

Bacterial Susceptibility Report: 2011

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This report includes bacterial susceptibility information for 10 units/buildings:

Division	Units
Palo Alto Division	2A, 2F(IICU), 3C, 3F(ICU), 4C, 7F, Emergency Room
Menlo Park Division	Buildings 331 and 360
Livermore Division	Building 90

Summary of Findings:

Finding	Comments
<ul style="list-style-type: none"> Piperacillin-tazobactam activity against <i>Escherichia coli</i>, <i>Klebsiella pneumoniae</i>, and <i>Pseudomonas aeruginosa</i> decreased compared to the last report. The decrease was most pronounced against <i>Pseudomonas aeruginosa</i> (units 2A, 2F, 3C, 3F, and 331 decreased by 19, 45, 20, 24, and 25 percentage points, respectively). The decreases against <i>Escherichia coli</i> were milder ranging from 3-13 percentage points. 	<ul style="list-style-type: none"> bioMerieux, Inc initiated an urgent recall for VITEK®2 piperacillin-tazobactam tests on gram negative susceptibility cards that were manufactured after March 10, 2009 due to higher rates of false-susceptible and false-resistant results. For <i>Escherichia coli</i>, <i>Klebsiella pneumoniae</i>, and <i>Pseudomonas aeruginosa</i>, the problem was predominantly false-resistant results. This may have contributed in part to the higher resistant rates in this report. Another possible contributor is the duplicate isolate removal methodology within the VITEK®2 report software (time period and category change rules). Thus, one patient with multiple cultures for the same resistant organism that has at least one change in its antibiogram would be reported multiple times and drive up the resistance rate. Activity against Enterobacter is generally lower, especially in the intensive care unit (cefepime or imipenem should be considered). Although susceptibility rates are high for ertapenem, it is generally considered inferior to imipenem against this pathogen.
<ul style="list-style-type: none"> Overall, 7% of <i>Escherichia coli</i>, 5% of <i>Klebsiella oxytoca</i>, and 16% of <i>Klebsiella pneumoniae</i> were ESBL-producing isolates (compared to 5%, 7%, and 7%, respectively, in the previous report). The highest rates were observed on 4C (<i>Escherichia coli</i> – 56% rate), 90 (<i>Escherichia coli</i> – 31% rate), and 7F (<i>Klebsiella pneumoniae</i> – 43% rate) 	<ul style="list-style-type: none"> The higher ESBL rates for 4C and 90 (both <i>Escherichia coli</i>) appeared to be due to multiple cultures from nine and five patients, respectively (spread throughout the two-year time period). The 43% rate on 7F (<i>Klebsiella pneumoniae</i>) was primarily driven by an outbreak of urinary tract infections/asymptomatic bacteriuria in 2009.
<ul style="list-style-type: none"> <i>Escherichia coli</i> and <i>Pseudomonas aeruginosa</i> resistance to ciprofloxacin and levofloxacin remain high (approximately 40-50% for both organisms). Resistance rates vary from unit to unit. 	
<ul style="list-style-type: none"> Vancomycin-resistant enterococcus rate is estimated to be 12% 	11% in the previous report
<ul style="list-style-type: none"> Methicillin-resistant <i>S aureus</i>: Rifampin susceptibilities remain very good (~99%) Nearly all are susceptible to trimethoprim-sulfamethoxazole (~98%) 	

EMERGENCY ROOM ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics										
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa
E faecalis	12	100*			100*			83*	58*			17*	92*	100*			100*
Enterococcus sp	83	100			98		67	67	70		0	19	94	96			98
S aureus	237			49	1		51	51			79	39	100		100	98	100
S capitis	22			86	10		82	82			76	68	100	100	100	100*	100
S epidermidis	88			44	2		41	41			57	40	100	100	92	57	99
S hominis	31			65	10		74	74			74	45	100	100	100	79	100
S lugdunensis	10			65*	10*		100*	100*			80*	80*	100*	100*	90*	100*	100*
Staph coag neg	37			54	5		51	51			70	57	100	97	97	60	100
S pneumoniae (f)	12				92*		100*	100*		100*			100*			100*	100*

EMERGENCY ROOM ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
C freundii	12				0*	100*	75*	75*	100*	92*	92*	92*	92*		92*	100*	100*		83*
E cloacae	21			86	0	100	90	86	100	95	95	90	90	83*	33	95	95	100*	90
E coli (c)	233	50	66	93	87	97	96	95	100	90	91	69	69	96	98	100	99	100	75
K pneumoniae (c)	75	0	77	91	88	92	91	92	100	95	93	89	89	91	28	100	100	100	80
M morgani	17	0*	6*	82*	12*	100*	76*	100*	100*	76*	82*	41*	65*	86*	0*	100*		100*	41*
P mirabilis	44	79	93	98	95	95	95	95	100	91	93	82	82	93	0	100		100*	84
P aeruginosa	72	0	0	94	0	86	89	0	97	89	96	82	77		0*		96	95	0
S marcescens	10			100*	0*	100*	100*	100*	100*	100*	100*	100*	100*		0*	100*	100*		100*
S maltophilia	10																		90*

