

# 2008 Antibiotic Susceptibility Report



## COSTS

### NOTES

- This data represents susceptibilities of organism cultures (including urinary) from Fairview Ridges Hospital from 1/1/2007-12/31/2007. Since laboratory data may not correlate with clinical efficacy, additional factors such as infection site, drug penetration, immune status, organ function, concomitant disease states, and medications need to be considered.
- The laboratory MIC definition of sensitivity of Timentin for *P. aeruginosa* is  $\leq 64$  mcg/ml. Since this concentration is only marginally achievable, lab reports may demonstrate false-positive activity. About 50% of organisms are sensitive to concentrations typically achieved.
- The reported sensitivity of ceftriaxone/cefotaxime for *S. pneumoniae* includes a combination of CSF isolates (MIC  $\leq 0.5$  mcg/ml used) and non-CSF isolates (MIC  $\leq 1$  mcg/ml used).
- No significant extended-spectrum beta-lactamase (ESBL) activity has been identified for *E. coli* and *Klebsiella* spp.
- All numbers expressed as percent sensitive. Additional sensitivity data may be available for antibiotics that are not routinely reported. Please call (952) 924-5159 for more information.
- Contact Ron Greenberg, Pharm.D, BCPS at (952) 892-2504 with questions regarding the antibiotic formulary.

ANTIBIOTIC	USUAL DOSE	COST/DOSE	COST/DAY
<b>PENICILLINS</b>			
Ampicillin	2 g q6h	\$6.21	\$24.84
Nafcillin	2 g q4h	\$15.18	\$91.08
Penicillin G	2.5 M units q4h	\$1.55	\$9.30
Timentin	3.1 g q6h	\$10.16	\$40.64
Unasyn	3 g q6h	\$5.42	\$21.68
Zosyn	3.375 g q6h	\$20.26	\$81.04
<b>CEPHALOSPORINS</b>			
Cefazolin	1 g q8h	\$0.85	\$2.55
Cefoxitin	1 g q6h	\$4.35	\$17.40
Ceftazidime	1 g q8h	\$4.19	\$12.57
Ceftriaxone	1 g q24h	\$2.41	\$2.41
Cefuroxime	1.5 g q8h	\$3.63	\$10.89
<b>AMINOGLYCOSIDES</b>			
Gentamicin	350 mg q24h	\$1.80	\$1.80
Tobramycin	350 mg q24h	\$5.18	\$5.18
<b>ANTI-ANAEROBIC</b>			
Clindamycin	900 mg q8h	\$12.10	\$36.30
Metronidazole	500 mg q8h	\$1.88	\$5.64
<b>MISCELLANEOUS</b>			
Azithromycin	500 mg q24h	\$7.20	\$7.20
Aztreonam	1 g q8h	\$27.64	\$82.92
Ciprofloxacin	400 mg q12h	\$23.00	\$48.00
Daptomycin	500 mg q24h	\$177.97	\$177.97
Doxycycline	100 mg q12h	\$3.73	\$7.46
Ertapenem	1 g q24h	\$42.61	\$42.61
Linezolid	600 mg q12h	\$75.99	\$151.98
Levofloxacin	750 mg q24h	\$11.93	\$11.93
Primaxin	500 mg q8h	\$20.85	\$62.55
Synercid	500 mg q8h	\$129.56	\$388.68
Tigecycline	50 mg q12h	\$51.80	\$103.60
Vancomycin	1 g q12h	\$6.40	\$12.80

\*Costs represent only drug acquisition cost and do not include supplies, diluents, and fees

**GRAM-POSITIVE ORGANISMS**

	Strep. pneumoniae	Staph. aureus: MSSA	Staph. aureus: MRSA	Staph: Coag. Negative	Enterococcus faecalis	Enterococcus faecium
No. Isolates	11	94	116	65	53	26
Ampicillin					100	15
Cefazolin		96		29		
Cephalosporins-Gen 3	100*	98		30		
Clindamycin	90	80	19	61		
Erythromycin	82	68	5	41		
Levofloxacin	100	88	18	53	60**	12**
Linezolid (ID approval req.)		100	100	100	100	96
Oxacillin		98		31		
Penicillin G	82	20		6	100	15
TMP/SMX	82	100	98	75		
Tetracycline	91	98	99	75	26	50
Vancomycin	100	100	100	100	98	42

\*Reported as combined sensitivity to ceftriaxone & cefotaxime. Other cephalosporins will be more resistant.  
 \*\*Do NOT use levofloxacin for any enterococcus infections.  
 MRSA breakdown: 56% of 2007 Staph. aureus isolates are MRSA

**GRAM-NEGATIVE ORGANISMS**

	Enterobacter cloacae	Escherichia coli	Klebsiella oxytoca	Klebsiella pneumoniae	Proteus mirabilis	Pseudomonas aeruginosa	Serratia marcescens	Stenotrophomonas maltophilia
No. Isolates	13	128	11	36	17	50	13	8
Ampicillin		59			82			
Cefazolin		90	64	100	76			
Ceftazidime	77^	98	100	100	94	84	100^	63
Ceftriaxone	77^	98	100	100	94		100^	
Ciprofloxacin	85	86	100	89	53	78	54	25
Gentamicin	85	96	100	100	82	82	100	
Imipenem	100	100	100	100	NR	92	100	
Levofloxacin	100	87	100	89	71	78	62	
Piperacillin	89	79	50		83	88	89	25
TMP/SMX	85	84	100	94	82	25	100	100
Tobramycin	85	96	100	100	82	100	100	
Timentin	82	90	91	100	100	78	77	50
Unasyn		77	91	100	82			
Zosyn	100	100	100	100	100	94	89	

^Enterobacter and Serratia may develop resistance during prolonged therapy with 3<sup>rd</sup> generation cephalosporins. Isolates that are initially susceptible may become resistant within 3-4 days.

Last Revised/Approved by: R Greenberg, PharmD 6/08