

Antibiotic % Susceptibility Patterns
Long-Term Care - Calgary
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	Cephalixin (urine)	Cefazolin	Ceftriaxone	Ceftazidime	Azithromycin	Clindamycin	Trimethoprim-Sulfamethoxazole	Vancomycin	Tetracycline ^a	Nitrofurantoin	Fosfomycin	Ciprofloxacin ^{d,e}	Levofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem		
GP	<i>Enterococcus faecalis</i>	371	100				R	R	R	R		R	R	100	25 ^b	98		74 ^b							
	<i>Enterococcus faecium</i>	30	30				R	R	R	R		R	R	83	30 ^b	10		30 ^b							
	<i>Staphylococcus aureus</i>	All	267		81				81				84	96	100	98									
		MSSA	220		100				100				89	96	100	97									
	MRSA	57		R				R				65	98	100	98										
GN	<i>Citrobacter freundii</i> complex ^c	73	R		R		R	R					90			89		88		92	93	100	100		
	<i>Enterobacter cloacae</i> complex ^c	56	R		R		R	R					64			31		84		98	96	93	100		
	<i>Escherichia coli</i>	All	1054	53		80	83	82	78	83				76			95		59		88	87			
		ESBL	193	R				R	R	R	R			42			92	97	7		62	59	99	99	
	<i>Klebsiella oxytoca</i>	72	R		96	96	92	64	94				96			79		93		99	99				
	<i>Klebsiella pneumoniae</i> complex	313	R		94	98	95	95	95				91			45		92		97	96				
	<i>Morganella morganii</i> ^c	44	R		R		R	R					55			R		52		70	82	100	100		
	<i>Proteus mirabilis</i>	310	77		99	100	99	83	100				73		R	R		69		95	97				
<i>Pseudomonas aeruginosa</i>	127	R		R	100				R	98				R			87				98	R	93		

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

^b Urine isolates only

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

^d Revised (2019) CLSI Enterobacterales interpretive criteria for susceptible are being used for the first time to calculate %S; these are $\leq 0.25 \mu\text{g/mL}$ and $\geq 26 \text{ mm}$ for ciprofloxacin. Previous CLSI interpretive criteria for susceptible were $\leq 1 \mu\text{g/mL}$ and $\geq 21 \text{ mm}$
^e Revised (2019) CLSI Pseudomonas aeruginosa interpretive criteria for susceptible are being used for the first time to calculate %S; these are $\leq 0.5 \mu\text{g/mL}$ and $\geq 25 \text{ mm}$ for ciprofloxacin. Previous CLSI interpretive criteria for susceptible were $\leq 1 \mu\text{g/mL}$ and $\geq 21 \text{ mm}$
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-lactamase; R - intrinsic resistance