



Laboratory Services Important Test Announcement

Revised susceptibility interpretive criteria for *Pseudomonas aeruginosa* and Enteric Gram negative rods

Live Date: 2/19/2024

Effective, February 19, 2024, the Clinical Microbiology Laboratory will implement the following revised susceptibility interpretive criteria for *Pseudomonas aeruginosa* and Enterobacterales (Enteric Gram negative rods) as described in Clinical Laboratories Standards Institute (CLSI) M100 Ed33 published in 2023.

	Minimum Inhibitory Concentration (MICs) µg/mL			Impact of revised interpretive criteria for NCH isolates from 1/1/2022-12/31/2022 ¹
	Susceptible	Intermediate	Resistant	
<i>Pseudomonas aeruginosa</i>				
Gentamicin	-	-	-	Old: 82% S New: Not reported
Tobramycin	≤1	2	≥4	Old: 89% S, 1.3% I, 9.9% R New: 81% S, 5.8% I, 13% R
Amikacin	≤16	32	≥64	Old: 91% S, 2.5% I, 5.9% R New: No interpretation change, only urine reporting
Piperacillin-tazobactam	≤16	32	≥64	Old: 87% S, 9.5% I, 3.4% R New: 87% S, 6.2% I, 6.3% R
Enterobacterales (Enteric Gram negative rods)				
Gentamicin	≤2	4	≥8	Old: 91% S, 0.5% I, 7% R New: 92% S, 0.4% I, 8% R
Tobramycin	≤2	4	≥8	Old: 91% S, 5.7% I, 3.2% R New: 90% S, 0.8% I, 8.8% R
Amikacin	≤4	8	≥16	Old: 98% S, 0.4% I, 1.3% R New: 94% S, 2.2% I, 4% R

¹Data from NCH 2022 Inpatient antibiogram was evaluated with Old (currently in use) and New susceptibility interpretive criteria published in CLSI M100 Ed 33.

The impact of the revised susceptibility interpretive criteria on the percent NCH isolates reported as susceptible (S), intermediated (I), and resistant (R) are noted in the table above. Notable changes include:

- *Pseudomonas aeruginosa* gentamicin susceptibility will no longer be tested nor reported due to lack of expected efficacy with most *P. aeruginosa* isolates and accepted aminoglycoside dosing strategies.
- *P. aeruginosa* amikacin susceptibility will only be reported for isolates from urinary sources where higher drug levels are achievable.

For clinical questions, please contact the Antimicrobial Stewardship Program or the Infectious Disease consult service.

For more information regarding these changes contact the Director of Antimicrobial Susceptibility Testing at 614-722-4878 or the microbiology lab at 614-722-5373.