

VRSA/VISA
(Vancomycin Resistant/Intermediate *Staphylococcus aureus*)
Information for Clinicians

Causative Agent: *Staphylococcus aureus* that has developed reduced susceptibility to vancomycin. This is important in strains that are also resistant to methicillin-class antibiotics (MRSA), as it may severely limit therapeutic choices and pose an infection control risk.

Transmission/Infection Control: It is extremely important that all cases of VRSA/VISA be rapidly and accurately identified and isolated. Notify infection control and the local health department immediately upon possible identification. The patient should be isolated with strict contact precautions. If the isolate is confirmed, CDC should be notified (Utah Department of Health can assist with this notification). All possible contacts to the patient need to be identified and categorized as to the level of interaction. Contacts will need to be cultured to assess the possible spread of this infection. All contacts with VRSA/VISA will need to be decolonized.

Incidence: The occurrence of these diseases is extremely low. As of June 2004, only 3 cases of VRSA had been identified in the United States. VISA is also extremely uncommon.

Possible Risk Factors: Many patients who develop VRSA or VISA have chronic underlying illnesses, such as diabetes, renal failure (dialysis), cancer, etc. Many have undergone extensive antibiotic therapy, including prolonged vancomycin exposure.

Treatment: Treatment for VRSA/VISA is dependent upon the antibiotic susceptibility profile of the organism. We strongly suggest that clinicians with possible cases consult with an infectious disease physician as soon as possible and notify their local health department immediately.

Laboratory Identification: VRSA/VISA are difficult for laboratories to detect, and automated MIC devices (such as MicroScan) are unreliable at detection. Generally, a VRSA is considered to be resistant at ≥ 32 $\mu\text{g/mL}$, and VISA are resistant to vancomycin at concentrations from 8-16 $\mu\text{g/mL}$. Isolates with an MIC ≥ 4 $\mu\text{g/mL}$ should be reconfirmed, saved, and submitted to the UDOH laboratory.

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