



**ALBERTA PRECISION
LABORATORIES**

Leaders in Laboratory Medicine

**Antibiotic % Susceptibility Patterns
Calgary Zone Rural Community
January - December 2022**

Data derived from routine susceptibility tests performed by Alberta Precision Laboratories

	N	Penicillin (IV)	Ampicillin / Amoxicillin	Cloxacillin	Amoxicillin-Clavulanate	Piperacillin-Tazobactam	Cephalexin	Cefazolin	Cefixime	Ceftriaxone	Ceftazidime	Clindamycin	Trimethoprim-sulfamethoxazole	Vancomycin	Tetracycline ^c	Doxycycline ^b	Nitrofurantoin ^b	Fosfomycin (PO) ^b	Ciprofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem
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Gram-positive		294	100	R	R	R	R	R	R	R	R	R	100	29	100	94 ^b								
Enterococcus faecalis		294	100	R	R	R	R	R	R	R	R	R	100	29	100	94 ^b								
Enterococcus faecium ^d		34	62	R	R	R	R	R	R	R	R	R	88	50	18	47 ^b								
Staphylococcus aureus	All	327	89	89	89	89	89	84	94	100	97													
	MSSA	294	100	100	100	100	100	84	96	100	97													
	MRSA	39	R	R	R	R	R	87	82	100	92													
Staphylococcus lugdunensis		49	98	98	98	98	98	96	100	100	100													
Streptococcus, group A ^d		37	100	100	100	100	100	73	100															
Streptococcus, group B ^d		34	100	100	100	100	100	65	100															

Gram-negative		30	R	R	R	R	R						93			97	100	100	100	100	100	100	100
Citrobacter freundii complex ^a		48	R	98	98	98 ^b	98	98	98	98	98	98	98			89	100	98	100				
Citrobacter koseri ^d		39	R	R	R	R	R						97			39	100	100	100	100	100	100	100
Escherichia coli	All	1837	68	90	95	92 ^b	90	93	95				86			99	77	94	95				
	ESBL	82	R	R	R	R	R	R	R	R	R	R	50		52	94	99	15	65	62	100	100	100
	Klebsiella (Enterobacter) aerogenes ^{a,d}	51	R	R	R	R	R	R	R	R	R	R	100		31	98	100	100	100	100	100	100	100
Klebsiella oxytoca		48	R	94	96	88 ^b	60	100	98				98		87	94	100	100					
Klebsiella pneumoniae complex		256	R	96	98	97 ^b	96	97	98				95		38	89	98	99					
Morganella morganii ^{a,d}		33	R	R	R	R	R	R	R	R	R	R	88		R	70	94	100	100	100	100	100	100
Proteus mirabilis		74	82	97	99	96 ^b	76	99	99				88		R	R	R	95	88	92			
Pseudomonas aeruginosa		41	R	R	93		R	R	93		R	R	R		R	R	R	80	100	R	88		

^a These organisms usually produce β-lactamase which can cause failure of 3rd generation cephalosporin therapy, despite in vitro susceptibility

^b Urine isolates only

^c Susceptibility to doxycycline can be inferred from susceptibility to tetracycline

^d Combined data (January - December 2021 and January - December 2022) due to the small number of isolates in 2022

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: MSSA - methicillin-susceptible Staphylococcus aureus; MRSA - methicillin-resistant Staphylococcus aureus; ESBL - extended spectrum beta-lactamase; R - intrinsic resistance