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 4% of the E coli (n=233) and 9% of the K pneumoniae (n=75) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic
- (f) All 12 S pneumoniae isolates were also susceptible to amoxicillin, ceftriaxone (for both meningitis and non-meningitis MICs), and ertapenem

100-2A ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancomycin
E faecium	10	0*			0*		0*		70*	50*			10*	100*	0*			10*
Enterococcus sp	14	100*			100*		29*		43*	57*			0*	100*	86*			86*
S aureus	55			52	0		38	40				57	29	100		98	98	100
S epidermidis	42			10	0							36	24	100	100	93	45	100
S hominis	10				0*		70*	70*				60*	10*	100*	90*	100*		100*

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E cloacae	11			55*	0*	73*	55*	55*	100*	73*	73*	73*	64*	60*	18*		91*		55*
E coli (c)	34	32	47	88	68	88	85	85	100	82	79	59	59	85	88	100	100	100*	62
K pneumoniae (c)	14	0*	93*	93*	93*	100*	100*	100*	100*	100*	100*	100*	100*	100*	29*	100*	100*	100*	93*
P aeruginosa	27	0	0	78	0	81	74	0	100	70	89	56	44		0		63	71*	0

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 12% of the E coli (n=34) and 0% of the K pneumoniae (n=14) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

100-2F (IICU) ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancocycin
E faecium	14	7*			0*		0*		93*	57*		0*	0*	79*	7*			7*
S aureus	33			52	6		45	48				58	42	100		100	97	100
S epidermidis				9	0		19	19				31	9	100	100	91	21	100

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E coli (c)	26	50	62	85	92	92	92	92	100	92	85	62	62	95*	96	100	100	100*	54
P aeruginosa	69	0	0	45	0	48	52	1	93	45	59	23	22		0		52	56	0
S marcescens	10			90*	0*	100*	100*	90*	100*	90*	80*	90*	90*		0*		90*		

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 8% of the E coli (n=26) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

100-3C ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancocycin
Enterococcus sp	14	93*			93*		71*		64*	71*			36*	100*	93*			100*
S aureus	32			56	0		56	56				63	41	100		97	97	100
S epidermidis	26			16	0		15	15				27	27	100	92	100	18	100

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E coli (c)	31	32	42	97	68	97	90	93	100	84	87	58	61	93	100	100	100	100	65
K pneumoniae (c)	11	0*	64*	82*	82*	90*	90*	90*	100*	100*	82*	82*	82*		18*	100*	100*		73*
P aeruginosa	10	0*	0*	80*	0*	80*	80*	0*	90*	90*	100*	80*	80*		0*		80*		0*

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 6% of the E coli (n=31) and 18% of the K pneumoniae (n=11) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

100-3F (ICU) ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancomycin
E faecium	11	0*			0*		0*		100*	90*			9*		0*			0*
Enterococcus sp	10	80*			80*		60*		80*	70*			30*	90*	80*			80*
S aureus	69			46	9		45	46				61	39	100		100	100	100
S epidermidis	35			23	0		34	34				37	26	100	100	94	32	100

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
A baumannii	10	0*	60*		0*	30*	30*	0*		60*	50*	10*	20*		0*		40*		50*
E cloacae	26			73	0	100	77	73	100	100	100	85	81	79*	27	96	100	100*	92
E coli (c)	42	31	45	93	86	95	93	93	100	95	95	79	81	93	98	100	100	100	69
K pneumoniae (c)	29	0	76	76	76	83	83	83	100	86	83	79	79	86	28	100	100	100*	83
P mirabilis	13	69*	100*	100*	92*	92*	92*	92*	100*	100*	100*	46*	54*	100*	0*	100*		100*	54*
P aeruginosa	70	0	0	71	0	59	61	0	90	67	76	51	37		0		54	46	0
S maltophilia	23												74*						83

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 5% of the E coli (n=42) and 17% of the K pneumoniae (n=29) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

100-4C ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics													
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancomycin		
S aureus	20			10*	0*		5*	5*						35*	25*	100*		95*	100*	100*

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E cloacae	12			58*	0*	83*	33*	42*	100*	92*	92*	67*	67*	33*	0*	83*	92*		58*
E coli (c)	25	12	52	92	44	44	44	44	100	80	80	20	20	44*	92	100	100	100*	84
P aeruginosa	14	0*	0*	93*	0*	64*	93*	0*	43*	36*	100*	57*	36*		0*		93*	90*	7*

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 56% of the E coli isolates tested (n=25) were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

