

Methicillin-Resistant *Staphylococcus aureus* (MRSA) PCR

A rapid, accurate and powerful tool to assist in the prevention and control of MRSA

Staphylococcus aureus is a major cause of nosocomial or hospital-acquired infections. Treatment can be challenging due to antimicrobial-resistant strains. Methicillin-resistant *S. aureus* (MRSA) is frequently encountered in health-care settings: up to 60% of nosocomial infections in patients in the intensive care unit are caused by methicillin-resistant *S. aureus*.¹ Risk factors include prolonged hospital stay, proximity to patients infected with MRSA, prolonged exposure to multiple, broad-spectrum antibiotic therapy, and MRSA nasal carriage. Early screening for MRSA nasal colonization can identify patients requiring isolation and can be part of an effective infection control program for MRSA.

Methicillin-resistant *S. aureus* PCR is a rapid, molecular-based assay cleared by the FDA for the direct detection of MRSA from nasal specimens. Compared to culture methods requiring up to five days, the rapid turn-around time of the MRSA PCR test enables hospitals to dramatically reduce the time required to identify an outbreak, enabling improved prevention and control.

HOW IS IT USED?

- Rapid, direct detection of nasal colonization by MRSA
- Aids in the prevention and control of MRSA infections in healthcare settings

Sensitivity/Specificity of MRSA PCR vs. Culture

Screening Method	Sensitivity %	Specificity %
Culture	78-80	99
PCR	93	96

MRSA, PCR: Negative Predictive Value - 98%
Positive Predictive Value - 94%

MRSA PCR Limit of Detection: 325 MRSA per swab
24 MRSA/mL of saline

MRSA PCR (Direct Detection from Nasal Swabs)

Test Code	17656X
CPT Code*	87798
Specimen Requirements	Nasal swab (Liquid Stuart Transport); requires specific swab transport system (BBL™ CultureSwab™ [Cat #220099]; Quest Diagnostics Stock Clerk #132858). Do not use gel swabs.
Transport Temperature	Refrigerated
Specimen Stability	Refrigerated: 5 days; Room temperature: 36 hours; Frozen: Unacceptable
Set up and Reporting	Set up Mon-Sat; reports same day
Reference Ranges	No MRSA DNA detected
Methodology	Polymerase Chain Reaction (PCR)
FDA Status	FDA cleared

*The CPT code provided is based on AMA guidelines and is for informational purposes only. CPT coding is the sole responsibility of the billing party. Please direct any questions regarding coding to the payor being billed.

1. National Nosocomial Infections Surveillance System (NNISS).

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