

Physicians Laboratory Services Cumulative Antimicrobial Susceptibility Report  
All Clients, Urine Isolates | January 2019 - December 2019

| % Susceptible Gram Positive             | Total* | Penicillin(2) | Ampicillin | Oxacillin(1) | Amoxicillin/Clavulanate | Cefotaxime(2) | Ceftriaxone(2) | Meropenem | Gentamicin | Ciprofloxacin(7) | Levofloxacin(7) | Moxifloxacin | Trimethoprim/Sulfa | Clindamycin(5) | Daptomycin(6) | Erythromycin(5) | Nitrofurantoin(3) | Linezolid(4) | Vancomycin | Tetracycline(7) | Gentamicin Synergy(8) | Streptomycin Synergy(8) | Penicillin (non-CSF)(2) | Penicillin V (oral)(2) | Cefotaxime (non-CSF)(2) | Ceftriaxone (non-CSF)(2) |     |
|---|--------|---------------|------------|--------------|-------------------------|---------------|----------------|-----------|------------|------------------|-----------------|--------------|--------------------|----------------|---------------|-----------------|-------------------|--------------|------------|-----------------|-----------------------|-------------------------|-------------------------|------------------------|-------------------------|--------------------------|-----|
| <i>Staph. aureus</i> (MSSA) %           | 114    | --            | --         | 100          | --                      | --            | --             | --        | 100        | 73               | 75              | --           | 99                 | --             | 100           | --              | 100               | 100          | 100        | 94              | --                    | --                      | --                      | --                     | --                      | --                       | --  |
| <i>Staph. aureus</i> (MRSA) %           | 70     | --            | --         | 0            | --                      | --            | --             | --        | 94         | 10               | 11              | --           | 97                 | --             | 100           | --              | 100               | 100          | 100        | 93              | --                    | --                      | --                      | --                     | --                      | --                       | --  |
| <i>Staph. spp.</i> (coagulase-negative) | 605    | --            | --         | 55           | --                      | --            | --             | --        | 96         | 64               | 65              | --           | 78                 | --             | 100           | --              | 100               | 100          | 100        | 90              | --                    | --                      | --                      | --                     | --                      | --                       | --  |
| <i>Strep. pneumoniae</i>                | 1      | 100           | --         | --           | 100                     | 100           | 100            | --        | --         | --               | 100             | --           | 100                | --             | --            | --              | --                | --           | 100        | 100             | --                    | --                      | 100                     | 100                    | 100                     | 100                      | 100 |
| <i>Enterococcus faecalis</i>            | 864    | 100           | 100        | --           | --                      | R             | R              | --        | --         | 76               | 81              | --           | R                  | R              | 100           | --              | 100               | 100          | 98         | 26              | --                    | --                      | --                      | --                     | --                      | --                       | --  |
| <i>Enterococcus faecium</i>             | 72     | 38            | 39         | --           | --                      | R             | R              | --        | --         | 22               | 28              | --           | R                  | R              | 89            | --              | 71                | 100          | 47         | 35              | --                    | --                      | --                      | --                     | --                      | --                       | --  |
| <i>Enterococcus spp.</i>                | 26     | 81            | 85         | --           | --                      | R             | R              | --        | --         | 54               | 58              | --           | R                  | R              | 100           | --              | 92                | 100          | 81         | 42              | --                    | --                      | --                      | --                     | --                      | --                       | --  |

The % susceptible for each organism/antimicrobial combination was generated by including the first isolate of that organism encountered on a given patient.

R Organism has intrinsic resistance to this antimicrobial.

-- Not tested/indicated for organism.

\* Antibiograms created for organisms with less than 30 total isolates have questionable statistical significance. Interpret data with caution.

(1) Oxacillin predicts susceptibility to most cephalosporins, carbapenems, and beta-lactam/beta-lactamase inhibitors.

(2) For *S. pneumoniae*: cefotaxime, ceftriaxone, and penicillin % susceptible listed is based on parenteral CSF (meningitis), parenteral non-CSF, and oral MIC breakpoints.

(3) Nitrofurantoin is reported for isolates from urine only.

(4) Linezolid is reported for isolates from non-urine sources only.

(5) For *Staphylococcus spp.*: clindamycin and erythromycin are reported for isolates from non-urine sources only.

(6) For *Staphylococcus spp.*: daptomycin is reported for isolates from non-respiratory sources only.

(7) For all *Enterococcus spp.*: ciprofloxacin, levofloxacin, and tetracycline are reported for isolates from urine only.

(8) For *E. faecalis* and *E. faecium*: gentamicin and streptomycin high-level resistance testing is reported for isolates from blood cultures only.

