associated MRSA Information for Clinicians" Released February 3, 2005. Accessed 1-19-2007, www.cdc.gov/ncidid/dhqp/ar_mrsa_ca_clinicians.html