

Medical Center of Louisiana – New Orleans Antibioqram 2008 (Reflective of 2007 Antibiotic % Susceptibility Data for Selected Organisms)

Pathogen / Antibiotic	Acinetobacter species	Citrobacter koseri	Enterobacter aerogenes	Enterobacter cloacae	E. coli	Klebsiella pneumoniae	Proteus mirabilis	Pseudomonas aeruginosa	Serratia marcescens ¹⁰	Enterococcus Faecium ⁹	Enterococcus Faecalis ⁹	Staph aureus	Staph Coag Negative	Streptococcus pneumoniae ⁸
No of Isolates	52	30	33	72	473	131	106	139	15	42	70	650	169 ⁷	34
Amikacin	87	100	100	100	100	98	100	95	100					
Ampicillin		0	3	4	45	0	94		7	12	97			
Aztreonam	31	100	85	74	97	95	95	81	87					
Cefazolin		97	3	0	89	89	97		0			33	44	
Cefepime ³	79	100	100	99	98	95	99	86	100					
Cefotaxime ^{2,3,4}	50	100	91	72	98	94	99		80					
Cefoxitin														
Ceftriaxone ³	60	100	83	72	97	94	99		100					92
Ciprofloxacin ^{3,5}	81	100	97	96	77	94	96	85	100					
Clindamycin														
Gentamicin	88	100	100	99	91	98	94	91	100			99	82	
Imipenem ²	98	100	100	99	100	99	100	92	100					
Linezolid ²										100	99	100		
Metronidazole														
Moxifloxacin ^{3,5}		100	100	97	67	99	95		100					100
Nitrofurantoin ¹		92	50	12	98/	65	2							
Oxacillin ³												33	46	
Penicillin												4	16	54
Piperacillin/Tazobactam ^{2,3,5}		100	91	76	97	95	100	94	73					
TMP/SMX	75	100	100	96	66	89	95		100			98	61	
Tobramycin	85	100	100	99	92	95	95	97	100					
Vancomycin ^{2,6}										21	99	100	100	

1 Nitrofurantoin reported on URINE isolates ONLY

2 Restricted antibiotic (see reverse side for details)

3 Automatic substitution in place (see reverse side for details)

4 Non-formulary antibiotic

5 Preferred agent in a specific class of medications: moxifloxacin, ciprofloxacin, and piperacillin/tazobactam are preferred agents

6 Specific Guidelines for use of this agent (see reverse side for details)

7 Number of CNS tested, more were isolated

8 Ceftriaxone vs. S. pneumoniae data is using break points for non-meningitis.

9 Overall VRE rate is 17% (83% susceptible)

10 Shaded values should not be reported due to low number of isolates.

RESTRICTED ANTIMICROBIALS-ANTI-INFECTIVES 2008

Category 1: To obtain a restricted antimicrobial-anti-infective in this category, you must contact the Infectious Disease (ID) Fellow or Staff/Attending on call for the ID approval. He/she will contact the pharmacist and give a verbal approval. You are responsible for writing the order for the medication, including the drug name, dose, route and frequency of administration. You must indicate “approved by Dr. XXX (Name of ID specialist)” after obtaining the verbal authorization of the ID specialist. If you are an ID specialist, please indicate that on the order and clearly write name and physician number. If you are an intern/resident rounding with ID team and writing orders on behalf of your team, you must indicate the name of ID fellow. To contact the ID specialist on-call, call the operator.

Category 1 Medications

DRUG	ADULT DOSE	COST/ DAY	APPROVED INDICATIONS
Amphotericin B Lipid Formulation (Abelcet®)	5 mg/kg/day IV Qday	\$352	Patients who have amphotericin-induced renal toxicity, severe reaction or failure to respond to conventional amphotericin therapy
Caspofungin (Cancidas®)	LD: 70mg IV MD: 50mg IV Qday	\$391	Refractory invasive <i>aspergillus</i> and <i>Candida</i> infections (intra-abdominal abscesses, candidemia, peritonitis and pleural space)
Daptomycin (Cubicin®)	4 mg/kg - 6mg/kg IV Qday	\$143 - \$214	Complicated skin structure infections caused by MRSA. Not indicated for pneumonia.
Drotrecogin Alpha (Xigris®)	24mcg/kg/hr IV x 96 hours	\$4724 - \$14622	Treatment of adults with sepsis and acute organ dysfunction (requires approval by Critical Care or ID staff)
Imipenem-cilastatin (Primaxin®)	500mg IV Q6h Max: 1gm IV Q6h	\$91- \$181	Intra-abdominal Infection, nosocomial sepsis, fever in neutropenic patients (single agent)
Linezolid (Zyvox®)	600mg IV Q12h or 600mg PO Q12h	\$134 (IV) \$106 (PO)	Serious, systemic infections caused by vancomycin-resistant enterococcus (VRE) (both <i>E. faecalis</i> & <i>E. faecium</i>)
Tigecycline (Tygacil®)	LD:100mg IV MD: 50mg IV Q12h	\$118	Complicated skin Infections, Complicated intra-abdominal infections. Not indicated for <i>Pseudomonas</i> species
Voriconazole (Vfend®)	IV: LD: 6mg/kg Q12h x 1 day MD: 3-4 mg/kg Q12h PO: LD: 200-400mg Q12h x 1 day MD: 100-200 mg Q12h	\$189- \$378 (IV) \$57- \$115 (PO)	Serious infections caused by <i>Aspergillus</i> sp., disseminated <i>Candida</i> and serious fungal infections refractory to other therapy

