

Antibiotic % Susceptibility
Calgary Zone Adult Intensive Care Units (FMC, PLC, RGH, SHC)
May -December 2023^a

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	Azithromycin ^f	Clindamycin	Trimethoprim-sulfamethoxazole	Vancomycin	Minocycline	Tetracycline ^d	Nitrofurantoin ^e	Ciprofloxacin	Levofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem
Gram Positive:																									
Enterococcus faecalis		39		100 ^b				R	R	R	R	R	R	R	R	100		28	100	90 ^c					
Staphylococcus aureus	All	200			83			82	82					84	90	100		98	99	79					
	MRSA	37			R			R	R					67	92	97		94	100	17					
	MSSA	165			100			100	100					87	89	100		98	99	92					
Staphylococcus, coagulase-negative		30			28			31	31					50	63	100		93	100	63					
Streptococcus pneumoniae	meningitis	58	91								81														
	non-meningitis	58	100								100		65					66			100				
Gram Negative:																									
Enterobacter cloacae complex		45		R		R		R	R						96				47	91		98	98	96	100
Escherichia coli		133		48		75	75	71 ^c	55	72	75				72				95	58		86	88	98	99
Haemophilus influenzae		59		80									97		75			93							
Klebsiella pneumoniae complex		75		R		85	85		76	84	85				87				44	75		99	95	97	97
Pseudomonas aeruginosa		72		R		R	86			R	R	89			R					82			97	R	85
Stenotrophomonas maltophilia		32		R		R	R				R	44			100		97				88	R	R	R	R

^aDue to launch of Connect Care in May 2023, data from Jan-April not included.

^bFor Enterococci, results of ampicillin susceptibility testing can be used to predict the activity of amoxicillin, amoxicillin-clavulanate, piperacillin-tazobactam and for E. faecalis only, additionally imipenem.

^cUrinary isolates only

^dSusceptibility to doxycycline can be inferred from susceptibility to tetracycline

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

^fRespiratory specimens only

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; R - intrinsic resistance



ALBERTA PRECISION LABORATORIES

Leaders in Laboratory Medicine

Antibiotic % Susceptibility Patterns Calgary ICU's (FMC, PLC, RGH, SHC) January - December 2022

Data derived from routine susceptibility tests performed by Alberta Precision Laboratories

LABORATORIES		Data derived from routine susceptibility tests performed by National Reference Laboratories																								
Leaders in Laboratory Medicine		N	Penicillin (IV)	Ampicillin / Amoxicillin	Cloxacillin	Amoxicillin-Clavulanate	Piperacillin-Tazobactam	Cephalexin	Cefazolin	Cefixime	Ceftriaxone	Ceftazidime	Azithromycin	Clarithromycin	Clindamycin	Trimethoprim-sulfamethoxazole	Vancomycin	Tetracycline ^c	Minocycline	Nitrofurantoin ^b	Ciprofloxacin	Levofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem
Gram-positive																										
Enterococcus faecalis		69		100				R	R	R	R	R			R	R	100	23		98	90 ^b					
Enterococcus faecium ^d		62		21				R	R	R	R	R			R	R	65	33			16 ^b					
Staphylococcus aureus	All	279			82			82	82						77	95	100	96								
	MSSA	228			100			100	100						78	96	100	98								
	MRSA	58			R			R	R						69	90	100	91								
Staphylococcus, coagulase-negative		34			24			24	24						47	53	100	82								
Streptococcus anginosus group ^d		41	100								100				83		100									
Streptococcus pneumoniae	meningitis	57		79																						
	non-meningitis	57		96									75										100			
Gram-negative																										
Acinetobacter baumannii complex ^d		30		R		R	97					100				93					100		93	93	R	100
Citrobacter freundii complex ^{a,d}		33		R		R		R	R							82					70		85	88	91	91
Enterobacter cloacae complex ^a		51		R		R		R	R							94					94		96	96	88	100
Escherichia coli	All	160		44		78	78	76 ^b	63	75	78					71				96	58		89	90		
	ESBL	30		R				R	R	R	R	R				43					0		73	73	100	100
Haemophilus influenzae		47		91										87		72										
Klebsiella aerogenes ^{a,d}		32		R		R		R	R							100					100		100	100	100	100
Klebsiella oxytoca		33		R		88	88		24	97	88					97					100		100	100		
Klebsiella pneumoniae complex		75		R		87	87		83	84	87					89					79		97	96		
Proteus mirabilis ^d		34		82		94	94		65	97	94					76		R	R	R	85		82	82		
Pseudomonas aeruginosa		65		R		R	91				R	R	94			R		R			78			98	R	82
Serratia marcescens ^{a,d}		60		R		R		R	R							98				R	97		97	95	100	100
Stenotrophomonas maltophilia ^a		32		R		R	R					R	22			100			100			94	R	R	R	R

^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