



Lucile Packard Children's Hospital

Stanford Children's Health

Antibiogram Data from 2021 Isolates

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Values expressed are % susceptible

Gram Negative Bacilli	No. of Isolates (a)	Penicillins		Cephalosporins and Lactams					Carbapenems		Aminoglyc's			Others		Urines Only	
		Ampicillin (\$)	Piper/Tazobactam (\$\$)	Cefuroxime (IV) (\$)	Ceftriaxone (\$)	Ceftazidime (\$)	Cefepime (b) (\$)	Aztreonam (\$\$\$)	Ertapenem (\$\$\$)	Meropenem (\$\$)	Amikacin (\$\$\$)	Gentamicin (\$\$\$)	Tobramycin (\$\$\$)	Ciprofloxacin (\$)	Co-trimoxazole (\$\$)	Cefazolin (\$)	Predicts 1st gen cephem
<i>Achromobacter xylosoxidans</i>	16(c,d)	-	90	-	-	89	8	0	-	88	0	0	0	19	75	-	-
<i>Acinetobacter baumannii</i>	25(c,d)	-	-	-	-	96	96	-	-	96	92	92	96	92	92	-	-
<i>Citrobacter freundii</i> complex	26(c,d)	0	81	0	77	77	-	-	100	100	100	96	100	89	89	0	100
<i>Enterobacter cloacae</i> complex	44	0	86	0	86	84	100	86	91	100	100	96	98	96	89	0	67
<i>Escherichia coli</i>	465	47	97	63	89	94	78	71	100	100	100	89	89	77	70	84	98
<i>Klebsiella aerogenes</i> (<i>Enterobacter aerogenes</i>)	25(c,d)	0	92	0	76	88	-	67	100	100	100	100	100	92	88	-	0
<i>Klebsiella oxytoca</i>	44	0	91	84	86	89	80	84	96	98	100	98	98	88	89	58	90
<i>Klebsiella pneumoniae</i>	85	0	93	75	94	95	89	90	100	100	100	97	94	93	85	90	21
<i>Morganella morganii</i>	15(c,d)	0	-	0	80	73	-	-	100	-	-	100	100	93	100	-	-
<i>Proteus mirabilis</i>	36	86	100	-	94	97	-	-	100	100	97	92	92	92	81	94	0
<i>Pseudomonas aeruginosa</i>	97	-	94	C/T 97		92	93	85	-	93	97	89	96	90	-	-	-
<i>Pseudomonas aeruginosa</i> (CF-mucoid) (e)	31(d)	-	77	C/T 100		90	84	81	Imp 83	81	77	-	90	74	-	-	-
<i>Pseudomonas aeruginosa</i> (CF-non-mucoid) (e)	39	-	97	C/T 100		97	100	87	Imp 90	90	85	-	100	90	-	-	-
<i>Salmonella</i> spp.	18(c,d)	83	-	-	94	-	-	-	-	-	-	-	-	83	94	-	-
<i>Serratia marcescens</i>	28(c)	0	100	0	100	100	100	100	100	100	100	100	96	96	100	-	0
<i>Stenotrophomonas maltophilia</i>	33	-	-	-	-	-	-	-	-	-	-	-	Levo 85	100	-	-	-

(a) First isolate from each patient was included

(b) Cefepime not routinely tested on non-CF urine and blood isolates.

(c) Data from isolate totals <30 may be statistically unreliable

(d) Includes isolates from 2020

(e) Cystic fibrosis patient isolates tested by disk diffusion

C/T= Ceftolozane/Tazobactam; Imp= Imipenem; Levo= Levofloxacin

Values expressed are % susceptible

Gram Positive Cocci

	Number of Isolates	Beta-Lactams							Others										
		Oxacillin/Nafcillin (\$\$)		Penicillin or Ampicillin (\$)			1st Generation cephem (\$)	Cefuroxime (\$)	Ceftriaxone (\$)	Meropenem (\$\$\$)	Gentamicin (\$\$\$)	Ciprofloxacin (\$)	Clindamycin (a) (\$)	Erythromycin (\$\$\$\$)	Nitrofurantoin - urine (\$\$\$)	Co-trimoxazole (\$)	Vancomycin (\$\$\$)	Tetracycline (\$\$)	Linezolid (\$\$\$\$)
		%S	%I	%R															
Staphylococcus aureus	463	87	(b)	-	-	87	-	-	-	-	-	77	66	-	100	100	-	-	
MRSA only	58	0	0	-	-	0	-	-	-	-	-	60	23	-	100	100	98	-	
Staphylococcus lugdunensis	7(c,d)	100	(b)	-	-	100	-	-	-	-	-	71	86	-	100	100	-	-	
Staphylococcus sp., Coagulase-negative	35	49	(b)	-	-	49	-	-	-	-	-	54	34	-	69	100	-	-	
Enterococcus faecium	17(c,d)	-	59	0	41	-	-	-	-	-	-	-	-	-	88	-	88	-	
Enterococcus faecalis	14(c)	-	100	0	0	-	-	-	-	-	-	-	-	-	100	-	-	-	
Enterococcus sp. (not identified to species)	150	-	95	0	5	-	-	-	-	-	87	-	95	-	98	-	-	-	
Streptococcus group B (vag/anal screen)	99	-	100	0	0	-	-	-	-	-	-	59	-	-	-	-	-	-	
viridans group streptococci	21(c)	-	76	19	5	-	-	95	-	-	-	90	45	-	100	-	-	-	
Streptococcus pneumoniae	22(c)	-	59(e)	-	41	-	70	95(f)	73	-	-	72	55	-	73	100	Doxycycline 56	-	

Drug cost: Please choose the appropriate antibiotic based on best spectrum of coverage and lowest cost. Costs are reflective of 1 day of therapy based on adult dosing and include drug levels and reformulations.

\$ = \$0-20
 \$\$ = \$20-50
 \$\$\$ = \$50-100
 \$\$\$\$ = >\$100

(a) Testing for inducible clindamycin resistance performed on all staphylococci, group B strep, and S. pneumoniae
 (b) Sensitivity confirmed by request. (c) Data from isolate totals <30 may be statistically unreliable.
 (d) Includes isolates from 2020. (e) Based on meningitis interpretive criteria (more conservative). Nonmeningitis interpretation is 100%. (f) Ceftriaxone uses the meningitis interpretive criteria (more conservative).

Candida

Percent Susceptible By Broth Microdilution (YeastOne, Trek Diagnostics)	No. Tested	Amphotericin B (a) (\$\$\$\$)	Fluconazole (b) (\$)	Voriconazole (\$\$\$\$)	Caspofungin (c) (\$\$\$)
Candida albicans	16(d,e)	100	94	94	100
Candida glabrata	7(d,e)	100	86	-	100
Candida parapsilosis	13(d,e)	100	85	92	100
Other Candida species	6(d,e)	100	(f)	50	100

(a) Suggested Ampho Resistant breakpoint MIC > or = 2 mcg/ml. (b) Susceptible dose-dependent breakpoint MIC was used.
 (c) Consult Peds ID if Caspofungin being considered for treatment. (d) Data from isolate totals <30 may be statistically unreliable.
 (e) Includes isolates from 2020. (f) Species other than C. krusei are 100% susceptible; C. krusei is intrinsically resistant to fluconazole.

Haemophilus influenzae

For infections with beta-lactamase producing H. influenzae: cefuroxime, ceftriaxone, trimethoprim/sulfamethoxazole, amoxicillin/clavulanate, or azithromycin is recommended.
 Ceftriaxone is drug of choice for CNS infections.
 At LPCH, 75% (35/47) of H. influenzae are ampicillin susceptible.