

April 10, 2019

Colleagues,

Please find attached the 2018 Antibiotic Susceptibility Report. This is provided annually to evaluate for progression of bacterial resistance at UW Valley Medical Center. **The principle change in 2018 is this antibiogram includes inpatient isolates only and no longer includes clinic network isolates. Overall, this has resulted in improved antimicrobial susceptibility particularly for trimethoprim/sulfa and ciprofloxacin.**

Overall, 2018 is similar to 2017 showing minimal increase in resistance. The red/yellow and green highlights are designed to assist with interpretation and selection of best antibiotic therapy for certain suspected infections. Green is generally effective, yellow effective in certain circumstances and red, generally not encouraged for use. We encourage culture directed therapy once full susceptibilities are available. As in the past, we will share comments about the report in particular and antibiotic treatment in general:

- Both cefepime and piperacillin/tazobactam are good choices for empiric treatment of *Pseudomonas aeruginosa*
- Ampicillin/sulbactam continues to be a poor antibiotic choice empirically for *E. coli* due to high rates of resistance
- For uncomplicated enterococcus UTIs, including VRE, ampicillin and amoxicillin are appropriate to use despite susceptibility data because of extremely high concentrations these drugs achieve in the urine.
- Penicillin is once again an appropriate choice for treating Viridans streptococci
- Clindamycin remains a poor empiric choice as a single agent for beta-hemolytic strep syndromes such as cellulitis and peri-partum infections without known susceptibilities.
- A pharmacy tab is available for the Access Bar in EPIC. The 2018 antibiogram can be found in this tab under the Antimicrobial Stewardship Link on the right side of the page

As always, maintaining sustained activities of our antibiotics is up to your thoughtful use of them. We appreciate your efforts in this area, particularly with the challenges of medication shortages.

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**Antibiotic Susceptibility Report
2018**

Gram Positive Isolates

Percent susceptible

Organism	No. of Isolates	Ampicillin	Cefazolin	Ceftriaxone	Clindamycin	Erythromycin	Levofloxacin	Nitrofurantoin	Oxacillin	Penicillin	Tetracycline	Trimeth/Sulfa	Vancomycin	Linezolid	Daptomycin
MSSA	881		100		84		91	100	100	0	95	97	100		
MRSA	569				70			98			89	83	100		
Staphylococcus, not aureus	539		56		67		71	93	56	0	78	71	100		
Staphylococcus lugdunensis	82		85		90		99	95	85	0	89	98	100		
Beta-hemolytic Strep Grp B	230		100		63	56				100					
Enterococcus species	752	97					60*	97							
VRE	17	18						35						100	100
Streptococcus pneumoniae	85			98		64	98			87					
Streptococcus Viridans Group	93			92	90	65				92					

*Urine Isolates only (550 total)

Shading indicates not tested

**Gram Negative Isolates
Percent susceptible**

Organism	No. of Isolates	Ampicillin	Ampicillin/Sulbactam	Aztreonam	Cefazolin	Ceftriaxone	Gentamicin	Levofloxacin	Nitrofurantoin	Piperacillin/tazo	Trimethoprim/Sulfa	Cefepime	Ertapenem	Meropenem	Minocycline
Acinetobacter species	36						100	97		92	97	86		100	
Citrobacter freundii	62			85		85	89	94	97	89	76		100		
Citrobacter koseri	55			96		96	100	100	93	98	98		100		
Enterobacter aerogenes	72			88		88	100	97	21	82	99		100		
Enterobacter cloacae complex	134			89		90	98	97	48	90	90		98		
Escherichia coli	3540	56	65	94	85*	91	93	79	96	96	78		100		
Klebsiella oxytoca	105		61	90	59*	93	99	97	86	90	96		100		
Klebsiella pneumoniae	562		90	98	95*	98	98	94	37	97	92		100		
Morganella morganii	64			89		95	88	73		92	61		100		
Proteus mirabilis	420	80	90	100	94*	98	85	77		100	70		100		
Providencia rettgeri	11			91		100	91	100		100	100		100		
Providencia stuartii	8			100		100	0	13		100	88		100		
Pseudomonas aeruginosa	337			87			97	77		96		94		92	
Raoultella planticola	10		90	90		90	90	100	100	100	90		100		
Serratia marcescens	54			100		100	98	100		96	100		100		
Stenotrophomonas maltophilia	41							93			95				100

* Urine isolates only

Shading indicates not tested

Beta-Lactamase

Organism	No. of Isolates	Percent Positive	Percent Negative
H. parainfluenzae	54	15	85
Haemophilus influenzae	105	21	79