

### Community Urine Isolates, All Ages

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from patient urine specimens submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2023 and 12/31/2023 for all isolates. These data are based on computer analysis of isolates not defined as healthcare associated: community isolates are defined as those collected in an outpatient setting. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Cephalexin	Ciprofloxacin	Daptomycin	Doxycycline	Eravacycline	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Nitrofurantoin	Penicillin G	Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Citrobacter freundii	30	100	0	0	0	100	—	76	76	—	86	—	—	—	93	86	—	100	80	—	96	—	—	83	93	86	—	—	
Citrobacter koseri	71	100	97	0	94	87	98	—	98	98	—	98	—	—	—	100	100	—	100	92	—	56	—	—	97	100	97	—	—
Citrobacter species	48	100	0	0	0	0	97	—	91	89	—	85	—	—	—	100	85	—	100	87	—	97	—	—	93	100	91	—	—
Coagulase Negative Staphylococcus species	111	—	—	—	—	—	98	—	—	—	—	—	—	75	—	89	—	100	—	—	56	100	—	99	—	—	55	100	—
Enterobacter cloacae complex	74	100	0	0	0	89	—	78	74	—	89	—	—	—	—	97	91	—	98	86	—	32	—	—	87	97	89	—	—
Enterococcus faecalis	333	—	—	100	—	—	—	—	—	—	—	—	—	36	—	—	—	99	—	—	—	99	—	—	—	—	—	100	100
Enterococcus faecium	26	—	—	19	—	—	—	—	—	—	—	—	92*	27	—	—	—	100	—	—	—	8	—	—	—	—	—	65	100
E. Coli	3179	100	89	58	62	78	93	—	93	92	89	73	—	—	—	92	79	—	100	90	—	97	—	—	77	92	80	—	—
Klebsiella aerogenes	86	100	0	0	0	0	96	—	76	77	—	95	—	—	—	100	96	—	98	96	—	33	—	—	97	100	100	—	—
Klebsiella oxytoca	66	100	95	0	24	16	96	—	98	95	—	95	—	—	—	98	100	—	100	95	—	92	—	—	98	98	93	—	—
Klebsiella pneumoniae	592	100	94	0	77	81	94	—	94	94	92	87	—	—	—	97	90	—	99	80	—	52	—	—	80	96	88	—	—
Morganella morganii	33	100	0	0	24	0	100	—	90	93	—	75	—	—	—	81	75	—	100	30	—	0	—	—	39	84	66	—	—
Proteus mirabilis	272	100	98	90	96	1	99	—	98	98	96	92	—	—	—	70	92	—	100	0	—	0	—	—	0	82	90	—	—
Pseudomonas aeruginosa	174	98	—	—	—	95	—	95	—	—	75	—	—	—	—	—	68	—	89	—	—	—	—	—	98	—	—	—	—
Serratia marcescens	38	100	0	0	0	0	94	—	100	81	—	81	—	—	—	100	94	—	97	78	—	0	—	—	63	—	—	—	—

	Below 60%
	Between 60% and 90%
	90% and above

\* The percentage is Susceptible Dose-Dependent for E. faecium and Daptomycin

### Emergency Department - Non-Urines

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from Inpatient specimens (excluding urines) collected in the emergency department and submitted to the UNC Microbiology Laboratory between 1/1/2023 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Ciprofloxacin	Clindamycin	Daptomycin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Piperacillin + Tazobactam	Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Coagulase Negative Staphylococcus species	144	—	—	—	—	—	98	—	—	—	68	85	80	—	89	—	100	—	—	50	—	98	—	—	59	100	—	
Enterobacter cloacae complex	24	100	0	0	0	95	—	83	83	87	—	—	—	91	100	87	—	100	87	—	79	—	91	100	95	—	—	
Enterococcus faecalis	60	—	—	100	—	—	—	—	—	—	—	—	100	—	—	—	—	100	—	—	—	—	—	—	—	97	100	
E. Coli	184	100	85	50	54	71	84	—	86	83	66	—	—	99	87	73	—	99	89	—	97	—	74	86	75	—	—	
Klebsiella pneumoniae	76	100	85	0	73	78	84	—	82	82	82	—	—	100	90	88	—	100	90	—	88	—	84	88	82	—	—	
Methicillin resistant Staphylococcus aureus	145	—	—	—	—	—	93	—	—	—	69	98	82	—	94	—	100	—	—	0	—	99	—	—	90	99	—	
Methicillin-Susceptible Staphylococcus aureus	194	—	—	—	—	—	99	—	—	—	73	100	92	—	97	—	99	—	—	100	—	99	—	—	96	100	—	
Proteus mirabilis	39	100	100	89	92	5	94	—	100	92	76	—	—	100	69	76	—	100	0	—	100	—	0	82	87	—	—	
Pseudomonas aeruginosa	99	—	—	—	—	—	97	—	96	—	80	—	—	—	—	—	70	—	94	—	90	—	—	94	—	—	—	

