

**ELKHART COUNTY
SUSCEPTIBILITY PATTERNS OF NONURINE ISOLATES
January to December 2009**



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Microbiology Department

Susceptibility Patterns
Of Common Organisms
Isolated From
Elkhart

January-December 2009

(%) Represents the percent susceptible (-) Test not performed or antibiotic not indicated for organism at this site

ORGANISMS COUNTED First isolate per patient per year	MRSA^{1,2}	<i>Staph aureus</i>² not MRSA	<i>Staph coagulase</i> <i>negative</i>^{3,4}	<i>Enterococcus</i>^{3,4}	<i>Streptococcus</i> <i>pneumoniae</i>^{5,}	<i>E. coli</i>	<i>Pseudomonas</i> <i>aeruginosa</i>	<i>Klebsiella</i> <i>pneumoniae</i>	<i>Proteus</i> <i>mirabilis</i>	<i>Enterobacter</i> <i>cloacae</i>
No. of isolates (1353)	(333)	(263)	(73)	(114)	(31)	(128)	(106)	(53)	(41)	(31)
ANTIMICROBIALS	%	%	%	%	%	%	%	%	%	%
AMIKACIN	-	-	-	-	-	100	97	100	100	100
AMPICILLIN	-	-	-	78	-	59	-	-	85	-
AMP/SULBACTAM	-	-	-	-	-	70	-	87	93	-
CEFAZOLIN	-	100	37	-	-	91	-	94	93	-
CEFOTETAN	-	-	-	-	-	100	-	100	100	-
CEFTAZIDIME	-	-	-	-	-	98	95	100	95	87
CEFTRIAZONE	-	-	-	-	100	98	-	100	95	90
CLINDAMYCIN	76	87	67	-	-	-	-	-	-	-
ERYTHROMYCIN	-	72	39	-	90	-	-	-	-	-
GENTAMICIN	-	-	-	-	-	94	95	100	90	97
LEVOFLOXACIN	61	92	59	-	100	80	91	96	63	100
OXACILLIN	-	100	37	-	-	-	-	-	-	-
PENICILLIN	-	17	12	78	100	-	-	-	-	-
PIP/TAZOBACTAM	-	-	-	-	-	98	98	96	100	94
TETRACYCLINE	96	97	89	-	97	-	-	-	-	-
TOBRAMYCIN	-	-	-	-	-	95	95	100	90	97
TRIMETH/SULFA	99	99	74	-	97	79	-	98	80	97
VANCOMYCIN	100	100	100	91	100	-	-	-	-	-

1. 56% of all *Staphylococcus aureus* are MRSA
2. 15% of MRSA and 11% of *Staphylococcus aureus* other than MRSA have inducible clindamycin resistance
3. 9% of *Enterococcus* are VRE
4. Synergy with penicillin and high levels of gentamicin or streptomycin is likely for 90% and 78% of *Enterococcus* respectively
5. *Streptococcus pneumoniae* susceptibility data based on blood isolates only
- 6a. Oral penicillin and *Streptococcus pneumoniae*: 43% of all from non-sterile sites are intermediate (33%) or resistant (10%) and
- 6b. IV penicillin and *Streptococcus pneumoniae*: 10% of all from non-sterile sites are intermediate (10%) or resistant (0%)
7. 77% of Group B *Streptococcus* from vaginal/rectal sources are susceptible to clindamycin

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(-) Test not performed or antibiotic not indicated for organism

PATIENT LOCATION	ORGANISMS COUNTED First isolate per patient per year	<i>Escherichia coli</i>	<i>Enterococcus</i>	<i>Klebsiella pneumoniae</i>	<i>Proteus mirabilis</i>	<i>Pseudomonas aeruginosa</i>
OP	Number of isolates (1066)	(677)^	(143)	(112)	(98)	(36)
OP	ANTIMICROBIALS	%	%	%	%	%
OP	AMPICILLIN	58	87	-	88	-
OP	AMP/SULBACTAM	68	-	93	92	-
OP	CEFAZOLIN	93	-	96	97	-
OP	LEVOFLOXACIN	82	59	98	61	91
OP	NITROFURANTOIN	93	89	31	-	-
OP	PENICILLIN	-	87	-	-	-
OP	TETRACYCLINE	-	31	-	-	-
OP	TRIMETH/SULFA	81	-	90	77	-
IP	Number of isolates (1724)	(1173)^	(216)	(180)	(103)	(52)
IP	AMPICILLIN	57	87	-	82	-
IP	AMP/SULBACTAM	68	-	94	88	-
IP	CEFAZOLIN	93	-	97	92	-
IP	LEVOFLOXACIN	88	62	98	69	81
IP	NITROFURANTOIN	95	87	37	-	-
IP	PENICILLIN	-	87	-	-	-
IP	TETRACYCLINE	-	25	-	-	-
IP	TRIMETH/SULFA	80	-	95	83	-

**SUSCEPTIBILITY TESTING BY
SOURCE GROUP**

Abscess (202)

MRSA (50%)
Staphylococcus aureus (20%)
Escherichia coli (8%)
Enterococcus sp. (7%)

Blood (243)

Escherichia coli (17%)
Staphylococcus coag neg (13%)
Streptococcus pneumoniae (12%)
Streptococcus viridans group (9%)
Staphylococcus aureus (8%)

Lower Respiratory (194)

Pseudomonas aeruginosa (21%)
MRSA (16%)
Streptococcus pneumoniae (12%)
Staphylococcus aureus (12%)

Wound/skin (560)

MRSA (31%)
Staphylococcus aureus (25%)
Enterococcus sp. (11%)
Pseudomonas aeruginosa (6%)
Escherichia coli (6%)

Urine (3184)

Escherichia coli (58%)
Enterococcus sp. (11%)
Klebsiella pneumoniae (9%)
Proteus mirabilis (6%)

^1% of all urine *E. coli* are presumptive extended beta-lactamase producers (ESBL)