



Children's Mercy KANSAS CITY

Children's Mercy Hospitals & Clinics - 2021 Antibigram Department of Pathology & Laboratory Medicine- Microbiology Laboratory

2021 Gram Negative Antibigram (% susceptible)

Organism	# of isolates tested	Amikacin ¹	Ampicillin	Amp/sulbactam ¹	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Meropenem ¹	Pip/tazo	Tobramycin	Trimeth/Sulfa
<i>Acinetobacter baumannii</i> complex (includes ALL sources)	25 ²	-	-	100	-	-	80	16	96	100	100	-	100	100
<i>Citrobacter freundii</i> (includes ALL sources)	45	100	IR	IR	IR	-	89	89	98	96	100	-	96	89
<i>Klebsiella aerogenes</i> [^] (includes ALL sources)	26 ²	100	IR	IR	IR	100	81	81	100	100	100	-	100	96
<i>Serratia marcescens</i> (includes ALL sources)	81	100	IR	IR	IR	99	99	99	99	100	100	-	99	99
<i>Enterobacter cloacae</i> (Non-urine sources ONLY)	63	100	IR	IR	IR	98 ^b	89	89	98	98	100	-	98	95
<i>Pseudomonas aeruginosa</i> (Non-Urine sources ONLY)	181	99	-	-	-	94	95	-	99	94	96	96	98	-
* <i>Escherichia coli</i> (Non-Urine sources ONLY)	166	99	43	54	59 ^a	88 ^b	78	77	81	88	100	94	86	68
<i>Klebsiella oxytoca</i> (Non-Urine sources ONLY)	59	100	IR	75	30 ^a	96 ^b	97	92	98	98	100	-	98	98
* <i>Klebsiella pneumoniae</i> (Non-Urine sources ONLY)	64	100	IR	77	82 ^a	98 ^b	88	88	91	88	100	90	89	84
* <i>Proteus mirabilis</i> (Non-Urine sources ONLY)	16 ²	100	88	94	9 ^a	100 ^b	94	88	88	81	100	100	88	81

ESBL positive isolates: *E. coli* (11), *K. pneumoniae* (2), *K. oxytoca* (1)

[^] *Klebsiella aerogenes*, formerly named *Enterobacter aerogenes*.

¹ Antibiotics tested on Non-Urine isolates only: *A. baumannii* complex (22), *C. freundii* (20), *K. aerogenes* (11), *S. marcescens* (62).

² Please exercise discretion when data are reviewed for species with fewer than 30 isolates.

^a Cefazolin susceptibility based off Kirby Bauer results: *E. coli* (129), *K. oxytoca* (48), *K. pneumoniae* (74), and *P. mirabilis* (16).

^b Cefepime susceptibility based off Kirby Bauer results: *E. cloacae* (47), *E. coli* (79), *K. oxytoca* (37), *K. pneumoniae* (59), and *P. mirabilis* (7)

IR = Intrinsic Resistance, (-) = No data available

**E. coli*, *K. pneumoniae* and *P. mirabilis* breakpoints differ for urine culture vs. cultures from all other sources. Please contact the Microbiology laboratory for more information.



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2021 Gram Negative - URINE ONLY- Antibigram (% susceptible)

Organism	# of isolates tested	Ampicillin	Amox/clav	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Ciprofloxacin	Gentamicin	Nitrofurantoin	Tobramycin	Trimeth/Sulfa
<i>Enterobacter cloacae</i>	43	IR	IR	IR	-	88	84	98	95	35	95	93
<i>Pseudomonas aeruginosa</i>	62	-	-	-	95	95	-	95	95	-	98	-
* <i>Escherichia coli</i>	1556	60	87	94	-	97	97	93	94	95	94	78
<i>Klebsiella oxytoca</i>	38	IR	92	8	-	97	95	100	97	84	95	89
* <i>Klebsiella pneumoniae</i>	125	IR	94	94	-	94	95	94	97	24	97	88
* <i>Proteus mirabilis</i>	85	87	93	98	-	100	100	96	96	IR	96	92

ESBL positive isolates: *E. coli* (44), *K. pneumoniae* (11), *K. oxytoca* (2)

IR = Intrinsic Resistance, (-) = No data available

**E. coli*, *K. pneumoniae* and *P. mirabilis* breakpoints differ for urine culture vs. cultures from all other sources. Please contact the Microbiology laboratory for more information.



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2021 Gram Positive Antibigram (% Susceptible)

Organism	# of isolates tested	Ampicillin	Cefotaxime	Clindamycin	Erythromycin	Gentamicin ³	Linezolid	Meropenem	Nitrofurantoin ⁴	Oxacillin	Penicillin	Penicillin (Oral)	Rifampin ^a	Tetracycline	Trim/Sulfa	Vancomycin
<i>Enterococcus faecalis</i>	169	99	-	-	-	-	-	-	99	-	99	-	-	-	-	99
All <i>Staphylococcus aureus</i>	1244	-	-	83	55	-	100	-	100	72	0	-	100	96	96	100
MSSA	898	-	-	82	68	-	100	-	100	100	0	-	100	95	97	100
MRSA	346	-	-	86	22	-	100	-	100	0	0	-	100	98	92	100
<i>Staphylococcus epidermidis</i>	156	-	-	56	29	85	100	-	99	32	0	-	99	93	72	100
<i>S. pneumoniae</i> *	58	-	-	93	48	-	-	91	-	-	-	66§	-	-	-	100
Meningitis breakpoint		-	86 [†]	-	-	-	-	-	-	-	63 [†]	-	-	-	-	-
Non-meningitis breakpoint		-	97 [‡]	-	-	-	-	-	-	-	95 [‡]	-	-	-	-	-

**S. pneumoniae* % susceptible was calculated using all isolates based on meningitis, nonmeningitis and oral breakpoints.

of *S. pneumoniae* isolates tested: Penicillin=58, Cefotaxime=58, Erythromycin=44, Clindamycin=56, Meropenem=11, Vancomycin=13

[†]Susceptible breakpoint for *S. pneumoniae* in patients with meningitis is ≤ 0.5 $\mu\text{g/mL}$ for cefotaxime and ≤ 0.06 $\mu\text{g/mL}$ for penicillin

[‡]Susceptible breakpoint for *S. pneumoniae* in patients with non-meningitis infections is ≤ 1 $\mu\text{g/mL}$ for cefotaxime and ≤ 2 $\mu\text{g/mL}$ for penicillin

[§]Susceptible breakpoint for *S. pneumoniae* is ≤ 0.06 $\mu\text{g/mL}$ for penicillin when penicillin V is administered by the oral route

³ Used only in combination for synergy and is not adequate therapy by itself.

⁴ Antibiotics tested on UTI isolates only: *E. faecalis* (139), *S. aureus* (36), *S. epidermidis* (59)

(-) =No data available