	Below 60%
	Between 60% and 90%
	90% and above

### Emergency Department - Urines

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from Inpatient urine specimens collected in the emergency department and submitted to the UNC Microbiology Laboratory between 1/1/2023 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

##### UNCH MCLENDON LABORAOTRY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Cephalexin	Ciprofloxacin	Daptomycin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Nitrofurantoin	Piperacillin + Tazobactam	Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Citrobacter species	22	100	0	0	0	95	—	72	72	—	86	—	—	100	95	86	—	100	90	—	95	68	—	80	90	86	—	—	
Coagulase Negative Staphylococcus species	40	—	—	—	—	—	97	—	—	—	—	—	—	75	—	90	—	100	—	—	37	100	—	100	—	—	55	100	—
Enterobacter cloacae complex	56	100	0	0	0	76	—	71	67	—	85	—	—	86	98	89	—	100	83	—	25	71	—	85	96	89	—	—	
Enterococcus faecalis	155	—	—	100	—	—	—	—	—	—	—	—	—	31	—	—	—	99	—	—	—	99	—	—	—	—	95	100	
Enterococcus faecium	20	—	—	15	—	—	—	—	—	—	—	—	100*	30	—	—	—	95	—	—	—	20	—	—	—	—	45	100	
E. Coli	1497	100	86	51	57	73	91	—	93	90	87	71	—	—	99	91	78	—	99	90	—	97	95	—	75	90	78	—	
Klebsiella aerogenes	57	100	0	0	0	91	—	75	75	—	94	—	—	100	98	96	—	100	94	—	42	75	—	91	98	96	—	—	
Klebsiella oxytoca	39	100	84	0	17	15	87	—	89	87	—	87	—	—	100	87	94	—	100	82	—	92	82	—	79	87	84	—	
Klebsiella pneumoniae	319	100	90	0	71	75	85	—	85	85	84	79	—	—	98	93	83	—	99	84	—	55	87	—	81	91	82	—	
Morganella morganii	21	100	0	0	38	0	100	—	85	85	—	47	—	—	100	80	47	—	95	28	—	0	95	—	38	85	71	—	
Proteus mirabilis	144	100	97	78	92	2	97	—	98	95	91	79	—	—	100	68	79	—	100	0	—	0	98	—	0	76	84	—	
Pseudomonas aeruginosa	119	94	—	—	—	97	—	96	—	—	79	—	—	—	—	68	—	—	92	—	—	—	94	—	—	94	—	—	
Serratia marcescens	25	100	0	0	0	100	—	100	96	—	80	—	—	—	100	100	84	—	100	76	—	0	96	—	—	48	—	—	

