



Antimicrobial Stewardship Collaborative
of South Carolina

2023 South Carolina Statewide Antibiogram Using All Systemic 2022 Isolates

	# isolates	Ampicillin	Ampicillin/sulbactam	Amox/clav	Pip/tazo	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Aztreonam	Meropenem	Ertapenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin
Gram Negative Organisms																				
<i>Acinetobacter baumannii</i>	490	R	88	R	75	R	R	40	75	79	R	93	R	90	97	97	79	84	85	R
<i>Klebsiella (formerly Enterobacter) aerogenes</i>	1096	R	R	R	80	R	NR	76	88	96	82	99	99	99	99	100	95	97	96	20
<i>Enterobacter cloacae</i>	2106	R	R	R	77	R	R	68	75	91	74	98	93	97	96	100	92	93	88	43
<i>Escherichia coli</i>	33139	52	59	84	96	83	88	92	92	94	94	100	100	93	93	99	79	79	76	96
<i>Klebsiella oxytoca</i>	802	R	68	92	91	58	91	93	96	96	94	99	100	97	97	100	96	98	93	86
<i>Klebsiella pneumoniae</i>	10283	R	80	90	92	85	89	90	89	91	91	99	99	96	94	99	89	93	88	37
<i>Proteus mirabilis</i>	5243	86	93	96	99	86	94	96	96	97	95	99	98	96	96	99	83	85	86	R
<i>Pseudomonas aeruginosa</i>	5680	R	R	R	91	R	R	R	92	94	75	94	R	92	98	97	85	82	R	R

	# isolates	Oxacillin/nafcillin	Penicillin G	Ampicillin	Ceftriaxone	Gentamicin (synergy)	Rifampin (synergy)	Levofloxacin	Clindamycin	Erythromycin	Tetracycline	Trimeth/sulfa	Nitrofurantoin	Linezolid	Vancomycin	Deptomycin
Gram Positive Organisms																
MSSA	5553	100	21	NR	NR	99	100	89	75	61	92	98	100	100	100	100
MRSA	4924	R	R	R	R	98	99	43	71	20	87	90	100	99	100	98
<i>Streptococcus pneumoniae</i>	690	NR	94	NR	98	NR	NR	99	85	58	83	70	R	100	100	NR
<i>Streptococcus pneumoniae (meningitis)</i>	457	NR	72	NR	89	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<i>Enterococcus faecalis</i>	7027	R	100	100	R	NR	NR	86	R	R	NR	R	99	99	99	99
<i>Enterococcus faecium</i>	1084	R	15	16	R	NR	NR	16	R	R	33	R	30	97	41	94

NR= not reported, R= intrinsic resistance

Not all antimicrobials were tested against each isolate

Data reported as % susceptible

Individual institutions may have differing resistance patterns, facilities should reference facility-level antibiograms if able



2023 South Carolina Upstate Antibiogram Using All Systemic 2022 Isolates

Gram Negative Organisms	# isolates	Ampicillin	Ampicillin/subactam	Amox/clav	Pip/tazo	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Aztreonam	Meropenem	Ertapenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin
<i>Acinetobacter baumannii</i>	151	R	87	R	NR	R	R	NR	NR	70	R	93	R	88	99	NR	81	84	81	R
<i>Klebsiella (formerly Enterobacter) aerogenes</i>	429	R	R	R	80	R	NR	79	100	98	84	100	100	100	100	100	98	97	98	21
<i>Enterobacter cloacae</i>	761	R	R	R	NR	R	R	NR	77	93	77	98	83	97	96	100	93	95	89	47
<i>Escherichia coli</i>	12555	54	56	84	97	86	89	95	94	97	96	100	99	93	94	99	82	82	77	97
<i>Klebsiella oxytoca</i>	296	R	70	87	90	70	90	94	97	99	95	100	100	98	98	100	97	98	94	91
<i>Klebsiella pneumoniae</i>	3454	R	83	91	95	91	90	93	90	94	93	99	98	97	96	100	93	95	90	39
<i>Proteus mirabilis</i>	1610	86	94	96	99	79	95	96	95	97	94	100	99	96	96	99	81	83	85	R
<i>Pseudomonas aeruginosa</i>	1751	R	R	R	90	R	R	R	87	89	72	94	R	93	99	98	86	84	R	R

