

NEBRASKA DHHS HEALTHCARE-ASSOCIATED INFECTIONS
AND ANTIMICROBIAL RESISTANCE PROGRAM

NEBRASKA STATE GRAM-NEGATIVE ANTIBIOGRAM REPORT

YEAR: 2024

Annual Report 2024

Prepared By:

Jenna Preusker, PharmD, BCPS, BCIDP
Juan Teran Plasencia, MD
Kanishka, MPH
Rabia Syed, MPH
M. Salman Ashraf, MBBS



Executive Summary

An antibiogram is a summary report of antimicrobial susceptibilities of local bacterial isolates submitted to a microbiology laboratory over a defined period (usually one year). It shows the percentage of bacterial pathogens that are susceptible to various antibiotics and is typically presented in a table format.



Antibiograms are a critical tool for clinicians, pharmacists, and infection preventionists. They help guide empiric antibiotic therapy decisions—especially before culture results are available—by providing insight into local resistance patterns.

In addition to informing treatment, antibiograms also play a key role in antibiotic stewardship by promoting the selection of narrow-spectrum agents when appropriate and helping reduce inappropriate antibiotic use, which can drive resistance.



Purpose of the Report

Antibiograms are valuable tools for tracking changes in antimicrobial resistance patterns over time. Public health departments can utilize antibiogram data to monitor susceptibility and resistance profiles across jurisdictions.

Facilities should continue to develop and use their own institutional antibiograms. Statewide antibiograms offer a broader view and can provide insight on trends in a particular jurisdiction.

This information is vital for understanding the epidemiology of antimicrobial resistance and informing public health interventions to combat its spread at the local health jurisdiction and state level.

Regional antibiograms, which aggregate data from multiple facilities in a region, can be used to benchmark local data and identify regional differences in resistance patterns.

What's Included in the Report

- ◆ **Nebraska Statewide Gram-Negative Antibigram**
- ◆ **Local Health Department Gram-Negative Antibigrams**
- ◆ **Antibiotic Susceptibility Heat Maps of Significant Gram-Negative Drug-Bug Combinations**
- ◆ **Trends in Gram-Negative Susceptibility in Nebraska, 2020-2024**



Disclaimers and Limitations



The data to create the antibiograms found within this report was retrieved from electronic lab reports submitted to the Nebraska Electronic Disease Surveillance System (NEDSS).



The report contains only the first isolate submitted per patient in 2024 and includes specimens from all locations (inpatient and outpatient) and all sources (e.g. urine, respiratory, blood, etc.).



Please note, some laboratories choose to suppress certain antibiotic susceptibility results for some organisms for antibiotic stewardship purposes. Therefore, not all isolates will have results for all antibiotics available. For a particular organism, if the number of isolates tested for a specific drug is much lower than the total isolates tested for other drugs, the results may not be reflecting the true susceptibility pattern and may overcall resistance or susceptibility.



Data are the result of single microorganism-antimicrobial combinations and, therefore, do not show trends in cross-resistance of microorganisms to other drugs (multi-drug resistance), nor do they reveal synergistic properties of antimicrobials used in combination.



Additional limitations of antibiograms include potential sampling biases, incomplete data extraction, and variations in data collection and interpretation methodologies across different institutions.

Important! Interpreting Antibigrams



- Antibiogram layout
 - Antibiotics are grouped by class and are listed vertically across the top
 - Bacterial isolates are listed horizontally and arranged alphabetically
 - The total number of isolates that were included in this report for a specific bacteria are listed in the second column
 - The percentage of isolates that are **susceptible** is listed first, followed by the number of isolates tested for the drug-bug combination
 - Note: not all antibiotic susceptibilities are available for all drug-bug combinations
 - Spaces that are blank indicate that the drug-bug combination is not routinely tested
 - “R” indicates that the bug is intrinsically resistant to the antibiotic
- Antibiogram Interpretation
 - Usually, a susceptibility rate over 90% indicates more susceptible options and will be represented by a green highlight.
 - On the other hand, susceptibility rate of less than 70% may indicate highly resistant options and are represented by a red highlight
 - Review Organism Distribution: Note the total number of isolates mentioned in parenthesis for different bacterial species to understand common pathogens.
 - Use caution interpreting susceptibility results:
 - With <30 isolates, which is indicated by a ^
 - Gray boxes indicate not enough data to interpret as less than 70% of susceptibility data is available for the drug-bug combination
 - Interpretation Key:

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Nebraska Statewide Antibigram

Nebraska Statewide Antibioqram

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total_Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Escherichia coli</i>	28,035	59.5% (27964)	58.3% (19662)	83.3% (12080)	93.4% (20344)	86.5% (18489)	83% (10104)	90.4% (8924)	93.9% (26507)	99.2% (12302)	92.7% (18114)	99.5% (8724)	99.9% (14922)	99.9% (13252)	92.9% (27519)	89.5% (14926)	81.3% (25342)	79.6% (27890)	97.3% (25845)	78% (9468)
<i>Acinetobacter baumannii</i>	53	R	96.2% (52)	R		R	R	R		85.4% (41)	96.9% (32)		R	100% (31)	95.1% (41)	100% (42)	95.5% (44)	97.5% (40)	R	95.5% (22)*
<i>Citrobacter freundii</i>	720	R	R	R	90.6% (563)	R	R	R	79.6% (540)	93.5% (431)	98.3% (699)		97.7% (486)	99.2% (476)	94.7% (719)	93.5% (508)	91.2% (692)	86.8% (638)	93.7% (663)	82.7% (398)
<i>Citrobacter koseri</i>	558	R	98.5% (264)	98.8% (342)	99.4% (532)	96.2% (397)	89.9% (287)	96.7% (241)	98.9% (524)	99.3% (297)	99.7% (399)	99.3% (151)	100% (382)	100% (359)	99.8% (556)	100% (353)	99.4% (534)	99.2% (512)	76.8% (495)	98.2% (281)
<i>Enterobacter cloacae complex</i>	1,255	R	R	R	83.3% (966)	R	R	R	69.8% (755)	79% (734)	95.2% (1241)		90.2% (766)	99.6% (715)	98.1% (1240)	97.1% (805)	95.1% (1173)	91.5% (1250)	32% (925)	89.9% (611)
<i>Haemophilus influenzae</i>	76	66.7% (75)		84.8% (46)					100% (62)					100% (17)*			100% (45)	71.9% (57)		82.9% (41)
<i>Klebsiella aerogenes</i>	993	R	R	R	85.6% (834)	R	R	R	79.9% (730)	92.1% (572)	98.3% (978)	100% (25)*	97.2% (662)	99.7% (504)	98.9% (983)	98.5% (573)	96.9% (926)	97.7% (988)	23.3% (847)	93.7% (434)
<i>Klebsiella oxytoca</i>	1,302	R	70.7% (1178)	91% (774)	92.7% (1067)	48.9% (1135)	81.7% (612)	92% (588)	93.1% (1244)	97.9% (798)	93.4% (978)	99.3% (416)	99.8% (875)	100% (844)	96.7% (1272)	95.7% (806)	96.9% (1242)	92.6% (1273)	88.7% (1011)	89.2% (609)
<i>Klebsiella pneumoniae</i>	5,824	R	86.4% (5283)	93.4% (3104)	94.1% (5515)	88.6% (4047)	86.3% (2452)	90.6% (2327)	94.1% (5568)	97.3% (3171)	92.9% (4093)	99.3% (1531)	99.7% (3806)	99.9% (3543)	97% (5759)	95.3% (3222)	91.2% (5632)	90.8% (5773)	41.8% (5202)	84.3% (2439)
<i>Morganella morganii</i>	121	R	R	R	96.3% (109)	R	R		92.9% (42)	91.7% (24)*	96.9% (98)		100% (18)*	100% (21)*	90.2% (112)	82.9% (41)	72.5% (102)	79.1% (115)	R	
<i>Proteus mirabilis</i>	2,814	82.1% (2786)	86.6% (1840)	94.7% (1512)	97.2% (1930)	68.5% (1837)	95.3% (1267)	96.2% (1275)	95.1% (2519)	99.2% (1591)	94.2% (1721)	99.9% (860)	99.9% (1633)	99.9% (1124)	92% (2786)	89.1% (1638)	82.5% (2613)	83.8% (2767)	R	R
<i>Providencia spp.</i>	97	27.9% (43)	58.8% (34)	46.2% (13)*	100% (91)	22.2% (45)	83.3% (6)*		89.7% (39)	87% (23)*	98.9% (90)		92.3% (13)*	100% (10)*	70.2% (94)	41.3% (46)	72.3% (83)	90.8% (87)	7.5% (80)	
<i>Pseudomonas aeruginosa</i>	3,647	R	R	R	94.5% (3344)	R	R	R	R	97.3% (2548)	95.6% (3396)	99.8% (1429)	R	92.6% (2424)		97.3% (2560)	84% (3413)	R		R
<i>Serratia marcescens</i>	495	R	R	R	86.4% (324)	R	R	R	80.1% (346)	97.1% (312)	99.6% (480)	99% (203)	98.6% (291)	98.4% (308)	98.1% (476)	93.2% (322)	93.8% (469)	95.2% (418)	R	29.3% (222)
<i>Stenotrophomonas maltophilia</i>	75	R	R	R		R	R	R	R				R	R	R	R	86.8% (68)	93.7% (63)	R	

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Local Health Department Antibiograms

Central District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	35	R	R	R	96.2% (26)^	R	R	R	82.4% (17)^	100% (9)^	100% (35)		100% (15)^	100% (16)^	88.6% (35)	75% (12)^	88.6% (35)	82.1% (28)^	93.9% (33)	87.5% (8)^
<i>Citrobacter koseri</i>	16	R	100% (5)^	100% (6)^	100% (16)^	100% (8)^	100% (4)^	100% (3)^	100% (16)^	100% (6)^	100% (10)^	100% (3)^	100% (8)^	100% (8)^	93.8% (16)^	100% (9)^	100% (16)^	100% (14)^	93.3% (15)^	100% (4)^
<i>Enterobacter cloacae complex</i>	40	R	R	R	76.9% (26)^	R	R	R	60% (10)^	81.8% (11)^	97.4% (38)	R	78.6% (14)^	100% (11)^	97.4% (39)	92.3% (13)^	89.7% (39)	85% (40)	23.3% (30)	75% (8)^
<i>Escherichia coli</i>	1237	57.5% (1232)	58.3% (908)	83.2% (374)	93.8% (968)	80.9% (726)	82.6% (270)	89.7% (261)	93.1% (1224)	99.3% (445)	90.7% (789)	99.6% (262)	100% (719)	100% (611)	92.7% (1231)	86.6% (492)	76% (1230)	75.6% (1225)	95.8% (1170)	79.8% (277)
<i>Klebsiella aerogenes</i>	30	R	R	R	87% (23)^	R	R	R	76.5% (17)^	100% (11)^	96.7% (30)	100% (1)^	94.1% (17)^	100% (9)^	100% (30)	100% (11)^	96.7% (30)	96.7% (30)	16% (25)^	100% (8)^
<i>Klebsiella oxytoca</i>	60	R	83.6% (55)	95.8% (24)^	100% (42)	61.4% (44)	84.6% (13)^	100% (13)^	91.5% (59)	91.7% (24)^	90% (40)	100% (14)^	100% (33)	100% (30)	95% (60)	88.5% (26)^	96.6% (59)	93.3% (60)	84.8% (46)	85.7% (14)^
<i>Klebsiella pneumoniae</i>	234	R	86.9% (214)	93.4% (61)	96.9% (227)	88.4% (86)	77.5% (40)	94.7% (38)	93% (230)	97.1% (69)	89.2% (130)	100% (39)	100% (119)	100% (102)	92.3% (234)	85.4% (82)	84.2% (234)	90.6% (233)	37.4% (214)	81.4% (43)
<i>Proteus mirabilis</i>	125	63.6% (121)	76.7% (73)	100% (33)	97.6% (82)	76.9% (52)	100% (29)^	100% (28)^	89.2% (120)	97.4% (39)	83.1% (65)	100% (29)^	98.4% (61)	100% (50)	86.2% (123)	72% (50)	72.4% (123)	70.7% (123)	R	R
<i>Pseudomonas aeruginosa</i>	185	R	R	R	97.7% (172)	R	R	R	R	100% (99)	97.6% (169)	100% (72)	R	92.1% (114)		97.8% (137)	88.8% (179)	R		R
<i>Serratia marcescens</i>	18	R	R	R	85.7% (7)^	R	R	R	100% (9)^	100% (7)^	93.8% (16)^	100% (7)^	100% (7)^	77.8% (9)^	100% (15)^	100% (6)^	100% (16)^	92.9% (14)^	R	40% (5)^