7SCI ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancomycin
E faecalis	10	100*			100*		30*		40*	80*			30*	100*	100*			90*
Enterococcus sp	40	97			95		45		50	65		0*	13	98	100			
S aureus	43			28	0		16	16				53	16	100	100	100	100	100
Staph coag neg	10			30*	0*		40*					30*	30*	100*	100*	100*	60*	100*

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E aerogenes	11			73*	0*	100*	73*	73*	100*	100*	100*	73*	73*		0*	82*	100*		82*
E coli (c)	82	38	56	94	83	90	90	91	100	90	87	48	48	86	89	100	100	100	74
K pneumoniae (c)	80	0	51	63	57	61	61	59	95	59	51	48	60	66	4	99	100	100	51
P mirabilis	57	81	91	100	91	95	95	95	100	88	93	61	84	92	0	100		100	73
P aeruginosa	92	0	0	88	0	85	88	0	93	64	87	42	35		0		82	82	0

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 11% of the E coli (n=82) and 43% of the K pneumoniae (n=80) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

90 (Livermore) ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancocycin
Enterococcus sp	18	94*			94*		50*		39*	78*			39*	89*	100*			94*
S aureus	16			25*	0*		31*	31*				69*	31*	100*		100*	93*	100*

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E coli (c)	49	24	35	84	57	72	72	71	100	84	76	24	24	71	86	100	100	100	65
K pneumoniae (c)	18	0*	50*	89*	78*	78*	78*	78*	89*	100*	89*	78*	78*	50*	28*	100*	100*	100*	89*
P mirabilis	23	83	96	100	83	83	83	83	100	74	87	65	74	79*	0	100			61
P stuartii	12	0*	0*	100*	0*	100*	91*	100*	100*	0*	0*	0*	0*		0*	92*			25*
P aeruginosa	19	0*	0*	89*	0*	84*	89*	0*	100*	95*	100*	79*	74*		0*		68*		0*

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 31% of the E coli (n=49) and 22% of K pneumoniae (n=18) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

331 (Menlo Park) ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancomycin
Enterococcus sp	16	100*			100*		6*		13*	75*			13*	100*	100*			100*
S aureus	21			29	0		14	14				71	19	100		100	95*	100

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E coli (c)	38	18	32	100	92	100	97	92	100	68	68	18	18	100	92	100	100	95	66
P mirabilis	49	63	86	96	90	98	98	98	100	73	100	31	33	100	0	100		100	20
P stuartii	21	14	14	100	14	100	100	100	100	14	14	19	19	100*	0	100		100*	48
P aeruginosa	16	0*	0*	75*	0*	81*	75*	0*	88*	44*	75*	50*	50*		0*		88*	82*	

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 5% of the E coli (n=38) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic

360 (Menlo Park) ANTIBIOGRAM: January 2009 – December 2010 (2 years)

GRAM-POSITIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins					Fluoroquinolones/Aminoglycosides (synergy)/Other Antibiotics											
		Ampicillin	Ampicillin-sulbactam	Oxacillin	Penicillin	Cefazolin	Levofloxacin	Moxifloxacin	Gent-500 (b)	Strep-2000 (b)	Chloramphenicol	Clindamycin	Erythromycin	Linezolid	Nitrofurantoin (a)	Rifampin (d)	Trimethoprim-sulfa	Vancocycin
Enterococcus sp	13	100*			100*				23*	62*			0*	92*	100*			100*

GRAM-NEGATIVE AEROBES (% susceptibility)

Organism	# isolates tested	Penicillins/Cephalosporins							Aminoglycosides			Fluoroquinolones/Other Antibiotics							
		Ampicillin	Ampicillin-sulb	Piperacillin-tazo	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Amikacin	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Aztreonam	Nitrofurantoin (a)	Ertapenem	Imipenem	Meropenem (e)	Trimethoprim-sulfa
E coli (c)	26	19	23	38	65	96	96	96	100	96	58	8	8	96	100	100	100	100	50
P mirabilis	26	77	77	76	88	96	96	100	100	96	100	19	19	92	0	100		100	12
P stuartii	14	0*	0*	92*	0*	100*	100*	100*	100*	0*	0*	0*	0*	100*	0*	100*		100*	21*
P aeruginosa	16	0*	0*	33*	0*	40*	33*	0*	100*	93*	100*	40*	43*		0*		80*	67*	0*

FOOTNOTES

- * Only 10-20 isolates were tested
- (a) Used only for uncomplicated UTI
- (b) Test for enterococcal high-level resistance to gentamicin and streptomycin (MIC's of 500 mcg/ml and 2000 mcg/ml, respectively). "S" = synergy with beta-lactams likely, "R" = high-level resistance, synergy with beta-lactams is unlikely.
- (c) 4% of the E coli (n=26) isolates tested were ESBL-producing.
- (d) Rifampin should NOT be used as monotherapy for the treatment of staphylococcal infections
- (e) Meropenem is a non-formulary antibiotic