

***VANCOMYCIN INTERMEDIATE and
VANCOMYCIN RESISTANT STAPHYLOCOCCUS AUREUS
(VISA/VRSA)***

Last revised February 10, 2011

I. IDENTIFICATION

- A. CLINICAL DESCRIPTION: *Staphylococcus aureus* causes a variety of syndromes, including skin and soft tissue infections, empyema, bloodstream infections, pneumonia, osteomyelitis, septic arthritis, endocarditis, and meningitis. VISA and VRSA are isolates of *S. aureus* with reduced susceptibility to Vancomycin (MIC of ≥ 4 ug/ml).
- B. REPORTING CRITERIA: Laboratory confirmation
- C. LABORATORY CRITERIA FOR CONFIRMATION:
- Criterion: isolation of *S. aureus* from any body site
 - AND immediate or full resistance of the *S. aureus* isolate to vancomycin, detected and defined according to the Clinical and Laboratory Standards Institute approved standards and recommendations (MIC 4-8 ug/ml for VISA and MIC ≥ 16 for VRSA).
- D. WISCONSIN CASE DEFINITION:
- Suspect case of VISA or VRSA: identification of an isolate of *S. aureus* with an MIC of ≥ 4 ug/ml when tested in vitro against vancomycin.
 - Confirmed case of VISA: an isolate of *S. aureus* confirmed by testing at the WSLH to have an MIC of 4-8 ug/ml when tested in vitro against vancomycin.
 - Confirmed case of VRSA: an isolate of *S. aureus* confirmed by testing at the WSLH to have an MIC of ≥ 16 ug/ml when tested in vitro against vancomycin.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. VRSA: WISCONSIN DISEASE SURVEILLANCE CATEGORY I:
Report IMMEDIATELY BY TELEPHONE to the patient's local health department upon identification of a confirmed or suspected case. the local health department shall then notify the state epidemiologist immediately of any confirmed or suspected cases. Within 24 hours submit a case report either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means.

Submit isolates of *S. aureus* with susceptibility to Vancomycin of MIC ≥ 16 ug/ml to the WSLH for confirmatory testing.

VISA: WISCONSIN DISEASE SURVEILLANCE CATEGORY II:
Although listed as a Category I disease in Wisconsin Administrative Code DHS 145, VISA may be reported as a Category II disease. Report to the patient's local health department either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means within 72 hours upon recognition of a case or suspected case.

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

B. EPIDEMIOLOGY REPORTS REQUIRED:

- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs
OR
- *Paper Copy* – Acute and Communicable Diseases Case Report (F-44151)

C. PUBLIC HEALTH INTERVENTIONS:

None for VISA.

For VRSA: Confirmatory testing of suspect isolates, evaluation of institution infection control measures, and assessment of transmission risk to contacts and health care workers to determine need for testing of contacts.

PREVENTION MEASURES: Patients should be managed according to recommendations described in the DPH “Guidelines for prevention and control of antibiotic resistant organisms in health care settings,” and the CDC “Management of multi-drug resistant organisms in health care settings, 2006.” Special attention should be given to restriction of vancomycin use.

III. CONTACTS FOR CONSULTATION

A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:

<http://www.dhs.wisconsin.gov/localhealth/index.htm>

B. BCDER / COMMUNICABLE DISEASE EPIDEMIOLOGY SECTION: (608) 267-9003

C. WISCONSIN STATE LABORATORY OF HYGIENE / BACTERIOLOGY: (608) 263-3421

IV. RELATED REFERENCES

- Clinical and Laboratory Standards Institute. Performance standards for antimicrobial susceptibility testing. 16th informational supplement. M100-S16. Wayne, PA: CLSI, 2006.
- Centers for Disease Control and Prevention. Nationally notifiable infectious diseases, 2008. Available at: <http://www.cdc.gov/ncphi/diss/nndss/phs/infdis2008.htm>.
- Wisconsin Division of Public Health. Guidelines for prevention and control of antibiotic resistant organisms in health care settings, September 2005. Available at: <http://dhfs.wisconsin.gov/communicable/MRSA/index.htm>
- Siegel JD, Rhinehart E, Jackson M, Chiarello L. Management of multi-drug resistant organisms in health care settings, 2006. AJIC 2007; 35: S165-S193.
- American Academy of Pediatrics. Summaries of infectious diseases. In: Pickering LK, Baker CJ, Long SS, McMillian JA, eds. Red Book: 2006 Report of the Committee on Infectious Diseases. 27th ed. Elk Grove Village, IL; American Academy of Pediatrics; 2006: 601-602.