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Douglas County Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Acinetobacter baumannii</i>	17	R	94.1% (17)^	R		R	R	R		100% (10)^	100% (11)^		R	100% (9)^	91.7% (12)^	100% (15)^	83.3% (12)^	100% (17)^	R	88.9% (9)^
<i>Citrobacter freundii</i>	166	R	R	R	86.6% (164)	R	R	R	77.4% (124)	91.9% (123)	98.2% (165)		96.8% (126)	99.2% (124)	93.4% (166)	92.1% (126)	90.9% (165)	86.1% (166)	91.4% (152)	84.6% (123)
<i>Citrobacter koseri</i>	180	R	97.2% (109)	100% (119)	100% (175)	96.8% (125)	91% (122)	96.3% (108)	100% (179)	100% (109)	99.2% (122)	98.1% (54)	100% (118)	100% (118)	100% (178)	100% (119)	100% (174)	99.4% (180)	69.7% (155)	96.6% (116)
<i>Escherichia coli</i>	7884	56.4% (7871)	50.1% (4991)	82.8% (3380)	91.6% (5065)	88.4% (3637)	83.1% (3585)	89.8% (3105)	92.5% (7841)	99.8% (3130)	86.8% (3945)	99.4% (3103)	99.8% (3439)	99.9% (3120)	92.2% (7584)	85.4% (3754)	81.2% (7363)	77.9% (7849)	97% (7024)	77% (3110)
<i>Haemophilus influenzae</i>	17	70.6% (17)^		100% (4)^					100% (12)^	100% (2)^				100% (9)^			100% (1)^	33.3% (9)^		100% (1)^
<i>Klebsiella aerogenes</i>	331	R	R	R	85.2% (325)	R	39.5% (215)	7.6% (118)	79.4% (223)	91.9% (209)	97.5% (326)	100% (9)^	95.6% (228)	100% (209)	98.5% (328)	97.6% (211)	98.4% (323)	97.3% (331)	25.2% (270)	94.2% (205)
<i>Klebsiella oxytoca</i>	362	R	67.6% (339)	90.1% (242)	93.6% (343)	50% (326)	83.3% (240)	92.8% (235)	93.7% (351)	98.3% (239)	92.9% (255)	99.2% (131)	99.6% (246)	100% (239)	97.4% (350)	96.3% (240)	96.5% (347)	91.8% (354)	89.2% (277)	88.9% (234)
<i>Enterobacter cloacae complex</i>	347	R	R	R	81.6% (316)	R	R	R	69.4% (219)	75.1% (217)	93.9% (346)	R	89.2% (231)	100% (227)	97.4% (340)	95.5% (247)	95% (338)	91.6% (347)	27.3% (260)	88.6% (236)
<i>Klebsiella pneumoniae</i>	1802	R	85.8% (1692)	92.6% (1081)	93.1% (1728)	87.7% (1106)	86.8% (1092)	90.9% (1062)	92.9% (1777)	96.7% (1071)	89.2% (1156)	99.2% (529)	99.6% (1120)	99.9% (1071)	96.3% (1769)	93.8% (1114)	90.3% (1758)	89.6% (1788)	39.9% (1611)	85.7% (1063)
<i>Morganella morganii</i>	26	R	100% (1)^		96% (25)^				100% (3)^		100% (23)^		100% (2)^	100% (1)^	80.8% (26)^	25% (4)^	69.2% (26)^	69.2% (26)^	R	R
<i>Proteus mirabilis</i>	994	85.5% (989)	90.5% (640)	97.3% (585)	98.6% (660)	53.6% (586)	97.1% (581)	97.3% (584)	97% (974)	100% (586)	95.9% (607)	99.7% (327)	100% (604)	100% (332)	94.4% (983)	91.7% (605)	85.5% (983)	86% (984)	R	R
<i>Providencia spp.</i>	26		100% (1)^		100% (26)^				50% (2)^		96% (25)^		100% (2)^		69.2% (26)^		69.2% (26)^	80.8% (26)^		
<i>Pseudomonas aeruginosa</i>	947	R	R	R	94.4% (913)	R	R	R	R	97.9% (607)	95.4% (909)	99.7% (364)	R	92.1% (635)		97.5% (685)	82.6% (868)	R		R
<i>Serratia marcescens</i>	152	R	R	R	85.1% (101)	R	R	R	77.2% (101)	97% (101)	100% (148)	98.6% (74)	98% (98)	100% (97)	98.7% (150)	94.1% (101)	93.4% (151)	96.7% (150)	R	30.6% (85)

Percent Susceptible
Key:

100-90
89.9-70
<70

Not enough data to
interpret, <70% of
susceptibility data
available

Blanks = Indicate drug not routinely tested

R = Intrinsically resistant

^ = Use caution interpreting results with < 30 isolates reported

East Central District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Enterobacter cloacae</i> complex	31	R	R	R	91.7% (24)^	R	R	R	73.9% (23)^	78.3% (23)^	92.9% (28)^	R	93.1% (29)^	100% (28)^	96.8% (31)	96% (25)^	96.8% (31)	87.1% (31)	55.6% (18)^	100% (22)^
<i>Escherichia coli</i>	546	60.4% (538)	60.1% (454)	80% (300)	90.8% (458)	86.8% (409)	85.4% (376)	87% (262)	92.9% (534)	99.5% (391)	89.4% (320)	99.2% (262)	100% (419)	100% (379)	92.6% (542)	87.6% (299)	84.1% (542)	78% (542)	96.1% (511)	72% (386)
<i>Klebsiella aerogenes</i>	19	R	R	R	89.5% (19)^	R	R	R	92.9% (14)^	100% (14)^	100% (19)^	100% (5)^	100% (15)^	100% (14)^	100% (19)^	100% (14)^	100% (19)^	100% (19)^	58.8% (17)^	92.3% (13)^
<i>Klebsiella oxytoca</i>	34	R	80% (25)^	80% (25)^	91.2% (34)	56.3% (32)	83.3% (24)^	100% (9)^	91.2% (34)	100% (28)^	100% (18)^	100% (9)^	100% (25)^	100% (27)^	100% (34)	100% (23)^	97.1% (34)	97.1% (34)	100% (31)	80% (15)^
<i>Klebsiella pneumoniae</i>	109	R	86% (86)	97.1% (68)	96.3% (107)	93.1% (87)	88% (75)	83.9% (31)	96.3% (108)	98.8% (83)	92.2% (51)	100% (29)^	100% (85)	100% (79)	95.4% (109)	96.8% (63)	91.7% (108)	89% (109)	38.2% (89)	85.5% (62)
<i>Proteus mirabilis</i>	57	88.9% (54)	89.6% (48)	97.1% (35)	98% (49)	84.8% (46)	95.3% (43)	96.4% (28)^	96.2% (52)	100% (45)	100% (34)	100% (25)^	100% (47)	100% (40)	88.9% (54)	83.3% (36)	80% (55)	85.2% (54)	R	R
<i>Pseudomonas aeruginosa</i>	72	R	R	R	96.5% (57)	R	R	R	R	97.7% (44)	96.7% (60)	100% (28)^	R	93.8% (48)		95.3% (43)	83.6% (67)	R		R
<i>Serratia marcescens</i>	15	R	R	R	83.3% (12)^	R	R	R	69.2% (13)^	100% (12)^	100% (13)^	100% (7)^	92.3% (13)^	100% (12)^	100% (15)^	100% (11)^	80% (15)^	92.3% (13)^	R	18.2% (11)^

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Elkhorn Logan Valley Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	22	R	R	R	86.7% (15)^	R	R	R	78.9% (19)^	75% (12)^	95.5% (22)^		100% (19)^	100% (19)^	90.9% (22)^	88.9% (18)^	90.9% (22)^	90.9% (22)^	100% (16)^	100% (10)^
<i>Enterobacter cloacae</i> complex	59	R	R	R	85.7% (49)	R	R	R	65.2% (46)	76.1% (46)	94.9% (59)	R	92% (50)	97.9% (48)	98.3% (59)	97.8% (46)	94.9% (59)	88.1% (59)	44.4% (36)	100% (16)^
<i>Escherichia coli</i>	193	63.2% (190)	58.7% (121)	89.1% (64)	93% (129)	83.2% (107)	78.9% (57)	90.6% (32)	95.2% (189)	98.7% (77)	91.4% (93)	96.9% (32)	100% (102)	100% (70)	94.2% (189)	89.7% (68)	82.1% (184)	80.7% (192)	97.7% (176)	67.8% (59)
<i>Klebsiella aerogenes</i> (organism)	27	R	R	R	76% (25)^	R	R	R	70.8% (24)^	78.3% (23)^	100% (26)^		91.7% (24)^	95.6% (23)^	100% (26)^	100% (23)^	96.1% (26)^	100% (26)^	33.3% (24)^	100% (6)^
<i>Klebsiella oxytoca</i>	55	R	66.7% (51)	90.9% (44)	95.9% (49)	37.3% (51)	75% (8)^	85.7% (7)^	96.1% (51)	97.8% (46)	95.7% (46)	100% (6)^	100% (47)	100% (47)	98% (50)	97.6% (42)	96.3% (54)	96% (50)	92.9% (42)	75% (12)^
<i>Klebsiella pneumoniae</i>	163	R	85% (153)	94.7% (131)	96.8% (154)	90.3% (145)	94.4% (18)^	77.8% (18)^	93.6% (156)	96.3% (134)	95% (139)	100% (14)^	100% (142)	100% (140)	96.2% (157)	96.1% (128)	93.8% (160)	87.9% (157)	58.8% (131)	68.2% (22)^
<i>Proteus mirabilis</i>	26	92.3% (26)^	100% (17)^	100% (16)^	100% (19)^	62.5% (16)^	100% (11)^	100% (12)^	90.9% (22)^	100% (17)^	86.7% (15)^	100% (5)^	100% (19)^	100% (6)^	84% (25)^	83.3% (12)^	80% (25)^	84% (25)^	R	R
<i>Pseudomonas aeruginosa</i>	116	R	R	R	88.2% (102)	R	R	R	R	93.8% (96)	88.7% (106)	100% (17)^	R	92% (100)		98.9% (87)	87.5% (112)	R		R

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with <30 isolates reported
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Four Corners Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	20	R	R	R	100% (8)^	R	R	R	89.5% (19)^	100% (5)^	95% (20)^		100% (18)^	100% (13)^	85% (20)^	90% (10)^	90% (20)^	78.6% (14)^	94.1% (17)^	62.5% (8)^
<i>Citrobacter koseri</i>	12	R	100% (2)^	100% (8)^	100% (12)^	100% (10)^	50% (2)^	80% (5)^	100% (12)^	100% (3)^	100% (11)^	100% (2)^	100% (11)^	100% (7)^	100% (12)^	100% (6)^	100% (12)^	100% (4)^	63.6% (11)^	100% (7)^
<i>Enterobacter cloacae</i> complex	30	R	R	R	100% (9)^	R	R	R	78.3% (23)^	100% (7)^	100% (30)	R	96.2% (26)^	100% (12)^	100% (30)	100% (14)^	89.7% (29)^	93.3% (30)	45.5% (22)^	93.8% (16)^
<i>Escherichia coli</i>	592	62% (589)	69% (451)	86.2% (275)	93.7% (397)	83.6% (548)	72.3% (137)	88.7% (265)	94.7% (588)	100% (165)	95.3% (559)	99.3% (135)	100% (553)	100% (348)	94.2% (588)	95% (298)	77.7% (591)	81.5% (588)	97.7% (566)	79% (243)
<i>Klebsiella aerogenes</i>	17	R	R	R	100% (8)^	R	R	R	82.4% (17)^	100% (8)^	100% (17)^		100% (16)^	100% (7)^	100% (17)^	100% (9)^	88.2% (17)^	100% (17)^	30.8% (13)^	81.8% (11)^
<i>Klebsiella oxytoca</i>	34	R	60% (30)	88.5% (26)^	95.8% (24)^	38.7% (31)	68.4% (19)^	85% (20)^	91.2% (34)	95.7% (23)^	90.9% (33)	100% (19)^	100% (32)	100% (30)	91.2% (34)	91.3% (23)^	91.2% (34)	85.3% (34)	79.2% (24)^	83.3% (24)^
<i>Klebsiella pneumoniae</i>	141	R	83.2% (95)	95.6% (91)	94.8% (115)	92.8% (125)	81.1% (37)	94.7% (57)	95.7% (141)	100% (50)	97.1% (136)	100% (37)	100% (134)	100% (93)	98.6% (141)	98.6% (69)	92.2% (141)	90.6% (138)	46.3% (121)	77.2% (79)
<i>Proteus mirabilis</i>	44	90.9% (44)	88.6% (35)	96.8% (31)	97.5% (40)	89.7% (39)	100% (24)^	100% (30)	100% (42)	100% (25)^	100% (41)	100% (23)^	100% (41)	100% (29)^	93.2% (44)	90.3% (31)	79.1% (43)	85.7% (42)	R	R
<i>Pseudomonas aeruginosa</i>	70	R	R	R	93.9% (66)	R	R	R	R	100% (39)	93.8% (65)	100% (36)	R	92% (50)		97.3% (37)	83.6% (67)	R		R
<i>Serratia marcescens</i>	14	R	R	R	91.7% (12)^	R	R	R	84.6% (13)^	90% (10)^	100% (14)^	100% (10)^	100% (13)^	100% (12)^	100% (14)^	100% (11)^	85.7% (14)^	92.3% (13)^	R	30% (10)^

Percent Susceptible
Key:

100-90

89.9-70

<70

Not enough data to
interpret, <70% of
susceptibility data
available

Blanks = Indicate drug not routinely tested

R = Intrinsically resistant

^ = Use caution interpreting results with < 30 isolates reported

Lincoln-Lancaster County Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	101	R	R	R	83.1% (59)	R	R	79.7% (64)	91.9% (37)	98.9% (88)		96.5% (57)	100% (53)	98% (100)	95.3% (43)	89% (100)	88% (100)	90.8% (98)	83.9% (31)
<i>Citrobacter koseri</i>	96	R	95% (20)^	95.7% (46)	97.9% (96)	92.7% (82)	92% (25)^	97.9% (96)	100% (40)	100% (84)	100% (19)^	100% (84)	100% (64)	100% (96)	100% (45)	97.9% (96)	97.9% (94)	83.9% (87)	100% (25)^
<i>Enterobacter cloacae complex</i>	163	R	R	R	88.5% (96)	R	R	64.4% (59)	77.2% (57)	96.3% (162)	R	95.8% (95)	100% (80)	99.4% (161)	98.6% (71)	94.3% (159)	90.7% (162)	32.8% (137)	93.6% (47)
<i>Klebsiella aerogenes</i>	192	R	R	R	82.5% (114)	R	R	81.2% (159)	94.2% (69)	98.4% (190)	100% (3)^	97.3% (148)	100% (46)	100% (191)	100% (69)	95.8% (192)	97.4% (192)	14.4% (173)	94.7% (38)
<i>Morganella morganii</i>	14	R	66.7% (3)^	100% (1)^	92.3% (13)^	30% (10)^		75% (4)^		91.7% (12)^		100% (4)^	100% (4)^	100% (12)^		85.7% (14)^	92.3% (13)^	R	R
<i>Stenotrophomonas maltophilia</i>	25	R	R	R		R	R	R				R	R	R	R	95.7% (23)^	100% (20)^	R	
<i>Escherichia coli</i>	5047	61.2% (5025)	65.2% (4231)	84.3% (1778)	95.3% (4313)	78.7% (3871)	79.6% (909)	95.7% (4993)	98.6% (1772)	95.7% (3957)	99.2% (924)	99.9% (3941)	99.9% (3000)	93.8% (5027)	90.2% (1866)	81.8% (5012)	81.3% (5003)	97.8% (4802)	78.7% (927)
<i>Klebsiella oxytoca</i>	172	R	73.1% (160)	91.5% (71)	90.1% (111)	38.1% (160)	76.7% (43)	92.1% (165)	97.3% (74)	92.2% (141)	100% (44)	100% (134)	100% (104)	95.3% (170)	92.1% (76)	95.8% (167)	92.1% (165)	88.7% (142)	90.9% (44)
<i>Klebsiella pneumoniae</i>	997	R	87.8% (948)	94.2% (313)	92.5% (976)	83.2% (754)	85.2% (149)	94.5% (985)	96.6% (320)	94.3% (784)	99.4% (166)	99.6% (780)	100% (601)	97.2% (992)	94.6% (333)	90.2% (994)	91.3% (989)	38.7% (915)	83.7% (153)
<i>Proteus mirabilis</i>	315	76.6% (308)	80.5% (190)	93.3% (120)	97.5% (202)	68.6% (191)	100% (87)	94.7% (300)	95.2% (126)	92.7% (191)	100% (92)	100% (192)	100% (147)	90.5% (315)	84.7% (131)	85.4% (309)	86.1% (303)	R	R
<i>Pseudomonas aeruginosa</i>	578	R	R	R	95.3% (529)	R	R	R	97.9% (433)	97% (537)	99.7% (378)	R	92.4% (459)		96.2% (448)	82.7% (560)	R		R
<i>Serratia marcescens</i>	55	R	R	R	91.9% (37)	R	R	78.9% (38)	96.6% (29)^	98% (51)	95% (20)^	100% (37)	93.8% (32)	95.9% (49)	93.5% (31)	88.7% (53)	85.7% (49)	R	47.1% (17)^

Percent Susceptible
Key:

100-90

89.9-70

<70

Not enough data to interpret, <70% of susceptibility data available

Blanks = Indicate drug not routinely tested

R = Intrinsically resistant

^ = Use caution interpreting results with < 30 isolates reported

Loup Basin Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates Reported)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Ciprofloxacin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Enterobacter cloacae</i> complex	15	R	R	R	72.7% (11)^	R	R	R	44.4% (9)^	55.6% (9)^	100% (15)^	R	80% (10)^	100% (8)^	100% (15)^	100% (10)^	100% (15)^	100% (15)^	100% (15)^	50% (12)^	90.9% (11)^
<i>Escherichia coli</i>	266	66.2% (263)	67.7% (192)	88.8% (143)	94.9% (216)	92.4% (185)	89.6% (144)	93.7% (95)	95.4% (262)	100% (137)	94.9% (178)	98.9% (95)	99.4% (167)	100% (164)	92.4% (264)	89.9% (158)	81.7% (262)	80.4% (260)	82.3% (266)	98% (245)	81.1% (143)
<i>Klebsiella oxytoca</i>	13	R	54.5% (11)^	100% (7)^	90% (10)^	60% (10)^	100% (6)^	100% (3)^	92.3% (13)^	100% (7)^	100% (9)^	100% (3)^	100% (6)^	100% (8)^	100% (11)^	100% (9)^	90.9% (11)^	90.9% (11)^	92.3% (13)^	100% (7)^	100% (5)^
<i>Klebsiella pneumoniae</i>	54	R	89.6% (48)	96.2% (26)^	96.2% (52)	93.5% (31)	86.4% (22)^	100% (18)^	100% (53)	100% (23)^	100% (33)	100% (18)^	100% (31)	100% (33)	100% (54)	100% (28)^	98.1% (53)	94.4% (54)	98.1% (54)	55.6% (45)	96% (25)^
<i>Proteus mirabilis</i>	20	90% (20)^	100% (13)^	100% (9)^	100% (14)^	80% (15)^	90% (10)^	100% (8)^	100% (20)^	100% (11)^	100% (11)^	100% (8)^	100% (12)^	100% (13)^	95% (20)^	90% (10)^	75% (20)^	78.9% (19)^	85% (20)^	R	R
<i>Pseudomonas aeruginosa</i>	60	R	R	R	94.6% (56)	R	R	R	R	97.6% (41)	96.4% (55)	100% (22)^	R	95.5% (44)		96.4% (28)^	91.4% (58)	86% (57)	R		R

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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North Central District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total_Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	23	R	R	R	94.1% (17)^	R	R	R	88.2% (17)^	93.8% (16)^	95.7% (23)^		94.1% (17)^	95.5% (22)^	100% (23)^	95% (20)^	90.9% (22)^	94.4% (18)^	95% (20)^	91.7% (12)^
<i>Citrobacter koseri</i>	10	R	100% (6)^	87.5% (8)^	100% (10)^	87.5% (8)^	100% (5)^	85.7% (7)^	88.9% (9)^	85.7% (7)^	100% (9)^	100% (5)^	100% (8)^	100% (9)^	100% (10)^	100% (8)^	100% (10)^	100% (9)^	90% (10)^	100% (7)^
<i>Enterobacter cloacae</i> complex	34	R	R	R	87% (23)^	R	R	R	82.4% (17)^	82.4% (17)^	90.6% (32)	R	88.2% (17)^	100% (16)^	100% (34)	100% (23)^	96.2% (26)^	94.1% (34)	34.8% (23)^	81.8% (11)^
<i>Escherichia coli</i>	598	64.2% (598)	70.4% (561)	85.4% (212)	96.3% (562)	85.3% (543)	91% (200)	83.6% (220)	95.9% (587)	98.7% (473)	95.8% (474)	100% (198)	100% (232)	100% (468)	91.9% (594)	91.8% (352)	85.6% (514)	84% (593)	98.6% (563)	79.6% (221)
<i>Klebsiella aerogenes</i>	26	R	R	R	83.3% (12)^	R	R	R	90% (10)^	100% (10)^	100% (25)^		100% (10)^	100% (10)^	100% (25)^	100% (15)^	100% (22)^	100% (26)^	31.6% (19)^	71.4% (7)^
<i>Klebsiella oxytoca</i>	39	R	66.7% (39)	89.5% (19)^	88.5% (26)^	32.4% (34)	91.7% (12)^	76.9% (13)^	92.3% (39)	97% (33)	94.3% (35)	91.7% (12)^	100% (20)^	100% (33)	94.9% (39)	100% (27)^	96.7% (30)	89.7% (39)	85.7% (28)^	100% (12)^
<i>Klebsiella pneumoniae</i>	156	R	90.7% (150)	93.4% (61)	98.7% (151)	92.1% (139)	100% (36)	97.6% (41)	96.7% (151)	97.5% (121)	96.9% (129)	100% (34)	100% (65)	100% (124)	97.4% (153)	94.5% (91)	94.8% (134)	92.1% (152)	54.3% (140)	94.9% (39)
<i>Proteus mirabilis</i>	69	92.8% (69)	95.4% (65)	87.5% (16)^	98.5% (65)	57.4% (61)	93.8% (16)^	87.5% (16)^	98.5% (65)	100% (52)	98.1% (52)	100% (14)^	100% (18)^	100% (49)	98.5% (68)	97.2% (36)	86.4% (59)	94% (67)	R	R
<i>Pseudomonas aeruginosa</i>	99	R	R	R	95.3% (86)	R	R	R	R	98.7% (77)	95.9% (73)	100% (25)^	R	95.5% (66)		93.2% (59)	77.6% (76)	R		R

Percent Susceptible
Key:

100-90

89.9-70

<70

Not enough data to
interpret, <70% of
susceptibility data
available

Blanks = Indicate drug not routinely tested

R = Intrinsically resistant

^ = Use caution interpreting results with < 30 isolates reported

Northeast Nebraska Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total_Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Minocycline	Tetracycline
<i>Citrobacter freundii</i>	11	R	R	R	87.5% (8)^	R	R	R	87.5% (8)^	83.3% (6)^	100% (11)^		100% (8)^	100% (9)^	90.9% (11)^	90.9% (11)^	100% (9)^	90% (10)^	100% (10)^		100% (2)^
<i>Enterobacter cloacae</i> complex	13	R	R	R	62.5% (8)^	R	R	R	33.3% (6)^	66.7% (6)^	84.6% (13)^	R	85.7% (7)^	100% (6)^	100% (13)^	100% (9)^	83.3% (12)^	84.6% (13)^	55.6% (9)^	100% (3)^	100% (3)^
<i>Escherichia coli</i>	102	54.9% (102)	64% (100)	63.6% (11)^	92% (100)	82.3% (96)	54.5% (11)^	55.6% (9)^	94.1% (101)	96.8% (63)	94% (67)	100% (9)^	100% (14)^	98.5% (65)	92.1% (101)	90.6% (53)	75.4% (69)	79.4% (102)	100% (93)	100% (9)^	80% (10)^
<i>Klebsiella oxytoca</i>	11	R	80% (10)^	100% (7)^	100% (7)^	20% (10)^	100% (1)^	100% (1)^	100% (10)^	100% (10)^	100% (10)^	100% (1)^	100% (7)^	100% (10)^	100% (11)^	100% (7)^	100% (10)^	90% (10)^	100% (5)^	100% (1)^	100% (1)^
<i>Klebsiella pneumoniae</i>	41	R	87.5% (40)	96.3% (27)^	97.5% (40)	91.9% (37)	60% (5)^	50% (4)^	95.1% (41)	97.2% (36)	94.6% (37)	100% (4)^	100% (26)^	100% (39)	90% (40)	90.6% (32)	97.2% (36)	87.8% (41)	60% (35)	75% (4)^	50% (4)^
<i>Pseudomonas aeruginosa</i>	39	R	R	R	97.2% (36)	R	R	R	R	97.1% (35)	100% (30)	100% (4)^	R	87.1% (31)		95.2% (21)^	82.4% (34)	R		R	R

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Panhandle Public Health District

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total_Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	21	R	R	100% (2)^	95.2% (21)^	R	R	90.5% (21)^	95.2% (21)^	100% (21)^	100% (1)^	100% (3)^	100% (1)^	95.2% (21)^	95.2% (21)^	100% (5)^	92.9% (14)^	89.5% (19)^	100% (1)^
<i>Citrobacter koseri</i>	14	R	100% (1)^	R	100% (2)^	100% (12)^	75% (4)^	100% (3)^	100% (1)^	100% (2)^	R	100% (1)^	100% (3)^	100% (14)^	100% (14)^	100% (5)^	100% (3)^	92.3% (13)^	100% (3)^
<i>Enterobacter cloacae complex</i>	55	R	R		74.4% (43)	R	R	71.2% (52)	76.9% (52)	100% (54)		100% (2)^	100% (7)^	100% (55)	100% (55)	95.7% (23)^	98.2% (55)	22.5% (40)	75% (8)^
<i>Escherichia coli</i>	1918	61.9% (1916)	24.3% (604)	70.7% (600)	89.1% (601)	93.8% (1834)	78.1% (64)	92.4% (1014)	96% (960)	99.3% (970)	100% (22)^	100% (45)	100% (54)	93.2% (1918)	93.4% (1910)	53.8% (295)	79.9% (1914)	96.8% (1814)	56.5% (46)
<i>Klebsiella aerogenes</i>	34	R	R	R	87.5% (24)^	R	R	88.2% (34)	88.2% (34)	100% (34)	100% (2)^		100% (3)^	100% (34)	100% (34)	83.3% (6)^	100% (34)	20% (30)	100% (3)^
<i>Klebsiella oxytoca</i>	24	R	80% (5)^	100% (11)^	100% (5)^	87% (23)^	100% (3)^	95.8% (24)^	95.5% (22)^	100% (23)^	100% (3)^	100% (3)^	100% (3)^	100% (24)^	100% (24)^	100% (6)^	87.5% (24)^	93.8% (16)^	100% (3)^
<i>Klebsiella pneumoniae</i>	103	R	75% (8)^	R	87.5% (8)^	93% (100)	85.7% (14)^	95% (101)	96.6% (89)	98.9% (90)	100% (4)^	100% (4)^	83.3% (6)^	99% (102)	98% (100)	91.3% (23)^	95% (101)	42.4% (92)	62.5% (8)^
<i>Proteus mirabilis</i>	180	85.5% (180)	59.6% (52)	82% (50)	92.4% (53)	96.1% (153)	66.7% (6)^	85.7% (56)	98.1% (54)	94.4% (54)		100% (6)^	83.3% (6)^	91.1% (180)	91% (179)	38.7% (31)	86.6% (180)	R	R
<i>Pseudomonas aeruginosa</i>	207	R	R	R	93.9% (164)	R	R	R	94.5% (203)	95.2% (206)		R	87% (23)^		98.1% (207)	83.3% (203)	R		R
<i>Serratia marcescens</i>	13	R	R		100% (10)^	R	R	92.3% (13)^	100% (13)^	100% (13)^		100% (1)^	100% (1)^	100% (13)^	84.6% (13)^	100% (2)^	100% (8)^	R	

