

2015 Mainland Antibiograms

The following antibiograms are profiles of antimicrobial susceptibility testing results of the most commonly reported respiratory tract, skin & soft tissue, and urinary tract pathogens submitted to LifeLabs from January 1, 2014 to December 31, 2014. The information in the antibiograms is to be used only as a guide, and we emphasize that culture and susceptibility testing are required for accurate determination of etiology and antimicrobial susceptibility. The analysis and presentation of the antimicrobial susceptibility test data is in accordance with the guidelines in the Clinical and Laboratory Standards Institute (CLSI) document M39-A3.

Respiratory Tract Pathogens

ORGANISM	Number of isolates	ANTIBIOTIC (% susceptible)									
		Ampicillin / Amoxicillin	Azithromycin	Cefuroxime	Clarithromycin	Erythromycin	Levofloxacin	Penicillin	Tetracycline	ТМХ	
Haemophilus influenzae	144	83		97	95			R	95	70	
Streptococcus pneumoniae	109	99	48		48	48	97	71	61	78	
Moraxella catarrhalis ¹	92	R						R			

¹Susceptibility testing for *Moraxella catarrhalis* is not routinely performed. Most clinical isolates of *M. catarrhalis* are resistant to amoxicillin but are generally susceptible to amoxicillin-clavulanate, macrolides, trimethoprim-sulfamethoxazole, quinolones, cefuroxime, cefixime, and ceftriaxone.

Skin and Soft tissue Pathogens

ORGANISM		ANTIBIOTIC (% susceptible)													
	Number of isolates	Ampicillin	Azithromycin	Ceftriaxone	Cephalothin / Cephalexin	Ciprofloxacin	Clarithromycin	Clindamycin	Cloxacillin	Erythromycin	Levofloxacin	Penicillin	Tetracycline	TMX	Vancomycin
S. aureus (MSSA)	4852				100				100	80			95		
S. aureus (MRSA)	1112	R		R	R	19		70	R	22		R	90	93	100
Streptococcus group A ²	67	100	81	100	100		81	81		81	100	100		R	100

²Antimicrobial susceptibility testing for Streptococcus group A is not routinely performed except in cases of penicillin allergy or on physician's request.

Urinary Tract Pathogens

		ANTIBIOTIC (% susceptible)									
ORGANISM	Number of isolates	Ampicillin	Cephalothin / Cephalexin	Ciprofloxacin	Gentamicin	Nitrofurantoin	Tetracycline	ТМХ			
Escherichia coli	21166	62	62	85	93	93	76	80			
Streptococcus group B ³	2511				R			R			
Klebsiella pneumoniae	2179	R	94	98	98	29	89	94			
Enterococcus faecalis4	1181	100	R	76		98	22	R			
Proteus mirabilis	1094	76	85	85	94	R	R	77			
Staphylococcus saprophyticus ⁵	1085										
Citrobacter koseri	297	R	96	100	100	52	99	99			
Enterococcus faecium ²	48	42	R	31		27	56	R			

³Antimicrobial susceptibility testing is not routinely performed on urine isolates of Streptococcus group B because such infections usually respond to antibiotics commonly used to treat uncomplicated urinary tract infections, such as ampicillin, cephalosporins and nitrofurantoin. Susceptibility to fluoroquinolones is variable.

90-100% of isolates are susceptible to the antibiotic indicated (GOOD CHOICE)

21-89% of isolates are susceptible to the antibiotic indicated (INTERMEDIATE CHOICE)

0-20% of isolates are susceptible to the antibiotic indicated (POOR CHOICE)

The organism is inherently resistant to the antibiotic indicated **OR** is not recommended due to poor clinical response and/or poor activity Antimicrobial susceptibility testing not performed

TMX = Trimethoprim-Sulfa; MSSA = Methicillin-susceptible Staphylococcus aureus; MRSA = Methicillin-resistant Staphylococcus aureus

⁴Results from June to December 2014.

⁵Antimicrobial susceptibility testing is not routinely performed on urine isolates of *Staphylococcus saprophyticus* because such infections usually respond to antibiotics commonly used to treat uncomplicated urinary tract infections, such as trimethoprim-sulfamethoxazole, nitrofurantoin and fluoroquinolones.