

UNIVERSITY OF CINCINNATI MEDICAL CENTER
UC Health, Cincinnati, Ohio
2018 Antibigram Preparation Information

General

- The UCMC Antibigrams for 2018 have been compiled using WHONET software from the World Health Organization.
- Only first isolates from patients in UCMC inpatient locations or from the UCEC are included in these antibigrams.
- The primary susceptibility platform employed for testing in 2108 was the Biomerieux Vitek[®] 2 System.
- The drugs included in this antibigram report are the drugs routinely tested and reported at UC Health. These drugs are selected based on a combination of the following: CLSI recommendations, the UC Health formulary, and availability of these drugs on the commercial susceptibility panels.
- Drugs not tested or not indicated for a given source or organism are left blank.
- Only organisms with 20 or more isolates are included on the antibigram. CLSI recommends using 30 isolates as the cutoff, so those between 20 and 30 are shaded gray.
- If the percentage of susceptible isolates increased by $\geq 10\%$ compared to the previous year's data, the table cell has been shaded green; a decrease by $\geq 10\%$ compared to the previous year's data has been shaded red.

- Gram Positive Antibigram Notes:
 - Results for *Staphylococcus aureus* are presented in aggregate and broken down based upon MRSA/MSSA.
 - The isolates included in the report do not include MRSA Surveillance Screen cultures or Staphylococcal pneumonia Nasal Swab cultures.
 - Staphylococci may possess a resistance mechanism to lincosamides that is induced by exposure to macrolides. All *Staphylococcus* species are routinely screened for inducible clindamycin resistance. When this resistance is found, the interpretive result is modified to Resistant and no MIC value is reported.
 - Results listed for *Staphylococcus epidermidis* are based on isolates identified to species; this does not represent an aggregation of results for all coagulase-negative staphylococci.

Gram Negative Organism (# of patient isolates)	Ampicillin/Sulbactam	Ampicillin	Cefazolin*	Cefepime	Ceftriaxone	Ciprofloxacin	Gentamicin	Levofloxacin	Meropenem	Piperacillin/Tazobactam	Tobramycin	Trimethoprim/Sulfamethoxazole
<i>Acinetobacter baumannii</i> (56)	87	0	0	72	9	72	87	76	81	61	91	81
<i>Citrobacter freundii</i> (34)			0	100	80	97	93	97	100	79	100	93
<i>Citrobacter koseri (diversus)</i> (46)			96	100	98	98	98	98	98	98	98	100
<i>Enterobacter aerogenes</i> (52)			0	100	84	100	98	100	100	86	98	96
<i>Enterobacter cloacae complex</i> (174)			0	87	73	96	94	97	99	77	93	90
<i>Escherichia coli</i> (1,221)	56	47	81	95	92	77	92	77	100	96	93	75
<i>Klebsiella oxytoca</i> (92)	57	0	24	98	90	97	91	97	100	93	92	93
<i>Klebsiella pneumoniae</i> (420)	81	0	91	95	92	91	94	93	99	94	92	90
<i>Morganella morganii</i> (21)	5	0	0	95	76	76	100	76	100	95	100	81
<i>Proteus mirabilis</i> (177)	85	75	71	99	98	70	91	72	99	100	93	75
<i>Providencia stuartii</i> (20)	15	0	0	100	100	30	0	30	100	100	0	85
<i>Pseudomonas aeruginosa</i> (423)	0	0	0	88	0	81	91	77	87	90	95	0
<i>Serratia marcescens</i> (97)			0	99	99	99	99	99	100		93	98
<i>Stenotrophomonas maltophilia</i> (85)								94				87

*Cefazolin values reflect the percentage of Non-Resistant isolates using an MIC breakpoint of ≤ 4 µg/mL

If the percentage of susceptible isolates increased by ≥ 10% compared to the previous year's data, the table cell has been shaded green; a decrease by ≥ 10% compared to the previous year's data has been shaded red.

Gram Positive Organism (# of patient isolates)	Ampicillin	Cefotaxime	Ceftriaxone	Clindamycin	Doxycycline	Erythromycin	Levofloxacin	Linezolid	Oxacillin	Penicillin G	Tetracycline	Trimethoprim/Sulfamethoxazole	Vancomycin
<i>Enterococcus faecalis</i> (311)	100				25	9	76	95			25		97
<i>Enterococcus faecium</i> (115)	24				27	5	21	97			23		39
<i>Staphylococcus aureus</i> (822)				72	97	35	73	100	49		95	95	100
<i>S. aureus</i> - MRSA (437)				67	95	12		100	0		94	92	100
<i>S. aureus</i> - MSSA (415)				76	99	59		100	100		97	97	100
<i>Staphylococcus epidermidis</i> (157)				49	87	26		100	28		82	49	100
<i>Staphylococcus lugdunensis</i> (31)				65	100	68		100	74		97	100	100
<i>Streptococcus pneumoniae</i> (86)				82		48	100	100			78	84	100
non-meningitis therapy interpretations		95	94										
meningitis therapy interpretations		82	79							56			
<i>Streptococcus viridans</i> group (71)	75	83	95	64		47	91	100		69	59		100

* *Streptococcus pneumoniae* MIC interpretations for Cefotaxime, Ceftriaxone, and Penicillin-G vary based on achievable drug levels in the CSF versus blood. Percentages were calculated by applying both sets of interpretations to all 86 isolates.

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