



ALBERTA PRECISION LABORATORIES

Leaders in Laboratory Medicine

Antibiotic % Susceptibility Patterns: Urine - Females > 40 years
Emergency and Community Patients
January - December 2022

Data derived from routine susceptibility tests performed by Alberta Precision Laboratories

N	Ampicillin / Amoxicillin	Cloxacillin	Amoxicillin-Clavulanate	Piperacillin-Tazobactam	Cephalexin	Cefazolin	Cefixime	Ceftriaxone	Ceftazidime	Trimethoprim-sulfamethoxazole	Vancomycin	Tetracycline ^e	Doxycycline	Nitrofurantoin	Fosfomycin (PO)	Ciprofloxacin	Gentamicin	Tobramycin	Ertapenem	Meropenem
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Gram-positive

Enterococcus faecalis		1684	100			R	R	R	R	R	R	100	24		99		93				
Enterococcus faecium		121	53			R	R	R	R	R	88	44		22		36					
Enterococcus species - other ^d		33	94			R	R	R	R	R	82	42		61		100					
Staphylococcus aureus ^a	All	110		91		91					100										
	MSSA	100		100		100					100										

Gram-negative

Citrobacter freundii complex ^b		213	R		R	R	R				89				96		90	95	96	100	100
Citrobacter koseri		170	R		99	100	97	97	99	99	99				88		99	100	100	100	100
Enterobacter cloacae complex ^b		286	R		R		R	R			91				36		94	100	99	97	100
Escherichia coli	All	12129	65		89	92	90	87	91	92	82				98		72	93	94		
	ESBL	840	R				R	R	R	R	49			53	94	97	7	71	67	100	100
Klebsiella (Enterobacter) aerogenes ^b		156	R		R		R	R			98				21		97	99	100	100	100
Klebsiella oxytoca		298	R		91	93	86	50	98	94	94				93		95	99	98		
Klebsiella pneumoniae complex	All	1777	R		96	97	96	96	97	97	93				38		90	99	99		
	ESBL	47	R				R	R	R	R	24			28	20		11	61	67	100	100
Morganella morganii ^b		67	R		R		R	R			67				R		72	91	91	99	100
Proteus mirabilis		523	85		98	98	97	81	98	98	86		R	R	R		91	93	95		
Providencia species ^{b,d}		42	R		R		R	R			95			R	R		98			100	100
Pseudomonas aeruginosa		188	R		R	97			R	R	96	R		R	R		84		99	R	93
Serratia marcescens ^b		38	R		R		R	R			100				R		95	100	100	100	100

^a Staphylococcus aureus bacteriuria may be associated with blood stream or other systemic infection. Clinical correlation required.

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

^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; ESBL - extended spectrum beta-lactamase; R - intrinsic resistance