



Lucile Packard Children's Hospital

Stanford Children's Health

Antibiogram Data from 2020 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 (\$)	Aztreonam (\$\$\$)	Ertapenem (\$\$\$)	Meropenem (\$\$)	Amikacin (\$\$\$)	Gentamicin (\$\$\$)	Tobramycin (\$\$\$)	Ciprofloxacin (\$)	Co-trimoxazole (\$\$)	Cefazolin (\$)	Predicts 1st gen cephem
<i>Achromobacter xylosoxidans</i>	21(b,c)	-	81	-	-	62	0	0	-	86	0	0	0	14	88	-	-
<i>Acinetobacter baumannii</i>	13(b)	-	-	-	-	92	92	-	-	92	92	92	92	92	92	-	-
<i>Citrobacter freundii</i> complex	11(b)	0	100	0	100	100	-	-	100	100	100	100	100	82	82	0	-
<i>Enterobacter cloacae</i> complex	45	0	78	0	71	76	94	69	84	100	100	98	98	93	96	0	60
<i>Escherichia coli</i>	397	48	94	72	88	92	73	74	99	99	100	88	88	82	66	84	96
<i>Klebsiella aerogenes</i> (<i>Enterobacter aerogenes</i>)	11(b)	0	91	0	73	82	-	-	100	100	100	100	100	91	91	-	0
<i>Klebsiella oxytoca</i>	47	0	98	87	98	98	96	96	100	100	100	96	96	94	89	52	71
<i>Klebsiella pneumoniae</i>	86	0	93	-	88	91	89	94	97	99	100	95	92	87	83	90	20
<i>Morganella morganii</i>	18(b,c)	0	-	0	94	89	-	-	100	-	-	94	100	89	94	-	-
<i>Proteus mirabilis</i>	28(b)	81	100	-	100	100	-	-	100	100	100	89	89	96	89	100	0
<i>Pseudomonas aeruginosa</i>	93	-	95	C/T 100		96	96	82	-	99	99	91	100	90	-	-	-
<i>Pseudomonas aeruginosa</i> (CF-mucoid) (d)	19(b)	-	74	C/T 90		90	90	90	Imp 68	84	74	-	90	79	-	-	-
<i>Pseudomonas aeruginosa</i> (CF-non-mucoid) (d)	42	-	88	C/T 95		91	88	74	Imp 86	86	81	-	88	81	-	-	-
<i>Salmonella</i> spp.	29(b,c)	93	-	-	97	-	-	-	-	-	-	-	-	79	100	-	-
<i>Serratia marcescens</i>	21(b)	0	100	0	100	100	100	100	100	100	100	100	100	86	91	-	0
<i>Stenotrophomonas maltophilia</i>	47	-	-	-	-	-	-	-	-	-	-	-	Levo 94	98	-	-	-

(a) First isolate from each patient was included

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

(c) Includes isolates from 2019

(d) 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	424	86	(b)	-	-	86	-	-	-	95	-	73	62	-	100	100	-	-	
MRSA only	60	0	0	-	-	0	-	-	-	90	-	49	22	-	98	100	97	-	
Staphylococcus lugdunensis	13(c,d)	100	(b)	-	-	100	-	-	-	100	-	92	100	-	100	100	-	-	
Staphylococcus sp., Coagulase-negative	50	27	(b)	-	-	27	-	-	-	63	-	46	23	-	53	100	-	-	
Enterococcus faecium	12(c)	-	58	0	42	-	-	-	-	-	-	-	-	-	100	-	83		
Enterococcus faecalis	24(c)	-	100	0	0	-	-	-	-	-	-	-	-	-	100	-	-		
Enterococcus sp. (not identified to species)	164	-	95	0	5	-	-	-	-	-	87	-	96	-	98	-	-		
Streptococcus group B (vag/anal screen)	77	-	100	0	0	-	-	-	-	-	-	56	-	-	-	-	-		
viridans group streptococci	26(c)	-	58	34	8	-	-	92	-	-	-	81	46	-	100	-	-		
Streptococcus pneumoniae	27(c)	-	59(e)	-	41	-	73	93(f)	89	-	-	79	59	-	63	100	Doxycycline 67		

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 2019. (e) Based on meningitis interpretive criteria (more conservative). Nonmeningitis interpretation is 93%. (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	17(d,e)	100	100	100	100
Candida glabrata	6(d,e)	100	67	-	83
Candida parapsilosis	13(d,e)	100	77	85	100
Other Candida species	8(d,e)	100	(f)	43	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 2019. (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, 72% (57/79) of H. influenzae are ampicillin susceptible based on 2019-20 data.