



Department of Pathology and Immunology

**SECTION OF PATHOLOGY INFORMATICS**

**Regional Adult Antibigrams**

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**2023**

# Foreword

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These antibiograms summarize the susceptibility rates of bacteria isolated from clinical specimens collected during the year 2023 and processed in the microbiology laboratory at Barnes-Jewish Hospital. Only the first isolate per patient based on collection time are included in the generation of the antibiograms. Susceptibility rates are presented for organisms where there were at least 30 total tested isolates. Additional susceptibilities are presented for select organism groups as defined in the [glossary](#).

Questions regarding these antibiograms and antimicrobial susceptibility testing performed in the Microbiology Laboratory of Barnes-Jewish Hospital should be directed to:

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# 2023 Regional Adult: Gram Positive

																	# isolates				
Corynebacterium spp., not C. striatum									45			77		100			39			100	87
Corynebacterium striatum								6				18		100			1			100	161
Enterococcus faecalis	100	#	#	#	#	#	#	#	#	85	32	90	100	100	99	#			#	96	1639
Enterococcus faecium	16	#	#	#	#	#	#	#	#	73	34	99	100	100	4	#			#	35	411
Staphylococcus aureus			59	100	59					70	90	96	100	100		59				98	3958
Staphylococcus aureus (MRSA)			0	100	0					64	89	93	100	100		0				97	1631
Staphylococcus aureus (MSSA)			100	100	100					74	90	98	100	100		100				99	2324
Staphylococcus aureus (VISA)			52	100	52					49	46	97	100	100		52				100	61
Staphylococcus capitis			71		72					77	48	96	100	100		72				96	85
Staphylococcus epidermidis			32		32					50	91	87	100	100		32				43	779
Staphylococcus haemolyticus			14		14					37	94	86	100	100		14				31	35
Staphylococcus hominis			50		50					70	99	82	100	100		50				65	185
Staphylococcus intermedius group			81		81					65		79	100	100		81				57	58
Staphylococcus lugdunensis			84		84					78	100	98	100	100		76				98	374
Streptococcus agalactiae (Group B Streptococci)					100					38			98	100		100				100	175
Streptococcus anginosus					100					74			100	100		98				100	104
Streptococcus constellatus					100					82			100	100		89				100	53
Streptococcus dysgalactiae					100					52			98	100		100				100	50
Streptococcus intermedius					100					80			99	100		100				100	76
Streptococcus mitis group					97								92			65				100	114
Streptococcus pneumoniae			59				92	99		88		83	99	99			71	98	72	100	211
Streptococcus pyogenes (Group A Streptococci)					100					67			100	100		100				100	84

  

85-100% of isolates susceptible	■
60-84% of isolates susceptible	■
0-59% of isolates susceptible	■
Not routinely tested or insufficient data	■
Intrinsically Resistant	#

  

Ampicillin	Azithromycin	Cefazolin	Cefepime	Ceftriaxone	Ceftriaxone (meningitis)	Ceftriaxone (non-meningitis)	Ciprofloxacin	Clindamycin	Daptomycin	Doxycycline	High-Level Gentamicin	Levofloxacin	Linezolid	Moxifloxacin	Nitrofurantoin	Oxacillin	Penicillin	Penicillin (meningitis)	Penicillin (non-meningitis)	Trimethoprim-Sulfamethoxazole	Vancomycin
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Data based on first isolate per patient.

Daptomycin only routinely tested on Staphylococcus isolates recovered from blood or sterile body sites.

Nitrofurantoin only indicated for uncomplicated cystitis.

Streptococcus agalactiae (Group B Streptococci) only routinely tested if recovered from blood or sterile body sites.

Streptococcus dysgalactiae only routinely tested if recovered from blood or sterile body sites.

Streptococcus pyogenes (Group A Streptococci) only routinely tested if recovered from blood or sterile body sites.

**Hospitals Included:** Alton Memorial Hospital, Barnes-Jewish Hospital, Christian Hospital, Memorial Hospital, Parkland Health Center, St. Louis Children's Hospital

