



PAULDING
COUNTY HOSPITAL



2025 Antibigram Report



Biomerieux Vitek II



Biomerieux BacT Alert 3D60



BioFire Film Array

Basics

- Antibigrams are collection of information obtained from C&S performed in the institution within a given time frame.
- Provides the % of samples for a given organism which were sensitive to certain antibiotics

Antibiogram does not provide:

- Organism sensitivity to an Antibiotic (Abx) based on site of infection
- Organism sensitivity based on location in hospital
- Average MIC
- Abx killing at various doses/concentrations
- Trend data

Paulding County Hospital (PCH) Antibiogram

- Updated annually
- Distributed through Paulding County Hospital Website and located in the Antimicrobial Stewardship Program (ASP) Policy in PolicyStat
- Reports are divided into Gram Negative and Gram Positive Organisms

What can the PCH Antibiogram do?

- An antibiogram is an essential tool for any clinician when treating an infection empirically
- Antibiogram can serve as an alternative to a C&S report until the results of a C&S are available
- Antibiogram can serve as an alternative to a C&S report if no organism is grown out of a C&S despite high clinical suspicion of an infection

Antibiogram Report Explained

Isolate Number, % Susceptible, and Resistance

1. Isolate Number:

- Number of isolates reflects the number of isolates which have yielded positive for colonies of the given organism
- Clinical utility
 - The greater the number of isolates, the more accurate the sensitivity results for the given organism
 - The greater the number of isolates, the higher probability of isolating the given organism

2. % Susceptible:

- Percentage of isolates of the given organism which is susceptible (sensitive) to the given Abx
- Clinical Utility:
 - PK parameters being equal, an Abx with a greater % susceptible will be more likely to eradicate the organism than an Abx with a lower % susceptible
- Pitfalls:
 - Concentration differences between site of infection and in vitro
 - o Penetration to the site of infection
 - o Inactivation of drug at site of infection
 - o Declining levels in vivo vs continuous level in vitro
- Rapid development of resistance in vivo vs in vitro
 - FQ and MRSA
 - Erythromycin induced clindamycin resistance
- Inaccurate due to small isolate number.

3. Resistance:

- Reflects the % of organism which are resistant to certain Abx
- Clinical Utility:
 - Assists in determining if coverage for MDR organisms in the empiric therapy are necessary
- Information can be obtained from the % susceptibility chart
- Important for MRSA, VRE, ESBL, and KPC

2025 Gram Negative Antibigram Report

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PCH % Susceptible Gram Negative Isolates	No. Isolates*	Amikacin	Ampicillin/Sulb actam	Ampicillin	Cefazolin	Cefepime	Ceftriaxone	Ciprofloxacin	Ertapenem	Gentamicin	Levofloxacin	Meropenem	Nitrofurantoin	Peperacillin/ Tazobactam	Trimethoprim/ Sulfa
Acinetobacter baumannii	1		100								100	100		100	100
Citrobacter braakii	1	100			0	100	100	100	100	100	100	100	100	100	100
Citrobacter freundii	7	100			0	100	71	100	100	86	100	100	100	71	86
Citrobacter koseri	3	100			0	100	100	100	100	100	100	100	67	100	100
Enterobacter cloacae complex	19	100			0	100		100	94	94	100	100	26	83	89
Escherichia coli	381	100	65	53	48	91	89	82	100	92	82	100	96	95	81
Klebsiella aerogenes	14	100			0	92	77	85	100	100	92	100	7	83	92
Klebsiella oxytoca	11	100	45	0	0	100	82	91	100	100	100	100	92	91	91
Klebsiella pneumoniae ssp pneu	75	100	93	0	11	97	94	97	100	99	96	100	25	96	93
Morganella morganii ssp morganii	2	100	50	0	0			50	100	100	50		0	100	50
Morganella morganii ssp sibonii	2	100	0	0	0			100	100	100	100		0	100	100
Proteus mirabilis	49	100	89	73	0	91	91	78	100	89	95	100	0	100	87
Providencia rettgeri	1		100	0	0	100	100		100	100	100	100	0	100	100
Providencia stuartii	4		50	0	0	100	100	25	100	0	50	100	0	100	0
Pseudomonas aeruginosa	25	96				100		96		96	96	100		88	
Raoultella ornithinolytica	1	100	100	0	0	100	100	100	100	100	100	100	0	100	100
Raoultella planticola	2	100	50	0	0	50	50	50	100	100	100	100	50	50	100
Serratia marcescens	4	100			0	100	100	100	100	100	100	100	0		100

* Number of isolates may vary with each antimicrobial

2025 Gram Positive Antibigram Report

PCH % Susceptible Gram Positive Isolates	No. Isolates*	Ampicillin	Ciprofloxacin	Clindamycin	Erythromycin	Gentamicin	Gentamicin High Level	Levofloxacin	Linezolid	Moxifloxacin	Nitrofurantoin	Oxacillin MIC	Penicillin-G	Streptomycin High Level	Quinupristin/Dalfopristin	Rifampicin	Tetracycline	Tigecycline	Trimethoprim/Sulfa	Vancomycin
Enterococcus avium	1	100	100		0		100	100	100		0		100	100			100	100		100
Enterococcus faecalis	24	100	96		17		92	96	100		100		100	92	0		17	100		100
Enterococcus faecium	1	100	0		100		0	0	100		100		100	100	100		0	100		100
Staphylococcus aureus	42		63	71	41	100		66	100	93	100	51	0		100	98	90	100	85	100
Staphylococcus capitis	1		100	100	100	100		100	100	100	100	100	0		100	100	100	100	100	100
Staphylococcus epidermidis	11		73	82	45	100		73	100	91	100	55	0		100	100	91	100	46	100
Staphylococcus haemolyticus	2		0	50	0	50		0	100	50	100	0	0		100	50	50	100	50	100
Staphylococcus hominis ss	8		63	63	13	100		75	100	100	100	13	13		100	100	50	100	75	100
Staphylococcus lugdunsis	2		100	50	50	100		100	100	100	100	100	0		100	100	50	100	100	100
Staphylococcus saprophyticus	2		100	56	22	100		100	100	100	100	56	0		100	100	89	100	67	100
Staphylococcus simulans	1		0	100	0	100		0	100	0	100	0	0		100	100	100	100	100	100
Staphylococcus warneri	1		100	100	100	100		100	100	100	100	100	0		100	100	100	100	100	100
Streptococcus agalactiae	12	100		0				92	100	92			100		100		25	100		100

* Number of isolates may vary with each antimicrobial

[illegible]