	Below 60%
	Between 60% and 90%
	90% and above

\* The percentage is Susceptible Dose-Dependent for E. faecium and Daptomycin

### Aerobic Organisms, Inpatient Non-ICU, Non-Urine Isolates, Adult Only

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from inpatient specimens (excluding urines) submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2023 and 12/31/2023. These data are based on computer analysis of isolates defined as healthcare associated; i.e. those collected in an inpatient setting; excluding samples from the ICU. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Ciprofloxacin	Clindamycin	Daptomycin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Piperacillin + Tazobactam	Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin	
		§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	§	
Acinetobacter baumannii complex	32	93	0	—	76	56	—	68	—	59	—	—	—	—	—	77	65	—	65	83	—	59	—	—	93	—	—		
Citrobacter koseri	21	100	100	0	90	95	100	—	100	100	100	—	—	—	100	100	100	—	100	100	—	95	—	100	100	100	—	—	
Coagulase Negative Staphylococcus species	230	—	—	—	—	—	—	97	—	—	—	59	94	80	—	87	—	100	—	100	34	—	96	—	—	46	100	—	
Enterobacter cloacae complex	110	100	0	0	0	66	—	50	44	83	—	—	—	69	93	83	—	97	83	—	50	—	87	92	85	—	—		
Enterococcus faecalis	159	—	—	100	—	—	—	—	—	—	—	—	—	100	—	—	—	98	—	—	—	—	—	—	—	—	93	100	
Enterococcus faecium	77	—	—	12	—	—	—	—	—	—	—	—	—	86*	0	—	—	99	—	—	—	—	—	—	—	—	35	100	
E. Coli	350	99	80	44	49	61	78	—	80	76	60	—	—	—	99	86	67	—	99	90	—	91	—	71	84	72	—	—	
Klebsiella aerogenes	55	100	0	0	0	0	78	—	45	45	92	—	—	—	90	100	94	—	94	89	—	43	—	87	100	90	—	—	
Klebsiella oxytoca	25	100	87	0	45	24	96	—	95	88	88	—	—	—	100	100	96	—	100	95	—	84	—	92	100	92	—	—	
Klebsiella pneumoniae	195	100	78	0	56	61	72	—	70	71	68	—	—	—	96	82	73	—	96	77	—	73	—	68	80	71	—	—	
Methicillin resistant Staphylococcus aureus	438	—	—	—	—	—	—	87	—	—	—	58	95	71	—	—	97	—	99	—	—	0	—	98	100	—	93	99	—
Methicillin-Susceptible Staphylococcus aureus	439	—	—	—	—	—	—	100	—	—	—	75	100	93	—	—	97	—	99	—	—	100	—	98	—	—	98	100	—
Morganella morganii	23	100	0	0	21	0	100	—	56	60	73	—	—	—	100	86	73	—	100	43	—	86	—	60	91	91	—	—	
Proteus mirabilis	81	100	100	87	92	1	92	—	95	91	79	—	—	—	100	65	79	—	100	0	—	98	—	0	80	85	—	—	
Pseudomonas aeruginosa	421	—	—	—	—	—	84	—	—	81	—	79	—	—	—	—	69	—	83	—	—	80	—	—	95	—	—	—	
Serratia marcescens	77	100	0	0	0	0	98	—	98	96	93	—	—	—	98	98	96	—	98	76	—	97	—	—	49	50	—	—	
Stenotrophomonas maltophilia	101	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—	—	99	—	—	—	—	—	92	—	—	

	Below 60%
	Between 60% and 90%
	90% and above

\* The percentage is Susceptible Dose-Dependent for E. faecium and Daptomycin

### Aerobic Organisms, Inpatient Non-ICU, Urine Isolates, Adult Only

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from patient urine specimens (excluding ICU) submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2023 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsicly Resistant

##### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Cephalexin	Ciprofloxacin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Nitrofurantoin	Piperacillin + Tazobactam	Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Coagulase Negative Staphylococcus species	26	—	—	—	—	—	—	96	—	—	—	—	80	—	84	—	100	—	—	23	100	—	100	—	—	42	100	—
Enterobacter cloacae complex	55	100	0	0	0	0	72	—	61	56	—	85	—	73	92	87	—	98	80	—	29	60	—	80	92	81	—	—
Enterococcus faecalis	137	—	—	100	—	—	—	—	—	—	—	—	36	—	—	—	99	—	—	—	99	—	—	—	—	—	99	99
E. Coli	678	100	84	51	57	65	84	—	86	83	81	64	—	99	90	70	—	99	89	—	95	93	—	73	87	75	—	—
Klebsiella aerogenes	39	100	0	0	0	0	87	—	66	66	—	94	—	94	97	97	—	97	87	—	38	64	—	82	97	92	—	—
Klebsiella oxytoca	34	100	82	0	14	5	88	—	88	85	—	88	—	100	88	97	—	100	88	—	94	85	—	82	88	85	—	—
Klebsiella pneumoniae	261	100	88	0	65	70	80	—	79	80	79	74	—	99	88	80	—	100	80	—	50	84	—	72	87	74	—	—
Proteus mirabilis	119	100	97	81	94	2	98	—	100	96	94	79	—	100	68	80	—	100	0	—	0	99	—	0	80	84	—	—
Pseudomonas aeruginosa	146	96	—	—	—	—	90	—	87	—	—	83	—	—	—	71	—	88	—	—	—	83	—	—	97	—	—	—

