2024 BC Lower Mainland Antibiograms

The following antibiograms are profiles of antimicrobial susceptibility testing results of pathogens submitted to LifeLabs from January 1, 2023 to December 31, 2023 compiled as per guidelines in Clinical and Laboratory Standards Institute (CLSI) document M39-A4.

Respiratory Tract Pathogens (Sputum)

ORGANISM	Number of isolates tested	ANTIBIOTIC (% susceptible)													
		Ampicillin/ Amoxicillin	Azithromycin	Ceftriaxone	Ciprofloxacin	Clarithromycin	Erythromycin	Levofloxacin	Tetracycline	Penicillin (oral)	Trimethroprim-sulfa	Ceftazidime	Tobramycin	Meropenem	Piperacillin-tazobactam
Haemophilus influenzae	124	66		100	98				91	R	64				
Moraxella catarrhalis[1]	53	R								R					
Streptococcus pneumoniae	37	>95[2]	65	97		65	65	97	65	75	67				
Pseudomonas aeruginosa	75	R	R	R	70	R	R		R	R	R	92	**80**	94	98

[1] Susceptibility testing for *Moraxella catarrhalis* is not routinely performed. Most clinical isolates of *M. catarrhalis* are resistant to amoxicillin but susceptible to amoxicillin-clavulanate, macrolides, trimethoprim-sulfamethoxazole, quinolones, cefuroxime, cefixime, and ceftriaxone.
[2] Amoxicillin testing is not routinely performed on *Streptococcus pneumoniae*; however, 2019 testing of a subset of isolates showed >95% susceptibility.

Skin and Soft Tissue Pathogens

ORGANISM	Number of isolates tested	ANTIBIOTIC (% susceptible)												
		Ampicillin/ Amoxicillin	Azithromycin	Ceftriaxone	Cephalothin / Cephalexin	Clarithromycin	Clindamycin	Cloxacillin	Erythromycin	Levofloxacin	Linezolid	Penicillin	Tetracycline[1]	Trimethoprim-Sulfa	Vancomycin
S. aureus (MSSA)	7766				100		83	100	78				95	99	100
S. aureus (MRSA)	1663	R		R	R		75	R	47		100	R	69	87	100
Group A Streptococcus[2]	288	100	75	100	100	75	75		75			100		R	100

[1] Isolates susceptible to tetracycline are predictably susceptible to doxycycline; however, some isolates that are resistant to tetracycline may be susceptible to doxycycline.
[2] Group A Streptococcus is universally susceptible to penicillin, amoxicillin and cephalosporins, antimicrobial susceptibility testing performed only on a subset of isolates.

Urinary Tract Pathogens

ORGANISM	Number of isolates tested		ANTIBIOTIC (% susceptible)							
		Ampicillin/ Amoxicillin	Cefixime	Ceftriaxone	Ciprofloxacin	Fosfomycin	Gentamicin	Nitrofurantoin	Tetracycline[1]	Trimethoprim-Sulfa
Escherichia coli	26932	60	88	88	67	98	92	98	77	79
Enterococcus faecalis	4520	100			84	92		99	23	R
Group B *Streptococcus*[2]	4351									
Klebsiella pneumoniae	3828	R	94	94	88		98	25	88	93
Proteus mirabilis	1747	76	97	97	86		92	R	R	81

[1] Isolates susceptible to tetracycline are predictably susceptible to doxycycline; however, some isolates that are resistant to tetracycline may be susceptible to doxycycline.
[2] Susceptibility testing is not routinely performed on urine isolates of Group B Streptococcus because such infections usually respond to antibiotics commonly used to treat uncomplicated urinary tract infections, such as ampicillin and cephalosporins. Susceptibility to nitrofurantoin and fluoroquinolones is variable.

90-100% of isolates are susceptible to the antibiotic indicated **(GOOD CHOICE)**
51-89% of isolates are susceptible to the antibiotic indicated **(INTERMEDIATE CHOICE)**
0-50% 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