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Public Health Solutions District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	32	R	R	R	100% (18)^	R	R	R	76.2% (21)^	96.3% (27)^	100% (30)		100% (31)	100% (21)^	93.8% (32)	100% (18)^	87.5% (32)	86.4% (22)^	96.8% (31)	83.3% (18)^
<i>Citrobacter koseri</i>	22	R	100% (10)^	100% (14)^	100% (22)^	95.2% (21)^	100% (10)^	100% (10)^	100% (15)^	100% (18)^	100% (21)^	100% (10)^	100% (20)^	100% (13)^	100% (22)^	100% (12)^	100% (22)^	100% (13)^	57.9% (19)^	100% (10)^
<i>Enterobacter cloacae complex</i>	57	R	R	R	79.3% (29)^	R	R	R	75% (32)	87.2% (39)	93% (57)	R	95.7% (46)	96% (25)^	96.5% (57)	95.8% (24)^	98.1% (52)	92.9% (56)	28.9% (45)	92% (25)^
<i>Escherichia coli</i>	1159	61.3% (1159)	68.8% (938)	84.2% (646)	93.9% (1137)	90% (1124)	90.8% (415)	83.1% (409)	95.3% (758)	99% (839)	96.9% (1129)	99.5% (411)	99.9% (1128)	100% (692)	93.3% (1159)	94.4% (447)	86.9% (1107)	81.7% (1158)	97.8% (1118)	82.8% (418)
<i>Klebsiella aerogenes</i>	32	R	R	R	94.7% (19)^	R	R	R	82.1% (28)^	100% (16)^	93.5% (31)	100% (2)^	100% (29)^	100% (17)^	93.8% (32)	88.2% (17)^	93.8% (32)	93.5% (31)	26.7% (30)	88.2% (17)^
<i>Klebsiella oxytoca</i>	49	R	87.2% (39)	100% (33)	93.3% (30)	59.6% (47)	100% (22)^	95.5% (22)^	97.5% (40)	100% (35)	97.9% (47)	100% (22)^	100% (46)	100% (32)	100% (48)	100% (26)^	100% (48)	97.9% (48)	84.6% (39)	95.7% (23)^
<i>Klebsiella pneumoniae</i>	238	R	85.9% (199)	96.3% (135)	96.2% (235)	94.3% (227)	96.6% (88)	83% (88)	97.1% (172)	99.4% (163)	97.8% (229)	100% (88)	100% (227)	100% (149)	99.2% (237)	100% (100)	95.6% (226)	94.1% (237)	37.7% (212)	85.4% (89)
<i>Proteus mirabilis</i>	108	84.3% (108)	92.6% (94)	96.4% (55)	98.1% (103)	95% (100)	97.9% (47)	95.7% (47)	93.8% (65)	100% (90)	96.1% (102)	100% (47)	100% (102)	100% (58)	92.6% (108)	91.8% (49)	89.2% (102)	84.1% (107)	R	R
<i>Pseudomonas aeruginosa</i>	149	R	R	R	92.9% (140)	R	R	R	R	97.6% (126)	95.1% (144)	100% (96)	R	95% (119)		98.7% (77)	84.1% (145)	R		R
<i>Serratia marcescens</i>	19	R	R	R	93.3% (15)^	R	R	R	100% (13)^	100% (16)^	100% (19)^	100% (14)^	100% (15)^	93.8% (16)^	100% (16)^	92.9% (14)^	94.7% (19)^	92.3% (13)^	R	36.4% (11)^

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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Sarpy/Cass Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	81	R	R	R	93.5% (77)	R	R	R	83.9% (62)	96.6% (58)	97.5% (81)		96.8% (62)	98.4% (62)	96.3% (81)	95.2% (62)	93.8% (81)	90.1% (81)	92.9% (70)	82% (61)
<i>Citrobacter koseri</i>	80	R	100% (47)	100% (51)	100% (79)	98.2% (56)	97.9% (47)	90.4% (52)	100% (80)	100% (47)	100% (52)	100% (29)^	100% (51)	100% (51)	100% (80)	100% (51)	100% (78)	98.7% (79)	76.4% (72)	98% (50)
<i>Enterobacter cloacae</i> complex	115	R	R	R	82.1% (106)	R	R	R	69% (71)	80% (70)	95.7% (115)	R	88.9% (72)	100% (72)	96.5% (114)	94.9% (79)	96.4% (112)	91.3% (115)	25.3% (83)	87% (77)
<i>Escherichia coli</i>	3313	57.9% (3311)	53.7% (2232)	83.9% (1612)	92.5% (2212)	89.5% (1758)	91.1% (1478)	84.5% (1693)	94% (3303)	99.9% (1505)	90.9% (1851)	99.7% (1478)	99.8% (1630)	99.9% (1519)	92% (3196)	87% (1740)	83.4% (3092)	79.3% (3303)	97% (2970)	79% (1482)
<i>Klebsiella aerogenes</i>	100	R	R	R	93.9% (98)	R	R	R	90.9% (66)	100% (62)	100% (100)	100% (5)^	100% (63)	100% (61)	100% (98)	100% (62)	98.9% (92)	98% (99)	21.7% (83)	94.5% (55)
<i>Klebsiella oxytoca</i>	147	R	67.2% (137)	92.9% (85)	92.2% (141)	51.5% (134)	90.4% (83)	79.1% (86)	91.6% (143)	96.4% (83)	89% (91)	100% (54)	98.9% (87)	100% (84)	93.7% (143)	90.9% (88)	95.8% (143)	91.7% (145)	80.5% (118)	86.9% (84)
<i>Klebsiella pneumoniae</i>	619	R	85.1% (589)	92.6% (378)	93.9% (592)	89.8% (382)	91.6% (367)	87.5% (376)	94.8% (617)	98.1% (371)	93.4% (392)	98.8% (248)	99.5% (382)	100% (371)	98.4% (611)	96.9% (381)	93.2% (607)	92.1% (618)	42.5% (567)	83.3% (366)
<i>Proteus mirabilis</i>	284	83.7% (283)	89% (191)	94.5% (164)	97.9% (192)	67.5% (169)	97.6% (164)	97.6% (164)	98.2% (281)	100% (165)	97.6% (169)	100% (115)	100% (168)	100% (117)	95% (281)	94.7% (170)	89.6% (278)	86.5% (282)	R	R
<i>Pseudomonas aeruginosa</i>	368	R	R	R	94.5% (346)	R	R	R	R	97.8% (232)	95.2% (353)	99.4% (159)	R	90.3% (247)		98.8% (255)	86.3% (335)	R		R
<i>Serratia marcescens</i>	56	R	R	R	76.2% (42)	R	R	R	73.2% (41)	95.1% (41)	100% (56)	100% (31)	100% (41)	100% (41)	96.4% (55)	92.5% (40)	96.4% (56)	94.4% (54)	R	27.8% (36)

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with <30 isolates reported
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Southeast District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Ceftolozane_Tazobactam	Cefepime	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Enterobacter cloacae</i> complex	19	R	R	R	70% (10)^	R	R	R	100% (2)^	100% (3)^	R	94.7% (19)^	100% (8)^	100% (8)^	100% (19)^	100% (9)^	100% (19)^	94.7% (19)^	29.4% (17)^	87.5% (8)^
<i>Klebsiella aerogenes</i>	15	R	R	R	71.4% (14)^	R	R	R	80% (5)^	100% (3)^		100% (15)^	100% (8)^	100% (3)^	93.3% (15)^	100% (3)^	86.7% (15)^	100% (15)^	33.3% (15)^	100% (3)^
<i>Klebsiella oxytoca</i>	22	R	81% (21)^	75% (4)^	95.2% (21)^	47.4% (19)^	50% (4)^	100% (4)^	90.9% (22)^	100% (4)^	100% (5)^	90% (10)^	100% (10)^	100% (10)^	100% (22)^	100% (4)^	95.5% (22)^	100% (22)^	100% (17)^	100% (4)^
<i>Pseudomonas aeruginosa</i>	72	R	R	R	98.3% (58)	R	R	R	R	100% (42)	100% (18)^	98.5% (68)	R	95.2% (42)		100% (56)	89.6% (67)	R		R
<i>Escherichia coli</i>	407	60.7% (405)	52.5% (236)	87.8% (74)	95.1% (243)	85.2% (135)	82.4% (51)	87.5% (48)	94.3% (384)	100% (93)	100% (48)	89.3% (149)	99.3% (146)	100% (86)	91.8% (403)	75.2% (101)	80.2% (399)	78.7% (403)	96.8% (380)	75% (48)
<i>Klebsiella pneumoniae</i>	81	R	89.3% (75)	81.8% (11)^	93.8% (80)	75% (20)^	77.8% (9)^	88.9% (9)^	96.2% (78)	90.9% (11)^	100% (8)^	91.7% (24)^	100% (21)^	100% (17)^	98.8% (81)	100% (12)^	92.6% (81)	93.8% (81)	32.9% (76)	88.9% (9)^
<i>Proteus mirabilis</i>	38	81.6% (38)	85.7% (14)^	88.9% (9)^	93.3% (15)^	42.9% (14)^	100% (6)^	100% (6)^	94.4% (36)	90% (10)^	100% (3)^	86.7% (15)^	100% (15)^	100% (8)^	97.4% (38)	90% (10)^	81.1% (37)	91.9% (37)	R	R

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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South Heartland District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total_Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefoxitin	Cefuroxime	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	35	R	R	R	97.1% (34)	R	R	R	78.8% (33)	93.8% (32)	97.1% (35)		100% (27)^	100% (33)	88.6% (35)	90.6% (32)	91.4% (35)	76.5% (34)	100% (35)	65.4% (26)^
<i>Enterobacter cloacae</i> complex	37	R	R	R	88.6% (35)	R	R	R	61.3% (31)	83.3% (30)	91.7% (36)	R	90% (20)^	100% (29)^	100% (36)	100% (31)	97.2% (36)	97.3% (37)	43.3% (30)	85% (20)^
<i>Escherichia coli</i>	984	59.2% (983)	63.6% (944)	85.2% (913)	95.3% (952)	88.2% (930)	91.9% (479)	81.4% (483)	95.5% (979)	99% (911)	96.3% (935)	100% (479)	99.8% (509)	100% (922)	94% (978)	94% (919)	85% (983)	76.4% (979)	98.3% (943)	76.6% (491)
<i>Haemophilus influenzae</i>	41	58.5% (41)	50% (2)^	84.6% (39)	100% (2)^	75% (4)^			100% (41)	100% (2)^	100% (2)^			100% (2)^	100% (4)^	100% (2)^	100% (41)	80.5% (41)	100% (1)^	84.6% (39)
<i>Klebsiella aerogenes</i>	35	R	R	R	96.9% (32)	R	R	R	71.9% (32)	87.5% (32)	97.1% (34)	100% (1)^	100% (19)^	100% (32)	97.1% (32)	96.9% (32)	94.3% (33)	97.1% (32)	29.6% (27)^	94.7% (19)^
<i>Klebsiella oxytoca</i>	38	R	77.8% (36)	91.2% (34)	91.7% (36)	55.6% (36)	88.9% (18)^	66.7% (18)^	91.9% (37)	100% (33)	93.9% (33)	100% (18)^	100% (19)^	100% (32)	94.4% (36)	93.9% (33)	97.3% (37)	97.3% (37)	90.6% (32)	94.7% (19)^
<i>Klebsiella pneumoniae</i>	174	R	86.6% (164)	92.1% (151)	96.4% (169)	91.1% (157)	87.7% (81)	79.5% (83)	94.7% (171)	97.3% (149)	95.6% (159)	98.8% (80)	100% (94)	100% (155)	98.8% (172)	98.7% (150)	87.9% (174)	88.8% (170)	50.3% (157)	85.2% (88)
<i>Proteus mirabilis</i>	103	85.3% (102)	90.3% (93)	94.5% (91)	100% (93)	93.5% (92)	94.7% (38)	100% (38)	100% (100)	100% (92)	100% (92)	100% (37)	100% (40)	100% (89)	95.1% (102)	97.8% (91)	87.1% (101)	88.2% (102)	R	R
<i>Pseudomonas aeruginosa</i>	90	R	R	R	95.1% (81)	R	R	R	R	98.7% (75)	97.5% (80)	100% (42)	R	94.7% (76)		94.1% (51)	83.3% (90)	R		R
<i>Serratia marcescens</i>	20	R	R	R	89.5% (19)^	R	R	R	82.4% (17)^	88.9% (18)^	100% (20)^	100% (7)^	100% (7)^	100% (19)^	100% (19)^	94.4% (18)^	100% (20)^	100% (18)^	R	33.3% (6)^

