

URINARY ISOLATES – INPATIENT
UC Health, Cincinnati, Ohio
2018 Antibigram Preparation Information

General

- The Urinary Isolate Antibigrams for 2018 have been compiled using WHONET software from the World Health Organization.
- Only first urinary isolates from UC Health inpatient locations or from the emergency department 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 Note: 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
<i>Citrobacter freundii</i> (49)			0	98	81	94				94	94		98	89		80		98	92	
<i>Citrobacter koseri (diversus)</i> (37)			97	100	97	97				97	97		97	87		95		97	100	
<i>Enterobacter aerogenes</i> (43)			0	100	81	100				98	100		100	14		84		98	98	
<i>Enterobacter cloacae complex</i> (100)			0	86	60	91				89	92		100	41		70		88	81	
<i>Escherichia coli</i> (1,839)	57	49	83	96	93	78				92	78		100	96		96		93	75	
<i>Klebsiella oxytoca</i> (61)	59	0	26	98	84	97				92	97		100	89		89		92	92	
<i>Klebsiella pneumoniae</i> (501)	81	0	90	95	92	93				95	94		99	36		93		93	90	
<i>Proteus mirabilis</i> (185)	88	77	72	100	98	71				91	74		100	0		100		92	75	
<i>Pseudomonas aeruginosa</i> (255)	0	0	0	87	0	78				87	73		87	0		92		94	0	
<i>Serratia marcescens</i> (27)			0	100	96	100				96	100		100	0				89	100	
<i>Enterococcus faecalis</i> (324)		100				69		24	6		71	95		99			25			97
<i>Enterococcus faecium</i> (83)		22				11		19	1		13	95		16			15			34
<i>Staphylococcus aureus</i> (98)							71	97	44			100		99	52		91		89	100
<i>Staphylococcus epidermidis</i> (58)							55	91	31			100		100	36		86		60	100

*Cefazolin values for *Enterobacteriaceae* reflect the percentage of susceptible isolates using an MIC breakpoint of $\leq 16 \mu\text{g/mL}$. 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 $\geq 10\%$ 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.