ALBERTA PRECISION LABORATORIES

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Antibiotic % Susceptibility Patterns
Peter Lougheed Hospital
January - December 2019

Data derived from routine susceptibility tests performed by Alberta Precision Laboratories

			n	Penicillin IV	Ampicillin / Amoxicillin	Cloxacillin	Amoxicillin-Clavulanate (PO)	Piperacillin-Tazobactam	Cephalexin (urine)	Cefazolin	Ceftriaxone	Ceftazidime	Azithromycin	Clindamycin	Trimethoprim-Sulfamethoxazole	Vancomycin	Tetracycline[b]	Nitrofurantoin	Fosfomycin	Ciprofloxacin[f,g]	Levofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem
GP	*Enterococcus faecalis*		105		100				R	R	R	R		R	R	100	24[c]	97		87[c]					
	Enterococcus faecium	All	68		7				R	R	R	R		R	R	69	46[c]	9		9[c]					
	Staphylococcus aureus	All	153			73				73				82	96	100	95								
		MSSA	117			100				100				85	97	100	96								
		MRSA	42			R				R				71	93	100	95								
	Coagulase-negative *Staphylococcus*		50			38				38				62	64	100	86								
	Streptococcus anginosus group		36	92							100		78[a]	86		97	73								
GN	*Enterobacter cloacae* complex[d]		44		R		R		R	R					95			80[e]		98		98	98	98	100
	Escherichia coli	All	206		48		77	77	72	67	77				74			97		55		85	87		
		ESBL	39		R				R	R	R	R			49			90	100	8		51	51	100	100
	Klebsiella pneumoniae complex		68		R		91	94	87	82	87				84			29		81		91	91		
	Pseudomonas aeruginosa		69		R		R	87			R	91			R		R			90			100	R	96
	Stenotrophomonas maltophilia[h]		69		R		R	R			R	45			100						89	R	R	R	R

[a] As inferred from susceptibility to erythromycin

[b] Susceptibility to doxycycline can be inferred from susceptibility to tetracycline

[c] Urine isolates only

[d] These organisms usually produce inducible β-lactamase which can cause failure of 3rd generation β-lactam therapy, despite in vitro susceptibility

[e] Testing not performed for all isolates included. The %S statistic presented in the table is an adjusted estimate of %S based on the data available and an assumption that isolates not tested are susceptible.

[f] Revised (2019) CLSI Enterobacterales interpretive criteria for susceptible are being used for the first time to calculate %S; these are ≤ 0.25 µg/mL and ≥ 26 mm for ciprofloxacin. Previous CLSI interpretive criteria for susceptible were ≤ 1 µg/mL and ≥ 21 mm

[g] Revised (2019) CLSI Pseudomonas aeruginosa interpretive criteria for susceptible are being used for the first time to calculate %S; these are ≤ 0.5 µg/mL and ≥ 25 mm for ciprofloxacin. Previous CLSI

[h] *Stenotrophomonas maltophilia* results represent the whole Calgary in-patient population

Note: Percent susceptible for each organism/antimicrobial combination was generated by including the first isolate of that organism recovered from a given patient during the time period analyzed.

ABBREVIATIONS: GP - Gram-positive; GN - Gram-negative; MSSA - methicillin-susceptible Staphylococcus aureus; MRSA - methicillin-resistant Staphylococcus aureus; ESBL - extended spectrum beta-