



MEMORIAL HOSPITAL

ANTIBIOGRAM (% SUSCEPTIBLE) May 2015 - June 2016

	Ampicillin	Amp/Sulbactam (unasynt)	Cefazolin	Cefepime	Ceftriaxone (Non-Meningitis/ Meningitis)	Ciprofloxacin	Clindamycin	Erythromycin (use azithromycin)	Gentamicin	Levofloxacin	Linezolid	Meropenem	Nitrofurantoin	Oxacillin (use nafcillin)	Penicillin Nonmeningitis/ Meningitis/ Oral	Pip/Tazobactam	Tetracycline (use doxycycline)	Tobramycin	Trimeth/Sulfa	Vancomycin	Average Cost of Drug/Day (Range Typically PO-IV) \$ = (\$1-10) \$\$ = (\$10 - 50) \$\$\$ = (\$50 - 100)
Average Cost of Drug/Day	\$\$	\$	\$	\$\$	\$	\$	\$\$	\$	\$	\$	\$\$\$-\$\$\$	\$\$	\$	\$\$	\$\$\$	\$\$	\$\$	\$	\$	\$	Average Cost of Drug/Day
NON-URINE			0	98	88	98			98	98		100				90		98	96		NON-URINE
Enterobacter cloacae (48)																					Enterobacter cloacae (48)
Enterococcus faecalis (140)	99																			100	Enterococcus faecalis (140)
Escherichia coli (275)	51	57	83	93	92	78			91	78		100				96		91	79		Escherichia coli (275)
Klebsiella oxytoca (35)	0	71	46	100	97	100			100	100		100				97		100	100		Klebsiella oxytoca (35)
Klebsiella pneumoniae (93)	0	92	95	100	99	100			100	100		100				97		99	97		Klebsiella pneumoniae (93)
Proteus mirabilis (34)	59	68	50	94	97	50			76	59		100				100		82	62		Proteus mirabilis (34)
Pseudomonas aeruginosa (99)	0	0	0	90	0	88			94	84		96				98		97	0		Pseudomonas aeruginosa (99)
Serratia marcescens (22)			0	95	91	100			100	100		95						100	100		Serratia marcescens (22)
Staphylococcus aureus - MSSA (545)						92	83	71	99	92	100			100	0		94		99	100	Staphylococcus aureus - MSSA (545)
Staphylococcus aureus - MRSA (345)						49	74	17	99	51	100			0	0		97		97	100	Staphylococcus aureus - MRSA (345)
Staphylococcus epidermidis (109)						58	61	32	88	51	100			33	0		84		53	100	Staphylococcus epidermidis (109)
Stenotrophomonas maltophilia (21)										95									95		Stenotrophomonas maltophilia (21)
Streptococcus pneumoniae (86)					100 / 91			72		100	100				100 / 77 / 77		83		79	100	Streptococcus pneumoniae (86)
URINE			0	100	87	94			96	94		100	90			90		98	83		URINE
Citrobacter freundii (93)																					Citrobacter freundii (93)
Citrobacter koseri (34)			0	100	100	100			100	100		100	94			100		100	97		Citrobacter koseri (34)
Enterobacter aerogenes (51)			0	100	88	100			100	100		100	12			90		100	98		Enterobacter aerogenes (51)
Enterobacter cloacae (116)			0	99	82	98			100	98		100	37			87		100	92		Enterobacter cloacae (116)
Enterococcus faecalis (438)	100					79				79	100		99							100	Enterococcus faecalis (437)
Enterococcus faecium (37)	14					6				8	100		31							46	Enterococcus faecium (36)
Escherichia coli (3097)	57	65	94	99	94	84			93	84		100	96			97		94	80		Escherichia coli (3095)
Klebsiella oxytoca (98)	0	64	80	100	96	100			98	100		100	86			96		98	92		Klebsiella oxytoca (98)
Klebsiella pneumoniae (564)	0	90	97	99	99	98			99	98		100	49			97		99	94		Klebsiella pneumoniae (564)
Proteus mirabilis (188)	78	81	91	98	96	71			86	76		99	0			99		86	74		Proteus mirabilis (188)
Pseudomonas aeruginosa (161)	0	0	0	93	0	77			88	72		96	0			98		89	0		Pseudomonas aeruginosa (161)
Serratia marcescens (23)			0	100	100	100			100	100		100	0					87	100		Serratia marcescens (23)
Staphylococcus aureus - MSSA (88)						77			99	77	100		100	100	0		98		99	100	Staphylococcus aureus - MSSA (88)
Staphylococcus aureus - MRSA (51)						10			94	10	100		100	0	0		96		90	100	Staphylococcus aureus - MRSA (51)
Staphylococcus epidermidis (224)						52			92	52	100		100	47	0		83		58	100	Staphylococcus epidermidis (224)
Staphylococcus saprophyticus (44)						95			100	98	100		100	89	0		95		95	100	Staphylococcus saprophyticus (44)
Stenotrophomonas maltophilia (11)										91									100		Stenotrophomonas maltophilia (11)

This report includes MH-UCH Inpatients & Emergency Depts.

Includes automated tests performed by Vitek II and manual tests performed by E-Test.

Special Notes:

- Susceptibilities for organisms with <30 isolates should be interpreted with caution, as these can be significantly affected by outliers.
- Multi-Drug Resistant Organism (MDRO) applies to Ceftriaxone and Ceftazidime Resistant organisms within the Enterobacteriaceae group only.
- 1 Carbapenemase-Resistant Enterobacteriaceae (CRE) E. coli has been confirmed in 2015 by CDPHE.
- CREs have been seen in the community.

MDRO PROTOCOL: An automatic infectious disease consult will occur for **CRE/CRPA** from ANY site and blood specimens positive for **S. aureus, Enterococcus, or Yeast** in inpatient adult patients age 15 and over. Unless there are extenuating circumstances, the patient will be seen within 24 hours.

Inducible Resistance:

MRSA inducible clindamycin resistance 15%
MSSA inducible clindamycin resistance 15%

Gp B Strep Clinda = 59% Sensitive;
18% are resistant due to "inducible mechanism"

While susceptibility testing may indicate that bacteria are susceptible to an antibiotic, some bacteria may have enzymes that can be "turned on" or induced (thus inducible resistance) in vitro resulting in antibiotic resistance

Total % Frequency:

MRSA = 38% (396)
MSSA = 62% (633)
MDRO = 3.9% (197)
VRE = 5.3% (33)
CRE = 0.1% (4)
CRPA = 1.9% (5)

Blood Cultures:

Frequency of Pathogen Isolation:

1. Escherichia coli (135)
2. Staph. aureus - MSSA (91)
3. Staph. aureus - MRSA (56)
4. Strep. pneumoniae (41)
5. Klebsiella pneumoniae (38)
6. Staph. epidermidis (33)
7. Enterococcus faecalis (23)