

Organism (No. tested #)	Amoxicillin	Amoxicillin/ Clavulanate	Piperacillin/Tazobactam	Aztreonam	Meropenem	Cefaclor *	Cefuroxime	Ceftriaxone	Ceftazidime	Gentamicin	Amikacin	Cotrimoxazole	Ciprofloxacin	Norfloxacin *	Nitrofurantoin *	Trimethoprim *	Fosfomycin *	Mecillinam *	Tetracycline
<i>Citrobacter</i> spp. (79)	R	60			100	64	54	74		100		100	85	100	90	92			
<i>Enterobacter</i> spp. (125)	R	R	67	60	100	R	R	60		97	98	87	92	100	65	89			
<i>E.coli</i> excluding ESBLs (2236)	49	62	96	91	100	96	96	98		95	99	68	81	92	99	73	95	85	
ESBL producing <i>E.coli</i> (268)	R	R		R	100	R	R	R		67	98	36	40	51	98	33	92		
<i>Klebsiella</i> spp. excluding ESBLs (532)	R	76	71	77	99	89	85	92		98	98	95	93	96	84	86		52	
ESBL producing <i>Klebsiella</i> (72)	R	R		R	100	R	R	R		64	100	29	20	61	76	11			
<i>Morganella morganii</i> (45)	R	R	100	100	100	R	R	93		91	100	88	88	91	3	88			
<i>Proteus mirabilis</i> (208)	80	90			100	94	95	94		92	86	71	85	96	R	81			
<i>Serratia</i> spp. (84)	R	R	100	98	100	R	R	98		100	100	100	100	100	3	97			
<i>Pseudomonas aeruginosa</i> (484)			98		85				94	97			93						
<i>Stenotrophomonas maltophilia</i> (2019 and 2020) (34)												100							
<i>H.influenzae</i> (113)	59	87					64	96				71							98
<i>Moraxella catarrhalis</i> (52)	R	100					98					81							96

R = predictably resistant

S = predictably sensitive

All organisms were not tested against all antibiotics

* Tested against urinary isolates only. Norfloxacin should be reserved for infections caused by resistant isolates. Nitrofurantoin should not be used for complicated urinary tract infections. Trimethoprim should not be used for complicated urinary tract infections. Cefaclor should not be used for complicated urinary tract infections.

Extended spectrum beta-lactamase (ESBL) - producing organisms are considered resistant to penicillins, cephalosporins and aztreonam, despite apparent in vitro susceptibility to some of these agents.

Most strains of *Enterobacter*, *Serratia*, *Citrobacter*, *Proteus vulgaris*, *Proteus penneri*, *Providencia* and *Morganella* spp (ESCPPM) produce an inducible beta-lactamase. Clinical failures have been described in patients with infections caused by these organisms when treated with third generation cephalosporins, due to selection of resistant mutants with permanent hyper-production of the enzyme.

Please see https://surv.esr.cri.nz/antimicrobial/neisseria_meningitidis.php for information on antimicrobial susceptibility among *Neisseria meningitidis* isolates.