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| % Susceptible<br>Gram Negative | Total* | Ampicillin                  | Ampicillin/Sulbactam | Piperacillin/Tazobactam | Cefazolin | Cefuroxime | Cefotaxime | Ceftazidime | Ceftriaxone | Cefepime | Cefoxitin | Aztreonam | Ertapenem | Meropenem | Amikacin | Gentamicin | Tobramycin | Ciprofloxacin | Levofloxacin | Trimethoprim/Sulfa | Nitrofurantoin(1) | Tetracycline(2) |
|--------------------------------|--------|-----------------------------|----------------------|-------------------------|-----------|------------|------------|-------------|-------------|----------|-----------|-----------|-----------|-----------|----------|------------|------------|---------------|--------------|--------------------|-------------------|-----------------|
| <i>Escherichia coli</i>        | 6237   | 59                          | 63                   | 98                      | 88        | 91         | 94         | 94          | 94          | 95       | 95        | 95        | 100       | 100       | 100      | 92         | 92         | 80            | 80           | 77                 | 98                | 77              |
| <i>Klebsiella pneumoniae</i>   | 1227   | R                           | 86                   | 98                      | 91        | 91         | 96         | 96          | 96          | 97       | 94        | 97        | 100       | 100       | 100      | 97         | 97         | 96            | 97           | 88                 | 56                | 85              |
| <i>Proteus mirabilis</i>       | 566    | 83                          | 91                   | 100                     | 89        | 98         | 98         | 98          | 98          | 98       | 99        | 98        | 100       | 100       | 99       | 89         | 90         | 62            | 72           | 77                 | R                 | R               |
| <i>Enterobacter aerogenes</i>  | 161    | R                           | R                    | 96                      | R         | R          | 92         | 89          | 91          | 99       | R         | 96        | 100       | 100       | 100      | 99         | 99         | 98            | 99           | 96                 | 20                | 91              |
| <i>Enterobacter cloacae</i>    | 216    | R                           | R                    | 82                      | R         | R          | 75         | 77          | 75          | 97       | R         | 77        | 98        | 100       | 100      | 99         | 99         | 96            | 97           | 90                 | 26                | 90              |
| <i>Serratia marcescens</i>     | 55     | R                           | R                    | 87                      | R         | R          | 89         | 93          | 95          | 100      | R         | 95        | 100       | 100       | 100      | 100        | 96         | 96            | 95           | 98                 | R                 | 7               |
| <i>Pseudomonas aeruginosa</i>  | 412    | R                           | R                    | 98                      | R         | R          | R          | 95          | R           | 92       | R         | 83        | R         | 95        | 98       | 84         | 97         | 79            | 78           | R                  | --                | R               |
| <i>Acinetobacter baumannii</i> | 8      | R                           | 100                  | --                      | R         | R          | 88         | 88          | 88          | 75       | R         | R         | R         | 88        | 88       | 88         | 100        | 75            | 75           | 88                 | --                | 88              |
| <i>Citrobacter freundii</i>    | 140    | R                           | R                    | 94                      | R         | R          | 90         | 89          | 89          | 99       | R         | 90        | 100       | 100       | 99       | 99         | 97         | 99            | 99           | 86                 | 91                | 85              |
| <i>Morganella morganii</i>     | 75     | R                           | 13                   | 97                      | R         | R          | 87         | 84          | 93          | 97       | 73        | 89        | 100       | 100       | 99       | 81         | 92         | 61            | 67           | 61                 | R                 | R               |
| <i>Providencia spp.</i>        | 54     | R                           | 54                   | 98                      | R         | 65         | 98         | 96          | 98          | 98       | 98        | 94        | 100       | 100       | 100      | 50         | 52         | 61            | 65           | 85                 | R                 | R               |
| <i>Shigella spp.</i>           | 0      | --                          | --                   | --                      | --        | --         | --         | --          | --          | --       | --        | --        | --        | --        | --       | --         | --         | --            | --           | --                 | --                | --              |
| <i>Stenotrophomonas</i>        | 10     | R                           | R                    | R                       | R         | R          | R          | 90          | R           | --       | R         | R         | R         | R         | R        | R          | R          | --            | 100          | 100                | --                | R               |
| <i>Klebsiella oxytoca</i>      | 266    | R                           | 65                   | 94                      | 40        | 87         | 95         | 95          | 92          | 95       | 98        | 92        | 100       | 100       | 100      | 97         | 95         | 94            | 97           | 92                 | 93                | 92              |
| <i>Haemophilus influenzae</i>  | 1      | Beta-lactamase positive: 0% |                      |                         |           |            |            |             |             |          |           |           |           |           |          |            |            |               |              |                    |                   |                 |

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(1) Nitrofurantoin is reported for isolates from urine only.

(2) For *A. baumannii*: tetracycline is reported for isolates from urine only.