ALL RESTRICTIONS WILL BE STRICTLY ENFORCED BY THE PHARMACY

Operator:	UH Campus:	903-3000
Pharmacy:	UH Campus:	903-3017

First Dose Rule:
If the ID Specialist (Fellow or Staff) cannot be contacted, a first dose may be dispensed when a physician writes a clear indication and reason to choose Category 1 medication. Subsequent doses can ONLY be released after ID specialist gives approval.
Example: 1st dose of zyvox can be dispensed if patient with unstable renal function or fails to respond to vancomycin.

Category 2: To obtain a restricted medication from this group you must write the correct indication on the order sheet along with the drug name, dose, route and frequency of administration. Unapproved indications must have ID approval as Category 1 medications. A substitute dose will be dispensed without ID approval.

Category 2 Medications

DRUG	ADULT DOSE	COST /DAY	APPROVED INDICATIONS
Ceftriaxone	Dose greater than 1 gm IV Q24h	\$67	Doses of 2gm or more are restricted to “sepsis” or “SBP” (2gm Q24h) & “meningitis (2gm Q12h) A dose of 1gm Q24h will be substituted unless the order indicates above conditions
Piperacillin/Tazobactam (Zosyn®)	Dose greater than 4.5gm IV Q8h or 3.375gm IV Q6h	\$101	Skin and soft tissue infections in diabetic patients or patients with peripheral vascular disease, clenched fist injuries, head and neck injuries, intra-abdominal & nosocomial infections. For suspected or documented <i>Pseudomonas</i> pneumonia, 4.5gm Q6h is recommended.
Vancomycin (IV) ¹	Dose greater than 15mg /kg Q12h or 2gm Q12 h	\$23	MRSA infections; gram (+) cocci infections in patients with a documented penicillin allergy; therapeutic failures (e.g. on cephalosporins and/or penicillins); Empiric therapy (< 72 hours) when a high suspicion of MRSA or MRSE is present

1. Doses of Vancomycin > 2gm q12h in adult patients MUST BE APPROVED by an ID Specialist or a Clinical Pharmacist (Clinical Pharmacokinetic Consult).

Guidelines for Use of: oral Vancomycin

- IV preparation will be used for oral use
- Normal dose is 125-250 mg q6h
- Approved indication: Pseudomembranous colitis in documented metronidazole failure or resistance

THERAPEUTIC SUBSTITUTIONS

The following antibiotics are Therapeutic Substitutions:

- **Ceftriaxone (Rocephin®) for cefotaxime (Claforan®)** in all patients *except neonates or infants (<13 months)*. The maximum dose for sepsis is 2 GM per day. The maximum dose for meningitis is 4 GM per day.
- **Substitutions for Fluoroquinolones:**
 - Levofloxacin 500mg and 250 mg are automatically interchanged with moxifloxacin 400 mg in all patients, **except**
 - *Pseudomonas* infections or MAC infection, and UTI, Ciprofloxacin will be substituted
 - Ciprofloxacin is also suggested for osteomyelitis and nosocomial pneumonia.
 - If levofloxacin 750 mg is requested, you will be advised to choose an alternative antibiotic, contact ID for advice or go through the non-formulary process.
- **Cefepime (Maxipime®) for ceftazidime (Fortaz®, Tazicef®)** in all patients except infants and neonates (< 2 months of age) or if used as an ophthalmic preparation (ONLY for Ophthalmology and EENT specialists). All other ceftazidime orders will be substituted with cefepime. Cefepime 1 gm Q12h is equivalent to Ceftazidime 1 gm Q8-12h
- **Piperacillin-tazobactam (Zosyn®) for Ampicillin-sulbactam (Unasyn®) and Ticarcillin-clavulanate (Timentin®)**
- **Oxacillin for Nafcillin** in all patients (no exceptions). Oxacillin 2 gm Q6h is equivalent to Nafcillin 2gm Q6h

Guidelines for Use of: Fluconazole (Diflucan®)

Loading/Induction Dose: 200-800mg IV or PO (doses > 400mg may be split)
Maintenance Dose: 200-400mg Qday
UTI: 100mg PO Qday x 5 days
Vaginitis: 150mg PO x one dose

Indications: Hepatosplenic candidiasis; Oral or vaginal candidiasis unresponsive to nystatin or clotrimazole; Cryptococcal infections and secondary prophylaxis for Cryptococcal meningitis in immunosuppressed patients; Febrile ICU patients with TWO sites positive for yeast or yeast in the urine (limit to 5 days)