

The following antibiograms are profiles of antimicrobial susceptibility testing results of pathogens submitted to LifeLabs from January 1, 2015 to December 31, 2015 as per the Clinical and Laboratory Standards Institute (CLSI) document M39-A4.

Respiratory Tract Pathogens

ORGANISM	Number of isolates	ANTIBIOTIC (% susceptible)																	
		Amoxicillin - Clavulanate	Ampicillin	Azithromycin	Ceftriaxone	Cefuroxime	Ciprofloxacin	Clarithromycin	Doxycycline	Erythromycin	Levofloxacin	Tetracycline	Penicillin (oral)	TMX	Ceftazidime	Gentamicin	Meropenem	Piperacillin-Tazobactam	Tobramycin
<i>Haemophilus influenzae</i>	127	99	80		100 n=61		97 n=61				95	R	70						
<i>Moraxella catarrhalis</i> ¹	78		R									R							
<i>Pseudomonas aeruginosa</i>	39						83							96	91	92	95	100	

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	Number of isolates	ANTIBIOTIC (% susceptible)													
		Ampicillin	Azithromycin	Ceftriaxone	Cephalothin / Cephalixin	Clarithromycin	Clindamycin	Cloxacillin	Erythromycin	Levofloxacin	Linezolid	Penicillin	Tetracycline	TMX	Vancomycin
<i>S. aureus</i> (MSSA)	3043				100		88 n=2246	100	85			97	97 n=2246		
<i>S. aureus</i> (MRSA)	411	R		R	R		84	R	20		100	R	94	98	100
Group A Streptococcus ²	443	100	75	100	100	75	76		75	100		100		R	100

²Susceptibility testing was performed for a small subset of isolates as per physician request: Group A Streptococcus (n=20). Groups A, B, C and G streptococcal isolates are predictably susceptible to penicillin, amoxicillin and cephalosporins (e.g. cephalixin), therefore antimicrobial susceptibility testing is not routinely performed. Susceptibility to erythromycin and clindamycin is variable..

Urinary Tract Pathogens

ORGANISM	Number of isolates	ANTIBIOTIC (% susceptible)								
		Ampicillin	Ceftriaxone	Cephalothin / Cephalixin	Ciprofloxacin	Fosfomycin ⁴	Gentamicin	Nitrofurantoin	Tetracycline	TMX
<i>Escherichia coli</i>	14120	62	93 n=10067	58	85	97	94	96	78	80
<i>Klebsiella pneumoniae</i>	1596	R	96 n=1171	92	97		97	42	87	93
Group B Streptococcus ³	1292						R			R
<i>Enterococcus faecalis</i>	1202	100		R	82			98	22	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.

⁴Fosfomycin testing was performed on a limited number of *E. coli* (n=1550) isolates.

- 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**)
- R 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*