

## VISA/VRSA Fact Sheet

- 1. What is *Staphylococcus aureus*?** - *Staphylococcus aureus*, often simply referred to simply as “staph”, are bacteria commonly found on the skin and in the noses of healthy people. Approximately 25% to 30% of the human population is colonized (bacteria are present, but not causing an infection) in the nose. Occasionally, staph does cause infection; i.e. staph bacteria are one of the most common causes of skin infections in the United States. Most of these infections are minor (such as pimples, boils, and other infectious skin conditions) and most can be treated without the use of antimicrobial agents (also known as antibiotics or antibacterial agents). However, staph bacteria can also cause serious and sometimes fatal infections, i.e. bloodstream infections, wound infections, and pneumonia. In the past, most serious staph bacterial infections were treated with a type of antimicrobial agent related to penicillin. Over the past 50 years, treatment of these infections has become more difficult because staph bacteria have become resistant to various antimicrobial agents, including the commonly used penicillin-related antibiotics.
- 2. What are vancomycin intermediate *Staphylococcus aureus* (VISA) and vancomycin resistant *Staphylococcus aureus* (VRSA)?** - VISA and VRSA are specific types of antimicrobial-resistant staph bacteria. While most staph infections still respond to the antimicrobial agent vancomycin some have developed resistance. VISA and VRSA are more difficult to treat because they no longer respond to vancomycin treatment.
- 3. How do VISA and VRSA get their names?** - Staph bacteria are classified as VISA or VRSA based on laboratory tests. Laboratories perform tests to determine if staph bacteria are resistant to antimicrobial agents that might be used for treatment of infections. For vancomycin and other antimicrobial agents, laboratories determine how much of the agent is required to inhibit the growth of the organism in a test tube. The result of the test is usually expressed as a minimum inhibitory concentration (MIC) or the minimum amount of antimicrobial agent that inhibits bacterial growth in the test tube. Staph bacteria are classified as VISA if the MIC for vancomycin is 4-8 $\mu$ g/ml (meaning resistance is at intermediate levels), and classified as VRSA if the vancomycin MIC is  $\geq$ 16 $\mu$ g/ml (meaning fully resistant).
- 4. Who gets VISA and VRSA infections?** - Persons who develop VISA and VRSA infections may have underlying health conditions (such as diabetes and kidney disease), previous infections with methicillin-resistant *Staphylococcus aureus* (MRSA), a history of tubes going into their bodies (such as intravenous catheters), recent hospitalizations, and recent exposure to vancomycin and other antimicrobial agents.
- 5. What should I do if I think I may have a staph infection?** - See your healthcare provider.
- 6. Are VISA and VRSA infections treatable?** - Yes. To date, all VISA and VRSA isolates have been treatable with several Food and Drug Administration (FDA) approved drugs.

7. **How can the spread of VISA and VRSA be prevented?** – The use of appropriate infection control practices (such as wearing gloves before and after contact with infectious body substances and adherence to proper hand hygiene) by healthcare personnel can significantly reduce the spread of VISA and VRSA.
  
8. **What should I do if a family member or close friend has VISA or VRSA?** - VISA and VRSA are types of antibiotic-resistant staph bacteria. Therefore, as with all staph bacteria, spread occurs among people having close physical contact with infected patients or contaminated material like bandages. Persons having close physical contact with infected patients should: (1) keep their hands clean by washing thoroughly with soap and water, (2) avoid contact with other people’s wounds or material contaminated from wounds. If you visit a friend or family member who is infected with VISA or VRSA while they are hospitalized, follow the hospital’s recommended precautions.
  
9. **For more information about VISA/VRSA:**  
[http://www.cdc.gov/HAI/organisms/visa\\_vrsa/visa\\_vrsa.html](http://www.cdc.gov/HAI/organisms/visa_vrsa/visa_vrsa.html)

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.