URINARY ISOLATES – OUTPATIENT
UC Health, Cincinnati, Ohio
2018 Antibiogram Preparation Information

General

- The Urinary Isolate Antibiograms for 2018 have been compiled using WHONET software from the World Health Organization.
- Only <u>first urinary isolates</u> from patients from all facilities (excluding all Inpatient and Emergency locations) are included in this antibiogram.
- The primary susceptibility testing employed for testing in 2018 was the Biomerieux Vitek® 2 System.
- The drugs included in this antibiogram 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.
    - Oral equivalents for some drugs on these panels have been provided by Pharmacy: amoxicillin is equivalent to ampicillin; amoxicillin/clavulanic acid is equivalent to ampicillin/sulbactam; cephalexin is equivalent to cefazolin; and cefdinir, cefpodoxime, and cefuroxime are equivalent to ceftriaxone.
- 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 antibiogram. 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 Antibiogram Notes: 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.

Organism (# of patient isolates)	Ampicillin/Sulbactam	Ampicillin	Cefazolin*	Cefepime	Ceftriaxone	Ciprofloxacin	Clindamycin	Doxycycline	Erythromycin	Gentamicin	Levofloxacin	Linezolid	Meropenem	Nitrofurantoin	Oxacillin	Piperacillin/Tazobactam	Tetracycline	Tobramycin	Trimethoprim/Sulfamethoxazole	Vancomycin
Citrobacter freundii (40)			0	100	80	92				97	92		100	97		85		100	69	
Citrobacter koseri (diversus) (38)			100	100	100	100				100	100		100	95		100		100	100	
Enterobacter aerogenes (33)			0	100	94	100				97	97		100	9		94		100	97	
Enterobacter cloacae complex (65)			0	94	83	97				98	97		98	38		83		98	89	
Escherichia coli (1,939)	64	57	86	97	94	82				93	82		100	97		98		94	79	
Klebsiella oxytoca (46)	52	0	28	98	94	98				98	98		100	89		91		100	96	
Klebsiella pneumoniae (407)	86	0	94	97	96	96				99	97		100	41		97		98	91	
Proteus mirabilis (140)	86	82	79	100	99	84				96	88		100	0		100		96	86	
Pseudomonas aeruginosa (72)	0	0	0	96	0	79				93	74		95	0		96		100	0	
Enterococcus faecalis (173)		99						24	12		81	95		99			25			99
Enterococcus faecium (19)		29						31	6		12	94		24			35			65
Staphylococcus aureus (42)							69	98	45			100		100	60		91		91	100
Staphylococcus epidermidis (53)							76	88	36			100		98	54		77		66	100

*Cefazolin values for *Enterobacteriaceae* reflect the percentage of susceptible isolates using an MIC breakpoint of ≤ 16 µg/mL. This clinical breakpoint should be used when cefazolin is used for therapy of uncomplicated UTIs due to *E. coli*, *K. pneumoniae*, and *P. mirabilis*.

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.