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with <30 isolates reported
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Southwest Nebraska Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Enterobacter cloacae</i> complex	20	R	R	R	93.3% (15)^	R	R	R	57.1% (14)^	66.7% (9)^	100% (20)^	R	86.7% (15)^	100% (11)^	95% (20)^	93.8% (16)^	95% (20)^	90% (20)^	41.7% (12)^	92.3% (13)^
<i>Klebsiella aerogenes</i>	12	R	R	R	90.9% (11)^	R	R	R	33.3% (12)^	100% (8)^	100% (11)^		100% (11)^	100% (11)^	100% (12)^	100% (11)^	100% (11)^	91.7% (12)^	63.6% (11)^	100% (9)^
<i>Proteus mirabilis</i>	54	80.8% (52)	80% (45)	95.5% (44)	95.6% (45)	80.9% (47)	86.7% (45)	92.5% (40)	87.5% (48)	100% (40)	90.7% (43)	100% (33)	100% (45)	100% (34)	86.8% (53)	82.2% (45)	71.2% (52)	71.2% (52)	R	R
<i>Citrobacter freundii</i>	26	R	R	R	89.5% (19)^	R	R	R	61.9% (21)^	93.3% (15)^	96.2% (26)^		90.9% (22)^	94.4% (18)^	92.3% (26)^	92% (25)^	96.2% (26)^	82.6% (23)^	95% (20)^	84.2% (19)^
<i>Escherichia coli</i>	586	62.5% (584)	69.5% (501)	86.1% (433)	94.5% (509)	88.6% (537)	84.4% (455)	91.1% (372)	93.6% (580)	100% (342)	94% (503)	99.4% (320)	99.8% (411)	100% (352)	95.4% (584)	96.5% (487)	81.2% (581)	81.9% (585)	98.3% (542)	79.8% (400)
<i>Klebsiella oxytoca</i>	39	R	69.4% (36)	83.9% (31)	79.4% (34)	30.3% (33)	73.3% (30)	82.8% (29)^	84.6% (39)	100% (27)^	86.8% (38)	96% (25)^	100% (32)	100% (28)^	100% (39)	100% (35)	100% (39)	94.9% (39)	100% (27)^	93.3% (30)
<i>Klebsiella pneumoniae</i>	126	R	86.9% (107)	92.8% (111)	94.5% (110)	91.5% (118)	86.5% (111)	90.2% (92)	95.1% (123)	100% (82)	93.3% (105)	100% (63)	100% (98)	100% (84)	96.8% (125)	97.2% (106)	91.2% (125)	91.9% (124)	47.3% (112)	83.5% (97)
<i>Pseudomonas aeruginosa</i>	90	R	R	R	95% (80)	R	R	R	R	98.4% (63)	92.9% (85)	100% (41)	R	96.6% (59)		100% (58)	85.4% (89)	R		R

Percent Susceptible
Key:

100-90

89.9-70

<70

Not enough data to
interpret, <70% of
susceptibility data
available

Blanks = Indicate drug not routinely tested

R = Intrinsically resistant

^ = Use caution interpreting results with < 30 isolates reported

Three Rivers Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter freundii</i>	20	R	R	R	94.4% (18)^	R	R	R	92.3% (13)^	100% (12)^	100% (20)^		100% (13)^	100% (12)^	100% (20)^	100% (13)^	90% (20)^	84.2% (19)^	95% (20)^	75% (12)^
<i>Citrobacter koseri</i>	33	R	100% (17)^	100% (18)^	100% (32)	95% (20)^	100% (8)^	100% (9)^	100% (25)^	100% (17)^	100% (12)^	100% (1)^	100% (19)^	100% (19)^	100% (33)	100% (7)^	100% (32)	100% (33)	67.9% (28)^	100% (7)^
<i>Enterobacter cloacae complex</i>	93	R	R	R	86.8% (91)	R	R	R	75.9% (83)	82.9% (82)	91.3% (92)	R	84.5% (84)	98.8% (82)	96.8% (93)	93.8% (32)	92.1% (89)	87% (92)	27.9% (61)	85.7% (28)^
<i>Klebsiella aerogenes</i>	47	R	R	R	76.6% (47)	R	50% (10)^	R	72.7% (33)	71.9% (32)	95.7% (46)		97.1% (35)	100% (32)	100% (47)	100% (10)^	95.7% (47)	100% (47)	15.9% (44)	100% (10)^
<i>Klebsiella oxytoca</i>	81	R	53.2% (79)	89.1% (55)	94.8% (77)	49.3% (71)	95.2% (21)^	89.5% (38)	96.8% (62)	96.4% (56)	95.1% (41)	100% (7)^	100% (57)	100% (58)	97.5% (80)	95.7% (23)^	98.8% (80)	94.9% (79)	90.6% (64)	91.7% (24)^
<i>Escherichia coli</i>	672	59.4% (670)	50.4% (361)	86.1% (151)	93.7% (383)	87.1% (209)	84.7% (137)	90.2% (123)	93.2% (665)	99.3% (142)	84.7% (242)	98.4% (122)	98.2% (228)	99.4% (174)	90.9% (658)	72% (200)	79.9% (652)	82.2% (668)	97.1% (623)	82.9% (123)
<i>Klebsiella pneumoniae</i>	308	R	87.3% (300)	94.5% (235)	94.1% (304)	89.1% (220)	88.4% (86)	84.3% (115)	91.6% (190)	96.2% (234)	87.9% (124)	100% (29)^	100% (241)	100% (238)	96.7% (307)	93.3% (90)	92.8% (305)	92.2% (307)	41% (273)	78.8% (85)
<i>Proteus mirabilis</i>	179	79.5% (176)	87.9% (132)	96% (125)	99.3% (138)	47.9% (117)	97.2% (36)	93.5% (77)	94.5% (127)	97.6% (126)	93% (86)	100% (8)^	100% (127)	100% (17)^	90.3% (175)	83.3% (42)	82.9% (175)	79.9% (174)	R	R
<i>Pseudomonas aeruginosa</i>	195	R	R	R	91.8% (184)	R	R	R	R	91.5% (141)	93.3% (180)	100% (28)^	R	93.8% (145)		95.3% (85)	82.4% (182)	R		R
<i>Serratia marcescens</i>	32	R	R	R	88.5% (26)^	R	R	R	88% (25)^	100% (26)^	100% (32)	100% (5)^	96% (25)^	100% (25)^	96.9% (32)	100% (11)^	100% (31)	100% (20)^	R	

Percent Susceptible Key: 100-90 89.9-70 <70 Not enough data to interpret, <70% of susceptibility data available

Blanks = Indicate drug not routinely tested
R = Intrinsically resistant
^ = Use caution interpreting results with < 30 isolates reported

Two Rivers Public Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)



	Total_Isolates	Ampicillin	Ampicillin_Subactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Citrobacter koseri</i>	14	R	100% (5)^	100% (7)^	100% (14)^	100% (6)^	100% (7)^	80% (5)^	92.9% (14)^	100% (5)^	100% (8)^	100% (3)^	100% (7)^	100% (7)^	100% (14)^	100% (7)^	100% (14)^	100% (12)^	83.3% (12)^	100% (7)^
<i>Escherichia coli</i>	1484	60.6% (1483)	56% (811)	82.6% (724)	92.9% (1074)	86.8% (841)	83.3% (719)	90.4% (446)	92.7% (1474)	99.8% (470)	90.3% (928)	99.8% (446)	100% (851)	99.9% (816)	93.1% (1456)	89.2% (770)	79.4% (1440)	81.3% (1473)	97.2% (1356)	78.2% (687)
<i>Klebsiella oxytoca</i>	70	R	77.8% (54)	93.3% (45)	90.6% (53)	59.6% (52)	83.3% (42)	93.5% (31)	91.3% (69)	100% (34)	94.6% (56)	100% (25)^	100% (52)	100% (50)	97.1% (69)	95.8% (48)	100% (69)	89.9% (69)	91.4% (58)	90.5% (42)
<i>Enterobacter cloacae complex</i>	66	R	R	R	82.2% (45)	R	R	R	74.1% (27)^	88% (25)^	98.4% (64)	R	84% (25)^	100% (28)^	100% (63)	100% (41)	98.4% (63)	90.8% (65)	36.5% (52)	94.9% (39)
<i>Klebsiella aerogenes</i>	37	R	R	R	76% (25)^	R	61.1% (18)^	R	80% (25)^	100% (10)^	100% (36)		100% (22)^	100% (9)^	97.3% (37)	100% (19)^	97.1% (35)	94.6% (37)	18.8% (32)	88.9% (18)^
<i>Klebsiella pneumoniae</i>	269	R	87.5% (208)	95% (141)	96.2% (260)	91.3% (138)	87.5% (136)	89.8% (88)	94.3% (265)	97.9% (94)	92.9% (170)	97.3% (73)	99.4% (164)	99.4% (163)	98.5% (266)	95.8% (144)	90.6% (267)	90.9% (265)	37.1% (240)	88.4% (138)
<i>Proteus mirabilis</i>	154	71.7% (152)	80% (75)	93% (71)	91.8% (97)	77.6% (76)	89.4% (66)	97.8% (46)	91.9% (148)	98% (51)	90.2% (82)	100% (37)	100% (78)	100% (68)	88.9% (153)	84% (81)	70.7% (150)	75.5% (151)	R	R
<i>Pseudomonas aeruginosa</i>	190	R	R	R	94.2% (173)	R	R	R	R	95.6% (90)	95.2% (168)	100% (65)	R	92.5% (120)		95.5% (133)	82% (172)	R		R
<i>Serratia marcescens</i>	24	R	R	R	80% (10)^	R	R	R	50% (10)^	100% (9)^	100% (23)^	100% (7)^	100% (10)^	100% (10)^	95.8% (24)^	72.7% (11)^	91.7% (24)^	100% (24)^	R	40% (10)^
<i>Citrobacter freundii</i>	42	R	R	R	93.5% (31)	R	R	R	79.3% (29)^	100% (19)^	100% (41)		100% (26)^	100% (28)^	97.6% (42)	96.4% (28)^	97.6% (41)	96.8% (31)	100% (41)	92.6% (27)^

Percent Susceptible Key: 100-90 89.9-70 <70 Not enough data to interpret, <70% of susceptibility data available

Blanks = Indicate drug not routinely tested
R = Intrinsically resistant
^ = Use caution interpreting results with <30 isolates reported



West Central District Health Department

Includes Inpatient and Outpatient isolates, first isolate per patient
Data Displayed as: % Susceptible (Number of Available Isolates)

	Total Isolates	Ampicillin	Ampicillin_Sulbactam	Amoxicillin_Clavulanate	Piperacillin_Tazobactam	Cefazolin	Cefuroxime	Cefoxitin	Ceftriaxone	Ceftazidime	Cefepime	Ceftolozane_Tazobactam	Ertapenem	Meropenem	Gentamicin	Tobramycin	Levofloxacin	Trimethoprim_Sulfa	Nitrofurantoin	Tetracycline
<i>Enterobacter cloacae</i> complex	40	R	R	R	100% (15)^	R	R	R	80% (15)^	100% (15)^	100% (40)	R	100% (13)^	100% (14)^	100% (40)	100% (39)	97.5% (40)	97.4% (39)	47.8% (23)^	100% (14)^
<i>Klebsiella oxytoca</i>	51	R	88% (50)	94.4% (18)^	91.3% (23)^	66.7% (21)^	88.9% (18)^	94.4% (18)^	98% (51)	100% (19)^	98% (51)	100% (18)^	100% (18)^	100% (18)^	98% (51)	98% (51)	98% (51)	92% (50)	86.8% (38)	83.3% (18)^
<i>Klebsiella pneumoniae</i>	202	R	84.1% (201)	88.1% (67)	92.5% (201)	89.3% (169)	80.6% (67)	89.4% (66)	92.6% (202)	100% (67)	94.5% (201)	100% (66)	100% (69)	100% (74)	98% (202)	97.4% (192)	93% (201)	88.6% (202)	51.5% (165)	77.3% (66)
<i>Proteus mirabilis</i>	54	63% (54)	66.7% (54)	75.9% (54)	75.9% (54)	68.5% (54)	72.2% (54)	75.9% (54)	72.2% (54)	100% (54)	72.2% (54)	100% (53)	100% (54)	100% (53)	61.1% (54)	61.1% (54)	57.4% (54)	55.6% (54)	R	R
<i>Pseudomonas aeruginosa</i>	102	R	R	R	96.8% (94)	R	R	R	R	98.9% (93)	98.9% (93)	100% (27)^	R	94.3% (35)		98.8% (81)	91.8% (98)	R		R
<i>Citrobacter freundii</i>	39	R	R	R	100% (16)^	R	R	R	78.9% (38)	100% (15)^	100% (39)		100% (15)^	100% (17)^	94.9% (39)	97.4% (38)	82.1% (39)	75% (16)^	94.4% (36)	66.7% (15)^
<i>Escherichia coli</i>	1021	64.6% (1019)	72.8% (1012)	88.7% (382)	95.5% (1011)	91.3% (977)	85% (380)	94.1% (374)	94.9% (1017)	100% (379)	96.3% (1016)	99.7% (374)	100% (381)	100% (407)	94.4% (1021)	94.6% (988)	81.3% (1018)	81.7% (1021)	97.7% (928)	81.1% (375)
<i>Serratia marcescens</i>	23	R	R	R	100% (1)^	R	R	R	85% (20)^	100% (1)^	100% (23)^	100% (1)^	100% (1)^	100% (5)^	95.7% (23)^	94.4% (18)^	100% (23)^	75% (4)^	R	100% (1)^

