Memorial Hospital
UNIVERSITY OF COLORADO HEALTH

ANTIBIOGRAM (% SUSCEPTIBLE)
June 2014 - May 2015

		Ampicillin	Amp/Sulbactam (unasyn)	Cefazolin	Cefepime	Ceftriaxone (Meningitis /Non-Meningitis)	Ciprofloxacin	Clindamycin	Erythromycin (use azithromycin)	Gentamicin	Levofloxacin	Linezolid	Meropenem	Nitrofurantoin	Oxacillin (use nafcillin)	Penicillin / Penicillin - Meningitis	Pip/Tazobactam	Tetracycline (use doxycycline)	Tobramycin	Trimeth/Sulfa	Vancomycin	
	Relative Drug Cost	$	$	$	$	$	$	$$	$	$	$	$$$$	$$	$	$$	$$	$	$$	$	$	$	Relative Drug Cost
NON-URINE	Enterobacter cloacae (22)			0	100	100	100			100	100						100		100	100		Enterobacter cloacae (22)
	Enterococcus faecalis (64)	100																			100	Enterococcus faecalis (64)
	Escherichia coli (83)	55	64	85	88	94	78			88	78		100				96		86	78		Escherichia coli (83)
	Klebsiella oxytoca (13)	0	69	75	100	92	10			100	100		100				92		100	100		Klebsiella oxytoca (13)
	Klebsiella pneumoniae (32)	0	97	100	100	100	100			100	100		100				100		100	100		Klebsiella pneumoniae (32)
	Proteus mirabilis (15)	73	80	100	100	100	67			87	73		100				100		87	80		Proteus mirabilis (15)
	Pseudomonas aeruginosa (37)	0	0	0	95	0	89			92	81		92				92		97	0		Pseudomonas aeruginosa (64)
	Serratia marcescens (4)			0	100	100	100			100	100		100						75	100		Serratia marcescens (4)
	Staphylococcus aureus - MSSA (164)						88	83	74	99	89	100			100	0		96		99	100	Staphylococcus aureus - MSSA (164)
	Staphylococcus aureus - MRSA (132)						45	75	8	100	45	100			0	0		98		99	100	Staphylococcus aureus - MRSA (132)
	Staphylococcus epidermidis (92)						55	63	42	85	55	100			43	0		85		65	100	Staphylococcus epidermidis (92)
	Staphylococcus hominis (41)						66	62	28	100	66	100			46	0		63		57	100	Staphylococcus hominis (41)
	Stenotrophomonas maltophilia (9)										67									89		Stenotrophomonas maltophilia (9)
	Streptococcus pneumoniae (37)					92/100			70		100	100				82/100		89		84	100	Streptococcus pneumoniae (37)
URINE	Citrobacter freundii (35)				100	83	86			89	86		100	89			91		100	80		Citrobacter freundii (35)
	Citrobacter koseri (19)				100	100	100			100	100		100	58			100		100	100		Citrobacter koseri (19)
	Enterobacter aerogenes (29)				100	93	100			100	100		100	3			93		100	100		Enterobacter aerogenes (29)
	Enterobacter cloacae (44)				100	84	100			100	100		100	25			82		100	95		Enterobacter cloacae (44)
	Enterococcus faecalis (181)	100					76				77	94		100							100	Enterococcus faecalis (181)
	Enterococcus faecium (22)	18					5				5	100		10							24	Enterococcus faecium (22)
	Escherichia coli (1970)	55	62	91	98	97	87			94	86		100	94			97		94	79		Escherichia coli (1970)
	Klebsiella oxytoca (35)	0	63	81	100	93	100			100	100		100	69			91		100	94		Klebsiella oxytoca (35)
	Klebsiella pneumoniae (255)	0	90	94	97	97	99			99	99		100	34			98		99	94		Klebsiella pneumoniae (255)
	Proteus mirabilis (76)	74	84	95	95	96	76			92	83		100	0			100		95	71		Proteus mirabilis (76)
	Pseudomonas aeruginosa (71)	0	0	0	97	0	76			87	70		94	0			90		90	0		Pseudomonas aeruginosa (74)
	Serratia marcescens (8)			0	100	100	100			100	100		100	0					100	100		Serratia marcescens (8)
	Staphylococcus aureus - MSSA (49)						82	74	65	98	82	100		100	100	0		94		98	100	Staphylococcus aureus - MSSA (49)
	Staphylococcus aureus - MRSA (19)						26	17	0	100	26	100		100	0	0		89		100	100	Staphylococcus aureus - MRSA (19)
	Staphylococcus epidermidis (88)						58	75	41	93	58	100		100	52	1		84		57	100	Staphylococcus epidermidis (88)
	Staphylococcus saprophyticus (38)						100	72	50	100	100	100		100	32	0		97		97	100	Staphylococcus saprophyticus (38)
	Stenotrophomonas maltophilia (6)										33									33		Stenotrophomonas maltophilia (6)

Key to Drug Cost
$ = ($1-10)
$$ = ($10 - 50)
SSS = ($50 - 100)
$$$$ = (>$100)

This report includes MH-UCH Inpatients & Emergency Depts.
Includes automated tests performed by Vitek II and manual tests performed by E-Test.

Special Notes
Multi-Drug Resistant Organism (MDRO) applies to Enterobacteriaceae group only
1 isolate of Carbapenemase-Resistant Enterobacteriaceae (CRE) has been confirmed in 2015
CREs have been seen in the community
Vancomycin intermediate resistance has been confirmed in Coag Neg Staph and MRSA

SAB PROTOCOL: An automatic infectious disease consult will occur for any **blood specimens positive for *S. aureus*** in 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 16%
MSSA inducible clindamycin resistance 18%

Grp B Strep Clinda = 46% Sensitive;
0% 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 = 41% (151)

MSSA = 59% (213)

MDRO = 2.3% (62)

VRE = 7.6% (19)

CRE = 0.038% (1)

Blood Cultures

Frequency of Isolation:

1. Coag Neg Staph (361)
2. Escherichia coli (50)
3. Staph. aureus - MSSA (36)
4. Strep. pneumoniae (17)
5. Klebsiella pneumoniae (15)
6. Staph. aureus - MRSA (14)
7. Enterococcus faecalis (10)