

Laboratory Update- Microbiology

Effective July 22, 2024

New testing from Microbiology

Micro will be performing a Rapid test for PBP2. What does this mean for our providers?

Early detection of methicillin-resistant Staphylococcal infections is known to reduce healthcare costs, critical in efforts to decrease patient morbidity and mortality, reduce empiric use of vancomycin and permits cost-effective decisions for optimal patient management.

Conventional methods of antimicrobial susceptibility testing can take over 24 hours, and *mecA* gene identification is expensive and time-consuming to perform. However, penicillin-binding protein 2a (PBP2a) detection has the advantage over *mecA* in identifying strains that not only harbor the *mecA* gene but also produce the protein that confers resistance to penicillin.

When Micro identifies a *Staphylococcus aureus* from culture, we will perform the PBP2 rapid test to identify if the *Staphylococcus aureus* is an MSSA (methicillin sensitive) or MRSA (methicillin resistant). A preliminary report will be sent to the chart. This process will be completed for all culture samples except for blood.

*Preliminary report: altered PBP2 detected, indicating presence of MRSA.

*Preliminary report: NO altered PBP2 detected, indicating MRSA NOT present.

Providers will see PBP2 being reported beginning July 22, 2024.

All inpatient MRSA identified with PBP2 will be called to the patients care team as a preliminary report. Sensitivities will be performed.

Positive blood cultures with Gram stains of Gram-positive cocci in clusters will continue to receive same day testing by PCR for MRSA and *Staphylococcus aureus*.

Any questions please contact Microbiology:

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