

**Antibiotic % Susceptibility Patterns  
Calgary Zone Rural Community  
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 <sup>b</sup>	Nitrofurantoin	Fosfomycin	Ciprofloxacin <sup>e,f</sup>	Levofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem		
GP	<i>Enterococcus faecalis</i>	348	100				R	R	R	R		R	R	99	22 <sup>c</sup>	98		92 <sup>c</sup>							
	<i>Enterococcus</i> species - other	54	100				R	R	R	R		R	R	93	22 <sup>c</sup>	98		93 <sup>c</sup>							
	<i>Staphylococcus aureus</i>	All	549		85				85				86	96	100	97									
		MSSA	469		100				100				87	97	100	97									
		MRSA	88		R				R				78	92	100	95									
	<i>Staphylococcus lugdunensis</i>	64		98				98				95	100	100	97										
Group A <i>Streptococcus</i>	74	100					100	100		70 <sup>a</sup>	78		100												
GN	<i>Citrobacter freundii</i> complex <sup>d</sup>	54		R	R		R	R					93			96		91		98	98	100	100		
	<i>Enterobacter cloacae</i> complex <sup>d</sup>	60		R	R		R	R					92			35		97		100	100	100	100		
	<i>Escherichia coli</i>	All	2574		64	87	96	95	91	96				80			98		80		94	95			
		ESBL	97		R			R	R	R	R			43			91	97	20		65	59	100	100	
	<i>Klebsiella (Enterobacter) aerogenes</i> <sup>d</sup>	34		R	R		R	R					100			3		100		100	100	100	100		
	<i>Klebsiella oxytoca</i>	68		R	94	94	90	62	94				97			92		100		100	100				
	<i>Klebsiella pneumoniae</i> complex	275		R	98	99	97	97	97				96			39		93		98	99				
	<i>Proteus mirabilis</i>	111		84	98	100	99	83	100				83		R	R		94		95	96				
<i>Pseudomonas aeruginosa</i>	60		R	R	100				R	100			R		R		78			98	R	100			

<sup>a</sup> As inferred from susceptibility to erythromycin

<sup>b</sup> Susceptibility to doxycycline can be inferred from susceptibility to tetracycline

<sup>c</sup> Urine isolates only

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

<sup>e</sup> 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

<sup>f</sup> 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 interpretive criteria for susceptible were ≤ 1 µg/mL and ≥ 21 mm

**Note 1:** Includes Banff, Claresholm, Canmore, Didsbury, High River, Okotoks, Strathmore, Vulcan and surrounding areas

**Note 2:** 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-lactamase; R - intrinsic resistance