**Ages:** Adult (≥18 years)

**Collection Setting:** Inpatient, Outpatient, and Emergency Department

# 2023 Regional Adult: Gram Negative

																# isolates
Achromobacter spp.	#	#	#	13	90	#	#	13	13	97	87	#	100	9	91	68
Acinetobacter calcoaceticus-baumannii complex	#	76	#	41	56			32	76		38	#	34		63	131
Acinetobacter spp., not A. calcoaceticus-baumannii complex	#	100	#	97	94		48	100	97		100	#	96		94	68
Citrobacter freundii complex	#	#	&	98	&		&	86	96		99	98	&		86	261
Citrobacter koseri	#	93		95	100	98	99	98	99		100	95	100		97	247
Enterobacter cloacae complex	#	#	&	97	&		&	91	98		98	47	&		88	710
Escherichia coli	49	55		87	96	94	91	76	92		100		99		74	9461
Escherichia coli - URINE ONLY	50			90	97	94	92	77	92		100	98	99		75	8591
Klebsiella (Enterobacter) aerogenes	#	#	&	98			&	92	98		99	39	&		92	340
Klebsiella oxytoca	#	48		56	96	92	85	87	92		100	97	92		84	435
Klebsiella pneumoniae	#	55		87	93	90	89	82	94		100	57	96		76	2419
Klebsiella variicola	#	84		96	98	96	96	90	98		100	83	98		90	246
Morganella morganii	#	31		#	97	84	93	74	91	42	98	#	#	96	74	194
Proteus mirabilis	82	92		73	98	98	95	74	95	92	100	#	#	100	76	1498
Proteus vulgaris/hauseri	#	84		#	100	99	88	98	97		100	#	#	100	91	96
Providencia rettgeri	#	#		#	100	99	95	77	99		100	#	#	100	79	82
Providencia stuartii	#	#		#	95	86	96	41	82		97	#	#	97	78	96
Pseudomonas aeruginosa	#	#	80	#	94	100	93	99	#	84	87	89	#	92	97	1994
Pseudomonas aeruginosa (mucoid morphotype)	#	#	80	#	87	99	93	98	#	59	81	85	#	93	90	167
Pseudomonas putida group	#	#	#	#	100	97		#	100	100		82	#		#	34
Pseudomonas spp., not P.aeruginosa	#	#	#	#	97	94		#	98	100		84	#		38	63
Serratia marcescens	#	#	#	#	100	100	98	86	98		100	#	100		91	228
Stenotrophomonas maltophilia	#	#	#	#			#	#		#	89	#	100	#	#	215

  

85-100% of isolates susceptible	■
60-84% of isolates susceptible	■
0-59% of isolates susceptible	■
Not routinely tested or insufficient data	■
Intrinsically Resistant	#
Inducibly Resistant	&

  

Ampicillin	
Ampicillin/Subbactam	
Aztreonam	
Cefazolin	
Cefepime	
Cefiderocol	
Ceftazidime	
Ceftolozane/Tazobactam	
Ceftriaxone	
Ciprofloxacin	
Gentamicin	
Imipenem	
Levofloxacin	
Meropenem	
Minocycline	
Nitrofurantoin	
Piperacillin/Tazobactam	
Tobramycin	
Trimethoprim-Sulfamethoxazole	

Data based on first isolate per patient.

Nitrofurantoin only indicated for uncomplicated cystitis.

Serratia marcescens data limited due to protocol changes in October 2023.

**Hospitals Included:** Alton Memorial Hospital, Barnes-Jewish Hospital, Christian Hospital, Memorial Hospital, Parkland Health Center, St. Louis Children's Hospital

**Ages:** Adult (≥18 years)

**Collection Setting:** Inpatient, Outpatient, and Emergency Department

# Glossary

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## Abbreviations

**MRSA:** Methicillin resistant *Staphylococcus aureus*

**MSSA:** Methicillin susceptible *Staphylococcus aureus*

**VISA:** Vancomycin intermediate *Staphylococcus aureus*

## Organism groups

***Corynebacterium* spp., not *C. striatum*:** *Corynebacterium accolens*, *Corynebacterium amycolatum*, *Corynebacterium aurimucosum* / *minutissimum*, *Corynebacterium bovis*, *Corynebacterium diphtheriae*, *Corynebacterium freneyi*, *Corynebacterium glucuronolyticum*, *Corynebacterium imitans*, *Corynebacterium jeikeium* (JK Group), *Corynebacterium kroppenstedtii*, *Corynebacterium macginleyi*, *Corynebacterium propinquum/pseudodiphtheriticum*, *Corynebacterium pseudodiphtheriticum*, *Corynebacterium riegelii*, *Corynebacterium* spp., *Corynebacterium tuberculostearicum*, *Corynebacterium ulcerans*, *Corynebacterium urealyticum*

***Corynebacterium striatum*:** *Corynebacterium striatum*, *Corynebacterium striatum/ simulans*

***Pseudomonas aeruginosa*:** *Pseudomonas aeruginosa*, *Pseudomonas aeruginosa* (muroid morphotype), *Pseudomonas aeruginosa* group

***Pseudomonas* spp., not *P.aeruginosa*:** *Pseudomonas fluorescens* group, *Pseudomonas luteola*, *Pseudomonas oryzihabitans*, *Pseudomonas otitidis*, *Pseudomonas putida* group, *Pseudomonas* spp., *Pseudomonas* spp., not *Pseudomonas aeruginosa*, *Pseudomonas stutzeri*

# Report Log

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Report Generation Date and Time

2024-04-18 10:23

Report Generation Software

<https://github.com/WUSM-LGM-Informatics-Section/resistalytics>

v2023.0.0-12-g4c5fcd7

4c5fcd719b09b390df805a30f7358534a5b98046

Software Written and Maintained by

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