

Atrium Health - FLOYD INPATIENTS 2024
Antibiotic Susceptibility Surveillance Report

| Gram Positive Organisms ¹ | # of Isolates Tested | Penicillins | | | Miscellaneous | | | | | | | | | | |
|--|----------------------|-------------|------------------------|------------|---------------|-------------|------------|---------------------------|--------------|-----------|-----------------------------|-----------------------|---------------------------|-------------------------------|------------|
| | | Ampicillin | Oxacillin ² | Penicillin | Ceftriaxone | Clindamycin | Daptomycin | Erythromycin ³ | Levofloxacin | Linezolid | Nitrofurantoin ⁴ | Rifampin ⁵ | Tetracycline ⁶ | Trimethoprim-Sulfamethoxazole | Vancomycin |
| <i>Staphylococcus aureus</i> - Total | 380 | | 50 | | | 70 | 100 | 37 | | 100 | 100 | 99 | 90 | 94 | 100 |
| <i>Staphylococcus aureus</i> - MRSA* | 193 | | | | | 75 | 100 | 15 | | 100 | 100 | 100 | 87 | 92 | 100 |
| <i>Staphylococcus lugdunensis</i> | 33 | | 75 | | | 72 | 100 | 75 | | 100 | 100 | 100 | 96 | 100 | 100 |
| <i>Staphylococcus epidermidis</i> | 41 | | 26 | | | 46 | 100 | 21 | | 100 | 100 | 92 | 82 | 60 | 100 |
| <i>Enterococcus faecalis</i> ⁷ | 248 | 99 | | | | | 100 | | | 98 | 98 | | | | 98 |
| <i>Enterococcus faecium</i> ⁷ - Total | 38 | 21 | | | | | | | | 100 | 34 | | | | 50 |
| <i>Enterococcus faecium</i> ⁷ - VRE* | 19** | | | | | | | | | 100 | 26 | | | | |
| <i>Streptococcus pneumoniae</i> - MENINGITIS | 33 | | | 100 | 100 | | | | | | | | | | 100 |
| <i>Streptococcus pneumoniae</i> - NON-MENINGITIS | 33 | | | 72 | 84 | | | 57 | 93 | | | | 81 | 69 | 100 |
| <i>Streptococcus anginosus/contellatus/intermedius grp</i> | 42 | | | 95 | 95 | 64 | | | 97 | | | | | | 100 |

Grey boxes are for antimicrobials showing ≤ 60% susceptibility

Black boxes are for antimicrobials that are not recommended due to : 1)no *in vivo* activity; 2)sub-optimal clinical activity; or 3)susceptibility testing not performed

¹ Data are presented as percent susceptible. Duplicate isolates from the same patient are excluded. A minimum of 30 isolates is required to achieve statistical significance.

² For *Staphylococcus* species, susceptibility to oxacillin predicts susceptibility to cephalosporins, carbapenems, and β-lactam combination agents.

³ Susceptibility to erythromycin predicts susceptibility to azithromycin and clarithromycin.

⁴ Use for lower UTI only.

⁵ Rifampin should NOT be used as monotherapy due to rapid development of resistance.

⁶ Susceptibility to tetracycline predicts susceptibility to doxycycline, minocyclinem and tigecycline.

⁷ *Enterococcus* species are always resistant to aminoglycosides (except high concentrations), cephalosporins, clindamycin and trimethoprim-sulfamethoxazole.

* Data also included in the corresponding organism total above

** Statistical validity of % susceptible is decreased if fewer than 30 isolates are tested.

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| Gram Negative Organisms ¹ | # of Isolates Tested | Penicillins | | | Cephems | | | | Miscellaneous | | | | | | | |
|--------------------------------------|----------------------|-------------|----------------------|-------------------------|------------------------|-------------|----------|-----------|---------------|-----------|------------|------------|-----------------------|---------------|-----------------------------|-------------------------|
| | | Ampicillin | Ampicillin-Sulbactam | Piperacillin-Tazobactam | Cefazolin ² | Ceftriaxone | Cefepime | Aztreonam | Ertapenem | Meropenem | Gentamicin | Tobramycin | Amikacin ⁴ | Ciprofloxacin | Nitrofurantoin ³ | Trimethoprim-Sulfametho |
| <i>Escherichia coli</i> - Total | 751 | 44 | 60 | 94 | 77 | 81 | 82 | 87 | 100 | 99 | 87 | 86 | 95 | 66 | 95 | 70 |
| <i>Escherichia coli</i> - ESBL * | 134 | | | | | | | | 100 | 100 | 70 | 62 | 78 | 11 | 88 | 36 |
| <i>Klebsiella pneumonia</i> - Total | 261 | | 80 | 90 | 85 | 86 | 87 | 88 | 98 | 98 | 92 | 91 | 98 | 84 | 18 | 83 |
| <i>Klebsiella pneumonia</i> - ESBL * | 37 | | | | | | | | 97 | 100 | 56 | 45 | 91 | 21 | 8 | 13 |
| <i>Klebsiella aerogenes</i> | 31 | | | 64 | | 67 | 96 | 70 | 96 | 100 | 100 | 96 | 100 | 96 | 12 | 96 |
| <i>Enterobacter cloacae</i> complex | 55 | | | 65 | | 63 | 85 | 69 | 80 | 96 | 98 | 98 | 98 | 89 | 32 | 85 |
| <i>Proteus mirabilis</i> | 156 | 71 | 89 | 100 | 83 | 89 | 92 | 98 | 99 | 100 | 85 | 88 | 98 | 64 | | 72 |
| <i>Serratia marcescens</i> | 43 | | | | | 93 | 100 | 100 | 100 | 100 | 100 | 65 | 100 | 93 | | 100 |
| <i>Morganella morganii</i> | 30 | | | 100 | | 90 | 96 | 100 | 100 | 100 | 100 | 100 | 100 | 75 | | 93 |
| <i>Providencia species</i> | 30 | | | 100 | | 92 | 96 | 96 | 100 | 100 | 37 | 33 | 100 | 42 | | 77 |
| <i>Pseudomonas aeruginosa</i> | 159 | | | 84 | | | 95 | | | 93 | | 95 | 100 | 86 | | |
| <i>Pseudomonas aeruginosa</i> -MDRO* | 12** | | | 41 | | | 66 | | | 33 | | 75 | 100 | 16 | | |

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¹ Data are presented as percent susceptible. Duplicate isolates from the same patient are excluded. A minimum of 30 isolates is required to achieve statistical significance.

² In cases of uncomplicated UTI caused by *E. coli*, *Klebsiella* or *Proteus mirabilis*, susceptibility to cefazolin predicts susceptibility to oral cephalosporins.

³ Use for lower UTI only.

⁴ Amikacin should only be considered for *P. aeruginosa* from UTIs, and should not be considered in the use of treating systemic infections caused by *P.aeruginosa*

* Data also included in the corresponding organism total above.

** Statistical validity of % susceptible is decreased if fewer than 30 isolates are tested.