Percent Susceptible Key:	100-90	89.9-70	<70	Not enough data to interpret, <70% of susceptibility data available	Blanks = Indicate drug not routinely tested R = Intrinsically resistant ^ = Use caution interpreting results with < 30 isolates reported
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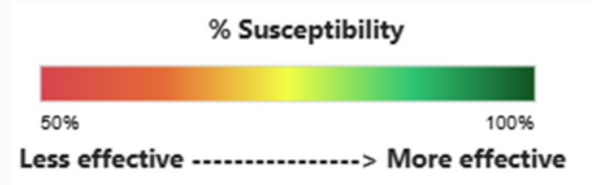


Drug-Bug Combinations of Interest

Escherichia coli

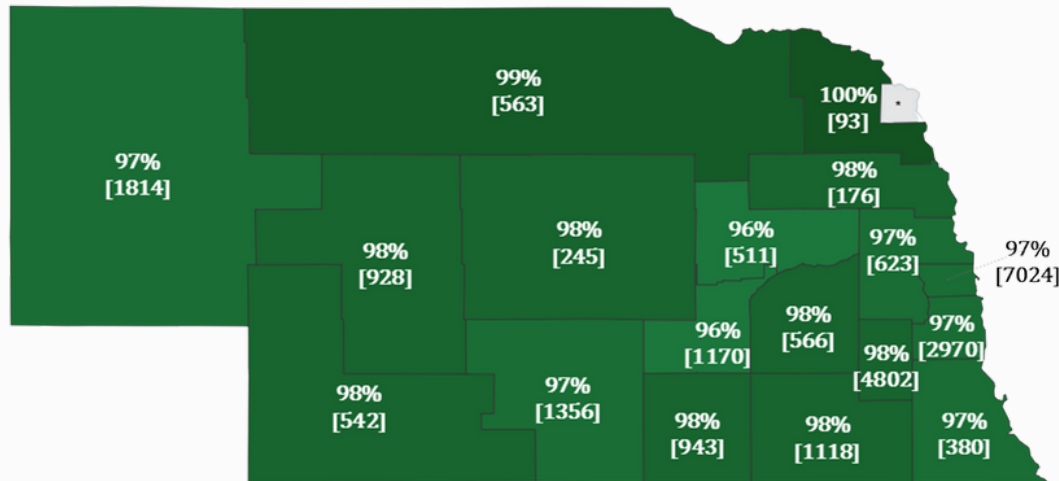
The maps below display the percent susceptibility and the number of isolates included by local health department jurisdiction. Red indicates less effective drug-bug combinations, and darker green indicates more effective combinations.

* indicates insufficient data to report (<15 isolates or <50% of susceptibility data available for the drug-bug combination)

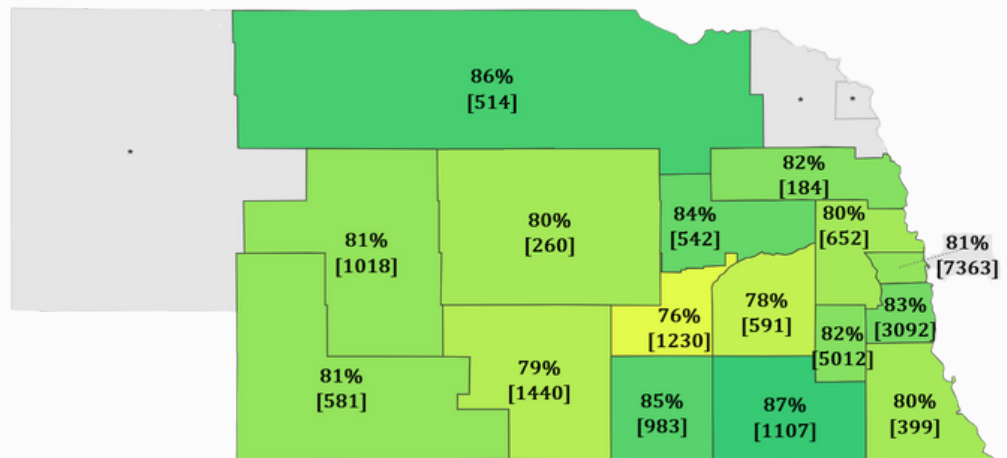


Nitrofurantoin

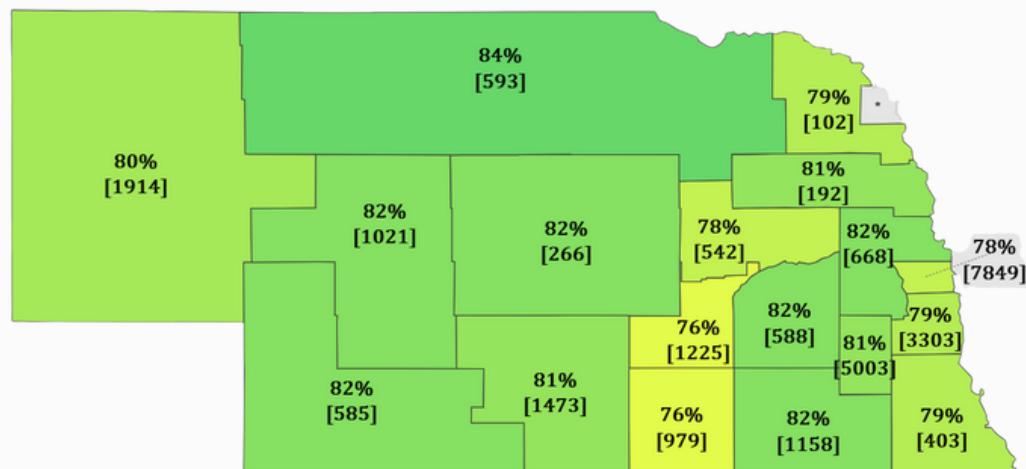
Please note: Nitrofurantoin is for treatment of lower urinary tract infections.



Levofloxacin



Trimethoprim-Sulfamethoxazole



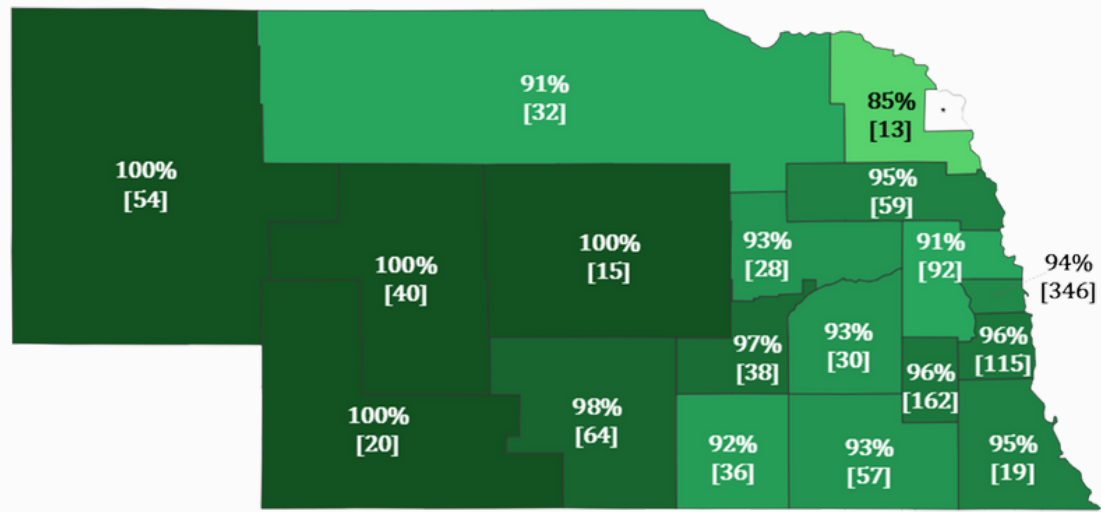
Enterobacter cloacae

The maps below display the percent susceptibility and the number of isolates included by local health department jurisdiction. Red indicates less effective drug-bug combinations, and darker green indicates more effective combinations.

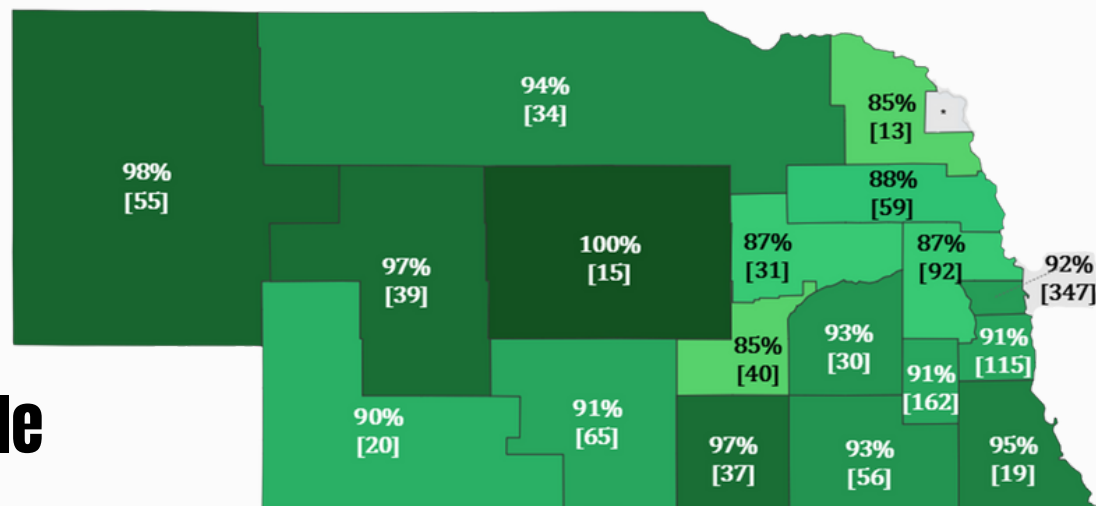
* indicates insufficient data to report (<15 isolates or <50% of susceptibility data available for the drug-bug combination)



Cefepime



Trimethoprim-Sulfamethoxazole



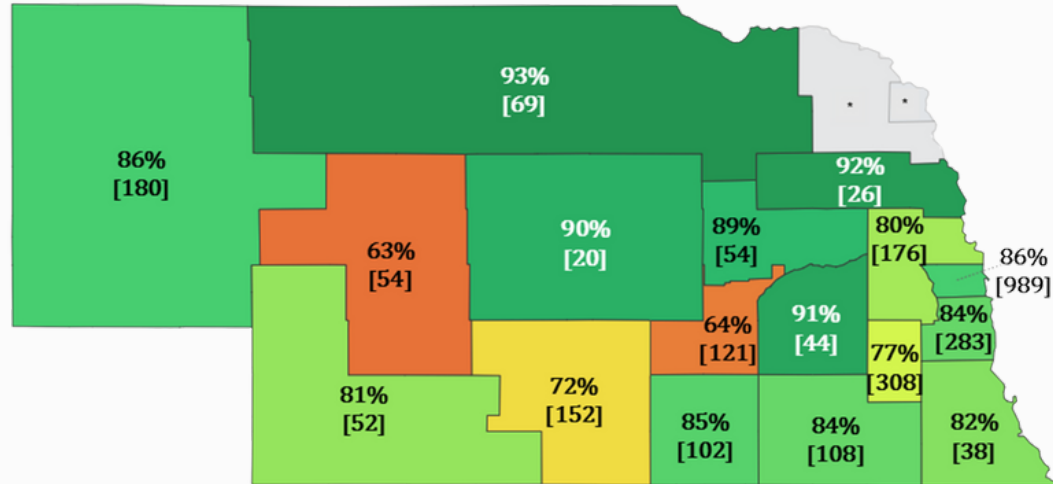
Proteus miribalis

The maps below display the percent susceptibility and the number of isolates included by local health department jurisdiction. Red indicates less effective drug-bug combinations, and darker green indicates more effective combinations.