	Below 60%
	Between 60% and 90%
	90% and above

### ICU All Isolates, All Ages

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from Adult ICU specimens (excluding the Burn ICU) submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2022 and 12/31/2022 for all isolates. These data are based on computer analysis of isolates not defined as healthcare associated; i.e. those collected in an inpatient ICU setting. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate		Ampicillin	Ampicillin + Sulbactam		Cefazolin	Cefepime	Ceftaroline	Ceftazidime	Ceftriaxone	Cephalexin	Ciprofloxacin	Clindamycin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Nitrofurantoin	Piperacillin + Tazobactam		Rifampin	Tetracycline	Tobramycin	Trimethoprim + Sulfamethoxazole		Vancomycin	Vancomycin	
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
Coagulase Negative Staphylococcus species	27	—	—	—	—	—	—	100	—	—	—	—	—	40	77	—	85	—	100	—	—	14	100	—	96	—	—	—	—	25	100	—	—	
Enterobacter cloacae complex	45	100	0	0	0	0	57	—	47	42	—	86	—	—	65	97	86	—	95	88	—	29	46	—	88	97	86	—	—	—	—	—	—	
Enterococcus faecalis	28	—	—	100	—	—	—	—	—	—	—	—	—	—	33	—	—	—	—	92	—	—	—	100	—	—	—	—	—	—	100	100	—	—
E. Coli	85	100	80	42	51	57	77	—	78	76	78	58	—	—	100	87	68	—	100	89	—	97	94	—	69	87	72	—	—	—	—	—	—	—
Klebsiella aerogenes	31	100	0	0	0	0	80	—	48	51	—	93	—	—	83	100	93	—	90	90	—	35	48	—	90	100	87	—	—	—	—	—	—	—
Klebsiella pneumoniae	69	100	84	0	57	57	71	—	69	71	78	65	—	—	97	82	72	—	97	73	—	43	78	—	60	82	69	—	—	—	—	—	—	—
Methicillin resistant Staphylococcus aureus	123	—	—	—	—	—	—	79	—	—	—	—	—	50	53	—	99	—	100	—	—	0	100	—	98	—	—	95	100	—	—	—	—	—
Methicillin-Susceptible Staphylococcus aureus	66	—	—	—	—	—	—	100	—	—	—	—	—	79	98	—	100	—	100	—	—	100	100	—	100	—	—	98	100	—	—	—	—	—
Pseudomonas aeruginosa	123	100	—	—	—	—	81	—	73	—	—	—	—	78	—	—	—	100	65	—	77	—	—	73	—	—	96	—	—	—	—	—	—	—
Stenotrophomonas maltophilia	53	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—	—	100	—	—	—	—	—	—	92	—	—	—	—	—

	Below 60%
	Between 60% and 90%
	90% and above

### Pediatric Inpatient, Non-Urine Isolates

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from pediatric inpatient unit specimens (excluding urines) submitted to the University of North Carolina Health Care Microbiology Laboratory between 1/1/2023 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

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Organisms	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Cefoxitin	Ceftaroline	Ceftazidime	Ceftriaxone	Ciprofloxacin	Clindamycin	Daptomycin	Doxycycline	Ertapenem	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Nitrofurantoin	Piperacillin + Tazobactam	Rifampin	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Coagulase Negative Staphylococcus species	28	—	—	—	—	—	—	32	96	—	—	—	32	100	96	—	35	—	100	—	—	32	—	—	100	—	57	100	—
Methicillin resistant Staphylococcus aureus	26	—	—	—	—	—	—	0	92	—	—	—	61	100	96	—	96	—	100	—	—	0	—	—	100	—	88	100	—
Methicillin-Susceptible Staphylococcus aureus	44	—	—	—	—	—	—	100	100	—	—	—	77	100	100	—	100	—	100	—	—	100	—	—	100	—	100	100	—
Pseudomonas aeruginosa	54	—	—	—	—	—	83	—	—	83	—	88	—	—	—	—	—	79	—	94	—	—	—	83	—	92	—	—	
Serratia marcescens	20	100	0	0	0	0	100	—	—	100	100	94	—	—	—	100	100	100	—	100	94	—	0	100	—	68	0	—	—
Stenotrophomonas maltophilia	26	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	84	—	—	96	—	—	—	—	—	88	—	—