Gram Positive Organisms	# isolates	Oxacillin/nafcillin	Penicillin G	Ampicillin	Ceftriaxone	Gentamicin (synergy)	Rifampin (synergy)	Levofloxacin	Clindamycin	Erythromycin	Tetracycline	Trimeth/sulfa	Nitrofurantoin	Linezolid	Vancomycin	Daptomycin
MSSA	2638	100	21	NR	NR	99	100	90	75	58	91	98	100	100	100	99
MRSA	2026	R	R	R	R	100	100	52	68	17	84	87	100	98	98	97
<i>Streptococcus pneumoniae</i>	216	NR	91	NR	97	NR	NR	100	84	60	82	69	R	100	100	NR
<i>Streptococcus pneumoniae (meningitis)</i>	121	NR	54	NR	80	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<i>Enterococcus faecalis</i>	2354	R	99	100	R	NR	NR	85	R	R	R	R	100	99	97	99
<i>Enterococcus faecium</i>	318	R	15	16	R	NR	NR	33	R	R	R	R	24	95	43	86

NR= not reported, R= intrinsic resistance

Not all antimicrobials were tested against each isolate

Data reported as % susceptible

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2023 South Carolina Midlands Antibigram Using All Systemic 2022 Isolates

Gram Negative Organisms	# isolates	Ampicillin	Ampicillin/sulbactam	Amox/clav	Pip/tazo	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Aztreonam	Meropenem	Ertapenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin
<i>Acinetobacter baumannii</i>	123	R	89	R	73	R	R	52	71	82	R	91	R	91	95	100	78	86	83	R
<i>Klebsiella (formerly Enterobacter) aerogenes</i>	221	R	R	R	85	R	NR	78	83	97	79	100	99	100	99	99	94	95	96	19
<i>Enterobacter cloacae</i>	403	R	R	R	NR	R	R	NR	77	93	66	99	96	98	97	100	92	89	89	43
<i>Escherichia coli</i>	5823	52	62	84	95	85	92	91	91	94	93	100	100	91	92	100	79	73	76	96
<i>Klebsiella oxytoca</i>	145	R	67	89	91	47	88	90	94	95	91	98	99	96	99	100	98	96	92	84
<i>Klebsiella pneumoniae</i>	1795	R	80	88	91	86	87	89	87	90	96	99	99	96	92	99	85	89	88	37
<i>Proteus mirabilis</i>	1018	90	93	97	100	87	94	97	97	99	98	100	99	95	97	100	83	84	87	R
<i>Pseudomonas aeruginosa</i>	990	R	R	R	91	R	R	R	89	95	76	92	R	92	98	98	86	80	R	R

Gram Positive Organisms	# isolates	Oxacillin/nafcillin	Penicillin G	Ampicillin	Ceftriaxone	Gentamicin (synergy)	Rifampin (synergy)	Levofloxacin	Clindamycin	Erythromycin	Tetracycline	Trimeth/sulfa	Nitrofurantoin	Linezolid	Vancomycin	Daptomycin
MSSA	819	100	18	NR	NR	99	NR	80	76	56	97	98	100	100	100	99
MRSA	1002	R	R	R	R	98	98	39	73	14	90	88	97	100	100	100
<i>Streptococcus pneumoniae</i>	126	NR	92	NR	94	NR	NR	98	81	52	78	70	R	100	100	NR
<i>Streptococcus pneumoniae (meningitis)</i>	100	NR	61	NR	85	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<i>Enterococcus faecalis</i>	1389	R	98	99	R	NR	NR	86	R	R	R	R	99	98	98	100
<i>Enterococcus faecium</i>	201	R	43	28	R	NR	NR	14	R	R	R	R	22	97	45	82

NR= not reported, R= intrinsic resistance

Not all antimicrobials were tested against each isolate

Data reported as % susceptible

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2023 South Carolina PeeDee Antibiogram Using All Systemic 2022 Isolates

Gram Negative Organisms	# isolates	Ampicillin	Ampicillin/sulbactam	Amox/clav	Pip/tazo	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Aztreonam	Meropenem	Ertapenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin
<i>Acinetobacter baumannii</i>	62	R	90	R	NR	R	NR	NR	NR	90	R	98	R	95	NR	NR	95	91	94	R
<i>Klebsiella (formerly Enterobacter) aerogenes</i>	113	R	R	R	74	R	NR	58	NR	96	47	99	99	99	97	NR	95	44	97	20
<i>Enterobacter cloacae</i>	293	R	R	R	NR	R	NR	NR	73	93	63	98	97	99	98	100	88	97	94	40
<i>Escherichia coli</i>	5032	48	59	81	95	83	NR	90	92	91	87	100	100	91	91	100	68	73	74	96
<i>Klebsiella oxytoca</i>	134	R	61	100	87	62	NR	91	NR	93	71	98	100	94	94	NR	94	98	93	75
<i>Klebsiella pneumoniae</i>	1824	R	79	83	91	84	NR	89	87	90	83	99	100	96	95	99	81	92	89	32
<i>Proteus mirabilis</i>	894	85	93	93	100	86	NR	98	98	98	100	95	94	97	97	100	76	84	86	R
<i>Pseudomonas aeruginosa</i>	973	R	R	R	95	R	NR	R	94	91	76	94	R	94	98	98	83	81	R	R