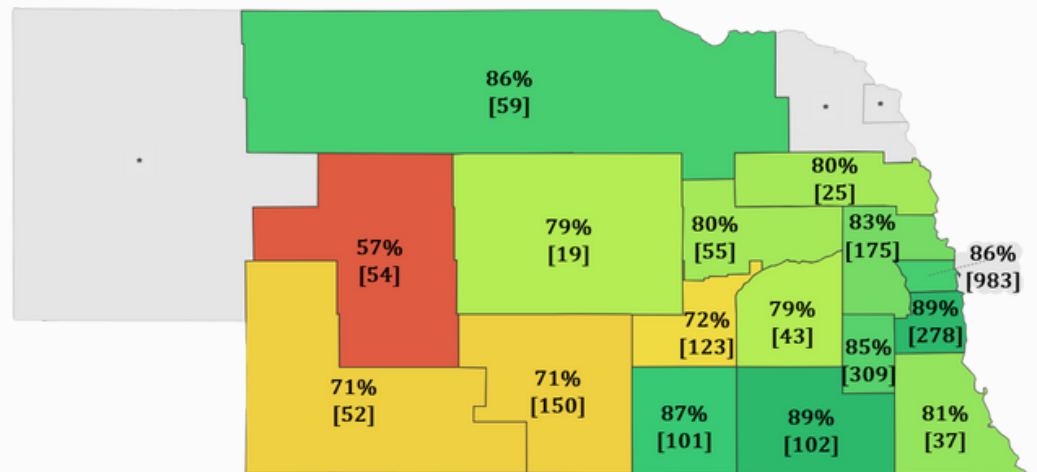
* indicates insufficient data to report (<15 isolates or <50% of susceptibility data available for the drug-bug combination)



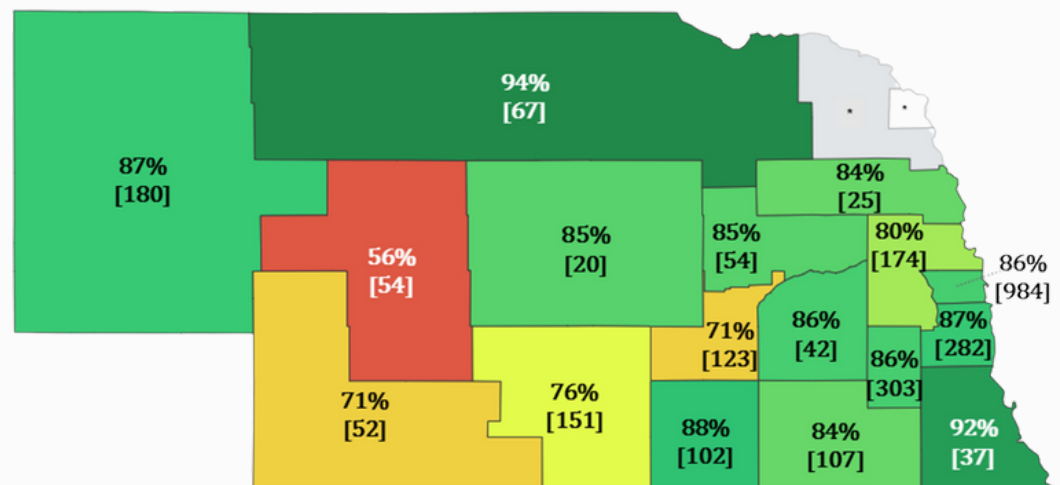
Ampicillin



Levofloxacin



Trimethoprim-Sulfamethoxazole



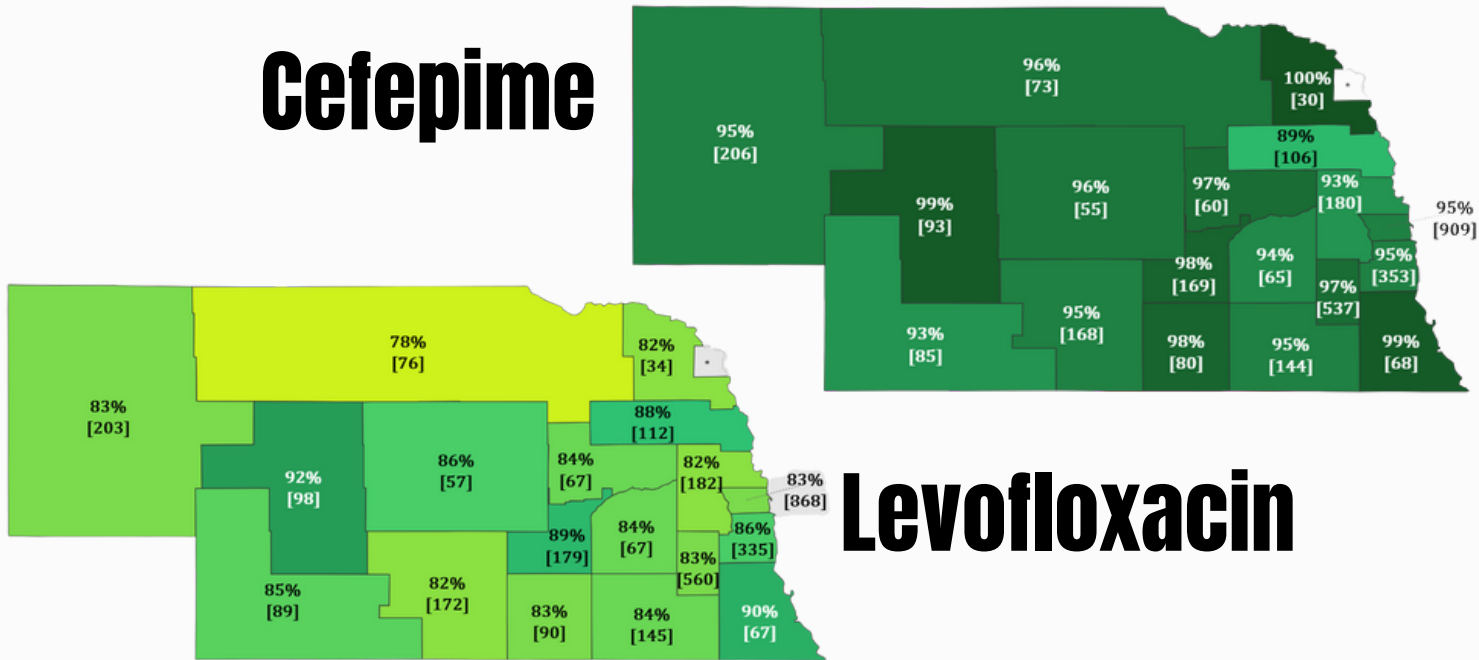
Pseudomonas aeruginosa

The maps below display the percent susceptibility and the number of isolates included by local health department jurisdiction. Red indicates less effective drug-bug combinations, and darker green indicates more effective combinations.

* indicates insufficient data to report (<15 isolates or <50% of susceptibility data available for the drug-bug combination)

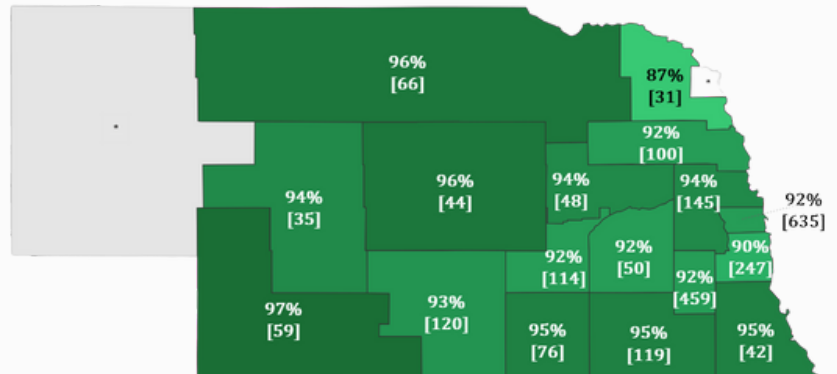


Cefepime



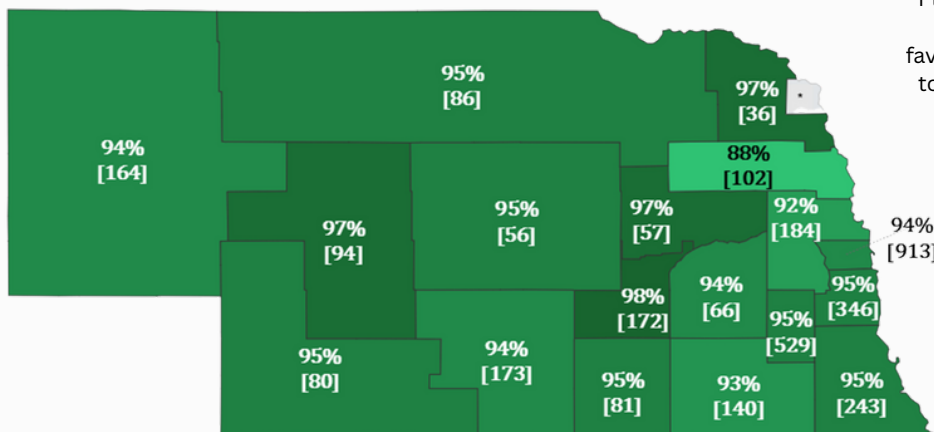
Levofloxacin

Meropenem



Please note: Even though meropenem shows high rates of susceptibility, cefepime or piperacillin/tazobactam are favored over meropenem to preserve carbapenems and due to the higher risk of acquired resistance with meropenem.