	Below 60%
	Between 60% and 90%
	90% and above




### Pediatric Inpatient Urine Isolates Only

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from pediatric inpatient unit urine specimens submitted to the University of North Carolina Health Care Microbiology Laboratory between 1/1/2021 and 12/31/2022. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY

Organism	Total Isolates	Amikacin	Amoxicillin + Clavulanate	Ampicillin	Ampicillin + Sulbactam	Cefazolin	Cefepime	Ceftazidime	Ceftriaxone	Cephalexin	Ciprofloxacin	Ertapenem	Gentamicin	Levofloxacin	Meropenem	Minocycline	Nitrofurantoin	Piperacillin + Tazobactam	Streptomycin High Level	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin Screen
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
E. Coli	32	100	87	43	46	78	87	90	87	87	71	100	84	81	100	93	93	96	—	84	78	—

	Below 60%
	Between 60% and 90%
	90% and above



### Aerobic Organisms, Cystic Fibrosis Cultures

Antimicrobial susceptibility of frequently encountered aerobic bacteria recovered from CF respiratory specimens submitted to the University of North Carolina Health Care Microbiology Laboratory between 1/1/2023 and 12/31/2023, all isolates. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

##### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Amikacin	Aztreonam	Cefepime	Ceftaroline	Ceftazidime	Ciprofloxacin	Clindamycin	Doxycycline	Gentamicin	Levofloxacin	Linezolid	Meropenem	Minocycline	Nafcillin	Piperacillin + Tazobactam	Rifampin	Tobramycin	Trimethoprim + Sulfamethoxazole	Vancomycin
		S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
Methicillin resistant Staphylococcus aureus	79	—	—	—	97	—	—	37	88	98	—	100	—	—	0	—	91	—	98	100
Methicillin-Susceptible Staphylococcus aureus	252	—	—	—	100	—	—	56	96	99	—	100	—	—	100	—	98	—	99	100
Mucoid Pseudomonas aeruginosa	191	51	75	79	—	83	40	—	—	—	28	—	81	—	—	84	—	78	—	—
Smooth Pseudomonas aeruginosa	198	54	71	77	—	82	52	—	—	—	40	—	77	—	—	83	—	75	—	—
Stenotrophomonas maltophilia	32	—	—	—	—	42	—	—	—	—	75	—	—	100	—	—	—	—	96	—

	Below 60%
	Between 60% and 90%
	90% and above

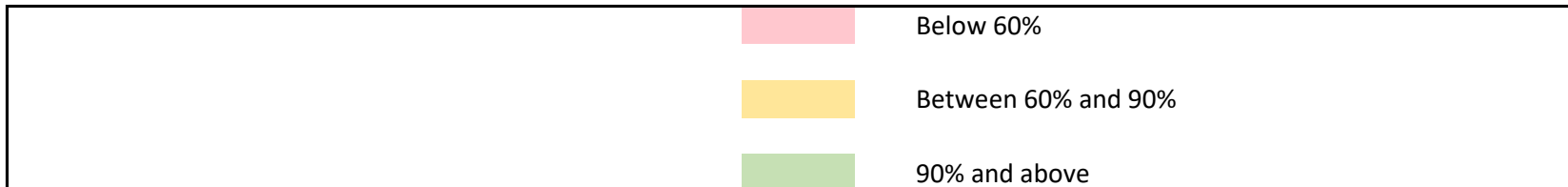
### Aerobic Streptococcus spp., All Isolates, All Ages

Antimicrobial susceptibility of Streptococcus species recovered from all specimens submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2022 and 12/31/2022. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

##### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Ceftriaxone	Ceftriaxone CSF	Clindamycin	Penicillin G	Penicillin G CSF	Vancomycin
		S	S	S	S	S	S
Streptococcus pneumoniae	64	98	82	—	98	61	100
Streptococcus mitis group	49	95	—	84	61	—	100






### Haemophilus influenzae, All Ages

Antimicrobial susceptibility of Haemophilus influenzae recovered from all specimens submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2022 and 12/31/2022. Results are expressed as percent of strains tested to be beta-lactamase negative. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsically Resistant