Gram Positive Organisms	# isolates	Oxacillin/nafcillin	Penicillin G	Ampicillin	Ceftriaxone	Gentamicin (synergy)	Rifampin (synergy)	Levofloxacin	Clindamycin	Erythromycin	Tetracycline	Trimeth/sulfa	Nitrofurantoin	Linezolid	Vancomycin	Daptomycin
MSSA	836	100	NR	NR	NR	100	100	NR	74	NR	95	98	100	100	100	100
MRSA	947	R	R	R	R	99	100	39	72	NR	90	92	100	100	100	100
<i>Streptococcus pneumoniae</i>	63	NR	57	NR	95	NR	NR	100	NR	62	93	76	R	100	100	NR
<i>Streptococcus pneumoniae (meningitis)</i>	42	NR	NR	NR	81	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<i>Enterococcus faecalis</i>	1169	R	100	100	R	NR	NR	85	R	R	R	R	99	99	99	NR
<i>Enterococcus faecium</i>	169	R	42	20	R	NR	NR	9	R	R	R	R	14	100	38	NR

NR= not reported, R= intrinsic resistance

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Data reported as % susceptible

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2023 South Carolina Lowcountry Antibiogram Using All Systemic 2022 Isolates

Gram Negative Organisms	# isolates	Ampicillin	Ampicillin/sulbactam	Amox/clav	Pip/tazo	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Aztreonam	Meropenem	Ertapenem	Gentamicin	Tobramycin	Amikacin	Ciprofloxacin	Levofloxacin	Trimeth/sulfa	Nitrofurantoin
<i>Acinetobacter baumannii</i>	154	R	86	R	78	R	R	NR	NR	79	E	92	R	88	95	95	74	81	88	R
<i>Klebsiella (formerly Enterobacter) aerogenes</i>	333	R	R	R	80	R	NR	71	91	94	81	99	NR	99	100	100	91	96	92	13
<i>Enterobacter cloacae</i>	649	R	R	R	NR	R	R	NR	73	87	71	98	91	96	99	99	91	92	84	38
<i>Escherichia coli</i>	9729	52	61	86	96	77	83	90	92	93	90	100	100	93	99	99	77	79	75	94
<i>Klebsiella oxytoca</i>	227	R	74	97	95	43	95	94	97	96	93	99	100	95	100	100	95	98	92	88
<i>Klebsiella pneumoniae</i>	3210	R	77	92	90	76	86	89	90	90	86	99	100	92	99	99	88	92	85	40
<i>Proteus mirabilis</i>	1721	83	93	96	99	91	93	95	96	97	93	99	100	96	99	99	85	87	85	R
<i>Pseudomonas aeruginosa</i>	1966	R	R	R	90	R	R	R	93	90	78	92	R	98	97	97	84	80	R	R

Gram Positive Organisms	# isolates	Oxacillin/nafticillin	Penicillin G	Ampicillin	Ceftriaxone	Gentamicin (synergy)	Rifampin (synergy)	Levofloxacin	Clindamycin	Erythromycin	Tetracycline	Trimeth/sulfa	Nitrofurantoin	Linezolid	Vancomycin	Daptomycin
MSSA	1260	100	20	NR	100	98	100	89	74	63	94	99	100	100	100	100
MRSA	949	R	R	R	R	96	99	38	74	20	85	94	100	100	100	100
<i>Streptococcus pneumoniae</i>	285	NR	98	NR	100	NR	NR	98	100	61	NR	68	R	NR	100	NR
<i>Streptococcus pneumoniae (meningitis)</i>	194	NR	82	NR	99	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<i>Enterococcus faecalis</i>	2115	R	99	99	R	NR	NR	87	R	R	R	R	100	NR	98	100
<i>Enterococcus faecium</i>	396	R	11	8	R	NR	NR	9	R	R	R	R	40	99	34	100

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