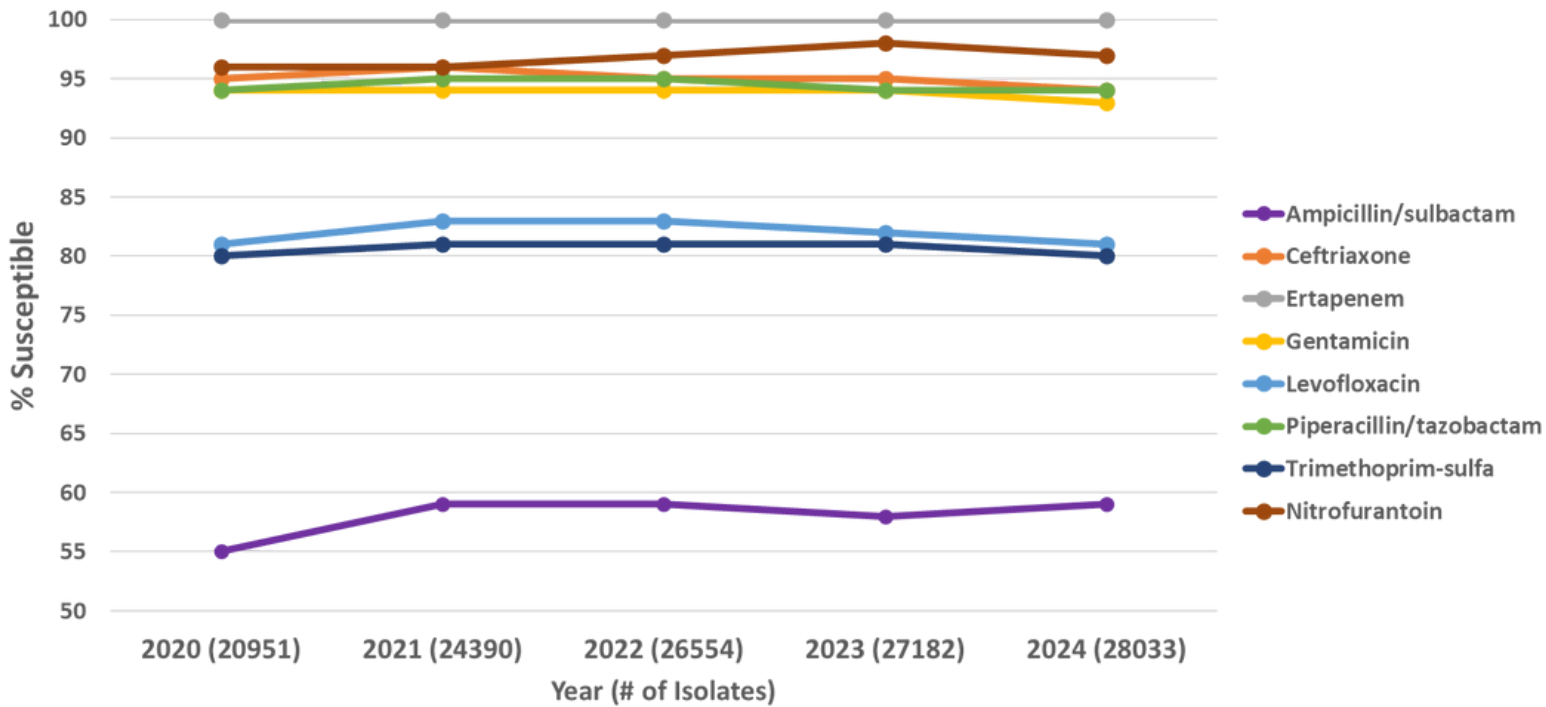
Piperacillin Tazobactam



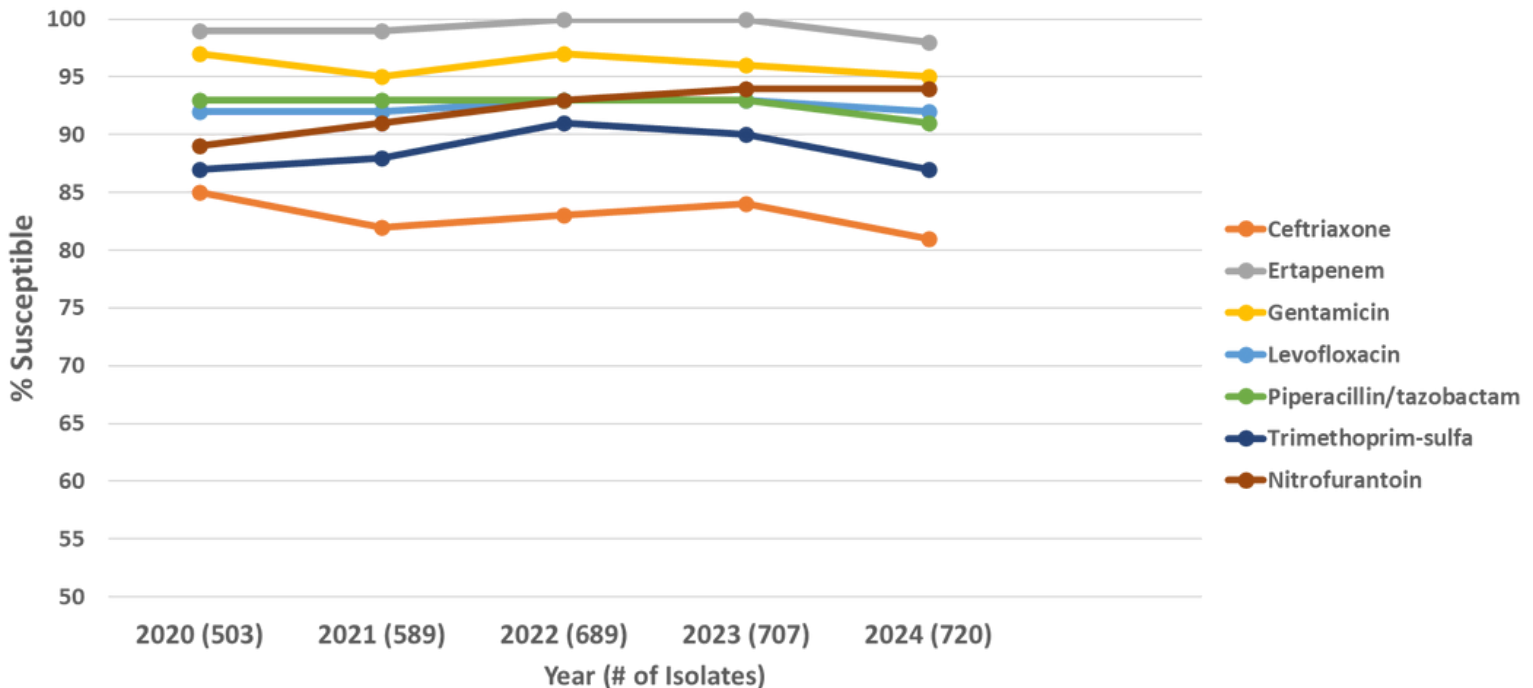


Gram-Negative Organism Statewide Susceptibility Trends 2020-2024

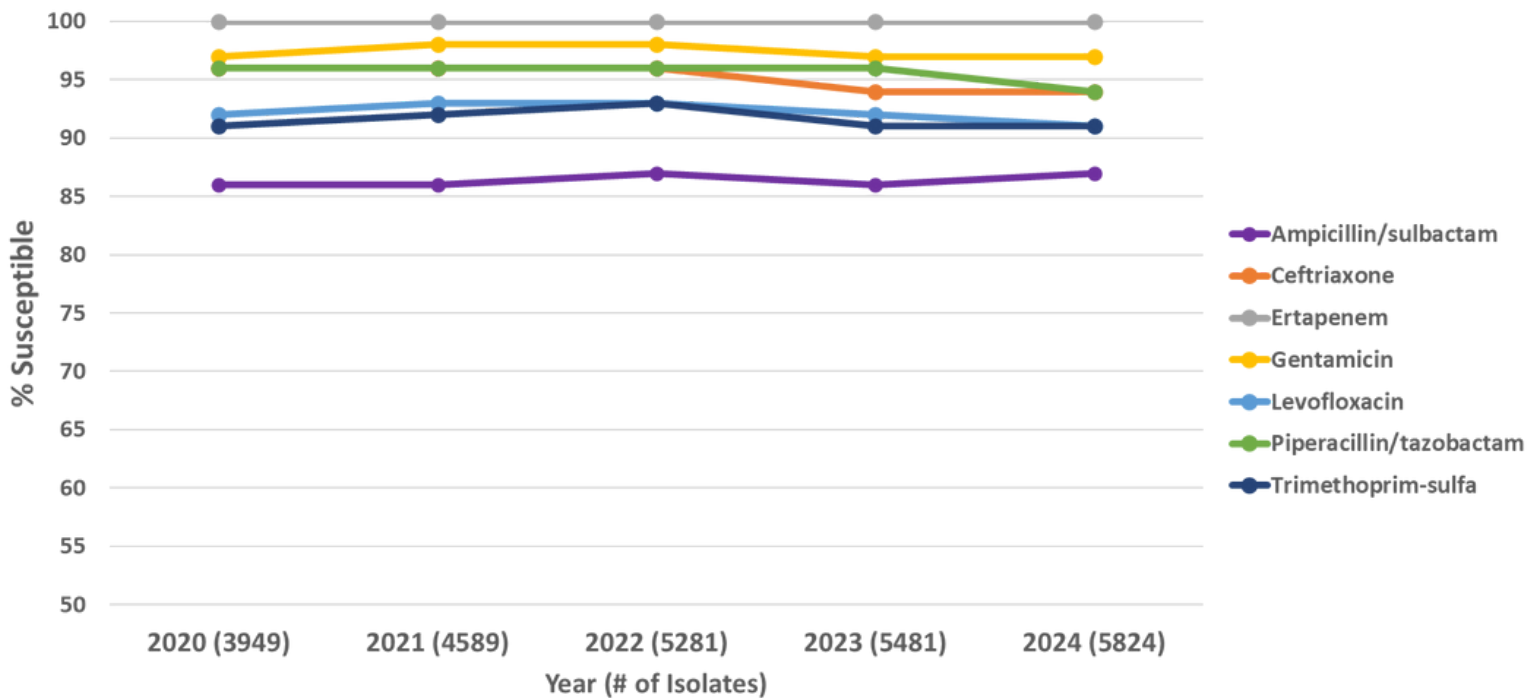
Escherichia coli



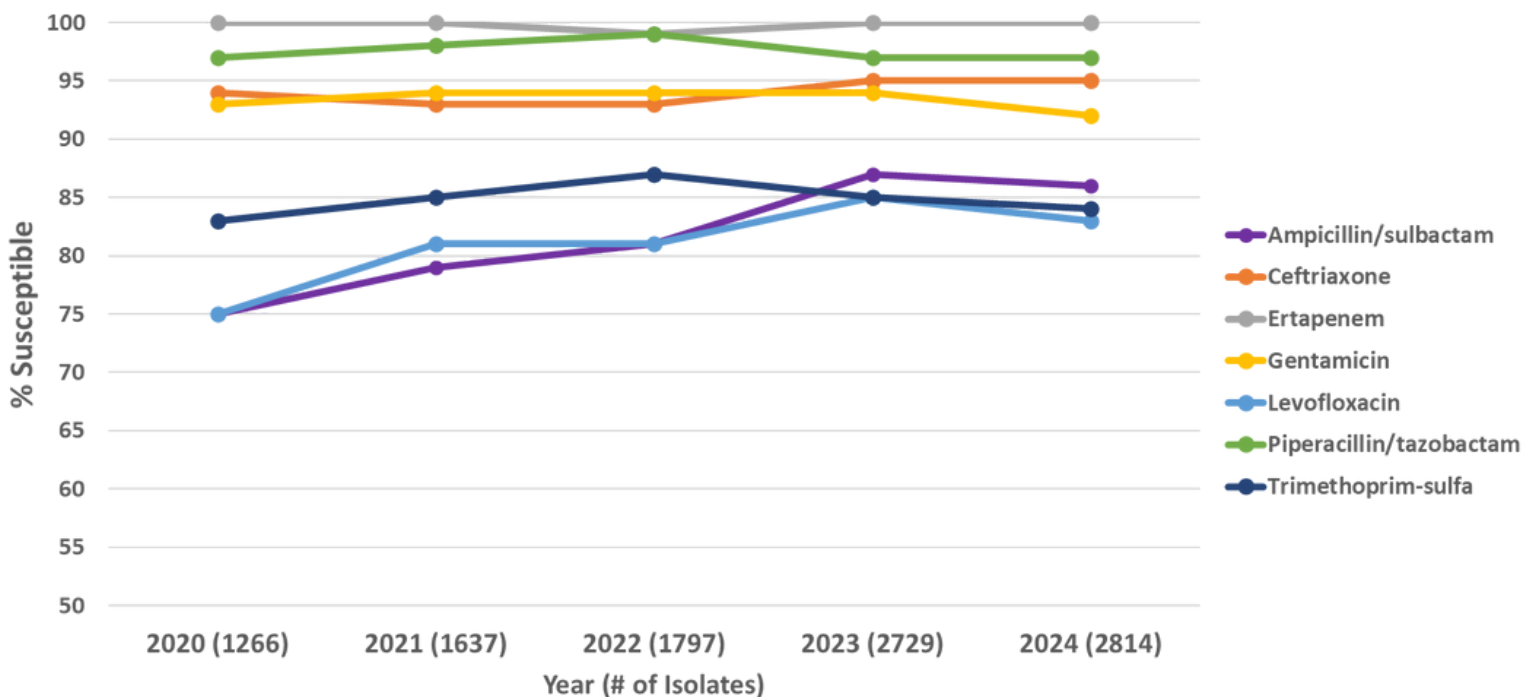
Citrobacter freundii



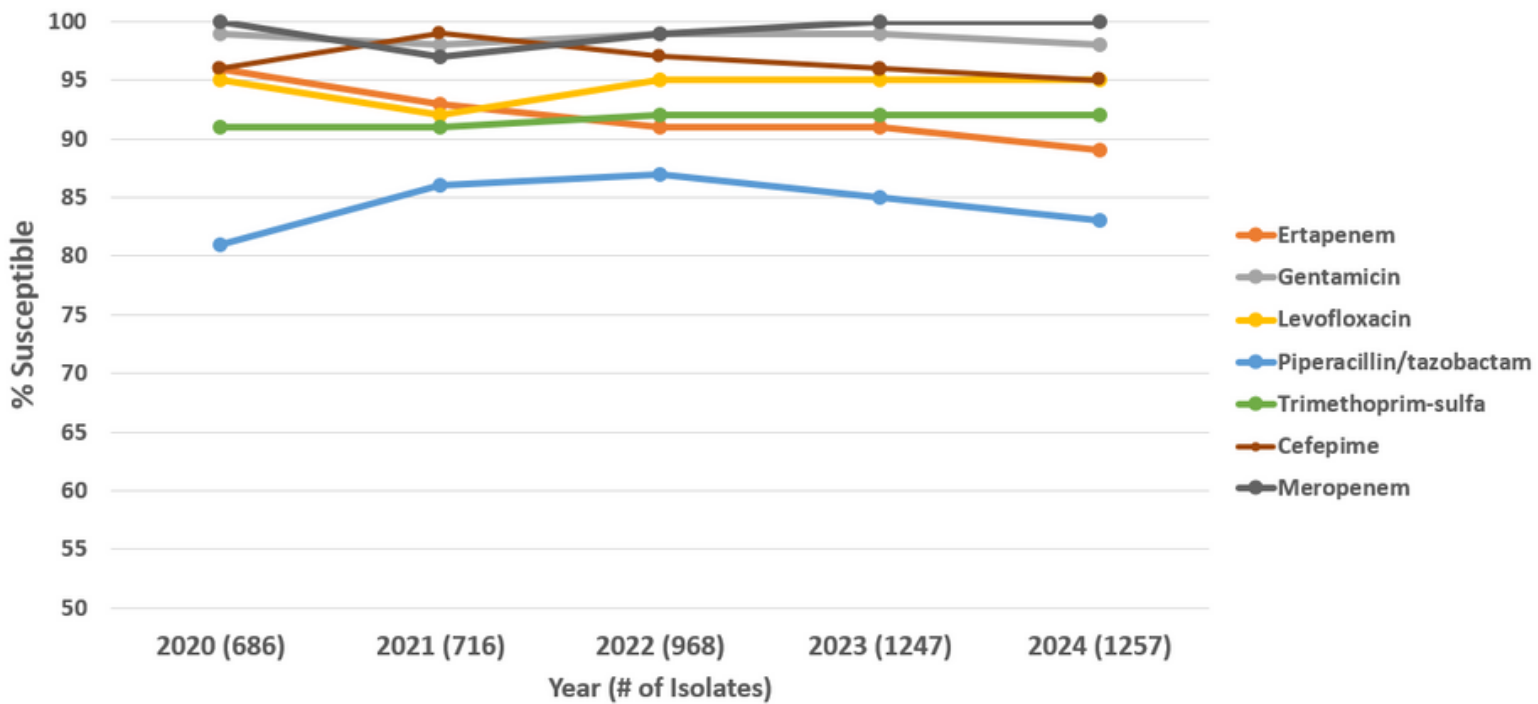
Klebsiella pneumoniae



Proteus mirabilis



Enterobacter cloacae complex



Pseudomonas aeruginosa