##### UNCH MCLENDON LABORATORY

Organisms	Total Isolates	Beta-lactamase Negative
		S
Haemophilus influenzae	130	62

	Below 60%
	Between 60% and 90%
	90% and above

### Yeast, All Ages

Antimicrobial susceptibility of frequently encountered yeasts recovered from patient specimens submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2022 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

### # Organism is Intrinsically Resistant

#### UNCH MCLENDON LABORATORY




Organisms	Total Isolates	Fluconazole	Icitrafungin	Voriconazole	Amphotericin B
		S	S	S	S
Candida albicans	94	92	97	94	0.5
Candida glabrata	112	*	96	#	1
Candida parapsilosis complex	55	94	94	98	0.5
Candida tropicalis	34	64	100	61	1

Note: No interpretive ranges exist for amphotericin B the median MIC value (mcg/mL) is displayed

\* Candida glabrata does not have a susceptible breakpoint for fluconazole. For isolates with susceptible dose dependent interpretations (<= 32 mcg/mL), susceptibility depends on achieving the maximum possible blood level, and higher than the standard adult dosing (6mg/kg/day) may be needed.

# For Candida glabrata and voriconazole, current data are insufficient to demonstrate a correlation between susceptibility testing results and clinical outcome.

Note: Candida albicans isolated from treatment naive patients are predictably susceptible to fluconazole.

	Below 60%
	Between 60% and 90%
	90% and above

### Mycobacteria, All Ages

Antimicrobial susceptibility of frequently encountered acid-fast bacilli recovered from patient specimens submitted to the University of North Carolina Hospitals Microbiology Laboratory between 1/1/2022 and 12/31/2023. Results are expressed as percent of strains tested to be susceptible by in vitro susceptibility testing. Strains yielding intermediate results together with resistant strains account for the balance. Susceptibility data are included only if more than 30 isolates were tested unless considered significant. In cases where fewer than 30 isolates were tested for a specific drug, the number of isolates may not be a large enough sampling size to have statistical validity.

#### # Organism is Intrinsicallly Resistant

##### UNCH MCLENDON LABORAOTRY

Organisms	Total Isolates	Amikacin (IV)	Amikacin (liposomal, inhaled)	Cefoxitin	Ciprofloxacin	Clarithromycin	Doxycycline	Imipenem	Linezolid	Moxifloxacin	Trimethoprim + Sulfamethoxazole
Mycobacterium abscessus complex	143	93	—	4	2	37	0	3	35	1	14
Mycobacterium avium complex	64	48	97	—	—	97	—	—	0	14	—
Mycobacterium chelonae	21	85	—	0	4	100	9	0	52	0	28
Mycobacterium fortuitum group	25	100	—	24	100	20	14	48	100	100	100

M. avium complex - Clofazimine median = 0.12, range (0.03-0.5)



Table 8. Expected Antimicrobial Susceptibility Patterns of the Most Commonly Isolated *Nocardia* spp.

Species/Complex	Drugs									
	Amoxicillin-Clavulanate	Ceftriaxone	Imipenem	Ciprofloxacin	Minoocycline	Linezolid	Sulfonamides*	Amikacin	Tobramycin	Clarithromycin
<i>N. cyriacigeorgica</i>	R	S	S	R	V	S	S	S	S	R
<i>N. abscessus</i>	S	S	V	R	V	S	S	S	V	R
<i>N. nova</i> complex†	R	S	S	R	V	S	S	S	R	S
<i>N. transvalensis</i> complex‡	V	S	V	S	V	S	S	R	R	R
<i>N. farcinica</i>	S	R	V	S	V	S	S	S	R	R
<i>N. brasiliensis</i>	S	V	R	R	S	S	S	S	S	R
<i>N. pseudobrasiliensis</i>	R	V	R	S	R	S	S	S	S	S
<i>N. otitidiscaviarum</i>	R	R	R	S	V	S	S	S	V	V

\* Includes trimethoprim-sulfamethoxazole.

† Members of the *N. nova* complex include but are not limited to *N. africana*, *N. elegans*, *N. kruczkiae*, *N. nova*, and *N. veterana*.

‡ Members of the *N. transvalensis* complex include *N. blacklockiae*, *N. transvalensis*, and *N. wallacei*.

Abbreviations: R, resistant; S, susceptible; V, variable.